

Report prepared jointly by the U.S. Geological Survey and Environment Canada.
Cooperating agencies: U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service.

Data from the 2011 International Piping Plover Census

Data Series 922

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U.S. Department of the Interior
U.S. Geological Survey

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SALLY JEWELL, Secretary

U.S. Geological Survey

Suzette M. Kimball, Acting Director

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Conversion Factors

SI to Inch-Pound

| Multiply | By | To obtain |
|-----------------|-----------|------------------|
| kilometer (km) | 0.6214 | mile (mi) |

Data from the 2011 International Piping Plover Census

By Elise Elliott-Smith¹, Mark Bidwell², Amanda E. Holland³, and Susan M. Haig¹

Abstract

This report provides results from the 2011 International Census of Piping Plovers (*Charadrius melodus*). Distribution and abundance data for wintering and breeding Piping Plovers are summarized in tabular format. An appendix provides census data for every site surveyed in every state, province, and island. The 2011 winter census resulted in the observation of 3,973 Piping Plovers. Expanded coverage outside of the United States led to the discovery of more than 1,000 Piping Plovers wintering in the Bahamas. The breeding census detected 2,771 birds in Atlantic Canada and the Plains, Prairies, and Great Lakes regions of the United States and Canada. Combining the census count with the U.S. Atlantic “window census” provides a total minimum estimate of 5,723 breeding birds for the species.

Introduction

The Piping Plover (*Charadrius melodus*) is one of the most imperiled shorebirds in the United States and Canada (Brown and others, 2001; Elliott-Smith and Haig, 2004) and is federally listed in both countries. Every 5 years since 1991, the U.S. Geological Survey (USGS) coordinates an International Piping Plover Census to provide a comprehensive view of abundance and distribution that assists in evaluating the effectiveness of recovery efforts. In 2011, for the fifth time in 20 years, a comprehensive inventory of Piping Plovers was conducted across their winter and breeding range in the United States, Canada, France (islands near Canada), Mexico, and the Caribbean.

Methods

The 2011 International Piping Plover Census was conducted using similar and compatible methods to those used during 1991, 1996, 2001, and 2006 (Haig and Plissner,

1993; Plissner and Haig, 2000; Haig and others, 2005).

The census was led by a census coordinator (Elise Elliott-Smith, U.S. Geological Survey). Individual surveys were organized with the assistance of state, provincial, island, and regional coordinators.

The winter census was conducted prior to the breeding census in order to count only those birds capable of being present in the subsequent breeding census. January 24 through February 6, 2011 was designated as the time period for the winter census. The breeding census was conducted from June 4 through June 17. We attempted to conduct the census during a short time interval to minimize recounting of birds resulting from their movement between sites. Specific dates were selected based on similarity to previous census dates. An additional factor when in coastal areas was selection of winter census dates that would coincide with a period of daytime high tides, particularly on the Texas coast. Some data collected outside the designated winter census time interval were accepted to document use in regions where Piping Plovers are rare. Likewise, we accepted some data outside the breeding census window. Flooding of interior breeding sites and access roads required that some surveys be conducted after the census window, when water levels receded.

Generally, the census was conducted by covering all habitat at each site with a single pass in a single day and recording the total number of adult plovers seen. Pairs were noted and enumerated for the breeding census whenever two birds were seen together. Most surveys were conducted on foot and guidance was given to surveyors to increase the likelihood of Piping Plover detection. Participants were advised to conduct surveys when weather was favorable because visibility and detectability may be limited during high winds, rain, and fog. At tidally influenced sites, surveyors generally were advised to survey at high tide when birds are concentrated and habitat is easier to cover. A subset of breeding sites were surveyed twice to allow for estimates of detection probability by studies using data reported herein.

Types of data collected during the 2011 International Piping Plover Census were similar to data collected in prior census years. Information recorded included the number of birds, location, weather, tidal stage, approximate length of shoreline covered, presence or absence of leg-bands and any band combinations, and surveyor information. Additionally, this year we collected data on potential disturbance to birds or habitat and the vulnerability of winter sites to sea-level rise.

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This inventory is referred to as a “census” because of the breadth of habitat that is covered across the species range, which is as complete as possible. However, we recognize that it is impossible to count every plover because of imperfect coverage and imperfect detection during surveys. Although double-counting plovers is possible, the constrained census window is intended to minimize this source of uncertainty. As indicated in the individual areas summaries presented in appendix I, incomplete coverage and imperfect detection are likely more common. As a result, the census totals reported herein most likely represent minimum population estimates. As in prior years, we attempted to cover as much known and potential Piping Plover habitat as possible throughout the species winter and breeding range. Surveying winter habitat outside the United States is a particular challenge and, although coverage improved in 2011, it was still incomplete. Given 2006 results, which suggested the Bahamas could be an important wintering area, we expanded our surveys in this island group. Breeding census counts are always higher than winter counts, likely because of improved coverage and detection. However, identifying all suitable breeding habitat in the interior is difficult during extreme wet and dry years. Extensive flooding and use of non-traditional breeding habitat (for example, gravel roads adjacent to sites) in 2011 made it impossible to obtain a thorough count of birds in the Plains and Prairie region; thus, counts in this report are likely underestimates of true population size. In future surveys, more work needs to be done to improve coverage and account for

imperfect detection so that counts from breeding surveys can be used to estimate population size more reliably.

Unlike prior years, none of the U.S. Atlantic States participated in the 2011 census. The U.S. Atlantic breeding population is estimated annually from a “window census” conducted near the timeframe of the census. This survey differs from the census in that the focus is estimating pairs rather than making a count of individuals, and although some data reflect a single count, multiple visits are made to some sites. Thus, we present pair counts from the 2011 “window census” (A. Hecht, U.S. Fish and Wildlife Service, written commun., 2012) and double the total pair count to obtain a total adult count for the region. Because detection probability is not accounted for, when combining U.S. Atlantic States window data with our results, this provides a likely minimum estimate for the Atlantic Coast population and for the entire species.

Results

A total of 3,973 Piping Plovers were seen during the 2011 winter census (table 1). The Bahamas was identified as an important wintering area, ranking second only to Texas in number of Piping Plovers. Preliminary genetic analyses by Dr. Susan Haig and observations of banded birds (during the census and as reported by C. Gratto-Trevor, oral comm.,

Table 1. Distribution and abundance of wintering Piping Plovers, 2011.

[Sites surveyed, kilometers surveyed, and Participants: Numbers reported serve as minimum estimates. Not all censusers included this information. na, not applicable]

| State/Country | Number of Piping Plovers | Percentage of all birds censused | Sites surveyed | Kilometers surveyed | Participants | Coordinator |
|-----------------------|--------------------------|----------------------------------|----------------|---------------------|--------------|---|
| Virginia | 1 | <0.1 | 22 | 177 | 20 | R. Boettcher |
| North Carolina | 43 | 1.1 | 36 | 405 | 41 | S. Schweitzer |
| South Carolina | 86 | 2.2 | 36 | 144 | 50 | M. Bimbi, F. Sanders |
| Georgia | 63 | 1.6 | 17 | 136 | 50 | B. Winn, T. Keyes |
| Florida | 306 | 7.7 | 201 | 1,299 | 291 | P. Kelly, B. Brooks |
| Atlantic ¹ | 83 | 2.1 | 91 | 630 | na | M. Knight |
| Gulf ¹ | 223 | 5.6 | 110 | 669 | na | |
| Alabama | 38 | 1.0 | 6 | 12 | 3 | R. Clay |
| Mississippi | 88 | 2.2 | 18 | 146 | 21 | N. Winstead |
| Louisiana | 86 | 2.2 | 16 | 119 | 11 | M. Seymour |
| Texas | 2,145 | 54.0 | 88 | 1,600 | 68 | D. Anderson, R. Cobb, L. Gallo, M. Zdravkovic |
| Mexico | 30 | 0.8 | 5 | 175 | 2 | A. Banda, G. Garcia |
| Bahamas | 1,066 | 26.8 | 203 | 678 | 29 | P. Moore, E. Elliott-Smith |
| Cuba | 19 | 0.5 | 10 | 45 | 3 | P. Rodriguez |
| Puerto Rico | 2 | <0.1 | 6 | 13 | 4 | A. Pérez |
| GRAND TOTAL | 3,973 | 100 | 664 | 4,949 | 593 | |

¹Regional subtotals within Florida.

2013) indicate that Piping Plovers wintering in the Bahamas may be primarily from the Atlantic Coast breeding population. The Bahamas count (1,066) was 32 percent of the Atlantic breeding count (3,362). This number likely does not represent the exact percentage of Atlantic birds wintering in the Bahamas, but it does suggest the relative importance of the Bahamas to the breeding population. Likewise, the Texas coast is very important to Prairie Canada breeders (Gratto-Trevor and others, 2012), but further research is needed to fully understand population connectivity and the importance of specific wintering sites.

In total, 2,771 Piping Plovers were counted during the breeding census in the Plains/Prairies, Atlantic Canada, and Great Lakes (table 2). As in prior years, the breeding census was conducted in the interior United States and Canada, the Great Lakes region, and Atlantic Canada. The U.S. Atlantic region did not officially participate, but their “window census” resulted in the detection of 1,476 pairs. Doubling the U.S. Atlantic pair count and combining with the census count results in an overall species count of at least 5,723 Piping Plovers during the breeding season.

Table 2. Census effort and coverage for the 2011 International Piping Plover breeding census.

[Sites surveyed, Kilometers surveyed, and Participants: Numbers reported serve as minimum estimates. Not all censusers included this information. na, not applicable; nr, information was not reported]

| State/Province | Adults | Census (percent) | Region (percent) | Breeding pairs | Sites surveyed | Linear kilometers surveyed | Participants | Coordinator |
|--|--------|------------------|------------------|----------------|----------------|----------------------------|--------------|--------------------------|
| Northern Great Plains/Prairies | 2,249 | 39.3 | na | 706 | 772 | 3,853 | 340 | |
| Prairie Canada | 1,012 | 17.7 | 45.0 | 288 | 385 | 2,750 | 180 | |
| Alberta | 244 | 4.3 | 10.8 | 91 | 70 | 252 | 31 | D. Prescott |
| Saskatchewan | 764 | 13.3 | 34.0 | 195 | 278 | 2,473 | 131 | M. Ranalli, J. Rumancik |
| Manitoba | 2 | 0.0 | 0.1 | 1 | 33 | 15 | 16 | K. Porteous |
| Ontario (Lake of the Woods) | 2 | 0.0 | 0.1 | 1 | 4 | 10 | 2 | L. Heyens, B. Campbell |
| U.S. Northern Great Plains | 1,237 | 21.6 | 55.0 | 418 | 387 | 1,103 | 160 | |
| Minnesota | 2 | 0.0 | 0.1 | 1 | 4 | 6 | 2 | K. Haws |
| Montana | 91 | 1.6 | 4.0 | 35 | 59 | 32 | 17 | K. Brennan, F. Prellwitz |
| Montana (Missouri River) ¹ | 2 | na | na | 1 | 3 | <1 | na | |
| North Dakota | 623 | 10.9 | 27.7 | 255 | 178 | 295 | 43 | K. Brennan |
| North Dakota (Missouri River) ¹ | 31 | na | na | 18 | 25 | 2 | na | |
| South Dakota | 151 | 2.6 | 6.7 | 21 | 45 | 113 | 16 | N. Gates |
| South Dakota (Missouri River) ¹ | 151 | na | na | 20 | 20 | 112 | na | |
| Nebraska | 350 | 6.1 | 15.6 | 97 | 86 | 632 | 44 | J. Jorgenson |
| Nebraska (Missouri River) | 2 | na | na | 1 | 1 | <1 | na | |
| Missouri River (MT, ND, SD, NE) ¹ | 186 | 3.3 | 8.3 | 40 | 49 | 114 | 36 | G. Pavelka, G. Borman |
| Iowa ² | na | na | na | na | 0 | 0 | 0 | D. Howell |
| Kansas ² | na | na | na | na | 0 | 0 | 0 | D. Mulhern |
| Colorado | 20 | 0.3 | 0.9 | 9 | 15 | 25 | 2 | D. Nelson, P. Plage |
| Great Lakes | 112 | 2.0 | na | 43 | 130 | 550 | 96 | |
| Canada (Ontario) | 14 | 0.2 | 12.5 | 6 | 58 | 207 | 50 | S. Mackenzie |
| United States | 98 | 1.7 | 87.5 | 37 | 72 | 343 | 46 | |
| Michigan | 90 | 1.6 | 80.4 | 33 | 56 | 283 | 32 | V. Cavalieri |
| Wisconsin | 8 | 0.1 | 7.1 | 4 | 8 | 35 | 8 | V. Cavalieri |
| MN/IL/IN/OH/PA/NY | 0 | 0.0 | 0.0 | 0 | 8 | 25 | 6 | V. Cavalieri, K. Haws |
| Atlantic | 3,362 | 40.8 | na | 1,576 | 859 | 1,947 | 319 | |
| St. Pierre and Miquelon (France) | 4 | 0.1 | 0.1 | 1 | 4 | 19 | 4 | R. Etcheberry |
| Atlantic Canada | 406 | 7.1 | 12.1 | 165 | 387 | 1,093 | 158 | |
| Newfoundland | 51 | 0.9 | 1.5 | 22 | 100 | 126 | 29 | K. Baker |
| Quebec | 66 | 1.2 | 2.0 | 22 | 17 | 131 | 31 | F. Shaffer |
| Prince Edward Island | 67 | 1.2 | 2.0 | 28 | 82 | 189 | 18 | J. Rock |
| New Brunswick | 130 | 2.3 | 3.9 | 54 | 61 | 263 | 41 | J. Rock |
| Nova Scotia | 92 | 1.6 | 2.7 | 39 | 127 | 384 | 39 | S. Abbott, K. Potter |

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Table 2. Census effort and coverage for the 2011 International Piping Plover Breeding Census.—Continued

[Sites surveyed, Kilometers surveyed, and Participants: Numbers reported serve as minimum estimates. Not all censusers included this information. na, not applicable; nr, information was not reported]

| State/Province | Adults | Census (percent) | Region (percent) | Breeding pairs | Sites surveyed | Linear kilometers surveyed | Participants | Coordinator |
|-----------------------------|--------|------------------|------------------|----------------|----------------|----------------------------|--------------|---------------------|
| U.S. Atlantic ³ | 2,952 | 51.6 | 87.8 | 1,476 | nr | nr | nr | |
| Maine ³ | nr | na | na | 33 | nr | nr | nr | L. Zitske |
| New Hampshire ³ | nr | na | na | 4 | nr | nr | nr | B.Clifford |
| Massachusetts ³ | nr | na | na | 630 | nr | nr | nr | S. Melvin |
| Rhode Island ³ | nr | na | na | 86 | nr | nr | nr | E. King, C. Wiitala |
| Connecticut ³ | nr | na | na | 26 | nr | nr | nr | J. Victoria |
| New York ³ | nr | na | na | 318 | nr | nr | nr | F. Hamilton |
| New Jersey ³ | nr | na | na | 97 | nr | nr | nr | T. Pover |
| Delaware ³ | nr | na | na | 8 | nr | nr | nr | M. Bailey |
| Maryland ³ | nr | na | na | 36 | nr | nr | nr | T. Pearl |
| Virginia ³ | nr | na | na | 179 | nr | nr | nr | R. Boettcher |
| North Carolina ³ | nr | na | na | 59 | nr | nr | nr | S. Schweitzer |
| Totals | | | | | | | | |
| U.S. | 4,287 | 74.9 | na | 1,931 | 459 | 1,446 | 206 | |
| Canada | 1,432 | 25.0 | na | 459 | 830 | 4,050 | 388 | |
| France | 4 | 0.1 | na | 1 | 4 | 19 | 4 | |
| Grand total | 5,723 | na | na | 2,391 | 1,932 | 5,515 | 598 | |

¹Regional subtotals within a given State. Missouri River results by State are included in State results.

²Iowa and Kansas did not participate in the 2011 Census due to high water levels and lack of habitat. One nest and a few adults were observed in Iowa later in the season after water receded.

³The U.S. Atlantic did not participate in the 2011 Census. U.S. Atlantic breeding pair estimates were obtained from the 2011 Atlantic Window Census, which focuses on estimating breeding pairs. The total for U.S. Atlantic adults presented here was obtained by doubling the estimated number of pairs, and thus does not include any unpaired adults present at the time of the survey.

Overall winter numbers were similar to 2006, but our data from Louisiana is incomplete because of the Deepwater Horizon oil spill. This spill occurred in spring and summer of 2010, affecting the entire northern Gulf of Mexico coastline and in particular the Louisiana Mississippi River Delta (Mendelssohn and others, 2012). Through the Natural Resource Damage Assessment (NRDA) process, some Piping Plover habitat was closed to the public but subject to special studies to determine oil spill impacts. Data collected as part of the NRDA process include counts of Piping Plovers, but these data have not yet been released. At some time, we should be able to fill in the data gaps, which could add 200 or more Piping Plovers to the winter count (based on prior census results). Coverage was fairly comprehensive elsewhere in the United States. Although the survey effort in the Bahamas represents an increase over previous efforts, some habitat remains to be surveyed. Other gaps in coverage include parts of Mexico, Cuba, and elsewhere in the northern Caribbean.

The 2011 breeding census count was substantially lower than the last census in 2006 when the overall count was 8,092 (5,723 in 2011) with more than 4,500 birds seen in the northern Great Plains and Prairie region (2,249 in 2011;

Elliott-Smith and others, 2009). This apparent decrease could be real, or it could be an artifact of extreme flooding in the Prairie and Plains region during 2011, which rendered much traditional habitat unsuitable. Some birds were observed using non-traditional habitat, such as flooded agricultural fields and gravel roads adjacent to traditional sites. It remains unknown what proportion of plovers use such sites, or other areas, during extreme wet and dry years.

During the winter census, potential disturbance to birds included people (46 percent of sites), off-leash dogs (23 percent), fishing (14 percent), vehicles (14 percent) and other activities (9 percent). Habitat disturbance included vehicle ruts (14 percent), invasive species (10 percent), hardened shoreline (10 percent), dredged material (7 percent), oil (3 percent), geotubes (1 percent), and other habitat disturbances (9 percent). Many winter sites may be vulnerable to sea-level rise, given that 71 percent of sites were rated “flat or gently sloping” and 29 percent have habitat only at low or mid tides.

During the breeding census, we collected disturbance data pertaining only to habitat. This included vehicle ruts (12 percent of sites), cattle tramping (7 percent), housing

development (5 percent), invasive species (2 percent), industry (2 percent), and dredged material (1 percent). Most disturbances fell into the “other” category (19 percent), with comments suggesting impacts from human recreation, dogs, ATVs, garbage, encroaching vegetation, erosion, etc., all of which were exacerbated in some instances by flood conditions.

Summary

This report presents the results of 2011 International Piping Plover Census. The winter census, conducted from January 24 to February 6, detected 3,973 Piping Plovers. The breeding census, conducted from June 4 to 17, detected 5,723 Piping Plovers including those counted during the U.S. Atlantic “window census.”

Acknowledgments

Appreciation is extended to all those who supported the census. The U.S. Army Corps of Engineers, U.S. Geological Survey, Forest and Rangeland Ecosystem Science Center, Environment Canada, and the U.S. Fish and Wildlife Service provided financial support. Multiple partners provided support for coordination and implementation of on-the-ground surveys in individual States and Provinces and in particular we would like to thank the Canadian Wildlife Service for assistance in Canada and on the winter grounds. The International Piping Plover Coordination Group was instrumental in the planning and implementation of the census. The coordination group assisted in recruitment and assignment of State and Provincial coordinators and helped ensure that completed data sheets were submitted. Additionally, the census would not have been possible without on-the-ground coordination of State, Provincial, regional, and island coordinators. These included Federal, State, and non-governmental personnel who recruited surveyors, distributed census materials, and collated data. Thousands of people actually conducted the surveys. The volume of data that went into this report was extraordinary and several students assisted with entering data and developing tabular summaries, including Megan McClelland, Karla Garcia, and Reilly Newman.

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Appendix 1

State/Provincial Summaries

Following are detailed accounts of the 2011 International Piping Plover Census for each state, province, island or island group. Accounts include a narrative prepared by the state, provincial, island, regional, or census coordinator assessing the success of the census in their area. At the bottom of each narrative is a small table with Piping Plover numbers for each census year. Each narrative is followed by a map of sites surveyed and a detailed table which includes information on each and every site surveyed during the census. Winter Census results are presented first, followed by results from each population censused on the breeding grounds. Furthermore, presentation of results generally starts with the northeast most state/province and ends in the southwest.

We conducted a detectability study during the 2011 Breeding Census and this information is also included in the state/provincial accounts. For provinces and states that participated in the detectability study there is a table at the end of the narrative with the name of each site included in the detectability study and a tally of how many birds were counted during the first and second surveys. It should be noted that for states/provinces that participated in the detectability study, the “high count” for each site is included in the detailed site tables following each map.

Key to 2011 Database Variables

Results tabulated in this report represent data collected during the 2011 census. Listed below are explanations for the variables presented.

Universal Variables:

Map # – Reference for associated map

Km – Kilometers surveyed

Site Description – Habitat description where surveying occurred (see “Other Variables”)

Disturbance Concerns – Description of potential disturbance concerns where birds were observed (see “other Variables”). We note “none” for no disturbance; if questions were skipped we note “n.r.” (none reported).

Prior Years Censused & Years Seen – If previously surveyed, years surveyed are noted. Bold and underlined years indicate plovers were seen at the site during that Census year. Years with no emphasis indicate that no plovers were observed at that site during that Census year.

Owner – Site ownership (see “Site Ownership Variables”). If left blank we note “n.r.” (none reported).

PIPL – Piping Plover

SNPL – Snowy Plover

WIPL – Wilson’s Plover

Other Variables:

| Winter Habitat Variables | |
|--------------------------|-------------------------------------|
| Water Body: | |
| I | Ocean |
| II. | Protected Bay, Harbor, Cove, Lagoon |
| III. | Gulf of Mexico |
| IV. | Ocean Inlet |
| V. | Other |
| Shoreline: | |
| A. | Mainland |
| B. | Barrier Island |
| C. | Spoil Island |
| D. | Bar |
| E. | Other Island |
| F. | Washover Area |
| G. | Other |

| Breeding Habitat Variables | |
|---------------------------------------|--|
| Water Body: | |
| I | Ocean |
| II. | Protected Bay, Harbor, Cove, Lagoon, Sound |
| III. | River |
| IV. | Alkali Lake/Pond |
| V. | Natural Freshwater Lake |
| VI. | Reservoir |
| VII. | Industrial Pond |
| VIII. | Sandpit |
| IX. | Other |
| Shoreline: | |
| A. | Mainland (of coast, lake, river) |
| B. | Barrier Beach |
| C. | Barrier Island |
| D. | Protected Shore |
| E. | Natural Bar/Island |
| F. | Man Made Bar/Island |
| G. | Dry Lakebed |
| H. | Agricultural Field |
| I. | Other |
| Disturbance /Concern Variables | |
| A. | Agricultural Activities (incl. cattle trampling, etc.) |
| D. | Dogs |
| G. | Flat or Gently Sloping |
| H. | Human activity |
| I. | Invasive Species |
| L. | Habitat Only at Low/Mid Tides |
| N. | Industry |
| V. | Vehicles/Vehicle Ruts |
| W. | High Water/Flooding |
| P. | Pollutants/Oil |
| S. | Shoreline Stabilization/Dredging/Geotubes |
| B. | Airboats |
| F. | Fishing |
| U. | Urbanization/Housing and Development |
| O. | Other |
| Ownership: | |
| f. | Federal |
| s(p). | State/Provincial |
| m. | Municipal |
| p. | Private |
| c. | County |
| unk. | Unknown |

The 2011 International Piping Plover Winter Census in Virginia

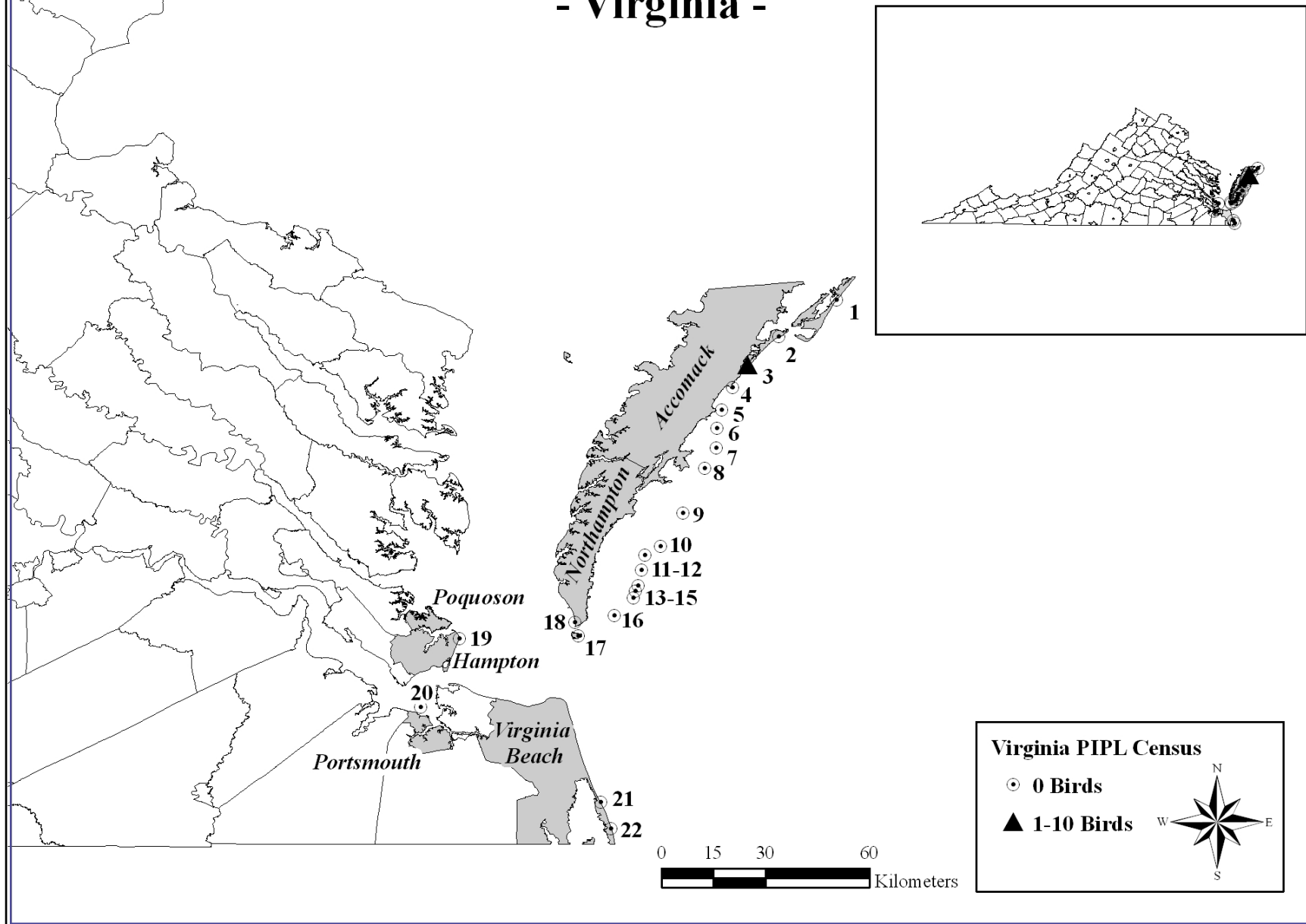
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The 2011 Census was only the second time Virginia participated in the International Winter Census because the state is not generally considered to be part of the species' winter range. During the 2011 Census, 20 observers surveyed a total of 22 sites, all of which encompass the same locations covered during annual breeding surveys. As during the 2006 Census, this year's effort yielded only one Piping Plover, once again confirming that Virginia beaches are not used extensively by Piping Plovers in the winter. Similar to the 2006 Census, the single observation occurred on one of Virginia's northern barrier islands; however, not as far north as the 2006 sighting.

Comparison of Census Numbers

| Species | 1991 | 1996 | 2001 | 2006 | 2011 |
|-----------------|------|------|------|------|------|
| Piping Plover | - | - | - | 1 | 1 |
| Snowy Plover | - | - | - | n.a. | n.a. |
| Wilson's Plover | - | - | - | 0 | 0 |

2011 International Piping Plover Winter Census - Virginia -

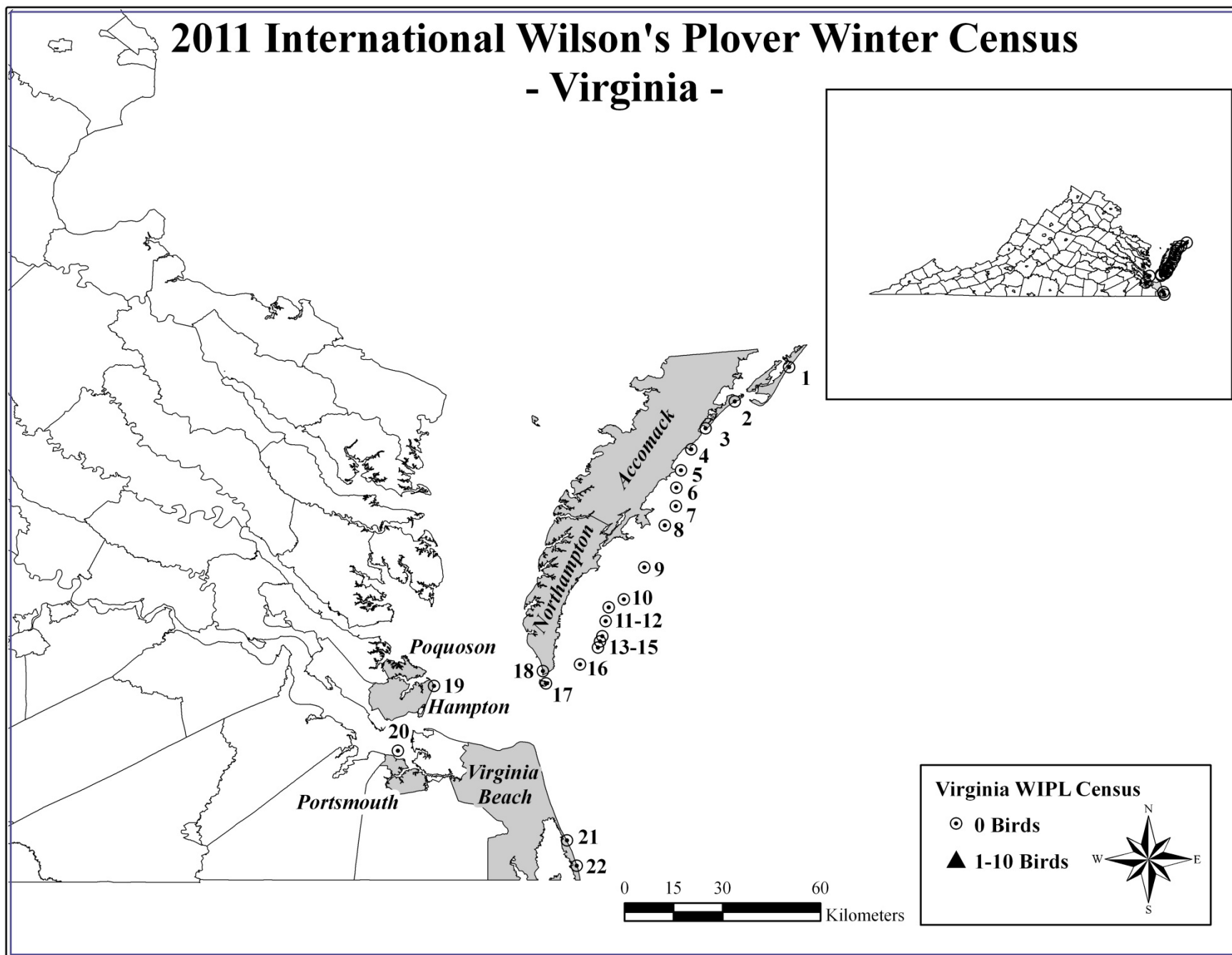


The 2011 International Piping Plover Winter Census in Virginia

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-------------------|--|------|---------|-----------------|--------------|---------------------|---------------------------|---|---|---|------------------|------------|
| | | | | | | | | | | | | |
| Accomack | Assateague Island, Chincoteague NWR portion | 1 | 1/27/11 | 0 | 26.9 | I II B F | H V F G | - | - | - | <u>06</u> | f |
| Accomack | Assawoman Island | 3 | 1/25/11 | 1 | 3.7 | I B F | H F G | - | - | - | 06 | f |
| Accomack | Dawson Shoals | 7 | 2/4/11 | 0 | 0.8 | I G F | G | - | - | - | 06 | p |
| Accomack | Metompkin Island | 4 | 2/6/11 | 0 | 11.0 | I II IV B F | G | - | - | - | 06 | f, p |
| Accomack | North Cedar Island (Cedar Sandbar) | 5 | 1/29/11 | 0 | 3.4 | I II B F | G | - | - | - | 06 | s(p) |
| Accomack | Parramore Island | 8 | 2/4/11 | 0 | 15.0 | I II IV B F | none | - | - | - | 06 | p |
| Accomack | South Cedar Island | 6 | 2/4/11 | 0 | 10.5 | I II IV B F | H G | - | - | - | 06 | f, p |
| Accomack | Wallops Island | 2 | 1/25/11 | 0 | 5.8 | I IV B | G | - | - | - | 06 | f |
| Hampton | Grandview Beach | 19 | 1/31/11 | 0 | 4.2 | I II A | S G | - | - | - | 06 | m |
| Northampton | Cobb Island | 10 | 1/25/11 | 0 | 6.0 | I II IV B F | G | - | - | - | 06 | p |
| Northampton | Fisherman Island | 17 | 1/28/11 | 0 | 9.2 | I II IV B F | G | - | - | - | 06 | f |
| Northampton | Hog Island | 9 | 2/4/11 | 0 | 14.6 | I II IV B F | none | - | - | - | 06 | p |
| Northampton | Little Cobb Island | 11 | 1/25/11 | 0 | 1.3 | I II IV B F | none | - | - | - | 06 | p |
| Northampton | Myrtle Island | 15 | 1/30/11 | 0 | 4.0 | I II IV B F | G | - | - | - | 06 | p |
| Northampton | Ship Shoal Island | 13 | 1/30/11 | 0 | 4.9 | I II IV B F | G | - | - | - | 06 | p |
| Northampton | Shmyrtle Shoal | 14 | 1/30/11 | 0 | 0.5 | IV E F | G L | - | - | - | - | s(p) |
| Northampton | Smith Island | 16 | 2/4/11 | 0 | 12.5 | I II IV B D F | none | - | - | - | 06 | p |
| Northampton | Wise Point Beach (S tip of Delmarva Peninsula) | 18 | 1/28/11 | 0 | 2.9 | II IV A | S | - | - | - | - | f, s(p), p |
| Northampton | Wreck Island | 12 | 1/25/11 | 0 | 6.0 | I II IV B F | none | - | - | - | 06 | s(p) |
| Portsmouth | Craney Island | 20 | 1/27/11 | 0 | 18.5 | I II A C | H V S I | - | - | - | 06 | f |
| Virginia Beach | Back Bay NWR | 21 | 2/4/11 | 0 | 6.4 | I A | H V | - | - | - | 06 | f |
| Virginia Beach | False Cape State Park | 22 | 2/4/11 | 0 | 9.7 | I A | H V G | - | - | - | 06 | s(p) |
| Total | | | | 1 | 177.7 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Piping Plovers were seen at the site during that Census year.

2011 International Wilson's Plover Winter Census - Virginia -



The 2011 International Wilson's Plover Winter Census in Virginia

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|-------------------|--|------|---------|-----------------|--------------|---------------------|---------------------------|---|---|---|----|------------|
| | | | | | | | | | | | | |
| Accomack | Assateague Island, Chincoteague NWR portion | 1 | 1/27/11 | 0 | 26.9 | I II B F | H V F G | - | - | - | 06 | f |
| Accomack | Assawoman Island | 3 | 1/25/11 | 0 | 3.7 | I B F | H F G | - | - | - | 06 | f |
| Accomack | Dawson Shoals | 7 | 2/4/11 | 0 | 0.8 | I G F | G | - | - | - | 06 | p |
| Accomack | Metompkin Island | 4 | 2/6/11 | 0 | 11.0 | I II IV B F | G | - | - | - | 06 | f, p |
| Accomack | North Cedar Island (Cedar Sandbar) | 5 | 1/29/11 | 0 | 3.4 | I II B F | G | - | - | - | 06 | s(p) |
| Accomack | Parramore Island | 8 | 2/4/11 | 0 | 15.0 | I II IV B F | none | - | - | - | 06 | p |
| Accomack | South Cedar Island | 6 | 2/4/11 | 0 | 10.5 | I II IV B F | H G | - | - | - | 06 | f, p |
| Accomack | Wallops Island | 2 | 1/25/11 | 0 | 5.8 | I IV B | G | - | - | - | 06 | f |
| Hampton | Grandview Beach | 19 | 1/31/11 | 0 | 4.2 | I II A | S G | - | - | - | 06 | m |
| Northampton | Cobb Island | 10 | 1/25/11 | 0 | 6.0 | I II IV B F | G | - | - | - | 06 | p |
| Northampton | Fisherman Island | 17 | 1/28/11 | 0 | 9.2 | I II IV B F | G | - | - | - | 06 | f |
| Northampton | Hog Island | 9 | 2/4/11 | 0 | 14.6 | I II IV B F | none | - | - | - | 06 | p |
| Northampton | Little Cobb Island | 11 | 1/25/11 | 0 | 1.3 | I II IV B F | none | - | - | - | 06 | p |
| Northampton | Myrtle Island | 15 | 1/30/11 | 0 | 4.0 | I II IV B F | G | - | - | - | 06 | p |
| Northampton | Ship Shoal Island | 13 | 1/30/11 | 0 | 4.9 | I II IV B F | G | - | - | - | 06 | p |
| Northampton | Shmyrtle Shoal | 14 | 1/30/11 | 0 | 0.5 | IV E F | G L | - | - | - | - | s(p) |
| Northampton | Smith Island | 16 | 2/4/11 | 0 | 12.5 | I II IV B D F | none | - | - | - | 06 | p |
| Northampton | Wise Point Beach (S tip of Delmarva Peninsula) | 18 | 1/28/11 | 0 | 2.9 | II IV A | S | - | - | - | - | f, s(p), p |
| Northampton | Wreck Island | 12 | 1/25/11 | 0 | 6.0 | I II IV B F | none | - | - | - | 06 | s(p) |
| Portsmouth | Craney Island | 20 | 1/27/11 | 0 | 18.5 | I II A C | H V S I | - | - | - | 06 | f |
| Virginia Beach | Back Bay NWR | 21 | 2/4/11 | 0 | 6.4 | I A | H V | - | - | - | 06 | f |
| Virginia Beach | False Cape State Park | 22 | 2/4/11 | 0 | 9.7 | I A | H V G | - | - | - | 06 | s(p) |
| Total | | | | 0 | 177.7 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Wilson's Plovers were seen at the site during that Census year.

The 2011 International Piping Plover Winter Census in North Carolina

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The 2011 International Piping Plover Census in North Carolina was largely complete with most known sites and suitable habitats surveyed. Thirty people covered almost all suitable habitats and slightly more habitat than in 2006. This year's count of 43 birds is lower than the number of Piping Plovers counted in 1996, 2001, and 2006, but higher than the 1991 count. We censused a greater length of shoreline (over 400 km) this year and had more participants.

We had several days with high winds, rain, and snow during the census window; however, we censused all but two sites within the time frame. Winter storms and snow reduce the number of plovers in North Carolina and these weather events may have brought about the lower number of plovers in 2011. We tried to avoid counting during high winds and rain, but a couple of sites were surveyed during these conditions so it is possible that birds were not detected at these sites. Browns Island, a small barrier island just north of Onslow Beach, was not surveyed during the census window because the Marine Corps Base would not grant access to the restricted area.

Approximately 6 km along the east end of Cedar Island were not censused because they were inaccessible by foot and waterfowl hunters were hunting in the area. We consider the east end of Cedar Island suitable habitat although we do not have many records of Piping Plovers using it. Piping Plovers may use narrow sand and mud-flats behind barrier islands or other inaccessible areas within the sounds. Many kilometers of narrow, developed, ocean-facing beach were not surveyed because we rarely see Piping Plovers in these areas and do not consider them to be suitable habitat. Human activities and stronger wind and wave impacts in these areas likely render them unsuitable for Piping Plovers. We did not survey all natural and dredge-material islands near Ocracoke Inlet, including North Rock, Shell Castle, Beacon, and Casey Islands.

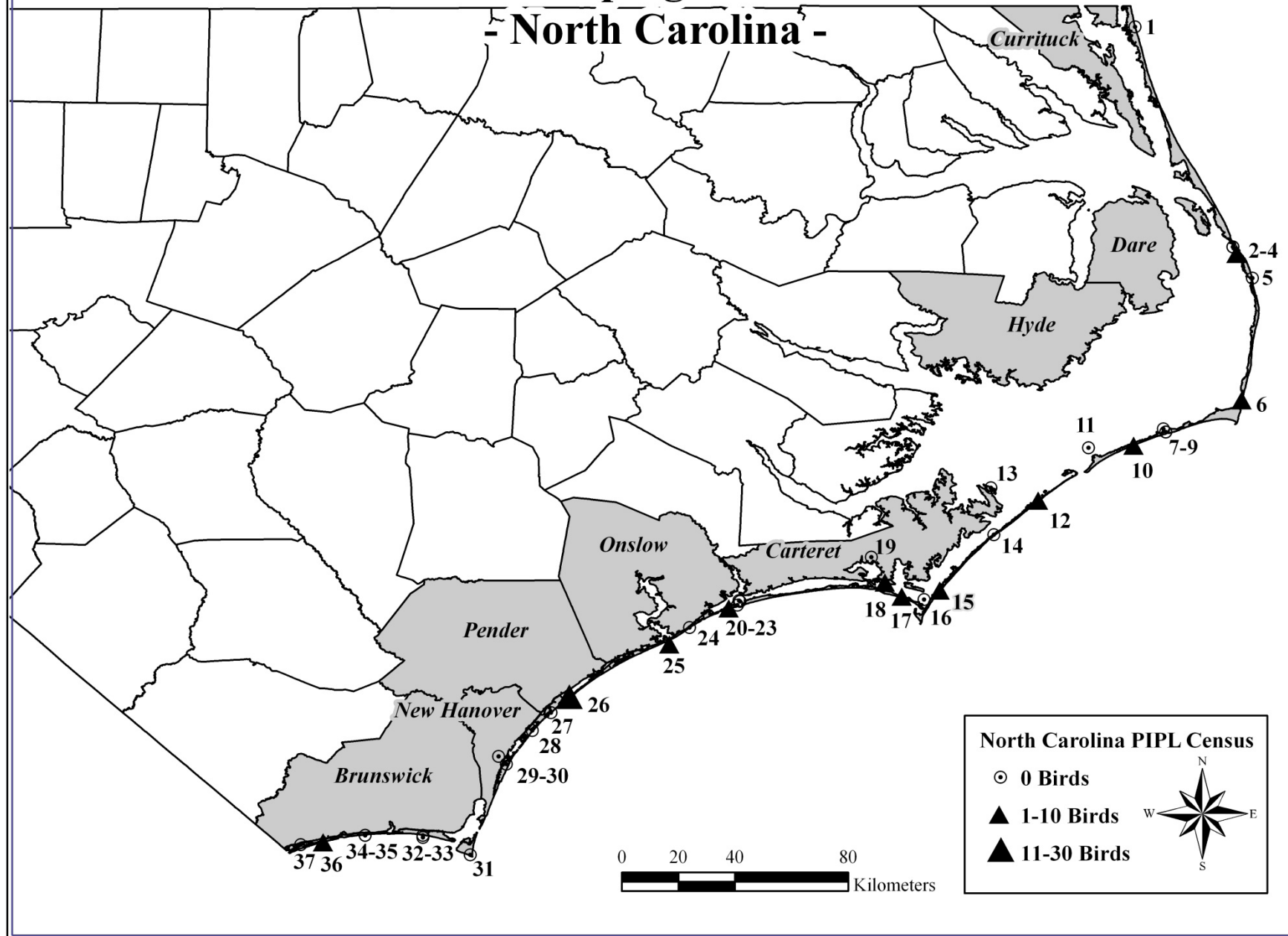
During the census for Piping Plovers, we also recorded all Wilson's and Snowy Plovers detected. Only two Wilson's Plovers were detected, and both of them were on the east end of Ocean Isle Beach. No Snowy Plovers were detected. The North Carolina coast is not a common wintering area for either of these plover species.

Comparison of Census Numbers

| Species | 1991 | 1996 | 2001 | 2006 | 2011 |
|-----------------|------|------|------|------|------|
| Piping Plover | 21 | 50 | 87 | 84 | 43 |
| Snowy Plover | - | - | - | n.a. | n.a. |
| Wilson's Plover | - | - | - | 1 | 2 |

2011 International Piping Plover Winter Census

- North Carolina -



The 2011 International Piping Plover Winter Census in North Carolina

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------------|--|------|---------|--------------|------|------------------|------------------------|---|-----------|-----------|-----------|---------|
| | | | | | | | | 91 | 96 | <u>01</u> | <u>06</u> | |
| Brunswick | Bald Head Island to S. End of Ft. Fisher | 31 | 2/3/11 | 0 | 27.3 | I II IV B | V S G | 91 | 96 | <u>01</u> | <u>06</u> | s(p), m |
| Brunswick | Fort Caswell; E end Oak Island | 32 | 2/3/11 | 0 | 3.5 | I IV B | H | 91 | 96 | <u>01</u> | <u>06</u> | m |
| Brunswick | Holden Beach; E end (Lockwood Folly's Inlet) | 34 | 2/3/11 | 0 | 4.0 | I IV B | H D V O G | 91 | 96 | 01 | 06 | m, p |
| Brunswick | Holden Beach; W end (Shallotte Inlet) | 35 | 2/3/11 | 0 | 4.8 | I IV B | H G | <u>91</u> | 96 | 01 | 06 | m, p |
| Brunswick | Long Beach; W end Oak Island | 33 | 2/3/11 | 0 | 3.2 | I IV B D | H D | 91 | 96 | 01 | 06 | m |
| Brunswick | Ocean Isle Beach East and West Ends | 36 | 2/3/11 | 1 | 8.8 | I IV B | H | 91 | 96 | 01 | <u>06</u> | s(p) |
| Brunswick | Sunset Beach and Bird Island | 37 | 2/6/11 | 0 | 6.4 | I IV B | H D G | 91 | <u>96</u> | 01 | 06 | s(p) |
| Carteret | Cape Lookout NS; Morgan Island & Sandbag Island | 16 | 2/1/11 | 0 | 4.0 | V C | none | 91 | 96 | 01 | 06 | f |
| Carteret | Cape Lookout NS - North Core Banks | 12 | 1/28/11 | 6 | 37.0 | I IV B | G | <u>91</u> | <u>96</u> | 01 | <u>06</u> | f |
| Carteret | Cape Lookout NS - Shackleford Banks | 17 | 1/24/11 | 7 | 14.5 | I II IV B | O | 91 | <u>96</u> | 01 | <u>06</u> | f |
| Carteret | Cape Lookout NS - South Core Banks | 15 | 1/24/11 | 2 | 37.0 | I II IV B | G | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Carteret | Cedar Island | 13 | 1/24/11 | 0 | 4.0 | V E | H V A G | 91 | 96 | 01 | 06 | f |
| Carteret | Dump Island and New Dump Island | 14 | 2/1/11 | 0 | 3.5 | V C | none | - | - | - | - | s(p) |
| Carteret | Ft. Macon SP | 19 | 1/24/11 | 0 | 1.6 | I IV B | G | 91 | <u>96</u> | 01 | 06 | s(p) |
| Carteret | Rachel Carson Estuarine Research Reserve (Bird Shoal) | 18 | 1/24/11 | 3 | 2.6 | IV C E | none | 91 | <u>96</u> | 01 | <u>06</u> | s(p) |
| Carteret/Onslow | Bogue Inlet Shoals | 20 | 2/3/11 | 0 | 2.0 | IV D G | G | 91 | 96 | 01 | 06 | s(p) |
| Currituck | Currituck National Wildlife Refuge | 1 | 1/24/11 | 0 | 17.7 | I G | H V G L | 91 | 96 | 01 | 06 | f |
| Dare | Cape Hatteras NS; Rodanthe to Buxton | 2 | 1/26/11 | 0 | 37.0 | I B | V G L | - | - | - | 06 | f |
| Dare | Cape Hatteras NS; Bodie Island | 3 | 1/27/11 | 0 | 9.1 | I IV V B F | H D V F G | <u>91</u> | 96 | 01 | 06 | f |
| Dare | Cape Hatteras NS; Cape Point to Hatteras Inlet | 7 | 1/27/11 | 0 | 27.4 | I IV V B | H V D G L | <u>91</u> | 96 | 01 | 06 | f |
| Dare | Clam Shoal | 6 | 1/27/11 | 3 | 8.0 | V G | H G L | - | <u>96</u> | 01 | <u>06</u> | s(p) |
| Dare | Oregon Inlet and multiple islands | 4 | 1/28/11 | 1 | 11.0 | V C | U | - | - | 01 | <u>06</u> | s(p) |
| Dare | Pea Island National Wildlife Refuge | 5 | 1/27/11 | 0 | 19.3 | IV V B | O G | 91 | 96 | <u>01</u> | <u>06</u> | f |
| Dare/Hyde | DOT Island, Ferry Channel Island, and Cora June Island | 8 | 1/27/11 | 0 | 13.0 | V C | none | 91 | 96 | 01 | 06 | s(p) |
| Hyde | Cape Hatteras NS; Ocracoke Island | 10 | 1/28/11 | 6 | 27.4 | I IV V B | H V G | 91 | 96 | 01 | 06 | f |
| Hyde | Ocracoke Inlet; Big Foot Island | 11 | 1/27/11 | 0 | 3.2 | VC | G | - | - | - | - | s(p) |
| New Hanover | Carolina Beach State Park | 30 | 2/6/11 | 0 | 8.0 | I IV B | H D V F | 91 | 96 | 01 | 06 | s(p) |
| New Hanover | Figure Eight Island and Wrightsville Beach | 28 | 2/3/11 | 0 | 4.8 | I II IV B | G | - | <u>96</u> | 01 | 06 | m, p |
| New Hanover | Masonboro Inlet ⁴ | 29 | 2/9/11 | 0 | 11.8 | I II IV B D | H G | 91 | 96 | 01 | <u>06</u> | s(p) |
| Onslow | Bogue Inlet Islands, Dudley Island ⁴ | 21 | 2/23/11 | 0 | 1.6 | IV G | G | 91 | 96 | 01 | 06 | unk |

The 2011 International Piping Plover Winter Census in North Carolina (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|--------|-----------------|--------------|---------------------|-------------------------|---|----|------------------|------------------|---------|
| | | | | | | | | | | | | |
| Onslow | East Bear Island | 23 | 2/3/11 | 2 | 3.2 | I IV B | G | 91 | 96 | 01 | 06 | s(p) |
| Onslow | N Topsail Beach; New River Inlet | 25 | 2/6/11 | 1 | 0.8 | IV B F | H V S G | 91 | 96 | 01 | 06 | m |
| Onslow | Onslow Beach, Camp Lejeune (U.S. Marine Corps Base) | 24 | 2/4/11 | 0 | 12.9 | I IV B F | V G | - | - | 01 | 06 | f |
| Onslow | West Bear Island | 22 | 2/4/11 | 0 | 7.2 | I IV B | G | 91 | 96 | 01 | 06 | s(p) |
| Pender | Hutaff Island and Rich Inlet Shoals ⁴ | 27 | 2/7/11 | 0 | 6.6 | I IV B D | H G | 91 ² | 96 | <u>01</u> | <u>06</u> | s(p), p |
| Pender | Lea Island; S Topsail Beach and Inlet | 26 | 2/3/11 | 11 | 11.1 | I IV B D | V S G | 91 ³ | 96 | <u>01</u> | <u>06</u> | m, p |
| Total | | | | 43 | 405.3 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Piping Plovers were seen at the site during that Census year.

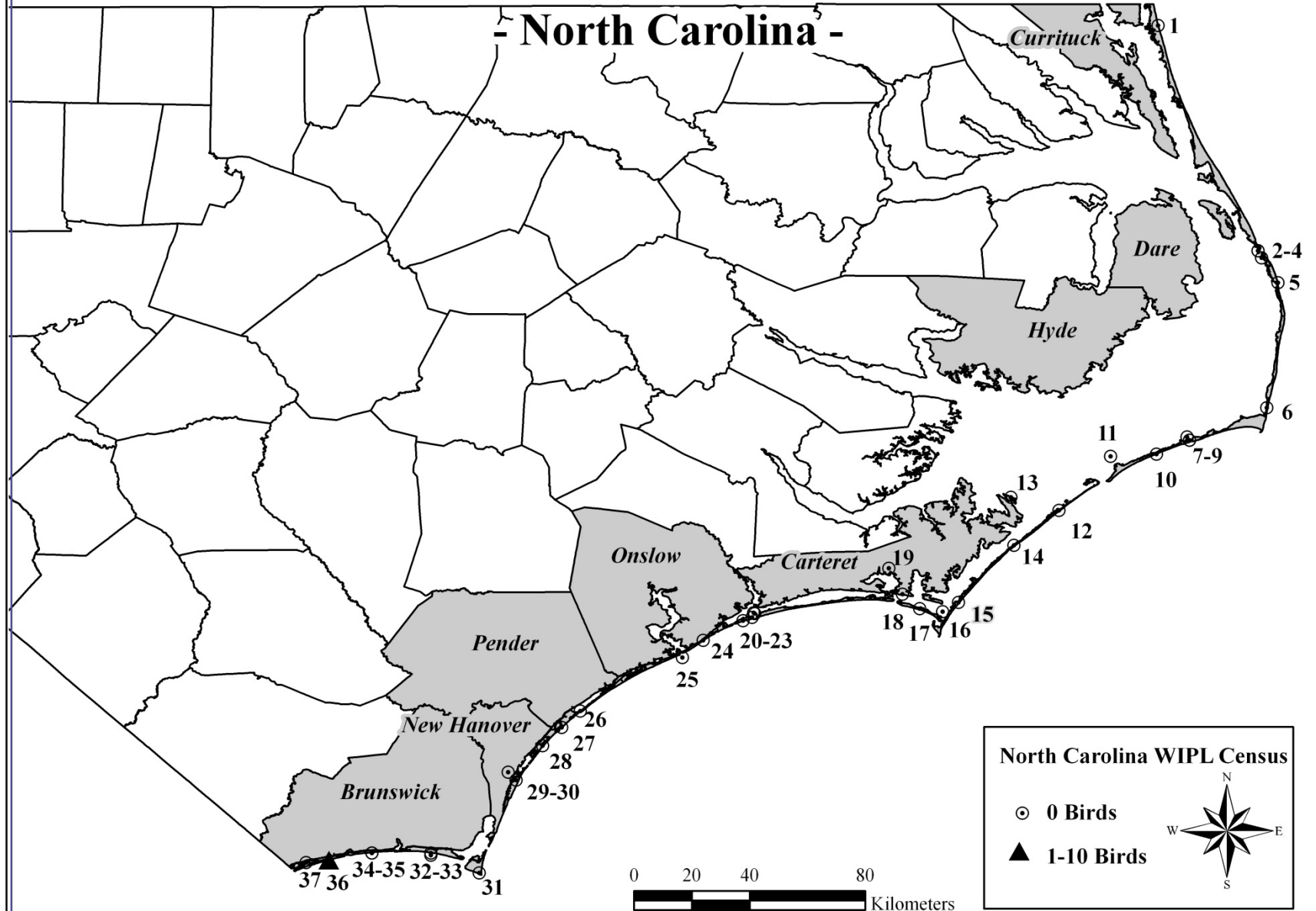
² Only a portion of this site was surveyed in 1991 but this included Figure Eight Island and PIPL were seen there in 1991.

³ S Topsail Beach was covered in 1991 and this was where PIPL were seen in 2011.

⁴ Please note that this survey was conducted outside the Census window.

2011 International Wilson's Plover Winter Census

- North Carolina -



The 2011 International Wilson's Plover Winter Census in North Carolina

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|-----------------|--|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|-----------|---------|
| Brunswick | Bald Head Island to S. End of Ft. Fisher | 31 | 2/3/11 | 0 | 27.3 | I II IV B | V S G | - | - | - | 06 | s(p), m |
| Brunswick | Fort Caswell; E end Oak Island | 32 | 2/3/11 | 0 | 3.5 | I IV B | H | - | - | - | 06 | m |
| Brunswick | Holden Beach; E end (Lockwood Folly's Inlet) | 34 | 2/3/11 | 0 | 4.0 | I IV B | H D V O G | - | - | - | 06 | m, p |
| Brunswick | Holden Beach; W end (Shallotte Inlet) | 35 | 2/3/11 | 0 | 4.8 | I IV B | H G | - | - | - | 06 | m, p |
| Brunswick | Long Beach; W end Oak Island | 33 | 2/3/11 | 0 | 3.2 | I IV B D | H D | - | - | - | 06 | m |
| Brunswick | Ocean Isle Beach East and West Ends | 36 | 2/3/11 | 2 | 8.8 | I IV B | H | - | - | - | 06 | s(p) |
| Brunswick | Sunset Beach and Bird Island | 37 | 2/6/11 | 0 | 6.4 | I IV B | H D G | - | - | - | 06 | s(p) |
| Carteret | Cape Lookout NS; Morgan Island & Sandbag Island | 16 | 2/1/11 | 0 | 4.0 | V C | none | - | - | - | 06 | f |
| Carteret | Cape Lookout NS - North Core Banks | 12 | 1/28/11 | 0 | 37.0 | I IV B | G | - | - | - | 06 | f |
| Carteret | Cape Lookout NS - Shackleford Banks | 17 | 1/24/11 | 0 | 14.5 | I II IV B | O | - | - | - | 06 | f |
| Carteret | Cape Lookout NS - South Core Banks | 15 | 1/24/11 | 0 | 37.0 | I II IV B | G | - | - | - | 06 | f |
| Carteret | Cedar Island | 13 | 1/24/11 | 0 | 4.0 | V E | H V A G | - | - | - | 06 | f |
| Carteret | Dump Island and New Dump Island | 14 | 2/1/11 | 0 | 3.5 | V C | none | - | - | - | - | s(p) |
| Carteret | Ft. Macon SP | 19 | 1/24/11 | 0 | 1.6 | I IV B | G | - | - | - | 06 | s(p) |
| Carteret | Rachel Carson Estuarine Research Reserve (Bird Shoal) | 18 | 1/24/11 | 0 | 2.6 | IV C E | none | - | - | - | <u>06</u> | s(p) |
| Carteret/Onslow | Bogue Inlet Shoals | 20 | 2/3/11 | 0 | 2.0 | IV D G | G | - | - | - | 06 | s(p) |
| Currituck | Currituck National Wildlife Refuge | 1 | 1/24/11 | 0 | 17.7 | I G | H V G L | - | - | - | 06 | f |
| Dare | Cape Hatteras NS; Rodanthe to Buxton | 2 | 1/26/11 | 0 | 37.0 | I B | V G L | - | - | - | 06 | f |
| Dare | Cape Hatteras NS; Bodie Island | 3 | 1/27/11 | 0 | 9.1 | I IV V B F | H D V F G | - | - | - | 06 | f |
| Dare | Cape Hatteras NS; Cape Point to Hatteras Inlet | 7 | 1/27/11 | 0 | 27.4 | I IV V B | H V D G L | - | - | - | 06 | f |
| Dare | Clam Shoal | 6 | 1/27/11 | 0 | 8.0 | V G | H G L | - | - | - | 06 | s(p) |
| Dare | Oregon Inlet and multiple islands | 4 | 1/28/11 | 0 | 11.0 | V C | U | - | - | - | 06 | s(p) |
| Dare | Pea Island National Wildlife Refuge | 5 | 1/27/11 | 0 | 19.3 | IV V B | O G | - | - | - | 06 | f |
| Dare/Hyde | DOT Island, Ferry Channel Island, and Cora June Island | 8 | 1/27/11 | 0 | 13.0 | V C | none | - | - | - | 06 | s(p) |
| Hyde | Cape Hatteras NS; Ocracoke Island | 10 | 1/28/11 | 0 | 27.4 | I IV V B | H V G | - | - | - | 06 | f |
| Hyde | Ocracoke Inlet; Big Foot Island | 11 | 1/27/11 | 0 | 3.2 | VC | G | - | - | - | - | s(p) |
| New Hanover | Carolina Beach State Park | 30 | 2/6/11 | 0 | 8.0 | I IV B | H D V F | - | - | - | 06 | s(p) |
| New Hanover | Figure Eight Island and Wrightsville Beach | 28 | 2/3/11 | 0 | 4.8 | I II IV B | G | - | - | - | 06 | m, p |
| New Hanover | Masonboro Inlet ² | 29 | 2/9/11 | 0 | 11.8 | I II IV B D | H G | - | - | - | 06 | s(p) |
| Onslow | Bogue Inlet Islands, Dudley Island ² | 21 | 2/23/11 | 0 | 1.6 | IV G | G | - | - | - | 06 | unk |

**The 2011 International Wilson's Plover Winter Census in North Carolina
(Continued)**

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|--------|-----------------|--------------|---------------------|---------------------------|---|---|---|----|---------|
| | | | | | | | | - | - | - | | |
| Onslow | East Bear Island | 23 | 2/3/11 | 0 | 3.2 | I IV B | G | - | - | - | 06 | s(p) |
| Onslow | N Topsail Beach; New River Inlet | 25 | 2/6/11 | 0 | 0.8 | IV B F | H V S G | - | - | - | 06 | m |
| Onslow | Onslow Beach, Camp Lejeune (U.S. Marine Corps Base) | 24 | 2/4/11 | 0 | 12.9 | I IV B F | V G | - | - | - | 06 | f |
| Onslow | West Bear Island | 22 | 2/4/11 | 0 | 7.2 | I IV B | G | - | - | - | 06 | s(p) |
| Pender | Hutaff Island and Rich Inlet Shoals ² | 27 | 2/7/11 | 0 | 6.6 | I IV B D | H G | - | - | - | 06 | s(p), p |
| Pender | Lea Island; S Topsail Beach and Inlet | 26 | 2/3/11 | 0 | 11.1 | I IV B D | V S G | - | - | - | 06 | m, p |
| Total | | | | 2 | 405.3 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Wilson's Plovers were seen at the site during that Census year.

² Please note that this survey was conducted outside the Census window.

The 2011 International Piping Plover Winter Census in South Carolina

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Thirty-six sites were surveyed during the 2011 International Census in South Carolina. We intended to survey all 42 sites surveyed during the 2006 Census, but the weather, boat-only access, and limited surveyors in the southern part of the state prevented complete coverage. Total shoreline surveyed was also down from 2006 (256.6 km in 2006 compared to 144.4 in 2011). Of the few sites missed in 2011, only one site had any Piping Plovers in 2006. Bay Point had one Piping Plover in 2006 and five Piping Plovers were seen there during an unofficial survey in very early March 2011. Little Capers Island also likely had plovers but was missed. Of the 37 sites surveyed during the 2011 Census, Piping Plovers were observed at 18.

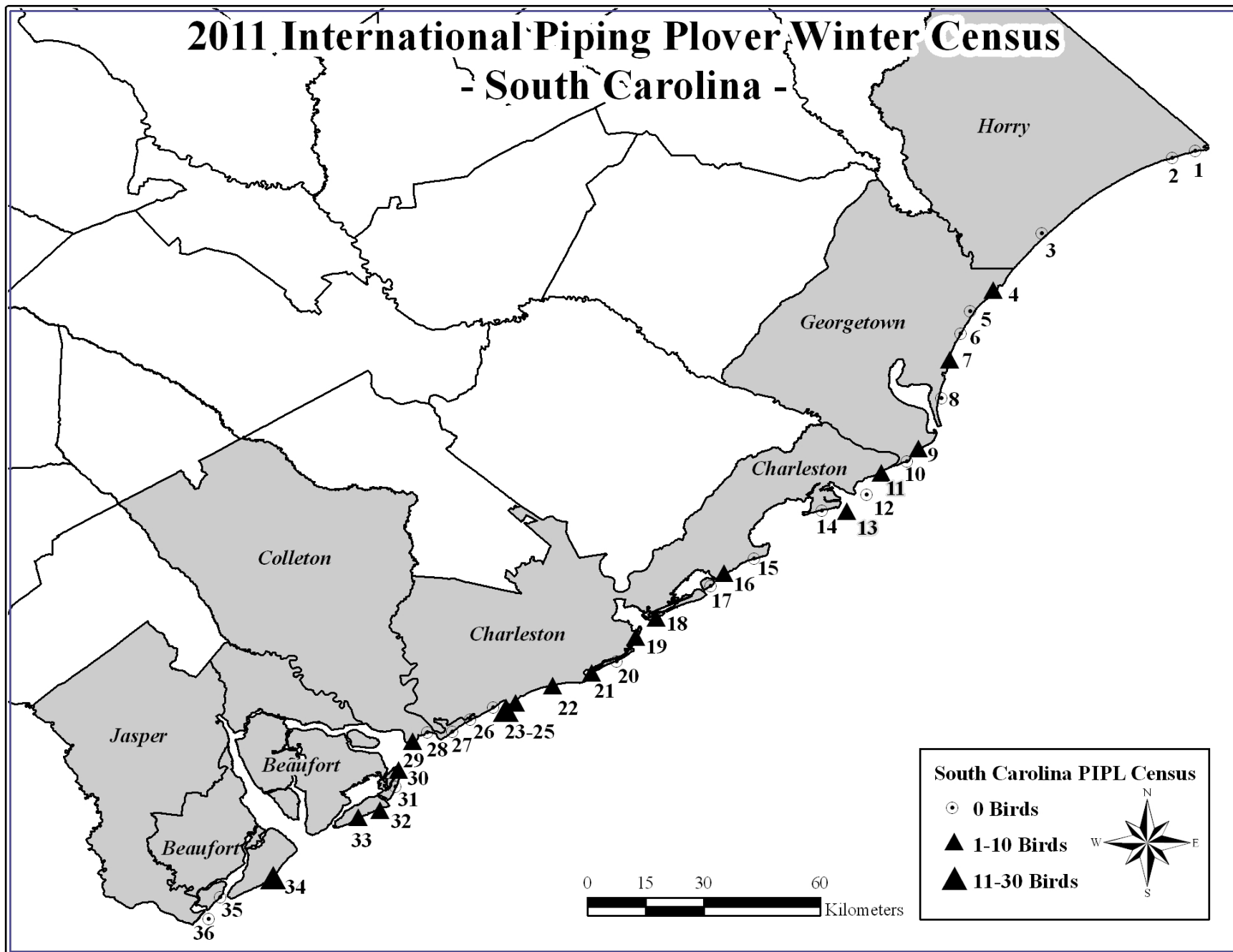
In total, 86 Piping Plovers were counted during the 2011 Census between 24 January and 6 February. The top 3 sites for Piping Plovers during the 2011 Census were Hilton Head Island (N=12), Deveaux Bank (N = 11), and Harbor Island (N = 10). Both the 2001 Census and the 1996 Census detected 78 birds, and the 2006 Census detected 100 birds. The 2011 Census count was likely low due to inclement weather which reduced coverage and likely impaired detectability. Several surveyors thought they detected fewer birds than would have been counted at their sites under more favorable conditions. Furthermore, intensive survey work completed in South Carolina (S. Maddock unpublished data) suggest that the International Piping Plover Winter Census results are likely an underestimate of our winter population.

Summarized by M. Bimbi

Comparison of Census Numbers

| Species | 1991 | 1996 | 2001 | 2006 | 2011 |
|-----------------|------|------|------|------|------|
| Piping Plover | 51 | 78 | 78 | 100 | 86 |
| Snowy Plover | n.a. | n.a. | n.a. | n.a. | 1 |
| Wilson's Plover | n.r. | n.r. | n.r. | 30 | 7 |

2011 International Piping Plover Winter Census - South Carolina -



The 2011 International Piping Plover Winter Census in South Carolina

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|------------|----------------------------------|------|---------|--------------|------|------------------|------------------------|---|-----------|-----------|-----------|---------|
| | | | | | | | | | | | | |
| Beaufort | Daufuskie Island | 35 | 1/26/11 | 0 | 1.6 | I IV E | G | - | - | 01 | 06 | p |
| Beaufort | Fripp Island | 32 | 1/24/11 | 4 | 1.6 | I II B | S G | 91 | <u>96</u> | 01 | <u>06</u> | p |
| Beaufort | Harbor Island | 30 | 1/24/11 | 10 | 1.6 | I E | G | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Beaufort | Hilton Head Island | 34 | 2/3/11 | 12 | 4.8 | I B | S G | <u>91</u> | <u>96</u> | 01 | 06 | p |
| Beaufort | Hunting Island | 31 | 1/24/11 | 0 | 1.6 | I IV E | S G | - | 96 | <u>01</u> | 06 | s(p) |
| Beaufort | Pritchards Island | 33 | 1/29/11 | 3 | 0.4 | I IV B | G | 91 | <u>96</u> | - | 06 | s(p) |
| Charleston | Bird Key Stono | 21 | 1/24/11 | 4 | 0.8 | IV B | G L | 91 | - | <u>01</u> | <u>06</u> | s(p) |
| Charleston | Botany Bay Island and Plantation | 25 | 1/27/11 | 0 | 6.0 | I IV A | G | 91 | 96 | - | 06 | s(p), p |
| Charleston | Bull Island (Cape Romain NWR) | 15 | 1/28/11 | 0 | 0.5 | I B | G | 91 | <u>96</u> | 01 | 06 | f |
| Charleston | Cape Island | 12 | 1/27/11 | 0 | 2.0 | I IV B | n.r. | <u>91</u> | <u>96</u> | 01 | <u>06</u> | f |
| Charleston | Capers Island | 16 | 1/28/11 | 1 | 3.0 | IV B | G | 91 | 96 | 01 | 06 | s(p) |
| Charleston | Deveaux Bank | 24 | 2/3/11 | 11 | 4.8 | I II IV D E | G | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Charleston | Deweese Island | 17 | 1/28/11 | 0 | 4.3 | I IV B | G | - | - | <u>01</u> | <u>06</u> | p |
| Charleston | Edingsville | 26 | 1/30/11 | 0 | 1.0 | I A | H G | 91 | 96 | - | 06 | p |
| Charleston | Edisto Beach State Park | 27 | 2/3/11 | 0 | 3.2 | I IV B | H S G | - | 96 | - | 06 | s(p), p |
| Charleston | Folly Beach | 20 | 1/30/11 | 0 | 4.0 | I IV B | H D S G L | - | - | - | <u>06</u> | p, c |
| Charleston | Kiawah Island | 22 | 1/24/11 | 8 | 17.7 | I II IV B | G | - | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Charleston | Lighthouse Island | 13 | 1/27/11 | 7 | 4.0 | I IV B | n.r. | 91 | - | - | <u>06</u> | f |
| Charleston | Morris Island | 19 | 1/30/11 | 2 | 1.6 | I IV D E | H D G L | - | - | - | 06 | m, p |
| Charleston | Murphy Island | 11 | 2/1/11 | 5 | 0.8 | I B D | G | - | - | 01 | <u>06</u> | s(p) |
| Charleston | Raccoon Key ² | 14 | 1/23/11 | 0 | 7.0 | I IV B | G | 91 | - | <u>01</u> | 06 | f |
| Charleston | Seabrook Island | 23 | 1/24/11 | 1 | 5.6 | I IV B | H D S G L | - | - | <u>01</u> | 06 | p |
| Charleston | Sullivan's Island | 18 | 2/4/11 | 2 | 9.0 | I IV B | H D G | 91 | 96 | - | <u>06</u> | p |
| Colleton | Otter Island | 29 | 1/24/11 | 4 | 6.4 | I E | G | - | 96 | <u>01</u> | - | s(p) |
| Colleton | Pine Island | 28 | 1/24/11 | 0 | 3.2 | I E | G | - | - | 01 | - | s(p) |
| Georgetown | Cedar Island | 10 | 1/27/11 | 0 | 3.1 | I B | none | - | - | - | <u>06</u> | s(p) |
| Georgetown | Debidue Beach ² | 7 | 2/9/11 | 6 | 6.3 | IV B | G | - | - | 01 | 06 | p |
| Georgetown | Huntington Beach | 4 | 2/6/11 | 1 | 4.8 | I IV B D | H D G | - | - | <u>01</u> | <u>06</u> | s(p) |
| Georgetown | Litchfield Beach | 5 | 1/24/11 | 0 | 6.3 | I B | G | 91 | - | 01 | 06 | m, p |
| Georgetown | North Island | 8 | 1/25/11 | 2 | 0.1 | I B | G | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Georgetown | Pawleys Island | 6 | 1/24/11 | 0 | 6.0 | I IV B | G | - | - | 01 | 06 | m, p |
| Georgetown | South Island, Sand Island | 9 | 2/6/11 | 3 | 9.8 | I B | G | 91 | 96 | 01 | 06 | s(p) |

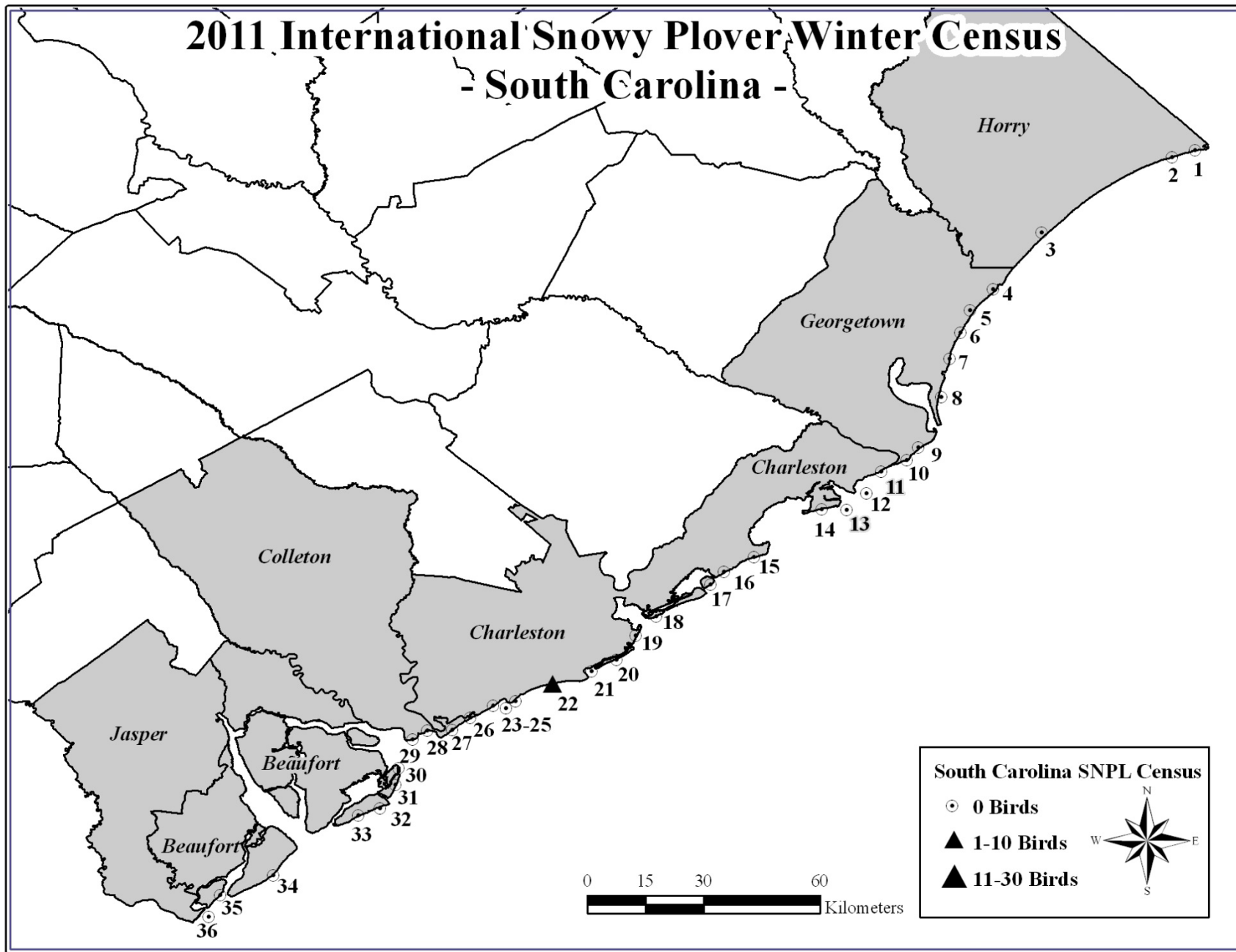
The 2011 International Piping Plover Winter Census in South Carolina (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|----------------------------|------|---------|-----------------|--------------|---------------------|---------------------------|---|---|---|------------------|-------|
| | | | | | | | | | | | | |
| Horry | Cherry Grove ² | 2 | 2/10/11 | 0 | 4.0 | I A B | H D G | - | - | - | 06 | m, p |
| Horry | Myrtle Beach State Park | 3 | 2/6/11 | 0 | 1.6 | I B | G | - | - | - | 06 | s(p) |
| Horry | Waites Island ² | 1 | 2/10/11 | 0 | 4.0 | I B | G | - | - | - | <u>06</u> | p |
| Jasper | Tomkins Island | 36 | 1/28/11 | 0 | 1.6 | IV C | H | - | - | - | 06 | f |
| Total | | | | 86 | 144.4 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Piping Plovers were seen at the site during that Census year.

² Please note that this survey was conducted outside the Census window.

2011 International Snowy Plover Winter Census - South Carolina -



The 2011 International Snowy Plover Winter Census in South Carolina

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|------------|----------------------------------|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|---|---------|
| | | | | | | | | | | | | |
| Beaufort | Daufuskie Island | 35 | 1/26/11 | 0 | 1.6 | I IV E | G | - | - | - | - | p |
| Beaufort | Fripp Island | 32 | 1/24/11 | 0 | 1.6 | I II B | S G | - | - | - | - | p |
| Beaufort | Harbor Island | 30 | 1/24/11 | 0 | 1.6 | I E | G | - | - | - | - | p |
| Beaufort | Hilton Head Island | 34 | 2/3/11 | 0 | 4.8 | I B | S G | - | - | - | - | p |
| Beaufort | Hunting Island | 31 | 1/24/11 | 0 | 1.6 | I IV E | S G | - | - | - | - | s(p) |
| Beaufort | Pritchards Island | 33 | 1/29/11 | 0 | 0.4 | I IV B | G | - | - | - | - | s(p) |
| Charleston | Bird Key Stono | 21 | 1/24/11 | 0 | 0.8 | IV B | G L | - | - | - | - | s(p) |
| Charleston | Botany Bay Island and Plantation | 25 | 1/27/11 | 0 | 6.0 | I IV A | G | - | - | - | - | s(p), p |
| Charleston | Bull Island (Cape Romain NWR) | 15 | 1/28/11 | 0 | 0.5 | I B | G | - | - | - | - | f |
| Charleston | Cape Island | 12 | 1/27/11 | 0 | 2.0 | I IV B | n.r. | - | - | - | - | f |
| Charleston | Capers Island | 16 | 1/28/11 | 0 | 3.0 | IV B | G | - | - | - | - | s(p) |
| Charleston | Deveaux Bank | 24 | 2/3/11 | 0 | 4.8 | I II IV D E | G | - | - | - | - | s(p) |
| Charleston | Deweese Island | 17 | 1/28/11 | 0 | 4.3 | I IV B | G | - | - | - | - | p |
| Charleston | Edingsville | 26 | 1/30/11 | 0 | 1.0 | I A | H G | - | - | - | - | p |
| Charleston | Edisto Beach State Park | 27 | 2/3/11 | 0 | 3.2 | I IV B | H S G | - | - | - | - | s(p), p |
| Charleston | Folly Beach | 20 | 1/30/11 | 0 | 4.0 | I IV B | H D S G L | - | - | - | - | p, c |
| Charleston | Kiawah Island | 22 | 1/24/11 | 1 | 17.7 | I II IV B | G | - | - | - | - | p |
| Charleston | Lighthouse Island | 13 | 1/27/11 | 0 | 4.0 | I IV B | n.r. | - | - | - | - | f |
| Charleston | Morris Island | 19 | 1/30/11 | 0 | 1.6 | I IV D E | H D G L | - | - | - | - | m, p |
| Charleston | Murphy Island | 11 | 2/1/11 | 0 | 0.8 | I B D | G | - | - | - | - | s(p) |
| Charleston | Raccoon Key ² | 14 | 1/23/11 | 0 | 7.0 | I IV B | G | - | - | - | - | f |
| Charleston | Seabrook Island | 23 | 1/24/11 | 0 | 5.6 | I IV B | H D S G L | - | - | - | - | p |
| Charleston | Sullivan's Island | 18 | 2/4/11 | 0 | 9.0 | I IV B | H D G | - | - | - | - | p |
| Colleton | Otter Island | 29 | 1/24/11 | 0 | 6.4 | I E | G | - | - | - | - | s(p) |
| Colleton | Pine Island | 28 | 1/24/11 | 0 | 3.2 | I E | G | - | - | - | - | s(p) |
| Georgetown | Cedar Island | 10 | 1/27/11 | 0 | 3.1 | I B | none | - | - | - | - | s(p) |
| Georgetown | Debidue Beach ² | 7 | 2/9/11 | 0 | 6.3 | IV B | G | - | - | - | - | p |
| Georgetown | Huntington Beach | 4 | 2/6/11 | 0 | 4.8 | I IV B D | H D G | - | - | - | - | s(p) |
| Georgetown | Litchfield Beach | 5 | 1/24/11 | 0 | 6.3 | I B | G | - | - | - | - | m, p |
| Georgetown | North Island | 8 | 1/25/11 | 0 | 0.1 | I B | G | - | - | - | - | s(p) |
| Georgetown | Pawleys Island | 6 | 1/24/11 | 0 | 6.0 | I IV B | G | - | - | - | - | m, p |
| Georgetown | South Island, Sand Island | 9 | 2/6/11 | 0 | 9.8 | I B | G | - | - | - | - | s(p) |

**The 2011 International Snowy Plover Winter Census in South Carolina
(Continued)**

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|--------------|----------------------------|------|---------|-----------------|--------------|---------------------|---------------------------|---|---|---|---|-------|
| | | | | | | | | | | | | |
| Horry | Cherry Grove ² | 2 | 2/10/11 | 0 | 4.0 | I A B | H D G | - | - | - | - | m, p |
| Horry | Myrtle Beach State Park | 3 | 2/6/11 | 0 | 1.6 | I B | G | - | - | - | - | s(p) |
| Horry | Waites Island ² | 1 | 2/10/11 | 0 | 4.0 | I B | G | - | - | - | - | p |
| Jasper | Tomkins Island | 36 | 1/28/11 | 0 | 1.6 | IV C | H | - | - | - | - | f |
| Total | | | | 1 | 144.4 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Snowy Plovers were seen at the site during that Census year.

² Please note that this survey was conducted outside the Census window.



The 2011 International Wilson's Plover Winter Census in South Carolina

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|------------|----------------------------------|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|-----------|---------|
| | | | | | | | | - | - | - | 06 | |
| Beaufort | Daufuskie Island | 35 | 1/26/11 | 1 | 1.6 | I IV E | G | - | - | - | 06 | p |
| Beaufort | Fripp Island | 32 | 1/24/11 | 0 | 1.6 | I II B | S G | - | - | - | <u>06</u> | p |
| Beaufort | Harbor Island | 30 | 1/24/11 | 0 | 1.6 | I E | G | - | - | - | <u>06</u> | p |
| Beaufort | Hilton Head Island | 34 | 2/3/11 | 0 | 4.8 | I B | S G | - | - | - | 06 | p |
| Beaufort | Hunting Island | 31 | 1/24/11 | 0 | 1.6 | I IV E | S G | - | - | - | 06 | s(p) |
| Beaufort | Pritchards Island | 33 | 1/29/11 | 0 | 0.4 | I IV B | G | - | - | - | 06 | s(p) |
| Charleston | Bird Key Stono | 21 | 1/24/11 | 0 | 0.8 | IV B | G L | - | - | - | 06 | s(p) |
| Charleston | Botany Bay Island and Plantation | 25 | 1/27/11 | 0 | 6.0 | I IV A | G | - | - | - | 06 | s(p), p |
| Charleston | Bull Island (Cape Romain NWR) | 15 | 1/28/11 | 0 | 0.5 | I B | G | - | - | - | <u>06</u> | f |
| Charleston | Cape Island | 12 | 1/27/11 | 0 | 2.0 | I IV B | n.r. | - | - | - | 06 | f |
| Charleston | Capers Island | 16 | 1/28/11 | 0 | 3.0 | IV B | G | - | - | - | 06 | s(p) |
| Charleston | Deveaux Bank | 24 | 2/3/11 | 0 | 4.8 | I II IV D E | G | - | - | - | <u>06</u> | s(p) |
| Charleston | Deweese Island | 17 | 1/28/11 | 0 | 4.3 | I IV B | G | - | - | - | <u>06</u> | p |
| Charleston | Edingsville | 26 | 1/30/11 | 0 | 1.0 | I A | H G | - | - | - | 06 | p |
| Charleston | Edisto Beach State Park | 27 | 2/3/11 | 0 | 3.2 | I IV B | H S G | - | - | - | 06 | s(p), p |
| Charleston | Folly Beach | 20 | 1/30/11 | 0 | 4.0 | I IV B | H D S G L | - | - | - | 06 | p, c |
| Charleston | Kiawah Island | 22 | 1/24/11 | 0 | 17.7 | I II IV B | G | - | - | - | 06 | p |
| Charleston | Lighthouse Island | 13 | 1/27/11 | 0 | 4.0 | I IV B | n.r. | - | - | - | <u>06</u> | f |
| Charleston | Morris Island | 19 | 1/30/11 | 0 | 1.6 | I IV D E | H D G L | - | - | - | <u>06</u> | m, p |
| Charleston | Murphy Island | 11 | 2/1/11 | 0 | 0.8 | I B D | G | - | - | - | 06 | s(p) |
| Charleston | Raccoon Key ² | 14 | 1/23/11 | 3 | 7.0 | I IV B | G | - | - | - | 06 | f |
| Charleston | Seabrook Island | 23 | 1/24/11 | 0 | 5.6 | I IV B | H D S G L | - | - | - | 06 | p |
| Charleston | Sullivan's Island | 18 | 2/4/11 | 0 | 9.0 | I IV B | H D G | - | - | - | 06 | p |
| Colleton | Otter Island | 29 | 1/24/11 | 1 | 6.4 | I E | G | - | - | - | - | s(p) |
| Colleton | Pine Island | 28 | 1/24/11 | 0 | 3.2 | I E | G | - | - | - | - | s(p) |
| Georgetown | Cedar Island | 10 | 1/27/11 | 0 | 3.1 | I B | none | - | - | - | 06 | s(p) |
| Georgetown | Debidue Beach ² | 7 | 2/9/11 | 0 | 6.3 | IV B | G | - | - | - | 06 | p |
| Georgetown | Huntington Beach | 4 | 2/6/11 | 0 | 4.8 | I IV B D | H D G | - | - | - | 06 | s(p) |
| Georgetown | Litchfield Beach | 5 | 1/24/11 | 0 | 6.3 | I B | G | - | - | - | 06 | m, p |
| Georgetown | North Island | 8 | 1/25/11 | 0 | 0.1 | I B | G | - | - | - | 06 | s(p) |
| Georgetown | Pawleys Island | 6 | 1/24/11 | 0 | 6.0 | I IV B | G | - | - | - | 06 | m, p |
| Georgetown | South Island, Sand Island | 9 | 2/6/11 | 2 | 9.8 | I B | G | - | - | - | 06 | s(p) |

**The 2011 International Wilson's Plover Winter Census in South Carolina
(Continued)**

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|--------------|----------------------------|------|---------|-----------------|--------------|---------------------|---------------------------|---|---|---|----|-------|
| | | | | | | | | | | | | |
| Horry | Cherry Grove ² | 2 | 2/10/11 | 0 | 4.0 | I A B | H D G | - | - | - | 06 | m, p |
| Horry | Myrtle Beach State Park | 3 | 2/6/11 | 0 | 1.6 | I B | G | - | - | - | 06 | s(p) |
| Horry | Waites Island ² | 1 | 2/10/11 | 0 | 4.0 | I B | G | - | - | - | 06 | p |
| Jasper | Tomkins Island | 36 | 1/28/11 | 0 | 1.6 | IV C | H | - | - | - | 06 | f |
| Total | | | | 7 | 144.4 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Wilson's Plovers were seen at the site during that Census year.

² Please note that this survey was conducted outside the Census window.

The 2011 International Piping Plover Winter Census in Georgia

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The 2011 Piping Plover Survey in Georgia went off smoothly. We were able to visit all sites on January 24th except for Wolf Island and Queens Island, which due to rough seas had to be visited on January 27th. In total, we visited 17 sites and counted 63 Piping Plovers.

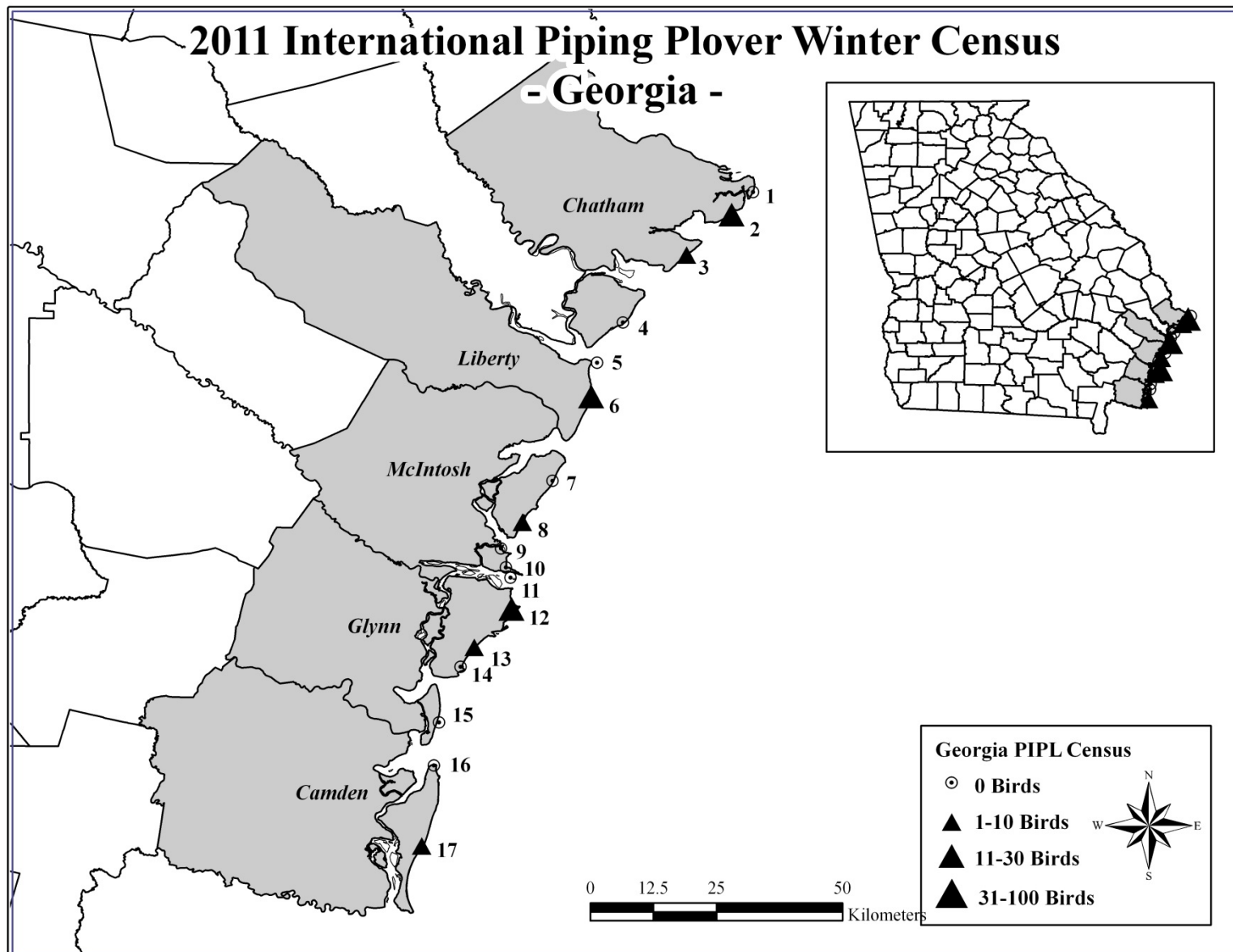
Although coverage was similar to 2006, Piping Plover numbers were much lower in 2011. Observation conditions were not likely to blame with partly cloudy skies, temperatures in the 50's, and winds 10-15 knots from the northeast. Several of our more accessible sites (Tybee Island, St Simons and Jekyll Islands) noted potential disturbance by walkers and un-leashed dogs, but these were the minority of sites. One factor which may have affected Piping Plover numbers in Georgia during the 2010-2011 winter was a two-week extreme cold spell in December.

Comparison of Census Numbers

| Species | 1991 | 1996 | 2001 | 2006 | 2011 |
|-----------------|------|------|------|------|------|
| Piping Plover | 37 | 124 | 111 | 212 | 63 |
| Snowy Plover | n.a. | n.a. | n.a. | n.a. | n.a. |
| Wilson's Plover | n.r. | n.r. | n.r. | 2 | 31 |

¹ at time of Census Brad Winn was a project manager for Georgia Department of Natural Resources.

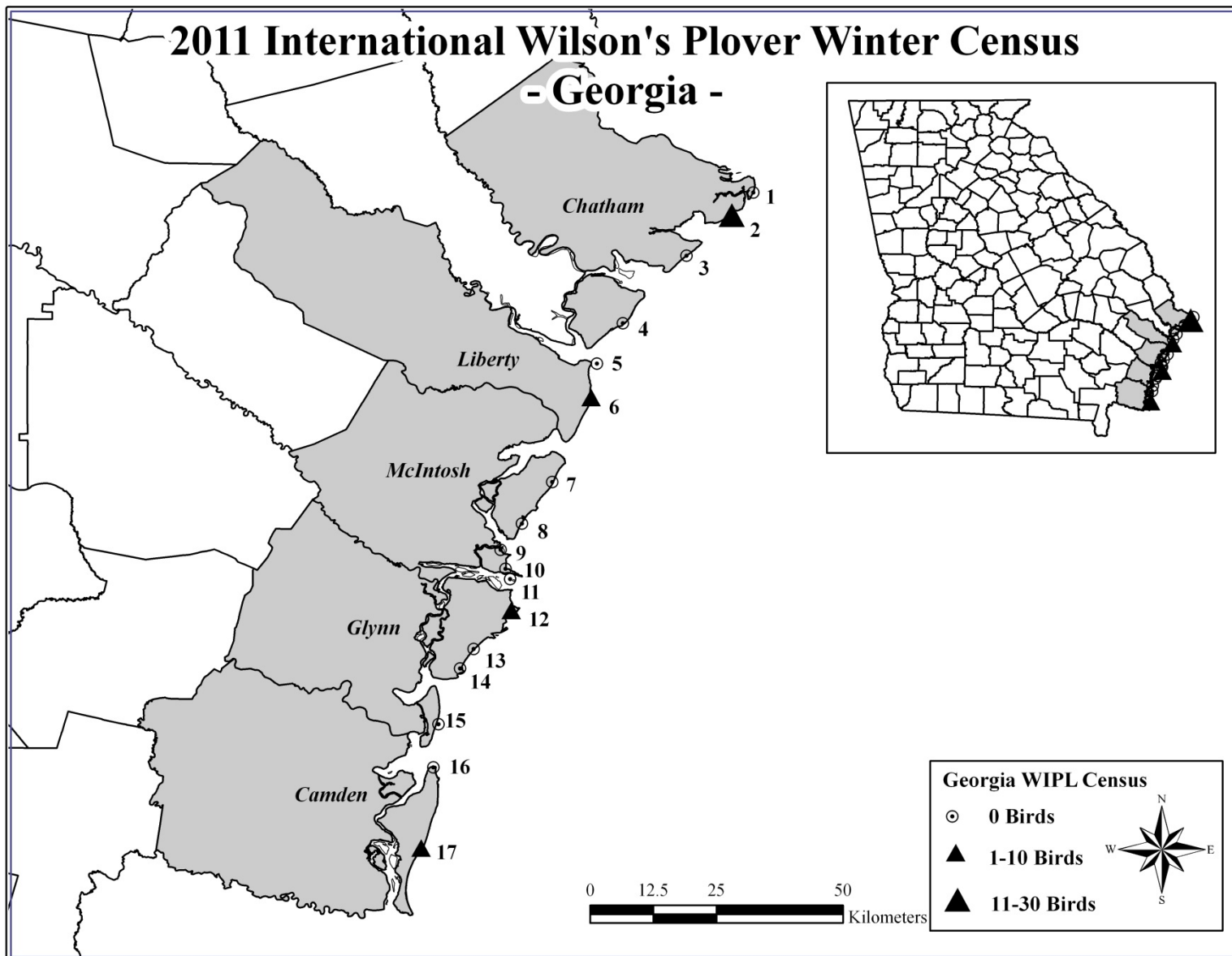
Assessment written by Tim Keyes and edited by Elise Elliott-Smith



The 2011 International Piping Plover Winter Census in Georgia

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|-------------------------------------|------|---------|-----------------|--------------|---------------------|---------------------------|---|-----------|-----------|-----------|-------|
| | | | | | | | | | | | | |
| Camden | Cumberland Island National Seashore | 17 | 1/24/11 | 5 | 29.0 | I B | G | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Camden | Little Cumberland Island | 16 | 1/24/11 | 0 | 6.8 | I IV B | H D G | 91 | <u>96</u> | 01 | - | p |
| Chatham | Little Tybee Island | 2 | 1/24/11 | 15 | n.r. | I B | G | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Chatham | Ossabaw Island | 4 | 1/24/11 | 0 | 18.1 | I IV B | G | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Chatham | Tybee Island | 1 | 1/24/11 | 0 | 6.4 | I II B | H S G | 91 | 96 | 01 | - | p |
| Chatham | Wassaw NWR | 3 | 1/24/11 | 2 | 10.5 | I IV B | G | 91 | 96 | <u>01</u> | <u>06</u> | f |
| Glynn | Jekyll Island | 15 | 1/24/11 | 0 | 9.4 | I B | H D G | <u>91</u> | 96 | <u>01</u> | <u>06</u> | s(p) |
| Glynn | Little Egg Island sandbar | 11 | 1/24/11 | 0 | 2.8 | I D | G | - | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Glynn | Little St. Simons Island | 12 | 1/24/11 | 20 | 11.3 | I B | G | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Glynn | Sea Island | 13 | 1/24/11 | 1 | 5.6 | I B | H S G | 91 | <u>96</u> | 01 | <u>06</u> | p |
| Glynn | St. Simons Island | 14 | 1/24/11 | 0 | 2.5 | I B | H D G | - | - | 01 | - | s(p) |
| Liberty | St. Catherine's Island | 6 | 1/24/11 | 18 | 13.3 | I II IV B | G | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Liberty | St. Catherine's Island sandbar | 5 | 1/24/11 | 0 | 3.2 | I D | G | - | 96 | <u>01</u> | <u>06</u> | s(p) |
| McIntosh | Blackbeard Island NWR | 7 | 1/24/11 | 0 | 11.3 | I B | G | 91 | 96 | 01 | <u>06</u> | f |
| McIntosh | North Wolf NWR and Queens | 9 | 1/27/11 | 0 | 3.2 | I IV B | none | - | <u>96</u> | 01 | - | f, p |
| McIntosh | Sapelo Island | 8 | 1/24/11 | 2 | 10.0 | I IV B | H G L | 91 | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| McIntosh | Wolf Island NWR | 10 | 1/24/11 | 0 | 4.0 | I B | none | - | 96 | <u>01</u> | <u>06</u> | f |
| Total | | | | 63 | 135.5 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Piping Plovers were seen at the site during that Census year.



The 2011 International Wilson's Plover Winter Census in Georgia

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|--------------|-------------------------------------|------|---------|-----------------|--------------|---------------------|---------------------------|---|---|---|------------------|-------|
| | | | | | | | | | | | | |
| Camden | Cumberland Island National Seashore | 17 | 1/24/11 | 6 | 29.0 | I B | G | - | - | - | 06 | f |
| Camden | Little Cumberland Island | 16 | 1/24/11 | 0 | 6.8 | I IV B | H D G | - | - | - | - | p |
| Chatham | Little Tybee Island | 2 | 1/24/11 | 13 | n.r. | I B | G | - | - | - | 06 | s(p) |
| Chatham | Ossabaw Island | 4 | 1/24/11 | 0 | 18.1 | I IV B | G | - | - | - | 06 | s(p) |
| Chatham | Tybee Island | 1 | 1/24/11 | 0 | 6.4 | I II B | H S G | - | - | - | - | p |
| Chatham | Wassaw NWR | 3 | 1/24/11 | 0 | 10.5 | I IV B | G | - | - | - | 06 | f |
| Glynn | Jekyll Island | 15 | 1/24/11 | 0 | 9.4 | I B | H D G | - | - | - | 06 | s(p) |
| Glynn | Little Egg Island sandbar | 11 | 1/24/11 | 0 | 2.8 | I D | G | - | - | - | 06 | s(p) |
| Glynn | Little St. Simons Island | 12 | 1/24/11 | 4 | 11.3 | I B | G | - | - | - | 06 | p |
| Glynn | Sea Island | 13 | 1/24/11 | 0 | 5.6 | I B | H S G | - | - | - | <u>06</u> | p |
| Glynn | St. Simons Island | 14 | 1/24/11 | 0 | 2.5 | I B | H D G | - | - | - | - | s(p) |
| Liberty | St. Catherine's Island | 6 | 1/24/11 | 8 | 13.3 | I II IV B | G | - | - | - | 06 | p |
| Liberty | St. Catherine's Island sandbar | 5 | 1/24/11 | 0 | 3.2 | I D | G | - | - | - | 06 | s(p) |
| McIntosh | Blackbeard Island NWR | 7 | 1/24/11 | 0 | 11.3 | I B | G | - | - | - | 06 | f |
| McIntosh | North Wolf NWR and Queens | 9 | 1/27/11 | 0 | 3.2 | I IV B | none | - | - | - | - | f, p |
| McIntosh | Sapelo Island | 8 | 1/24/11 | 0 | 10.0 | I IV B | H G L | - | - | - | 06 | s(p) |
| McIntosh | Wolf Island NWR | 10 | 1/24/11 | 0 | 4.0 | I B | none | - | - | - | 06 | f |
| Total | | | | 31 | 135.5 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Wilson's Plovers were seen at the site during that Census year.

The 2011 International Piping Plover Winter Census in Florida

The 2011 Census was coordinated by three individuals from the U. S. Fish and Wildlife Service, who split the Florida coast into three Census regions. The first region, northwest Florida, spans the beaches from the Alabama border to the east end of Jefferson County. The second region, north Florida, includes Gulf coast counties southeast of the panhandle region to the south end of Manatee County and from the Georgia border to south end of Brevard County. The third region, southern Florida, includes all the remaining counties in Florida south to Key West National Wildlife Refuge. The total number of Piping Plovers estimated during the 2011 Census of Florida was 306, with 223 reported on the Gulf of Mexico coast and 83 on the Atlantic Coast. Additionally, 495 Snowy Plovers and 305 Wilson's Plovers were sighted on Florida beaches during the 2011 Census. The Florida Piping Plover total was lower than any prior Census, yet the 2011 Snowy Plover total is the highest Census count. Surveyors covered a total of 1298 km (807 miles).

Comparison of Census Numbers

| Species | 1991 | 1996 | 2001 | 2006 | 2011 |
|-----------------|------|------|------|------|------|
| Piping Plover | 551 | 375 | 416 | 454* | 306 |
| Snowy Plover | n.r. | n.r. | 311 | 312 | 495 |
| Wilson's Plover | n.r. | n.r. | n.r. | 394 | 292 |

*Datasheets from two sites were lost; surveyors estimated that they saw 40 Piping Plovers and this number is included in the 2006 total. We have no data on Wilson's or Snowy Plovers for either site.

Northwest Florida (panhandle)

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In the nine coastal counties located in northwest Florida along the Gulf of Mexico (Gulf), 36 Federal and State biologists and avid birders in the private sector (some associated with local Audubon Chapters) surveyed along approximately 363 km (226 miles) of shoreline (Gulf of Mexico beaches and bayside shorelines). Surveyors focused on mainland, peninsular, and island beaches. Surveys were conducted on Gulf beach fronts, bayside habitats, coastal dune inlets, and barrier island inlets.

Surveys conducted between January 24 and February 6, 2011, documented a total of 83 Piping Plovers in 5 out of 9 counties. Three hundred and thirteen (313) Snowy Plovers were documented in 7 of 9 counties. Results from different survey days on Dog Island and John S. Phipps Preserve, lands in close proximity in Franklin County, are possibly documenting all or some of the same 17 Snowy Plovers, thereby inflating the total numbers. Bay and Gulf Counties reported two Wilson's Plover each.

Surveys occurred during all tidal ranges, with most between low to mid-tide levels. Temperatures ranged between 38 and 68 degrees Fahrenheit with wind speeds less than 1 and up to 15 miles per hour. Most skies were overcast or cloudy with a few sunny days. In the 2006 Census, grave attempts were made for a comprehensive survey effort which succeeded in covering 592 km (368 miles). The 2011 Census covered only 61 percent of habitat compared to the 2006 Census. Optimal areas with

historic use by Piping Plovers were the primary focus and most were covered to our knowledge. Inaccessible (shallow) bayside and marsh flats within all the northwest Florida bays and bayous remain the unknown locations that need surveys. These areas are difficult to survey due to shallow waters as well as limited accessibility from land.

North Florida

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One hundred and fifty-six participants including Federal, State, and County agencies, Audubon Chapters, and other volunteers conducted surveys on 71 survey routes covering approximately 383 km (238 miles) of coastal beaches, inlets and waterways between (1/28/2011 and 2/6/2011). One hundred and nine Piping Plovers, 67 Snowy Plovers, and 168 Wilson's Plovers were observed in North Peninsula Florida.

Thirty-one routes were surveyed between in 7 counties on the northern Gulf Coast of peninsula Florida from Taylor south through Manatee County covering 129 km (80 miles) of coastline. Eighty-four Piping Plovers were recorded during these surveys at eight locations: Cedar Key, North Anclote Bar, Anclote Key, Three Rooker Bar, Honeymoon Island, Caladesi Island, Madeira Beach and Shell Key. These Gulf Coast surveys were conducted between (1/28/2011 and 2/4-6/2011) and weather does not appear to be a factor in the low number of Piping Plover observations.

On the northern Atlantic Coast of peninsula Florida, forty routes in 7 counties from Nassau south to Brevard County were surveyed covering close to 258 km (158 miles) of coastal beaches and inlets. An additional 48 km (30 miles) of the ICW and other coastal waterways primarily in Volusia were surveyed by boat. Twenty-five Piping Plovers were documented during these surveys at three locations:

Little Talbot Island, Matanzas Inlet and Ponce Inlet. Almost all of the North Atlantic Coast of Florida was surveyed simultaneously on 2/4/2011 and the weather does not appear to have been a factor in the low number of Piping Plover observations.

All sites that were surveyed in 2006 were surveyed in 2011 except for one of the Bird Islands in Nassau Sound, Duval County on the Atlantic Coast and Florida Barge Canals in Citrus County and Brasher Park/Green Key/Gulf Harbors Beach/Sand Bay Salt Springs State Park (3.9 km) in Pasco County on the Gulf Coast.

The Piping Plover numbers documented in North Peninsula Florida in 2011 as compared to 2006 is lower (109 birds in 2011 compared to 225 in 2006). However, the cause for the drop in numbers is unclear.

South Florida

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One hundred and fifty participants including Federal, State, and County agencies, Audubon Chapters, and other volunteers surveyed 82 sites along approximately 428 km (266 miles) of shoreline in 11 south Florida coastal counties from Sarasota County south to Collier County on the Gulf Coast and Indian River County south to Monroe County along the Atlantic Coast. A total of 114 Piping Plovers (56 Gulf and 58 Atlantic) were censused in south Florida between January 24 and February 6, 2011. Additionally, 115 Snowy Plovers (all but one on the Gulf Coast) and 120 Wilson's Plovers (103 on the Gulf Coast and 17 on the Atlantic Coast) were observed. With

growing concerns over the decline in numbers of Red Knots, the Florida Fish and Wildlife Conservation Commission (FWC) requested that the number of knots observed during the census also be recorded. Beaches are generally narrow in Florida, allowing the observers to visually search both lower and upper beach habitat for birds.

The total number of Piping Plovers censused in south Florida along the Gulf Coast this year (56) was comparable to numbers recorded in 1991 (67), lower than those recorded in 1996 (76) and 2006 (74), and up from 2001 (50). In 1991, Piping Plovers were located at the Charlotte Beach State Recreation Area, Marco Island, North Captiva Island, Fort Myers Beach, and Midnight Pass. In 1996, they were observed at Sand Dollar and Big Marco Pass Critical Wildlife Area, Big Marco Pass Shoals, and Fort Myers Beach. In 2001, they were only observed at Little Estero Lagoon and Marco Island/Big Marco Pass Shoals. In 2006, they were recorded along the Charlotte County Barrier Islands, Little Estero Lagoon Critical Wildlife Area, North Captiva Island, Cayo Costa Island, Marco Island/Big Marco Pass Shoals, and Keywadeen Island. This year they were recorded at Venice Beach, Marco Island, Kice Island, Cayo Costa Island, North Captiva Island, Bunche Beach, and Little Estero Lagoon Critical Wildlife Area. Concentrations of Piping Plovers along the Gulf Coast included 19 at Marco Island, 15 at Bunche Beach, and 9 at Little Estero Lagoon Critical Wildlife Area.

The total number of Piping Plovers censused in south Florida along the Atlantic Coast (58) was higher than the 1991 (46), 1996 (15), and 2006 (44) census results, and lower than the 2001 results (67). In 1991, Piping Plovers were located at St. Lucie Inlet, Carl Ross Key, Boca Grande Key, and Ohio Key. In 1996, they were recorded at St. Lucie Inlet, Boca Grande, and Ohio Key. In 2001, they were observed at St. Lucie Inlet Sailfish Point, Crandon Park, and Woman Key. In 2006, they were only recorded at Boca Grande Key and Crandon Park.

This year, they were recorded along the Indian River County beaches south of the Barber Bridge, St. Lucie Inlet sandbars, Crandon Park, Boca Grande Key, and the Sandy Keys. The observation of the Piping Plover along the Indian River County beaches is particularly noteworthy, as the species was thought to historically occur in this county, but the date of last observation is unknown. A total of 37 of the 58 Piping Plovers observed on the Atlantic Coast were located at Crandon Park and 14 on Boca Grande Key.

Census coverage in suitable habitat in south Florida was relatively comprehensive this year and covered most of the south Florida coastline, but there were some areas where surveys were not conducted that should be included in the 2016 census. Surveys were not conducted from St. Lucie Inlet State Park south to Hobe Sound National Wildlife Refuge or at Jonathan Dickinson State Park in Martin County because habitat was thought to be marginal; however, there was an unconfirmed historical report of a Piping Plover using inland habitat at Jonathan Dickinson. No one was able to survey Lower Matecumbe, Pavilion Key, or the Marquesas Keys in Monroe County or other areas in the Everglades this year due to personnel time constraints and accessibility.

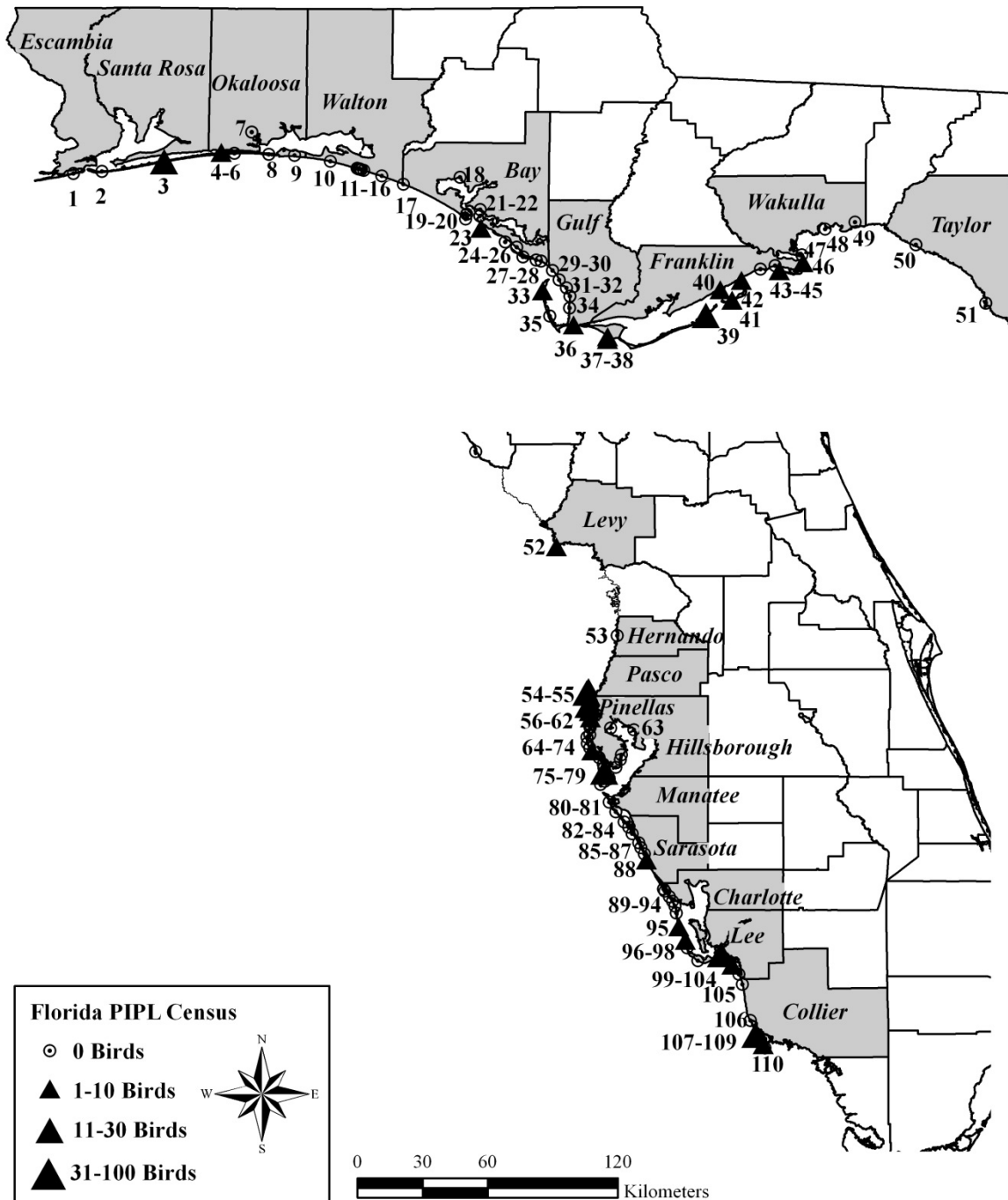
Along the Gulf Coast, areas that were not censused this year that should be surveyed in 2016 include suitable habitat in the Ten Thousand Islands area and Big Marco Pass Shoals in Collier County; Skimmer Island, San Carlos Bay Flats, and Big Hickory Island in Lee County; and Lemon Bay in Charlotte County. Other areas that are not as high of a priority but could be censused in 2016 include Barefoot Beach, Clam Pass County Park, and Naples Pier in Collier County; Casperson and Manasota Beaches in Sarasota County; and Charlotte Harbor (east) in Charlotte County. Additionally,

Little Sarasota Bay and suitable habitat within the Intercoastal Waterway in Sarasota County should be included in future censuses. Aerial photographs should be assessed to identify tidal preserve areas and un-vegetated flats that may provide suitable habitat not specifically associated with coastal beaches.

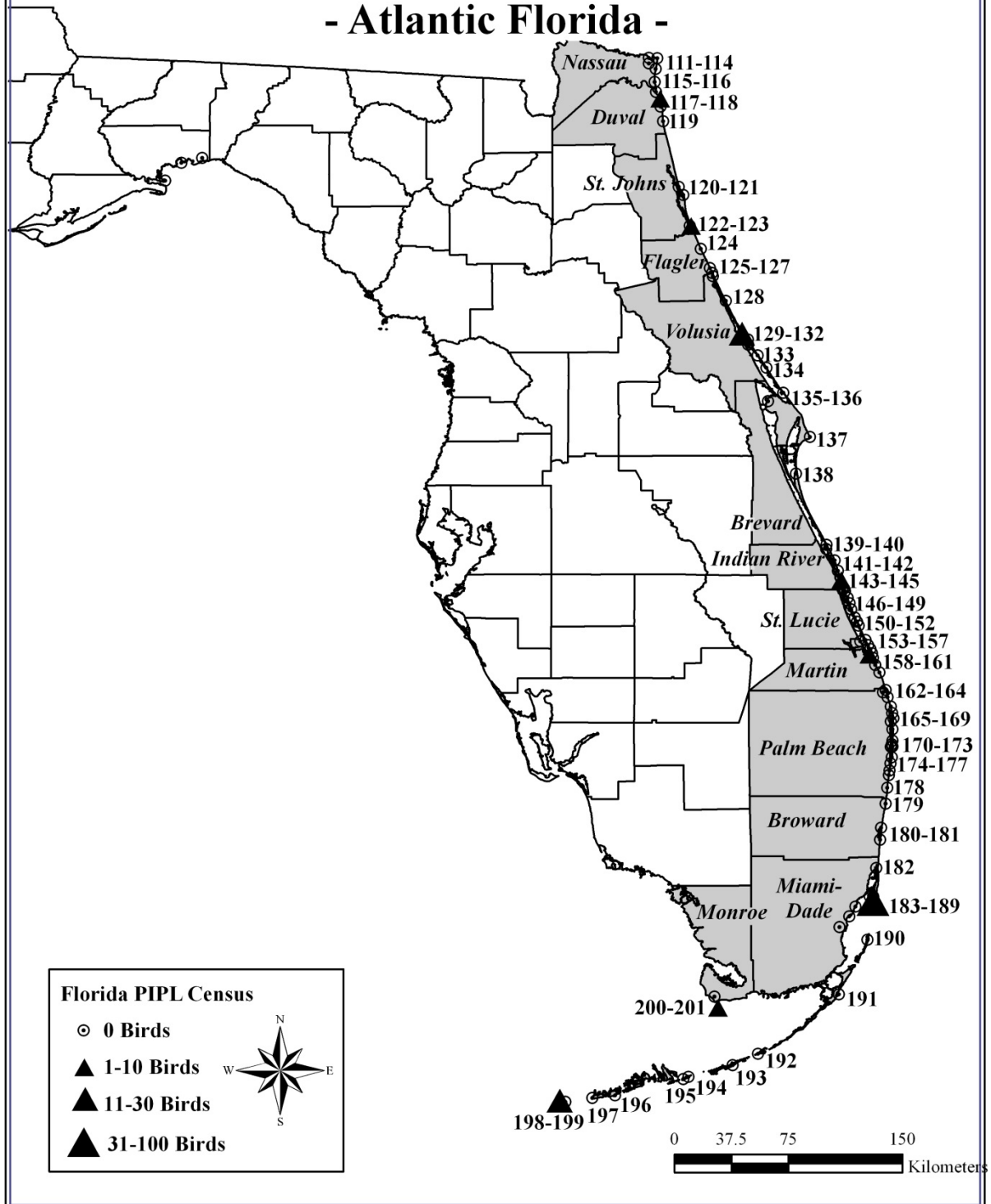
Census coverage in south Florida was comparable to 2006, but weather conditions were better this year. The results from this year's census were most likely not significantly affected by weather conditions in south Florida. Although weather conditions during the census in 2006 were sub-optimal, the total number of Piping Plovers observed in 2006 was the same as this year. Whether this indicates a decline in the total number of Piping Plovers wintering in south Florida or is the result of some other factor is unknown.

Because accessibility seems to be a primary limitation in surveying several important areas of Florida, especially in the southwest corner of the state in and around the Everglades area and along numerous chains of offshore islands, it may be worth considering the feasibility of using other survey methods, such as aerial surveys.

