

AUTHOR'S EDITION.

DEPARTMENT OF THE INTERIOR.
UNITED STATES GEOLOGICAL AND GEOGRAPHICAL SURVEY.
F. V. HAYDEN, U. S. Geologist-in-Charge.

FIELD NOTES
ON
BIRDS

SERVED IN DAKOTA AND MONTANA ALONG THE
FORTY-NINTH PARALLEL

DURING THE
SEASONS OF 1873 AND 1874.

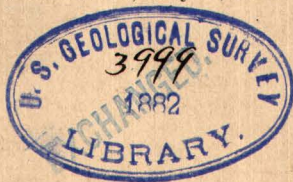
BY

Dr. ELLIOTT COUES, U. S. A.,

LATE SURGEON AND NATURALIST U. S. NORTHERN BOUNDARY COMMISSION.

EXTRACTED FROM THE BULLETIN OF THE SURVEY, Vol. IV, No. 3.

WASHINGTON, July 29, 1878.



ART. XXV.—FIELD-NOTES ON BIRDS OBSERVED IN DAKOTA
AND MONTANA ALONG THE FORTY-NINTH PARALLEL
DURING THE SEASONS OF 1873 AND 1874.*

BY DR. ELLIOTT COUES, U. S. A.,

Late Surgeon and Naturalist U. S. Northern Boundary Commission.

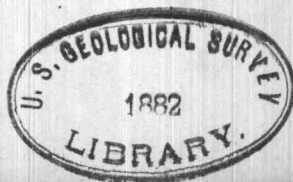
The following notes result from observations made in the field during my connection with the United States Northern Boundary Commission—Archibald Campbell, Esq., Commissioner, Major W. J. Twining, Corps of Engineers, U. S. A., Chief Astronomer. The line surveyed by the Commission in 1873 and 1874 extended from the Red River of the North to the Rocky Mountains, a distance of 850 miles, along the northern border of the Territories of Dakota and Montana, in latitude 49° north. During the season of 1873, I took the field at Pembina, on the Red River, early in June, and in the course of the summer passed along the Line nearly to the Coteau de Missouri, returning from the Souris or Mouse River via Fort Stevenson and the Missouri to Bismarck. This season's operations were entirely on the parallel of 49°, and in the watershed of the Mouse and Red Rivers, my principal collecting-grounds being Pembina, Turtle Mountain, and the Mouse River. This region of the northerly waters is sharply distinguished geographically and topographically, as well as zoologically, from the Missouri and Milk River Basin, which I entered the following year. In 1874, I began at Fort Buford, at the mouth of the Yellowstone, travelled northwesterly to 49°, which was reached at Frenchman's River, one of the numerous tributaries of Milk River, and thence along the parallel to the Rocky Mountains at Waterton or Chief Mountain Lake and other headwaters of the Saskatchewan; returning back on the Line to Three Buttes or Sweet-grass Hills, thence direct to Fort Benton, Montana, and thence by a boat voyage down the Missouri to Bismarck. In neither season was much collecting done except along the parallel itself; and the operations of each season were in a region sharply distinguished, as I have said, by its faunal peculiarities. From these two broad belts of country, corresponding at 49° nearly to the Territories of Dakota and Montana respectively, is to be set apart a third, that of the Rocky Mountains alone.

I made an elaborate comparison of the faunal characters of these three

[* For articles on other portions of the same writer's collection, see this Bulletin, this Vol., No. 1, pp. 259-292, and No. 2, pp. 481-518.—Ed.]

Bull. iv. No. 3—1

545



regions with reference to anticipated publication in connection with the official report of the United States Boundary Commission; but the present is hardly the place to present these considerations in detail. I may, however, state that my results agree closely with those derived from the geological investigations made by Mr. George M. Dawson, my colleague of the British contingent of the Survey, whose valuable Report should be consulted in this connection, and that they are in striking accord with what would be the geographer's or the topographer's consideration.

1. *Red River region*, or watershed of the Red and Mouse Rivers. At 49° this extends westward along the northern border of Dakota, nearly to Montana,—to the point where the Coteau crosses the Line. The bird-fauna of this region is decidedly Eastern in character,—much more so than that of the portion of the Missouri Basin which lies south of it and no further west. It is well distinguished, both by this Eastern *facies* and by the absence of the species which mark the Missouri region. The region consists of more or less (nearly in direct ratio as we pass westward) fertile prairie, treeless except along the streams, cut by the two principal river-valleys, the Red and the Mouse, crossed by the low range of the Pembina Mountains, and marked by the isolated butte known as Turtle Mountain. It is bounded to the west and south by the Coteau,—a comparatively very slight ridge, which nevertheless absolutely separates the two great watersheds. The Red River flows nearly due north; the Mouse River makes a great horseshoe bend, at first directed toward the Missouri, which it almost reaches before it is “bluffed off”, literally, and sent northward.* The bird fauna of Pembina and the whole immediate Red River Valley is thoroughly Eastern. The only Western trace I observed was *Spizella pallida* and some *Icteridæ*, especially *Scolecophagus cyanocephalus*; though *Sturnella neglecta* and *Xanthocephalus icterocephalus* are both common prairie birds much further east, as *Pediæetes columbianus* also is. Characteristic mammals are *Spermophilus 13-lineatus*, *S. franklini*, *Tamias quadrivittatus*, *Thomomys talpoides*, and the rare *Onychomys leucogaster*. Out on the prairie, beyond the Pembina Mountains, this region is distinguished by the profusion of several very notable birds,—*Anthus spragueii*, *Plectrophanes ornatus*, *Passerculus bairdi*, and *Eremophila leucolæma*, all breeding, none of them observed at Pembina. Here also was found *Coturniculus lecontei*. This treeless area is further marked by the absence of sundry birds common enough in the heavily-timbered Red River Valley, as *Empidonaces*, *Vireones*, *Antrosto-*

* Fort Pembina is situated on the Red River, latitude 49° nearly; longitude 97° 13, 42" west; altitude 790 feet above sea-level. The Pembina Mountains, well wooded, with a maximum elevation of about 1,700 feet, lie 35 miles west of the Red River, forming an escarpment which separates the low immediate valley of the Red River from the next higher prairie steppe, which reaches to the Coteau. Turtle Mountain is an isolated, heavily-wooded butte, 125 miles west of Pembina, with an elevation of about 2,000 feet above sea-level, lying directly on the parallel of 49°. Our camp, at its west base, was in longitude 100° 30' 41.1", distant 149.25 miles from Pembina along the parallel.

mus vociferus, *Turdus pallasi*, *Geothlypis philadelphia*, *Goniaphea ludoviciana*, *Setophaga ruticilla*, and many others. *Spermophilus richardsoni* begins in this region, and *S. franklini* and doubtless *Onychomys* end here. There are Badgers in plenty and a few Antelopes; there were no Buffalo in 1873, though the country was still scored with their trails, and skeletons were plenty from the Mouse River westward. This region is still more strongly marked by the *absence* of the Missouri specialties.

2. *The Missouri region*, or the great watershed of the Missouri and Milk Rivers. As soon as we cross the Coteau, the whole aspect of the country changes, and there is a marked difference in the fauna. We enter a much more sterile and broken region, absolutely treeless excepting along the larger water-courses, full of "bad lands", with much sagebrush,—such country stretching, with scarcely any modification, to the base of the Rockies. In this latitude, the Milk River is the main artery, with many north-south affluents crossing 49°. The characteristic mammals are the Buffalo (first seen in 1874 in the vicinity of Frenchman's River), Antelope, Prairie and Sage Hares (*LL. campestris* and *sylvaticus* var. *nuttalli*), the Prairie "Gophers" (*Spermophilus richardsoni*, in extraordinary abundance), and Prairie "Dogs" (*Cynomys ludovicianus*), some of these being perfectly distinctive of the Missouri as compared with the Red River region. *Putorius longicauda* is the Ermine of this region. Kit Foxes (*Vulpes velox*) are common, but so they are along the Mouse River. The characteristic birds are *Calamospiza bicolor*, *Tyrannus verticalis*, *Plectrophanes maccooni*, *Pica hudsonica*, *Speotyto hypogæa*, *Centrocercus urophasianus* (diagnostic of the region, like the mammal *Cynomys ludovicianus*, or the reptiles *Phrynosoma douglassi* and *Crotalus confluentus*), and *Eudromias montanus*. Few, if any, distinctively Eastern birds extend across or even into this region. *Plectrophanes ornatus* goes to the mountains, but in diminished numbers; one specimen of *Neocorys* was taken near the mountains, but neither *Passerculus bairdi* nor *Coturniculus lecontei* was observed; *Eremophila* continues in full force.

The Sweetgrass Hills, or Three Buttes, are the most considerable outliers of the Rocky Mountains, along the parallel of 49°, quite isolated on the prairie. I noticed no avian specialties here, but Mountain Sheep were comparatively abundant (as they were also along the bluffs of the Missouri River, above the mouth of the Yellowstone), and the Yellow-haired Porcupine, *Erethizon epixanthus*, was numerous.

3. *Rocky Mountain region*.—Rising gradually and, of course, imperceptibly, the Missouri region maintains its features to the very foot of the mountains, the headwaters of the Milk River being prairie streams, sluggish, warm, and muddy, with much alkaline detritus. The divide between this watershed and that of the Saskatchewan is too slight to be recognized as such by an inexperienced eye; on passing it, we strike the clear, cold, turbulent streams from the mountains, abounding in *Salmonidæ*, and soon enter the woods. This region is strongly marked, not only by "Western" species, in the geographer's sense, but

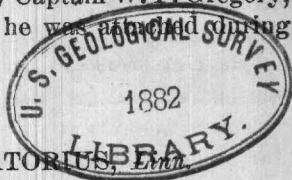
by Alpine forms, strangers to lower altitudes at the same latitude, by exclusively arboreal forms, and by abrupt disappearance of the prairie types mentioned in the preceding paragraph. The marks of the region, as compared with the prairie, are unmistakable. We here find *Lagomys princeps* (down to 4,500 feet), *Tamias lateralis*, *Sciurus hudsonius* var., *Neotoma cinerea*, *Arctomys flaviventris*, among mammals; large game was scarce,—a few deer (*C. virginianus*), a bear or two, and an alleged *Aploceros montanus*. There were no live Buffalo, but plenty of skulls and skeletons far into the mountains. Among notable birds may be mentioned *Cinclus mexicanus*, *Dendroica auduboni*, *Geothlypis macgillivrayi*, *Ampelis garrulus*, doubtless breeding!, *Perisoreus canadensis*, *Empidonax hammondi*, *E. obscurus*, *Selasphorus rufus*, *Picus harrisi*, *Asyndesmus torquatus*, the two Alpine Grouse, *Tetrao franklini* and *T. richardsoni* (together with *Pediæcetes*, which pervades all three regions), *Bucephala islandica* (breeding), and *Histrionicus torquatus* (breeding).

Some of the more conspicuous birds of the three regions, or of any one of them, may be tabulated in the following form. The implication in each case is simply my own observations, not the known general range of the species. All the species in this table, doubtless even *Ampelis garrulus*, were on their breeding-grounds, excepting a very few migrants seen early in June at Pembina.

	Red River region.	Missouri region.	Rocky Mountain region.		Red River region.	Missouri region.	Rocky Mountain region.
<i>Turdus migratorius</i>	x	x	x	<i>Cyanurus cristatus</i>	x		
<i>Turdus fuscescens</i>	x			<i>Perisoreus canadensis</i>			x
<i>Cinclus mexicanus</i>			x	<i>Tyrannus carolinensis</i>	x	x	x
<i>Sialia arctica</i>			x	<i>Tyrannus verticalis</i>		x	x
<i>Eremophila leucolama</i>	x	x		<i>Sayornis sayus</i>		x	x
<i>Neocorys spraguei</i>	x	x		<i>Contopus virens</i>	x		
<i>Mniotilta varia</i>	x			<i>Empidonax traillii</i>	x		
<i>Helminthophaga celata</i>	x	x		<i>Empidonax minimus</i>	x		
<i>Dendroica auduboni</i>			x	<i>Empidonax hammondi</i>			x
<i>Dendroica pennsylvanica</i>	x			<i>Empidonax obscurus</i>			x
<i>Dendroica striata</i>	x			<i>Anthus vociferus</i>	x		
<i>Dendroica maculosa</i>	x			<i>Trochilus colubris</i>	x		
<i>Geothlypis philadelphia</i>	x			<i>Selasphorus rufus</i>			x
<i>Geothlypis macgillivrayi</i>			x	<i>Coccyzus erythrophthalmus</i>	x		
<i>Setophaga ruticilla</i>	x			<i>Picus villosus</i>	x		
<i>Ampelis garrulus</i>			x	<i>Picus harrisi</i>			x
<i>Vireo philadelphicus</i>	x			<i>Melanerpes erythrocephalus</i>	x	x	
<i>Plectrophanes ornatus</i>	x	x		<i>Asyndesmus torquatus</i>			x
<i>Plectrophanes macconni</i>		x		<i>Colaptes auratus</i>	x		
<i>Centronyx bairdi</i>	x	?		<i>Colaptes "hybridus"</i>		x	x
<i>Coturniculus lecontei</i>	x			<i>Speotyto hypogaea</i>			
<i>Junco hyemalis</i>	x			<i>Falco polyagrus</i>		x	?
<i>Zonotrichia querula</i>	x			<i>Buteo swainsoni</i>	x	x	
<i>Melospiza melodia</i>	x			<i>Tetrao franklini</i>			x
<i>Calamospiza bicolor</i>		x		<i>Tetrao richardsoni</i>			x
<i>Pipilo erythrophthalmus</i>	x			<i>Centrocercus urophasianus</i>		x	
<i>Pipilo arcticus</i>		x	x	<i>Pediæcetes columbianus</i>	x		x
<i>Icterus spurius</i>	x			<i>Eudromia montanus</i>		x	?
<i>Icterus baltimorii</i>	x			<i>Recurvirostra americana</i>		x	?
<i>Scolecophagus ferrugineus</i>	x	x	x	<i>Steganopus wilsoni</i>	x	x	?
<i>Scolecophagus cyanocephalus</i>				<i>Fuligula vallisneria</i>			
<i>Quiscalus purpureus</i>	x	x		<i>Bucephala islandica</i>			x
<i>Pica hudsonica</i>		x	x	<i>Histrionicus torquatus</i>			x

The list herewith is restricted to the birds actually observed and generally shot.

There remains the agreeable duty of witnessing the ready and unvarying courtesy extended to the Naturalist of the Commission by Mr. Campbell and Major Twining, who sought to aid by all means in their power the scientific interests he had in charge; and by Captain W. F. Gregory, Corps of Engineers, U. S. A., to whose party he was attached during the season of 1874.



TURDUS (PLANESTICUS) MIGRATORIUS, *Emm.*

THE ROBIN.

Found in abundance at Pembina, where it was breeding in the wooded river-bottom. In this latitude, the eggs are generally laid during the middle and latter parts of June, and I scarcely think that more than one brood is reared annually. Further westward the species seems to occur chiefly during the migrations, as most of the country is unsuited to its wants. In September, large numbers were observed in the fringes of trees along the Mouse River. During the second season, the birds were again found on the Upper Missouri River and in the Rocky Mountains. On the whole, the species is much less numerous, excepting in the immediate valley of the Red River, than it is in settled and wooded portions of the United States, and probably none pass the winter in this latitude.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2953	♂	Pembina, Dak	June 12, 1873	Elliott Cones.	.....	.....	.....	Skin.
2954	do	do	do .....	.....	.....	.....	do.
2985	do	June 14, 1873	do .....	.....	.....	.....	Egg.
3117	do	June 22, 1873	do .....	.....	.....	.....	do.
3126	do	June 23, 1873	do .....	.....	.....	.....	Three eggs.
3130	do	June 24, 1873	do .....	.....	.....	.....	Nest with 5 eggs.
3131	do	do	do .....	.....	.....	.....	Nest: young in alcohol.
3756	Mouse River, Dak	Sept. 16, 1873	do .....	.....	.....	.....	Skin.

TURDUS (HYLOCICHLA) PALLASI, *Cab.*

HERMIT THRUSH.

The Hermit Thrush was not observed during the Survey until toward the close of the second season, when specimens were taken in the Rocky Mountains near Chief Mountain Lake, under circumstances which left no doubt of its breeding in the vicinity. As it is, however, a common species of wide distribution in North America, it is doubtless to be found, like the Robin, wherever timber grows, along the line of the Northern Boundary.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4531	Rocky Mountains, latitude 49°.	Aug. 20, 1874	Elliott Cones.	.....	.....	.....	Skin.
4606do	Aug. 25, 1874	....do .....	.....	.....	.....	....do.

TURDUS (HYLOCICHLA) SWAINSONI, *Cab.*

OLIVE-BACKED THRUSH.

The remarks made under head of the last species, with regard to geographical distribution, are equally applicable to the present one. It was only observed, however, in September, during the general autumnal migration, in the slight fringe of trees along the stream where I was collecting at the time. In a country so nearly treeless as is the tract lying between the Red River and the Rocky Mountains, the slightest pieces of woodland are eagerly sought by all the migrants as stopping-places for food and rest. Though at other seasons tenanted by few species, they become populous in the fall by the presence of great numbers of small insectivorous and granivorous species, among which the *Turdidæ*, *Sylvicolidæ*, and *Fringillidæ* are conspicuous.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3759	Mouse River, Dak ..	Sept. 16, 1873	Elliott Cones.	7.50	12.10	3.80	Skin.

TURDUS (HYLOCICHLA) FUSCESCENS, *Steph.*

VEERY, or WILSON'S THRUSH.

Unlike either of the preceding species, the Veery does not appear to extend westward beyond the Valley of the Red River,—at any rate, it was only observed in the vicinity of Pembina. Here it was found breeding in abundance during the month of June, when its exquisite song enlivened the tangled recesses of the wooded river-bottom, in which the timid birds secreted themselves, and formed one of the most characteristic pieces of bird-melody to be heard in that ill-favored locality. A nest was found on the 9th of June, containing four fresh eggs, uniform, bluish-green in color, and measuring about 0.86 in length by 0.66 in diameter. It was placed upon a small heap of decayed leaves which had been caught on the foot-stalks of a bush a few inches from the ground, and composed of weed-stems, grasses, and fibrous bark-strips, woven together, and mixed with withered leaves. The walls were

thick, giving a bulky, irregular, and rather slovenly appearance, and causing the cavity to appear comparatively small,—it was only about $2\frac{1}{2}$ inches in diameter by less than 2 inches in depth, though the whole nest was as large as a child's head.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen and remarks.
2927	♀	Pembina, Dak	June 9, 1873	Elliott Coues	.....	.....	.....	Skin, with nest and 4 eggs.
2955	do	June 12, 1873	do .....	.....	.....	.....	Skin.
2978	do	June 14, 1873	do	7.75	12.25	.....	do.

MIMUS CAROLINENSIS, (Linn.) Gray.

CATBIRD.

The Catbird was ascertained to be one of the common species of the Red River region, where it was breeding in June, in situations similar to those it selects in the East. I traced it westward to Turtle Mountain, but did not observe it again in the Rocky Mountains, where its presence was to have been expected. It is also a rather common species on the Upper Missouri and the northern affluents of this and of the Milk River. The Missouri appears to be the highway by which the species gains the Rocky Mountains, as observed by Dr. Hayden. The naturalists of the Northwest Boundary Commission collected specimens in Washington Territory, and Sir John Richardson has left a record of its occurrence in the Saskatchewan region as far north as latitude 54° north. As at Pembina, the bird was breeding in June in the shrubbery along the Upper Missouri and its tributaries.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen and remarks.
2958	Pembina, Dak	June 13, 1873	Elliott Coues.	.....	.....	.....	Nest with 4 eggs.
3061	do	June 19, 1873	do .....	.....	.....	.....	Nest with 2 eggs.
3114	do	June 22, 1873	do .....	.....	.....	.....	Three eggs.
3127	do	June 23, 1873	do .....	.....	.....	.....	Two eggs.
3217	do	June 30, 1873	do .....	.....	.....	.....	Nest with 5 eggs.
3352	Turtle Mountain, Dak.	July 23, 1873	do .....	.....	.....	.....	Skin.
4024	Big Muddy River, Mont.	June 22, 1874	do .....	.....	.....	.....	Skin; nest with 3 eggs.
4025	do	do	do .....	.....	.....	.....	Skin.

HARPORHYNCHUS RUFUS, (Linn.) Cab.

THRASHER, or BROWN THRUSH.

Observed at Pembina, which appears to be near the northern limit of the distribution of this species. In other latitudes, however, it extends

further westward, having been found by earlier expeditions in various portions of Dakota, Nebraska, Wyoming, and Colorado. It is one of the species of *Turdidæ* which does not appear to leave the United States in winter, as we have no West Indian or Central American quotations. It breeds in suitable localities anywhere within general range. A nest containing four eggs was found at Pembina late in June.

During the second season, the species was observed on the Missouri above Fort Buford.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen and remarks.
3084	Pembina, Dak.	June 21, 1873	Elliott Coues	.....	.....	.....	Nest with 4 eggs.
.....	Near Fort Buford, Dak.	July —, 1874	.....do.....	.....	.....	.....	(Not preserved.)

CINCLUS MEXICANUS, *Sic.*

AMERICAN DIPPER, or WATER OUZEL.

During the tedious march through the monotonous country of the Milk River, when little was to be looked for that had not already been found, I daily indulged pleasant anticipations of change for the better, in the new and more varied features of the avifauna which I should meet on entering the mountains. I was particularly desirous of finding the Dipper,—a bird that in former years had given me the slip when I was crossing the mountains of New Mexico and Arizona. Nor was I disappointed; the most favorable conditions of the bird's existence are met in the many crystal cascades, fed by the snow-capped peaks that form Chief Mountain Lake,—a beautiful sheet of water environed by precipitous mountains, debouching with a tortuous course into one of the many clear streams that unite to form the Saskatchewan. Nor was this romantic spot the home of the Dipper alone, among the more interesting forms of animal life. The Bohemian Waxwing was breeding here, many degrees of latitude further south than had been known before. So was the Harlequin Duck, like the Waxwing then for the first time ascertained to rear its young within the limits of the United States. Barrow's Golden Eye and other species, to me, at least, extremely interesting, were here first encountered, as more fully noted in other portions of this narrative.

At the time of my visit, it was too late to look for the nest or eggs of the Dipper, as the young were already on wing; that they were bred in the immediate vicinity, at an altitude of only about 4,000 feet, was evident from the immature condition of the specimens examined.

My observations upon the habits of the species were too limited to enable me to add anything to the account, compiled from various sources, which was published in the "Birds of the Northwest".

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4545	Rocky Mountains, latitude 49°.	Aug. 21, 1874	Elliott Cones.	.....	.....	.....	Skin.

SIALIA ARCTICA, *Sw.*

ROCKY MOUNTAIN BLUEBIRD.

The Northern Boundary appears to be slightly beyond the limit of distribution of the Eastern Bluebird, since the species was not observed at Pembina, where the avifauna is almost entirely Eastern in its composition. The Western Bluebird, *S. mexicana*, is still further removed from the region now under consideration. The third and only other species of this country has a more northerly distribution than either of the others, reaching to about latitude 64° or 65° north; it is found from the eastern foothills of the Rocky Mountains to the Pacific, and in some localities is very abundant. A few individuals were observed by the Commission in the Rocky Mountains, at Chief Mountain Lake, but no specimens were preserved. Its habits are much the same as those of its well-known Eastern congener.

REGULUS CALENDULA, *Licht.*

RUBY-CROWNED KINGLET.

This species, of general distribution throughout the wooded portions of North America, was observed on Mouse River, in September, during the autumnal migration, frequenting the dense undergrowth of the river-bottom in company with *Helminthophaga celata* and *Dendræca coronata*. In its spring and autumn movements, it undoubtedly passes the several wooded points of the line, and may yet be found breeding in the mountains in this latitude.

Its nest and eggs long remained among the special desiderata of American ornithologists. So far as known, no authentic specimens reached our hands until two or three years ago, when Mr. J. H. Batty, then attached to Dr. Hayden's Survey, discovered a nest in Colorado, July 21, 1873. It was placed on a spruce bough, about 15 feet from the ground, and contained five young and one egg. The structure, which I have examined at the Smithsonian, is larger than such a tiny architect would be expected to produce, and consists of a loosely blended mass of hair and feathers, mixed with moss and short pieces of straw. Other observers, notably Mr. T. M. Trippe, had previously indicated the undoubted breeding of the species in the higher wooded portions of Colorado, which is confirmed by the discovery of this nest.

It is a very curious fact, in the history of this genus, that a variety of *Regulus calendula*, or a very closely allied species, should be among the few resident birds which constitute the isolated fauna of the island of Guadeloupe, 200 miles south of San Diego, Cal.

PARUS ATRICAPILLUS SEPTENTRIONALIS, *Harris*.

LONG-TAILED CHICKADEE.

An abundant resident of the region of the Upper Missouri, in all suitable situations; but neither this nor any other species of the genus was noticed in the Red River Valley. It is the characteristic form of the whole Rocky Mountain region from the Fur Countries into Mexico, where it is the only representative of the genus, excepting *P. montanus*.

Detailed measurements of a series of specimens of this disputed form, for comparison with those of *P. atricapillus*, will be found in my work already quoted. These were carefully made in the flesh, at Fort Randall, during the winter of 1872-73. The average length was found to be 5.50 inches; the wing, 2.40 to 2.75; and the tail, 2.60 to 2.80.

A specimen procured at Chief Mountain Lake is preserved among the collections of the Commission.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4634	Rocky Mountains, lat. 49°.	Aug. 28, 1874	Elliott Coues.	....	.....	.....	Skin.

TROGLODYTES AËDON, *Vicill*.

HOUSE WREN.

Observed as far west as the confines of the Missouri Coteau. The westernmost specimens, as well as those from the immediate valley of the Red River, appear to be typical *aëdon*. The Eastern form has also occasionally been met with in the Missouri region itself; though there the prevailing type is the var. *parkmanni*.

On the Red River, in June, the species was breeding very abundantly in the neighborhood of the fort and town of Pembina.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2791	Pembina, Dak	June 2, 1873	Elliott Coues	4.90	6.70	.....	Skin.
3104	do	June 23, 1873	do .....	.....	.....	.....	do.
3115	do	do	do .....	.....	.....	.....	Nine eggs (2 sets).
3132	do	June 24, 1873	do .....	.....	.....	.....	Nest with 5 eggs.
3173	do	June 26, 1873	do .....	.....	.....	.....	Five eggs.
3727	Mouse River, Dak ..	Sept. 3, 1873	do .....	.....	.....	.....	Skin.
3744	Long Coteau River, Dak.	Sept. 11, 1873	do	5.00	6.75	.....	do.

CISTOTHORUS STELLARIS, (*Licht.*) *Cab.*

SHORT-BILLED MARSH WREN.

The present is one of a few species of general distribution in the Eastern Province, which appears much more abundant along its line of migration in the Mississippi Valley than on the Atlantic coast. In the East, the species does not appear to have been observed beyond Southern New England. The present specimens, secured at Pembina in June, and later in the season along the Mouse River, are the northernmost on record, probably representing about the limit of its distribution in this quarter. The species has been observed westward to the Loup Fork of the Platte. I found the birds to be rather plentiful along the Red River, in low, oozy ground overgrown with scrub willows, and also in the reedy sloughs of the prairie. They were undoubtedly breeding here, though no nests were secured.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2910	♂	Pembina, Dak	June 4, 1873	Elliott Coues	4.50	5.75	.....	Skin.
3451	Mouse River, Dak ..	Aug. 9, 1873	... do .....	.....	.....	.....	... do.

TELMATODYTES PALUSTRIS, (*Wils.*) *Cab.*

LONG-BILLED MARSH WREN.

This species was not observed till we reached the Rocky Mountains, when a few were seen on marshy ground near Chief Mountain Lake. It is, however, of undoubted occurrence in suitable situations along the Line.

EREMOPHILA ALPESTRIS LEUCOLEMA, *Coues.*

WESTERN HORNED LARK.

One of the most interesting points in the history of the Horned Lark is its peculiar distribution during the breeding-season. Its breeding-range is in no way related to zones of latitude, nor yet is it determined by altitude, but by the topographical features of the country. It rarely, if ever, stops to breed along the Atlantic coast so far south as New England, where the surface of the country is not adapted to its peculiar wants. It is stated to occasionally nest in portions of Canada West; but it is not until we reach the valley of the uppermost Mississippi, in a broad sense, that we find the bird regularly breeding within the United States. I am informed by Mr. W. K. Lente, who accompanied the expedition during the season of 1873, that it nests in Wisconsin, near Racine, laying about the middle of April, even before the snow is off the ground.

From the Red River and corresponding longitude, west to the Rocky Mountains, it breeds in profusion, and during the greater part of the year it is, without exception, the most abundant, universally diffused, and characteristic species of the prairie avifauna. Numerous specimens were taken, not only along the parallel of 49°, but also on the Missouri and Milk Rivers, and the species accompanied our line of march into the mountains. The individuals bred in this dry and sterile region are usually lighter-colored than those of better-watered areas, and are those which I have designated by the term *leucolæma*, in indication of a slight geographical differentiation.

The Horned Lark is one of the few species which, in this latitude, usually rear at least two broods each season,—a fact which in part accounts for the preponderance of individuals over those of the species with which they are associated. I have already adverted to the extremely early nesting-time which has been ascertained, and have only to add that the period of reproduction is protracted through July. I have observed young birds on the wing in June, and found fresh eggs in the nest during the latter half of July. In fact, all through the summer months the troops of Larks everywhere to be seen consist of old birds mixed with the young in all stages of growth. The great flocks, however, are not usually made up until the end of the summer, when all the young are full-grown, and the parents, having concluded the business of rearing their young, have changed their plumage. The young of the first brood soon lose the peculiar speckled plumage with which they are at first covered; the later ones change about the time the feathers of the old birds are being renewed. The agreeable warbling song is scarcely to be heard after June.

While it is not probable that any of these birds endure the full rigors of winter in the exposed country of this latitude, I am unable to say when they retreat. They continue abundant until October, and probably only retreat before the severe storms of the following month, to return again in March, if not in February. It is brave and hardy, one of the few birds that weather the terrible storms that usually prevail in April in the Missouri region.

The nest of the Horned Lark may be stumbled upon anywhere on the open prairie. It is a slight affair,—merely a shallow depression in the ground, lined with a few dried grass-stems. The eggs are four or five in number, measuring nearly an inch in length by about three-fifths in breadth; they are very variable in contour. The color is well adapted to concealment in the gray-brown nest, being nearly the color of the withered materials upon which they rest, thickly and uniformly dotted with light brown. The eggs and young birds, like those of other small species nesting on the ground in this region, often become the prey of the foxes, badgers, and weasels, if not also of the gophers.

The Horned Lark is a sociable bird, not only highly gregarious with its own kind, but one that mixes indiscriminately with several other spe-

cies, as Sprague's Lark, the Savanna Sparrow, Baird's, Maccown's, and the Chestnut-collared Buntings, all of which are abundant birds of the same region.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3747		Mouse River, Dak.	Sept. 12, 1873	Elliott Coues.				Skin.
3855		do	Oct. 1, 1873	do	7.60	13.90	4.50	do.
3856		do	do	do	7.40	13.75	4.50	do.
3857		do	do	do	7.30	13.50	4.30	do.
4097		Porcupine R., Mont	June 29, 1874	do				Skin, hairy (young).
4150		Frenchman's River, Mont.	July 7, 1874	do				Skin.
4151		do	do	do				do.
4157	♂	do	July 8, 1874	do				do.
4158		do	do	do				do.
4159		do	do	do				do.
4245	♀	Two Forks Milk R., Mont.	July 18, 1874	do				Skin (parent of eggs, same No.).
4246		do	do	do				Skin.
4247		do	do	do				do.
4252		N'r Two Forks Milk River, Mont.	July 21, 1874	do				do.
4253		do	do	do				do.
4323		Sweetgrass Hills, Mont.	Aug. 6, 1874	J. H. Batty	6.50	14.75	4.00	do.
4335		West of Sweetgrass Hills, Mont.	Aug. 7, 1874	Elliott Coues.				do.
4345		do	Aug. 8, 1874	do				do.
4423		do	Aug. 12, 1874	do				do.
4424		do	do	do				do.
4464		Headwaters Milk R., Mont.	Aug. 15, 1874	do				do.
4470		do	do	do				do.
4471		do	do	do				do.
4621		Rocky Mts., latitude 49°.	Aug. 26, 1874	J. H. Batty				do.
4666		West of Sweetgrass Hills.	Aug. 30, 1874	do				do.
4667		do	do	do				do.
4668		do	do	do				do.
4669		do	do	do				do.
4674		do	do	do				do.
4682		do	Aug. 31, 1874	Elliott Coues.				do.
4683		do	do	do				do.
4684		do	do	do				do.
4685		do	do	do				do.
4686		do	do	do				do.
4687		do	do	do				do.
4688		do	do	do				do.
4689		do	do	do				do.
4690		do	do	do				do.

ANTHUS LUDOVICIANUS, (Gm.) Licht.

TITLARK, OR PIPIT.

In the general area surveyed by the Commission, the Titlark appears to be only a bird of passage, in spring and autumn. During the first season I accompanied the Survey, none were observed until September, when, with arrival of various other species from the north, they made their appearance in considerable numbers along the Mouse River. The following season, however, I found them in August about Chief Mountain Lake, and do not doubt that those then observed were bred in the immediate vicinity, as at that time the fall migration had not commenced. In the Eastern Province, the Pipit agrees closely with the Horned Lark in its distribution during the breeding-season; in the

West, however, the case is reversed, the *altitudes* at which it nestles being complementary to the latitude it elsewhere seeks for the same purpose. It nests abundantly in the Rocky Mountains, above timber-line, along with the Ptarmigan, as first determined by Mr. J. A. Allen, and subsequently very fully set forth by Mr. T. M. Trippe, at pp. 231, 232, of the "Birds of the Northwest". Its general habits as observed in the West furnish no occasion for special comment.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3704	...	Mouse River, Dak ..	Sept. 2, 1873	Elliott Coues.	6.60	10.40	3.20	Skin.
4638	...	Rocky Mountains, latitude 49°.	Aug. 29, 1874	do .....	.....	.....	.....	do.
4639	...	do	do	do .....	.....	.....	.....	do.

NEOCORYS SPRAGUII, (*Aud.*) *Scl.*

MISSOURI SKYLARK.

This very interesting bird, which in this country represents the celebrated Skylark of Europe, was discovered by Audubon in 1843, during his trip to the Upper Missouri. His type specimen, secured at Fort Union, June 19, is still preserved in the National Museum, having been among the many rare or unique specimens presented by him many years ago to Professor Baird. For about twenty years, no other specimens were forthcoming, and little, if anything more, was heard of the bird until an English officer, Captain Blakiston, met with it in considerable numbers in the Saskatchewan region, and contributed an account of its habits, as observed by him, to the "Ibis", then, as now, one of the very few journals devoted to ornithology. One of his specimens, like Audubon's original, reached the Smithsonian Institution, and remained until recently the only duplicate known to exist in any American collection. During my connection with the Boundary Commission I passed the season of 1873 in the very centre of abundance of the species, and collected over fifty specimens, all of which reached Washington safely and in good condition. Many more could have been secured, but I considered this number sufficient, not only for my own study of the species, but for distribution among other ornithologists, and various public collections in this country and Europe. During the same summer, my friend J. A. Allen, who was similarly engaged in field-work south of me, in the Yellowstone region, in connection with an engineering expedition then in progress, also became familiar with the bird, collected many specimens, and had the good fortune to discover the nest and eggs. These latter, now in the National Museum, are the only specimens, so far as I know, which have come under the notice of naturalists since Audubon first discov-

ered them. I transcribe the account which he courteously furnished me for publication in a different connection:—

“The only nest we found was placed on the ground, and neatly formed of fine dry grass. It was thinly arched over with the same material, and being built in a tuft of rank grass, was most thoroughly concealed. The bird would seem to be a close setter, as in this case the female remained on the nest till I actually stepped over it, she brushing against my feet as she went off. The eggs were five in number, rather long and pointed, measuring about 0.90 by 0.60 inches; of a grayish-white color, thickly and minutely flecked with darker, giving them a decidedly purplish tint.”

It is a natural step from the nest and egg to the young. On the 2d of August, 1873, while encamped at Turtle Mountain, I discovered a brood of four newly fledged young birds, and captured the whole family, the mother bird being also secured. The little ones were still unable to fly, and would doubtless have escaped observation had it not been for the anxiety of the parents, whose disturbed actions and querulous complaints led to their detection. The nest was doubtless within a few yards of my tent, but after careful and repeated search I had to give it up. The young birds, upon gaining their first full plumage, differ materially from the adults. The upper parts have a richer cast, owing to the buffy edgings of the feathers; those of the back and scapulars have also narrow, sharp, white tips, forming a set of semicircular markings. The greater coverts and longest inner wing feathers are likewise broadly white-tipped. The buffy-brown patch formed by the ear-coverts is also more conspicuous than it is in the adults. The under parts, excepting the throat and middle of the belly, are strongly tinged with buff, while the streaks on the breast and sides are large, numerous, and diffuse.

A more exact description of the adults than is usually found in treatises may be here reproduced. The sexes are alike, though the male averages a little larger than the female. In addition to the dimension given in the table which succeeds this article may be given those of other parts. The tail is about $2\frac{1}{2}$ inches; bill $\frac{1}{2}$ an inch along the culmen, which is a little concave toward the base. The bill as a whole is weak, slender, compressed, and acute. Tarsus, measured in front, $\frac{4}{5}$ to $\frac{9}{10}$; hind toe and claw $\frac{4}{5}$ to 1, the variation depending chiefly upon the length of the hind claw, which differs a good deal in different individuals; eye black; feet pale flesh-color (nearly colorless); upper mandible black, the lower pale flesh-color; upper parts dark brown streaked with pale gray, the baldness of the pattern corresponding with the size of the feathers, since the streaking constitutes the edging of each one; under parts dull whitish or very pale clay-color, washed with a heavier or lighter shade of brown across the breast and along the sides, these same parts being sharply streaked with blackish; there is also a series of small black streaks on each side of the throat; quills of the wings fuscous, the inner ones and the coverts edged with grayish-white, like the

feathers of the upper parts; outermost two pairs of tail-feathers for the most part white, and the third feather usually also with a touch of white near the end; the middle pair colored like the back. During the wear of the feathers in summer, the bird becomes darker on the upper parts, the grayish-white edgings of the feathers narrower and sharper, and the streaks on the breast become fainter. After the fall moult, the general colors become purer and brighter, with stronger variegation on the upper parts and a ruddier brown wash on the lower. But these variations, however obvious to the ornithologist's eye, do not prevent ready recognition of the species. The bird bears some little resemblance to the common Titlark, its general form being much the same; but the latter never shows the decidedly variegated state of plumage which renders the present species unmistakable.

If I am not mistaken, the range of the Missouri Skylark extends into Minnesota, and I have seen a record to that effect; but I cannot at this moment recall the reference or lay my hand on the article. I did not see the bird in the immediate vicinity of the Red River, and do not think I should have overlooked it had any individuals been breeding about Pembina, where I was every day in the field for more than a month collecting very assiduously. Passing the low range of the Pembina Mountains, however, I at once entered the prairie region, where it was breeding in great numbers, in company with Baird's and the Chestnut-collared Buntings. The first one I shot, July 14, was a bird of the year, already full-grown and on wing, and as I found scarcely fledged young at least a month later, I judge that, like the *Eremophila*, the bird raises two broods a year. Travelling westward to and beyond the second crossing of the Mouse River, no day passed that I did not see numbers of the birds; and at some of our camps, notably that at the first crossing of the Mouse River, they were so numerous that the air seemed full of them; young ones were caught by hand in the camp, and many might have been shot without stirring from my tent, as they hovered overhead on tremulous wings, uttering continuously their sharp querulous cry. They continued abundant through the greater part of September, in which month the renewal of the plumage is completed, and some still remained on the ground until October. Exactly when they migrate, however, and where they go to, or when they return, are equally unknown to me,—not the least singular point in the bird's history is the success with which it has eluded observation during the winter months. It is not to be supposed that so delicate a bird is capable of enduring the rigors of winter in this inclement region; and yet, so far as I know, no one has found it in winter, at which season it surely *ought* one would suppose, to be generally distributed in more southerly portions of the West.*

On reaching Fort Buford the following season, I naturally expected

* A specimen was lately taken at Galveston, Tex., in March, by Mr. George B. Bennett. See this Bulletin, this Vol., No. 1, p. 10.

to find the Skylarks equally abundant; for this was the spot where the original victim fell to Audubon's—rather, I understand, to Mr. Isaac Sprague's—gun. But in this I was disappointed, for in the whole region up to the mouth of the Milk River, I only noticed perhaps a few hundred, and, to my surprise, not a single bird of the kind did I see anywhere along the line of march through the Milk River country, until I came to the headwaters of that river, two or three days' journey from the Rocky Mountains, where, on the 13th of August, a single specimen was secured. There is nothing in the general range of the species to account for this, since the bird, as Mr. Allen has informed us, is common in the Yellowstone region; it must be attributed to some peculiarity of local distribution, or fortuitous default of observation.

The general habits and manners of these birds are very much like those of their nearest allies, the Titlarks. During the breeding-season, as usual, it is dispersed in pairs over the country; but, like many other prairie birds, it has its predilection for certain spots, especially in the vicinity of the streams, where many pairs gather in straggling companies, and loose troops are seen together as soon as the first broods are on wing. Such semi-communism is a conspicuous trait of many species not strictly gregarious; but in the present case, after the duties of incubation are entirely finished, larger flocks, acting upon the same impulses, are frequently observed. Were it not for their great abundance, there would be some trouble in securing large numbers, for there are few birds more difficult to shoot upon the wing, while their colors, assimilating with the rusty herbage of the prairie, effectually conceal them when on the ground. When startled, they rise with a rapid, wayward flight, which often defies the most expert marksman. Their ordinary hovering flight, again, though not rapid, is of the peculiarly devious, desultory, and jerky character which renders a sure aim almost impossible, just as it is in the case of a bat, for instance; the instantaneous snap shot, which is one of the prettiest exhibitions of a sportsman's acquired instincts, is alone likely to be successful. After thus hovering on wing for a time, during which the lisping, plaintive note is continually uttered, the birds are wont to pitch suddenly down to the ground again, often upon the very spot whence they arose, and are then immediately lost to view, even among the scantiest herbage of the prairie. On the ground, as on the wing, their actions are precisely like those of Titlarks: they never hop with both feet, like most kinds of Sparrows, but run with one foot after the other, tripping along with mincing steps, and continually vibrating the tail, which seems as if jointed with an elastic hinge. They have a fancy for frequenting the wagon-roads which cross the boundless expanse of prairie, perhaps finding the worn ruts smoother and easier to walk upon, perhaps attracted by insects which the disturbance of the surface exposes, or by the droppings of the draught animals which have passed along.

But the most interesting portion of the natural history of these birds

is their charming song, and the wonderful soaring action during its delivery. The music is heard only during a brief period—in the love season, when the birds are mating and nesting; at other times they have only the sibilant chirp already noted. The bird soars on high till it is but a speck in the blue ether, even until it is lost to view, and then the matchless song descends as if from another world, while its indescribable effect is heightened by the monotonous and often dreary surroundings of the scene. The song continues with scarcely an intermission for several minutes, before the little performer, setting his wings, glides quietly back to his humble home in the grass; and when, as often happens, several are singing within hearing of each other, the whole air seems filled with melody, and vibrating in accord with the harmonious strains. Such concerts as these, to which I have listened for nearly a month together, are among the most delicious pieces of bird-melody to be heard anywhere, and their memory is to me one of the choicest of the many pleasurable experiences that have been mine in the years I have devoted to my favorite pursuits.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3360	...	20 miles west of Pembina Mts., Dak.	July 14, 1873	Elliott Coues.	6.50	11.25	3.30	Skin.
3302	..	75 miles west of Pembina Mts., Dak.	July 17, 1873	...do.....	6.30	10.40	3.10	...do.
3314	25 miles east of Turtle Mt., Dak.	July 18, 1873	...do.....	6.40	10.50	3.15	...do.
3315do.....	...do.....	...do.....	6.50	10.90	3.25	...do.
3316do.....	...do.....	...do.....	6.30	10.50	3.20	...do.
3317do.....	...do.....	...do.....	6.60	11.00	3.30	...do.
3318do.....	...do.....	...do.....	6.50	10.80	3.20	...do.
3319do.....	...do.....	...do.....	6.40	10.90	3.15	...do.
3397	♂	Turtle Mt., Dak.	Aug. 2, 1873	...do.....	6.25	10.25	3.05	Skin (parent of Nos. 3398-3401).
3398do.....	...do.....	...do.....	...	...	...	Skin (nestling).
3399do.....	...do.....	...do.....	...	...	...	...do.
3400do.....	...do.....	...do.....	...	...	...	...do.
3401do.....	...do.....	...do.....	...	...	...	...do.
3421	♂	Mouse River, Dak.	Aug. 9, 1873	...do.....	6.60	10.75	...	...do.
3422do.....	...do.....	...do.....	6.75	11.15	...	Skin.
3423do.....	...do.....	...do.....	6.75	11.10	...	...do.
3424do.....	...do.....	...do.....	6.50	10.85	...	...do.
3425do.....	...do.....	...do.....	6.75	10.90	...	...do.
3426do.....	...do.....	...do.....	6.80	11.20	...	...do.
3427do.....	...do.....	...do.....	6.50	10.75	...	...do.
3428do.....	...do.....	...do.....	6.70	11.25	...	...do.
3429do.....	...do.....	...do.....	6.60	11.00	...	...do.
3430do.....	...do.....	...do.....	6.30	10.35	...	...do.
3431do.....	...do.....	...do.....	6.50	10.50	...	...do.
3432do.....	...do.....	...do.....	6.50	10.60	...	...do.
3433do.....	...do.....	...do.....	6.50	10.75	...	...do.
3434do.....	...do.....	...do.....	6.35	10.50	...	...do.
3435do.....	...do.....	...do.....	6.75	10.90	...	...do.
3472do.....	Aug. 10, 1873	...do.....	...	...	...	...do.
3483do.....	Aug. 11, 1873	...do.....	6.50	11.00	...	...do.
3484do.....	...do.....	...do.....	6.70	10.60	...	...do.
3485do.....	...do.....	...do.....	6.50	10.50	...	...do.
3486do.....	...do.....	...do.....	6.50	10.50	...	...do.
3487do.....	...do.....	...do.....	6.70	10.70	...	...do.
3493do.....	Aug. 13, 1873	...do.....	6.50	10.25	...	...do.
3494do.....	...do.....	...do.....	6.80	11.30	...	...do.
3495do.....	...do.....	...do.....	6.65	10.60	...	...do.
3496do.....	...do.....	...do.....	6.75	11.10	...	...do.
3497do.....	...do.....	...do.....	7.00	11.50	...	...do.
3498do.....	...do.....	...do.....	6.50	10.75	...	...do.
3499do.....	...do.....	...do.....	6.60	10.85	...	...do.
3500do.....	...do.....	...do.....	6.50	10.65	...	...do.

List of specimens—Continued.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3501	♂	Mouse River, Dak ..	Aug. 13, 1873	Elliott Coues	6.75	11.25	.....	Skin.
3502	do	do	do	6.65	10.85	.....	do.
3503	do	do	do	6.75	11.00	.....	do.
3504	do	do	do	6.65	10.90	.....	do.
3505	♂	do	do	do	6.50	11.00	.....	do.
3506	do	do	do	6.40	10.40	.....	do.
3542	do	Aug. 19, 1873	do .....	.....	.....	.....	do.
3705	♂	do	Sept. 2, 1873	do	6.30	10.80	.....	do.
3706	do	do	do	6.50	11.20	.....	do.
3850	do	Oct. 1, 1873	do	6.50	10.80	3.30	do.
4440	Headwaters Milk River, Mont.	Aug. 13, 1874	do	6.40	10.50	3.30	do.

MNIOTILTA VARIA, (L.) Vieill.

BLACK-AND-WHITE CREEPER.

A single specimen was taken at Pembina, where it probably breeds, though the fact was not ascertained. Not found further west. In the Missouri region, it has not been traced beyond old Fort Pierre, where Dr. Hayden some years since observed it.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2919	Pembina, Dak	June 9, 1873	Elliott Coues.	.....	.....	.....	Skin.

HELMINTHOPHAGA PEREGRINA, (Wils.) Cab.

TENNESSEE WARBLER.

Upon my arrival at Pembina, the beginning of June, I at once perceived that the vernal migration of the present species past this point was about to be concluded. This was evidenced by the great disproportion of the sexes, for out of thirteen specimens secured and examined only three proved to be males. In this case, as in many others, the males lead the van during the migration, the females bringing up the rear a little later. Such preponderance of females, taken among specimens indiscriminately secured, is a pretty sure indication that the migration is in progress; for when the birds stop, and begin breeding, many more of the active and musical males than of the quiet, shy, and unobtrusive females will be likely to be observed, as was strikingly illustrated on the same spot by the Mourning Warblers. Another indication of the rapid progress of the migration was the steady current, so to speak, of these birds that flowed along the waters of the river itself. The general course of the river is nearly due north and south, and it thus forms a convenient and attractive highway of migration, along

which numerous woodland species pass. I accounted for the great abundance of such birds at this point by the fact that the whole country to the westward being open, and, therefore, unsuited to their wants, a condensation, or a sort of thickened, folded-over edge of the species here occurred. As long as the migration lasted, the heavy timber of the river-bottom was filled with the birds in a steady stream. There was no occasion to go in search of specimens; stationing myself in some eligible spot, I had only to take them as they came along, fluttering from tree to tree, pursuing insects with a sharp, scraping note, yet never long delaying their onward course. With the second week in June they had all, so far as I know, passed northward; certainly I found no indication of any remaining to breed in this locality.

The species was not observed further west in this latitude, though it has been traced high up the Missouri by other persons. It was named *Sylvicola missouriensis* in 1858 by Maximilian, the late Prince of Wied.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2778	♂	Pembina, Dak	June 2, 1873	Elliott Coues	5.00	7.75	.....	Skin.
2779do.....	.....do.....	.....do.....	4.75	7.75	.....	.....do.
2819do.....	June 3, 1873	.....do.....	4.75	7.50	.....	.....do.
2820do.....	.....do.....	.....do.....	4.75	7.75	.....	.....do.
2821do.....	.....do.....	.....do.....	4.60	7.70	.....	.....do.
2822do.....	.....do.....	.....do.....	4.90	7.50	.....	.....do.
2823do.....	.....do.....	.....do.....	4.60	7.40	.....	.....do.
2824do.....	.....do.....	.....do.....	4.80	7.50	.....	.....do.
2825do.....	.....do.....	.....do.....	4.70	7.50	.....	.....do.
2826do.....	.....do.....	.....do.....	4.90	7.70	.....	.....do.
2827do.....	.....do.....	.....do.....	4.75	7.40	.....	.....do.
2828do.....	.....do.....	.....do.....	4.90	8.00	.....	.....do.
2829do.....	.....do.....	.....do.....	4.90	7.90	.....	.....do.

HELMINTHOPHAGA CFLATA, (Say) Bd.

ORANGE-CROWNED WARBLER.

Observed during the fall migration, in September, along the Mouse River, where it was abundant.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3761	Mouse River, Dak ..	Sept. 16, 1873	Elliott Coues	5.20	7.60	2.30	Skin.
3779do.....	Sept. 18, 1873	.....do.....	.....	.....	.....	.....do.
3780do.....	.....do.....	.....do.....	5.00	7.75	2.40	.....do.
3781do.....	.....do.....	.....do.....	4.80	7.50	2.35	.....do.
3782do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
3794do.....	Sept. 19, 1873	.....do.....	.....	.....	.....	.....do.
3801do.....	Sept. 22, 1873	.....do.....	4.80	7.00	2.30	.....do.
3802do.....	.....do.....	.....do.....	5.00	7.60	2.50	.....do.
3803do.....	.....do.....	.....do.....	4.90	7.40	2.45	.....do.
3840do.....	Sept. 30, 1873	.....do.....	4.80	7.60	2.40	.....do.

DENDRÆCA ÆSTIVA, (Gm.) Bd.

YELLOW WARBLER.

This abundant and universally diffused species was observed at various points along the whole line, and in the Missouri region.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2784	♂	Pembina, Dak	June 2, 1873	Elliott Coues.	5.00	7.75	.....	Skin.
2785	do	do	do	5.10	7.70	.....	do.
2786	do	do	do	4.90	7.50	.....	do.
2813	do	June 3, 1873	do .....	.....	.....	.....	Alcoholic.
2844	♂	do	June 4, 1873	do	5.00	7.75	.....	do.
2845	do	do	do .....	.....	.....	.....	do.
2846	do	do	do	4.90	7.60	.....	do.
2895	do	June 6, 1873	do .....	.....	.....	.....	Skin.
3564	Mouse River, Dak ..	Aug. 23, 1873	do .....	.....	.....	.....	do.
4445	♀	Headwaters Milk River, Mont.	Aug. 14, 1874	J. H. Batty	.....	.....	.....	do.

DENDRÆCA CORONATA, (Linn.) Gray.

YELLOW-RUMPED WARBLER.

Not observed until about the middle of September, when, during the fall migration, it made its appearance in abundance along the Mouse River, in company with the Snowbirds and other species just come from the north. It is one of the Warblers which, though distinctively belonging to the Eastern Province, occasionally straggles southward by a direct line from the extreme western points which it reaches in Alaska. Drs. Cooper and Suckley found it in Washington Territory; Dr. Hayden, up the Missouri to above old Fort Pierre; and Mr. C. E. Aiken, Mr. T. M. Trippe, and Mr. H. W. Henshaw have each found it in Colorado Territory. Its breeding-range is not a little remarkable: it has been recorded as breeding in Jamaica, as well as in various parts of British America and Alaska, but is not known to nest in the greater part of the intervening country. Similarly, in winter, some individuals endure the rigors of the Middle, if not of some of the Northern, States, while others press on into Central America. No other Warbler, as far as known, has such a peculiar distribution as this.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3765	Mouse River, Dak ..	Sept. 16, 1873	Elliott Coues.	.....	.....	.....	Skin.
3769	do	do	do .....	.....	.....	.....	do.
3783	do	Sept. 18, 1873	do .....	.....	.....	.....	do.

DENDRÆCA AUDUBONI, (*Towns.*) *Bd.*

AUDUBON'S WARBLER.

Audubon's Warbler was only observed in the Rocky Mountains, beyond the eastern foothills of which it is not known to extend. From the Rocky Mountains to the Pacific, it is as abundant, in suitable localities, as the Yellow-rump is in most parts of the East, and its counterpart in habits. The individuals found about Chief Mountain Lake did not appear to be migrating,—in fact, the full movement had not begun at the period of observation,—and the species doubtless breeds in this locality in the heavy pine timber.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4536	Rocky Mountains, lat. 49°.	Aug. 23, 1874	Elliott Coues.	.....	.....	.....	Skin.
4557	do	do	do .....	.....	.....	.....	do.
4558	do	do	do .....	.....	.....	.....	do.

DENDRÆCA STRIATA, (*Forst.*) *Bd.*

BLACK-POLL WARBLER.

A specimen of this species, procured on Woody Mountain, was observed in the collection made by Mr. G. M. Dawson, geologist of the English Commission.

DENDRÆCA PENNSYLVANICA, (*Linn.*) *Bd.*

CHESTNUT-SIDED WARBLER.

One specimen only of this distinctively Eastern specimen was secured at Pembina,—perhaps its western, if not also nearly its northern, limit. It was not observed beyond the Red River. This is one of the more delicate species of the genus, which regularly breeds little, if any, beyond the Northern States, and entirely withdraws in winter, reaching Central and even South America. I have not found any indication of its occurrence west of the longitude of the Red River in any latitude.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2814	♀	Pembina, Dak	June 3, 1873	Elliott Coues.	5.00	7.70	.....	Skin.

DENDRÆCA MACULOSA, (Gm.) Bd.

BLACK-AND-YELLOW WARBLER.

Specimen from Woody Mountain, seen in Mr. Dawson's collection.

SIURUS NÆVIUS, (Bodd.) Coues.

WATER THRUSH.

During the progress of the Northwest Boundary Survey, with which the work of the present Commission connected, the Water Thrush was observed in Washington Territory; and since that time its very general range throughout North America has been demonstrated, though the bird was long supposed to be, like *S. motacilla*, a species of the Eastern Province. A specimen was secured in August west of the Sweetgrass Hills, on the headwaters of Milk River. This was the only individual procured during the expedition, and seemed to be somewhat out of place, since the species frequents, for the most part, moister and better-wooded regions. It was again observed, however, in the undergrowth surrounding some reedy pools near Chief Mountain.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4430	West of Sweetgrass Hills, Mont.	Aug. 12, 1874	Elliott Coues	.....	.....	.....	Skin.

GEOTHYLPIS TRICHAS, (Linn.) Cab.

MARYLAND YELLOW-THROAT.

Observed at Pembina, on Turtle Mountain, and in the Rocky Mountains, but not in the open country between these points. The species is one of general distribution in the United States in all suitable localities, and appears to breed indifferently in any latitude within these limits. The Northern Boundary may be not far from the line of its dispersion in this direction.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2878	♂	Pembina, Dak	June 5, 1873	Elliott Coues	.....	.....	.....	Skin.
3373	♂	Turtle Mountain, Dak	July 28, 1873	do .....	.....	.....	.....	do.
3374	♂	do	do	do .....	.....	.....	.....	do.
4620	Rocky Mountains, lat. 49°.	Aug. 26, 1874	J. H. Battye ..	.....	.....	.....	do.