2011 International Piping Plover Winter Census - Gulf Florida -



2011 International Piping Plover Winter Census - Atlantic Florida -



The 2011 International Piping Plover Winter Census in Florida

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------|---|------|---------|-----------------|------|---------------------|---------------------------|---|------------------------|-----------|-----------|------------------|
| | | | | | | | | | | | | |
| Bay | Bonfire Beach | 27 | 1/27/11 | 0 | 2.6 | III A | H D S G | - | - | - | 06 | p |
| Bay | Camp Helen State Park | 17 | 1/27/11 | 0 | 0.7 | I II III IV A | H D F V O G | - | - | 01 | 06 | s(p) |
| Bay | Crooked Island East | 26 | 1/27/11 | 0 | 9.7 | III B F | V G | <u>91</u> | <u>96</u> | 01 | <u>06</u> | f |
| Bay | Crooked Island West | 24 | 1/27/11 | 0 | 8.9 | III B F | V O G | <u>91</u> | 96 | 01 | 06 | f |
| Bay | Grand Lagoon - Bay Point, Alligator Point | 20 | 1/24/11 | 0 | 0.4 | II A D | H D G L | <u>91</u> | - | <u>01</u> | 06 | s(p) |
| Bay | Marifarms North | 18 | 1/28/11 | 0 | 5.4 | II V G | S | - | - | 01 | 06 | s(p), p |
| Bay | Mexico Beach ⁷ | 28 | 2/24/11 | 0 | 2.6 | III A | H G | <u>91</u> | <u>96</u> ² | 01 | 06 | m, c |
| Bay | Shell Island | 23 | 1/27/11 | 9 | 15.2 | III B F | V G | <u>91</u> | <u>96</u> | <u>01</u> | 06 | f, s(p) |
| Bay | St. Andrew Bay - Davis Pt. to Redfish Pt. | 22 | 1/27/11 | 0 | 1.6 | II A D | L | - | - | <u>01</u> | 06 | f |
| Bay | St. Andrews State Recreation Area | 19 | 1/27/11 | 0 | 3.3 | II III A | H D S V O G L | <u>91</u> | 96 | 01 | 06 | s(p) |
| Bay | Tyndall AFB (Buck Beach) | 25 | 1/27/11 | 0 | 4.8 | II A | G L | - | - | - | 06 | f |
| Bay | West Beach Drive | 21 | 2/1/11 | 0 | 4.0 | II A | H G L | - | - | 01 | 06 | m, p |
| Brevard | Cape Canaveral Air Force Station | 137 | 2/4/11 | 0 | 21.0 | I B | H F G | 91 | 96 | 01 | 06 | f |
| Brevard | Merritt Island NWR (Shiloh Impoundments) | 136 | 1/28/11 | 0 | 10.5 | V G | G | - | - | - | - | f |
| Brevard | Patrick Air Force Base | 138 | 2/4/11 | 0 | 9.2 | I B | H D F O G | - | - | - | 06 | f |
| Brevard | South Canaveral National Seashore | 135 | 2/4/11 | 0 | 20.1 | I B | H G | 91 | 96 | 01 | 06 | f |
| Broward | Broward County Northern Link to Hillsboro Inlet | 179 | 2/1/11 | 0 | 6.8 | I B | H S | 91 | - | - | 06 | m, p |
| Broward | Hugh Taylor Birch State Park | 180 | 1/31/11 | 0 | 1.6 | I II V | H D V F S I U L | - | - | - | 06 | s(p), m |
| Broward | John U. Lloyd Beach S.P. | 181 | 1/29/11 | 0 | 4.0 | I II IV B | H L | 91 | - | 01 | 06 | s(p) |
| Charlotte | Barrier Island (Don Pedro) | 91 | 1/29/11 | 0 | 3.2 | III B | n.r. | 91 | - | - | 06 | p |
| Charlotte | Barrier Island (Knight Island) | 90 | 1/30/11 | 0 | 3.2 | II III IV V B F | F S V O | 91 | - | 01 | <u>06</u> | m |
| Charlotte | Barrier Island (Little Gasparilla Island) | 92 | 1/29/11 | 0 | 3.2 | III B | H D G | 91 | - | - | 06 | p |
| Charlotte | Gasparilla Island | 93 | 2/4/11 | 0 | 4.8 | III B | H D G | 91 | - | - | 06 | f, p |
| Charlotte | Stump Pass Beach | 89 | 1/30/11 | 0 | 2.1 | II III V B | H S G | 91 | 96 | - | - | s(p) |
| Collier | Big Marco Pass Shoal | 107 | 2/1/11 | 19 | 4.0 | III B | H D | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Collier | Cape Romano | 108 | 1/25/11 | 0 | 3.4 | III B D | H D F G | - | - | - | 06 | s(p), p |
| Collier | Caxambas Island | 109 | 1/31/11 | 0 | 0.3 | III D | H D G | - | - | - | 06 | s(p) |
| Collier | Delnor-Wiggins Pass State Park | 105 | 2/2/11 | 0 | 0.8 | III B | H G | - | - | - | 06 | s(p) |
| Collier | Keewaydin Island | 106 | 1/31/11 | 0 | 12.1 | III B | H D F S O G | - | - | - | <u>06</u> | s(p), p |
| Collier | Kice Island | 110 | 1/31/11 | 5 | 4.0 | III B D | H D F O G | - | - | - | - | s(p) |
| Duval | Little Talbot Island State Park | 117 | 2/4/11 | 6 | 6.5 | I IV B | H G | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Duval | Mayport Jetty South to County Line | 119 | 2/4/11 | 0 | 16.0 | I B | G | 91 | 96 | 01 | 06 | f, s(p), m, c |

The 2011 International Piping Plover Winter Census in Florida (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|--|------|---------|-----------------|------|---------------------|---------------------------|---|-----------|-----------|-----------|---------|
| | | | | | | | | 91 | 96 | 01 | 06 | |
| Duval | Ward's Bank (Huguenot Park) | 118 | 2/4/11 | 0 | 6.4 | I II IV A | V G | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, s(p) |
| Escambia | Fort Pickens Gulf Islands N.S. | 2 | 1/29/11 | 0 | 24.1 | II III B | H V G | <u>91</u> | 96 | 01 | 06 | f |
| Escambia | Perdido Key Gulf Islands N.S. | 1 | 2/2/11 | 0 | 26.1 | II B C | H V G | - | 96 | <u>01</u> | 06 | f |
| Escambia | Santa Rosa Gulf Islands N.S. | 3 | 1/27/11 | 19 | 25.6 | III B | H D V G | - | 96 | 01 | <u>06</u> | f |
| Flagler | Flagler Beach and ICW (Pier to Gamble Rogers MSRA) | 125 | 2/4/11 | 0 | 4.9 | I V B G | H G | 91 | 96 | - | - | m, c |
| Flagler | Flagler Beach Pier to Marineland | 124 | 2/4/11 | 0 | 22.3 | I B | H G | - | - | - | - | m, c |
| Flagler | Gamble Rogers Memorial SRA | 126 | 2/4/11 | 0 | 3.4 | I II V B | H G | - | - | - | 06 | s(p), m |
| Franklin | Bald Pt. State Park | 46 | 2/5/11 | 3 | 1.5 | II III A | H G | - | 96 | 01 | <u>06</u> | s(p) |
| Franklin | Carrabelle Beach | 40 | 2/1/11 | 1 | 2.2 | II A | H D F G | <u>91</u> | <u>96</u> | 01 | 06 | c |
| Franklin | Dog Island | 41 | 1/28/11 | 1 | 13.7 | III V B | H F O G | <u>91</u> | - | <u>01</u> | <u>06</u> | s(p), p |
| Franklin | Flagg Island (Off St. Vincent Refuge) | 38 | 2/5/11 | 1 | 2.3 | III G | H O G | - | - | - | - | s(p) |
| Franklin | FSU Marine Lab | 43 | 2/1/11 | 0 | 1.6 | III A | H D G | - | - | 01 | 06 | p |
| Franklin | John S. Phipps Reserve (West end of Peninsula) | 45 | 1/29/11 | 8 | 3.2 | II III G | G | <u>91</u> ³ | 96 | <u>01</u> | <u>06</u> | p |
| Franklin | Lanark Reef | 42 | 1/28/11 | 4 | 1.6 | III V B | G | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Franklin | St. George Island State Park | 39 | 2/4/11 | 17 | 18.0 | II III B | H V O | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Franklin | St. Vincent Island | 37 | 2/1/11 | 8 | 19.8 | II III B D | G | 91 | <u>96</u> | 01 | 06 | f |
| Franklin | Turkey Point to St. Teresa Beach | 44 | 2/1/11 | 0 | 8.8 | II A | H D V F G | 91 | 96 | 01 | <u>06</u> | p, c |
| Gulf | Highland View (Scamp St. to Port St. Joe) | 31 | 2/2/11 | 0 | 1.6 | II A G | S L | - | - | - | 06 | n.r. |
| Gulf | Indian Pass to Cape San Blas and Stump Hole | 36 | 2/2/11 | 5 | 11.6 | III A | H D V G | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | m, c |
| Gulf | NE St. Joe Bay Shoreline | 32 | 2/3/11 | 0 | 3.2 | II A | G | 91 | 96 | 01 | - | s(p) |
| Gulf | Simmons Bayou | 34 | 2/3/11 | 0 | 0.5 | II A | G | - | - | - | - | s(p) |
| Gulf | St. Joe Beach (County Line to Pine St.) | 29 | 2/24/11 | 0 | 4.0 | III A | H G | - | - | - | 06 | m, c |
| Gulf | St. Joe Peninsula SP (Northern Portion) | 33 | 2/3/11 | 4 | 17.3 | II III G | H V O | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Gulf | St. Joe Peninsula SP (Southern Portion) | 35 | 1/31/11 | 0 | 9.5 | III G | H D G L | <u>91</u> | <u>96</u> | 01 | <u>06</u> | m, c |
| Gulf | Windmark Beach (Pine St. to N Signal Ln Pier) | 30 | 1/28/11 | 0 | 4.7 | II A | H G L | 91 | 96 | 01 | 06 | p |
| Hernando | Pine Island | 53 | 1/28/11 | 0 | 0.8 | II III B | H G | - | - | - | - | c |
| Hillsborough | Cypress Point Park | 63 | 2/5/11 | 0 | 1.0 | II A | H O G | - | - | - | - | s(p) |
| Hillsborough | Egmont Key NWR & State Park | 79 | 2/4/11 | 0 | 4.8 | II III B | G | 91 | 96 | 01 | 06 | f |
| Indian River | Indian River Co. Beaches | 143 | 2/3/11 | 1 | 10.2 | I B | H D F S O G | 91 | 96 | - | 06 | m, p |
| Indian River | Pelican Island NWR | 140 | 2/1/11 | 0 | 21.7 | II V B C D E G | H F S V I O G | 91 | 96 | - | - | f |
| Indian River | Round Island Conservation Area | 144 | 2/2/11 | 0 | 1.6 | V G | H D O G | 91 | - | - | 06 | f, c |
| Indian River | Round Island Park | 145 | 2/3/11 | 0 | 0.7 | I B | H F G | 91 | 96 | - | 06 | p, c |

The 2011 International Piping Plover Winter Census in Florida (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|-----------------|------|---------------------|---------------------------|---|-----------|-----------|-----------|------------------|
| | | | | | | | | 91 | 96 | - | 06 | |
| Indian River | Sebastian Inlet State Park to Wabasso Beach Park | 139 | 2/1/11 | 0 | 9.7 | I B | H D F O G | 91 | 96 | - | 06 | f, s(p), m |
| Indian River | Tracking Station Access to Barber Bridge | 142 | 2/3/11 | 0 | 2.6 | I B | H D S U O | 91 | 96 | - | 06 | m, p |
| Indian River | Tracking Station Park N to Wabasso Beach | 114 | 2/3/11 | 0 | 10.3 | I B | H D S G | 91 | 96 | - | 06 | s(p), m, p, c |
| Lee | Bonita Beach | 104 | 2/4/11 | 0 | 6.9 | III | H F G | - | - | - | 06 | m, p, c |
| Lee | Bunche Beach | 99 | 1/29/11 | 15 | 2.4 | II V A | H F G L | 91 | 96 | 01 | - | f, m, c |
| Lee | Captiva Island | 97 | 2/1/11 | 0 | 7.7 | I III A B | H F G | 91 | - | - | 06 | m, c |
| Lee | Cayo Costa | 95 | 1/26/11 | 4 | 11.7 | II III B G | H G | 91 | - | 01 | <u>06</u> | s(p), p |
| Lee | Esteros Island (R1) | 100 | 1/28/11 | 0 | 4.7 | II III B C | H D O G L | - | 96 | 01 | 06 | m, p, c |
| Lee | Esteros Island (R2) | 101 | 1/24/11 | 0 | 4.3 | II III B F | H D V F O G | <u>91</u> | 96 | 01 | 06 | m, p, c |
| Lee | Esteros Island (R3) | 102 | 2/5/11 | 9 | 2.4 | II III B | H G | - | <u>96</u> | <u>01</u> | <u>06</u> | s(p), m, p, c |
| Lee | Gasparilla Island | 94 | 2/4/11 | 0 | 11.3 | III B | H D G | - | - | - | 06 | f, s(p), p |
| Lee | Lovers Key State Park | 103 | 2/5/11 | 0 | 4.0 | III B | H O G | - | - | - | 06 | s(p) |
| Lee | N. Captiva Island | 96 | 1/27/11 | 2 | 3.4 | II III B | H D V F O G L | <u>91</u> | <u>96</u> | - | <u>06</u> | s(p) |
| Lee | Sanibel Island | 98 | 2/1/11 | 0 | 20.0 | I III A B D F | H D F O G | 91 | 96 | 01 | 06 | s(p), m |
| Levy | Cedar Key Area | 52 | 1/24/11 | 5 | 12.9 | III D | F G | 91 | - | - | <u>06</u> | s(p) |
| Manatee | Anna Maria Island | 80 | 1/30/11 | 0 | 10.0 | I B | n.r. | <u>91</u> | 96 | 01 | 06 | n.r. |
| Manatee | Longboat Key (formerly "Beer Can Island") | 81 | 1/30/11 | 0 | 7.3 | I B | n.r. | 91 | 96 | <u>01</u> | 06 | n.r. |
| Martin | Hobe Sound NWR | 160 | 1/31/11 | 0 | 5.6 | I B | H F S G | 91 | 96 | 01 | 06 | f |
| Martin | Hutchinson Island, Alex's Beach to Stuart Beach | 154 | 1/31/11 | 0 | 2.9 | I B | H F O G | 91 | 96 | - | 06 | s(p) |
| Martin | Hutchinson Island, Bathtub Beach to St. Lucie Inlet | 156 | 1/31/11 | 0 | 2.7 | I IV B | H F G L | <u>91</u> | 96 | - | 06 | p |
| Martin | Hutchinson Island, St. Lucie Line S to Alex's Beach | 157 | 2/1/11 | 0 | 2.8 | I B | H F O G | 91 | 96 | - | 06 | s(p) |
| Martin | Hutchinson Island, Stuart Beach to Bathtub Beach | 155 | 1/31/11 | 0 | 3.4 | I B | H F | 91 | 96 | - | 06 | s(p) |
| Martin | Jupiter Island Beaches | 161 | 1/31/11 | 0 | 7.6 | I B | H D F V S G | 91 | 96 | - | - | m |
| Martin | St. Lucie Inlet sandbars | 158 | 1/31/11 | 4 | 3.2 | II D | H D O S G | - | <u>96</u> | <u>01</u> | 06 | s(p) |
| Martin | St. Lucie Inlet State Park | 159 | 1/31/11 | 0 | 9.0 | I IV B | D V G | 91 | 96 | 01 | 06 | s(p) |
| Martin | W shore of Indian River Near Jensen Beach | 153 | 2/1/11 | 0 | 0.4 | II A D | H G L | - | - | - | 06 | s(p) |
| Miami-Dade | Bill Baggs State Park lighthouse to Crandon Park | 185 | 1/27/11 | 0 | 3.9 | I B | H V | - | - | 01 | 06 | s(p), m |
| Miami-Dade | Biscayne National Park | 190 | 2/4/11 | 0 | 9.7 | I II IV B D | H F G L | - | 96 | - | 06 | f |
| Miami-Dade | Crandon Park Beach | 186 | 1/27/11 | 37 | 2.8 | I B D | H V G L | 91 | - | <u>01</u> | <u>06</u> | c |

The 2011 International Piping Plover Winter Census in Florida (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-------------------------|--|------|---------|-----------------|------|---------------------|---------------------------|---|-----------|-----------|-----------|---------|
| | | | | | | | | | | | | |
| Miami-Dade | Cutler Wetlands | 189 | 2/3/11 | 0 | 0.5 | V A | H D V | - | - | - | - | p |
| Miami-Dade | Deering Estate and Chicken Key | 188 | 2/2/11 | 0 | 3.1 | II A C G | H D F O G L | - | - | - | 06 | s(p), c |
| Miami-Dade | Matheson Hammock | 187 | 2/4/11 | 0 | 1.2 | II A G | H D O G L | - | - | - | 06 | c |
| Miami-Dade | Oleta River State Park | 182 | 2/4/11 | 0 | 0.3 | II A | G | - | - | - | - | s(p) |
| Miami-Dade | Rickenbacker Causeway Shoreline | 183 | 1/28/11 | 0 | 1.7 | II E | H D F S I G | - | - | 01 | 06 | c |
| Miami-Dade | Virginia Key Critical Wildlife Area | 184 | 1/28/11 | 0 | 2.6 | II B | H S I | 91 | 96 | 01 | 06 | m |
| Monroe | Bahia Honda State Park | 195 | 1/24/11 | 0 | 4.8 | I G | H F O G | 91 | 96 | 01 | 06 | s(p) |
| Monroe | Boca Chica Beach | 196 | 1/27/11 | 0 | 1.3 | I E | H D V S G | - | 96 | - | 06 | s(p) |
| Monroe | Boca Grande Key | 199 | 1/25/11 | 14 | 1.2 | V E G | H D G L | <u>91</u> | <u>96</u> | 01 | <u>06</u> | f |
| Monroe | Curry Hammock State Park | 193 | 1/24/11 | 0 | 0.4 | I G | H O G | - | - | - | 06 | s(p) |
| Monroe | Fort Taylor Historic State Park | 197 | 2/1/11 | 0 | 0.8 | I III E | H G | - | - | - | 06 | s(p) |
| Monroe | John D. Pennekamp state Park/ Carysfort Yacht Club | 191 | 2/3/11 | 0 | 1.0 | I II A | H G | - | - | 01 | 06 | s(p) |
| Monroe | Lake Ingraham | 200 | 1/29/11 | 0 | 1.6 | II | G L | 91 | 96 | - | - | f |
| Monroe | Long Key State Park | 192 | 1/24/11 | 0 | 1.6 | I G | H G L | - | 96 | - | 06 | s(p) |
| Monroe | Ohio Key | 194 | 1/27/11 | 0 | 0.5 | I E G | H D G | <u>91</u> | <u>96</u> | 01 | 06 | f |
| Monroe | Sandy Key to Carl Ross Key | 201 | 2/6/11 | 2 | 1.5 | II E | G | <u>91</u> | 96 | - | - | f |
| Monroe | Woman Key | 198 | 1/25/11 | 0 | 1.3 | I E | H D G L | - | 96 | <u>01</u> | 06 | f |
| Nassau | Amelia Island State Park | 116 | 2/4/11 | 0 | 2.8 | I IV B | G | 91 | - | 01 | 06 | s(p) |
| Nassau | Bell River Spoil Island | 113 | 2/6/11 | 0 | 0.4 | V C | O G | - | - | - | - | p |
| Nassau | Fort Clinch State Park | 112 | 2/4/11 | 0 | 6.4 | I II IV B | H S | 91 | - | 01 | 06 | s(p) |
| Nassau | Little Tiger Island | 111 | 2/6/11 | 0 | 2.4 | V E | O | - | - | <u>01</u> | <u>06</u> | p |
| Nassau | North Fernandina Beach | 114 | 4/4/11 | 0 | 11.0 | I B | H S G | - | - | - | 06 | s(p) |
| Nassau | South Fernandina Beach | 115 | 2/4/11 | 0 | 7.4 | I B | H | - | - | - | - | p |
| Okaloosa | Eglin AFB (E restricted beach), Santa Rosa Island | 6 | 1/27/11 | 0 | 9.7 | III B | H V G | 91 | 96 | 01 | 06 | f |
| Okaloosa | Eglin AFB (Public Beach), Okaloosa Island | 8 | 1/27/11 | 0 | 7.4 | I IV B | H V S G | 91 | 96 | 01 | 06 | f |
| Okaloosa | Henderson Beach State Park | 9 | 1/28/11 | 0 | 2.2 | III A | H D V O G L | - | - | 01 | 06 | s(p) |
| Okaloosa | Okaloosa Holding Ponds | 7 | 1/25/11 | 0 | 4.5 | V A | n.r. | - | - | - | - | n.r. |
| Okaloosa/ Santa Rosa | Eglin AFB (W restricted beach), Santa Rosa Island | 4 | 1/27/11 | 0 | 9.7 | III B | V G | 91 | 96 | 01 | 06 | f |
| Okaloosa/ Santa Rosa | Eglin AFB (N restricted beach) | 5 | 2/2/11 | 3 | 22.7 | II III B | G L | 91 | - | <u>01</u> | 06 | f |
| Palm Beach | Boynton Inlet to Gulfstream Park | 175 | 2/1/11 | 0 | 4.8 | I IV A | H S O G | - | - | - | 06 | m, p, c |

The 2011 International Piping Plover Winter Census in Florida (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------------------|---|------|---------|-----------------|------|---------------------|---------------------------|---|-----------|-----------|-----------|------------------|
| | | | | | | | | | | | | |
| Palm Beach | Gulfstream Park to N. Delray Beach | 176 | 2/2/11 | 0 | 6.4 | I B | H O G | - | - | - | 06 | s(p), m |
| Palm Beach | Highland Beach | 178 | 2/3/11 | 0 | 13.4 | I IV B | H D V S I | - | - | - | 06 | m, p, c |
| Palm Beach | Ibis Isle Restoration Area | 171 | 2/3/11 | 0 | 0.6 | II B | G L | - | - | - | - | s(p) |
| Palm Beach | Juno Beach Park to MacArthur State Park | 165 | 2/3/11 | 0 | 6.5 | I B | H F | - | - | - | 06 | c |
| Palm Beach | Jupiter Beach to Juno Beach Park | 164 | 2/3/11 | 0 | 5.8 | I IV B | H D F S | - | - | - | 06 | c |
| Palm Beach | Jupiter Sound, Jupiter inlet, Loxahatchee River | 163 | 2/3/11 | 0 | 7.4 | II IV V A B D | H D S U G L | 91 | - | - | 06 | s(p) |
| Palm Beach | Lantana Park to Boynton Inlet | 174 | 2/1/11 | 0 | 4.3 | I IV F | G | - | - | - | 06 | c |
| Palm Beach | MacArthur Beach State Park | 166 | 2/4/11 | 0 | 2.4 | I II B | H D F G | 91 | 96 | 01 | 06 | s(p) |
| Palm Beach | MacArthur Beach State Park to Palm Beach Shores | 167 | 2/3/11 | 0 | 4.6 | I IV B | H V F | - | - | - | 06 | m, p |
| Palm Beach | N. Delray Beach to Atlantic Dunes Park | 177 | 2/5/11 | 0 | 0.8 | n.r. | H D G | - | 96 | - | 06 | n.r. |
| Palm Beach | Palm Beach Shores to Southern Blvd | 169 | 2/3/11 | 0 | 11.9 | I IV B | H D S G | - | - | - | - | s(p), m |
| Palm Beach | Peanut Island | 168 | 1/31/11 | 0 | 1.6 | V B | H G | - | - | - | - | m |
| Palm Beach | Sloan's Curve to Lantana Beach | 172 | 2/3/11 | 0 | 6.4 | I B | H V S | - | - | - | 06 | s(p), m, p, c |
| Palm Beach | Snook Islands Natural Area to Lake Worth Lagoon | 173 | 2/6/11 | 0 | 2.0 | II A G | S G L | - | - | - | - | m |
| Palm Beach | Southern Blvd to Sloan's Curve | 170 | 2/3/11 | 0 | 3.3 | I A | H G | - | - | - | 06 | m, p |
| Palm Beach/ Martin | Jupiter Island - Jupiter Inlet through Blowing Rocks Preserve | 162 | 1/31/11 | 0 | 3.2 | I IV B | H D V F | - | 96 | - | 06 | c |
| Pasco | Anclote Key sandbar | 54 | 2/4/11 | 4 | 2.7 | III D | H G | - | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Pasco/Pinellas | Anclote Key State Park | 55 | 2/4/11 | 27 | 8.0 | III B | G | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Pinellas | Belleair Causeway Bridge | 64 | 2/4/11 | 0 | 4.8 | II A B | H F G L | - | - | - | - | n.r. |
| Pinellas | Caladesi Island State Park | 59 | 2/4/11 | 2 | 4.0 | II III B | H O G | <u>91</u> | <u>96</u> | <u>01</u> | - | s(p) |
| Pinellas | Clearwater Beach | 60 | 2/4/11 | 0 | 4.4 | n.r. | n.r. | - | - | - | 06 | n.r. |
| Pinellas | Courtney Campbell Causeway, Clearwater, Public Beach | 62 | 2/4/11 | 0 | 29.0 | II V G | H D F V G | <u>91</u> ⁴ | - | - | - | m |
| Pinellas | Dunedin Causeway (to Honeymoon Island) | 58 | 2/4/11 | 0 | 1.6 | II G | H G | <u>91</u> | 96 | 01 | 06 | c |
| Pinellas | Ft. DeSoto County Park, E beach | 77 | 2/4/11 | 0 | 4.0 | V B | V G | <u>91</u> ⁵ | 96 | - | 06 | c |
| Pinellas | Ft. DeSoto County Park, NW Beach | 76 | 2/6/11 | 0 | 4.5 | III B | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | 06 | n.r. |
| Pinellas | Ft. DeSoto County Park, South tip | 78 | 2/1/11 | 0 | 1.1 | n.r. | n.r. | 91 | - | - | - | n.r. |
| Pinellas | Honeymoon Island SRA | 57 | 2/4/11 | 2 | 6.4 | III B | H S G | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Pinellas | Indian Rocks Beach | 65 | 2/5/11 | 0 | 3.7 | n.r. | n.r. | <u>91</u> ⁶ | - | - | 06 | n.r. |
| Pinellas | Lassing Park | 71 | 1/26/11 | 0 | 0.7 | n.r. | n.r. | - | - | - | - | n.r. |
| Pinellas | Madeira Beach | 68 | 1/27/11 | 4 | 5.1 | III A | H V F G | - | - | - | 06 | m |

The 2011 International Piping Plover Winter Census in Florida (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------|--|------|---------|-----------------|------|---------------------|---------------------------|---|-----------|-----------|-----------|------------------|
| | | | | | | | | | | | | |
| Pinellas | Pass-a-Grille Beach | 74 | 2/5/11 | 0 | 2.7 | III B | H G | - | - | - | - | m |
| Pinellas | Pinellas Point | 73 | 1/30/11 | 0 | 1.6 | V A | O G L | - | - | - | - | m |
| Pinellas | Redington Beach/North Redington Beach | 67 | 2/6/11 | 0 | 4.4 | III B | H O G | - | - | - | 06 | s(p) |
| Pinellas | Sandy Park to Bellair Beach Morgan Dr. Park | 61 | 2/5/11 | 0 | 3.4 | n.r. | n.r. | <u>91</u> ⁶ | - | - | 06 | n.r. |
| Pinellas | Shell Key | 75 | 2/6/11 | 11 | 2.4 | II B | H G L | - | <u>96</u> | <u>01</u> | <u>06</u> | c |
| Pinellas | St. Pete Beach | 72 | 2/4/11 | 0 | 3.4 | n. r. | n.r. | - | - | - | - | n.r. |
| Pinellas | St. Petersburg- North shore park area | 69 | 1/30/11 | 0 | 0.8 | n.r. | n.r. | - | - | - | 06 | n.r. |
| Pinellas | Three Rooker Bar | 56 | 2/4/11 | 29 | 3.2 | III B | G | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Pinellas | Treasure Island | 70 | 2/6/11 | 0 | 6.4 | III A G | H U G | - | - | - | 06 | m |
| Pinellas | Walsingham Road South to Park Blvd | 66 | 2/4/11 | 0 | 3.0 | III B | H F G | - | - | - | 06 | m |
| Sarasota | Caspersen Beach (Venice Beach) | 88 | 2/5/11 | 2 | 6.1 | III A | H S | 91 | - | - | 06 | s(p), m, p, c |
| Sarasota | Lido Beach | 83 | 1/29/11 | 0 | 4.0 | III B | H S O G | 91 | - | - | 06 | c |
| Sarasota | North Casey Key | 86 | 2/5/11 | 0 | 4.8 | III B | H D S G | - | 96 | - | 06 | n.r. |
| Sarasota | Siesta Key, N end to Point of Rocks | 84 | 2/5/11 | 0 | 4.7 | III B | H D V G | - | - | - | 06 | c |
| Sarasota | Siesta Key, Turtle Beach to Point of Rocks | 85 | 2/6/11 | 0 | 3.1 | II III B F | H D G | - | - | - | 06 | s(p), c |
| Sarasota | South Casey Key | 87 | 2/5/11 | 0 | 5.0 | III B | H D S O G | - | 96 | - | 06 | p, c |
| Sarasota | South Longboat Key | 82 | 2/5/11 | 0 | 4.8 | III B | H S U O | - | - | - | 06 | p |
| St. Johns | Anastasia State Recreation Area | 121 | 2/4/11 | 0 | 7.9 | I IV B | H O G | <u>91</u> | 96 | 01 | 06 | s(p) |
| St. Johns | Rattlesnake Island | 122 | 2/4/11 | 0 | 1.0 | IV E | n.r. | - | - | - | - | n.r. |
| St. Johns | St. Augustine Beach (Matanzas Inlet) | 123 | 2/4/11 | 4 | 25.7 | I II IV V A B C D | H D V F S U G | - | 96 | - | <u>06</u> | f, s(p), m, c |
| St. Johns | Vilano Point to North Beach | 120 | 2/4/11 | 0 | 25.7 | I B | D G | - | 96 | 01 | 06 | f, c |
| St. Lucie | Avalon State Park | 146 | 2/3/11 | 0 | 2.4 | I B | H | 91 | 96 | 01 | 06 | s(p) |
| St. Lucie | Fort Pierce Inlet State Park | 148 | 2/3/11 | 0 | 1.4 | I IV B | H F G | 91 | 96 | 01 | 06 | s(p) |
| St. Lucie | Fort Pierce Inlet State Park to Avalon State Park | 147 | 1/28/11 | 0 | 6.4 | I B | H G | 91 | 96 | 01 | 06 | p, c |
| St. Lucie | S Hutchinson Island | 149 | 1/31/11 | 0 | 24.5 | I B | H D F | 91 | 96 | - | 06 | m, p, c |
| St. Lucie | South Hutchinson Island- Little Mud Creek N to Frederick Douglass Park | 151 | 1/31/11 | 0 | 3.7 | I B | H D F | 91 | 96 | - | 06 | m, p, c |
| St. Lucie | South Hutchinson Island- Little Mud Creek S to the narrows | 152 | 1/31/11 | 0 | 6.4 | I B | H D F | 91 | 96 | - | 06 | m, p, c |
| St. Lucie | South Hutchinson Island-Fredrick Douglass Park to Inlet | 150 | 1/31/11 | 0 | 6.4 | I B | H D F | 91 | 96 | - | 06 | m, p, c |
| Taylor | Hagen's Cove | 51 | 2/4/11 | 0 | 0.7 | n.r. | n.r. | - | - | 01 | 06 | n.r. |

The 2011 International Piping Plover Winter Census in Florida (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|-----------------|---------------|---------------------|---------------------------|---|----|----|------------------|------------------|
| | | | | | | | | | | | | |
| Taylor | Hickory Mound Impoundment | 50 | 2/4/11 | 0 | 5.0 | III V G | n.r. | - | - | - | - | s(p) |
| Volusia | Disappearing Island | 129 | 2/4/11 | 15 | 3.0 | IV V C D | H D F O G | - | - | - | <u>06</u> | s(p) |
| Volusia | Indian River Lagoon Park | 132 | 2/4/11 | 0 | 13.7 | II A B C | G | - | - | - | - | m |
| Volusia | Intercoastal Waterway (Other islands) | 130 | 2/4/11 | 0 | 19.3 | V B C D E | S I | - | - | - | - | s(p) |
| Volusia | Mosquito Lagoon | 133 | 2/4/11 | 0 | 9.3 | II B C | none | - | - | - | - | f, s(p) |
| Volusia | New Smyrna Beach | 131 | 2/4/11 | 0 | 15.0 | I II IV V B D F G | H D V F S I O G | <u>91</u> | 96 | 01 | <u>06</u> | s(p), p, c |
| Volusia | North Canaveral National Seashore | 134 | 2/4/11 | 0 | 18.5 | I B | G | 91 | 96 | 01 | 06 | f |
| Volusia | North Peninsula SRA, Intracoastal Waterways | 127 | 2/4/11 | 0 | 4.0 | V B G | H B O | - | - | - | - | s(p) |
| Volusia | Volusia/Flagler County Line to North Side of Ponce De Leon Inlet | 128 | 2/4/11 | 0 | 51.3 | I II IV A B C D | H V S G | - | 96 | 01 | 06 | s(p), m, p, c |
| Wakulla | St. Marks - Oyster Bay | 48 | 2/1/11 | 0 | 23.3 | II A | n.r. | - | - | - | 06 | n.r. |
| Wakulla | St. Marks National Wildlife Refuge Impoundments | 49 | 2/1/11 | 0 | 7.5 | II A | n.r. | - | - | - | 06 | n.r. |
| Wakulla | Mashes Is County Park | 47 | 2/1/11 | 0 | 4.1 | II A | H D G | 91 | 96 | 01 | 06 | s(p) |
| Walton | Deer Lake State Park | 16 | 1/28/11 | 0 | 1.0 | III V A | H O G | - | - | - | 06 | s(p) |
| Walton | Grayton Beach State Park-Little Redfish Lake | 15 | 1/28/11 | 0 | 0.8 | III V A | H D V O G | 91 | - | 01 | 06 | c |
| Walton | Grayton Beach State Park-Main Park Access | 11 | 1/28/11 | 0 | 1.8 | III V A | H D V O G | 91 | - | 01 | 06 | s(p) |
| Walton | Grayton Beach State Park-Pine Street Access | 13 | 1/28/11 | 0 | 0.7 | III V A | H V O G | 91 | - | 01 | 06 | s(p) |
| Walton | Topsail Hill Preserve State Park | 10 | 1/28/11 | 0 | 6.0 | III V A | H D V O G | - | - | 01 | 06 | s(p) |
| Walton | Walton County Public Beach-Gulf Breeze | 14 | 1/28/11 | 0 | 0.4 | III V A | H D V O G | - | - | - | 06 | c |
| Walton | Walton County Public Beach-Town of Grayton | 12 | 1/28/11 | 0 | 0.5 | III V A | H D V O G | - | - | - | 06 | c |
| Total | | | | 306 | 1297.5 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Piping Plovers were seen at the site during that Census year.

² More area on Mexico Beach was surveyed during the 1996 Census than in 2011. In 1996, one PIPL was seen, but its specific location was not given. We do not know for certain whether the single PIPL was seen within the span of the 2011 survey route.

³ In 1991, 1 PIPL was observed on Alligator Point (which included Phipps Reserve), but its specific location was not given. We do not know for certain whether the single PIPL was seen within the span of the 2011 survey route.

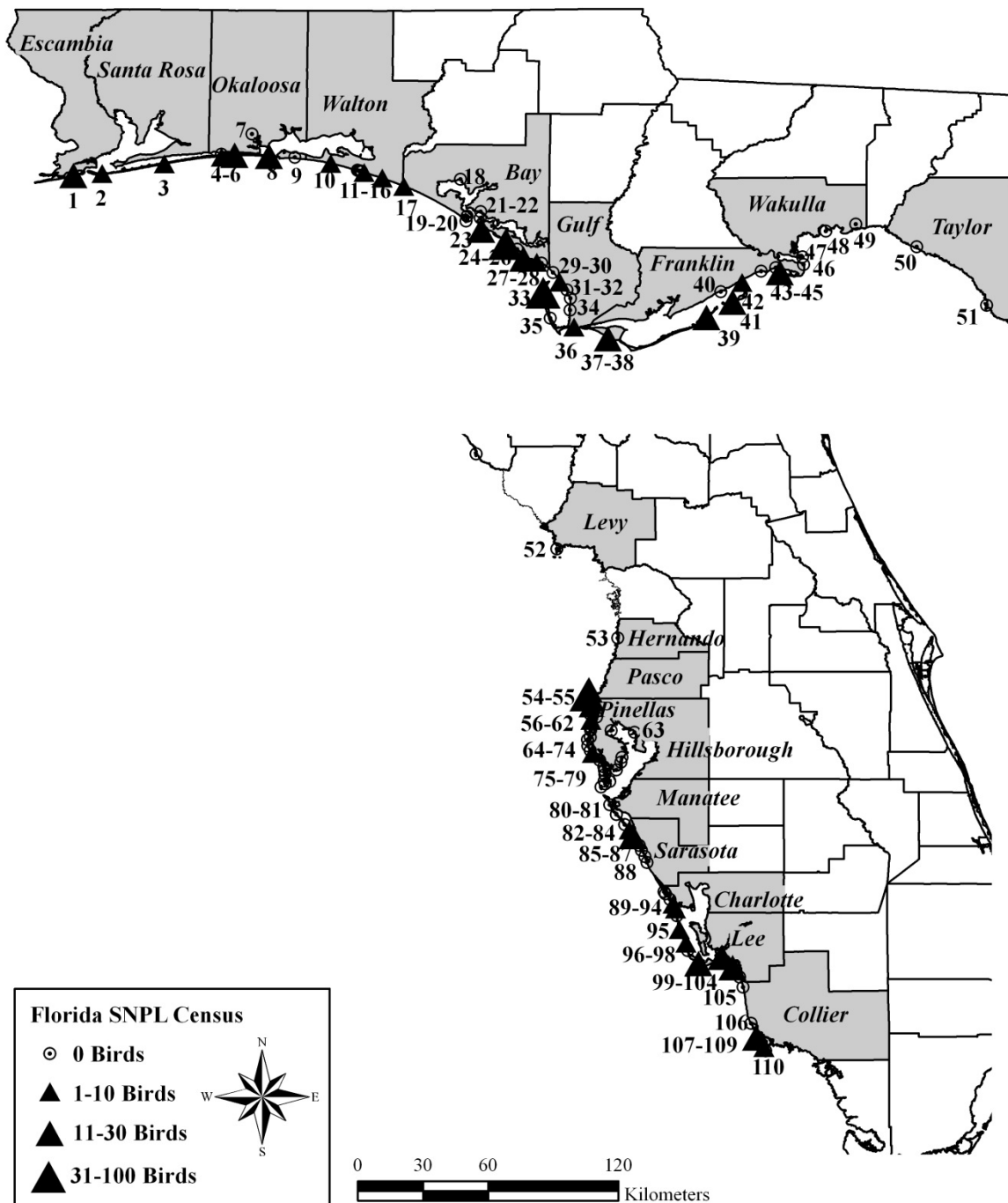
⁴ No official census, but 6 PIPL were seen here on 12/22/1990.

⁵ The 1991 datasheet and map indicate that 2 PIPL were seen here on 12/1/1990.

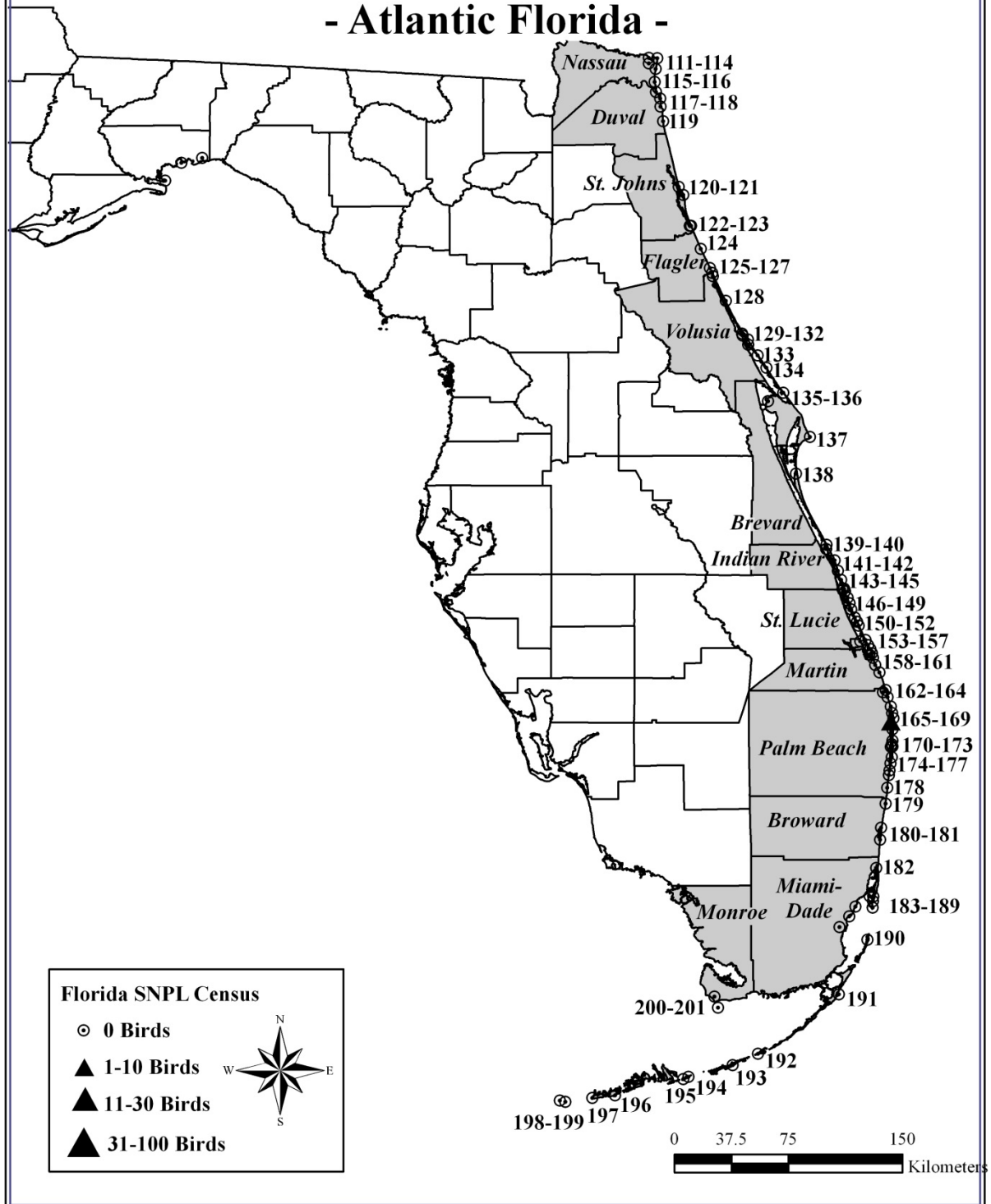
⁶ In 1991, 10 PIPL were seen on "Sand Key", a route which overlaps with this 2011 site. Specific locations of the PIPL were not given. We do not know for certain whether the PIPL were seen within the span of the 2011 survey route

⁷ Please note that this survey was conducted outside the Census window.

2011 International Snowy Plover Winter Census - Gulf Florida -



2011 International Snowy Plover Winter Census - Atlantic Florida -



The 2011 International Snowy Plover Winter Census in Florida

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|-----------|---|------|---------|-----------------|------|---------------------|---------------------------|---|---|-----------|-----------|------------------|
| | | | | | | | | - | - | - | <u>06</u> | |
| Bay | Bonfire Beach | 27 | 1/27/11 | 4 | 2.6 | III A | H D S G | - | - | - | <u>06</u> | p |
| Bay | Camp Helen State Park | 17 | 1/27/11 | 9 | 0.7 | I II III IV A | H D F V O G | - | - | 01 | 06 | s(p) |
| Bay | Crooked Island East | 26 | 1/27/11 | 27 | 9.7 | III B F | V G | - | - | <u>01</u> | <u>06</u> | f |
| Bay | Crooked Island West | 24 | 1/27/11 | 31 | 8.9 | III B F | V O G | - | - | <u>01</u> | <u>06</u> | f |
| Bay | Grand Lagoon - Bay Point, Alligator Point | 20 | 1/24/11 | 0 | 0.4 | II A D | H D G L | - | - | 01 | 06 | s(p) |
| Bay | Marifarms North | 18 | 1/28/11 | 0 | 5.4 | II V G | S | - | - | 01 | 06 | s(p), p |
| Bay | Mexico Beach ² | 28 | 2/24/11 | 0 | 2.6 | III A | H G | - | - | 01 | 06 | m, c |
| Bay | Shell Island | 23 | 1/27/11 | 23 | 15.2 | III B F | V G | - | - | <u>01</u> | <u>06</u> | f, s(p) |
| Bay | St. Andrew Bay - Davis Pt. to Redfish Pt. | 22 | 1/27/11 | 0 | 1.6 | II A D | L | - | - | 01 | 06 | f |
| Bay | St. Andrews State Recreation Area | 19 | 1/27/11 | 0 | 3.3 | II III A | H D S V O G L | - | - | 01 | <u>06</u> | s(p) |
| Bay | Tyndall AFB (Buck Beach) | 25 | 1/27/11 | 0 | 4.8 | II A | G L | - | - | - | 06 | f |
| Bay | West Beach Drive | 21 | 2/1/11 | 0 | 4.0 | II A | H G L | - | - | 01 | 06 | m, p |
| Brevard | Cape Canaveral Air Force Station | 137 | 2/4/11 | 0 | 21.0 | I B | H F G | - | - | 01 | 06 | f |
| Brevard | Merritt Island NWR (Shiloh Impoundments) | 136 | 1/28/11 | 0 | 10.5 | V G | G | - | - | - | - | f |
| Brevard | Patrick Air Force Base | 138 | 2/4/11 | 0 | 9.2 | I B | H D F O G | - | - | - | 06 | f |
| Brevard | South Canaveral National Seashore | 135 | 2/4/11 | 0 | 20.1 | I B | H G | - | - | 01 | 06 | f |
| Broward | Broward County Northern Link to Hillsboro Inlet | 179 | 2/1/11 | 0 | 6.8 | I B | H S | - | - | - | 06 | m, p |
| Broward | Hugh Taylor Birch State Park | 180 | 1/31/11 | 0 | 1.6 | I II V | H D V F S I U L | - | - | - | 06 | s(p), m |
| Broward | John U. Lloyd Beach S.P. | 181 | 1/29/11 | 0 | 4.0 | I II IV B | H L | - | - | 01 | 06 | s(p) |
| Charlotte | Barrier Island (Don Pedro) | 91 | 1/29/11 | 0 | 3.2 | III B | n.r. | - | - | - | 06 | p |
| Charlotte | Barrier Island (Knight Island) | 90 | 1/30/11 | 0 | 3.2 | II III IV V B F | F S V O | - | - | <u>01</u> | <u>06</u> | m |
| Charlotte | Barrier Island (Little Gasparilla Island) | 92 | 1/29/11 | 5 | 3.2 | III B | H D G | - | - | - | 06 | p |
| Charlotte | Gasparilla Island | 93 | 2/4/11 | 7 | 4.8 | III B | H D G | - | - | - | <u>06</u> | f, p |
| Charlotte | Stump Pass Beach | 89 | 1/30/11 | 0 | 2.1 | II III V B | H S G | - | - | - | - | s(p) |
| Collier | Big Marco Pass Shoal | 107 | 2/1/11 | 19 | 4.0 | III B | H D | - | - | <u>01</u> | <u>06</u> | s(p) |
| Collier | Cape Romano | 108 | 1/25/11 | 0 | 3.4 | III B D | H D F G | - | - | - | 06 | s(p), p |
| Collier | Caxambas Island | 109 | 1/31/11 | 0 | 0.3 | III D | H D G | - | - | - | 06 | s(p) |
| Collier | Delnor-Wiggins Pass State Park | 105 | 2/2/11 | 0 | 0.8 | III B | H G | - | - | - | <u>06</u> | s(p) |
| Collier | Keewaydin Island | 106 | 1/31/11 | 0 | 12.1 | III B | H D F S O G | - | - | - | 06 | s(p), p |
| Collier | Kice Island | 110 | 1/31/11 | 1 | 4.0 | III B D | H D F O G | - | - | - | - | s(p) |
| Duval | Little Talbot Island State Park | 117 | 2/4/11 | 0 | 6.5 | I IV B | H G | - | - | 01 | 06 | s(p) |
| Duval | Mayport Jetty South to County Line | 119 | 2/4/11 | 0 | 16.0 | I B | G | - | - | 01 | 06 | f, s(p), m, c |

The 2011 International Snowy Plover Winter Census in Florida (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|--------------|--|------|---------|-----------------|------|---------------------|---------------------------|---|---|-----------|-----------|---------|
| | | | | | | | | - | - | 01 | 06 | |
| Duval | Ward's Bank (Huguenot Park) | 118 | 2/4/11 | 0 | 6.4 | I II IV A | V G | - | - | 01 | 06 | f, s(p) |
| Escambia | Fort Pickens Gulf Islands N.S. | 2 | 1/29/11 | 2 | 24.1 | II III B | H V G | - | - | <u>01</u> | <u>06</u> | f |
| Escambia | Perdido Key Gulf Islands N.S. | 1 | 2/2/11 | 13 | 26.1 | II B C | H V G | - | - | <u>01</u> | <u>06</u> | f |
| Escambia | Santa Rosa Gulf Islands N.S. | 3 | 1/27/11 | 6 | 25.6 | III B | H D V G | - | - | 01 | <u>06</u> | f |
| Flagler | Flagler Beach and ICW (Pier to Gamble Rogers MSRA) | 125 | 2/4/11 | 0 | 4.9 | I V B G | H G | - | - | - | - | m, c |
| Flagler | Flagler Beach Pier to Marineland | 124 | 2/4/11 | 0 | 22.3 | I B | H G | - | - | - | - | m, c |
| Flagler | Gamble Rogers Memorial SRA | 126 | 2/4/11 | 0 | 3.4 | I II V B | H G | - | - | - | 06 | s(p), m |
| Franklin | Bald Pt. State Park | 46 | 2/5/11 | 0 | 1.5 | II III A | H G | - | - | 01 | 06 | s(p) |
| Franklin | Carrabelle Beach | 40 | 2/1/11 | 0 | 2.2 | II A | H D F G | - | - | 01 | 06 | c |
| Franklin | Dog Island | 41 | 1/28/11 | 17 | 13.7 | III V B | H F O G | - | - | 01 | 06 | s(p), p |
| Franklin | Flagg Island (Off St. Vincent Refuge) | 38 | 2/5/11 | 3 | 2.3 | III G | H O G | - | - | - | - | s(p) |
| Franklin | FSU Marine Lab | 43 | 2/1/11 | 0 | 1.6 | III A | H D G | - | - | 01 | 06 | p |
| Franklin | John S. Phipps Reserve (West end of Peninsula) | 45 | 1/29/11 | 17 | 3.2 | II III G | G | - | - | 01 | <u>06</u> | p |
| Franklin | Lanark Reef | 42 | 1/28/11 | 1 | 1.6 | III V B | G | - | - | <u>01</u> | 06 | s(p) |
| Franklin | St. George Island State Park | 39 | 2/4/11 | 27 | 18.0 | II III B | H V O | - | - | <u>01</u> | <u>06</u> | s(p) |
| Franklin | St. Vincent Island | 37 | 2/1/11 | 20 | 19.8 | II III B D | G | - | - | <u>01</u> | <u>06</u> | f |
| Franklin | Turkey Point to St. Teresa Beach | 44 | 2/1/11 | 0 | 8.8 | II A | H D V F G | - | - | 01 | 06 | p, c |
| Gulf | Highland View (Scamp St. to Port St. Joe) | 31 | 2/2/11 | 0 | 1.6 | II A G | S L | - | - | - | 06 | n.r. |
| Gulf | Indian Pass to Cape San Blas and Stump Hole | 36 | 2/2/11 | 1 | 11.6 | III A | H D V G | - | - | 01 | 06 | m, c |
| Gulf | NE St. Joe Bay Shoreline | 32 | 2/3/11 | 0 | 3.2 | II A | G | - | - | 01 | - | s(p) |
| Gulf | Simmons Bayou | 34 | 2/3/11 | 0 | 0.5 | II A | G | - | - | - | - | s(p) |
| Gulf | St. Joe Beach (County Line to Pine St.) | 29 | 2/24/11 | 0 | 4.0 | III A | H G | - | - | - | 06 | m, c |
| Gulf | St. Joe Peninsula SP (Northern Portion) | 33 | 2/3/11 | 51 | 17.3 | II III G | H V O | - | - | <u>01</u> | <u>06</u> | s(p) |
| Gulf | St. Joe Peninsula SP (Southern Portion) | 35 | 1/31/11 | 0 | 9.5 | III G | H D G L | - | - | <u>01</u> | 06 | m, c |
| Gulf | Windmark Beach (Pine St. to N Signal Ln Pier) | 30 | 1/28/11 | 10 | 4.7 | II A | H G L | - | - | <u>01</u> | <u>06</u> | p |
| Hernando | Pine Island | 53 | 1/28/11 | 0 | 0.8 | II III B | H G | - | - | - | - | c |
| Hillsborough | Cypress Point Park | 63 | 2/5/11 | 0 | 1.0 | II A | H O G | - | - | - | - | s(p) |
| Hillsborough | Egmont Key NWR & State Park | 79 | 2/4/11 | 0 | 4.8 | II III B | G | - | - | 01 | 06 | f |
| Indian River | Indian River Co. Beaches | 143 | 2/3/11 | 0 | 10.2 | I B | H D F S O G | - | - | - | 06 | m, p |
| Indian River | Pelican Island NWR | 140 | 2/1/11 | 0 | 21.7 | II V B C D E G | H F S V I O G | - | - | - | - | f |
| Indian River | Round Island Conservation Area | 144 | 2/2/11 | 0 | 1.6 | V G | H D O G | - | - | - | 06 | f, c |
| Indian River | Round Island Park | 145 | 2/3/11 | 0 | 0.7 | I B | H F G | - | - | - | 06 | p, c |

The 2011 International Snowy Plover Winter Census in Florida (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|-----------------|------|---------------------|---------------------------|---|---|-----------|-----------|------------------|
| | | | | | | | | - | - | - | - | |
| Indian River | Sebastian Inlet State Park to Wabasso Beach Park | 139 | 2/1/11 | 0 | 9.7 | I B | H D F O G | - | - | - | 06 | f, s(p), m |
| Indian River | Tracking Station Access to Barber Bridge | 142 | 2/3/11 | 0 | 2.6 | I B | H D S U O | - | - | - | 06 | m, p |
| Indian River | Tracking Station Park N to Wabasso Beach | 114 | 2/3/11 | 0 | 10.3 | I B | H D S G | - | - | - | 06 | s(p), m, p, c |
| Lee | Bonita Beach | 104 | 2/4/11 | 0 | 6.9 | III | H F G | - | - | - | 06 | m, p, c |
| Lee | Bunche Beach | 99 | 1/29/11 | 13 | 2.4 | II V A | H F G L | - | - | 01 | - | f, m, c |
| Lee | Captiva Island | 97 | 2/1/11 | 0 | 7.7 | I III A B | H F G | - | - | - | 06 | m, c |
| Lee | Cayo Costa | 95 | 1/26/11 | 10 | 11.7 | II III B G | H G | - | - | 01 | <u>06</u> | s(p), p |
| Lee | Esterio Island (R1) | 100 | 1/28/11 | 0 | 4.7 | II III B C | H D O G L | - | - | 01 | 06 | m, p, c |
| Lee | Esterio Island (R2) | 101 | 1/24/11 | 0 | 4.3 | II III B F | H D V F O G | - | - | 01 | 06 | m, p, c |
| Lee | Esterio Island (R3) | 102 | 2/5/11 | 16 | 2.4 | II III B | H G | - | - | <u>01</u> | <u>06</u> | s(p), m, p, c |
| Lee | Gasparilla Island | 94 | 2/4/11 | 0 | 11.3 | III B | H D G | - | - | - | 06 | f, s(p), p |
| Lee | Lovers Key State Park | 103 | 2/5/11 | 0 | 4.0 | III B | H O G | - | - | - | 06 | s(p) |
| Lee | N. Captiva Island | 96 | 1/27/11 | 9 | 3.4 | II III B | H D V F O G L | - | - | - | <u>06</u> | s(p) |
| Lee | Sanibel Island | 98 | 2/1/11 | 16 | 20.0 | I III A B D F | H D F O G | - | - | <u>01</u> | <u>06</u> | s(p), m |
| Levy | Cedar Key Area | 52 | 1/24/11 | 0 | 12.9 | III D | F G | - | - | - | 06 | s(p) |
| Manatee | Anna Maria Island | 80 | 1/30/11 | 0 | 10.0 | I B | n.r. | - | - | 01 | <u>06</u> | n.r. |
| Manatee | Longboat Key (formerly "Beer Can Island") | 81 | 1/30/11 | 0 | 7.3 | I B | n.r. | - | - | <u>01</u> | <u>06</u> | n.r. |
| Martin | Hobe Sound NWR | 160 | 1/31/11 | 0 | 5.6 | I B | H F S G | - | - | 01 | 06 | f |
| Martin | Hutchinson Island, Alex's Beach to Stuart Beach | 154 | 1/31/11 | 0 | 2.9 | I B | H F O G | - | - | - | 06 | s(p) |
| Martin | Hutchinson Island, Bathtub Beach to St. Lucie Inlet | 156 | 1/31/11 | 0 | 2.7 | I IV B | H F G L | - | - | - | 06 | p |
| Martin | Hutchinson Island, St. Lucie Line S to Alex's Beach | 157 | 2/1/11 | 0 | 2.8 | I B | H F O G | - | - | - | 06 | s(p) |
| Martin | Hutchinson Island, Stuart Beach to Bathtub Beach | 155 | 1/31/11 | 0 | 3.4 | I B | H F | - | - | - | 06 | s(p) |
| Martin | Jupiter Island Beaches | 161 | 1/31/11 | 0 | 7.6 | I B | H D F V S G | - | - | - | - | m |
| Martin | St. Lucie Inlet sandbars | 158 | 1/31/11 | 0 | 3.2 | II D | H D O S G | - | - | 01 | 06 | s(p) |
| Martin | St. Lucie Inlet State Park | 159 | 1/31/11 | 0 | 9.0 | I IV B | D V G | - | - | 01 | 06 | s(p) |
| Martin | W shore of Indian River Near Jensen Beach | 153 | 2/1/11 | 0 | 0.4 | II A D | H G L | - | - | - | 06 | s(p) |
| Miami-Dade | Bill Baggs State Park lighthouse to Crandon Park | 185 | 1/27/11 | 0 | 3.9 | I B | H V | - | - | 01 | 06 | s(p), m |
| Miami-Dade | Biscayne National Park | 190 | 2/4/11 | 0 | 9.7 | I II IV B D | H F G L | - | - | - | 06 | f |
| Miami-Dade | Crandon Park Beach | 186 | 1/27/11 | 0 | 2.8 | I B D | H V G L | - | - | 01 | 06 | c |

The 2011 International Snowy Plover Winter Census in Florida (Continued)

| COUNTY | SITE NAME | MAP # | DATE | TOTAL ADULT | | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|-------------------------|--|-------|---------|-------------|------|------------------|------------------------|---|----|-----------|----|---------|
| | | | | S | KM | | | | | | | |
| Miami-Dade | Cutler Wetlands | 189 | 2/3/11 | 0 | 0.5 | V A | H D V | - | - | - | - | p |
| Miami-Dade | Deering Estate and Chicken Key | 188 | 2/2/11 | 0 | 3.1 | II A C G | H D F O G L | - | - | - | 06 | s(p), c |
| Miami-Dade | Matheson Hammock | 187 | 2/4/11 | 0 | 1.2 | II A G | H D O G L | - | - | - | 06 | c |
| Miami-Dade | Oleta River State Park | 182 | 2/4/11 | 0 | 0.3 | II A | G | - | - | - | - | s(p) |
| Miami-Dade | Rickenbacker Causeway Shoreline | 183 | 1/28/11 | 0 | 1.7 | II E | H D F S I G | - | - | 01 | 06 | c |
| Miami-Dade | Virginia Key Critical Wildlife Area | 184 | 1/28/11 | 0 | 2.6 | II B | H S I | 91 | 96 | 01 | 06 | m |
| Monroe | Bahia Honda State Park | 195 | 1/24/11 | 0 | 4.8 | I G | H F O G | - | - | 01 | 06 | s(p) |
| Monroe | Boca Chica Beach | 196 | 1/27/11 | 0 | 1.3 | I E | H D V S G | - | - | 01 | 06 | s(p) |
| Monroe | Boca Grande Key | 199 | 1/25/11 | 0 | 1.2 | V E G | H D G L | - | - | 01 | 06 | f |
| Monroe | Curry Hammock State Park | 193 | 1/24/11 | 0 | 0.4 | I G | H O G | - | - | - | 06 | s(p) |
| Monroe | Fort Taylor Historic State Park | 197 | 2/1/11 | 0 | 0.8 | I III E | H G | - | - | 01 | 06 | s(p) |
| Monroe | John D. Pennekamp state Park/ Carysfort Yacht Club | 191 | 2/3/11 | 0 | 1.0 | I II A | H G | - | - | - | 06 | s(p) |
| Monroe | Lake Ingraham | 200 | 1/29/11 | 0 | 1.6 | II | G L | - | - | - | 06 | f |
| Monroe | Long Key State Park | 192 | 1/24/11 | 0 | 1.6 | I G | H G L | - | - | 01 | 06 | s(p) |
| Monroe | Ohio Key | 194 | 1/27/11 | 0 | 0.5 | I E G | H D G | - | - | - | - | f |
| Monroe | Sandy Key to Carl Ross Key | 201 | 2/6/11 | 0 | 1.5 | II E | G | - | - | - | 06 | f |
| Monroe | Woman Key | 198 | 1/25/11 | 0 | 1.3 | I E | H D G L | - | - | 01 | 06 | f |
| Nassau | Amelia Island State Park | 116 | 2/4/11 | 0 | 2.8 | I IV B | G | - | - | - | - | s(p) |
| Nassau | Bell River Spoil Island | 113 | 2/6/11 | 0 | 0.4 | V C | O G | - | - | 01 | 06 | p |
| Nassau | Fort Clinch State Park | 112 | 2/4/11 | 0 | 6.4 | I II IV B | H S | - | - | - | - | s(p) |
| Nassau | Little Tiger Island | 111 | 2/6/11 | 0 | 2.4 | V E | O | - | - | - | - | p |
| Nassau | North Fernandina Beach | 114 | 4/4/11 | 0 | 11.0 | I B | H S G | - | - | 01 | 06 | s(p) |
| Nassau | South Fernandina Beach | 115 | 2/4/11 | 0 | 7.4 | I B | H | - | - | 01 | 06 | p |
| Okaloosa | Eglin AFB (E restricted beach), Santa Rosa Island | 6 | 1/27/11 | 13 | 9.7 | III B | H V G | - | - | - | 06 | f |
| Okaloosa | Eglin AFB (Public Beach), Okaloosa Island | 8 | 1/27/11 | 12 | 7.4 | I IV B | H V S G | - | - | - | - | f |
| Okaloosa | Henderson Beach State Park | 9 | 1/28/11 | 0 | 2.2 | III A | H D V O G L | - | - | 01 | 06 | s(p) |
| Okaloosa | Okaloosa Holding Ponds | 7 | 1/25/11 | 0 | 4.5 | V A | n.r. | - | - | <u>01</u> | 06 | n.r. |
| Okaloosa/ Santa Rosa | Eglin AFB (W restricted beach), Santa Rosa Island | 4 | 1/27/11 | 7 | 9.7 | III B | V G | - | - | <u>01</u> | 06 | f |
| Okaloosa/ Santa Rosa | Eglin AFB (N restricted beach) | 5 | 2/2/11 | 0 | 22.7 | II III B | G L | - | - | - | - | f |
| Palm Beach | Boynton Inlet to Gulfstream Park | 175 | 2/1/11 | 0 | 4.8 | I IV A | H S O G | - | - | <u>01</u> | 06 | m, p, c |

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|-----------------------|---|------|---------|-----------------|------|---------------------|---------------------------|---|---|-----------|-----------|------------------|
| | | | | | | | | - | - | - | - | |
| Palm Beach | Gulfstream Park to N. Delray Beach | 176 | 2/2/11 | 0 | 6.4 | I B | H O G | - | - | 01 | <u>06</u> | s(p), m |
| Palm Beach | Highland Beach | 178 | 2/3/11 | 0 | 13.4 | I IV B | H D V S I | - | - | - | 06 | m, p, c |
| Palm Beach | Ibis Isle Restoration Area | 171 | 2/3/11 | 0 | 0.6 | II B | G L | - | - | - | 06 | s(p) |
| Palm Beach | Juno Beach Park to MacArthur State Park | 165 | 2/3/11 | 0 | 6.5 | I B | H F | - | - | - | 06 | c |
| Palm Beach | Jupiter Beach to Juno Beach Park | 164 | 2/3/11 | 0 | 5.8 | I IV B | H D F S | - | - | - | - | c |
| Palm Beach | Jupiter Sound, Jupiter inlet, Loxahatchee River | 163 | 2/3/11 | 0 | 7.4 | II IV V A B D | H D S U G L | - | - | - | 06 | s(p) |
| Palm Beach | Lantana Park to Boynton Inlet | 174 | 2/1/11 | 0 | 4.3 | I IV F | G | - | - | - | 06 | c |
| Palm Beach | MacArthur Beach State Park | 166 | 2/4/11 | 0 | 2.4 | I II B | H D F G | - | - | 01 | 06 | s(p) |
| Palm Beach | MacArthur Beach State Park to Palm Beach Shores | 167 | 2/3/11 | 0 | 4.6 | I IV B | H V F | - | - | - | 06 | m, p |
| Palm Beach | N. Delray Beach to Atlantic Dunes Park | 177 | 2/5/11 | 0 | 0.8 | n.r. | H D G | - | - | - | 06 | n.r. |
| Palm Beach | Palm Beach Shores to Southern Blvd | 169 | 2/3/11 | 0 | 11.9 | I IV B | H D S G | - | - | - | - | s(p), m |
| Palm Beach | Peanut Island | 168 | 1/31/11 | 1 | 1.6 | V B | H G | - | - | - | - | m |
| Palm Beach | Sloan's Curve to Lantana Beach | 172 | 2/3/11 | 0 | 6.4 | I B | H V S | - | - | - | 06 | s(p), m, p, c |
| Palm Beach | Snook Islands Natural Area to Lake Worth Lagoon | 173 | 2/6/11 | 0 | 2.0 | II A G | S G L | - | - | - | - | m |
| Palm Beach | Southern Blvd to Sloan's Curve | 170 | 2/3/11 | 0 | 3.3 | I A | H G | - | - | - | 06 | m, p |
| Palm Beach/ Martin | Jupiter Island - Jupiter Inlet through Blowing Rocks Preserve | 162 | 1/31/11 | 0 | 3.2 | I IV B | H D V F | - | - | - | 06 | c |
| Pasco | Anclote Key sandbar | 54 | 2/4/11 | 14 | 2.7 | III D | H G | - | - | <u>01</u> | 06 | s(p) |
| Pasco/Pinellas | Anclote Key State Park | 55 | 2/4/11 | 38 | 8.0 | III B | G | - | - | <u>01</u> | 06 | s(p) |
| Pinellas | Belleair Causeway Bridge | 64 | 2/4/11 | 0 | 4.8 | II A B | H F G L | - | - | - | - | n.r. |
| Pinellas | Caladesi Island State Park | 59 | 2/4/11 | 6 | 4.0 | II III B | H O G | - | - | <u>01</u> | - | s(p) |
| Pinellas | Clearwater Beach | 60 | 2/4/11 | 0 | 4.4 | n.r. | n.r. | - | - | - | 06 | n.r. |
| Pinellas | Courtney Campbell Causeway, Clearwater, Public Beach | 62 | 2/4/11 | 0 | 29.0 | II V G | H D F V G | - | - | - | - | m |
| Pinellas | Dunedin Causeway (to Honeymoon Island) | 58 | 2/4/11 | 0 | 1.6 | II G | H G | - | - | 01 | 06 | c |
| Pinellas | Ft. DeSoto County Park, E beach | 77 | 2/4/11 | 0 | 4.0 | V B | V G | - | - | - | 06 | c |
| Pinellas | Ft. DeSoto County Park, NW Beach | 76 | 2/6/11 | 0 | 4.5 | III B | n.r. | - | - | <u>01</u> | 06 | n.r. |
| Pinellas | Ft. DeSoto County Park, South tip | 78 | 2/1/11 | 0 | 1.1 | n.r. | n.r. | - | - | - | - | n.r. |
| Pinellas | Honeymoon Island SRA | 57 | 2/4/11 | 0 | 6.4 | III B | H S G | - | - | <u>01</u> | <u>06</u> | s(p) |
| Pinellas | Indian Rocks Beach | 65 | 2/5/11 | 0 | 3.7 | n.r. | n.r. | - | - | - | 06 | n.r. |
| Pinellas | Lassing Park | 71 | 1/26/11 | 0 | 0.7 | n.r. | n.r. | - | - | - | - | n.r. |
| Pinellas | Madeira Beach | 68 | 1/27/11 | 7 | 5.1 | III A | H V F G | - | - | - | 06 | m |

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| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|-----------|--|------|---------|-----------------|------|---------------------|---------------------------|---|---|-----------|-----------|------------------|
| | | | | | | | | | | | | |
| Pinellas | Pass-a-Grille Beach | 74 | 2/5/11 | 0 | 2.7 | III B | H G | - | - | - | - | m |
| Pinellas | Pinellas Point | 73 | 1/30/11 | 0 | 1.6 | V A | O G L | - | - | - | - | m |
| Pinellas | Redington Beach/North Redington Beach | 67 | 2/6/11 | 0 | 4.4 | III B | H O G | - | - | - | 06 | s(p) |
| Pinellas | Sandy Park to Bellair Beach Morgan Dr. Park | 61 | 2/5/11 | 0 | 3.4 | n.r. | n.r. | - | - | - | 06 | n.r. |
| Pinellas | Shell Key | 75 | 2/6/11 | 0 | 2.4 | II B | H G L | - | - | <u>01</u> | <u>06</u> | c |
| Pinellas | St. Pete Beach | 72 | 2/4/11 | 0 | 3.4 | n. r. | n.r. | - | - | - | - | n.r. |
| Pinellas | St. Petersburg- North shore park area | 69 | 1/30/11 | 0 | 0.8 | n.r. | n.r. | - | - | - | 06 | n.r. |
| Pinellas | Three Rooker Bar | 56 | 2/4/11 | 2 | 3.2 | III B | G | - | - | <u>01</u> | 06 | s(p) |
| Pinellas | Treasure Island | 70 | 2/6/11 | 0 | 6.4 | III A G | H U G | - | - | - | 06 | m |
| Pinellas | Walsingham Road South to Park Blvd | 66 | 2/4/11 | 0 | 3.0 | III B | H F G | - | - | - | 06 | m |
| Sarasota | Caspersen Beach (Venice Beach) | 88 | 2/5/11 | 0 | 6.1 | III A | H S | - | - | - | 06 | s(p), m, p, c |
| Sarasota | Lido Beach | 83 | 1/29/11 | 2 | 4.0 | III B | H S O G | - | - | - | <u>06</u> | c |
| Sarasota | North Casey Key | 86 | 2/5/11 | 0 | 4.8 | III B | H D S G | - | - | - | 06 | n.r. |
| Sarasota | Siesta Key, N end to Point of Rocks | 84 | 2/5/11 | 16 | 4.7 | III B | H D V G | - | - | - | <u>06</u> | c |
| Sarasota | Siesta Key, Turtle Beach to Point of Rocks | 85 | 2/6/11 | 0 | 3.1 | II III B F | H D G | - | - | - | 06 | s(p), c |
| Sarasota | South Casey Key | 87 | 2/5/11 | 0 | 5.0 | III B | H D S O G | - | - | - | 06 | p, c |
| Sarasota | South Longboat Key | 82 | 2/5/11 | 0 | 4.8 | III B | H S U O | - | - | - | 06 | p |
| St. Johns | Anastasia State Recreation Area | 121 | 2/4/11 | 0 | 7.9 | I IV B | H O G | - | - | 01 | 06 | s(p) |
| St. Johns | Rattlesnake Island | 122 | 2/4/11 | 0 | 1.0 | IV E | n.r. | - | - | - | - | n.r. |
| St. Johns | St. Augustine Beach (Matanzas Inlet) | 123 | 2/4/11 | 0 | 25.7 | I II IV V A B C D | H D V F S U G | - | - | - | 06 | f, s(p), m, c |
| St. Johns | Vilano Point to North Beach | 120 | 2/4/11 | 0 | 25.7 | I B | D G | - | - | 01 | 06 | f, c |
| St. Lucie | Avalon State Park | 146 | 2/3/11 | 0 | 2.4 | I B | H | - | - | 01 | 06 | s(p) |
| St. Lucie | Fort Pierce Inlet State Park | 148 | 2/3/11 | 0 | 1.4 | I IV B | H F G | - | - | 01 | 06 | s(p) |
| St. Lucie | Fort Pierce Inlet State Park to Avalon State Park | 147 | 1/28/11 | 0 | 6.4 | I B | H G | - | - | 01 | 06 | p, c |
| St. Lucie | S Hutchinson Island | 149 | 1/31/11 | 0 | 24.5 | I B | H D F | - | - | - | 06 | m, p, c |
| St. Lucie | South Hutchinson Island- Little Mud Creek N to Frederick Douglass Park | 151 | 1/31/11 | 0 | 3.7 | I B | H D F | - | - | - | 06 | m, p, c |
| St. Lucie | South Hutchinson Island- Little Mud Creek S to the narrows | 152 | 1/31/11 | 0 | 6.4 | I B | H D F | - | - | - | 06 | m, p, c |
| St. Lucie | South Hutchinson Island-Fredrick Douglass Park to Inlet | 150 | 1/31/11 | 0 | 6.4 | I B | H D F | - | - | - | 06 | m, p, c |
| Taylor | Hagen's Cove | 51 | 2/4/11 | 0 | 0.7 | n.r. | n.r. | - | - | 01 | 06 | n.r. |

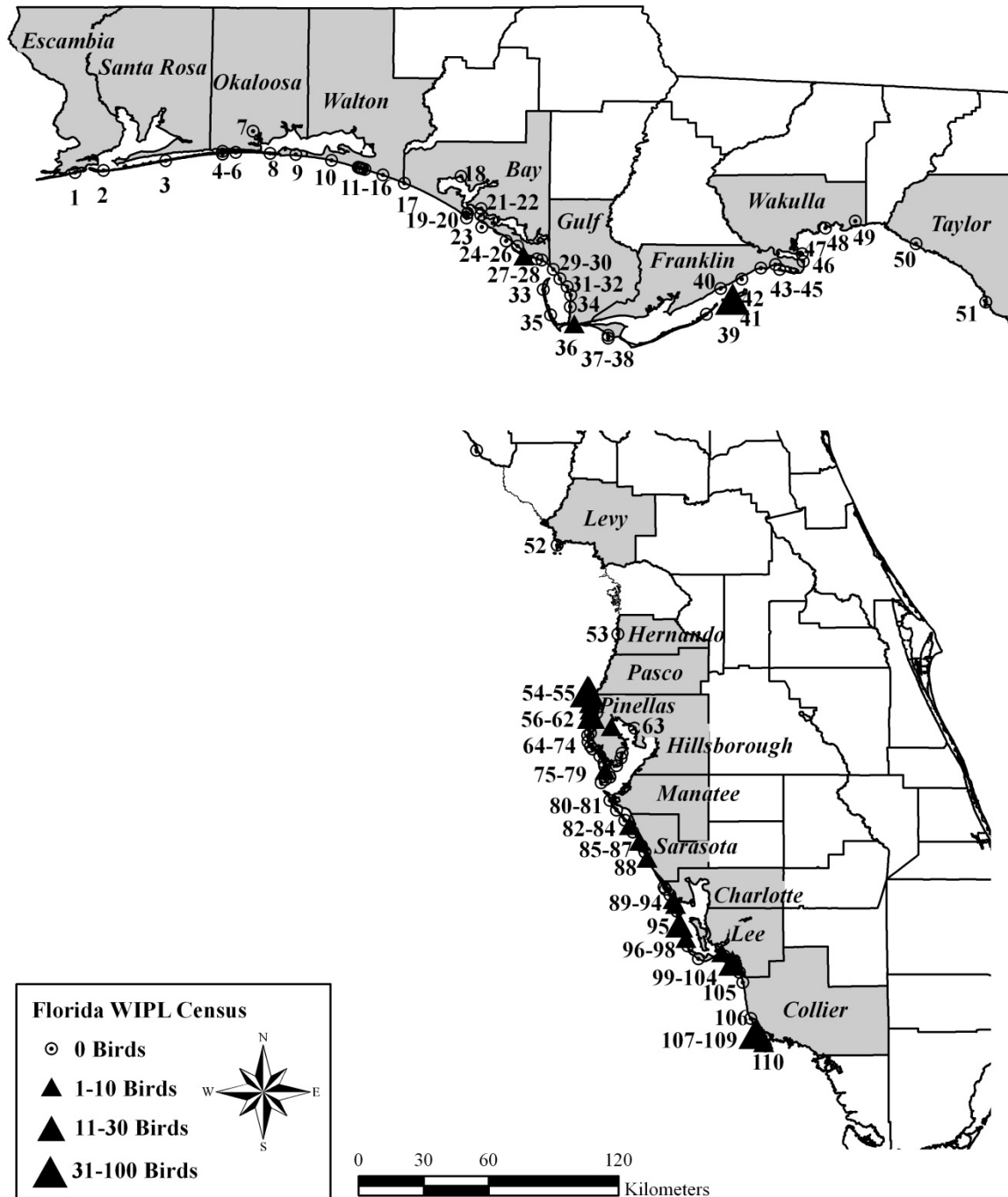
The 2011 International Snowy Plover Winter Census in Florida (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|-----------------|---------------|---------------------|-------------------------|---|---|----|-----------|------------------|
| | | | | | | | | | | | | |
| Taylor | Hickory Mound Impoundment | 50 | 2/4/11 | 0 | 5.0 | III V G | n.r. | - | - | - | - | s(p) |
| Volusia | Disappearing Island | 129 | 2/4/11 | 0 | 3.0 | IV V C D | H D F O G | - | - | - | 06 | s(p) |
| Volusia | Indian River Lagoon Park | 132 | 2/4/11 | 0 | 13.7 | II A B C | G | - | - | - | - | m |
| Volusia | Intercoastal Waterway (Other islands) | 130 | 2/4/11 | 0 | 19.3 | V B C D E | S I | - | - | - | - | s(p) |
| Volusia | Mosquito Lagoon | 133 | 2/4/11 | 0 | 9.3 | II B C | none | - | - | - | - | f, s(p) |
| Volusia | New Smyrna Beach | 131 | 2/4/11 | 0 | 15.0 | I II IV V B D F G | H D V F S I O G | - | - | 01 | 06 | s(p), p, c |
| Volusia | North Canaveral National Seashore | 134 | 2/4/11 | 0 | 18.5 | I B | G | - | - | 01 | 06 | f |
| Volusia | North Peninsula SRA, Intracoastal Waterways | 127 | 2/4/11 | 0 | 4.0 | V B G | H B O | - | - | - | - | s(p) |
| Volusia | Volusia/Flagler County Line to North Side of Ponce De Leon Inlet | 128 | 2/4/11 | 0 | 51.3 | I II IV A B C D | H V S G | - | - | 01 | 06 | s(p), m, p, c |
| Wakulla | St. Marks - Oyster Bay | 48 | 2/1/11 | 0 | 23.3 | II A | n.r. | - | - | - | 06 | n.r. |
| Wakulla | St. Marks National Wildlife Refuge Impoundments | 49 | 2/1/11 | 0 | 7.5 | II A | n.r. | - | - | - | 06 | n.r. |
| Wakulla | Mashes Is County Park | 47 | 2/1/11 | 0 | 4.1 | II A | H D G | - | - | 01 | 06 | s(p) |
| Walton | Deer Lake State Park | 16 | 1/28/11 | 7 | 1.0 | III V A | H O G | - | - | - | 06 | s(p) |
| Walton | Grayton Beach State Park-Little Redfish Lake | 15 | 1/28/11 | 0 | 0.8 | III V A | H D V O G | - | - | 01 | 06 | c |
| Walton | Grayton Beach State Park-Main Park Access | 11 | 1/28/11 | 6 | 1.8 | III V A | H D V O G | - | - | 01 | 06 | s(p) |
| Walton | Grayton Beach State Park-Pine Street Access | 13 | 1/28/11 | 0 | 0.7 | III V A | H V O G | - | - | 01 | <u>06</u> | s(p) |
| Walton | Topsail Hill Preserve State Park | 10 | 1/28/11 | 6 | 6.0 | III V A | H D V O G | - | - | 01 | 06 | s(p) |
| Walton | Walton County Public Beach-Gulf Breeze | 14 | 1/28/11 | 0 | 0.4 | III V A | H D V O G | - | - | - | 06 | c |
| Walton | Walton County Public Beach-Town of Grayton | 12 | 1/28/11 | 0 | 0.5 | III V A | H D V O G | - | - | - | 06 | c |
| Total | | | | 495 | 1297.5 | | | | | | | |

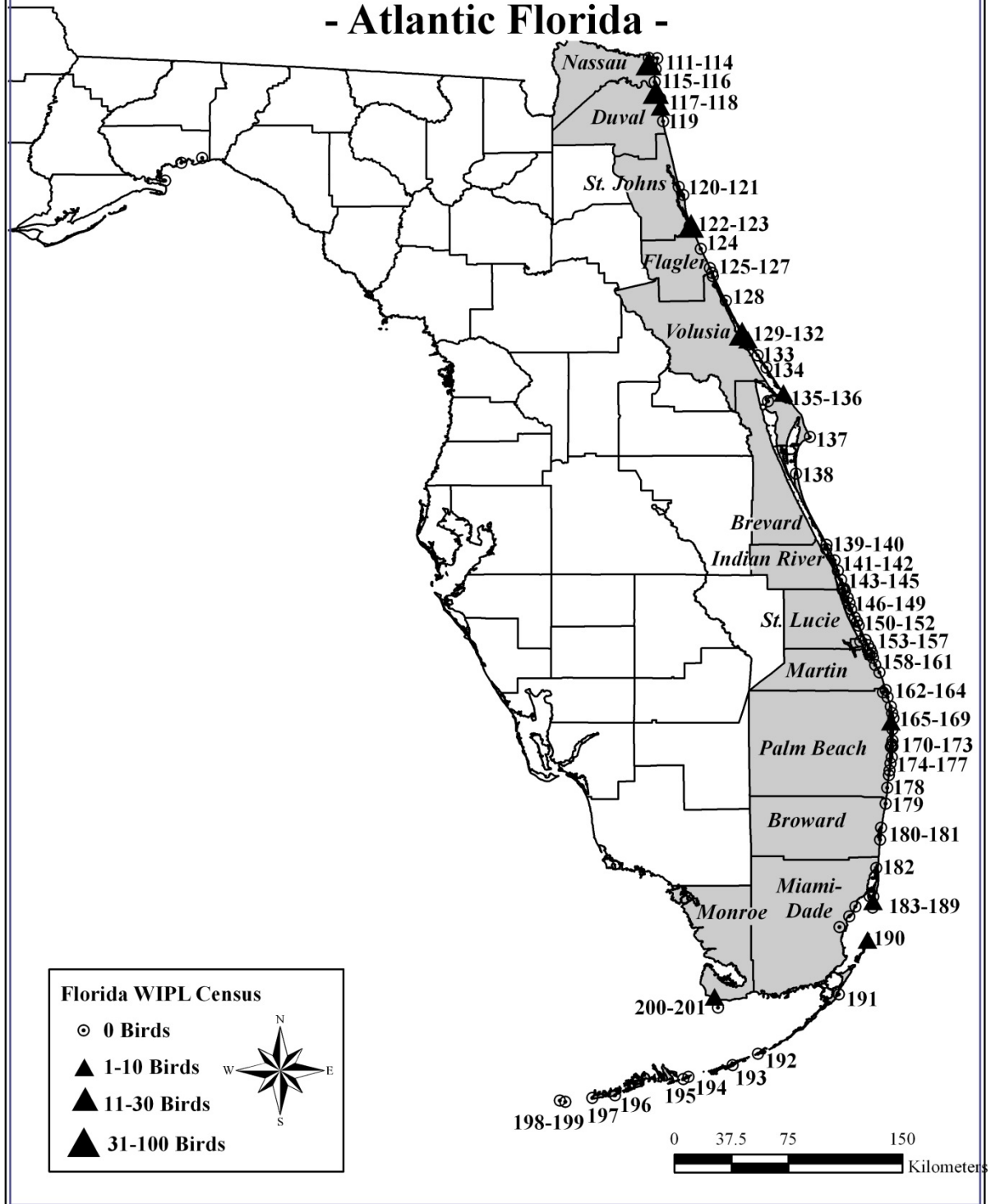
¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Snowy Plovers were seen at the site during that Census year.

² Please note that this survey was conducted outside the Census window.

2011 International Wilson's Plover Winter Census - Gulf Florida -



2011 International Wilson's Plover Winter Census - Atlantic Florida -



The 2011 International Wilson's Plover Winter Census in Florida

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|-----------|---|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|-----------|------------------|
| | | | | | | | | | | | | |
| Bay | Bonfire Beach | 27 | 1/27/11 | 0 | 2.6 | III A | H D S G | - | - | - | 06 | p |
| Bay | Camp Helen State Park | 17 | 1/27/11 | 0 | 0.7 | I II III IV A | H D F V O G | - | - | - | 06 | s(p) |
| Bay | Crooked Island East | 26 | 1/27/11 | 2 | 9.7 | III B F | V G | - | - | - | 06 | f |
| Bay | Crooked Island West | 24 | 1/27/11 | 0 | 8.9 | III B F | V O G | - | - | - | 06 | f |
| Bay | Grand Lagoon - Bay Point, Alligator Point | 20 | 1/24/11 | 0 | 0.4 | II A D | H D G L | - | - | - | 06 | s(p) |
| Bay | Marifarms North | 18 | 1/28/11 | 0 | 5.4 | II V G | S | - | - | - | 06 | s(p), p |
| Bay | Mexico Beach ² | 28 | 2/24/11 | 0 | 2.6 | III A | H G | - | - | - | 06 | m, c |
| Bay | Shell Island | 23 | 1/27/11 | 0 | 15.2 | III B F | V G | - | - | - | 06 | f, s(p) |
| Bay | St. Andrew Bay - Davis Pt. to Redfish Pt. | 22 | 1/27/11 | 0 | 1.6 | II A D | L | - | - | - | 06 | f |
| Bay | St. Andrews State Recreation Area | 19 | 1/27/11 | 0 | 3.3 | II III A | H D S V O G L | - | - | - | 06 | s(p) |
| Bay | Tyndall AFB (Buck Beach) | 25 | 1/27/11 | 0 | 4.8 | II A | G L | - | - | - | 06 | f |
| Bay | West Beach Drive | 21 | 2/1/11 | 0 | 4.0 | II A | H G L | - | - | - | 06 | m, p |
| Brevard | Cape Canaveral Air Force Station | 137 | 2/4/11 | 0 | 21.0 | I B | H F G | - | - | - | <u>06</u> | f |
| Brevard | Merritt Island NWR (Shiloh Impoundments) | 136 | 1/28/11 | 0 | 10.5 | V G | G | - | - | - | - | f |
| Brevard | Patrick Air Force Base | 138 | 2/4/11 | 0 | 9.2 | I B | H D F O G | - | - | - | 06 | f |
| Brevard | South Canaveral National Seashore | 135 | 2/4/11 | 4 | 20.1 | I B | H G | - | - | - | <u>06</u> | f |
| Broward | Broward County Northern Link to Hillsboro Inlet | 179 | 2/1/11 | 0 | 6.8 | I B | H S | - | - | - | 06 | m, p |
| Broward | Hugh Taylor Birch State Park | 180 | 1/31/11 | 0 | 1.6 | I II V | H D V F S I U L | - | - | - | 06 | s(p), m |
| Broward | John U. Lloyd Beach S.P. | 181 | 1/29/11 | 0 | 4.0 | I II IV B | H L | - | - | - | 06 | s(p) |
| Charlotte | Barrier Island (Don Pedro) | 91 | 1/29/11 | 0 | 3.2 | III B | n.r. | - | - | - | 06 | p |
| Charlotte | Barrier Island (Knight Island) | 90 | 1/30/11 | 0 | 3.2 | II III IV V B F | F S V O | - | - | - | <u>06</u> | m |
| Charlotte | Barrier Island (Little Gasparilla Island) | 92 | 1/29/11 | 1 | 3.2 | III B | H D G | - | - | - | 06 | p |
| Charlotte | Gasparilla Island | 93 | 2/4/11 | 6 | 4.8 | III B | H D G | - | - | - | <u>06</u> | f, p |
| Charlotte | Stump Pass Beach | 89 | 1/30/11 | 0 | 2.1 | II III V B | H S G | - | - | - | - | s(p) |
| Collier | Big Marco Pass Shoal | 107 | 2/1/11 | 48 | 4.0 | III B | H D | - | - | - | <u>06</u> | s(p) |
| Collier | Cape Romano | 108 | 1/25/11 | 0 | 3.4 | III B D | H D F G | - | - | - | <u>06</u> | s(p), p |
| Collier | Caxambas Island | 109 | 1/31/11 | 0 | 0.3 | III D | H D G | - | - | - | <u>06</u> | s(p) |
| Collier | Delnor-Wiggins Pass State Park | 105 | 2/2/11 | 0 | 0.8 | III B | H G | - | - | - | 06 | s(p) |
| Collier | Keewaydin Island | 106 | 1/31/11 | 0 | 12.1 | III B | H D F S O G | - | - | - | <u>06</u> | s(p), p |
| Collier | Kice Island | 110 | 1/31/11 | 2 | 4.0 | III B D | H D F O G | - | - | - | - | s(p) |
| Duval | Little Talbot Island State Park | 117 | 2/4/11 | 0 | 6.5 | I IV B | H G | - | - | - | <u>06</u> | s(p) |
| Duval | Mayport Jetty South to County Line | 119 | 2/4/11 | 0 | 16.0 | I B | G | - | - | - | 06 | f, s(p), m, c |

The 2011 International Wilson's Plover Winter Census in Florida (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|--------------|--|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|-----------|---------|
| | | | | | | | | - | - | - | - | |
| Duval | Ward's Bank (Huguenot Park) | 118 | 2/4/11 | 7 | 6.4 | I II IV A | V G | - | - | - | 06 | f, s(p) |
| Escambia | Fort Pickens Gulf Islands N.S. | 2 | 1/29/11 | 0 | 24.1 | II III B | H V G | - | - | - | 06 | f |
| Escambia | Perdido Key Gulf Islands N.S. | 1 | 2/2/11 | 0 | 26.1 | II B C | H V G | - | - | - | 06 | f |
| Escambia | Santa Rosa Gulf Islands N.S. | 3 | 1/27/11 | 0 | 25.6 | III B | H D V G | - | - | - | 06 | f |
| Flagler | Flagler Beach and ICW (Pier to Gamble Rogers MSRA) | 125 | 2/4/11 | 0 | 4.9 | I V B G | H G | - | - | - | - | m, c |
| Flagler | Flagler Beach Pier to Marineland | 124 | 2/4/11 | 0 | 22.3 | I B | H G | - | - | - | - | m, c |
| Flagler | Gamble Rogers Memorial SRA | 126 | 2/4/11 | 0 | 3.4 | I II V B | H G | - | - | - | 06 | s(p), m |
| Franklin | Bald Pt. State Park | 46 | 2/5/11 | 0 | 1.5 | II III A | H G | - | - | - | 06 | s(p) |
| Franklin | Carrabelle Beach | 40 | 2/1/11 | 0 | 2.2 | II A | H D F G | - | - | - | 06 | c |
| Franklin | Dog Island | 41 | 1/28/11 | 0 | 13.7 | III V B | H F O G | - | - | - | <u>06</u> | s(p), p |
| Franklin | Flagg Island (Off St. Vincent Refuge) | 38 | 2/5/11 | 0 | 2.3 | III G | H O G | - | - | - | - | s(p) |
| Franklin | FSU Marine Lab | 43 | 2/1/11 | 0 | 1.6 | III A | H D G | - | - | - | 06 | p |
| Franklin | John S. Phipps Reserve (West end of Peninsula) | 45 | 1/29/11 | 0 | 3.2 | II III G | G | - | - | - | 06 | p |
| Franklin | Lanark Reef | 42 | 1/28/11 | 0 | 1.6 | III V B | G | - | - | - | 06 | s(p) |
| Franklin | St. George Island State Park | 39 | 2/4/11 | 0 | 18.0 | II III B | H V O | - | - | - | 06 | s(p) |
| Franklin | St. Vincent Island | 37 | 2/1/11 | 0 | 19.8 | II III B D | G | - | - | - | 06 | f |
| Franklin | Turkey Point to St. Teresa Beach | 44 | 2/1/11 | 0 | 8.8 | II A | H D V F G | - | - | - | 06 | p, c |
| Gulf | Highland View (Scamp St. to Port St. Joe) | 31 | 2/2/11 | 0 | 1.6 | II A G | S L | - | - | - | 06 | n.r. |
| Gulf | Indian Pass to Cape San Blas and Stump Hole | 36 | 2/2/11 | 2 | 11.6 | III A | H D V G | - | - | - | 06 | m, c |
| Gulf | NE St. Joe Bay Shoreline | 32 | 2/3/11 | 0 | 3.2 | II A | G | - | - | - | - | s(p) |
| Gulf | Simmons Bayou | 34 | 2/3/11 | 0 | 0.5 | II A | G | - | - | - | - | s(p) |
| Gulf | St. Joe Beach (County Line to Pine St.) | 29 | 2/24/11 | 0 | 4.0 | III A | H G | - | - | - | 06 | m, c |
| Gulf | St. Joe Peninsula SP (Northern Portion) | 33 | 2/3/11 | 0 | 17.3 | II III G | H V O | - | - | - | <u>06</u> | s(p) |
| Gulf | St. Joe Peninsula SP (Southern Portion) | 35 | 1/31/11 | 0 | 9.5 | III G | H D G L | - | - | - | <u>06</u> | m, c |
| Gulf | Windmark Beach (Pine St. to N Signal Ln Pier) | 30 | 1/28/11 | 0 | 4.7 | II A | H G L | - | - | - | 06 | p |
| Hernando | Pine Island | 53 | 1/28/11 | 0 | 0.8 | II III B | H G | - | - | - | - | c |
| Hillsborough | Cypress Point Park | 63 | 2/5/11 | 0 | 1.0 | II A | H O G | - | - | - | - | s(p) |
| Hillsborough | Egmont Key NWR & State Park | 79 | 2/4/11 | 0 | 4.8 | II III B | G | - | - | - | 06 | f |
| Indian River | Indian River Co. Beaches | 143 | 2/3/11 | 0 | 10.2 | I B | H D F S O G | - | - | - | 06 | m, p |
| Indian River | Pelican Island NWR | 140 | 2/1/11 | 0 | 21.7 | II V B C D E G | H F S V I O G | - | - | - | - | f |
| Indian River | Round Island Conservation Area | 144 | 2/2/11 | 0 | 1.6 | V G | H D O G | - | - | - | 06 | f, c |
| Indian River | Round Island Park | 145 | 2/3/11 | 0 | 0.7 | I B | H F G | - | - | - | 06 | p, c |

The 2011 International Wilson's Plover Winter Census in Florida (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|-----------|------------------|
| Indian River | Sebastian Inlet State Park to Wabasso Beach Park | 139 | 2/1/11 | 0 | 9.7 | I B | H D F O G | - | - | - | <u>06</u> | f, s(p), m |
| Indian River | Tracking Station Access to Barber Bridge | 142 | 2/3/11 | 0 | 2.6 | I B | H D S U O | - | - | - | 06 | m, p |
| Indian River | Tracking Station Park N to Wabasso Beach | 114 | 2/3/11 | 0 | 10.3 | I B | H D S G | - | - | - | 06 | s(p), m, p, c |
| Lee | Bonita Beach | 104 | 2/4/11 | 0 | 6.9 | III | H F G | - | - | - | 06 | m, p, c |
| Lee | Bunche Beach | 99 | 1/29/11 | 4 | 2.4 | II V A | H F G L | - | - | - | - | f, m, c |
| Lee | Captiva Island | 97 | 2/1/11 | 0 | 7.7 | I III A B | H F G | - | - | - | <u>06</u> | m, c |
| Lee | Cayo Costa | 95 | 1/26/11 | 13 | 11.7 | II III B G | H G | - | - | - | <u>06</u> | s(p), p |
| Lee | Estero Island (R1) | 100 | 1/28/11 | 0 | 4.7 | II III B C | H D O G L | - | - | - | 06 | m, p, c |
| Lee | Estero Island (R2) | 101 | 1/24/11 | 0 | 4.3 | II III B F | H D V F O G | - | - | - | 06 | m, p, c |
| Lee | Estero Island (R3) | 102 | 2/5/11 | 24 | 2.4 | II III B | H G | - | - | - | <u>06</u> | s(p), m, p, c |
| Lee | Gasparilla Island | 94 | 2/4/11 | 0 | 11.3 | III B | H D G | - | - | - | 06 | f, s(p), p |
| Lee | Lovers Key State Park | 103 | 2/5/11 | 0 | 4.0 | III B | H O G | - | - | - | 06 | s(p) |
| Lee | N. Captiva Island | 96 | 1/27/11 | 1 | 3.4 | II III B | H D V F O G L | - | - | - | 06 | s(p) |
| Lee | Sanibel Island | 98 | 2/1/11 | 0 | 20.0 | I III A B D F | H D F O G | - | - | - | 06 | s(p), m |
| Levy | Cedar Key Area | 52 | 1/24/11 | 0 | 12.9 | III D | F G | - | - | - | <u>06</u> | s(p) |
| Manatee | Anna Maria Island | 80 | 1/30/11 | 0 | 10.0 | I B | n.r. | - | - | - | 06 | n.r. |
| Manatee | Longboat Key (formerly "Beer Can Island") | 81 | 1/30/11 | 0 | 7.3 | I B | n.r. | - | - | - | 06 | n.r. |
| Martin | Hobe Sound NWR | 160 | 1/31/11 | 0 | 5.6 | I B | H F S G | - | - | - | 06 | f |
| Martin | Hutchinson Island, Alex's Beach to Stuart Beach | 154 | 1/31/11 | 0 | 2.9 | I B | H F O G | - | - | - | 06 | s(p) |
| Martin | Hutchinson Island, Bathtub Beach to St. Lucie Inlet | 156 | 1/31/11 | 0 | 2.7 | I IV B | H F G L | - | - | - | 06 | p |
| Martin | Hutchinson Island, St. Lucie Line S to Alex's Beach | 157 | 2/1/11 | 0 | 2.8 | I B | H F O G | - | - | - | 06 | s(p) |
| Martin | Hutchinson Island, Stuart Beach to Bathtub Beach | 155 | 1/31/11 | 0 | 3.4 | I B | H F | - | - | - | 06 | s(p) |
| Martin | Jupiter Island Beaches | 161 | 1/31/11 | 0 | 7.6 | I B | H D F V S G | - | - | - | - | m |
| Martin | St. Lucie Inlet sandbars | 158 | 1/31/11 | 0 | 3.2 | II D | H D O S G | - | - | - | 06 | s(p) |
| Martin | St. Lucie Inlet State Park | 159 | 1/31/11 | 0 | 9.0 | I IV B | D V G | - | - | - | 06 | s(p) |
| Martin | W shore of Indian River Near Jensen Beach | 153 | 2/1/11 | 0 | 0.4 | II A D | H G L | - | - | - | 06 | s(p) |
| Miami-Dade | Bill Baggs State Park lighthouse to Crandon Park | 185 | 1/27/11 | 0 | 3.9 | I B | H V | - | - | - | 06 | s(p), m |
| Miami-Dade | Biscayne National Park | 190 | 2/4/11 | 1 | 9.7 | I II IV B D | H F G L | - | - | - | 06 | f |
| Miami-Dade | Crandon Park Beach | 186 | 1/27/11 | 6 | 2.8 | I B D | H V G L | - | - | - | <u>06</u> | c |

The 2011 International Wilson's Plover Winter Census in Florida (Continued)

| COUNTY | SITE NAME | MAP # | DATE | TOTAL ADULT | | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|-------------------------|--|-------|---------|-------------|------|------------------|------------------------|---|----|----|-----------|---------|
| | | | | S | KM | | | | | | | |
| Miami-Dade | Cutler Wetlands | 189 | 2/3/11 | 0 | 0.5 | V A | H D V | - | - | - | - | p |
| Miami-Dade | Deering Estate and Chicken Key | 188 | 2/2/11 | 0 | 3.1 | II A C G | H D F O G L | - | - | - | 06 | s(p), c |
| Miami-Dade | Matheson Hammock | 187 | 2/4/11 | 0 | 1.2 | II A G | H D O G L | - | - | - | 06 | c |
| Miami-Dade | Oleta River State Park | 182 | 2/4/11 | 0 | 0.3 | II A | G | - | - | - | - | s(p) |
| Miami-Dade | Rickenbacker Causeway Shoreline | 183 | 1/28/11 | 0 | 1.7 | II E | H D F S I G | - | - | 01 | 06 | c |
| Miami-Dade | Virginia Key Critical Wildlife Area | 184 | 1/28/11 | 0 | 2.6 | II B | H S I | 91 | 96 | 01 | 06 | m |
| Monroe | Bahia Honda State Park | 195 | 1/24/11 | 0 | 4.8 | I G | H F O G | - | - | - | <u>06</u> | s(p) |
| Monroe | Boca Chica Beach | 196 | 1/27/11 | 0 | 1.3 | I E | H D V S G | - | - | - | 06 | s(p) |
| Monroe | Boca Grande Key | 199 | 1/25/11 | 0 | 1.2 | V E G | H D G L | - | - | - | 06 | f |
| Monroe | Curry Hammock State Park | 193 | 1/24/11 | 0 | 0.4 | I G | H O G | - | - | - | 06 | s(p) |
| Monroe | Fort Taylor Historic State Park | 197 | 2/1/11 | 0 | 0.8 | I III E | H G | - | - | - | 06 | s(p) |
| Monroe | John D. Pennekamp state Park/ Carysfort Yacht Club | 191 | 2/3/11 | 0 | 1.0 | I II A | H G | - | - | - | <u>06</u> | s(p) |
| Monroe | Lake Ingraham | 200 | 1/29/11 | 5 | 1.6 | II | G L | - | - | - | - | f |
| Monroe | Long Key State Park | 192 | 1/24/11 | 0 | 1.6 | I G | H G L | - | - | - | 06 | s(p) |
| Monroe | Ohio Key | 194 | 1/27/11 | 0 | 0.5 | I E G | H D G | - | - | - | 06 | f |
| Monroe | Sandy Key to Carl Ross Key | 201 | 2/6/11 | 0 | 1.5 | II E | G | - | - | - | - | f |
| Monroe | Woman Key | 198 | 1/25/11 | 0 | 1.3 | I E | H D G L | - | - | - | 06 | f |
| Nassau | Amelia Island State Park | 116 | 2/4/11 | 16 | 2.8 | I IV B | G | - | - | - | <u>06</u> | s(p) |
| Nassau | Bell River Spoil Island | 113 | 2/6/11 | 13 | 0.4 | V C | O G | - | - | - | - | p |
| Nassau | Fort Clinch State Park | 112 | 2/4/11 | 0 | 6.4 | I II IV B | H S | - | - | - | 06 | s(p) |
| Nassau | Little Tiger Island | 111 | 2/6/11 | 0 | 2.4 | V E | O | - | - | - | <u>06</u> | p |
| Nassau | North Fernandina Beach | 114 | 4/4/11 | 0 | 11.0 | I B | H S G | - | - | - | 06 | s(p) |
| Nassau | South Fernandina Beach | 115 | 2/4/11 | 0 | 7.4 | I B | H | - | - | - | - | p |
| Okaloosa | Eglin AFB (E restricted beach), Santa Rosa Island | 6 | 1/27/11 | 0 | 9.7 | III B | H V G | - | - | - | 06 | f |
| Okaloosa | Eglin AFB (Public Beach), Okaloosa Island | 8 | 1/27/11 | 0 | 7.4 | I IV B | H V S G | - | - | - | 06 | f |
| Okaloosa | Henderson Beach State Park | 9 | 1/28/11 | 0 | 2.2 | III A | H D V O G L | - | - | - | 06 | s(p) |
| Okaloosa | Okaloosa Holding Ponds | 7 | 1/25/11 | 0 | 4.5 | V A | n.r. | - | - | - | - | n.r. |
| Okaloosa/ Santa Rosa | Eglin AFB (W restricted beach), Santa Rosa Island | 4 | 1/27/11 | 0 | 9.7 | III B | V G | - | - | - | 06 | f |
| Okaloosa/ Santa Rosa | Eglin AFB (N restricted beach) | 5 | 2/2/11 | 0 | 22.7 | II III B | G L | - | - | - | 06 | f |
| Palm Beach | Boynton Inlet to Gulfstream Park | 175 | 2/1/11 | 0 | 4.8 | I IV A | H S O G | - | - | - | 06 | m, p, c |

The 2011 International Wilson's Plover Winter Census in Florida (Continued)

| COUNTY | SITE NAME | MAP # | DATE | TOTAL ADULT S | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|-----------------------|---|-------|---------|---------------|------|------------------|------------------------|---|---|---|-----------|---------------|
| Palm Beach | Gulfstream Park to N. Delray Beach | 176 | 2/2/11 | 0 | 6.4 | I B | H O G | - | - | - | 06 | s(p), m |
| Palm Beach | Highland Beach | 178 | 2/3/11 | 0 | 13.4 | I IV B | H D V S I | - | - | - | 06 | m, p, c |
| Palm Beach | Ibis Isle Restoration Area | 171 | 2/3/11 | 0 | 0.6 | II B | G L | - | - | - | - | s(p) |
| Palm Beach | Juno Beach Park to MacArthur State Park | 165 | 2/3/11 | 0 | 6.5 | I B | H F | - | - | - | 06 | c |
| Palm Beach | Jupiter Beach to Juno Beach Park | 164 | 2/3/11 | 0 | 5.8 | I IV B | H D F S | - | - | - | 06 | c |
| Palm Beach | Jupiter Sound, Jupiter inlet, Loxahatchee River | 163 | 2/3/11 | 0 | 7.4 | II IV V A B D | H D S U G L | - | - | - | 06 | s(p) |
| Palm Beach | Lantana Park to Boynton Inlet | 174 | 2/1/11 | 0 | 4.3 | I IV F | G | - | - | - | 06 | c |
| Palm Beach | MacArthur Beach State Park | 166 | 2/4/11 | 0 | 2.4 | I II B | H D F G | - | - | - | 06 | s(p) |
| Palm Beach | MacArthur Beach State Park to Palm Beach Shores | 167 | 2/3/11 | 0 | 4.6 | I IV B | H V F | - | - | - | 06 | m, p |
| Palm Beach | N. Delray Beach to Atlantic Dunes Park | 177 | 2/5/11 | 0 | 0.8 | n.r. | H D G | - | - | - | 06 | n.r. |
| Palm Beach | Palm Beach Shores to Southern Blvd | 169 | 2/3/11 | 0 | 11.9 | I IV B | H D S G | - | - | - | - | s(p), m |
| Palm Beach | Peanut Island | 168 | 1/31/11 | 5 | 1.6 | V B | H G | - | - | - | - | m |
| Palm Beach | Sloan's Curve to Lantana Beach | 172 | 2/3/11 | 0 | 6.4 | I B | H V S | - | - | - | 06 | s(p), m, p, c |
| Palm Beach | Snook Islands Natural Area to Lake Worth Lagoon | 173 | 2/6/11 | 0 | 2.0 | II A G | S G L | - | - | - | - | m |
| Palm Beach | Southern Blvd to Sloan's Curve | 170 | 2/3/11 | 0 | 3.3 | I A | H G | - | - | - | 06 | m, p |
| Palm Beach/ Martin | Jupiter Island - Jupiter Inlet through Blowing Rocks Preserve | 162 | 1/31/11 | 0 | 3.2 | I IV B | H D V F | - | - | - | 06 | c |
| Pasco | Anclote Key sandbar | 54 | 2/4/11 | 3 | 2.7 | III D | H G | - | - | - | 06 | s(p) |
| Pasco/Pinellas | Anclote Key State Park | 55 | 2/4/11 | 52 | 8.0 | III B | G | - | - | - | <u>06</u> | s(p) |
| Pinellas | Belleair Causeway Bridge | 64 | 2/4/11 | 0 | 4.8 | II A B | H F G L | - | - | - | - | n.r. |
| Pinellas | Caladesi Island State Park | 59 | 2/4/11 | 18 | 4.0 | II III B | H O G | - | - | - | - | s(p) |
| Pinellas | Clearwater Beach | 60 | 2/4/11 | 0 | 4.4 | n.r. | n.r. | - | - | - | 06 | n.r. |
| Pinellas | Courtney Campbell Causeway, Clearwater, Public Beach | 62 | 2/4/11 | 2 | 29.0 | II V G | H D F V G | - | - | - | - | m |
| Pinellas | Dunedin Causeway (to Honeymoon Island) | 58 | 2/4/11 | 0 | 1.6 | II G | H G | - | - | - | 06 | c |
| Pinellas | Ft. DeSoto County Park, E beach | 77 | 2/4/11 | 0 | 4.0 | V B | V G | - | - | - | <u>06</u> | c |
| Pinellas | Ft. DeSoto County Park, NW Beach | 76 | 2/6/11 | 0 | 4.5 | III B | n.r. | - | - | - | <u>06</u> | n.r. |
| Pinellas | Ft. DeSoto County Park, South tip | 78 | 2/1/11 | 0 | 1.1 | n.r. | n.r. | - | - | - | - | n.r. |
| Pinellas | Honeymoon Island SRA | 57 | 2/4/11 | 7 | 6.4 | III B | H S G | - | - | - | <u>06</u> | s(p) |
| Pinellas | Indian Rocks Beach | 65 | 2/5/11 | 0 | 3.7 | n.r. | n.r. | - | - | - | 06 | n.r. |
| Pinellas | Lassing Park | 71 | 1/26/11 | 0 | 0.7 | n.r. | n.r. | - | - | - | - | n.r. |
| Pinellas | Madeira Beach | 68 | 1/27/11 | 0 | 5.1 | III A | H V F G | - | - | - | 06 | m |

The 2011 International Wilson's Plover Winter Census in Florida (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|-----------|--|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|-----------|------------------|
| | | | | | | | | | | | | |
| Pinellas | Pass-a-Grille Beach | 74 | 2/5/11 | 0 | 2.7 | III B | H G | - | - | - | - | m |
| Pinellas | Pinellas Point | 73 | 1/30/11 | 0 | 1.6 | V A | O G L | - | - | - | - | m |
| Pinellas | Redington Beach/North Redington Beach | 67 | 2/6/11 | 0 | 4.4 | III B | H O G | - | - | - | 06 | s(p) |
| Pinellas | Sandy Park to Bellair Beach Morgan Dr. Park | 61 | 2/5/11 | 0 | 3.4 | n.r. | n.r. | - | - | - | 06 | n.r. |
| Pinellas | Shell Key | 75 | 2/6/11 | 4 | 2.4 | II B | H G L | - | - | - | <u>06</u> | c |
| Pinellas | St. Pete Beach | 72 | 2/4/11 | 0 | 3.4 | n. r. | n.r. | - | - | - | - | n.r. |
| Pinellas | St. Petersburg- North shore park area | 69 | 1/30/11 | 0 | 0.8 | n.r. | n.r. | - | - | - | 06 | n.r. |
| Pinellas | Three Rooker Bar | 56 | 2/4/11 | 10 | 3.2 | III B | G | - | - | - | 06 | s(p) |
| Pinellas | Treasure Island | 70 | 2/6/11 | 0 | 6.4 | III A G | H U G | - | - | - | 06 | m |
| Pinellas | Walsingham Road South to Park Blvd | 66 | 2/4/11 | 0 | 3.0 | III B | H F G | - | - | - | 06 | m |
| Sarasota | Caspersen Beach (Venice Beach) | 88 | 2/5/11 | 2 | 6.1 | III A | H S | - | - | - | 06 | s(p), m, p, c |
| Sarasota | Lido Beach | 83 | 1/29/11 | 1 | 4.0 | III B | H S O G | - | - | - | 06 | c |
| Sarasota | North Casey Key | 86 | 2/5/11 | 0 | 4.8 | III B | H D S G | - | - | - | 06 | n.r. |
| Sarasota | Siesta Key, N end to Point of Rocks | 84 | 2/5/11 | 0 | 4.7 | III B | H D V G | - | - | - | 06 | c |
| Sarasota | Siesta Key, Turtle Beach to Point of Rocks | 85 | 2/6/11 | 1 | 3.1 | II III B F | H D G | - | - | - | 06 | s(p), c |
| Sarasota | South Casey Key | 87 | 2/5/11 | 0 | 5.0 | III B | H D S O G | - | - | - | 06 | p, c |
| Sarasota | South Longboat Key | 82 | 2/5/11 | 0 | 4.8 | III B | H S U O | - | - | - | 06 | p |
| St. Johns | Anastasia State Recreation Area | 121 | 2/4/11 | 0 | 7.9 | I IV B | H O G | - | - | - | 06 | s(p) |
| St. Johns | Rattlesnake Island | 122 | 2/4/11 | 0 | 1.0 | IV E | n.r. | - | - | - | - | n.r. |
| St. Johns | St. Augustine Beach (Matanzas Inlet) | 123 | 2/4/11 | 13 | 25.7 | I II IV V A B C D | H D V F S U G | - | - | - | <u>06</u> | f, s(p), m, c |
| St. Johns | Vilano Point to North Beach | 120 | 2/4/11 | 0 | 25.7 | I B | D G | - | - | - | 06 | f, c |
| St. Lucie | Avalon State Park | 146 | 2/3/11 | 0 | 2.4 | I B | H | - | - | - | 06 | s(p) |
| St. Lucie | Fort Pierce Inlet State Park | 148 | 2/3/11 | 0 | 1.4 | I IV B | H F G | - | - | - | 06 | s(p) |
| St. Lucie | Fort Pierce Inlet State Park to Avalon State Park | 147 | 1/28/11 | 0 | 6.4 | I B | H G | - | - | - | 06 | p, c |
| St. Lucie | S Hutchinson Island | 149 | 1/31/11 | 0 | 24.5 | I B | H D F | - | - | - | 06 | m, p, c |
| St. Lucie | South Hutchinson Island- Little Mud Creek N to Frederick Douglass Park | 151 | 1/31/11 | 0 | 3.7 | I B | H D F | - | - | - | 06 | m, p, c |
| St. Lucie | South Hutchinson Island- Little Mud Creek S to the narrows | 152 | 1/31/11 | 0 | 6.4 | I B | H D F | - | - | - | 06 | m, p, c |
| St. Lucie | South Hutchinson Island-Fredrick Douglass Park to Inlet | 150 | 1/31/11 | 0 | 6.4 | I B | H D F | - | - | - | 06 | m, p, c |
| Taylor | Hagen's Cove | 51 | 2/4/11 | 0 | 0.7 | n.r. | n.r. | - | - | - | 06 | n.r. |

The 2011 International Wilson's Plover Winter Census in Florida (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|-----------------|---------------|---------------------|---------------------------|---|---|---|------------------|------------------|
| | | | | | | | | | | | | |
| Taylor | Hickory Mound Impoundment | 50 | 2/4/11 | 0 | 5.0 | III V G | n.r. | - | - | - | - | s(p) |
| Volusia | Disappearing Island | 129 | 2/4/11 | 18 | 3.0 | IV V C D | H D F O G | - | - | - | <u>06</u> | s(p) |
| Volusia | Indian River Lagoon Park | 132 | 2/4/11 | 0 | 13.7 | II A B C | G | - | - | - | - | m |
| Volusia | Intercoastal Waterway (Other islands) | 130 | 2/4/11 | 0 | 19.3 | V B C D E | S I | - | - | - | - | s(p) |
| Volusia | Mosquito Lagoon | 133 | 2/4/11 | 0 | 9.3 | II B C | none | - | - | - | - | f, s(p) |
| Volusia | New Smyrna Beach | 131 | 2/4/11 | 1 | 15.0 | I II IV V B D F G | H D V F S I O G | - | - | - | 06 | s(p), p, c |
| Volusia | North Canaveral National Seashore | 134 | 2/4/11 | 0 | 18.5 | I B | G | - | - | - | 06 | f |
| Volusia | North Peninsula SRA, Intracoastal Waterways | 127 | 2/4/11 | 0 | 4.0 | V B G | H B O | - | - | - | - | s(p) |
| Volusia | Volusia/Flagler County Line to North Side of Ponce De Leon Inlet | 128 | 2/4/11 | 0 | 51.3 | I II IV A B C D | H V S G | - | - | - | 06 | s(p), m, p, c |
| Wakulla | St. Marks - Oyster Bay | 48 | 2/1/11 | 0 | 23.3 | II A | n.r. | - | - | - | 06 | n.r. |
| Wakulla | St. Marks National Wildlife Refuge Impoundments | 49 | 2/1/11 | 0 | 7.5 | II A | n.r. | - | - | - | 06 | n.r. |
| Wakulla | Mashes Is County Park | 47 | 2/1/11 | 0 | 4.1 | II A | H D G | - | - | - | 06 | s(p) |
| Walton | Deer Lake State Park | 16 | 1/28/11 | 0 | 1.0 | III V A | H O G | - | - | - | 06 | s(p) |
| Walton | Grayton Beach State Park-Little Redfish Lake | 15 | 1/28/11 | 0 | 0.8 | III V A | H D V O G | - | - | - | 06 | c |
| Walton | Grayton Beach State Park-Main Park Access | 11 | 1/28/11 | 0 | 1.8 | III V A | H D V O G | - | - | - | 06 | s(p) |
| Walton | Grayton Beach State Park-Pine Street Access | 13 | 1/28/11 | 0 | 0.7 | III V A | H V O G | - | - | - | 06 | s(p) |
| Walton | Topsail Hill Preserve State Park | 10 | 1/28/11 | 0 | 6.0 | III V A | H D V O G | - | - | - | 06 | s(p) |
| Walton | Walton County Public Beach-Gulf Breeze | 14 | 1/28/11 | 0 | 0.4 | III V A | H D V O G | - | - | - | 06 | c |
| Walton | Walton County Public Beach-Town of Grayton | 12 | 1/28/11 | 0 | 0.5 | III V A | H D V O G | - | - | - | 06 | c |
| Total | | | | 292 | 1297.5 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Wilson's Plovers were seen at the site during that Census year.

² Please note that this survey was conducted outside the Census window.

The 2011 International Piping Plover Winter Census in Alabama

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Three census participants in two parties surveyed the six most important wintering Piping Plover sites in Alabama on 5 February 2011. One site in Baldwin County (Ft. Morgan Historic State Park) and four sites in Mobile County were surveyed on foot. Sites in Mobile County included Pelican Island, Little Dauphin Island, Katrina Cut-East (Dauphin Island), and Katrina Cut-West (Dauphin Island). Additionally, the undeveloped north shore of the western end of Dauphin Island was surveyed by boat. In total, 12.2 km (7.6 miles) were surveyed on foot while 12.6 (7.8 miles) were surveyed from boat. Conditions were generally overcast with light winds and temperatures in the lower 40's (Fahrenheit).