GEOTHYLPIS PHILADELPHIA, (*Wils.*) *Bd.*

MOURNING WARBLER.

I was agreeably surprised to find this species, which is rather rare in most Eastern localities, breeding abundantly at Pembina; and I suspect that the Mississippi Valley, rather than the Atlantic seaboard, may be the principal line of migration along which it comes from its winter home in Central America to its breeding resorts along the northern boundary of the United States. At the end of June I found a nest, supposed to be of this species, but the identification was not at all satisfactory. The birds were breeding in June, as I knew by the different actions of the two sexes. The males were in full song, and, contrary to their very secretive habits during most of the year, became rather conspicuous, not only by their singing, but by their custom of leaving the dense shrubbery and undergrowth, in which they usually hide, to mount to the tops of the trees. The females, on the other hand, were extraordinarily quiet and retiring; so much so, that during the whole month I secured not a single specimen, though nearly a dozen males were taken without much difficulty. The birds were only observed in the heavy timber of the river-bottom in this locality, and were not afterward encountered during our progress westward; whence I suppose this is about the limit of their Western dispersion. The species appears to breed in like numbers in various portions of Minnesota, where Mr. T. M. Trippe has found it haunting the tamarack swamps and adjoining damp thickets. He corroborates the habit I have just mentioned of ascending to the tree-tops; and, like myself, was unfortunate in finding no nest, though he frequently saw the old birds feeding their young in the latter part of June and early in July. The song is a loud, clear, and agreeable warble, reiterated with great persistency.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen and remarks.
2775	♂	Pembina, Dak	June 2, 1873	Elliott Coues.	5.25	7.75	.....	Skin.
2776	♂	...do .....	...do .....	...do	5.30	7.70	...do.	...do.
2777	♂	...do .....	...do .....	...do	5.25	7.70	...do.	...do.
2876	♂	...do	June 6, 1873	...do	5.40	8.10	...do.	...do.
2877	♂	...do .....	...do .....	...do	5.30	7.75	...do.	...do.
2920	♂	...do	June 9, 1873	...do	5.30	7.90	...do.	...do.
2935	♂	...do	June 11, 1873	...do	5.25	7.75	...do.	...do.
2968	♂	...do	June 13, 1873	...do	5.50	7.70	...do.	...do.
3219do	June 30, 1873	...do .....	.....	.....	.....	Nest with 1 egg (?).

GEOTHYLPIS PHILADELPHIA MACGILLIVRAYI, (*Aud.*) *Bd.*

MACGILLIVRAY'S WARBLER.

A single specimen was secured in the Rocky Mountains in August. In this latitude at least, the present bird does not appear to approach

the range of its Eastern conspecies within several hundred miles, though further south the two may approach each other more closely. The typical *macgillivrayi*, however, has been recorded from Boxelder Creek, one of the tributaries of the Missouri above the mouth of the Yellowstone.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4581	Rocky Mountains, latitude 49°.	Aug. 23, 1874	Elliott Coues.	5.50	7.90	2.50	Skin.

ICTERIA VIRENS, (Linn.) Bd.

YELLOW-BREASTED CHAT.

No Chats were observed at Pembina, nor anywhere along the parallel of 49°, and it may well be doubted whether the species ever quite reaches this latitude. Its absence from the Red River Valley is in striking contrast to its abundance and general dispersion in the Missouri region, but a comparatively short distance to the southward and much further west. In the Atlantic States it barely reaches into Southern New England. I found it during the second season up the Missouri to beyond the mouth of the Yellowstone.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4022	♂	Big Muddy River, Mont.	June 22, 1874	Elliott Coues	.....	.....	.....	Skin.

MYIODIOCTES PUSILLUS, (Wils.) Bp.

BLACK-CAPPED FLY-CATCHING WARBLER.

A species of general distribution in North America, and doubtless occurring at all suitable points along the Line, though only actually observed near the eastern base of the Rocky Mountains.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4449	Headwaters Milk River, Mont.	Aug. 14, 1874	J. H. Batty...	.....	.....	.....	Skin.

SETOPHAGA RUTICILLA, (*Linn.*) *Sw.*

REDSTART.

Very abundant at Pembina, where it breeds. Early in June, the birds exhibited the incessant activity which marks the mating season, and were conspicuous in the sombre foliage of the dense timber along the river, no less by the brilliancy of their black, white, and red plumage, than by their noisiness and sprightly actions. Their characteristic habits of expanding and flirting the tail, and running sideways along the twigs of trees, and their wonderful agility in the pursuit of flying insects, are all particularly well displayed at this season.

Though I did not myself observe the species further westward along the Line, nor anywhere in the Missouri region, it has been traced by others, especially by Dr. J. G. Cooper, along the Upper Missouri and Milk Rivers, and thence to the Cœur d'Alène Mountains. It is also known to occur in Colorado and Utah.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2783	♂	Pembina, Dak	June 2, 1873	Elliott Coues	4.75	7.60	.....	Skin.
2804do	June 3, 1873	.....do .....	.....	.....	.....	.....do.
2805do .....	.....do .....	.....do .....	.....	.....	.....	.....do.
2806do .....	.....do .....	.....do .....	.....	.....	.....	.....do.

HIRUNDO ERYTHROGAстра HORREORUM, (*Barton,*) *Coues.*

BARN SWALLOW.

I find no specimens of this species entered in my register from Pembina, where, according to my recollection, it was not breeding at the time of my visit, though the family was there well represented by numbers of Cliff and White-bellied Swallows. Nevertheless, Barn Swallows were commonly observed, during July and August, at various points along the Line, nearly to the Rocky Mountains. Eligible breeding-places for this species being few and far between in this country, it is correspondingly uncommon, at least in comparison with its numbers in most settled districts. A small colony of the birds which had located for the summer on a small stream west of the Sweetgrass Hills afforded me an opportunity of observing a curious modification of their nesting-habits, which I believe had not been known until I published a note upon the subject. The nests were built in little holes in the perpendicular side of a "cut-bank",—whether dug by the birds themselves or not I could not satisfy myself, though I am inclined to think that they were. My assistant, Mr. Batty, seemed to feel quite confident in the matter; and the probability is, that if the holes were not wholly made by the birds, they were at least fitted up for the purpose.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4298	Mouse River, Dak ..	Aug. 30, 1873	Elliott Coues.	.....	.....	.....	Skin.
	Crossing of Milk	July 25, 1874	...do .....	.....	.....	.....	...do.
4388	River, Mont.						
	West of Sweetgrass	Aug 10, 1874	...do .....	.....	.....	.....	...do.
	Hills, Mont.						

TACHYCINETA BICOLOR, (*Vieill.*) *Cab.*

WHITE-BELLIED SWALLOW.

Only observed at Pembina, where it was breeding in small numbers about the Fort, together with large colonies of Cliff Swallows.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3056	♂	Pembina, Dak	June 19, 1873	Elliott Coues.	.....	.....	.....	Skin.

TACHYCINETA THALASSINA, (*Siv.*) *Cab.*

VIOLET-GREEN SWALLOW.

Observed on one occasion (June 26, 1874) on the Upper Missouri near Quaking Ash River.

PETROCHELIDON LUNIFRONS, (*Say*) *Scl.*

CLIFF SWALLOW.

This is the most abundant, generally distributed, and characteristic species of the family throughout the region under consideration. The various streams that cut their devious ways through the prairie afford an endless succession of steep banks exactly suited to its wants during the nesting-season, and at various places great clusters of the curious bottle-nosed mud-nests were found, while the flocks of Swallows which often hung about our camps were mainly composed of this species. At some points, the Bank Swallows were breeding with them; the same banks being peppered with their little round holes, generally in the soft soil just below the surface, while the projecting nests of the Cliff Swallows studded the harder or rocky exposures below. At Fort Pembina, the Cliff Swallows were so numerous as to become a nuisance; their incessant twittering was considered a bore, while the litter they brought and their droppings resulted in a sad breach of military decorum. Nevertheless, it was found almost impossible to dislodge them, and one could not but

admire the courage and perseverance which they displayed in reconstructing or repairing their nests, though these were repeatedly destroyed. In examining scores of nests, I was rather surprised to find how small a proportion were finished into the complete retort-shape, even among those which had not been disturbed. Some were little more than cups, like those of the Barn Swallow, partially arched over, and many were simply conical, while in other details they varied greatly according to the position in which they happened to be fixed or their relations to each other. The laying-season in this latitude is at its height during the second and third weeks in June. Probably only one brood is reared each season. Young birds are on the wing by the middle or latter part of July.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2970	Pembina, Dak	June 13, 1873	Elliott Cones.	5.90	12.30	.....	Skin.
2971do.....	.....do.....	.....do.....	5.90	12.30	.....	.....do.
2994do.....	.....do.....	.....do.....	.....	.....	.....	Egg.
3051do.....	June 19, 1873	.....do.....	.....	.....	.....	Skin.
3058do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
3116do.....	June 22, 1873	.....do.....	.....	.....	.....	Six eggs.
3228do.....	July 7, 1873	.....do.....	.....	.....	.....	Skin.
4296	Crossing of Milk River, Mont.	July 25, 1874	.....do.....	.....	.....	.....	.....do.
4297do.....	.....do.....	.....do.....	.....	.....	.....	.....do.

COTYLE RIPARIA, (*Linn.*) *Boie.*

BANK SWALLOW.

In noticing the preceding species, I have already alluded to the present as one of those of general distribution along the Line in summer, breeding in colonies anywhere where the cut-banks of the rivers afford suitable sites for the digging of the holes in which the nests are constructed.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2969	Pembina, Dak	June 13, 1873	Elliott Cones.	5.30	11.10	.....	Skin.

PROGNE SUBIS, (*Linn.*) *Baird*

PURPLE MARTIN.

I was rather surprised to find Martins breeding on Turtle Mountain, having observed none at Pembina. In this locality, where there are, of course, no artificial conveniences for the purpose, they must nest in Woodpeckers' holes and similar cavities of trees, as they do in other parts

of the West where I have observed them. This was the only locality where the species was observed, though it is known to extend into the Saskatchewan region.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3350	---	Turtle Mountain, Dak.	July 23, 1873	Elliott Coues	-----	-----	-----	Skin.

AMPELIS GARRULUS, *Linn.*

BOHEMIAN WAXWING.

The taking of the specimen below tabulated may be regarded as the most interesting single result of the Commission, as far as ornithology is concerned, since it shows that the Waxwing breeds on or very near the boundary of the United States. The individual is a newly fledged bird, in the streaky condition which characterizes the first plumage, and was undoubtedly bred in the immediate vicinity. This inference is confirmed by the fact that at the date of capture, August 19, all the birds of the locality were obviously in their summer home, no migratory movement having begun in any case. The individual was shot on the mountain-side adjoining Chief Mountain Lake, at an altitude of about 4,200 feet, in thick coniferous woods, where it was in company with numbers of *A. cedrorum*. No others were observed, which could hardly have been the case had the species been on its migration.

The Waxwing is one of the birds which longest defied ornithologists to discover its nest and eggs, not only in this country, but even in Europe. In the latter country, its breeding-grounds were first discovered, and the desired specimens secured by Mr. J. Wolley's indefatigable exertions in Lapland in 1856. In America, Messrs. R. Kennicott and R. McFarlane share the credit of the corresponding discovery; the former enthusiastic and accomplished naturalist having taken the nest and egg on the Yukon in 1861, the latter on the Anderson River. The nidification is much the same as that of the common Cedar Bird, and quite similar, though the nest, of course, is larger.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4525	Rocky Mountains, latitude 49°.	Aug. 19, 1874	Elliott Coues.	-----	-----	-----	Skin (newly fledged).

AMPELIS CEDRORUM, (*Vieill.*) Gray.

CEDAR BIRD; CAROLINA WAXWING.

Not seen at Pembina but found at various other points along the Line, and ascertained to be particularly abundant in the Rocky Mountains. At this locality, two of its conspicuous traits were illustrated, namely, the lateness and the irregularity of its breeding. On the same day, August 19, that I took young birds fully fledged and on wing, a nest containing four eggs was found by one of my assistants, Mr. A. B. Chapin. This might be interpreted upon the supposition that two broods are reared in a season, but I do not think that such was the case in the present instance: the bird is too late a breeder for this, at any rate in such a high latitude, not far from its northernmost limit of its distribution.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3541	♂	Mouse River, Dak ..	Aug. 19, 1873	Elliott Coues.	.....	.....	.....	Skin.
3721do	Sept. 3, 1873	.....do .....	.....	.....	.....	.....do.
3732	Long Coteau River, Dak.	Sept. 8, 1873	.....do .....	.....	.....	.....	.....do.
4524	Rocky Mountains, latitude 49°.	Aug. 19, 1874	.....do .....	.....	.....	.....	Skin (young).
4526do .....	.....do	A. B. Chapin.	.....	.....	.....	Nest with 4 eggs.
4532do	Aug. 20, 1874	.....do .....	.....	.....	.....	Skin.
4559do	Aug. 23, 1874	J. H. Batty.	.....	.....	.....	.....do.
4560do .....	.....do .....	.....do .....	.....	.....	.....	.....do.
4561do .....	.....do .....	.....do .....	.....	.....	.....	.....do.
4562do .....	.....do .....	.....do .....	.....	.....	.....	.....do.
4563do .....	.....do .....	.....do .....	.....	.....	.....	.....do.

VIREO OLIVACEUS, (*Linn.*) Vieill.

RED-EYED VIREO.

Abundant at Pembina, where it was breeding in June, and again on the Upper Missouri between Fort Buford and the mouth of the Milk River. Though characteristically a bird of the Eastern Province, it has latterly been traced to the Rocky Mountains and somewhat beyond. The late Dr. C. B. R. Kennerly found it in Washington Territory, and Mr. J. A. Allen at Ogden, Utah.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2807	♂	Pembina, Dak	June 3, 1873	Elliott Coues.	6.30	10.10	.....	Skin.
2808do .....	.....do .....	.....do	5.90	9.50	.....	.....do.
2809do .....	.....do .....	.....do	6.25	10.00	.....	.....do.
2859do	June 5, 1873	.....do	6.00	9.70	.....	.....do.
2860do .....	.....do .....	.....do	5.90	9.40	.....	.....do.
2861do .....	.....do .....	.....do	6.00	9.75	.....	.....do.
2889do	June 6, 1873	.....do	6.00	10.30	.....	.....do.
2925do	June 9, 1873	.....do	5.75	9.90	.....	.....do.
2926do .....	.....do .....	.....do	5.90	10.20	.....	.....do.
2937do	June 11, 1873	.....do .....	.....	.....	.....	.....do.
2966do	June 13, 1873	.....do .....	.....	.....	.....	.....do.

VIREO PHILADELPHICUS



Cass.

BROTHERLY-LOVE VIREO.

This appears to be a species which, like the Mourning Warbler and some others, is more abundant in the interior, and especially in the Mississippi Valley, than in the Atlantic States. It was originally described, a few years since, from the vicinity of Philadelphia, as indicated by its name, and has been justly esteemed as rather a rare bird in the Eastern and Middle States, though its great similarity to *V. gilvus* may be a cause of its being partially overlooked. In New England, it has been found on two or three occasions, and Dr. Brewer informed me of its abundance in Wisconsin during the latter part of May. Mr. T. M. Trippe in querying *V. gilvus* as found by him in Minnesota, probably had the present species in view. It undoubtedly breeds about Pembina, in the heavy timber of the river-bottom, but I was not so fortunate as to discover its nest, a circumstance the more to be regretted since neither the nest or eggs have as yet come to light.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2811	♂	Pembina, Dak	June 3, 1873	Elliott Coues	5.10	8.50	.....	Skin.
2812	♀	.....do .....	.....do .....	.....do	4.80	7.80	.....	.....do.

VIREO GILVUS, (Vieill.) Bp

WARBLING VIREO.

Observed in abundance at Pembina, and again found at the opposite extremity of the Line, the specimen captured in the Rocky Mountains, however, being probably of the slight variety *swainsoni*. At Pembina, the Warbling Vireo was in full song and breeding in June. A nest found on the 11th of that month was still empty; but in this latitude few of the small insectivorous birds appear to lay before the third week in June.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2810	♂	Pembina, Dak	June 3, 1873	Elliott Coues	5.60	8.50	.....	Skin.
2890	♀	.....do	June 6, 1873	.....do	6.00	9.10	.....	.....do.
2923	♂	.....do	June 9, 1873	.....do	5.30	8.60	.....	.....do.
2933	♀	.....do	June 11, 1873	.....do .....	.....	.....	.....	Nest.
4519	Rocky Mountains, latitude 49°.	Aug. 19, 1874	.....do .....	.....	.....	.....	Skin (var. <i>swainsoni</i>).

VIREO SOLITARIUS, (*Wils.*) *Vieill.*

SOLITARY VIREO.

One specimen of this rather rare species was secured at Pembina, which is probably about its northern limit. It was taken in the timber of the river-bottom, frequented by three other species of the same genus.

A fifth species of Vireo, the White-eyed, probably also occurs in the same locality, since it has been found in Minnesota. It was not, however, observed.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2839	Pembina, Dak	June 4, 1873	Elliott Coues	5.50	9.25	.....	Skin.

COLLURIO LUDOVICIANUS EXCUBITORIDES, (*Siv.*) *Coues.*

WHITE-RUMPED SHRIKE.

This is the characteristic species of the whole region explored,—the larger kind, *C. borealis*, probably only occurring during its migration to or from the north, and in winter; at any rate, it was not observed. The White-rumped Shrike is common in suitable localities, and numerous specimens were secured at different points. At Turtle Mountain, during the last week in July, I found a family of these birds in an isolated clump of bushes. The young, four in number, had just left the nest, which was discovered in the crotch of a bush, five or six feet from the ground. It was one of the dirtiest nests I have ever handled, being fouled with excrement, and with a great deal of a scurfy or scaly substance, apparently cast from the feathers of the young during their growth. The nest proper rested upon a bulky mass of interlaced twigs; it was composed of some white weed that grew abundantly in the vicinity, matted together with strips of fibrous bark.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2774	♂♂	Pembina, Dak	June 1, 1873	Elliott Coues	.....	.....	.....	Skin.
2983	do	June 14, 1873	do	8.60	12.40	.....	do.
2984	do	do	do	8.60	12.40	.....	do.
3385	Turtle Mountain, Dak.	July 30, 1873	do .....	.....	.....	.....	do.
3386	do	do	do .....	.....	.....	.....	do.
3387	do	do	do .....	.....	.....	.....	do.
3391	do	July 31, 1873	do .....	.....	.....	.....	do.
4506	Rocky Mountains, latitude 49°.	Aug. 17, 1874	do .....	.....	.....	.....	do.
4640	do	Aug. 29, 1874	do .....	.....	.....	.....	do.

CARPODACUS PURPUREUS, (Gm.) Gray.

PURPLE FINCH.

This species was found in small numbers on Turtle Mountain during the latter part of July. It doubtless breeds in this locality. It has been traced by other observers as far as the region of the Saskatchewan, but I did not find it in the Rocky Mountains, nor, indeed, anywhere along the Line, excepting in the locality just mentioned. In the Missouri region, I have ascertained that it ascends the river as far at least as Fort Randall,—how much further I am unable to say; the evidence of its presence above that point being negative, with the exception of Dr. Hayden's record of a specimen from Vermilion River.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3368	♀	Turtle Mountain, Dak.	July 28, 1873	Elliott Coues	.....	.....	.....	Skin.

CHRYSOMITRIS TRISTIS, (Linn.) Bp.

AMERICAN GOLDFINCH.

This familiar bird was noted only at Pembina. It is, however, a species of general distribution in North America, so that the lack of observation respecting it at other points is to be regarded as simply fortuitous.

While upon the small subgroup of the *Fringillidæ* to which the present species belongs, I may properly note some other kinds which undoubtedly belong to the avifauna of the Boundary Line, though they escaped my observation. These are chiefly winter visitors from the north,—for it will be remembered that I was in the field, during both seasons, only from June to October.

The Pine Grosbeak, *Pinicola enucleator*, the two Cross-bills, *Loxia americana* and *L. leucoptera*, the Gray-crowned finch, *Leucosticte tephrocotis*, and the Red-poll Linnet, *Ægiothus linaria*, all enter this country later in the fall, some to remain during winter, others to pass further on; while the Pine Linnet, *Chrysomitris pinus*, is a species of the same general distribution as the Goldfinch.

Of the genus *Plectrophanus*, next to be considered, all the North American species occur in this region, which is the very home of two of them; two others came southward just as I was leaving, the 1st of October; and the fifth, the Snow Bunting, *P. nivalis*, which was the only one not seen, doubtless came along shortly afterward.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2830	♂	Pembina, Dak	June 4, 1873	Elliott Coues	5.10	9.00	.....	Skin.

PLECTROPHANES LAPPONICUS, (*Linn.*) *Selby.*

LAPLAND LONGSPUR.

On one of the last occasions when, during the season of 1873, I used my gun for collecting, a single specimen of the Lapland Longspur was secured. I think that the species had just reached the parallel on its southward movement; otherwise I could hardly have failed to observe it sooner, as I was shooting almost every day. Exactly how far south it may linger to breed I do not know, but there are some indications that it may occasionally nest in this latitude. Nevertheless, it ordinarily reaches the Arctic regions in summer; and I have seen the nest and eggs from an island in Behring's Sea. It moves southward in October in large flocks, reaching at least as far as Kentucky and Colorado. It does not appear to have been found in the United States west of the Rocky Mountains, but this may be merely through default of observation, since it is a species of circumpolar distribution, like the Snow Bunting, abundant in northern portions of Asia and Europe. Such casual observations as I made when the specimen was secured showed nothing specially different in its habits from either *P. pictus* or *P. ornatus*, with both of which it was associated.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3851	Mouse River, Dak. ...	Oct. 1, 1873	Elliott Coues.	6.50	11.25	3.70	Skin.

PLECTROPHANES PICTUS, *Sw.*

PAINTED LONGSPUR.

Observed only on one occasion, when it was found in company with the Chestnut-collared and Lapland Longspurs, having probably, like the last species, just arrived from the north. The two autumnal (young) specimens secured closely resemble the corresponding plumage of *P. ornatus*, though the birds are readily distinguished by certain marks. *P. pictus* is the larger of the two (length, 6.50; extent, 11.25; wing, 3.75; tail, 2.50; tarsus, 0.75; middle toe and claw the same). Upper parts much as in the adults in summer, but the distinctive head-markings obscure

or wanting. Entire under parts buff or rich yellowish-brown, paler on the chin and throat, which, like the forebreast, are obsoletely streaked with dusky. Tibiæ white. Two or three outer feathers of the tail only white. Bill dusky-brown above and at the end, paler below. Feet light brown, toes darker. In no stage of plumage of *P. ornatus* are the under parts extensively buffy, while all the tail-feathers, excepting perhaps the middle pair, are white at the base.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3853	♂	Mouse River, Dak...	Oct. 1, 1873	Elliott Coues	6.50	11.20	3.75	Skin.
3854	♀	.....do.....	.....do.....	.....do.....	6.40	11.00	3.55	.....do.

PLECTROPHANES ORNATUS, *Towns.*

CHESTNUT-COLLARED LONGSPUR.

These birds were not noticed in the immediate valley of the Red River; but no sooner had I passed the Pembina Mountains than I found them in profusion. Throughout this part of the country they are wonderfully abundant, even exceeding in the aggregate either Baird's Bunting or the Missouri Skylark. Their numbers continued undiminished to the furthest point reached by my party during the first season—the headwaters of Mouse River—and they were still in the country when I left, the second week in October. The next season I noticed but few along the Upper Missouri and Lower Milk River, where *P. maccowni* became abundant; they were more common along Frenchman's River, but some little distance further westward I lost sight of them, and in a letter transmitted to the "American Naturalist", from the Two Forks of Milk River, I was induced to suppose I had got beyond their range; this, however, proved not to be the case, for subsequently I saw them at intervals till I entered the foothills of the Rocky Mountains. The interesting relation between the habitat of this species and of *P. maccowni* is more fully expressed under head of the latter; here I will only advert to its great abundance in the whole Red River watershed west of that river itself, its sudden falling-off in numbers at the point where the Coiteau de Missouri crosses 49°, yet its persistence westward to the Rocky Mountains.

My first specimens were secured July 14, 1873, at which date the early broods were already on wing. Uniting of several families had scarcely begun, however, nor were small flocks made up, apparently, till the first broods had, as a general thing, been left to themselves, the parents busy-ing themselves with a second set of eggs. Then straggling troops, consisting chiefly of birds of the year, were almost continually seen, mixing freely with Baird's Buntings and the Skylarks; in fact, most of the con-

gregations of the prairie birds that were successively disturbed by our advancing wagon-trains consisted of all three of these, with a considerable sprinkling of Savanna Sparrows, Shore Larks, and Bay-winged Buntings. The first eggs I secured were taken July 18, nearly a week after I had found young on wing; these were fresh; other nests examined at the same time contained newly hatched young. Again, I have found fresh eggs so late as the first week in August. During the second season, the first eggs were taken July 6, and at that time there were already plenty of young birds flying. The laying-season must consequently reach over a period of at least two months. I was not on the ground early enough to determine the commencement exactly; but supposing a two weeks' incubation, and about the same length of time occupied in rearing the young in the nest, the first batches of eggs must be laid early in June to give the sets of young which fly by the first of July. There is obviously time for the same pair to get a second, if not a third, brood off their hands by the end of August; I should say that certainly two, and probably three, broods are reared, as a rule. The result of all this is, that from the end of June until the end of August young birds in every state of plumage, and the parents in various degrees of wear and tear, are all found together. The young males very soon show some black on the under parts, but do not gain the distinctive head-markings until the next season. The completion of general moult is delayed until September, to nearly the time the Prairie Chickens have theirs; with its completion, both old and young acquire a much clearer and richer plumage than that worn during the summer. While the summer adults rarely show the bend of the wing black, this feature comes out strongly in September. Comparatively few of the birds of this region show the mahogany-color on the under parts, described as being very conspicuous in those of some other portions of the country. Many of the females, in high plumage, are scarcely distinguishable from the males. The extent of white on the tail is a conspicuous feature when the birds are flying, serving for their instant recognition among their allies. There is a good deal of variation in dimensions, as indicated by the measurements given in the table beyond.

The nest, of course, is placed on the ground, usually beneath some little tuft of grass or weeds, which effectually conceals it. Like that of other ground-building sparrows, it is sunk flush with the surface of the ground, thin at the bottom, but with thicker and tolerably firm brim; it consists simply of a few grasses and weed-stems, for the most part circularly disposed. In size, the cup is about $3\frac{1}{2}$ inches across the brim and nearly 2 in depth. During the first season, I only found four eggs or young in a nest; but I afterward took one containing six eggs. These measure about $\frac{4}{5}$ long by $\frac{3}{8}$ broad, of an ordinary shape. They are difficult to describe as to color, for the marking is intricate as well as very variable here as elsewhere in the genus. I have called them "grayish-white, more or less clouded and mottled with pale

purplish-gray, which confers the prevailing tone; this is overlaid with numerous surface markings of points, scratches, and small spots of dark brown, wholly indeterminate in distribution and number, but always conspicuous, being sharply displayed upon the subdued ground color." On those occasions when I approached a nest containing eggs, the female usually walked off quietly, after a little flutter, to some distance, and then took wing; at other times, however, when there were young in the nest, both parents hovered close overhead, with continuous cries.

During the summer, when the old birds are breeding, and those of the year are still very young, they are very familiar and heedless, and will scarcely get out of the way. In September, when the large flocks make up, and are joined by *P. pictus* from the north, they become much wilder, fly more strongly, and are then procured with some difficulty. I never observed the dense flocking that some writers describe; the congregation I always found to be a straggling one, so that single birds only could be shot on the wing. In the winter, however, or during the migration, the case may be different. The ordinary flight is perfectly undulatory, and not very rapid; but in the fall the birds have a way of tearing about, when startled, with a wayward course, which renders them difficult to shoot on the wing. The ordinary call-note is a chirp, of peculiar character, but not easy to describe; besides this, the males during the breeding-season have a pleasing twittering song, uttered while they are flying. The chirp is usually emitted with each impulse of the wings. The birds scatter indiscriminately over the prairie, but are particularly fond of the trails made by buffalo or by wagon-trains, where they can run without impediment, and where doubtless they find food which is not so accessible upon undisturbed ground. Though so generally distributed, there are some spots where they are particularly numerous, and others again, where, for no assignable reason, they are not to be seen. This curious sort of semi-colonization is witnessed in the cases of many other prairie birds, and some of the smaller rodent mammals, like the pouched gophers and field-mice.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3255	20 miles west Pembina Mts.	July 14, 1873	Elliott Coues.	5.90	10.70	.....	Skin.
3256	do	do	do	5.75	10.30	.....	do.
3257	do	do	do	5.82	10.40	.....	do.
3258	do	do	do	6.00	10.65	.....	do.
3259	do	do	do	5.75	10.00	.....	do.
3261	do	do	do	5.70	10.15	.....	do.
3262	do	do	do	5.75	10.00	.....	do.
3266	50 miles west Pembina Mts.	July 15, 1873	do	6.00	10.50	.....	do.
3287	do	do	do	6.20	10.60	.....	do.
3297	do	July 16, 1873	do	5.80	9.60	.....	do.
3327	♀	25 miles east Turtle Mt.	July 18, 1873	do .....	.....	.....	.....	Skin, with nest and 4 eggs.
3328	♂	do	do	do .....	.....	.....	.....	Skin.
3329	do	do	do .....	.....	.....	.....	do.
3330	do	do	do .....	.....	.....	.....	do.

List of specimens—Continued.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3331	...	25 miles east Turtle Mt.	July 18, 1873	Elliott Coues.	.....	.....	.....	Skin.
3332	...	do	do	do	.....	.....	.....	do.
3333	...	do	do	do	.....	.....	.....	do.
3447	...	Moose River, Dak.	Aug. 9, 1873	do	.....	.....	.....	do.
3448	...	do	do	do	.....	.....	.....	do.
3449	...	do	do	do	.....	.....	.....	do.
3450	...	do	do	do	.....	.....	.....	do.
3453	...	do	Aug. 10, 1873	do	.....	.....	.....	Skin (young).
3465	+	do	do	do	5.75	10.25	.....	Skin.
3466	...	do	do	do	5.80	10.35	.....	do.
3467	...	do	do	do	6.25	10.75	.....	do.
3468	...	do	do	do	.....	.....	.....	do.
3469	...	do	do	do	.....	.....	.....	do.
3470	...	do	do	do	.....	.....	.....	do.
3473	...	do	do	do	.....	.....	.....	do.
3474	...	do	do	do	6.00	10.25	.....	do.
3492	...	do	Aug. 11, 1873	do	6.00	10.50	.....	do.
3516	...	do	Aug. 13, 1873	do	6.25	10.90	.....	do.
3517	...	do	do	do	6.10	10.65	.....	do.
3518	...	do	do	do	6.30	11.00	.....	do.
3519	...	do	do	do	6.10	10.60	.....	do.
3520	...	do	do	do	5.90	10.25	.....	do.
3521	...	do	do	do	.....	.....	.....	do.
3522	...	do	do	do	.....	.....	.....	do.
3523	...	do	do	do	.....	.....	.....	do.
3524	...	do	do	do	.....	.....	.....	do.
3525	...	do	do	do	.....	.....	.....	do.
3532	...	do	do	do	.....	.....	.....	do.
3568	...	do	Aug. 22, 1873	do	.....	.....	.....	do.
3569	...	do	Aug. 23, 1873	do	.....	.....	.....	do.
3588	...	do	do	do	.....	.....	.....	do.
3709	...	do	Aug. 27, 1873	do	.....	.....	.....	do.
3710	...	do	Sept. 2, 1873	do	6.25	10.80	3.30	do.
3711	...	do	do	do	6.25	10.80	3.33	do.
3712	...	do	do	do	5.90	10.35	3.20	do.
3713	...	do	do	do	.....	.....	.....	do.
3714	+	do	do	do	5.80	10.20	3.20	do.
3715	+	do	do	do	5.50	10.10	3.10	do.
3722	...	do	do	do	.....	.....	.....	do.
3732	...	do	Sept. 3, 1873	do	.....	.....	.....	do.
3733	...	do	do	do	.....	.....	.....	do.
3734	...	do	do	do	.....	.....	.....	do.
3735	...	do	do	do	.....	.....	.....	do.
3736	...	do	do	do	.....	.....	.....	do.
3737	...	do	do	do	.....	.....	.....	do.
4137	♂	Long Coteau River, Dak.	Sept. 8, 1873	do	6.10	10.70	3.40	do.
4138	♀	Frenchman's River, Mont.	July 6, 1874	do	.....	.....	.....	do.
4139	♀	do	do	do	.....	.....	.....	Skin, with set of 6 eggs.
4140	...	do	do	do	.....	.....	.....	Skin.
4141	...	do	July 7, 1874	do	.....	.....	.....	do.
4142	...	do	do	do	.....	.....	.....	do.
4143	...	do	do	do	.....	.....	.....	do.
4144	...	do	do	do	.....	.....	.....	do.
4145	...	do	do	do	.....	.....	.....	do.
4146	...	do	do	do	.....	.....	.....	do.
4163	...	do	July 8, 1874	do	.....	.....	.....	do.
4166	...	do	do	do	.....	.....	.....	do.
4167	...	do	do	do	.....	.....	.....	do.
4168	...	do	do	do	.....	.....	.....	do.
4169	...	do	do	do	.....	.....	.....	do.
4170	...	do	do	do	.....	.....	.....	do.
4171	...	do	do	do	.....	.....	.....	do.
4172	...	do	do	do	.....	.....	.....	do.
4173	...	do	do	do	.....	.....	.....	do.
4293	...	Crossing of Milk River, Mont.	July 25, 1875	do	.....	.....	.....	do.
4294	...	do	do	do	.....	.....	.....	do.
4300	...	do	do	do	.....	.....	.....	do.
4404	...	West Sweetgrass Hills, Mont.	Aug. 11, 1874	do	.....	.....	.....	do.
4432	...	Headwaters Milk River, Mont.	Aug. 13, 1874	J. H. Batty	5.75	10.25	3.25	do.
4434	...	do	do	do	.....	.....	.....	do.

PLECTROPHANES MACCOWNI, *Lawr.*

BLACK-BREASTED LONGSPUR.

This species was never seen in the Red River region, and I do not think it occurs in that watershed, which is so thickly populated in summer with *P. ornatus*, as already described. It seems to be one of the many birds that mark the natural division between that region and the Missouri Basin. I first encountered it June 21, 1874, a day's march above Fort Buford. The specimen obtained was a young one, not quite able to fly. As we progressed toward the Milk River, the bird grew more and more abundant, and it occurred throughout the country thence to the Rocky Mountains. There were some points on the route where it was scarcely to be seen (as is usually the case with the small prairie birds); but this was a matter of slight local distribution, for the species was equally numerous, "in spots," throughout the country. *P. ornatus* accompanied it in some numbers about as far as Frenchman's River, where both species were breeding, and a few stragglers were noted along the whole way; but, in spite of this admixture, *P. maccowni* is to be considered the characteristic species of the genus in the Missouri watershed at this latitude, just as *P. ornatus* is in that of the Red River.

Maccown's Longspur was very abundant in the country about Frenchman's River, and equally so about the headwaters of Milk River and in the eastern foothills of the Rocky Mountains. It does not appear, however, to enter the mountains themselves, but stops just short of the beginning of the trees,—just where the *Spermophili* give way to the *Geomyidae* and the Badgers to the Woodchucks. Of its periods of nidification and laying I am less precisely informed than in the case of *P. ornatus*. The fledgling taken June 21 indicates an early June brood, corresponding to the first one of *P. ornatus*; but I took no eggs after July 10, when the only set in the collection was secured. Young birds in all stages were common from this time until the latter part of August, and I have no doubt that at least two broods are reared each season. The nidification is substantially the same as that of *P. ornatus*. The few sets of eggs I have examined are of the same size as those of the bird just named, and closely resemble the lighter-colored varieties of the latter. The ground-color, however, is dull white, without the purplish-gray clouding so noticeable in the eggs of *P. ornatus*. The markings are rather sparse and obscurely mottled, with some heavier, sharper, scratchy ones, all of different shades of brown. According to analogy, it is reasonable to presume upon the same wide range of variation in this case that is known to obtain elsewhere in the genus *Plectrophanes*.

While the females are incubating, the males have a very pretty way of displaying themselves and of letting the music out at the same time. They soar to a little height, and then, fixing the extended wings at an angle of forty-five degrees with their bodies, sink slowly down to the

ground, singing most heartily—"sliding down the scale of their own music," as some one has happily expressed it in the case of another species of similar habit. This song, I think, is superior to that of the Chestnut-collared Bunting, though of the same general character. When hovering in the manner just indicated, both birds resemble butterflies,—there is something so light, wayward, and flickering in their motions.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4010	---	Big Muddy River, Mont.	June 21, 1874	Elliott Coues	-----	-----	-----	Skin (nestling).
4147	♂	Frenchman's River, Mont.	July 7, 1874	do	6.25	11.25	3.50	Skin.
4148	do	do	do	do	6.20	11.50	3.45	do.
4149	do	do	do	do	6.00	11.10	3.40	do.
4160	do	do	July 8, 1874	do	6.00	11.50	3.60	do.
4161	do	do	do	do	-----	-----	-----	do.
4162	do	do	do	do	6.30	11.60	3.60	do.
4163	do	do	do	do	6.00	11.00	3.40	do.
4164	do	do	do	do	5.75	10.70	3.30	do.
4218	♀	Near Frenchman's River, Mont.	July 10, 1874	do	-----	-----	-----	Skin, with 4 eggs.
4227	♀	Two Forks of Milk River.	July 16, 1874	do	-----	-----	-----	Skin (parent of young in alcohol).
4228	do	do	do	do	-----	-----	-----	do.
4241	do	do	July 18, 1874	do	-----	-----	-----	Skin.
4242	do	do	do	do	-----	-----	-----	do.
4243	do	do	do	do	-----	-----	-----	do.
4244	do	do	do	do	-----	-----	-----	do.
4249	do	do	do	do	-----	-----	-----	do.
4254	♀	Near Two Forks of Milk River.	July 21, 1874	do	-----	-----	-----	do.
4255	do	do	do	do	-----	-----	-----	do.
4256	---	Crossing of Milk River, Mont.	July 24, 1874	do	-----	-----	-----	do.
4295	do	do	July 25, 1874	do	-----	-----	-----	do.
4330	♂	West of Sweetgrass Hills, Mont.	Aug. 7, 1874	do	-----	-----	-----	do.
4331	do	do	do	do	-----	-----	-----	do.
4332	do	do	do	do	-----	-----	-----	do.
4333	do	do	do	do	-----	-----	-----	do.
4334	do	do	do	do	-----	-----	-----	do.
4403	do	do	Aug. 11, 1874	do	-----	-----	-----	do.
4425	do	do	Aug. 12, 1874	do	-----	-----	-----	do.
4426	do	do	do	do	-----	-----	-----	do.
4427	do	do	do	do	-----	-----	-----	do.
4428	do	do	do	do	-----	-----	-----	do.
4429	do	do	do	do	-----	-----	-----	do.
4441	---	Headwaters Milk River, Mont.	Aug. 13, 1874	J. H. Batty	-----	-----	-----	do.
4442	do	do	do	do	-----	-----	-----	do.
4443	do	do	do	do	-----	-----	-----	do.
4457	do	do	Aug. 15, 1874	do	-----	-----	-----	do.
4458	do	do	do	do	-----	-----	-----	do.
4459	do	do	do	do	-----	-----	-----	do.
4460	do	do	do	do	-----	-----	-----	do.
4461	do	do	do	do	-----	-----	-----	do.
4466	do	do	do	Elliott Coues.	-----	-----	-----	do.
4467	do	do	do	do	-----	-----	-----	do.
4468	do	do	do	do	-----	-----	-----	do.
4469	do	do	do	do	-----	-----	-----	do.
4472	do	do	do	do	-----	-----	-----	do.
4473	do	do	do	do	-----	-----	-----	do.
4474	do	do	do	do	-----	-----	-----	do.
4498	♀	Near Rocky Mountains, lat. 49°.	Aug. 16, 1874	do	-----	-----	-----	do.
4499	do	do	do	do	-----	-----	-----	do.
4500	do	do	do	do	-----	-----	-----	do.
4501	do	do	do	do	-----	-----	-----	do.
4502	do	do	do	do	-----	-----	-----	do.
4 28	do	do	Aug. 28, 1874	do	-----	-----	-----	do.
4629	do	do	do	do	-----	-----	-----	do.
4630	do	do	do	do	-----	-----	-----	do.
4631	do	do	do	do	-----	-----	-----	do.
4632	do	do	do	do	-----	-----	-----	do.
4641	♂	do	Aug. 29, 1874	do	-----	-----	-----	do.

List of specimens—Continued.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4659	---	Headwaters Milk River, Mont.	Aug. 30, 1874	Elliott Coues.	.....	.....	.....	Skin.
4660	---	do	do	do .....	.....	.....	.....	do.
4661	---	do	do	do .....	.....	.....	.....	do.
4662	---	do	do	do .....	.....	.....	.....	do.
4663	---	do	do	do .....	.....	.....	.....	do.
4664	---	do	do	do .....	.....	.....	.....	do.
4665	---	do	do	do .....	.....	.....	.....	do.
4667	♂	West of Sweetgrass Hills, Mont.	Aug. 31, 1874	do .....	.....	.....	.....	do.
4678	♂	do	do	do .....	.....	.....	.....	do.
4679	♂	do	do	do .....	.....	.....	.....	do.
4680	♂	do	do	do .....	.....	.....	.....	do.
4681	♂	do	do	do .....	.....	.....	.....	do.

PASSERCULUS BAIRDI, (*Aud.*) Coues.

BAIRD'S BUNTING.

It is difficult to understand how this bird eluded observation for thirty years—from the time of its original discovery by Audubon, on the Upper Missouri, nearly to the present day. If the species were really rare, this would not be remarkable; but it has lately been shown to be extremely abundant in different parts of the West. I did not meet with it along the Red River itself, but found it as soon as I passed from the Pembina Mountains to the boundless prairie beyond. In some particular spots, it outnumbered all the other birds together; and on an average through the country, from the Pembina Mountains to the Mouse River, it was one of the trio of commonest birds,—the Skylarks and Chestnut-collared Longspurs being the other two. The first specimens I procured were taken July 14. Some of them were newly fledged, but the great majority were adult males, showing that at that time the breeding-season was at its height. Out of thirty-one specimens secured July 14 and 15, only one was a female, the individuals of this sex being evidently occupied with the duty of incubating or brooding their young. The males at this time were very conspicuous, like *Spizella pallida* under the same circumstances, as they sat singing on the weeds or low bushes of the prairie. The song consists of two or three distinct syllables, followed by a trill uttered in a mellow, tinkling tone. The nest I never succeeded in finding, although I must have passed by many. The eggs were first discovered by Mr. Allen in the region just south of me. They were taken July 1, 1873, the date corresponding to that which I fixed as the laying season from consideration of the habits of the birds. The nest and eggs are described from his specimens in the "Birds of the Northwest". Whether or not two broods are reared, I cannot say; but some of my late summer specimens were so young that I judged they might belong to a second brood. Birds of apparently about the same age were shot six weeks apart.

The general habits of Baird's Bunting are much like those of *Passerculus savanna*, and the appearance of the two birds during life is so similar that it is difficult to tell them apart at any distance. The *Centronyx* is not truly gregarious, but, like many other prairie birds, affects particular spots, which are colonized by large numbers. When the young are all on wing, it associates in straggling troops, mixing freely with the Sky-larks and Longspurs. During the summer, the plumage becomes extremely worn and faded; with the moult, which occurs in September, a much more richly colored dress is assumed. The bird remains in this country at least until October, though its numbers sensibly diminish during the preceding month.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3242	♂	20 miles west Pembina Mts.	July 14, 1873	Elliott Coues.	.....	.....	.....	Skin.
3243	do	do	do	.....	.....	.....	do.
3244	do	do	do	5.25	9.10	.....	do.
3245	do	do	do	5.75	9.40	.....	do.
3246	do	do	do	5.65	9.20	.....	do.
3247	do	do	do	5.50	9.30	.....	do.
3248	do	do	do	5.75	9.40	.....	do.
3249	do	do	do	5.75	9.45	.....	do.
3250	do	do	do	5.50	8.87	.....	do.
3251	do	do	do	5.75	9.50	.....	do.
3252	do	do	do	5.75	9.50	.....	do.
3265	50 miles west Pembina Mts.	July 15, 1873	do	5.10	9.30	.....	do.
3266	do	do	do	5.70	9.50	.....	do.
3267	do	do	do	5.75	9.70	.....	do.
3268	do	do	do	5.50	9.25	.....	do.
3269	do	do	do	5.75	9.75	.....	do.
3270	do	do	do	5.70	9.70	.....	do.
3271	do	do	do	5.60	9.30	.....	do.
3272	do	do	do	5.75	9.00	.....	do.
3273	do	do	do	5.65	9.50	.....	do.
3274	do	do	do	5.65	9.50	.....	do.
3275	do	do	do	5.65	9.50	.....	do.
3276	do	do	do	5.85	9.60	.....	do.
3277	do	do	do	5.80	9.50	.....	do.
3278	do	do	do	5.75	9.40	.....	do.
3279	do	do	do	5.50	9.45	.....	do.
3280	do	do	do	5.75	9.50	.....	do.
3281	do	do	do	5.40	8.35	.....	do.
3282	do	do	do	5.65	9.35	.....	do.
3283	do	do	do	5.30	9.00	.....	do.
3284	do	do	do	5.60	9.50	.....	do.
3290	do	July 16, 1873	do	.....	.....	.....	do.
3291	do	do	do	5.50	9.35	.....	do.
3292	do	do	do	5.65	9.70	.....	do.
3293	do	do	do	5.65	9.30	.....	do.
3294	do	do	do	5.60	9.40	.....	do.
3295	do	do	do	5.65	9.30	.....	do.
3296	do	do	do	5.60	9.60	.....	do.
3303	75 miles west Pembina Mts.	July 17, 1873	do	5.40	9.50	2.90	do.
3304	do	do	do	5.75	9.10	2.75	do.
3305	do	do	do	5.50	9.40	2.80	do.
3306	do	do	do	5.10	9.10	2.75	do.
3320	25 miles east Turtle Mountain.	July 18, 1873	do	.....	.....	.....	do.
3321	do	do	do	.....	.....	.....	do.
3322	do	do	do	.....	.....	.....	do.
3323	do	do	do	.....	.....	.....	do.
3324	do	do	do	.....	.....	.....	do.
3325	do	do	do	.....	.....	.....	do.
3326	do	do	do	.....	.....	.....	do.
3358	Turtle Mt., Dak.	July 25, 1873	do	5.25	9.40	.....	do.
3359	do	do	do	5.30	9.50	.....	do.
3436	Mouse River, Dak.	Aug. 9, 1875	do	5.65	9.20	.....	do.

List of specimens—Continued.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3437	Mouse River, Dak...	Aug. 9, 1875	Elliott Coues.	5.50	8.60	.....	Skin.
3438	do	do	do	5.50	9.00	.....	do.
3439	do	do	do	5.75	9.30	.....	do.
3440	do	do	do	5.70	9.00	.....	do.
3441	do	do	do	5.50	9.00	.....	do.
3464	♀	do	Aug. 10, 1873	do	.....	.....	.....	do.
3488	do	Aug. 11, 1873	do	5.70	9.00	.....	do.
3489	do	do	do	5.50	8.85	.....	do.
3507	do	Aug. 13, 1873	do	5.80	9.75	.....	do.
3508	do	do	do	5.50	9.10	.....	do.
3509	do	do	do	5.65	9.35	.....	do.
3510	do	do	do	5.65	9.35	.....	do.
3511	do	do	do	5.65	9.30	.....	do.
3512	do	do	do	5.50	9.25	.....	do.
3513	do	do	do	5.60	9.25	.....	do.
3514	do	do	do	5.65	9.45	.....	do.
3515	do	do	do	5.75	9.30	.....	do.
3849	do	Oct. 1, 1873	do	5.80	9.60	3.05	do.

COTURNICULUS LECONTII, (*Aud.*) *Bp.*

LECONTE'S BUNTING.

The rediscovery of this little-known and extremely interesting species in Dakota was made in the season of 1873 by the Commission. On the march between Turtle Mountain and the first crossing of Mouse River, I came upon what seemed to be a small colony of the birds in a moist depression of the prairie, where the herbage was waist-high. By diligent search, after shooting the first specimen and perceiving what it was, I managed, not without difficulty, to secure five in all. This was on the 9th of August. I subsequently found the bird again, and secured a sixth specimen, amongst the reeds of a prairie slough near the headwaters of the river just mentioned. So far as I could determine from short observation, the birds are much like the *Ammodromi* in their general habits and appearance, and they inhabit similar situations. Their note was a chirring noise, like that of a grasshopper. They were started at random from the tall, waving grass, flitted in sight for a few seconds, and then dropped suddenly, so that the chances of shooting them were very poor. One was killed at very close range by a blow from the *wad* of my cartridge, the charge of shot having passed in lump close by. I have no doubt that the birds were breeding in this place, though no nests were found. Their retiring habits and the nature of their resorts have doubtless caused them to be overlooked for years. Audubon says that he found them common on the Upper Missouri. A specimen, in poor condition, from Texas, was the only one known to exist in any collection before these of mine were secured, Audubon's type having been lost or mislaid. A redescription of the species, in which it is shown that the characters originally assigned required modification, is given in the "Birds of the Northwest".

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3442	♂	Mouse River, Dak.	Aug. 9, 1873	Elliott Coues.	5.00	7.10	.....	Skin.
3443do.....	.....do.....	.....do.....	5.00	7.00	.....	.....do.
3444do.....	.....do.....	.....do.....	5.00	6.90	.....	.....do.
3445do.....	.....do.....	.....do.....	5.10	6.90	.....	.....do.
3446do.....	.....do.....	.....do.....	5.25	.....	.....	.....do.
3743	Long Coteau River, Dak.	Sept. 9, 1873	.....do.....	.....	.....	.....	.....do.

PASSERCULUS SAVANNA, (*Wils.*) *Bp.*

SAVANNA SPARROW.

Breeds in profusion throughout the region explored. Though not exclusively a bird of the prairie, it seems to be as much at home in the open plains as anywhere, associating intimately with *Centronyx* and the two leading species of *Plectrophanes*. It is also found, however, in the brush along the streams and larger rivers, which are unfrequented by the species just named, in company with the *Melospiza* and *Junco*s. A large *suite* of specimens was taken, a part of it, however, unintentionally, for it is not an easy matter to always distinguish between the Savanna Sparrow and Baird's Bunting at gunshot range; and when I have killed a bird, I generally make a point of preserving it, even though it is not particularly wanted as a specimen, in order that its life may not have been taken in vain. The nest is placed on the ground, simply built of dried grasses, with a lining of horse-hair; the eggs are four or five in number, in this locality usually laid in the first half of June. Like nearly all the Fringilline birds of this region, the Savanna Sparrow is frequently the Cowbird's foster-parent, and in one instance that came under my observation the nest contained two of the alien eggs.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2792	Pembina, Dak.	June 2, 1873	Elliott Coues	.....	.....	.....	Skin.
2864do.....	June 5, 1873	.....do.....	5.20	9.00	.....	.....do.
2865do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
2883do.....	June 6, 1873	.....do.....	.....	.....	.....	.....do.
2884do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
3254	Near Pembina Mountains, Dak.	July 14, 1873	.....do.....	.....	.....	.....	.....do.
3263do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
3264do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
3265do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
3343	Turtle Mountain, Dak.	July 20, 1873	.....do.....	.....	.....	.....	.....do.
3344do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
3360do.....	July 25, 1873	.....do.....	.....	.....	.....	.....do.
3382do.....	July 30, 1873	.....do.....	.....	.....	.....	.....do.
3497do.....	Aug. 8, 1873	.....do.....	.....	.....	.....	.....do.
3565	Mouse River, Dak.	Aug. 23, 1873	.....do.....	.....	.....	.....	.....do.
3597do.....	Aug. 30, 1873	.....do.....	5.60	9.00	2.90	.....do.
3707	♂	.....do.....	Sept. 2, 1873	.....do.....	6.00	10.00	3.00	.....do.

List of specimens—Continued.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3708	♀	Monse River, Dak.	Sept. 2, 1873	Elliott Cones	5.40	9.00	2.65	Skin.
3734	Long Coteau River, Dak.	Sept. 8, 1873	do	.....	.....	.....	do.
3831	Monse River, Dak.	Sept. 27, 1873	do	.....	.....	.....	do.
4262	Crossing of Milk River, Dak.	July 24, 1874	do	.....	.....	.....	do.
4263	do	do	do	.....	.....	.....	do.
4292	do	July 25, 1874	do	.....	.....	.....	do.
4401	West of Sweetgrass Hills, Mont.	Aug. 11, 1874	do	.....	.....	.....	do.
4402	do	do	do	.....	.....	.....	do.
4445	Headwaters Milk River, Mont.	Aug. 14, 1874	do	.....	.....	.....	do.
4463	do	Aug. 15, 1874	do	.....	.....	.....	do.
4476	Rocky Mountains, latitude 49°.	Aug. 16, 1874	do	.....	.....	.....	do.
4616	do	Aug. 26, 1874	J. H. Batty	.....	.....	.....	do.
4617	do	do	do	.....	.....	.....	do.

POECETES GRAMINEUS, (*Gm.*) *Bd.*

BAY-WINGED BUNTING, or GRASS FINCH.

Like the last, the present species extends over the whole region explored, and breeds in abundance, while the general remarks upon distribution made in the case of the Savanna Sparrow are equally applicable here. Several nests were found at Pembina, containing eggs, about the middle of June. One of them also held two *Molothrus* eggs. The nests were built in open ground, quite deeply sunken, so as to be flush with the surface, and more substantial than those of many ground-builders, the walls being an inch or more thick at the brim. The cavity is small and deep in comparison with the whole nest. The usual materials are grasses and weed-stalks, the coarser material outside, the finer fibres within and at the bottom. The eggs, of which I have not found more than four, measure about 0.80 by 0.55; they are grayish-white, heavily marked all over with spots, dashes, and blotches of reddish-brown, and sprinkling of fine dots of the same or darker brown. The female is a close setter, not leaving the nest until nearly trodden upon, and then fluttering off as if crippled, to distract attention from the nest to herself.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2866	♂	Pembina, Dak.	June 5, 1873	Elliott Cones	.....	.....	.....	Skin.
2959	do	June 13, 1873	do	.....	.....	.....	Skin, nest, and 4 eggs.
3045	do	June 19, 1873	do	.....	.....	.....	Nest, with 3 eggs, and 2 of <i>Molothrus</i> .
3340	Turtle Mountain, Dak.	July 20, 1873	do	.....	.....	.....	Skin.
3341	do	do	do	.....	.....	.....	do.

List of specimens—Continued.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3342	Turtle Mountain, Dak.	July 20, 1873	Elliott Coues.	.....	.....	.....	Skin.
3349	do	July 23, 1873	do	.....	.....	.....	do.
3393	do	Aug. 2, 1873	do	.....	.....	.....	do.
3596	Mouse River	Aug. 30, 1873	do	.....	.....	.....	do.
3730	Long Coteau River, Dak.	Sept. 8, 1873	do	.....	.....	.....	do.
3731	do	do	do	.....	.....	.....	do.
4021	♂	Big Muddy River, Mont.	June 22, 1874	do	.....	.....	.....	do.
4032	Quaking Ash River, Mont.	June 26, 1874	do	.....	.....	.....	do.
4033	do	do	do	.....	.....	.....	do.
4261	Crossing of Milk River, Mont.	July 24, 1874	do	.....	.....	.....	do.
4340	West of Sweetgrass Hills, Mont.	Aug. 8, 1874	do	.....	.....	.....	do.
4448	Headwaters Milk River, Mont.	Aug. 14, 1874	J. H. Batty	.....	.....	.....	do.
4450	do	do	do	.....	.....	.....	do.
4465	do	Aug. 15, 1874	do	.....	.....	.....	do.
4497	Rocky Mountains, latitude 49°.	Aug. 16, 1874	do	.....	.....	.....	do.
4514	do	Aug. —, 1874	Elliott Coues.	.....	.....	.....	do.
4618	do	Aug. 26, 1874	do	.....	.....	.....	do.
4619	do	do	do	.....	.....	.....	do.
4633	do	Aug. 28, 1874	do	.....	.....	.....	do.

SPIZELLA MONTICOLA, (*Gm.*) Baird.

TREE SPARROW.

No Tree Sparrows were observed in summer during either season, and I think none breed so far south as this. They appear in numbers with the general migration which brings the northern Fringillines, and which reaches this latitude about the 1st of October. Unlike several of the other species, however, they are not generally distributed, being confined to the woods, or rather the shrubbery along the streams, where they may be observed in small troops in company with the Snowbirds, and Harris's, Lincoln's, and White-crowned Sparrows. They are hardy birds, capable of enduring great cold, and I suppose that they may pass the winter in this latitude, as they certainly do a little distance southward in the Missouri region. I found them in considerable numbers at Fort Randall, Dak., during the winter of 1872-73, which they passed, to all appearances, very comfortably in the heavy undergrowth of the river-bottom.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3875	Mouse River, Dak.	Oct. 5, 1873	Elliott Coues.	.....	.....	.....	Skin.