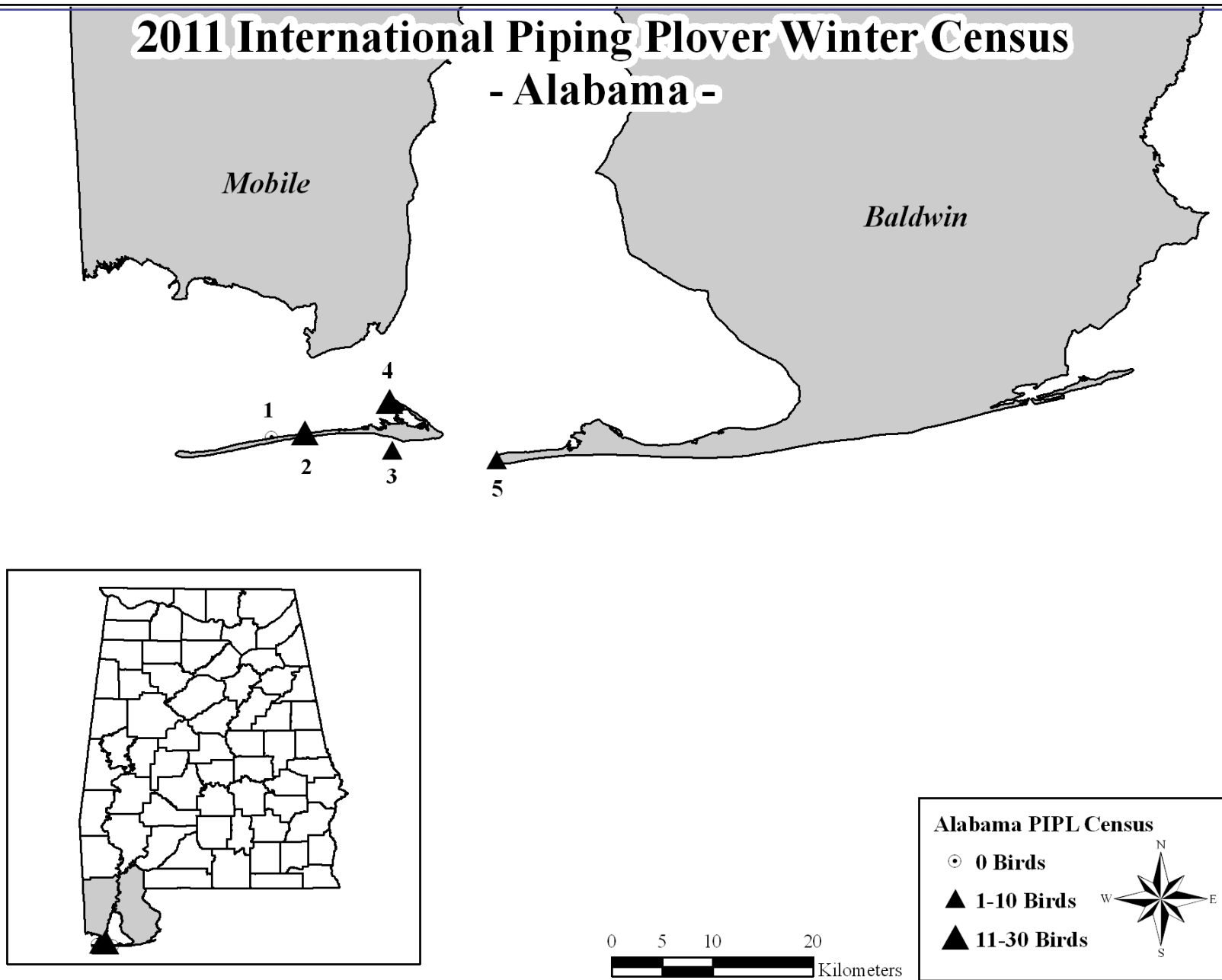
A total of 38 Piping Plovers were sighted along with 27 Snowy Plovers. Over half (21) of the Piping Plovers were spotted on Little Dauphin Island. Only two sites (Katrina Cut-East, Dauphin Island West End) had zero Piping Plovers and two sites (Little Dauphin Island, Dauphin Island West End) were absent of Snowy Plovers. Four color-banded Piping Plovers were spotted, three on Little Dauphin Island and one at Ft. Morgan Historic State Park. During the 2006 census, 29 total Piping Plovers were counted on Pelican and Dauphin Islands.

Historically Little Dauphin Island and Pelican Island have been the two most important sites for concentrations of Piping Plovers and that trend should continue. Pelican Island is now a peninsula connected to Dauphin Island which increases foot traffic but likely has little impact to wintering birds. The tidally exposed flats at the north end of Little Dauphin Island appear more suitable for plovers than they have been in several years giving evidence to the ever changing conditions of barrier islands. Katrina Cut, the breach of Dauphin Island made by Hurricane Katrina in 2005, has favorable plover feeding habitat on its east and west sides. Lack of any impacts by tropical storms or hurricanes since 2005 has likely been a detriment to plover habitat. Without the overwash and flooding of barrier islands in Mobile County, vegetative succession advances and beaches rise resulting in a loss of tidal flats, tidal pools, and washover zones. Of note in 2011 was a project closing the Katrina Cut with a mile-long wall of rip-rap. Any impacts to plovers are unknown. Also, initial observations of the effects of the Deepwater Horizon oil spill of 2010 and subsequent cleanup operations on plovers appear negligible.

Comparison of Census Numbers

| Species | 1991 | 1996 | 2001 | 2006 | 2011 |
|-----------------|------|------|------|------|------|
| Piping Plover | 12 | 31 | 30 | 29 | 38 |
| Snowy Plover | n.r. | n.r. | 0 | 6 | 27 |
| Wilson's Plover | n.r. | n.r. | n.r. | 0 | 0 |

2011 International Piping Plover Winter Census - Alabama -

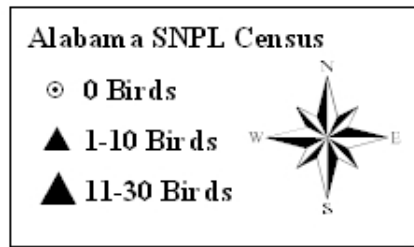
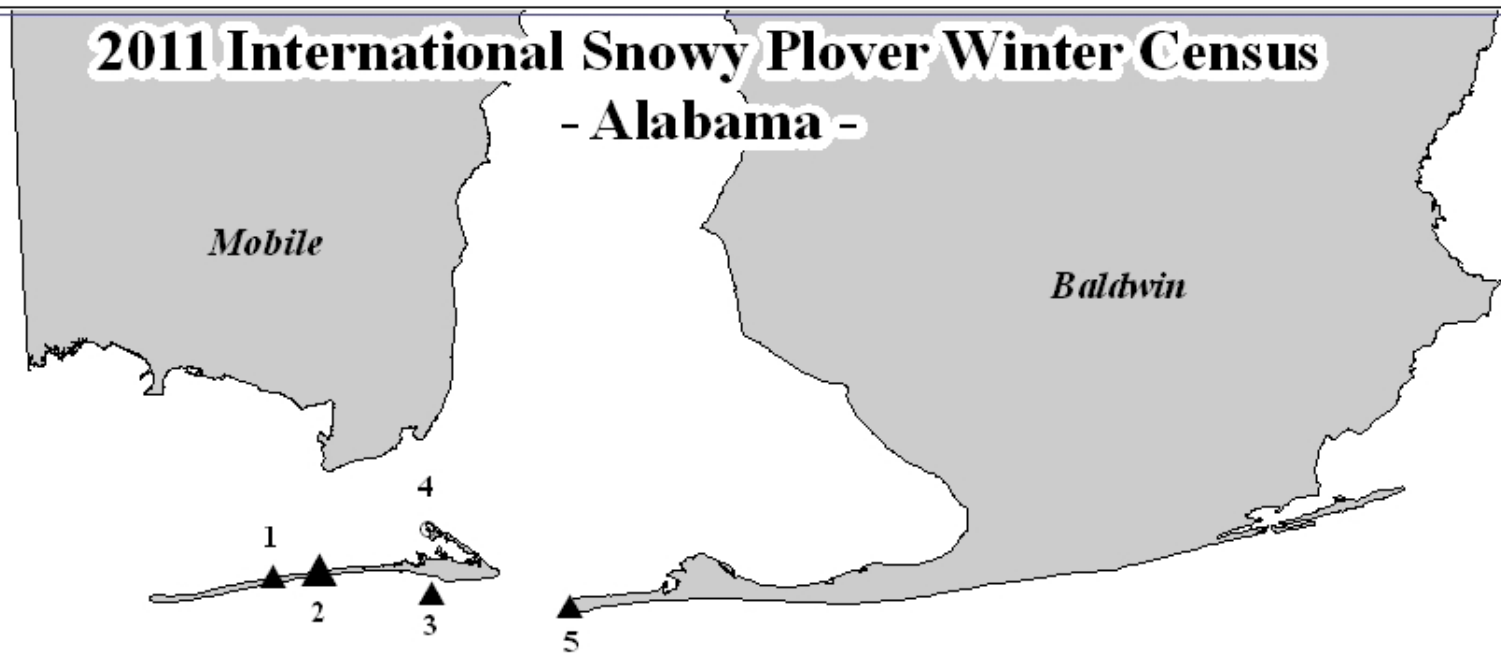


The 2011 International Piping Plover Winter Census in Alabama

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|---------------------------------|------|--------|-----------------|-------------|---------------------|---------------------------|---|-----------|-----------|-----------|---------|
| | | | | | | | | | | | | |
| Baldwin | Fort Morgan Historic State Park | 5 | 2/5/11 | 1 | 3.2 | III IV A | H D V P S G L | - | - | - | - | f, s(p) |
| Mobile | Katrina Cut - East | 2 | 2/5/11 | 11 | 1.3 | III IV V B | V S G L | - | - | - | - | m |
| Mobile | Katrina Cut - West | 1 | 2/5/11 | 0 | 0.5 | III IV V B | V S G | - | - | - | - | p |
| Mobile | Little Dauphin Island | 4 | 2/5/11 | 21 | 0.5 | IV V B | G L | 91 | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Mobile | Pelican Island (peninsula) | 3 | 2/5/11 | 5 | 6.8 | II III B | H D G | 91 | <u>96</u> | 01 | <u>06</u> | p |
| Total | | | | 38 | 12.3 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Piping Plovers were seen at the site during that Census year.

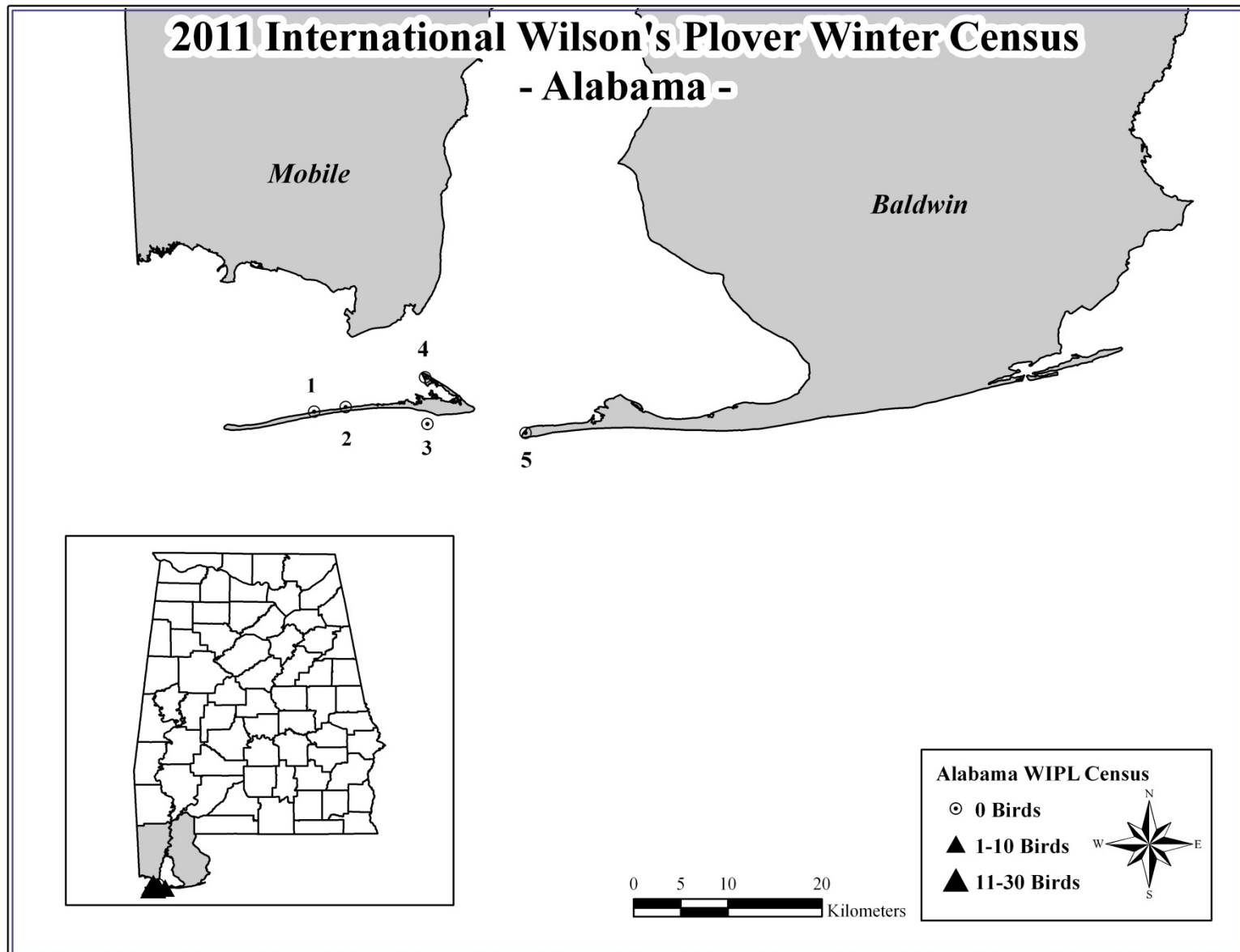
2011 International Snowy Plover Winter Census - Alabama -



The 2011 International Snowy Plover Winter Census in Alabama

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|--------------|---------------------------------|------|--------|-----------------|-------------|---------------------|---------------------------|---|---|---|------------------|---------|
| | | | | | | | | | | | | |
| Baldwin | Fort Morgan Historic State Park | 5 | 2/5/11 | 6 | 3.2 | III IV A | H D V P S G L | - | - | - | - | f, s(p) |
| Mobile | Katrina Cut - East | 2 | 2/5/11 | 11 | 1.3 | III IV V B | V S G L | - | - | - | - | m |
| Mobile | Katrina Cut - West | 1 | 2/5/11 | 4 | 0.5 | III IV V B | V S G | - | - | - | - | p |
| Mobile | Little Dauphin Island | 4 | 2/5/11 | 0 | 0.5 | IV V B | G L | - | - | - | 06 | f |
| Mobile | Pelican Island (peninsula) | 3 | 2/5/11 | 6 | 6.8 | II III B | H D G | - | - | - | <u>06</u> | p |
| Total | | | | 27 | 12.3 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Snowy Plovers were seen at the site during that Census year.



The 2011 International Wilson's Plover Winter Census in Alabama

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|--------------|---------------------------------|------|--------|-----------------|-------------|---------------------|---------------------------|---|---|---|----|----------|
| | | | | | | | | | | | | |
| Baldwin | Fort Morgan Historic State Park | 5 | 2/5/11 | 0 | 3.2 | III IV A | H D V P S G L | - | - | - | - | f, s (p) |
| Mobile | Katrina Cut - East | 2 | 2/5/11 | 0 | 1.3 | III IV V B | V S G L | - | - | - | - | m |
| Mobile | Katrina Cut - West | 1 | 2/5/11 | 0 | 0.5 | III IV V B | V S G | - | - | - | - | p |
| Mobile | Little Dauphin Island | 4 | 2/5/11 | 0 | 0.5 | IV V B | G L | - | - | - | 06 | f |
| Mobile | Pelican Island (peninsula) | 3 | 2/5/11 | 0 | 6.8 | II III B | H D G | - | - | - | 06 | p |
| Total | | | | 0 | 12.3 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Wilson's Plovers were seen at the site during that Census year.

The 2011 International Piping Plover Winter Census in Mississippi

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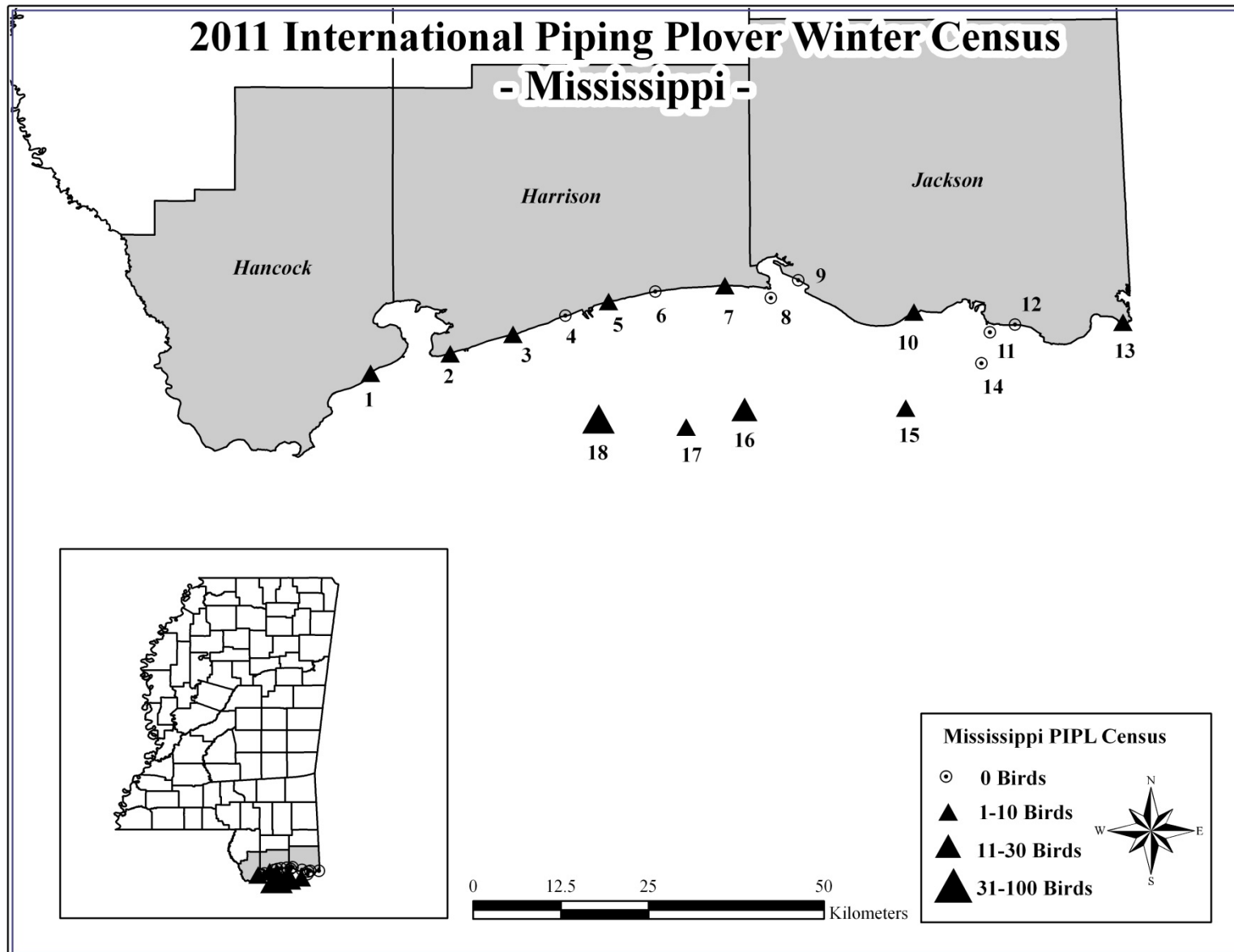
The Mississippi census was conducted February 8-11, 2011 with the help of 21 people. We would like to thank to the National Wildlife Federation, Mississippi Department of Marine Resources, Mississippi Department of Environmental Quality, Harrison County Sheriff's Office and Gulf Islands National Seashore for assisting with funding, boats and access. Surveyors included birders and biologists from the Mississippi Museum of Natural Science, U.S. Fish and Wildlife Service, U.S. Forest Service and Mississippi Department of Marine Resources.

A total of 19 sites were surveyed during the Census and 88 Piping Plovers were observed. Island sites were surveyed on February 8th and mainland sites on February 9th. Island coverage was incomplete due to a shortage of boats and closures on parts of some islands, leaving several key sites un-surveyed. Important sites missed include most of East Ship and Deer Islands as well as all of Petit Bois Island (these sites had 7, 0, and 19 birds respectively during the 2006 Census). All key mainland sites were surveyed.

The main difference between this survey and prior ones was the presence of oil-spill clean-up crews, resulting in a large increase in numbers of people and vehicles on beaches. This was especially true on the islands where virtually no people or vehicles have been observed during past surveys. Some previously important sites had fewer or no birds possibly due to increased human disturbance; though some sites had birds in very close proximity to oil spill cleanup crews.

Comparison of Census Numbers

| Species | 1991 | 1996 | 2001 | 2006 | 2011 |
|-----------------|------|------|------|------|------|
| Piping Plover | 59 | 27 | 18 | 78 | 88 |
| Snowy Plover | n.r. | n.r. | 13 | 36 | 49 |
| Wilson's Plover | n.r. | n.r. | n.r. | 0 | 6 |



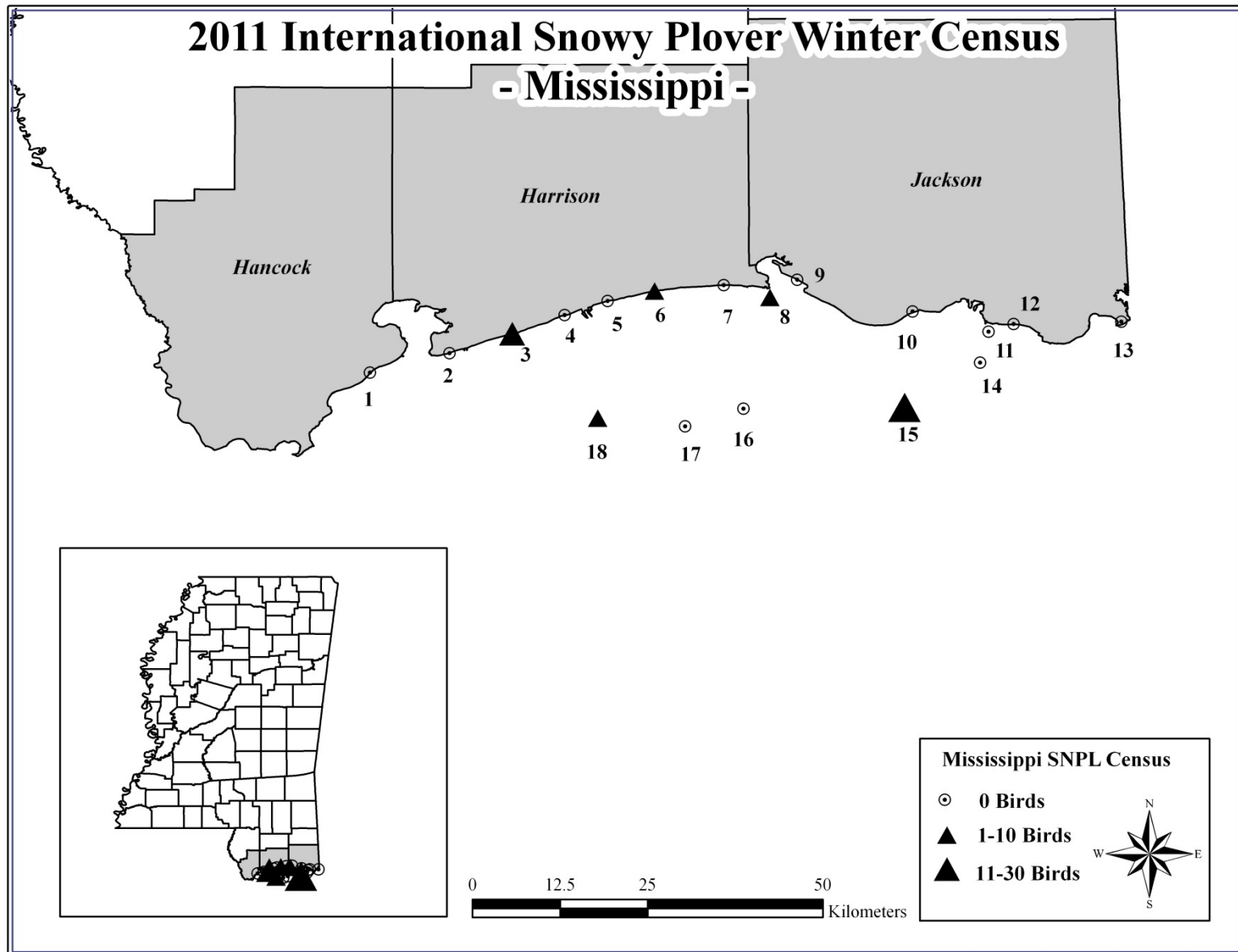
The 2011 International Piping Plover Winter Census in Mississippi

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|-----------------|--------------|---------------------|---------------------------|---|------------------------|-----------|-----------|---------|
| | | | | | | | | | | | | |
| Hancock | Clermont Harbor (Lakeshore to Bay St. Louis Piers) ³ | 1 | 2/9/11 | 6 | 12.9 | II A | H D V | <u>91</u> | 96 | <u>01</u> | 06 | s(p) |
| Harrison | Beauvoir Road to Point Cadet ³ | 7 | 2/9/11 | 1 | 8.1 | II A | H D V | - | <u>96</u> ² | 01 | - | s(p) |
| Harrison | Cat Island ³ | 18 | 2/8/11 | 45 | 22.5 | II III B | H V P | <u>91</u> | 96 | - | <u>06</u> | f, p |
| Harrison | Courthouse Road to Beauvoir Road ³ | 6 | 2/9/11 | 0 | 7.7 | II A | H D V | - | <u>96</u> ² | 01 | 06 | s(p) |
| Harrison | Deer Island ³ | 8 | 2/8/11 | 0 | 9.7 | II E | H P S | <u>91</u> | 96 | - | 06 | s(p) |
| Harrison | East Ship Island ³ | 16 | 2/8/11 | 11 | 1.6 | II III B | H P S | 91 | <u>96</u> | 01 | <u>06</u> | f |
| Harrison | Gulfport Harbor to Courthouse Road ³ | 5 | 2/9/11 | 3 | 4.3 | II A | H D V | 91 | <u>96</u> ² | 01 | <u>06</u> | s(p) |
| Harrison | Long Beach Harbor to Gulfport Harbor ³ | 4 | 2/9/11 | 0 | 4.3 | II A | H D V | <u>91</u> | <u>96</u> ² | <u>01</u> | 06 | s(p) |
| Harrison | Pass Christian Harbor to Long Beach Harbor ³ | 3 | 2/9/11 | 5 | 10.5 | II A | H D V | <u>91</u> | 96 | 01 | <u>06</u> | s(p) |
| Harrison | Henderson Point to Pass Christian Harbor ³ | 2 | 2/9/11 | 1 | 4.8 | II A | H D V | <u>91</u> | 96 | 01 | <u>06</u> | s(p) |
| Harrison | West Ship Island ³ | 17 | 2/8/11 | 7 | 9.7 | II III B | H V S P | <u>91</u> | 96 | 01 | <u>06</u> | f |
| Jackson | Belle Fontaine Beach ³ | 10 | 2/9/11 | 1 | 1.6 | II A | H D V | 91 | 96 | 01 | 06 | p |
| Jackson | Grand Bay National Estuarine Research Reserve ³ | 13 | 2/11/11 | 1 | n.r. | II A | n.r. | 91 | 96 | 01 | <u>06</u> | f, s(p) |
| Jackson | Horn Island ³ | 15 | 2/8/11 | 7 | 38.6 | II III B | H V P | 91 | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Jackson | Ocean Springs Beach ³ | 9 | 2/9/11 | 0 | 3.5 | II A | H D V L | <u>91</u> | 96 | 01 | 06 | s(p) |
| Jackson | Pascagoula Beach ³ | 12 | 2/9/11 | 0 | 3.2 | II A | H D V S L | 91 | 96 | - | 06 | m |
| Jackson | Round Island ³ | 14 | 2/8/11 | 0 | 2.4 | II E | n.r. | 91 | 96 | 01 | 06 | m |
| Jackson | Singing River Island ³ | 11 | 2/8/11 | 0 | n.r. | II E | L | - | 96 | 01 | 06 | m |
| Total | | | | 88 | 145.5 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Piping Plovers were seen at the site during that Census year.

² 12 PIPL were seen at "Pt. Cadet to Long Beach Harbor" in 1996. Specific locations were unspecified and may have occurred along either "Beauvoir Road to Point Cadet," "Courthouse Road to Beauvoir Road," "Gulfport Harbor to Courthouse Road" or "Long Beach Harbor to Gulfport Harbor".

³ Please note that this survey was conducted outside the Census window.

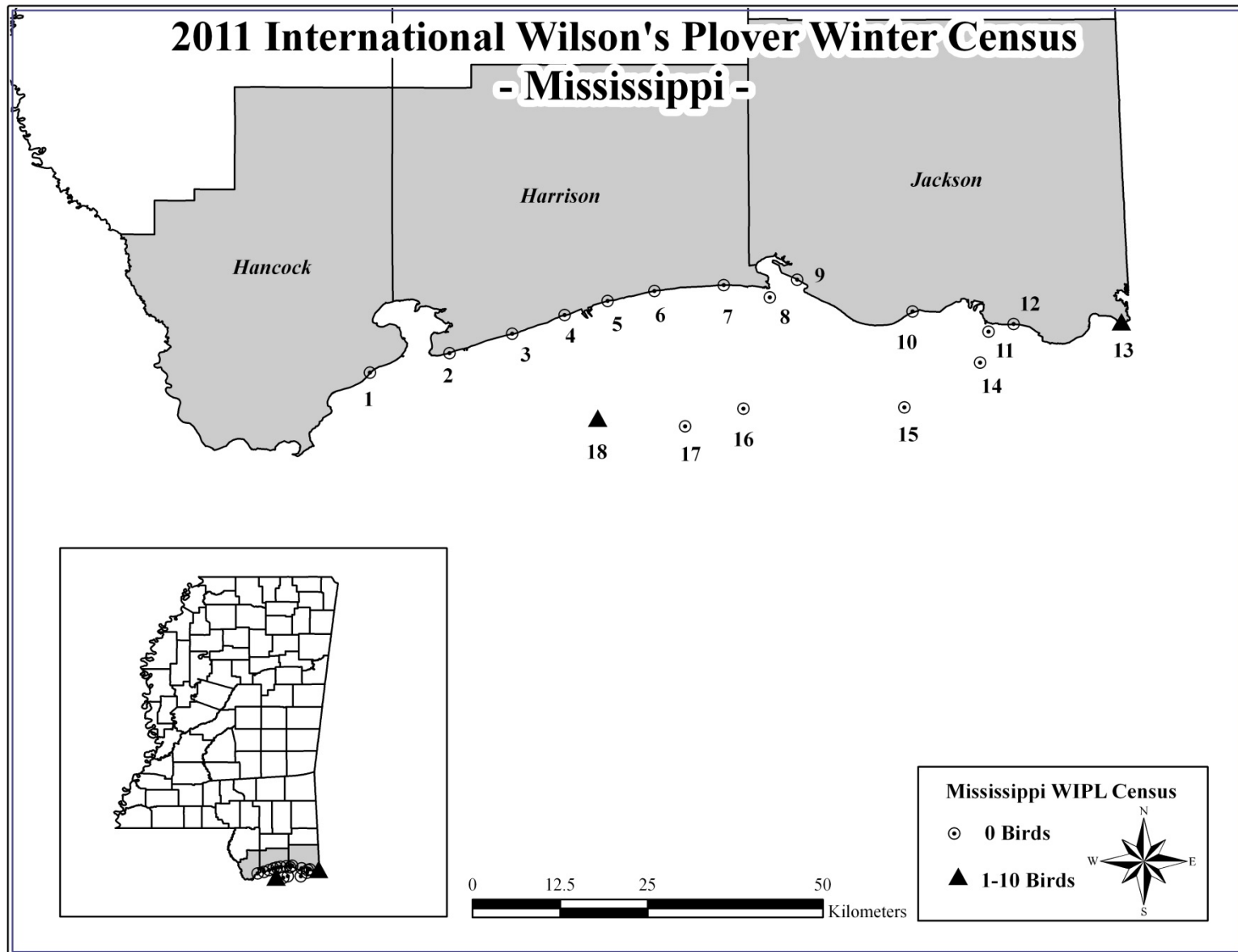


The 2011 International Snowy Plover Winter Census in Mississippi

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|-----------------|--------------|---------------------|---------------------------|---|---|-----------|-----------|---------|
| | | | | | | | | | | | | |
| Hancock | Clermont Harbor (Lakeshore to Bay St. Louis Piers) ³ | 1 | 2/9/11 | 0 | 12.9 | II A | H D V | - | - | 01 | 06 | s(p) |
| Harrison | Beauvoir Road to Point Cadet ³ | 7 | 2/9/11 | 0 | 8.1 | II A | H D V | - | - | 01 | - | s(p) |
| Harrison | Cat Island ³ | 18 | 2/8/11 | 4 | 22.5 | II III B | H V P | - | - | - | <u>06</u> | f, p |
| Harrison | Courthouse Road to Beauvoir Road ³ | 6 | 2/9/11 | 4 | 7.7 | II A | H D V | - | - | 01 | 06 | s(p) |
| Harrison | Deer Island ³ | 8 | 2/8/11 | 4 | 9.7 | II E | H P S | - | - | - | 06 | s(p) |
| Harrison | East Ship Island ³ | 16 | 2/8/11 | 1 | 1.6 | II III B | H P S | - | - | 01 | <u>06</u> | f |
| Harrison | Gulfport Harbor to Courthouse Road ³ | 5 | 2/9/11 | 0 | 4.3 | II A | H D V | - | - | 01 | 06 | s(p) |
| Harrison | Long Beach Harbor to Gulfport Harbor ³ | 4 | 2/9/11 | 0 | 4.3 | II A | H D V | - | - | <u>01</u> | 06 | s(p) |
| Harrison | Pass Christian Harbor to Long Beach Harbor ³ | 3 | 2/9/11 | 10 | 10.5 | II A | H D V | - | - | 01 | <u>06</u> | s(p) |
| Harrison | Henderson Point to Pass Christian Harbor ³ | 2 | 2/9/11 | 0 | 4.8 | II A | H D V | - | - | 01 | 06 | s(p) |
| Harrison | West Ship Island ³ | 17 | 2/8/11 | 0 | 9.7 | II III B | H V S P | - | - | 01 | <u>06</u> | f |
| Jackson | Belle Fontaine Beach ³ | 10 | 2/9/11 | 0 | 1.6 | II A | H D V | - | - | 01 | 06 | p |
| Jackson | Grand Bay National Estuarine Research Reserve ³ | 13 | 2/11/11 | 0 | n.r. | II A | n.r. | - | - | 01 | 06 | f, s(p) |
| Jackson | Horn Island ³ | 15 | 2/8/11 | 26 | 38.6 | II III B | H V P | - | - | <u>01</u> | <u>06</u> | f |
| Jackson | Ocean Springs Beach ³ | 9 | 2/9/11 | 0 | 3.5 | II A | H D V L | - | - | 01 | 06 | s(p) |
| Jackson | Pascagoula Beach ³ | 12 | 2/9/11 | 0 | 3.2 | II A | H D V S L | - | - | - | 06 | m |
| Jackson | Round Island ³ | 14 | 2/8/11 | 0 | 2.4 | II E | n.r. | - | - | 01 | 06 | m |
| Jackson | Singing River Island ³ | 11 | 2/8/11 | 0 | n.r. | II E | L | - | - | 01 | 06 | m |
| Total | | | | 49 | 145.5 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Snowy Plovers were seen at the site during that Census year.

³ Please note that this survey was conducted outside the Census window.



The 2011 International Wilson's Plover Winter Census in Mississippi

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|-----------------|--------------|---------------------|---------------------------|---|---|---|----|---------|
| | | | | | | | | | | | | |
| Hancock | Clermont Harbor (Lakeshore to Bay St. Louis Piers) ³ | 1 | 2/9/11 | 0 | 12.9 | II A | H D V | - | - | - | 06 | s(p) |
| Harrison | Beauvoir Road to Point Cadet ³ | 7 | 2/9/11 | 0 | 8.1 | II A | H D V | - | - | - | - | s(p) |
| Harrison | Cat Island ³ | 18 | 2/8/11 | 1 | 22.5 | II III B | H V P | - | - | - | 06 | f, p |
| Harrison | Courthouse Road to Beauvoir Road ³ | 6 | 2/9/11 | 0 | 7.7 | II A | H D V | - | - | - | 06 | s(p) |
| Harrison | Deer Island ³ | 8 | 2/8/11 | 0 | 9.7 | II E | H P S | - | - | - | 06 | s(p) |
| Harrison | East Ship Island ³ | 16 | 2/8/11 | 0 | 1.6 | II III B | H P S | - | - | - | 06 | f |
| Harrison | Gulfport Harbor to Courthouse Road ³ | 5 | 2/9/11 | 0 | 4.3 | II A | H D V | - | - | - | 06 | s(p) |
| Harrison | Long Beach Harbor to Gulfport Harbor ³ | 4 | 2/9/11 | 0 | 4.3 | II A | H D V | - | - | - | 06 | s(p) |
| Harrison | Pass Christian Harbor to Long Beach Harbor ³ | 3 | 2/9/11 | 0 | 10.5 | II A | H D V | - | - | - | 06 | s(p) |
| Harrison | Henderson Point to Pass Christian Harbor ³ | 2 | 2/9/11 | 0 | 4.8 | II A | H D V | - | - | - | 06 | s(p) |
| Harrison | West Ship Island ³ | 17 | 2/8/11 | 0 | 9.7 | II III B | H V S P | - | - | - | 06 | f |
| Jackson | Belle Fontaine Beach ³ | 10 | 2/9/11 | 0 | 1.6 | II A | H D V | - | - | - | 06 | p |
| Jackson | Grand Bay National Estuarine Research Reserve ³ | 13 | 2/11/11 | 5 | n.r. | II A | n.r. | - | - | - | 06 | f, s(p) |
| Jackson | Horn Island ³ | 15 | 2/8/11 | 0 | 38.6 | II III B | H V P | - | - | - | 06 | f |
| Jackson | Ocean Springs Beach ³ | 9 | 2/9/11 | 0 | 3.5 | II A | H D V L | - | - | - | 06 | s(p) |
| Jackson | Pascagoula Beach ³ | 12 | 2/9/11 | 0 | 3.2 | II A | H D V S L | - | - | - | 06 | m |
| Jackson | Round Island ³ | 14 | 2/8/11 | 0 | 2.4 | II E | n.r. | - | - | - | 06 | m |
| Jackson | Singing River Island ³ | 11 | 2/8/11 | 0 | n.r. | II E | L | - | - | - | 06 | m |
| Total | | | | 6 | 145.5 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Wilson's Plovers were seen at the site during that Census year.

³ Please note that this survey was conducted outside the Census window.

The 2011 International Piping Plover Winter Census in Louisiana

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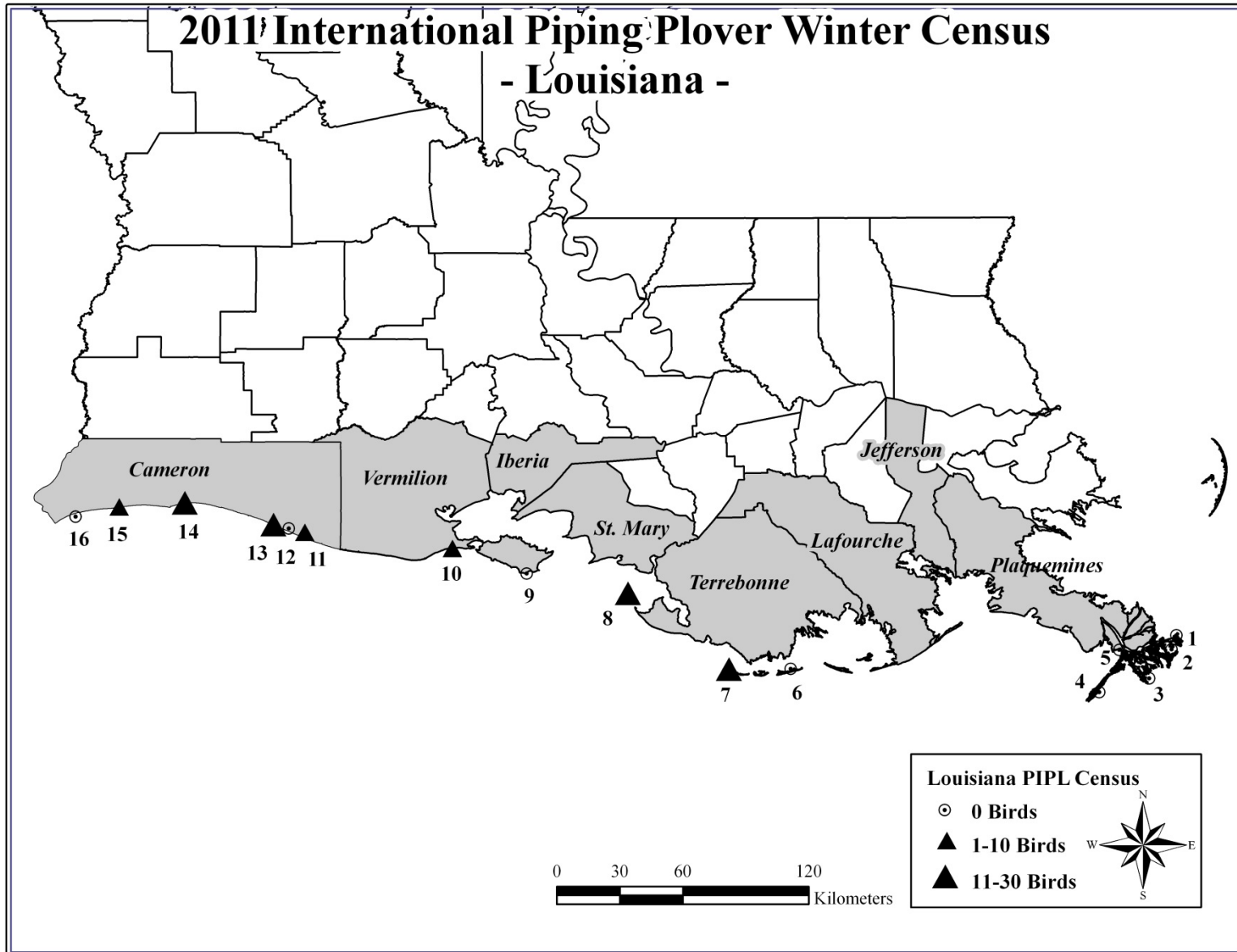
Eleven surveyors in seven parties spent approximately 27 total party hours surveying about 94 km at 13 sites along the Louisiana coast and counted 86 Piping Plovers. The number of sites surveyed was greatly reduced from 2006 (13 sites in 2011 compared to 33 sites in 2006) and Piping Plover numbers were much lower in 2011 compared to 2006 (86 vs. 226). Thirteen sites in the Southeastern portion of the state which held 143 Piping Plovers during the 2006 Census could not be surveyed in 2011. Elsewhere in the state, coverage was comparable to 2006 and numbers of Piping Plovers were similar (83 birds in 2006 vs. 86 in 2011).

The Louisiana coastal zone can be a challenge to survey but the greatest hindrance to surveys in 2011 was the Deepwater Horizon oil spill. In Louisiana, road access points to sites are few and far between and many sites must be surveyed by boat. Some areas simply could not be accessed for surveys (e.g., the Chandeleur Island chain) during the survey window. However, the oil spill produced unforeseen access issues for several sites, particularly those historically utilized by Piping Plovers (e.g., much of SE Louisiana). In the case of areas around the oil spill impact zone, NRDA operations or oil spill response operations precluded the Louisiana Department of Wildlife and Fisheries's survey effort. At some time in the future, the data collected for NRDA will be released to both the LDWF and the USFWS's Field Office, and there will no longer be data gaps.

The 2011 survey effort would not have been possible without the assistance of the Louisiana Department of Wildlife and Fisheries and its many collaborators who provided surveyor time, boats, 4-wheel drive trucks and ATVs. In particular, we would like to thank the US Fish and Wildlife Service (USFWS), the National Audubon Society, Louisiana State University, LSU Museum of Natural Science, Barataria-Terrebonne National Estuary Program, Louisiana Bird Resource Center, and private citizens.

Comparison of Census Numbers

| Species | 1991 | 1996 | 2001 | 2006 | 2011 |
|-----------------|------|------|------|------|------|
| Piping Plover | 750 | 420 | 511 | 226 | 86 |
| Snowy Plover | n.r. | n.r. | 36 | 207 | 74 |
| Wilson's Plover | n.r. | n.r. | n.r. | 63 | 3 |

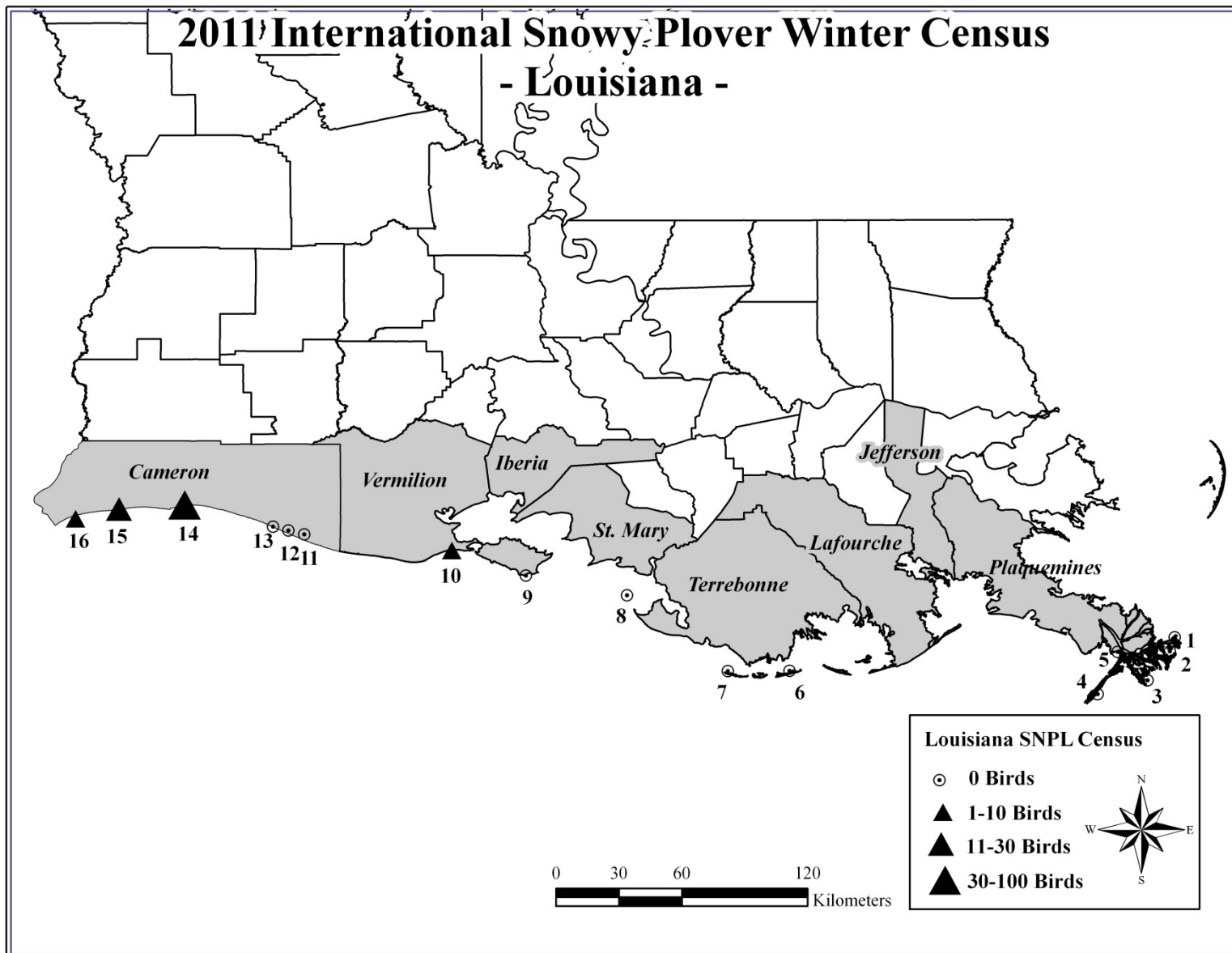


The 2011 International Piping Plover Winter Census in Louisiana

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|--|------|---------|-----------------|--------------|---------------------|---------------------------|---|-----------|-----------|-----------|-------|
| | | | | | | | | | | | | |
| Cameron | Beach Prong to 3 miles west | 13 | 2/2/11 | 19 | 4.8 | III A | n.r. | - | - | - | - | p |
| Cameron | Rockefeller Refuge, west | 11 | 1/25/11 | 7 | 8.2 | III A G | G L | <u>91</u> | 96 | <u>01</u> | 06 | s(p) |
| Cameron | Rockefeller Refuge, west (Price Lake Levee- Beach Prong) | 12 | 1/26/11 | 0 | 6.6 | III A G | G L | 91 | <u>96</u> | <u>01</u> | 06 | s(p) |
| Cameron | Rutherford | 14 | 1/25/11 | 13 | 17.5 | n.r. | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Cameron | Smith Bayou to West Jetty | 15 | 2/2/11 | 7 | 37 | n.r. | n.r. | 91 | <u>96</u> | 01 | 06 | n.r. |
| Cameron | Texas Point Quad | 16 | 1/29/11 | 0 | 5.3 | III A | V G | - | - | - | - | n.r. |
| Iberia | Marsh Island Refuge | 9 | 2/5/11 | 0 | 7.2 | n.r. | n.r. | 91 | 96 | - | 06 | n.r. |
| Plaquemines | East Bird Islands Garden Island Bay | 3 | 2/6/11 | 0 | 1.6 | III B F | P G | - | - | - | - | s(p) |
| Plaquemines | Southeast Pass | 2 | 2/5/11 | 0 | 0.4 | III D | P G | - | 96 | <u>01</u> | 06 | s(p) |
| Plaquemines | Southwest Pass | 4 | 2/6/11 | 0 | 0.8 | III E | P G | - | - | - | - | p |
| Plaquemines | South Pass, Cowhorn Island | 5 | 2/6/11 | 0 | 0.8 | III E | P G | - | - | - | - | s(p) |
| Plaquemines | Pass A L'outre | 1 | 2/5/11 | 0 | 0.8 | III D | P G | - | 96 | 01 | 06 | s(p) |
| St. Mary | Atchafalaya Delta | 8 | 2/9/11 | 15 | 6.2 | III C | n.r. | <u>91</u> | 96 | <u>01</u> | <u>06</u> | s(p) |
| Terrebonne | Raccoon Island (Last Island) | 7 | 2/12/11 | 20 | 4.8 | III B | n.r. | <u>91</u> | 96 | <u>01</u> | <u>06</u> | s(p) |
| Terrebonne | Trinity Island/East Island | 6 | 2/12/11 | 0 | 12.1 | n.r. | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | n.r. |
| Vermillion | Audubon Rainey Sanctuary/Chenier au Tigre Quad ² | 10 | 2/9/11 | 5 | 4.8 | III A G | G | - | - | - | - | p |
| Total | | | | 86 | 118.8 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Piping Plovers were seen at the site during that Census year.

² Please note that this survey was conducted outside the Census window.

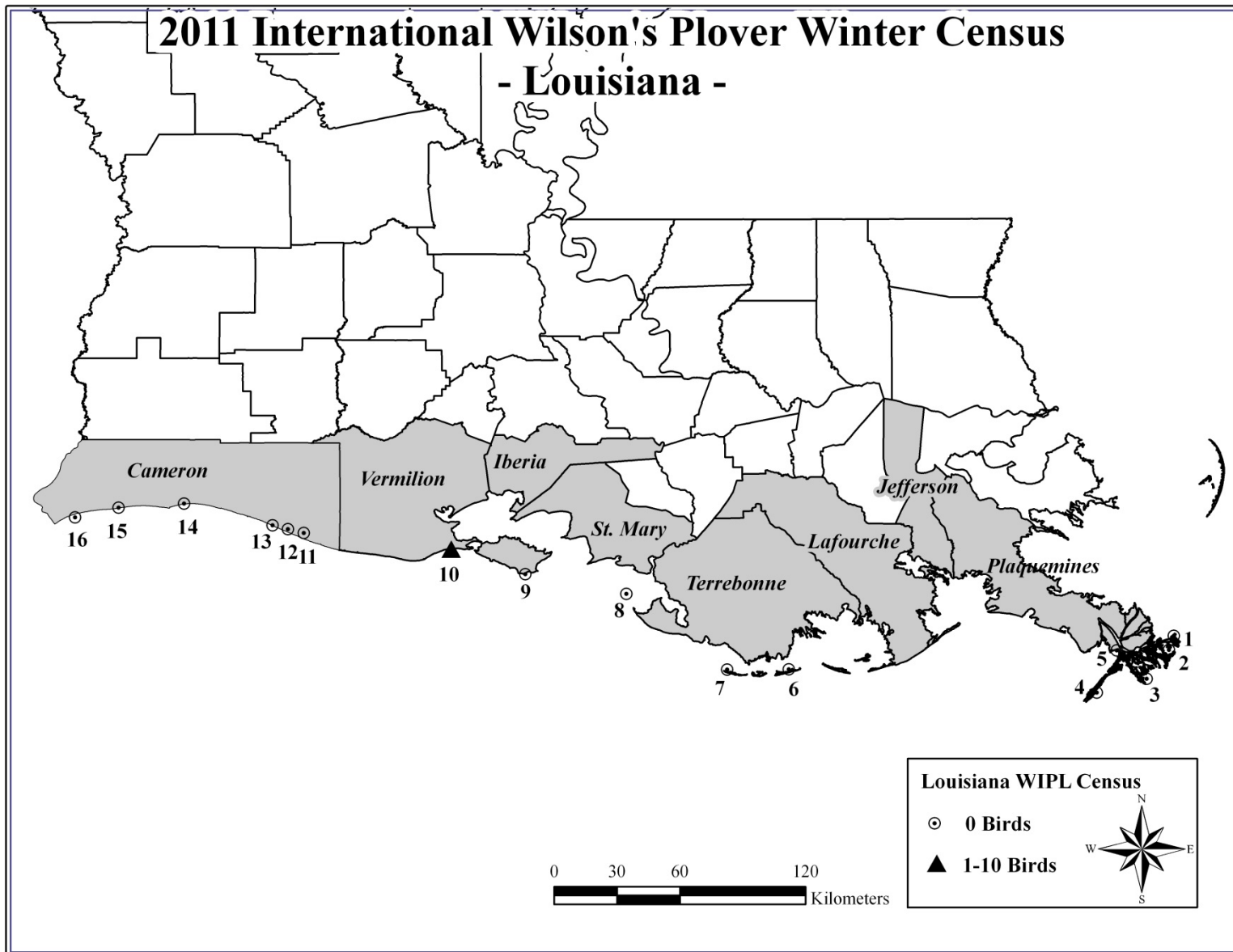


The 2011 International Snowy Plover Winter Census in Louisiana

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|--------------|--|------|---------|-----------------|--------------|---------------------|---------------------------|---|---|-----------|-----------|-------|
| | | | | | | | | | | | | |
| Cameron | Beach Prong to 3 miles west | 13 | 2/2/11 | 0 | 4.8 | III A | n.r. | - | - | - | - | p |
| Cameron | Rockefeller Refuge, west | 11 | 1/25/11 | 0 | 8.2 | III A G | G L | - | - | 01 | 06 | s(p) |
| Cameron | Rockefeller Refuge, west (Price Lake Levee- Beach Prong) | 12 | 1/26/11 | 0 | 6.6 | III A G | G L | - | - | 01 | 06 | s(p) |
| Cameron | Rutherford | 14 | 1/25/11 | 54 | 17.5 | n.r. | n.r. | - | - | 01 | 06 | s(p) |
| Cameron | Smith Bayou to West Jetty | 15 | 2/2/11 | 14 | 37 | n.r. | n.r. | - | - | 01 | 06 | n.r. |
| Cameron | Texas Point Quad | 16 | 1/29/11 | 1 | 5.3 | III A | V G | - | - | - | - | n.r. |
| Iberia | Marsh Island Refuge | 9 | 2/5/11 | 0 | 7.2 | n.r. | n.r. | - | - | - | 06 | n.r. |
| Plaquemines | East Bird Islands Garden Island Bay | 3 | 2/6/11 | 0 | 1.6 | III B F | P G | - | - | - | - | s(p) |
| Plaquemines | Southeast Pass | 2 | 2/5/11 | 0 | 0.4 | III D | P G | - | - | 01 | 06 | s(p) |
| Plaquemines | Southwest Pass | 4 | 2/6/11 | 0 | 0.8 | III E | P G | - | - | - | - | p |
| Plaquemines | South Pass, Cowhorn Island | 5 | 2/6/11 | 0 | 0.8 | III E | P G | - | - | - | - | s(p) |
| Plaquemines | Pass A L'outre | 1 | 2/5/11 | 0 | 0.8 | III D | P G | - | - | 01 | 06 | s(p) |
| St. Mary | Atchafalaya Delta | 8 | 2/9/11 | 0 | 6.2 | III C | n.r. | - | - | - | 06 | s(p) |
| Terrebonne | Raccoon Island (Last Island) | 7 | 2/12/11 | 0 | 4.8 | III B | n.r. | - | - | - | 06 | s(p) |
| Terrebonne | Trinity Island/East Island | 6 | 2/12/11 | 0 | 12.1 | n.r. | n.r. | - | - | 01 | 06 | n.r. |
| Vermillion | Audubon Rainey Sanctuary/Chenier au Tigre Quad ² | 10 | 2/9/11 | 5 | 4.8 | III A G | G | - | - | - | - | p |
| Total | | | | 74 | 118.8 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Snowy Plovers were seen at the site during that Census year.

² Please note that this survey was conducted outside the Census window.



The 2011 International Wilson's Plover Winter Census in Louisiana

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|--------------|--|------|---------|-----------------|-------------|---------------------|---------------------------|---|---|---|------------------|-------|
| | | | | | | | | | | | | |
| Cameron | Beach Prong to 3 miles west | 13 | 2/2/11 | 0 | 4.8 | III A | n.r. | - | - | - | - | p |
| Cameron | Rockefeller Refuge, west | 11 | 1/25/11 | 0 | 8.2 | III A G | G L | - | - | - | 06 | s(p) |
| Cameron | Rockefeller Refuge, west (Price Lake Levee- Beach Prong) | 12 | 1/26/11 | 0 | 6.6 | III A G | G L | - | - | - | 06 | s(p) |
| Cameron | Rutherford | 14 | 1/25/11 | 0 | 17.5 | n.r. | n.r. | - | - | - | <u>06</u> | s(p) |
| Cameron | Smith Bayou to West Jetty | 15 | 2/2/11 | 0 | 37 | n.r. | n.r. | - | - | - | 06 | n.r. |
| Cameron | Texas Point Quad | 16 | 1/29/11 | 0 | 5.3 | III A | V G | - | - | - | - | n.r. |
| Iberia | Marsh Island Refuge | 9 | 2/5/11 | 0 | 7.2 | n.r. | n.r. | - | - | - | 06 | n.r. |
| Plaquemines | East Bird Islands Garden Island Bay | 3 | 2/6/11 | 0 | 7.2 | III B F | P G | - | - | - | - | s(p) |
| Plaquemines | Southeast Pass | 2 | 2/5/11 | 0 | 1.6 | III D | P G | - | - | - | <u>06</u> | s(p) |
| Plaquemines | Southwest Pass | 4 | 2/6/11 | 0 | 0.8 | III E | P G | - | - | - | - | p |
| Plaquemines | South Pass, Cowhorn Island | 5 | 2/6/11 | 0 | 0.4 | III E | P G | - | - | - | - | s(p) |
| Plaquemines | Pass A L'outre | 1 | 2/5/11 | 0 | 0.8 | III D | P G | - | - | - | 06 | s(p) |
| St. Mary | Atchafalaya Delta | 8 | 2/9/11 | 0 | 0.8 | III C | n.r. | - | - | - | 06 | s(p) |
| Terrebonne | Raccoon Island (Last Island) | 7 | 2/12/11 | 0 | 6.2 | III B | n.r. | - | - | - | 06 | s(p) |
| Terrebonne | Trinity Island/East Island | 6 | 2/12/11 | 0 | 12.1 | n.r. | n.r. | - | - | - | 06 | n.r. |
| Vermillion | Audubon Rainey Sanctuary/Chenier au Tigre Quad ² | 10 | 2/9/11 | 3 | 4.8 | III A G | G | - | - | - | - | p |
| Total | | | | 3 | 118. | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Wilson's Plovers were seen at the site during that Census year.

² Please note that this survey was conducted outside the Census window.

The 2011 International Piping Plover Winter Census in Texas

As in 2001 and 2006, the Texas coast was split into three Census regions. The upper Texas coast covers habitat from the Louisiana border to Matagorda County. The central Texas coast includes Calhoun to Kenedy Counties. The third region, lower Texas, includes the remaining two counties, Willacy and Cameron. The total number of Piping Plovers estimated during the 2011 Census of Texas was 2,145. Additionally, 4,981 Snowy Plovers and 37 Wilson's Plovers were sighted on Texas beaches during the 2011 Census.

Comparison of Census Numbers

| Species | 1991 | 1996 | 2001 | 2006 | 2011 |
|-----------------|-------|-------|-------|-------|-------|
| Piping Plover | 1,904 | 1,333 | 1,042 | 2,090 | 2,145 |
| Snowy Plover | n.r. | n.r. | 690 | 1,340 | 4,981 |
| Wilson's Plover | n.r. | n.r. | n.r. | 85 | 37 |

Upper Texas

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Between January 24 and February 27, 2011, 19 people participated in the 5th International Piping Plover Winter Census along the upper Texas Coast. The upper Texas coast region encompasses five bay systems: East Galveston Bay, West Galveston Bay, Chocolate Bay, Christmas Bay and Matagorda Bay.

The upper Texas coast experienced unusually cold temperatures and windy conditions caused by a series of low pressures beginning late January and lasting through mid-February. There was great concern that surveys would overly stress the plovers. Subsequently, we requested an extension of time to complete surveys. These conditions caused low tides for most of the survey period and exposed many tidal flats that are not normally seen.

Survey efforts by 19 participants spanned 408 km (253.5 miles) of the upper coast including bay shorelines, margins of bay spoil islands and beaches along the Gulf of Mexico. Surveyors conducted the census by foot, all terrain vehicle, boat and airboat. The low tides made surveying effort extremely challenging to get around in the bays. Due to the increased exposed tidal flats, portions of the bays were not surveyed.

A total of 254 Piping Plovers were seen during the 2011 Census in north Texas. The 2011 survey results were down significantly from previous census year totals. Due to the inclement weather experienced along the upper Texas coast during the survey, we are not sure if the low count numbers reflect a decrease in overall population, if the birds moved further south, or if the birds were able to find locations not normally surveyed and were just missed during the count. Pedestrians, vehicle traffic, and dogs were observed at some of the sites during the Census. We were unable to survey a few sites (Lavaca Bay, Carancahua, Tres Palacios (Oyster Lake area), West Matagorda Pensiula beach side, and Pelican Island; West and East Galveston Bay sandbar and placement areas could have been surveyed more thoroughly).

The lack of good quality beach habitat limits Piping Ploves along the upper Texas coast. From Texas Point NWR through a good portion of Galveston Island, the beaches are eroding due to increased storm intensity, frequency,

development and human disturbance (vehicle traffic). The Service is working with partners to cost share the re-nourishment of beach along the upper portions of the Texas coast. The City of Galveston re-nourishes the beaches in front of the seawall which may not allow for adequate prey sources for the plovers. Additionally, the Texas General Land Office is looking to mine sand from San Luis Pass. This area has provided habitat for many shorebirds.

Central Texas

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Piping Plovers, Snowy Plovers, and Wilson's Plovers were counted on areas of suitable habitat within the central Texas coast between January 25th and February 16th, 2011, for the 5th International Piping Plover Winter Census. The central Texas coast, for purposes of this international effort, extends from Calhoun County in the north to Kenedy County in the south. Four main bay systems including San Antonio, Aransas, and Corpus Christi bays, and the Upper Laguna Madre, as well as numerous secondary and tertiary bay systems, make up this part of the Texas coast.

A total of 850 Piping Plovers, 1,522 Snowy Plovers, and 8 Wilson's Plovers were reported within the central Texas coast during the 2011 census. The 2011 Piping Plover numbers were similar to the 933 seen in 1991 when an airboat was used to survey the entire bay shoreline of the Texas barrier islands. The 1996 (n = 611) and 2001 (n = 277) Piping Plovers numbers were much lower than the counts from 1991, 2006, and this year. The 2011 number of 850 Piping Plovers is approximately 230 birds less than what was reported from the central coast in

2006 (n = 1,080). One of the biggest differences in numbers was seen in the Espiritu Santo Bay system, west of Matagorda Island, where 427 Piping Plovers were counted in 2006 versus 132 seen in 2011. Snowy Plover numbers were the highest documented to date from any of the international wintering plover census efforts in this region. The number of Wilson's Plovers found during this census was negligible.

For the 2011 census, approximately 834.23 km (518.37 miles) were surveyed, including bay shorelines, islands within the bay systems, seasonally-exposed mud/sand flats within the bays, and the Gulf of Mexico beach. These areas were surveyed with the help of 31 participants over a 3-week period. The 2-week prescribed time frame for the census was exceeded because of unfavorable weather conditions that prohibited boat surveys, and in some cases precluded even vehicle and foot travel. Surveys were conducted using boats, trucks, foot travel, all-terrain vehicles, and one airboat.

Surveys for the three species were conducted at all sites known to be important Piping Plover habitat on the central Texas coast. Due to the immense effort, this census concentrated on those areas known to support Piping Plovers and Snowy Plovers were likely missed at some mainland sites. Participants surveyed all habitats within a given bay system in a one-day period to minimize double-counting. However, because some plover habitat sites in one bay system may occur in close proximity to sites in the adjoining system there was potential for some birds being either double-counted or missed completely. Weather conditions that were unsuitable for surveys further complicated scheduling and increased this potential overlap.

The largest areas excluded from the 2011 effort based on a lack of previous Piping Plover occurrence were the mainland shorelines surrounding Nueces Bay and Baffin Bay, and

the Laguna Madre shoreline of Corpus Christi (known as Flour Bluff). In 2011, shallow water affected the ability to survey portions of bayside San Jose and Matagorda Islands, and some parts of the mud/sand flats between Padre Island National Seashore (PINS) and the Gulf Intracoastal Waterway (GIWW). Boat access to Nighthawk Bay flats, a known high use area for Piping Plovers, was also difficult and no plovers were seen on the day that area was surveyed. However, concentrations of Piping and Snowy Plovers have been documented using this area on a regular basis during the entire fall and winter of 2010/2011 (Tara Imlay, Virginia Polytechnic Institute, pers. comm. 2011).

A few new areas were surveyed during the 2011 census including the bay shore of southern North Padre Island (between the Land Cut and Mansfield Channel), the island (Decros Point) and surrounding shoals and flats just north of Matagorda Island, and the northern bay shoreline of San Jose Island. Extremely shallow water and abysmal conditions (high wind and turbid water) precluded observations of much of the south shoreline of North Padre Island yet 175 Piping Plovers and 36 Snowy Plovers were found at this site. The Gulf beach opposite this shoreline was surveyed by vehicle and adjacent to the north shore of Mansfield Channel yielded 114 Snowy Plovers observations. Decros Point's southern end was surveyed more comprehensively than prior efforts but no plovers were located. The northern bay shore of San Jose Island was surveyed by boat this year for the first time since 1991, but only 6 Piping Plovers and 6 Snowy Plovers were observed.

As was true in the 2006 census, the vast majority of Piping Plovers were located within the bay systems on barrier island bay shorelines and seasonally-exposed mud/sand flats. Bay water levels were very low during all of the 2011 census period making bay habitats available to foraging birds most of the time. Although 259.10 km (161 miles) of Gulf beach

shoreline were surveyed, only 119 plovers (14 Piping Plovers and 105 Snowy Plovers) were found on the beach this year. Thirty-five Piping Plovers were also found on mainland bay shorelines at 4 sites; all of which have past records of Piping Plover occurrence. With very few exceptions, Piping Plovers were found in groups and not as individuals. Piping Plovers did occur in small groups at a number of sites, but were also found in several large aggregations where as many as 231 were together on one emergent mud flat.

The reasons for lower Piping Plover numbers in 2011 than 2006 are unknown. The survey effort in 2011 was as intensive as in 2006 and even covered new, previously unsurveyed sites. The lower number of Piping Plovers may have been partially attributable to unsuccessful survey results on days when winds associated with cold fronts inundated habitat that surveyors did visit, while simultaneously exposing other suitable habitat not surveyed on those days.

The one-day census provides only a snap-shot of any given area and has the potential to cause an underestimate of populations. In the future, more intense annual surveys of the most important sites (as defined by census and other survey data showing consistent use by larger groups of birds) might help to provide better population estimates. In the Texas central coast region, the results of the 5 international censuses, in conjunction with other information that has been compiled over time, has produced a fairly consistent picture of the significant Piping Plover sites that should receive this focused attention.

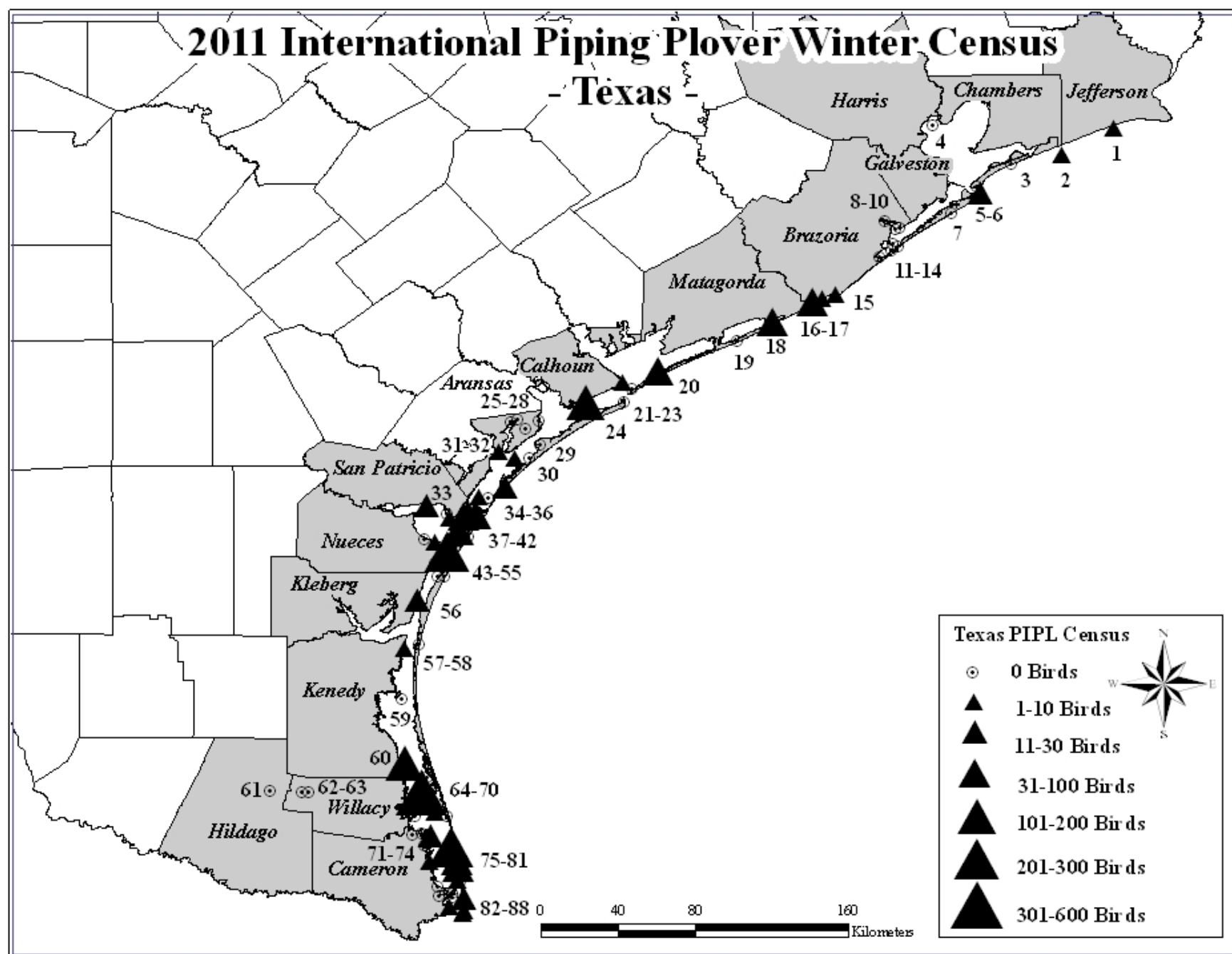
Lower Texas

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Biologists from Conservian/Coastal Bird Conservation conducted a late winter, nonbreeding survey of the Lower Laguna Madre Region of Texas from January 17 to February 15. A total of 1,047 Piping Plovers were observed during the survey period. All Piping Plovers with the exception of 21 birds were documented between January 27 and January 30, 2011. This total is higher than the 2001 or 2006 Census. The largest contiguous group of 557 Piping Plovers was documented on January 30 on South Padre Island at the Mansfield Channel (9 additional birds were seen just southwest of the channel).

During the 2011 late winter survey we also documented 3,295 Snowy Plovers and 8 Wilson's Plovers. All but 241 of the Snowy Plovers were located on South Padre Island during the same four day period. While the Census is intended to be a count of wintering birds we found multiple Snowy Plover pairs defending territories at the inland lake sites in mid-February. This indicates that a January/February census window is likely too late to reflect exclusively wintering Snowy Plover populations in the Lower Laguna Madre Region of Texas.

We used multiple survey teams working simultaneously to cover all known and potential winter Piping Plover habitat in the region during good survey conditions. Surveys were conducted on foot but ATVs and airboats were used to access remote areas. Unlike more northerly locations in Texas, we were able to survey during mild weather with low winds and temperatures in the 60's.



The 2011 International Piping Plover Winter Census in Texas

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|----------|--|------|---------|-----------------|------|---------------------|---------------------------|---|------------------------|-----------|-----------|---------|
| | | | | | | | | | | | | |
| Aransas | Aransas Bay, Goose Island ³³ | 31 | 1/1/11 | 4 | 0.8 | II D E | H F G L | - | - | - | <u>06</u> | s(p) |
| Aransas | Burgentine Lake (Aransas NWR; W Blackjack) ³³ | 26 | 2/7/11 | 0 | 3.8 | II A | G | - | - | - | <u>06</u> | f |
| Aransas | E Blackjack (Aransas NWR Complex) ³³ | 28 | 2/7/11 | 0 | 5.3 | II A | H G | <u>91</u> | 96 | 01 | - | f |
| Aransas | Fulton to Ingleside Point (Mainland) | 37 | 1/25/11 | 0 | 42.6 | II A | G | <u>91</u> | <u>96</u> ² | 01 | 06 | s(p), p |
| Aransas | N San Jose Island, Bayside (Big Island to Cedar Bayou) | 32 | 1/28/11 | 6 | 22.5 | II B | H G L | <u>91</u> ³ | - | - | - | s(p), p |
| Aransas | San Jose Island (Gulf Side) | 34 | 1/26/11 | 14 | 64.4 | III B | n.r. | <u>91</u> ⁴ | <u>96</u> ⁵ | <u>01</u> | <u>06</u> | p |
| Aransas | San Jose Island bayside (N Pass) | 36 | 1/28/11 | 0 | 2.0 | II B | n.r. | <u>91</u> ⁶ | <u>96</u> | 01 | <u>06</u> | s(p) |
| Aransas | Tatton Unit (Aransas NWR) ³³ | 25 | 2/7/11 | 0 | 3.7 | II A | G | 91 | - | - | 06 | f |
| Brazoria | Alligator Point ³³ | 9 | 2/11/11 | 0 | 4.8 | II C D | S G L | - | - | - | - | s(p) |
| Brazoria | Chocolate Bayou ³³ | 8 | 2/11/11 | 0 | 4.8 | II C D | S G L | - | - | - | - | s(p) |
| Brazoria | Christmas/Drum Bay ^{32, 33} | 14 | 2/15/11 | 0 | 26.6 | II III IV A D E F | G | - | - | - | - | f, s(p) |
| Brazoria | Cold Pass | 13 | 1/27/11 | 0 | 3.2 | II G | B F G L | - | - | - | - | s(p), c |
| Brazoria | Sargent Beach (East) | 16 | 1/28/11 | 10 | 6.4 | III A | none | <u>91</u> ⁷ | 96 | <u>01</u> | - | s(p) |
| Brazoria | Sargent Beach (West) | 17 | 1/27/11 | 38 | 4.2 | III IV A D E F | B G | <u>91</u> ⁷ | 96 | <u>01</u> | <u>06</u> | s(p) |
| Brazoria | West Bay Bird Island | 12 | 1/27/11 | 0 | 1.1 | II B E | G L | - | - | - | - | s(p) |
| Brazoria | West Bay Mooring Area BU Site ³³ | 10 | 2/11/11 | 0 | 4.8 | II C D | S G L | - | - | - | 06 | s(p) |
| Brazoria | Wolf Island | 15 | 1/28/11 | 7 | 6.4 | III B | none | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Calhoun | Cedar Bayou, Matagorda Island NWR (Gulf Beach Route) ³³ | 30 | 2/7/11 | 0 | 13.6 | I II B | G | <u>91</u> | <u>96</u> ⁵ | <u>01</u> | <u>06</u> | f |
| Calhoun | Decros Point including Pass Cavallo and Sundown Island ³³ | 22 | 2/14/11 | 0 | 45.2 | II III IV B F | H B S G | <u>91</u> ⁸ | - | <u>01</u> | <u>06</u> | s(p), p |
| Calhoun | Matagorda Island Inner Levee System ³³ | 29 | 2/7/11 | 0 | 15.7 | II B | G | - | 96 | - | 06 | f |
| Calhoun | Matagorda Island NWR Beach (J-Hook) ³³ | 23 | 2/7/11 | 0 | 11.4 | I II A | G | <u>91</u> ⁹ | <u>96</u> ⁵ | 01 | <u>06</u> | f |
| Calhoun | Matagorda Island NWR Gulf Beach ³³ | 27 | 2/7/11 | 0 | 33.0 | I B | G | <u>91</u> ⁹ | <u>96</u> ⁵ | <u>01</u> | <u>06</u> | f |
| Calhoun | Port O'Conner Shoreline | 21 | 2/1/11 | 6 | 2.0 | V A | S G L | 91 | - | 01 | <u>06</u> | m |
| Calhoun | Welder Flats, Shoalwater Bay, The Lagoon-Dewberry Island ³³ | 24 | 2/8/11 | 132 | 85.3 | II A E G | H B F G L | 91 | - | <u>01</u> | <u>06</u> | p |
| Cameron | Bahia Grande | 83 | 2/3/11 | 0 | 30.6 | V G | H F S | - | 96 | <u>01</u> | 06 | f |
| Cameron | Boca Chica Beach ³³ | 87 | 1/18/11 | 1 | 4.7 | III V A | H D V F G | <u>91</u> | 96 | 01 | 06 | s(p) |
| Cameron | Brazos Island Beach & Flats ³³ | 85 | 1/21/11 | 29 | 8.7 | III V A | H D V F G | <u>91</u> | 96 | 01 | 06 | f, s(p) |
| Cameron | Brownsville Ship Channel Spoil Cells ³³ | 84 | 1/23/11 | 0 | 4.5 | III V B | V F G | 91 | 96 | - | 06 | s(p), m |
| Cameron | Buena Vista Ranch | 74 | 2/6/11 | 0 | 9.7 | II A | V A G | <u>91</u> ¹⁰ | 96 | 01 | 06 | p |
| Cameron | Intracoastal Spoil Islands ³³ | 73 | 3/2/11 | 18 | 11.9 | II C | F | - | - | - | - | s(p) |

The 2011 International Piping Plover Winter Census in Texas (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|------------------------|--|------|---------|-----------------|------|---------------------|---------------------------|---|-------------------------|-----------|-------------------------|------------|
| | | | | | | | | | | | | |
| Cameron | Laguna Atascosa NWR Bayside Drive (Pelican Lake, Plover Point, Moranco Blanco) ³³ | 76 | 1/19/11 | 3 | 14.3 | II A | F G | <u>91</u> | 96 | 01 | - | f |
| Cameron | Long Island Village/ Outdoor Resorts ³³ | 82 | 2/8/11 | 0 | 4.5 | II V G | H V S U G | - | - | - | - | p |
| Cameron | Mouth of the Rio Grande ³³ | 88 | 1/18/11 | 8 | 3.2 | III A | V G | - | - | - | - | f |
| Cameron | Port Isabel - Hwy 100 | 81 | 1/24/11 | 0 | 14.5 | II A | H F S U G | - | <u>96</u> | - | - | m, p |
| Cameron | South Bay & Boca Chica Flats ³³ | 86 | 1/17/11 | 1 | 25.3 | II V A F | V G | <u>91</u> | <u>96</u> | 01 | 06 | f |
| Cameron | South Padre Island Beach (North of Access 5) | 70 | 1/25/11 | 0 | 43.5 | I III B | H D V F | <u>91</u> | 96 | 01 | - | f, s(p), p |
| Cameron | South Padre Island Beach (South of Access 5) | 80 | 1/25/11 | 0 | 10.6 | I III B | H D V F S U G | - | - | - | - | m |
| Cameron | South Padre Island, lower middle of Laguna Madre Side | 77 | 1/26/11 | 51 | 7.7 | I III B | H D V G | - | <u>96</u> ¹¹ | <u>01</u> | <u>06</u> | f, s(p), p |
| Cameron | South Padre Island, middle of Laguna Madre Side | 75 | 1/27/11 | 217 | 15.3 | I III B | H D V G | <u>91</u> | <u>96</u> | 01 | <u>06</u> | f, s(p), p |
| Cameron | South Padre Island, S end Laguna Madre Side (Isla Blanca to N of Convention Ctr) | 79 | 1/24/11 | 6 | 9.2 | II B | H D V F U G | <u>91</u> | <u>96</u> ¹¹ | 01 | <u>06</u> | p |
| Cameron | South Padre Island, S end Laguna Madre Side (just N of Convention Ctr) | 78 | 1/25/11 | 51 | 5.2 | I III B | H D V G | - | <u>96</u> | 01 | 06 | f, s(p), p |
| Cameron | Unit 4, Laguna Atascosa NWR ³³ | 68 | 3/2/11 | 0 | 12.9 | II A | G | 91 | <u>96</u> | 01 | - | f |
| Cameron | Unit 5 (Horse Island Cove), Laguna Atascosa NWR | 72 | 2/6/11 | 0 | 8.9 | II A | G | - | <u>96</u> | 01 | 06 | f |
| Cameron | Unit 8 (Cayo Flats), Laguna Atascosa NWR | 71 | 2/5/11 | 0 | 9.7 | V A | G | - | - | - | - | f |
| Chambers/ Jefferson | McFaddin NWR to High Island | 1 | 1/31/11 | 3 | 51.5 | III A | G L | 91 | <u>96</u> | 01 | 06 | f, s(p) |
| Galveston | Big Reef; Galveston Island | 6 | 1/27/11 | 30 | 4.0 | III B | H D V G L | <u>91</u> | 96 | <u>01</u> | 06 | s(p) |
| Galveston | Bolivar Flats ³² | 5 | 1/28/11 | 0 | 3.2 | II III B | H D V G | <u>91</u> ¹² | <u>96</u> ¹³ | <u>01</u> | <u>06</u> | s(p), p |
| Galveston | Galvston Island, E. Beach to end of Seawall | 7 | 1/27/11 | 0 | 16.5 | III B | H D V F S G L | <u>91</u> ¹⁴ | 96 | 01 | <u>06</u> ¹⁵ | s(p) |
| Galveston | High Island to Bolivar Flats ³² | 3 | 1/28/11 | 0 | 43.5 | III B | H D V F G | <u>91</u> | <u>96</u> ¹³ | 01 | <u>06</u> | f, m |
| Galveston | Rollover Pass Flats ³² | 2 | 1/28/11 | 7 | 1.6 | II D | H F G | 91 | - | - | <u>06</u> | s(p) |
| Galveston | San Luis Pass; Galveston Island | 11 | 1/27/11 | 0 | 2.9 | | H G | <u>91</u> ¹⁴ | <u>96</u> ¹⁶ | <u>01</u> | <u>06</u> ¹⁷ | s(p) |
| Harris | Atkinson Island Cells 5 & 6 ^{32, 33} | 4 | 2/11/11 | 0 | 1.9 | II C | S G | - | 96 | - | - | s(p) |
| Hidalgo | East Lake (La Sal Del Rey) ³³ | 61 | 2/14/11 | 0 | 5.0 | V G | none | - | - | - | - | f |
| Kenedy | South end 9-Mile Hole ³³ | 59 | 2/16/11 | 0 | 6.0 | II G | G L | - | - | - | - | s(p) |
| Kenedy | Upper Laguna Madre, Flats at Land Cut, E & W of GIWW | 57 | 1/27/11 | 1 | 49.6 | II A | n.r. | <u>91</u> | - | 01 | 06 | s(p) |
| Kenedy/ Kleberg | Padre Island National Seashore (Bird Island basin to landcut) | 56 | 1/27/11 | 15 | 64.4 | II F | G | <u>91</u> ¹⁸ | 96 | 01 | <u>06</u> | f |

The 2011 International Piping Plover Winter Census in Texas (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------------|---|------|---------|-----------------|-------|---------------------|---------------------------|---|-------------------------|-----------|-----------|---------|
| | | | | | | | | <u>91</u> ¹⁹ | <u>96</u> ²⁰ | 01 | <u>06</u> | |
| Kenedy/ Kleberg | Padre Island National Seashore, Gulf Beach | 58 | 1/27/11 | 0 | 48.3 | III B | H V S G | <u>91</u> ¹⁹ | <u>96</u> ²⁰ | 01 | <u>06</u> | f |
| Kenedy/ Willacy | Bayshore flat on S end of N Padre Island (S of Land cut and N of Mansfield Channel in LLM) ³³ | 60 | 2/16/11 | 175 | 34.6 | II B D | G L | <u>91</u> | <u>96</u> | - | - | s(p) |
| Kenedy/ Willacy | Padre Island National Seashore/ 9-Mile Hole SE ³³ | 64 | 2/16/11 | 0 | 54.7 | III B | G | <u>91</u> | <u>96</u> ²⁰ | 01 | <u>06</u> | f, s(p) |
| Kleberg | Nighthawk Bay | 54 | 1/27/11 | 0 | n.r. | II B | G L | 91 | <u>96</u> ²¹ | 01 | 06 | f, s(p) |
| Kleberg/ Nueces | Packery to PINS | 55 | 1/27/11 | 0 | 22.5 | III B | H D V F G | <u>91</u> ¹⁹ | <u>96</u> ²⁰ | 01 | <u>06</u> | s(p) |
| Kleberg/ Nueces | Upper Laguna Madre (islands S of JFK Causeway to Bird Island Basin) | 53 | 1/27/11 | 0 | 1.9 | II C | n.r. | <u>91</u> ²² | <u>96</u> ²³ | 01 | <u>06</u> | s(p) |
| Matagorda | East Matagorda Bay ³³ | 18 | 2/25/11 | 70 | 85.3 | II B | n.r. | - | - | - | - | s(p) |
| Matagorda | East Matagorda Peninsula ^{32, 33} | 19 | 2/18/11 | 0 | 20.9 | III A D F | V G | <u>91</u> ²⁴ | 96 | 01 | 06 | s(p) |
| Matagorda | Matagorda Peninsula, Bayside and Colorado River Delta ³³ | 20 | 2/15/11 | 89 | 140.0 | II B G | G L | <u>91</u> ²⁵ | - | - | <u>06</u> | s(p) |
| Nueces | Mollie Beattie | 52 | 1/27/11 | 0 | 4.8 | II B | G | - | 96 | 01 | 06 | s(p) |
| Nueces | Mollie Beattie (North End) | 50 | 1/26/11 | 0 | 2.8 | II B G | V G | - | 96 | 01 | - | s(p), p |
| Nueces | Mustang Island - Bay shoreline N end to Wilson's Cut and Shamrock Island | 42 | 1/26/11 | 47 | 70.8 | II B | P S G L | <u>91</u> ²⁶ | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Nueces | Mustang Island - Charlie's Pasture | 41 | 1/26/11 | 89 | 5.8 | II B | n.r. | - | - | - | - | m |
| Nueces | Mustang Island - Port A to Packery (gulf side) | 44 | 1/26/11 | 0 | 29.0 | III B | H D V G | <u>91</u> | 96 | 01 | 06 | s(p) |
| Nueces | Mustang Island State Park (S Bayside and Fish Pass) | 47 | 1/26/11 | 0 | 1.6 | II B | H V F P G | 91 | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Nueces | Oso Bay - NAS CC | 46 | 1/26/11 | 8 | n.r. | II A | H F G L | <u>91</u> | <u>96</u> ²⁷ | - | 06 | f |
| Nueces | Packery Channel Park | 49 | 1/26/11 | 7 | 1.6 | II B | H V F G | - | - | 01 | 06 | s(p) |
| Nueces | Pelican Island | 40 | 1/26/11 | 56 | n.r. | II C D E | S G L | <u>91</u> | - | - | <u>06</u> | p |
| Nueces | Redfish Bay (N of causeway) | 35 | 1/28/11 | 2 | 45.1 | II A B C D E | n.r. | <u>91</u> | <u>96</u> ² | - | <u>06</u> | s(p) |
| Nueces | Redfish Bay (S of causeway including Harbor Island) | 39 | 1/26/11 | 8 | 28.6 | II A C E | H B F G L | <u>91</u> | <u>96</u> ² | <u>01</u> | 06 | s(p) |
| Nueces | S side of JFK Causeway and Laguna Madre Shoreline | 51 | 1/26/11 | 22 | 3.0 | II A | H V F G | <u>91</u> ²⁸ | - | - | 06 | s(p) |
| Nueces | Upper Laguna Madre/S end of Corpus Christi Bay (islands and flats) | 48 | 1/26/11 | 233 | 11.9 | II C G | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Nueces | Ward Island | 45 | 1/26/11 | 0 | 2.0 | II A | I G | 91 | - | 01 | 06 | s(p) |
| Nueces | Wilson's Cut/Croaker Hole | 43 | 1/28/11 | 0 | 1.6 | II B | V | - | - | <u>01</u> | <u>06</u> | s(p) |
| San Patricio | La Quinta Channel Islands | 38 | 1/26/11 | 5 | 25.7 | II C | H S G | <u>91</u> | <u>96</u> ² | <u>01</u> | 06 | s(p), p |

The 2011 International Piping Plover Winter Census in Texas (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|--|------|---------|-----------------|---------------|---------------------|---------------------------|---|-----------|----|-------------------------|------------|
| | | | | | | | | | | | | |
| San Patricio | Sunset Lake | 33 | 1/28/11 | 14 | 0.1 | II D | H D F I G L | <u>91</u> ²⁹ | 96 | 01 | 06 | m |
| Willacy | East Lake ³³ | 63 | 2/14/11 | 0 | 5.6 | V G | S | 91 | - | 01 | - | f |
| Willacy | East Lake (La Sal Vieja) ³³ | 62 | 2/15/11 | 0 | 12.9 | V G | A I | - | - | 01 | - | f |
| Willacy | Mansfield Channel Spoil Islands ³³ | 65 | 3/2/11 | 0 | 3.7 | II C | F | 91 | - | - | - | s(p) |
| Willacy | South Padre Island, N end flats by Port Mansfield Channel | 66 | 1/30/11 | 566 | 0.5 | I III B | H D V G | - | 96 | 01 | <u>06</u> | f, s(p), p |
| Willacy | South Padre Island, S of Mansfield Channel | 67 | 1/29/11 | 87 | 11.1 | I III B | H D V G | <u>91</u> | 96 | 01 | <u>06</u> ³⁰ | f, s(p), p |
| Willacy | South Padre Island, upper middle of Laguna Madre Side | 69 | 1/28/11 | 9 | 4.8 | I III B | H D V G | 91 | <u>96</u> | 01 | <u>06</u> ³¹ | f, s(p), p |
| Total | | | | 2145 | 1600.0 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Piping Plovers were seen at the site during that Census year.

² This site was surveyed as a part of "Redfish Bay/ Harbor Island/ Ingleside Cove" in '96. The survey route and locations of the PIPL are unknown and may have occurred in an area along this 2011 survey route.

³ This site was surveyed within two separate sites in '91: "Matagorda Island, Aransas" and "St. Joseph Island Bay". The specific locations of the PIPL seen at these sites in '91 are unknown and may have occurred along the 2011 survey route.

⁴ This site was surveyed within two separate sites in '91: "Matagorda Island, Beach" and "St. Joseph Island Beach". The specific locations of the PIPL seen at these sites in '91 are unknown and may have occurred along the 2011 survey route.

⁵ This site was surveyed as a part of "Matagorda Island Gulf Beach" in '96. The specific locations of the 7 PIPL seen in '96 are unknown and may have occurred along the 2011 survey route.

⁶ This site was surveyed as a part of "St Joseph Island Bay" in '91. The specific locations of the PIPL seen in '91 are unknown and may have occurred along the 2011 survey route.

⁷ This stretch was surveyed as a part of "Sargent Beach" in '91. The specific locations of the PIPL seen in '91 are unknown and may have occurred along the 2011 survey route.

⁸ This site was surveyed within two separate sites in '91: "Matagorda Peninsula South Bay" and "Matagorda Peninsula South Beach". The specific locations of the PIPL seen at these sites in '91 are unknown and may have occurred along the 2011 survey route.

⁹ This site was surveyed as a part of "Matagorda Island, Beach" in '91. The specific locations of the PIPL seen in '91 are unknown and may have occurred along the 2011 survey route.

¹⁰ This site was surveyed as a part of "Laguna Madre West" in '91. No plovers were seen in the span of this 2011 survey route during the '91 census; however, 46 PIPL were seen in the area on January 6, 1991 (outside of the census window).

¹¹ This site was surveyed as a part of "W side S. Padre I., boat ramp to N End Hwy 100" in '96. The specific locations of the PIPL seen in '96 are unknown and may have occurred along the 2011 survey route.

¹² This site was surveyed as a part of "Bolivar Flats" in '91. The specific locations of the PIPL seen in '91 are unknown and may have occurred along the 2011 survey route.

¹³ This site was surveyed as a part of "Bolivar Peninsula" in '96. The specific locations of the PIPL seen in '96 are unknown and may have occurred along the 2011 survey route.

¹⁴ This site was surveyed as a part of "Big Reef-San Luis" in '91. The specific locations of the PIPL seen in '91 are unknown and may have occurred along the 2011 survey route.

¹⁵ This site was surveyed as a part of "Galveston Island Beaches; E beach to end of seawall" in '06. The specific locations of the PIPL seen in '06 are unknown and may have occurred along the 2011 survey route.

¹⁶ This site was surveyed as a part of "San Luis Pass tidal delta" in '96. The specific locations of the PIPL seen in '96 are unknown and may have occurred along the 2011 survey route.

¹⁷ This site was surveyed as a part of "San Luis Pass; Galveston Island" in '06. The specific locations of the PIPL seen in '06 are unknown and may have occurred along the 2011 survey route.

¹⁸ This site was surveyed as a part of "Padre Island Bayside" in '91. The specific locations of the PIPL seen in '91 are unknown and may have occurred along the 2011 survey route.

¹⁹ This site was surveyed as a part of "Padre Island Beach" in '91. The specific locations of the PIPL seen in '91 are unknown and may have occurred along the 2011 survey route.

²⁰ This site was surveyed as a part of "Padre Island NS Beach" in '96. The specific locations of the PIPL seen in '96 are unknown and may have occurred along the 2011 survey route.

²¹ This site was surveyed as a part of “Upper Laguna Madre: Bird I. Basin to JFK Causeway” in ‘96. The specific locations of PIPL seen in ‘96 are unknown and may have occurred along the 2011 survey route.

²² This site was surveyed within two separate sites in ‘91: “Padre Island Bayside” and “South Bird Island”. The specific locations of the PIPL seen in ‘91 are unknown and may have occurred along the 2011 survey route.

²³ This site was surveyed as a part of “Mudflat N boundary Padre Island NS” in ‘96. The specific locations of the PIPL seen in ‘96 are unknown and may have occurred along the 2011 survey route.

²⁴ This site may have been surveyed as a part of “Matagorda Peninsula North Beach” in ‘91. The specific locations of the PIPL seen in ‘91 are unknown and may have occurred along the 2011 survey route.

²⁵ This site was surveyed as a part of “Matagorda Peninsula South Bay” in ‘91. The specific locations of the PIPL seen in ‘91 are unknown and may have occurred along the 2011 survey route.

²⁶ This site was surveyed as a part of “Mustang Island Bay” in ‘91. The specific locations of the PIPL seen in ‘91 are unknown and may have occurred along the 2011 survey route.

²⁷ In ‘96, 3 PIPL were seen along the route “Oso Bay” but no map was provided. The survey route and locations of the PIPL are unknown and may have occurred in an area along the 2011 survey route.

²⁸ This site was surveyed as a part of “Flour Bluff” in ‘91. The specific locations of the PIPL seen in ‘91 are unknown and may have occurred along the 2011 survey route.

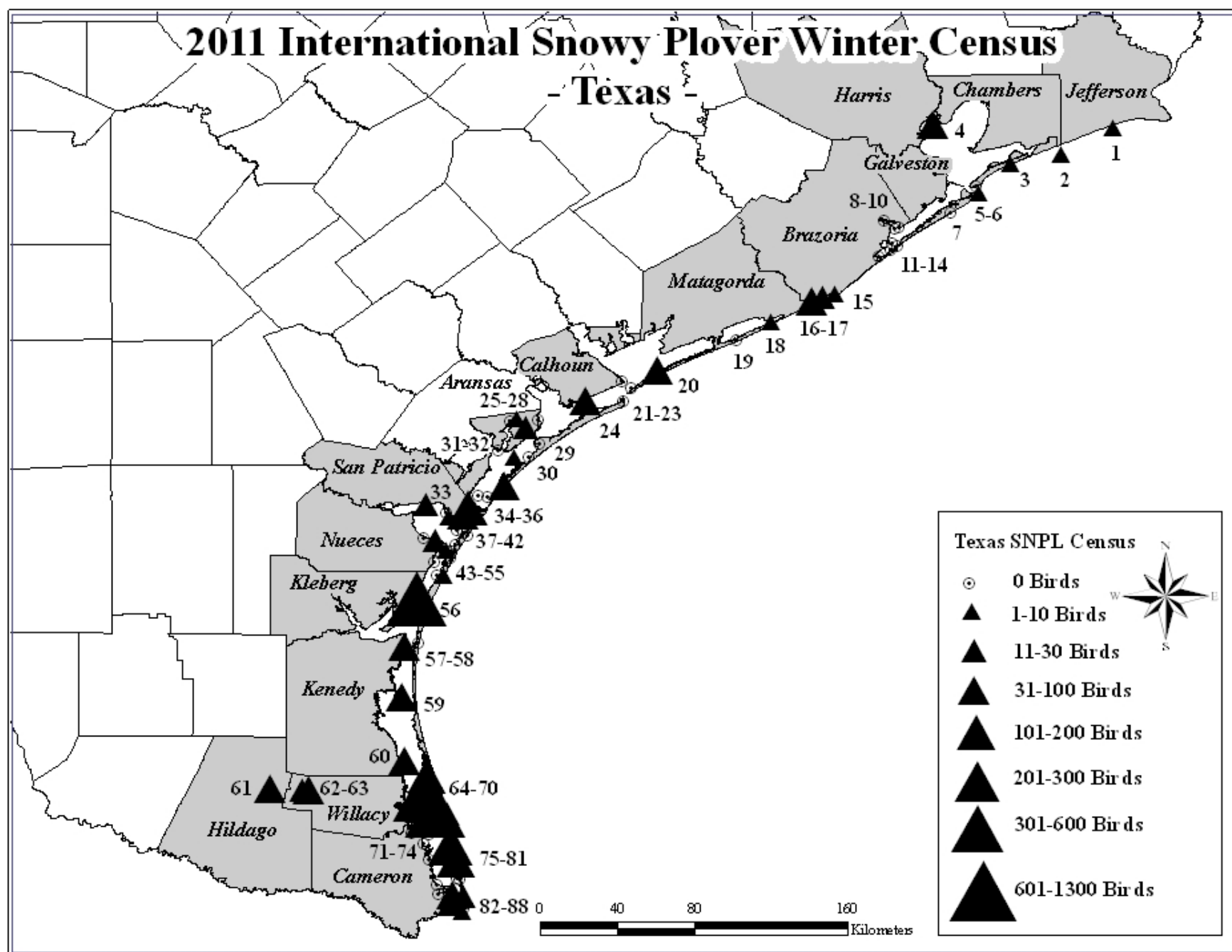
²⁹ This site was surveyed as a part of “Indian Point” in ‘91. The specific locations of the PIPL seen in ‘91 are unknown and may have occurred along the 2011 survey route.

³⁰ This site was surveyed as a part of “South Padre Island, N end flats by Port Mansfield Channel” in ‘06. The specific locations of the PIPL seen in ‘06 are unknown and may have occurred along the 2011 survey route.

³¹ This site was surveyed as a part of “South Padre Island, Laguna Madre Side” in ‘06. The specific locations of the PIPL seen in ‘06 are unknown and may have occurred along the 2011 survey route.

³² Specific survey route for this site is unknown - map illegible. Notations for sightings in prior Census years are based on an estimation of the 2011 survey route.

³³ Please note that this survey was conducted outside the Census window.



The 2011 International Snowy Plover Winter Census in Texas

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|----------|--|------|---------|--------------|------|-------------------|------------------------|---|------------------------|------------------------|-----------|---------|
| | | | | | | | | | | | | |
| Aransas | Aransas Bay, Goose Island ³³ | 31 | 1/1/11 | 0 | 0.8 | II D E | H F G L | - | - | - | 06 | s(p) |
| Aransas | Burgentine Lake (Aransas NWR; W Blackjack) ³³ | 26 | 2/7/11 | 1 | 3.8 | II A | G | - | - | - | 06 | f |
| Aransas | E Blackjack (Aransas NWR Complex) ³³ | 28 | 2/7/11 | 0 | 5.3 | II A | H G | 91 | 96 | 01 | - | f |
| Aransas | Fulton to Ingleside Point (Mainland) | 37 | 1/25/11 | 0 | 42.6 | II A | G | <u>91</u> | <u>96</u> ² | 01 | 06 | s(p), p |
| Aransas | N San Jose Island, Bayside (Big Island to Cedar Bayou) | 32 | 1/28/11 | 6 | 22.5 | II B | H G L | <u>91</u> ³ | - | - | - | s(p), p |
| Aransas | San Jose Island (Gulf Side) | 34 | 1/26/11 | 95 | 64.4 | III B | n.r. | <u>91</u> ⁴ | 96 | <u>01</u> | <u>06</u> | p |
| Aransas | San Jose Island bayside (N Pass) | 36 | 1/28/11 | 0 | 2.0 | II B | n.r. | <u>91</u> ⁵ | <u>96</u> | <u>01</u> ⁶ | 06 | s(p) |
| Aransas | Tatton Unit (Aransas NWR) ³³ | 25 | 2/7/11 | 0 | 3.7 | II A | G | 91 | - | - | 06 | f |
| Brazoria | Alligator Point ³³ | 9 | 2/11/11 | 0 | 4.8 | II C D | S G L | - | - | - | - | s(p) |
| Brazoria | Chocolate Bayou ³³ | 8 | 2/11/11 | 0 | 4.8 | II C D | S G L | - | - | - | - | s(p) |
| Brazoria | Christmas/Drum Bay ^{32, 33} | 14 | 2/15/11 | 0 | 26.6 | II III IV A D E F | G | - | - | - | - | f, s(p) |
| Brazoria | Cold Pass | 13 | 1/27/11 | 0 | 3.2 | II G | B F G L | - | - | - | - | s(p), c |
| Brazoria | Sargent Beach (East) | 16 | 1/28/11 | 18 | 6.4 | III A | none | 91 | 96 | <u>01</u> | - | s(p) |
| Brazoria | Sargent Beach (West) | 17 | 1/27/11 | 32 | 4.2 | III IV A D E F | B G | 91 | 96 | <u>01</u> | <u>06</u> | s(p) |
| Brazoria | West Bay Bird Island | 12 | 1/27/11 | 0 | 1.1 | II B E | G L | - | - | - | - | s(p) |
| Brazoria | West Bay Mooring Area BU Site ³³ | 10 | 2/11/11 | 0 | 4.8 | II C D | S G L | - | - | - | 06 | s(p) |
| Brazoria | Wolf Island | 15 | 1/28/11 | 1 | 6.4 | III B | none | 91 | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Calhoun | Cedar Bayou, Matagorda Island NWR (Gulf Beach Route) ³³ | 30 | 2/7/11 | 0 | 13.6 | I II B | G | 91 | 96 | <u>01</u> | <u>06</u> | f |
| Calhoun | Decros Point including Pass Cavallo and Sundown Island ³³ | 22 | 2/14/11 | 0 | 45.2 | II III IV B F | H B S G | <u>91</u> ⁷ | - | 01 | <u>06</u> | s(p), p |
| Calhoun | Matagorda Island Inner Levee System ³³ | 29 | 2/7/11 | 0 | 15.7 | II B | G | - | 96 | - | 06 | f |
| Calhoun | Matagorda Island NWR Beach (J-Hook) ³³ | 23 | 2/7/11 | 0 | 11.4 | I II A | G | <u>91</u> ⁸ | 96 | 01 | <u>06</u> | f |
| Calhoun | Matagorda Island NWR Gulf Beach ³³ | 27 | 2/7/11 | 28 | 33.0 | I B | G | <u>91</u> ⁸ | 96 | <u>01</u> | <u>06</u> | f |
| Calhoun | Port O'Conner Shoreline | 21 | 2/1/11 | 0 | 2.0 | V A | S G L | 91 | - | 01 | 06 | m |
| Calhoun | Welder Flats, Shoalwater Bay, The Lagoon-Dewberry Island ³³ | 24 | 2/8/11 | 91 | 85.3 | II A E G | H B F G L | 91 | - | <u>01</u> | <u>06</u> | p |
| Cameron | Bahia Grande | 83 | 2/3/11 | 0 | 30.6 | V G | H F S | - | <u>96</u> ⁹ | 01 | 06 | f |
| Cameron | Boca Chica Beach ³³ | 87 | 1/18/11 | 0 | 4.7 | III V A | H D V F G | 91 | 96 | 01 | 06 | s(p) |
| Cameron | Brazos Island Beach & Flats ³³ | 85 | 1/21/11 | 16 | 8.7 | III V A | H D V F G | 91 | <u>96</u> | 01 | 06 | f, s(p) |
| Cameron | Brownsville Ship Channel Spoil Cells ³³ | 84 | 1/23/11 | 49 | 4.5 | III V B | V F G | 91 | 96 | - | 06 | s(p), m |
| Cameron | Buena Vista Ranch | 74 | 2/6/11 | 0 | 9.7 | II A | V A G | <u>91</u> ¹⁰ | 96 | 01 | 06 | p |
| Cameron | Intracoastal Spoil Islands ³³ | 73 | 3/2/11 | 0 | 11.9 | II C | F | - | - | - | - | s(p) |

The 2011 International Snowy Plover Winter Census in Texas (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|------------------------|--|------|---------|-----------------|------|---------------------|---------------------------|---|-------------------------|-------------------------|-------------------------|------------|
| | | | | | | | | | | | | |
| Cameron | Laguna Atascosa NWR Bayside Drive (Pelican Lake, Plover Point, Moranco Blanco) ³³ | 76 | 1/19/11 | 0 | 14.3 | II A | F G | <u>91</u> | 96 | 01 | - | f |
| Cameron | Long Island Village/ Outdoor Resorts ³³ | 82 | 2/8/11 | 0 | 4.5 | II V G | H V S U G | - | - | - | - | p |
| Cameron | Mouth of the Rio Grande ³³ | 88 | 1/18/11 | 6 | 3.2 | III A | V G | - | - | - | - | f |
| Cameron | Port Isabel - Hwy 100 | 81 | 1/24/11 | 0 | 14.5 | II A | H F S U G | - | 96 | - | - | m, p |
| Cameron | South Bay & Boca Chica Flats ³³ | 86 | 1/17/11 | 23 | 25.3 | II V A F | V G | <u>91</u> | <u>96</u> | 01 | 06 | f |
| Cameron | South Padre Island Beach (North of Access 5) | 70 | 1/25/11 | 12 | 43.5 | I III B | H D V F | <u>91</u> | 96 | 01 | - | f, s(p), p |
| Cameron | South Padre Island Beach (South of Access 5) | 80 | 1/25/11 | 0 | 10.6 | I III B | H D V F S U G | - | - | - | - | m |
| Cameron | South Padre Island, lower middle of Laguna Madre Side | 77 | 1/26/11 | 116 | 7.7 | I III B | H D V G | - | <u>96</u> ¹¹ | <u>01</u> | 06 | f, s(p), p |
| Cameron | South Padre Island, middle of Laguna Madre Side | 75 | 1/27/11 | 296 | 15.3 | I III B | H D V G | <u>91</u> | <u>96</u> ¹² | 01 | <u>06</u> ¹³ | f, s(p), p |
| Cameron | South Padre Island, S end Laguna Madre Side (Isla Blanca to N of Convention Ctr) | 79 | 1/24/11 | 0 | 9.2 | II B | H D V F U G | 91 | <u>96</u> ¹¹ | 01 | 06 | p |
| Cameron | South Padre Island, S end Laguna Madre Side (just N of Convention Ctr) | 78 | 1/25/11 | 26 | 5.2 | I III B | H D V G | - | <u>96</u> ¹¹ | 01 | 06 | f, s(p), p |
| Cameron | Unit 4, Laguna Atascosa NWR ³³ | 68 | 3/2/11 | 1 | 12.9 | II A | G | <u>91</u> | <u>96</u> | 01 | - | f |
| Cameron | Unit 5 (Horse Island Cove), Laguna Atascosa NWR | 72 | 2/6/11 | 0 | 8.9 | II A | G | - | <u>96</u> | 01 | 06 | f |
| Cameron | Unit 8 (Cayo Flats), Laguna Atascosa NWR | 71 | 2/5/11 | 0 | 9.7 | V A | G | - | - | - | - | f |
| Chambers/ Jefferson | McFaddin NWR to High Island | 1 | 1/31/11 | 4 | 51.5 | III A | G L | 91 | 96 | <u>01</u> ¹⁴ | 06 | f, s(p) |
| Galveston | Big Reef; Galveston Island | 6 | 1/27/11 | 6 | 4.0 | III B | H D V G L | <u>91</u> | <u>96</u> | <u>01</u> | 06 | s(p) |
| Galveston | Bolivar Flats ³² | 5 | 1/28/11 | 0 | 3.2 | II III B | H D V G | <u>91</u> ¹⁵ | <u>96</u> ¹⁶ | <u>01</u> | <u>06</u> | s(p), p |
| Galveston | Galvston Island, E. Beach to end of Seawall | 7 | 1/27/11 | 0 | 16.5 | III B | H D V F S G L | 91 | 96 | 01 | 06 | s(p) |
| Galveston | High Island to Bolivar Flats ³² | 3 | 1/28/11 | 1 | 43.5 | III B | H D V F G | <u>91</u> | <u>96</u> ¹⁶ | 01 | <u>06</u> | f, m |
| Galveston | Rollover Pass Flats ³² | 2 | 1/28/11 | 6 | 1.6 | II D | H F G | 91 | - | - | 06 | s(p) |
| Galveston | San Luis Pass; Galveston Island | 11 | 1/27/11 | 0 | 2.9 | | H G | 91 | 96 | 01 | <u>06</u> ¹⁷ | s(p) |
| Harris | Atkinson Island Cells 5 & 6 ^{32, 33} | 4 | 2/11/11 | 38 | 1.9 | II C | S G | - | <u>96</u> ¹⁸ | - | - | s(p) |
| Hidalgo | East Lake (La Sal Del Rey) ³³ | 61 | 2/14/11 | 94 | 5.0 | V G | none | - | - | - | - | f |
| Kenedy | South end 9-Mile Hole ³³ | 59 | 2/16/11 | 67 | 6.0 | II G | G L | - | - | - | - | s(p) |
| Kenedy | Upper Laguna Madre, Flats at Land Cut, E & W of GIWW | 57 | 1/27/11 | 66 | 49.6 | II A | n.r. | <u>91</u> | - | 01 | 06 | s(p) |
| Kenedy/ Kleberg | Padre Island National Seashore (Bird Island basin to landcut) | 56 | 1/27/11 | 767 | 64.4 | II F | G | <u>91</u> ¹⁹ | 96 | 01 | <u>06</u> | f |

The 2011 International Snowy Plover Winter Census in Texas (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|--------------------|---|------|---------|-----------------|-------|---------------------|---------------------------|---|-------------------------|-------------------------|-----------|---------|
| | | | | | | | | <u>91</u> ²⁰ | <u>96</u> ²¹ | <u>01</u> | <u>06</u> | |
| Kenedy/ Kleberg | Padre Island National Seashore, Gulf Beach | 58 | 1/27/11 | 0 | 48.3 | III B | H V S G | <u>91</u> ²⁰ | <u>96</u> ²¹ | <u>01</u> | <u>06</u> | f |
| Kenedy/ Willacy | Bayshore flat on S end of N Padre Island (S of Land cut and N of Mansfield Channel in LLM) ³³ | 60 | 2/16/11 | 36 | 34.6 | II B D | G L | <u>91</u> | <u>96</u> ²² | - | - | s(p) |
| Kenedy/ Willacy | Padre Island National Seashore/ 9-Mile Hole SE ³³ | 64 | 2/16/11 | 114 | 54.7 | III B | G | <u>91</u> | 96 | 01 | <u>06</u> | f, s(p) |
| Kleberg | Nighthawk Bay | 54 | 1/27/11 | 0 | n.r. | II B | G L | 91 | 96 | 01 | 06 | f, s(p) |
| Kleberg/ Nueces | Packery to PINS | 55 | 1/27/11 | 10 | 22.5 | III B | H D V F G | <u>91</u> ²⁰ | <u>96</u> ²¹ | 01 | 06 | s(p) |
| Kleberg/ Nueces | Upper Laguna Madre (islands S of JFK Causeway to Bird Island Basin) | 53 | 1/27/11 | 0 | 1.9 | II C | n.r. | <u>91</u> ²³ | <u>96</u> ²⁴ | 01 | <u>06</u> | s(p) |
| Matagorda | East Matagorda Bay ³³ | 18 | 2/25/11 | 3 | 85.3 | II B | n.r. | - | - | - | - | s(p) |
| Matagorda | East Matagorda Peninsula ^{32, 33} | 19 | 2/18/11 | 0 | 20.9 | III A D F | V G | <u>91</u> ²⁵ | 96 | <u>01</u> | <u>06</u> | s(p) |
| Matagorda | Matagorda Peninsula, Bayside and Colorado River Delta ³³ | 20 | 2/15/11 | 56 | 140.0 | II B G | G L | <u>91</u> ²⁶ | - | - | 06 | s(p) |
| Nueces | Mollie Beattie | 52 | 1/27/11 | 0 | 4.8 | II B | G | - | 96 | 01 | <u>06</u> | s(p) |
| Nueces | Mollie Beattie (North End) | 50 | 1/26/11 | 0 | 2.8 | II B G | V G | - | 96 | 01 | - | s(p), p |
| Nueces | Mustang Island - Bay shoreline N end to Wilson's Cut and Shamrock Island | 42 | 1/26/11 | 0 | 70.8 | II B | P S G L | <u>91</u> ²⁷ | 96 | 01 | 06 | s(p), p |
| Nueces | Mustang Island - Charlie's Pasture | 41 | 1/26/11 | 26 | 5.8 | II B | n.r. | - | - | - | - | m |
| Nueces | Mustang Island - Port A to Packery (gulf side) | 44 | 1/26/11 | 0 | 29.0 | III B | H D V G | <u>91</u> | 96 | 01 | 06 | s(p) |
| Nueces | Mustang Island State Park (S Bayside and Fish Pass) | 47 | 1/26/11 | 0 | 1.6 | II B | H V F P G | 91 | 96 | 01 | <u>06</u> | s(p) |
| Nueces | Oso Bay - NAS CC | 46 | 1/26/11 | 12 | n.r. | II A | H F G L | <u>91</u> | 96 | <u>01</u> ²⁸ | 06 | f |
| Nueces | Packery Channel Park | 49 | 1/26/11 | 0 | 1.6 | II B | H V F G | - | - | 01 | 06 | s(p) |
| Nueces | Pelican Island | 40 | 1/26/11 | 60 | n.r. | II C D E | S G L | <u>91</u> | - | - | <u>06</u> | p |
| Nueces | Redfish Bay (N of causeway) | 35 | 1/28/11 | 0 | 45.1 | II A B C D E | n.r. | 91 | <u>96</u> ² | - | 06 | s(p) |
| Nueces | Redfish Bay (S of causeway including Harbor Island) | 39 | 1/26/11 | 112 | 28.6 | II A C E | H B F G L | <u>91</u> | <u>96</u> ² | 01 | 06 | s(p) |
| Nueces | S side of JFK Causeway and Laguna Madre Shoreline | 51 | 1/26/11 | 0 | 3.0 | II A | H V F G | 91 | - | - | 06 | s(p) |
| Nueces | Upper Laguna Madre/S end of Corpus Christi Bay (islands and flats) | 48 | 1/26/11 | 3 | 11.9 | II C G | n.r. | <u>91</u> | 96 | 01 | <u>06</u> | s(p) |
| Nueces | Ward Island | 45 | 1/26/11 | 0 | 2.0 | II A | I G | 91 | - | <u>01</u> ²⁸ | 06 | s(p) |
| Nueces | Wilson's Cut/Croaker Hole | 43 | 1/28/11 | 0 | 1.6 | II B | V | - | - | 01 | 06 | s(p) |
| San Patricio | La Quinta Channel Islands | 38 | 1/26/11 | 3 | 25.7 | II C | H S G | <u>91</u> | <u>96</u> ² | <u>01</u> | 06 | s(p), p |

The 2011 International Snowy Plover Winter Census in Texas (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|--------------|--|------|---------|-----------------|---------------|---------------------|---------------------------|---|----|-----------|-------------------------|------------|
| | | | | | | | | | | | | |
| San Patricio | Sunset Lake | 33 | 1/28/11 | 24 | 0.1 | II D | H D F I G L | <u>91</u> ³⁰ | 96 | 01 | 06 | m |
| Willacy | East Lake ³³ | 63 | 2/14/11 | 33 | 5.6 | V G | S | <u>91</u> | - | <u>01</u> | - | f |
| Willacy | East Lake (La Sal Vieja) ³³ | 62 | 2/15/11 | 19 | 12.9 | V G | A I | - | - | 01 | - | f |
| Willacy | Mansfield Channel Spoil Islands ³³ | 65 | 3/2/11 | 0 | 3.7 | II C | F | <u>91</u> | - | - | - | s(p) |
| Willacy | South Padre Island, N end flats by Port Mansfield Channel | 66 | 1/30/11 | 198 | 0.5 | I III B | H D V G | - | 96 | 01 | <u>06</u> | f, s(p), p |
| Willacy | South Padre Island, S of Mansfield Channel | 67 | 1/29/11 | 1284 | 11.1 | I III B | H D V G | <u>91</u> | 96 | 01 | <u>06</u> ³¹ | f, s(p), p |
| Willacy | South Padre Island, upper middle of Laguna Madre Side | 69 | 1/28/11 | 1122 | 4.8 | I III B | H D V G | 91 | 96 | 01 | <u>06</u> ³¹ | f, s(p), p |
| Total | | | | 4981 | 1600.0 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Snowy Plovers were seen at the site during that Census year.

² This site was surveyed as a part of "Redfish Bay/ Harbor Island/ Ingleside Cove" in '96. The survey route and locations of the SNPL are unknown and may have occurred in an area along this 2011 survey route.

³ This site was surveyed within two separate sites in '91: "Matagorda Island, Aransas" and "St. Joseph Island Bay". The specific locations of the SNPL seen at these sites in '91 are unknown and may have occurred along the 2011 survey route.

⁴ This site was surveyed within two separate sites in '91: "Matagorda Island, Beach" and "St. Joseph Island Beach". The specific locations of the SNPL seen at these sites in '91 are unknown and may have occurred along the 2011 survey route.

⁵ This site was surveyed as a part of "St Joseph Island Bay" in '91. The specific locations of the SNPL seen in '91 are unknown and may have occurred along the 2011 survey route.

⁶ This stretch was surveyed in '01 as "San Jose Island bayside, south/Harbor Island (CTX1)". The specific locations of the SNPL seen in '01 are unknown and may have occurred along the 2011 survey route.

⁷ This site was surveyed within two separate sites in '91: "Matagorda Peninsula South Bay" and "Matagorda Peninsula South Beach". The specific locations of the SNPL seen at these sites in '91 are unknown and may have occurred along the 2011 survey route.