SPIZELLA SOCIALIS, (Wils.) Bp.

CHIPPING SPARROW.

Specimens of this very common and familiar species were taken in the Rocky Mountains, and it was observed at other points where none were secured. It is not, however, a conspicuous feature of the avifauna of this region, most of which is not suited to its wants, and even at Pembina the Clay-colored Bunting takes the place which the "Chippy" fills in the East. It is, in fact, absent from the greater part of the country surveyed.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4588	Rocky Mountains, lat. 49°.	Aug. 23, 1874	Elliott Coues.	.....	.....	.....	Skin.
4598do.....	Aug. 24, 1874	.....do.....	.....	.....	.....	.. do.
4599do.....	.....do.....	.....do.....	.....	.....	.....	.. do.

SPIZELLA PALLIDA, (Sw.) Bp.

CLAY-COLORED BUNTING.

The Western Meadow Lark, Brewer's Blackbird, and the present species were the chief birds I observed at Pembina to indicate an avifauna in any wise different from that of the Eastern Province at large, and two of these cannot be considered very strong marks, since they both occur some distance further eastward. Upon my arrival, the 1st of June, these Buntings were all paired, the males were in full song, nidification was mostly finished, and the eggs were about to be laid. The first specimen procured, June 2, contained a fully formed egg. A nest taken June 5 was scarcely completed. The first complement of eggs was taken June 11; it numbered four. I think the eggs are mostly laid by the end of the second week in June. The nest is placed in bushes, generally within a few inches of the ground. It resembles that of the Chipbird, though it is not so neatly and artistically finished, and often lacks the horse-hair lining, which is so constant and conspicuous a feature of the latter. In size it averages about three inches across outside by two in depth, with a cavity two inches wide and one and a half inches deep. The structure is of fine grasses and slender weed-stalks, with or without some fine rootlets, sometimes lined with hair, like the Chippy's, sometimes with very fine grass-tops. It is placed in a crotch of the bush or in a tuft of weeds. The copses of scrubby willows I found to be favorite nesting-places, though any of the shrubbery along the river-bank seemed to answer. On those occasions when I approached a nest containing eggs, the female fluttered silently and furtively away, without venturing a protest. The eggs I found in one case to be depos-

ited daily till the complement was filled. They measure 0.62 in length by 0.50 in breadth on an average. The ground-color is light dull green, sparsely but distinctly speckled with some rich and other darker shades of brown, these markings being chiefly confined to the larger end, or wreathed about it, though there are often a few specks here and there over the rest of the surface. From the earliness of the first sets of eggs, I suppose that two broods may be reared each season.

The Buntings were very numerous about Pembina, and during the breeding-season became conspicuous from the habit of the males at this season of mounting to the tops of the bushes and singing continually. The song is simple, but voluble and earnest, as if the birds gave the whole of their minds to it—as is doubtless the fact. It consists of three notes and a trill. The song ceases with the end of the breeding-season, when the birds retain nothing but their slight chirp. With its cessation, the characteristic breeding-habit of mounting the bushes is given up, and the birds become less conspicuous, though really more numerous than ever, from the accession of the new broods. They then go in little troops, which haunt all the shrubbery and mix intimately with the other Sparrows which frequent like situations. They are not, however, to be found on the prairie at any considerable distance from woods or shrubby undergrowth. As the season advanced, and during my progress westward, I found them in equal abundance on Pembina and Turtle Mountains and along the Mouse River.

The next season none were noticed in the Upper Missouri country. They cannot be so numerous in this region, for I could hardly have overlooked them altogether. Nevertheless, they extend across the country to the Rocky Mountains, as specimens were procured west of the Sweetgrass Hills.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2790	♂	Pembina, Dak.	June 3, 1873	Elliott Cones.	.....	.....	.....	Skin; contained egg ready for extrusion.
2838do.....	June 4, 1873	.....do.....	5.25	7.25	.....	Skin.
2856do.....	June 5, 1873	.....do.....	5.00	7.60	.....	.....do.
2857do.....	.....do.....	.....do.....	5.10	7.50	.....	.....do.
2858do.....	.....do.....	.....do.....	5.30	7.60	.....	.....do.
2867do.....	.....do.....	.....do.....	.....	.....	.....	Nest; parents Nos. 2857, 2858.
2879do.....	June 6, 1873	.....do.....	5.40	7.70	.....	Skin.
2880do.....	.....do.....	.....do.....	5.50	8.00	.....	.....do.
2881do.....	.....do.....	.....do.....	5.40	7.70	.....	.....do.
2882do.....	.....do.....	.....do.....	5.20	7.40	.....	.....do.
2901do.....	June 7, 1873	.....do.....	5.25	7.75	.....	.....do.
2902do.....	.....do.....	.....do.....	5.30	7.50	.....	.....do.
2903do.....	.....do.....	.....do.....	5.20	7.60	.....	.....do.
2904do.....	.....do.....	.....do.....	5.50	7.70	.....	.....do.
2905do.....	.....do.....	.....do.....	5.20	7.40	.....	.....do.
2906do.....	.....do.....	.....do.....	5.30	7.90	.....	.....do.
2907do.....	.....do.....	.....do.....	5.50	7.70	.....	.....do.
2908do.....	.....do.....	.....do.....	5.30	7.80	.....	.....do.
2909do.....	.....do.....	.....do.....	5.50	7.90	.....	.....do.
2930do.....	June 11, 1873	.....do.....	.....	.....	.....	Nest, with 4 eggs.

List of specimens—Continued.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2986	♂	Pembina, Dak.	June 11, 1873	Elliott Coues.	5.10	7.60	.....	Skin.
2967	do	June 13, 1873	do .....	.....	.....	.....	do.
2979	do	June 14, 1873	do	5.00	7.50	.....	do.
2966	do	do	do	5.75	.....	.....	Skin; nest with 3 eggs.
2987	do	do	do .....	.....	.....	.....	Skin; nest with 4 eggs.
2995	♂	do	June 16, 1873	do	5.25	7.60	.....	Skin.
3118	do	June 22, 1873	do .....	.....	.....	.....	Egg.
3285	50 miles west Pembina Mountains.	July 15, 1873	do	5.40	8.00	.....	Skin.
3298	do	July 16, 1873	do .....	.....	.....	.....	do.
3332	Turtle Mt., Dak ..	July 20, 1873	do .....	.....	.....	.....	do.
3339	do	do	do .....	.....	.....	.....	do.
3346	do	July 23, 1873	do .....	.....	.....	.....	do.
3347	do	do	do .....	.....	.....	.....	do.
3348	do	do	do .....	.....	.....	.....	do.
3352	Mouse River, Dak ..	July 30, 1873	do .....	.....	.....	.....	do.
3359	do	do	do .....	.....	.....	.....	do.
3394	do	Aug. 2, 1873	do .....	.....	.....	.....	do.
3416	Turtle Mt., Dak ..	Aug. 8, 1873	do .....	.....	.....	.....	do.
3490	Mouse River, Dak ..	Aug. 13, 1873	do	4.65	8.60	.....	do.
3598	do	Aug. 30, 1873	do .....	.....	.....	.....	do.
3735	Long Coteau River, Dak.	Sept. 8, 1873	do	5.25	7.50	2.30	do.
3804	Mouse River, Dak ..	Sept. 22, 1873	do	5.60	7.75	2.40	do.
3805	do	do	do	5.90	8.10	2.50	do.
4339	West of Sweetgrass Hills.	Aug. 8, 1874	do .....	.....	.....	.....	do.
4372	do	Aug. 9, 1874	do	5.35	8.50	2.80	do.

JUNCO HYEMALIS, (Linn.) Sel.

EASTERN SNOWBIRD.

The Snowbird appeared along the Mouse River about the middle of September in troops, as usual, and at once became abundant. I had expected to find it breeding on Pembina and Turtle Mountains, and still judge it likely that it does so, though it did not come under my observation. It may not be generally known that in the Eastern States it breeds as far south as Virginia and the Carolinas, if not still farther. While on the South Virginian Alleghanies, in the summer of 1875, at an altitude of about 5,000 feet, I scared a female off her nest, which contained four eggs. This southerly breeding-range in the mountains explains the sudden appearance of the birds upon the first cold snap in October. While in the Rocky Mountains, in August, 1874, I expected to find either this species or *J. oregonus*, but none appeared in the vicinity of our camp. The Mouse River specimens seem to be pure *hyemalis*, though the *Zonotrichia* of this same locality is *Z. intermedia*, not *Z. leucophrys*.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3767	Mouse River, Dak ..	Sept. 16, 1873	Elliott Coues.	.....	.....	.....	Skin.
3876	♂	do	Oct. 5, 1873	do .....	.....	.....	.....	do.

ZONOTRICHIA QUERULA, (*Nutt.*) *Gamb.*

HARRIS'S FINCH.

A fine series of specimens of this handsome and interesting Finch was secured at our Mouse River Dépôt during the latter half of September and beginning of October. Its breeding-grounds are as yet unknown; but these birds, at any rate, came from the north, and, as I was out every day with my gun about that time, the earliest date given below (September 18) probably indicates very nearly the time of their arrival. The previous year I had observed the birds at Fort Randall, Dakota, in October; but none remained through the winter in that locality. According to Prof. F. H. Snow, of Kansas, they winter in that State, and they have been observed by others in abundance during the migrations along the Lower Missouri, in Missouri and Iowa. I saw none at Pembina, where I suppose I arrived after they had passed on. The distribution of the species is very limited, and, as already observed, its breeding-range is not yet made out. My Mouse River specimens are, I think, the westernmost hitherto recorded. These were all in fall plumage, apparently of the first year, though a portion of the White-crowned Sparrows that came with them had perfect head-markings. They came very quietly from the north, and all at once thronged the bushes and shrubbery along the banks of the stream, in company with several other brush-loving Fringillines. At this period, they were songless, and had no note excepting a weak chirp. When disturbed at their avocations, they have a habit of flying up to the tops of the bushes to see what the fuss is about, and in this conspicuous position they may of course be readily destroyed. Their general habits appear to be much the same as those of the other *Zonotrichiæ*, though their large size, reddishness, and heavy dark markings underneath make them look somewhat like Fox Sparrows.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3770	♂	Mouse River, Dak ..	Sept. 18, 1873	Elliott Cones.	7.75	11.25	3.50	Skin.
3771	♂	do	do	do	7.50	11.10	3.40	do.
3772	♂	do	do	do	7.25	10.85	3.40	do.
3788	♂	do	Sept. 19, 1873	do	7.40	11.20	3.50	do.
3806	♂	do	Sept. 22, 1873	do	7.30	10.70	3.40	do.
3807	♂	do	do	do .....	.....	10.20	3.00	do.
3837	♂	do	Sept. 30, 1873	do	7.50	11.25	3.40	do.
3838	♂	do	do	do	7.60	10.90	3.40	do.
3871	♂	do	Oct. 3, 1873	do	7.60	11.25	3.40	do.

ZONOTRICHIA LEUCOPHRYS INTERMEDIA, *Ridg.*

RIDGWAY'S SPARROW.

I was rather surprised to find that the White-crowned Sparrows of the Mouse River country were of this variety instead of typical *leuco-*

phrys, but such was the case, as shown beyond question by some of the specimens taken with perfect head-dress. In the Rocky Mountains, this variety was of course to be expected. In the latter region, specimens were procured in August, probably bred in the vicinity, as no migration had then begun; but in the rest of the country explored, no *Zonotrichia* were seen until the coming of the fall birds, when they became at once abundant in the shrubbery of the streams, about the middle of September.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3773	...	Mouse River, Dak ..	Sept. 18, 1873	Elliott Coues.	6.25	9.10	2.95	Skin.
3774	...	do	do	do	6.60	9.60	3.00	do.
3775	...	do	do	do	6.75	10.00	3.10	do.
3776	...	do	do	do	6.70	9.90	3.05	do.
3777	...	do	do	do	6.75	10.00	3.05	do.
3778	...	do	do	do	7.00	10.20	3.20	do.
3792	...	do	Sept. 19, 1873	do	6.50	9.50	2.90	do.
3793	...	do	do	do	6.30	9.10	2.80	do.
3808	...	do	Sept. 22, 1873	do	6.50	9.70	3.10	do.
3809	...	do	do	do	6.85	10.00	3.10	do.
3810	...	do	do	do	6.65	9.65	3.00	do.
3811	...	do	do	do	7.00	10.00	3.10	do.
3812	...	do	do	do	6.75	9.75	3.15	do.
3850	...	do	Sept. 30, 1873	do	6.75	9.75	3.15	do.
4533	...	Rocky Mountains, latitude 49°.	Aug. 20, 1874	do .....	...	...	...	do.
4564	...	do	Aug. 22, 1874	do .....	...	...	...	do.

MELOSPIZA LINCOLNI, (Aud.) Bd.

LINCOLN'S FINCH.

Observed in large numbers during the latter part of September and beginning of October, along the Mouse River. It arrived from the north at the same time that the Snowbirds and *Zonotrichia* did, and during the summer was only observed in the Rocky Mountains late in August. It is a species of general distribution in North America, but it may be questioned whether it breeds anywhere in this latitude except in the Rocky Mountains. As observed along Mouse River, it was a shy and secretive bird, spending its time near the ground in the tangle along the river-bottom, and plunging into the thickest retreats upon slight alarm, with a low, rapid, jerky flight. The only note I heard was a slight chirp. Altogether its habits appear to most closely resemble those of the Swamp Sparrow, to which it is so nearly related in physical characters.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3763	...	Mouse River, Dak.	Sept. 16, 1873	Elliott Coues.	5.75	7.80	2.50	Skin.
3764	...	do	do	do	5.75	7.75	2.50	do.
3784	...	do	Sept. 18, 1873	do	5.75	7.75	2.40	do.
3789	...	do	Sept. 19, 1873	do	5.75	7.90	2.40	do.
3813	...	do	Sept. 22, 1873	do	6.00	8.25	2.50	do.
3814	...	do	do	do	6.10	8.20	2.50	do.
3815	...	do	do	do	5.80	7.80	2.40	do.
3816	...	do	do	do	5.85	8.30	2.50	do.
3874	...	do	Oct. 5, 1873	do	5.50	8.10	2.50	do.
4589	...	Rocky Mountains, latitude 49°.	Aug. 23, 1874	J. H. Batt.	...	...	...	do.

MELOSPIZA PALUSTRIS, (Wils.) Bd.

SWAMP SPARROW.

This is another of the several species of the family which were observed during the autumnal movement at the camp on Mouse River, from the middle of September until I left the country, the second week in October. It haunts the closest and most impenetrable shrubbery, to which it clings with such pertinacity that it is liable to be overlooked unless diligently sought for. I have seldom seen it in plain view, and never, to my recollection, at any distance from the ground, or on the outskirts of the undergrowth. It has been commonly considered confined to the Eastern Province, and the specimens below enumerated are, with one exception, the westernmost hitherto recorded. Dr. H. C. Yarrow, however, found it in Southern Utah some four years ago. The difficulty of tracing it westward, where it seems to be less abundant than it is in the Atlantic districts, is probably one reason why its distribution was long supposed to be more restricted than it really is.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3762	...	Mouse River	Sept. 16, 1873	Elliott Coues	...	...	...	Skin.
3790	...	do	Sept. 19, 1873	do	...	...	...	do.
3791	...	do	do	do	...	...	...	do.
3830	...	do	Sept. 27, 1873	do	5.60	8.10	2.35	do.
3867	...	do	Oct. 1, 1873	do	5.90	8.10	2.50	do.
3873	♀	do	Oct. 5, 1873	do	5.50	7.70	2.25	do.

MELOSPIZA MELODIA, (Wils.) Bd.

SONG SPARROW.

By an oversight, I stated in the "Birds of the Northwest" that I did not find this species in Northern Dakota. A specimen, however, was procured at Turtle Mountain early in August. It appears to be rare in this part of the country, as this was the only one taken, and I find no record respecting it except in my register of specimens.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3395	Turtle Mount'n, Dak.	Aug. 2, 1873	Elliott Coues.	.....	.....	.....	Skin.

CALAMOSPIZA BICOLOR, (*Towns.*) *Bp.*

LARK BUNTING.

The apparent absence of this species from the Red River region, with its abundance on the Missouri, is one of the strong marks of difference in the fauna of the two watersheds. It is an abundant and characteristic species of the sage-brush country of the Upper Missouri, and extends thence to the Rocky Mountains through the Milk River region. Specimens were taken soon after leaving Fort Buford, and others at various points to the headwaters of Milk River. The bird is rather a late breeder, unless the eggs found July 9 and 21 were those of a second brood, which is probable, since at no time did I hear the mating song of the males, or witness the singular aerial excursions which mark the same period of the bird's life, like those of the Yellow-breasted Chat. The earliest male specimens procured were already in worn and faded plumage. The eggs are four or five in number, measuring 0.80 to 0.95 in length by about 0.65 in breadth; they are pale bluish-green, like those of *Sialia*, and normally unmarked, though occasionally sparsely dotted. Two Cowbird eggs were found in one of the nests secured. The nest is sunken in the ground, so that the brim is flush with the surface, and is built of grasses and weed-stalks, lined with similar but finer material.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4034	Quaking Ash River, Mont.	June 26, 1874	Elliott Coues	.....	.....	.....	Skin.
4035	do	do	do	.....	.....	.....	do.
4183	Near Frenchman's River, Mont.	July 9, 1874	do	.....	.....	.....	Nest with 2 eggs and of 2 <i>Molothrus</i> .
4186	do	do	do	.....	.....	.....	Skin.
4248	♂	Two Forks of Milk River.	July 18, 1874	do	.....	.....	.....	do.
4250	Near Two Forks of Milk River.	July 21, 1874	do	.....	.....	.....	Set of 4 eggs.
4341	♂	West of Sweetgrass Hills, Mont.	Aug. 8, 1874	do	.....	.....	.....	Skin.
4342	do	do	do	.....	.....	.....	do.
4343	do	do	do	.....	.....	.....	do.
4344	do	do	do	.....	.....	.....	do.
4373	♂+♀	do	Aug. 9, 1874	do	6.75	10.35	3.40	do.

GONIAPHEA LUDOVICIANA, (Linn.) Bowd.

ROSE-BREASTED GROSBEEK.

I was pleased to find this truly elegant bird breeding in abundance at Pembina in the undergrowth of the heavy timber along the banks of the Red River, as I had never before enjoyed a good opportunity of studying its habits. It was not observed at any other point along the Line, though stated to penetrate as far northward as the Saskatchewan region. A fine *suite* of specimens was carefully preserved, and several sets of eggs procured. The birds were mating and in full song by the beginning of June, when I arrived upon the spot, but no nests were found until the 21st. Four was the largest number found in a nest; others contained only two or three, but in all incubation had begun. The only nest I took myself was built in a thick grove of saplings, about eight feet from the ground; it contained three eggs averaging an inch in length by three-fourths in breadth. These were of a pale dull green color, profusely speckled with reddish-brown. The nests were rather rude and bulky structures, about six inches across outside by four in depth, with the cavity only half as much each way, owing to the thickness of the loose walls. They were built entirely of the slender tortuous stems and rootlets of some climbing shrub, for the most part loosely interlaced, though more firmly, evenly, and circularly laid around the brim, and finished sometimes with a little horse-hair lining, sometimes without. The male at this season has a delightful song. The female is, however, nearly voiceless, and of extremely retiring disposition.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2794	♂	Pembina, Dak	June 2, 1873	Elliott Coues.	7.75	12.75	.....	Skin.
2795	♂	do	do	do	7.75	12.75	.....	do.
2796	♂	do	do	do	7.75	12.75	.....	do.
2797	♂	do	do	do	8.10	13.00	.....	do.
2798	♂	do	do	do	8.00	12.50	.....	do.
2841	♂	do	June 4, 1873	do	8.00	13.00	.....	do.
2842	♂	do	do	do	7.75	12.75	.....	do.
2851	♂	do	June 5, 1873	do	8.10	12.75	.....	do.
2852	♂	do	do	do	7.75	12.50	.....	do.
2928	♂	do	June 9, 1873	do	7.80	12.60	.....	do.
2929	♂	do	do	do	8.00	13.00	.....	do.
2965	♂	do	June 13, 1873	do	7.90	12.90	.....	do.
3065	♂	do	June 21, 1873	do .....	.....	.....	.....	Nest with 3 eggs.
3113	♂	do	June 22, 1873	do .....	.....	.....	.....	Two eggs.
3129	♂	do	June 23, 1873	do .....	.....	.....	.....	Nest with 4 eggs.
3170	♂	do	June 25, 1873	do .....	.....	.....	.....	Skin.

PIPILO ERYTHROPHthalmus, (Linn.) Vieill.

TOWHEE BUNTING.

The *Pipilo* of the Red River Valley is clearly referable to true *erythrophthalmus*, though even in this locality, decidedly Eastern in the com-

plexion of its avifauna, there is a slight tendency toward the characters of *maculatus* var. *arcticus*.

The bird was not uncommon about Pembina, where it was breeding in June. A nest was taken June 11, containing two eggs that belonged in it, together with *three* that did not, having been deposited by the Cowbirds.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2802	♂	Pembina, Dak	June 3, 1873	Elliott Coues.	8.25	11.50	.....	Skin.
2803do.....	.....do.....	.....do.....	.....	.....	.....	.....do.....
2831do.....	June 11, 1873	.....do.....	.....	.....	.....	Nest with 2 eggs, and 3 eggs of <i>Molothrus</i> .
2976	♀	.....do.....	June 14, 1873	.....do.....	7.75	10.75	.....	.....

PIPILO MACULATUS ARCTICUS, (Sw.) Coues.

SPOTTED TOWHEE.

Along the parallel of 49°, this form becomes established at least as far east as the Mouse River, where I secured a specimen in September. Along the Missouri, *erythrophthalmus* prevails, according to Dr. Hayden, up to latitude 43°, beyond which it is replaced by the present. The Spotted Towhees were found to be abundant along the Upper Missouri, above Fort Buford, in the undergrowth of the river-bottoms; were not noticed along the tributaries of the Milk River, which are less suited to their wants, nor of course on the open prairie between the successive northern affluents. They were again met with, however, in the Rocky Mountains. It is also known to extend northward into the Saskatchewan country. Excepting its different call-note, which curiously resembles that of a Catbird, its habits and manners are the counterpart of those of the Eastern form.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3760	Mouse River, Dak.	Sept. 16, 1873	Elliott Coues	.....	.....	.....	Skin.
4029	Quaking Ash River, Mont.	June 26, 1874	.....do.....	.....	.....	.....	.....do.....

DOLICHONYX ORYZIVORUS, (Linn.) Sw.

BOBOLINK.

At Pembina, in June, Bobolinks were breeding in large numbers on the open prairie adjoining the river. The ground near the river has a meadowy character, which seems to exactly suit them, and they were

evidently perfectly at home. The gaily dressed males, in the pink of perfection as to their nuptial attire, and singing with the utmost volubility, were very conspicuous objects all over the prairie; but the secretive and homely females were seldom observed unless accidentally flushed from the grass. The nest is so well hidden that I did not discover one, though I searched long and carefully on more than one occasion; and I am therefore unable to state the exact period of laying. To judge from the actions of the birds and the complete separation and hiding of the females, incubation was in progress by the second week in June.

On the same parallel of latitude, I traced the species westward quite to the Rocky Mountains, where it was not uncommon in August about Chief Mountain Lake. In the Upper Missouri country, however, I failed to observe a single individual. The sterile, alkaline, and sagebrush nature of most of this region seems to be ill-suited to its wants.

The very highly plumaged specimens taken at Pembina have been made by Mr. R. Ridgway the basis of a var. *albinucha*, the buffy patch upon the back of the neck being nearly white in these cases.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2862	♂	Pembina, Dak	June 5, 1873	Elliott Cones.	7.25	12.10	.....	Skin.
2863do.....	.....do.....	.....do.....	7.10	11.90	.....	.....do.
2885do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
2886do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
2982do.....	June 14, 1873	.....do.....	.....	.....	.....	.....do.
2989do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
2990do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
3236do.....	July 8, 1873	.....do.....	.....	.....	.....	.....do.
3298	50 miles west of Pembina Mountains.	July 15, 1873	.....do.....	6.90	11.00	.....	.....do.
3534	Mouse River, Dak	Aug. 16, 1873	.....do.....	.....	.....	.....	.....do.
4614	♂	Rocky Mountains, latitude 49°.	Aug. 26, 1874	J. H. Batty.	.....	.....	.....	.....do.
4615	♂	.....do.....	.....do.....	.....do.....	.....	.....	.....	.....do.

MOLOTHRUS ATER, (Bodd.) Gray.

COWBIRD.

I have nowhere found the Cowbird more abundant than it is in summer throughout the region surveyed by the Commission. Even were the birds not seen, ample evidence of their presence in numbers would be found in the alien eggs with which a majority of the smaller birds of that country are pestered. Scarcely any species, from the little Flycatcher (*E. minimus*) and the Clay-colored Bunting up to the Towhee and Kingbird, escapes the infliction. The breeding species are there fewer than in many or most localities in the East, though abounding in individuals; both of which circumstances tend to increase the proportion of cases in which the parasitism is accomplished. It has been customary—and very properly so—to record the various species which suffer from the Cowbird; but it seems probable that when the whole truth is

known very few of those that breed within the Cowbird's summer range will be found to be passed over—among those whose eggs are not considerably larger than its own, and whose nests are accessible to the vagrant.

Although, as I have said, the Cowbirds are distributed over the whole country, yet they focus in and about the settlements; and by the same token they seem to follow the travelling parties and camp with them. The same is the case in all other parts of the West where I have observed the bird. They are like the small wolves (coyotés) in this respect. Being rarely molested, they acquire a wonderful heedlessness, and ramble unconcernedly through the camp under the feet of the horses and mules, and almost under our own. In July and August particularly, when the year's young are first on wing, gathering in small troops, they appear to have no comprehension of danger whatever, and are occasionally punished with a crack from the "black-snake" of some facetious teamster,—and, unlike a mule, they are never of any use afterward. One was actually caught by hand as it fluttered about a man's head, apparently intending to alight upon what it may have supposed to be a peculiar mule. Some time in August the birds become less numerous, apparently moving off somewhere. There seems to be something not yet clearly understood in their movements at this season. How long they actually remain in the country I am unable to say.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2840	♂	Pembina, Dak	June 4, 1873	Elliott Coues	7.75	13.50		Skin.
2932		do	June 11, 1873	do				Three eggs in nest of <i>Pipilo</i> .
3046		do	June 19, 1873	do				Two eggs in nest of <i>Spizella pallida</i> .
3078	♂	do	June 20, 1873	do				Skin.
3079		do	do	do				do.
3080		do	do	do				do.
3087		do	June 21, 1873	do				Egg in nest of <i>Empidonax minimus</i> .
3106		do	June 22, 1873	do				Skin.
3229		do	July 7, 1873	do				do.
3230		do	do	do				do.
3231		do	do	do				do.
3237		do	July 8, 1873	do				do.
3238		do	do	do				do.
3239		do	do	do				do.
3307		75 miles west of Pembina Mountains.	July 17, 1873	do				do.
3452		Mouse River, Dak.	Aug. 9, 1873	do				do.
3554		do	Aug. 22, 1873	do				do.
3555		do	do	do				do.
3556		do	do	do				do.
3557		do	do	do				do.
4184		Near Frenchman's River, Mont.	July 9, 1874	do				Two eggs from nest of <i>Calamospiza</i> .
4185 bis		do	do	do				One egg from nest of <i>Tyrannus carolinensis</i> .

AGELÆUS PHŒNICEUS, (Linn.) Vieill.

RED-WINGED BLACKBIRD.

Although inhabiting the country at large, at least as far northwest as the region of the Saskatchewan, the Marsh Blackbird is necessarily somewhat localized in the details of its distribution, owing to the requirements of its economy. It is certainly not a conspicuous feature of the region surveyed, the greater portion of which is unsuited to its wants. Even at Pembina it was not the leading Blackbird, being outnumbered both by the Yellowheads and Brewer's. I find in my notebooks no record of observation respecting it except in this locality, but this may have been my fault of neglecting to note the occurrence of so common a species at other points.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3052	♂♂	Pembina, Dak	June 19, 1873	Elliott Coues.	.....	.....	.....	Skin.
3053		.....do .....	.....do .....	.....do .....	.....	.....	.....	.....do.

XANTHOCEPHALUS ICTEROCEPHALUS, (Bp.) Bd.

YELLOW-HEADED BLACKBIRD.