⁸ This site was surveyed as a part of "Matagorda Island, Beach" in '91. The specific locations of the SNPL seen in '91 are unknown and may have occurred along the 2011 survey route.

⁹ This site was surveyed as a part of "San Martin Lake & Bahia Grande area" in '96. The specific locations of the SNPL seen in '96 are unknown and may have occurred along the 2011 survey route.

¹⁰ This site was surveyed as a part of "Laguna Madre West" in '91. No plovers were seen in the span of this 2011 survey route during the '91 census; however, 65 SNPL were seen in the area on January 6, 1991 (outside of the Census window).

¹¹ This site was surveyed as a part of "W side S. Padre I., boat ramp to N End Hwy 100" in '96. The specific locations of the SNPL seen in '96 are unknown and may have occurred along the 2011 survey route.

¹² This site was surveyed as a part of "S. Padre Island" in '96. The specific locations of the SNPL seen in '96 are unknown and may have occurred along the 2011 survey route.

¹³ This site was surveyed as a part of "South Padre Island, Laguna Madre Side" in '06. The specific locations of the SNPL seen in '06 are unknown and may have occurred along the 2011 survey route.

¹⁴ This site was surveyed as a part of "McFaddin NWR; Sabine Pass to High Island" in '01. The specific location of the SNPL is unknown and may have occurred in an area along the 2011 survey route.

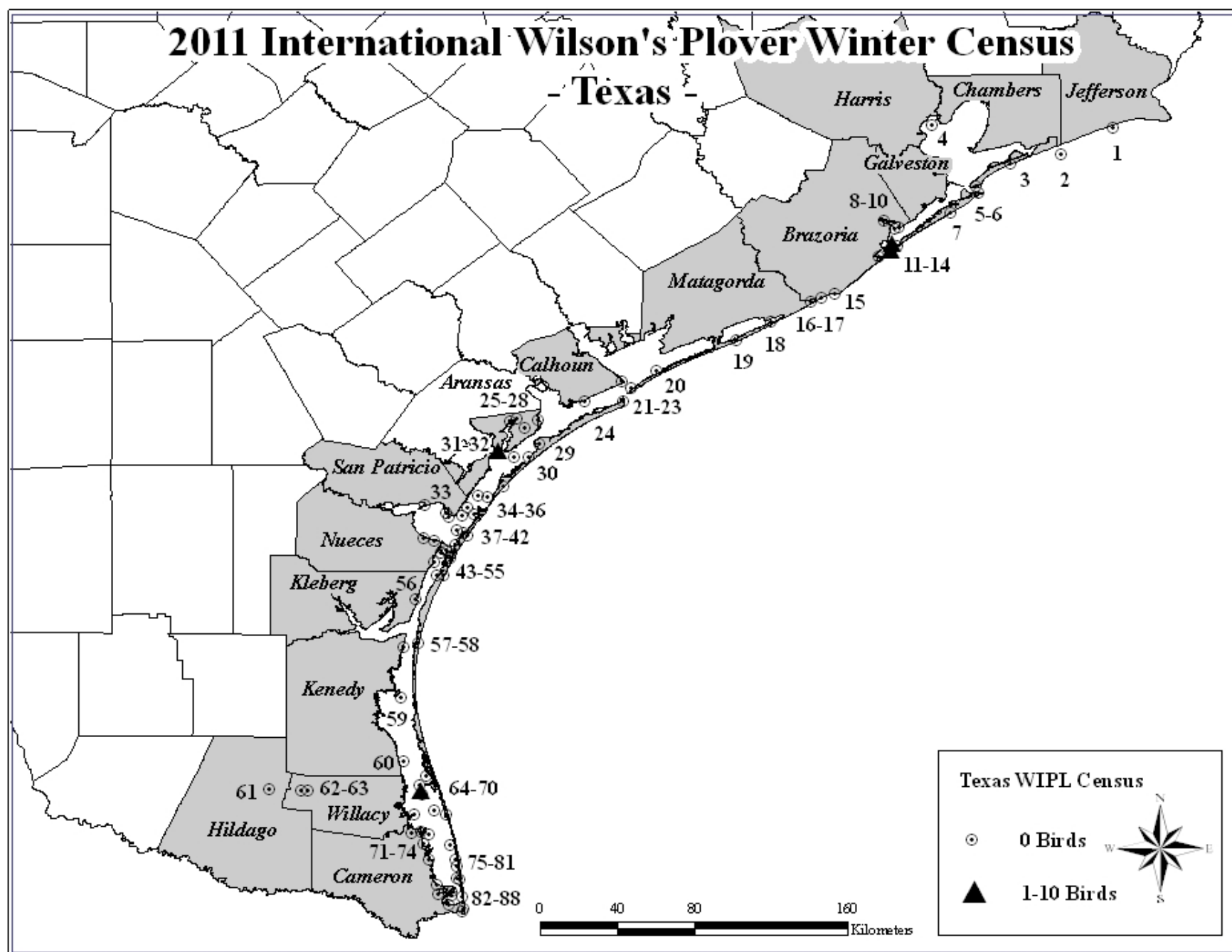
¹⁵ This site was surveyed as a part of "Bolivar Flats" in '91. The specific locations of the SNPL seen in '91 are unknown and may have occurred along the 2011 survey route.

¹⁶ This site was surveyed as a part of "Bolivar Peninsula" in '96. The specific locations of the SNPL seen in '96 are unknown and may have occurred along the 2011 survey route.

¹⁷ This site was surveyed as a part of "Big Reef-San Luis" in '91. The specific locations of the SNPL seen in '91 are unknown and may have occurred along the 2011 survey route.

¹⁸ This site may have been surveyed as a part of "Port of Houston Bayport Demo. Marsh" in '96. The specific locations of the SNPL seen in '96 are unknown and may have occurred along the 2011 survey route.

- ¹⁹ This site was surveyed as a part of “Padre Island Bayside” in ‘91. The specific locations of the SNPL seen in ‘91 are unknown and may have occurred along the 2011 survey route.
- ²⁰ This site was surveyed as a part of “Padre Island Beach” in ‘91. The specific locations of the SNPL seen in ‘91 are unknown and may have occurred along the 2011 survey route.
- ²¹ This site was surveyed as a part of “Padre Island NS Beach” in ‘96. The specific locations of the SNPL seen in ‘96 are unknown and may have occurred along the 2011 survey route.
- ²² This site was surveyed as a part of “Southern Landcut, E” in ‘96. The specific locations of the SNPL are unknown and may have occurred along this 2011 survey route.
- ²³ This site was surveyed within two separate sites in ‘91: “Padre Island Bayside” and “South Bird Island”. The specific locations of the SNPL seen in ‘91 are unknown and may have occurred along the 2011 survey route.
- ²⁴ This site was surveyed as a part of “Mudflat N boundary Padre Island NS” in ‘96. The specific locations of the SNPL seen in ‘96 are unknown and may have occurred along the 2011 survey route.
- ²⁵ This site may have been surveyed as a part of “Matagorda Peninsula North Beach” in ‘91. The specific locations of the SNPL seen in ‘91 are unknown and may have occurred along the 2011 survey route.
- ²⁶ This site was surveyed as a part of “Matagorda Peninsula South Bay” in ‘91. The specific locations of the SNPL seen in ‘91 are unknown and may have occurred along the 2011 survey route.
- ²⁷ This site was surveyed as a part of “Mustang Island Bay” in ‘91. The specific locations of the SNPL seen in ‘91 are unknown and may have occurred along the 2011 survey route.
- ²⁹ This site was surveyed as a part of “Ward Island (CTX21)” in ‘01. The specific locations of the SNPL are unknown and may have occurred along this 2011 survey route.
- ³⁰ This site was surveyed as a part of “Indian Point” in ‘91. The specific locations of the PIPL seen in ‘91 are unknown and may have occurred along the 2011 survey route.
- ³¹ This site was surveyed as a part of “South Padre Island, N end flats by Port Mansfield Channel” in ‘06. The specific locations of the PIPL seen in ‘06 are unknown and may have occurred along the 2011 survey route.
- ³² Specific survey route for this site is unknown - map illegible. Notations for sightings in prior Census years are based on an estimation of the 2011 survey route.
- ³³ Please note that this survey was conducted outside the Census window.



The 2011 International Wilson's Plover Winter Census in Texas

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|----------|---|------|---------|-----------------|------|---------------------|---------------------------|---|---|----|-----------|---------|
| | | | | | | | | - | - | - | - | |
| Aransas | Aransas Bay, Goose Island ⁴ | 31 | 1/1/11 | 7 | 0.8 | II D E | H F G L | - | - | - | 06 | s(p) |
| Aransas | Burgentine Lake (Aransas NWR; W Blackjack) ⁴ | 26 | 2/7/11 | 0 | 3.8 | II A | G | - | - | - | <u>06</u> | f |
| Aransas | E Blackjack (Aransas NWR Complex) ⁴ | 28 | 2/7/11 | 0 | 5.3 | II A | H G | - | - | 01 | - | f |
| Aransas | Fulton to Ingleside Point (Mainland) | 37 | 1/25/11 | 1 | 42.6 | II A | G | - | - | 01 | 06 | s(p), p |
| Aransas | N San Jose Island, Bayside (Big Island to Cedar Bayou) | 32 | 1/28/11 | 0 | 22.5 | II B | H G L | - | - | - | - | s(p), p |
| Aransas | San Jose Island (Gulf Side) | 34 | 1/26/11 | 0 | 64.4 | III B | n.r. | - | - | 01 | 06 | p |
| Aransas | San Jose Island bayside (N Pass) | 36 | 1/28/11 | 0 | 2.0 | II B | n.r. | - | - | 01 | 06 | s(p) |
| Aransas | Tatton Unit (Aransas NWR) ⁴ | 25 | 2/7/11 | 0 | 3.7 | II A | G | - | - | - | 06 | f |
| Brazoria | Alligator Point ⁴ | 9 | 2/11/11 | 0 | 4.8 | II C D | S G L | - | - | - | - | s(p) |
| Brazoria | Chocolate Bayou ⁴ | 8 | 2/11/11 | 0 | 4.8 | II C D | S G L | - | - | - | - | s(p) |
| Brazoria | Christmas/Drum Bay ^{3, 4} | 14 | 2/15/11 | 0 | 26.6 | II III IV A D E F | G | - | - | - | - | f, s(p) |
| Brazoria | Cold Pass | 13 | 1/27/11 | 9 | 3.2 | II G | B F G L | - | - | - | - | s(p), c |
| Brazoria | Sargent Beach (East) | 16 | 1/28/11 | 0 | 6.4 | III A | none | - | - | 01 | - | s(p) |
| Brazoria | Sargent Beach (West) | 17 | 1/27/11 | 0 | 4.2 | III IV A D E F | B G | - | - | 01 | <u>06</u> | s(p) |
| Brazoria | West Bay Bird Island | 12 | 1/27/11 | 10 | 1.1 | II B E | G L | - | - | - | - | s(p) |
| Brazoria | West Bay Mooring Area BU Site ⁴ | 10 | 2/11/11 | 0 | 4.8 | II C D | S G L | - | - | - | <u>06</u> | s(p) |
| Brazoria | Wolf Island | 15 | 1/28/11 | 0 | 6.4 | III B | none | - | - | 01 | 06 | s(p) |
| Calhoun | Cedar Bayou, Matagorda Island NWR (Gulf Beach Route) ⁴ | 30 | 2/7/11 | 0 | 13.6 | I II B | G | - | - | 01 | 06 | f |
| Calhoun | Decros Point including Pass Cavallo and Sundown Island ⁴ | 22 | 2/14/11 | 0 | 45.2 | II III IV B F | H B S G | - | - | 01 | <u>06</u> | s(p), p |
| Calhoun | Matagorda Island Inner Levee System ⁴ | 29 | 2/7/11 | 0 | 15.7 | II B | G | - | - | - | 06 | f |
| Calhoun | Matagorda Island NWR Beach (J-Hook) ⁴ | 23 | 2/7/11 | 0 | 11.4 | I II A | G | - | - | 01 | 06 | f |
| Calhoun | Matagorda Island NWR Gulf Beach ⁴ | 27 | 2/7/11 | 0 | 33.0 | I B | G | - | - | 01 | 06 | f |
| Calhoun | Port O'Conner Shoreline | 21 | 2/1/11 | 0 | 2.0 | V A | S G L | - | - | 01 | 06 | m |
| Calhoun | Welder Flats, Shoalwater Bay, The Lagoon-Dewberry Island ⁴ | 24 | 2/8/11 | 0 | 85.3 | II A E G | H B F G L | - | - | 01 | 06 | p |
| Cameron | Bahia Grande | 83 | 2/3/11 | 0 | 30.6 | V G | H F S | - | - | 01 | 06 | f |
| Cameron | Boca Chica Beach ⁴ | 87 | 1/18/11 | 0 | 4.7 | III V A | H D V F G | - | - | 01 | 06 | s(p) |
| Cameron | Brazos Island Beach & Flats ⁴ | 85 | 1/21/11 | 0 | 8.7 | III V A | H D V F G | - | - | 01 | 06 | f, s(p) |
| Cameron | Brownsville Ship Channel Spoil Cells ⁴ | 84 | 1/23/11 | 0 | 4.5 | III V B | V F G | - | - | - | 06 | s(p), m |
| Cameron | Buena Vista Ranch | 74 | 2/6/11 | 0 | 9.7 | II A | V A G | - | - | 01 | 06 | p |
| Cameron | Intracoastal Spoil Islands ⁴ | 73 | 3/2/11 | 2 | 11.9 | II C | F | - | - | - | - | s(p) |

The 2011 International Wilson's Plover Winter Census in Texas (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|------------------------|---|------|---------|-----------------|------|---------------------|---------------------------|---|---|----|-----------|------------|
| | | | | | | | | | | | | |
| Cameron | Laguna Atascosa NWR Bayside Drive (Pelican Lake, Plover Point, Moranco Blanco) ⁴ | 76 | 1/19/11 | 0 | 14.3 | II A | F G | - | - | 01 | - | f |
| Cameron | Long Island Village/ Outdoor Resorts ⁴ | 82 | 2/8/11 | 0 | 4.5 | II V G | H V S U G | - | - | - | - | p |
| Cameron | Mouth of the Rio Grande ⁴ | 88 | 1/18/11 | 0 | 3.2 | III A | V G | - | - | - | - | f |
| Cameron | Port Isabel - Hwy 100 | 81 | 1/24/11 | 0 | 14.5 | II A | H F S U G | - | - | - | - | m, p |
| Cameron | South Bay & Boca Chica Flats ⁴ | 86 | 1/17/11 | 0 | 25.3 | II V A F | V G | - | - | 01 | 06 | f |
| Cameron | South Padre Island Beach (North of Access 5) | 70 | 1/25/11 | 0 | 43.5 | I III B | H D V F | - | - | 01 | - | f, s(p), p |
| Cameron | South Padre Island Beach (South of Access 5) | 80 | 1/25/11 | 0 | 10.6 | I III B | H D V F S U G | - | - | - | - | m |
| Cameron | South Padre Island, lower middle of Laguna Madre Side | 77 | 1/26/11 | 0 | 7.7 | I III B | H D V G | - | - | 01 | 06 | f, s(p), p |
| Cameron | South Padre Island, middle of Laguna Madre Side | 75 | 1/27/11 | 0 | 15.3 | I III B | H D V G | - | - | 01 | 06 | f, s(p), p |
| Cameron | South Padre Island, S end Laguna Madre Side (Isla Blanca to N of Convention Ctr) | 79 | 1/24/11 | 0 | 9.2 | II B | H D V F U G | - | - | 01 | 06 | p |
| Cameron | South Padre Island, S end Laguna Madre Side (just N of Convention Ctr) | 78 | 1/25/11 | 0 | 5.2 | I III B | H D V G | - | - | 01 | 06 | f, s(p), p |
| Cameron | Unit 4, Laguna Atascosa NWR ⁴ | 68 | 3/2/11 | 0 | 12.9 | II A | G | - | - | 01 | - | f |
| Cameron | Unit 5 (Horse Island Cove), Laguna Atascosa NWR | 72 | 2/6/11 | 0 | 8.9 | II A | G | - | - | 01 | 06 | f |
| Cameron | Unit 8 (Cayo Flats), Laguna Atascosa NWR | 71 | 2/5/11 | 0 | 9.7 | V A | G | - | - | - | - | f |
| Chambers/ Jefferson | McFaddin NWR to High Island | 1 | 1/31/11 | 1 | 51.5 | III A | G L | - | - | 01 | 06 | f, s(p) |
| Galveston | Big Reef; Galveston Island | 6 | 1/27/11 | 0 | 4.0 | III B | H D V G L | - | - | 01 | 06 | s(p) |
| Galveston | Bolivar Flats ³ | 5 | 1/28/11 | 0 | 3.2 | II III B | H D V G | - | - | 01 | <u>06</u> | s(p), p |
| Galveston | Galvston Island, E. Beach to end of Seawall | 7 | 1/27/11 | 0 | 16.5 | III B | H D V F S G L | - | - | 01 | 06 | s(p) |
| Galveston | High Island to Bolivar Flats ³ | 3 | 1/28/11 | 0 | 43.5 | III B | H D V F G | - | - | 01 | <u>06</u> | f, m |
| Galveston | Rollover Pass Flats ³ | 2 | 1/28/11 | 0 | 1.6 | II D | H F G | - | - | - | <u>06</u> | s(p) |
| Galveston | San Luis Pass; Galveston Island | 11 | 1/27/11 | 0 | 2.9 | | H G | - | - | 01 | 06 | s(p) |
| Harris | Atkinson Island Cells 5 & 6 ^{3, 4} | 4 | 2/11/11 | 0 | 1.9 | II C | S G | - | - | - | - | s(p) |
| Hidalgo | East Lake (La Sal Del Rey) ⁴ | 61 | 2/14/11 | 0 | 5.0 | V G | none | - | - | - | - | f |
| Kenedy | South end 9-Mile Hole ⁴ | 59 | 2/16/11 | 0 | 6.0 | II G | G L | - | - | - | - | s(p) |
| Kenedy | Upper Laguna Madre, Flats at Land Cut, E & W of GIWW | 57 | 1/27/11 | 0 | 49.6 | II A | n.r. | - | - | 01 | 06 | s(p) |
| Kenedy/ Kleberg | Padre Island National Seashore (Bird Island basin to landcut) | 56 | 1/27/11 | 0 | 64.4 | II F | G | - | - | 01 | 06 | f |

The 2011 International Wilson's Plover Winter Census in Texas (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|--------------------|--|------|---------|-----------------|-------|---------------------|---------------------------|---|------------------------|----|----|---------|
| | | | | | | | | - | - | 01 | 06 | |
| Kenedy/ Kleberg | Padre Island National Seashore, Gulf Beach | 58 | 1/27/11 | 0 | 48.3 | III B | H V S G | - | - | 01 | 06 | f |
| Kenedy/ Willacy | Bayshore flat on S end of N Padre Island (S of Land cut and N of Mansfield Channel in LLM) ⁴ | 60 | 2/16/11 | 0 | 34.6 | II B D | G L | - | - | - | - | s(p) |
| Kenedy/ Willacy | Padre Island National Seashore/ 9-Mile Hole SE ⁴ | 64 | 2/16/11 | 0 | 54.7 | III B | G | - | - | 01 | 06 | f, s(p) |
| Kleberg | Nighthawk Bay | 54 | 1/27/11 | 0 | n.r. | II B | G L | - | - | 01 | 06 | f, s(p) |
| Kleberg/ Nueces | Packery to PINS | 55 | 1/27/11 | 0 | 22.5 | III B | H D V F G | - | - | 01 | 06 | s(p) |
| Kleberg/ Nueces | Upper Laguna Madre (islands S of JFK Causeway to Bird Island Basin) | 53 | 1/27/11 | 0 | 1.9 | II C | n.r. | - | - | 01 | 06 | s(p) |
| Matagorda | East Matagorda Bay ⁴ | 18 | 2/25/11 | 0 | 85.3 | II B | n.r. | - | - | - | - | s(p) |
| Matagorda | East Matagorda Peninsula ^{3, 4} | 19 | 2/18/11 | 0 | 20.9 | III A D F | V G | - | - | 01 | 06 | s(p) |
| Matagorda | Matagorda Peninsula, Bayside and Colorado River Delta ⁴ | 20 | 2/15/11 | 0 | 140.0 | II B G | G L | - | - | - | 06 | s(p) |
| Nueces | Mollie Beattie | 52 | 1/27/11 | 0 | 4.8 | II B | G | - | <u>96</u> ² | 01 | 06 | s(p) |
| Nueces | Mollie Beattie (North End) | 50 | 1/26/11 | 0 | 2.8 | II B G | V G | - | <u>96</u> ² | 01 | - | s(p), p |
| Nueces | Mustang Island - Bay shoreline N end to Wilson's Cut and Shamrock Island | 42 | 1/26/11 | 0 | 70.8 | II B | P S G L | - | - | 01 | 06 | s(p), p |
| Nueces | Mustang Island - Charlie's Pasture | 41 | 1/26/11 | 1 | 5.8 | II B | n.r. | - | - | - | - | m |
| Nueces | Mustang Island - Port A to Packery (gulf side) | 44 | 1/26/11 | 0 | 29.0 | III B | H D V G | - | - | 01 | 06 | s(p) |
| Nueces | Mustang Island State Park (S Bayside and Fish Pass) | 47 | 1/26/11 | 0 | 1.6 | II B | H V F P G | - | - | 01 | 06 | s(p) |
| Nueces | Oso Bay - NAS CC | 46 | 1/26/11 | 0 | n.r. | II A | H F G L | - | - | - | 06 | f |
| Nueces | Packery Channel Park | 49 | 1/26/11 | 0 | 1.6 | II B | H V F G | - | - | 01 | 06 | s(p) |
| Nueces | Pelican Island | 40 | 1/26/11 | 0 | n.r. | II C D E | S G L | - | - | - | 06 | p |
| Nueces | Redfish Bay (N of causeway) | 35 | 1/28/11 | 0 | 45.1 | II A B C D E | n.r. | - | - | - | 06 | s(p) |
| Nueces | Redfish Bay (S of causeway including Harbor Island) | 39 | 1/26/11 | 0 | 28.6 | II A C E | H B F G L | - | - | 01 | 06 | s(p) |
| Nueces | S side of JFK Causeway and Laguna Madre Shoreline | 51 | 1/26/11 | 0 | 3.0 | II A | H V F G | - | - | - | 06 | s(p) |
| Nueces | Upper Laguna Madre/S end of Corpus Christi Bay (islands and flats) | 48 | 1/26/11 | 0 | 11.9 | II C G | n.r. | - | - | 01 | 06 | s(p) |
| Nueces | Ward Island | 45 | 1/26/11 | 0 | 2.0 | II A | I G | - | - | 01 | 06 | s(p) |
| Nueces | Wilson's Cut/Croaker Hole | 43 | 1/28/11 | 0 | 1.6 | II B | V | - | - | 01 | 06 | s(p) |
| San Patricio | La Quinta Channel Islands | 38 | 1/26/11 | 0 | 25.7 | II C | H S G | - | - | 01 | 06 | s(p), p |

The 2011 International Wilson's Plover Winter Census in Texas (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|--------------|--|------|---------|-----------------|---------------|---------------------|---------------------------|---|---|----|----|------------|
| | | | | | | | | | | | | |
| San Patricio | Sunset Lake | 33 | 1/28/11 | 0 | 0.1 | II D | H D F I G L | - | - | 01 | 06 | m |
| Willacy | East Lake ⁴ | 63 | 2/14/11 | 0 | 5.6 | V G | S | - | - | 01 | - | f |
| Willacy | East Lake (La Sal Vieja) ⁴ | 62 | 2/15/11 | 0 | 12.9 | V G | A I | - | - | 01 | - | f |
| Willacy | Mansfield Channel Spoil Islands ⁴ | 65 | 3/2/11 | 0 | 3.7 | II C | F | - | - | - | - | s(p) |
| Willacy | South Padre Island, N end flats by Port Mansfield Channel | 66 | 1/30/11 | 6 | 0.5 | I III B | H D V G | - | - | 01 | 06 | f, s(p), p |
| Willacy | South Padre Island, S of Mansfield Channel | 67 | 1/29/11 | 0 | 11.1 | I III B | H D V G | - | - | 01 | 06 | f, s(p), p |
| Willacy | South Padre Island, upper middle of Laguna Madre Side | 69 | 1/28/11 | 0 | 4.8 | I III B | H D V G | - | - | 01 | 06 | f, s(p), p |
| Total | | | | 37 | 1600.0 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Wilson's Plovers were seen at the site during that Census year.

² This site was surveyed as a part of "Packery & Newport Pass" in '96. The specific locations of the WIPL seen in '96 are unknown and may have occurred along the 2011 survey route.

³ Specific survey route for this site is unknown - map illegible. Notations for sightings in prior Census years are based on an estimation of the 2011 survey route.

⁴ Please note that this survey was conducted outside the Census window.

The 2011 International Piping Plover Winter Census in Mexico

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We surveyed three municipalities along the Tamaulipas coast: Soto La Marina, San Fernando and Matamoros. In total, we counted 82 individuals of the three species. Most abundant species was Snowy Plover (46), then Piping Plover (30) and Wilson's Plover (6). San Fernando held the biggest numbers (61 individuals), then Matamoros (21) and we recorded no plovers in Soto La Marina.

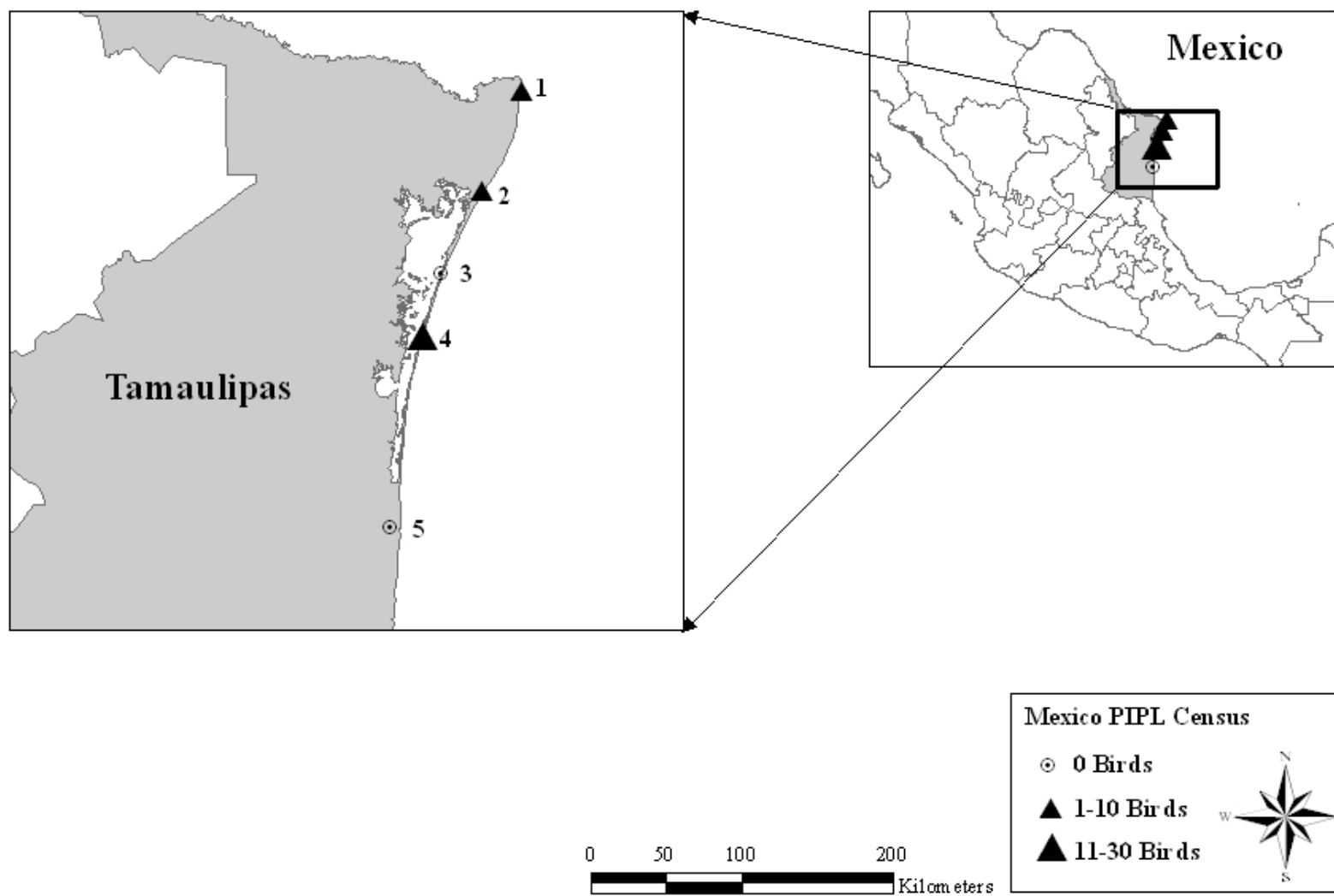
In Soto La Marina, numbers of plovers and shorebirds in general are small. Habitat is mostly beach and some seasonal mudflats (these were dry at the time of census).

San Fernando has been usually the most productive municipality in terms of numbers. Beach is the main type of habitat. This site formerly supported mudflats, sandflats, algal flats and others, but in recent years has experienced loss of habitat because of dredging in the surroundings.

Compared to 2006, we counted fewer Piping Plovers but surveyed more habitat. We were able to expand our surveys south to La Pesca (20 Piping Plovers seen) and Boca de Catan (no Piping Plovers). Whereas in 2006 we counted 19 Piping Plovers in Puerto El Mezquital al Sur we were unable to survey this portion in 2011. In Matamoros, we missed about 30 km because of open natural canals, the result of windy conditions.

In future Census years, a much larger effort in Tamaulipas may be warranted. Given the number of Piping Plovers in the Lower Laguna Madre Region of Texas and results from prior incomplete surveys in Mexico (prior Census efforts; Mabee et al. 2001), the northern portion of Tamaulipas has the potential to support many Piping Plovers and Snowy Plovers. An international effort with biologists from Mexico, the U.S., and Canada including resources for multiple ATV's would likely be the most successful Census approach. However, given safety concerns in 2011 a comprehensive effort was impossible.

2011 International Piping Plover Winter Census - Mexico -



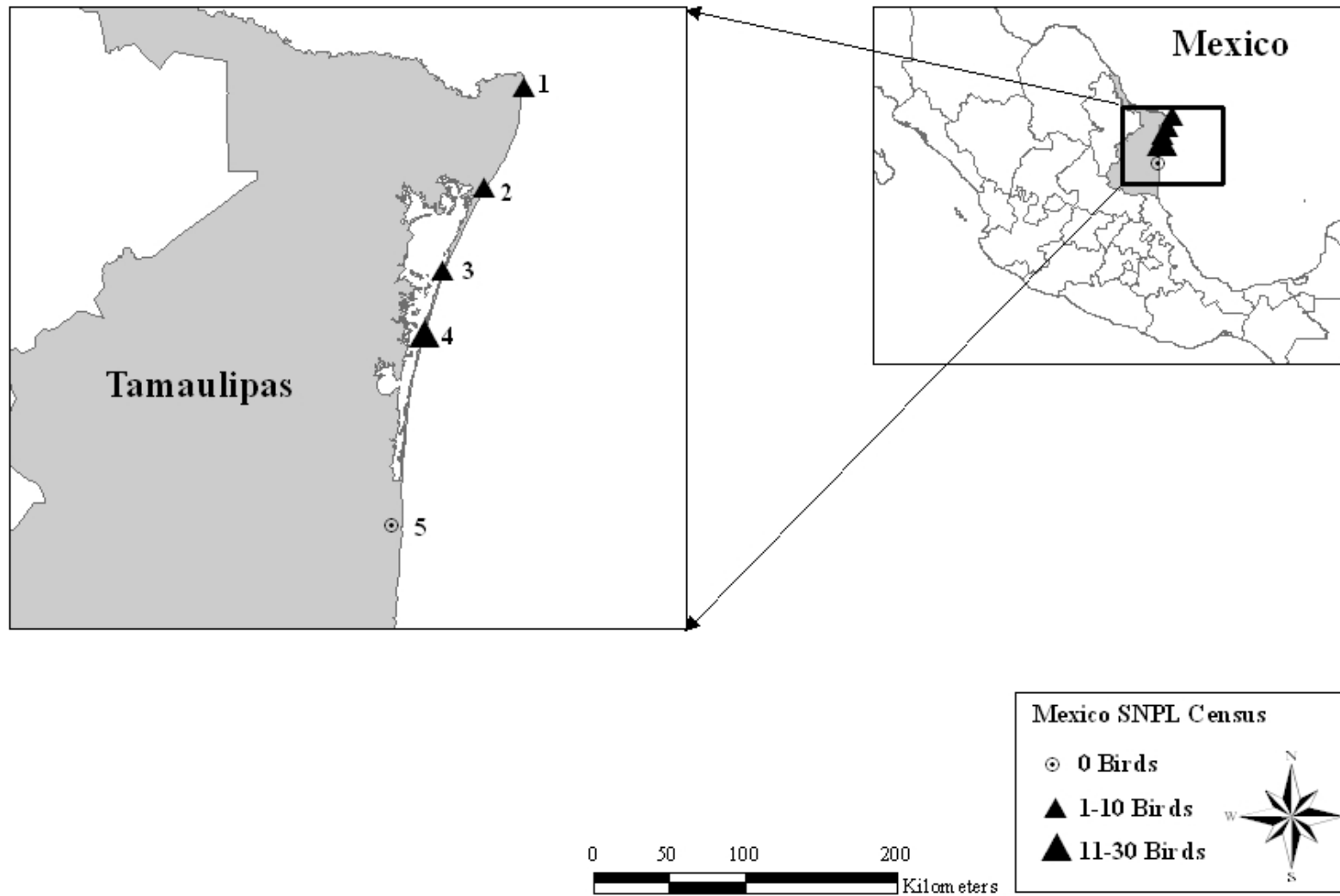
The 2011 International Piping Plover Winter Census in Mexico

| STATE | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|-----------------|--------------|---------------------|---------------------------|---|-----------|---|-----------|-------|
| | | | | | | | | | | | | |
| Tamaulipas | Barra Boca Ciega | 3 | 1/27/11 | 0 | n.r. | III B 4 8 | H F S I G L | 91 | <u>96</u> | - | <u>06</u> | f |
| Tamaulipas | Boca de Catan | 4 | 1/26/11 | 20 | 70.0 | III B 4 | F A I G L | - | - | - | - | f |
| Tamaulipas | La Pesca | 5 | 1/21/11 | 0 | 65.0 | III B 4 | H D V S U G L | - | - | - | - | f |
| Tamaulipas | Playa Bagdad ² | 1 | 2/8/11 | 5 | 23.0 | III B 4 | H F G L | - | - | - | <u>06</u> | f |
| Tamaulipas | Puerto El Mezquital al Norte ² | 2 | 2/9/11 | 5 | 17.0 | III B 4 | D I G L | - | - | - | <u>06</u> | f |
| Total | | | | 30 | 175.0 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Piping Plovers were seen at the site during that Census year.

² Please note that this survey was conducted outside the Census window.

2011 International Snowy Plover Winter Census - Mexico -



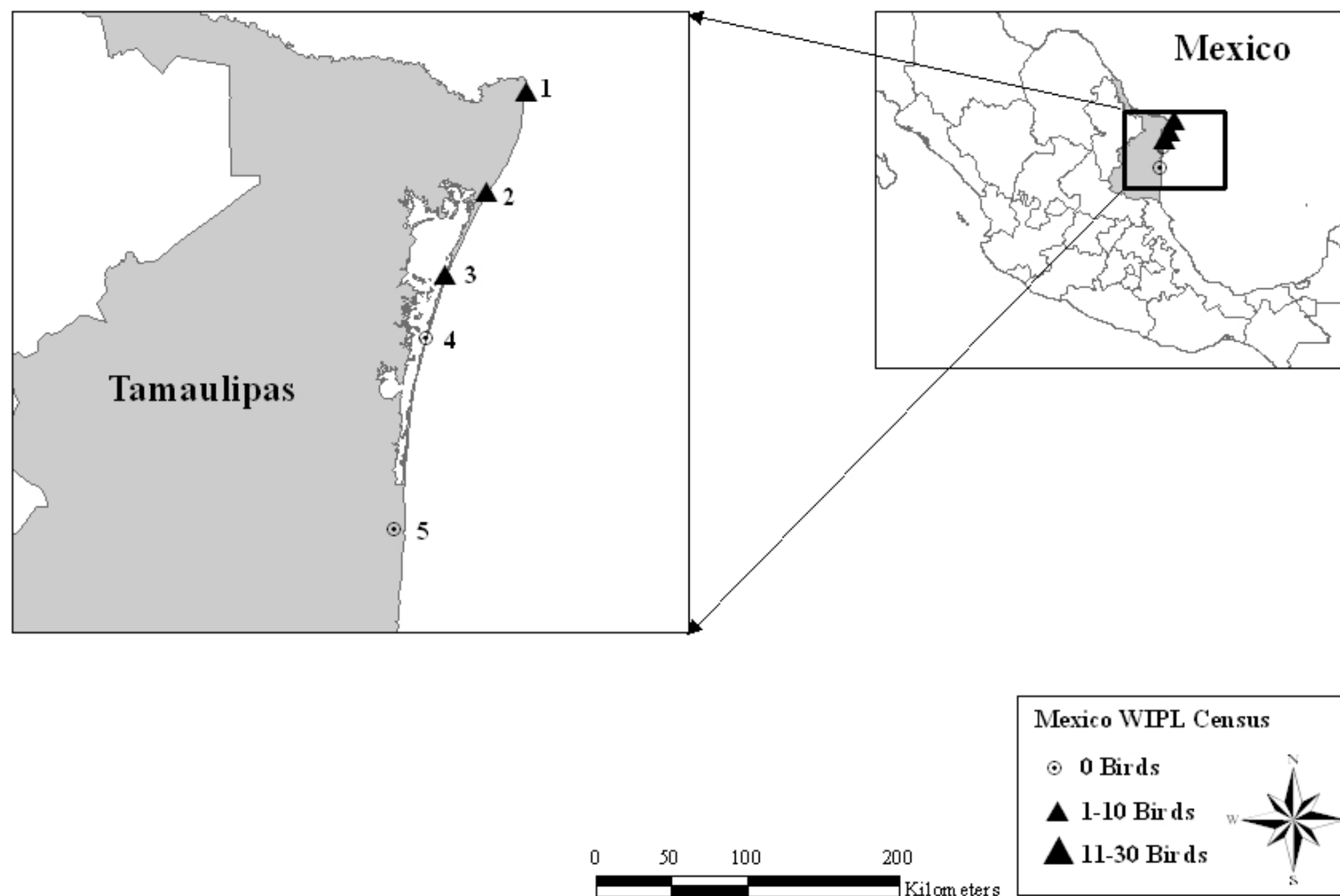
The 2011 International Snowy Plover Winter Census in Mexico

| STATE | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|-----------------|--------------|---------------------|-------------------------|---|---|---|------------------|-------|
| | | | | | | | | | | | | |
| Tamaulipas | Barra Boca Ciega | 3 | 1/27/11 | 2 | n.r. | III B 4 8 | H F S I G L | - | - | - | <u>06</u> | f |
| Tamaulipas | Boca de Catan | 4 | 1/26/11 | 4 | 70.0 | III B 4 | F A I G L | - | - | - | - | f |
| Tamaulipas | La Pesca | 5 | 1/21/11 | 30 | 65.0 | III B 4 | H D V S U G L | - | - | - | - | f |
| Tamaulipas | Playa Bagdad ² | 1 | 2/8/11 | 10 | 23.0 | III B 4 | H F G L | - | - | - | <u>06</u> | f |
| Tamaulipas | Puerto El Mezquital al Norte ² | 2 | 2/9/11 | 0 | 17.0 | III B 4 | D I G L | - | - | - | <u>06</u> | f |
| Total | | | | 46 | 175.0 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Snowy Plovers were seen at the site during that Census year.

² Please note that this survey was conducted outside the Census window.

2011 International Wilson's Plover Winter Census - Mexico -



The 2011 International Wilson's Plover Winter Census in Mexico

| STATE | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|-----------------|--------------|---------------------|-------------------------|---|---|---|----|-------|
| | | | | | | | | | | | | |
| Tamaulipas | Barra Boca Ciega | 3 | 1/27/11 | 2 | n.r. | III B 4 8 | H F S I G L | - | - | - | 06 | f |
| Tamaulipas | Boca de Catan | 4 | 1/26/11 | 3 | 70.0 | III B 4 | F A I G L | - | - | - | - | f |
| Tamaulipas | La Pesca | 5 | 1/21/11 | 0 | 65.0 | III B 4 | H D V S U G L | - | - | - | - | f |
| Tamaulipas | Playa Bagdad ² | 1 | 2/8/11 | 1 | 23.0 | III B 4 | H F G L | - | - | - | 06 | f |
| Tamaulipas | Puerto El Mezquital al Norte ² | 2 | 2/9/11 | 0 | 17.0 | III B 4 | D I G L | - | - | - | 06 | f |
| Total | | | | 6 | 175.0 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Wilson's Plovers were seen at the site during that Census year.

² Please note that this survey was conducted outside the Census window.

The 2011 International Piping Plover Winter Census in The Bahamas

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The 2011 International Winter Census effort in The Bahamas was carried out between January 23 and February 6, 2011, at 198 sites. In addition, 5 sites were surveyed outside the census window but during winter (February). In total, 203 sites were surveyed by 29 observers. Coordination was a collective effort led by The Bahamas National Trust (BNT; Predensa Moore) and USGS FRES (E. Elliott-Smith). Participants included local bird watchers, BNT Park Wardens, biologists from the USFWS, Canadian Wildlife Service, National Audubon, Bird Studies Canada, Massachusetts Audubon, Conservian, Conserve Wildlife Foundation (New Jersey), and volunteer bird watchers from the US. A total of 1,066 Piping Plovers were observed during the 203 site visits on 12 island groups.

Compared to previous Censuses, we greatly increased our survey effort in The Bahamas. Prior to 2006, reports from The Bahamas had been few and were incidental. Numbers from the early Census years were 35 birds observed in 2001, 25 in 1996, and 29 in 1991. The 2006 Census represented the first coordinated effort to survey Piping Plovers in The Bahamas. That effort resulted in the detection of 417 Piping Plovers and it was suspected to be an underestimate because not all potential habitat had been surveyed. We surveyed over five times the amount of shoreline in 2011 (678 km vs. 128 km in 2006). Hence, the 1,066 Piping Plovers observed in 2011 is substantially higher than previous counts but is almost certainly due to our increased effort and not reflective of an increase in the wintering population.

The number of sites surveyed and Bahamas coverage in general during the 2011 census far exceeded what had been previously surveyed. Locations such as the Berry Islands, Joulter Cays, Bimini Islands, San Salvador, Crooked and Acklins Islands had never been surveyed and other islands had greatly increased coverage in 2011 relative to 2006. Roughly 40% of the sites surveyed had Piping Plovers. Locations with high counts included 255 Piping Plovers near the southeast tip of Ambergris Cay, 44 at an unnamed sandbar south of Fish Cays, and 27 at a tidal flat on the northwest side of Chub Cay, all on the Berry Islands; 83 at the northern end of Andros and Blanket Sound, 100 in the Joulter Cays, all on North Andros; 46 at Manowar Cay on Exuma; 36 at Gold Rock Creek, 31 at East End Cays, and 20 between Pelican Point and Rocky Point Flats, all on Grand Bahama; 26 at Island Palm Shores on Abaco; 24 at Joe Sound Harbor on Long Island; and 21 at Water Cays on South Andros.

Overall, 2011 Census coverage was comprehensive on Grand Bahama, the Bimini Islands, New Providence, and San Salvador. Most potential habitat was surveyed on Eleuthera, Long Island and Great Exuma. Many sites were covered on Abaco but habitat remains to be explored particularly in cays to the northeast and flats off the west side of the island ("the Marls"). Surveys of the north Berry Islands were comprehensive but we were only able to survey about half the south Berry Islands and none of the central islands (a subsequent, more comprehensive survey of the southern and mid- Berry Islands resulted in similar numbers to the 2011 Census, suggesting that the 2011 census found most of the plover hot spots, but we have not directly compared the geographic extent or region of overlap for our respective survey efforts). Many sites were surveyed on North Andros during the 2011 Census but only a

portion of the Joulter Cays was surveyed. An expanded effort in the Joulter Cays during winter 2012 documented over 300 Piping Plovers. More than 100 Piping Plovers were seen in Central Andros during the same expedition (Matt Jeffery, unpublished data). Many sites on South Andros were surveyed in 2011 but the southern tip and southwest portion of the island look to have the most promising habitat in aerial and satellite imagery, and we were not able to survey there (an incidental report of 21 Piping Plovers was provided by a birder who was bone fishing off the south side of the island). It is uncertain whether the west side of Andros would have habitat but it is largely unexplored. We were unable to coordinate surveys on most of the cays in the Exuma chain in 2011 and a 2012 expedition documented over 100 Piping Plovers on habitat that had not been surveyed in 2011 (Sidney Maddock, unpublished data). Although we visited Crooked and Acklins Islands in 2011 our visit was ill-timed and we were unable to access any habitat by boat due to a Ministry of Tourism fly fishing/boating workshop which involved all the local fishermen. Aerial photography of both Crooked and Acklins Islands suggest there is much promising habitat which we were unable to explore. Surveys were comprehensive on the populated portion of Great Inagua but we were unable to survey the remaining three-quarters (however local BNT warden and aerial photography do not suggest optimal plover habitat exists in those areas). We did not visit Cat Island in 2011 but no Piping Plovers were recorded there in 2006, so it is unlikely that our failure to survey there in 2011 missed many birds. We did receive some incidental sightings in 2006 from the Ragged Island chain but we were unable to survey there in 2011. Other islands that have never been surveyed include Mayaguana, Rum Cay, and Conception.

Surveyors noted that habitat management and control of feral animals may be required to protect plovers and their habitat on most of the islands. Invasive plant species *Casuarina* (*Casuarina equisetifolia*) and *Scaevola* (*Scaevola taccada*) are the primary threats to the Piping Plover high tide roosting habitats. They out-compete native vegetation which is better able to trap sand and

offers some beach protection during storm events. Hence, invasion by *Casuarina* and *Scaevola* leads to erosion and narrowing of beaches. They may also provide cover and perching habitat in proximity to tidal flats for shorebird predators such as Peregrine Falcons and Merlins (Predensa Moore, unpublished data). The removal and management of these plants is a very expensive and labor intensive prospect and the job is made more difficult due to the archipelagic nature of the Bahama Islands. Feral animals, both dogs and cats, appear to be a present across the islands even at some remote sites and how large of a threat they pose to wintering plovers is unknown. Sites located closer to urban areas may face habitat loss and disturbance from development and human use.

Outreach and education can contribute to improving plover awareness and habitat management. Through our many conversations, it was clear that people know very little about Piping Plovers but are interested to learn about plovers and the importance of habitats in The Bahamas. Most had no knowledge about shorebirds, yet they were familiar with more high profile species, like flamingo, or more visible coastal species, like herons, egrets, and Osprey. Outreach materials with pictures of Piping Plover (and other plovers) in non-breeding plumage, habitats, and maps showing breeding and wintering areas would be an asset for future surveys to provide to guides and coastal landowners. No doubt our Census effort raised awareness on some islands and on Abaco a local filmmaker accompanied the survey crew, producing a piece that appeared on local television.

Due to the convergence in some areas between bonefish and shorebird habitats, experienced bonefishing guides could be excellent resources for future surveys, conservation, and research efforts. Special shorebird identification and shorebird habitat training sessions for bonefishing

guides would be a possible opportunity for enhancing awareness and engaging guides in conservation at high priority wintering areas. Encouraging guides to check on the status of known Piping Plover (and other shorebird) wintering sites could be worthwhile.

Subsequent to the 2011 Bahamas Census there has been much interest in additional explorations, outreach, and conservation efforts. Follow-up expanded surveys have been made in the Berry Islands, Joulter Cays, and Exuma Cays. Joulter Cays and the northern Berry Islands have been included as an Important Bird Area and National Audubon is working with BNT to formally protect this region. The 2006 and 2011 Censuses have been stepping stones bringing us closer to understanding Piping Plover distribution, habitat preferences, behavior, threats, and management challenges. Much work remains to be done in The Bahamas.

We wish to thank the USFWS for largely funding the Census effort in The Bahamas. The Canadian Wildlife Service and National Audubon also contributed substantially to the effort. Many others donated time and expertise to make this effort successful.

Summarized by E. Elliott-Smith with input from surveyors, in particular P. Moore and S. Abbott

Comparison of Census Numbers

| Species | 1991 | 1996 | 2001 | 2006 | 2011 |
|-----------------|------|------|------|------|-------|
| Piping Plover | 29 | 25 | 35* | 417 | 1,066 |
| Snowy Plover | n.r. | n.r. | n.r. | 13 | 38 |
| Wilson's Plover | n.r. | n.r. | n.r. | 218 | 446 |

*No official survey was coordinated in 2001, but Piping Plovers were reported by local birders and through the National Audubon Society's Annual Christmas Bird Count.

Grand Bahama and Abaco

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Between January 24-31, 2011, we (Ellen Jedrey and Gabrielle Gareau) surveyed the southern coastline of Grand Bahama from the west end (Old Bahama Bay) to the east end (including the Eastern Cays) for Piping Plovers, Wilson's Plovers and Snowy Plovers as part of the International Piping Plover Winter Census. In total, we surveyed 25 sites that covered approximately 179.3 km (111.4 mi) of shoreline, including some areas by foot/boat and that were not suitable habitat. Prescott Gay, of Bahamas National Trust, provided a tremendous amount of logistical support; local volunteers also provided support. On January 30, Edie Ray arrived, and the group travelled to Abaco on January 31. From February 1-5, our group surveyed 38 sites on Abaco Island, approximately 128 km (79 mi) of coastline (including some areas that were boated/driven). We surveyed with Todd Pover, of Conserve Wildlife Foundation of New Jersey, and other volunteers (Woody Bracey in particular) while on Abaco. On February 6, we (Ellen Jedrey, Edie Ray, Gabrielle Gareau) travelled back to Grand Bahama to Great Sale Cay, which is included in the overall totals for Grand Bahama. We departed on February 7, 2011.

On Grand Bahama, we observed a total of 163 individual Piping Plovers, 1 Snowy Plover, and 86 Wilson's Plovers. The highest number of Piping Plovers observed at any site was 36 individuals observed at Gold Rock Creek and eastward (approximately 8.6 km). In addition, a total of 11 color-banded Piping Plovers were observed and reported.

Threats recorded on the great majority of beaches included presence of Casaurina, feral cat tracks, and feral dog tracks. Casaurina appears to have resulted in loss of a great deal of beach/berm habitat, and beaches were generally very narrow on Grand Bahama. In addition, coastal development and armoring (bulkheads, revetments, jetties) were also recorded at a number of sites, particularly around Freeport and adjacent areas east and west.

On Abaco, we observed a total of 76 Piping Plovers (not including one observed on Sandy Point west beach, which flew north and we couldn't be sure we didn't double count), 0 Snowy Plovers, and 66 Wilsons Plovers. The site with the single highest count of Piping Plovers (26) was Island Palms Shores on February 3, 2011.

Threats recorded included feral cat tracks (on almost all beaches) and development at many sites, particularly those that had the highest number of Piping Plovers/roosting tracks (i.e. Schooner Bay, Bahama Palms Shores, Island Palms Shores). In addition, feral dog tracks were recorded at a number of sites. Casaurina is present, and appears to be increasing on Abaco, however the problem appears not to be as severe compared to Grand Bahama.

Coverage was complete along the entire south side of Grand Bahama but there is likely good habitat in Abaco that remains to be surveyed. In general, our coverage of Grand Bahama was comprehensive and it is not likely that many birds were missed. The "Marls" region on the west side of Abaco presents a challenge to survey but it could be very suitable for Piping Plovers. Cays to the northwest of Abaco were not surveyed and are definitely worth exploring.

Bimini Islands

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The 2011 International Winter Census effort on the Bimini Islands was carried out over two days (February 4-5, 2011) at three sites by two observers. A total of 9 Piping Plovers were reported on the Bimini Islands. All potential shorebird habitat was surveyed on North and South Bimini and all the small Cays 45 km (28 miles) south to Ocean Cay.

Promising areas were surveyed at both high and low tides. All known sand flats habitat were located and surveyed. Substantial sand flats were found and appeared to be good habitat but shorebird numbers were low. Small flocks of Ruddy Turnstones, Black-bellied Plovers, Willets and Sanderlings were also observed.

Piping Plovers were observed on all three sites. Four Piping Plovers were reported at East Wells, North Bimini, described as remote habitat, sand spit associated with mangrove tidal creek. Four Piping Plovers were reported on South Cat Cay, described as natural and artificial habitat, sand shoreline associated with sand flats and armored wall (part of airport runway). One Piping Plover was reported on a small island just south of Ocean Cay called Brown Water Rocks, described as remote habitat, sand flat associated with small limestone island.

The Bimini Islands in general supported very low numbers of any type shorebirds. The beaches are very narrow. Coastlines have been impacted by development and growth of Casaurina.

North Andros

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The 2011 International Piping Plover Winter Census on North Andros was conducted from January 27 to February 2, 2011. Thirteen sites were visited, most of which were on the eastern, northern, and southern coastline of the island. The western coast is largely inaccessible. Piping Plovers were found at six sites and Wilson's Plovers were found at ten sites. In total, 217 Piping Plovers and 180 Wilson's Plovers were recorded. The majority of the Piping Plovers were found at two sites, the Joulter Cays off the northern end of Andros and Blanket Sound in the central eastern coast region, where 100 and 83 individuals were counted, respectively. The majority of Wilson's Plovers were found at four sites, Joulter Cays, Lowe Sound, southwest of Mastic Cay, and Plum Cay, with 54, 40, 26, and 21 individuals, respectively.

The Joulter Cays had the greatest number of both Piping and Wilson's Plovers. The Joulter Cays are a vast area of tidal flats and islands located off the northern end of Andros. They are remote and accessible only by boat. The survey team included five participants that spread out over the northern and southern regions of the Joulter Cays to cover as much of the area as possible. Even with this broad coverage, an estimated 30% of the suitable habitat was covered. The survey was complicated by a mid-day low tide, which reduced the total potential habitat that could be covered. A total of 100 Piping Plovers and 54 Wilson's plovers were recorded. It is

very likely that this site supports additional Piping and Wilson's Plovers.

Lowe Sound is located on the northern end of Andros. The area has large tidal flats and suitable high tide resting and roosting sites. A total of 14 Piping Plovers and 40 Wilson's Plovers were recorded.

Red Bays is located on the northwest end of Andros. This was the only site that was able to be surveyed on the western coastline of Andros. A road leads through the community of Red Bays to a boat launching site. The area south of the boat launching to Loggerhead Point site had no suitable habitat. The tidal flats north of the boat launching site were suitable for plovers; one Piping Plover and 13 Wilson's Plovers were recorded. Further exploration of the northwest region would likely result in additional plovers being discovered.

The area from Stafford Creek, north of Forfar Field Station, north to Mastic Bay appeared to have extensive tidal flats and suitable habitat. The area has suitable foraging habitat at low tide, but little, if any, suitable high tide resting or roosting habitats. The offshore cays were surveyed as well as the mainland shoreline. The mainland shoreline and the shoreline of the offshore cays were heavily vegetated with *Casuarina* and *Scaevola*. No Piping Plovers and only one Wilson's Plover were observed.

The region from Stafford Creek to Stanyard Creek (also spelled Staniard) supported the second highest concentration of Piping Plovers on northern Andros. This area includes Forfar Field Station and the associated Forfar flats, Blanket Sound and the associated flats, and Kamalame Cay. This area was covered thoroughly and observed through all tidal stages. Piping Plovers were observed on the tidal flats south of Forfar Field Station, north Blanket Sound, south Blanket Sound, and the sound

side of Kamalame Cay. It is likely that the plovers using these locations are the same local population. It appeared that Piping Plovers dispersed to the tidal flats south of Forfar Field Station and throughout Blanket Sound during low tides when flats in these areas were exposed and then concentrated on the flats at the southern end of Blanket Sound and the sound side of Kamalame Cay during higher tides. Piping Plovers were observed on the ocean beach of Kamalame Cay in 2010. Our survey team walked the entire length of the ocean and sound side shoreline of Kamalame Cay at the same time. While no Piping Plovers were observed on the ocean beach, the habitat appeared suitable as a high tide resting or roosting site. It is possible that the ocean beach is used at times when the sound side habitats are not accessible. A total of 83 Piping Plovers and 6 Wilson's Plovers were recorded.

Stanyard Creek flats and Stanyard Creek beach are located south of Blanket Sound and Kamalame Cay. The beach is narrow and is popular among local beachgoers. The tidal flats appeared to have suitable foraging habitat at low tide, but no resting or roosting habitat at high tide. Both sites were covered thoroughly and no Piping Plovers or Wilson's Plovers were observed.

The beach at Small Hope Bay was surveyed thoroughly. Piping Plovers were observed on the beach in this area in 2010, but no Piping Plovers were observed during the 2011 survey. Two Wilson's Plovers were observed near Small Hope Bay lodge.

Several sites that appeared to have suitable habitat between Fresh Creek and Cargill Creek were surveyed. These included the extensive flats south of AUTECH, near Plum Cay, and the extensive flats southwest of Mastic Cay. While the habitat appeared suitable for Piping Plovers, no Piping Plovers were observed. Wilson's Plovers were recorded on the tidal flats associated with Plum Cay and southwest of Mastic Cay; 24 and 26 individuals, respectively. The area is worthy of further exploration.

Cargill Creek is located in the southeastern area of North Andros. The tidal flats south of Cargill Creek have suitable foraging habitat during low tide and adequate resting and roosting habitat during high tide. Thirteen Piping Plovers and four Wilson's Plovers were recorded.

Bigwood Cay is a remote cay, accessible only by boat, located in the central region of Andros between north and south Andros. The area consists of a large cay (Bigwood Cay) and many smaller cays. The survey team covered the eastern and northern shorelines and the associated tidal flats. No Piping Plovers were observed on the eastern shoreline. All of the Piping Plovers recorded on Bigwood Cay were found on the tidal flats on northern shoreline. The survey covered as much of the area as possible, but more extensive exploration is needed. The survey team was not able to get to the western or southern areas of Bigwood Cay, both of which appear to have suitable habitat for Piping Plovers and Wilson's Plovers. Further exploration of Bigwood Cay and the associated tidal flats and cays is warranted.

Human disturbance appeared to be minimal at most sites where Piping Plovers were observed. Evidence of the presence of free-roaming dogs was observed on some beaches and tidal flats. Invasive *Casuarina* and *Scaevola* were present at every site that was surveyed. At some locations these plants dominated the shoreline vegetation and occurred to the mean high water line, greatly reducing or eliminating potential high tide resting and roosting area.

The 2011 International Piping Plover Winter Census on North Andros provided a more comprehensive survey of the island and associated flats than any prior effort. However, complete coverage of all potential habitats on North Andros was limited by accessibility to remote areas, boat transportation, funding, and time. A subsequent survey effort in 2012 (by

Audubon, USGS, and USFWS biologists) documented over 300 Piping Plovers in the Joulters and over 100 on North Andros. The area is worthy of additional exploration in the future.

Eleuthera

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The 2011 International Winter Census effort on Eleuthera was carried out between January 25 and January 31, 2011, at 23 sites by two observers. Seventeen Piping Plovers were reported on Eleuthera Island and 13 Piping Plovers were reported on Harbor Island (off northern Eleuthera). Observers drove a total distance of 970 km to access remote beaches and shorelines along all coasts from the north end of Eleuthera south to Rock Sound. Surveys were conducted on foot at all sites. Severe weather or unfavorable tides required repeat surveys at Spanish Wells, Current, and Savannah Sound.

Of the 23 sites surveyed, we recorded Piping Plover at only five locations. These included 5 at Spanish Wells, 1 at Man Island, 13 at Harbor Island (all North Eleuthera), 3 at James Point (Wreck) Beach, and 8 at Savannah Sound (both Atlantic Coast). Somewhat confusing this total were an additional 13 Piping Plovers recorded on the west side of Harbor Island following the east side beach survey and 8 Piping Plovers roosting on the Atlantic shore north of Grinder's Point the day preceding the second Savannah Sound survey. Due to the spatial and temporal proximity of these sightings and their precise duplication, observers assumed they represented the same populations in both circumstances.

Most Piping Plovers were observed on the north end of Eleuthera (19 birds). At Spanish Wells, despite initially recording 4 Piping Plover on the east end flats, adverse weather interrupted the survey. The repeat survey was performed on an ebbing tide,

finding 5 Piping Plover on the east end flats. No plovers were seen on the expansive exposed habitats within view of the island, including tidal flats adjoining both sides of Spanish Well's entrance channel and similar flats adjoining Gun Point across the inlet. Observers found an expansive sand spit adjoining the north inlet on Man Island, but reported only 1 Piping Plover and 1 Black-bellied Plover. At Harbor Island, 13 plovers were initially sighted on the Atlantic beach (Pink Sands) on the first of the ebb tide shortly after dawn. It is likely the plovers roosted on the high beach during the night and briefly lingered there before beach activities compelled them to shift to the harbor side to rest until the primary forage habitat (harbor side flats) became exposed. We were unable to survey the inter-tidal flats evident in Inner Sound north of the airport. This remote area requires a vessel to investigate, but appears highly favorable as shorebird foraging habitat.

We observed 11 Piping Plovers along the Atlantic beaches of Eleuthera's main island, but habitat there proved difficult to access and highly problematic to survey by foot due to steep slopes, very soft substrate, and a multitude of rocky points. Most of the lime rock, beach access, roads running east from the Queen's Highway were unmarked, unmaintained and in poor to bad condition. Generally, the Atlantic beaches became less sloping progressing south, but few shorebirds were present and no species were observed foraging in the intertidal zone. Piping Plovers were observed at three spots on the Atlantic Coast during the Census: James Point (Wreck) Beach (3 birds), Savannah Sound and Grinder's Point (we suspect the same 8 birds were sighted in both locations). At James Point (Wreck) Beach, a small flock of unidentified mixed shorebird species were found roosting on a derelict hulk of a wreck off the beach before being flushed but 3 Piping Plover were seen foraging in abundant Sargasso weed on the adjoining high beach. Prior to the Census

we received two reports of small numbers of Piping Plovers near Club Med Beach (Tippy's). Both were of non-foraging birds, and one observation was on a rocky point. Offshore rocks and rocky islets are common along Eleuthera's Atlantic shore and contribute to the difficulties of searching for Piping Plover along that coast.

No Piping Plovers were observed on Eleuthera's west shore (Bight of Eleuthera). In contrast to Atlantic beaches, the west shore offers gently sloping or near-flat beaches, but beaches are fewer in number and more widely separated along a predominantly rocky shoreline. Ten Bay Beach and Cocadimama Beach appeared to be most favorable for Piping Plover due their expansive low tide habitats, yet no Piping Plover were found at either beach. Ten Bay appeared to be a popular beach for recreationists but Cocadimama Beach had but one couple during our survey. Low numbers of shorebirds (Black-bellied Plover, Semipalmated Plover, Willets, Ruddy Turnstones, Killdeer, Sanderling, and America Oystercatchers) were observed most frequently on narrow, rocky shores near towns and harbors (most characterized by algal growth on the substrate not seen elsewhere on that coast).

We observed no Piping Plovers on southern Eleuthera, but our surveys were limited to Rock Sound proper which offered very limited intertidal habitat. Insight gained from local residents suggested that other potential sites in the region would be unfavorable for Piping Plover. Although access may be challenging, future surveys might investigate the series of small inlets and shallow bays along the island's southernmost shore (Deep, Rollins, Rock, Hartford's and John Millar's Creek).

In conclusion, Eleuthera appears to support only small numbers of wintering Piping Plovers. In many areas foraging habitat is limited and shorelines are predominantly rocky. Seemingly ideal foraging habitat in several locations (Upper Cove Beach at Current, Man Island spit, Cocodimama Beach, Windermere Island Beach) supported few or no Piping Plovers. Although dog tracks were found at all survey sites, cat tracks on others, and ATV tracks on Spanish Well's north

beach, it's not clear that these factors contributed to the paucity of plover sightings. At two sites Piping Plovers were observed in close proximity to human activity and in many locations Piping Plovers could avoid adverse disturbances by shifting to an adjoining beach or offshore roost site.

Berry Islands

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Two biologists (from U.S. Fish & Wildlife Service (FWS) and Bird Studies Canada (BSC)) conducted the census of Piping, Wilson's, and Snowy Plovers on the Berry Islands from January 23 to 27, 2011. The Berry Islands were surveyed for the first time in 2011 and proved to be exceptional. Surveyors found extensive, minimally-disturbed tidal flats with an abundance of shorebirds and waterbirds, including the largest single flock of Piping Plovers of all areas surveyed during the 2011 Census. Thirty Berry Island sites were surveyed by foot, power boat, and kayak for a total of 19.4 km covered, including the entire east coast of Great Harbour Cay, the western pocket beaches of Great Harbour Cay to Little Stirrup Cay, Ambergris Cay and other cays south of Great Harbour Cay, Haines Cay and small cays near Shelling Beach. The south and central Berry Islands were only partially surveyed due to limited time.

Bonefish boat charter captain Percy Darville and Inspector James Moss of the Royal Bahamas Police Force were pivotal to the successful census of the Berry Islands.

A total of 341 Piping Plovers and 40 Wilson's Plovers were seen on the Berry Islands. No Snowy Plovers were observed. The greatest concentration of Piping Plovers (255) seen anywhere in The Bahamas was among a mixed flock of roosting shorebirds on a small sand spit between East Caesar Cay Spit to SE tip Ambergris Cay. Rain and thunderstorms forced us to cancel a boat survey on one day, but weather did not appear to affect the survey results on other days. A subsequent visit was made in 2012, but fewer birds were detected perhaps due to less favorable tidal conditions.

In general, our coverage of the northern Berry Islands was very comprehensive. No Piping Plovers were observed on Great Harbour Cay, though we observed large tidal flats at Shelling Beach that appeared to be good foraging habitat (a few Piping Plovers were spotted there on a subsequent visit in 2012). This area is best surveyed at low, rising tide. We found 16 Wilson's Plovers along Great Harbour Cay's long, eastern sandy beach. Two small islands north of Great Harbour Cay (Big & Little Stirrup Cays) are owned by cruise ship companies and are regularly overwhelmed with boat tourists. We surveyed Little Stirrup Cay, which is intensively developed, but found no Piping or Wilson's Plovers. We did not survey Big Stirrup Cay, but it is probably not suitable habitat for plovers due to development and disturbance. We do not recommend expending future survey effort at these sites.

Future censuses should focus efforts on the sandy cays and tidal flats south of Great Harbour Cay (Ambergris Cay and surrounding small cays) and the southern Berry islands, which are part of the northeast corner of the Great Bahama Bank and only accessible by boat. Large areas of flats are exposed at low tide making detectability and boat access challenging, thus we recommend engaging an experienced bonefishing guide, timing surveys to mid and rising tides, and targeting potential shorebird roost sites (e.g., spits, bars, beaches and

rocky areas adjacent to tidal flats). Tidal flat habitat appeared limited in the central Berry Islands, however, conditions could change and they should be surveyed, particularly the area near Comfort Cay. A rapid, one-day survey of the southern Berry Islands yielded 86 Piping Plovers, but time restrictions limited our survey effort.

We observed very little disturbance overall on the Berry Islands aside from dense stands of Casuarina backing beaches on numerous cays. In addition to habitat deterioration, we discovered that Casuarina may serve as predator perches near roosting and foraging habitat, as an unidentified falcon flushed roosting shorebird flocks twice during surveys. The islands and cays surveyed were relatively undeveloped and free of hard infrastructure on the coast. Residential houses were present along Great Harbour Cay's long sand beach, but there was little evidence of shoreline hardening. Great Harbour Cay residents with whom we spoke were unfamiliar with Piping Plover, but were very interested in the Census efforts.

General results from our surveys suggest that large tidal flats (muddy sand and sandy) as well as intertidal rocky sand habitats with tide pools and submerged aquatic vegetation seemed to support larger feeding flocks of Piping Plover than sandy beaches. Roosting flocks of Piping Plover tended to be closely associated with other shorebirds on open, dry sand, such as sand bars and sand spits. On at least one occasion we observed Piping Plovers roosting with other shorebirds on dark rock in the south Berry Islands. Wilson's Plover tended to prefer sandy beaches with abundant, dark wrack or rocky intertidal habitat and rarely co-occurred with Piping Plover (these general observations held true for our surveys on other islands).

Long Island

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The census at Long Island was conducted 28-31 January by two biologists from Bahamas National Trust and Birds Studies Canada. We received assistance from two local volunteers, Olga Stokes, who assisted with most surveys, and Ruth Martonborough who provided a car shuttle at Pinders. The census effort resulted in a total of 42 Piping Plovers and 6 Wilson's Plovers. No Snowy Plovers were observed. The largest flock of Piping Plovers observed was 24 birds that were seen foraging with other shorebirds on tidal flats of Joe Harbor Sound. A flock of 8 Piping Plovers were found foraging in rocky intertidal habitat with mats of aquatic vegetation at Duncanson's Point. Boat surveys of Conch, Dollar and Sandy Cays and surrounding tidal flats resulted in flocks of shorebirds but only two Piping Plovers. Sand beaches along the Atlantic Coast from Pinders to Salt Pond (6.5 km) and the alkali pond of Red Pond (1.1 km) were surveyed on foot and resulted in only one Piping Plover and one Wilson's Plover.

All sites on Long Island surveyed in 2006 were again surveyed in 2011. However, we were unable to confidently relocate the 2006 end point at Pinders so coverage of that region of the Atlantic Coast may have differed slightly. We also surveyed one new site at Diamond Salt Works, which had no suitable habitat.

South Andros and New Providence

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The census at South Andros was conducted by three biologists from Bahamas National Trust, Bird Studies Canada, and the US Fish and Wildlife Service. In total, 70 Piping Plovers and 40 Wilson's Plovers were observed but no Snowy Plovers were seen. Thanks to additional surveyors and time, substantially more habitat was surveyed in 2011 (29.9 km) than in 2006 (3.6 km). Overall, the road-accessible east side of South Andros was surveyed comprehensively. Small flocks of Piping Plovers (4-16 birds) were observed at multiple sites on the east coast, often with other shorebirds.

Despite separate attempts over two days with different guides and boats, we were unable to survey the remote and roadless south or west shores and tidal flats of South Andros. Our attempts were thwarted by motor failure and shallow conditions of Little Creek which connects east and west shores via extensive wetlands. We also attempted to follow Grassy Creek to reach the western side, but rough ocean conditions forced us to return to Pleasant Bay. During

a visit to Water Cay on 6 February, John Cox found 21 Piping Plovers, highlighting the potentially suitable habitat that may have been missed in the southwest. Engaging an experienced guide with knowledge of tidal and water depth conditions (and a seaworthy boat) is critical for accessing potential habitat along remote southern and western shores.

The only evidence of vehicle disturbance on South Andros was tracks observed on the beach at Kemp's Bay. Other human-related disturbances (e.g., dogs off-leash and development) were limited to habitats around settlements. Pastor James Knowles assisted with logistics, including an unexpected shuttle after boat motor failure, and is a good contact in the area.

New Providence

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The census at New Providence was conducted by three biologists from Bahamas National Trust, Bird Studies Canada, and the US Fish and Wildlife Service. It was limited to one site, South Beach, which is an Important Bird Area and has the only habitat suitable for Piping Plovers on the island. Most other coastal sites are heavily developed. This site was surveyed in 2006 but more habitat was covered in 2011. A total of 11 Piping Plovers were found in a single flock, including five of six birds banded there in 2010. The resighting of these banded individuals suggests high site fidelity. Access to the site requires careful timing with tides. Future surveyors should consult first with Predensa Moore at BNT. No Wilson's or Snowy Plovers were observed on New Providence.

Great Exuma

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With a great deal of help from Bailey Smith and Lorraine Minns, I surveyed accessible beaches and flats at Great Exuma for Piping, Snowy, and Wilson's Plovers from January 27-29, 2011. I surveyed 15 different coastal areas and found good habitat for Plovers at 6 sites. All sites surveyed on Great Exuma during the 2006 Census were revisited. Snowy Plovers were found and photographed among the Piping Plovers at one of the sites. In total, I saw 91 Piping Plovers at 5 locations around Great Exuma. There was one additional account of 2 Piping Plovers on Bells Cay which brings the total to 93 Piping Plovers. I also counted 27 Wilson's Plovers at 5 locations and 2 Snowy Plovers at one site.

Within the Exumas there is likely quite a bit of suitable plover habitat that was not surveyed during the Census. In the winter of 2012, an excursion covering the Exuma Cays turned up a little over 100 Piping Plovers and none of the habitat covered had been surveyed as part of the 2011 Census (Sidney Maddock, unpublished data). There may be some additional habitat in the Cays not yet covered and there are a few potential sites on Great Exuma (Southwest Spur, Calvin Hill Spur, Brigantines Flats, and Cocoplum Beach) and Little Exuma (Southeast Beach and C-shaped Bay) that were not covered during the 2011 Census. Another potential site is Conception Island in Exuma Sound.

Sea level rise, development, and feral animals are some of the potential threats to plover habitat on Great Exuma. The mainland flats are bordered by sharp rock ledges, such that there would be no appropriate habitat at low tide at higher sea levels. The only flats where habitat may remain are on Sandy Cay, Moriah Harbour Cay, and Manowar Cay. Feral dogs are likely a more immediate threat. At several sights including Wolf Dame's Back Landing and all the mainland beaches dog prints were crisscrossing the area. Many other flats are adjacent to roads and housing or condominium developments that are mostly abandoned but may be restarted in the future. Other sites including Manowar Cay and Moriah Harbour Cay and the flats at Sea View Drive are open to development. Bailey and Lorraine and their family along with other local residents have been trying to protect Moriah Harbour as a national park and no take zone for several decades. While they have made progress, the areas are not protected currently.

San Salvador, Crooked and Acklins Island

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We spent three days surveying San Salvador and counted 4 Piping Plovers, 26 Snowy Plovers, and 6 Wilson's Plovers. We surveyed a total of 6 sites and comprehensively covered all potential plover habitat on the island except one 0.4 mile section of beach, at the southern end of Sand Bay.

Our surveys of Crooked and Acklins Islands were not as successful as San Salvador surveys. In total we counted 4 Piping Plovers, 9 Snowy Plovers, and 4 Wilson's Plovers on Acklins Island and no plovers on Crooked Island. Low plover numbers could be due to our limited survey coverage. Aerial photography and views from the plane suggest that there is some promising habitat on both islands. However, these islands are large and road access to the coastline is limited. It was our intent to access habitat by boat but all boat drivers on the island were involved in a boating course during the week we were on the island and it was not possible to charter a boat. An expanded effort should be made to survey these two islands.

Great Inagua

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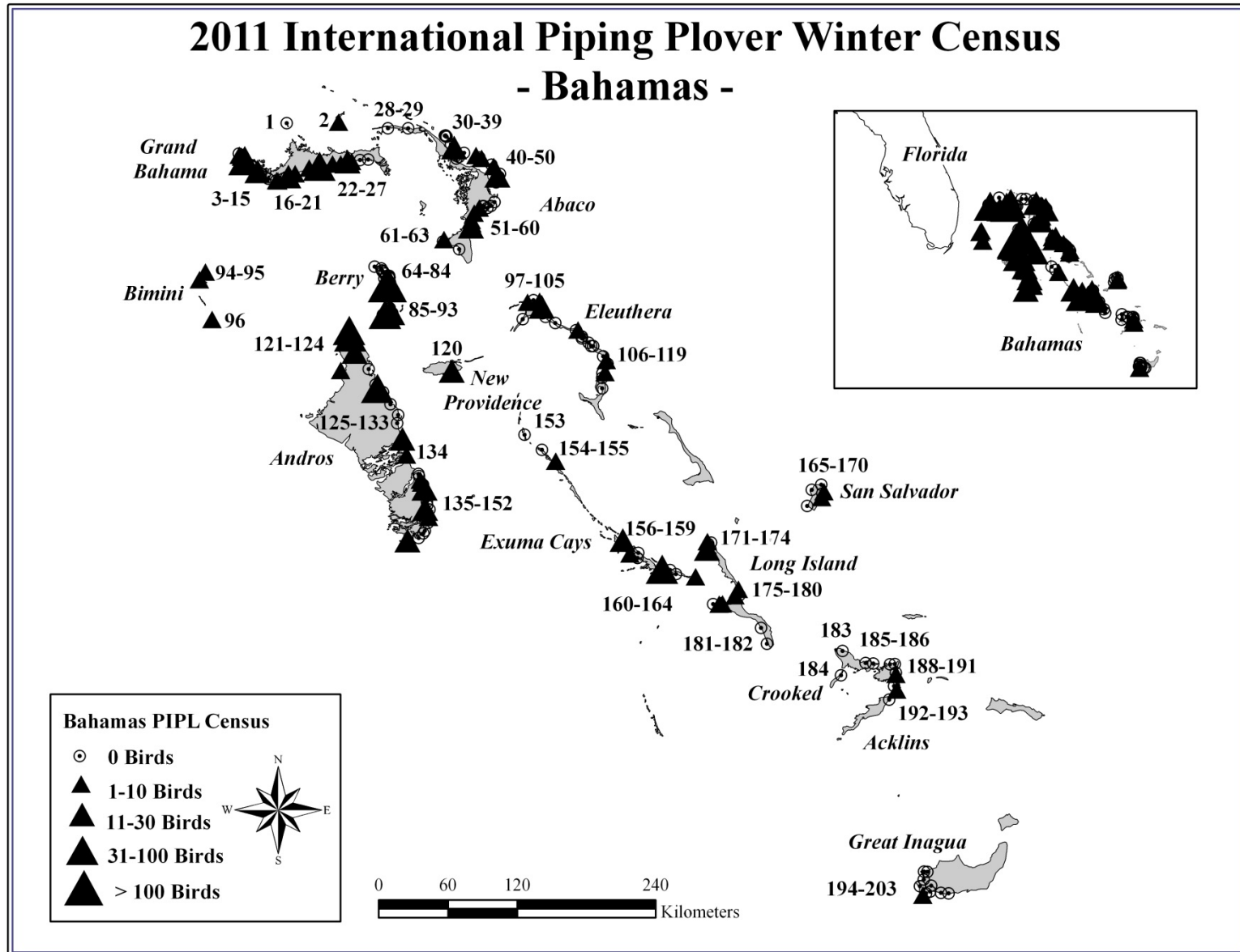
Between January 28th and 31st, Caleb Spiegel (FWS) and BNT warden Henry Nixon comprehensively surveyed around 14.2 km of coastline and 1.2 km of impounded salt pond shoreline on foot. This distance, divided among nine coastal sites, and one inland impounded salt pond site makes up the majority of potential plover habitat on the populated western quarter of Great Inagua. The only area not comprehensively covered on the west end of Great Inagua included some of the old Morton impounded salt ponds, which do not seem like ideal Piping Plover habitat and would require many days to thoroughly survey. However, these ponds provide extensive habitat for other shorebird species (we noted over 1,600 Calidrid sandpipers,

mostly Semipalmated Sandpipers using the ponds, and extensive numbers of Lesser Yellowlegs). In addition, according to Henry Nixon, up to a dozen Snowy Plovers are regularly seen along the salt pond access roads, or in other salt pond habitat. Great Inagua is huge, and decent roads only exist on the populated quarter we surveyed. Habitat surveyed on Great Inagua was not as suitable for wintering Piping Plovers as habitat in many other parts of The Bahamas such as the Berry Islands or Andros Island. There were few extensive sand flats, steeper ocean drop offs, and strong wave action on north- and west-facing beaches.

Five Piping Plovers were seen on Great Inagua at a single site on the south end of the island, within 3 km of where the only two Piping Plovers were observed in 2006. A total of three Wilson's Plovers were counted on Great Inagua at two different sites on the south side of the island. The south side of western Great Inagua has the most extensive contiguous stretches of beach with adjacent tidal flats that are exposed at low tide, and minimal wave action. While no Snowy Plovers were seen during the survey, Henry Nixon reported seeing four of them on January 26 along the roads of the Morton Salt ponds (near Maroon Hill Pond).

Some plover habitat may have been missed on other parts of the island. However, Henry Nixon, a lifetime Inagua resident, did not know of any areas with potential high-quality plover habitat in the non-populated backcountry of the island and aerial imagery does not look as promising as other nearby islands (e.g., Crooked and Acklins Islands, Turks and Caicos). If the island is to be thoroughly surveyed, the census effort would need to be increased. An exploratory mission into the backcountry would require preplanning, including camping logistics for several days, a hardy 4x4 vehicle(s), and a safety backup plan. Depending on road conditions, a thorough survey of backcountry areas could take up to a week. Survey resources are probably best spent elsewhere if the aim is to locate large numbers of Piping Plovers.

2011 International Piping Plover Winter Census - Bahamas -



The 2011 International Piping Plover Winter Census in The Bahamas

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------|--|------|---------|-----------------|------|---------------------|---------------------------|---|---|-----------|------------------------|-------|
| | | | | | | | | | | | | |
| Abaco | Bahama Palm Shores to the Delphi Club | 57 | 2/1/11 | 2 | 10.5 | I A | H D V S I U G | - | - | - | - | f |
| Abaco | Bahama Palms Shores North (Eight Mile Bay) | 56 | 2/1/11 | 4 | 3.0 | I A | D I G | - | - | - | - | f, p |
| Abaco | Cannon Bay and Point | 37 | 2/5/11 | 0 | 3.2 | II A | I G L | - | - | - | - | f |
| Abaco | Casaurina Bay, Town Beach, Casaurina Pt. W | 55 | 2/1/11 | 0 | 1.6 | II A | H D U G | - | - | - | - | m, p |
| Abaco | Casaurina Point | 54 | 2/1/11 | 0 | 0.7 | II A | H D U G | - | - | - | - | p |
| Abaco | Cherokee Sound | 53 | 2/3/11 | 0 | 1.1 | II A | G | - | - | - | - | m |
| Abaco | Crossing Harbor | 63 | 2/3/11 | 0 | <0.1 | II A | I G L | - | - | - | - | f |
| Abaco | Crown Haven to S Coopers Town | 29 | 2/4/11 | 0 | 36.4 | I II A G | H D F P S I L | - | - | - | - | m, p |
| Abaco | Durkey Beach, Elbow Cay | 47 | 1/31/11 | 0 | 0.4 | I B | H | - | - | - | - | f |
| Abaco | Elbow Cay, Southern Oceanside | 48 | 1/31/11 | 0 | 1.4 | I B | H D S | - | - | - | - | f |
| Abaco | Flats North of Sandy Point | 61 | 2/3/11 | 3 | 0.2 | II G | H F G L | - | - | - | - | f |
| Abaco | Great Guana Cay (Middle Oceanfront) | 41 | 1/29/11 | 0 | 1.2 | I B | n.r. | - | - | - | - | m |
| Abaco | Great Guana Cay (Northern Oceanfront) | 40 | 1/30/11 | 1 | 6.4 | I B | V S G | - | - | - | - | m, p |
| Abaco | Great Guana Cay (Southern Oceanfront) | 42 | 1/30/11 | 3 | 2.7 | I B | H D | - | - | - | - | m |
| Abaco | Green Turtle Cay | 35 | 2/2/11 | 11 | 2.1 | II B | H D F G | - | - | <u>01</u> | <u>06</u> ² | f |
| Abaco | Island Palm Shores | 60 | 2/3/11 | 26 | 2.1 | I B | D V I G | - | - | - | - | f |
| Abaco | Junk Beach, Tilloo Cay | 50 | 2/4/11 | 0 | 0.8 | I B | H D P I | - | - | - | - | f |
| Abaco | Little Harbor | 51 | 2/3/11 | 0 | 0.2 | II A | H U G L | - | - | - | - | p |
| Abaco | Manjack Cay, NE Beach | 31 | 2/2/11 | 0 | 0.5 | I B | H D I G | - | - | - | - | f |
| Abaco | Manjack Cay, North Tip | 30 | 2/2/11 | 0 | 1.9 | I B | n.r. | - | - | - | - | p |
| Abaco | Manjack Cay, NW Cove | 32 | 2/2/11 | 0 | 1.5 | I B | G L | - | - | - | - | p |
| Abaco | Manjack Cay, SE Beach | 33 | 2/2/11 | 0 | 1.9 | I B | I | - | - | - | - | f |
| Abaco | Man-O-War Cay (North Tip) | 43 | 2/3/11 | 0 | 1.1 | I B | H S U | - | - | - | - | p |
| Abaco | Man-O-War Cay (Oceanfront) | 44 | 2/3/11 | 5 | 3.0 | I B | H S U | - | - | - | - | m |
| Abaco | North End Beach, Elbow Cay | 45 | 1/31/11 | 0 | 1.6 | I B | H D | - | - | - | - | f |
| Abaco | Orphans, Smith and Water Cays (off Little Abaco) | 28 | 2/4/11 | 0 | 13.6 | II E | I G L | - | - | - | - | f |
| Abaco | Schooner Bay: Serenity Point S. to Island Palms near Crossing Rocks | 59 | 2/3/11 | 7 | 4.0 | I A | H D V S I U G | - | - | - | - | f, p |
| Abaco | Serenity Point | 58 | 2/1/11 | 2 | 2.8 | I A | H D V S I U G | - | - | - | - | f, p |
| Abaco | Small Beach on Green Turtle Cay | 34 | 2/2/11 | 0 | 0.2 | II B | G | - | - | - | - | f |
| Abaco | Tahiti Beach, Elbow Cay | 49 | 1/31/11 | 0 | 0.7 | II IV B F | H D G | - | - | - | - | f |
| Abaco | Treasure Cay Beach - East Half | 38 | 2/5/11 | 0 | 2.8 | II B | H D V S I U G | - | - | - | - | f |
| Abaco | Treasure Cay Beach - West Half | 36 | 2/5/11 | 0 | 2.5 | I II A | H D I U G | - | - | - | - | p, c |

The 2011 International Piping Plover Winter Census in The Bahamas (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|---------|---|------|---------|-----------------|-----|---------------------|---------------------------|---|---|---|---|-------|
| | | | | | | | | | | | | |
| Abaco | West-Facing Beach S of Sandy Point | 62 | 2/3/11 | 0 | 2.4 | II A | H D V F S I U L | - | - | - | - | f |
| Abaco | Whale Cay | 39 | 2/2/11 | 0 | 0.9 | I B | L | - | - | - | - | n.r. |
| Abaco | White Sound, Elbow Cay | 46 | 1/31/11 | 12 | 0.4 | II B | B S G | - | - | - | - | f |
| Abaco | Winding Bay | 52 | 2/3/11 | 0 | 2.6 | II A | H U G | - | - | - | - | p |
| Acklins | Beach N of Creek Point ¹⁰ | 190 | 2/7/11 | 1 | 7.0 | I A | H V S | - | - | - | - | n.r. |
| Acklins | Beach S of Creek Point and N of Salt Pond ¹⁰ | 192 | 2/8/11 | 3 | 4.8 | I A | P G L | - | - | - | - | n.r. |
| Acklins | Florida ¹⁰ | 193 | 2/8/11 | 0 | 1.5 | I A | n.r. | - | - | - | - | n.r. |
| Acklins | Small beach SE of Pinefield Settlement ¹⁰ | 189 | 2/7/11 | 0 | 0.2 | I A | G L | - | - | - | - | n.r. |
| Acklins | Snug Corner Settlement (past cemetery) ¹⁰ | 191 | 2/7/11 | 0 | 0.3 | IV A | G L | - | - | - | - | n.r. |
| Acklins | Unnamed off-shore Cay (NE of Chester's Settlement) | 187 | 2/6/11 | 0 | 0.4 | I E | A G L | - | - | - | - | n.r. |
| Acklins | W beach on Lady Slipper Cay (S of Atwood Harbour) | 188 | 2/6/11 | 0 | 1.5 | I E | H D U G L | - | - | - | - | n.r. |
| Berry | Ambergris Cay (E side) | 83 | 1/24/11 | 0 | 0.3 | I E | I L | - | - | - | - | n.r. |
| Berry | Chub Cay - NW side tidal flat | 91 | 1/27/11 | 27 | 0.9 | I E | G L | - | - | - | - | n.r. |
| Berry | Cockroach Cay (NW side) | 92 | 1/27/11 | 0 | 0.5 | I E | I | - | - | - | - | n.r. |
| Berry | Cormorant Cay (Sapphire Cays) | 86 | 1/27/11 | 0 | 0.1 | I E | I G | - | - | - | - | n.r. |
| Berry | East Caesar Cay Spit to SE tip Ambergris Cay | 82 | 1/24/11 | 255 | 0.2 | I E | I G | - | - | - | - | n.r. |
| Berry | Fanny Cay (East Side) | 81 | 1/24/11 | 0 | <1 | I E | L | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - "Shelling Beach" | 74 | 1/23/11 | 0 | 0.4 | II G | H G L | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - "Sugar Beach Caves" | 66 | 1/23/11 | 0 | 0.9 | I E | H | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - North Beach (Just before point at mid-beach) | 69 | 1/23/11 | 0 | 0.3 | I E | L | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - North Beach (Start at Purple/blue house w/ Pelican statues at edge of driveway) | 67 | 1/23/11 | 0 | 1.0 | I E | H D | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - North Beach (start at Yellow House - Northernmost house on beach) | 65 | 1/23/11 | 0 | 1.6 | I E | none | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - North Beach (Villa Allegria House) | 68 | 1/23/11 | 0 | 2.2 | I E | H D U | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - South Beach (Main crescent-shaped beach) | 70 | 1/23/11 | 0 | 4.0 | I E | H D I U G | - | - | - | - | n.r. |
| Berry | Great Harbour Cay (SW Side) | 72 | 1/24/11 | 0 | 0.1 | I E | none | - | - | - | - | n.r. |
| Berry | Haines Cay - entire E side of beach | 75 | 1/25/11 | 0 | 3.5 | I E | I G | - | - | - | - | n.r. |

The 2011 International Piping Plover Winter Census in The Bahamas (Continued)

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|-----------|--|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|---|-------|
| | | | | | | | | | | | | |
| Berry | Haines Cay - small beach on NW side (across flat from Shelling Beach) | 73 | 1/25/11 | 0 | 0.1 | I E | I L | - | - | - | - | n.r. |
| Berry | Haines Cay (SW End) | 76 | 1/24/11 | 0 | 0.0 | I E | G L | - | - | - | - | n.r. |
| Berry | Islet of N. Haines Cay & W. of Great Harbour Cay (across flat from Shelling Beach) | 71 | 1/25/11 | 0 | 0.4 | I E | I | - | - | - | - | n.r. |
| Berry | Little Cormorant Cay | 87 | 1/27/11 | 0 | 0.3 | I E | I G | - | - | - | - | n.r. |
| Berry | Little Stirrup Cay a.k.a. "Coco Cay" (S. end beaches) | 64 | 1/24/11 | 0 | 1.0 | I E | H S I | - | - | - | - | n.r. |
| Berry | Money Cay | 84 | 1/24/11 | 0 | 0.1 | I E | G | - | - | - | - | n.r. |
| Berry | S. side Sandy Cay (Sapphire Cay) | 85 | 1/27/11 | 10 | n.r. | I E | G | - | - | - | - | n.r. |
| Berry | Sand Islet btwn Chub Cay & Fish Cays | 90 | 1/27/11 | 0 | 0.0 | I E | G | - | - | - | - | n.r. |
| Berry | Spit off E. Caesar Cay | 78 | 1/24/11 | 0 | 0.2 | I E | I G | - | - | - | - | n.r. |
| Berry | Tidal Flat between Fanny & Caesar Cays (S of Berry Island) | 80 | 1/24/11 | 0 | 0.0 | I D | G L | - | - | - | - | n.r. |
| Berry | Tidal Sandbar near Caesar Cay | 79 | 1/24/11 | 0 | 0.0 | I D | G L | - | - | - | - | n.r. |
| Berry | Unnamed Sand Bar S. of Fish Cays | 89 | 1/27/11 | 44 | 0.1 | I D | G | - | - | - | - | n.r. |
| Berry | Unnamed Tiny Sand Bar btwn Fish Cays | 88 | 1/27/11 | 0 | 0.0 | I D | G | - | - | - | - | n.r. |
| Berry | Vigilant Cay (entire shoreline) | 93 | 1/27/11 | 5 | 1.2 | I E | G | - | - | - | - | n.r. |
| Berry | Water Cay (W End) | 77 | 1/24/11 | 0 | 0.0 | I E | L | - | - | - | - | n.r. |
| Bimini | East Wells | 95 | 2/5/11 | 4 | 35.4 | IV V G | I | - | - | - | - | f |
| Bimini | Ocean Cay | 96 | 2/4/11 | 1 | 6.4 | I G | G | - | - | - | - | f |
| Bimini | South Cat Cay | 94 | 2/4/11 | 4 | 62.8 | II E G | S | - | - | - | - | f, p |
| Crooked | Beach E of Brown's Settlement | 186 | 2/4/11 | 0 | 0.8 | I A | P G | - | - | - | - | n.r. |
| Crooked | Beach N of Majors, E of Bullet Hill Settlement | 185 | 2/4/11 | 0 | 2.0 | I II A | G | - | - | - | - | n.r. |
| Crooked | Beach NW of Seaview Settlement | 183 | 2/5/11 | 0 | 2.0 | I A | D I G | - | - | - | - | n.r. |
| Crooked | Long Cay | 184 | 2/5/11 | 0 | 14.0 | I IV A | H I A L | - | - | - | - | n.r. |
| Eleuthera | Airport Beach / Govenors Harbor | 108 | 1/27/11 | 0 | 3.2 | I A | H D | - | - | - | - | n.r. |
| Eleuthera | Atlantic Beach N of Grinder's Pt. | 116 | 1/27/11 | 0 ³ | 0.4 | I E | none | - | - | - | - | n.r. |
| Eleuthera | Bottom Harbour | 103 | 1/26/11 | 0 | 1.6 | II E G | I L | - | - | - | - | n.r. |
| Eleuthera | Club Med / French Leave Beach | 112 | 1/27/11 | 0 | 1.6 | I A | H D | - | - | - | - | n.r. |
| Eleuthera | Cocodimama Beach | 109 | 1/31/11 | 0 | 0.8 | II G | D I G L | - | - | - | - | n.r. |
| Eleuthera | Gaulding Cay Beach | 104 | 1/25/11 | 0 | 0.8 | V E | G L | - | - | - | - | n.r. |
| Eleuthera | Governor's Harbour | 111 | 1/27/11 | 0 | 1.6 | V G | H D V S | - | - | - | - | n.r. |
| Eleuthera | Hut Point Beach | 110 | 1/27/11 | 0 | 0.8 | I A | H D | - | - | - | - | n.r. |

The 2011 International Piping Plover Winter Census in The Bahamas (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|-----------------|------|---------------------|---------------------------|---|-----------|---|------------------------|-------|
| | | | | | | | | | | | | |
| Eleuthera | James Cistern Wharf off Queen's Highway | 106 | 1/27/11 | 0 | 0.2 | II A | H D V F S | - | - | - | - | n.r. |
| Eleuthera | Man Island Spit and Picnic Beach | 100 | 1/29/11 | 1 | 0.2 | II IV G | G | - | - | - | - | n.r. |
| Eleuthera | Preacher's Cave Beach | 99 | 1/25/11 | 0 | 0.8 | IG | n.r. | - | - | - | - | n.r. |
| Eleuthera | Rock Sound | 119 | 1/31/11 | 0 | n.r. | II G | n.r. | - | - | - | - | n.r. |
| Eleuthera | Savannah Sound (W. Shore) | 114 | 1/28/11 | 8 | 1.6 | II G | H F G L | - | - | - | - | n.r. |
| Eleuthera | Shore N of Barge Landing, N of Water Taxi Port (Three Islands) | 101 | 1/30/11 | 0 | 3.2 | II E | H F G | - | - | - | - | n.r. |
| Eleuthera | Spanish Wells | 98 | 1/30/11 | 5 | 3.2 | I IV D G | H D V F S G L | - | - | - | <u>06</u> | n.r. |
| Eleuthera | Surfer's Beach, Gregory Town | 105 | 1/25/11 | 0 | 0.8 | I E | H | - | - | - | - | n.r. |
| Eleuthera | Tarpum Bay | 117 | 1/27/11 | 0 | 0.8 | V G | H D V S | - | - | - | - | n.r. |
| Eleuthera | Ten Bay Beach | 113 | 1/31/11 | 0 | 1.6 | II G | H D G L | - | - | - | - | n.r. |
| Eleuthera | Upper Cove Beach (E of Current) | 97 | 1/25/11 | 0 | 0.4 | II V G | D G L | - | - | - | - | n.r. |
| Eleuthera | Windermere Island | 115 | 1/28/11 | 0 | 8.0 | I II E | H D G L | - | - | - | - | p |
| Eleuthera | Winding Bay | 118 | 1/31/11 | 0 | 3.2 | II G | H D I U G L | - | - | - | <u>06</u> ⁴ | n.r. |
| Eleuthera | Wreck Beach/James Cistern | 107 | 1/26/11 | 3 | 1.6 | I E | n.r. | - | - | - | - | n.r. |
| Exuma | Beaches E of Sea View Drive to Sunset Bluff | 159 | 1/29/11 | 0 | 10.0 | II A | H D F L | - | - | - | - | f, p |
| Exuma | Bell Island (all major beaches) | 155 | 1/24/11 | 2 | 1.8 | II E | L | - | - | - | - | p |
| Exuma | East of 3 Sisters Rocks | 158 | 1/28/11 | 0 | 0.2 | I A | H D | - | - | - | - | p |
| Exuma | Exuma Point | 156 | 1/28/11 | 18 | 0.5 | II A | H D I G L | - | - | - | <u>06</u> | f |
| Exuma | Hawksbill Cay & Shroud Cay | 153 | 1/29/11 | 0 | 9.0 | I II IV A | n.r. | - | <u>96</u> | - | 06 | f |
| Exuma | Leaf Cay/White Cay | 164 | 1/28/11 | 4 | 2.9 | I E | H G L | - | - | - | <u>06</u> | f |
| Exuma | Little Exuma Beaches & Access Points | 162 | 1/27/11 | 0 | 2.0 | I A | H D I U | - | - | - | - | p |
| Exuma | Manowar Cay | 160 | 1/27/11 | 46 | 4.0 | II E | H D V F I | - | - | - | - | p |
| Exuma | Moriah Harbour Cay, Great Exuma | 161 | 1/28/11 | 18 | 1.0 | II E | H D G | - | - | - | 06 ⁵ | f, p |
| Exuma | Sea Way Drive, Great Exuma | 157 | 1/29/11 | 5 | 2.8 | II A | H D I G L | - | - | - | <u>06</u> | p |
| Exuma | Warderick Wells Cay (Career, Powerful, Causeway and Boo Boo Beaches) | 154 | 1/29/11 | 0 | 0.5 | II A | H G L | - | <u>96</u> | - | <u>06</u> ⁶ | f |
| Exuma | Wolf Dames Back Landing, Little Exuma | 163 | 1/29/11 | 0 | 1.6 | I A | D L | - | - | - | 06 | p |
| Grand Bahama | 8 Mile Rock (including Lover's Beach) | 11 | 1/27/11 | 0 | 5.4 | I A | H S | - | - | - | - | f |
| Grand Bahama | Bahama Beach/Bahama Bay (aka "Seward of Grand Bahama") | 8 | 1/26/11 | 0 | 1.8 | I A | S I G L | - | - | - | - | f |
| Grand Bahama | Barbary Beach (Discovery Bay Canal to White Beach) | 19 | 1/25/11 | 3 | 12.5 | I A | H D V S I L | - | - | - | <u>06</u> | f, p |

The 2011 International Piping Plover Winter Census in The Bahamas (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|--------------|------|------------------|------------------------|---|-----------|-----------|-----------|-------|
| Grand Bahama | Bootle Bay (Blue Marlin Cove) S and E of inlet to Bahama Beach inlet | 7 | 1/26/11 | 8 | 6.5 | I A | S I | - | - | - | - | f |
| Grand Bahama | Discovery Beach (Freeport Bay Canal to Discovery Bay Canal) | 18 | 1/24/11 | 19 | 5.7 | I A | H D V S I U G | - | - | - | <u>06</u> | f |
| Grand Bahama | East End Cays (inclgd Sweeting's, Lightbourne, Redshank, Cross, and unnamed Cays/flats) | 6 | 1/30/11 | 31 | 60.0 | I II IV V A E F | F I G | - | - | - | - | f |
| Grand Bahama | Gold Rock Creek to High Rock | 21 | 1/28/11 | 36 | 5.4 | I A | H D S I G | - | - | <u>01</u> | - | f |
| Grand Bahama | Great Sale Cay | 2 | 2/6/11 | 1 | 7.5 | I E F | H D P I G | - | - | - | - | f |
| Grand Bahama | High Rock (Rocky Cliff to Oil Transfer Facility) | 22 | 1/28/11 | 5 | 4.5 | I A | H D V S I G | - | - | - | <u>06</u> | f, p |
| Grand Bahama | Holmes Rock (E to 8 Mile Rock) | 10 | 1/27/11 | 14 | 3.4 | I A | H I L | - | - | - | - | f |
| Grand Bahama | Island Seas - Silver Point Beach into Jetty | 15 | 1/27/11 | 5 | 3.2 | I A | H D S I G | - | - | - | <u>06</u> | f, p |
| Grand Bahama | Lucaya Beach | 16 | 1/30/11 | 0 | 2.4 | I A | n.r. | - | - | - | - | n.r. |
| Grand Bahama | Mangrove Cay | 1 | 2/6/11 | 0 | 1.5 | I E | G | - | - | - | - | f |
| Grand Bahama | McLean's Town Cemetery | 27 | 1/29/11 | 0 | 0.7 | I II A | H D I G | - | - | - | - | f |
| Grand Bahama | Old Bahama Bay - Ginn Sur Mer (Canal E to Bootle Bay/Blue Marlin Cove) | 5 | 1/26/11 | 4 | 4.4 | I A | D S I G L | - | - | - | - | f, p |
| Grand Bahama | Old Bahama Bay - Ginn Sur Mer (NW end, S to canal) | 4 | 1/26/11 | 5 | 2.0 | I A | D S P I U | - | - | - | - | f, p |
| Grand Bahama | Pelican Point - E of Rocky Point | 25 | 1/29/11 | 3 | 5.7 | I A | H D I U G | - | - | - | - | f |
| Grand Bahama | Pelican Point - Rocky Point Flats | 24 | 1/29/11 | 20 | 3.2 | I A | H D I G | - | - | - | <u>06</u> | f |
| Grand Bahama | Pinder's Point to Hunter's | 12 | 1/27/11 | 0 | 4.7 | I A | H D S P I G | - | - | - | - | f |
| Grand Bahama | Rocky Creek and areas W of McLean's Town | 26 | 1/30/11 | 0 | 11.6 | I V A | F I G L | - | - | - | - | f |
| Grand Bahama | Running Mon | 14 | 1/27/11 | 2 | 1.1 | I A | H S G | - | - | - | - | f |
| Grand Bahama | Seaward at Bahama Bay to Holmes Rock | 9 | 1/27/11 | 0 | 5.8 | I A | H D S I U G L | - | - | - | - | f |
| Grand Bahama | Taino Beach | 17 | 2/3/11 | 0 | 1.6 | I A | n.r. | - | - | - | - | n.r. |
| Grand Bahama | West End, Old Bahama Bay (Small beach on NW side) | 3 | 1/26/11 | 0 | 0.8 | I A | H V S I U G | - | <u>96</u> | - | - | p |
| Grand Bahama | West of Pelican Point Flats to Oil Terminal | 23 | 1/28/11 | 1 | 7.0 | I A | H D S I G | - | - | - | <u>06</u> | f |
| Grand Bahama | White (aka "Nudie") Beach to Gold Rocks Inlet (W side) | 20 | 1/28/11 | 6 | 7.8 | I A | H S I G | - | - | <u>01</u> | 06 | f |
| Grand Bahama | Xanadu Beach and Bahama Princess Beach | 13 | 1/27/11 | 0 | 4.5 | I A | H S I U G | - | - | - | - | f |
| Great Inagua | Blackwood Beach (SW side of Island) | 202 | 1/30/11 | 0 | 2.5 | I A | none | - | - | - | - | n.r. |
| Great Inagua | Bluff Beach, East of Conch Shell Pt. (S. side of island to limestone outcrop on beach) | 203 | 1/30/11 | 0 | 1.2 | I A | H D L | - | - | - | - | n.r. |
| Great Inagua | Craig's Bight East | 201 | 1/29/11 | 0 | 3.6 | I E | G L | - | - | - | 06 | n.r. |

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|----------------|--|------|---------|-----------------|------|---------------------|---------------------------|---|---|-----------|------------------------|---------|
| | | | | | | | | | | | | |
| Great Inagua | Craig's Bight West to Crossing | 200 | 1/29/11 | 0 | 2.5 | I E | D P G | - | - | - | <u>06</u> | n.r. |
| Great Inagua | Man of War Bay | 196 | 1/29/11 | 0 | 1.0 | I A | none | - | - | - | <u>06</u> | n.r. |
| Great Inagua | Maroon Hill Pond | 198 | 1/31/11 | 0 | 1.2 | V A | S G | - | - | - | - | p |
| Great Inagua | Red Pond West | 194 | 1/29/11 | 0 | 0.5 | I I V E | G L | - | - | - | <u>06</u> | n.r. |
| Great Inagua | The Tunnel Beach | 197 | 1/29/11 | 0 | 0.8 | I I V E | none | - | - | - | <u>06</u> | n.r. |
| Great Inagua | Vandaxville Beach to Lighthouse | 199 | 1/28/11 | 5 | 4.5 | I E | H D V P U | - | - | - | <u>06</u> | n.r. |
| Great Inagua | Well Road Beach | 195 | 1/29/11 | 0 | 1.2 | I E | none | - | - | - | <u>06</u> | n.r. |
| Harbour | Pink Sand Beach (E) and Harbor Side (W) | 102 | 1/29/11 | 13 | 4.0 | I I I G | H D S G L | - | - | - | - | n.r. |
| Long Island | Atlantic Coast from Pinders to Salt Pond | 175 | 1/31/11 | 1 | 6.5 | I E | H I | - | - | - | <u>06</u> | n.r. |
| Long Island | Cape Santa Maria Dev., Hoosie Harbor | 172 | 1/28/11 | 0 | 0.5 | I I E | H S G | - | - | - | <u>06</u> | n.r. |
| Long Island | Conch Cay (off Long Island) | 178 | 1/30/11 | 1 | 1.8 | I D E | G L | - | - | - | <u>06</u> | n.r. |
| Long Island | Cove near C.C. Monument, Newton Cay | 171 | 1/28/11 | 7 | 0.7 | I I E | H G | - | - | - | <u>06</u> | n.r. |
| Long Island | Diamond Salt Works | 181 | 1/29/11 | 0 | 0.2 | V G | S G | - | - | - | - | n.r. |
| Long Island | Dollar Cay Tidal Flats | 179 | 1/30/11 | 1 | 0.9 | I D | G | - | - | - | <u>06</u> | n.r. |
| Long Island | Duncansons Point | 177 | 1/30/11 | 8 | 2.0 | I E | H V G | - | - | - | <u>06</u> | n.r. |
| Long Island | Gordon's | 182 | 1/29/11 | 0 | 1.9 | I E | I | - | - | - | <u>06</u> | n.r. |
| Long Island | Joe Sound Harbor | 174 | 1/28/11 | 24 | 0.2 | I I E | G L | - | - | - | <u>06</u> | n.r. |
| Long Island | Newton Cay, W Side | 173 | 1/28/11 | 0 | 0.6 | I I E | None | - | - | - | <u>06</u> | n.r. |
| Long Island | Red Pond | 176 | 1/31/11 | 0 | 1.1 | V G | H G | - | - | - | <u>06</u> | n.r. |
| Long Island | Sandy Cay North & Tidal Flats | 180 | 1/30/11 | 0 | 0.9 | I D E | G | - | - | - | <u>06</u> | n.r. |
| New Providence | South Beach | 120 | 2/5/11 | 11 | 3.2 | I I A | H I L | - | - | <u>01</u> | <u>06</u> | n.r. |
| North Andros | Bigwood Cay | 134 | 1/28/11 | 6 | 14.0 | I I I E | H F I G L | - | - | - | - | n.r. |
| North Andros | Joulter's Cays (North) | 121 | 1/29/11 | 65 | 5.6 | I E F G | G L | - | - | - | - | f |
| North Andros | Joulter's Cays (South) | 122 | 1/29/11 | 35 | n.r. | I E | H F I G L | - | - | - | <u>06</u> | f |
| North Andros | Kamalame Cay - Blanket Sound | 127 | 2/1/11 | 83 | 3.7 | I I I B | H D G L | - | - | - | <u>06</u> ⁷ | f |
| North Andros | Lowe's Sound Mangrove Flats | 123 | 1/31/11 | 14 | 10.9 | I A E G | H D F S I G L | - | - | - | <u>06</u> ⁸ | f, m, p |
| North Andros | Mastic Bay and Rat Cay | 125 | 1/31/11 | 0 | 7.5 | I I I D E | I G L | - | - | - | - | f |
| North Andros | N ForFar to Saddleback Cay | 126 | 1/27/11 | 0 | 4.2 | I A E | I G | - | - | <u>01</u> | - | n.r. |
| North Andros | Plum Cay | 131 | 1/30/11 | 0 | 2.4 | I I I E | G L | - | - | - | - | f |
| North Andros | Red Bays | 124 | 1/31/11 | 1 | 11.6 | I I I A | G L | - | - | - | - | n.r. |
| North Andros | Small Hope Bay | 130 | 1/30/11 | 0 | 0.6 | I A | H D S I G L | - | - | - | - | n.r. |
| North Andros | South of Cargill Creek | 133 | 1/28/11 | 13 | 0.3 | I A | H D F G L | - | - | - | - | f |

The 2011 International Piping Plover Winter Census in The Bahamas (Continued)

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|---------------|---|------|---------|-----------------|--------------|---------------------|---------------------------|---|---|---|------------------------|-------|
| | | | | | | | | | | | | |
| North Andros | Southwest of Mastic Cay | 132 | 1/30/11 | 0 | 3.0 | I I I D E | G L | - | - | - | - | n.r. |
| North Andros | Staniard Creek | 129 | 1/27/11 | 0 | 4.1 | I A | H D I U G | - | - | - | - | f |
| North Andros | Staniard Creek Flats | 128 | 1/30/11 | 0 | 0.3 | I I A | D G | - | - | - | 06 | n.r. |
| San Salvadore | Bonefish Bay (Club Med Beach) | 166 | 2/1/11 | 0 | 1.6 | I A | H D V S U | - | - | - | - | n.r. |
| San Salvadore | Dim Bay and Greens Bay to Crab Cay | 168 | 1/31/11 | 0 | 2.7 | I A | G | - | - | - | - | n.r. |
| San Salvadore | East Beach | 167 | 2/2/11 | 4 | 3.5 | I A | D G | - | - | - | - | n.r. |
| San Salvadore | Holiday Track Settlement (The Thumb) | 169 | 2/1/11 | 1 | 3.0 | I A | G L | - | - | - | - | n.r. |
| San Salvadore | Rice Bay | 165 | 2/2/11 | 0 | 0.5 | I A | H V U L | - | - | - | - | n.r. |
| San Salvadore | Sandy Point | 170 | 2/1/11 | 0 | 0.1 | I A | H | - | - | - | - | n.r. |
| South Andros | Congo Town | 137 | 2/3/11 | 4 | 0.1 | I E | I U G | - | - | - | 06 | n.r. |
| South Andros | Deep Creek to Little Creek | 144 | 2/3/11 | 0 | 2.8 | I E | G L | - | - | - | - | n.r. |
| South Andros | Driggs Hill (at cemetery) | 135 | 2/3/11 | 0 | 0.1 | I E | I L | - | - | - | - | n.r. |
| South Andros | Driggs Hill (Lighthouse Pt to Long Bay Settlement) | 136 | 2/3/11 | 0 | 0.1 | I E | H | - | - | - | - | n.r. |
| South Andros | Kemps Bay | 142 | 2/3/11 | 0 | 4.6 | I E | D V S I U | - | - | - | 06 | n.r. |
| South Andros | Kemp's Bay Complex to Smith's Hill Settlement | 140 | 2/1/11 | 13 | 3.7 | I E | G | - | - | - | - | n.r. |
| South Andros | Mars Bay Settlement (North of Wharf) | 147 | 2/1/11 | 7 | 0.4 | I I E | H F I U G L | - | - | - | 06 | n.r. |
| South Andros | North of Hawks Nest (Hawksbill Creek) | 149 | 2/2/11 | 0 | 0.6 | I E | I L | - | - | - | - | n.r. |
| South Andros | Northern Deep Creek Settlement at Cemetery | 143 | 2/3/11 | 0 | 0.1 | I E | G L | - | - | - | - | n.r. |
| South Andros | Old Pier S of Congo Town to the Bluff Settlement (Mt. Sinai Baptist Church) | 138 | 2/3/11 | 9 | 2.7 | I E | H D U G | - | - | - | - | n.r. |
| South Andros | Sand Bar (2 miles NE of Top Cay) | 151 | 2/2/11 | 0 | 0.6 | I D | G L | - | - | - | - | n.r. |
| South Andros | Sand Bar ~3km E of Little Creek ¹¹ | 146 | 2/4/11 | 0 | 0.4 | I D | G | - | - | - | - | n.r. |
| South Andros | South of Hawks Nest to Snap Pt. | 150 | 2/2/11 | 0 | 2.6 | I E | none | - | - | - | - | n.r. |
| South Andros | South of Mars Bay: Flats at S end of white gravel road | 148 | 2/2/11 | 0 | 3.0 | I E | H F G L | - | - | - | <u>06</u> ⁹ | n.r. |
| South Andros | South Smith's Hill Settlement to North Kemp's Bay Settlement | 141 | 2/1/11 | 0 | 1.0 | I E | D G | - | - | - | - | n.r. |
| South Andros | The Bluff Settlement | 139 | 2/1/11 | 0 | 1.3 | I E | I G | - | - | - | - | n.r. |
| South Andros | Tidal Flat Slightly N of Pleasant Bay | 145 | 2/3/11 | 16 | 0.5 | I E | G L | - | - | - | - | n.r. |
| South Andros | Water Cays ¹⁰ | 152 | 2/6/11 | 21 | 0.4 | I I D | H F G L | - | - | - | - | n.r. |
| Total | | | | 1066 | 678.4 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Piping Plovers were seen at the site during that Census year.

² Exact locations of PIPLs were not specified in 2006 and may have occurred along any point ~1.2 km north of the 2011 Green Turtle Cay census route (2006 route covered more area).

³ 8 PIPL were see at this site, but they were believed to be the same 8 PIPL seen foraging in Savannah Sound on 1/28/2011.

⁴ Exact locations of PIPLs were not specified in 2006 and may have occurred along any point ~3 km north of the 2011 Winding Bay census route (2006 route covered more area).

⁵ 2 PIPL were seen in 2006 ~0.7 miles east of where the 2011 census ended. The 2011 survey was cut short due to dwindling light at the end of the day, so the complete area could not be covered.

⁶ In 2006, 3 PIPL were seen on Careen Beach and 2 were seen on Powerful Beach. The 2006 and 2011 survey routes were not specified, but by name only, I assume these were overlap.

⁷ 68 PIPL were seen in 2006 under the site name “Staniard Creek” which closely follows the 2011 “Kamalame Cay - Blanket Sound” route.

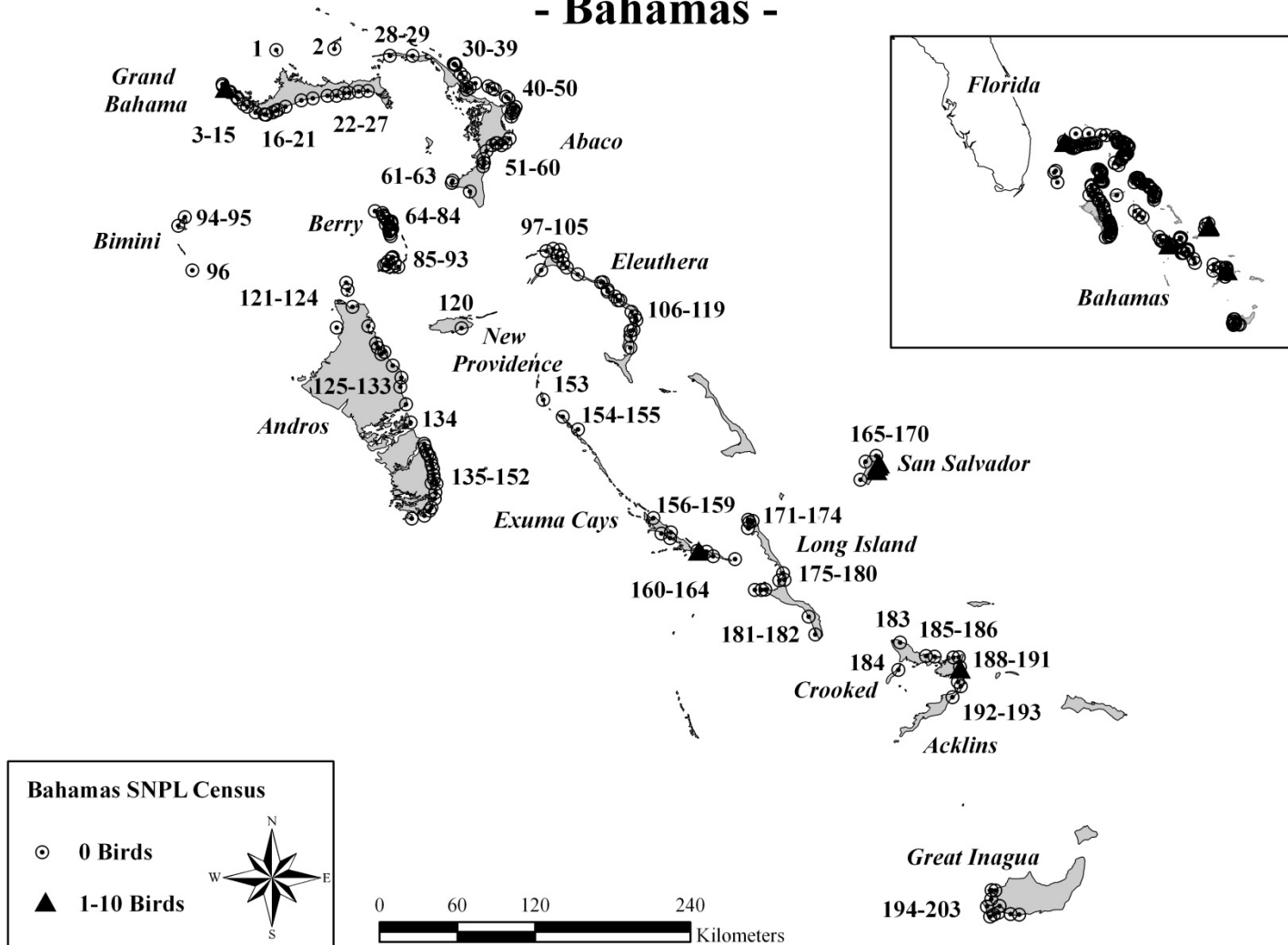
⁸ The 2006 survey route seemed to be a bit further east (by ~1.5 miles) from the 2011 survey route. It could be debatable whether or not these sites actually overlap. The specific locations of the PIPL seen in 2006 were not given.

⁹ 38 PIPL were seen ~0.25 miles from thus survey route (within the 2006 Mars Bay survey route).

¹⁰ Please note that this survey was conducted outside the Census window.

¹¹ 14 PIPL were seen, but they were believed to be the same PIPL as seen at Kemp's Bay Complex to Smith's Hill Settlement.