In the breeding season, the Yellow-headed Blackbird gathers in colonies on some marshy spot. I have observed it at this period in various portions of the West, from Northern Dakota to New Mexico, always noting its preference at this time for watery localities, however generally it may disperse over the country at other seasons. Its general distribution and migrations are given in my account of the species in the "American Naturalist" (v. 1871, p. 195) and "Birds of the Northwest" (p. 188). It is stated by Richardson to be abundant in the Fur Countries to about 58° north, reaching the Saskatchewan region by the 20th of May.

At Pembina it was breeding abundantly in the prairie sloughs, together with great numbers of Black Terns and a few Redwings. In one of the sloughs where I spent most of the day wading about, sometimes up to my waist and in some spots considerably deeper (as I was discouraged to find on getting into them), a large number of nests were found, mostly containing nestlings, but a few with eggs. This the last week of June. The nests were built much like those of the Long-billed Marsh Wren, as far as the situation goes, being fixed to a tuft of reeds or bunch of tall rank marsh-grass, some stems of which pass through the substance. They were placed at varying elevations, but always far enough above the water to be out of danger of inundation. The nest

is a light, dry, rustling structure, swaying with the motion of the reed to which it is affixed, built of the same materials as those which support it, which are woven and plaited together; no mud is used, nor is there any special lining; the brim is thick and somewhat folded over, like the seam of a garment; but I never saw a nest, among the many examined, which was arched over, as stated by some authors. The diameter outside is 5 or 6 inches, and the depth nearly as much. From three to six eggs or young birds were found in different nests; the former measure from about an inch and an eighth in length by three-fourths in breadth. The ground-color is grayish-green; this is thickly spotted with different shades of reddish-brown, sometimes so profusely that the ground-color is obscured, especially at the larger end.

Since I stated, in the "Birds of the Northwest", that I had not then seen the species on the Missouri higher up than Leavenworth, I observed it above Buford during the season of 1874.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3005	♂	Pembina, Dak.	June 17, 1873	Elliott Coues.	10. 00	16. 25	.....	Skin.
3006	do	do	do	10. 00	16. 30	.....	do.
3007	do	do	do	8. 00	13. 65	.....	do.
3008	do	do	do	10. 25	16. 75	.....	do.
3009	do	do	do .....	.....	.....	.....	do.
3010	do	do	do .....	.....	.....	.....	do.
3011	do	do	do .....	.....	.....	.....	do.
3012	do	do	do .....	.....	.....	.....	do.
3013	do	do	do .....	.....	.....	.....	do.
3014	do	do	do .....	.....	.....	.....	do.
3015	do	do	do .....	.....	.....	.....	do.
3165	do	June 25, 1873	do .....	.....	.....	.....	do.
3166	do	do	do	8. 25	13. 75	4. 60	do.
3167	do	do	do .....	.....	.....	.....	do.
3168	do	do	do .....	.....	.....	.....	do.
3169	do	do	do	10. 50	16. 50	5. 60	do.
3182	do	June 27, 1873	do .....	.....	.....	.....	do.
3183	do	do	do .....	.....	.....	.....	do.
3184	do	do	do .....	.....	.....	.....	Skin (nestling).
3185	do	do	do .....	.....	.....	.....	do.
3396	Turtle Mountain, Dak.	Aug. 2, 1873	do .....	.....	.....	.....	Skin (young).
3491	♂	Mouse River, Dak. ...	Aug. 13, 1873	do	8. 70	14. 10	.....	Skin.
3550	do	Aug. 22, 1873	do	10. 30	17. 00	.....	do.
3551	do	do	do	10. 75	17. 25	.....	do.

STURNELLA MAGNA NEGLECTA, Aud.

WESTERN MEADOW LARK.

All the Meadow Larks observed in this region, even at Pembina, where the fauna is so thoroughly Eastern, were typical *neglecta*. They are a common bird of the whole country, though perhaps less numerous as we approach the Rocky Mountains, in the very arid Milk River region. They are fond of good soil, and seemed to me to be scarcely so abundant, even in the Red River region, as I had observed them to be in more fertile portions of Southwestern Dakota, as the vicinity of Fort Randall, for example, and thence to Sioux City. They reach this part of the country early in April. Toward the end of June, in the region above

Fort Buford, several sets of eggs were procured, and at the same time young birds were already on wing.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2853	♂	Pembina, Dak	June 5, 1873	Elliott Cones	10.65	14.50	.....	Skin.
3042	♂	do	June 17, 1873	do .....	.....	.....	.....	do.
3103	♂	do	June 21, 1873	do .....	.....	.....	.....	do.
3213	♂	do	June 30, 1873	do .....	.....	.....	.....	do.
3336	♂	Turtle Mountain, Dak.	July 20, 1873	do .....	.....	.....	.....	do.
3402	♂	do	Aug. 2, 1873	do .....	.....	.....	.....	do.
3403	♂	do	do	do .....	.....	.....	.....	do.
4023	♂	Big Muddy River, Mont.	June 22, 1874	do .....	.....	.....	.....	do.
4028	♂	Quaking Ash River, Mont.	June 26, 1874	do .....	.....	.....	.....	Three eggs.
4079	♂	Porcupine River, Mont.	June 28, 1874	do .....	.....	.....	.....	Five eggs.

ICTERUS SPURIUS, (*Linn.*) *Bp.*

ORCHARD ORIOLE.

One specimen, early in June, at Pembina; the only locality where observed.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2897	♂	Pembina, Dak	June 6, 1873	Elliott Cones.	.....	.....	.....	Skin.

ICTERUS BALTIMORE, (*Linn.*) *Daud.*

BALTIMORE ORIOLE.

Abundant at Pembina, the only locality where it was found. Like the Bobolinks of this region, the Orioles acquire an extremely brilliant plumage, in which the usual orange is often heightened into an intense flame-color. The same intensity of coloration has been noted by Mr. Allen in the cases of the Kansas Orioles. Several nests with eggs were taken during the latter part of the month of June.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2793	♂	Pembina, Dak	June 2, 1873	Elliott Cones	.....	.....	.....	Skin.
2833	♂	do	June 4, 1873	do	7.90	12.30	.....	do.
2834	♂	do	do	do	7.90	12.30	.....	do.
2940	♂	do	June 11, 1873	do .....	.....	.....	.....	do.
2941	♂	do	do	do .....	.....	.....	.....	do.
2942	♂	do	do	do .....	.....	.....	.....	do.
2991	♂	do	June 14, 1873	do .....	.....	.....	.....	do.
3121	♂	do	June 22, 1873	do .....	.....	.....	.....	Nest with 3 eggs.
3210	♂	do	June 28, 1873	do .....	.....	.....	.....	Nest with 4 eggs.
3234	♂	do	July 8, 1873	do .....	.....	.....	.....	Skin.

SCOLECOPHAGUS CYANOCEPHALUS, (Wagl.) Cab.

BLUE-HEADED GRACKLE.

This is the characteristic Blackbird of the whole region in summer. Hundreds spend this season at Fort Pembina. It is no less abundant at Fort Buford, and in fact extends over the whole area. This is probably near its northern limit. Its general range includes the whole of the United States, from a little west of the Mississippi to the Pacific. It breeds indifferently throughout this area, but retires in winter from the northern portions of its habitat. In summer, it is the only representative of its genus in Dakota and Montana, but in the fall, after the migration, it is associated with *S. ferrugineus*. A nest containing three eggs was taken on the Quaking Ash River, Montana, June 26, 1874.

A full account of the habits of the species will be found in the "Birds of the Northwest", pp. 199-202.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2981	♂	Pembina, Dak	June 14, 1873	Elliott Coues				Skin.
2997	♂	do	June 16, 1873	do	9.75	16.50	5.70	do.
2998	♂	do	do	do	9.00	15.00	4.75	do.
3043	♂	do	June 18, 1873	do				do.
3055	♂	do	June 19, 1873	do				do.
3077	♂	do	June 20, 1873	do				do.
3107	♂	do	June 22, 1873	do				do.
3108	♂	do	do	do				do.
3109	♂	do	do	do				do.
3134	♂	do	June 24, 1873	do				do.
3135	♂	do	do	do				do.
3765	♂	Mouse River, Dak	Sept. 16, 1873	do	9.75	15.20	4.80	do.
3766	♂	do	do	do	9.50	14.85	4.60	do.
3795	♂	do	Sept. 19, 1873	do	10.10	16.00	5.15	do.
3796	♂	do	do	do	10.15	16.25	5.15	do.
3797	♂	do	do	do	10.25	16.30	5.25	do.
3798	♂	do	do	do	9.70	15.25	4.90	do.
3799	♂	do	do	do	9.00	14.50	4.50	do.
3800	♂	do	do	do	9.50	14.80	4.75	do.
3841	♂	do	Sept. 30, 1873	do	9.30	15.00	4.70	do.
3842	♂	do	do	do	9.00	13.75	4.25	do.
3843	♂	do	do	do	9.10	13.80	4.25	do.
3844	♂	do	do	do	9.00	13.65	4.20	do.
3845	♂	do	do	do	8.90	13.70	4.25	do.
3846	♂	do	do	do	9.10	14.00	4.35	do.
3847	♂	do	do	do	9.50	14.50	4.40	do.
3848	♂	do	do	do	9.60	14.75	4.60	do.
3872	♂	do	Oct. 3, 1873	do	9.50	14.70	4.60	do.
4027	♀	Quaking Ash River, Mont.	June 26, 1874	do				Nest with 3 eggs.
4627	♀	Rocky Mts., lat. 49°	Aug. 28, 1874	do				Skin.

NOTE.—The above list includes some specimens (from Mouse River) of *S. ferrugineus*, not now extractable without reference to the specimens themselves, the numbers having been confused; but the summer birds are all *cyanocephalus*.

SCOLECOPHAGUS FERRUGINEUS, (Gm.) Sw.

RUSTY GRACKLE.

The Rusty Grackle enters Dakota from the north in September, and then mixes indiscriminately with the preceding species; but the two will not be found together during the breeding-season. At our camp

SCOLECOPHAGUS CYANOCEPHALUS, (Wagl.) Cab.

BLUE-HEADED GRACKLE.

This is the characteristic Blackbird of the whole region in summer. Hundreds spend this season at Fort Pembina. It is no less abundant at Fort Buford, and in fact extends over the whole area. This is probably near its northern limit. Its general range includes the whole of the United States, from a little west of the Mississippi to the Pacific. It breeds indifferently throughout this area, but retires in winter from the northern portions of its habitat. In summer, it is the only representative of its genus in Dakota and Montana, but in the fall, after the migration, it is associated with *S. ferrugineus*. A nest containing three eggs was taken on the Quaking Ash River, Montana, June 26, 1874.

A full account of the habits of the species will be found in the "Birds of the Northwest", pp. 199-202.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen and remarks.
2981	♂	Pembina, Dak	June 14, 1873	Elliott Coues				Skin.
2997	♂	do	June 16, 1873	do	9.75	16.50	5.70	do.
2998	♂	do	do	do	9.00	15.00	4.75	do.
3043	♂	do	June 18, 1873	do				do.
3055	♂	do	June 19, 1873	do				do.
3077	♂	do	June 20, 1873	do				do.
3107	♂	do	June 22, 1873	do				do.
3108	♂	do	do	do				do.
3109	♂	do	do	do				do.
3134	♂	do	June 24, 1873	do				do.
3135	♂	do	do	do				do.
3765	♂	Mouse River, Dak	Sept. 16, 1873	do	9.75	15.20	4.80	do.
3766	♂	do	do	do	9.50	14.85	4.60	do.
3795	♂	do	Sept. 19, 1873	do	10.10	16.00	5.15	do.
3796	♂	do	do	do	10.15	16.25	5.15	do.
3797	♂	do	do	do	10.25	16.30	5.25	do.
3798	♂	do	do	do	9.70	15.25	4.90	do.
3799	♂	do	do	do	9.00	14.50	4.50	do.
3800	♂	do	do	do	9.50	14.80	4.75	do.
3841	♂	do	Sept. 30, 1873	do	9.30	15.00	4.70	do.
3842	♂	do	do	do	9.00	13.75	4.25	do.
3843	♂	do	do	do	9.10	13.80	4.25	do.
3844	♂	do	do	do	9.00	13.65	4.20	do.
3845	♂	do	do	do	8.90	13.70	4.25	do.
3846	♂	do	do	do	9.10	14.00	4.35	do.
3847	♂	do	do	do	9.50	14.50	4.40	do.
3848	♂	do	do	do	9.60	14.75	4.60	do.
3872	♂	do	do	do	9.50	14.70	4.60	do.
4027	♀	Quaking Ash River, Mont.	Oct. 3, 1873	do				Nest with 3 eggs.
4627	♂	Rocky Mts., lat. 49°	Aug. 28, 1874	do				Skin.

NOTE.—The above list includes some specimens (from Mouse River) of *S. ferrugineus*, not now extractable without reference to the specimens themselves, the numbers having been confused; but the summer birds are all *cyanocephalus*.

SCOLECOPHAGUS FERRUGINEUS, (Gm.) Sw.

RUSTY GRACKLE.

The Rusty Grackle enters Dakota from the north in September, and then mixes indiscriminately with the preceding species; but the two will not be found together during the breeding-season. At our camp

on the Mouse River, both species became very abundant after the second week in September, and so continued to be at the time of our departure, early in October. They associated together so intimately that a discharge into a flock of Blackbirds often brought down individuals of both species. Their habits are exactly the same, but the two species may be distinguished with little difficulty.

The foregoing tabular "List of specimens" includes, among those taken in September and October, several specimens of this species. The entry made in my register at the time did not discriminate between them, so that the numbers cannot be separated without handling the specimens, which are not conveniently accessible at time of writing.

QUISCALUS PURPUREUS *ÆNEUS*, Ridg.

BRONZED PURPLE GRACKLE.

Abundant at Pembina, where it was breeding in June in the hollows of trees. Occurred sparingly along the Mouse River in the fall, and during the last season traced westward to the Rocky Mountains. The specimens show the bronzy general coloration defined against the steel-blue head and neck, supposed to afford ground for the recognition of variety *æneus*.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent	Wing.	Nature of specimen, and remarks.
2835	♂	Pembina, Dak	June 4, 1873	Elliott Coues.	12.25	.....	.....	Skin.
2911	♂	do	June 7, 1873	do .....	.....	.....	.....	do.
2915	♂	do	June 9, 1873	do	12.00	16.50	.....	do.
2916	♂	do	do	do .....	.....	.....	.....	do.
3044	♂	do	June 18, 1873	do .....	.....	.....	.....	do.
3051	♂	do	June 19, 1873	do .....	.....	.....	.....	do.
3054	♂	do	do	do .....	.....	.....	.....	do.
3112	♂	do	June 22, 1873	do .....	.....	.....	.....	Egg.
3869	♂	Mouse River, Dak ..	Oct. 3, 1873	do	12.40	18.00	5.65	Skin.
4101	♂	Near mouth Milk River, Mont.	June 30, 1874	do .....	.....	.....	.....	do.
4626	Rocky Mountains, latitude 49°.	Aug. 28, 1874	do .....	.....	.....	.....	do.

CORVUS AMERICANUS, Aud.

COMMON CROW.

According to my observation, Crows are not very common in the region under consideration, though I saw a good many along the Mouse River. The species occurs, however, along the whole of the Missouri River. A nest containing five eggs, with the female parent, was secured on the Quaking Ash River, June 26, 1874.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4026	♀	Quaking Ash River, Mont.	June 26, 1874	Elliott Coues.	.....	.....	.....	Skin, nest, 5 eggs.

CORVUS CORAX, *Linn.*

RAVEN.

Occasionally observed, but no specimens were secured.

PICA MELANOLEUCA HUDSONICA, (*Sub.*) *Coues.*

AMERICAN MAGPIE.

No Magpies were seen in the Red River region, where, if occurring at all, I doubt their presence as far east as the river itself. During the second season, however, they were very frequently noticed at various points on the Upper Missouri and Milk Rivers, and thence to the Rocky Mountains. On the 1st of July, newly fledged birds were taken near the mouth of Milk River, and at the Sweetgrass Hills, during the first week in August, imperfectly plumaged individuals, a little over a foot long, were noticed.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4123	Near mouth of Milk River, Mont.	July 1, 1874	Elliott Coues.	.....	.....	.....	Skin.
4124	do	do	do	.....	.....	.....	do.
4316	Sweetgrass Hills, Mont.	Aug. 6, 1874	J. H. Batty	14.50	23.50	7.40	do.
4317	do	do	do	.....	.....	.....	do.
4318	do	do	do	.....	.....	.....	do.
4624	Rocky Mountains, latitude 49°.	Aug. 28, 1874	Elliott Coues.	.....	.....	.....	do.

CYANURUS CRISTATUS, (*Linn.*) *Sw.*

BLUE JAY.

Not seen west of Pembina, where it was very abundant.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2787	♂	Pembina, Dak	June 2, 1873	Elliott Coues.	.....	.....	.....	Skin.
2788	do	do	do	.....	.....	.....	do.
2789	do	do	do	.....	.....	.....	do.

PERISOREUS CANADENSIS CAPITALIS, *Bd.*

ROCKY MOUNTAIN JAY.

Only seen in the Rocky Mountains at latitude 49°, where, however, it was common and doubtless bred. The specimens secured in this locality show the restricted dark areas of the head, upon which the variety *capitalis* is based.

There is no doubt, however, that the true *P. canadensis* occurs in suitable localities in other parts of the region surveyed, since it has been ascertained by Mr. T. M. Trippe to breed in the tamarack swamps of Minnesota.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4607	♂	Rocky Mountains, latitude 49°.	Aug. 25, 1874	Elliott Coues.	12.00	17.00	5.80	Skin.
4608	♀	do	do	do	11.85	17.00	5.90	do.
4609	♀	do	do	do	11.80	17.00	5.85	do.

TYRANNUS CAROLINENSIS, (*Gm.*) *Temm.*

KINGBIRD.

Extremely numerous at Pembina, where many nests were taken after the middle of June, and traced westward as far as the Survey progressed that year. One of the nests (No. 3062) was placed on a rail fence, in the crotch formed by a post. In the Missouri region, it was equally abundant from Fort Buford to near the headwaters of the Milk River. Many nests containing two to four eggs were taken the latter part of June and early in July. One of these was particularly interesting, showing that the Summer Warbler is not the only species that gets rid of the obnoxious eggs of the Cowbird by building a second story to the nest, and thus leaving the alien egg to addle in the basement below. A nest taken near Frenchman's River, containing two eggs, seemed to be a curiously built affair, and on examining it closely I found the wrong egg embedded in its substance below the others (No. 4185). The Kingbird is not so much attached to woodland as has been supposed. I saw great numbers whilst travelling by rail, on the prairies of Minnesota and Dakota, where it seemed to be as much at home as anywhere. All things considered, it may be rated as one of the most abundant and generally diffused species of the whole region under consideration.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2799	♂	Pembina, Dak	June 2, 1873	Elliott Coues.				Skin.
2831	do	June 4, 1873	do	8.90	16.50		do.
2832	do	do	do	8.75	16.00		do.
2977	do	June 14, 1873	do	8.00	14.00		do.
3062	do	June 19, 1873	do				Nest with 4 eggs.
3081	do	June 21, 1873	do				Nest with 3 eggs.
3082	do	do	do				do.
3653	do	do	do				do.
3105	do	June 22, 1873	do				Skin.
3119	do	do	do				Nest with 4 eggs.
3120	do	do	do				do.
3122	do	do	do				Nest with 3 eggs.
3125	do	do	do				Nest with 4 eggs.
3127	do	June 23, 1873	do				Two eggs.
3174	do	June 26, 1873	do				Nest with 2 eggs.
3211	do	June 28, 1873	do				Nest with 4 eggs.
4020	Big Muddy River, Mont.	June 22, 1874	do				Skin; nest with 3 eggs.
4080	Porcupine River, Mont.	June 28, 1874	do				Nest with 4 eggs.
4185	Near Frenchman's River, Mont.	July 9, 1874	do				Nest with 2 eggs, and 1 of <i>Molothrus</i> excluded in the basement.

TYRANNUS VERTICALIS, *Say*.

ARKANSAS FLYCATCHER.

In the Red River region, *T. carolinensis* alone represents the genus; but throughout the Upper Missouri and Milk River country the two are found together, and it is hard to say which is the most numerous. They have much the same general habits, and often associate intimately together; indeed, I have known one tree to contain nests of both species. The cries of the *verticalis* are louder and harsher, with less of a sibilant quality, than those of the Kingbird; but there is little else to note as different. The nests of the *verticalis* are bulky and conspicuous, all the more easily found because the bird has a way of leaving the general woods of the river-bottom to go up the ravines that make down from the hillsides, and there nest on some isolated tree, miles away, perhaps, from any other landmark. Taking nests of both species at the same time, I found that those of *verticalis* were generally distinguishable by their larger size and softer make, with less fibrous and more fluffy material; but the eggs, if mixed together, could not be separated with any certainty. The sets of eggs taken during the latter part of June consisted of from three to six. Eggs were found as late as the second week in July. The nests were placed in trees at a height of from five or six to forty or fifty feet, generally in the crotch of a horizontal limb, at some distance from the main trunk; but in one case a nest was placed in the crotch which the first large bough made with the trunk. In one case, a pair of the Flycatchers built in the same tree that contained the nest of Swainson's Buzzard, and both kinds of birds were incubating at peace with each other, if not with all the world, when I

came along to disturb them. In another one, they nested with a pair of Kingbirds. The birds display admirable courage in defense of their homes, loosing in their anxiety all sense of danger to themselves.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4011	...	Big Muddy River, Mont.	June 21, 1874	Elliott Coues.	.....	.....	.....	Skin; nest with 3 eggs.
4012do.....	.....do.....	.....do.....	.....	.....	.....	Skin; nest with 5 eggs.
4017	♂	.....do.....	June 22, 1874	.....do.....	.....	.....	.....	Skin, with set of eggs.
4018do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
4019do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
4081	Porcupine Creek, Mont.	June 28, 1874	.....do.....	.....	.....	.....	Skin; nest with 5 eggs.
4082do.....	.....do.....	.....do.....	.....	.....	.....	Skin.
4083do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
4084do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
4102	Near mouth of Milk River, Mont.	June 30, 1874	.....do.....	.....	.....	.....	.....do.
4103do.....	.....do.....	.....do.....	.....	.....	.....	.....do.

SAYORNIS SAYUS, (Bp.) Bd.

SAY'S FLYCATCHER.

Not observed in the Red River region. First noticed at Fort Buford, where it used to perch upon the roofs of the houses, like the Pewit of the East, and traced thence westward to the Rocky Mountains. It occurred at intervals without being particularly numerous at any point. Its nidification was not observed.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4322	♀	Sweetgrass Hills, Mont.	Aug. 6, 1874	J. H. Batty...	7.50	12.10	3.90	Skin.
4371do.....	Aug. 9, 1874	... do	7.75	13.40	4.40	....do.
4456	Headwaters Milk River, Mont.	Aug. 15, 1874	Elliott Coues.	7.75	12.50	4.10	....do.
4699	♂	Near Fort Benton, Mont.	Sept. 8, 1874	.....do.....	.....	.....	.....	....do.

CONTOPUS VIRENS, (Linn.) Cab.

WOOD PEWEE.

Only noticed at Pembina, which is probably at or near its north-western limit.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2891	♂	Pembina, Dak	June 6, 1873	Elliott Coues.	6.25	10.25	.....	Skin.

EMPIDONAX TRAILLI, (*Aud.*) *Bd.*

TRAILL'S FLYCATCHER.

I found this species common at Pembina, like the *minimus*, during the first week in June, but did not observe it later than the 9th of that month. They appeared to pass on northward, yet I can hardly suppose that the species never breeds here, which is fully as far north as the localities in which it nests in the Eastern States. However, if it does so, I overlooked the fact.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2782	♂	Pembina, Dak	June 2, 1873	Elliott Coues.	5.50	8.75	.....	Skin.
2816	♂	do	June 3, 1873	do	6.00	9.10	.....	do.
2817	♂	do	do	do	6.25	9.60	.....	do.
2818	♂	do	do	do	6.00	9.00	.....	do.
2921	♀	do	June 9, 1873	do	5.50	8.40	.....	do.

EMPIDONAX MINIMUS, *Bd.*

LEAST FLYCATCHER.

Very abundant at Pembina, and found also on Turtle Mountain, beyond which not seen. I found it common on my arrival, the 1st of June, and during that month secured a large series of specimens, including many nests and eggs, the latter not until the middle of the month. The usual site of the nest is the upright crotch formed by three or more diverging twigs of some sapling or stout bush, usually 10 or 12 feet from the ground. One nest that I took I could reach standing on the ground, but another was in a slender elm-tree some 40 feet high, on a swaying bough, but in a crotch of upright twigs as usual. The female, during incubation, is as close a setter as some of the ground Sparrows. In one instance I came within arm's length before the bird flew, and then she merely fluttered out of reach and stood uttering a disconsolate note. The nest is usually let deeply down into the crotch, and bears the impress of the twigs. It is composed of intertwined strips of fine fibrous inner bark and decomposed weedy substances, matted with a great quantity of soft plant-down, and finished with a lining of a few horse-hairs or fine grasses, making a firm, warm fabric, with a smooth, even brim, about $2\frac{1}{2}$ inches across outside and less than 2 inches deep; general shape tends somewhat to be conical, but much depends upon the site of the nest. The walls are thin, sometimes barely coherent along the track of the supporting twigs. The cavity is large for the size of the nest, scarcely or not contracted at the top, and about as wide as deep. In six instances I found not more than 4 eggs, which seems to be the full complement. These are pure white in color, of ordinary shape (but variable in this respect), and measure about two-thirds of an inch in length by one-half in breadth. Extremes of length noted were 0.59 and 0.68; the diameter is less variable.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen and remarks.
2780	♂	Pembina, Dak.	June 2, 1873	Elliott Coues.	5.25	2.25	.....	Skin.
2781	♂	do	do	do	5.40	2.30	.....	do.
2815	♂	do	June 3, 1873	do	5.50	2.25	.....	do.
2854	♂	do	June 5, 1873	do	5.25	2.25	.....	do.
2855	♂	do	do	do	5.00	2.00	.....	do.
2887	♂	do	June 6, 1873	do	5.00	2.00	.....	do.
2888	♂	do	do	do	5.20	2.20	.....	do.
2922	♂	do	June 9, 1873	do	4.80	2.40	.....	do.
2932	♂	do	June 11, 1873	do	4.90	2.80	.....	do.
2939	♂	do	do	do	4.90	2.80	.....	do.
2956	♂	do	June 12, 1873	do	5.50	2.60	.....	do.
2957	♂	do	do	do	5.50	2.60	.....	do.
2960	♂	do	June 13, 1873	do .....	.....	.....	.....	Nest with 4 eggs.
2961	♂	do	do	do .....	.....	.....	.....	Nest with 2 eggs.
2960	♂	do	June 14, 1873	do	4.80	2.40	.....	Skin.
3086	♂	do	June 21, 1873	do .....	.....	.....	.....	Nest with 4 eggs, and 1 of <i>Molothrus</i> .
3123	do	June 22, 1873	do .....	.....	.....	.....	Nest with 3 eggs.
3124	do	do	do .....	.....	.....	.....	Nest with 4 eggs.
3133	do	June 24, 1873	do .....	.....	.....	.....	do.
3415	Turtle Mountain, Dak	Aug. 8, 1873	do	5.40	8.40	.....	Skin.

EMPIDONAX HAMMONDI, Bd.

HAMMOND'S FLYCATCHER.

This species, which appears to be the Western representative of *minus*, was only found in the Rocky Mountains, where a single specimen was secured in August.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen and remarks.
4537	Rocky Mountains, latitude 49°.	Aug. 20, 1874	Elliott Coues.	.....	.....	.....

EMPIDONAX OBSCURUS, Bd.

WRIGHT'S FLYCATCHER.

Instead of *trailli* var. *pusillus*, which I expected to find in the Rocky Mountains, this species was taken in that locality. The occurrence so far beyond its hitherto-known range is particularly interesting. Three specimens were taken during the latter part of August. The bird doubtless breeds in this region, which is the northernmost point by far at which it has been observed.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen and remarks.
4520	Rocky Mountains, latitude 49°.	Aug. 19, 1874	Elliott Coues.	.....	.....	.....	Skin.
4521	do	do	do .....	.....	.....	.....	do.
4532	do	Aug. 20, 1874	do .....	.....	.....	.....	do.

ANTROSTOMUS VOCIFERUS, (*Wils.*) *Bp.*

WHIPPOORWILL.

Although I took no specimens of this bird, its unmistakable notes were heard every night in June at Pembina, assuring me of its presence in numbers in the heavy timber of the river-botton. This locality is very near its northern limit, and it probably is not found any distance west of the Red River.

CHORDILES VIRGINIANUS, (*Briss.*) *Bp.*

NIGHT-HAWK; BULL-BAT.

Occurs in summer throughout the whole region surveyed, and is in most places very common. The birds of the arid Missouri region are referable, I suppose, to var. *henryi*. Eggs were found at Pembina June 13, and at the mouth of Milk River on the 1st of July; in both instances two in number, laid on the bare ground. So late as the 23d of July, newly hatched young were found at one of our camps on Turtle Mountain. Notwithstanding that they lay in the midst of a populous camp, where the men and animals constantly passed the spot, the female continued to brood them with courage and patience, and on too near approach would feign a broken wing, and tumble about in a manner that would have seemed ridiculous could her tender object have been forgotten. The male bird made a great ado, dashing down from overhead, but apparently without any clear idea of what was expected of him, or how to do it. Upon one of my visits to the spot I found that the young had been transported since I had been there last, though only to a distance of two or three yards.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2962	♂	Pembina, Dak	June 13, 1873	Elliott Coues.	9.25	23.00	.....	Skin and 2 eggs.
2982	do	June 14, 1873	do	9.00	22.00	.....	Skin.
2996	♂	do	June 16, 1873	do	9.75	23.50	8.10	do.
3299	50 miles west of Pembina Mts.	July 16, 1873	do .....	.....	.....	.....	do.
3300	do	do	do .....	.....	.....	.....	do.
3301	do	do	do .....	.....	.....	.....	do.
3351	Turtle Mt., Dak	July 23, 1873	do .....	.....	.....	.....	Skin (with nestling).
3477	Mouse River, Dak. ...	Aug. 10, 1873	do .....	.....	.....	.....	Skin.
3719	♀	do	Sept. 3, 1873	do .....	.....	.....	.....	do.
4117	Near mouth of Milk River, Mont.	July 1, 1874	do .....	.....	.....	.....	Two eggs.
4264	♂	Crossing of Milk River, Mont.	July 24, 1874	do .....	.....	.....	.....	Skin.
4265	do	do	do .....	.....	.....	.....	do.
4301	♂	do	July 25, 1874	do .....	.....	.....	.....	do.

CHÆTURA PELAGICA, (Linn.) Bð.

CHIMNEY SWIFT.

Common at Pembina, and traced thence westward only to the Mouse River. Not seen in the Missouri region nor in the Rocky Mountains. I did not notice where the birds were breeding; but from the circumstance of seeing them habitually flying about over the timber of the river-bottom, instead of at the fort, I judge that they here still retained their primitive custom of nesting in hollow trees.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen and remarks.
2800	♂	Pembina, Dak	June 2, 1873	Elliott Cones	.....	.....	.....	Skin.
3076	do	June 20, 1873	do .....	.....	.....	.....	do.
3136	do	June 24, 1873	do .....	.....	.....	.....	do.
3589	Mouse River, Dak	Aug. 27, 1873	do .....	.....	.....	.....	do.

TROCHILUS COLUBRIS, Linn.

RUBY-THROATED HUMMINGBIRD.

Quite common at Pembina, in the open flowery glades of the woods along the river. Not seen west of this point.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen and remarks.
2850	♂	Pembina, Dak	June 5, 1873	Elliott Cones.	.....	.....	.....	Skin.

SELASPHORUS RUFUS, (Gm.) Sw.

RUFIOUS HUMMINGBIRD.

Found in considerable numbers at our camp on Chief Mountain Lake, in open flowery spots amongst the windfalls, at an altitude of about 4,200 feet.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen and remarks.
4522	Rocky Mountains, latitude 49°.	Aug. 19, 1874	Elliott Cones.	.....	.....	.....	Skin.
4523	do	do	do .....	.....	.....	.....	do.
4535	do	Aug. 20, 1874	do .....	.....	.....	.....	do.
4536	do	do	do .....	.....	.....	.....	do.

CERYLE ALCYON, *Boie*.

BELTED KINGFISHER.

Of general distribution along the waters of this region as elsewhere in North America. I saw it on the Red, Mouse, Milk, and Missouri Rivers, and some of the affluents of the two last, as well as on the headwaters of the Saskatchewan.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2917	♀	Pembina, Dak	June 9, 1873	Elliott Coues.	.....	.....	.....	Skin.

COCCYGUS ERYTHROPHthalmus, (*Wils.*) *Bp.*

BLACK-BILLED CUCKOO.

Somewhat to my surprise, this Cuckoo was ascertained to breed in the Pembina Mountains. I had not previously observed it along the Red River, nor did I meet with *C. americanus* anywhere during the survey. The nest was discovered July 12, at which date it contained a single young one, scarcely able to fly, the older ones of the same brood having doubtless already made off. The nest was in what I suppose to be an unusual situation, namely, an oak scrub less than two feet from the ground, in a dense thicket on the mountain-side. A large basement of loosely interlaced twigs rested in a crotch of the bush, supporting the nest proper, which consisted of a flat matting of withered leaves and catkins of the poplar. After a chase and a headlong plunge into an uncomfortable brier-patch, I managed to catch the little fellow, who, encouraged by the constant exhortations of his anxious mother, was scrambling off in a very creditable style for one so young.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3240	Pembina Mountains, Dak.	July 12, 1873	Elliott Coues.	.....	.....	.....	Skin (nestling).

PICUS VILLOSUS, *Linn.*

HAIRY WOODPECKER.

Observed in heavy timber on Turtle Mountain. As a species of general dispersion in Eastern North America, it doubtless occurs in other wooded portions of the Red and Missouri region. Exactly at what point it is modified into var. *harrisi* may not have been ascertained; but the

change probably does not take place much, if any, east of the Rocky Mountains. Pure *villosus* occurs on the Missouri at Fort Randall.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3345 bis	Turtle Mountain, Dak.	July 20, 1873	Elliott Coues.	.....	.....	....	Skin.

PICUS VILLOSUS HARRISI, (*Aud.*) Coues.

HARRIS'S WOODPECKER.

Found only in the Rocky Mountains.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4597	♂	Rocky Mountains, latitude 49°.	Aug. 24, 1874	Elliott Coues.	.....	.....	.....	Skin.

SPHYRAPICUS VARIUS, (*Linn.*) Bd.

YELLOW-BELLIED WOODPECKER.

Plentiful at Pembina, where it was breeding with the Redheads in June, and again seen on the Mouse River; not observed further west, nor anywhere in the Missouri country,—though we are not to infer that it is actually absent from that region. In these high latitudes (and further north—for it goes to 61° at least), it is probably only a summer resident. It seems to be more decidedly migratory than most of our Woodpeckers, and penetrates in winter to Central America. This may be partly, at least, due to the peculiarity of its food, for it feeds largely upon living cambium, and may not be able to secure this to its taste when the sap ceases to flow.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2849	♂	Pembina, Dak	June 5, 1873	Elliott Coues.	.....	.....	.....	Skin.
2892	♂	...do	June 6, 1873	...do .....	.....	.....	.....	...do.
2946	♂	...do	June 11, 1873	...do .....	.....	.....	.....	...do.
3171	♂	...do	June 25, 1873	...do .....	.....	.....	.....	...do.
3235	♂	...do	July 8, 1873	...do .....	.....	.....	.....	...do.
3757	♂	Mouse River, Dak ..	Sept. 16, 1873	...do .....	.....	.....	.....	...do.

MELANERPES ERYTHROCEPHALUS, (*Linn.*) *Sw.*

RED-HEADED WOODPECKER.

Common along the Red and Upper Missouri Rivers. It probably extends, in suitable places, to the Rocky Mountains, but was not noticed after leaving the vicinity of the Missouri, as there is not wood enough to attract it along the affluents of the Milk River on the parallel of 49°.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2918	♀	Pembina, Dak	June 9, 1873	Elliott Coues	.....	.....	.....	Skin.
4085	Porcupine Creek, Mont.	June 28, 1874	...do .....	.....	.....	.....	...do.

ASYNDESMUS TORQUATUS, (*Wils.*) *Coues.*

LEWIS'S WOODPECKER.

While we were encamped on one of the headwaters of the Saskatchewan, at the eastern base of the mountains, a Lewis's Woodpecker flew overhead, and was distinctly recognized both by Mr. Batty and myself. At our permanent camp on Chief Mountain Lake, we confidently expected to see the species again and secure specimens, but in this we were disappointed, for not a single one was encountered in our excursions in the vicinity.

COLAPTES AURATUS, (*Linn.*) *Sw.*

GOLDEN-WINGED WOODPECKER.

Flickers were common along the Red and Mouse Rivers, and were also observed at Pembina and Turtle Mountains, which is equivalent to saying that the species inhabits the wooded portions of the Red River watershed. All the specimens secured were pure *auratus*, without a touch of *mexicanus*, and the mixed race probably does not occur in this region. This is another evidence of the distinction, which I continually insist upon, between the watersheds of the two great rivers.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2896	Pembina, Dak	June 6, 1873	Elliott Coues	.....	.....	.....	Skin.
2912do	June 7, 1873	...do .....	.....	.....	.....	...do.
3950do	June 19, 1873	...do .....	.....	.....	.....	...do.
3337	Turtle Mountain, Dak.	July 20, 1873	...do .....	.....	.....	.....	...do.
3553	Mouse River, Dak ..	Aug. 22, 1873	...do .....	.....	.....	.....	...do.
3720	♂	...do	Sept. 3, 1873	...do .....	.....	.....	.....	...do.

COLAPTES "HYBRIDUS" of Baird.

All the *Colaptes* of the Upper Missouri, Yellowstone, and Milk River region appear to be of the hybrid race, in which there is every degree of departure from the characters of typical *auratus*. The change begins somewhere on the Middle Missouri, as low down, *I think*, as Fort Randall, and certainly as old Fort Pierre. It is a point of interest that this mongrel style overruns into the Saskatchewan region; for, of two specimens secured at the eastern base of the mountains, one had the red quills and ash throat of *mexicanus*, and the cheek-patch mixed with red, while the other was nearly pure *auratus*.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4507	♂	Rocky Mountains, latitude 49°.	Aug. 17, 1874	Elliott Cones.	.....	.....	.....	Skin: red quills and ash throat of <i>mexicanus</i> ; occipital crescent and brown cap of <i>auratus</i> ; cheek-patch mixed red and black.
4590	♀	.....do.....	Aug. 23, 1874	.....do.....	.....	.....	.....	Nearly pure <i>auratus</i> .

BUBO VIRGINIANUS, (Gm.) Bp.

GREAT HORNED OWL.

A pair of these Owls were observed at Pembina early in June, and two unfledged young ones, evidently belonging to them, were found on a fallen log in the timber-belt along the river. The nest was not discovered, though supposed to be in the hollow of a blasted tree that stood near. The old birds flew about apparently not in the least incommoded by the daylight, but were too wary to be approached; and though I set a steel trap for them, upon the log where the young had been, they did not put their foot in it. The two young birds, one of which was much larger than the other, and therefore supposed to be a female, were brought alive to camp, and kept during the whole season. They made more agreeable and amusing pets than birds of prey generally prove to be, and the fun we had out of them repaid the trouble of carrying them about. They became perfectly tame, would take food out of my hands, or even alight on my shoulder; and, after a while, when they were full-grown and in good plumage, I used to release them and allow them to forage for themselves during the night. They generally returned of their own accord, but sometimes I had to send one of my men in search of them; in fact, the care of these Owls was the chief duty of a certain member of the party during September. They began to hoot when

about four months old. One of them died soon after, from some unexplained cause; the other survived all the vicissitudes of camp-life, including a pistol-shot from a man who mistook the bird for a wild one, and was finally, after travelling seven or eight hundred miles, safely deposited in an aviary in Saint Paul.

SPEOTYTO CUNICULARIA HYPOGÆA, (Bp.) Coues.

BURROWING OWL.

First observed at a point on the Boundary Line a little east of Frenchman's River, not far from the mouth of Milk River, where a few individuals inhabited a small settlement of Prairie Dogs (*Cynomys ludovicianus*). This seems to be about the northern limit of the species, and it is nowhere so abundant in this region as in many places further south. It was met with a second time a little west of Frenchman's River, and for the third time, in somewhat greater numbers, on a piece of prairie near Sweetgrass Hills. There were no Prairie Dogs here or at the locality last mentioned, so far as I know, but the ground was riddled with the burrows of the Tawny Marmots (*Spermophilus richardsoni*), which seemed to suit the Owls just as well.

Several other species of this family certainly inhabit the region surveyed; but the two foregoing were the only ones actually observed. The circumstances of a Survey like the present are not the most favorable for observation of these nocturnal birds; for, when night comes, a man is generally too tired to care about anything but sleep, especially when the prospect is breakfast by candle-light and "pull out" at daylight to argue again with mules and miles.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4187	Near Frenchman's River.	July 9, 1874	Elliott Coues.	.....	.....	.....	Skin.
4314	Sweetgrass Hills, Mont.	Aug. 3, 1874	....do .....	.....	.....	.....	....do.
4315do .....	....do .....	....do .....	.....	.....	.....	....do.

CIRCUS CYANEUS HUDSONICUS, (Linn.) Schl.

MARSH HARRIER.

Common throughout the region surveyed, and in the vicinity of the streams and wooded parts of the country the most abundant of all the Hawks, not even excepting Swainson's Buzzard. A nest was discovered at Pembina, June 3, on the ground in the midst of the wild-rose patch that generally reaches out from the timber to the prairie. The nest was about a foot in diameter and a fourth as much in depth, with very slight

depression. It was composed of dried grasses, rather neatly disposed, resting upon a bed of rose-twigs. It contained five eggs, slightly incubated. These were of nearly equal size at both ends, and measured respectively 1.87 by 1.45, 1.86 by 1.45, 1.82 by 1.44, 1.80 by 1.45, 1.80 by 1.42. The color was dull white, with a faint greenish tinge, but without distinct markings of any kind, though much soiled mechanically. On approaching the spot where I had supposed, from observing the birds two or three times, that the nest was concealed, the female did not fly up till I was within a few feet of her, when she made off with all speed and great outcry, calling her mate. He soon appeared, and the pair circled for some time overhead, the male silent and at a very reasonable distance; the female, more impetuous or more anxious, came nearer, and constantly uttering a harsh note. At Turtle Mountain, in July, nearly a whole family, the young of which were newly on wing, was shot, the prudent male alone escaping. While encamped on Mouse River I had frequent opportunities of observing the birds fishing for frogs in the stagnant pools near the main stream.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2801	♂	Pembina, Dak	June 3, 1873	Elliott Coues	.....	.....	.....	Nest with 5 eggs.
2947	do	June 11, 1873	do .....	.....	.....	.....	Skin, with sternum.
3375	Turtle Mt., Dak	July 28, 1873	do .....	.....	.....	.....	Skin.
3376	do	do	do .....	.....	.....	.....	do.
3377	do	do	do .....	.....	.....	.....	do.
3378	do	do	do .....	.....	.....	.....	do.
3482	Mouse River, Dak ..	Aug. 10, 1873	do .....	.....	.....	.....	do.
3532	do	Aug. 16, 1873	do .....	.....	.....	.....	do.
3536	do	Aug. 17, 1873	do .....	.....	.....	.....	do.
3538	do	Aug. 19, 1873	do .....	.....	.....	.....	do.
3737	Long Coteau River, Dak.	Sept. 8, 1873	do	17.75	40.75	13.25	do.
3786	Mouse River, Dak ..	Sept. 18, 1873	do	18.75	41.50	13.50	do.
3787	do	do	do	20.50	46.50	14.60	do.
3870	do	Oct. 3, 1873	do	18.50	40.50	13.35	do.
4338	West of Sweetgrass Hills, Mont.	Aug. 8, 1874	do .....	.....	.....	.....	do.
4389	do	Aug. 10, 1874	do .....	.....	.....	.....	do.
4636	Rocky Mts., lat. 49°.	Aug. 30, 1874	J. H. Batty	.....	.....	.....	do.
4637	do	do	do .....	.....	.....	.....	do.

ACCIPITER FUSCUS, (Gm.) Gray.

SHARP-SHINNED HAWK.

This dashing and elegant little Hawk is probably less rare in the region surveyed than my observations would indicate. I only recognized it on one occasion, when a specimen was procured, as below indicated. The second North American species of this genus, *A. cooperi*, undoubtedly occurs in this country, though it was not noticed.

While at Pembina I was assured by Colonel Wheaton, U. S. A., of the occasional occurrence in that vicinity of the Swallow-tailed Kite, *Elanoides forficatus*. This officer seemed to know the bird perfectly

well, and it is not a species about which there could easily be any mistake. Its presence here was not entirely unexpected, since it had been already found by Mr. Trippe in Minnesota at lat. 47°, and a degree or two of latitude is of course nothing to a bird of such powers of flight as this Kite possesses.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3718	♀	Mouse River, Dak..	Sept. 3, 1873	Elliott Coues	12.50	25.50	8.00	Skin.

FALCO MEXICANUS POLYAGRUS, (*Cass.*) *Coues*.

AMERICAN LANIER FALCON.

At one of the astronomical stations on the west branch of the "Two Forks" of Milk River, no less than four species of large Hawks had their nests within sight of each other and only a few hundred yards apart. These were Swainson's and the Ferruginous Buzzards, the Common Falcon, and the present species. Speaking of some of these Hawks in an article I recently contributed to the "American Naturalist" (vol. viii, 1874, 596,) I incorrectly omitted the Lanier, and all of the remarks relating to one of the nests of the supposed *F. communis* (the first one there spoken of) apply to the present species, though my account of the other nest, found a few miles away, is entirely accurate and pertinent.

I am not aware that the Lanier had before been found so far northwest as this, nor had we any reliable accounts of its nidification. In the "Birds of the Northwest" I gave a description of the eggs from a set procured by Dr. F. V. Hayden in the Wind River Mountains. The nest to which I now refer was discovered July 18, 1874, on the perpendicular face of the "cut-bank" of the stream. It contained three young, scarcely able to fly. Two of these were shot on the wing close by the nest; the third was subsequently brought to me alive by a soldier. The mother was shot, and, as well as I could determine, fell in a recess of the ground by the nest, in such a position that it could not be recovered. The male was not seen, or at any rate not recognized. This nest was built behind an upright column of earth, partly washed away from the main embankment, in such position that no full view of it could be obtained from any accessible standpoint. But it was certainly placed directly upon the ground, in a little water-worn hollow of the bank, behind the projecting mound, so that it was almost like a burrow. The spot being inaccessible from below, I had a man lowered by a rope from the top of the bank, but during the descent so much loosened earth fell into the place that the nest was completely hidden, so that its structure was left undetermined, if, indeed, there was any special structure.

This manner of nesting on the ground, in the depressions or on the projections of the cut-banks, seems to be readily adopted in this treeless region by all the Hawks, which, under other circumstances, regularly build in trees.

I should not omit to add that a colony of Cliff Swallows had affixed their nests of mud to the same embankment, a few yards from the site of the Falcon's eyrie, and appeared to be undisturbed in the possession of their homes.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4239	Two Forks of Milk River, Mont.	July 18, 1874	Elliott Cones.	.....	.....	.....	Skin (nestling).
4240	do	do	do .....	.....	.....	.....	do.

FALCO COMMUNIS, *Gm.*

PEREGRINE FALCON; DUCK HAWK.

As already stated in the foregoing account of *F. polyagrus*, the Peregrine was nesting in the same place and under precisely similar conditions. Another pair had a nest about ten miles away on the same stream. Here the earth bank was perpendicular, and lying flat upon the brink I could look directly into the nest, which rested on a slight shelf about 12 feet below. It contained three young, not yet fledged, July 19. On approaching the spot, while yet several hundred yards away, I observed both parents circling high in the air, venting their displeasure at the prospective invasion in loud, harsh cries. On reaching the spot, I saw that the male thought it prudent to have business elsewhere, but the more courageous mother bird, desperate with fear and anger, made repeated dashes within a few feet of my head, till I judged it just as well to destroy her, as I had designs upon the young. She fell hurtling with a broken wing at the foot of the cliff, 30 or 40 yards below. The eyrie was totally inaccessible from below, and, as I had no rope, it was equally so from above. I tried for a long time to lasso the young ones and draw them up with a piece of cord; but they had a way of freeing themselves just before the noose drew tight, and I was obliged to leave them.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4232	♀	Two Forks of Milk River, Mont.	July 17, 1874	Elliott Cones	.....	.....	.....	Skin.

FALCO RICHARDSONI, *Ridgw.*

RICHARDSON'S MERLIN.

One specimen, the only individual of this species observed, was taken on the headwaters of the Mouse River, September 8, 1873. I had no difficulty in approaching and shooting it, as it sat on the lower limb of a small tree. The stomach contained the remains of a Sparrow.

Since the supposed similarity of the sexes of this bird proves not to hold good, one of the strongest points of distinction between it and *F. columbarius* disappears, and the probability is that it is not specifically separable from the latter.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3729	♀	Headwaters Mouse River, Dak.	Sept. 8, 1873	Elliott Coues.	12.75	26.75	8.50	Eyes dark brown; legs yellow; lores, eyelids, base of upper and most of under mandible yellowish-green; cere more yellow; rest of bill and claws blue-black.

FALCO SPARVERIUS, *Linn.*

SPARROW HAWK.

Very abundant throughout the region surveyed. The specimens taken on Turtle Mountain, August 8, 1873, had at that date nearly assumed their first complete plumage; they were all members of the same family, and had not quite given up their companionship.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3049	♂	Pembina, Dak.	June 19, 1873	Elliott Coues	.....	.....	.....	Skin.
3212	♂	do	June 23, 1873	do .....	.....	.....	.....	do.
3224	♂	do	July 5, 1873	do .....	.....	.....	.....	do.
3418	♂	Turtle Mountain, Dak.	Aug. 8, 1873	do .....	.....	.....	.....	do.
3419	♂	do	do	do .....	.....	.....	.....	do.
3420	♂	do	do	do .....	.....	.....	.....	do.
3535	♂	Mouse River, Dak. ..	Aug. 16, 1873	do .....	.....	.....	.....	do.
3537	♂	do	Aug. 17, 1873	do .....	.....	.....	.....	do.
3570	♂	do	Aug. 24, 1873	do	10.50	22.50	.....	do.
3571	♂	do	do	do	11.50	24.50	.....	do.
3592	♂	do	Aug. 30, 1873	do	10.50	23.00	7.50	do.
3599	♂	do	do	do	11.00	23.50	7.50	do.
4066	♂	Porcupine Creek, Mont.	June 28, 1874	do .....	.....	.....	.....	do.
4104	♂	Near mouth Milk River, Mont.	June 30, 1874	do .....	.....	.....	.....	do.
4105	♂	do	do	do .....	.....	.....	.....	do.
4513	♂	Rocky Mountains, latitude 49°.	Aug. 18, 1874	do .....	.....	.....	.....	do.
4625	♂	do	Aug. 23, 1874	J. H. Batty ..	.....	.....	.....	do.

BUTEO BOREALIS, (Gm.) Vieill.

RED-TAILED BUZZARD; HEN HAWK.

I frequently observed this Hawk in different portions of Iowa, Kansas, Minnesota, and Dakota; but, in most portions of the last-named Territory, it is not nearly so abundant as the next species (*B. swainsoni*). The only individual noticed during my connection with the Survey was shot on the Mouse River, where *B. swainsoni* was the prevailing form.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3755	Mouse River.....	Sept. 14, 1873	Elliott Coues	21. 65	49. 00	14. 50	

BUTEO SWAINSONI, Bp.

SWAINSON'S BUZZARD.

Very abundant in Northern Dakota and Montana, where, I may say, I saw it almost daily each season. None of the Hawk tribe, in fact, were more numerous, excepting the Harrier and Sparrow-hawk. In this part of the country, neither the Rough-legs nor the Red-tails are common, and Swainson's Buzzard chiefly represents the genus. The bird may consequently be studied satisfactorily, both with regard to its habits, and to those great changes of plumage which, before they were understood, were so perplexing, and caused several nominal species to be proposed.

Swainson's Buzzard may be found anywhere in the region indicated. When about to alight on the ground in open country, it generally takes advantage of some little knoll as an observatory whence to watch for the gophers. But it gives the preference to wooded regions, and is always most numerous in the vicinity of streams fringed with trees. The nest is usually placed in trees, sometimes in shrubbery, but when both these fail, is placed on the brink of a cut-bank, or on some shelf projecting from its face, like those of most other Hawks under the same circumstances. These ground nests are apt to be less bulky and elaborate than those constructed in trees; and there is always a wide latitude in this respect, according to the precise character of the site selected. During the first season I was too late for eggs, when I first met with the birds, but discovered several nests in the timber along the Mouse River. The only one I found with anything in it contained two half-fledged young; it was very untidy with the scurfy exfoliation from the growing feathers of the youngsters, their excrement, and remains of their food in the shape of gophers. Previous to this time, in July, an unfledged young was brought to me, and early in August I possessed a

full-grown bird of the year. There is evidently then a wide extension of the breeding-season, unless two broods are reared, which seems not unlikely.

During the season of 1874, I took plenty of eggs. Wherever there were trees, the birds preferred them. In the Milk River country, they nested on the cut-banks. I never found more than two eggs in a nest, and supposed this to be the usual number. In one case of a single egg, supposed to be of this species, incubation was advanced. All these eggs, excepting an addled one found in a deserted nest the latter part of August, were taken between June 21st and July 17th. The eggs depart from the rule in this genus, in being nearly colorless and unmarked, resembling hens' eggs quite closely, both in size and shape. Most of the specimens taken were uniform dull white, with no more evident markings than such obsolete grayish spots as frequently appear on Marsh Harriers' eggs. A few were marked with obvious dirty-brownish scratchy spots at the smaller end; none were marked all over, nor strongly blotched anywhere.

The food of these Hawks seems to consist principally of gophers (*Spermophili*), which they pounce upon when caught away from home, or lie in wait for at the mouths of the burrows, ready to "yank" them out with a quick thrust of the talons when they show their noses. But they also feed largely upon grasshoppers, with which their crops are sometimes found crammed. They cut a very ridiculous figure when skipping about over the prairie after these lively insects. A more extended notice of the habits of the species, with descriptions of its various plumages, may be found in my paper in the "American Naturalist" for May, 1874 (pp. 282-287), and in the article in the "Birds of the Northwest".

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3289	Fifty miles west of Pembina Mts.	July 15, 1873	Elliott Coues	.....	.....	.....	Two eggs (?).
3355	Turtle Mountain, Dak.	July 23, 1873	... do .....	.....	.....	.....	Skin.
3526	♂	Mouse River, Dak.	Aug. 15, 1873	... do	22.00	54.00	17.00	Skin: eye brown; cere and feet yellow; bill and claws bluish-black.
3527do.....	.....do.....	.....do.....	.....	.....	.....	} Young from nest of 3526.
3528do.....	.....do.....	.....do.....	.....	.....	.....
3572do.....	Aug. 24, 1873	.....do.....	19.00	49.00	13.25	Skin.
3587do.....	Aug. 27, 1873	.....do.....	21.00	53.00	15.75	.....do.
3590do.....	Aug. 29, 1873	.....do.....	20.50	45.50	15.60	.....do.
3591do.....	Aug. 30, 1873	.....do.....	21.50	51.75	.....	.....do.
3717do.....	Sept. 3, 1873	.....do.....	20.50	51.00	15.25	.....do.
3728	♂	Long Coteau River, Dak.	Sept. 8, 1873	.....do.....	19.25	49.00	15.25	.....do.
3739do.....	Sept. 9, 1873	.....do.....	20.50	50.00	15.25	.....do.
3740do.....	.....do.....	.....do.....	19.50	49.00	15.00	.....do.
4013	Big Muddy River, Mont.	June 21, 1874	.....do.....	.....	.....	.....	Two eggs (tree).
4036	Quaking Ash River, Mont.	June 26, 1874	.....do.....	.....	.....	.....	.....do.
4116	Near Mouth Milk River, Mont.	June 30, 1874	.....do.....	.....	.....	.....	One egg (?) (tree).

List of specimens—Continued.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4230	Two Forks Milk River, Mont.	July 16, 1874	Elliott Cones.	.....	.....	.....	Two eggs (nest on the ground).
4231	do	July 17, 1874	do .....	.....	.....	.....	do.
4422	West of Sweetgrass Hills, Mont.	Aug. 13, 1874	J. H. Batty.	.....	.....	.....	Skin (melanistic).
4439	Headwaters Milk River, Mont.	Aug. 13, 1874	do .....	.....	.....	.....	Skin.
4454	do	Aug. 15, 1874	do	21.50	49.75	15.25	Skin (melanistic).
4455	do	do	do	21.25	52.00	16.00	Skin.
4509	Rocky Mountains, lat. 49°.	Aug. 17, 1874	Elliott Cones.	.....	.....	.....	do.
4510	do	do	do .....	.....	.....	.....	do.
4511	do	do	do .....	.....	.....	.....	One egg (addled).
4635	♂	do	Aug. 29, 1874	do .....	.....	.....	.....	Skin.

ARCHIBUTEO FERRUGINEUS, (*Licht.*) Gray.

FERRUGINEOUS BUZZARD.