2011 International Snowy Plover Winter Census - Bahamas -



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|--------|--|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|----|-------|
| | | | | | | | | | | | | |
| Abaco | Bahama Palm Shores to the Delphi Club | 57 | 2/1/11 | 0 | 10.5 | I A | H D V S I U G | - | - | - | - | f |
| Abaco | Bahama Palms Shores North (Eight Mile Bay) | 56 | 2/1/11 | 0 | 3.0 | I A | D I G | - | - | - | - | f, p |
| Abaco | Cannon Bay and Point | 37 | 2/5/11 | 0 | 3.2 | II A | I G L | - | - | - | - | f |
| Abaco | Casaurina Bay, Town Beach, Casaurina Pt. W | 55 | 2/1/11 | 0 | 1.6 | II A | H D U G | - | - | - | - | m, p |
| Abaco | Casaurina Point | 54 | 2/1/11 | 0 | 0.7 | II A | H D U G | - | - | - | - | p |
| Abaco | Cherokee Sound | 53 | 2/3/11 | 0 | 1.1 | II A | G | - | - | - | - | m |
| Abaco | Crossing Harbor | 63 | 2/3/11 | 0 | <0.1 | II A | I G L | - | - | - | - | f |
| Abaco | Crown Haven to S Coopers Town | 29 | 2/4/11 | 0 | 36.4 | I II A G | H D F P S I L | - | - | - | - | m, p |
| Abaco | Durkey Beach, Elbow Cay | 47 | 1/31/11 | 0 | 0.4 | I B | H | - | - | - | - | f |
| Abaco | Elbow Cay, Southern Oceanside | 48 | 1/31/11 | 0 | 1.4 | I B | H D S | - | - | - | - | f |
| Abaco | Flats North of Sandy Point | 61 | 2/3/11 | 0 | 0.2 | II G | H F G L | - | - | - | - | f |
| Abaco | Great Guana Cay (Middle Oceanfront) | 41 | 1/29/11 | 0 | 1.2 | I B | n.r. | - | - | - | - | m |
| Abaco | Great Guana Cay (Northern Oceanfront) | 40 | 1/30/11 | 0 | 6.4 | I B | V S G | - | - | - | - | m, p |
| Abaco | Great Guana Cay (Southern Oceanfront) | 42 | 1/30/11 | 0 | 2.7 | I B | H D | - | - | - | - | m |
| Abaco | Green Turtle Cay | 35 | 2/2/11 | 0 | 2.1 | II B | H D F G | - | - | - | 06 | f |
| Abaco | Island Palm Shores | 60 | 2/3/11 | 0 | 2.1 | I B | D V I G | - | - | - | - | f |
| Abaco | Junk Beach, Tilloo Cay | 50 | 2/4/11 | 0 | 0.8 | I B | H D P I | - | - | - | - | f |
| Abaco | Little Harbor | 51 | 2/3/11 | 0 | 0.2 | II A | H U G L | - | - | - | - | p |
| Abaco | Manjack Cay, NE Beach | 31 | 2/2/11 | 0 | 0.5 | I B | H D I G | - | - | - | - | f |
| Abaco | Manjack Cay, North Tip | 30 | 2/2/11 | 0 | 1.9 | I B | n.r. | - | - | - | - | p |
| Abaco | Manjack Cay, NW Cove | 32 | 2/2/11 | 0 | 1.5 | I B | G L | - | - | - | - | p |
| Abaco | Manjack Cay, SE Beach | 33 | 2/2/11 | 0 | 1.9 | I B | I | - | - | - | - | f |
| Abaco | Man-O-War Cay (North Tip) | 43 | 2/3/11 | 0 | 1.1 | I B | H S U | - | - | - | - | p |
| Abaco | Man-O-War Cay (Oceanfront) | 44 | 2/3/11 | 0 | 3.0 | I B | H S U | - | - | - | - | m |
| Abaco | North End Beach, Elbow Cay | 45 | 1/31/11 | 0 | 1.6 | I B | H D | - | - | - | - | f |
| Abaco | Orphans, Smith and Water Cays (off Little Abaco) | 28 | 2/4/11 | 0 | 13.6 | II E | I G L | - | - | - | - | f |
| Abaco | Schooner Bay: Serenity Point S. to Island Palms near Crossing Rocks | 59 | 2/3/11 | 0 | 4.0 | I A | H D V S I U G | - | - | - | - | f, p |
| Abaco | Serenity Point | 58 | 2/1/11 | 0 | 2.8 | I A | H D V S I U G | - | - | - | - | f, p |
| Abaco | Small Beach on Green Turtle Cay | 34 | 2/2/11 | 0 | 0.2 | II B | G | - | - | - | - | f |
| Abaco | Tahiti Beach, Elbow Cay | 49 | 1/31/11 | 0 | 0.7 | II IV B F | H D G | - | - | - | - | f |
| Abaco | Treasure Cay Beach - East Half | 38 | 2/5/11 | 0 | 2.8 | II B | H D V S I U G | - | - | - | - | f |
| Abaco | Treasure Cay Beach - West Half | 36 | 2/5/11 | 0 | 2.5 | I II A | H D I U G | - | - | - | - | p, c |

The 2011 International Snowy Plover Winter Census in The Bahamas (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|---------|---|------|---------|-----------------|-----|---------------------|---------------------------|---|---|---|---|-------|
| | | | | | | | | | | | | |
| Abaco | West-Facing Beach S of Sandy Point | 62 | 2/3/11 | 0 | 2.4 | II A | H D V F S I U L | - | - | - | - | f |
| Abaco | Whale Cay | 39 | 2/2/11 | 0 | 0.9 | I B | L | - | - | - | - | n.r. |
| Abaco | White Sound, Elbow Cay | 46 | 1/31/11 | 0 | 0.4 | II B | B S G | - | - | - | - | f |
| Abaco | Winding Bay | 52 | 2/3/11 | 0 | 2.6 | II A | H U G | - | - | - | - | p |
| Acklins | Beach N of Creek Point ³ | 190 | 2/7/11 | 9 | 7.0 | I A | H V S | - | - | - | - | n.r. |
| Acklins | Beach S of Creek Point and N of Salt Pond ³ | 192 | 2/8/11 | 0 | 4.8 | I A | P G L | - | - | - | - | n.r. |
| Acklins | Florida ³ | 193 | 2/8/11 | 0 | 1.5 | I A | n.r. | - | - | - | - | n.r. |
| Acklins | Small beach SE of Pinefield Settlement ³ | 189 | 2/7/11 | 0 | 0.2 | I A | G L | - | - | - | - | n.r. |
| Acklins | Snug Corner Settlement (past cemetery) ³ | 191 | 2/7/11 | 0 | 0.3 | IV A | G L | - | - | - | - | n.r. |
| Acklins | Unnamed off-shore Cay (NE of Chester's Settlement) | 187 | 2/6/11 | 0 | 0.4 | I E | A G L | - | - | - | - | n.r. |
| Acklins | W beach on Lady Slipper Cay (S of Atwood Harbour) | 188 | 2/6/11 | 0 | 1.5 | I E | H D U G L | - | - | - | - | n.r. |
| Berry | Ambergris Cay (E side) | 83 | 1/24/11 | 0 | 0.3 | I E | I L | - | - | - | - | n.r. |
| Berry | Chub Cay - NW side tidal flat | 91 | 1/27/11 | 0 | 0.9 | I E | G L | - | - | - | - | n.r. |
| Berry | Cockroach Cay (NW side) | 92 | 1/27/11 | 0 | 0.5 | I E | I | - | - | - | - | n.r. |
| Berry | Cormorant Cay (Sapphire Cays) | 86 | 1/27/11 | 0 | 0.1 | I E | I G | - | - | - | - | n.r. |
| Berry | East Caesar Cay Spit to SE tip Ambergris Cay | 82 | 1/24/11 | 0 | 0.2 | I E | I G | - | - | - | - | n.r. |
| Berry | Fanny Cay (East Side) | 81 | 1/24/11 | 0 | <1 | I E | L | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - "Shelling Beach" | 74 | 1/23/11 | 0 | 0.4 | II G | H G L | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - "Sugar Beach Caves" | 66 | 1/23/11 | 0 | 0.9 | I E | H | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - North Beach (Just before point at mid-beach) | 69 | 1/23/11 | 0 | 0.3 | I E | L | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - North Beach (Start at Purple/blue house w/ Pelican statues at edge of driveway) | 67 | 1/23/11 | 0 | 1.0 | I E | H D | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - North Beach (start at Yellow House - Northernmost house on beach) | 65 | 1/23/11 | 0 | 1.6 | I E | none | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - North Beach (Villa Allegria House) | 68 | 1/23/11 | 0 | 2.2 | I E | H D U | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - South Beach (Main crescent-shaped beach) | 70 | 1/23/11 | 0 | 4.0 | I E | H D I U G | - | - | - | - | n.r. |
| Berry | Great Harbour Cay (SW Side) | 72 | 1/24/11 | 0 | 0.1 | I E | none | - | - | - | - | n.r. |
| Berry | Haines Cay - entire E side of beach | 75 | 1/25/11 | 0 | 3.5 | I E | I G | - | - | - | - | n.r. |

The 2011 International Snowy Plover Winter Census in The Bahamas (Continued)

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|-----------|--|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|---|-------|
| | | | | | | | | | | | | |
| Berry | Haines Cay - small beach on NW side (across flat from Shelling Beach) | 73 | 1/25/11 | 0 | 0.1 | I E | I L | - | - | - | - | n.r. |
| Berry | Haines Cay (SW End) | 76 | 1/24/11 | 0 | 0.0 | I E | G L | - | - | - | - | n.r. |
| Berry | Islet of N. Haines Cay & W. of Great Harbour Cay (across flat from Shelling Beach) | 71 | 1/25/11 | 0 | 0.4 | I E | I | - | - | - | - | n.r. |
| Berry | Little Cormorant Cay | 87 | 1/27/11 | 0 | 0.3 | I E | I G | - | - | - | - | n.r. |
| Berry | Little Stirrup Cay a.k.a. "Coco Cay" (S. end beaches) | 64 | 1/24/11 | 0 | 1.0 | I E | H S I | - | - | - | - | n.r. |
| Berry | Money Cay | 84 | 1/24/11 | 0 | 0.1 | I E | G | - | - | - | - | n.r. |
| Berry | S. side Sandy Cay (Sapphire Cay) | 85 | 1/27/11 | 0 | n.r. | I E | G | - | - | - | - | n.r. |
| Berry | Sand Islet btwn Chub Cay & Fish Cays | 90 | 1/27/11 | 0 | 0.0 | I E | G | - | - | - | - | n.r. |
| Berry | Spit off E. Caesar Cay | 78 | 1/24/11 | 0 | 0.2 | I E | I G | - | - | - | - | n.r. |
| Berry | Tidal Flat between Fanny & Caesar Cays (S of Berry Island) | 80 | 1/24/11 | 0 | 0.0 | I D | G L | - | - | - | - | n.r. |
| Berry | Tidal Sandbar near Caesar Cay | 79 | 1/24/11 | 0 | 0.0 | I D | G L | - | - | - | - | n.r. |
| Berry | Unnamed Sand Bar S. of Fish Cays | 89 | 1/27/11 | 0 | 0.1 | I D | G | - | - | - | - | n.r. |
| Berry | Unnamed Tiny Sand Bar btwn Fish Cays | 88 | 1/27/11 | 0 | 0.0 | I D | G | - | - | - | - | n.r. |
| Berry | Vigilant Cay (entire shoreline) | 93 | 1/27/11 | 0 | 1.2 | I E | G | - | - | - | - | n.r. |
| Berry | Water Cay (W End) | 77 | 1/24/11 | 0 | 0.0 | I E | L | - | - | - | - | n.r. |
| Bimini | East Wells | 95 | 2/5/11 | 0 | 35.4 | IV V G | I | - | - | - | - | f |
| Bimini | Ocean Cay | 96 | 2/4/11 | 0 | 6.4 | I G | G | - | - | - | - | f |
| Bimini | South Cat Cay | 94 | 2/4/11 | 0 | 62.8 | II E G | S | - | - | - | - | f, p |
| Crooked | Beach E of Brown's Settlement | 186 | 2/4/11 | 0 | 0.8 | I A | P G | - | - | - | - | n.r. |
| Crooked | Beach N of Majors, E of Bullet Hill Settlement | 185 | 2/4/11 | 0 | 2.0 | I II A | G | - | - | - | - | n.r. |
| Crooked | Beach NW of Seaview Settlement | 183 | 2/5/11 | 0 | 2.0 | I A | D I G | - | - | - | - | n.r. |
| Crooked | Long Cay | 184 | 2/5/11 | 0 | 14.0 | I IV A | H I A L | - | - | - | - | n.r. |
| Eleuthera | Airport Beach / Govenors Harbor | 108 | 1/27/11 | 0 | 3.2 | I A | H D | - | - | - | - | n.r. |
| Eleuthera | Atlantic Beach N of Grinder's Pt. | 116 | 1/27/11 | 0 | 0.4 | I E | none | - | - | - | - | n.r. |
| Eleuthera | Bottom Harbour | 103 | 1/26/11 | 0 | 1.6 | II E G | I L | - | - | - | - | n.r. |
| Eleuthera | Club Med / French Leave Beach | 112 | 1/27/11 | 0 | 1.6 | I A | H D | - | - | - | - | n.r. |
| Eleuthera | Cocodimama Beach | 109 | 1/31/11 | 0 | 0.8 | II G | D I G L | - | - | - | - | n.r. |
| Eleuthera | Gaulding Cay Beach | 104 | 1/25/11 | 0 | 0.8 | V E | G L | - | - | - | - | n.r. |
| Eleuthera | Governor's Harbour | 111 | 1/27/11 | 0 | 1.6 | V G | H D V S | - | - | - | - | n.r. |
| Eleuthera | Hut Point Beach | 110 | 1/27/11 | 0 | 0.8 | I A | H D | - | - | - | - | n.r. |

The 2011 International Snowy Plover Winter Census in The Bahamas (Continued)

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|--------------|---|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|----|-------|
| | | | | | | | | | | | | |
| Eleuthera | James Cistern Wharf off Queen's Highway | 106 | 1/27/11 | 0 | 0.2 | II A | H D V F S | - | - | - | - | n.r. |
| Eleuthera | Man Island Spit and Picnic Beach | 100 | 1/29/11 | 0 | 0.2 | II IV G | G | - | - | - | - | n.r. |
| Eleuthera | Preacher's Cave Beach | 99 | 1/25/11 | 0 | 0.8 | IG | n.r. | - | - | - | - | n.r. |
| Eleuthera | Rock Sound | 119 | 1/31/11 | 0 | n.r. | II G | n.r. | - | - | - | - | n.r. |
| Eleuthera | Savannah Sound (W. Shore) | 114 | 1/28/11 | 0 | 1.6 | II G | H F G L | - | - | - | - | n.r. |
| Eleuthera | Shore N of Barge Landing, N of Water Taxi Port (Three Islands) | 101 | 1/30/11 | 0 | 3.2 | II E | H F G | - | - | - | - | n.r. |
| Eleuthera | Spanish Wells | 98 | 1/30/11 | 0 | 3.2 | I IV D G | H D V F S G L | - | - | - | 06 | n.r. |
| Eleuthera | Surfer's Beach, Gregory Town | 105 | 1/25/11 | 0 | 0.8 | I E | H | - | - | - | - | n.r. |
| Eleuthera | Tarpum Bay | 117 | 1/27/11 | 0 | 0.8 | V G | H D V S | - | - | - | - | n.r. |
| Eleuthera | Ten Bay Beach | 113 | 1/31/11 | 0 | 1.6 | II G | H D G L | - | - | - | - | n.r. |
| Eleuthera | Upper Cove Beach (E of Current) | 97 | 1/25/11 | 0 | 0.4 | II V G | D G L | - | - | - | - | n.r. |
| Eleuthera | Windermere Island | 115 | 1/28/11 | 0 | 8.0 | I II E | H D G L | - | - | - | - | p |
| Eleuthera | Winding Bay | 118 | 1/31/11 | 0 | 3.2 | II G | H D I U G L | - | - | - | 06 | n.r. |
| Eleuthera | Wreck Beach/James Cistern | 107 | 1/26/11 | 0 | 1.6 | I E | n.r. | - | - | - | - | n.r. |
| Exuma | Beaches E of Sea View Drive to Sunset Bluff | 159 | 1/29/11 | 0 | 10.0 | II A | H D F L | - | - | - | - | f, p |
| Exuma | Bell Island (all major beaches) | 155 | 1/24/11 | 0 | 1.8 | II E | L | - | - | - | - | p |
| Exuma | East of 3 Sisters Rocks | 158 | 1/28/11 | 0 | 0.2 | I A | H D | - | - | - | - | p |
| Exuma | Exuma Point | 156 | 1/28/11 | 0 | 0.5 | II A | H D I G L | - | - | - | 06 | f |
| Exuma | Hawksbill Cay & Shroud Cay | 153 | 1/29/11 | 0 | 9.0 | I II IV A | n.r. | - | - | - | 06 | f |
| Exuma | Leaf Cay/White Cay | 164 | 1/28/11 | 0 | 2.9 | I E | H G L | - | - | - | 06 | f |
| Exuma | Little Exuma Beaches & Access Points | 162 | 1/27/11 | 0 | 2.0 | I A | H D I U | - | - | - | - | p |
| Exuma | Manowar Cay | 160 | 1/27/11 | 0 | 4.0 | II E | H D V F I | - | - | - | - | p |
| Exuma | Moriah Harbour Cay, Great Exuma | 161 | 1/28/11 | 2 | 1.0 | II E | H D G | - | - | - | 06 | f, p |
| Exuma | Sea Way Drive, Great Exuma | 157 | 1/29/11 | 0 | 2.8 | II A | H D I G L | - | - | - | 06 | p |
| Exuma | Warderick Wells Cay (Career, Powerful, Causeway and Boo Boo Beaches) | 154 | 1/29/11 | 0 | 0.5 | II A | H G L | - | - | - | 06 | f |
| Exuma | Wolf Dames Back Landing, Little Exuma | 163 | 1/29/11 | 0 | 1.6 | I A | D L | - | - | - | 06 | p |
| Grand Bahama | 8 Mile Rock (including Lover's Beach) | 11 | 1/27/11 | 0 | 5.4 | I A | H S | - | - | - | - | f |
| Grand Bahama | Bahama Beach/Bahama Bay (aka "Seward of Grand Bahama") | 8 | 1/26/11 | 0 | 1.8 | I A | S I G L | - | - | - | - | f |
| Grand Bahama | Barbary Beach (Discovery Bay Canal to White Beach) | 19 | 1/25/11 | 0 | 12.5 | I A | H D V S I L | - | - | - | 06 | f, p |

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|--------------|---|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|----|-------|
| | | | | | | | | | | | | |
| Grand Bahama | Bootle Bay (Blue Marlin Cove) S and E of inlet to Bahama Beach inlet | 7 | 1/26/11 | 0 | 6.5 | I A | S I | - | - | - | - | f |
| Grand Bahama | Discovery Beach (Freeport Bay Canal to Discovery Bay Canal) | 18 | 1/24/11 | 0 | 5.7 | I A | H D V S I U G | - | - | - | 06 | f |
| Grand Bahama | East End Cays (inclgd Sweeting's, Lightbourne, Redshank, Cross, and unnamed Cays/flats) | 6 | 1/30/11 | 0 | 60.0 | I II IV V A E F | F I G | - | - | - | - | f |
| Grand Bahama | Gold Rock Creek to High Rock | 21 | 1/28/11 | 0 | 5.4 | I A | H D S I G | - | - | - | - | f |
| Grand Bahama | Great Sale Cay | 2 | 2/6/11 | 0 | 7.5 | I E F | H D P I G | - | - | - | - | f |
| Grand Bahama | High Rock (Rocky Cliff to Oil Transfer Facility) | 22 | 1/28/11 | 0 | 4.5 | I A | H D V S I G | - | - | - | 06 | f, p |
| Grand Bahama | Holmes Rock (E to 8 Mile Rock) | 10 | 1/27/11 | 0 | 3.4 | I A | H I L | - | - | - | - | f |
| Grand Bahama | Island Seas - Silver Point Beach into Jetty | 15 | 1/27/11 | 0 | 3.2 | I A | H D S I G | - | - | - | 06 | f, p |
| Grand Bahama | Lucaya Beach | 16 | 1/30/11 | 0 | 2.4 | I A | n.r. | - | - | - | - | n.r. |
| Grand Bahama | Mangrove Cay | 1 | 2/6/11 | 0 | 1.5 | I E | G | - | - | - | - | f |
| Grand Bahama | McLean's Town Cemetery | 27 | 1/29/11 | 0 | 0.7 | I II A | H D I G | - | - | - | - | f |
| Grand Bahama | Old Bahama Bay - Ginn Sur Mer (Canal E to Bootle Bay/Blue Marlin Cove) | 5 | 1/26/11 | 1 | 4.4 | I A | D S I G L | - | - | - | - | f, p |
| Grand Bahama | Old Bahama Bay - Ginn Sur Mer (NW end, S to canal) | 4 | 1/26/11 | 0 | 2.0 | I A | D S P I U | - | - | - | - | f, p |
| Grand Bahama | Pelican Point - E of Rocky Point | 25 | 1/29/11 | 0 | 5.7 | I A | H D I U G | - | - | - | - | f |
| Grand Bahama | Pelican Point - Rocky Point Flats | 24 | 1/29/11 | 0 | 3.2 | I A | H D I G | - | - | - | 06 | f |
| Grand Bahama | Pinder's Point to Hunter's | 12 | 1/27/11 | 0 | 4.7 | I A | H D S P I G | - | - | - | - | f |
| Grand Bahama | Rocky Creek and areas W of McLean's Town | 26 | 1/30/11 | 0 | 11.6 | I V A | F I G L | - | - | - | - | f |
| Grand Bahama | Running Mon | 14 | 1/27/11 | 0 | 1.1 | I A | H S G | - | - | - | - | f |
| Grand Bahama | Seaward at Bahama Bay to Holmes Rock | 9 | 1/27/11 | 0 | 5.8 | I A | H D S I U G L | - | - | - | - | f |
| Grand Bahama | Taino Beach | 17 | 2/3/11 | 0 | 1.6 | I A | n.r. | - | - | - | - | n.r. |
| Grand Bahama | West End, Old Bahama Bay (Small beach on NW side) | 3 | 1/26/11 | 0 | 0.8 | I A | H V S I U G | - | - | - | - | p |
| Grand Bahama | West of Pelican Point Flats to Oil Terminal | 23 | 1/28/11 | 0 | 7.0 | I A | H D S I G | - | - | - | 06 | f |
| Grand Bahama | White (aka "Nudie") Beach to Gold Rocks Inlet (W side) | 20 | 1/28/11 | 0 | 7.8 | I A | H S I G | - | - | - | 06 | f |
| Grand Bahama | Xanadu Beach and Bahama Princess Beach | 13 | 1/27/11 | 0 | 4.5 | I A | H S I U G | - | - | - | - | f |
| Great Inagua | Blackwood Beach (SW side of Island) | 202 | 1/30/11 | 0 | 2.5 | I A | none | - | - | - | - | n.r. |
| Great Inagua | Bluff Beach, East of Conch Shell Pt. (S. side of island to limestone outcrop on beach) | 203 | 1/30/11 | 0 | 1.2 | I A | H D L | - | - | - | - | n.r. |
| Great Inagua | Craig's Bight East | 201 | 1/29/11 | 0 | 3.6 | I E | G L | - | - | - | 06 | n.r. |

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|----------------|--|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|-----------------------|---------|
| | | | | | | | | | | | | |
| Great Inagua | Craig's Bight West to Crossing | 200 | 1/29/11 | 0 | 2.5 | I E | D P G | - | - | - | 06 | n.r. |
| Great Inagua | Man of War Bay | 196 | 1/29/11 | 0 | 1.0 | I A | none | - | - | - | 06 | n.r. |
| Great Inagua | Maroon Hill Pond | 198 | 1/31/11 | 0 | 1.2 | V A | S G | - | - | - | - | p |
| Great Inagua | Red Pond West ⁴ | 194 | 1/29/11 | 0 | 0.5 | I I V E | G L | - | - | - | 06 | n.r. |
| Great Inagua | The Tunnel Beach | 197 | 1/29/11 | 0 | 0.8 | I I V E | none | - | - | - | 06 | n.r. |
| Great Inagua | Vandaxville Beach to Lighthouse | 199 | 1/28/11 | 0 | 4.5 | I E | H D V P U | - | - | - | 06 | n.r. |
| Great Inagua | Well Road Beach | 195 | 1/29/11 | 0 | 1.2 | I E | none | - | - | - | 06 | n.r. |
| Harbour | Pink Sand Beach (E) and Harbor Side (W) | 102 | 1/29/11 | 0 | 4.0 | I I I G | H D S G L | - | - | - | - | n.r. |
| Long Island | Atlantic Coast from Pinders to Salt Pond | 175 | 1/31/11 | 0 | 6.5 | I E | H I | - | - | - | 06² | n.r. |
| Long Island | Cape Santa Maria Dev., Hoosie Harbor | 172 | 1/28/11 | 0 | 0.5 | I I E | H S G | - | - | - | 06 | n.r. |
| Long Island | Conch Cay (off Long Island) | 178 | 1/30/11 | 0 | 1.8 | I D E | G L | - | - | - | 06 | n.r. |
| Long Island | Cove near C.C. Monument, Newton Cay | 171 | 1/28/11 | 0 | 0.7 | I I E | H G | - | - | - | 06 | n.r. |
| Long Island | Diamond Salt Works | 181 | 1/29/11 | 0 | 0.2 | V G | S G | - | - | - | - | n.r. |
| Long Island | Dollar Cay Tidal Flats | 179 | 1/30/11 | 0 | 0.9 | I D | G | - | - | - | 06 | n.r. |
| Long Island | Duncansons Point | 177 | 1/30/11 | 0 | 2.0 | I E | H V G | - | - | - | 06 | n.r. |
| Long Island | Gordon's | 182 | 1/29/11 | 0 | 1.9 | I E | I | - | - | - | 06 | n.r. |
| Long Island | Joe Sound Harbor | 174 | 1/28/11 | 0 | 0.2 | I I E | G L | - | - | - | 06 | n.r. |
| Long Island | Newton Cay, W Side | 173 | 1/28/11 | 0 | 0.6 | I I E | None | - | - | - | 06 | n.r. |
| Long Island | Red Pond | 176 | 1/31/11 | 0 | 1.1 | V G | H G | - | - | - | 06 | n.r. |
| Long Island | Sandy Cay North & Tidal Flats | 180 | 1/30/11 | 0 | 0.9 | I D E | G | - | - | - | 06 | n.r. |
| New Providence | South Beach | 120 | 2/5/11 | 0 | 3.2 | I I A | H I L | - | - | - | 06 | n.r. |
| North Andros | Bigwood Cay | 134 | 1/28/11 | 0 | 14.0 | I I I E | H F I G L | - | - | - | - | n.r. |
| North Andros | Joulter's Cays (North) | 121 | 1/29/11 | 0 | 5.6 | I E F G | G L | - | - | - | - | f |
| North Andros | Joulter's Cays (South) | 122 | 1/29/11 | 0 | n.r. | I E | H F I G L | - | - | - | 06 | f |
| North Andros | Kamalame Cay - Blanket Sound | 127 | 2/1/11 | 0 | 3.7 | I I I B | H D G L | - | - | - | 06 | f |
| North Andros | Lowe's Sound Mangrove Flats | 123 | 1/31/11 | 0 | 10.9 | I A E G | H D F S I G L | - | - | - | 06 | f, m, p |
| North Andros | Mastic Bay and Rat Cay | 125 | 1/31/11 | 0 | 7.5 | I I I D E | I G L | - | - | - | - | f |
| North Andros | N ForFar to Saddleback Cay | 126 | 1/27/11 | 0 | 4.2 | I A E | I G | - | - | - | - | n.r. |
| North Andros | Plum Cay | 131 | 1/30/11 | 0 | 2.4 | I I I E | G L | - | - | - | - | f |
| North Andros | Red Bays | 124 | 1/31/11 | 0 | 11.6 | I I I A | G L | - | - | - | - | n.r. |
| North Andros | Small Hope Bay | 130 | 1/30/11 | 0 | 0.6 | I A | H D S I G L | - | - | - | - | n.r. |
| North Andros | South of Cargill Creek | 133 | 1/28/11 | 0 | 0.3 | I A | H D F G L | - | - | - | - | f |

The 2011 International Snowy Plover Winter Census in The Bahamas (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|---------------|---|------|---------|-----------------|--------------|---------------------|---------------------------|---|---|---|----|-------|
| | | | | | | | | | | | | |
| North Andros | Southwest of Mastic Cay | 132 | 1/30/11 | 0 | 3.0 | I I I D E | G L | - | - | - | - | n.r. |
| North Andros | Staniard Creek | 129 | 1/27/11 | 0 | 4.1 | I A | H D I U G | - | - | - | 06 | f |
| North Andros | Staniard Creek Flats | 128 | 1/30/11 | 0 | 0.3 | I I A | D G | - | - | - | - | n.r. |
| San Salvadore | Bonefish Bay (Club Med Beach) | 166 | 2/1/11 | 0 | 1.6 | I A | H D V S U | - | - | - | - | n.r. |
| San Salvadore | Dim Bay and Greens Bay to Crab Cay | 168 | 1/31/11 | 8 | 2.7 | I A | G | - | - | - | - | n.r. |
| San Salvadore | East Beach | 167 | 2/2/11 | 9 | 3.5 | I A | D G | - | - | - | - | n.r. |
| San Salvadore | Holiday Track Settlement (The Thumb) | 169 | 2/1/11 | 9 | 3.0 | I A | G L | - | - | - | - | n.r. |
| San Salvadore | Rice Bay | 165 | 2/2/11 | 0 | 0.5 | I A | H V U L | - | - | - | - | n.r. |
| San Salvadore | Sandy Point | 170 | 2/1/11 | 0 | 0.1 | I A | H | - | - | - | - | n.r. |
| South Andros | Congo Town | 137 | 2/3/11 | 0 | 0.1 | I E | I U G | - | - | - | 06 | n.r. |
| South Andros | Deep Creek to Little Creek | 144 | 2/3/11 | 0 | 2.8 | I E | G L | - | - | - | - | n.r. |
| South Andros | Driggs Hill (at cemetery) | 135 | 2/3/11 | 0 | 0.1 | I E | I L | - | - | - | - | n.r. |
| South Andros | Driggs Hill (Lighthouse Pt to Long Bay Settlement) | 136 | 2/3/11 | 0 | 0.1 | I E | H | - | - | - | - | n.r. |
| South Andros | Kemps Bay | 142 | 2/3/11 | 0 | 4.6 | I E | D V S I U | - | - | - | 06 | n.r. |
| South Andros | Kemp's Bay Complex to Smith's Hill Settlement | 140 | 2/1/11 | 0 | 3.7 | I E | G | - | - | - | - | n.r. |
| South Andros | Mars Bay Settlement (North of Wharf) | 147 | 2/1/11 | 0 | 0.4 | I I E | H F I U G L | - | - | - | 06 | n.r. |
| South Andros | North of Hawks Nest (Hawksbill Creek) | 149 | 2/2/11 | 0 | 0.6 | I E | I L | - | - | - | - | n.r. |
| South Andros | Northern Deep Creek Settlement at Cemetery | 143 | 2/3/11 | 0 | 0.1 | I E | G L | - | - | - | - | n.r. |
| South Andros | Old Pier S of Congo Town to the Bluff Settlement (Mt. Sinai Baptist Church) | 138 | 2/3/11 | 0 | 2.7 | I E | H D U G | - | - | - | - | n.r. |
| South Andros | Sand Bar (2 miles NE of Top Cay) | 151 | 2/2/11 | 0 | 0.6 | I D | G L | - | - | - | - | n.r. |
| South Andros | Sand Bar ~3km E of Little Creek | 146 | 2/4/11 | 0 | 0.4 | I D | G | - | - | - | - | n.r. |
| South Andros | South of Hawks Nest to Snap Pt. | 150 | 2/2/11 | 0 | 2.6 | I E | none | - | - | - | - | n.r. |
| South Andros | South of Mars Bay: Flats at S end of white gravel road | 148 | 2/2/11 | 0 | 3.0 | I E | H F G L | - | - | - | 06 | n.r. |
| South Andros | South Smith's Hill Settlement to North Kemp's Bay Settlement | 141 | 2/1/11 | 0 | 1.0 | I E | D G | - | - | - | - | n.r. |
| South Andros | The Bluff Settlement | 139 | 2/1/11 | 0 | 1.3 | I E | I G | - | - | - | - | n.r. |
| South Andros | Tidal Flat Slightly N of Pleasant Bay | 145 | 2/3/11 | 0 | 0.5 | I E | G L | - | - | - | - | n.r. |
| South Andros | Water Cays ³ | 152 | 2/6/11 | 0 | 0.4 | I I D | H F G L | - | - | - | - | n.r. |
| Total | | | | 38 | 678.4 | | | | | | | |

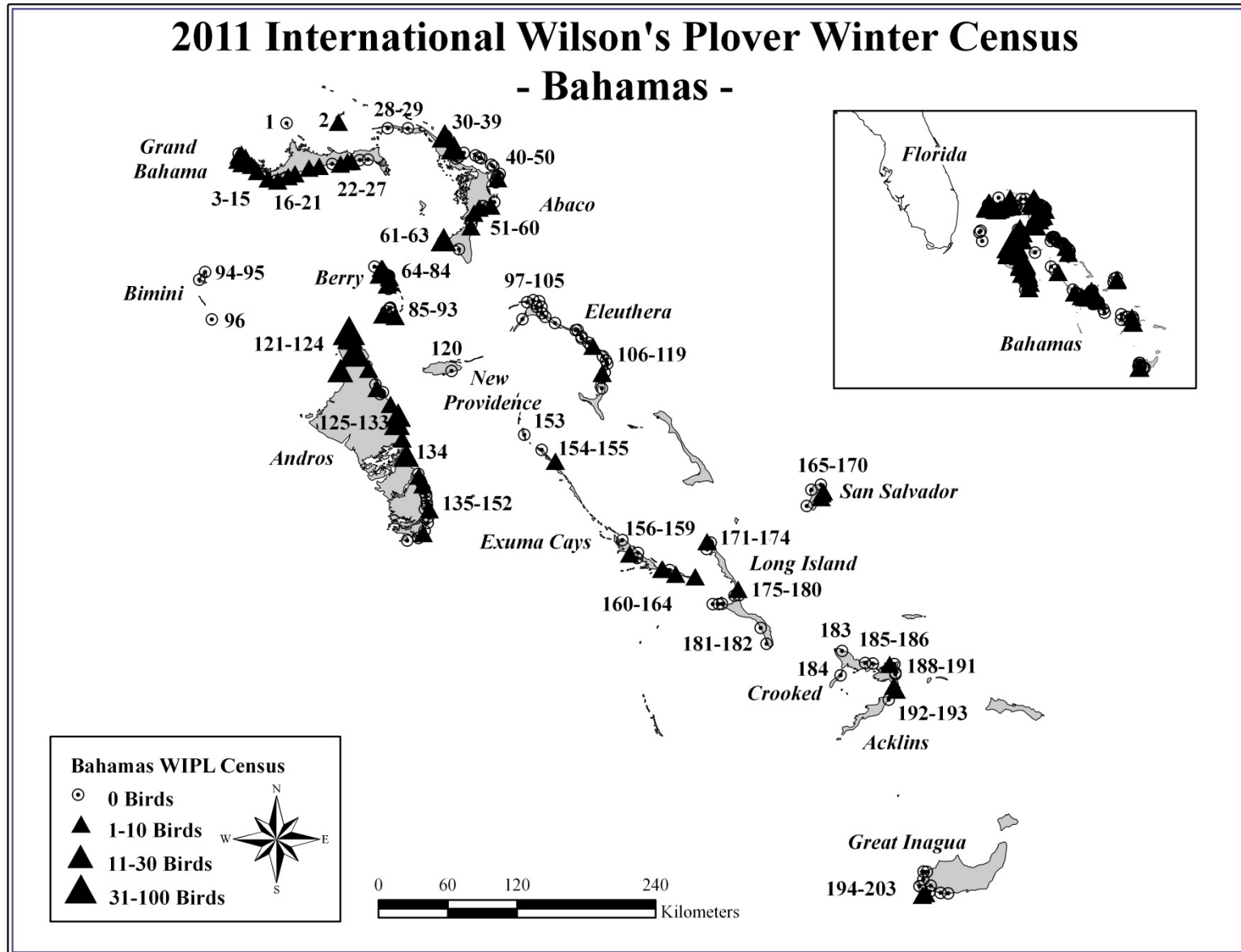
¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Snowy Plovers were seen at the site during that Census year.

² The 2006 route extended further south and was longer than the 2011 route. The SNPL seen in 2006 were ~0.15 km south of the starting location for the 2011 census.

³ Please note that this survey was conducted outside the Census window.

⁴ Four Snowy Plovers were observed near this site on 26 January (not part of the official Census but during the census period).

2011 International Wilson's Plover Winter Census - Bahamas -



The 2011 International Wilson's Plover Winter Census in The Bahamas

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|--------|--|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|------------------------|-------|
| | | | | | | | | | | | | |
| Abaco | Bahama Palm Shores to the Delphi Club | 57 | 2/1/11 | 3 | 10.5 | I A | H D V S I U G | - | - | - | - | f |
| Abaco | Bahama Palms Shores North (Eight Mile Bay) | 56 | 2/1/11 | 3 | 3.0 | I A | D I G | - | - | - | - | f, p |
| Abaco | Cannon Bay and Point | 37 | 2/5/11 | 0 | 3.2 | II A | I G L | - | - | - | - | f |
| Abaco | Casaurina Bay, Town Beach, Casaurina Pt. W | 55 | 2/1/11 | 0 | 1.6 | II A | H D U G | - | - | - | - | m, p |
| Abaco | Casaurina Point | 54 | 2/1/11 | 0 | 0.7 | II A | H D U G | - | - | - | - | p |
| Abaco | Cherokee Sound | 53 | 2/3/11 | 0 | 1.1 | II A | G | - | - | - | - | m |
| Abaco | Crossing Harbor | 63 | 2/3/11 | 0 | <0.1 | II A | I G L | - | - | - | - | f |
| Abaco | Crown Haven to S Coopers Town | 29 | 2/4/11 | 0 | 36.4 | I II A G | H D F P S I L | - | - | - | - | m, p |
| Abaco | Durkey Beach, Elbow Cay | 47 | 1/31/11 | 0 | 0.4 | I B | H | - | - | - | - | f |
| Abaco | Elbow Cay, Southern Oceanside | 48 | 1/31/11 | 8 | 1.4 | I B | H D S | - | - | - | - | f |
| Abaco | Flats North of Sandy Point | 61 | 2/3/11 | 15 | 0.2 | II G | H F G L | - | - | - | - | f |
| Abaco | Great Guana Cay (Middle Oceanfront) | 41 | 1/29/11 | 0 | 1.2 | I B | n.r. | - | - | - | - | m |
| Abaco | Great Guana Cay (Northern Oceanfront) | 40 | 1/30/11 | 0 | 6.4 | I B | V S G | - | - | - | - | m, p |
| Abaco | Great Guana Cay (Southern Oceanfront) | 42 | 1/30/11 | 0 | 2.7 | I B | H D | - | - | - | - | m |
| Abaco | Green Turtle Cay | 35 | 2/2/11 | 11 | 2.1 | II B | H D F G | - | - | - | <u>06</u> ² | f |
| Abaco | Island Palm Shores | 60 | 2/3/11 | 5 | 2.1 | I B | D V I G | - | - | - | - | f |
| Abaco | Junk Beach, Tilloo Cay | 50 | 2/4/11 | 0 | 0.8 | I B | H D P I | - | - | - | - | f |
| Abaco | Little Harbor | 51 | 2/3/11 | 0 | 0.2 | II A | H U G L | - | - | - | - | p |
| Abaco | Manjack Cay, NE Beach | 31 | 2/2/11 | 0 | 0.5 | I B | H D I G | - | - | - | - | f |
| Abaco | Manjack Cay, North Tip | 30 | 2/2/11 | 18 | 1.9 | I B | n.r. | - | - | - | - | p |
| Abaco | Manjack Cay, NW Cove | 32 | 2/2/11 | 2 | 1.5 | I B | G L | - | - | - | - | p |
| Abaco | Manjack Cay, SE Beach | 33 | 2/2/11 | 0 | 1.9 | I B | I | - | - | - | - | f |
| Abaco | Man-O-War Cay (North Tip) | 43 | 2/3/11 | 0 | 1.1 | I B | H S U | - | - | - | - | p |
| Abaco | Man-O-War Cay (Oceanfront) | 44 | 2/3/11 | 0 | 3.0 | I B | H S U | - | - | - | - | m |
| Abaco | North End Beach, Elbow Cay | 45 | 1/31/11 | 0 | 1.6 | I B | H D | - | - | - | - | f |
| Abaco | Orphans, Smith and Water Cays (off Little Abaco) | 28 | 2/4/11 | 0 | 13.6 | II E | I G L | - | - | - | - | f |
| Abaco | Schooner Bay: Serenity Point S. to Island Palms near Crossing Rocks | 59 | 2/3/11 | 0 | 4.0 | I A | H D V S I U G | - | - | - | - | f, p |
| Abaco | Serenity Point | 58 | 2/1/11 | 0 | 2.8 | I A | H D V S I U G | - | - | - | - | f, p |
| Abaco | Small Beach on Green Turtle Cay | 34 | 2/2/11 | 0 | 0.2 | II B | G | - | - | - | - | f |
| Abaco | Tahiti Beach, Elbow Cay | 49 | 1/31/11 | 0 | 0.7 | II IV B F | H D G | - | - | - | - | f |
| Abaco | Treasure Cay Beach - East Half | 38 | 2/5/11 | 0 | 2.8 | II B | H D V S I U G | - | - | - | - | f |
| Abaco | Treasure Cay Beach - West Half | 36 | 2/5/11 | 0 | 2.5 | I II A | H D I U G | - | - | - | - | p, c |

The 2011 International Wilson's Plover Winter Census in The Bahamas (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|---------|---|------|---------|-----------------|-----|---------------------|---------------------------|---|---|---|---|-------|
| | | | | | | | | | | | | |
| Abaco | West-Facing Beach S of Sandy Point | 62 | 2/3/11 | 0 | 2.4 | II A | H D V F S I U L | - | - | - | - | f |
| Abaco | Whale Cay | 39 | 2/2/11 | 0 | 0.9 | I B | L | - | - | - | - | n.r. |
| Abaco | White Sound, Elbow Cay | 46 | 1/31/11 | 0 | 0.4 | II B | B S G | - | - | - | - | f |
| Abaco | Winding Bay | 52 | 2/3/11 | 2 | 2.6 | II A | H U G | - | - | - | - | p |
| Acklins | Beach N of Creek Point ⁸ | 190 | 2/7/11 | 0 | 7.0 | I A | H V S | - | - | - | - | n.r. |
| Acklins | Beach S of Creek Point and N of Salt Pond ⁸ | 192 | 2/8/11 | 1 | 4.8 | I A | P G L | - | - | - | - | n.r. |
| Acklins | Florida ⁸ | 193 | 2/8/11 | 0 | 1.5 | I A | n.r. | - | - | - | - | n.r. |
| Acklins | Small beach SE of Pinefield Settlement ⁸ | 189 | 2/7/11 | 0 | 0.2 | I A | G L | - | - | - | - | n.r. |
| Acklins | Snug Corner Settlement (past cemetery) ⁸ | 191 | 2/7/11 | 2 | 0.3 | IV A | G L | - | - | - | - | n.r. |
| Acklins | Unnamed off-shore Cay (NE of Chester's Settlement) | 187 | 2/6/11 | 3 | 0.4 | I E | A G L | - | - | - | - | n.r. |
| Acklins | W beach on Lady Slipper Cay (S of Atwood Harbour) | 188 | 2/6/11 | 0 | 1.5 | I E | H D U G L | - | - | - | - | n.r. |
| Berry | Ambergris Cay (E side) | 83 | 1/24/11 | 0 | 0.3 | I E | I L | - | - | - | - | n.r. |
| Berry | Chub Cay - NW side tidal flat | 91 | 1/27/11 | 0 | 0.9 | I E | G L | - | - | - | - | n.r. |
| Berry | Cockroach Cay (NW side) | 92 | 1/27/11 | 0 | 0.5 | I E | I | - | - | - | - | n.r. |
| Berry | Cormorant Cay (Sapphire Cays) | 86 | 1/27/11 | 0 | 0.1 | I E | I G | - | - | - | - | n.r. |
| Berry | East Caesar Cay Spit to SE tip Ambergris Cay | 82 | 1/24/11 | 8 | 0.2 | I E | I G | - | - | - | - | n.r. |
| Berry | Fanny Cay (East Side) | 81 | 1/24/11 | 0 | <1 | I E | L | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - "Shelling Beach" | 74 | 1/23/11 | 0 | 0.4 | II G | H G L | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - "Sugar Beach Caves" | 66 | 1/23/11 | 0 | 0.9 | I E | H | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - North Beach (Just before point at mid-beach) | 69 | 1/23/11 | 0 | 0.3 | I E | L | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - North Beach (Start at Purple/blue house w/ Pelican statues at edge of driveway) | 67 | 1/23/11 | 0 | 1.0 | I E | H D | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - North Beach (start at Yellow House - Northernmost house on beach) | 65 | 1/23/11 | 3 | 1.6 | I E | none | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - North Beach (Villa Allegria House) | 68 | 1/23/11 | 13 | 2.2 | I E | H D U | - | - | - | - | n.r. |
| Berry | Great Harbour Cay - South Beach (Main crescent-shaped beach) | 70 | 1/23/11 | 0 | 4.0 | I E | H D I U G | - | - | - | - | n.r. |
| Berry | Great Harbour Cay (SW Side) | 72 | 1/24/11 | 0 | 0.1 | I E | none | - | - | - | - | n.r. |
| Berry | Haines Cay - entire E side of beach | 75 | 1/25/11 | 1 | 3.5 | I E | I G | - | - | - | - | n.r. |

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|-----------|--|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|---|-------|
| Berry | Haines Cay - small beach on NW side (across flat from Shelling Beach) | 73 | 1/25/11 | 0 | 0.1 | I E | I L | - | - | - | - | n.r. |
| Berry | Haines Cay (SW End) | 76 | 1/24/11 | 3 | 0.0 | I E | G L | - | - | - | - | n.r. |
| Berry | Islet of N. Haines Cay & W. of Great Harbour Cay (across flat from Shelling Beach) | 71 | 1/25/11 | 0 | 0.4 | I E | I | - | - | - | - | n.r. |
| Berry | Little Cormorant Cay | 87 | 1/27/11 | 0 | 0.3 | I E | I G | - | - | - | - | n.r. |
| Berry | Little Stirrup Cay a.k.a. "Coco Cay" (S. end beaches) | 64 | 1/24/11 | 0 | 1.0 | I E | H S I | - | - | - | - | n.r. |
| Berry | Money Cay | 84 | 1/24/11 | 0 | 0.1 | I E | G | - | - | - | - | n.r. |
| Berry | S. side Sandy Cay (Sapphire Cay) | 85 | 1/27/11 | 0 | n.r. | I E | G | - | - | - | - | n.r. |
| Berry | Sand Islet btwn Chub Cay & Fish Cays | 90 | 1/27/11 | 5 | 0.0 | I E | G | - | - | - | - | n.r. |
| Berry | Spit off E. Caesar Cay | 78 | 1/24/11 | 0 | 0.2 | I E | I G | - | - | - | - | n.r. |
| Berry | Tidal Flat between Fanny & Caesar Cays (S of Berry Island) | 80 | 1/24/11 | 0 | 0.0 | I D | G L | - | - | - | - | n.r. |
| Berry | Tidal Sandbar near Caesar Cay | 79 | 1/24/11 | 0 | 0.0 | I D | G L | - | - | - | - | n.r. |
| Berry | Unnamed Sand Bar S. of Fish Cays | 89 | 1/27/11 | 2 | 0.1 | I D | G | - | - | - | - | n.r. |
| Berry | Unnamed Tiny Sand Bar btwn Fish Cays | 88 | 1/27/11 | 0 | 0.0 | I D | G | - | - | - | - | n.r. |
| Berry | Vigilant Cay (entire shoreline) | 93 | 1/27/11 | 5 | 1.2 | I E | G | - | - | - | - | n.r. |
| Berry | Water Cay (W End) | 77 | 1/24/11 | 0 | 0.0 | I E | L | - | - | - | - | n.r. |
| Bimini | East Wells | 95 | 2/5/11 | 0 | 35.4 | IV V G | I | - | - | - | - | f |
| Bimini | Ocean Cay | 96 | 2/4/11 | 0 | 6.4 | I G | G | - | - | - | - | f |
| Bimini | South Cat Cay | 94 | 2/4/11 | 0 | 62.8 | II E G | S | - | - | - | - | f, p |
| Crooked | Beach E of Brown's Settlement | 186 | 2/4/11 | 0 | 0.8 | I A | P G | - | - | - | - | n.r. |
| Crooked | Beach N of Majors, E of Bullet Hill Settlement | 185 | 2/4/11 | 0 | 2.0 | I II A | G | - | - | - | - | n.r. |
| Crooked | Beach NW of Seaview Settlement | 183 | 2/5/11 | 0 | 2.0 | I A | D I G | - | - | - | - | n.r. |
| Crooked | Long Cay | 184 | 2/5/11 | 0 | 14.0 | I IV A | H I A L | - | - | - | - | n.r. |
| Eleuthera | Airport Beach / Govenors Harbor | 108 | 1/27/11 | 0 | 3.2 | I A | H D | - | - | - | - | n.r. |
| Eleuthera | Atlantic Beach N of Grinder's Pt. | 116 | 1/27/11 | 0 | 0.4 | I E | none | - | - | - | - | n.r. |
| Eleuthera | Bottom Harbour | 103 | 1/26/11 | 0 | 1.6 | II E G | I L | - | - | - | - | n.r. |
| Eleuthera | Club Med / French Leave Beach | 112 | 1/27/11 | 3 | 1.6 | I A | H D | - | - | - | - | n.r. |
| Eleuthera | Cocodimama Beach | 109 | 1/31/11 | 0 | 0.8 | II G | D I G L | - | - | - | - | n.r. |
| Eleuthera | Gaulding Cay Beach | 104 | 1/25/11 | 0 | 0.8 | V E | G L | - | - | - | - | n.r. |
| Eleuthera | Governor's Harbour | 111 | 1/27/11 | 0 | 1.6 | V G | H D V S | - | - | - | - | n.r. |
| Eleuthera | Hut Point Beach | 110 | 1/27/11 | 0 | 0.8 | I A | H D | - | - | - | - | n.r. |

**The 2011 International Wilson's Plover Winter Census in The Bahamas
(Continued)**

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|--------------|---|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|------------------------|-------|
| | | | | | | | | | | | | |
| Eleuthera | James Cistern Wharf off Queen's Highway | 106 | 1/27/11 | 0 | 0.2 | II A | H D V F S | - | - | - | - | n.r. |
| Eleuthera | Man Island Spit and Picnic Beach | 100 | 1/29/11 | 0 | 0.2 | II IV G | G | - | - | - | - | n.r. |
| Eleuthera | Preacher's Cave Beach | 99 | 1/25/11 | 0 | 0.8 | IG | n.r. | - | - | - | - | n.r. |
| Eleuthera | Rock Sound | 119 | 1/31/11 | 0 | n.r. | II G | n.r. | - | - | - | - | n.r. |
| Eleuthera | Savannah Sound (W. Shore) | 114 | 1/28/11 | 0 | 1.6 | II G | H F G L | - | - | - | - | n.r. |
| Eleuthera | Shore N of Barge Landing, N of Water Taxi Port (Three Islands) | 101 | 1/30/11 | 0 | 3.2 | II E | H F G | - | - | - | - | n.r. |
| Eleuthera | Spanish Wells | 98 | 1/30/11 | 0 | 3.2 | I IV D G | H D V F S G L | - | - | - | 06 | n.r. |
| Eleuthera | Surfer's Beach, Gregory Town | 105 | 1/25/11 | 0 | 0.8 | I E | H | - | - | - | - | n.r. |
| Eleuthera | Tarpum Bay | 117 | 1/27/11 | 2 | 0.8 | V G | H D V S | - | - | - | - | n.r. |
| Eleuthera | Ten Bay Beach | 113 | 1/31/11 | 0 | 1.6 | II G | H D G L | - | - | - | - | n.r. |
| Eleuthera | Upper Cove Beach (E of Current) | 97 | 1/25/11 | 0 | 0.4 | II V G | D G L | - | - | - | - | n.r. |
| Eleuthera | Windermere Island | 115 | 1/28/11 | 0 | 8.0 | I II E | H D G L | - | - | - | - | p |
| Eleuthera | Winding Bay | 118 | 1/31/11 | 0 | 3.2 | II G | H D I U G L | - | - | - | <u>06</u> ³ | n.r. |
| Eleuthera | Wreck Beach/James Cistern | 107 | 1/26/11 | 0 | 1.6 | I E | n.r. | - | - | - | - | n.r. |
| Exuma | Beaches E of Sea View Drive to Sunset Bluff | 159 | 1/29/11 | 0 | 10.0 | II A | H D F L | - | - | - | - | f, p |
| Exuma | Bell Island (all major beaches) | 155 | 1/24/11 | 1 | 1.8 | II E | L | - | - | - | - | p |
| Exuma | East of 3 Sisters Rocks | 158 | 1/28/11 | 0 | 0.2 | I A | H D | - | - | - | - | p |
| Exuma | Exuma Point | 156 | 1/28/11 | 0 | 0.5 | II A | H D I G L | - | - | - | 06 | f |
| Exuma | Hawksbill Cay & Shroud Cay | 153 | 1/29/11 | 0 | 9.0 | I II IV A | n.r. | - | - | - | <u>06</u> ⁴ | f |
| Exuma | Leaf Cay/White Cay | 164 | 1/28/11 | 4 | 2.9 | I E | H G L | - | - | - | 06 | f |
| Exuma | Little Exuma Beaches & Access Points | 162 | 1/27/11 | 0 | 2.0 | I A | H D I U | - | - | - | - | p |
| Exuma | Manowar Cay | 160 | 1/27/11 | 4 | 4.0 | II E | H D V F I | - | - | - | - | p |
| Exuma | Moriah Harbour Cay, Great Exuma | 161 | 1/28/11 | 5 | 1.0 | II E | H D G | - | - | - | 06 | f, p |
| Exuma | Sea Way Drive, Great Exuma | 157 | 1/29/11 | 6 | 2.8 | II A | H D I G L | - | - | - | <u>06</u> ⁵ | p |
| Exuma | Warderick Wells Cay (Career, Powerful, Causeway and Boo Boo Beaches) | 154 | 1/29/11 | 0 | 0.5 | II A | H G L | - | - | - | 06 | f |
| Exuma | Wolf Dames Back Landing, Little Exuma | 163 | 1/29/11 | 8 | 1.6 | I A | D L | - | - | - | <u>06</u> | p |
| Grand Bahama | 8 Mile Rock (including Lover's Beach) | 11 | 1/27/11 | 0 | 5.4 | I A | H S | - | - | - | - | f |
| Grand Bahama | Bahama Beach/Bahama Bay (aka "Seward of Grand Bahama") | 8 | 1/26/11 | 7 | 1.8 | I A | S I G L | - | - | - | - | f |
| Grand Bahama | Barbary Beach (Discovery Bay Canal to White Beach) | 19 | 1/25/11 | 1 | 12.5 | I A | H D V S I L | - | - | - | <u>06</u> | f, p |

The 2011 International Wilson's Plover Winter Census in The Bahamas (Continued)

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|------------------------|-------|
| Grand Bahama | Bootle Bay (Blue Marlin Cove) S and E of inlet to Bahama Beach inlet | 7 | 1/26/11 | 12 | 6.5 | I A | S I | - | - | - | - | f |
| Grand Bahama | Discovery Beach (Freeport Bay Canal to Discovery Bay Canal) | 18 | 1/24/11 | 6 | 5.7 | I A | H D V S I U G | - | - | - | <u>06</u> | f |
| Grand Bahama | East End Cays (inclgd Sweeting's, Lightbourne, Redshank, Cross, and unnamed Cays/flats) | 6 | 1/30/11 | 6 | 60.0 | I II IV V A E F | F I G | - | - | - | - | f |
| Grand Bahama | Gold Rock Creek to High Rock | 21 | 1/28/11 | 9 | 5.4 | I A | H D S I G | - | - | - | - | f |
| Grand Bahama | Great Sale Cay | 2 | 2/6/11 | 6 | 7.5 | I E F | H D P I G | - | - | - | - | f |
| Grand Bahama | High Rock (Rocky Cliff to Oil Transfer Facility) | 22 | 1/28/11 | 0 | 4.5 | I A | H D V S I G | - | - | - | <u>06</u> | f, p |
| Grand Bahama | Holmes Rock (E to 8 Mile Rock) | 10 | 1/27/11 | 1 | 3.4 | I A | H I L | - | - | - | - | f |
| Grand Bahama | Island Seas - Silver Point Beach into Jetty | 15 | 1/27/11 | 1 | 3.2 | I A | H D S I G | - | - | - | 06 | f, p |
| Grand Bahama | Lucaya Beach | 16 | 1/30/11 | 0 | 2.4 | I A | n.r. | - | - | - | - | n.r. |
| Grand Bahama | Mangrove Cay | 1 | 2/6/11 | 0 | 1.5 | I E | G | - | - | - | - | f |
| Grand Bahama | McLean's Town Cemetery | 27 | 1/29/11 | 0 | 0.7 | I II A | H D I G | - | - | - | - | f |
| Grand Bahama | Old Bahama Bay - Ginn Sur Mer (Canal E to Bootle Bay/Blue Marlin Cove) | 5 | 1/26/11 | 13 | 4.4 | I A | D S I G L | - | - | - | - | f, p |
| Grand Bahama | Old Bahama Bay - Ginn Sur Mer (NW end, S to canal) | 4 | 1/26/11 | 8 | 2.0 | I A | D S P I U | - | - | - | - | f, p |
| Grand Bahama | Pelican Point - E of Rocky Point | 25 | 1/29/11 | 5 | 5.7 | I A | H D I U G | - | - | - | - | f |
| Grand Bahama | Pelican Point - Rocky Point Flats | 24 | 1/29/11 | 1 | 3.2 | I A | H D I G | - | - | - | <u>06</u> ⁵ | f |
| Grand Bahama | Pinder's Point to Hunter's | 12 | 1/27/11 | 1 | 4.7 | I A | H D S P I G | - | - | - | - | f |
| Grand Bahama | Rocky Creek and areas W of McLean's Town | 26 | 1/30/11 | 0 | 11.6 | I V A | F I G L | - | - | - | - | f |
| Grand Bahama | Running Mon | 14 | 1/27/11 | 0 | 1.1 | I A | H S G | - | - | - | - | f |
| Grand Bahama | Seaward at Bahama Bay to Holmes Rock | 9 | 1/27/11 | 0 | 5.8 | I A | H D S I U G L | - | - | - | - | f |
| Grand Bahama | Taino Beach | 17 | 2/3/11 | 0 | 1.6 | I A | n.r. | - | - | - | - | n.r. |
| Grand Bahama | West End, Old Bahama Bay (Small beach on NW side) | 3 | 1/26/11 | 0 | 0.8 | I A | H V S I U G | - | - | - | - | p |
| Grand Bahama | West of Pelican Point Flats to Oil Terminal | 23 | 1/28/11 | 5 | 7.0 | I A | H D S I G | - | - | - | <u>06</u> | f |
| Grand Bahama | White (aka "Nudie") Beach to Gold Rocks Inlet (W side) | 20 | 1/28/11 | 4 | 7.8 | I A | H S I G | - | - | - | <u>06</u> | f |
| Grand Bahama | Xanadu Beach and Bahama Princess Beach | 13 | 1/27/11 | 0 | 4.5 | I A | H S I U G | - | - | - | - | f |
| Great Inagua | Blackwood Beach (SW side of Island) | 202 | 1/30/11 | 0 | 2.5 | I A | none | - | - | - | - | n.r. |
| Great Inagua | Bluff Beach, East of Conch Shell Pt. (S. side of island to limestone outcrop on beach) | 203 | 1/30/11 | 0 | 1.2 | I A | H D L | - | - | - | - | n.r. |
| Great Inagua | Craig's Bight East | 201 | 1/29/11 | 0 | 3.6 | I E | G L | - | - | - | 06 | n.r. |

**The 2011 International Wilson's Plover Winter Census in The Bahamas
(Continued)**

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|----------------|--|------|---------|-----------------|------|---------------------|---------------------------|---|---|---|------------------------|---------|
| | | | | | | | | | | | | |
| Great Inagua | Craig's Bight West to Crossing | 200 | 1/29/11 | 2 | 2.5 | I E | D P G | - | - | - | <u>06</u> ⁶ | n.r. |
| Great Inagua | Man of War Bay | 196 | 1/29/11 | 0 | 1.0 | I A | none | - | - | - | 06 | n.r. |
| Great Inagua | Maroon Hill Pond | 198 | 1/31/11 | 0 | 1.2 | V A | S G | - | - | - | - | p |
| Great Inagua | Red Pond West | 194 | 1/29/11 | 0 | 0.5 | I I V E | G L | - | - | - | 06 | n.r. |
| Great Inagua | The Tunnel Beach | 197 | 1/29/11 | 0 | 0.8 | I I V E | none | - | - | - | 06 | n.r. |
| Great Inagua | Vandaxville Beach to Lighthouse | 199 | 1/28/11 | 1 | 4.5 | I E | H D V P U | - | - | - | 06 | n.r. |
| Great Inagua | Well Road Beach | 195 | 1/29/11 | 0 | 1.2 | I E | none | - | - | - | 06 | n.r. |
| Harbour | Pink Sand Beach (E) and Harbor Side (W) | 102 | 1/29/11 | 0 | 4.0 | I I I G | H D S G L | - | - | - | - | n.r. |
| Long Island | Atlantic Coast from Pinders to Salt Pond | 175 | 1/31/11 | 1 | 6.5 | I E | H I | - | - | - | <u>06</u> ⁷ | n.r. |
| Long Island | Cape Santa Maria Dev., Hoosie Harbor | 172 | 1/28/11 | 0 | 0.5 | I I E | H S G | - | - | - | <u>06</u> | n.r. |
| Long Island | Conch Cay (off Long Island) | 178 | 1/30/11 | 0 | 1.8 | I D E | G L | - | - | - | 06 | n.r. |
| Long Island | Cove near C.C. Monument, Newton Cay | 171 | 1/28/11 | 5 | 0.7 | I I E | H G | - | - | - | <u>06</u> | n.r. |
| Long Island | Diamond Salt Works | 181 | 1/29/11 | 0 | 0.2 | V G | S G | - | - | - | - | n.r. |
| Long Island | Dollar Cay Tidal Flats | 179 | 1/30/11 | 0 | 0.9 | I D | G | - | - | - | 06 | n.r. |
| Long Island | Duncansons Point | 177 | 1/30/11 | 0 | 2.0 | I E | H V G | - | - | - | 06 | n.r. |
| Long Island | Gordon's | 182 | 1/29/11 | 0 | 1.9 | I E | I | - | - | - | 06 | n.r. |
| Long Island | Joe Sound Harbor | 174 | 1/28/11 | 0 | 0.2 | I I E | G L | - | - | - | <u>06</u> | n.r. |
| Long Island | Newton Cay, W Side | 173 | 1/28/11 | 0 | 0.6 | I I E | None | - | - | - | 06 | n.r. |
| Long Island | Red Pond | 176 | 1/31/11 | 0 | 1.1 | V G | H G | - | - | - | 06 | n.r. |
| Long Island | Sandy Cay North & Tidal Flats | 180 | 1/30/11 | 0 | 0.9 | I D E | G | - | - | - | 06 | n.r. |
| New Providence | South Beach | 120 | 2/5/11 | 0 | 3.2 | I I A | H I L | - | - | - | 06 | n.r. |
| North Andros | Bigwood Cay | 134 | 1/28/11 | 13 | 14.0 | I I I E | H F I G L | - | - | - | - | n.r. |
| North Andros | Joulter's Cays (North) | 121 | 1/29/11 | 33 | 5.6 | I E F G | G L | - | - | - | - | f |
| North Andros | Joulter's Cays (South) | 122 | 1/29/11 | 21 | n.r. | I E | H F I G L | - | - | - | <u>06</u> | f |
| North Andros | Kamalame Cay - Blanket Sound | 127 | 2/1/11 | 6 | 3.7 | I I I B | H D G L | - | - | - | 06 | f |
| North Andros | Lowe's Sound Mangrove Flats | 123 | 1/31/11 | 40 | 10.9 | I A E G | H D F S I G L | - | - | - | 06 | f, m, p |
| North Andros | Mastic Bay and Rat Cay | 125 | 1/31/11 | 1 | 7.5 | I I I D E | I G L | - | - | - | - | f |
| North Andros | N ForFar to Saddleback Cay | 126 | 1/27/11 | 0 | 4.2 | I A E | I G | - | - | - | - | n.r. |
| North Andros | Plum Cay | 131 | 1/30/11 | 21 | 2.4 | I I I E | G L | - | - | - | - | f |
| North Andros | Red Bays | 124 | 1/31/11 | 13 | 11.6 | I I I A | G L | - | - | - | - | n.r. |
| North Andros | Small Hope Bay | 130 | 1/30/11 | 2 | 0.6 | I A | H D S I G L | - | - | - | - | n.r. |
| North Andros | South of Cargill Creek | 133 | 1/28/11 | 4 | 0.3 | I A | H D F G L | - | - | - | - | f |

**The 2011 International Wilson's Plover Winter Census in The Bahamas
(Continued)**

| COUNTY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|---------------|---|------|---------|-----------------|--------------|---------------------|---------------------------|---|---|---|----|-------|
| | | | | | | | | | | | | |
| North Andros | Southwest of Mastic Cay | 132 | 1/30/11 | 26 | 3.0 | I I I D E | G L | - | - | - | - | n.r. |
| North Andros | Staniard Creek | 129 | 1/27/11 | 0 | 4.1 | I A | H D I U G | - | - | - | 06 | f |
| North Andros | Staniard Creek Flats | 128 | 1/30/11 | 0 | 0.3 | I I A | D G | - | - | - | - | n.r. |
| San Salvadore | Bonefish Bay (Club Med Beach) | 166 | 2/1/11 | 0 | 1.6 | I A | H D V S U | - | - | - | - | n.r. |
| San Salvadore | Dim Bay and Greens Bay to Crab Cay | 168 | 1/31/11 | 1 | 2.7 | I A | G | - | - | - | - | n.r. |
| San Salvadore | East Beach | 167 | 2/2/11 | 3 | 3.5 | I A | D G | - | - | - | - | n.r. |
| San Salvadore | Holiday Track Settlement (The Thumb) | 169 | 2/1/11 | 2 | 3.0 | I A | G L | - | - | - | - | n.r. |
| San Salvadore | Rice Bay | 165 | 2/2/11 | 0 | 0.5 | I A | H V U L | - | - | - | - | n.r. |
| San Salvadore | Sandy Point | 170 | 2/1/11 | 0 | 0.1 | I A | H | - | - | - | - | n.r. |
| South Andros | Congo Town | 137 | 2/3/11 | 2 | 0.1 | I E | I U G | - | - | - | 06 | n.r. |
| South Andros | Deep Creek to Little Creek | 144 | 2/3/11 | 0 | 2.8 | I E | G L | - | - | - | - | n.r. |
| South Andros | Driggs Hill (at cemetery) | 135 | 2/3/11 | 0 | 0.1 | I E | I L | - | - | - | - | n.r. |
| South Andros | Driggs Hill (Lighthouse Pt to Long Bay Settlement) | 136 | 2/3/11 | 2 | 0.1 | I E | H | - | - | - | - | n.r. |
| South Andros | Kemps Bay | 142 | 2/3/11 | 0 | 4.6 | I E | D V S I U | - | - | - | 06 | n.r. |
| South Andros | Kemp's Bay Complex to Smith's Hill Settlement | 140 | 2/1/11 | 0 | 3.7 | I E | G | - | - | - | - | n.r. |
| South Andros | Mars Bay Settlement (North of Wharf) | 147 | 2/1/11 | 0 | 0.4 | I I E | H F I U G L | - | - | - | 06 | n.r. |
| South Andros | North of Hawks Nest (Hawksbill Creek) | 149 | 2/2/11 | 0 | 0.6 | I E | I L | - | - | - | - | n.r. |
| South Andros | Northern Deep Creek Settlement at Cemetery | 143 | 2/3/11 | 0 | 0.1 | I E | G L | - | - | - | - | n.r. |
| South Andros | Old Pier S of Congo Town to the Bluff Settlement (Mt. Sinai Baptist Church) | 138 | 2/3/11 | 0 | 2.7 | I E | H D U G | - | - | - | - | n.r. |
| South Andros | Sand Bar (2 miles NE of Top Cay) | 151 | 2/2/11 | 0 | 0.6 | I D | G L | - | - | - | - | n.r. |
| South Andros | Sand Bar ~3km E of Little Creek | 146 | 2/4/11 | 6 | 0.4 | I D | G | - | - | - | - | n.r. |
| South Andros | South of Hawks Nest to Snap Pt. | 150 | 2/2/11 | 5 | 2.6 | I E | none | - | - | - | - | n.r. |
| South Andros | South of Mars Bay: Flats at S end of white gravel road | 148 | 2/2/11 | 0 | 3.0 | I E | H F G L | - | - | - | 06 | n.r. |
| South Andros | South Smith's Hill Settlement to North Kemp's Bay Settlement | 141 | 2/1/11 | 0 | 1.0 | I E | D G | - | - | - | - | n.r. |
| South Andros | The Bluff Settlement | 139 | 2/1/11 | 4 | 1.3 | I E | I G | - | - | - | - | n.r. |
| South Andros | Tidal Flat Slightly N of Pleasant Bay | 145 | 2/3/11 | 0 | 0.5 | I E | G L | - | - | - | - | n.r. |
| South Andros | Water Cays ⁸ | 152 | 2/6/11 | 0 | 0.4 | I I D | H F G L | - | - | - | - | n.r. |
| Total | | | | 446 | 678.4 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Wilson's Plovers were seen at the site during that Census year.

² Exact locations of WIPLs were not specified in 2006 and may have occurred along any point ~1.2 km north of the 2011 Green Turtle Cay census route (2006 route covered more area).

³ Exact locations of WIPLs were not specified in 2006 and may have occurred along any point ~3 km north of the 2011 Winding Bay census route (2006 route covered more area).

⁴ Hawksbill Cay was surveyed in 2006, but the exact route covered was not specified nor were the exact locations of the WIPLs.

⁵ The 2006 Sea Way Drive route was much smaller than the 2011 route. The 2011 route fully encompassed the 2006 route. Exact locations of WIPLs seen in 2011 were not specified and may have occurred outside the range of the 2006 survey route, but WIPLs seen in 2006 were definitely within the 2011 route.

⁶ Exact location of the WIPL in 2011 was not specified, but the WIPL seen in 2006 occurred within the range of the 2011 census route, even though it was spotted under the site name "Vandaxville Beach".

⁷ Exact location of the WIPL in 2011 was not specified, but the WIPL seen in 2006 occurred within the range of the 2011 census route.

⁸ Please note that this survey was conducted outside the Census window.

The 2011 International Piping Plover Winter Census in the Cuba

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The 2011 International Winter Census in Cuba was conducted from January 25 to February 8. A total of 45.4 km of beach and lagoon habitat was covered at ten sites in seven provinces of the country.

Given limited resources, surveys were less extensive than in prior census years, and we surveyed fewer sites and less shoreline in 2011 relative to other recent Census years (ten sites and 45.4 km in 2011 compared to 22 and 123.6 km in 2006). However, we were able to survey some important Piping Plover winter sites in Cuba, located in Peninsula de Hicacos in Matanzas province and Coco-Paredón keys in the Sabana-Camaguey Archipelago where 15 individuals of this species were counted.

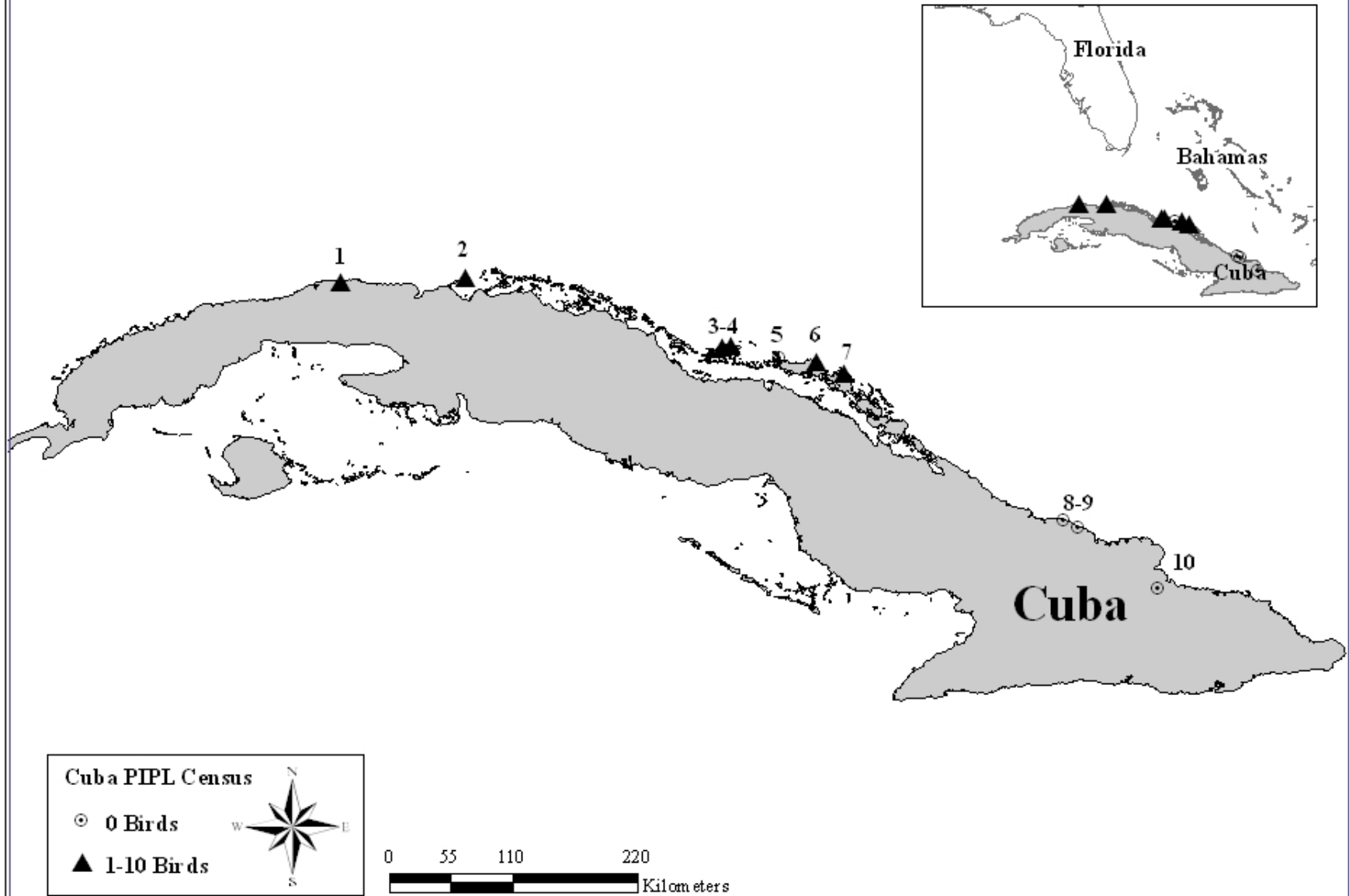
In 2011, a total of 19 Piping Plover were counted in Cuba, down from the 89 birds observed in 2006, 55 in 2001, and 64 in 1996. As mentioned above, the decline in numbers of birds seen is likely due to reduced habitat coverage during the 2011 Census and does not likely reflect a decline in Piping Plovers wintering in Cuba. There has however been a shift in habitat use, with Piping Plovers dispersing from the larger keys which are more developed and experience higher levels of tourism, to smaller less developed keys nearby. Habitat changes associated with continued tourism development and climate change may further affect Piping Plover distribution and threaten their future use of Cuba as a winter area.

Although Piping Plover numbers were low relative to other Census years, Snowy and Wilson's Plovers were higher than any prior Census year. Prior studies suggested that the coastal sector of northeast Cuba between the Ciego de Avila and Holguin provinces are the most important region for these species. Hence we surveyed three new sites, two in Holguin province and one in Las Tunas. In total during the 2011 Census we saw 54 Snowy Plovers and 159 Wilson's Plovers.

Comparison of Census Numbers

| Species | 1991 | 1996 | 2001 | 2006 | 2011 |
|-----------------|------|------|------|------|------|
| Piping Plover | 11 | 64 | 55 | 89 | 19 |
| Snowy Plover | n.r. | n.r. | 16 | 0 | 54 |
| Wilson's Plover | n.r. | n.r. | n.r. | 57 | 159 |

2011 International Piping Plover Winter Census - Cuba -

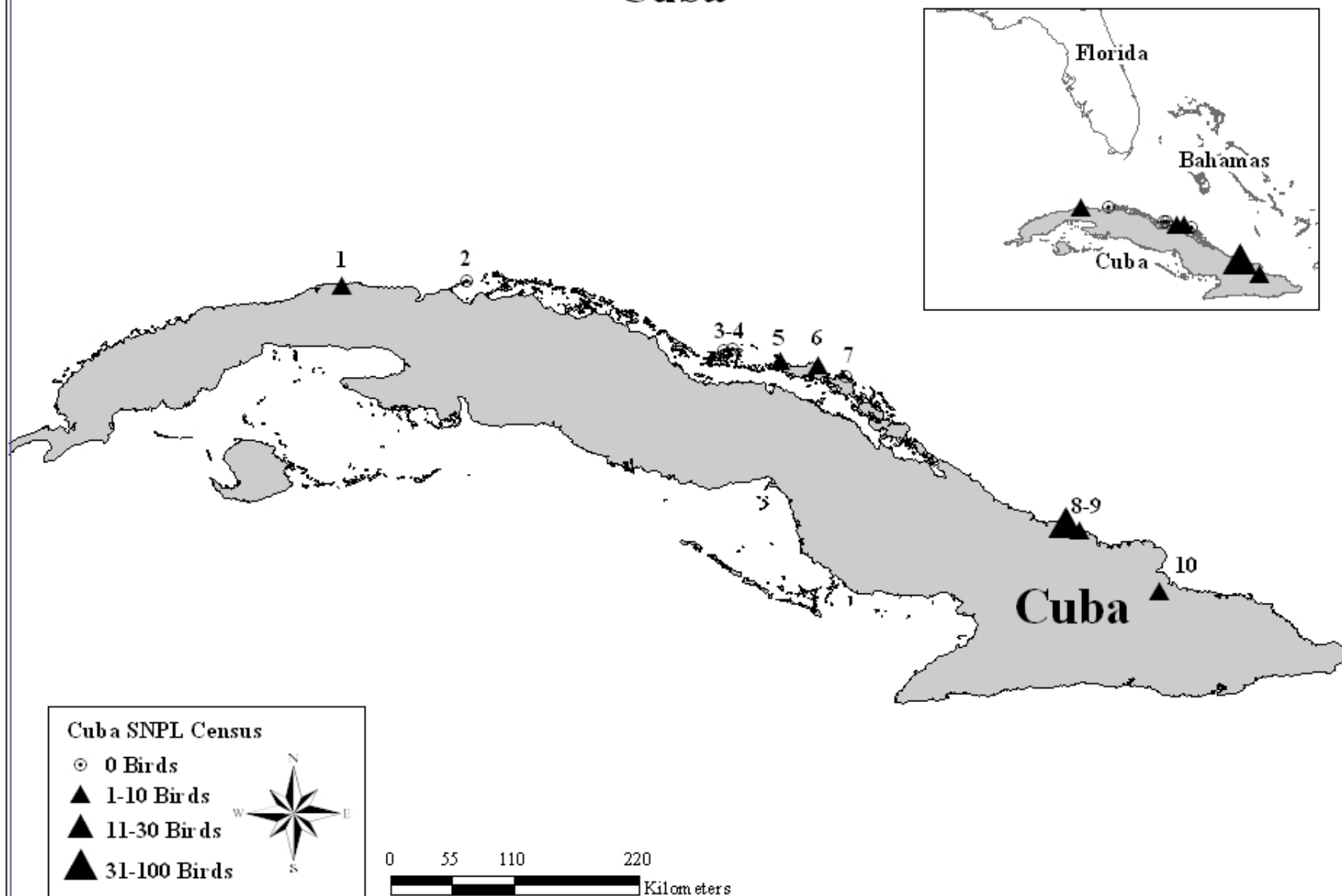


The 2011 International Piping Plover Winter Census in Cuba

| PROVINCE | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|---------------------|---------------------------------------|------|---------|-----------------|-------------|---------------------|-------------------------|---|-----------|-----------|-----------|-------|
| | | | | | | | | | | | | |
| Camagüey | Playa Los Piños/Cayo Paredón Grande | 7 | 1/30/11 | 5 | 4.0 | IV A | H D V F U G L | <u>91</u> | <u>96</u> | <u>01</u> | 06 | s(p) |
| Ciego de Ávila | Playa Las Coloradas/Cayo Coco | 6 | 1/30/11 | 6 | 3.0 | IV A | H D V F U G L | - | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Ciego de Ávila | Playa Pilar/Cayo Guillermo | 5 | 2/5/11 | 0 | 1.9 | IV A | H V U G | - | - | 01 | <u>06</u> | s(p) |
| Ciudad de Habana | Habana del Este (Playa Guanabo) | 1 | 1/25/11 | 1 | 10.0 | I A | H V F U G L | - | 96 | 01 | 06 | s(p) |
| Holguín | Lagunas Costeras del Delta del Mayari | 10 | 1/24/11 | 0 | 3.0 | II A | H V F G L | - | - | - | - | s(p) |
| Holguín | Lagunas de Juan Antonio | 9 | 1/24/11 | 0 | 3.2 | II A | H V F G L | - | - | - | - | s(p) |
| Las Tunas | Playas Las Azules | 8 | 1/24/11 | 0 | 3.0 | I A | H V F G L | - | - | - | - | s(p) |
| Matanzas | Península de Hicacos | 2 | 2/2/11 | 4 | 4.0 | I A | H V B U G L | - | 96 | <u>01</u> | 06 | s(p) |
| Villa Clara | Playa Ensenachos #1/Cayo Ensenachos | 3 | 1/28/11 | 1 | 2.3 | I A | H V U G L | - | - | 01 | 06 | s(p) |
| Villa Clara | Playa Estrella/Cayo Santa Maria | 4 | 1/29/11 | 2 | 11.0 | IV A | H V U G L | - | <u>96</u> | <u>01</u> | 06 | s(p) |
| Total | | | | 19 | 45.4 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Piping Plovers were seen at the site during that Census year.

2011 International Snowy Plover Winter Census - Cuba -

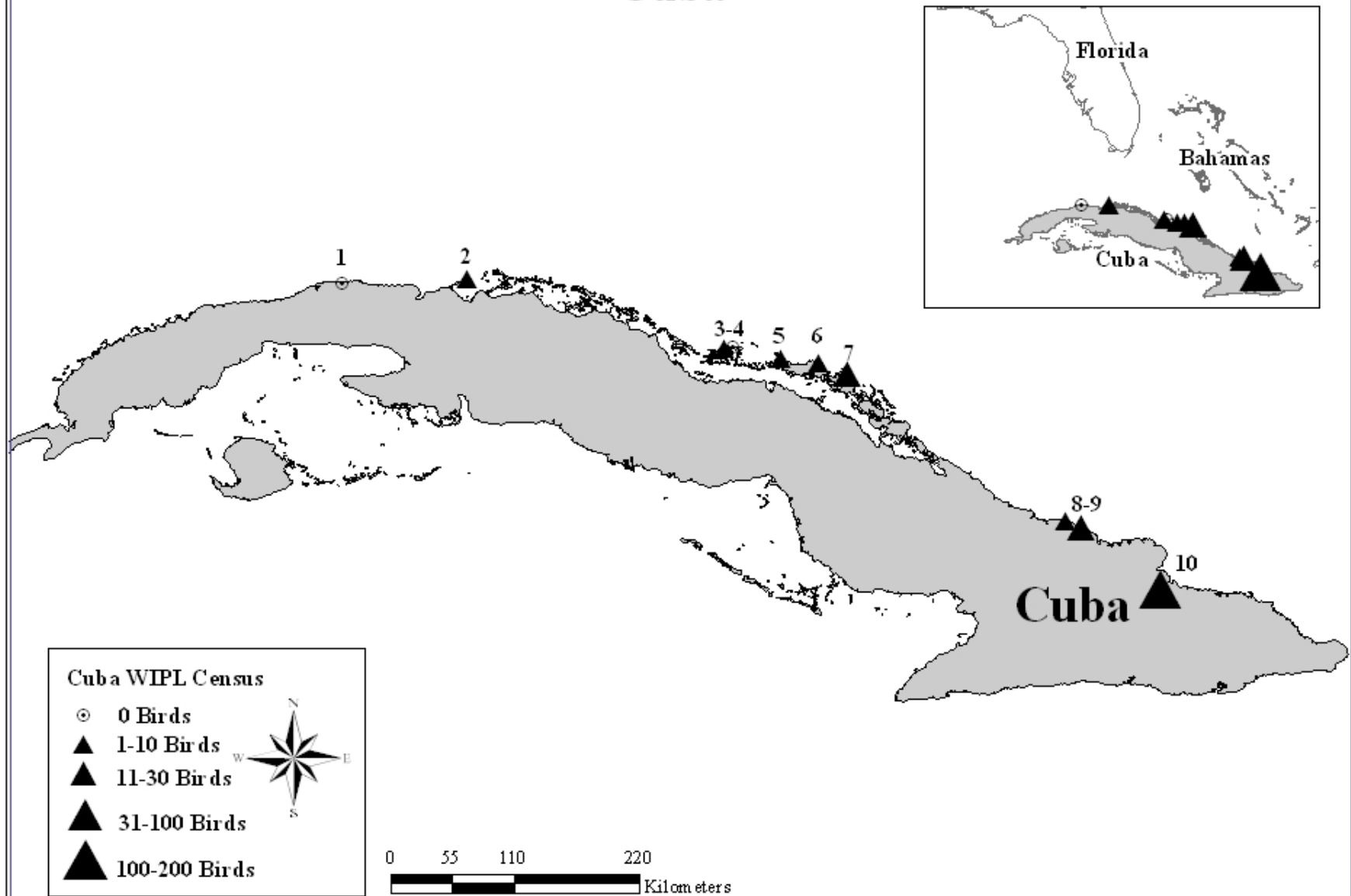


The 2011 International Snowy Plover Winter Census in Cuba

| PROVINCE | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|---------------------|---------------------------------------|------|---------|-----------------|-------------|---------------------|-------------------------|---|---|------------------|----|-------|
| | | | | | | | | | | | | |
| Camagüey | Playa Los Piños/Cayo Paredón Grande | 7 | 1/30/11 | 0 | 4.0 | IV A | H D V F U G L | - | - | 01 | 06 | s(p) |
| Ciego de Ávila | Playa Las Coloradas/Cayo Coco | 6 | 1/30/11 | 1 | 3.0 | IV A | H D V F U G L | - | - | 01 | 06 | s(p) |
| Ciego de Ávila | Playa Pilar/Cayo Guillermo | 5 | 2/5/11 | 1 | 1.9 | IV A | H V U G | - | - | 01 | 06 | s(p) |
| Ciudad de Habana | Habana del Este (Playa Guanabo) | 1 | 1/25/11 | 1 | 10.0 | I A | H V F U G L | - | - | 01 | 06 | s(p) |
| Holguín | Lagunas Costeras del Delta del Mayari | 10 | 1/24/11 | 7 | 3.0 | II A | H V F G L | - | - | - | - | s(p) |
| Holguín | Lagunas de Juan Antonio | 9 | 1/24/11 | 10 | 3.2 | II A | H V F G L | - | - | - | - | s(p) |
| Las Tunas | Playas Las Azules | 8 | 1/24/11 | 34 | 3.0 | I A | H V F G L | - | - | - | - | s(p) |
| Matanzas | Península de Hicacos | 2 | 2/2/11 | 0 | 4.0 | I A | H V B U G L | - | - | <u>01</u> | 06 | s(p) |
| Villa Clara | Playa Ensenachos #1/Cayo Ensenachos | 3 | 1/28/11 | 0 | 2.3 | I A | H V U G L | - | - | 01 | 06 | s(p) |
| Villa Clara | Playa Estrella/Cayo Santa Maria | 4 | 1/29/11 | 0 | 11.0 | IV A | H V U G L | - | - | 01 | 06 | s(p) |
| Total | | | | 54 | 45.4 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Snowy Plovers were seen at the site during that Census year.

2011 International Wilson's Plover Winter Census - Cuba -



The 2011 International Wilson's Plover Winter Census in Cuba

| PROVINCE | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|---------------------|---------------------------------------|------|---------|-----------------|-------------|---------------------|-------------------------|---|---|---|------------------|-------|
| | | | | | | | | | | | | |
| Camagüey | Playa Los Piños/Cayo Paredón Grande | 7 | 1/30/11 | 12 | 4.0 | IV A | H D V F U G L | - | - | - | 06 | s(p) |
| Ciego de Ávila | Playa Las Coloradas/Cayo Coco | 6 | 1/30/11 | 1 | 3.0 | IV A | H D V F U G L | - | - | - | <u>06</u> | s(p) |
| Ciego de Ávila | Playa Pilar/Cayo Guillermo | 5 | 2/5/11 | 5 | 1.9 | IV A | H V U G | - | - | - | 06 | s(p) |
| Ciudad de Habana | Habana del Este (Playa Guanabo) | 1 | 1/25/11 | 0 | 10.0 | I A | H V F U G L | - | - | - | 06 | s(p) |
| Holguín | Lagunas Costeras del Delta del Mayari | 10 | 1/24/11 | 110 | 3.0 | II A | H V F G L | - | - | - | - | s(p) |
| Holguín | Lagunas de Juan Antonio | 9 | 1/24/11 | 23 | 3.2 | II A | H V F G L | - | - | - | - | s(p) |
| Las Tunas | Playas Las Azules | 8 | 1/24/11 | 3 | 3.0 | I A | H V F G L | - | - | - | - | s(p) |
| Matanzas | Península de Hicacos | 2 | 2/2/11 | 2 | 4.0 | I A | H V B U G L | - | - | - | 06 | s(p) |
| Villa Clara | Playa Ensenachos #1/Cayo Ensenachos | 3 | 1/28/11 | 3 | 2.3 | I A | H V U G L | - | - | - | 06 | s(p) |
| Villa Clara | Playa Estrella/Cayo Santa Maria | 4 | 1/29/11 | 0 | 11.0 | IV A | H V U G L | - | - | - | 06 | s(p) |
| Total | | | | 159 | 45.4 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Wilson's Plovers were seen at the site during that Census year.

The 2011 International Piping Plover Winter Census in Puerto Rico

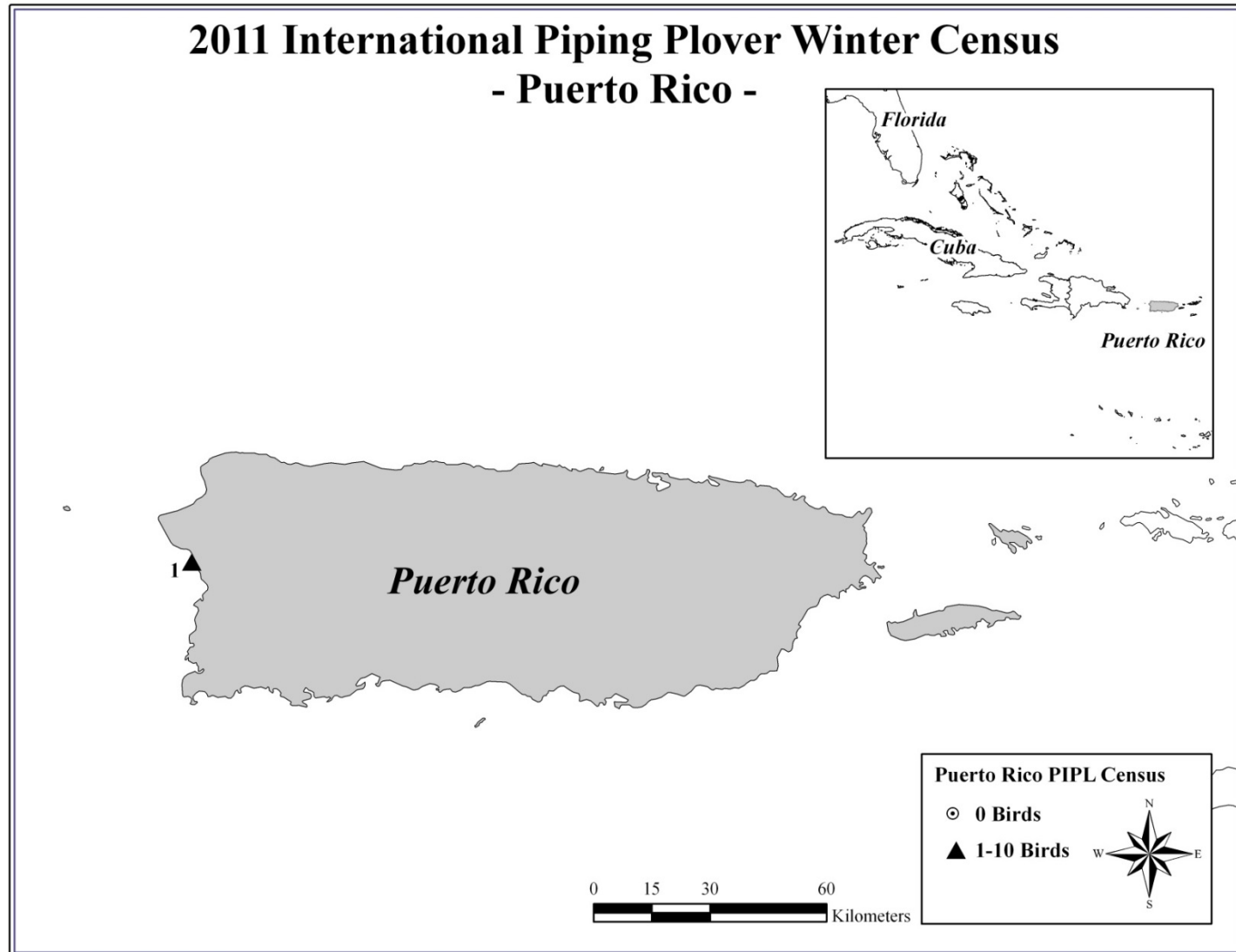
No coordinated survey effort was conducted on Puerto Rico in 2011. However, we did contact Alcides Morales Pérez, president of the Sociedad Ornitológica Puertorriqueña (SOPI). SOPI was unable to conduct any formal surveys and did not provide any sightings but we did retrieve plover sightings from SOPI on ebird (<http://ebird.org>).

Comparison of Census Numbers

| Species | 1991 | 1996 | 2001 | 2006 | 2011 |
|-----------------|------|------|------|------|------|
| Piping Plover | 0 | 0 | 6 | 2 | 2 |
| Snowy Plover | n.r. | n.r. | 17 | 1 | 3 |
| Wilson's Plover | n.r. | n.r. | n.r. | 63 | 16 |

Summarized by E. Elliott-Smith

2011 International Piping Plover Winter Census - Puerto Rico -



The 2011 International Piping Plover Winter Census in Puerto Rico

| MUNICIPALITY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|-----------------|-------------|---------------------|---------------------------|---|----|----|------------------|-------|
| | | | | | | | | | | | | |
| Anasco | Beach by mouth of Anasco River ² | 1 | 1/1/11 | 2 | 0.0 | n.r. | n.r. | - | - | - | 06 | unk |
| Cabo Rojo | Cabo Rojo NWR | | 2/1/11 | 0 | 4.8 | n.r. | n.r. | - | - | - | - | unk |
| Cabo Rojo | Cabo Rojo Salt Flats ² | | 2/20/11 | 0 | 3.2 | n.r. | n.r. | 91 | 96 | 01 | <u>06</u> | unk |
| Cabo Rojo | Charca de Combate ² | | 2/13/11 | 0 | 0.0 | n.r. | n.r. | - | - | - | - | unk |
| Guanica | La Parguera-Villa Parguera | | 1/31/11 | 0 | 4.8 | n.r. | n.r. | - | - | - | - | unk |
| Mayaguez | Combate-Moja Casabe | | 2/8/11 | 0 | 0.2 | n.r. | n.r. | - | - | - | - | unk |
| Total | | | | 2 | 13.0 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Piping Plovers were seen at the site during that Census year.

² Please note that this survey was conducted outside the Census window.

2011 International Snowy Plover Winter Census - Puerto Rico -



The 2011 International Snowy Plover Winter Census in Puerto Rico

| MUNICIPALITY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS SNPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|-----------------|-------------|---------------------|---------------------------|---|---|----|----|-------|
| | | | | | | | | - | - | - | - | |
| Anasco | Beach by mouth of Anasco River ² | | 1/1/11 | 0 | 0.0 | n.r. | n.r. | - | - | - | 06 | unk |
| Cabo Rojo | Cabo Rojo NWR | 1 | 2/1/11 | 2 | 4.8 | n.r. | n.r. | - | - | - | - | unk |
| Cabo Rojo | Cabo Rojo Salt Flats ² | | 2/20/11 | 0 | 3.2 | n.r. | n.r. | - | - | 01 | 06 | unk |
| Cabo Rojo | Charca de Combate ² | 2 | 2/13/11 | 1 | 0.0 | n.r. | n.r. | - | - | - | - | unk |
| Guanica | La Parguera-Villa Parguera | | 1/31/11 | 0 | 4.8 | n.r. | n.r. | - | - | - | - | unk |
| Mayaguez | Combate-Moja Casabe | | 2/8/11 | 0 | 0.2 | n.r. | n.r. | - | - | - | - | unk |
| Total | | | | 3 | 13.0 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Snowy Plovers were seen at the site during that Census year.

² Please note that this survey was conducted outside the Census window.

2011 International Wilson's Plover Winter Census - Puerto Rico -



The 2011 International Wilson's Plover Winter Census in Puerto Rico

| MUNICIPALITY | SITE NAME | MAP# | DATE | TOTAL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE / CONCERNS | PRIOR YEARS CENSUSED & YEARS WIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|-----------------|-------------|---------------------|---------------------------|---|---|---|-----------|-------|
| | | | | | | | | - | - | - | <u>06</u> | |
| Anasco | Beach by mouth of Anasco River ² | | 1/1/11 | 0 | 0.0 | n.r. | n.r. | - | - | - | <u>06</u> | unk |
| Cabo Rojo | Cabo Rojo NWR | 4 | 2/1/11 | 2 | 4.8 | n.r. | n.r. | - | - | - | - | unk |
| Cabo Rojo | Cabo Rojo Salt Flats ² | 2 | 2/20/11 | 9 | 3.2 | n.r. | n.r. | - | - | - | <u>06</u> | unk |
| Cabo Rojo | Charca de Combate ² | 1 | 2/13/11 | 3 | 0.0 | n.r. | n.r. | - | - | - | - | unk |
| Guanica | La Parguera-Villa Parguera | 5 | 1/31/11 | 1 | 4.8 | n.r. | n.r. | - | - | - | - | unk |
| Mayaguez | Combate-Moja Casabe | 3 | 2/8/11 | 1 | 0.2 | n.r. | n.r. | - | - | - | - | unk |
| Total | | | | 16 | 13.0 | | | | | | | |

¹ If previously surveyed, years surveyed are noted. Bold underlined years indicate that Wilson's Plovers were seen at the site during that Census year.

² Please note that this survey was conducted outside the Census window.

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The 2011 International Piping Plover Breeding Census in St. Pierre and Miquelon, France

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Miquelon
Îles Saint-Pierre et Miquelon, France
retchebe@cheznoo.net

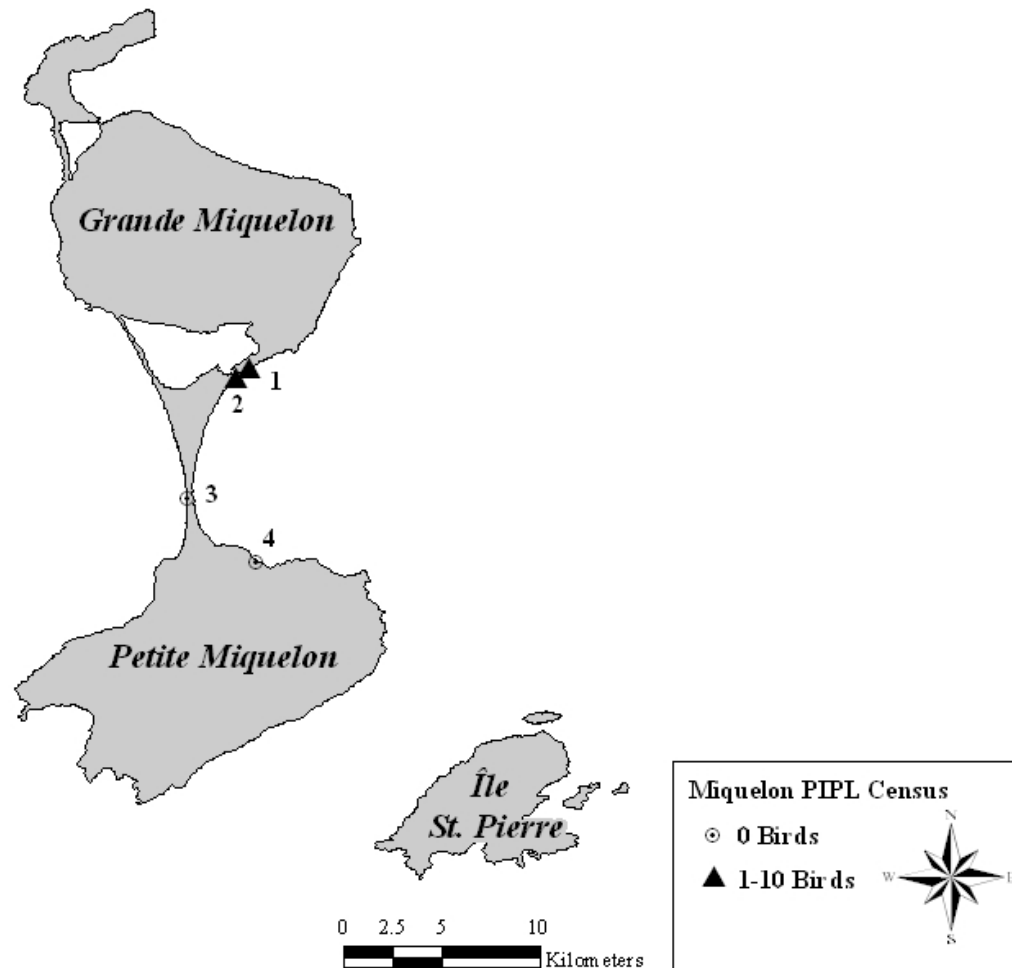
The International Census on Saint-Pierre and Miquelon resulted in the detection of four Piping Plovers, including one nesting pair. Three of four sites on the islands of Saint-Pierre and Miquelon were censused on June 13, 2011, by Lison Yon, Idir Alliche, Danielle Lebollocq and Roger Etcheberry. Two birds were seen on Gully of Grand Barachois, but pair status could not be determined. A fourth site was censused on June 11, 2011, by Laurent Jackman and Joël Detcheberry, and a breeding pair was reported. A four-egg nest was found on this initial visit but later it only had one egg. Gilles Gloaguen also visited this site and a second nest was located later in the season. No young were seen on any subsequent visit so it is unlikely that birds successfully bred on Saint Pierre or Miquelon in 2011.

Comparison of Census Numbers

| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|------|------|
| Total Adults | 4 | 6 | 9 | 8 | 4 |

[†]This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

2011 International Piping Plover Breeding Census - St. Pierre and Miquelon-



The 2011 International Piping Plover Breeding Census in St. Pierre and Miquelon

| SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|---------------------------------------|------|---------|------------------------|-------------------------|-------------|---------------------|-------------------------|---|------------------|------------------|------------------|-------|
| | | | | | | | | | | | | |
| Gully of Grand Barachois | 2 | 6/13/11 | 0 | 2 | 9.0 | I A | n.r. | 91 | 96 | <u>01</u> | <u>06</u> | s(p) |
| Northeast of Gully of Grand Barachois | 1 | 6/11/11 | 1 | 2 | 2.4 | I A | n.r. | 91 | 96 | <u>01</u> | <u>06</u> | s(p) |
| South of L'isthme | 4 | 6/13/11 | 0 | 0 | 1.2 | I A | H | - | - | - | - | s(p) |
| West Side of Isthme de Langlade | 3 | 6/13/11 | 0 | 0 | 6.0 | I A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | 06 | s(p) |
| Total | | | 1 | 4 | 18.6 | | | | | | | |

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

The 2011 International Piping Plover Breeding Census in Newfoundland

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A total of 103 beaches were surveyed in Newfoundland and Labrador (100) and Northern Quebec (3) by 29 staff and volunteers (Quebec beaches are reported in the Quebec section of this report). Throughout Newfoundland and Labrador the census was carried out by many groups, including Parks Canada, Newfoundland and Labrador Parks and Natural Areas Division, Newfoundland and Labrador Department of Natural Resources, Newfoundland and Labrador Wildlife Division, Environment Canada (Canadian Wildlife Service), Nature Conservancy Canada, Codroy Valley Area Development Association, and Mi'kmaq Alsumk Mowimsikik Koqoey Association (MAMKA).

The 2011 beach list was based on sites visited during the census in 2006 and new potential sites noted by various groups. It is believed that all known sites with Piping Plovers were surveyed. Nevertheless, several sites with suitable habitat that were surveyed in 2006 (but had no Piping Plovers) could not be surveyed this year due to poor weather conditions including Cowlest Beach, Connoire Bay North West Arm Sand Bar, and Wreck Island Beach. Three other beaches (First Beach, Second Beach, and Fourth Beach – Sandbanks Provincial Park) were surveyed prior to the census and no Piping Plovers were found, but they were not surveyed again during the census window.

A total of 51 Piping Plovers were counted on 16 beaches in Newfoundland during the breeding census: 21 pairs and 9 singles. Counts have exhibited a general increasing trend, with 2011 marking the highest count since the census began in 1991. This year's census results are likely representative of the population in Newfoundland, but may slightly underestimate the actual total due to the inconspicuous nature of Piping Plovers. All terrain vehicles, predation, and adverse weather continue to threaten Piping Plovers in Newfoundland.

Comparison of Census Numbers

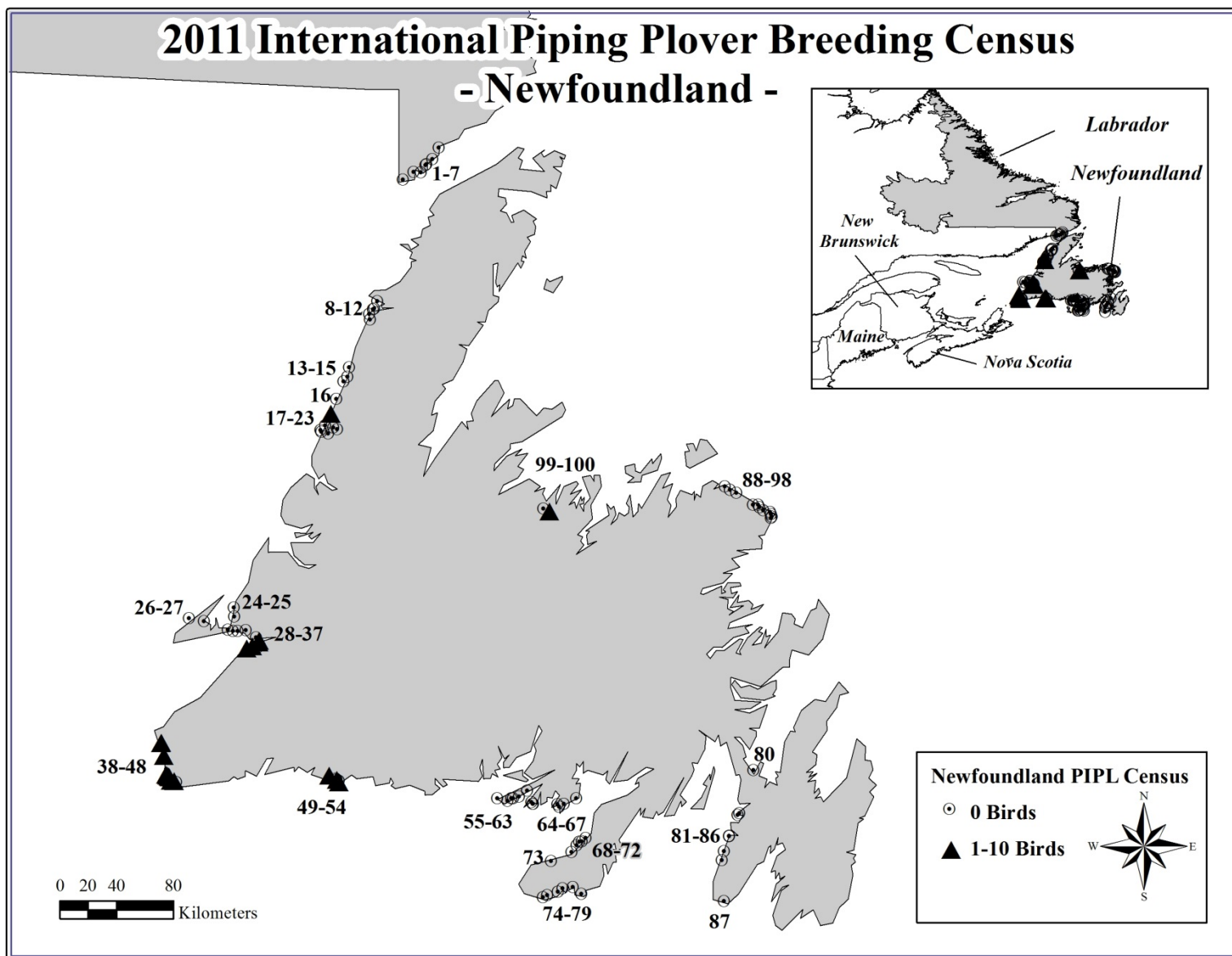
| | 1991 | 1996 | 2001 | 2006 | 2011 |
|----------------------|------|------|------|-----------------|-----------------|
| Total Adults | 7 | 27 | 39 | 48 ¹ | 51 ¹ |
| Beaches with plovers | 1 | 7 | 12 | 12 | 16 |
| Beaches surveyed | 14 | 24 | 35 | 73 | 100 |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

Detectability Study

| Sites Included | First Count | Second Count |
|--|-------------|--------------|
| 2nd Beach, Grand Bay West | 6 | 4 |
| Burntwood Point | 0 | 0 |
| Kelby Cove | 0 | 0 |
| Little Barachois | 0 | 0 |
| Osmond Beach | 2 | 2 |
| Parson's Pond | 0 | 0 |
| Pinware Prov. Park (French Cove Beach) | 0 | 0 |
| Point Au Mal | 0 | 0 |
| Port Saunders | 0 | 0 |
| Rocky Barachois (Bottle's Barachois) | 0 | 1 |
| Short Sand Beach | 2 | 2 |
| Spirity Cove | 0 | 0 |
| St. Paul's Point | 0 | 0 |
| Stephenville Crossing | 0 | 0 |
| Stephenville Crossing - South side of bridge | 1 | 2 |
| Stephenville Crossing - Main Gut | 2 | 2 |
| West Bay - Port au Port | 0 | 0 |

2011 International Piping Plover Breeding Census - Newfoundland -



The 2011 International Piping Plover Breeding Census in Newfoundland

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|---|-----------|-----------|-----------|---------|
| | | | | | | | | | | | | | |
| Labrador | Forteau Beach | 6 | 6/15/11 | 0 | 0 | 1.1 | I A | V | - | - | - | - | s(p), m |
| Labrador | L'anse Amour | 5 | 6/15/11 | 0 | 0 | 1.1 | I A | V | - | - | - | - | s(p) |
| Labrador | L'anse au Clair | 7 | 6/14/11 | 0 | 0 | 0.5 | I III A D | V | - | - | - | - | s(p), m |
| Labrador | L'anse au Loup 1 | 3 | 6/15/11 | 0 | 0 | 0.9 | I A | U | - | - | - | - | s(p), m |
| Labrador | L'anse au Loup 2 | 4 | 6/15/11 | 0 | 0 | 0.3 | I A | U | - | - | - | - | s(p) |
| Labrador | L'anse un Diable | 2 | 6/15/11 | 0 | 0 | 0.2 | I A | N | - | - | - | - | s(p) |
| Labrador | Pinware River Prov. Park (French Cove Beach) | 1 | 6/5/11 | 0 | 0 | 2.0 | I A | n.r. | - | - | - | - | s(p) |
| Newfoundland | 1st Beach, Grand Bay West | 48 | 6/5/11 | 0 | 0 | 0.4 | I A | n.r. | - | - | 01 | 06 | s(p) |
| Newfoundland | 2nd Beach, Grand Bay West ² | 47 | 6/5/11 | 3 | 6 | n.r. | I A | n.r. | - | 96 | 01 | <u>06</u> | s(p) |
| Newfoundland | Alex Cove | 23 | 6/14/11 | 0 | 0 | 0.7 | IV A | n.r. | - | - | - | - | f |
| Newfoundland | Banting Memorial Park | 97 | 6/7/11 | 0 | 0 | 1.5 | I A | n.r. | - | - | - | 06 | unk |
| Newfoundland | Beck Bay | 55 | 6/6/11 | 0 | 0 | 0.8 | I B | V | - | - | - | 06 | unk |
| Newfoundland | Bellevue Beach | 80 | 6/13/11 | 0 | 0 | 3.8 | I IV A B | n.r. | - | - | - | 06 | s(p) |
| Newfoundland | Big Barachois | 44 | 6/5/11 | 1 | 3 | 1.7 | I A | V | 91 | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Newfoundland | Big Barasway | 49 | 6/4/11 | 1 | 5 | 6.1 | I B | V | <u>91</u> | 96 | <u>01</u> | 06 | unk |
| Newfoundland | Big Barasway - Seal Cove Beach | 57 | 6/6/11 | 0 | 0 | 1.3 | I B | n.r. | 91 | 96 | 01 | 06 | unk |
| Newfoundland | Big Seal Cove, Ship Harbour | 81 | 6/6/11 | 0 | 0 | 0.3 | I A | n.r. | - | - | - | 06 | s(p) |
| Newfoundland | Black Island Cove | 62 | 6/6/11 | 0 | 0 | 0.6 | I A | V | - | - | - | 06 | unk |
| Newfoundland | BlackBrook, SPI | 19 | 6/14/11 | 0 | 0 | 0.7 | IV A | n.r. | - | - | - | - | f |
| Newfoundland | Boxey Harbour | 66 | 6/6/11 | 0 | 0 | 0.7 | I A | V N | - | - | - | 06 | unk |
| Newfoundland | Broom Point | 21 | 6/9/11 | 0 | 0 | 0.1 | I A | n.r. | 91 | 96 | 01 | 06 | f |
| Newfoundland | Burntwood Point | 11 | 6/6/11 | 0 | 0 | 0.9 | I A | O | - | - | - | - | unk |
| Newfoundland | Cape Freels | 89 | 6/8/11 | 0 | 0 | 1.6 | I A | n.r. | 91 | 96 | 01 | 06 | m |
| Newfoundland | Cape Freels 2 | 88 | 6/8/11 | 0 | 0 | 1.8 | I A | n.r. | - | 96 | 01 | 06 | m |
| Newfoundland | Cape Freels 3 | 90 | 6/8/11 | 0 | 0 | 0.7 | I A | n.r. | - | 96 | 01 | 06 | m |
| Newfoundland | Cape Freels 4 | 91 | 6/8/11 | 0 | 0 | 0.9 | I A | n.r. | - | 96 | 01 | 06 | m |
| Newfoundland | Cape Ray Beach, J.T. Cheeseman Provincial Park | 41 | 6/7/11 | 2 | 6 | 2.4 | I IV IX A B D | n.r. | - | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Newfoundland | Chappie Cove- Deadman's Bight | 63 | 6/6/11 | 0 | 0 | 0.3 | I A | V | - | - | - | 06 | unk |
| Newfoundland | Coombes Head | 52 | 6/5/11 | 0 | 1 | 1.0 | I B | n.r. | - | - | - | - | unk |
| Newfoundland | Crow Head West Beach | 50 | 6/4/11 | 0 | 0 | 0.9 | I B | n.r. | - | - | 01 | 06 | unk |
| Newfoundland | Daniel's Harbour | 13 | 6/16/11 | 0 | 0 | 0.0 | I A | n.r. | 91 | 96 | - | - | s(p) |

The 2011 International Piping Plover Breeding Census in Newfoundland (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|------------------------|-------------------------|-----|---------------------|-------------------------|---|----|-----------|-----------|-------|
| | | | | | | | | | | | | | |
| Newfoundland | Deadman's Bay | 100 | 6/7/11 | 0 | 0 | 3.0 | I A | V | 91 | 96 | 01 | 06 | unk |
| Newfoundland | East of Coomb's Cove | 64 | 6/6/11 | 0 | 0 | 0.8 | I A B | V | - | - | 01 | 06 | unk |
| Newfoundland | Eastern Brook, SPI | 20 | 6/14/11 | 0 | 0 | 1.1 | IV A | n.r. | - | - | - | - | f |
| Newfoundland | Eastern Cove - Dog Cove | 59 | 6/6/11 | 0 | 0 | 0.7 | I A | n.r. | - | - | - | 06 | unk |
| Newfoundland | Flat Bay | 37 | 6/6/11 | 5 | 10 | 4.0 | I IV A E | n.r. | - | - | <u>01</u> | 06 | s(p) |
| Newfoundland | Fox Island River | 24 | 6/12/11 | 0 | 0 | 2.0 | I A E | n.r. | - | - | 01 | 06 | s(p) |
| Newfoundland | Frenchman's Cove 3 (White Point) | 71 | 6/13/11 | 0 | 0 | 1.9 | I A B | V | - | - | 01 | 06 | s(p) |
| Newfoundland | Frenchman's Cove East | 69 | 6/10/11 | 0 | 0 | 2.3 | I IV A B D | n.r. | - | - | 01 | 06 | s(p) |
| Newfoundland | Frenchman's Cove West | 70 | 6/10/11 | 0 | 0 | 2.6 | I A | V U | - | - | 01 | 06 | unk |
| Newfoundland | Garnish Beach | 68 | 6/14/11 | 0 | 0 | 1.5 | I A | V | - | - | 01 | 06 | unk |
| Newfoundland | Gooseberry Cove Beach | 86 | 6/6/11 | 0 | 0 | 0.3 | I A | O | - | - | - | 06 | s(p) |
| Newfoundland | Grand Beach | 72 | 6/13/11 | 0 | 0 | 4.9 | I A B | V O | - | - | 01 | 06 | s(p) |
| Newfoundland | Great Barasway Beach | 85 | 6/6/11 | 0 | 0 | 0.2 | I A B | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Newfoundland | Green Point (Point Verte) | 84 | 6/6/11 | 0 | 0 | 1.0 | I A B | V | - | - | - | 06 | s(p) |
| Newfoundland | Kelby Cove | 46 | 6/6/11 | 0 | 0 | 0.5 | I A | n.r. | - | - | - | - | s(p) |
| Newfoundland | Kippens | 30 | 6/8/11 | 0 | 0 | 0.0 | I A | U | - | - | - | - | s(p) |
| Newfoundland | L'anse au Loup | 73 | 6/14/11 | 0 | 0 | 2.7 | I B | V | - | - | 01 | 06 | unk |
| Newfoundland | Lansey Bank Cove | 77 | 6/13/11 | 0 | 0 | 0.2 | I A | V | - | - | - | 06 | unk |
| Newfoundland | Little Barachois | 35 | 6/12/11 | 0 | 0 | 1.0 | I IV A E | n.r. | - | - | - | - | s(p) |
| Newfoundland | Little Barasway | 51 | 6/4/11 | 0 | 0 | 1.5 | I A B | n.r. | - | - | - | 06 | unk |
| Newfoundland | Little Barasway - Seal Cove | 58 | 6/6/11 | 0 | 0 | 0.7 | I A B | n.r. | - | - | - | - | unk |
| Newfoundland | Little Codroy/St. Andrew's Gut | 40 | 6/6/11 | 1 | 2 | 4.9 | I A | n.r. | - | - | <u>01</u> | <u>06</u> | s(p) |
| Newfoundland | Little Lawn | 78 | 6/13/11 | 0 | 0 | 0.5 | I B | V | - | - | - | 06 | unk |
| Newfoundland | Lumsden | 93 | 6/8/11 | 0 | 0 | 1.1 | I III A | V | 91 | - | - | 06 | unk |
| Newfoundland | Lumsden Head East | 94 | 6/8/11 | 0 | 0 | 1.7 | I A | V | 91 | 96 | 01 | 06 | unk |
| Newfoundland | Lumsden Head West | 99 | 6/8/11 | 0 | 1 | 1.8 | I A | V | 91 | 96 | 01 | 06 | unk |
| Newfoundland | Millville Beach, Grand Codroy Provincial Park | 39 | 6/14/11 | 2 | 4 | 1.8 | I IV A B D I | O | 91 | 96 | 01 | 06 | s(p) |
| Newfoundland | Musgrave Harbour | 98 | 6/7/11 | 0 | 0 | 3.6 | I A | n.r. | 91 | 96 | 01 | 06 | unk |
| Newfoundland | Osmond Beach | 42 | 6/14/11 | 1 | 2 | 0.6 | I A | n.r. | - | 96 | 01 | 06 | unk |
| Newfoundland | Parson's Pond | 16 | 6/8/11 | 0 | 0 | 0.0 | I A | n.r. | 91 | 96 | - | - | s(p) |
| Newfoundland | Partridge Cove | 60 | 6/6/11 | 0 | 0 | 0.4 | I B | n.r. | - | - | - | 06 | m |
| Newfoundland | Pennybeck | 95 | 6/7/11 | 0 | 0 | 1.4 | I A | n.r. | - | - | - | 06 | unk |

The 2011 International Piping Plover Breeding Census in Newfoundland (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|---|-----------|-----------|-----------|-------|
| | | | | | | | | | | | | | |
| Newfoundland | Picadilly Beach | 31 | 6/8/11 | 0 | 0 | 1.5 | IV E | n.r. | - | - | - | - | s(p) |
| Newfoundland | Point au Gaul | 75 | 6/13/11 | 0 | 0 | 2.1 | I A | V | - | - | - | 06 | unk |
| Newfoundland | Point Au Mal | 25 | 6/12/11 | 0 | 0 | 2.0 | I E | n.r. | - | - | 01 | 06 | s(p) |
| Newfoundland | Point Lance Beach | 87 | 6/6/11 | 0 | 0 | 1.5 | I A | V | - | - | - | 06 | s(p) |
| Newfoundland | Point Verde | 83 | 6/6/11 | 0 | 0 | 2.3 | I A B | V N | - | - | - | 06 | s(p) |
| Newfoundland | Port au Port | 28 | 6/8/11 | 0 | 0 | 0.0 | I A | N | - | - | - | - | s(p) |
| Newfoundland | Port Saunders | 8 | 6/6/11 | 0 | 0 | 0.5 | I A | O | - | - | - | - | unk |
| Newfoundland | Portland Creek | 14 | 6/8/11 | 0 | 0 | 1.6 | I A | V | - | - | - | 06 | s(p) |
| Newfoundland | Portland Hill | 15 | 6/16/11 | 0 | 0 | 0.0 | I A | n.r. | - | - | - | - | s(p) |
| Newfoundland | Red Head - Burgeo | 53 | 6/5/11 | 0 | 0 | 1.2 | I A | n.r. | - | - | - | - | s(p) |
| Newfoundland | River of Ponds | 12 | 6/7/11 | 0 | 0 | 0.9 | I A | O | - | - | - | - | unk |
| Newfoundland | Rocky Barachois (Bottle's Barachois) ² | 45 | 6/14/11 | 0 | 1 | 0.7 | I A | V O | - | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Newfoundland | Romaines | 29 | 6/8/11 | 0 | 0 | 0.0 | I A | A U | - | - | - | - | s(p) |
| Newfoundland | Saltwater Cove | 56 | 6/6/11 | 0 | 0 | 0.5 | I A | V O | - | - | 01 | 06 | unk |
| Newfoundland | Saltwater Cove - St. John's Bay | 65 | 6/6/11 | 0 | 0 | 0.7 | I A B | V | - | - | - | 06 | unk |
| Newfoundland | Sandbanks Park, 3rd Beach | 54 | 6/12/11 | 1 | 2 | n.r. | n.r. | n.r. | - | - | - | <u>06</u> | s(p) |
| Newfoundland | Sandy Cove | 76 | 6/13/11 | 0 | 0 | 0.4 | I A B | V | - | - | 01 | 06 | s(p) |
| Newfoundland | Sandy Point | 36 | 6/9/11 | 1 | 2 | 2.0 | I A E | n.r. | 91 | <u>96</u> | <u>01</u> | 06 | s(p) |
| Newfoundland | Searston Beach | 38 | 6/5/11 | 0 | 0 | 0.4 | I A | V | 91 | 96 | <u>01</u> | 06 | s(p) |
| Newfoundland | Shallow Bay | 17 | 6/16/11 | 1 | 2 | 5.0 | I A | n.r. | 91 | 96 | 01 | 06 | unk |
| Newfoundland | Shalloway Bay | 96 | 6/7/11 | 0 | 0 | 1.2 | I A | U | - | 96 | 01 | 06 | unk |
| Newfoundland | Ship Harbour Point | 82 | 6/6/11 | 0 | 0 | 1.0 | I A | V | - | - | - | 06 | unk |
| Newfoundland | Shoal Cove Beach | 79 | 6/13/11 | 0 | 0 | 0.4 | I A | V | - | - | - | - | unk |
| Newfoundland | Short Sand Beach | 43 | 6/5/11 | 1 | 2 | 0.5 | I A | n.r. | 91 | 96 | 01 | <u>06</u> | s(p) |
| Newfoundland | Spirity Cove | 10 | 6/6/11 | 0 | 0 | 1.0 | I A | O | - | - | - | - | unk |
| Newfoundland | St. Jacques Harbour | 67 | 6/6/11 | 0 | 0 | 0.5 | I A B | n.r. | - | - | - | 06 | unk |
| Newfoundland | St. Paul's Point | 18 | 6/8/11 | 0 | 0 | 0.9 | I IV A D | V | 91 | 96 | 01 | 06 | s(p) |
| Newfoundland | Stephenville Crossing | 32 | 6/11/11 | 0 | 0 | 1.0 | I A | n.r. | 91 | 96 | <u>01</u> | <u>06</u> | s(p) |
| Newfoundland | Stephenville Crossing - South side of bridge ² | 34 | 6/15/11 | 1 | 2 | 1.5 | I A | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Newfoundland | Stephenville Crossing- Main Gut | 33 | 6/5/11 | 1 | 2 | n.r. | I A | n.r. | 91 | 96 | 01 | 06 | unk |
| Newfoundland | Taylor's Bay | 74 | 6/13/11 | 0 | 0 | 0.3 | I B | V | - | - | 01 | 06 | unk |

The 2011 International Piping Plover Breeding Census in Newfoundland (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|-------------------------|------|--------|------------------------|-------------------------|--------------|---------------------|-------------------------|---|----|----|----|-------|
| Newfoundland | Three Rock Cove | 26 | 6/8/11 | 0 | 0 | 3.0 | I A | n.r. | - | - | - | - | s(p) |
| Newfoundland | Trappers Cove | 9 | 6/6/11 | 0 | 0 | 1.0 | I A | n.r. | - | - | - | - | unk |
| Newfoundland | West Bay - Port au Port | 27 | 6/8/11 | 0 | 0 | 1.0 | I IV A D | n.r. | - | - | - | - | s(p) |
| Newfoundland | Western Brook Beach | 22 | 6/9/11 | 0 | 0 | 1.6 | I A | n.r. | 91 | 96 | 01 | 06 | f |
| Newfoundland | Western Cove | 61 | 6/6/11 | 0 | 0 | 1.6 | I A | n.r. | - | - | - | 06 | unk |
| Newfoundland | Windmill Bight | 92 | 6/8/11 | 0 | 0 | 0.7 | I A B | n.r. | - | - | 01 | 06 | s(p) |
| Total | | | | 22 | 53 | 126.1 | | | | | | | |

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

² This total is the "high count"; since two surveys were conducted at some sites for the detectability study, this total includes the highest count at each site.

Recensement International du Pluvier Siffleur au Québec, en 2011

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Toutes les plages des Îles-de-la-Madeleine ont été couvertes lors de l'inventaire de 2011, à l'exception de la plage de l'île Brion. Mis à part la plage de l'Ouest qui a été inventoriée le 7 juin, toutes les autres plages ont été visitées le 4 juin. Contrairement aux inventaires de 1991, 1996 et 2001, les plages de la Gaspésie n'ont pas été recensées. Compte tenu qu'aucun oiseau n'y avait été vu lors des trois premiers recensements, il ne nous apparaissait pas pertinent de couvrir ces plages. Pour ce qui est de la Côte-Nord, seulement trois plages ont été inventoriées. Ces plages n'avaient jamais été visitées lors des inventaires précédents.

Au total, 66 Pluviers siffleurs ont été dénombrés sur les 127 km de plages des Îles-de-la-Madeleine parcourus par 25 participants. Tout comme en 2006, les plages de l'Hôpital et de la Dune du Sud totalisent plus de la moitié des pluviers observés (56,1%).

Le nombre de Pluviers siffleurs dénombrés est supérieur à ce qui a été dénombré en 1991, 2001 et 2006, mais demeure inférieur aux résultats de 1996. La population de Pluviers siffleurs au Québec ne démontre par une tendance continue à la hausse malgré des efforts de conservation importants au cours des deux dernières décades.

The 2011 International Piping Plover Breeding Census in Quebec

All Magdalen Islands beaches were surveyed in 2011, except Brion Island beach. Apart from Plage de l'Ouest surveyed on June 7, all the other beaches were checked on June 4. Unlike surveys done in 1991, 1996, and 2001 beaches of the Gaspé Peninsula were not included in the 2011 survey. Taking into account that Piping Plovers were absent from those areas on the three years mentioned it did not appear essential to survey those beaches this year. Regarding the St. Lawrence River North Shore (Côte-Nord), only three beaches were surveyed. These beaches have never been visited in previous census.

A total of 66 Piping Plovers were counted on the 127 km (78.9 mile) stretch of Magdalen Island shoreline covered by 25 participants. Additionally, 3 beaches were surveyed in Northern Quebec as part of the Newfoundland effort but none had plovers. As in 2006, more than half (56.1%) of the birds were observed on two beaches namely those referred to as Dune du Sud and Plage de l'Hôpital.

The number of birds counted is greater than in the 1991, 2001 and 2006 surveys but lower than in 1996. The Québec Piping Plover population does not show any evidence of steady rising trend despite important conservation efforts over the last two decades.

**Comparaison de Nombres du Recensement/
Comparison of Census Numbers**

| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Total Adults | 61 ² | 87 ² | 55 ² | 63 ¹ | 66 ¹ |

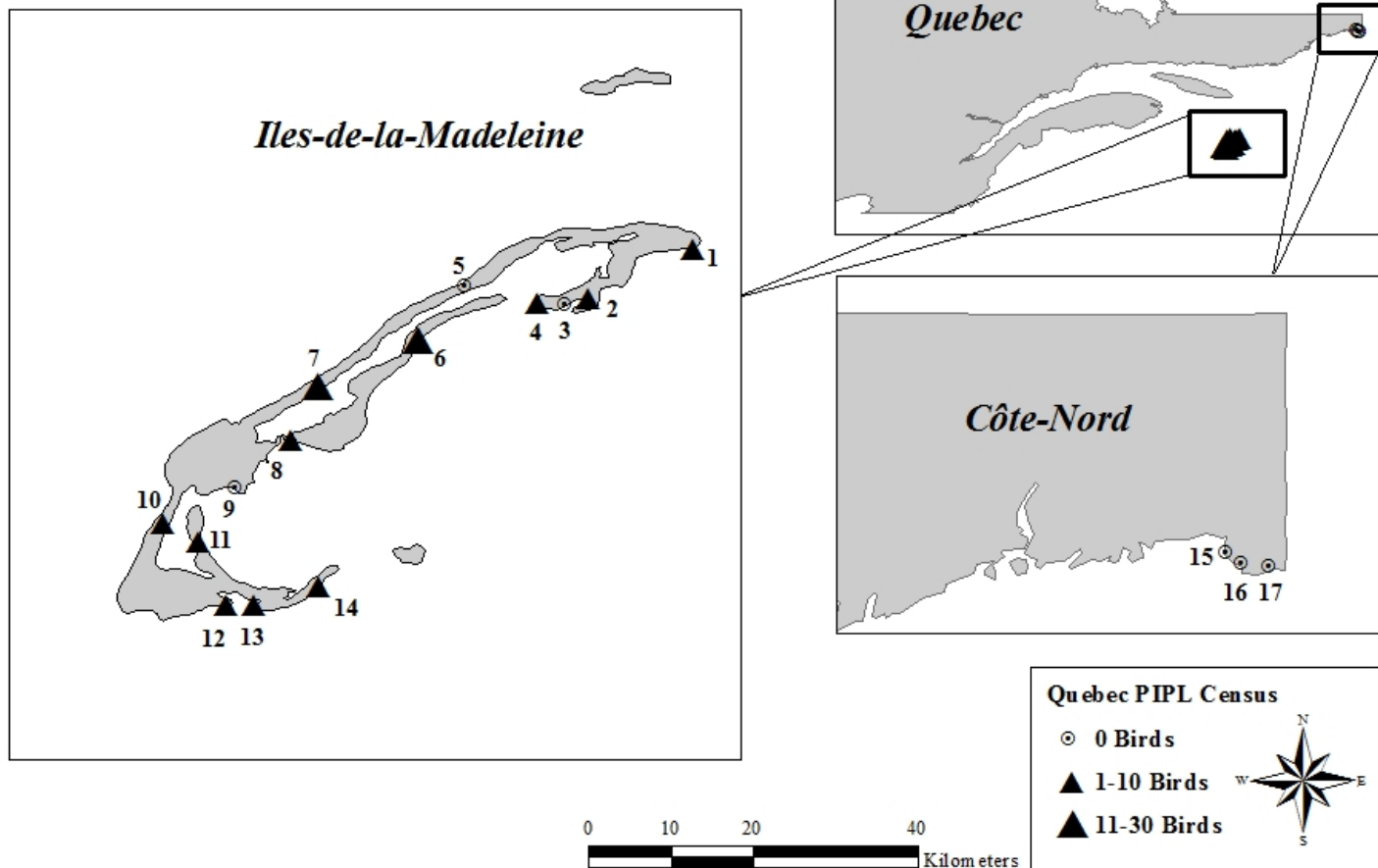
¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

²These totals differ slightly from numbers reported in previous Census reports. They represent totals from a single count.

**Etude de Détectabilité/
Detectability Study**

| Sites Included | First Count | Second Count |
|----------------------------|-------------|--------------|
| La Pointe et La Digue | 2 | 1 |
| Pointe de la Grande-Entrée | 2 | 1 |
| Sandy Hook | 5 | 1 |

2011 International Piping Plover Breeding Census - Quebec -



The 2011 International Piping Plover Breeding Census in Quebec

| REGION | SITE NAME | MAP# | DATE | BREED- ING | TOTAL PIPL | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|----------------------|---|------|---------|---------------|---------------|--------------|---------------------|-------------------------|---|------------------|------------------|------------------|---------|
| | | | | PAIRS | ADULTS | | | | | | | | |
| Côte-Nord | Brador Beach | 15 | 6/15/11 | 0 | 0 | 1.0 | I A | U V | - | - | - | - | s(p), m |
| Côte-Nord | L'Anse Morel | 17 | 6/15/11 | 0 | 0 | 0.6 | I A | none | - | - | - | - | s(p), m |
| Côte-Nord | Lourdes de Blanc Sablon | 16 | 6/15/11 | 0 | 0 | 1.9 | I A | H | - | - | - | - | s(p), m |
| Îles-de-la-Madeleine | Bassin aux Huîtres (Est) | 2 | 6/4/11 | 2 | 2 | 1.7 | I E | n.r. | 91 | 96 | <u>01</u> | <u>06</u> | s(p) |
| Îles-de-la-Madeleine | Bassin aux Huitres (Ouest) | 3 | 6/4/11 | 0 | 0 | 0.6 | I E | n.r. | 91 | <u>96</u> | 01 | 06 | s(p) |
| Îles-de-la-Madeleine | Dune du Bassin | 12 | 6/4/11 | 0 | 1 | 3.2 | I E | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Îles-de-la-Madeleine | Dune du Nord | 5 | 6/4/11 | 0 | 0 | 16.0 | I E | n.r. | 91 | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Îles-de-la-Madeleine | Dune du Sud | 6 | 6/4/11 | 8 | 21 | 22.0 | I II E | n.r. | 91 | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Îles-de-la-Madeleine | La Pointe et La Digue | 8 | 6/4/11 | 1 | 2 | 3.0 | I E | S | 91 | <u>96</u> | 01 | <u>06</u> | s(p), p |
| Îles-de-la-Madeleine | Les plages de Cap-aux-Meules, L'Etang a Procul-Bourgeois, et La Digue a Fernand | 9 | 6/4/11 | 0 | 0 | 3.5 | I E | n.r. | 91 | <u>96</u> | 01 | 06 | s(p) |
| Îles-de-la-Madeleine | Plage de l'Hôpital | 7 | 6/4/11 | 5 | 16 | 18.0 | I E | n.r. | 91 | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Îles-de-la-Madeleine | Plage de l'Ouest | 10 | 6/4/11 | 1 | 3 | 10.5 | I E | V | 91 | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Îles-de-la-Madeleine | Plage du Havre | 13 | 6/4/11 | 0 | 1 | 4.5 | I E | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Îles-de-la-Madeleine | Plage Martinique-Havre Aubert | 11 | 6/4/11 | 2 | 8 | 13.0 | I II E | V | 91 | 96 | <u>01</u> | <u>06</u> | s(p) |
| Îles-de-la-Madeleine | Pointe de l'Est | 1 | 6/4/11 | 1 | 5 | 19.0 | I E | V | 91 | <u>96</u> | 01 | <u>06</u> | s(p) |
| Îles-de-la-Madeleine | Pointe de la Grande-Entrée | 4 | 6/4/11 | 1 | 2 | 1.0 | I E | n.r. | 91 | 96 | 01 | <u>06</u> | s(p) |
| Îles-de-la-Madeleine | Sandy Hook | 14 | 6/4/11 | 1 | 5 | 11.0 | II E | n.r. | 91 | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Total | | | | 22 | 66 | 130.5 | | | | | | | |

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

The 2011 International Piping Plover Breeding Census in Nova Scotia

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In Nova Scotia (NS), 128 out of 130 beach sites selected for census were surveyed by 36 individuals: 13 volunteers from Bird Studies Canada (BSC), and 23 staff from BSC, NS Department of Natural Resources (DNR), Environment Canada (EC), and Parks Canada Agency (PCA). Sites were selected for the 2011 census based on the 2006 census site list. Additionally we surveyed some potential habitat identified through annual surveys, local knowledge of volunteers and staff, and Google Earth aerial imagery. All selected sites were surveyed during the census period with the exception of two, which did not have suitable plover habitat: Little Harbour, Halifax County and Rafuse Island, Lunenburg County. We believe, therefore, that the 2011 census represents a comprehensive survey of Nova Scotia's potential suitable plover habitat.

Thirty sites were surveyed twice during the census period for the detectability study. Herein, we report results from all first surveys. A total of 92 adult plovers were observed at 31 of the 128 census sites in 2011. This marks a 7% increase in the total count since the 2006 census. Annual monitoring efforts in NS suggest an 18% increase in adults (sum of pairs and singles tallied annually at end of breeding season) between 2006 and 2011. Census results over the 20 year period between the first census in 1991 and 2011 indicate a 19% decline in total adults.

Within Atlantic Canada and Québec, Piping Plovers in the Gulf of St. Lawrence region, including northern NS, are believed to be reproductively isolated from plovers in the southern NS (Atlantic Coast) region¹. Of the 92 adults observed during the 2011 census, 64 (70%) were located in southern NS and 28 (30%) in northern NS. Regional proportions are equal to those of 2011 year-end population counts. The annual year-end count of 99 adults was higher than the census count. International Census counts are typically lower than year-end counts as some plovers arrive on NS beaches after the census survey period. In addition, the proportion of plover pairs is usually lower because of census timing and survey methodology. In 2011, 37 pairs were observed during the census representing 80% of total adults. This is lower than the 88% (SD 4%) average observed in previous four census counts. Cold, wet weather in the 2011 spring and summer was likely a key factor explaining the higher proportion of singles relative to other census years. Fewer nest attempts and lower than average chick survival resulted in one of the lowest productivity rates on record (1.23 fledglings per monitored pair) for the province. The number of sites occupied by one or more adults (31) was the highest since 1991 (35).

¹ Amirault-Langlais, D.L., T.L. Imlay, and A.W. Boyne. Dispersal patterns suggest two breeding populations of Piping Plovers in Eastern Canada. *The Wilson Journal of Ornithology*, *submitted*.

There was a net increase in occupation of four sites compared to 2006: eleven sites newly occupied (nine within southern NS) and seven no longer occupied (five within southern NS). Of the 31 occupied sites, 23 (74%) supported one or more pairs. Since 2006, average number of sites occupied by pairs in NS was 24 (SD 2).

A coordinated team of skilled volunteers and partners were pivotal to the successful completion of the 2011 International Census. We thank participants for their time and effort in reaching far flung beaches from Cape Sable Island to Cape North.

Comparison of Census Numbers

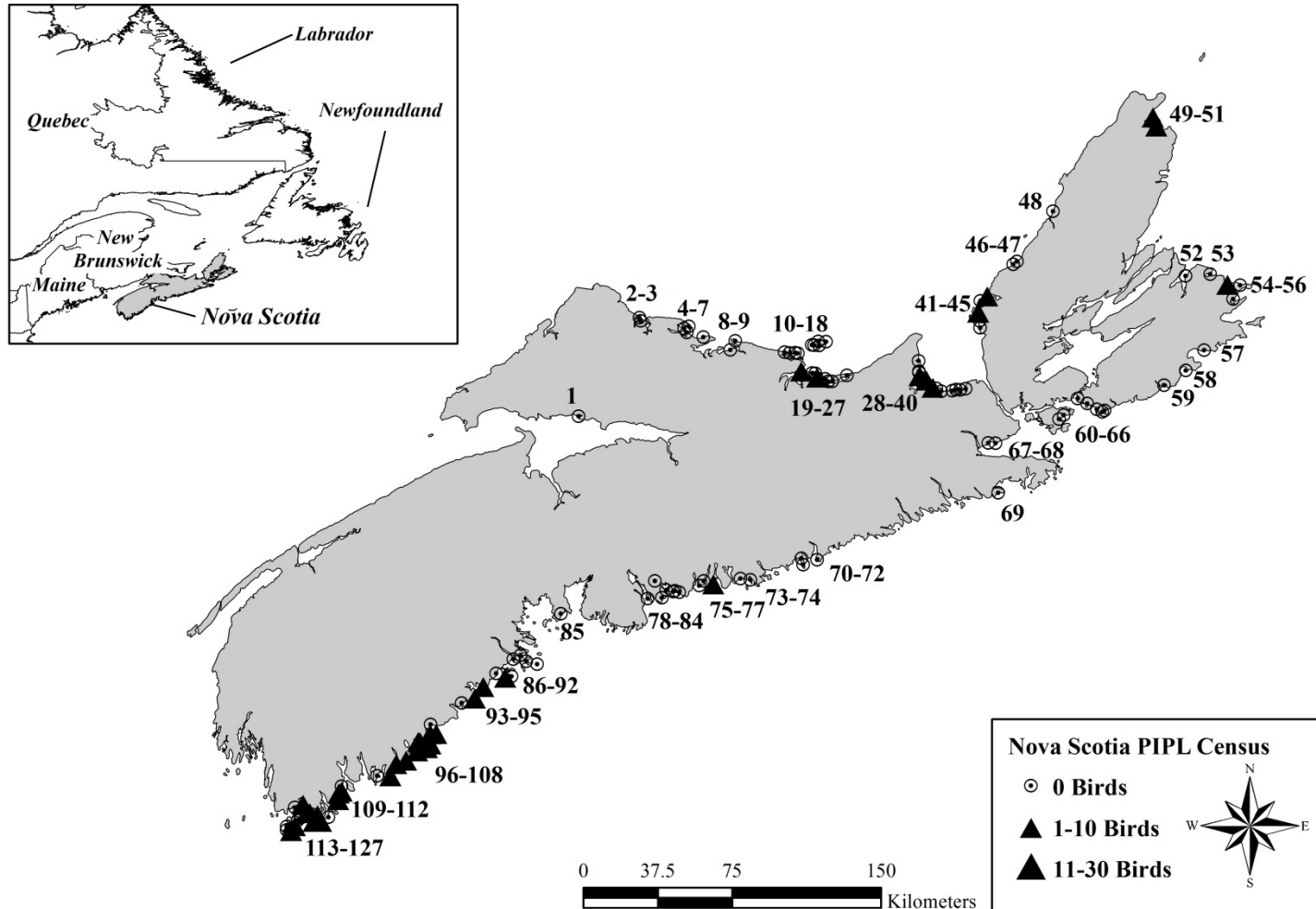
| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|-----------------|-----------------|
| Total Adults | 113 | 79 | 93 | 86 ¹ | 92 ¹ |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

Detectability Study

| Sites Included | First Count | Second Count |
|--|-------------|--------------|
| Captain's Pond & Monk's Pond (Monk's Head) | 2 | 1 |
| Dunns Beach | 0 | 0 |
| Mahoney's Beach | 2 | 1 |
| Pomquet Beach Park | 6 | 5 |
| Dominion (Lingan) Beach | 0 | 0 |
| Glance Bay Bar | 3 | 2 |
| Shipping Point | 1 | 1 |
| Hirtle's Beach | 0 | 0 |
| Oxner's Beach | 0 | 0 |
| James Beach and Little Harbour Spit | 0 | 2 |
| Pictou Bar Spit (Pictou Landing, Lighthouse Beach) | 2 | 0 |
| Beach Meadows Beach | 0 | 0 |
| Little Port Joli Beach | 2 | 2 |
| Port Joli, Goose Haven Beach | 2 | 0 |
| Ragged Harbor Beach | 2 | 2 |
| St. Catherine's Beach | 7 | 5 |
| Summerville Beach | 0 | 0 |
| Black Point Beach | 2 | 2 |
| Crow Neck (Baccaro) | 11 | 12 |
| Fox Bar Beach | 1 | 1 |
| Goose Point | 1 | 1 |
| Hawk Point | 2 | 0 |
| Johnston's Pond Beach | 1 | 2 |
| Louis Head Beach | 1 | 1 |
| Red Head Beach | 4 | 4 |
| The Hawk Beach | 0 | 0 |
| North Harbour Beach | 2 | 2 |

2011 International Piping Plover Breeding Census - Nova Scotia -



The 2011 International Piping Plover Breeding Census in Nova Scotia

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-------------|--|------|---------|------------------------|-------------------------|-----|---------------------|-------------------------|---|-----------|-----------|-----------|-------|
| | | | | | | | | | 91 | 96 | 01 | 06 | |
| Antigonish | Bayfield Beach | 36 | 6/6/11 | 0 | 0 | 1.1 | I A B | U V | 91 | 96 | 01 | 06 | s(p) |
| Antigonish | Captain's Pond & Monk's Pond (Monk's Head) ² | 33 | 6/6/11 | 1 | 2 | 1.2 | I B | V | 91 | <u>96</u> | 01 | 06 | s(p) |
| Antigonish | Dunns Beach | 32 | 6/6/11 | 0 | 0 | 1.1 | I B | V | 91 | 96 | 01 | 06 | s(p) |
| Antigonish | Graham's Cove/ Ferry Road | 35 | 6/11/11 | 0 | 0 | 1.0 | I A | U | 91 | 96 | 01 | - | p |
| Antigonish | Jimtown | 30 | 6/17/11 | 0 | 0 | 0.7 | II B | H D | - | 96 | - | 06 | p |
| Antigonish | Linwood Beach | 40 | 6/8/11 | 0 | 0 | 3.0 | II E | V | - | 96 | 01 | - | p |
| Antigonish | Mahoney's Beach ² | 31 | 6/9/11 | 0 | 2 | 1.4 | I B C | H D U | 91 | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Antigonish | Ogdens Pond Beach | 29 | 6/17/11 | 0 | 0 | 1.0 | II B | H D | 91 | 96 | 01 | 06 | p |
| Antigonish | Pomquet Beach Park ² | 34 | 6/9/11 | 1 | 6 | 3.1 | I A | H D | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Antigonish | South Lakevale | 28 | 6/12/11 | 0 | 0 | 0.5 | I A B | H U V | 91 | 96 | 01 | 06 | p |
| Antigonish | Tracadie Big Island/Delorey Island | 39 | 6/8/11 | 0 | 0 | 0.5 | I A I | U V | 91 | 96 | 01 | - | p |
| Antigonish | Tracadie West Arm | 38 | 6/8/11 | 0 | 0 | 0.7 | I B | U V | 91 | 96 | 01 | - | p |
| Antigonish | Tracadie-West | 37 | 6/8/11 | 0 | 0 | 1.0 | I C | U V S | - | - | - | - | p |
| Cape Breton | Belfry Beach to Winging Point | 58 | 6/9/11 | 0 | 0 | 3.0 | I A B | n.r. | - | - | 01 | - | s(p) |
| Cape Breton | Dominion (Lingan) Beach | 53 | 6/8/11 | 0 | 0 | 1.0 | I II A B | H U V | 91 | 96 | 01 | 06 | s(p) |
| Cape Breton | Glace Bay Bar ² | 54 | 6/9/11 | 1 | 3 | 1.0 | I A B | H D V | 91 | 96 | 01 | <u>06</u> | f |
| Cape Breton | Kennington Cove | 57 | 6/8/11 | 0 | 0 | 0.1 | I II A | n.r. | 91 | 96 | - | - | f |
| Cape Breton | Port Morien Beach | 56 | 6/13/11 | 0 | 0 | 0.8 | I II A | n.r. | - | - | - | 06 | p |
| Cape Breton | Schooner Pond Beach (Donkin) | 55 | 6/13/11 | 0 | 0 | 0.0 | I A B | S | - | - | - | - | p |
| Cape Breton | South Bar Beach | 52 | 6/21/11 | 0 | 0 | 0.0 | I II A B | n.r. | 91 | 96 | 01 | 06 | p |
| Colchester | Sand Point - Five Islands | 1 | 6/17/11 | 0 | 0 | 0.3 | II B | n.r. | - | 96 | 01 | 06 | p |
| Cumberland | Cameron Beach | 2 | 6/11/11 | 0 | 0 | 0.0 | I A | S V | 91 | 96 | 01 | 06 | p |
| Cumberland | Hortons Point (Beach) | 6 | 6/6/11 | 0 | 0 | 1.3 | I E | V | 91 | 96 | 01 | 06 | p |
| Cumberland | Long Point (Beach) | 5 | 6/11/11 | 0 | 0 | 0.8 | I A | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Cumberland | Oak Island Beach | 4 | 6/16/11 | 0 | 0 | 1.2 | I C | n.r. | 91 | <u>96</u> | 01 | 06 | p |
| Cumberland | Treen Point (Malagash Mines) | 7 | 6/6/11 | 0 | 0 | 1.5 | I A | n.r. | 91 | 96 | 01 | 06 | p |
| Cumberland | West Pugwash Beach | 3 | 6/5/11 | 0 | 0 | 1.0 | I B | None | 91 | 96 | 01 | 06 | p |
| Guysborough | Clam Pond | 68 | 6/11/11 | 0 | 0 | 2.0 | I B | V U | 91 | 96 | - | - | p |
| Guysborough | Ragged Head Pond | 67 | 6/11/11 | 0 | 0 | 5.0 | I B | V | 91 | 96 | - | - | s(p) |
| Guysborough | Tor Bay Provincial Park Beach | 69 | 6/11/11 | 0 | 0 | 2.0 | I B | O | - | 96 | 01 | 06 | s(p) |
| Halifax | Bull Beach | 71 | 6/8/11 | 0 | 0 | 0.9 | I A | n.r. | - | 96 | 01 | 06 | s(p) |
| Halifax | Clam Harbour Beach | 73 | 6/16/11 | 0 | 0 | 3.0 | I A B | H D | <u>91</u> | 96 | 01 | 06 | s(p) |

The 2011 International Piping Plover Breeding Census in Nova Scotia (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------|--|------|---------|------------------------|-------------------------|-----|---------------------|-------------------------|---|-----------|-----------|-----------|------------|
| | | | | | | | | | 91 | 96 | 01 | 06 | |
| Halifax | Conrads Beach (East & West) | 80 | 6/14/11 | 0 | 0 | 2.0 | I A | H D | 91 | 96 | 01 | 06 | s(p), p |
| Halifax | Conrads's Beach | 76 | 6/16/11 | 0 | 0 | 1.5 | II A | H F V | <u>91</u> | <u>96</u> | 01 | - | p |
| Halifax | Cow Bay Beach (Silver Sands) | 83 | 6/14/11 | 0 | 0 | 1.0 | I B | V | 91 | 96 | 01 | - | m |
| Halifax | Lawrencetown Beach | 78 | 6/14/11 | 0 | 0 | 0.3 | I A | H U | - | 96 | 01 | 06 | s(p), p |
| Halifax | Long/Meiser's Beach | 77 | 6/17/11 | 0 | 0 | 0.9 | I B | n.r. | - | 96 | 01 | - | s(p) |
| Halifax | Martinique Beach | 75 | 6/10/11 | 0 | 1 | 3.5 | I B | V | <u>91</u> | 96 | <u>01</u> | <u>06</u> | s(p) |
| Halifax | Maugher's Beach, McNabs Island | 84 | 6/17/11 | 0 | 0 | 1.5 | I II D E | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Halifax | McCormack's Beach (Eastern Passage) | 82 | 6/14/11 | 0 | 0 | 0.2 | II D | H U | - | 96 | 01 | - | s(p) |
| Halifax | Rainbow Haven Beach (Cole Harbour) | 81 | 6/14/11 | 0 | 0 | 1.8 | I A | H U | 91 | 96 | 01 | 06 | s(p) |
| Halifax | Sober Island / Red Cliff | 70 | 6/8/11 | 0 | 0 | 0.0 | I D | n.r. | - | - | - | - | p |
| Halifax | Stoney Beach (Lawrencetown Head) | 79 | 6/14/11 | 0 | 0 | 0.5 | I A | H U | <u>91</u> | 96 | 01 | 06 | s(p) |
| Halifax | Taylor Head Beach | 72 | 6/8/11 | 0 | 0 | 1.2 | I A D | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Halifax | West March / Seapool Beach | 74 | 6/16/11 | 0 | 0 | 1.3 | I A | H D U | 91 | 96 | 01 | 06 | p |
| Inverness | Belle Cote Beach | 48 | 6/7/01 | 0 | 0 | 0.0 | I A B | S | - | - | - | 06 | s(p) |
| Inverness | Big Rory's Point/Emerson Point | 41 | 6/15/11 | 0 | 0 | 0.5 | I A B | n.r. | 91 | 96 | 01 | 06 | p |
| Inverness | Colindale Beach | 44 | 6/8/11 | 0 | 0 | 0.5 | I II A D | n.r. | 91 | 96 | 01 | 06 | p |
| Inverness | Inverness Beach | 47 | 6/7/11 | 0 | 0 | 3.7 | I A B | U N | - | - | - | 06 | p |
| Inverness | Little Judique Harbour | 42 | 6/9/11 | 0 | 0 | 1.4 | I A | n.r. | 91 | 96 | 01 | 06 | p |
| Inverness | Margaree Harbour Beach | 46 | 6/7/11 | 0 | 0 | 0.4 | I A B | None | - | - | - | 06 | p |
| Inverness | Shipping Point | 43 | 6/8/11 | 0 | 1 | 1.8 | I A | V | 91 | 96 | 01 | <u>06</u> | p |
| Inverness | South West Mabou Beach | 45 | 6/8/11 | 2 | 4 | 1.8 | I A B | None | - | - | 01 | <u>06</u> | s(p) |
| Lunenburg | Bayswater | 85 | 6/10/11 | 0 | 0 | 0.6 | I A | H D U | 91 | 96 | 01 | - | s(p) |
| Lunenburg | Cape Bay Beach | 91 | 6/16/11 | 1 | 2 | 1.0 | I E | H | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Lunenburg | Cherry Hill Beach | 93 | 6/7/11 | 3 | 7 | 2.5 | I B | D V | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Lunenburg | Conrad Island Causeway | 86 | 6/15/11 | 0 | 0 | 1.5 | I II A D F I | H D | - | - | - | - | s(p), p |
| Lunenburg | Green Bay | 92 | 6/7/11 | 0 | 0 | 0.8 | I A | H D S U | - | - | - | - | p |
| Lunenburg | Halibut Bay, Cape LaHave Island | 90 | 6/16/11 | 0 | 0 | 0.8 | I E | n.r. | 91 | 96 | 01 | - | s(p) |
| Lunenburg | Hirtle's Beach | 88 | 6/15/11 | 0 | 0 | 3.3 | I A B | H D U | 91 | 96 | 01 | 06 | s(p), m, p |
| Lunenburg | Kingsburg Beach | 87 | 6/15/11 | 0 | 0 | 1.9 | I II A D | U | - | 96 | 01 | 06 | s(p), p |

The 2011 International Piping Plover Breeding Census in Nova Scotia (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------|---|------|---------|------------------------|-------------------------|-----|---------------------|-------------------------|---|-----------|-----------|-----------|---------|
| | | | | | | | | | | | | | |
| Lunenburg | Oxner's Beach | 89 | 6/15/11 | 0 | 0 | 1.1 | I II A D | H D | - | - | <u>01</u> | 06 | s(p), p |
| Pictou | Big Merigomish Island Beach | 27 | 6/13/11 | 0 | 0 | 5.0 | I B F | S U | 91 | 96 | 01 | 06 | p |
| Pictou | Bowen Island | 23 | 6/12/11 | 0 | 0 | 0.1 | II C | None | <u>91</u> | <u>96</u> | <u>01</u> | 06 | p |
| Pictou | Cape John, Megs Cove | 9 | 6/9/11 | 0 | 0 | 0.8 | I A | S V | - | - | 01 | 06 | p |
| Pictou | Caribou Island, Black Point to Hawksbill Point | 12 | 6/9/11 | 0 | 0 | 1.0 | I C | H D | - | 96 | 01 | - | p |
| Pictou | Caribou Island, Caribou Reef | 13 | 6/9/11 | 0 | 0 | 1.2 | I C | H | 91 | 96 | 01 | 06 | p |
| Pictou | Caribou Island, Narrows | 11 | 6/9/11 | 0 | 0 | 0.5 | I C | S V | - | - | 01 | - | p |
| Pictou | Chance Harbour Beach | 20 | 6/14/11 | 0 | 0 | 0.0 | I A | U V | - | 96 | 01 | 06 | p |
| Pictou | James Beach and Little Harbour Spit ² | 22 | 6/14/11 | 1 | 2 | 0.7 | II A | U | <u>91</u> | 96 | 01 | <u>06</u> | p |
| Pictou | Kings Head (Chisholm Beach) | 25 | 6/10/11 | 0 | 0 | 0.5 | II A | n.r. | 91 | 96 | 01 | 06 | p |
| Pictou | Melmerbey Beach | 24 | 6/10/11 | 0 | 0 | 2.2 | I A B | H V S | 91 | 96 | 01 | <u>06</u> | s(p) |
| Pictou | Murray Beach, Rushtons Park | 8 | 6/7/11 | 0 | 0 | 2.5 | I A | S U | 91 | 96 | 01 | 06 | s(p) |
| Pictou | Pictou Bar Spit (Pictou Landing, Lighthouse Beach ² | 19 | 6/14/11 | 1 | 2 | 1.5 | I A | D V S | 91 | 96 | 01 | 06 | s(p), p |
| Pictou | Pictou Island (East end) | 17 | 6/10/11 | 0 | 0 | 0.5 | I E | n.r. | - | - | 01 | 06 | p |
| Pictou | Pictou Island (West end) | 14 | 6/10/11 | 0 | 0 | 0.2 | I E | H | - | - | 01 | - | p |
| Pictou | Pictou Island John Dans Cove | 16 | 6/10/11 | 0 | 0 | 0.7 | I E | V | - | - | 01 | 06 | p |
| Pictou | Roger Point, Pictou Island | 18 | 6/10/11 | 0 | 0 | 1.5 | I E | H | - | - | 01 | 06 | p |
| Pictou | Savage Point, Big Merigomish Island | 26 | 6/13/11 | 0 | 0 | 0.4 | II B | n.r. | 91 | 96 | 01 | 06 | p |
| Pictou | Sinclair's Island | 21 | 6/12/11 | 0 | 0 | 0.8 | I A | None | 91 | 96 | 01 | 06 | p |
| Pictou | Waterside Beach | 10 | 6/9/11 | 0 | 0 | 1.4 | I C | n.r. | - | - | 01 | 06 | s(p) |
| Pictou | Wharf Beach, Pictou Island | 15 | 6/10/11 | 0 | 0 | 0.3 | I E | U | - | - | 01 | - | p |
| Queens | Back Beach, Port Mouton Island | 97 | 6/17/11 | 1 | 2 | 0.5 | II E | None | 91 | <u>96</u> | 01 | 06 | p |
| Queens | Beach Meadows Beach | 95 | 6/16/11 | 0 | 0 | 1.1 | I A | U | <u>91</u> | 96 | 01 | 06 | m |
| Queens | Carter's/Wobamkek Beach | 98 | 6/17/11 | 1 | 2 | 1.1 | II A | H | <u>91</u> | <u>96</u> | 01 | 06 | s(p) |
| Queens | Cranberry Pond | 99 | 6/17/11 | 0 | 0 | 0.8 | II A | H V U | <u>91</u> | <u>96</u> | - | 06 | p |
| Queens | Little Port Joli Beach ² | 100 | 6/16/11 | 1 | 2 | 1.5 | I B | n.r. | <u>91</u> | 96 | 01 | 06 | f |
| Queens | Port Joli, Durham Lane Beach | 102 | 6/9/11 | 0 | 1 | 0.4 | I II A | n.r. | - | - | - | - | p |
| Queens | Port Joli, Goose Haven Beach ² | 103 | 6/6/11 | 1 | 2 | 0.4 | II A D | n.r. | <u>91</u> | 96 | 01 | 06 | p |
| Queens | Ragged Harbor Beach | 94 | 6/9/11 | 1 | 2 | 1.6 | I A | None | 91 | <u>96</u> | <u>01</u> | 06 | p |
| Queens | Sandy Bay Beach | 104 | 6/17/11 | 1 | 2 | 1.2 | I A | None | <u>91</u> | <u>96</u> | <u>01</u> | 06 | s(p), p |
| Queens | St. Catherine's Beach ² | 101 | 6/8/11 | 3 | 7 | 2.0 | I B | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f |

The 2011 International Piping Plover Breeding Census in Nova Scotia (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------|------------------------------------|------|---------|------------------------|-------------------------|-----|---------------------|-------------------------|---|-----------|-----------|-----------|---------|
| | | | | | | | | | | | | | |
| Queens | Summerville Beach | 96 | 6/8/11 | 0 | 0 | 1.1 | II B | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | 06 | s(p) |
| Richmond | Crossroads/L'Ardoise Beach | 62 | 6/14/11 | 0 | 0 | 3.5 | I A | n.r. | - | - | 01 | - | p |
| Richmond | Grand Greve Beach | 64 | 6/12/11 | 0 | 0 | 0.8 | I B | n.r. | - | - | 01 | - | p |
| Richmond | Morrison Beach, Framboise | 59 | 6/13/11 | 0 | 0 | 3.3 | I B | V | - | - | 01 | - | s(p), p |
| Richmond | Point Michaud Beach | 60 | 6/13/11 | 0 | 0 | 2.5 | I A E | V | - | - | 01 | - | s(p) |
| Richmond | Pondville Beach | 66 | 6/12/11 | 0 | 0 | 0.8 | I B | n.r. | - | - | 01 | - | s(p) |
| Richmond | Rear Point Michaud Beach | 61 | 6/13/11 | 0 | 0 | 2.0 | I A E | V | - | - | 01 | - | p |
| Richmond | Rockdale beach | 63 | 6/12/11 | 0 | 0 | 1.5 | I A | H V U | - | - | 01 | - | p |
| Richmond | Rocky Bay Beach | 65 | 6/12/11 | 0 | 0 | 0.8 | I A | U | - | - | 01 | - | p |
| Shelburne | Black Point Beach | 107 | 6/8/11 | 1 | 2 | 1.0 | I A B | n.r. | <u>91</u> | 96 | 01 | <u>06</u> | p |
| Shelburne | Blanche Pointe | 113 | 6/12/11 | 0 | 0 | 0.0 | I B | n.r. | 91 | 96 | 01 | - | p |
| Shelburne | Bull's Head | 120 | 6/16/11 | 0 | 0 | 0.8 | I A | V | - | <u>96</u> | - | 06 | p |
| Shelburne | Burk's Point | 115 | 6/16/11 | 0 | 0 | 1.5 | I A | None | 91 | 96 | 01 | <u>06</u> | p |
| Shelburne | Clam Point | 119 | 6/16/11 | 0 | 0 | 0.9 | I A | None | <u>91</u> | 96 | <u>01</u> | 06 | s(p) |
| Shelburne | Cranes Point | 109 | 6/17/11 | 0 | 0 | 2.3 | I A | None | - | - | - | - | p |
| Shelburne | Crescent Beach | 108 | 6/4/11 | 0 | 0 | 0.8 | I A B | H D U | 91 | 96 | 01 | <u>06</u> | m |
| Shelburne | Crow Neck (Baccaro ² | 114 | 6/13/11 | 5 | 12 | 3.0 | I A | V | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Shelburne | Daniels Head/ Southside | 122 | 6/8/11 | 1 | 3 | 2.7 | I A | None | 91 | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Shelburne | Fish Island | 127 | 6/17/11 | 0 | 0 | 0.8 | I E | None | - | - | 01 | - | s(p) |
| Shelburne | Fox Bar Beach | 110 | 6/7/11 | 0 | 1 | 3.1 | I A | V | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Shelburne | Goose Point | 116 | 6/16/11 | 0 | 1 | 1.2 | I A | None | 91 | 96 | 01 | 06 | p |
| Shelburne | Hawk Point ² | 124 | 6/6/11 | 1 | 2 | 1.6 | I A | None | 91 | 96 | 01 | <u>06</u> | p |
| Shelburne | Johnston's Pond Beach ² | 105 | 6/6/11 | 1 | 2 | 1.0 | I A B | None | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Shelburne | Louis Head Beach | 106 | 6/4/11 | 0 | 1 | 1.8 | I A | U | <u>91</u> | <u>96</u> | 01 | <u>06</u> | s(p), p |
| Shelburne | North East Point Beach | 118 | 6/6/11 | 0 | 0 | 1.1 | I A | H | <u>91</u> | 96 | 01 | 06 | p |
| Shelburne | Ratcliffe Hills Beach | 126 | 6/17/11 | 0 | 0 | 1.1 | I E | None | - | - | 01 | - | s(p), p |
| Shelburne | Red Head Beach | 112 | 6/7/11 | 2 | 4 | 2.6 | I A | V | <u>91</u> | 96 | <u>01</u> | <u>06</u> | p |
| Shelburne | Round Bay | 111 | 6/7/11 | 1 | 2 | 3.0 | I A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | 06 | s(p), p |
| Shelburne | Sand Hills Beach (Sebim Beach) | 117 | 6/6/11 | 3 | 6 | 2.3 | I A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Shelburne | Stoney Island | 121 | 6/6/11 | 0 | 0 | 3.0 | I A | V | 91 | 96 | <u>01</u> | <u>06</u> | p |
| Shelburne | The Cape, Inner Beach | 125 | 6/17/11 | 0 | 0 | 2.8 | I E | S | 91 | 96 | 01 | - | s(p) |
| Shelburne | The Hawk Beach | 123 | 6/6/11 | 0 | 0 | 2.1 | I A | None | <u>91</u> | <u>96</u> | <u>01</u> | 06 | p |

The 2011 International Piping Plover Breeding Census in Nova Scotia (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|----------------------|------|--------|------------------------|-------------------------|--------------|---------------------|-------------------------|---|-----------|-----------|-----------|---------|
| | | | | | | | | | | | | | |
| Victoria | Middle Harbour Beach | 50 | 6/7/11 | 0 | 0 | 0.8 | I A B | n.r. | - | - | - | - | p |
| Victoria | North Harbour Beach | 49 | 6/9/11 | 1 | 2 | 5.0 | I A B | V | 91 | 96 | 01 | 06 | s(p), p |
| Victoria | South Harbour Beach | 51 | 6/9/11 | 3 | 6 | 2.5 | I A B | None | 91 | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Total | | | | 39 | 96 | 383.5 | | | | | | | |

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

² This total is the "high count"; since two surveys were conducted at some sites for the detectability study, this total includes the highest count at each site.

The 2011 International Piping Plover Breeding Census on Prince Edward Island

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In Prince Edward Island 76 beaches¹ were surveyed by 18 volunteers and staff from Island Nature Trust, Parks Canada and the Prince Edward Island government. The 2011 beach list was based on sites visited during the last census (2006) and it included all known sites with suitable plover habitat. All beaches on the list were surveyed apart from Poverty Island which was missed because of logistics involved with accessing the site.

No new areas were identified for future consideration but because of the potential for winter storms to change coastal habitat in Prince Edward Island, new sites should always be considered, especially in years with significant winter weather events.

A total of 67 Piping Plovers were counted on 21 beaches in Prince Edward Island during the breeding census, including 29 pairs and 9 singles. The 2011 population on Prince Edward Island is low compared to recent census years and the decline observed since the 2006 census is consistent with trends observed from annual year-end population totals.

Census results are considered representative of the actual population in Prince Edward Island but are a slight underestimate the actual total. Detection of birds can be a challenge and on average (\pm SD) Prince Edward Island census counts have represented $91 \pm 7\%$ of the estimated year-end population totals.

Predation, adverse weather and human disturbance (e.g., vehicle traffic and dogs on beaches) are likely the biggest factors affecting Piping Plover numbers during the breeding season on Prince Edward Island. Population declines on the Island may be attributed to successive years of low productivity with many eggs lost before hatch (due to predation and floods).

The distribution of birds on Prince Edward Island has changed over the past 20 years, with a shift from west to east and a significant decrease in the proportion of Prince Edward Island birds located in the National Park (located approximately in the center of the island's north coast). West coast beaches are subject to considerable off-highway vehicle traffic, which may explain why fewer birds are now found at these sites. Declines of breeding birds in the National Park (supporting 50% of pairs in 1991 and $< 20\%$ in 2011) may be explained by the popularity of National Park beaches for dog walking (a prohibited activity) or by elevated predation. However, reason for the decline in Prince Edward Island National Park is poorly understood at this time. Low survival of post fledgling chicks and adults during the non-breeding season may also be factors contributing to declines in the Prince Edward Island population. Conservation groups, provincial and federal governments are working together to identify and address threats.

¹ In some cases the number of sites does not exactly match the number of beaches. Beaches were sometimes split or combined based on how they were surveyed in this and/or prior censuses.

Comparison of Census Numbers

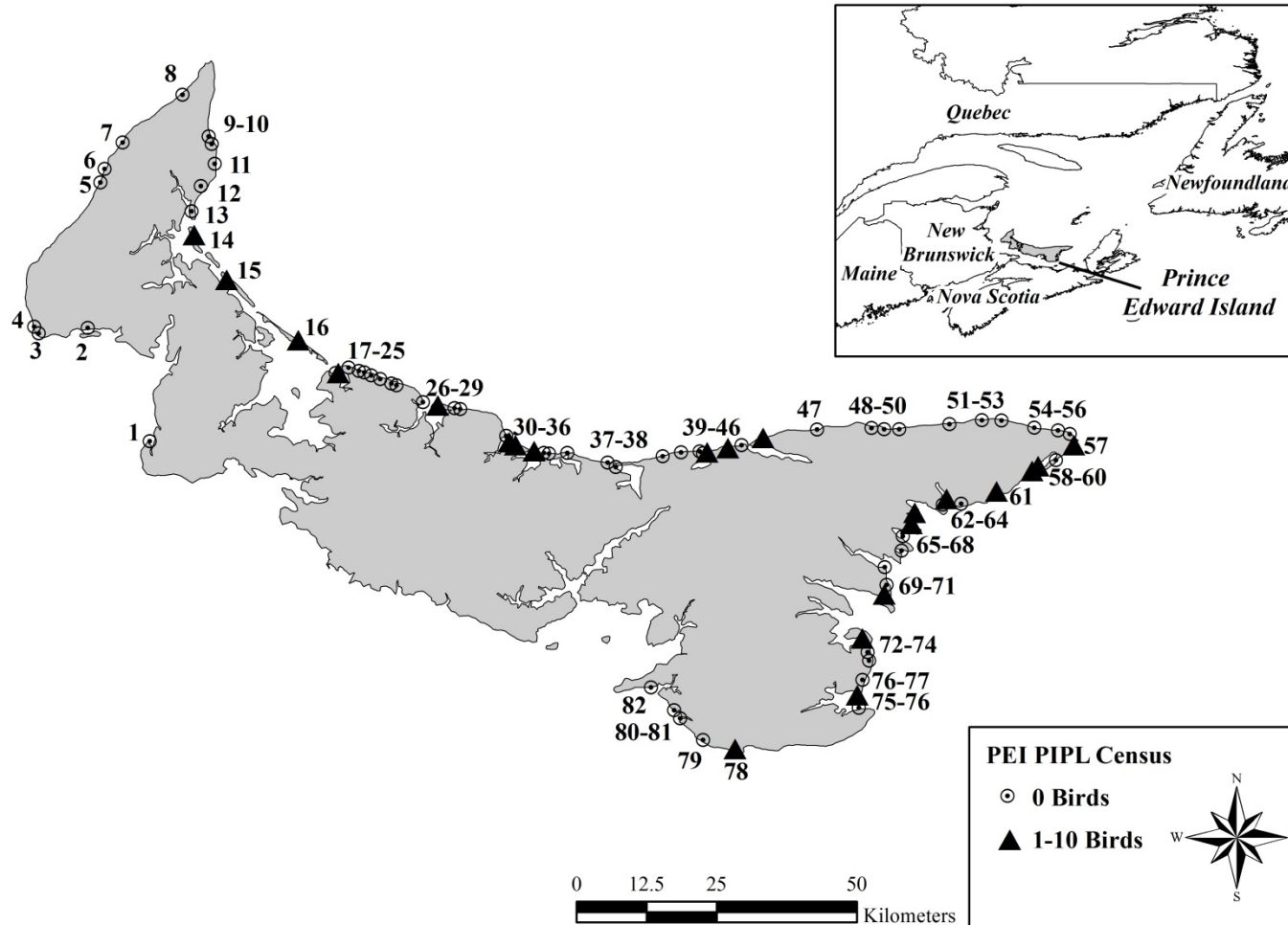
| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|-----------------|-----------------|
| Total Adults | 110 | 66 | 112 | 93 ¹ | 67 ¹ |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

Detectability Study

| Sites Included | First Count | Second Count |
|------------------------------------|-------------|--------------|
| Basin Head (Bothwell) | 1 | 0 |
| Boughton Island | 3 | 2 |
| Eglington Cove | 4 | 2 |
| Lake Run (Saint Peter's) | 6 | 6 |
| North Rustico Sandbar | 6 | 6 |
| Panmure Island | 2 | 2 |
| Saint Peter's Harbour | 0 | 0 |
| South Lake | 2 | 3 |
| Spry Cove/ Sally's Beach | 0 | 0 |
| Tracadie Sandbar | 0 | 0 |
| Wood Islands | 6 | 6 |
| Covehead Harbour West | 0 | 0 |
| Robinson's Island Sandspit | 0 | 3 |
| Rustico Causeway | 2 | 2 |
| Tracadie Beach to Covehead Harbour | 0 | 0 |

2011 International Piping Plover Breeding Census - Prince Edward Island -



The 2011 International Piping Plover Breeding Census in Prince Edward Island

| REGION | SITE NAME | MAP# | DATE | BREED- ING | TOTAL PIPL | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------|--|------|---------|---------------|---------------|-----|---------------------|-------------------------|---|-----------|-----------|-----------|-------|
| | | | | PAIRS | ADULTS | | | | | | | | |
| Kings | Basin Head (Bothwell) ² | 60 | 6/8/11 | 0 | 1 | 3.5 | I A | n.r. | 91 | 96 | <u>01</u> | <u>06</u> | s(p) |
| Kings | Beach Point | 77 | 6/5/11 | 0 | 0 | 0.8 | I A | n.r. | 91 | 96 | 01 | 06 | unk |
| Kings | Black Pond | 61 | 6/8/11 | 1 | 3 | 2.3 | I A | n.r. | - | 96 | <u>01</u> | <u>06</u> | s(p) |
| Kings | Boughton Bay (Old Ferry Spit) | 69 | 6/10/11 | 0 | 0 | 1.5 | I A E | n.r. | 91 | 96 | <u>01</u> | 06 | s(p) |
| Kings | Boughton Island ² | 71 | 6/10/11 | 1 | 3 | 3.5 | I A | n.r. | 91 | 96 | <u>01</u> | <u>06</u> | s(p) |
| Kings | Cable Head | 47 | 6/9/11 | 0 | 0 | 1.0 | I A | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Kings | Campbell's Cove | 53 | 6/11/11 | 0 | 0 | 1.0 | I A | n.r. | - | - | 01 | 06 | s(p) |
| Kings | Canavoy (Savage Harbour East) | 43 | 6/9/11 | 3 | 6 | 3.5 | I A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Kings | Condons Pond | 75 | 6/4/11 | 0 | 0 | 2.2 | I A | n.r. | - | - | 01 | 06 | s(p) |
| Kings | Cow River | 48 | 6/11/11 | 0 | 0 | 0.3 | I A | n.r. | 91 | - | 01 | 06 | s(p) |
| Kings | Cross River (Big Pond) | 51 | 6/11/11 | 0 | 0 | 0.5 | I A | n.r. | 91 | 96 | 01 | 06 | unk |
| Kings | Diligent Pond | 57 | 6/8/11 | 1 | 2 | 1.3 | I A | n.r. | <u>91</u> | 96 | <u>01</u> | <u>06</u> | s(p) |
| Kings | East Lake | 55 | 6/7/11 | 0 | 0 | 2.0 | I A | n.r. | 91 | <u>96</u> | 01 | 06 | s(p) |
| Kings | East Point | 56 | 6/7/11 | 0 | 0 | 1.0 | I A | V | - | 96 | 01 | 06 | unk |
| Kings | Eglington Cove ² | 66 | 6/6/11 | 1 | 4 | 1.0 | I A | n.r. | <u>91</u> | 96 | <u>01</u> | <u>06</u> | s(p) |
| Kings | Fortune Beach | 65 | 6/6/11 | 1 | 2 | 1.0 | I A | n.r. | - | - | 01 | 06 | p |
| Kings | Grahams Pond | 73 | 6/4/11 | 0 | 0 | 0.8 | I VIII B | n.r. | - | - | 01 | 06 | s(p) |
| Kings | Greenwich Peninsula/ Schooner PEINP | 46 | 6/6/11 | 2 | 5 | 6.0 | I A | n.r. | <u>91</u> | - | <u>01</u> | 06 | f |
| Kings | Howe Bay | 67 | 6/6/11 | 0 | 0 | 1.5 | I A | n.r. | <u>91</u> | 96 | 01 | 06 | s(p) |
| Kings | Lake Run (Saint Peter's) | 44 | 6/10/11 | 3 | 6 | 1.5 | I A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Kings | Launching Point | 70 | 6/10/11 | 0 | 0 | 1.0 | I A | H D | 91 | 96 | 01 | 06 | s(p) |
| Kings | Naufrage | 49 | 6/11/11 | 0 | 0 | 1.0 | I A | V | <u>91</u> | 96 | 01 | 06 | s(p) |
| Kings | Norris Pond | 62 | 6/7/11 | 0 | 0 | 0.5 | I A | V | - | - | 01 | 06 | s(p) |
| Kings | North Lake | 54 | 6/7/11 | 0 | 0 | 0.8 | I A | V | 91 | 96 | 01 | 06 | s(p) |
| Kings | Panmure Island | 72 | 6/4/11 | 1 | 2 | 2.5 | I A | H | 91 | 96 | 01 | <u>06</u> | s(p) |
| Kings | Pigots Pond | 41 | 6/10/11 | 0 | 0 | 0.8 | I A E | n.r. | - | - | 01 | 06 | s(p) |
| Kings | Poverty Beach | 76 | 6/4/11 | 1 | 2 | 1.2 | I A | n.r. | 91 | 96 | <u>01</u> | 06 | s(p) |
| Kings | Priest Pond | 52 | 6/11/11 | 0 | 0 | 0.8 | I A | n.r. | 91 | 96 | 01 | 06 | p |
| Kings | Saint Margaret's | 50 | 6/11/11 | 0 | 0 | 1.0 | I A | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Kings | Saint Peter's Harbour | 45 | 6/10/11 | 0 | 0 | 2.5 | I A | n.r. | 91 | 96 | <u>01</u> | <u>06</u> | s(p) |
| Kings | Savage Harbour West | 42 | 6/10/11 | 0 | 0 | 0.3 | I A | n.r. | <u>91</u> | 96 | <u>01</u> | 06 | p |
| Kings | Sheep Pond | 64 | 6/7/11 | 0 | 0 | 0.8 | I A | H D | - | - | 01 | 06 | s(p) |

The 2011 International Piping Plover Breeding Census in Prince Edward Island (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------|---|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|---|-----------|-----------|-----------|---------|
| | | | | | | | | | | | | | |
| Kings | Souris Causeway | 63 | 6/7/11 | 1 | 2 | 1.0 | I IV A E | H D | 91 | 96 | <u>01</u> | 06 | s(p) |
| Kings | South Lake ² | 59 | 6/16/11 | 1 | 3 | 6.0 | I IV A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Kings | Spry Cove/ Sally's Beach | 68 | 6/6/11 | 0 | 0 | 3.0 | I A | n.r. | 91 | 96 | <u>01</u> | <u>06</u> | s(p) |
| Kings | Steele's Pond | 74 | 6/4/11 | 0 | 0 | 0.8 | I A B | n.r. | - | - | 01 | 06 | s(p) |
| Prince | Black Pond West | 7 | 6/14/11 | 0 | 0 | 1.0 | I A | V | - | <u>96</u> | 01 | 06 | s(p) |
| Prince | Cabot Provincial Park | 17 | 6/17/11 | 0 | 0 | 1.5 | I C | n.r. | <u>91</u> | 96 | <u>01</u> | 06 | s(p) |
| Prince | Cascumpec Sand Hills ³ | 14 | 6/22/11 | 1 | 2 | 3.5 | I A | n.r. | 91 | 96 | <u>01</u> | <u>06</u> | f |
| Prince | Cedar Dunes Park ³ | 3 | 6/18/11 | 0 | 0 | 1.0 | I A | V | 91 | 96 | 01 | 06 | s(p) |
| Prince | Cedar Dunes West ³ | 4 | 6/18/11 | 0 | 0 | 2.0 | I E | V | 91 | 96 | 01 | 06 | s(p), p |
| Prince | Conway Island ³ | 15 | 6/22/11 | 1 | 2 | 8.5 | I A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Prince | Darnley Point | 18 | 6/17/11 | 1 | 3 | 2.0 | I A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Prince | Foley's Pond (The Gap) | 12 | 6/16/11 | 0 | 0 | 0.5 | I E | H U V | - | 96 | 01 | 06 | p |
| Prince | Hog Island ³ | 16 | 6/22/11 | 1 | 2 | 12.0 | I II A C | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Prince | Indian Point Sand Hills | 2 | 6/16/11 | 0 | 0 | 7.0 | I A | V | <u>91</u> | 96 | 01 | 06 | s(p) |
| Prince | Jacques Cartier East | 13 | 6/16/11 | 0 | 0 | 5.5 | I A | H D U V | 91 | <u>96</u> | 01 | 06 | s(p) |
| Prince | Kildare Capes | 11 | 6/16/11 | 0 | 0 | 3.0 | I A | H D | 91 | 96 | 01 | 06 | p |
| Prince | Little Miminegash | 5 | 6/14/11 | 0 | 0 | 3.0 | I A | V | - | 96 | 01 | 06 | s(p) |
| Prince | Maximeville ³ | 1 | 6/18/11 | 0 | 0 | 2.0 | I A | n.r. | - | 96 | 01 | 06 | s(p) |
| Prince | Miminegash Pond | 6 | 6/14/11 | 0 | 0 | 1.0 | I A | V | 91 | 96 | 01 | 06 | s(p) |
| Prince | Morrison's Pond | 20 | 6/15/11 | 0 | 0 | 1.2 | I A | H D U | - | 96 | 01 | 06 | p |
| Prince | Nail Pond | 8 | 6/14/11 | 0 | 0 | 3.0 | I A | V | <u>91</u> | <u>96</u> | 01 | 06 | s(p), p |
| Prince | Profitts Point (Twin Shores) ³ | 19 | 6/18/11 | 0 | 0 | 1.0 | I A | H U | - | 96 | 01 | 06 | p |
| Prince | Round Pond | 10 | 6/16/11 | 0 | 0 | 3.0 | I A | H V | - | 96 | 01 | 06 | p |
| Prince | Tignish Shore | 9 | 6/16/11 | 0 | 0 | 1.8 | I A | H D V | - | 96 | 01 | 06 | s(p), p |
| Queen | Adams Cottages | 21 | 6/15/11 | 0 | 0 | 0.8 | I A | H D | - | - | 01 | 06 | p |
| Queen | Adams Pond | 22 | 6/15/11 | 0 | 0 | 0.4 | I A | H D | - | 96 | 01 | 06 | p |
| Queens | Bell Point | 79 | 6/5/11 | 0 | 0 | 1.5 | I II B C | n.r. | 91 | 96 | 01 | 06 | p |
| Queens | Blooming Point PEINP | 58 | 6/9/11 | 0 | 0 | 7.5 | I A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Queens | Brackley Main PEINP | 34 | 6/6/11 | 0 | 0 | 1.2 | I A | n.r. | 91 | 96 | 01 | 06 | f |
| Queens | Brandors Pond | 23 | 6/15/11 | 0 | 0 | 0.5 | I A | H D | - | 96 | 01 | 06 | p |
| Queens | Campbells Pond | 25 | 6/15/11 | 0 | 0 | 0.7 | I II A | H D | - | <u>96</u> | 01 | 06 | p |
| Queens | Cavendish Campground PEINP | 28 | 6/6/11 | 0 | 0 | 1.1 | I A | V | - | 96 | 01 | <u>06</u> | f |

The 2011 International Piping Plover Breeding Census in Prince Edward Island (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|------------------------|-------------------------|--------------|---------------------|-------------------------|---|------------------|------------------|------------------|---------|
| | | | | | | | | | | | | | |
| Queens | Cavendish Main | 29 | 6/6/11 | 0 | 0 | 1.1 | I B | V | - | 96 | 01 | 06 | f |
| Queens | Cavendish Sandspit | 27 | 6/6/11 | 0 | 4 | 10.0 | I A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Queens | Cousin's Pond | 24 | 6/15/11 | 0 | 0 | 0.8 | I II A | H D V F | <u>91</u> | <u>96</u> | <u>01</u> | 06 | s(p) |
| Queens | Covehead Harbour West | 36 | 6/14/11 | 0 | 0 | 3.5 | I II A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Queens | Deroche Pond | 39 | 6/8/11 | 0 | 0 | 5.0 | I A | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Queens | Feehan's Point | 40 | 6/13/11 | 0 | 0 | 2.6 | I A | D | - | - | 01 | 06 | s(p) |
| Queens | Gascoigne Cove East | 80 | 6/15/11 | 0 | 0 | 1.0 | I A | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Queens | Gascoigne Cove West | 81 | 6/5/11 | 0 | 0 | 2.0 | I A | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Queens | North Rustico PEINP | 30 | 6/6/11 | 0 | 0 | 1.0 | I IV A B E | V | - | - | - | - | f |
| Queens | North Rustico Sandbar | 31 | 6/9/11 | 3 | 6 | 2.0 | I A | n.r. | 91 | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Queens | Pond Point | 82 | 6/15/11 | 0 | 0 | 1.0 | I II A B | n.r. | 91 | - | 01 | 06 | p |
| Queens | Robinson's Island Sandspit ² | 32 | 6/12/11 | 0 | 3 | 4.1 | I II A B | n.r. | 91 | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Queens | Rustico Causeway | 33 | 6/9/11 | 1 | 2 | 2.3 | I A | n.r. | <u>91</u> | 96 | <u>01</u> | <u>06</u> | f |
| Queens | Shaw's Beach | 35 | 6/6/11 | 0 | 0 | 1.2 | I A | V | 91 | 96 | 01 | 06 | f |
| Queens | Tracadie Beach to Covehead Harbour | 37 | 6/8/11 | 0 | 0 | 8.8 | I A | V | 91 | 96 | <u>01</u> | <u>06</u> | f |
| Queens | Tracadie Sandbar | 38 | 6/8/11 | 0 | 0 | 2.0 | I II A E | V | 91 | 96 | 01 | <u>06</u> | s(p) |
| Queens | Wood Islands | 78 | 6/5/11 | 3 | 6 | 3.0 | I A E | n.r. | 91 | 96 | 01 | 06 | s(p), p |
| Queens | Yankee Beach | 26 | 6/15/11 | 0 | 0 | 0.7 | I A | H D V | - | 96 | 01 | 06 | s(p) |
| Total | | | | 28 | 71 | 189.3 | | | | | | | |

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

² This total is the "high count"; since two surveys were conducted at some sites for the detectability study, this total includes the highest count at each site.

³ Please note that these surveys were conducted outside the Census window.

The 2011 International Piping Plover Breeding Census in New Brunswick

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In New Brunswick (NB), 63 beaches¹ were surveyed by 41 participants. Staff and volunteers from Nature New Brunswick Irving Eco-Centre / Dune de Bouctouche, the Canadian Wildlife Service (Environment Canada), and Parks Canada visited New Brunswick beaches between the 4th and 17th June. The 2011 list of beaches was based on sites visited during the last census in 2006 and included all known suitable plover habitat.

Two sites were deemed unsuitable for nesting plovers: Carron Point, because the shoreline has been hardened to the water's edge and Maissonnette Beach, because it was inundated by winter storms. Although Middle Miscou beach and Petit Barachois beach are on the list of beaches to check, site visits were not conducted in 2011. The north and south sections of Middle Miscou beach have been severely eroded with no plover habitat remaining. It is possible that a small patch of suitable habitat exists in the center of this site however it was not accessible in 2011. Visits to Petit Barachois were delayed due to limited access restricted by tide; this beach was visited after the census period with no plovers counted. Grande Digue was split into

two separate sites and the southern portion is now an island, accessible only by boat (now respectively: Pointe Grande Digue and Grande Digue Island). Similarly, Tabusintac Dune was split in to two (now Tabusintac nord and Tabusintac sud).

No new areas were identified for future consideration but because of the potential for winter storms to change coastal habitat in New Brunswick, new sites should always be considered, especially in years with significant winter weather events.

In 2011, 130 Piping Plovers were counted on 32 beaches in New Brunswick during the breeding census, including 48 pairs and 34 singles. Despite a general increase in the number of beaches surveyed across years, the number of beaches with plovers has remained relatively stable and the number of adults counted has decreased, with the fewest number of birds counted in 2011.

Census results are representative of the actual population in New Brunswick but are likely a slight underestimate of the population total. For example, on average (\pm SD) New Brunswick census counts have represented $95 \pm 3\%$ of year-end estimated population totals. Census counts are lower than year-end totals because during a census, a few beaches may be missed (e.g. in 2011, two sites were not surveyed ; see above for explanation) and detection of birds can also be a challenge. The latter is especially true in northern New Brunswick where many beaches are characterized by extensive wash-over areas in which birds are especially difficult to find. Given that the number of beaches surveyed has generally increased across years, we might expect a subsequent bias towards counting more birds however this has not been the case for New Brunswick.

Major winter storm events in December 2010 affected extensive areas of the New Brunswick coastline, eroding shoreline at some sites and creating large wash-over areas of ‘ideal’ plover habitat at others. Due to the latter, habitat does not appear to be limiting for Piping Plovers in New Brunswick especially in northern regions. Human disturbance, habitat degradation, adverse weather and predation likely pose the biggest threats to Piping Plovers in New Brunswick. Some of the principle concerns directly related to human activities are: widespread use of vehicles on beaches, coastal development and building projects that compromise dune integrity (e.g. hardening of shorelines, erosion prevention initiatives, removal of sand), and off-leash dogs that disturb birds. Conservation groups, provincial and federal governments are working together to identify and address threats.

¹ In some cases the number of sites does not exactly match the number of beaches. Beaches were sometimes split or combined based on how they were surveyed in this and/or prior censuses.

Comparison of Census Numbers

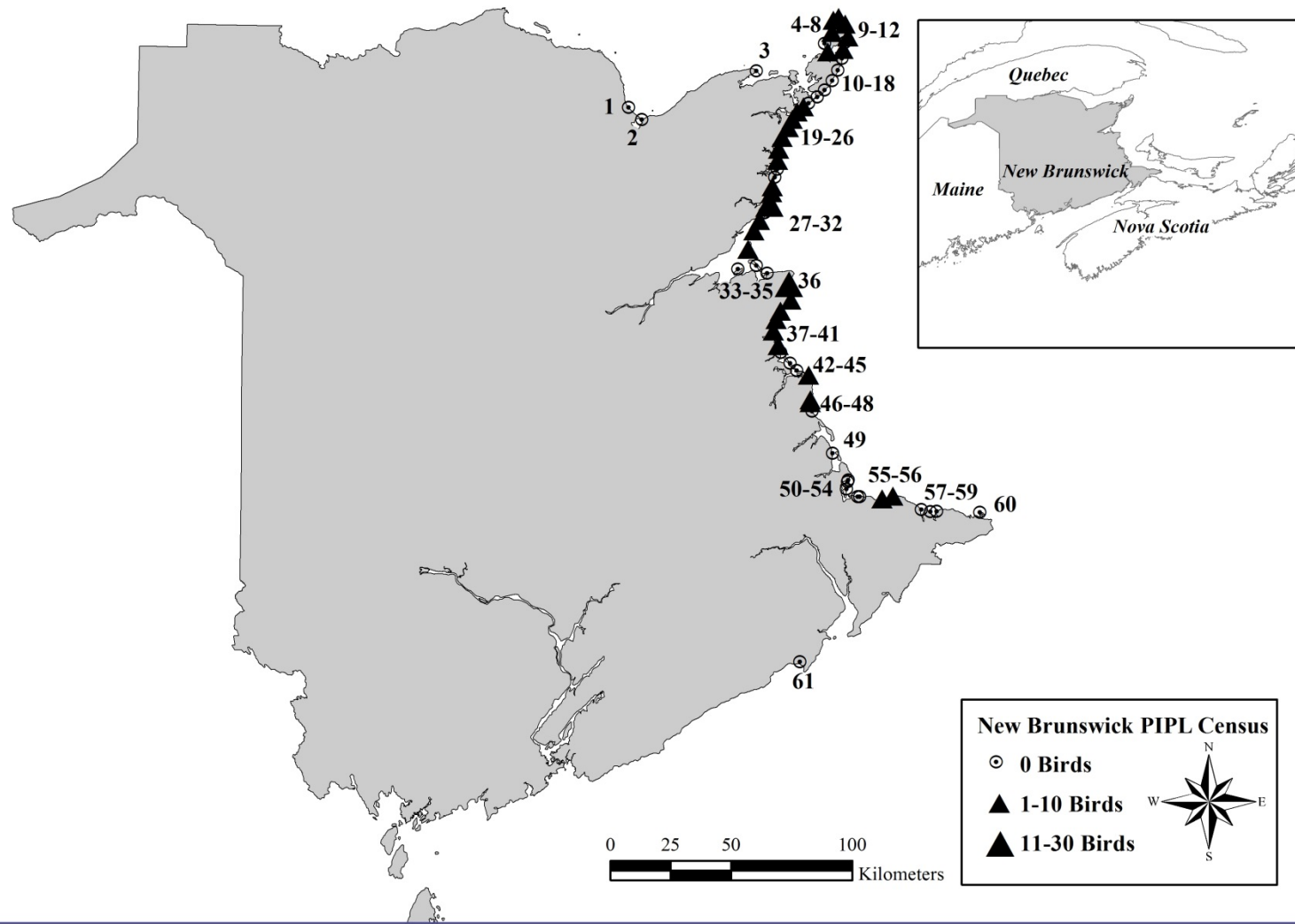
| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|------------------|------------------|
| Total Adults | 203 | 146 | 167 | 166 ¹ | 130 ¹ |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

Detectability Study

| Sites Included | First Count | Second Count |
|-----------------------------------|-------------|--------------|
| Baie-de-Petit-Pokemouche | 1 | 0 |
| Grand Lac (Lameque) | 0 | 0 |
| Grand Passage | 3 | 4 |
| Green Point | 1 | 0 |
| Miscou Beach | 3 | 5 |
| Pointe-à-Bouleau | 1 | 0 |
| Tracadie Dune | 4 | 5 |
| Chockpish | 4 | 4 |
| Escuminac Beaches | 13 | 10 |
| North Kouchibouguac Dune | 7 | 3 |
| South Kouchibouguac Dune | 2 | 3 |
| Blacklands Sandspit (Crab Island) | 0 | 0 |
| Cedar Road Beach South | 5 | 10 |

2011 International Piping Plover Breeding Census - New Brunswick -



The 2011 International Piping Plover Breeding Census in New Brunswick

| REGION | SITE NAME | MAP# | DATE | BREED- ING | TOTAL PIPL | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|------------|---|------|---------|---------------|---------------|------|---------------------|-------------------------|---|-----------|-----------|-----------|------------|
| | | | | PAIRS | ADULTS | | | | | | | | |
| Albert | Waterside Beach | 61 | 6/17/11 | 0 | 0 | 3.5 | I A | V | <u>91</u> | 96 | 01 | 06 | s(p) |
| Gloucester | Baie-de-Petit-Pokemouche ² | 19 | 6/4/11 | 0 | 1 | 3.5 | I B | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Gloucester | Beresford Beach | 1 | 6/14/11 | 0 | 0 | 0.3 | II B | n.r. | - | 96 | 01 | 06 | p |
| Gloucester | Cap Bateau | 14 | 6/15/11 | 0 | 0 | 1.5 | I B | n.r. | - | 96 | 01 | 06 | s(p), p |
| Gloucester | Carron Point | 2 | 6/14/11 | 0 | 0 | 0.2 | II B | n.r. | 91 | 96 | 01 | 06 | p |
| Gloucester | Chiasson Office | 17 | 6/15/11 | 0 | 0 | 2.2 | I B | n.r. | - | <u>96</u> | 01 | 06 | f, p |
| Gloucester | École-La-Vague | 18 | 6/15/11 | 0 | 0 | 4.5 | I B | n.r. | - | <u>96</u> | <u>01</u> | 06 | f, m, p |
| Gloucester | Grand Lac (Lameque) | 16 | 6/14/11 | 0 | 0 | 1.0 | I B | n.r. | - | - | 01 | <u>06</u> | s(p) |
| Gloucester | Grand Passage ² | 20 | 6/15/11 | 2 | 4 | 5.7 | I A B | V | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Gloucester | Grande Plaine | 7 | 6/13/11 | 4 | 8 | 4.5 | I A | V | - | - | <u>01</u> | <u>06</u> | s(p), p |
| Gloucester | Green Point ² | 23 | 6/15/11 | 0 | 1 | 8.5 | I B | V | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, p |
| Gloucester | Lac Frye | 8 | 6/14/11 | 0 | 1 | 1.3 | I A | V | <u>91</u> | <u>96</u> | <u>01</u> | - | p |
| Gloucester | Miscou Beach ² | 9 | 6/16/11 | 2 | 5 | 8.0 | I II A B | V S | <u>91</u> | <u>96</u> | 01 | <u>06</u> | f, s(p), p |
| Gloucester | Miscou Centre Beach | 5 | 6/14/11 | 0 | 0 | 6.0 | I A | V | - | <u>96</u> | 01 | 06 | s(p), p |
| Gloucester | Miscou Harbour South, Marks Point South | 4 | 6/14/11 | 1 | 2 | 2.5 | I A B | U | - | - | 01 | 06 | f, p |
| Gloucester | Pigeon Hill Sandspit (Fox Den) | 12 | 6/12/11 | 4 | 8 | 7.2 | I II C | none | 91 | - | <u>01</u> | 06 | s(p) |
| Gloucester | Pigeon Hill Beach | 13 | 6/15/11 | 0 | 0 | 3.0 | I B | n.r. | <u>91</u> | <u>96</u> | 01 | 06 | s(p), p |
| Gloucester | Plover Ground North | 21 | 6/13/11 | 2 | 4 | 4.4 | I A B | V | <u>91</u> | <u>96</u> | <u>01</u> | 06 | p |
| Gloucester | Plover Ground South | 22 | 6/13/11 | 0 | 1 | 2.5 | I A | V | <u>91</u> | <u>96</u> | <u>01</u> | 06 | p |
| Gloucester | Pointe de Maisonnnette | 3 | 6/4/11 | 0 | 0 | 0.9 | II B | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Gloucester | Pointe-à-Bouleau ² | 25 | 6/7/11 | 0 | 1 | 2.9 | I II C | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, s(p), p |
| Gloucester | Ruisseau Cheniere (Miscou Island) | 6 | 6/14/11 | 1 | 2 | 3.7 | I A | V | - | <u>96</u> | <u>01</u> | 06 | s(p), p |
| Gloucester | St. Raphael, St. Marie | 15 | 6/6/11 | 0 | 0 | 1.2 | I A | S | - | - | - | 06 | s(p), p |
| Gloucester | Tracadie Dune ² | 24 | 6/10/11 | 2 | 5 | 4.7 | I II C | U | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Gloucester | Val Comeau | 26 | 6/6/11 | 0 | 0 | 3.3 | I B | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Gloucester | Wilson Point North (Miscou) | 10 | 6/15/11 | 1 | 5 | 3.2 | I A | V | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Gloucester | Wilson Point South (Miscou) | 11 | 6/12/11 | 0 | 0 | 2.9 | I A E | V | <u>91</u> | - | 01 | 06 | f, s(p), p |
| Kent | Bouctouche Dune | 46 | 6/8/11 | 1 | 3 | 12.2 | IX B | none | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Kent | Chockpish ² | 47 | 6/10/11 | 2 | 4 | 3.7 | IX A | V O | - | - | <u>01</u> | <u>06</u> | unk |
| Kent | Cocagne Island | 49 | 6/14/11 | 0 | 0 | 8.0 | I E | n.r. | 91 | - | 01 | 06 | p |
| Kent | Cote-Sainte-Anne | 48 | 6/10/11 | 0 | 0 | 5.0 | IX A | H S | - | - | 01 | 06 | unk |
| Kent | Escuminac Beaches ² | 36 | 6/14/11 | 5 | 13 | 10.0 | IX A | V | - | <u>96</u> | <u>01</u> | <u>06</u> | unk |

The 2011 International Piping Plover Breeding Census in New Brunswick (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|----------------|---|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|---|-----------|-----------|-----------|------------|
| | | | | | | | | | | | | | |
| Kent | North Kouchibouguac Dune ² | 40 | 6/7/11 | 3 | 7 | 3.0 | I B | none | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Kent | North Richibucto Dune | 43 | 6/15/11 | 0 | 0 | 15.0 | I C | none | - | 96 | 01 | 06 | f |
| Kent | Pointe Grande-Digue (North) | 50 | 6/14/11 | 0 | 0 | 1.5 | I II A B | D O | 91 | 96 | 01 | - | up |
| Kent | Pointe Sapin Beach | 37 | 6/16/11 | 0 | 1 | 4.8 | IX A | none | - | - | 01 | 06 | unk |
| Kent | Pointe-Sapin Dune | 38 | 6/5/11 | 2 | 4 | 3.0 | I A | none | - | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Kent | Portage River Dune | 39 | 6/5/11 | 3 | 7 | 3.0 | I II A B | none | - | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Kent | South Kouchibouguac Dune ² | 41 | 6/7/11 | 1 | 3 | 6.0 | I B | none | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Kent | South Richibucto Beach | 45 | 6/7/11 | 0 | 1 | 6.2 | IX B | none | <u>91</u> | 96 | 01 | <u>06</u> | unk |
| Kent | South Richibucto Dune (Barrier Island) | 44 | 6/15/11 | 0 | 0 | 3.5 | IX C | none | <u>91</u> | 96 | <u>01</u> | - | unk |
| Kent | Tern Islands | 42 | 6/15/11 | 0 | 0 | 1.5 | II C | none | - | 96 | - | - | f |
| Northumberland | Bay du Vin Island | 35 | 6/8/11 | 0 | 0 | 5.8 | I II D | H U | - | - | - | - | s(p) |
| Northumberland | Blacklands Sandspit (Crab Island) | 31 | 6/8/11 | 0 | 0 | 1.5 | I E | n.r. | <u>91</u> | 96 | - | - | s(p) |
| Northumberland | Blacklands Sandspit (Swinging Point) | 32 | 6/8/11 | 2 | 5 | 3.0 | I II E | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Northumberland | Cedar Road Beach South ² | 28 | 6/17/11 | 4 | 10 | 5.0 | I B | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, s(p), p |
| Northumberland | Cedar Road Spit | 29 | 6/9/11 | 3 | 6 | 3.1 | I II C | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Northumberland | Dune de Neguac, Neguac Beach | 33 | 6/16/11 | 1 | 3 | 6.5 | I II C | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Northumberland | Fox Island | 36 | 6/8/11 | 0 | 0 | 13.0 | I II B C D E | U V | 91 | 96 | 01 | 06 | f, p |
| Northumberland | Pointe à Barreau | 27 | 6/5/11 | 0 | 0 | 2.4 | I B | n.r. | 91 | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Northumberland | Portage Island National Wildlife Area | 34 | 6/7/11 | 0 | 2 | 14.5 | I II B C D | V | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Northumberland | Preston Beach | 35 | 6/14/11 | 0 | 0 | 2.3 | IX B | none | <u>91</u> | 96 | 01 | 06 | unk |
| Northumberland | Tabusintac Dune | 30 | 6/8/11 | 8 | 21 | 6.0 | I II C | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Westmorland | Cadman Beach | 59 | 6/8/11 | 0 | 0 | 2.3 | IX A | none | 91 | 96 | 01 | 06 | unk |
| Westmorland | Cape Bimet West | 54 | 6/7/11 | 0 | 0 | 0.8 | I A | H S U | 91 | 96 | 01 | 06 | p |
| Westmorland | Cape Brule East | 53 | 6/7/11 | 0 | 0 | 0.8 | I A | none | 91 | 96 | 01 | 06 | p |
| Westmorland | Cape Jourmain National Wildlife Area | 60 | 6/10/11 | 0 | 0 | 1.5 | I A | O | - | - | <u>01</u> | 06 | f |
| Westmorland | Cap-Pelé | 56 | 6/8/11 | 0 | 1 | 1.0 | IX A | none | - | - | - | - | unk |
| Westmorland | Grand Digue South (Island Segment) | 51 | 6/8/11 | 0 | 0 | 1.0 | I E | none | 91 | 96 | 01 | 06 | p |
| Westmorland | Johnston Point | 58 | 6/8/11 | 0 | 0 | 1.5 | IX A | none | 91 | 96 | 01 | 06 | unk |

The 2011 International Piping Plover Breeding Census in New Brunswick (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|----------------|------|--------|------------------------|-------------------------|--------------|---------------------|-------------------------|---|----|----|----|-------|
| | | | | | | | | | | | | | |
| Westmorland | Landry East | 55 | 6/8/11 | 0 | 1 | 8.0 | I A | H D V | 91 | 96 | 01 | 06 | p |
| Westmorland | Little Cape | 57 | 6/8/11 | 0 | 0 | 1.3 | IX B | none | <u>91</u> | 96 | 01 | 06 | unk |
| Westmorland | Shediac Island | 52 | 6/8/11 | 0 | 0 | 2.5 | I C | none | - | - | 01 | 06 | m, p |
| Total | | | | 54 | 140 | 263.1 | | | | | | | |

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

² This total is the "high count"; since two surveys were conducted at some sites for the detectability study, this total includes the highest count at each site.

The 2011 International Piping Plover Breeding Census at Great Lakes sites in Michigan, Wisconsin, Illinois, Indiana, and Pennsylvania

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The 2011 International Piping Plover Breeding Census in the U.S. Great Lakes was completed during the 4 June to 17 June census period. Surveys of known and/or potential breeding habitat for the Great Lakes population of the Piping Plover (*Charadrius melodus*) covered a six state area that included Michigan, Wisconsin, Illinois, Indiana, Pennsylvania and New York. A total of 72 coastal sites were visited one or more times, including 56 sites in Michigan. Some areas were reported as a single site in 2011 but were broken down into two or more sites in 2006; likewise, a few sites that were reported as a single site in 2006 were broken down into two or more sites in 2011. Sites selected for survey in Michigan and Wisconsin were based primarily on the results of the 2006 International Piping Plover Breeding Census. These sites included nearly all of the currently known breeding locations in the U.S. Great Lakes. Some sites surveyed in 2006 were not included in the 2011 census due to lack of access, or the current lack of habitat. Alternately, a small number of new sites were added to the effort in 2011 as a result of recent observation of Piping Plover presence.

Census locations selected for survey in the other Great Lakes states were based primarily on designated critical habitat areas (USFWS May 7, 2001). These sites are generally considered the best potential Piping Plover habitat outside their current range in Michigan and Wisconsin.

A total of 98 Piping Plovers were observed in the U.S. Great Lakes during the census period. This was 11 fewer birds than observed during the 2006 Census. Of the 2011 total, 8 were recorded in Wisconsin, with the remainder in Michigan. No observations of Piping Plovers were recorded for the other states.

The number of Piping Plovers tallied for the 2011 International Breeding Census varied, however, from the number recorded during the annual monitoring program in the Great Lakes. Annual monitoring efforts reported a total of 50 breeding pairs in the U.S. portion of the Great Lakes. This tally is the result of intense survey efforts and nearly daily monitoring of active breeding locations. The discrepancy in the number of Piping Plovers counted in 2011 may have been due to weather conditions during the census period or movement patterns of birds. As many of the observers who participated in the International Census were the same as those employed for the seasonal monitoring program, observer bias is not a likely cause of the discrepancy.

In the Great Lakes we have intense survey efforts and monitoring programs every year. During the time since the 2006 census, the Great Lakes population of Piping Plovers continued to rise and the highest numbers recorded since listing occurred during 2009, when there were 71 pairs counted across the basin. During the last two years there have been declines. We are currently investigating causes of the recent decline and exploring further management options.

Comparison of Census Numbers – Michigan

| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|------------------|-----------------|
| Total Adults | 39 | 47 | 65 | 101 ¹ | 90 ¹ |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

Comparison of Census Numbers – Wisconsin

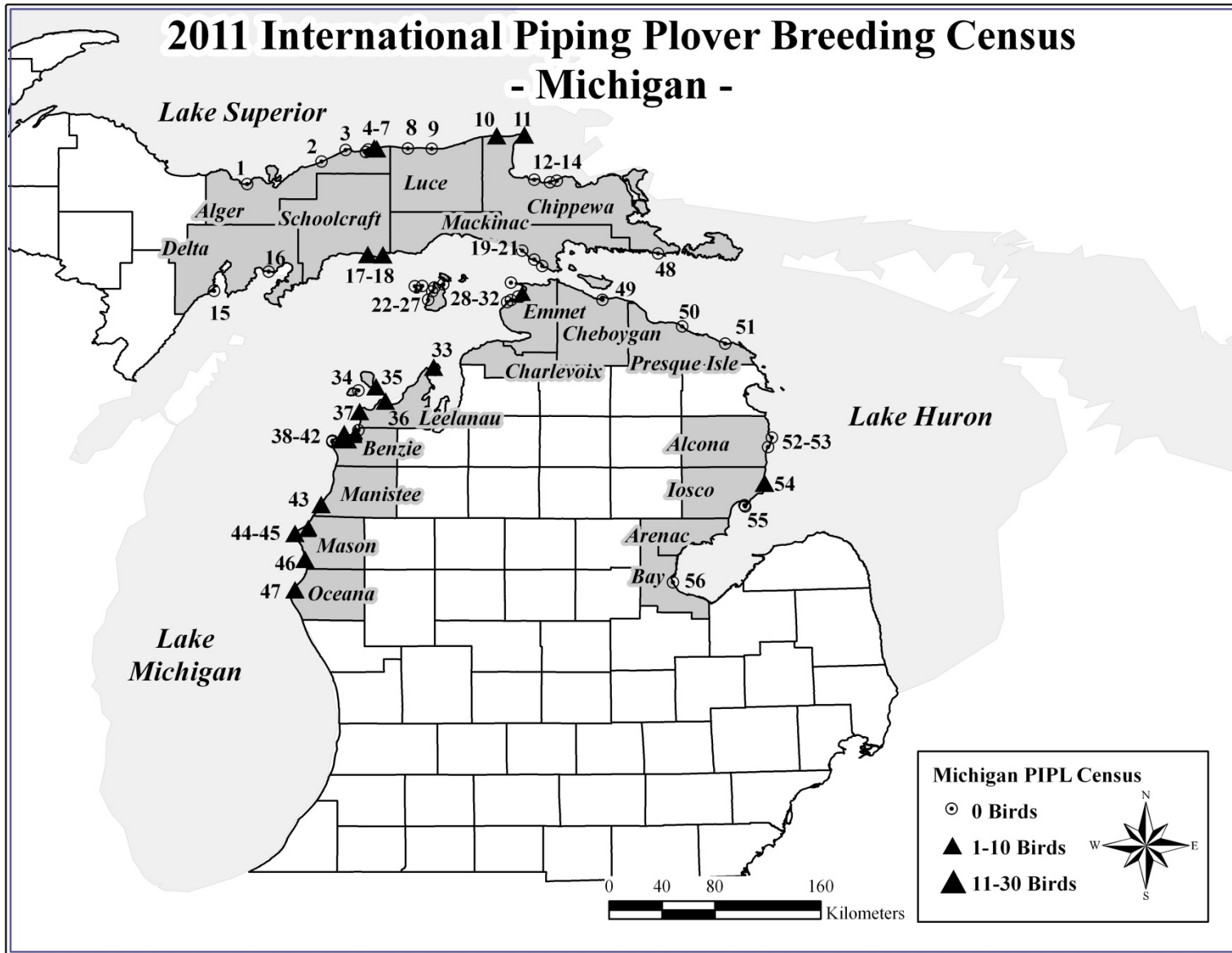
| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|----------------|----------------|
| Total Adults | 1 | 0 | 6 | 8 ¹ | 8 ¹ |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

Comparison of Census Numbers – Illinois, Indiana, and Pennsylvania

| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|------|------|
| Total Adults | n.a. | n.a. | 0 | 0 | 0 |

2011 International Piping Plover Breeding Census - Michigan -



The 2011 International Piping Plover Breeding Census in Michigan

| REGION | SITE NAME | MAP# | DATE | BREED- ING | TOTAL PIPL | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|------------|---|------|---------|---------------|---------------|-----|---------------------|-------------------------|---|----|-----------|------------------------|---------|
| | | | | PAIRS | ADULTS | | | | | | | | |
| Alcona | Harrisville State Park | 53 | 6/12/11 | 0 | 0 | 0.8 | V A | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Alcona | Sturgeon Point | 52 | 6/12/11 | 0 | 0 | 0.8 | V A | n.r. | 91 | 96 | 01 | 06 | m |
| Alger | 12 Mile Beach to Beaver Creek | 2 | 6/15/11 | 0 | 0 | 6.5 | V A | n.r. | - | 96 | 01 | 06 | unk |
| Alger | Au Train River Mouth | 1 | 6/17/11 | 0 | 0 | 1.2 | V A | n.r. | - | - | 01 | 06 | s(p) |
| Alger | Grand Marais (Inner Bay) | 7 | 6/8/11 | 1 | 2 | 2.4 | III V A D | V H | 91 | 96 | 01 | <u>06</u> | m, p |
| Alger | Grand Marais (West Bay) | 6 | 6/5/11 | 1 | 3 | 1.6 | III V A | H I | 91 | 96 | 01 | 06 | p |
| Alger | Grand Sable Lake | 4 | 6/10/11 | 0 | 0 | 0.8 | V A | O | - | 96 | 01 | 06 | unk |
| Alger | Hurricane River to 12 Mile Beach CG | 3 | 6/13/11 | 0 | 0 | 3.2 | V A | n.r. | - | 96 | 01 | 06 | unk |
| Alger | Sable Falls | 5 | 6/9/11 | 0 | 0 | 2.5 | V A | n.r. | - | 96 | 01 | - | unk |
| Bay | South Linwood Beach | 56 | 6/17/11 | 0 | 0 | 0.8 | V A | D V H | - | - | - | - | p |
| Benzie | Elberta Beach | 42 | 6/17/11 | 0 | 0 | 1.5 | V A | O | - | 96 | 01 | 06 | m |
| Benzie | Esch to Platte Point | 39 | 6/17/11 | 3 | 6 | 8.3 | V A | n.r. | 91 | 96 | <u>01</u> | <u>06</u> | unk |
| Benzie | Point Betsie | 41 | 6/17/11 | 0 | 0 | 1.8 | V A | n.r. | - | 96 | 01 | 06 | unk |
| Benzie | S Sleeping Bear Dunes to Platte Point | 40 | 6/16/11 | 6 | 14 | 3.0 | V A | n.r. | 91 | 96 | <u>01</u> | <u>06</u> | unk |
| Charlevoix | Bonner's Bluff/Landing, Beaver Island | 26 | 6/11/11 | 0 | 0 | 3.7 | V E | H I | - | 96 | <u>01</u> | 06 | s(p) |
| Charlevoix | Donegal Bay and McCauley Point | 25 | 6/9/11 | 0 | 0 | 3.2 | V E | H I | <u>91</u> | 96 | <u>01</u> | 06 | s(p), p |
| Charlevoix | High Island NE Spit | 23 | 6/5/11 | 0 | 0 | 2.0 | V E | I | 91 | 96 | <u>01</u> | <u>06</u> ³ | s(p), p |
| Charlevoix | High Island NW Side | 22 | 6/5/11 | 0 | 0 | 3.5 | V E | I | <u>91</u> | 96 | 01 | <u>06</u> ³ | s(p), p |
| Charlevoix | Lookout Point, Beaver Island | 24 | 6/9/11 | 0 | 0 | 1.0 | V E I | I | - | 96 | 01 | 06 | s(p), p |
| Charlevoix | McFaddin Pt./Green's Bay, Beaver Island | 27 | 6/15/11 | 0 | 0 | 2.0 | V E | H I | 91 | 96 | 01 | 06 | s(p), p |
| Cheboygan | Cheboygan State Park | 49 | 6/13/11 | 0 | 0 | 1.6 | V A | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Chippewa | Bay View Campground | 13 | 6/15/11 | 0 | 0 | 6.4 | V A | n.r. | - | - | - | - | p |
| Chippewa | Big Pine Picnic Area | 14 | 6/15/11 | 0 | 0 | 1.6 | V A | n.r. | - | - | - | - | unk |
| Chippewa | De Tour Beach | 48 | 6/16/11 | 0 | 0 | 2.2 | V A | V | - | 96 | <u>01</u> | <u>06</u> | s(p) |
| Chippewa | Naomikong | 12 | 6/14/11 | 0 | 0 | 5.6 | V A | n.r. | - | - | - | - | p |
| Chippewa | Vermilion Beach | 10 | 6/4/11 | 2 | 4 | 8.9 | V A | n.r. | <u>91</u> | 96 | 01 | 06 | s(p), p |
| Chippewa | Whitefish Point | 11 | 6/4/11 | 1 | 3 | 3.2 | V A | n.r. | <u>91</u> | 96 | 01 | - | s(p), p |
| Delta | Indian Point, E side | 16 | 6/9/11 | 0 | 0 | 3.2 | VI A E | V | - | - | - | <u>06</u> | unk |
| Delta | Portage Point/Aronson Island | 15 | 6/11/11 | 0 | 0 | 4.8 | V A B | V I | - | - | - | - | unk |

The 2011 International Piping Plover Breeding Census in Michigan (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|---------------------|--|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|--|----|-----------|-----------|------------|
| | | | | | | | | | | | | | |
| Emmet | Bliss Township Beach | 29 | 6/9/11 | 1 | 2 | 3.2 | V A | n.r. | - | - | <u>01</u> | <u>06</u> | s(p), m, p |
| Emmet | Cross Village Central | 31 | 6/9/11 | 0 | 0 | 1.6 | V A | n.r. | <u>91</u> | 96 | <u>01</u> | 06 | p |
| Emmet | Cross Village North | 30 | 6/9/11 | 0 | 0 | 1.6 | V A | n.r. | <u>91</u> | 96 | <u>01</u> | <u>06</u> | p |
| Emmet | Cross Village South | 32 | 6/9/11 | 0 | 0 | 1.6 | V A | n.r. | <u>91</u> | 96 | 01 | 06 | p |
| Emmet | Temperance/Waugoshance/Crane Island | 28 | 6/5/11 | 0 | 0 | 8.1 | V A | n.r. | - | 96 | <u>01</u> | 06 | s(p) |
| Iosco | Au Sable River Mouth/Lake Huron Beach | 54 | 6/12/11 | 1 | 2 | 0.4 | V A | n.r. | - | 96 | 01 | 06 | s(p) |
| Iosco | Tawas Point, Tawas State Park | 55 | 6/12/11 | 0 | 0 | 4.0 | V A | n.r. | 91 | 96 | 01 | - | s(p) |
| Leelanau | Leelanau State Park | 33 | 6/11/11 | 0 | 1 | 2.4 | V A | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Leelanau | Sleeping Bear Point/Glen Haven | 37 | 6/15/11 | 3 | 8 | 13.7 | V A | n.r. | - | - | - | <u>06</u> | unk |
| Leelanau | South Manitou Island | 34 | 6/16/11 | 0 | 0 | 20.9 | V E | n.r. | 91 | 96 | 01 | 06 | unk |
| Leelanau/ Benzie | Empire to Esch | 38 | 6/16/11 | 0 | 0 | 5.6 | VA | n.r. | - | - | - | - | unk |
| Lelanau | E Sleeping Bear Bay/W Good Harbor Bay | 36 | 6/14/11 | 1 | 2 | 16.1 | V A | n.r. | - | - | - | - | unk |
| Lelenau | North Manitou Island | 35 | 6/15/11 | 1 | 10 | 38.6 | V E | n.r. | 91 | 96 | <u>01</u> | <u>06</u> | unk |
| Luce | Deer Park | 9 | 6/4/11 | 0 | 0 | 9.7 | V A | O | <u>91</u> | 96 | 01 | 06 | s(p) |
| Luce | Lake Superior State Forest Campground | 8 | 6/5/11 | 0 | 0 | 4.8 | V A | n.r. | - | 96 | 01 | 06 | s(p) |
| Mackinac | Brevort River to Pointe aux Chenes | 21 | 6/8/11 | 0 | 0 | 3.2 | V A | n.r. | - | - | - | <u>06</u> | p |
| Mackinac | Lake MI Campground/West Brevoort River | 19 | 6/9/11 | 0 | 0 | 6.0 | V A | n.r. | 91 | - | - | 06 | p |
| Mackinac | Point Aux Chenes Bay | 20 | 6/7/11 | 0 | 0 | 1.6 | V A | n.r. | <u>91</u> | 96 | <u>01</u> | <u>06</u> | p |
| Manistee | Manistee City Beach | 43 | 6/4/11 | 2 | 4 | 3.2 | V A | n.r. | - | - | - | - | m |
| Mason | Buttersville Park | 46 | 6/4/11 | 2 | 4 | 3.2 | V A | n.r. | - | - | - | - | m, p |
| Mason | Ludington State Park | 45 | 6/4/11 | 2 | 8 | 11.3 | V A | I | 91 | 96 | 01 | 06 | s(p) |
| Mason | Nordhouse Dunes Wilderness | 44 | 6/7/11 | 1 | 2 | 6.4 | V A | I | - | - | - | <u>06</u> | unk |
| Oceana | Silver Lake State Park | 47 | 6/4/11 | 1 | 4 | 4.8 | V A | n.r. | - | - | - | - | m, p |
| Presque Isle | Hoelt State Park | 50 | 6/13/11 | 0 | 0 | 1.0 | V A | n.r. | - | - | 01 | 06 | s(p) |
| Presque Isle | Thompson's Harbor State Park | 51 | 6/13/11 | 0 | 0 | 1.5 | V A | n.r. | - | 96 | 01 | 06 | s(p) |

The 2011 International Piping Plover Breeding Census in Michigan (Continued)

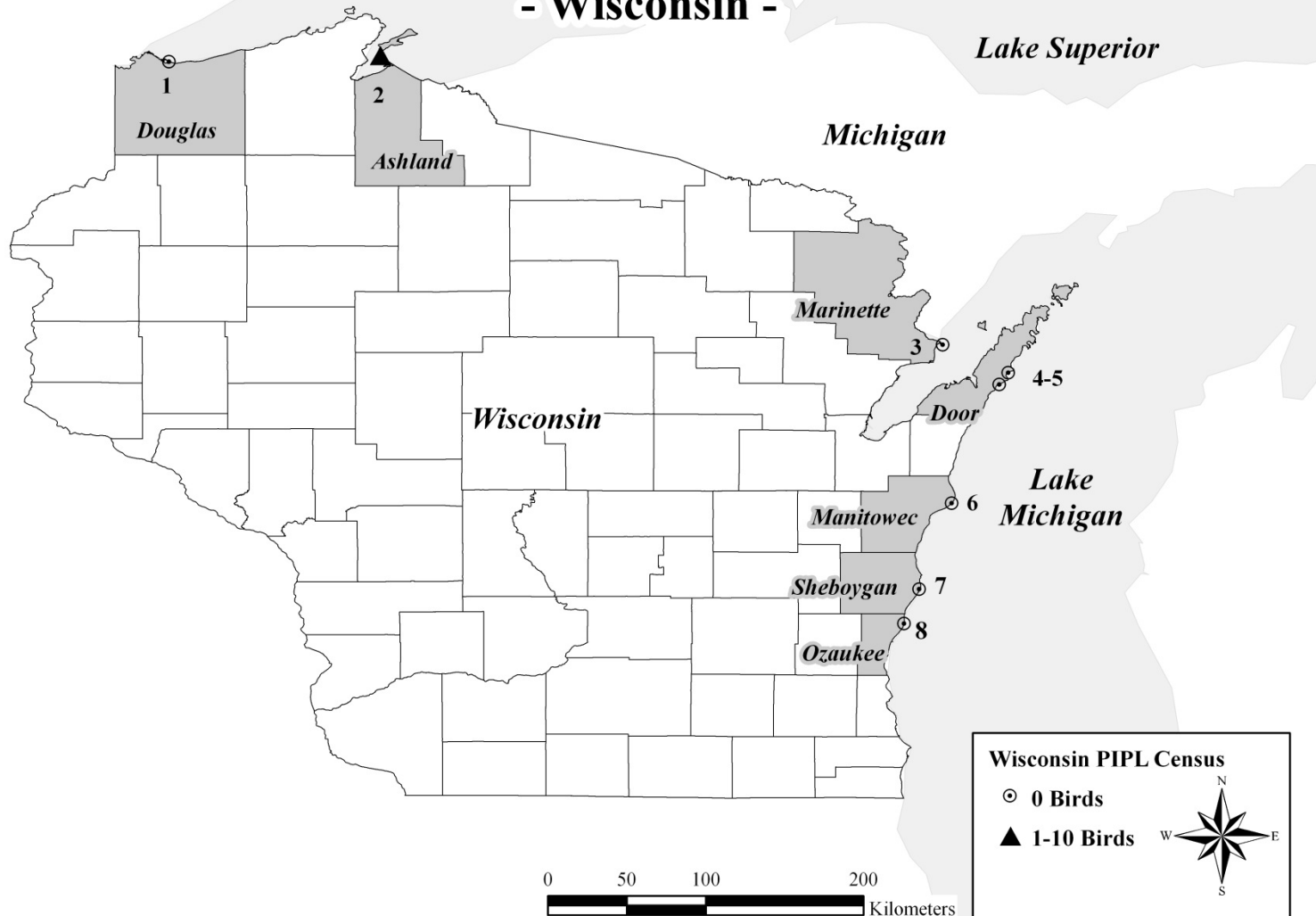
| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|----------------|------|---------|------------------------|-------------------------|--------------|---------------------|-------------------------|---|---|---|---|-------|
| Schoolcraft | Gulliver | 17 | 6/16/11 | 2 | 4 | 12.9 | V A | H | - | - | - | - | s(p) |
| Schoolcraft | Seul Choix Bay | 18 | 6/17/11 | 2 | 7 | 7.2 | V A | I | - | - | - | - | p |
| Total | | | | 33 | 90 | 283.0 | | | | | | | |

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

² This total is the "high count"; since two surveys were conducted at some sites for the detectability study, this total includes the highest count at each site.

³ High Island was not officially censused in 2006, but the site was checked and a pair was observed; however, the specific location of the pair along the survey route is unknown. The pair may have occurred along either the NW Side or the NE Spit.

2011 International Piping Plover Breeding Census - Wisconsin -

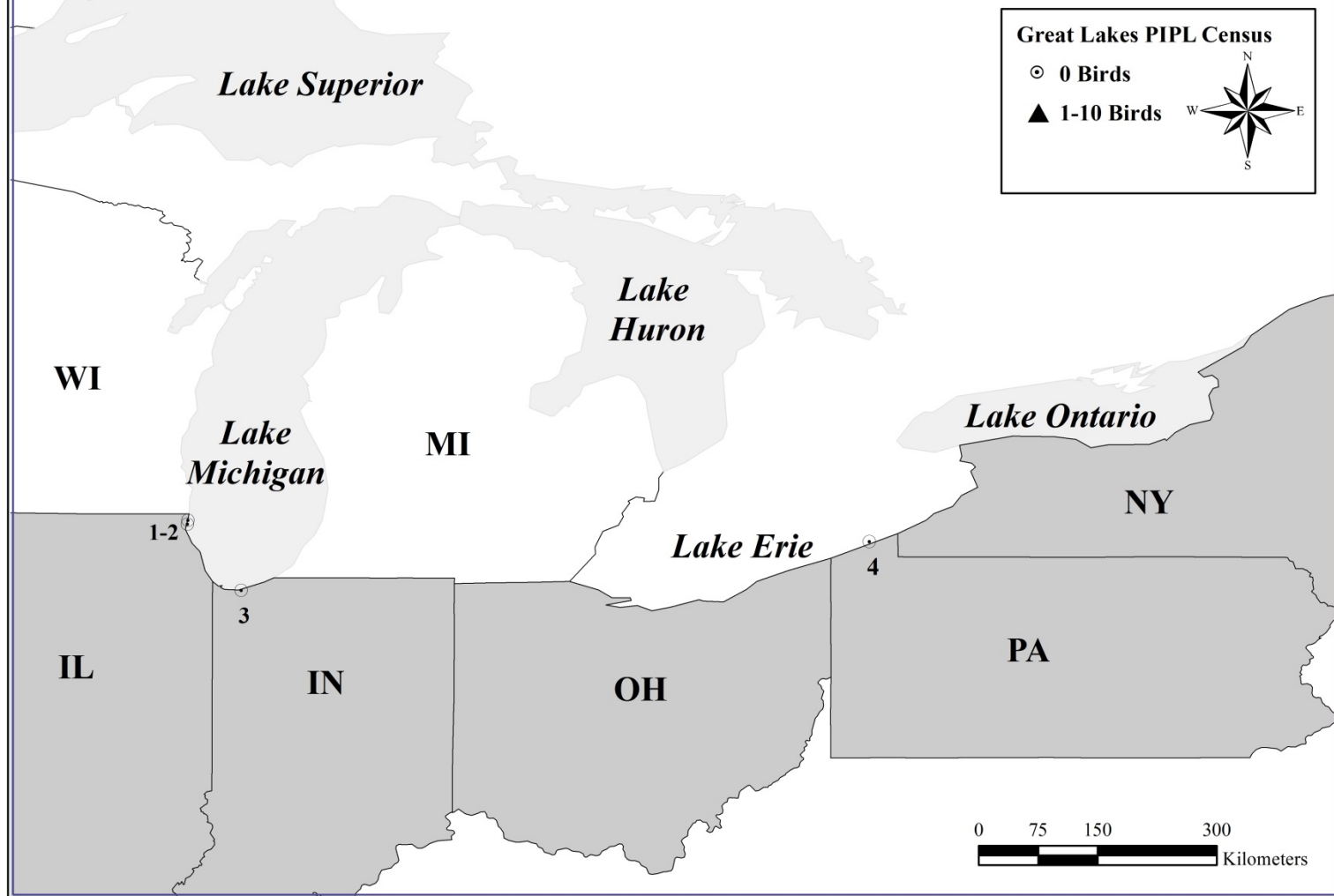


The 2011 International Piping Plover Breeding Census in Wisconsin

| REGION | SITE NAME | MAP# | DATE | BREED- ING | TOTAL | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|-----------------------------|------|---------|---------------|----------------|-------------|---------------------|-------------------------|---|----|------------------|------------------|------------|
| | | | | PAIRS | PIPL ADULTS | | | | | | | | |
| Ashland | Long Island (sand cut) | 2 | 6/10/11 | 4 | 8 | 7.3 | V B | H B | 91 | 96 | <u>01</u> | <u>06</u> | f, p |
| Door | Lily Bay | 5 | 6/8/11 | 0 | 0 | 1.2 | V A | H D | 91 | 96 | 01 | 06 | s(p), p |
| Door | Whitefish Dunes State Park | 4 | 6/16/11 | 0 | 0 | 6.5 | V A | V U I | 91 | 96 | 01 | 06 | s(p), m, p |
| Douglas | Wisconsin Point | 1 | 6/10/11 | 0 | 0 | 6.5 | III V B E | none | 91 | 96 | 01 | 06 | m |
| Manitowoc | Point Beach | 6 | 6/9/11 | 0 | 0 | 5.6 | V A | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Marinette | Seagull Bar (Marinette) | 3 | 6/14/11 | 0 | 0 | 2.9 | V IX E | I | 91 | 96 | <u>01</u> | 06 | s(p), m |
| Ozaukee | Harrington Beach State Park | 8 | 6/28/11 | 0 | 0 | 1.8 | V A | H D | 91 | 96 | 01 | 06 | s(p) |
| Sheboygan | Kohler-Andrae State Park | 7 | 6/9/11 | 0 | 0 | 3.3 | V A | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Total | | | | 4 | 8 | 35.0 | | | | | | | |

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

2011 International Piping Plover Breeding Census - Illinois, Indiana, Pennsylvania-



The 2011 International Piping Plover Breeding Census at other Great Lakes sites in Illinois, Indiana, and Pennsylvania

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|--|------|---------|------------------------|-------------------------|-------------|---------------------|-------------------------|---|---|----|----|---------|
| Illinois | ComEd Fishing Pier to Waukegan Pier | 1 | 6/4/11 | 0 | 0 | 1.9 | V A | O | - | - | 01 | 06 | m |
| Illinois | Illinois Critical Habitat Unit (Illinois Beach Nature Preserve) | 2 | 6/17/11 | 0 | 0 | 1.9 | V A | H | - | - | 01 | 06 | s(p), p |
| Indiana | Indiana Dunes National Lakeshore | 3 | 6/14/11 | 0 | 0 | 11.7 | V A | H V U I | - | - | 01 | 06 | unk |
| Pennsylvania | Presque Isle State Park | 4 | 6/6/11 | 0 | 0 | 5.5 | II V B D | n.r. | - | - | 01 | 06 | s(p) |
| Total | | | | 0 | 0 | 21.1 | | | | | | | |

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

The 2011 International Piping Plover Breeding Census in Ontario

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As part of the 2011 International Piping Plover Census, former, existing, and potential breeding locations of the Piping Plover in Ontario were censused. A total of 62 sites were surveyed in Ontario up from 45 sites in 2006 and 37 sites in 2001. All of the locations were along the shorelines of the Great Lakes (Superior, Huron (Georgian Bay), Erie, Ontario), and Lake of the Woods. In total, 16 adult plovers were reported on the census. An additional 4 adult plovers, likely spring migrants, were observed outside the census.

In general, census coverage was comprehensive. Some remote island sites on Lake Superior were not surveyed due to difficult access and bad weather. Some small beaches on Manitoulin Island, Pinery Provincial Park, Myles Bay (Black Creek Provincial Park), and a few other sites were not surveyed due to a lack of volunteer or staff support.

There were 14 known breeding adults (7 pairs) observed during the 2011 Census, including 4 pairs at Wasaga Beach and 2 at Sauble Beach on Georgian Bay and Lake Huron, respectively. Another pair was observed at Windy Point (Lake of the Woods) on June 6, but only a single bird remained on June 17. A single male was on territory at Carter's Bay on Manitoulin Island.

This is the largest recorded population of Piping Plovers in Ontario since the census began in 1991. Five adults were observed in 1991 (all from Sable Islands –Lake of the Woods), four adults were observed in 1996 (3 from Lake of the Woods), two adults were observed in the 2001 census (1 from Long Point, 1 from Windy Point – Lake of the Woods), and only two adults were observed in the 2006 census (1 from Windy Point and 1 from Presqu'ile Provincial Park) despite an attempted nesting at Wasaga Beach in 2005. The increase in plover numbers during the 2011 census reflects a true increase in the population rather than census coverage, as all occupied sites were surveyed in previous census years back to 2001.

The increase observed in the 2011 Census is primarily due to the recently established populations at Wasaga and Sauble Beach on Lake Huron and Georgian Bay. Since the 2006 census, breeding pairs were discovered at three locations in the Great Lakes region. The first attempt to nest was at Wasaga Beach in 2005, followed by a successful nesting in 2007. Since 2007, pairs have annually nested successfully at Wasaga Beach and Sauble Beach with another pair at Oliphant in 2008.

Threats to Piping Plovers in Ontario include human recreation, water levels, dogs, feral cats, natural predators, beach raking, and invasive species (*Phragmites australis*). Increased cottage and residential development along shorelines and beaches was one of the dominant threats identified in Ontario in 2011. The development itself is not necessarily problematic, but the associated increase in beach access and recreation is a concern. High water levels on Lake Erie and Lake Ontario reduced the amount of potential habitat particularly at Point Pelee, Rondeau Provincial

Park, and parts of Long Point. Persistent low water levels at some locations on Lake Huron and Georgian Bay allowed vegetation to reestablish in some low lying beach areas and pools.

Given the small but apparently stable or increasing population of Piping Plovers along the Lake Huron/Georgian Bay shoreline it would be prudent to expand the census in future years to as many locations as possible. The amount or suitability of Piping Plover habitat can be highly variable from year to year both across the province and at individual locations. Therefore, even though some locations may not have been suitable during prior surveys, an effort should be made to census and track potential changes in habitat over time.

A slowly increasing, but vulnerable, population is persisting at prime locations along the Lake Huron and Georgian Bay shorelines and there still appears to be a possible remnant population in Lake of the Woods. Provided that conservation actions, most notably mitigation of human disturbance, are successful at these locations, the outlook is positive for Piping Plovers in Ontario.

Comparison of Census Numbers

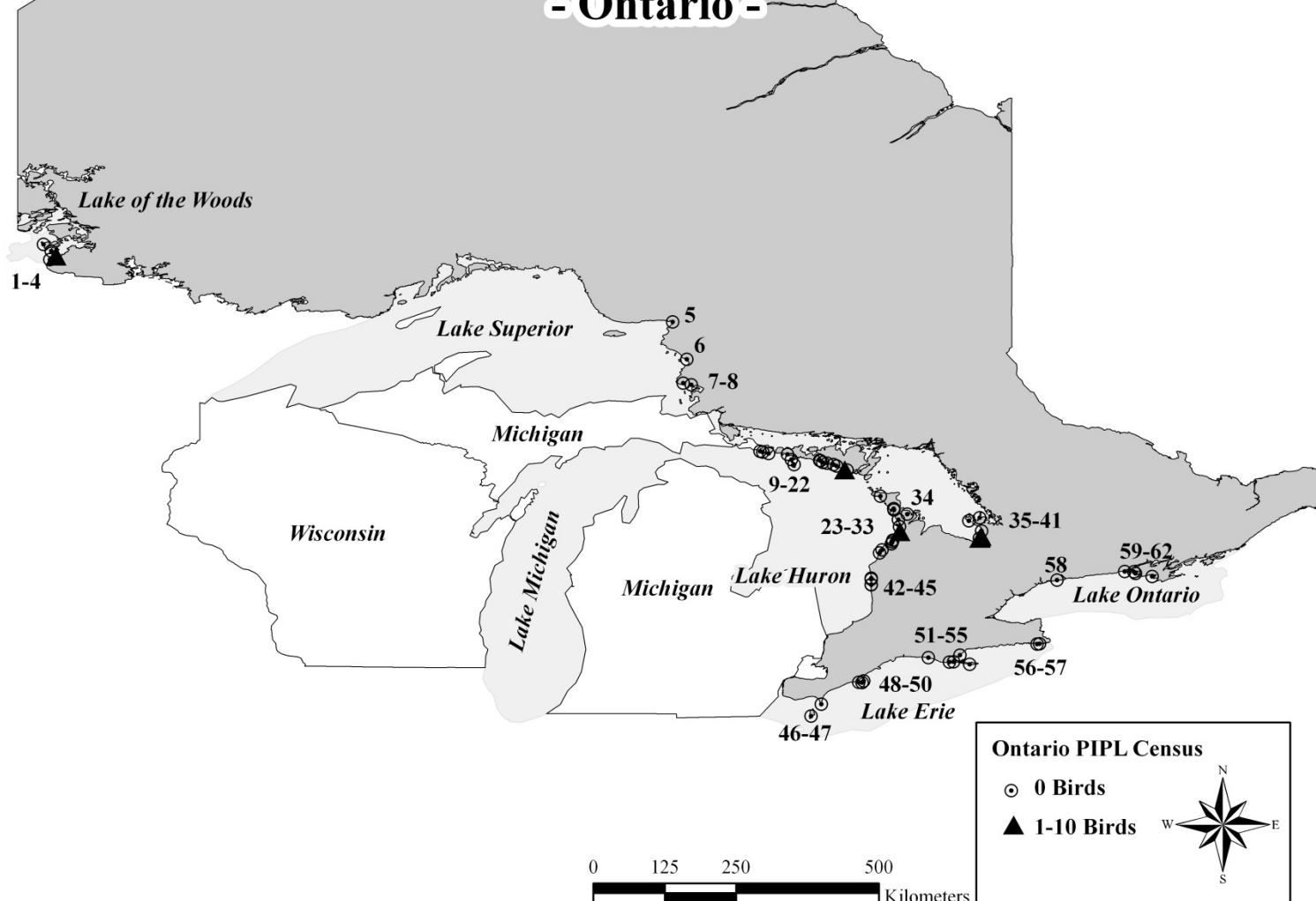
| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|----------------|------|
| Total Adults | 5 | 4 | 2 | 2 ¹ | 16 |

¹These birds were seen just prior to the official Census period

Detectability Study

| Sites Included | First Count | Second Count |
|----------------|-------------|--------------|
| Providence Bay | 0 | 0 |

2011 International Piping Plover Breeding Census - Ontario -



The 2011 International Piping Plover Breeding Census in Ontario

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|------------|---|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|---|----|----|----|------------|
| | | | | | | | | | | | | | |
| Lake Erie | Erieau Beach | 48 | 6/6/11 | 0 | 0 | 0.7 | V A | H | - | - | - | 06 | m |
| Lake Erie | Fish Point Provincial Nature Reserve | 46 | 6/6/11 | 0 | 0 | 2.5 | V A | none | - | - | - | - | s(p), p |
| Lake Erie | Hahn Woods to Hastings Drive*** | 52 | 6/22/11 | 0 | 0 | 5.3 | V A | I | - | - | 01 | 06 | f |
| Lake Erie | Long Point, Courtright Ridge E | 54 | 6/14/11 | 0 | 0 | 18.0 | V E | I | 91 | 96 | 01 | 06 | f, s(p) |
| Lake Erie | Long Point, Courtright Ridge W | 53 | 6/16/11 | 0 | 0 | 7.0 | V A D | H U | - | - | 01 | 06 | s(p), m, p |
| Lake Erie | Point Abino East | 57 | 6/8/11 | 0 | 0 | 2.0 | V A | H D | - | - | - | - | m, p |
| Lake Erie | Point Abino West | 56 | 6/8/11 | 0 | 0 | 3.5 | V A | H D W | - | - | 01 | 06 | m, p |
| Lake Erie | Point Pelee National Park | 47 | 6/17/11 | 0 | 0 | 8.0 | V A E | W | - | - | - | 06 | f |
| Lake Erie | Port Burwell Provincial Park | 51 | 6/4/11 | 0 | 0 | 2.5 | V A | I O | - | - | - | 06 | s(p) |
| Lake Erie | Rondeau Provincial Park E Beach | 50 | 6/13/11 | 0 | 0 | 9.0 | V A D | H U | - | - | 01 | - | f, s(p) |
| Lake Erie | Rondeau Provincial Park S Beach | 49 | 6/10/11 | 0 | 0 | 4.0 | V A D | O | - | - | 01 | 06 | f, s(p) |
| Lake Erie | Sandbanks Provincial Park | | 6/17/11 | 0 | 0 | 8.0 | V A B | H D V W O | - | - | - | - | s(p) |
| Lake Erie | Turkey Point Beach | 55 | 6/16/11 | 0 | 0 | 3.0 | II V A D | H U W O | - | - | - | 06 | s(p) |
| Lake Huron | Awenda Provincial Park | 35 | 6/16/11 | 0 | 0 | 3.0 | V A | I | - | - | - | - | s(p) |
| Lake Huron | Baie du Dore / Douglas Point | 32 | 6/5/11 | 0 | 0 | 5.0 | V A | U O | - | - | 01 | 06 | m, p |
| Lake Huron | Carter Bay | 21 | 6/6/11 | 0 | 1 | 1.5 | II V D | n.r. | - | - | 01 | 06 | f, s(p) |
| Lake Huron | Chief's Point | 27 | 6/15/11 | 0 | 0 | 5.0 | II V A | H D | - | - | 01 | 06 | p |
| Lake Huron | Christian Island (Hope and Beckwith) | 36 | 6/7/11 | 0 | 0 | 5.0 | V E | H O | - | - | - | - | p |
| Lake Huron | Dean Bay, Manitoulin | 19 | 6/15/11 | 0 | 0 | 0.6 | II V A E | H U O | - | - | - | - | m, p |
| Lake Huron | Desert Point, Great Duck Island*** | 14 | 7/14/11 | 0 | 0 | 1.5 | V A E | O | - | 96 | 01 | 06 | p |
| Lake Huron | Dominion Bay | 18 | 6/6/11 | 0 | 0 | 1.0 | II A | U | - | - | - | - | m, p |
| Lake Huron | Dorcas Bay | 23 | 6/7/11 | 0 | 0 | 1.0 | V A | n.r. | - | - | 01 | 06 | m, p |
| Lake Huron | Golf Course Road N to Point Farms Park*** | 44 | 6/3/11 | 0 | 0 | 0.8 | V A | H D U | - | - | 01 | 06 | s(p), m, p |
| Lake Huron | Golf Course Road S to Sunset Beach | 45 | 6/9/11 | 0 | 0 | 1.5 | V A | H U | - | - | 01 | 06 | s(p), m, p |
| Lake Huron | Hope Bay | 34 | 6/9/11 | 0 | 0 | 2.0 | II V A D | U | - | - | 01 | 06 | s(p), m |
| Lake Huron | Hyndman Bay, Cockburn Island*** | 10 | 7/15/11 | 0 | 0 | 0.4 | II A | none | - | - | - | - | s(p), m |

The 2011 International Piping Plover Breeding Census in Ontario (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|--|----|----|----|------------|
| | | | | | | | | | | | | | |
| Lake Huron | Inverhuron Provincial Park | 33 | 6/4/11 | 0 | 0 | 5.0 | V A | H S O | - | - | - | 06 | s(p), p |
| Lake Huron | Michael's Bay | 22 | 6/17/11 | 0 | 0 | 0.0 | II III V A D | O | - | - | 01 | 06 | s(p) |
| Lake Huron | Miramichi Bay | 30 | 6/9/11 | 0 | 0 | 1.5 | V A | n.r. | - | - | 01 | 06 | m, p |
| Lake Huron | Myles Bay | 25 | 6/9/11 | 0 | 0 | 0.5 | II V A | U O | - | - | 01 | 06 | s(p) |
| Lake Huron | Port Albert N to Mid Huron Beach Road ² | 42 | 6/3/11 | 0 | 0 | 1.0 | V A | H D U W | - | - | 01 | 06 | m, p |
| Lake Huron | Port Albert S to Brindley Beach Road ² | 43 | 9/6/11 | 0 | 0 | 5.0 | V A | n.r. | - | - | 01 | 06 | m, p |
| Lake Huron | Port Elgin | 31 | 6/9/11 | 0 | 0 | 4.0 | V A | H U V O | - | - | 01 | 06 | m, p |
| Lake Huron | Portage Bay E Beach | 16 | 6/16/11 | 0 | 0 | 1.0 | V A | H U | - | - | - | - | s(p), m, p |
| Lake Huron | Portage Bay W Beach ² | 15 | 6/27/11 | 0 | 0 | 1.4 | V A | H U V | - | - | - | - | s(p), m, p |
| Lake Huron | Providence Bay | 20 | 6/6/11 | 0 | 0 | 2.0 | V A D E | H U | - | - | 01 | 06 | m, p |
| Lake Huron | Red Bay/Howdenvale | 26 | 6/7/11 | 0 | 0 | 2.5 | II V A D | n.r. | - | - | 01 | 06 | m, p |
| Lake Huron | Sand Bay, Cockburn Island ² | 11 | 7/15/11 | 0 | 0 | 1.5 | III A | U V | - | - | - | - | m |
| Lake Huron | Sauble Beach | 28 | 6/10/11 | 2 | 5 | 11.0 | V A | H U | - | - | 01 | 06 | s(p), m, p |
| Lake Huron | Shrigley Bay | 17 | 6/16/11 | 0 | 0 | 0.8 | V A | U V | - | - | - | - | s(p), m, p |
| Lake Huron | Southampton | 29 | 6/9/11 | 0 | 0 | 5.0 | V A | H U V | - | - | 01 | 06 | m, p |
| Lake Huron | Stokes Bay | 24 | 6/9/11 | 0 | 0 | 2.0 | V A | U | - | - | 01 | 06 | m, p |
| Lake Huron | Tiny Beaches | 37 | 6/17/11 | 0 | 0 | 5.0 | V A | H U D O | - | - | - | - | m |
| Lake Huron | Wagosh Bay, Cockburn Island ² | 9 | 7/15/11 | 0 | 0 | 1.0 | II D E | U | - | - | - | - | s(p) |
| Lake Huron | Wasaga Beach - Site # 1 | 38 | 6/14/11 | 1 | 2 | 3.5 | II A | H U D O | - | - | - | 06 | s(p) |
| Lake Huron | Wasaga Beach - Site # 2 | 39 | 6/17/11 | 1 | 2 | 0.5 | II A I | H I O | - | 96 | - | 06 | s(p) |
| Lake Huron | Wasaga Beach - Site # 3 | 40 | 6/12/11 | 2 | 4 | 1.0 | II V A | H U | - | - | - | 06 | s(p) |
| Lake Huron | Wasaga Beach - Site # 4 | 41 | 6/7/11 | 0 | 0 | 7.5 | II A | U | - | - | 01 | 06 | s(p) |
| Lake Huron | West Belanger Bay, Manitoulin Island | 12 | 6/17/11 | 0 | 0 | 0.0 | V D | V | - | - | - | - | m, p |
| Lake Huron | West Duck Island (NE Shore) ² | 13 | 7/14/11 | 0 | 0 | 1.7 | V I X A E | none | - | 96 | 01 | - | s(p), p |
| Lake Ontario | Darlington Provincial Park | 58 | 6/8/11 | 0 | 0 | 2.0 | V A | H | - | - | - | 06 | s(p), m |
| Lake Ontario | North Beach Provincial Park | 61 | 6/16/11 | 0 | 0 | 4.0 | V A B | H D V W | - | - | - | - | s(p) |

The 2011 International Piping Plover Breeding Census in Ontario (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-------------------|--|------|---------|------------------------|-------------------------|--------------|---------------------|-------------------------|---|-----------|-----------|------------------------|---------|
| Lake Ontario | Presqu'ile Provincial Park | 59 | 6/15/11 | 0 | 0 | 3.5 | V IX A | H I O | - | - | - | 06 ³ | s(p) |
| Lake Ontario | Sandbanks Provincial Park | 62 | 6/17/11 | 0 | 0 | 8.0 | V B | H D V | - | - | - | - | |
| Lake Ontario | Weller's Bay National Wildlife Area | 60 | 6/15/11 | 0 | 0 | 8.0 | VIII B | W | - | - | - | 06 | f, s(p) |
| Lake Superior | Agawa Bay | 6 | 6/15/11 | 0 | 0 | 4.0 | II V A | H | - | 96 | - | 06 | s(p) |
| Lake Superior | Batchawana Bay Provincial Park | 7 | n.r. | 0 | 0 | 3.0 | II V A | H | - | 96 | - | - | s(p) |
| Lake Superior | Driftwood Beach, Michipicoten Post Provincial Park | 5 | 6/12/11 | 0 | 0 | 2.4 | V A | n.r. | - | - | 01 | 06 | s(p) |
| Lake Superior | Pancake Bay | 8 | 6/13/11 | 0 | 0 | 6.0 | II V A | H | - | - | - | - | s(p) |
| Lake of the Woods | Big Island - Oshie Bay | 1 | 6/6/11 | 0 | 0 | 0.0 | V A B | n.r. | - | 96 | 01 | 06 | s(p) |
| Lake of the Woods | Bigsby Island - Deep Bay | 2 | 6/6/11 | 0 | 0 | 2.5 | V A B | O | - | 96 | 01 | 06 | s(p) |
| Lake of the Woods | Sable Islands Prov. Nature Reserve | 4 | 6/7/11 | 0 | 0 | 6.0 | V A C | O | 91 | 96 | 01 | 06 | s(p) |
| Lake of the Woods | Windy Point | 3 | 6/6/11 | 1 | 2 | 1.0 | V A C E | none | 91 | 96 | 01 | 06 ⁴ | p |
| Total | | | | 7 | 16 | 216.6 | | | | | | | |

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

² Please note that these surveys were conducted outside the Census window.

³ 1 banded PIPL was observed at this site outside the 2006 Census window on May 29th and 30th, 2006.

⁴ 1 PIPL was seen along this site in 2006, but it was observed outside the census window.

The 2011 International Piping Plover Breeding Census in Minnesota

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Coverage during the 2011 Census in Minnesota was minimal, given that we only had three surveyors. Even with the small effort, all sites which had been active in the past 20 years were surveyed. However, we didn't check any potential north shore sites, as we had done in 2006. Sites we did check included Lake of the Woods: Stony Point, Garden Island, Rocky Point, Pine/Curry Island and Morris Point.

The Census effort was likely adequate to monitor the known population. Most other possible areas such as the northwest angle of Lake of the Woods extensive beaches, and north shore sites on Lake Superior have previously been searched when the state population was larger, and did not result in additional detections. Given the continual decline of the Piping Plover population in Minnesota it is unlikely that any birds were missed by not surveying these "potential" sites.

Census results are very similar to the 2006 survey, showing a small decrease in population. The 2006 population was two nesting pairs, and in 2011 we found one nesting pair. The results likely represent the actual population in Minnesota, as we have observers in the field that would report additional pairs, were they present.

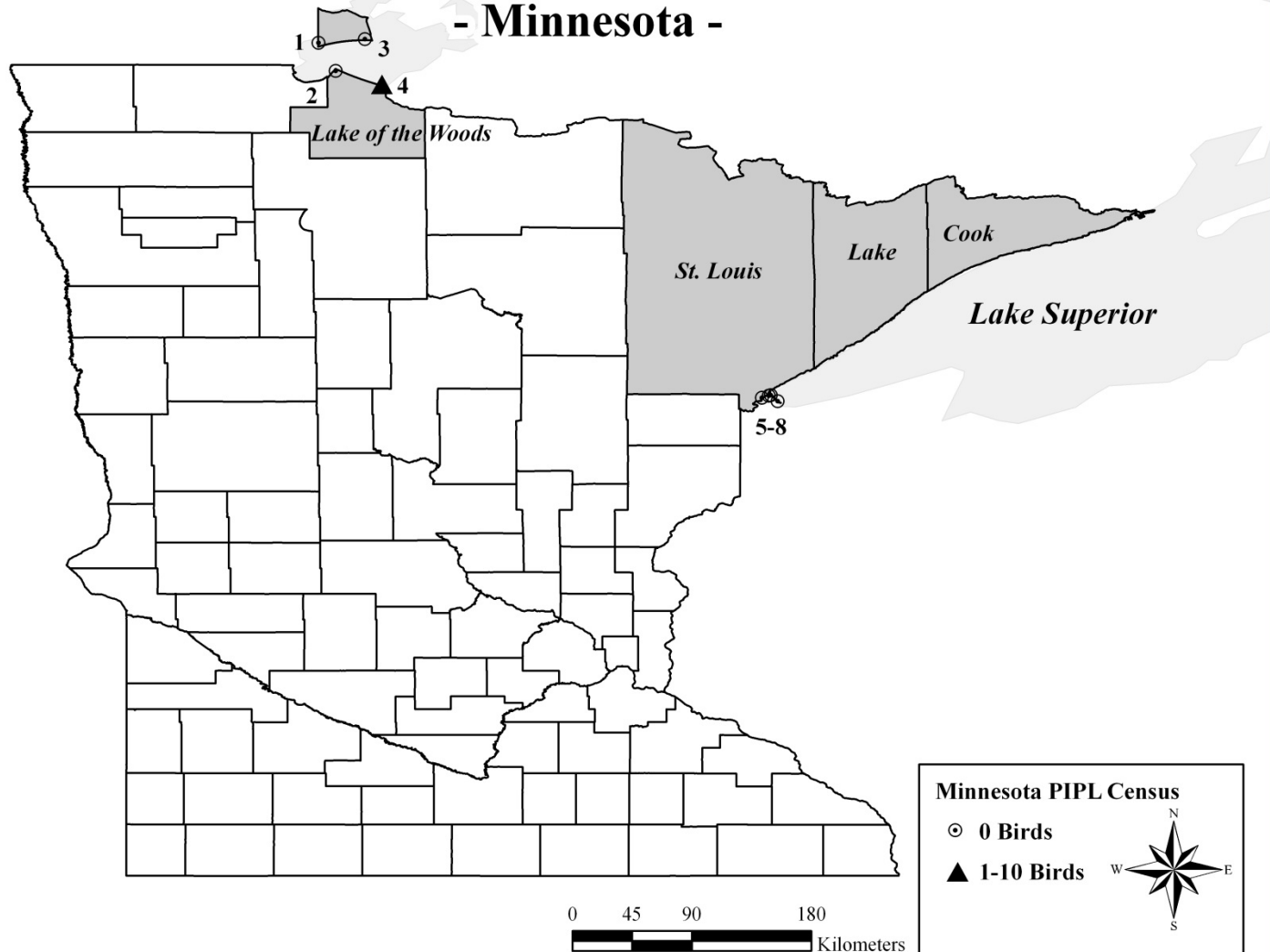
Population trends appear to be related to habitat quality. On Lake of the Woods, factors affecting plover habitat include water level and erosion. At Duluth, issues are increased harbor development and effects on suitable habitat in the St. Louis River estuary.

Comparison of Census Numbers

| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|----------------|----------------|
| Total Adults | 13 | 10 | 7 | 4 ¹ | 2 ¹ |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

2011 International Piping Plover Breeding Census - Minnesota -



The 2011 International Piping Plover Breeding Census in Minnesota

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-------------------|--|------|---------|------------------------|-------------------------|-------------|---------------------|-------------------------|---|-----------|-----------|-----------|-------|
| Lake of the Woods | Garden Island State Recreation Area | 3 | 6/16/11 | 0 | 0 | 1.0 | V E | none | - | - | - | 06 | s(p) |
| Lake of the Woods | Pine and Curry Island, Morris Point | 4 | 6/2/11 | 1 | 2 | 3.2 | V C | n.r. | 91 | 96 | 01 | 06 | n.r. |
| Lake of the Woods | Rocky Point | 2 | 6/2/11 | 0 | 0 | 1.1 | V A | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Lake of the Woods | Stony Point | 1 | 6/16/11 | 0 | 0 | 1.0 | II C E | W | - | - | - | 06 | p |
| St. Louis | Hearding Island | 7 | 6/8/11 | 0 | 0 | 0.6 | II E | P O | - | - | - | 06 | s(p) |
| St. Louis | Duluth Port Terminal | 6 | 6/8/11 | 0 | 0 | 0.4 | II A I | H N O | 91 | - | - | 06 | n.r. |
| St. Louis | Duluth T49 R14 Section 8 | 5 | 6/8/11 | 0 | 0 | 0.1 | II VIII I | N | - | - | - | 06 | n.r. |
| St. Louis | MN Point (Canal Park & end of Peninsula) | 8 | 6/8/11 | 0 | 0 | 3.2 | II V C D | H D S O | - | - | - | 06 | n.r. |
| Total | | | | 1 | 2 | 10.6 | | | | | | | |

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

The 2011 International Piping Plover Breeding Census in Manitoba

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Only one pair of breeding Piping Plovers was detected during the 2011 census period. The two plovers observed were nesting at Grand Beach in the south basin of Lake Winnipeg, a traditional breeding site for many years. Several single birds were seen outside the census window and given they were marked, we were certain that at least a few additional birds used Manitoba shores during the 2011 breeding season. However, even with these additional observations, Piping Plover numbers in Manitoba hit an all-time low in 2011. Numbers have declined, census to census, since the inception of the International Census in 1991. These critically low and declining numbers suggest the species could be extirpated from Manitoba within the next decade.

In part, low numbers reflect a decline of Piping Plovers in Manitoba, but water levels were also extremely high in 2011. High water levels reduce the availability and quality of nesting habitat on beaches surrounding the south basins of Lake Winnipeg and Lake Manitoba. High water levels on these two lakes continue to be the most limiting factor in Manitoba recovery efforts for this species. Aside from Grand Beach, most areas around Lake Winnipeg were completely flooded in 2011 or high water levels narrowed beaches to the point where they were unsuitable for nesting.

Unfortunately, high water has been a common problem on Lake Winnipeg due to flooding of inflows and it being regulated as a giant reservoir. In the past 17 years, the Red River, one of the three major inflows into Lake Winnipeg, has flooded 14 times, whether during the spring melt or a major precipitation event during June or July. This includes the infamous “Flood of the Century” in 1997. Four International Censuses were conducted in flood years. The 2011 census was conducted shortly after the third worst flood since 1995. Compounding the situation on Lake Winnipeg is flooding along the Assiniboine River, which normally empties into the Red, but can be, and is, diverted into Lake Manitoba. Therefore, nesting habitat around its south basin is also flooded and greatly reduced.

Other sites were also unsuitable in 2011 due to high water. Record high flow on the Waterhen River inundated Salt Point road at the bridge rendering access impossible. We were also unable to survey Katimik Lake and Kaweenakumik Lake due to very high water levels. Wells Harbour was not surveyed in 2011 due to high water. Until water levels drop significantly, exposing more shoreline and beach, it is unlikely breeding Piping Plover will find suitable habitat to nest in Manitoba.

Comparison of Census Numbers

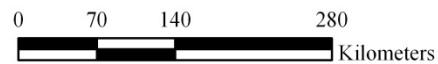
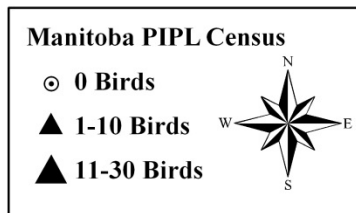
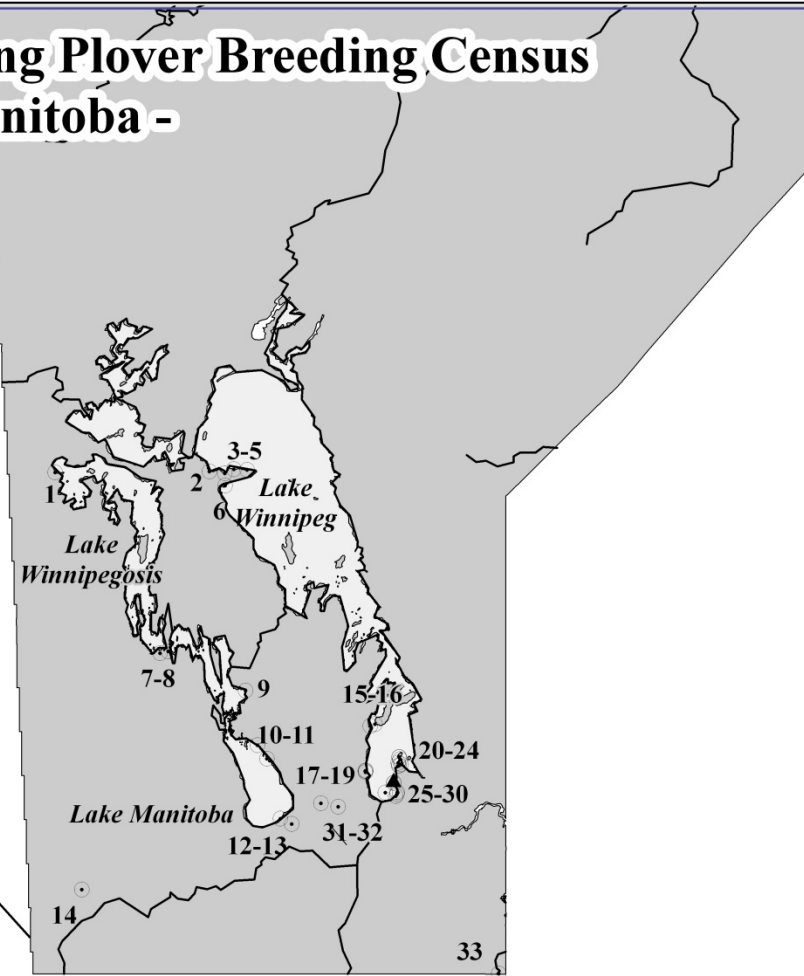
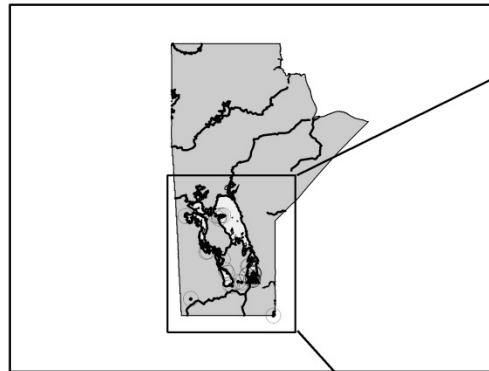
| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|----------------|----------------|
| Total Adults | 80 | 60 | 16 | 8 ¹ | 2 ¹ |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

Detectability Study

| Sites Included | First Count | Second Count |
|-------------------|-------------|--------------|
| Elk Island | 0 | 0 |
| Gimli Beach | 0 | 0 |
| Grand Beach | 2 | 2 |
| Grand Marais Spit | 0 | 0 |
| Hillside Beach | 0 | 0 |

2011 International Piping Plover Breeding Census - Manitoba -



The 2011 International Piping Plover Breeding Census in Manitoba

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|----------------------|---|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|---|-----------|-----------|-----------|------------|
| | | | | | | | | | | | | | |
| Lake Manitoba | Clandeboy Bay | 12 | 6/17/11 | 0 | 0 | 0.3 | V B | W | <u>91</u> | <u>96</u> | <u>01</u> | 06 | s(p) |
| Lake Manitoba | Elm Point | 10 | 6/10/11 | 0 | 0 | 0.5 | V A | W | - | - | - | 06 | p |
| Lake Manitoba | Lundar Beach Provincial Park | 11 | 6/10/11 | 0 | 0 | 0.0 | V A | W | - | - | - | 06 | s(p) |
| Lake Manitoba | Twin Lakes Beach | 13 | 6/4/11 | 0 | 0 | 0.0 | V A | W | 91 | 96 | 01 | 06 | s(p), m, p |
| Lake Manitoba | Watchorn Provincial Park | 9 | 6/10/11 | 0 | 0 | 0.1 | V A | H U V W | - | - | - | 06 | s(p) |
| Lake of the Woods | Buffalo Point ² | | 6/19/11 | 0 | 0 | 0.0 | V A | H U | - | - | - | 06 | m, p |
| Lake Winnipeg | Albert Beach | 23 | 6/7/11 | 0 | 0 | 0.5 | V A | none | - | - | 01 | 06 | s(p) |
| Lake Winnipeg | Beaconia Beach | 29 | 6/4/11 | 0 | 0 | 0.0 | V A B | W | - | - | 01 | 06 | s(p) |
| Lake Winnipeg | Chalet Beach | 27 | 6/16/11 | 0 | 0 | 0.0 | V A | W O | <u>91</u> | - | - | 06 | s(p) |
| Lake Winnipeg | Elk Island | 20 | 6/10/11 | 0 | 0 | n.r. | V E | none | - | <u>96</u> | 01 | 06 | s(p) |
| Lake Winnipeg | Gimli Beach | 17 | 6/14/11 | 0 | 0 | 0.0 | V A | W | - | - | - | - | n.r. |
| Lake Winnipeg | Grand Beach | 25 | 6/4/11 | 1 | 2 | 3.0 | V A | U | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Lake Winnipeg | Grand Marais Spit | 26 | 6/6/11 | 0 | 0 | 1.0 | V B | W | - | <u>96</u> | - | 06 | s(p) |
| Lake Winnipeg | Hecla Island Sand Spit | 15 | 6/6/11 | 0 | 0 | 0.1 | V E | W | <u>91</u> | <u>96</u> | 01 | 06 | s(p) |
| Lake Winnipeg | Hillside Beach | 24 | 6/7/11 | 0 | 0 | 1.0 | V A | none | - | - | 01 | 06 | m |
| Lake Winnipeg | Island Beach | 28 | 6/4/11 | 0 | 0 | 0.5 | V A | W | - | - | - | 06 | p |
| Lake Winnipeg | Longpoint - Hole in the Wall | 3 | 6/15/11 | 0 | 0 | 0.0 | V A | W | - | - | - | 06 | s(p) |
| Lake Winnipeg | Longpoint - Little Moose Lake | 5 | 6/15/11 | 0 | 0 | 0.0 | V A | W | - | - | - | 06 | s(p) |
| Lake Winnipeg | Longpoint - Saskachayweow Bar | 2 | 6/15/11 | 0 | 0 | 0.0 | V A | W | - | - | - | 06 | s(p) |
| Lake Winnipeg | Longpoint - Sturgeon Skin Point | 4 | 6/15/11 | 0 | 0 | 0.0 | V A | W | - | - | - | 06 | s(p) |
| Lake Winnipeg | North Gull Bay Spit | 6 | 6/12/11 | 0 | 0 | 5.5 | V A | V W | <u>91</u> | <u>96</u> | <u>01</u> | 06 | unk |
| Lake Winnipeg | Patricia Beach | 30 | 6/4/11 | 0 | 0 | 0.8 | V A | W | <u>91</u> | <u>96</u> | <u>01</u> | 06 | s(p) |
| Lake Winnipeg | Riverton Sand Bar & Sandspit | 16 | 6/6/11 | 0 | 0 | 0.3 | V E | W | <u>91</u> | 96 | 01 | 06 | s(p) |
| Lake Winnipeg | Sandy Bay | 21 | 6/7/11 | 0 | 0 | 0.5 | V A | none | - | - | 01 | 06 | m |
| Lake Winnipeg | South Beach | 19 | 6/14/11 | 0 | 0 | 0.0 | V A | V | - | - | - | - | s(p), m |
| Lake Winnipeg | Victoria Beach | 22 | 6/7/11 | 0 | 0 | 0.0 | V A | W | <u>91</u> | - | 01 | 06 | s(p) |
| Lake Winnipeg | Willow Point | 18 | 6/14/11 | 0 | 0 | 0.0 | V A | H W | - | - | 01 | 06 | s(p), p |
| Lake Winnipegosis | Overflowing River Salt Flat Ecological Preserve ² | 1 | 6/19/11 | 0 | 0 | 0.5 | V A | W | - | - | - | 06 | s(p) |
| Lawrence Lake | Lawrence Lake | 7 | 6/10/11 | 0 | 0 | 0.3 | IV IX A | n.r. | - | - | - | 06 | n.r. |
| Oak Lake | Oak Lake | 14 | 6/16/11 | 0 | 0 | 0.0 | V A I | U W | <u>91</u> | - | 01 | 06 | s(p), p |
| Salt Lake | Salt Lake | 8 | 6/5/11 | 0 | 0 | 0.0 | IV V D | W | 91 | - | - | 06 | p |

The 2011 International Piping Plover Breeding Census in Manitoba (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|---------------------------|------|--------|------------------------|-------------------------|-------------|---------------------|-------------------------|---|------------------|----|----|-------|
| | | | | | | | | | | | | | |
| Shoal Lakes | West Shoal Lake (S end) | 32 | 6/4/11 | 0 | 0 | 0.0 | V H | W | 91 | <u>96</u> | 01 | 06 | s(p) |
| Shoal Lakes | West Shoal Lake (W point) | 31 | 6/4/11 | 0 | 0 | 0.0 | V H | W | <u>91</u> | <u>96</u> | 01 | 06 | s(p) |
| Total | | | | 1 | 2 | 14.8 | | | | | | | |

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

² Please note that these surveys were conducted outside the Census window.

The 2011 International Piping Plover Breeding Census in Saskatchewan

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The 2011 International Piping Plover census was undertaken from June 4-17, 2011. It was the fifth census to take place since 1991 and Piping Plover numbers were lower in 2011 than any prior census year. The total Piping Plover count for Saskatchewan in 2011 was 764 birds, including at least 195 pairs. This is a 46% decrease from the 2006 total, a 5% decrease from the 2001 total, a 43% decrease from the 1996 total, and a 35% decrease from the 1991 total. Volunteers, contractors, and government and non-government biologists (131 individuals) surveyed 278 basins, 2,473 km (1,537 miles) of habitat, and input 1085 hours of their time.

Piping Plovers were reported at 36 basins, with 32 of these basins supporting nesting pairs. Seventeen of these sites were reported to have high water or were flooded, and seven had an average of less than 2 m of shoreline width available. Of the basins surveyed, over 200 were reported to have high water and/or flooding, which is the most likely explanation for the low numbers of Piping Plovers detected in Saskatchewan in 2011. Nonetheless, the low 2011 count suggests that conservation efforts are still needed for Piping Plovers in Saskatchewan.

Flooding presumably played a role in the concentration of the Saskatchewan population within the Missouri Coteau, especially at Chaplin Lake, which supported 46% of the entire Saskatchewan population alone. Other notable sites included Willow Bunch, Shoe Lake-north, and Manitou Lake (with 50, 37, and 35 birds, respectively). No Piping Plovers were observed outside of their typical range. Three new sites provided habitat for 11 birds, including a nesting pair at each. Due to poor weather conditions, inaccessible roads, negligence, or land access denial, 39 sites were not surveyed. Six of these sites were high priority sites (supporting Piping Plovers in the past). The top three have supported a high total of 16 plovers. The other three combined have supported five or fewer Piping Plovers during prior census efforts.

Comparison of Census Numbers

| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|-------------------|------------------|
| Total Adults | 180 | 276 | 150 | 1420 ¹ | 764 ¹ |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

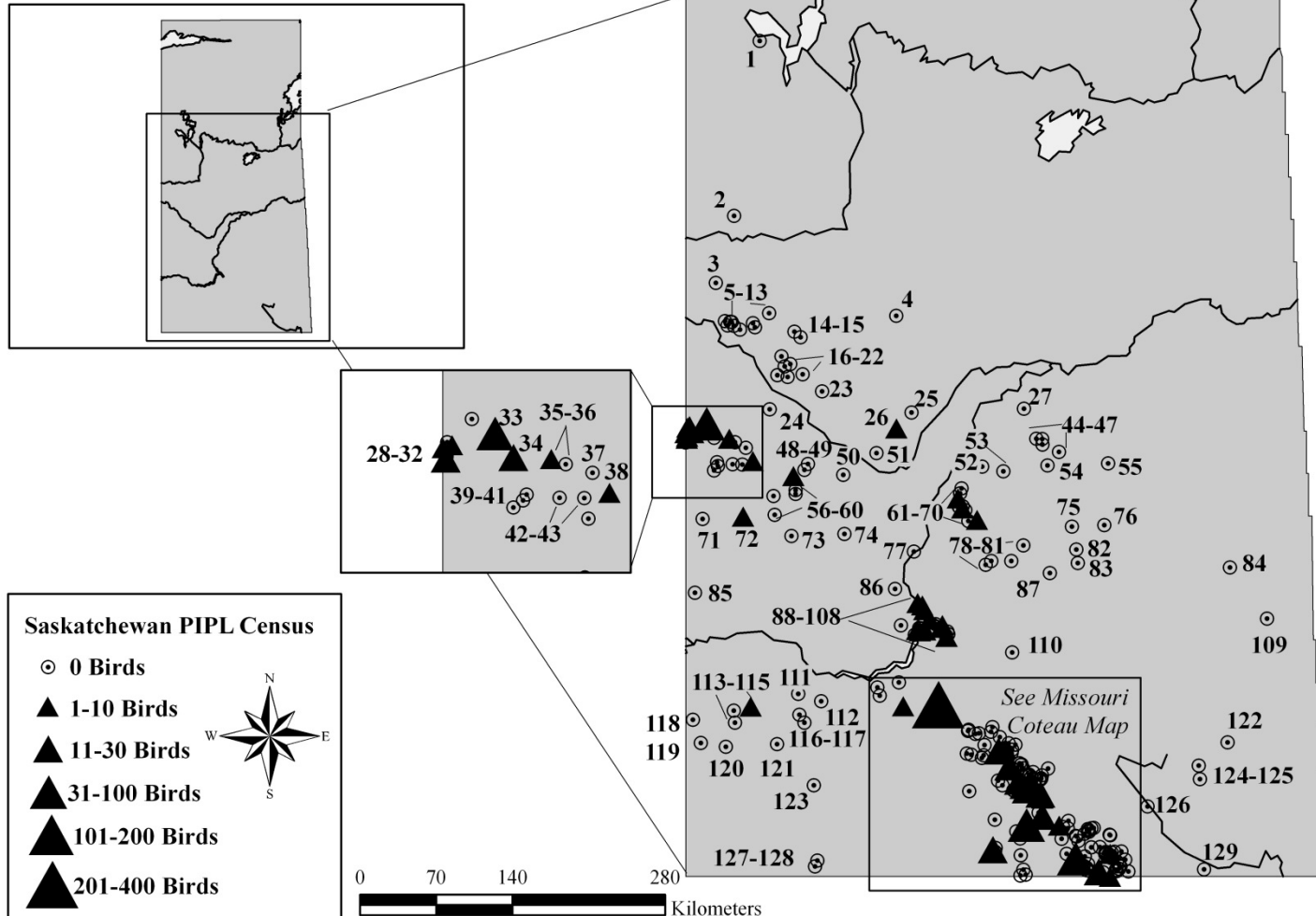
Detectability Study

| Sites Included | First Count | Second Count |
|---|-------------|--------------|
| Big Muddy Lake, Upper (090 430) | 13 | 24 |
| Unnamed, UTM 560 273 ¹ | 1 | 1 |
| Unnamed, UTM 650 075 | 2 | 4 |
| Unnamed, UTM 840 020 ¹ | 2 | 3 |
| Unnamed, UTM 842 027 ¹ | 11 | 7 |
| Killsquaw Lake (292 100) | 1 | 1 |
| Reflex Lake W (680 350) | 20 | 14 |
| Zella Lake (215 590; NE portion) ² | 6 | 4 |
| Lake Diefenbaker – Elbow ¹ | 1 | 1 |
| Lake Diefenbaker - Little Sage Bay ¹ | 1 | 0 |
| Lake Diefenbaker - North Summit (west) ¹ | 2 | 0 |

¹ First and second counts were performed on the same day.

² Only the NE portion of Zella Lake was surveyed the second time. Total count for the lake was 10.

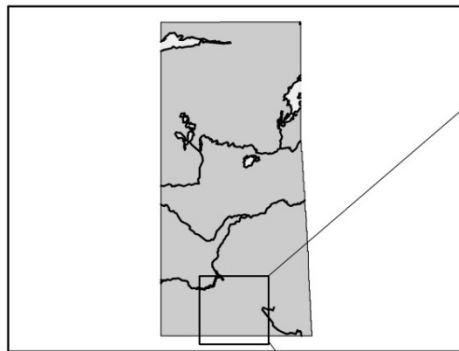
2011 International Piping Plover Breeding Census - Saskatchewan -



2011 International Piping Plover Breeding Census

- Saskatchewan -

Missouri Coteau Region

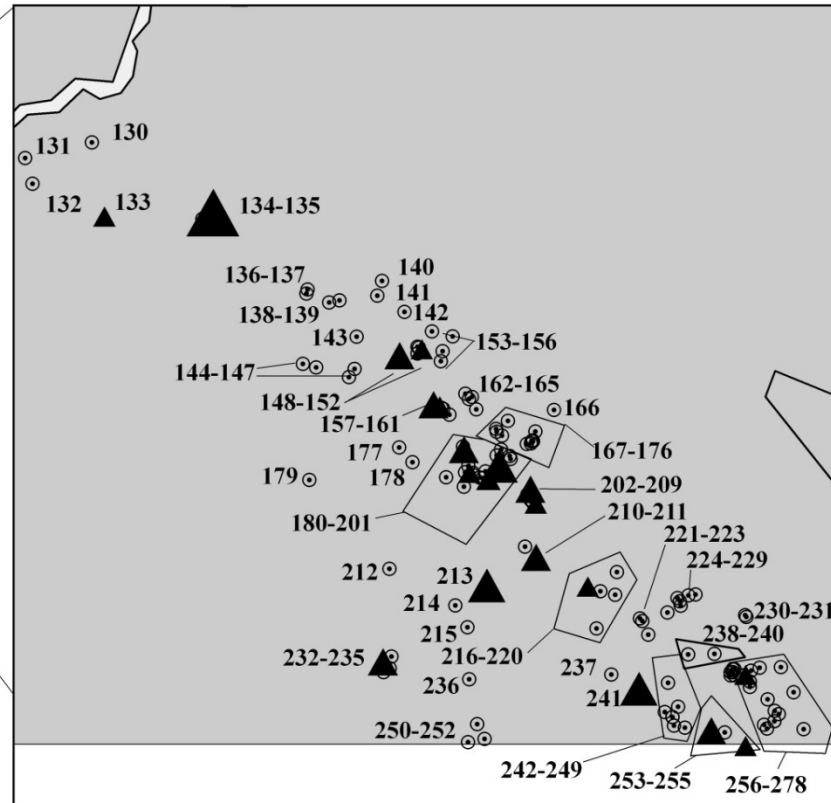


Saskatchewan PIPL Census

- 0 Birds
- ▲ 1-10 Birds
- ▲ 11-30 Birds
- ▲ 31-100 Birds
- ▲ 101-200 Birds
- ▲ 201-400 Birds



0 15 30 60
Kilometers



The 2011 International Piping Plover Breeding Census in Saskatchewan

| REGION | R.M. # | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------------------------|-----------|---|------|---------|------------------------|-------------------------|-----|---------------------|-------------------------|---|-----------|-----------|-----------|------------|
| Big Quill/ Last Mountain | 308 | Big Quill Lake | 76 | 6/5/11 | 0 | 0 | 0.0 | IV H I | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, s(p), p |
| Big Quill/ Last Mountain | 282 | Bultel Lake (385 166) | 80 | 6/9/11* | - | - | 0.0 | V D | W | 91 | 96 | 01 | 06 | p |
| Big Quill/ Last Mountain | 280 | Colt Lake (935 055) | 87 | 6/7/11* | - | - | 0.0 | IV F O | W | <u>91</u> | 96 | 01 | 06 | p |
| Big Quill/ Last Mountain | 281 | Devil's Lake (575 165) | 79 | 6/9/11* | - | - | 0.0 | V D | W | 91 | 96 | 01 | 06 | m, p |
| Big Quill/ Last Mountain | 282 | Horseshoe Lake (335 133) | 81 | 6/9/11* | - | - | 0.0 | V D | W | 91 | 96 | 01 | 06 | s(p), p |
| Big Quill/ Last Mountain | 339 | Jansen Lake (140 480) | 75 | 6/4/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | 01 | 06 | p |
| Big Quill/ Last Mountain | 279 | Kutawagan Lake Complex (185 155) | 83 | 6/17/11 | 0 | 0 | 1.0 | IV I | A W | <u>91</u> | 96 | 01 | 06 | f |
| Big Quill/ Last Mountain | 309 | Lac du Chemin (182 272) | 82 | 6/9/11 | 0 | 0 | 0.0 | V H O | W | <u>91</u> | 96 | 01 | 06 | n.r. |
| Big Quill/ Last Mountain | 312 | Little Manitou Lake (660 307) | 78 | 6/9/11 | 0 | 0 | 0.0 | IV VI F H | S W | <u>91</u> | 96 | 01 | 06 | unk |
| Big Quill/ Last Mountain | 222 | Lovering Lake East (572 326) | 110 | 6/10/11 | 0 | 0 | 0.0 | V H | n.r. | 91 | 96 | 01 | 06 | unk |
| Missouri Coteau | 101 | Agnellice Lake (660 300) | 164 | 6/17/11 | 0 | 0 | 0.0 | V D | W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 8 | Alkali Lake (500 280) | 255 | 6/14/11 | 0 | 1 ⁴ | 0.0 | IV D | A W | 91 | <u>96</u> | <u>06</u> | 06 | p |
| Missouri Coteau | 8 | Alma Lake (538 494) | 265 | 6/4/11 | 0 | 0 | 0.0 | IV H I | W | 91 | - | 01 | 06 | p |
| Missouri Coteau | 40 | Bead Lake (108 714) | 219 | 6/10/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | 01 | 06 | s(p) |
| Missouri Coteau | 8 | Beaubier Lake (675 432) | 270 | 6/4/11 | 0 | 0 | 0.0 | IV | W | 91 | - | 01 | 06 | p |
| Missouri Coteau | 9 | Big Muddy Lake, Upper & Lower (090 430) ² | 241 | 6/13/11 | 16 | 37 | 4.5 | IV I | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Missouri Coteau | 71 | Bliss Lake (633 135) | 181 | 6/9/11 | 2 | 14 | 0.6 | IV A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Missouri Coteau | 42 | Bonneau Lake (603 680) | 214 | 6/8/11 | 0 | 0 | 1.0 | IV H | A W | 91 | 96 | 01 | 06 | p |

The 2011 International Piping Plover Breeding Census in Saskatchewan (Continued)

| REGION | R.M. # | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------------|-----------|---|------|---------|------------------------|-------------------------|--------|---------------------|-------------------------|---|-----------|-----------|-----------|---------|
| Missouri Coteau | 38 | Bowden Lake (522 651) | 230 | 6/8/11* | - | - | 0.0 | IV A | W | 91 | 96 | 01 | 06 | s(p) |
| Missouri Coteau | 71 | Burn Lake (660 070) | 191 | 6/10/11 | 0 | 0 | 0.1 | IV | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Missouri Coteau | 70 | Channel Lake (825 855) | 210 | 6/8/11 | 0 | 0 | 0.0 | IV D H | W | <u>91</u> | 96 | 01 | <u>06</u> | p |
| Missouri Coteau | 164 | Chaplin Lake | 135 | 6/5/11 | 74 | 359 | 2081.5 | IV A F | A S N V W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Missouri Coteau | 11 | Cookson Reservoir (670 330) | 250 | 6/5/11 | 0 | 0 | 1.3 | VI A E | A | - | - | - | <u>06</u> | unk |
| Missouri Coteau | 11 | Coronach Reservoir, East Poplar River (636 515) | 252 | 6/4/11* | - | - | 0.0 | V A | A W | <u>91</u> | 96 | 01 | - | p |
| Missouri Coteau | 9 | Coteau Pots (300 342) | 245 | 6/8/11* | - | - | 0.0 | V A | W | 91 | <u>96</u> | 01 | 06 | p |
| Missouri Coteau | 9 | Coteau Pots (300 345) | 246 | 6/8/11* | - | - | 0.0 | V A | W | 91 | <u>96</u> | <u>01</u> | 06 | p |
| Missouri Coteau | 9 | Coteau Pots (300 350) | 247 | 6/8/11* | - | - | 0.0 | V A | W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 11 | Crookstow River (685 318) | 236 | 6/4/11 | 0 | 0 | <1 | III A | A W | 91 | - | <u>01</u> | - | p |
| Missouri Coteau | 71 | Dryboro Lake (640 075) | 188 | 6/15/11 | 0 | 0 | 0.0 | IV D H | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, p |
| Missouri Coteau | 132 | Dunkirk Lake (490 432) | 152 | 6/10/11 | 0 | 0 | 0.0 | IV H | W | 91 | - | 01 | 06 | unk |
| Missouri Coteau | 8 | East Coteau Lake (415 315) | 253 | 6/14/11 | 11 | 24 | n.r. | IV A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Missouri Coteau | 40 | Edna Lake (060 725) | 218 | 6/11/11 | 0 | 0 | 0.1 | IV A I | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Missouri Coteau | 39 | Elsie Lake (310 695) | 227 | 6/8/11 | 0 | 0 | <1 | IV A | W | <u>91</u> | 96 | 01 | <u>06</u> | s(p), p |
| Missouri Coteau | 12 | Fife Lake (370 520) ² | 233 | 6/6/11 | 9 | 26 | 3.5 | V A | V W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Missouri Coteau | 102 | Frederick Lake (435 425) | 148 | 6/8/11 | 4 | 25 | 11.0 | IV G H | A S | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Missouri Coteau | 12 | Grant Lake (370 484) | 235 | 6/5/11 | 0 | 0 | 0.0 | IV D | W | <u>91</u> | <u>96</u> | <u>01</u> | - | p |

The 2011 International Piping Plover Breeding Census in Saskatchewan (Continued)

| REGION | R.M. # | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------------|-----------|--|------|----------|------------------------|-------------------------|------|---------------------|-------------------------|--|-----------|-----------|-----------|---------|
| | | | | | | | | | | | | | | |
| Missouri Coteau | 40 | Green Lake (114 781) | 216 | 6/10/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | 01 | <u>06</u> | s(p) |
| Missouri Coteau | 166 | Handsome Lake (310 956) | 132 | 6/5/11* | - | - | 0.0 | IV A | W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 40 | Horizon Lake (870 825) | 211 | 6/6/11 | 4 | 11 | 1.5 | IV D H | W | - | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Missouri Coteau | 9 | Jim Creek Lake (267 367) | 244 | 6/5/11 | 0 | 0 | 0.0 | VI I | W | - | 96 | 01 | 06 | s(p), p |
| Missouri Coteau | 38 | Karl Lake (517 656) and Unnamed, UTM 514 656 | 231 | 6/8/11 | 0 | 0 | 0.0 | IV A | W | <u>91</u> ⁵ | 96 | 01 | 06 | s(p) |
| Missouri Coteau | 72 | Lake of the Rivers (475 190) | 178 | 6/10/11 | 0 | 0 | 1.0 | V H I | A W | <u>91</u> | 96 | <u>01</u> | <u>06</u> | p |
| Missouri Coteau | 9 | Little Coteau Lake (455 310) | 254 | 6/14/11* | - | - | 0.0 | IV H | W | 91 | <u>96</u> | 01 | 06 | p |
| Missouri Coteau | 9 | Lonetree Lake (355 290) | 249 | 6/9/11 | 0 | 0 | 0.0 | D | W | <u>91</u> | 96 | 01 | <u>06</u> | p |
| Missouri Coteau | 39 | MacDonagh Lake (335 712) | 225 | 6/9/11 | 0 | 0 | 0.0 | IV A | W | <u>91</u> | 96 | 01 | 06 | s(p) |
| Missouri Coteau | 39 | Marjorie Lake (315 684) | 228 | 6/9/11 | 0 | 0 | 0.0 | IV A | W | 91 | - | 01 | <u>06</u> | s(p), p |
| Missouri Coteau | 8 | Mather Lake (630 504) | 267 | 6/4/11 | 0 | 0 | 0.0 | IV | W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 39 | McGrath Lake (185 646) | 221 | 6/9/11 | 0 | 0 | 0.0 | IV D | W | 91 | 96 | 01 | <u>06</u> | p |
| Missouri Coteau | 39 | McGrath Lake South (193 638) | 222 | 6/9/11 | 0 | 0 | 0.0 | IV D | W | 91 | - | 01 | 06 | p |
| Missouri Coteau | 164 | Midtskogen Lake (830 836) | 134 | 6/6/11* | - | - | 0.0 | IV A H | W | - | - | - | - | s(p) |
| Missouri Coteau | 42 | Montague Lake (400 800) ³ | 212 | 6/22/11 | 0 | 0 | 27.4 | IV H | W | <u>91</u> | 96 | 01 | 06 | p |
| Missouri Coteau | 101 | N of Bliss Lake (630 155) | 180 | 6/11/11 | 0 | 0 | 0.0 | IV H | A W | 91 | - | 01 | 06 | unk |
| Missouri Coteau | 12 | North Pond (395 500) | 234 | 6/4/11 | 0 | 0 | 0.0 | IV H | A W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 102 | Old Wives Lake (300 480) | 143 | 6/8/11 | 0 | 0 | <1 | V A | A S W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |

The 2011 International Piping Plover Breeding Census in Saskatchewan (Continued)

| REGION | R.M. # | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------------|-----------|-------------------------|------|----------|------------------------|-------------------------|------------------|---------------------|-------------------------|--|-----------|-----------|-----------|------------|
| Missouri Coteau | 71/101 | Oro Lake (750 145) | 182 | 6/15/11 | 0 | 0 | <1 | V A | W | 91 | 96 | 01 | 06 | s(p), m, p |
| Missouri Coteau | 8 | Overland Lake (590 320) | 277 | 6/9/11 | 0 | 0 | 0.0 | IV D | W | 91 | 96 | <i>01</i> | <i>06</i> | p |
| Missouri Coteau | 8 | Payn Lake (580 333) | 276 | 6/9/11 | 0 | 0 | 0.0 | IV D | W | - | 96 | <i>01</i> | <i>06</i> | p |
| Missouri Coteau | 165 | Reed Lake (530 850) | 133 | 6/10/11 | 3 | 6 | 3.5 | IV A | A W | 91 | 96 | 01 | 06 | m |
| Missouri Coteau | 40 | Ritchie Lake (020 739) | 217 | 6/8/11 | 1 | 3 | 0.0 ⁶ | IV D H | W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 42 | Rivard Lake (633 625) | 215 | 6/9/11 | 0 | 0 | 2.5 | IV H | A W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 39 | Salt Lake (215 590) | 223 | 6/11/11 | 0 | 0 | 0.6 | IV A | W | 91 | 96 | 01 | 06 | f, p |
| Missouri Coteau | 166 | Salt Lake (288 035) | 131 | 6/5/11* | - | - | 0.0 | V A | W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 8 | Sandoff Lake (615 375) | 272 | 6/8/11 | 0 | 0 | 0.0 | IV I | W | 91 | 96 | 01 | 06 | s(p), p |
| Missouri Coteau | 101 | Skyeta Lake (735 197) | 170 | 6/8/11 | 0 | 0 | 0.0 | V E | W | 91 | - | 01 | 06 | p |
| Missouri Coteau | 39 | Stiles Lake (276 667) | 229 | 6/11/11* | - | - | 0.0 | IV A | W | 91 | - | 01 | 06 | p |
| Missouri Coteau | 40 | Unnamed, UTM 050 625 | 220 | 6/11/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | - | 06 | p |
| Missouri Coteau | 10 | Unnamed, UTM 085 495 | 237 | 6/5/11 | 0 | 0 | 0.0 | IV I | W | - | 96 | 01 | <i>06</i> | s(p) |
| Missouri Coteau | 103 | Unnamed, UTM 135 405 | 144 | 6/16/11 | 0 | 0 | 0.2 | IV D | W | 91 | - | 01 | 06 | p |
| Missouri Coteau | 133 | Unnamed, UTM 148 612 | 137 | 6/13/11 | 0 | 0 | 0.1 | IV D | A W | 91 | - | <i>01</i> | 06 | p |
| Missouri Coteau | 73 | Unnamed, UTM 150 065 | 179 | 6/14/11 | 0 | 0 | 0.0 | V IX H | W | 91 | - | 01 | 06 | p |
| Missouri Coteau | 133 | Unnamed, UTM 155 623 | 136 | 6/13/11 | - | - | 0.0 | IV D | A W | 91 | - | 01 | 06 | p |
| Missouri Coteau | 103 | Unnamed, UTM 170 394 | 145 | 6/16/11 | 0 | 0 | 0.1 | IV D | W | 91 | - | 01 | 06 | p |

The 2011 International Piping Plover Breeding Census in Saskatchewan (Continued)

| REGION | R.M. # | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------------|-----------|--------------------------------------|------|----------|------------------------|-------------------------|------|---------------------|-------------------------|--|-----------|-----------|-----------|---------|
| Missouri Coteau | 133 | Unnamed, UTM 220 587 | 138 | 6/13/11 | 0 | 0 | 0.0 | IV D | W | 91 | - | 01 | - | p |
| Missouri Coteau | 133 | Unnamed, UTM 246 585 | 139 | 6/15/11 | 0 | 0 | 0.0 | IV D | W | 91 | - | 01 | - | n.r. |
| Missouri Coteau | 9 | Unnamed, UTM 275 456 | 242 | 6/4/11 | 0 | 0 | 3.0 | V H | H | - | 96 | 01 | 06 | p |
| Missouri Coteau | 103 | Unnamed, UTM 277 363 | 147 | 6/14/11* | - | - | 0.0 | V H I | W | - | 96 | 01 | - | p |
| Missouri Coteau | 9 | Unnamed, UTM 295 330 | 248 | 6/8/11* | - | - | 0.0 | V A | W | - | 96 | 01 | 06 | p |
| Missouri Coteau | 102 | Unnamed, UTM 295 375 | 146 | 6/8/11 | 0 | 0 | <1 | IV H | A S W | - | 96 | 01 | 06 | p |
| Missouri Coteau | 39 | Unnamed, UTM 304 706 | 224 | 6/8/11 | 0 | 0 | <1 | IV A | W | 91 | 96 | 01 | 06 | s(p), p |
| Missouri Coteau | 9 | Unnamed, UTM 310 378 | 243 | 6/8/11* | - | - | 0.0 | V A | W | - | 96 | 01 | 06 | p |
| Missouri Coteau | 8 | Unnamed, UTM 337 540 | 239 | 6/4/11 | 0 | 0 | 1.5 | V H | n.r. | 91 | - | 01 | - | p |
| Missouri Coteau | 8 | Unnamed, UTM 340 538 | 238 | 6/4/11 | 0 | 0 | 1.5 | V H | n.r. | 91 | - | 01 | - | p |
| Missouri Coteau | 39 | Unnamed, UTM 360 717 | 226 | 6/11/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 132 | Unnamed, UTM 375 604 | 141 | 6/15/11 | 0 | 0 | 0.2 | IV D | A W | 91 | - | 01 | 06 | p |
| Missouri Coteau | 132 | Unnamed, UTM 382 645 | 140 | 6/13/11 | 0 | 0 | 0.0 | IV D | W | 91 | - | 01 | 06 | p |
| Missouri Coteau | 12 | Unnamed, UTM 400 535 | 232 | 6/4/11 | 0 | 0 | 0.0 | IV H | A W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 9 | Unnamed, UTM 421 542 | 240 | 6/4/11 | 0 | 0 | 1.5 | V H | n.r. | 91 | - | - | - | p |
| Missouri Coteau | 102 | Unnamed, UTM 430 164 (Skull Lake) | 177 | 6/8/11 | 0 | 0 | <0.1 | IV V D H | W | - | 96 | 01 | 06 | p |
| Missouri Coteau | 132 | Unnamed, UTM 455 552 | 142 | 6/15/11 | 0 | 0 | 0.0 | IV D | W | - | 96 | 01 | 06 | p |
| Missouri Coteau | 8 | Unnamed, UTM 475 490 | 259 | 6/13/11 | 0 | 0 | 0.0 | IV A | A W | - | 96 | - | - | n.r. |

The 2011 International Piping Plover Breeding Census in Saskatchewan (Continued)

| REGION | R.M. # | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------------|-----------|--|------|----------|------------------------|-------------------------|------|---------------------|-------------------------|--|-----------|-----------|-----------|---------|
| Missouri Coteau | 8 | Unnamed, UTM 476 483 | 261 | 6/13/11 | 0 | 0 | 0.0 | IV A | A W | - | 96 | - | - | n.r. |
| Missouri Coteau | 8 | Unnamed, UTM 480 486 | 260 | 6/13/11 | 0 | 0 | 0.0 | IV A | A W | - | 96 | - | - | n.r. |
| Missouri Coteau | 8 | Unnamed, UTM 483 494 | 256 | 6/13/11 | 0 | 0 | 0.0 | IV A | A W | - | 96 | - | - | n.r. |
| Missouri Coteau | 8 | Unnamed, UTM 483 498 | 257 | 6/13/11 | 0 | 0 | 0.0 | IV A | A W | - | 96 | - | - | n.r. |
| Missouri Coteau | 132 | Unnamed, UTM 488 445 | 149 | 6/14/11 | 0 | 0 | 0.0 | IV H | W | 91 | - | 01 | 06 | p |
| Missouri Coteau | 165 | Unnamed, UTM 493 073 | 130 | 6/5/11* | - | - | 0.0 | V A | W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 8 | Unnamed, UTM 493 480 | 262 | 6/13/11 | 0 | 0 | 0.0 | IV A | A W | 91 | 96 | - | - | n.r. |
| Missouri Coteau | 8 | Unnamed, UTM 495 490 | 258 | 6/13/11 | 0 | 0 | 0.0 | IV A | A W | - | 96 | - | - | n.r. |
| Missouri Coteau | 132 | Unnamed, UTM 500 450 | 150 | 6/14/11 | 0 | 0 | 0.0 | IV H I | W | 91 | <u>96</u> | 01 | 06 | p |
| Missouri Coteau | 102 | Unnamed, UTM 503 440 | 151 | 6/14/11 | 2 | 4 | 1.0 | IV H I | W | 91 | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Missouri Coteau | 8 | Unnamed, UTM 505 486 | 264 | 6/6/11 | 1 | 5 | <0.1 | IV I | W | - | 96 | 01 | 06 | p |
| Missouri Coteau | 9 | Unnamed, UTM 515 475 | 263 | 6/13/11 | 0 | 0 | 0.0 | IV A | A W | 91 | 96 | - | - | n.r. |
| Missouri Coteau | 10 | Unnamed, UTM 533 461 | 268 | 6/13/11 | 0 | 0 | 0.0 | IV A | A W | - | 96 | - | - | n.r. |
| Missouri Coteau | 131 | Unnamed, UTM 534 490 | 153 | 6/13/11* | - | - | 0.0 | IV H | W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 8 | Unnamed, UTM 535 455 | 269 | 6/6/11 | 0 | 0 | 0.0 | V I | W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 101 | Unnamed, UTM 540 279 (Butterfly Lake) | 157 | 6/11/11 | 6 | 26 | 1.5 | IV A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Missouri Coteau | 101 | Unnamed, UTM 560 273 | 158 | 6/15/11 | 0 | 1 | 2.0 | IV A E | A W | 91 | 96 | 01 | 06 | s(p) |
| Missouri Coteau | 101 | Unnamed, UTM 560 404 | 156 | 6/13/11 | 0 | 0 | 0.0 | IV I | W | 91 | - | 01 | 06 | s(p) |

The 2011 International Piping Plover Breeding Census in Saskatchewan (Continued)

| REGION | R.M. # | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------------|-----------|---|------|----------|------------------------|-------------------------|-----|---------------------|-------------------------|--|-----------|-----------|-----------|-------|
| Missouri Coteau | 101 | Unnamed, UTM 565 273 | 159 | 6/15/11 | 0 | 0 | 0.1 | IV A E | A W | 91 | 96 | 01 | 06 | s(p) |
| Missouri Coteau | 101 | Unnamed, UTM 567 435 | 155 | 6/14/11* | - | - | 0.0 | IV I | n.r. | 91 | - | 01 | 06 | p |
| Missouri Coteau | 101 | Unnamed, UTM 571 267 | 160 | 6/15/11* | - | - | 0.0 | IV A | none | 91 | - | 01 | 06 | p |
| Missouri Coteau | 71 | Unnamed, UTM 578 063 | 196 | 6/14/11 | 0 | 0 | 1.0 | IV | W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 101 | Unnamed, UTM 590 248 | 161 | 6/11/11 | 0 | 0 | 0.0 | IV H | I W | - | 96 | 01 | 06 | unk |
| Missouri Coteau | 8 | Unnamed, UTM 591 408 | 271 | 6/9/11* | - | - | 0.0 | IV D I | A W | - | 96 | 01 | 06 | p |
| Missouri Coteau | 131 | Unnamed, UTM 597 478 | 154 | 6/13/11* | - | - | 0.0 | IV H | W | - | - | - | - | unk |
| Missouri Coteau | 8 | Unnamed, UTM 613 345 | 274 | 6/9/11 | 0 | 0 | 0.3 | IV I | W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 8 | Unnamed, UTM 613 353 | 275 | 6/4/11 | 0 | 0 | 2.0 | V H | V | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 8 | Unnamed, UTM 628 368 | 273 | 6/4/11 | 0 | 0 | 1.0 | V H | none | - | 96 | 01 | 06 | p |
| Missouri Coteau | 71 | Unnamed, UTM 632 035 | 201 | 6/14/11 | 0 | 0 | 0.0 | IV | W | - | 96 | 01 | - | p |
| Missouri Coteau | 101 | Unnamed, UTM 640 309 ³ | 162 | 6/27/11 | 0 | 0 | 0.1 | IV H | A W | 91 | - | 01 | 06 | unk |
| Missouri Coteau | 71 | Unnamed, UTM 646 096 | 186 | 6/10/11 | 0 | 0 | 0.0 | IV | W | - | - | 01 | 06 | p |
| Missouri Coteau | 71 | Unnamed, UTM 650 075 ² | 189 | 6/11/11 | 1 | 4 | 0.1 | IV | W | 91 | 96 | 01 | 06 | f |
| Missouri Coteau | 101 | Unnamed, UTM 650 295 | 163 | 6/15/11 | 0 | 0 | 0.0 | IV E | W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 71 | Unnamed, UTM 662 075 (adj. to Burn Lake) | 190 | 6/10/11 | 0 | 0 | 0.1 | IV | W | 91 | 96 | 01 | 06 | f |
| Missouri Coteau | 101 | Unnamed, UTM 673 266 | 165 | 6/15/11 | 0 | 0 | 0.0 | IV E | W | 91 | - | 01 | 06 | p |
| Missouri Coteau | 71 | Unnamed, UTM 684 062 | 197 | 6/10/11 | 0 | 0 | 0.0 | IV | A W | 91 | - | 01 | 06 | f |

The 2011 International Piping Plover Breeding Census in Saskatchewan (Continued)

| REGION | R.M. # | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------------|-----------|--|------|----------|------------------------|-------------------------|------|---------------------|-------------------------|--|-----------|-----------|-----------|---------|
| | | | | | | | | | | 91 | 96 | 01 | 06 | |
| Missouri Coteau | 71 | Unnamed, UTM 691 060 | 198 | 6/10/11 | 0 | 0 | 0.1 | IV | A W | 91 | 96 | 01 | 06 | f |
| Missouri Coteau | 71 | Unnamed, UTM 700 080 | 192 | 6/10/11 | 0 | 0 | 0.0 | IV | A W | 91 | 96 | 01 | 06 | f |
| Missouri Coteau | 11 | Unnamed, UTM 702 290 | 251 | 6/4/11 | 0 | 0 | 0.0 | IV H I | A W | - | 96 | <u>01</u> | - | p |
| Missouri Coteau | 71 | Unnamed, UTM 705 056 | 199 | 6/10/11 | 0 | 1 | 0.0 | IV A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Missouri Coteau | 71 | Unnamed, UTM 714 054 | 200 | 6/10/11 | 4 | 10 | 1.0 | IV A | W | 91 | <u>96</u> | 01 | <u>06</u> | p |
| Missouri Coteau | 71 | Unnamed, UTM 717 067 | 195 | 6/10/11 | 0 | 0 | 0.1 | IV A | W | 91 | <u>96</u> | 01 | <u>06</u> | F |
| Missouri Coteau | 71 | Unnamed, UTM 725 075 | 193 | 6/10/11 | 0 | 0 | 0.1 | IV A | W | 91 | 96 | <u>01</u> | 06 | f |
| Missouri Coteau | 101 | Unnamed, UTM 733 205 | 168 | 6/8/11 | 0 | 0 | 0.0 | IV E | W | 91 | - | 01 | 06 | p |
| Missouri Coteau | 101 | Unnamed, UTM 735 128 | 183 | 6/11/11* | - | - | 0.0 | IV H | A W | 91 | - | 01 | <u>06</u> | unk |
| Missouri Coteau | 71 | Unnamed, UTM 738 085 (Shoe Lake, North) | 187 | 6/8/11 | 10 | 37 | 2.2 | IV A F | N | 91 | 96 | 01 | <u>06</u> | f, s(p) |
| Missouri Coteau | 71 | Unnamed, UTM 739 075 | 194 | 6/10/11 | 0 | 0 | 0.0 | IV | W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 101 | Unnamed, UTM 740 181 | 171 | 6/17/11 | 0 | 0 | 0.0 | V D | W | 91 | - | <u>01</u> | 06 | p |
| Missouri Coteau | 101 | Unnamed, UTM 770 230 | 167 | 6/17/11 | 0 | 0 | 0.0 | V D | W | 91 | - | 01 | 06 | p |
| Missouri Coteau | 71 | Unnamed, UTM 775 125 | 184 | 6/15/11 | 0 | 0 | <0.1 | IV H | A W | 91 | 96 | 01 | 06 | unk |
| Missouri Coteau | 71 | Unnamed, UTM 776 116 ³ | 185 | 6/25/11* | - | - | 0.0 | IV H | A W | 91 | 96 | 01 | 06 | unk |
| Missouri Coteau | 100 | Unnamed, UTM 831 160 | 176 | 6/9/11 | 0 | 0 | 0.0 | IV A | A W | 91 | 96 | 01 | 06 | p |
| Missouri Coteau | 70 | Unnamed, UTM 832 010 | 204 | 6/13/11* | - | - | 0.0 | IV A | W | 91 | <u>96</u> | 01 | <u>06</u> | f |
| Missouri Coteau | 70 | Unnamed, UTM 840 020 ² | 203 | 6/10/11 | 0 | 3 | 0.1 | IV D | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, s(p) |

The 2011 International Piping Plover Breeding Census in Saskatchewan (Continued)

| REGION | R.M. # | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------------|-----------|-----------------------------------|------|----------|------------------------|-------------------------|------|---------------------|-------------------------|--|-----------|-----------|-----------|---------|
| | | | | | | | | | | | | | | |
| Missouri Coteau | 70 | Unnamed, UTM 841 995 | 206 | 6/13/11* | - | - | 0.0 | IV A | W | 91 | 96 | <u>01</u> | <u>06</u> | f |
| Missouri Coteau | 70 | Unnamed, UTM 842 003 | 205 | 6/13/11 | 0 | 0 ⁷ | 0.0 | IV A H | W | 91 | 96 | 01 | 06 | f |
| Missouri Coteau | 70 | Unnamed, UTM 842 027 ² | 202 | 6/10/11 | 5 | 11 | 0.4 | IV A | n.r. | 91 | <u>96</u> | <u>01</u> | <u>06</u> | f, s(p) |
| Missouri Coteau | 100 | Unnamed, UTM 842 162 | 175 | 6/9/11 | 0 | 0 | 0.0 | IV A | A W | <u>91</u> | <u>96</u> | 01 | <u>06</u> | p |
| Missouri Coteau | 100 | Unnamed, UTM 845 167 | 173 | 6/9/11* | - | - | 0.0 | IV A | A | - | 96 | 01 | 06 | p |
| Missouri Coteau | 70 | Unnamed, UTM 846 992 | 207 | 6/13/11* | - | - | 0.0 | IV A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Missouri Coteau | 100 | Unnamed, UTM 848 171 | 172 | 6/9/11* | - | - | 0.0 | IV A | A W | - | 96 | 01 | 06 | P |
| Missouri Coteau | 100 | Unnamed, UTM 849 167 | 174 | 6/9/11* | - | - | 0.0 | IV A | A | - | 96 | 01 | <u>06</u> | P |
| Missouri Coteau | 70 | Unnamed, UTM 851 988 | 208 | 6/13/11* | - | - | 0.0 | IV A | W | - | 96 | 01 | 06 | F |
| Missouri Coteau | 100 | Unnamed, UTM 857 197 and 863 200 | 169 | 6/11/11 | 0 | 0 | 0.0 | IV H | A W | 91 | 96 | 01 | 06 | Unk |
| Missouri Coteau | 70 | Unnamed, UTM 860 984 (Plasmodium) | 209 | 6/13/11 | 1 | 2 | 0.1 | IV A | W | - | <u>96</u> | 01 | 06 | F |
| Missouri Coteau | 100 | Unnamed, UTM 915 261 ³ | 166 | 6/25/11* | - | - | 0.0 | IV H | W | - | 96 | 01 | 06 | Unk |
| Missouri Coteau | 8 | Wellington Lake (550 495) | 266 | 6/4/11 | 0 | 0 | 0.0 | IV H I | W | 91 | 96 | 01 | 06 | P |
| Missouri Coteau | 9 | West Coteau Lake (350 315) | 278 | 6/9/11 | 0 | 0 | 0.0 | IV A | W | <u>91</u> | 96 | 01 | <u>06</u> | s(p), p |
| Missouri Coteau | 42 | Willow Bunch Lake (670 770) | 213 | 6/9/11 | 15 | 50 | 35.0 | IV A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| North Central | 434 | Blaine Lake North (680 545) | 25 | 6/10/11* | - | - | 0.0 | IV H | W | 91 | 96 | 01 | 06 | unk |
| North Central | 555 | Pekakumew Lake (600 450) | 4 | 6/17/11 | 0 | 0 | 0.0 | IV D I | A W | 91 | - | - | 06 | s(p) |
| North Central | 405 | Radisson Lake (365 180) | 51 | 6/4/11 | 0 | 0 | 0.0 | IV | W | 91 | 96 | 01 | <u>06</u> | p |

The 2011 International Piping Plover Breeding Census in Saskatchewan (Continued)

| REGION | R.M. # | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|---------------|-----------|---|------|----------|------------------------|-------------------------|-----|---------------------|-------------------------|--|-----------|-----------|-----------|---------|
| | | | | | | | | | | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | |
| North Central | 434 | Redberry Lake (540 400) | 26 | 6/9/11 | 1 | 2 | 0.0 | IV A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| North Central | 344 | S. Saskatchewan River, Upstream (540 465) | 77 | 6/4/11 | 0 | 0 | 0.0 | A E | W | 91 | 96 | 01 | - | s(p) |
| Northeast | 400 | Basin Lake (815 290) ³ | 44 | 6/21/11 | 0 | 0 | 0.0 | IV A | W | <u>91</u> | <u>96</u> | 01 | 06 | p |
| Northeast | 372 | Buffer Lake (310 030) | 52 | 6/10/11 | 0 | 0 | 0.0 | IV D H | W | <u>91</u> | <u>96</u> | 01 | <u>06</u> | p |
| Northeast | 400 | Elkona Lake (865 282) | 45 | 6/5/11 | 0 | 0 | 0.1 | IV D H | V W | <u>91</u> | 96 | <u>01</u> | <u>06</u> | p |
| Northeast | 370 | Houghton Lake (940 080) | 54 | 6/7/11 | 0 | 0 | 0.0 | IV A | W | <u>91</u> | 96 | 01 | <u>06</u> | p |
| Northeast | 430 | Jumping Lake (Big) (700 560) | 27 | 6/13/11 | 0 | 0 | 0.0 | IV D H | A W | 91 | 96 | 01 | 06 | s(p) |
| Northeast | 398/368 | Lake Charron (470 060) | 55 | 6/16/11 | 0 | 0 | 0.0 | V D H | W | 91 | 96 | 01 | 06 | unk |
| Northeast | 399 | Lenore Lake (010 180) | 47 | 6/11/11 | 0 | 0 | 0.0 | V A | W | <u>91</u> | 96 | <u>01</u> | 06 | unk |
| Northeast | 400 | Middle Lake (870 235) | 46 | 6/9/11 | 0 | 0 | 0.0 | IV A | W | <u>91</u> | <u>96</u> | 01 | 06 | unk |
| Northeast | 371 | Muskiki Lake (500 000) | 53 | 6/11/11 | 0 | 0 | 0.1 | IV D A | W | <u>91</u> | 96 | 01 | 06 | p |
| Northwest | 379 | Aroma Lake (670 960) | 56 | 6/10/11 | 2 | 9 | 3.8 | IV A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Northwest | 439 | Atton Lake (442 568) | 24 | 6/15/11 | 0 | 0 | 2.5 | V A B | U V W | - | 96 | - | 06 | s(p) |
| Northwest | 501 | Belliveau Lake (150 300) | 13 | 6/19/11 | 0 | 0 | 0.0 | V A | U A W | - | - | 01 | 06 | s(p) |
| Northwest | 497 | Birch lake (855 220) | 23 | 6/7/11 | 0 | 0 | 0.0 | V A | W | 91 | - | - | 06 | p |
| Northwest | 499 | Blackfoot Lake (595 880) | 21 | 6/13/11* | - | - | 0.0 | IV A | W | - | 96 | - | 06 | p |
| Northwest | 499 | Brightsand Lake, McFellar's Beach, S. End (405 410) | 5 | 6/8/11 | 0 | 0 | 5.0 | V A B | U V | - | - | - | 06 | s(p) |
| Northwest | 411 | Chisholm Lake (993 080) | 39 | 6/12/11 | 0 | 0 | 2.0 | IV A G | n.r. | 91 | 96 | 01 | 06 | p |
| Northwest | 411 | Dillberry Lake (SK side) | 32 | 6/12/11 | 0 | 0 | 1.0 | V A | U V | - | - | - | - | s(p) |
| Northwest | 468 | Ferron Lake (640 950) | 19 | 6/13/11 | 0 | 0 | 3.0 | IV | A V | - | - | - | 06 | p |
| Northwest | 411 | Freshwater Lake N (692 311) | 30 | 6/10/11 | 3 | 6 | 4.1 | IV A | A | - | <u>96</u> | <u>01</u> | <u>06</u> | unk |
| Northwest | 411 | Freshwater Lake S (690 290) | 31 | 6/10/11 | 2 | 4 | 2.2 | IV A | n.r. | - | <u>96</u> | <u>01</u> | <u>06</u> | unk |
| Northwest | 410 | Houchen Lake (228 222) | 37 | 6/10/11* | - | - | 0.0 | V | n.r. | - | - | 01 | 06 | p |
| Northwest | 468 | Jackfish Lake (850 740) ³ | 22 | 6/22/11 | 0 | 0 | 1.0 | V A | W | 91 | - | - | 06 | s(p) |
| Northwest | 381 | Jay Lake (200 060) | 43 | 6/11/11 | 0 | 0 | 1.5 | IV A | A | 91 | 96 | 01 | 06 | p |
| Northwest | 378 | Jones Lake (775 029) | 49 | 6/5/11* | - | - | 0.0 | V A | W | - | - | 01 | 06 | s(p) |
| Northwest | 378 | Keppel Lake (812 090) | 48 | 6/5/11 | 0 | 0 | 1.0 | IV A | A | 91 | 96 | 01 | 06 | s(p) |

The 2011 International Piping Plover Breeding Census in Saskatchewan (Continued)

| REGION | R.M. # | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------|-----------|--|------|----------|------------------------|-------------------------|------|---------------------|-------------------------|--|-----------|-----------|-----------|------------------|
| | | | | | | | | | | | | | | |
| Northwest | 410 | Killsquaw Lake (292 100) | 38 | 6/11/11 | 0 | 1 | 8.0 | IV VII A G | N | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Northwest | 588 | Lac Des Isles (020 320) | 2 | 6/13/11 | 0 | 0 | 5.6 | V A E | U | 91 | 96 | 01 | 06 | s(p) |
| Northwest | 379 | Landis Lake (701 853) | 57 | 6/5/11* | - | - | 0.0 | IV A H | W | 91 | 96 | 01 | 06 | p |
| Northwest | 411 | Little Manitou Lake (935 308) | 34 | 6/10/11 | 0 | 0 | 0.0 | IV A | W | - | - | <u>01</u> | <u>06</u> | s(p) |
| Northwest | 377 | Lizard Lake (037 997) | 50 | 6/14/11* | - | - | 0.0 | IV A | A W | 91 | 96 | 01 | 06 | p |
| Northwest | 498 | Maiden Lake (695 256) | 15 | 6/7/11* | - | - | 0.0 | V A | n.r. | - | - | - | 06 | p |
| Northwest | 442 | Manitou Lake (870 470) | 33 | 6/11/11 | 2 | 35 | 33.3 | IV A | I | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, s(p), m, p |
| Northwest | 349 | N. of Handel (600 784) | 59 | 6/5/11 | 0 | 0 | 0.5 | IV G H | W | 91 | 96 | 01 | - | p |
| Northwest | 501 | Paradise Hill (079 366) | 10 | 6/8/11 | 0 | 0 | 1.0 | IV IX H | A W | - | - | - | - | s(p) |
| Northwest | 561 | Peck Lake (925 725) | 3 | 6/8/11 | 0 | 0 | 1.0 | V A | V O | 91 | 96 | - | 06 | s(p) |
| Northwest | 501 | Perch Lake (015 376) | 6 | 6/7/11 | 0 | 0 | <0.1 | V A H | U W | - | - | - | - | s(p), p |
| Northwest | 409 | Peter Pond Lake, Sandy Point | 1 | 6/13/11 | 0 | 0 | 9.5 | V A | V | 91 | 96 | 01 | <u>06</u> | m |
| Northwest | 469 | Picnic Lake (560 978) | 18 | 6/13/11 | 0 | 0 | 0.0 | V A | U W | - | - | 01 | 06 | s(p) |
| Northwest | 352 | Plover Lake (845 558) | 71 | 6/9/11 | 0 | 0 | 0.0 | IV I | none | 91 | 96 | 01 | 06 | s(p), p |
| Northwest | 501 | Potney Lake (079 366) - formerly Fink Lake ² | 8 | 6/19/11 | 0 | 0 | 0.1 | IV A | A W | - | - | - | - | s(p) |
| Northwest | 501 | Ray's Lake (095 330) | 11 | 6/8/11 | 0 | 0 | 0.0 | IX H | A N W | - | - | 01 | 06 | s(p) |
| Northwest | 381 | Reed Lake NW (110 061) | 42 | 6/11/11 | 0 | 0 | 2.0 | IV A | W | 91 | 96 | 01 | 06 | p |
| Northwest | 411 | Reflex Lake W (680 350) ² | 29 | 6/8/11 | 2 ⁹ | 20 | 6.1 | IV A | V | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | unk |
| Northwest | 498 | Russell Lake (610 590) | 17 | 6/13/11 | 0 | 0 | 0.1 | IV A | W | 91 | <u>96</u> | 01 | 06 | p |
| Northwest | 382 | Schopfer Slough (694 390) | 28 | 6/7/11 | 1 | 2 | 1.0 | IV D | W | <u>91</u> | 96 | <u>01</u> | 06 | p |
| Northwest | 379 | SE of Landis Lake (722 817) | 58 | 6/4/11 | 0 | 0 | 6.0 | IV G H | A | 91 | <u>96</u> | 01 | - | p |
| Northwest | 498 | SE of Russel Lake (639 968) | 20 | 6/13/11* | - | - | 0.0 | IV | W | - | - | - | 06 | p |
| Northwest | 410 | Seagram Lake E (128 272) | 36 | 6/11/11* | - | - | 0.0 | IV A | A W | - | 96 | 01 | 06 | p |
| Northwest | 410 | Seagram Lake W (076 297) | 35 | 6/10/11 | 1 | 4 | 10.0 | IV A | A | 91 | <u>96</u> | <u>01</u> | <u>06</u> | p |

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| REGION | R.M. # | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|---------------|-----------|---|------|----------|------------------------|-------------------------|------|---------------------|-------------------------|--|-----------|-----------|-----------|------------|
| | | | | | | | | | | | | | | |
| Northwest | 501 | Spelt Lake (060 365) ³ | 7 | 6/19/11* | - | - | 0.0 | IV A | n.r. | - | - | - | - | s(p) |
| Northwest | 499 | Spruce Lake (265 360) ³ | 9 | 6/19/11 | 0 | 0 | 0.0 | V A H | U A W | - | - | - | 06 | s(p) |
| Northwest | 498 | Stony Lake (635 307) | 14 | 6/7/11 | 0 | 0 | 0.0 | V A | W | 91 | 96 | 01 | 06 | p |
| Northwest | unk | Thompson Lakes (528 066) | 16 | 6/13/11 | 0 | 0 | 0.0 | V A | W | - | - | - | 06 | p |
| Northwest | 350 | Tramping Lake (510 610) | 60 | 6/10/11 | 0 | 0 | 3.5 | IV I | A W | <u>91</u> | 96 | 01 | 06 | s(p), p |
| Northwest | 499 | West of Spruce Lake (262 344) ³ | 12 | 6/19/11 | 0 | 0 | 0.0 | IX | W | - | - | 01 | 06 | s(p) |
| Northwest | 381 | Winterhaldt Lake (980 044) | 40 | 6/12/11 | 0 | 0 | 0.0 | IV | W | 91 | 96 | 01 | 06 | p |
| Northwest | 351 | Zella Lake (215 590) ² | 72 | 6/12/11 | 4 | 10 | 3.1 | IV H I | A W | 91 | <u>96</u> | 01 | 06 | f, s(p), p |
| Northwest | 382 | Zoller Lake (944 004) | 41 | 6/12/11 | 0 | 0 | 7.0 | IV A | n.r. | 91 | 96 | 01 | 06 | f, s(p), p |
| Regina Plains | 5 | Boundary Dam Reservoir (454 351) | 129 | 6/6/11 | 0 | 0 | <0.1 | VI A E | U | 91 | 96 | - | 06 | unk |
| Regina Plains | 274 | Good Spirit Lake (620 135) | 84 | 6/9/11 | 0 | 0 | 3.0 | V A | W | 91 | 96 | 01 | 06 | unk |
| Regina Plains | 124 | Island (Miller) Lake (345 285) | 122 | 6/8/11* | - | - | 0.0 | V A | W | - | - | - | - | p |
| Regina Plains | 95 | Moose Mountain Lake | 124 | 6/17/11 | 0 | 0 | 0.0 | V VI D | W | 91 | 96 | 01 | 06 | p |
| Regina Plains | 67 | Nickle Lake (885 925) | 126 | 6/8/11* | - | - | 0.0 | n.r. | W | 91 | 96 | 01 | 06 | unk |
| Regina Plains | 95 | Rock Lake (385 180) | 125 | 6/17/11 | 0 | 0 | 0.0 | V D | W | <u>91</u> | 96 | 01 | 06 | p |
| Regina Plains | 213 | Soda Lake (975 670) | 109 | 6/5/11 | 0 | 0 | 0.0 | V A | n.r. | 91 | 96 | 01 | 06 | p |
| S. Sask River | 224 | Lake Diefenbaker - Aikto Creek | 108 | 6/7/11 | 0 | 1 | 6.1 | VI A | V W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | unk |
| S. Sask River | 255 | Lake Diefenbaker - Camp Cantakaye | 98 | 6/8/11 | 0 | 0 | 1.8 | VI A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| S. Sask River | 255 | Lake Diefenbaker - Coteau Beach | 91 | 6/8/11 | 0 | 0 | 5.0 | VI A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | unk |
| S. Sask River | 254 | Lake Diefenbaker - Danielson | 90 | 6/7/11 | 0 | 2 | 4.3 | VI A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | unk |
| S. Sask River | 254 | Lake Diefenbaker - Danielson Park | 89 | 6/7/11 | 1 | 2 | 5.3 | VI A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| S. Sask River | 224 | Lake Diefenbaker - Douglas | 105 | 6/6/11 | 0 | 0 | 8.3 | VI A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| S. Sask River | 224 | Lake Diefenbaker - Elbow | 94 | 6/7/11 | 0 | 1 | 7.2 | VI A | W | <u>91</u> | <u>96</u> | <u>01</u> | 06 | unk |

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| REGION | R.M. # | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|---------------|-----------|---|------|---------|------------------------|-------------------------|-----|---------------------|-------------------------|--|-----------|-----------|-----------|-------|
| S. Sask River | 255 | Lake Diefenbaker - Gardiner Peninsula | 88 | 6/6/11 | 1 | 4 | 4.0 | VI A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| S. Sask River | 255 | Lake Diefenbaker - Hitchcock Bay | 97 | 6/8/11 | 0 | 0 | 0.0 | VI A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | unk |
| S. Sask River | 224 | Lake Diefenbaker - Little Sage Bay | 100 | 6/6/11 | 0 | 1 | 4.8 | VI A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | unk |
| S. Sask River | 224 | Lake Diefenbaker - Mackenzie Arm | 106 | 6/7/11 | 0 | 0 | 3.4 | VI A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | unk |
| S. Sask River | 255 | Lake Diefenbaker - North Muskapatoon | 99 | 6/8/11 | 2 | 4 | 1.3 | VI A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | unk |
| S. Sask River | 224 | Lake Diefenbaker - North Summit (East) | 104 | 6/7/11 | 0 | 0 | 0.1 | VI A | W | <u>91</u> | <u>96</u> | <u>01</u> | 06 | unk |
| S. Sask River | 224 | Lake Diefenbaker - North Summit (west) ² | 95 | 6/7/11 | 1 | 2 | 0.5 | VI A | W | <u>91</u> | <u>96</u> | <u>01</u> | 06 | unk |
| S. Sask River | 255 | Lake Diefenbaker - PFRA Coteau Pasture | 92 | 6/9/11 | 1 | 2 | 2.0 | VI A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f |
| S. Sask River | 224 | Lake Diefenbaker - River South | 102 | 6/6/11 | 1 | 2 | 1.0 | VI A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| S. Sask River | 224 | Lake Diefenbaker - Sage Bay | 101 | 6/6/11 | 0 | 0 | 2.4 | VI A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | unk |
| S. Sask River | 224 | Lake Diefenbaker - South Elbow | 93 | 6/7/11 | 0 | 0 | 3.0 | VI A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | unk |
| S. Sask River | 225 | Lake Diefenbaker - South Muskapatoon | 103 | 6/8/11 | 0 | 0 | 3.5 | VI A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | unk |
| S. Sask River | 224 | Lake Diefenbaker - Summit Creek | 107 | 6/7/11 | 0 | 0 | 3.8 | VI A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | unk |
| S. Sask River | 255 | Luck Lake (530 593) | 96 | 6/11/11 | 0 | 0 | 2.0 | V H | n.r. | 91 | - | 01 | 06 | unk |
| Saskatoon SE | 343 | Allan Potash Mine (250 560) ³ | 70 | 5/20/11 | 1 | 2 ¹⁰ | - | IV | n.r. | - | - | - | - | unk |
| Saskatoon SE | 343 | Bradwell Reservoir (182 535) | 69 | 6/15/11 | 0 | 0 | 0.5 | V I | W | 91 | 96 | 01 | 06 | p |
| Saskatoon SE | 373 | Burke Lake (105 795) | 62 | 6/16/11 | 0 | 0 | 8.0 | V I | A W | 91 | 96 | 01 | 06 | p |
| Saskatoon SE | 343 | Crawford Lake (130 674) | 64 | 6/16/11 | 0 | 0 | 6.0 | V H I | W | 91 | - | - | - | m, p |
| Saskatoon SE | 343 | Esker Slough (124 657) | 67 | 6/13/11 | 1 | 2 | 2.0 | V I | n.r. | 91 | 96 | 01 | 06 | p |
| Saskatoon SE | 343 | NW of Blucher (097 670) | 65 | 6/9/11 | 0 | 0 | 3.0 | V I | A W | 91 | 96 | - | 06 | P |

The 2011 International Piping Plover Breeding Census in Saskatchewan (Continued)

| REGION | R.M. # | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|-------------|--|------|----------|------------------------|-------------------------|---------------|---------------------|-------------------------|--|-----------|-----------|-----------|---------|
| | | | | | | | | | | | | | | |
| Saskatoon SE | 343 | NW of Blucher (103 667) | 66 | 6/9/11 | 0 | 0 | 1.0 | V I | A W | 91 | 96 | - | 06 | p |
| Saskatoon SE | 343 | NW of Blucher (155 642) | 68 | 6/13/11 | 0 | 0 | 3.0 | V I | W | 91 | 96 | 01 | 06 | p |
| Saskatoon SE | 343 | Patience Lake (085 750) | 63 | 6/16/11 | 0 | 1 | 11.0 | IV H I | W | 91 | 96 | 01 | 06 | p |
| Saskatoon SE | 373 | Porter Lake (120 840) | 61 | 6/16/11 | 0 | 0 | 6.0 | V H I | W | 91 | 96 | 01 | 06 | p |
| Southwest | 138 | Antelope Lake (860 720) | 117 | 6/9/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | - | 06 | unk |
| Southwest | 141 | Big Stick Lake, N&W sides (200 685) | 115 | 6/13/11* | - | - | 0.0 | n.r. | W | 91 | 96 | - | 06 | n.r. |
| Southwest | 111 | Bitter Lake (850 530) | 119 | 6/13/11 | 0 | 0 | 17.1 | IV A D I | A S N V W | 91 | - | - | - | s(p) |
| Southwest | 171 | Freefight Lake (343 845) | 114 | 6/6/11 | 0 | 2 | 3.0 | IV | n.r. | 91 | 96 | 01 | 06 | s(p) |
| Southwest | 171 | Ingebrigt Lake (195 795) | 113 | 6/6/11 | 0 | 0 | 4.0 | VI A | W | 91 | 96 | 01 | 06 | p |
| Southwest | 18 | Island Lake (025 455) | 127 | 6/15/11 | 0 | 0 | 0.3 | V H I | W | 91 | - | - | - | p |
| Southwest | 18 | Lonetree Lake (703 399) | 128 | 6/15/11 | 0 | 0 | 0.0 | VI | W | 91 | 96 | 01 | 06 | p |
| Southwest | 142 | MacLaren Lake (790 720) | 118 | 6/6/11 | 0 | 0 | 6.0 | VI A | W | 91 | 96 | 01 | 06 | p |
| Southwest | 168 | North of Antelope (818 790) | 116 | 6/9/11* | - | - | 0.0 | IV A | W | - | 96 | - | 06 | unk |
| Southwest | 108 | Notukeu Lake (966 140) | 123 | 6/22/11 | 0 | 0 | 1.0 | V | W | 91 | 96 | 01 | 06 | s(p) |
| Southwest | 141 | S of Tenaille Lake | 120 | 6/17/11 | 0 | 0 | 2.5 | IV H | A | 91 | 96 | - | 06 | p |
| Southwest | 169 | Snakehole Lake (783 975) | 111 | 6/9/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | 01 | 06 | unk |
| Southwest | 168 | Success Lake (005 925) | 112 | 6/9/11 | 0 | 0 | 0.0 | IV V A | W | - | 96 | 01 | 06 | unk |
| Southwest | 141/ 110 | Unnamed, UTM 508 590 | 121 | 6/13/11 | 0 | 0 | 1.3 | IV IX A | A | - | - | - | - | p |
| West | 261 | Alsask Reservoir (785 880) | 85 | 6/9/11 | 0 | 0 | 0.7 | IV I | N S | 91 | 96 | 01 | 06 | s(p), p |
| West | 319 | Opuntia Lake (675 420) | 73 | 6/13/11 | 0 | 0 | 1.6 | IV I | none | 91 | 96 | 01 | 06 | s(p), p |
| West | 285 | Stockwell Lake (480 925) | 86 | 6/11/11 | 0 | 0 | 0.0 | V I | n.r. | 91 | 96 | 01 | 06 | unk |
| West | 317 | Valley Centre (025 454) | 74 | 6/14/11* | - | - | 0.0 | IV A | W | 91 | 96 | 01 | 06 | m |
| Total | | | | | 195 | 778 | 2473.1 | | | | | | | |

* Site was checked on this date but was found to have no suitable habitat.

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

² This total is the "high count"; since two surveys were conducted at some sites for the detectability study, this total includes the highest count at each site.

³ Please note that these surveys were conducted outside the Census window.

⁴ not counted toward the Saskatchewan total because bird observed across the U.S. border and a single bird was also seen on the Montana survey (called "Salt Lake" in Montana)

⁵ In 1991, pairs were seen on Karl Lake (517 656) and adults (no pairs) were seen at Unnamed, UTM 514 656.

⁶ Although there appeared to be no suitable habitat at this site, 1 PIPL was seen flying over and 2 PIPL were seen on cultivated land.

⁷ 2 PIPL were seen flying over this site, from the direction of Unnamed, UTM 840 020 toward Unnamed, UTM 842 003. The birds did not land in this site.

⁸ In 1991, Unnamed UTM 863 200 was surveyed, but Unnamed UTM 857 197 was not.

⁹ 6 pairs were observed in the detectability study.

¹⁰ Although this site was surveyed well outside the census window we chose to include the count because a nest was seen on this initial visit and two juveniles (in addition to two adults) were seen on a subsequent visit on July 28, 2011.

The 2011 International Piping Plover Breeding Census in Alberta

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We survey almost all available and known plover habitat every year, but use the 5-year censuses to survey a few extra lakes. Most of these additional lakes have had plovers in past years, but are not normally occupied by plovers. All known sites likely to hold plovers were surveyed in 2011. We surveyed 70 basins, but did not survey 3 lakes that we had originally hoped to visit. Nonetheless, these three lakes had a low probability of supporting breeding Piping Plovers.

Water conditions were high, and habitat conditions marginal on many lakes. Nevertheless, plover numbers were higher than expected, given the relatively poor conditions. Based on our years of survey experience, we believe the survey results to be very close to the actual number of plovers in the province in 2011. The 2011 total was lower than 2006, but higher than a 2010 provincial survey.

Comparison of Census Numbers

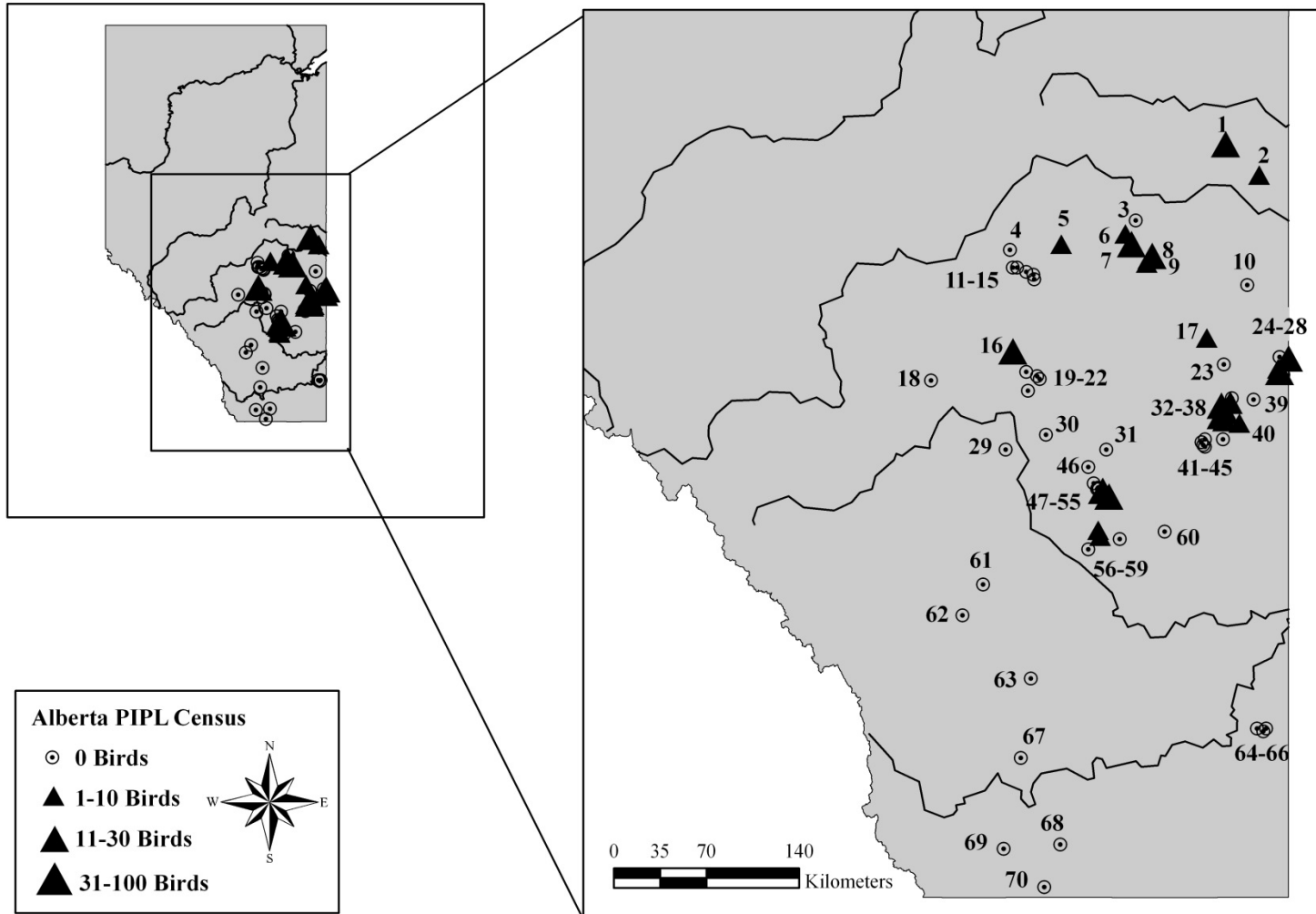
| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|------------------|------------------|
| Total Adults | 180 | 276 | 150 | 274 ¹ | 244 ¹ |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

Detectability Study

| Sites Included | First Count | Second Count |
|----------------------------|-------------|--------------|
| Cipher Lake | 0 | 0 |
| Reflex Lake (Alberta side) | 12 | 16 |

2011 International Piping Plover Breeding Census - Alberta -



The 2011 International Piping Plover Breeding Census in Alberta

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|---|---|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|--|-----------|-----------|-----------|------------|
| | | | | | | | | | - | - | <u>01</u> | <u>06</u> | |
| Bonnyville (MD) | Frog Lake ³ | 2 | 5/31/11 | 3 | 6 | 11.5 | V A | V O | - | - | <u>01</u> | <u>06</u> | s(p), p |
| Bonnyville (MD) | Muriel Lake ³ | 1 | 5/31/11 | 9 | 22 | 17.4 | V A | V O | - | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Camrose | Miquelon Lake #1 ³ | 15 | 6/21/11 | 0 | 0 | 0.0 | V A I | A V W O | - | <u>96</u> | 01 | 06 | s(p), p |
| Camrose | Miquelon Lake #2 | 14 | 6/13/11 | 0 | 0 | 1.6 | IV G | U A | 91 | 96 | 01 | 06 | s(p) |
| Camrose | Miquelon Lake #3 (Main lake) | 13 | 6/9/11 | 0 | 0 | 3.5 | IV G | H A V | 91 | 96 | 01 | 06 | s(p), p |
| Camrose | Rockeling Bay ³ | 20 | 5/31/11 | 0 | 0 | 0.0 | IV A | W | <u>91</u> | 96 | 01 | 06 | n.r. |
| Camrose | Sittingstone Lake | 19 | 6/10/11 | 0 | 0 | 0.0 | IV A | W | - | - | 01 | 06 | n.r. |
| Camrose/Ponoko | Red Deer Lake ³ | 16 | 5/31/11 | 5 | 12 | 6.0 | IV A | U W | - | <u>96</u> | <u>01</u> | <u>06</u> | n.r. |
| Camrose/Stettler/Lacombe | Buffalo Lake ³ | 22 | 6/1/11 | 0 | 0 | 0.0 | V A | W O | 91 | 96 | 01 | 06 | s(p) |
| Cardston | Shanks Lake | 70 | 6/14/11 | 0 | 0 | 0.0 | V A | W | - | 96 | 01 | 06 | s(p), p |
| Cardston | St. Mary Reservoir | 69 | 6/14/11 | 0 | 0 | 0.0 | VI A | n.r. | - | <u>96</u> | <u>01</u> | 06 | s(p), p |
| Cypress (MD) | Chappice Lake | 64 | 6/7/11 | 0 | 0 | 1.5 | IV A | W | <u>91</u> | <u>96</u> | 01 | 06 | s(p) |
| Cypress (MD) | Rutherford Lake (formerly Unnamed SE of Sam Lake) | 65 | 6/7/11 | 0 | 0 | 1.0 | IV A | A W | - | - | - | 06 | n.r. |
| Cypress (MD) | Sam Lake | 66 | 6/8/11 | 0 | 0 | 0.5 | IV A | A W | <u>91</u> | <u>96</u> | 01 | 06 | s(p) |
| Lacombe | Gull Lake | 18 | 6/16/11 | 0 | 0 | 0.0 | V A | U | - | - | - | - | s(p), m, p |
| Leduc | Joseph Lake | 11 | 6/9/11 | 0 | 0 | 0.3 | V D | N O | - | 96 | <u>01</u> | 06 | s(p), p |
| Leduc/Camrose | Oliver Lake | 12 | 6/9/11 | 0 | 0 | 0.0 | V A | O | - | 96 | <u>01</u> | 06 | s(p), p |
| Lethbridge | Keho Lake | 67 | 6/14/11 | 0 | 0 | 0.0 | VI A D H | W O | <u>91</u> | <u>96</u> | 01 | 06 | s(p), p |
| Minburn | Akasu Lake ³ | 6 | 6/3/11 | 1 | 2 | 15.1 | IV A | V O | - | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Minburn | Birch Lake, Main Basin | 9 | 6/8/11 | 2 | 6 | 5.0 | IV A | V | - | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Minburn | Birch Lake, North Basin | 8 | 6/6/11 | 6 | 12 | 3.0 | IV A | U V | - | <u>96</u> | 01 | 06 | s(p), p |
| Minburn | Junction Lake | 7 | 6/1/11 | 5 | 14 | 4.9 | IV A | V | - | <u>96</u> | 01 | <u>06</u> | s(p), p |
| Pointearth/ Stettler/ Special Area 2 | Sullivan Lake ³ | 31 | 5/30/11 | 0 | 0 | 0.0 | IV A | W | - | 96 | 01 | 06 | f, p |
| Provost (MD) | Clark Lake | 37 | 6/9/11 | 10 | 22 | 7.5 | IV A | A | - | - | - | <u>06</u> | s(p), p |
| Provost (MD) | Hansman Lake | 39 | 6/10/11 | 0 | 0 | 0.0 | IV A | n.r. | - | - | <u>01</u> | 06 | s(p), p |
| Provost (MD) | Horseshoe Lake | 34 | 6/9/11 | 5 | 19 | 14.5 | IV A | A N V | 91 | <u>96</u> | 01 | <u>06</u> | s(p), p |

The 2011 International Piping Plover Breeding Census in Alberta (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-------------------|---|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|---|-----------|-----------|-----------|------------|
| | | | | | | | | | | | | | |
| Provost (MD) | McLaren Lake (formerly Unnamed SE of Captain Eyre Lake) | 36 | 6/9/11 | 3 | 6 | 5.4 | IV A | A V | - | - | <u>01</u> | <u>06</u> | s(p), p |
| Provost (MD) | Metiskow Lake | 32 | 6/9/11 | 0 | 0 | 3.5 | IV A | n.r. | <u>91</u> | <u>96</u> | 01 | 06 | s(p), p |
| Provost (MD) | Piper Lake | 35 | 6/10/11 | 1 | 3 | 1.2 | IV A | n.r. | - | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Provost (MD) | Sunken Lake | 33 | 6/10/11 | 2 | 7 | 1.9 | IV A | A V | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | n.r. |
| Provost (MD) | West Lake | 38 | 6/9/11 | 3 | 8 | 4.4 | IV A | A | - | - | - | 06 | s(p), p |
| Red Deer | Goosequill Lake ³ | 29 | 6/3/11 | 0 | 0 | 0.0 | IV A | W O | 91 | 96 | 01 | 06 | s(p), p |
| Rockyview (MD) | Dalemead Lake (Langdon Reservoir) | 62 | 6/13/11 | 0 | 0 | 0.0 | VI A I | W O | - | - | - | 06 | s(p), p |
| Special Area 2 | Chain Lake 1 (Pearl Lake) ³ | 54 | 6/1/11 | 3 | 11 | 5.4 | IV A | n.r. | <u>91</u> | 96 | <u>01</u> | 06 | s(p), p |
| Special Area 2 | Chain Lake 2 ³ | 52 | 6/1/11 | 0 | 0 | 3.6 | IV A | n.r. | - | - | 01 | 06 | s(p), p |
| Special Area 2 | Chain Lake 3 (Clear Lake) ³ | 51 | 6/1/11 | 0 | 0 | 3.6 | IV A | n.r. | <u>91</u> | 96 | 01 | 06 | s(p), p |
| Special Area 2 | Chain Lake 3A ³ | 48 | 6/1/11 | 0 | 0 | 2.0 | IV A | n.r. | 91 | 96 | 01 | 06 | s(p), p |
| Special Area 2 | Chain Lake 4 ³ | 53 | 6/1/11 | 4 | 18 | 10.5 | IV A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | n.r. |
| Special Area 2 | Chain Lake 5 ³ | 47 | 6/1/11 | 0 | 0 | 0.0 | IV A | n.r. | - | 96 | 01 | 06 | s(p), p |
| Special Area 2 | Chain Lake 6 ³ | 50 | 6/1/11 | 0 | 0 | 6.0 | IV A | n.r. | <u>91</u> | 96 | 01 | 06 | s(p), p |
| Special Area 2 | Chain Lake 7 ³ | 49 | 5/30/11 | 0 | 0 | 0.0 | IV A | n.r. | 91 | 96 | 01 | 06 | s(p), p |
| Special Area 2 | Coleman Lake | 59 | 6/7/11 | 0 | 0 | 0.0 | VI A | W O | - | - | - | 06 | s(p) |
| Special Area 2 | Dowling Lake ³ | 55 | 6/2/11 | 11 | 28 | 29.2 | IV A | A V | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Special Area 2 | Handhills Lake ³ | 56 | 5/31/11 | 1 | 2 | 15.0 | IV A | V | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | n.r. |
| Special Area 2 | Littlefish Lake ³ | 58 | 6/3/11 | 0 | 0 | 4.6 | IV A | n.r. | <u>91</u> | 96 | <u>01</u> | <u>06</u> | s(p), p |
| Special Area 2 | Plover Lake ³ | 60 | 6/3/11 | 0 | 0 | 0.0 | IV A | n.r. | - | 96 | <u>01</u> | 06 | s(p), p |
| Special Area 2 | Unnamed (0.5 km S of Handhills) ³ | 57 | 5/31/11 | 0 | 1 | 1.8 | IV A | n.r. | - | - | 01 | 06 | n.r. |
| Special Area 4 | Foster Lake | 40 | 6/8/11 | 2 | 7 | 5.5 | IV A | A V | - | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Special Area 4 | Gooseberry Lake | 45 | 6/8/11 | 0 | 0 | 6.8 | IV A | none | <u>91</u> | 96 | 01 | 06 | s(p), p |
| Special Area 4 | Neutral Hills A | 44 | 6/7/11 | 0 | 0 | 0.0 | IV A | n.r. | <u>91</u> | 96 | 01 | 06 | s(p), p |
| Special Area 4 | Neutral Hills B1 | 43 | 6/7/11 | 0 | 0 | 3.0 | IV A | n.r. | 91 | <u>96</u> | 01 | 06 | s(p), p |
| Special Area 4 | Neutral Hills B2 | 42 | 6/7/11 | 0 | 0 | 2.0 | IV A | n.r. | 91 | 96 | 01 | 06 | s(p), p |
| Special Area 4 | Neutral Hills C1 | 41 | 6/7/11 | 0 | 0 | 2.5 | IV A | W | <u>91</u> | <u>96</u> | 01 | 06 | s(p), p |
| Stettler | Lowden Lake ³ | 30 | 5/30/11 | 0 | 0 | 0.0 | IV V A | W O | 91 | 96 | 01 | 06 | s(p), p |
| Stettler | Rider Lake ³ | 21 | 5/31/11 | 0 | 0 | 0.5 | IV A | W | <u>91</u> | 96 | 01 | <u>06</u> | s(p), p |
| Stettler | Spiers Lake | 46 | 6/14/11 | 0 | 0 | 3.2 | IV A | W | <u>91</u> | 96 | 01 | 06 | f, s(p), p |

The 2011 International Piping Plover Breeding Census in Alberta (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------------|---|------|---------|------------------------|-------------------------|--------------|---------------------|-------------------------|---|-----------|-----------|-----------|------------|
| | | | | | | | | | | | | | |
| Strathcona | Cooking Lake | 4 | 6/9/11 | 0 | 0 | 0.5 | V A D E | W O | - | - | - | 06 | s(p), p |
| Two Hills | Plain Lake ³ | 3 | 6/22/11 | 0 | 0 | 0.0 | V D | O | - | - | <u>01</u> | 06 | s(p), p |
| Vermilion River | Albert Lake | 10 | 6/7/11 | 0 | 0 | 2.0 | IV A | A | - | - | <u>01</u> | - | s(p), p |
| Vulcan | McGregor Lake | 63 | 6/8/11 | 0 | 0 | 0.0 | VI A | W O | - | 96 | 01 | 06 | s(p), m, p |
| Wainwright (MD) | Baxter Lakes | 5 | 6/8/11 | 2 | 6 | 3.0 | IV A E | V W O | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Wainwright (MD) | Border Lake | 23 | 6/9/11 | 0 | 0 | 0.8 | IV A | A W | - | - | - | 06 | f |
| Wainwright (MD) | Cipher Lake ² | 24 | 6/8/11 | 0 | 0 | 2.3 | IV A | n.r. | <u>91</u> | <u>96</u> | 01 | <u>06</u> | s(p), p |
| Wainwright (MD) | Killarney Lake | 27 | 6/8/11 | 5 | 16 | 8.2 | IV A | A V | <u>91</u> | <u>96</u> | <u>01</u> | - | s(p), p |
| Wainwright (MD) | Leane Lake | 28 | 6/8/11 | 0 | 0 | 8.0 | IV A | A | <u>91</u> | <u>96</u> | <u>01</u> | - | s(p), p |
| Wainwright (MD) | Mott Lake | 17 | 6/8/11 | 1 | 3 | 0.5 | IV A | W | - | - | - | 06 | f |
| Wainwright (MD) | NW Killarney | 26 | 6/8/11 | 0 | 1 | 3.7 | IV A | A | - | <u>96</u> | 01 | <u>06</u> | s(p), p |
| Wainwright (MD) | Reflex Lake (Alberta side) ² | 25 | 6/10/11 | 7 | 16 | 7.7 | IV A | V | <u>91</u> | <u>96</u> | 01 | <u>06</u> | s(p), p |
| Warner | Milk River Ridge Reservoir | 68 | 6/14/11 | 0 | 0 | 0.0 | VI A | W O | - | - | - | 06 | s(p), p |
| Wheatland | Dawson Lake | 61 | 6/13/11 | 0 | 0 | 0.0 | V A | W O | - | - | - | 06 | s(p), p |
| Total | | | | 91 | 248 | 251.6 | | | | | | | |

* Site was checked on this date but was found to have no suitable habitat.

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen. Italicized years indicate that the sites were checked but not officially censused due to lack of habitat.

² This total is the "high count"; since two surveys were conducted at some sites for the detectability study, this total includes the highest count at each site.

³ Please note that these surveys were conducted outside the Census window.

The 2011 International Piping Plover Breeding Census at sites on the Missouri River (MT, ND, SD, NE)

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The area of survey was from Fort Peck Lake in eastern Montana to Lewis & Clark Lake on the northeastern Nebraska southeastern South Dakota border. Not all of the river and reservoirs between these two boundaries were surveyed due to high water levels or historical lack of habitat. High releases from Fort Peck Dam, Garrison Dam, Fort Randall Dam, and Gavins Point Dam inundated much suitable river and reservoir habitat. The Missouri was completely flooded from Fort Peck Dam to the headwaters of Lake Sakakawea, from Garrison Dam to RM 1300.5 of Lake Oahe, from Fort Randall Dam to RM 842.2 of Lewis & Clark

Lake (Lake Francis Case behind the dam was also flooded), and from Gavins Point Dam to RM 753.0 Ponca State Park. The western portion of Fort Peck Lake, portions of Lake Sakakawea and its headwaters, and the eastern part of Lewis & Clark Lake were not surveyed since there is not typically any suitable habitat in these areas.

Overall, the Piping Plover adult census for the Missouri River was 186. By state and segment the results are as follows:

Montana

Fort Peck Lake – 2
Total: 2

North Dakota

Lake Sakakawea - 17
Lake Oahe (ND) – 14
Total: 31

South Dakota

Lake Oahe (SD) – 7
Lake Sharpe – 0
Lewis & Clark Lake – 144
Total: 151

Nebraska

Cedar County – 2
Total: 2

Missouri River Total – 186

In comparison to previous International Piping Plover Census results, 2011 showed an 85% decrease in Piping Plover numbers compared to the 2006 International Census and tied the 1996 International Census for the lowest number ever (see tables below). To add perspective to the census numbers, the Corps of Engineers has annually conducted an adult census on the Missouri River from 1986 to present. For the 25 year period of 1986-2010 the average number of adult Piping Plovers has been 751, with the number varying from a high of 1,764 in 2005 to

a low of 82 in 1997. Only the 1991 International Census count is somewhat close to the 25 year average while the other four census years are closer to the high and low extremes.

In 2011, the census effort adequately documented Piping Plover numbers on the Missouri River. At the time of the census record runoff had greatly reduced the amount of habitat available to the birds. The little habitat available had, in most cases, been surveyed several times before the census was done. Survey crew quality was generally good with at least one observer having several years of experience in conducting adult censuses and productivity monitoring for the segment censused.

Piping Plover numbers on the Missouri River are a function of annual runoff. In years of high runoff as in 1996 and 2011, shoreline and island habitat in the reservoirs are inundated as water is stored to avert downstream flooding. As the storage capacity of the reservoirs is approached, water releases from the dams are increased, which inundates sandbar habitat below the dams. This leaves very little breeding habitat for plovers. In years of low runoff such as 2001 and 2006, the reservoirs are lowered exposing miles of shoreline and island habitat. Releases from the dams are also decreased, providing sandbar habitat for plovers. Releases from the six main-stem dams on the Missouri River broke all previous record levels in 2011 with releases out of Garrison, Fort Randall and Gavins Point Dams being in excess of 100,000 cubic feet per second (cfs). For perspective, the average June releases for these dams varies from 22,000 to 29,000 cfs. Consequently all sandbar habitat on the Missouri River below the dams was inundated before the 2011 International Census.

Flooding on the reservoirs was almost as severe as the river itself. At the time of the 2011 International Census Fort Peck Lake and Lake Oahe were already at all-time record June elevations and Lake Sakakawea was within two

inches of equaling its June record. On Fort Peck Lake the only pair found nesting was in a parking lot. On Lake Sakakawea all but one pair of plovers were observed in recreation area parking lots. On Lake Oahe, plovers were found scattered as singles or pairs at various locations. In 2011, for the first time in an International Census, Lake Sharpe was censused. Lake Sharpe had not been censused previously due to a lack of known habitat. However, the lake is kept at a constant elevation and was not subject to rising lake levels from high runoff. Hence, it was believed that Piping Plovers displaced from Lake Oahe might nest there, but none were found.

Seventy seven percent of the plovers (144) counted on the Missouri River were found on Lewis & Clark Lake. The reasons for this relative high number come down to two factors. Like Lake Sharpe, Lewis & Clark Lake is operated at a constant lake level with very little fluctuation and therefore was not subject to the high runoff experienced at the other reservoirs. Secondly, the Corps of Engineers from 2007-2011 had constructed sandbar habitat at various locations in the middle and upper parts of the lake for Piping Plovers and Least Terns. This habitat was available to the plovers at the time of the census.

The only pair of plovers in Nebraska associated with the Missouri River was found on Corps of Engineers property located adjacent to the river. Their nest was found on the side of a farm road next to a corn field.

Comparison of Census Numbers - Overall

| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|-------|--------------------|------------------|
| Total Adults | 625 | 187 | 1,048 | 1,266 ¹ | 186 ¹ |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

Comparison of Census Numbers - Montana

| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|-----------------|----------------|
| Total Adults | 26 | 24 | 7 | 23 ¹ | 2 ¹ |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

Detectability Study - Montana

| Sites Included | First Count | Second Count |
|--|-------------|--------------|
| Big Dry Bay | 0 | 0 |
| Duck Creek, 3rd Coulee, & Skunk Coulee | 0 | 0 |

Comparison of Census Numbers – N Dakota

| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|------------------|-----------------|
| Total Adults | 307 | 125 | 643 | 702 ¹ | 31 ¹ |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

Detectability Study – North Dakota

| Sites Included | First Count | Second Count |
|--|-------------|--------------|
| Lake Oahe (Dredge Island) RM 1270.0 | 14 | 12 |
| Lake Sakakawea - Deepwater Bay East 1444 | 3 | 3 |
| Lake Sakakawea - Douglas Creek Bay 1400 | 1 | 2 |
| Lake Sakakawea - Spring Creek 1400.1 | 1 | 2 |
| Lake Sakakawea - Steinke Bay 1394 | 1 | 2 |
| Lake Sakakawea - Van Hook Boat Ramp 1451 | 7 | 10 |
| Lake Sakakawae - Little Beaver Bay 1499 | 1 | 2 |

Comparison of Census Numbers – S Dakota

| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|-----------------|------------------|
| Total Adults | 290 | 27 | 390 | 25 ¹ | 151 ¹ |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

Detectability Study – South Dakota

| Sites Included | First Count | Second Count |
|---|-------------|--------------|
| Lewis & Clark Lake, Missouri RM 842 (The Complex) | 24 | 15 |
| Lake Oahe (Kenel Flats North & South) RM 1231.0 | 0 | 0 |
| Lake Oahe (Moose Flats) RM 1179 | 0 | 0 |
| Lake Oahe (S. Railroad Grande) RM 1199 | 0 | 0 |
| Lake Oahe (State Line WPA - South) RM 1233 | 0 | 0 |
| Lake Oahe (Cheyenne River - NE) RM 1110 | 0 | 0 |
| Lake Oahe (Forest City) RM 1150 | 0 | 0 |
| Lake Oahe (Swift Bird) RM 1159-1161 | 0 | 0 |
| Sully Flats to Peoria Flats (RM 1095-1083) | 0 | 0 |
| Lake Oahe (Little Bend - East) RM 1111.0 | 2 | 2 |
| Lake Oahe (Little Bend - West) RM 1111.1 | 2 | 1 |
| Lake Oahe (Little Bend-2) RM 1111.2 | 1 | 0 |
| Lake Oahe (Little Bend-3) RM 111.3 | 2 | 0 |
| Lake Oahe (Blue Blanket) RM 1189 | 0 | 0 |
| Sage Creek to Charlie Creek (RM 1123-1115) | 0 | 0 |

Comparison of Census Numbers – Nebraska

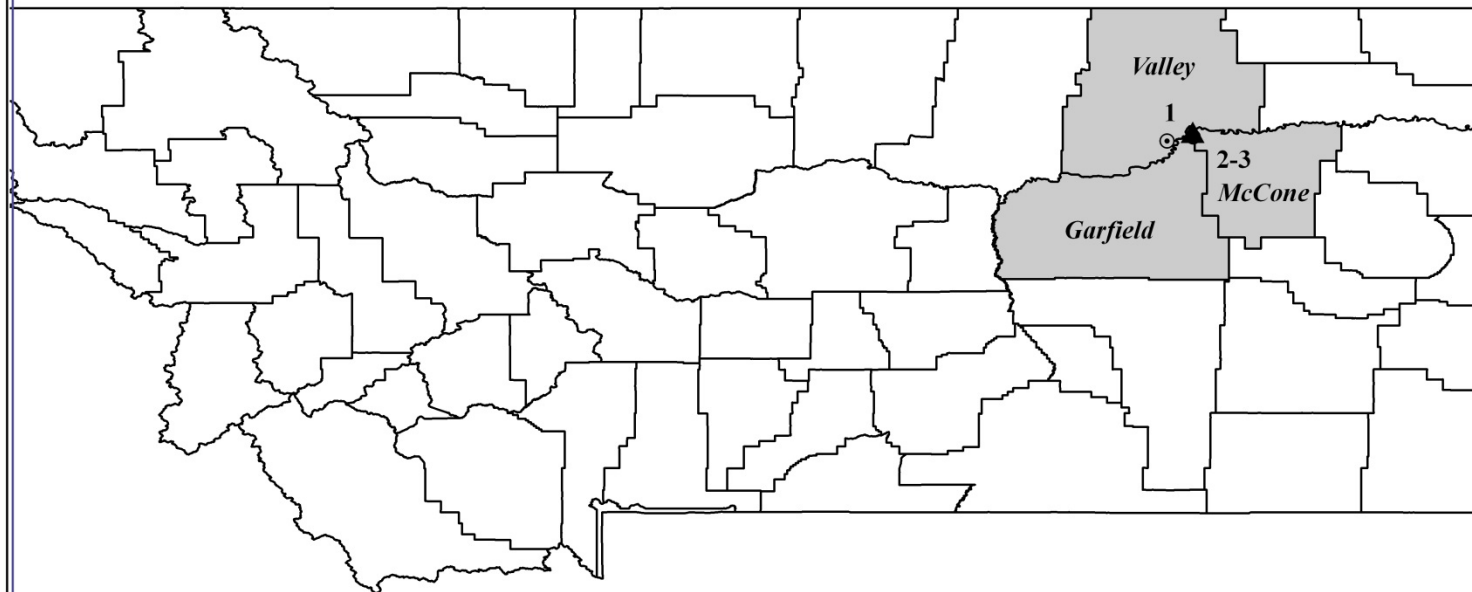
| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|------------------|----------------|
| Total Adults | 0 | 9 | 8 | 191 ¹ | 2 ¹ |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

Detectability Study – Nebraska

| Sites Included | First Count | Second Count |
|------------------------------|-------------|--------------|
| Audubon Bend Management Area | 2 | 2 |

2011 International Piping Plover Breeding Census - Missouri River (Montana) -



0 50 100 200
Kilometers

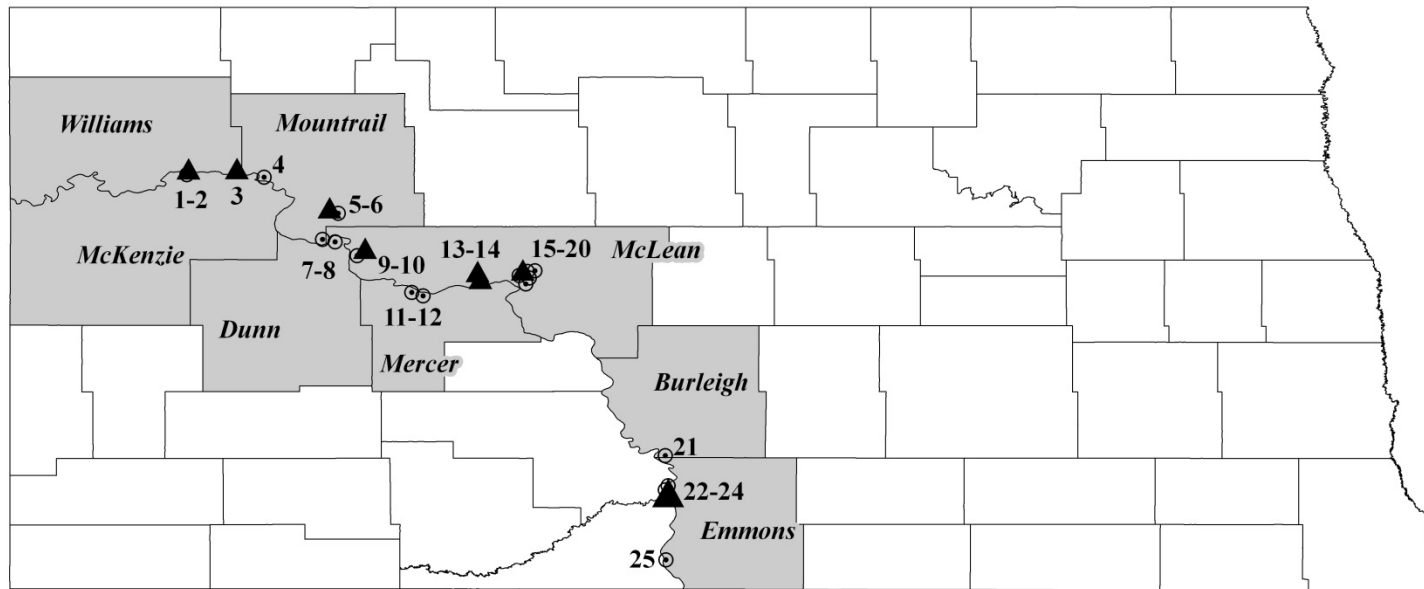


The 2011 International Piping Plover Breeding Census on the Missouri River in Montana

| COUNTY | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|---------------------|---|------|---------|------------------------|-------------------------|------------|---------------------|-------------------------|---|----|------------------|------------------|-------|
| Garfield/ McCone | Big Dry Bay | 3 | 6/10/11 | 0 | 0 | 0.0 | III A | W | - | - | - | - | f |
| Valley | Duck Creek, 3rd Coulee, & Skunk Coulee | 1 | 6/9/11 | 0 | 0 | 0.0 | III A | W | 91 | 96 | <u>01</u> | <u>06</u> | f |
| Valley | Dry Arm (Fort Peck Lake) | 2 | 6/16/11 | 1 | 2 | 0.1 | IX O | W | - | 96 | - | - | f |
| Total | | | | 1 | 2 | 0.1 | | | | | | | |

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

2011 International Piping Plover Breeding Census - Missouri River (North Dakota) -



0 37.5 75 150
Kilometers



The 2011 International Piping Plover Breeding Census on the Missouri River in North Dakota

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------------|---|------|---------|------------------------|-------------------------|-----|---------------------|-------------------------|--|----------------|-----------|-----------|-------|
| Burleigh/Emmons | Lake Oahe (East Shoreline) 1300.7-1277.2 | 21 | 6/6/11 | 0 | 0 | 0.0 | III A | W | - | - | - | - | f |
| Dunn | Lake Sakakawea - Independence Point 1445 | 8 | 6/9/11 | 0 | 0 | 0.0 | VI A | W | - | <u>96</u> | - | <u>06</u> | f |
| Emmons | Lake Oahe (East Shoreline) 1256-1232 | 25 | 6/7/11 | 0 | 0 | 0.0 | V A | W | - | - | - | - | f |
| Emmons/Morton | Lake Oahe (Dredge Island) RM 1270.0 | 24 | 6/9/11 | 7 | 14 | 0.6 | VI F | W | <u>91</u> | <u>96</u> | <u>01</u> | - | f |
| Emmons/Morton | Lake Oahe (Islands) 1277- 1270.2 | 22 | 6/9/11 | 0 | 0 | 0.0 | III E | W | - | - | - | - | f |
| McKenzie | Lake Sakakawea - Tobacco Gardens Bay 1511 | 2 | 6/15/11 | 0 | 0 | 0.0 | VI A | none | - | <u>96</u> | <u>01</u> | <u>06</u> | f |
| McLean | Lake Sakakawea - Arikara 1442 | 10 | 6/8/11 | 0 | 0 | 0.0 | VI A | none | <u>91</u> | - | <u>01</u> | <u>06</u> | f |
| McLean | Lake Sakakawea - Deepwater Bay East 1444 | 9 | 6/9/11 | 1 | 3 | 0.0 | VI A | W O | - | - ³ | <u>01</u> | <u>06</u> | f |
| McLean | Lake Sakakawea - DeTrobriand Bay 1395 | 15 | 6/6/11 | 0 | 0 | 0.0 | VI A | W | - | - ⁴ | <u>01</u> | <u>06</u> | f |
| McLean | Lake Sakakawea - Douglas Creek Bay 1400 ² | 14 | 6/14/11 | 1 | 2 | 0.0 | VI A | W | <u>91</u> | 96 | <u>01</u> | <u>06</u> | f |
| McLean | Lake Sakakawea - Mallard Island 1391 | 19 | 6/6/11 | 0 | 0 | 0.0 | VI E | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f |
| McLean | Lake Sakakawea - Pouch Point 1456 | 7 | 6/9/11 | 0 | 0 | 0.0 | VI A | W | - | <u>96</u> | <u>01</u> | - | f |
| McLean | Lake Sakakawea - Sportsman's 1393.3 | 17 | 6/6/11 | 0 | 0 | 0.0 | VI A | W | - | - | - | - | f |
| McLean | Lake Sakakawea - Spring Creek 1400.1 ² | 13 | 6/16/11 | 1 | 2 | 0.1 | VI A | W | - | - | - | - | f |
| McLean | Lake Sakakawea - Steinke Bay 1394 ² | 16 | 6/11/11 | 1 | 2 | 0.1 | VI A | W | - | <u>96</u> | <u>01</u> | <u>06</u> | f |
| McLean | Lake Sakakawea - West Totten 1393 | 18 | 6/6/11 | 0 | 0 | 0.0 | VI A | W | - | - | <u>01</u> | <u>06</u> | f |
| McLean | Lake Sakakawea - Wolf Creek 1390 | 20 | 6/6/11 | 0 | 0 | 0.0 | VI A | none | - | - | <u>01</u> | <u>06</u> | f |
| Mercer | Lake Sakakawea - Beaver Creek Bay 1420 | 11 | 6/10/11 | 0 | 0 | 0.0 | VI A | W | - | <u>96</u> | <u>01</u> | <u>06</u> | f |

The 2011 International Piping Plover Breeding Census on the Missouri River in North Dakota (Continued)

| COUNTY | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|--|------|---------|------------------------|-------------------------|------------|---------------------|-------------------------|---|------------------|------------------|------------------|-------|
| Mercer | Lake Sakakawea - Renner Bay 1415 | 12 | 6/10/11 | 0 | 0 | 0.0 | VI A | W | <u>91</u> | - | <u>01</u> | <u>06</u> | f |
| Morton/Sioux | Lake Oahe (West Shoreline) 1302-1242 | 23 | 6/8/11 | 0 | 0 | 0.0 | III A | W | - | - | - | - | f |
| Mountrail | Lake Sakakawea - Shell Creek Bay 1450 | 6 | 6/9/11 | 0 | 0 | 0.0 | VI A | W | - | <u>96</u> | <u>01</u> | 06 | f |
| Mountrail | Lake Sakakawea - Van Hook Boat Ramp 1451 ² | 5 | 6/13/11 | 5 | 10 | 0.8 | VI A | W | - | - | - | - | f |
| Mountrail | Lake Sakakawea - White Earth Bay 1493 | 4 | 6/13/11 | 0 | 0 | 0.0 | VI A | none | - | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Williams | Lake Sakakawae - Little Beaver Bay 1499 | 3 | 6/13/11 | 1 | 2 | 0.0 | VI A | W O | - | - | - | - | f |
| Williams | Lake Sakakawea - Red Mike 1510 | 1 | 6/15/11 | 1 | 2 | 0.0 | VI A | W | - | - | - | <u>06</u> | f |
| Total | | | | 18 | 37 | 1.6 | | | | | | | |

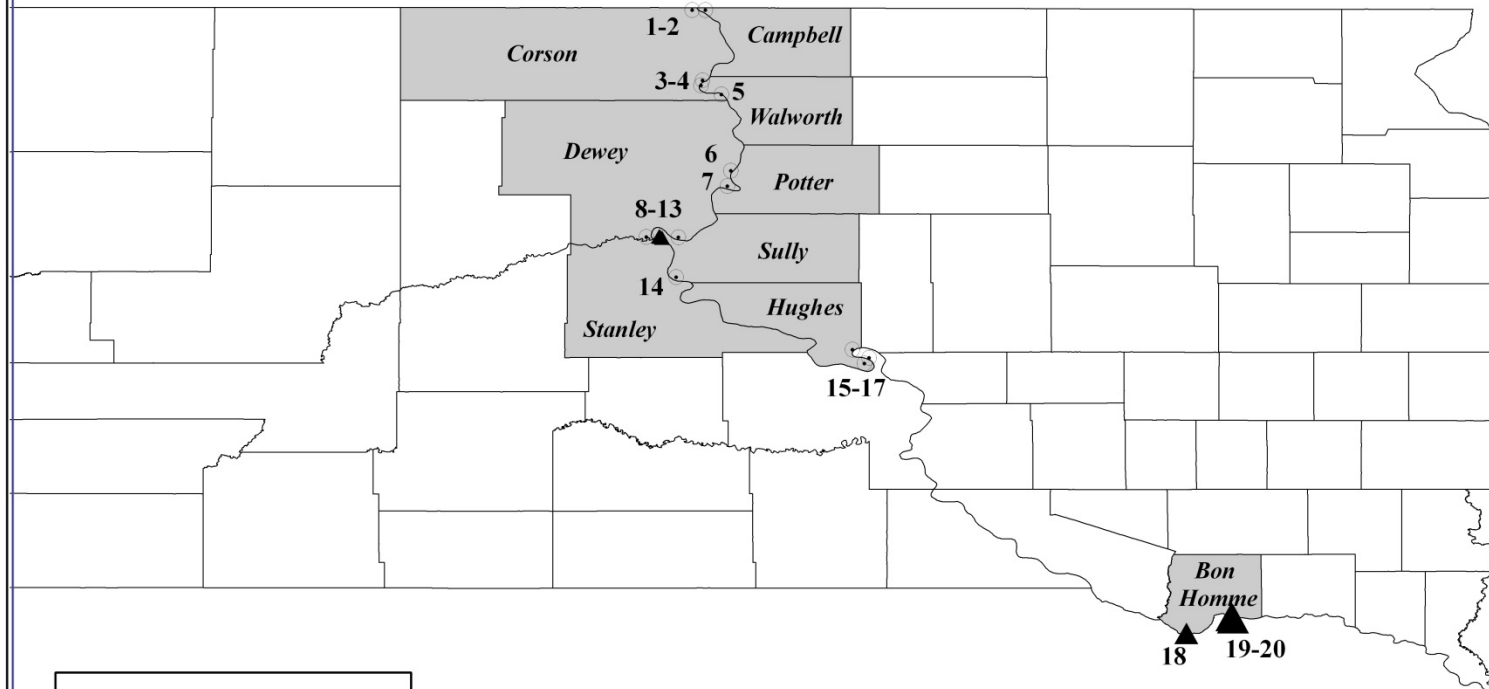
¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

² This total is the "high count"; since two surveys were conducted at some sites for the detectability study, this total includes the highest count at each site.

³ In 1996, 4 PIPL nests were found in a section of Deepwater Bay ~1 km east of the area that was surveyed in 2011.

⁴ In 1996, 1 PIPL nest was found in a section on DeTrobriand Island ~1 km southwest of this 2011 survey route.

2011 International Piping Plover Breeding Census - Missouri River (South Dakota) -



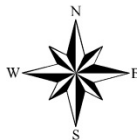
Missouri River PIPL Census

⊙ 0 Birds

▲ 1-10 Birds

▲ 11-30 Birds

▲ 31-100 Birds



0 40 80 160
Kilometers

The 2011 International Piping Plover Breeding Census on the Missouri River in South Dakota

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|----------------|--|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|--|-----------|-----------|-----------|-------|
| | | | | | | | | | 91 | 96 | 01 | 06 | |
| Bon Homme | Lewis & Clark Lake, Missouri RM 842 (The Complex) ² | 18 | 6/13/11 | 5 | 24 | 0.2 | VI F | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | 06 | f |
| Bon Homme | Lewis & Clark Lake, Missouri RM 826.3 | 20 | 6/14/11 | 8 | 71 | 1.0 | VI F | n.r. | 91 | - | - | - | f |
| Bon Homme | Lewis & Clark Lake, Missouri RM 826.6 | 19 | 6/6/11 | 4 | 49 | 1.1 | VI F | n.r. | 91 | - | - | - | f |
| Corson | Lake Oahe (Kenel Flats North & South) RM 1231.0 | 1 | 6/6/11 | 0 | 0 | 0.0 | VI A | W | 91 | - | <u>01</u> | - | f |
| Corson | Lake Oahe (Moose Flats) RM 1179 | 4 | 6/8/11 | 0 | 0 | 0.0 | VI A | W | 91 | - | - | - | f |
| Corson | Lake Oahe (S. Railroad Grande) RM 1199 | 3 | 6/8/11 | 0 | 0 | 0.0 | VI A | W | <u>91</u> | - | <u>01</u> | <u>06</u> | f |
| Campbell | Lake Oahe (State Line WPA - South) RM 1233 | 2 | 6/6/11 | 0 | 0 | 0.0 | VI A | W | - | - | <u>01</u> | <u>06</u> | f |
| Dewey | Lake Oahe (Cheyenne River - NE) RM 1110 | 13 | 6/10/11 | 0 | 0 | 1.6 | VI A | W | <u>91</u> | <u>96</u> | - | <u>06</u> | f |
| Dewey | Lake Oahe (Forest City) RM 1150 | 7 | 6/8/11 | 0 | 0 | 8.0 | VI A | W | 91 | - | <u>01</u> | <u>06</u> | f |
| Dewey | Lake Oahe (Swift Bird) RM 1159-1161 | 6 | 6/8/11 | 0 | 0 | 32.2 | VI A | W | 91 | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Hughes | Lake Sharpe (North Bend) RM 1006-1009 | 17 | 6/9/11 | 0 | 0 | 10.8 | VI A | n.r. | 91 | - | - | - | f |
| Hughes | Lake Sharpe (West Bend) RM 1010-1017 | 15 | 6/9/11 | 0 | 0 | 10.6 | VI A | n.r. | 91 | - | - | - | f |
| Hughes/Stanley | Sully Flats to Peoria Flats (RM 1095-1083) | 14 | 6/9/11 | 0 | 0 | 1.6 | VI A | W | <u>91</u> | - | <u>01</u> | <u>06</u> | f |
| Lyman | Lake Sharpe (Big Bend) RM 1003.5-1016.5 | 16 | 6/9/11 | 0 | 0 | 23.8 | VI A | n.r. | 91 | - | - | - | f |
| Sully | Lake Oahe (Little Bend - East) RM 1111.0 | 10 | 6/7/11 | 1 | 2 | 0.1 | VI A | W | <u>91</u> | - | <u>01</u> | <u>06</u> | f |
| Sully | Lake Oahe (Little Bend - West) RM 1111.1 ² | 11 | 6/7/11 | 1 | 2 | 0.1 | VI A | W | 91 | - | <u>01</u> | <u>06</u> | f |
| Sully | Lake Oahe (Little Bend-2) RM 1111.2 ² | 12 | 6/7/11 | 0 | 1 | 0.1 | VI A | W | <u>91</u> | - | - | - | f |

The 2011 International Piping Plover Breeding Census on the Missouri River in South Dakota (Continued)

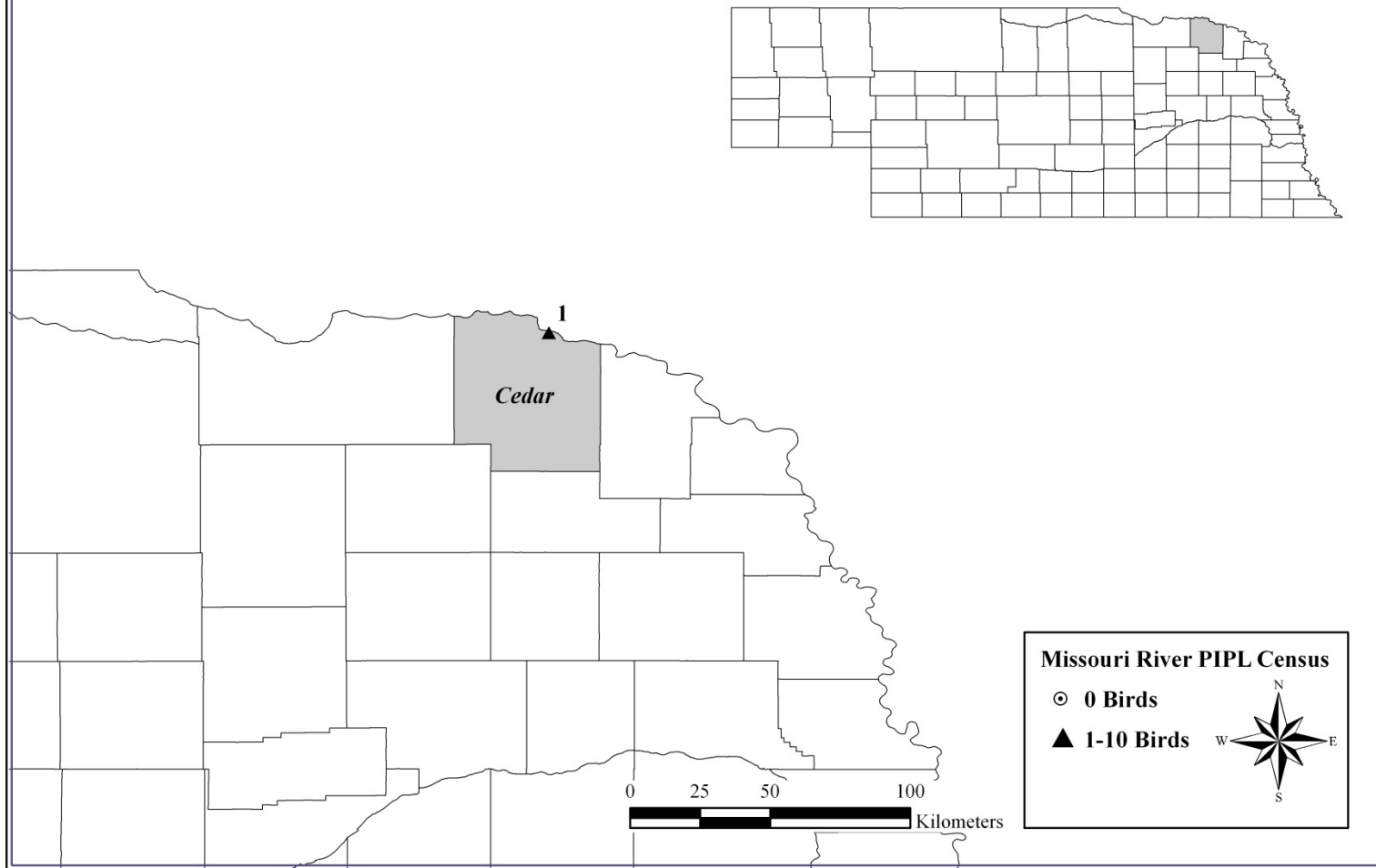
| COUNTY | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|---|------|--------|------------------------|-------------------------|--------------|---------------------|-------------------------|---|------------------|------------------|------------------|-------|
| Sully | Lake Oahe (Little Bend-3) RM 1111.3 ² | 9 | 6/7/11 | 1 | 2 | 0.1 | VI A | W | 91 | - | - | - | f |
| Walworth | Lake Oahe (Blue Blanket) RM 1189 | 5 | 6/9/11 | 0 | 0 | 8.0 | VI A | W | <u>91</u> | <u>96</u> | <u>01</u> | 06 | f |
| Zeibach | Sage Creek to Charlie Creek (RM 1123-1115) | 8 | 6/6/11 | 0 | 0 | 12.9 | VI A | W | <u>91</u> | - | - | <u>06</u> | f |
| Total | | | | 20 | 151 | 112.2 | | | | | | | |

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

² This total is the "high count"; since two surveys were conducted at some sites for the detectability study, this total includes the highest count at each site.

³ This site was a part of "Ft Randall/Gavin" in 1991. 11 PIPL were seen 1 river-mile upstream and 10 PIPL were seen 1 river-mile downstream from the center of this site.

2011 International Piping Plover Breeding Census - Missouri River (Nebraska) -



The 2011 International Piping Plover Breeding Census on the Missouri River in Nebraska

| COUNTY | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | OWNER |
|--------------|---------------------------------|------|---------|------------------------|-------------------------|------------|---------------------|-------------------------|---|-------|
| Cedar | Audubon Bend Management Area | 1 | 6/15/11 | 1 | 2 | 0.0 | III A | n.r. | - - - - | f |
| Total | | | | 1 | 2 | 0.0 | | | | |

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

The 2011 International Piping Plover Breeding Census in Montana (off-Missouri River)

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The 2011 International Piping Plover Census in Montana (off-Missouri River) was conducted by 17 observers who surveyed 56 sites and detected 89 Piping Plovers (high count off-river was 92; 2 additional plovers sighted on the Missouri River). This count was lower than all prior Census counts. However, this count is likely conservative since plovers were found nesting in unusual habitats (e.g., gravel roads, agricultural fields) due to flooding of traditional spots.

Water levels were high throughout the region in 2011. Given pervasive flooding, the 2011 Census was comprehensive. Some sites were completely flooded and others could not be surveyed until July when water levels finally receded. We were not able to access a small number of sites due to flooded roadways (e.g., VR2 Reservoir and Hamm's Reservoir).

Similar to 2006, Piping Plovers were confined to the alkali lakes in Sheridan County. One additional pair was counted outside the county on the Missouri River. Also, a pair was counted at Alkali Lake in Pondera County, a site that supported plovers in 1991 and 1996 but was not surveyed in 2006.

Comparison of Census Numbers¹

| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|------------------|-----------------|
| Total Adults | 308 | 153 | 137 | 130 ² | 91 ² |

¹Missouri River data are included in all totals.

²This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

Detectability Study

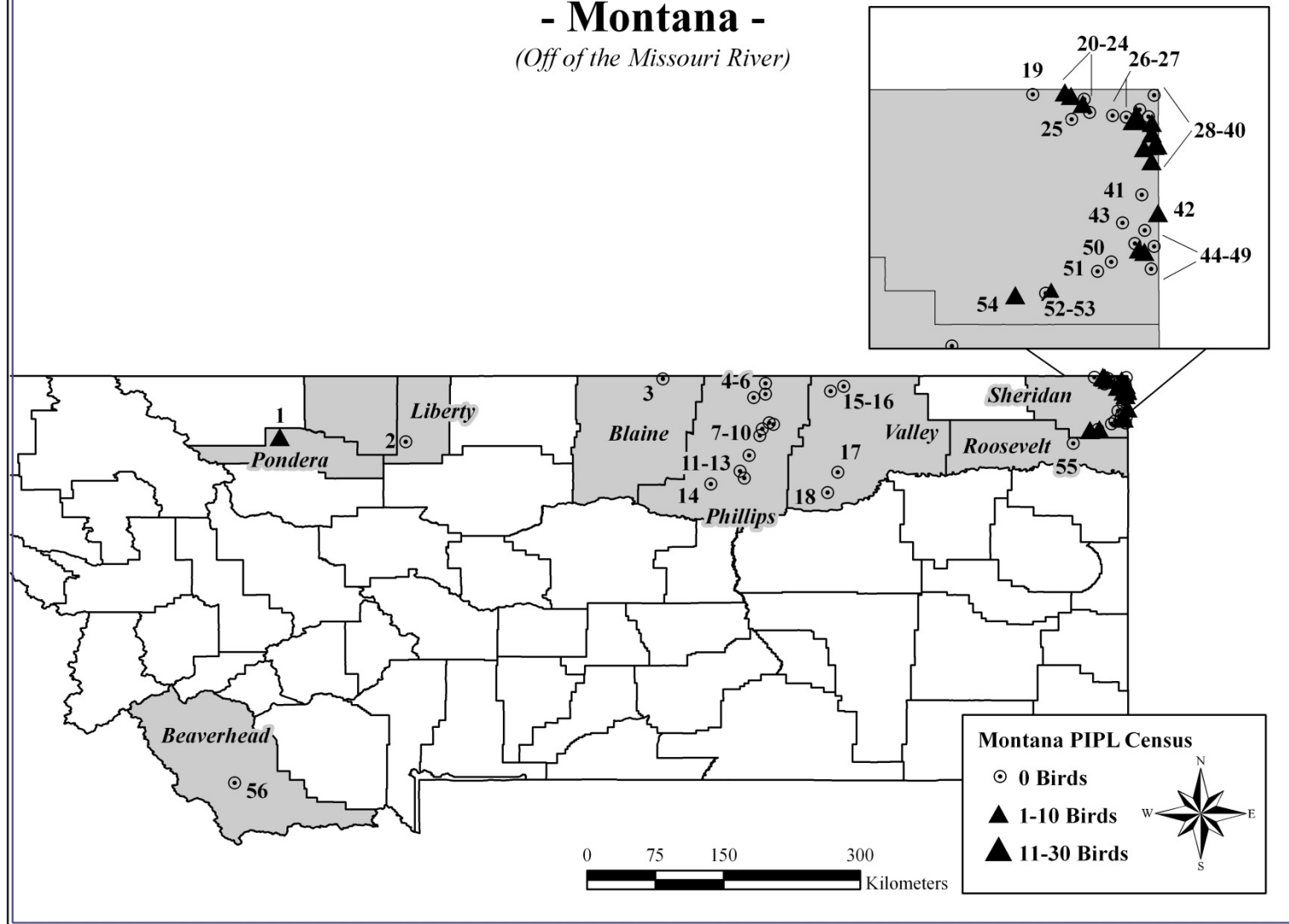
| Sites Included | First Count | Second Count |
|--------------------------------|-------------|--------------|
| Erickson WPA | 0 | 0 |
| Goose Lake | 1 | 0 |
| Katy's Lake, Medicine Lake NWR | 0 | 0 |
| Lake North of Espen WPA | 0 | 0 |
| Lake North of Stateline WPA | 2 | 2 |
| Murphy Wetland (Upper Goose) | 0 | 0 |
| North Lake | 2 | 3 |
| Parry WPA | 5 | 2 |
| Upper Goose Lake | 0 | 2 |
| West Goose Lake | 2 | 2 |

Summarized by E. Elliott-Smith

2011 International Piping Plover Breeding Census

- Montana -

(Off of the Missouri River)



The 2011 International Piping Plover Breeding Census in Montana

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|----------------|--|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|--|------------------------|-----------|-----------|------------|
| | | | | | | | | | 91 | 96 | 01 | 06 | |
| Beaverhead | Clark Canyon Reservoir | 56 | 6/9/11 | 0 | 0 | 1.6 | VI A | V W | 91 | - | 01 | 06 | f |
| Blaine | Alkali Lake | 3 | 6/13/11 | 0 | 0 | n.r. | IV D | n.r. | 91 | 96 | <u>01</u> | 06 | f |
| Liberty/Tooele | Tiber Reservoir | 2 | 6/12/11 | 0 | 0 | 0.0 | VI A | W | 91 | 96 | 01 | 06 | f |
| Phillips | Bennett Lake | 11 | 6/14/11 | 0 | 0 | 0.4 | V A | N | 91 | 96 | <u>01</u> | 06 | f, p |
| Phillips | Bowdoin NWR ³ | 10 | 6/21/11 | 0 | 0 | 2.5 | IV D E I | W | 91 | <u>96</u> | 01 | 06 | f |
| Phillips | Dibbler Reservoir ³ | 6 | 7/5/11 | 0 | 0 | 0.4 | VI A F | W | 91 | 96 | 01 | 06 | f |
| Phillips | Erphit Lake | 9 | 6/16/11 | 0 | 0 | 0.4 | V A | W | - | - | - | 06 | p |
| Phillips | Hewitt Lake NWR ³ | 7 | 6/21/11 | 0 | 0 | 0.0 | IV I | W | 91 | <u>96</u> ⁴ | 01 | 06 | f |
| Phillips | Nelson Reservoir | 8 | 6/9/11 | 0 | 0 | 1.6 | VI A | W N I | <u>91</u> | <u>96</u> ⁴ | <u>01</u> | 06 | f |
| Phillips | Pea Lake | 4 | 6/17/11 | 0 | 0 | 0.0 | n.r. | W | 91 | 96 | <u>01</u> | 06 | f, s(p), p |
| Phillips | Spencer Reservoir ³ | 12 | 6/21/11 | 0 | 0 | 0.0 | VI A I | A W | 91 | 96 | 01 | 06 | f, p |
| Phillips | Veseth Reservoir ³ | 14 | 7/14/11 | 0 | 0 | 0.0 | n.r. | W | - | - | - | 06 | f, p |
| Phillips | Whitcomb Lake ³ | 13 | 7/14/11 | 0 | 0 | 0.8 | IV A | A W | 91 | 96 | <u>01</u> | 06 | f |
| Phillips | Whitewater Lake ³ | 5 | 6/3/11 | 0 | 0 | 0.8 | VI A F | W | 91 | 96 | 01 | 06 | f, s(p), p |
| Pondera | Alkali Lake Wetland Mitigation Site | 1 | 7/11/11 | 1 | 2 | 0.0 | IV G H I | n.r. | 91 ⁵ | <u>96</u> | 01 | - | f |
| Roosevelt | Johnson Lake WPA | 55 | 6/10/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | 01 | 06 | n.r. |
| Sheridan | Berger Pond WPA ³ | 50 | 6/3/11 | 0 | 0 | 0.0 | IV A E | W | <u>91</u> | 96 | 01 | 06 | f, p |
| Sheridan | Big Slough WPA | 41 | 6/4/11 | 0 | 0 | 0.0 | IV A | W | 91 | <u>96</u> | <u>01</u> | 06 | f, p |
| Sheridan | Border Lake | 42 | 6/13/11 | 0 | 1 | 0.1 | IV A | none | - | - | - | - | p |
| Sheridan | Brush Lake ³ | 45 | 6/3/11 | 0 | 0 | 0.0 | IV A | U W | 91 | 96 | 01 | 06 | s(p), p |
| Sheridan | Chandler and Valpone WPA | 19 | 6/7/11 | 0 | 0 | 0.0 | IV A | n.r. | 91 | 96 | 01 | 06 | f |
| Sheridan | Clear Lake ³ | 43 | 6/3/11 | 0 | 0 | 0.3 | IV A | n.r. | 91 | <u>96</u> | 01 | 06 | p |
| Sheridan | Deep Lake ³ | 53 | 6/2/11 | 0 | 0 | 0.0 | IV A E | V W | <u>91</u> | 96 | <u>01</u> | <u>06</u> | f |
| Sheridan | Dog Leg WPA | 29 | 6/8/11 | 0 | 0 | 0.0 | IV A | W | <u>91</u> | 96 | 01 | <u>06</u> | f, p |
| Sheridan | Erickson WPA ³ | 46 | 6/3/11 | 0 | 0 | 0.0 | IV A D | W | <u>91</u> | <u>96</u> | <u>01</u> | 06 | f |
| Sheridan | Ferguson WPA | 27 | 6/13/11 | 0 | 0 | 0.0 | IV A | n.r. | 91 | 96 | 01 | <u>06</u> | f, p |
| Sheridan | Flat Lake | 32 | 6/9/11 | 14 | 36 | 4.8 | IV A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Sheridan | Gaffney Lake ³ | 52 | 6/2/11 | 0 | 1 | <0.1 | IV A D E | n.r. | <u>91</u> | 96 | <u>01</u> | 06 | f |
| Sheridan | Galloway's Lake | 23 | 6/6/11 | 2 | 4 | 0.5 | IV A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Sheridan | Gjesdal East WPA | 31 | 6/9/11 | 0 | 0 | 0.0 | IV A | n.r. | - | <u>96</u> | 01 | <u>06</u> | f |
| Sheridan | Goose Lake ² | 40 | 6/4/11 | 0 | 2 | 1.6 | IV A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, s(p), p |
| Sheridan | Justice Slough ³ | 49 | 6/3/11 | 0 | 0 | 0.2 | IV A D E | W | 91 | 96 | 01 | <u>06</u> | p |

The 2011 International Piping Plover Breeding Census in Montana (Continued)

| COUNTY | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|------------------------------------|--|------|---------|------------------------|-------------------------|-------------|---------------------|-------------------------|---|-----------|-----------|-----------|---------|
| | | | | | | | | | | | | | |
| Sheridan | Katy's Lake, Medicine Lake NWR | 51 | 6/10/11 | 0 | 0 | 0.4 | IV A D E | W | <u>91</u> | 96 | 01 | <u>06</u> | f, s(p) |
| Sheridan | Lake North of Espen WPA | 26 | 6/15/11 | 0 | 0 | 0.8 | IV A | W | - ⁶ | <u>96</u> | 01 | <u>06</u> | s(p), p |
| Sheridan | Lake North of Gaffney Lake ³ | | 6/2/11 | 0 | 1 | 1.1 | IV A | n.r. | - | - | - | - | f |
| Sheridan | Lake North of Stateline WPA | 33 | 6/9/11 | 1 | 2 | 0.4 | IV A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | 06 | f, p |
| Sheridan | Lake SE of Parry WPA | 48 | 6/5/11 | 3 | 8 | 0.6 | IV A | n.r. | 91 | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Sheridan | Lake SE of Salt | 21 | 6/6/11 | 0 | 2 | 0.3 | IV A | A | - | 96 | <u>01</u> | <u>06</u> | p |
| Sheridan | Lone Tree Lake | 24 | 6/15/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | 01 | 06 | n.r. |
| Sheridan | Marsh Wetland | 25 | 6/6/11 | 0 | 0 | 0.0 | IV A | A | - | - | - | 06 | p |
| Sheridan | Medicine Lake | 54 | 6/10/11 | 2 | 5 | 3.2 | IV A | A | <u>91</u> | <u>96</u> | 01 | <u>06</u> | f |
| Sheridan | Melby WPA | 44 | 6/8/11 | 0 | 0 | 0.0 | IV A | A | 91 | 96 | 01 | 06 | f, p |
| Sheridan | Murphy Wetland (Upper Goose) | 39 | 6/4/11 | 0 | 0 | 0.2 | IV A | W | <u>91</u> | - | <u>01</u> | <u>06</u> | p |
| Sheridan | North Lake ^{2,3} | 35 | 6/19/11 | 1 | 3 | 1.6 | IV A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Sheridan | Northeast WPA | 28 | 6/7/11 | 0 | 0 | 0.0 | IV A | n.r. | - | 96 | 01 | 06 | n.r. |
| Sheridan | Parry WPA ² | 47 | 6/5/11 | 2 | 5 | 1.3 | IV A | A W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, p |
| Sheridan | Rabenberg Wetland (Upper Goose) | 37 | 6/4/11 | 2 | 4 | 0.2 | IV A | n.r. | - | - | - | 06 | p |
| Sheridan | Salt Lake | 20 | 6/6/11 | 0 | 1 | 0.3 | IV A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Sheridan | Stateline WPA | 34 | 6/9/11 | 0 | 0 | 0.0 | IV A | W | - | 96 | 01 | 06 | f |
| Sheridan | Throntviet Lake | 30 | 6/13/11 | 4 | 11 | 1.6 | IV A | A | - | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Sheridan | Upper Goose Lake ^{2,3} | 36 | 6/19/11 | 1 | 2 | 1.6 | IV A | A N | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | m, p |
| Sheridan | West Goose Lake | 38 | 6/12/11 | 1 | 2 | <0.1 | IV A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Sheridan | Wigeon Slough WPA | 22 | 6/6/11 | 0 | 0 | 0.2 | IV A | W | 91 | 96 | 01 | 06 | f, p |
| Valley | Chambers Coulee Reservoir ³ | 16 | 7/7/11 | 0 | 0 | 0.0 | VI A | W I | - | 96 | 01 | 06 | f, p |
| Valley | Grub Reservoir ³ | 17 | 6/22/11 | 0 | 0 | 0.8 | IV VI I | W | 91 | 96 | 01 | 06 | f |
| Valley | Itchpair Slough (Lake Grable) ³ | 15 | 7/7/11 | 0 | 0 | 0.6 | V A | W | 91 | 96 | 01 | 06 | f |
| Valley | Valley Reservoir ³ | 18 | 6/22/11 | 0 | 0 | 0.2 | IV VI I | W | 91 | 96 | 01 | 06 | f, p |
| <i>Off-Missouri River Subtotal</i> | | | | 34 | 92 ² | 31.4 | | | | | | | |
| <i>Missouri River Subtotal</i> | | | | 1 | 2 ² | 0.1 | | | | | | | |
| Total | | | | 35 | 94² | 31.5 | | | | | | | |

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

² This total is the “high count”; since two surveys were conducted at some sites for the detectability study, this total includes the highest count at each site.

³ Please note that these surveys were done outside the Census window.

⁴ Nelson Reservoir, Bowdoin NWR, and Hewitt Lake NWR were combined as a single site in 1996. A pair of nesting PIPL were observed on Lake Bowdoin, but a single unpaired PIPL was also observed though its specific location was not provided. It may have occurred at either Nelson Reservoir, Bowdoin NWR, and Hewitt Lake NWR.

⁵ In 1991, 2 pairs were observed on this site on July 11, 1991, outside the census window.

⁶ A 1991 map for the census shows that this site was likely to have plovers but access to the site was denied so an official census never occurred.

The 2011 International Piping Plover Breeding Census in North Dakota (off-Missouri River)

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In North Dakota most known (off the Missouri River) breeding sites were censused. Thirteen new sites were added to the 2011 census. Most new sites were within the Long Lake Wetland Management District (4 in Burleigh County, 1 in Emmons County, and 6 in Kidder County). Plovers were documented at these sites for the first time in 2008. Several sites were not surveyed because no suitable nesting habitat was available due to high water conditions. Some sites were totally flooded and therefore not surveyed (Upper Souris National Wildlife Refuge (NWR), Chase Lake and Arrowwood NWRs. Numerous other areas were surveyed even though high water covered much or all suitable nesting habitat.

In the alkali lakes region of North Dakota, 591 Piping Plovers were counted this year which was down from 806 in 2006, but higher than the 2001 count of 469. Fluctuation in water levels, both in the lakes and the Missouri River was the largest factor influencing local population numbers. Snow melt and spring rains caused high river and lake levels in 2011, which in many cases flooded all suitable habitat at traditional nesting sites. In response to the reduction of available nesting shoreline plovers were observed nesting on roads and in flooded agricultural fields more frequently than in prior

years. Because some plovers distribution were observed nesting in non-traditional habitats which were not comprehensively surveyed, it is likely that the 2011 count was an underestimate of the actual number of birds in the region.

Comparison of Census Numbers¹

| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|-------------------|------------------|
| Total Adults | 992 | 1004 | 1112 | 1508 ² | 623 ² |

¹Missouri River data are included in all totals.

²This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

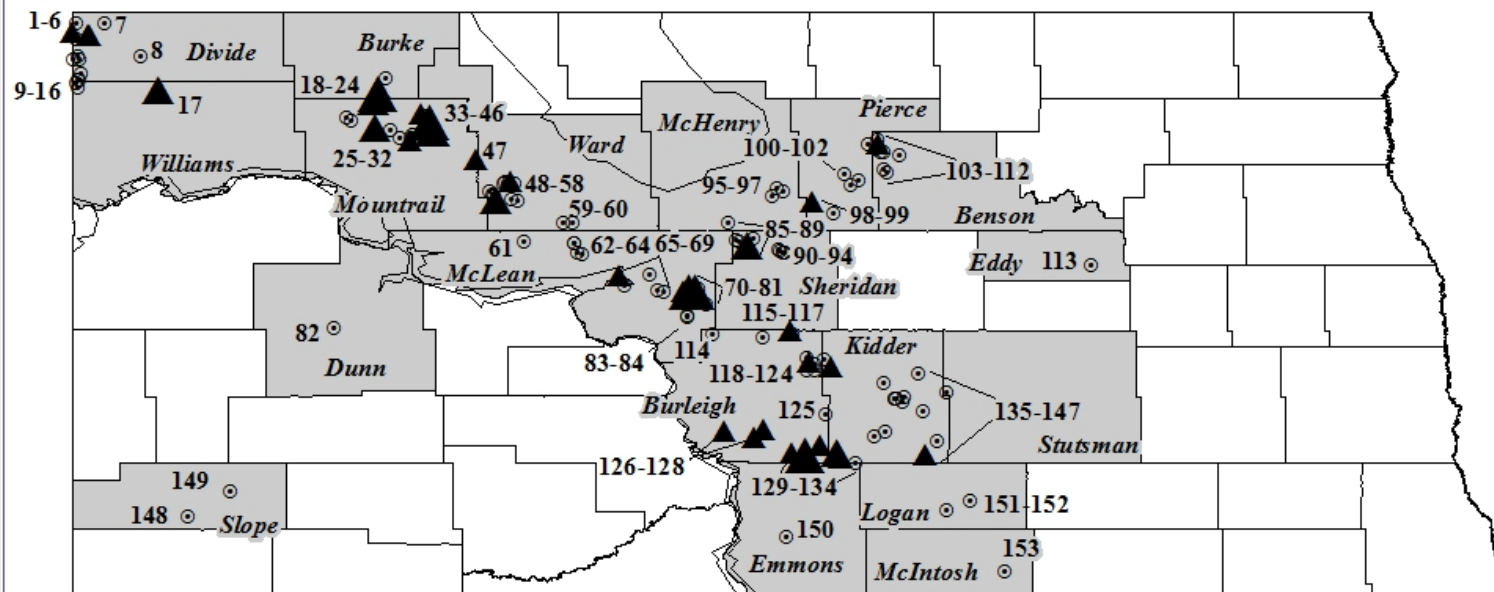
Detectability Study

| Sites Included | First Count | Second Count |
|--------------------------------------|-------------|--------------|
| Shively WPA | 6 | 6 |
| Lostwood NWR - Phalarope Wetland | 6 | 5 |
| Long Lake Pool - Unit I | 2 | 0 |
| Long Lake Pool - Unit II Marsh Dike | 32 | 32 |
| Long Lake NWR - Unit III | 2 | 2 |
| Kreil Wetland | 1 | 1 |
| North Lake | 1 | 2 |
| Mud Lake South (Bitz Lake) | 6 | 5 |
| Bluehill WPA | 0 | 0 |
| Crystal Lake | 0 | 0 |
| Engel Lake | 0 | 0 |
| McGinnis WPA | 0 | 0 |
| Pelican Lake | 66 | 77 |
| Lostwood WMD - Palermo Lake | 6 | 1 |
| Lostwood NWR - Piping Plover Wetland | 12 | 9 |
| Lostwood WMD - Redmond Lake | 7 | 7 |
| Strasburg WPA | 0 | 0 |
| LGFR | 0 | 0 |
| Orlien WPA | 18 | 12 |
| Schaefer Lake | 6 | 4 |
| Appam Lake | 11 | 22 |

2011 International Piping Plover Breeding Census

- North Dakota -

(Off of the Missouri River)



North Dakota PIPL Census

○ 0 Birds

▲ 1-10 Birds

▲ 11-30 Birds

▲ 31-100 Birds



0 35 70 140

Kilometers

The 2011 International Piping Plover Breeding Census in North Dakota

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------------|---|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|--|-----------|-----------|-----------|------------|
| | | | | | | | | | - | 96 | - | 06 | |
| Benson | Cranberry Lake | 112 | 6/6/11 | 0 | 0 | 0.0 | IV A | W | - | 96 | - | 06 | p |
| Benson | Duchscher Lake | 108 | 6/8/11 | 0 | 0 | 0.0 | V A | none | - | <u>96</u> | 01 | 06 | p |
| Benson | Horseshoe Lake | 104 | 6/8/11 | 0 | 0 | 0.0 | IV A | W | - | 96 | 01 | 06 | f, s(p), p |
| Benson | Long Lake WPA | 109 | 6/6/11 | 0 | 0 | 0.0 | IV A | W | - | <u>96</u> | 01 | 06 | f, p |
| Benson | Pfeifer Lake | 106 | 6/8/11 | 0 | 0 | 0.0 | IV A | W | <u>91</u> | <u>96</u> | 01 | 06 | f |
| Benson | Ripplinger Slough | 107 | 6/8/11 | 0 | 0 | 0.0 | IV A | W | - | - | - | - | p |
| Benson | Shively WPA | 105 | 6/8/11 | 2 | 6 | 0.4 | IV A | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, p |
| Benson | Simon WPA | 111 | 6/6/11 | 0 | 0 | 0.0 | IV A | W | - | <u>96</u> | - | 06 | f, p |
| Benson | Volk WPA | 110 | 6/6/11 | 0 | 0 | 0.0 | IV A | W | - | <u>96</u> | 01 | 06 | f |
| Burke | Lostwood NWR - Salt Wetland | 21 | 6/6/11 | 0 | 0 | 1.9 | IV D | n.r. | <u>91</u> ⁴ | 96 | 01 | 06 | f |
| Burke | Lostwood NWR - School Section Lake ³ | 19 | 5/26/11 | 1 | 2 | 4.2 | IV D | n.r. | - | <u>96</u> | 01 | 06 | f |
| Burke | Lostwood NWR - Thompson Lake ³ | 18 | 5/26/11 | 0 | 0 | 4.8 | IV D | n.r. | - | 96 | - | 06 | f |
| Burke | Lostwood NWR - Upper Lostwood Lake | 20 | 6/13/11 | 20 | 49 | 10.6 | IV D | n.r. | <u>91</u> ⁴ | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Burke/Mountrail | Lostwood NWR - Phalarope Wetland ^{2,3} | 23 | 6/1/11 | 3 | 6 | 3.0 | IV D | n.r. | <u>91</u> ⁴ | <u>96</u> | 01 | <u>06</u> | f |
| Burleigh | BLM #1 WPA | 115 | 6/8/11 | 0 | 0 | 0.0 | IV V A I | W | - | <u>96</u> | - | - | f, p |
| Burleigh | Bryan/Mohler WPA (Gravel Road) | 126 | 6/13/11 | 1 | 2 | 0.0 | IV V I | V | - | - | - | - | s(p), p |
| Burleigh | Harriet Lake | 123 | 6/9/11 | 0 | 0 | 0.0 | IV V A I | W | - | - | - | - | p |
| Burleigh | Hertz Lake ³ | 117 | 6/20/11 | 0 | 0 | 0.0 | IV V A I | W | - | 96 | 01 | - | p |
| Burleigh | Hysterical 02 | 114 | 6/10/11 | 0 | 0 | 0.2 | VI A | A W | - | - | 01 | 06 | p |
| Burleigh | Krueger Slough | 127 | 6/17/11 | 1 | 3 | 0.0 | IX I | none | - | - | - | - | p |
| Burleigh | Lake Arena | 124 | 6/9/11 | 0 | 0 | 0.0 | IV V A I | W | <u>91</u> | 96 | 01 | <u>06</u> | f, p |
| Burleigh | Long Lake Pool - Unit I ² | 129 | 6/6/11 | 1 | 2 | 1.6 | IV V E F | V W P | <u>91</u> ⁵ | - | 01 | 06 | f |
| Burleigh | Long Lake Pool - Unit II Marsh Dike ² | 130 | 6/16/11 | 16 | 32 | n.r. | IV V F I | W | <u>91</u> ⁵ | 96 | <u>01</u> | 06 | f |
| Burleigh | McKenzie Slough | 128 | 6/17/11 | 1 | 2 | 2.4 | V A H I | W | - | - | - | 06 | f, p |
| Burleigh | Rachel Hoff | 120 | 6/7/11 | 2 | 5 | 0.8 | IV V H I | W | <u>91</u> | <u>96</u> | <u>01</u> | 06 | f, p |
| Burleigh | Rath WPA ³ | 118 | 6/23/11 | 0 | 0 | 0.0 | IV V A I | W | 91 | 96 | 01 | <u>06</u> | f, p |
| Burleigh | Trusty WPA | 121 | 6/7/11 | 0 | 0 | 0.0 | IV V H I | W | 91 | 96 | 01 | 06 | f, p |

The 2011 International Piping Plover Breeding Census in North Dakota (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-------------------|----------------------------------|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|--|-----------|-----------|-----------|------------|
| | | | | | | | | | | | | | |
| Burleigh/Kidder | Long Lake NWR | 131 | 6/6/11 | 1 | 2 | <0.1 | IV V H I | W | <u>91</u> | 96 | 01 | <u>06</u> | f, p |
| Burleigh/Kidder | Stoney Slough ³ | 125 | 6/23/11 | 0 | 0 | 0.0 | IV V A I | W | - | - | 01 | - | p |
| Burleigh/Sheridan | Salt Lake | 116 | 6/8/11 | 1 | 2 | 0.8 | IV V A I | W | - | 96 | 01 | <u>06</u> | p |
| Divide | Camp Lake | 13 | 6/9/11 | 0 | 0 | 0.0 | IV A | W O | - | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Divide | Daneville Lake ³ | 9 | 6/1/11 | 0 | 0 | 0.0 | IV A E | W O | - | <u>96</u> | 01 | 06 | p |
| Divide | Daneville Lake SE | 11 | 6/5/11 | 0 | 0 | 0.0 | IV A E | I W | - | 96 | <u>01</u> | <u>06</u> | p |
| Divide | Hapet Lake | 8 | 6/5/11 | 0 | 0 | 0.0 | IV A | A W P O | - | - | <u>01</u> | - | s(p), p |
| Divide | Johnson WPA | 10 | 6/5/11 | 0 | 0 | 0.0 | IV A E | W | - | <u>96</u> | <u>01</u> | <u>06</u> | f, p |
| Divide | Kreil Wetland | 5 | 6/8/11 | 0 | 1 | 0.2 | IV A | A | - | 96 | <u>01</u> | <u>06</u> | p |
| Divide | McCone Lake ³ | 1 | 6/2/11 | 0 | 0 | 0.3 | IV A D | A W | - | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Divide | Miller Lake | 6 | 6/10/11 | 22 | 101 | 8.0 | IV A E | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, p |
| Divide | Mine Pond | 12 | | | | | | | | | | | |
| Divide | No Name 01 | 3 | 6/13/11 | 0 | 0 | 0.0 | IV A | n.r. | - | 96 | <u>01</u> | <u>06</u> | p |
| Divide | North Lake** | 4 | 6/16/11 | 1 | 2 | 0.4 | IV A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Divide | Radar WPA | 7 | 6/8/11 | 0 | 0 | 0.0 | IV A | O | - | - | 01 | 06 | f, p |
| Divide/Sheridan | Round/Westby Lake | 2 | 6/16/11 | 2 | 4 | 11.8 | IV A E | W | 91 | 96 | <u>01</u> | <u>06</u> | f, s(p), p |
| Divide/Williams | Africa Lake | 14 | 6/6/11 | 0 | 0 | 0.2 | IV A E I | W P | - | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Dunn | Lake Ilo NWR | 82 | 6/14/11 | 0 | 0 | n.r. | IV A | W | <u>91</u> | 96 | 01 | 06 | f |
| Eddy | Lake Coe | 113 | 6/15/11 | 0 | 0 | 0.0 | IV A E | W | <u>91</u> | 96 | 01 | 06 | f |
| Emmons | Maier Lake ³ | 150 | 6/1/11 | 0 | 0 | 0.0 | IV I | W | - | - | - | - | p |
| Emmons | Sisco-Fallgater WPA ³ | 134 | 6/1/11 | 0 | 0 | 0.0 | V A H I | none | - | 96 | 01 | <u>06</u> | f, p |
| Kidder | Alkaline Lake ³ | 146 | 6/21/11 | 0 | 5 | 2.4 | V I | W | - | - | - | - | p |
| Kidder | Bayer Lake | 122 | 6/15/11 | 4 | 8 | 0.8 | IV V A I | W | - | - | - | - | P |
| Kidder | Big Muddy East ³ | 139 | 6/3/11 | 0 | 0 | 0.0 | V A H I | W | - | 96 | - | - | p |
| Kidder | Big Muddy West ³ | 137 | 6/3/11 | 0 | 0 | 0.0 | V A E I | W | <u>91</u> | 96 | 01 | <u>06</u> | f, p |
| Kidder | Dewald Slough | 143 | 6/8/11 | 0 | 0 | 0.0 | V A I | n.r. | - | - | - | 06 | f, p |
| Kidder | Horsehead Lake | 135 | 6/16/11 | 0 | 0 | 0.0 | IV V A I | W | <u>91</u> | 96 | <u>01</u> | <u>06</u> | p |
| Kidder | Hutchinson NWR | 119 | 6/6/11 | 0 | 0 | 0.0 | V H I | W | - | - | - | - | f, p |
| Kidder | Lake Etta ³ | 144 | 6/1/11 | 0 | 0 | 0.8 | V H I | W | - | - | 01 | <u>06</u> | f, s(p), p |
| Kidder | Lake George ³ | 145 | 6/1/11 | 0 | 0 | 0.0 | V A I | W | - | 96 | 01 | 06 | f, p |
| Kidder | McPhail WMA | 142 | 6/17/11 | 0 | 0 | 0.0 | V A | O | - | - | 01 | 06 | p |
| Kidder | Mud Lake | 132 | 6/7/11 | 5 | 11 | 1.2 | IV V A H | A | - | - | - | - | p |

The 2011 International Piping Plover Breeding Census in North Dakota (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|----------|---|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|--|-----------|-----------|-----------|------------|
| Kidder | Mud Lake South (Bitz Lake) ² | 133 | 6/7/11 | 3 | 6 | 0.8 | IV V H I | W | - | - | 01 | 06 | p |
| Kidder | Sibley Lake | 138 | 6/6/11 | 0 | 0 | 0.0 | IV V H I | W | <u>91</u> | 96 | 01 | 06 | p |
| Kidder | South Lake | 136 | 6/15/11 | 0 | 0 | 0.0 | IV V A I | W | - | - | - | - | p |
| Kidder | Spring Lake | 140 | 6/6/11 | 0 | 0 | 0.0 | V H I | W | <u>91</u> | 96 | 01 | 06 | p |
| Kidder | Stony Lake | 141 | 6/3/11 | 0 | 0 | 0.0 | V A H I | none | - | - | - | - | p |
| Logan | Logan County WMA | 151 | 6/8/11 | 0 | 0 | 0.0 | V A | W | - | <u>96</u> | 01 | 06 | f, s(p), p |
| Logan | Schweigert WPA | 152 | 6/8/11 | 0 | 0 | 0.8 | V A | W | <u>91</u> | 96 | 01 | 06 | f, p |
| McHenry | Bromley Lake | 96 | 6/14/11 | 0 | 0 | 0.8 | V A | n.r. | <u>91</u> | <u>96</u> | 01 | 06 | f, p |
| McHenry | Crooked Lake | 97 | 6/9/11 | 0 | 0 | n.r. | IV A | W | <u>91</u> | <u>96</u> | <u>01</u> | 06 | n.r. |
| McHenry | Lake Lemer | 95 | 6/9/11 | 0 | 0 | n.r. | IV A | W | <u>91</u> | <u>96</u> | 01 | <u>06</u> | f, p |
| McHenry | Spichke WPA | 85 | 6/9/11 | 0 | 0 | 0.0 | IV A | W | - | 96 | 01 | 06 | f, p |
| McIntosh | McIntosh 02 | 153 | 6/8/11 | 0 | 0 | 0.0 | V A | W | - | 96 | 01 | 06 | f, p |
| McLean | Amoeba Lake | 72 | 6/9/11 | 0 | 0 | 0.9 | IV A | none | - | <u>96</u> | <u>01</u> | <u>06</u> | p |
| McLean | Audubon Refuge (Lake Audubon) | 65 | 6/4/11 | 1 | 2 | 1.6 | VI A | W | - | 96 | 01 | <u>06</u> | f |
| McLean | Blue Lake | 78 | 6/9/11 | 0 | 0 | 6.4 | IV A | W | 91 | 96 | 01 | 06 | s(p) |
| McLean | Bluehill WPA | 61 | 6/6/11 | 0 | 0 | 0.0 | IV A E | W | - | <u>96</u> | 01 | 06 | f, p |
| McLean | Cherry Lake | 69 | 6/6/11 | 0 | 0 | 0.4 | IV A | n.r. | - | <u>96</u> | 01 | 06 | f, p |
| McLean | Crystal Lake | 62 | 6/9/11 | 0 | 0 | 0.4 | IV A E I | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| McLean | Day Lake | 76 | 6/8/11 | 0 | 0 | 1.5 | V A | none | - | - | - | 06 | p |
| McLean | Elbow Lake | 75 | 6/8/11 | 5 | 10 | 2.5 | IV A | none | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| McLean | Engel Lake | 64 | 6/16/11 | 0 | 0 | 0.0 | IV A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| McLean | Fischer Lake (Koenig Lake) | 84 | 6/6/11 | 0 | 0 | 0.0 | IV A | n.r. | <u>91</u> | 96 | 01 | 06 | f, p |
| McLean | Fisher Lake (Laib's Marsh) | 83 | 6/6/11 | 0 | 0 | 0.0 | IV A | n.r. | - | 96 | 01 | 06 | f, p |
| McLean | Gaub WPA | 81 | 6/6/11 | 0 | 0 | 0.0 | IV A | n.r. | <u>91</u> | 96 | 01 | 06 | f, p |
| McLean | Lake Nettie | 67 | 6/9/11 | 0 | 0 | 8.0 | IV A | W | <u>91</u> | 96 | 01 | 06 | f, s(p) |
| McLean | Lake Williams | 70 | 6/9/11 | 2 | 6 | 1.3 | IV A | none | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, s(p), p |
| McLean | McGinnis WPA | 63 | 6/10/11 | 0 | 0 | 0.0 | IV A | n.r. | - | - | <u>01</u> | <u>06</u> | f, p |
| McLean | Mud Lake | 73 | 6/8/11 | 0 | 0 | 0.5 | VA | none | - | - | - | 06 | p |
| McLean | Paramecium Lake | 71 | 6/9/11 | 1 | 2 | 0.7 | IV A | none | - | 96 | <u>01</u> | <u>06</u> | p |
| McLean | Pelican Lake ² | 77 | 6/9/11 | 37 | 77 | 11.8 | IV A | none | - | <u>96</u> | <u>01</u> | <u>06</u> | p |
| McLean | Peterson Lake | 74 | 6/8/11 | 16 | 36 | 13.0 | IV A | none | - | <u>96</u> | <u>01</u> | <u>06</u> | f, p |

The 2011 International Piping Plover Breeding Census in North Dakota (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------|--|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|--|-----------|-----------|-----------|------------|
| | | | | | | | | | - | <u>96</u> | <u>01</u> | <u>06</u> | |
| McLean | Spot Lake | 79 | 6/9/11 | 4 | 8 | 3.5 | IV A | none | - | <u>96</u> | <u>01</u> | <u>06</u> | p |
| McLean | Stessman Marsh | 66 | 6/6/11 | 0 | 0 | 0.0 | IX I | W | - | - | <u>01</u> | 06 | f |
| McLean | Tractor Lake | 80 | 6/9/11 | 0 | 0 | 0.0 | IV A | none | - | 96 | <u>01</u> | <u>06</u> | s(p), p |
| McLean | Turtle Lake | 68 | 6/6/11 | 0 | 0 | 0.0 | IV A D | W | 91 | 96 | 01 | 06 | f, p |
| Mountrail | Lostwood NWR - Lower Lostwood Lake | 24 | 6/6/11 | 3 | 16 | 9.9 | IV D | W | <u>91</u> ⁴ | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Mountrail | Lostwood NWR - Piping Plover Wetland ² | 22 | 6/6/11 | 6 | 12 | 1.0 | IV D | W | <u>91</u> ⁴ | <u>96</u> | <u>01</u> | <u>06</u> | f |
| Mountrail | Lostwood WMD - Bieri Wetland | 46 | 6/6/11 | 0 | 1 | 1.4 | IV D | W | <u>91</u> ⁴ | - | 01 | 06 | p |
| Mountrail | Lostwood WMD - BLM 01 | 29 | 6/8/11 | 0 | 0 | 3.3 | IV D | n.r. | <u>91</u> ⁴ | <u>96</u> | <u>01</u> | 06 | f, p |
| Mountrail | Lostwood WMD - Cottonwood Lake East | 25 | 6/15/11 | 0 | 0 | 8.8 | IV D | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, s(p), p |
| Mountrail | Lostwood WMD - Cottonwood Lake West | 26 | 6/15/11 | 0 | 0 | 15.9 | IV D | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, p |
| Mountrail | Lostwood WMD - Goettle Wetland | 36 | 6/9/11 | 0 | 0 | 1.2 | IV D | W | - | - | 01 | <u>06</u> | p |
| Mountrail | Lostwood WMD - Halvorson WPA North | 32 | 6/8/11 | 0 | 0 | 9.2 | IV D | n.r. | 91 | 96 | <u>01</u> | 06 | f, p |
| Mountrail | Lostwood WMD - Halvorson WPA South | 31 | 6/8/11 | 0 | 0 | 3.1 | IV D | n.r. | 91 | <u>96</u> | - | 06 | p |
| Mountrail | Lostwood WMD - ND 02 | 28 | 6/8/11 | 0 | 0 | 9.6 | IV D | n.r. | 91 | - | 01 | 06 | f, s(p), p |
| Mountrail | Lostwood WMD - Palermo Lake ² | 43 | 6/5/11 | 1 | 6 | 6.2 | IV D | W | 91 | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Mountrail | Lostwood WMD - Palermo Lake SW | 30 | 6/8/11 | 0 | 1 | 7.9 | IV D | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, p |
| Mountrail | Lostwood WMD - Piping Plover WPA | 42 | 6/5/11 | 3 | 6 | 3.2 | IV D | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, p |
| Mountrail | Lostwood WMD - Redmond Lake | 37 | 6/9/11 | 2 | 7 | 14.0 | IV D | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Mountrail | Lostwood WMD - Redmond Lake East | 38 | 6/9/11 | 18 | 48 | 2.6 | IV D | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), p |
| Mountrail | Lostwood WMD - Redmond Lake North | 34 | 6/6/11 | 0 | 0 | 5.6 | IV D | W | <u>91</u> | 96 | <u>01</u> | <u>06</u> | p |

The 2011 International Piping Plover Breeding Census in North Dakota (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------|---|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|--|-----------|-----------|-----------|------------|
| Mountrail | Lostwood WMD - Redmond Lake SE | 39 | 6/9/11 | 3 | 12 | 8.4 | IV D | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, p |
| Mountrail | Lostwood WMD - Redmond Lake South | 40 | 6/5/11 | 9 | 21 | 9.5 | IV D | W | 91 | <u>96</u> | 01 | <u>06</u> | f, p |
| Mountrail | Lostwood WMD - Rued Wetland | 35 | 6/6/11 | 0 | 0 | 0.5 | IV D | W | <u>91</u> | 96 | - | 06 | p |
| Mountrail | Lostwood WMD - US1 F&G | 47 | 6/5/11 | 0 | 4 | 9.6 | IV D | W | <u>91</u> ⁴ | <u>96</u> | <u>01</u> | <u>06</u> | f, p |
| Mountrail | Lostwood WMD - USA 01 | 44 | 6/6/11 | 5 | 10 | 4.9 | IV D H | W | <u>91</u> ⁴ | <u>96</u> | <u>01</u> | <u>06</u> | f, p |
| Mountrail | Lostwood WMD - USA 01 SE | 45 | 6/6/11 | 0 | 0 | 0.6 | IV D | W | <u>91</u> ⁴ | 96 | 01 | 06 | f |
| Mountrail | Lostwood WMD - Wetland South of Redmond South | 41 | 6/5/11 | 0 | 0 | 1.1 | IV D | W | - | - | - | - | p |
| Mountrail | Lostwood WMD - White Lake ³ | 27 | 6/19/11 | 4 | 12 | 25.5 | IV D | n.r. | <u>91</u> | <u>96</u> | 01 | <u>06</u> | p |
| Mountrail | Silo Lake (Crowfoot Plat) ⁶ | 33 | 6/16/11 | 0 | 1 | 0.4 | V A H I | V I | - | - | - | - | p |
| Pierce | Balta WPA | 100 | 6/13/11 | 0 | 0 | 0.0 | IV A | W | 91 | - | - | - | f, p |
| Pierce | Little Antelope Lake | 99 | 6/13/11 | 0 | 0 | 0.0 | IV A | W | 91 | <u>96</u> | 01 | 06 | f, p |
| Pierce | Meyer WPA | 103 | 6/14/11 | 0 | 0 | 3.2 | V A | n.r. | - | 96 | 01 | 06 | f, p |
| Pierce | Orrin Lake | 98 | 6/16/11 | 1 | 2 | 0.2 | IV A | W | 91 | <u>96</u> | 01 | 06 | f, p |
| Pierce | Petrified Lake ³ | 102 | 6/3/11 | 0 | 0 | 0.2 | IV A | n.r. | 91 | 96 | 01 | 06 | p |
| Pierce | Sandhill Crane WPA | 101 | 6/13/11 | 0 | 0 | 0.0 | IV A | n.r. | 91 | 96 | 01 | 06 | f, s(p), p |
| Sheridan | Kandt Lake | 88 | 6/6/11 | 0 | 0 | 0.4 | IV A | A | 91 | 96 | 01 | 06 | p |
| Sheridan | Krueger Lake | 89 | 6/8/11 | 8 | 17 | 0.4 | IV A | W | 91 | <u>96</u> | <u>01</u> | <u>06</u> | f, p |
| Sheridan | Lonetree WMA - Avocet Lake | 91 | 6/13/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | 01 | 06 | s(p) |
| Sheridan | Lonetree WMA - Gadwall Lake | 92 | 6/6/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | 01 | 06 | s(p) |
| Sheridan | Lonetree WMA - New Lake | 90 | 6/13/11 | 0 | 0 | 0.0 | IV A | W | <u>91</u> | 96 | 01 | 06 | s(p) |
| Sheridan | Lonetree WMA - Other Lake | 94 | 6/6/11 | 0 | 0 | 0.1 | IV A | W | 91 | 96 | 01 | 06 | s(p) |
| Sheridan | Lonetree WMA - Plover Pond | 93 | 6/6/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | 01 | 06 | s(p) |
| Sheridan | Moesner Lake | 87 | 6/9/11 | 0 | 0 | 0.0 | IV A I | n.r. | <u>91</u> | 96 | 01 | 06 | p |
| Sheridan | Strasburg WPA | 86 | 6/6/11 | 0 | 0 | 0.0 | IV A | n.r. | <u>91</u> | <u>96</u> | 01 | <u>06</u> | f, p |
| Slope | Stewart Lake | 148 | 6/9/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | 01 | 06 | n.r. |

The 2011 International Piping Plover Breeding Census in North Dakota (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|------------------------------------|----------------------------|------|---------|------------------------|-------------------------|--------------|---------------------|-------------------------|--|------------------|------------------|------------------|---------|
| Slope | White Lake NWR | 149 | 6/14/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | 01 | 06 | f |
| Stutsman | Chase Lake NWR | 147 | 6/16/11 | 0 | 0 | 0.0 | IV A E | W | <u>91</u> | 96 | 01 | 06 | f |
| Ward | Danielson WPA | 60 | 6/9/11 | 0 | 0 | 4.0 | IV A | W | - | <u>96</u> | 01 | 06 | f |
| Ward | Foss Lake | 59 | 6/6/11 | 0 | 0 | 0.0 | IV A | W | - | 96 | 01 | 06 | p |
| Ward | Galusha WPA | 54 | 6/6/11 | 0 | 0 | 0.0 | IV A E | n.r. | - | <u>96</u> | <u>01</u> | 06 | f, p |
| Ward | LGFR Pond | 57 | 6/13/11 | 0 | 0 | 0.0 | IV A | n.r. | 91 | - | 01 | 06 | p |
| Ward | Middle Lake | 50 | 6/6/11 | 0 | 0 | 0.0 | IV A | W | - | - | <u>01</u> | <u>06</u> | p |
| Ward | One-legged lake | 51 | 6/11/11 | 0 | 0 | 1.5 | IV E | n.r. | - | - | <u>01</u> | 06 | p |
| Ward | Orlien WPA | 56 | 6/6/11 | 8 | 18 | 6.4 | IV A E | A W | - | <u>96</u> | <u>01</u> | <u>06</u> | f, p |
| Ward | Roberts Lake | 58 | 6/9/11 | 0 | 0 | 0.0 | IV A I | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | 06 | p |
| Ward | Schaefer Lake | 49 | 6/6/11 | 3 | 6 | 0.8 | IV E | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Ward | Simonson Lake | 52 | 6/6/11 | 0 | 0 | 0.0 | IV A E I | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Ward | Ward 01 | 55 | 6/6/11 | 0 | 0 | 0.0 | IV A I | V | <u>91</u> | <u>96</u> | 01 | 06 | p |
| Ward | Weltikol WPA | 53 | 6/6/11 | 0 | 0 | 0.0 | IV V A E I | n.r. | - | <u>96</u> | 01 | 06 | f, p |
| Ward | Wheeler Wetland | 48 | 6/6/11 | 0 | 0 | 0.0 | IV A I | A | - | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Williams | Appam Lake | 17 | 6/15/11 | 10 | 22 | 0.8 | IV A E | W | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, p |
| Williams | Stink Lake 02 ³ | 15 | 6/2/11 | 0 | 0 | 0.0 | IV A | W | - | 96 | 01 | 06 | p |
| Williams | Twin Lake | 16 | 6/13/11 | 0 | 0 | 0.0 | IV A | A W O | - | 96 | <u>01</u> | <u>06</u> | s(p), p |
| <i>Off-Missouri River Subtotal</i> | | | | 237 | 615 ² | 293.1 | | | | | | | |
| <i>Missouri River Subtotal</i> | | | | 18 | 37 ² | 1.6 | | | | | | | |
| Total | | | | 255 | 652² | 294.7 | | | | | | | |

¹ Bold and underlined years indicate that pairs were seen. Bold (only) years indicate that adults were seen.

² This total is the "high count"; since two surveys were conducted at some sites for the detectability study, this total includes the highest count at each site.

³ Please note that these surveys were done outside the Census window.

⁴ The entire Lostwood WMD was surveyed in 1991, but no maps were provided. PIPL may or may not have occurred within the range of this 2011 site.

⁵ Long Lake NWR was surveyed in 1991, but no maps were provided. The survey route and locations of the PIPL pairs is unclear. The pairs may have occurred within the range of this 2011 survey route.

⁶ This plover was seen on a road.

The 2011 International Piping Plover Breeding Census in South Dakota (off-Missouri River)

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High water levels in South Dakota precluded the presence of Piping Plovers on the majority of wetlands censused off of the Missouri River this year. Only two Piping Plovers were observed at one alkali wetland on private land in McPherson County, South Dakota, during the census. This site was one of several new wetlands added to the list of areas to be checked in 2011 that had records of Piping Plovers in recent years. All of the sites checked during the 2006 were censused again in 2011. The majority of both old and new sites had no exposed shoreline. During the 2006 census, drought was present on the plains and plovers were observed at four sites off the Missouri River. Those sites did not harbor nesting plovers this year, as wetter conditions prevailed in 2011.

The relatively low number of lakes and wetlands checked (25 sites) during the 2011 census represents a small portion of wetlands in the state. Other wetlands may provide Piping Plover breeding habitat. We are only aware of a few alkali wetlands, all of which were included in our census effort. If additional alkali sites are identified in the future, they may provide potential habitat and should be surveyed. Historically, breeding Piping Plovers in South Dakota have been documented primarily on the sandbars and shorelines of the Missouri River and its man-made reservoirs.

Comparison of Census Numbers¹

| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|------------------|------------------|
| Total Adults | 295 | 29 | 390 | 375 ² | 151 ² |

¹Missouri River data are included in all totals.

²This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

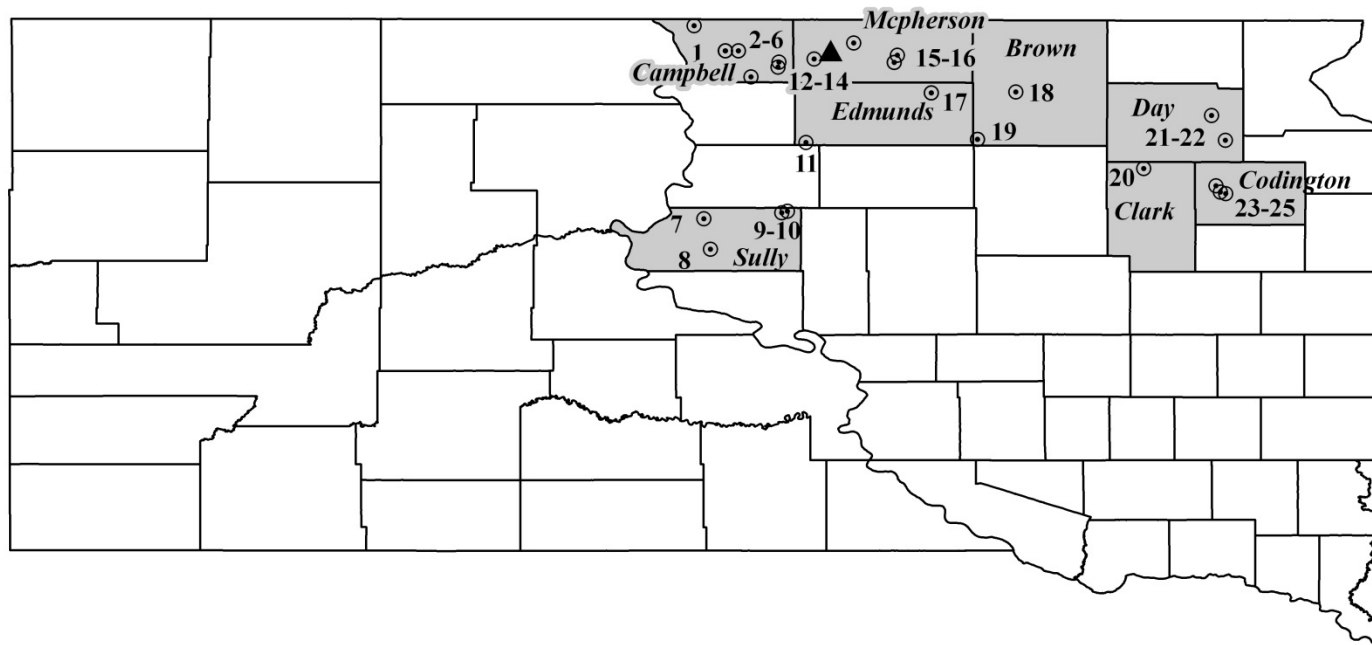
Detectability Study

| Sites Included | First Count | Second Count |
|--|-------------|--------------|
| Mound City | 0 | 0 |
| Ipswich | 0 | 0 |
| Eureka | 0 | 2 |
| Odessa GPA No. 1 (formerly Igle Walk-in) | 0 | 0 |
| Ordway Prairie Pond | 0 | 0 |

2011 International Piping Plover Breeding Census

- South Dakota -

(Off of the Missouri River)



0 37.5 75 150
Kilometers



The 2011 International Piping Plover Breeding Census in South Dakota

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|------------------------------------|---|------|---------|------------------------|-------------------------|--------------|---------------------|-------------------------|--|----|----|----|------------|
| | | | | | | | | | 91 | 96 | 01 | 06 | |
| Brown | Proud Waterfowl Production Area | 18 | 6/15/11 | 0 | 0 | 0.0 | V I | W | 91 | 96 | 01 | 06 | f |
| Brown | Salt Lake Brown Co | 19 | 6/15/11 | 0 | 0 | 0.0 | V I | A W | 91 | 96 | 01 | 06 | p |
| Campbell | Goetz Waterfowl Production Area | 5 | 6/7/11 | 0 | 0 | 0.0 | V I | W | 91 | 96 | 01 | 06 | f |
| Campbell | Hwy. 10 | 3 | 6/7/11 | 0 | 0 | 0.0 | V I | W | - | 96 | 01 | 06 | f |
| Campbell | Mound City | 2 | 6/7/11 | 0 | 0 | 0.0 | V H | n.r. | - | - | - | - | p |
| Campbell | Pocasse NWR | 1 | 6/6/11 | 0 | 0 | 0.0 | VI A | W | 91 | 96 | 01 | 06 | s(p) |
| Campbell | Salt Lake Campbell Co. | 4 | 6/7/11 | 0 | 0 | 0.0 | V I | W | - | 96 | 01 | 06 | s(p) |
| Campbell | West Flat Lake | 6 | 6/7/11 | 0 | 0 | 0.8 | V A | n.r. | 91 | 96 | 01 | 06 | f, p |
| Clark | Crocker | 20 | 6/8/11 | 0 | 0 | 0.0 | V H I | W | - | - | - | - | p |
| Codington | Horseshoe Lake | 25 | 6/8/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | 01 | 06 | f, s(p), p |
| Codington | Lake Nicholson | 23 | 6/8/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | 01 | 06 | s(p), p |
| Codington | Medicine Lake | 24 | 6/8/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | 01 | 06 | p |
| Day | Bitter Lake | 22 | 6/13/11 | 0 | 0 | 0.0 | IV H I | A V W U I | 91 | 96 | 01 | 06 | s(p), p |
| Day | Waubay Lake | 21 | 6/8/11 | 0 | 0 | 0.0 | IV A | W | 91 | 96 | 01 | 06 | f, s(p) |
| Edmunds | Alkali Lake | 11 | 6/6/11 | 0 | 0 | 0.0 | IV H I | n.r. | - | 96 | 01 | 06 | f |
| Edmunds | Ipswich | 17 | 6/13/11 | 0 | 0 | 0.0 | V H | A | - | - | - | - | p |
| McPherson | Eureka ² | 13 | 6/9/11 | 1 | 2 | 0.3 | IV H I | n.r. | - | - | - | - | p |
| McPherson | Kempf Waterfowl Production Area | 16 | 6/16/11 | 0 | 0 | 0.0 | V I | n.r. | 91 | 96 | 01 | 06 | f |
| McPherson | Melhoff Island Waterfowl Production Area | 12 | 6/6/11 | 0 | 0 | 0.0 | IV I | W | 91 | 96 | 01 | 06 | f |
| McPherson | Odessa GPA No. 1 (formerly Igle Walk-in) | 14 | 6/12/11 | 0 | 0 | 0.0 | IV A E | W | - | - | - | - | s(p), p |
| McPherson | Ordway Prairie Pond | 15 | 6/14/11 | 0 | 0 | 0.0 | V I | n.r. | - | - | - | - | p |
| Sully | Agar | 7 | 6/13/11 | 0 | 0 | 0.0 | V H | W | - | - | - | - | p |
| Sully | NE Sully Waterfowl Production Area | 9 | 6/11/11 | 0 | 0 | 0.0 | IV H I | W | - | 96 | 01 | 06 | f |
| Sully | Onida | 8 | 6/13/11 | 0 | 0 | 0.0 | V H | A | - | - | - | - | p |
| Sully | Stone Lake GPA | 10 | 6/11/11 | 0 | 0 | 0.0 | IV H I | W | - | - | - | 06 | s(p) |
| <i>Off-Missouri River Subtotal</i> | | | | 1 | 2 ² | 1.1 | | | | | | | |
| <i>Missouri River Subtotal</i> | | | | 20 | 151 ² | 112.2 | | | | | | | |
| Total | | | | 21 | 153² | 113.3 | | | | | | | |

¹ Bold and underlined years indicate that pairs were seen. Bold (only) years indicate that adults were seen. Italicized years indicate that the sites were checked but not officially censused due to lack of habitat.

² This total is the “high count”; since two surveys were conducted at some sites for the detectability study, this total includes the highest count at each site.

The 2011 International Piping Plover Breeding Census in Iowa

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Historically, Piping Plovers have only been found breeding in Iowa along the fly-ash ponds of MidAmerican's power plants. Due to the expected Missouri River floods, all of MidAmerican's resources were directed towards flood preparedness and asset protection. Therefore, they were unable to complete the census and no official surveys were conducted. At the time of the census window water levels were so high that all Piping Plover habitat was flooded. Water receded slowly and remained high through the summer. Overall, less than a handful of Piping Plover were seen over the entire summer (at MidAmerican sites) and one nest was seen but its fate is unknown.

Comparison of Census Numbers

| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|----------------|------|
| Total Adults | 13 | 14 | 11 | 9 ¹ | n.a. |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

Summarized by E. Elliott-Smith

The 2011 International Piping Plover Breeding Census in Nebraska (off-Missouri River)

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The wet conditions experienced across Nebraska during the 2011 International Piping Plover Census period contrasted sharply with the drought conditions of the 2006 Census. Sandbar and shoreline habitats were reduced statewide by high water in rivers, lakes and reservoirs. As a result, the number of Piping Plovers recorded during the 2011 International Census was much lower than 2006.

Over 600 km (373 miles) of river were surveyed by airboat or kayak and canoe. Forty four sand and gravel mines and one large reservoir, Lake McConaughy, were also surveyed. For the first time, a natural lake, Goose Lake, at Crescent Lake National Wildlife Refuge (Garden County) was included in the census. Piping Plovers were first attracted to this site a few years ago after the creation of an island in Goose Lake, but have subsequently used a sandy roadside near the lake.

In 2011, 348 adult Piping Plovers were counted in Nebraska (not counting the 2 birds seen on the Missouri River). This total is a 52% decrease from the 2006 total when 718 adults were recorded, but is similar to earlier census results in 2001, 1996, and 1991 when 300, 366, and 398 adults were recorded, respectively (off the Missouri River). The greatest decrease occurred at Lake McConaughy where totals went from 358 adults in 2006 to only 38 adults in 2011. In 2006, Lake McConaughy was

holding water at less than 50% of capacity and in 2011 it was at 100% capacity with record or near-record releases into the North Platte River and Sutherland Canal. These releases contributed to high water levels on the Platte River downstream areas, resulting in virtually no sandbar habitat available to birds along the Central Platte River. In 2006, most of the Central Platte River was not surveyed because of a lack of water.

The 104 Piping Plovers recorded on the Niobrara River were more than any other river system. The Lower Platte River was second with 73 adults, followed by the Central Platte River where 58 adults were recorded. The majority (65%, n=48) of plovers on the Lower Platte River were found at off-river sites, sand and gravel mines and lakeshore housing developments. All but one Piping Plover were recorded at off-river sites on the Central Platte River.

The majority of suitable Piping Plover habitat was surveyed in Nebraska. A few areas were not included in the survey, such as small sand and gravel mines that possessed very limited or marginal habitat or where access was not granted by property owners. These sites have generally been surveyed in the past and it has been determined that there is a low likelihood of plover occupancy. We believe that inclusion of these areas would have had minimal impact on the total recorded during the 2011 Census.

The International Piping Plover Census serves as a useful index of Piping Plover numbers in Nebraska. As noted in 2006, survey efforts in Nebraska are challenging due to the varied habitat types surveyed and various methods (e.g. airboat, foot, canoe) used to survey areas. Standardization of some aspects of the survey would be useful, particularly when there are personnel changes.

Fifty-one individuals, from twelve entities, contributed to the 2011 Census in Nebraska. The entities involved include the Missouri River Institute, Nebraska Game and Parks Commission, Nebraska Public Power District, Central Nebraska Public Power and Irrigation District, Central Platte Natural Resources District, Tern and Plover Conservation Partnership, National Park Service, U.S. Fish and Wildlife Service, U.S. Geological Survey, Virginia Tech University, and Wayne State College. We are grateful for their assistance.

Comparison of Census Numbers¹

| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|------------------|------------------|
| Total Adults | 398 | 375 | 308 | 909 ² | 350 ² |

¹Missouri River data are included in all totals.

²This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

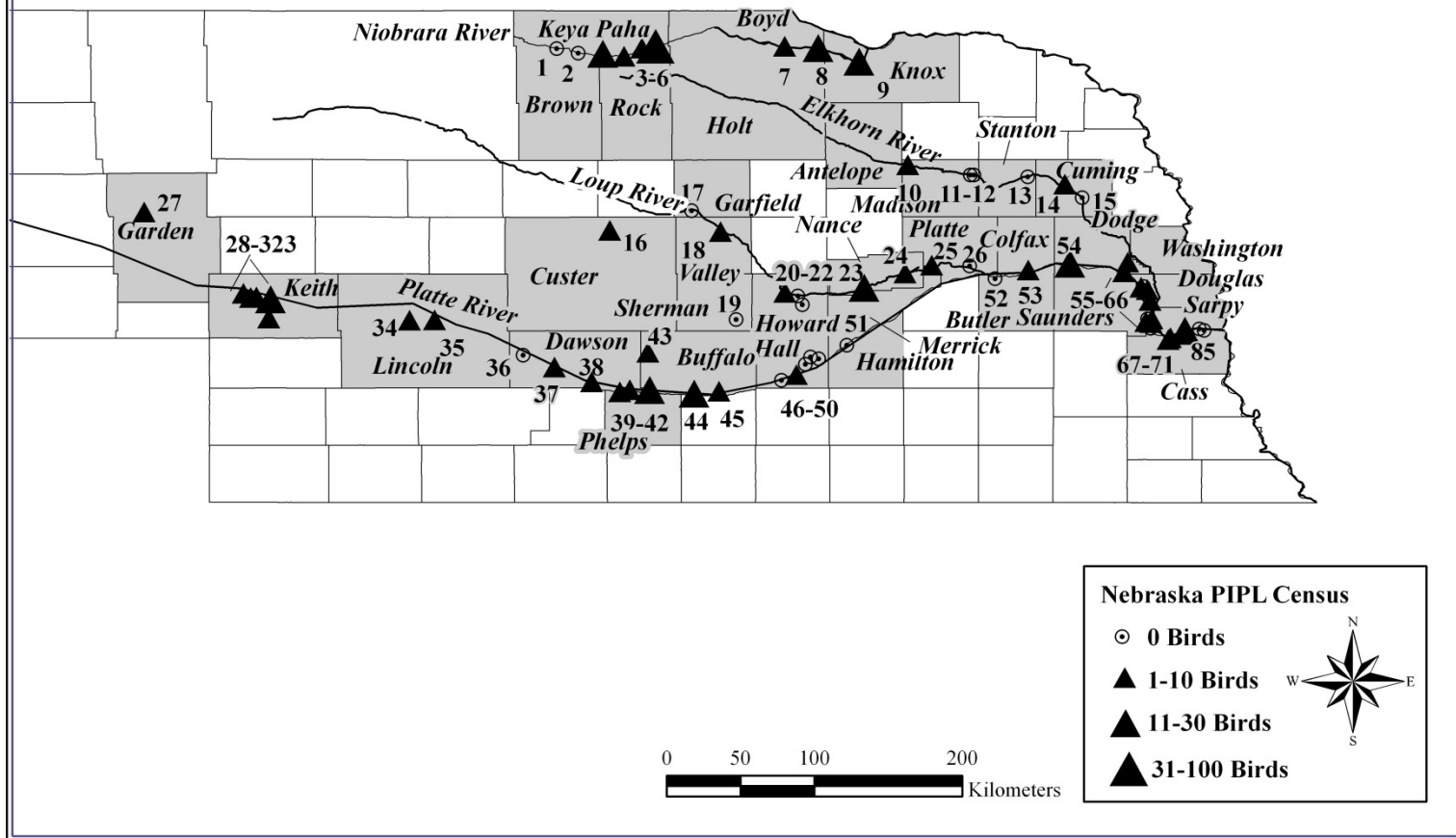
Detectability Study – Nebraska

| Sites Included | First Count | Second Count |
|--|-------------|--------------|
| Niobrara River, Spencer Dam to Redbird Bridge | 8 | 10 |
| Central Platte River, Broadfoot's North of Minden - (Newark) | 3 | 3 |
| Lower Platte River, Arps Pit | 1 | 2 |
| Elkhorn River, Lyman-Richey Fremont Pit (#47) | 5 | 6 |
| Lower Platte River, Lux S&G | 27 | 17 |
| Lower Platte River, Western Fremont Pit | 3 | 8 |
| Lower Platte River, Mallard Pit at Valley | 2 | 1 |
| Niobrara River, Meadville to Highway 183 | 0 | 0 |
| Niobrara River, Norden to Meadville | 0 | 0 |
| Niobrara River, Highway 183 to Highway 7 | 12 | 1 |
| Niobrara River, Carns Bridge to Highway 137 | 0 | 6 |
| Niobrara River, Highway 7 to Carns Bridge | 0 | 4 |
| Loup River, Loup Diversion | 6 | 8 |
| Lower Platte River, Western North Pit (Big Sandy) | 0 | 0 |

¹Replicate survey was conducted first (outside of Census window) so second survey was used to calculate official state total.

2011 International Piping Plover Breeding Census - Nebraska -

(Off of the Missouri River)



The 2011 International Piping Plover Breeding Census in Nebraska

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|---|--|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|--|-----------|-----------|-----------|------------------|
| | | | | | | | | | | | | | |
| Antelope/ Cuming/ Dodge/ Douglas/ Madison/ Sarpy/ Stanton | Elkhorn River, N. Fork Mouth to S. Fork Mouth | 10 | 6/14/11 | 0 | 6 | 4.8 | III E | n.r. | - | 96 | <u>01</u> | - | p |
| Boyd/ Holt | Niobrara River, Spencer Dam to Redbird Bridge ² | 7 | 6/16/11 | 0 | 10 | 18.5 | III E | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Boyd/ Holt/ Keya Paha/ Rock | Niobrara River, Spencer Dam to Hwy 137 | 6 | 6/8/11 | 11 | 61 | 64.4 | III E | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | n.r. |
| Boyd/ Holt/ Knox | Niobrara River, Redbird Bridge to Pischelville Bridge | 8 | 6/15/11 | 0 | 11 | 19.5 | III E | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Brown/ Keya Paha | Niobrara River, Meadville to Highway 183 | 2 | 6/16/11 | 0 | 0 | 9.7 | III E | n.r. | <u>91</u> | 96 | <u>01</u> | 06 | p |
| Brown/ Keya Paha | Niobrara River, Norden to Meadville ³ | 1 | 6/22/11 | 0 | 0 | 17.7 | III E | n.r. | - | 96 | 01 | 06 | p |
| Brown/ Keya Paha/ Rock | Niobrara River, Highway 183 to Highway 7 | 3 | 6/14/11 | 0 | 12 | 14.5 | III E | n.r. | <u>91</u> | 96 | 01 | <u>06</u> | p |
| Buffalo | Central Platte River, Broadfoot's North of Minden - (Newark) | 45 | 6/14/11 | 1 | 3 | 1.8 | VIII F | S | - | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Buffalo | Central Platte River, Broadfoot's West (Kearney South) | 44 | 6/15/11 | 6 | 13 | 3.3 | VIII F | S | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Buffalo | Central Platte River, Elm Creek- Paulsen/Bluehole Sandpit | 41 | 6/17/11 | 7 | 16 | 0.7 | VIII F | none | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Buffalo | Central Platte River, Sandy Channels/ Johnson Pit | 42 | 6/9/11 | 2 | 4 | 0.3 | VIII F | none | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Buffalo/ Dawson | Central Platte River (RM 215-247) | 43 | 6/13/11 | 0 | 1 | 0.4 | III E F | none | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, s(p), m, p |
| Buffalo/ Hall/ Hamilton/ Merrick/ Platte/ Polk | Central Platte River (RM 103-215) | 51 | 6/13/11 | 0 | 0 | 0.4 | III E F | none | <u>91</u> | <u>96</u> | 01 | - | f, s(p), m, p |
| Butler | Lower Platte River, Bellwood Central S&G | 52 | 6/8/11 | 0 | 0 | n.r. | VIII F | n.r. | - | - | - | <u>06</u> | p |

The 2011 International Piping Plover Breeding Census in Nebraska (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--|--|------|---------|------------------------|-------------------------|-------|---------------------|-------------------------|--|-----------|-----------|-----------|------------------|
| Butler/ Colfax/ Dodge/ Douglas/ Platte/ Sarpy/ Saunders | Lower Platte River, Elkhorn River Mouth to Loup River Mouth | 63 | 6/10/11 | 0 | 5 | 111.0 | III E | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p), m, p |
| Cass | Lower Platte River, Cullom (Lyman-Richey) | 71 | 6/13/11 | 0 | 0 | n.r. | VIII F | N S | - | - | - | - | p |
| Cass | Lower Platte River, Cullom (New Pit) | 70 | 6/13/11 | 0 | 0 | n.r. | VIII F | N S | - | 96 | 01 | 06 | p |
| Cass/ Sarpy | Lower Platte River, Salt Creek Mouth to Missouri River Confluence (Plattsmouth) | 69 | 6/13/11 | 0 | 16 | 43.4 | III E | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | f, s(p), m, p |
| Cass/ Sarpy/ Saunders | Lower Platte River River, Salt Creek Mouth to Elkhorn River Mouth | 67 | 6/14/11 | 0 | 4 | 11.0 | III E | n.r. | <u>91</u> | 96 | <u>01</u> | <u>06</u> | f, s(p), m, p |
| Colfax | Lower Platte River, Arps Pit ² | 53 | 6/17/11 | 1 | 2 | n.r. | VIII F | n.r. | <u>91</u> | 96 | 01 | <u>06</u> | p |
| Cuming | Elkhorn River, West Point (Stalp) | 15 | 6/7/11 | 0 | 0 | 4.8 | VIII F | N S I | 91 | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Cumming/ Madison/ Stanton | Elkhorn River, Mouth to N. Fork Elkhorn River Mouth | 14 | 6/13/11 | 2 | 7 | 5.0 | III E | V | - | 96 | 01 | 06 | p |
| Custer | North Loup River, Paulsen's Sand and Gravel | 16 | 6/14/11 | 3 | 6 | n.r. | VIII F | n.r. | - | - | - | - | p |
| Dawson | Central Platte River, Cottonwood Ranch Sandpit | 40 | 6/15/11 | 0 | 1 | 2.7 | VIII F | none | - | - | - | - | p |
| Dawson | Central Platte River, Lexington Sandpit | 38 | 6/17/11 | 3 | 8 | 0.6 | VIII F | none | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Dawson | Upper Platte River, Kirkpatrick's Sand Pit | 36 | 6/9/11 | 0 | 0 | 1.6 | VIII A | n.r. | <u>91</u> | 96 | 01 | 06 | p |
| Dawson | Upper Platte River, Koch's South- Cozad Pit | 37 | 6/9/11 | 3 | 6 | 1.6 | VIII A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Dodge | Elkhorn River, Lyman- Richey Fremont Pit (#47) ² | 55 | 6/14/11 | 2 | 6 | n.r. | VIII A F | n.r. | - | - | 01 | 06 | P |
| Dodge | Lower Platte River, Lux S&G ² | 54 | 6/9/11 | 7 | 27 | n.r. | VIII F | n.r. | 91 | 96 | 01 | <u>06</u> | p |

The 2011 International Piping Plover Breeding Census in Nebraska (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------------|--|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|--|-----------|-----------|-----------|---------|
| Dodge | Lower Platte River, Western Fremont Pit ² | 56 | 6/15/11 | 2 | 8 | n.r. | VIII F | n.r. | 91 | <u>96</u> | 01 | <u>06</u> | p |
| Douglas | Lower Platte River, Ginger Cove Pit (Valley #11) | 57 | 6/7/11 | 1 | 3 | n.r. | VIII F | n.r. | 91 | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Douglas | Lower Platte River, Lyman Richie S&G (Waterloo #40 Pit) | 60 | 6/7/11 | 0 | 0 | n.r. | VIII F | n.r. | <u>91</u> | 96 | - | 06 | p |
| Douglas | Lower Platte River, Mallard Pit at Valley ² | 59 | 6/7/11 | 1 | 2 | n.r. | VIII F | n.r. | - | - | <u>01</u> | <u>06</u> | p |
| Douglas | Lower Platte River, OMG-Venice | 61 | 6/7/11 | 0 | 1 | n.r. | VIII A | n.r. | - | - | - | - | p |
| Douglas | Lower Platte River, Valley (Lyman-Richey) | 58 | 6/7/11 | 0 | 0 | n.r. | VIII F | n.r. | - | - | - | - | p |
| Garden | Crescent Lake, NWR | 27 | 6/4/11 | 1 | 3 | n.r. | V A | A | - | 96 | - | - | f, s(p) |
| Garfield | North Loup River, Jeffres S&G | 17 | 6/16/11 | 0 | 0 | n.r. | VIII F | n.r. | - | - | - | - | p |
| Hall | Central Platte River, Hooker Bros. S&G, Grand Island (South) | 50 | 6/9/11 | 0 | 0 | 0.8 | VIII F | n.r. | - | - | 01 | 06 | n.r. |
| Hall | Central Platte River, Hooker Bros. S&G, Grand Island (West) | 49 | 6/9/11 | 0 | 0 | 1.6 | VIII F | V | - | - | 01 | 06 | p |
| Hall | Central Platte River, Lilley's in Prosser | 46 | 6/6/11 | 0 | 0 | 0.4 | VIII F | N | - | - | 01 | 06 | p |
| Hall | Central Platte River, Trust Wildrose (East) | 47 | 6/6/11 | 4 | 8 | 0.1 | VIII F | n.r. | <u>01</u> | 96 | - | - | p |
| Hall | Deweese - Alda | 48 | 6/6/11 | 0 | 0 | 1.6 | VIII F | U | - | - | - | 06 | p |
| Howard | North Loup River, St. Paul Pit | 21 | 6/15/11 | 0 | 0 | n.r. | VIII F | n.r. | - | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Howard | North Loup River, Tri-County S&G | 20 | 6/17/11 | 2 | 4 | n.r. | VIII F | n.r. | 91 | 96 | 01 | 06 | p |
| Howard/ Nance | Loup River, Loup Diversion to North Loup Mouth | 23 | 6/6/11 | 5 | 11 | 61.1 | III E | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | P |
| Howard/ Sherman | Middle Loup River, Rockville to Loup City | 19 | 6/17/11 | 0 | 0 | 61.1 | III E | n.r. | - | - | - | - | n.r. |

The 2011 International Piping Plover Breeding Census in Nebraska (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|-----------------|---|------|---------|------------------------|-------------------------|------|---------------------|-------------------------|--|-----------|------------------------|-----------|-------|
| Howard/ Sherman | Middle Loup River, St. Paul to Boelus | 22 | 6/13/11 | 0 | 0 | 61.1 | III E | n.r. | - | - | - | - | n.r. |
| Keith | North Platte River, Lake McConaughy, Arthur Bay to Sandy Beach | 30 | 6/11/11 | 0 | 1 | <1 | VI I | U | <u>91</u> | <u>96</u> | <u>01</u> ⁴ | <u>06</u> | p |
| Keith | North Platte River, Lake McConaughy, Dam to Arthur Bay | 31 | 6/11/11 | 9 | 28 | <1 | VI VIII I | U S V | <u>91</u> | <u>96</u> | <u>01</u> ⁴ | <u>06</u> | p |
| Keith | North Platte River, Lake McConaughy, Lemoyne to Spring Park | 28 | 6/7/11 | 0 | 1 | <1 | VI A I | U | <u>91</u> | <u>96</u> | <u>01</u> ⁴ | <u>06</u> | p |
| Keith | North Platte River, Lake McConaughy, Sandy Beach to Lemoyne | 29 | 6/7/11 | 0 | 1 | <1 | VI A D | U | <u>91</u> | <u>96</u> | <u>01</u> ⁴ | <u>06</u> | p |
| Keith | North Platte River, Lake McConaughy, ORM Water Treatment Area (Ready Mix Plant) | 33 | 6/9/11 | 0 | 1 | <1 | VI VIII F | U S I | - | - | - | - | m |
| Keith | North Platte River, Lake Ogallala, Mitigation Ground-N. Dike | 32 | 6/8/11 | 3 | 6 | <1 | VI VIII F | S I | - | - | - | - | p |
| Keya Paha/ Rock | Niobrara River, Carns Bridge to Highway 137 ^{2,3} | 5 | 6/29/11 | 0 | 6 | 12.9 | III E | n.r. | <u>91</u> | <u>96</u> | 01 | <u>06</u> | p |
| Keya Paha/ Rock | Niobrara River, Highway 7 to Carns Bridge ^{2,3} | 4 | 6/27/11 | 1 | 4 | 9.7 | III E | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | 06 | p |
| Knox | Niobrara River, Pischelville Bridge to Highway 12 | 9 | 6/14/11 | 0 | 13 | 22.2 | III A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Lincoln | Upper Platte River, North Platte Diversion Spoil Pile | 35 | 6/13/11 | 3 | 6 | 0.8 | VIII A | n.r. | - | - | - | - | p |
| Lincoln | Upper Platte River, North Platte West Sandpit | 34 | 6/13/11 | 2 | 4 | 0.8 | VIII A | n.r. | - | - | - | - | s(p) |
| Madison | Elkhorn River, Central S&G Norfolk #92 | 11 | 6/8/11 | 0 | 0 | 5.6 | VIII F | U S I | <u>91</u> | 96 | <u>01</u> | <u>06</u> | p |

The 2011 International Piping Plover Breeding Census in Nebraska (Continued)

| REGION | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|------------------------------------|--|------|---------|------------------------|-------------------------|--------------|---------------------|-------------------------|--|-----------|-----------|-----------|-------|
| Madison | Elkhorn River, Pilger S&G, Norfolk Pit | 12 | 6/9/11 | 0 | 0 | 1.6 | VIII F | U | - | <u>96</u> | 01 | 06 | n.r. |
| Nance | Loup River, Loup Diversion ² | 24 | 6/17/11 | 3 | 8 | n.r. | VIII A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Phelps | Central Platte River, Dyer Sandpit | 39 | 6/14/11 | 2 | 4 | 1.7 | VIII F | none | - | - | - | - | p |
| Platte | Loup River, Columbus #71 | 26 | 6/8/11 | 0 | 0 | n.r. | VIII IX F I | n.r. | - | - | 01 | - | p |
| Platte | Loup River, Columbus to Loup Diversion | 25 | 6/16/11 | 3 | 6 | 46.7 | III VIII F | n.r. | <u>91</u> | 96 | - | - | n.r. |
| Sarpy | Lower Platte River, Gretna Pit | 65 | 6/10/11 | 1 | 3 | n.r. | VIII F | n.r. | <u>91</u> | 96 | <u>01</u> | - | p |
| Sarpy | Lower Platte River, Linoma Beach Pit | 66 | 6/10/11 | 0 | 0 | n.r. | VIII F | n.r. | - | - | - | 06 | p |
| Sarpy | Lower Platte River, Western S&G at Louisville Pit | 68 | 6/13/11 | 1 | 2 | n.r. | VIII F | S | 91 | 96 | <u>01</u> | <u>06</u> | p |
| Saunders | Lower Platte River, Sand Creek - W. Ashland | 64 | 6/10/11 | 2 | 6 | n.r. | VIII F | n.r. | - | - | - | - | p |
| Saunders | Lower Platte River, Western North Pit (Big Sandy) | 62 | 6/10/11 | 0 | 0 | n.r. | VIII F | n.r. | - | <u>96</u> | <u>01</u> | <u>06</u> | p |
| Stanton | Elkhorn River, Willers Cove | 13 | 6/8/11 | 0 | 0 | 4.8 | VIII F | U I | 91 | - | - | - | p |
| Valley | North Loup River, Ulrich S&G (East) | 18 | 6/16/11 | 2 | 4 | n.r. | VIII F | n.r. | 91 | <u>96</u> | 01 | <u>06</u> | p |
| <i>Off-Missouri River Subtotal</i> | | | | 96 | 369 ² | 632.3 | | | | | | | |
| <i>Missouri River Subtotal</i> | | | | 1 | 2 ² | 0.0 | | | | | | | |
| Total | | | | 97 | 371² | 632.3 | | | | | | | |

¹Please note that these surveys were conducted outside the Census Window.

²This total is the "high count"; since two surveys were conducted at some sites for the detectability study, this total includes the highest count at each site.

³Please note that these surveys were conducted outside the Census window.

⁴PIPL pairs were seen along Lake McConaughy in 2001, but the specific locations were not given. The 2001 PIPL may have occurred within the range of this 2011 site but we cannot say for certain.

The 2011 International Piping Plover Breeding Census in Colorado

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No official census was conducted in Colorado in 2011. However, all reservoirs in the Lower Arkansas River drainage were visited in late May and early June, including many historic sites that did not have habitat. A total of 20 Piping Plovers were observed. This included one photo-documented observation of a single Piping Plover by birders at a reservoir in the northeastern portion of the state. The remaining birds were seen in the southeastern part of the state nesting on reservoirs where they have historically been observed.

Southeast Colorado experienced the tenth consecutive year of low water levels in 2011. The limited amount of suitable habitat in Colorado is heavily used by the recreating public, and it is essential for us to identify every nesting location so we can adequately protect the birds. All habitat is on reservoir shorelines or islands in reservoirs, as the Arkansas River is either heavily drawn down for irrigation

(resulting in little more than a trickle of flow), or flowing fast through a narrow channel lined with saltcedar trees to the edge of the river.

Sixteen Piping Plovers were counted on John Martin Reservoir on June 2nd 2011, the largest detection of the season. All birds were paired and seven of the pairs were incubating nests. A nest for the eighth pair was found a few days after the survey. Four pairs nested on reclaimed habitat at Dinosaur Island in the northwest part of the reservoir. Three pairs nested on Point 5 on the south side of the reservoir. One pair nested on Point 6.

A kayak survey of Adobe Creek Reservoir in calm conditions on June 4th resulted in the detection of 3 adult Piping Plovers on Tern Island. Tern Island is the site of major habitat reclamation. Two of these birds paired and nested on a smaller adjacent island (Long Island) later in the season.

Other large bodies of water were surveyed in SE Colorado in late May and early June but had very poor habitat or none at all. Sites checked but completely lacking habitat included Verhoeff Lake (Bent County), Lake Henry (Crowley County), Lake Meredith (Crowley County), Thurston Reservoir (Prowers County), Neesopah Reservoir (Kiowa County), Neeskah Reservoir (Kiowa County), King Reservoir (Prowers County), and Lake Cheraw (Otero County). Limited habitat was present at Lake Holbrook (Otero County), Nee Noshe Reservoir (Kiowa County), Carlton Gravel Pit (Prowers County), and Nee Grande (Neegronda) Reservoir (Kiowa County). Single Piping Plovers were observed at Nee Grande Reservoir, Lake Holbrook, and Lake Henry (on the dam road) in early-mid May but there was no evidence of nesting and no additional sightings were made during subsequent visits.

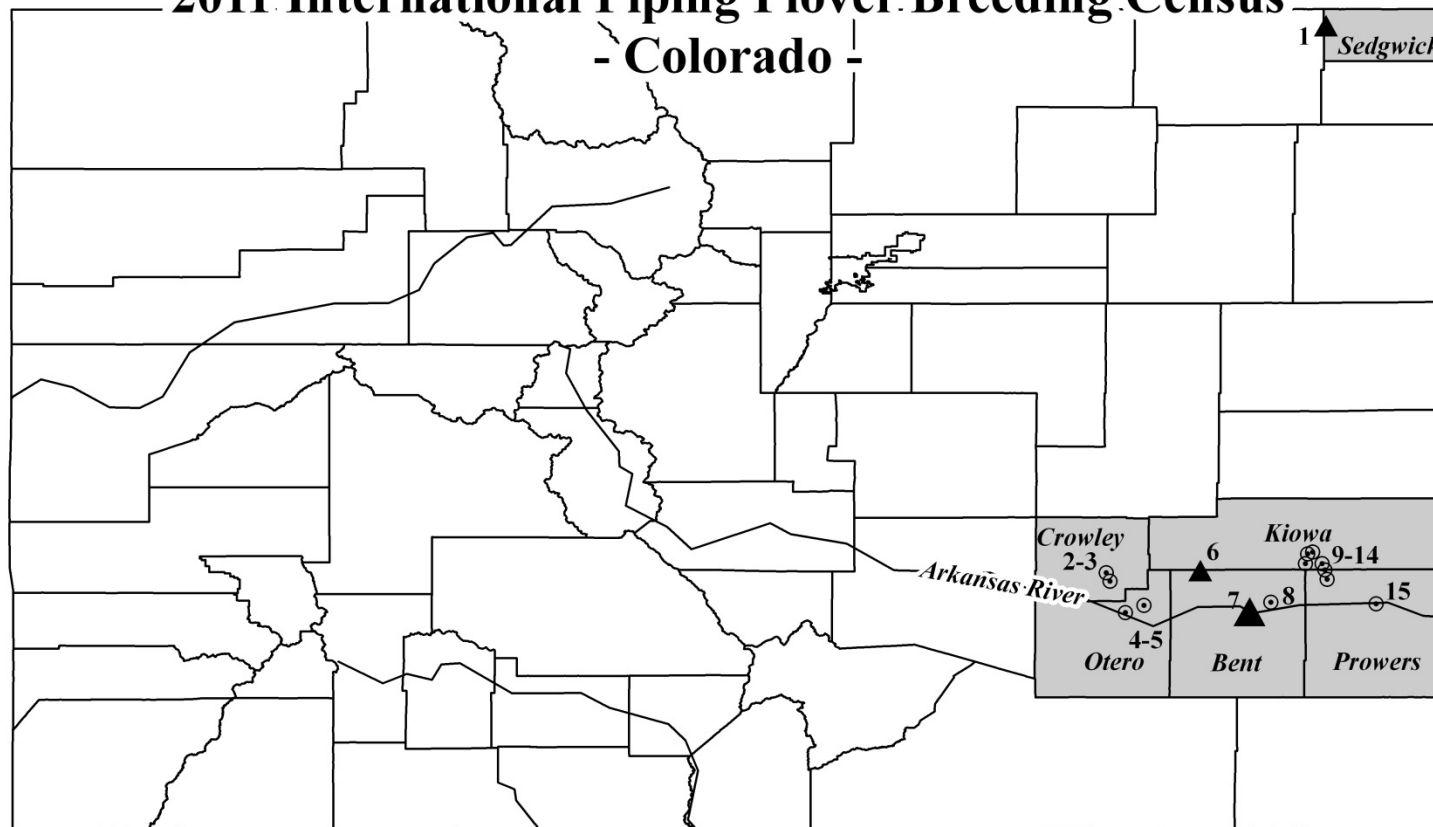
We have had good success in maintaining our population through vegetation removal and mechanical control at nesting sites, despite loss of habitat due to shrinking lakes, vegetation encroachment and increased predator presence. The nine nesting pairs equals our historic high count in Colorado.

Comparison of Census Numbers

| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|-----------------|-----------------|
| Total Adults | 13 | 14 | 13 | 20 ¹ | 20 ¹ |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

2011 International Piping Plover Breeding Census - Colorado -



0 37.5 75 150
Kilometers



The 2011 International Piping Plover Breeding Census in Colorado

| COUNTY | SITE NAME | MAP# | DATE | BREED- ING PAIRS | TOTAL PIPL ADULTS | KM | SITE DESCRIPTION | DISTURBANCE CONCERNS | PRIOR YEARS CENSUSED & YEARS PIPL SEEN ¹ | | | | OWNER |
|--------------|------------------------------------|------|----------|------------------------|-------------------------|-------------|---------------------|-------------------------|---|------------------|------------------|------------------|--------|
| Bent | John Martin Reservoir ² | 7 | 6/2/11 | 8 | 16 | 9.7 | VI A | n.r. | 91 | <u>96</u> | <u>01</u> | <u>06</u> | f, p |
| Bent | Verhoeff Reservoir ² | 8 | 5/21/11* | - | - | | | | - | - | <u>01</u> | - | |
| Bent/Kiowa | Adobe Creek Reservoir | 6 | 6/4/11 | 1 | 3 | 0.8 | VI A | n.r. | <u>91</u> | <u>96</u> | <u>01</u> | <u>06</u> | s(p) |
| Crowley | Lake Henry ²³ | 2 | 5/25/11* | - | - | | | | - | - | 01 | - | |
| Crowley | Lake Meredith ² | 3 | 5/25/11* | - | - | | | | - | - | 01 | - | |
| Kiowa | Nee Grande Reservoir ²⁴ | 9 | 6/3/11 | 0 | 0 | 9.7 | | | <u>91</u> | 96 | 01 | <u>06</u> | |
| Kiowa | Nee Noshe Reservoir ² | 11 | 6/2/11 | 0 | 0 | 4.8 | | | <u>91</u> | 96 | <u>01</u> | - | |
| Kiowa | Neesopah Reservoir | 10 | 6/4/11* | - | - | | | | - | - | 01 | - | |
| Kiowa | Queens (Neeskah) Reservoir | 12 | 6/4/11* | - | - | | | | <u>91</u> | 96 | 01 | - | |
| Otero | Holbrook Reservoir ²⁵ | 4 | 5/25/11 | 0 | 0 | n.r. | VI A | n.r. | - | - | 01 | - | s(p)/p |
| Otero | Lake Cheraw | 5 | 6/7/11* | - | - | | | | 91 | 96 | 01 | - | |
| Prowers | Carlton Gravel Pit ² | 15 | 6/3/11 | 0 | 0 | n.r. | VIII IX A | n.r. | - | - | - | - | p |
| Prowers | King Reservoir | 13 | 6/4/11* | - | - | | | | - | - | 01 | - | |
| Prowers | Thurston Reservoir | 14 | 6/4/11* | - | - | | | | - | - | 01 | - | |
| Sedgwick | Jumbo (Julesberg) Reservoir | 1 | 6/9/11 | 0 | 1 | n.r. | VI A | H | 91 | 96 | - | - | s(p) |
| Total | | | | 9 | 20 | 25.0 | | | | | | | |

* Site was checked on this date but was found to have no suitable habitat.

¹ Bold years indicate that adults were seen. Bold and underlined years indicate that pairs were seen.

² Please note that these surveys were done outside the Census window.

³ One Piping Plover was observed at this site on 5/15/11.

⁴ One Piping Plover was observed at this site on 5/20/11.

⁵ One Piping Plover was seen at this site on 5/8/11.

The 2011 International Piping Plover Breeding Census in Kansas

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There was no suitable habitat in Kansas in 2011 due to high water levels. Therefore no surveys were conducted.

Comparison of Census Numbers

| | 1991 | 1996 | 2001 | 2006 | 2011 |
|--------------|------|------|------|----------------|------|
| Total Adults | n.a. | 1 | 3 | 4 ¹ | n.a. |

¹This is the total from a single survey at each site; if more than one survey was conducted, we count only results from the first survey during the census window.

Summarized by E. Elliott-Smith

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