This large and handsome Hawk was found breeding on the Pembina Mountains by one of Lieut. F. V. Greene's party, who secured two fledged young ones early in July, and brought them into camp, where they were kept as pets for some time. Their great size induced the general belief that they were "eagles"—an impression which my assertions to the contrary may have weakened in the minds of those who had some faith in me, *quâ* ornithologist, though others, more confident, seemed to have said faith somewhat disturbed. I was obliged to compromise with the remark that they might after all make pretty good eagles for a "topog. outfit", though they could not pass for such royal birds in my own camp. Later in the following season, the species was again found breeding on the Two Forks of Milk River, being one of the quartette of great Hawks which had their nests together on the cut-banks of the stream, as mentioned in a preceding paragraph. July 18, one of the parents and the two young birds, just fully fledged, were secured. I did not visit the nest, which, I was informed, was situated at the brink of one of the highest embankments. The species has already been reported, by Capt. T. Blakiston, R. A., from the region of the Saskatchewan. The present quotation, from the Pembina Mountains, is the northeasternmost to date, and considerably extends the known range of the species.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4235	Two Forks of Milk River, Mont.	July 18, 1874	Elliott Cones.	.....	.....	.....	Skin; parent of Nos. 4236, 4237.
4236	do	do	do .....	.....	.....	.....	Skin (nestling).
4237	do	do	do .....	.....	.....	.....	do.

AQUILA CHRYSÆTUS, (*Linn.*)

GOLDEN EAGLE.

The Golden Eagle, though an inhabitant of the region at large, was only observed in one locality, at the Sweetgrass Hills, where one or more were seen very frequently. On one of the small affluents of the Milk River, a little west of the hills, two nests were found, built directly on level ground, yet at the brink of a cut-bank, which seemed to answer as the apology for the crag to which the bird usually resorts. Although the nests were empty and deserted, there can be no reasonable doubt of their belonging to the Golden Eagle—they were far too large to be those of any Hawk, and there was no trace of the presence of Bald Eagles in this dry country. One that I examined carefully was placed on the edge of a very slight embankment, not so steep that I could not easily walk up to it. It was rather on the brow of a hillock than on the brink of a cliff. It was composed of sticks, some as large as a man's wrist, brushwood, and bunches of grass and weeds, with masses of earth still adhering to the roots. The diameter was about four feet in one direction and three in the other, owing to the conformation of the ground. The mass of material averaged about six inches in depth. The other nest was described to me as considerably larger. Both were empty and apparently deserted.

HALIAËTUS LEUCOCEPHALUS, (*Linn.*) *Savig.*

BALD EAGLE.

While steaming down the Red River from Morehead to Pembina, we frequently saw Bald Eagles sailing overhead, and several nests were noticed upon the tops of tall, isolated trees as we passed along. Upon one of the nests the parent was observed sitting, but whether incubating or brooding her young could not of course be ascertained. This was the last week in May. There was a young bird in the gray plumage in confinement at Fort Pembina, and I was informed that it had been procured in the vicinity.

Three "kinds" of Eagles, aside from the Golden Eagle, which is not generally very well known in the United States, are usually recognized by the people, who can hardly be convinced that they are stages of plumage of the present species: these are the "black", "gray", and "bald" Eagle—names which respectively indicate the plumages of the first, second, and third years of the bird's life.

CATHARTES AURA, (*Linn.*) *Ill.*

TURKEY BUZZARD.

Frequently seen in the Red River region. My note-books make no mention of its occurrence during the second season, but it is not to be supposed absent, even if it was not observed. It is probably not resident in this country, and I saw none during the colder months at Fort

Randall, where it was first noticed, during the spring of 1873, about the middle of April.

ECTOPISTES MACRURA,* (*Linn.*) *Coues*.

WILD PIGEON.

Countless flocks of Wild Pigeons pervaded the atmosphere of the Red River Valley during the latter part of May and early portion of June, 1873. We observed them continually during our voyage down the river, and for some days afterward at Pembina, streaming through the air in endless succession of flocks. They generally flew high, far beyond gunshot, but in early morning and just before nightfall often came low enough to afford a shot. The woods along the river were filled with the stragglers, which of course could be easily secured. They breed here in limited numbers, but no general "pigeon-roost" was formed in the immediate vicinity. I took one nest, containing a single egg, June 13. A few of the birds straggled westward to Turtle Mountain, where one was shot in July. The next season none was seen in any part of the Missouri or Milk River region; but in the Rocky Mountains the species was again met with in small numbers, and a young bird, doubtless bred here, was secured at Chief Mountain Lake.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2836	Pembino, Dak	June 4, 1873	Elliott Coues	.....	.....	.....	Skin.
2913do	June 7, 1873	.....do .....	.....	.....	.....	.....do.
2964do	June 13, 1873	.....do .....	.....	.....	.....	.....do.
2975do	June 14, 1873	.....do	17.00	23.50	8.50	.....do.
.....	Turtle Mountain, Dak.	July —, 1873	.....do .....	.....	.....	.....	.....do.
4587	Rocky Mountains, latitude 49°.	Aug. 23, 1874	.....do .....	.....	.....	.....	.....do.

ZENÆDURA CAROLINENSIS, (*Linn.*) *Bp.*

CAROLINA TURTLE DOVE.

Common at Pembina in June, and again observed the following season on the Upper Missouri.

TETRAO CANADENSIS FRANKLINI, (*Dougl.*) *Coues*.

FRANKLIN'S SPRUCE GROUSE.

This variety of the Canada Grouse or Spruce Partridge is characteristic of the Northern Rocky Mountains, where it was seen, and where several

**Columba macroura* LINN. SN. ed. x, 1758, 164. (KALM, Beskrifning på de vilda Dufvor, Som somliga år i så otrolig stor mykenhet komma til de Södra Engelska nybyggen i Norra America. < Kongl. Svenska Vetensk.-Acad. Handl. xx, 1759, pp. 275-295.—See also Catesby, pl. 23; Edwards, pl. 15.)

Ectopistes macrura COUES, BNW. 1874, 766.—AUGHEY, First Ann. Rep. U. S. Entom. Comm. 1878, App. p. [46].

specimens were secured in August, 1874. It was not seen in the foothills, even in apparently eligible situations, nor until we were fairly in the mountains, among the timber and dense windfalls, where it was rather common in the vicinity of our camp at Chief Mountain Lake.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4529	♀	Rocky Mountains, latitude 49°.	Aug. 20, 1874	Elliott Coues.	18.25	28.00	8.50	Skin.
4530	♀	...do .....	...do .....	...do	17.50	26.75	8.30	...do.

TETRAO OBSCURUS RICHARDSONI, (*Dougl.*) Coues.

RICHARDSON'S DUSKY GROUSE.

The remarks made under head of the last species apply equally well to the present, which was found in the same situation. It appeared to be rather the more numerous of the two. A large number of individuals were shot for sport or for food by various members of the party.

There is no doubt that a species of Ptarmigan, *Lagopus leucurus*, inhabits the higher elevations of the Rocky Mountains in this latitude.

While at Pembina, I was assured of the existence of a species of "Wood Grouse", different from the Spruce Partridge, or "Black Grouse", in the mountains of the same name. This statement, I presume, refers to *Bonasa umbellus*. No Ruffed Grouse of any variety were seen in the Rocky Mountains, but probably only through default of observation, as the *B. umbelloides* is an inhabitant of this region.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4540	♀	Rocky Mountains, latitude 49°.	Aug. 21, 1874	Elliott Coues	19.50	28.00	8.50	Skin.
4541do .....	...do .....	...do	17.50	25.40	8.00	...do.
4544do .....	...do .....	...do .....	...	...	...	...do.

CENTROCERCUS UROPHASIANUS, (*Bp.*) Sw.

SAGE-CKOCK; COCK OF THE PLAINS.

The entire absence of this species from the Red River region is one of the characteristic points of distinction between this watershed and that of the Missouri. No Sage-cocks were seen during the first season, not even within the Missouri Coteau, in the vicinity of Fort Stevenson. Though the climatological conditions are the same as those of some regions where they abound, yet we miss the peculiar aspect of the sagebrush country to which they cling so pertinaciously. Upon leaving Fort

Buford, during the second season, we soon entered a favorable tract where the birds were tolerably common, and where several specimens were secured. At this time, the last week of June, the chicks were already flying smartly, having attained on an average the size of quails. The birds were traced to the mouth of the Milk River. Further west and north, the country seems to be too open for them, and no more were noticed.

It is a great mistake to suppose that this bird feeds entirely upon sage, as has been repeatedly asserted. A number of young birds which I opened, shot near the mouth of the Milk River, had the crop full of some kind of small aquatic beetle, which they had gleaned from a marshy spot near by, with only traces here and there of vegetable matter. Others had the crop stuffed with grasshoppers.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4071	♀	Wolf Creek, Mont.	June 27, 1874	Elliott Coues.	22.50	37.50	10.50	Skin.
4072do.....	.....do.....	.....do.....	.....	.....	.....	Skin (chick).
4073do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
4074do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
4075do.....	.....do.....	.....do.....	.....	.....	.....	.....do.
4122	Near mouth Milk River, Mont.	July 1, 1874	.....do.....	.....	.....	.....	.....do.

PEDICECETES PHASIANELLUS COLUMBIANUS, (*Ord*) Coues.

SHARP-TAILED GROUSE; "PRAIRIE CHICKEN."

The whole of the region surveyed during my connection with the Commission lies beyond the range of the true Prairie-hen (*Cupidonia cupido*); while the Sage-cock, as just said, is confined to a limited portion of the Missouri country in the latitude of 49°. This leaves the field clear to the Sharp-tailed Grouse, which replaces the Prairie-hen, and abounds throughout the region from the Red River to the Rocky Mountains. In the "Birds of the Northwest", I carefully traced the general distribution of the species, particularly along the line where it inosculates with the range of the *cupido*. To this account I would refer for particulars not here given, as well as for a careful description of the various changes of plumage and other points, to give which would exceed the due bounds of the present article.

In the latitude of Pembina, the Chickens begin to lay the latter part of May or first of June. The first two weeks of the latter month are at the height of the laying and setting season. The earliest egg I procured was one cut from the parent June 4; but within a day or two a full set of eleven was found. Thirteen was the largest number secured in any one clutch; the smallest, among those in which incubation had progressed, was five. Average measurement of thirty specimens is

1.75 by 1.25; extremes of length, 1.80 and 1.60; of breadth, 1.30 and 1.20. When the shell is first formed, it is of a pale, dull greenish color; but before the egg is laid it acquires a drab or olive color by mixture of brown pigment with the original shade, and finally gains a uniform sprinkling of dark brown dots. The nests are found in various situations. Some are made out on the bare prairie, far from any landmark; others in moister tracts overgrown to willow-bushes. The first chicks I saw were caught on the 19th of June; these were newly hatched. They are very expert in hiding from the time they leave the shell. On threatened danger, the mother alarms them with a peculiar note, when they instantly scatter and squat; the mother then whirs away, but not until assured of their safety. The feathers of the wings and tail sprout first to replace the down, as in the case of the domestic fowl, in striking contrast to the growth of water-fowl, which become pretty well feathered long before their wings are serviceable for flight. The next feathers after the wings and tail are some on the poll; next appear strips of feathers on the breast and back; and with the completion of the process a plumage is assumed which lasts through part of September. In consequence of the rapid growth of the wing-feathers—a wise provision for the safety of birds until then exposed to numerous dangers—the young take short flights in a few weeks. I saw them beginning to top the bushes early in July; most of them fly quite smartly by the middle of this month, being then about as large as Quail (*Ortyx*), though some of them do not grow to this size for a month subsequently, showing a considerable range of variation in the time of hatching. I doubt that two broods are reared in a season, except perhaps in case of an accident to the first family; and for that matter, the birds seem to have all they can do to get a single set of chicks off their hands.

The plumage last mentioned is retained during the greater part of September, and is unmistakable evidence of immaturity. The birds are “fit” to shoot, in one sense, from the time they are two-thirds grown, and afford sport enough of a certain grade; but they ought to be let alone, unless one merely wishes *food*, until the moult, which occurs some time in September, is completed. They then acquire a clean, fresh, and crisp plumage, differing decidedly from that before worn, and come into prime condition. The old birds, which are in woful plight by midsummer, have by this time also accomplished the moult and come into fine feather again. The change in either case is gradual and protracted, and at no time are the birds deprived of flight, like ducks at the same trying period.

To ascertain the food of this grouse during the summer, as well as that of other species, is a matter of more than simple curiosity. The service they render in destroying grasshoppers, too often overlooked, cannot be too strenuously insisted upon, or too prominently brought to notice. I have sometimes been tempted to believe that the increasing

numbers of the scourge may be due, in part at least, to the wholesale destruction of summer grouse (both this species and the Pinnated), at the period when their services are most valuable. I have of course, in my proper official capacity, killed and opened great numbers of the birds during the whole season; and I almost invariably found their crops stuffed with grasshoppers, the only other contents being buds or flowers or the tops or succulent leaves of various plants, and small numbers of beetles, spiders, or other insects. At the height of the grasshopper season, however, the birds appear to eat scarcely anything else, and each crop will contain a large handful. If an army of grouse could be mustered and properly officered, they would doubtless prove more effectual in abating the pest than any means hitherto tried.

In the winter, according to my observations made at Fort Randall, the food of the grouse consists chiefly of cedarberries and other hard fruits that persist, and the sealed buds of various amentaceous trees.

During the latter part of September or early in October, when old and young have both finished the renewal of their plumage, and the family arrangements are foreclosed, the habits of the birds are considerably modified,—in nothing more than in the degree of shyness they exhibit. During the summer, also, they are rarely seen on trees, or on the open prairie, except in the vicinity of wooded or brushy tracts to which they may retreat. Now grown more confident, they scatter over the high prairie to feed, following up the ravines that lead from the water-courses, and in the afternoon returning to roost in the tops of the tallest trees. These daily excursions and returns may be very plainly noted along the Missouri, where the cottonwood bottoms are sharply divided from the limitless prairie. During the winter, especially when the ground is covered with snow, their arboreal habits are confirmed. The birds then hug the timber, and sometimes, on lowering or stormy days, remain motionless on their perches for hours together.

Along the Missouri, above the Yellowstone, the birds were seen in considerable numbers during the second season; but they were scarcely so common as along the Red and Mouse Rivers. Small chicks were seen the latter part of June. In the still more arid and forbidding region through which the northern affluents of the Milk River flow, there were fewer still; days sometimes passed without my seeing any. In the better country about the Sweetgrass Hills, they recurred in sufficient numbers to afford fair sport; in the eastern foothills of the Rocky Mountains, they were almost as numerous as anywhere else. They occur in the mountains up to an altitude of at least 4,200 feet, where they meet, at the bottom of the coniferous belt, the Spruce Partridge and Dusky Grouse. All three of these birds were common about our camp at Chief Mountain Lake.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2848	Pembina, Dak	June 4, 1873	Elliott Coues.	.....	.....	.....	Egg cut from oviduct.
2898do	June 6, 1873	.....do .....	.....	.....	.....	Set of 11 eggs.
2899do .....	.....do .....	.....do .....	.....	.....	.....	Set of 5 eggs.
2914do	June 7, 1873	.....do .....	.....	.....	.....	Skin.
2934do	June 11, 1873	.....do .....	.....	.....	.....	Set of 11 eggs.
3004do	June 16, 1873	.....do	18.00	27.00	8.00	Skin.
3041do	June 18, 1873	.....do .....	.....	.....	.....	Skin and 12 eggs.
3047do	June 19, 1873	.....do	19.00	28.00	8.50	Skin.
3059do .....	.....do .....	.....do	19.00	28.00	.....	Skin (chick).
3060do .....	.....do .....	.....do .....	.....	.....	.....	.....do
3099do	June 22, 1873	.....do .....	.....	.....	.....	Skin.
3100do .....	.....do .....	.....do .....	.....	.....	.....	Skin (chick).
3110do .....	.....do .....	.....do .....	.....	.....	.....	Set of 5 eggs.
3159do	June 25, 1873	.....do .....	.....	.....	.....	Skin (chick).
3160do .....	.....do .....	.....do .....	.....	.....	.....	.....do
3161do .....	.....do .....	.....do .....	.....	.....	.....	.....do
3221do	June 30, 1873	.....do .....	.....	.....	.....	.....do
3222do .....	.....do .....	.....do .....	.....	.....	.....	.....do
3223do .....	.....do .....	.....do .....	.....	.....	.....	.....do
3226do	July 5, 1873	.....do .....	.....	.....	.....	.....do
3227do .....	.....do .....	.....do .....	.....	.....	.....	.....do
3241	Pembina Mts., Dak	July 13, 1873	.....do .....	.....	.....	.....	.....do
3335	Turtle Mt., Dak ..	July 20, 1873	.....do .....	.....	.....	.....	Skin.
3354do	July 23, 1873	.....do .....	.....	.....	.....	.....do
3380do	July 30, 1873	.....do .....	.....	.....	.....	.....do
3573	Mouse River, Dak ..	Aug. 24, 1873	.....do	17.00	28.00	.....	.....do
4014	Big Muddy River, Mont.	June 22, 1874	.....do .....	.....	.....	.....	.....do
4015do .....	.....do .....	.....do .....	.....	.....	.....	Skin (chick).
4016do .....	.....do .....	.....do .....	.....	.....	.....	.....do
4076	Wolf Creek, Mont. .	June 27, 1874	.....do .....	.....	.....	.....	.....do
4077do .....	.....do .....	.....do .....	.....	.....	.....	.....do
4512	Rocky Mountains, latitude 49°.	Aug. 18, 1874	.....do .....	.....	.....	.....	Skin.

CHARADRIUS FULVUS VIRGINICUS, (*Bork.*) Coues.

AMERICAN GOLDEN PLOVER.

No Golden Plovers are seen in summer in any portion of the region explored. They pass through in large numbers during the vernal migration, in the month of May, and return again in the fall—the latter part of September. They were very abundant at this time along the Mouse River, and in fact on the prairie at large, for they scatter indiscriminately over large tracts, feeding upon the grasshoppers. Many were shot for food, to replenish a larder upon which four months' steady attention had made serious inroads. At this season, they were in excellent order, and proved very acceptable.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3928	Mouse River, Dak ..	Sept. 27, 1873	Elliott Coues.	10.75	22.50	7.00	Skin; weight, 4½ oz.
3929do .....	.....do .....	.....do	10.10	22.50	7.10	Skin.

ÆGIALITIS VOCIFERA, (Linn.) Bp.

KILDEER PLOVER.

Abundant throughout the summer in all suitable places; and as it is not a fastidious bird, it seemed to be satisfied anywhere near water, though hardly upon the dry plains, like the following species. A nest with eggs was taken June 30 near the mouth of Milk River—rather, the eggs were taken from a slight depression on the pebbly margin of a stream, which answered for a nest.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2950	Pembina, Dak	June 11, 1873	Elliott Cones	.....	.....	.....	Skin.
4031	Quaking Ash River, Mont.	June 26, 1874	...do .....	.....	.....	.....	...do.
4107	Near Mouth Milk River, Mont.	June 30, 1874	...do .....	.....	.....	.....	Four eggs.
4387	West of Sweetgrass Hills, Mont.	Aug. 10, 1874	...do .....	.....	.....	.....	Skin.
4494	Rocky Mountains, latitude 49°.	Aug. 16, 1874	J. H. Batty...	.....	.....	.....	...do.

ENDROMIAS MONTANUS, (Towns.) Harting.

MOUNTAIN PLOVER.

The occurrence of this bird in the Milk River country, along the parallel of 49°, where it was breeding in considerable numbers, is a matter of interest, as fixing the northernmost points at which the species has thus far been observed. It does not appear to enter the Red River Basin, nor did I see it in the immediate vicinity of the Missouri below the mouth of Milk River. At this point, it was first seen July 1, and it was traced thence across the country nearly to the Sweetgrass Hills, beyond which it was lost. Its centre of abundance in this region was the vicinity of Frenchman's River, where many specimens, both adult and young, together with a set of three eggs, were secured during the first and second weeks in July. Three I believe to be the usual number. The birds seem to be at no time very wary or suspicious, and when they have a nest near by, or are leading their young over the prairie, they will scarcely retreat before threatened danger. Upon invasion of their breeding-places, they utter a singular, low, chattering cry, quite unlike the usual soft, mellow whistle, fly low over the ground to a short distance, or run swiftly for a few paces, and then stand motionless, drawn up to their full stature. The chicks are white beneath, curiously variegated in color above, with naked livid spaces about the neck. Almost from the first, they are difficult to capture alive; at the note of warning from the parent, they scatter with amazing celerity, and soon squat, when they become at once invisible, even in the scantiest herbage of the

prairie. The nesting period is protracted, for at the time I took nearly fresh eggs, well-feathered young, shifting for themselves, had already been observed.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4120	...	Near mouth of Milk River, Mont.	July 1, 1874	Elliott Coues.	.....	.....	.....	Skin.
4131	...	Frenchman's River, Mont.	July 4, 1874	...do.....	.....	.....	.....	...do.
4132	♂	...do.....	...do.....	...do.....	.....	.....	.....	...do.
4133do.....	...do.....	...do.....	.....	.....	.....	Skin (young).
4182	...	Near Frenchman's River, Mont.	July 9, 1874	...do.....	.....	.....	.....	Set of 3 eggs.
4188do.....	...do.....	...do.....	.....	.....	.....	Skin.
4189	♀	...do.....	...do.....	...do.....	.....	.....	.....	Skin (parent of Nos. 4090-2).
4190do.....	...do.....	...do.....	.....	.....	.....	Skin (chick).
4191do.....	...do.....	...do.....	.....	.....	.....	...do...do.
4192do.....	...do.....	...do.....	.....	.....	.....	...do...do.
4210do.....	July 10, 1874	...do.....	.....	.....	.....	Skin.
4211do.....	...do.....	...do.....	.....	.....	.....	...do.
4219	...	Near Two Forks of Milk River.	July 13, 1874	...do.....	.....	.....	.....	...do.
4220do.....	...do.....	...do.....	.....	.....	.....	...do.
4229	...	Two Forks of Milk River.	July 16, 1874	...do.....	.....	.....	.....	...do.
4260	...	Crossing of Milk River, Mont.	July 23, 1874	...do.....	.....	.....	.....	...do.

RECURVIROSTRA AMERICANA, Gm.

AMERICAN AVOCET.

Not observed in the Red River region, but found breeding in great abundance in the Milk River country, where it seemed specially fond of the alkali pools, that are too numerous for the traveller's comfort. It is one of the most conspicuous birds of the saline region, and may be recognized at any distance by its resemblance to a Crane in miniature. Its loud voice is peculiar, and the clamor is incessant when the breeding-places are invaded. The bird nests rather early, as by the first week of July, when I first encountered it at Frenchman's River, the young were already fledged, and by the middle of the month were on wing. At this age, they show a curious enlargement of the shank, which is swollen to much greater calibre than that of the tibia. The birds being abundant, and also very unsuspicious, a fine series of specimens was readily secured. They were generally observed in flocks of half a dozen to two dozen, wading about in the shallow water, often beyond gunshot from the shore, and at such times presenting a singularly pleasing and picturesque appearance. On getting beyond their depth, they begin to swim without difficulty, and frequently alight directly on deep water. They feed by immersing the head and neck for some moments together, during which time they are feeling about with their curious bills. Their preference for the alkaline pools may be less due to the quality of the water itself than to its shallowness and stillness, and the peculiarly soft, oozy, and almost slimy condition of the bottom.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4135	♂	Frenchman's River, Mont.	July 6, 1874	Elliott Coues.	.....	.....	.....	Skin.
4136	♂	do	do	do	.....	.....	.....	do.
4156	do	July 8, 1874	do	19.00	39.00	9.50	do.
4391	West of Sweetgrass Hills, Mont.	Aug. 11, 1874	do	.....	.....	.....	do.
4435	Headquarters Milk River, Mont.	Aug. 13, 1874	J. H. Batty	16.50	38.00	8.25	do.
4436	do	do	do	17.50	29.75	9.00	do.
4437	do	do	do	17.00	27.75	8.00	do.
4650	do	Aug. 29, 1874	Elliott Coues	.....	.....	.....	do.
4651	do	do	do	.....	.....	.....	do.
4652	do	do	do	.....	.....	.....	do.
4653	do	do	do	.....	.....	.....	do.
4654	do	do	do	.....	.....	.....	do.
4655	do	do	do	.....	.....	.....	do.
4656	do	do	do	.....	.....	.....	do.
4657	do	do	do	.....	.....	.....	do.
4658	do	do	do	.....	.....	.....	do.

STEGANOPUS WILSONI, (*Sab.*) Coues.

WILSON'S PHALAROPE.

Breeds throughout the country, from the Red River to the Rocky Mountains, and in suitable places common, though never observed in large numbers at any one place. I had no opportunity of observing it after August, and am inclined to think it retires southward in advance of most of the waders. Even during the latter part of August, when other waders were regularly flocking, I never saw the Phalarope in companies of more than half a dozen individuals, and it probably never makes up in large flocks, like the other two species. At Pembina, it was breeding about reedy pools and prairie sloughs in June. I was not so fortunate, however, as to discover a nest, though I searched faithfully more than once. At Mouse River, during the month of August, it was constantly seen on the pools near the stream. Newly fledged birds taken in August are altogether different from the adults in plumage and color of the naked parts. This first plumage, which strikingly resembles on the upper parts that of the *Tringa maculata*, is worn only for a brief period before it is exchanged for uniform ashy and white, which characterizes the winter state. The birds are extremely gentle and confiding during the breeding-season, and may be approached and destroyed without the slightest difficulty.

An excellent contribution to the biography of Wilson's Phalarope has recently been made by Mr. E. W. Nelson, in the Bulletin of the Nuttall Ornithological Club, vol. ii, No. 2, April, 1877, pp. 38-43.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3073	Pembina, Dak.	June 20, 1873	Elliott Coues	.....	.....	.....	Skin.
3455	Mouse River, Dak. ...	Aug. 10, 1873	...do	8.25	14.50	4.60	Skin: bill 1.10.
3456do .....	...do .....	...do .....	.....	.....	.....	Skin.
3594do	Aug. 30, 1873	...do	8.30	15.30	4.60	Skin: bill black; feet yellowish.
4078	Wolf Creek, Mont. ...	June 27, 1874	...do .....	.....	.....	.....	Skin.
4152	Frenchman's River, Mont.	July 7, 1874	...do .....	.....	.....	.....	...do.
4213	♂	Near Frenchman's River, Mont.	July 12, 1874	...do .....	.....	.....	.....	...do.
4214	♂♂	...do .....	...do .....	...do .....	.....	.....	.....	...do.
4215do .....	...do .....	...do .....	.....	.....	.....	...do.
4216do .....	...do .....	...do .....	.....	.....	.....	...do.
4217do .....	...do .....	...do .....	.....	.....	.....	...do.
4256	Near Two Forks of Milk River.	July 21, 1874	...do .....	.....	.....	.....	Skin (young).

LOBIPES HYPERBOREUS, (*Linn.*) *Cuv.*

HYPERBOREAN PHALAROPE.

A large pool, or little lake, lying by the trail of our party, near the eastern base of the Rocky Mountains, a day's march east of Saint Mary's River, seemed to be a favorite resort for all the waders of the region, as well as the Ducks and Geese. There were here congregated a surprising number of water-birds—both species and individuals. Of the waders, I noticed during an hour's shooting at this spot on the 16th of August two kinds of Phalarope, the Stilt Sandpiper, the Semipalmated, Least, Baird's, and the Pectoral Sandpipers, the Willet, Greater and Lesser Yellowshanks, Solitary and Spotted Tattler, in all no less than a dozen species, of which I took specimens of nearly all. It was perhaps the only still water for many miles around, and thus attracted a full congregation of the "long-legged fraternity", to say nothing of the Ducks and Geese. The Northern Phalarope was among the number, rather unexpectedly to me, seeing how early in the season it was. There were, however, but very few of this species, in comparison with the numbers of the rest. I presume these were early arrivals from the north, since it is not probable that the species breed so far south. The evidence, however, is obviously negative; and since such boreal nesters as the Waxwing and Harlequin Duck were certainly breeding in this latitude, the Phalaropes seen here may have been hatched not far away.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4495	Near Rocky Mountains, latitude 49°.	Aug. 16, 1874	Elliott Coues.	.....	.....	.....	Skin.

GALLINAGO WILSONI, (*Temm.*) *Bp.*

THE SNIPE.

Snipe-shooting opened on the Mouse River the middle of September, and for two or three weeks I enjoyed as good sport of this kind as I have ever had anywhere. The birds were abundant in the usual kind of grounds, here afforded in the vicinity of the reedy pools that are strung along near the river, and some excellent bags were made. I had previously seen none of the birds, nor were any observed during the succeeding season in the Missouri and Milk River countries, where there is little to attract them.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3758	♂	Mouse River, Dak...	Sept. 16, 1873	Elliott Cones	11.10	19.50	5.25	Skin: weight, 30 oz. 5 drs.
3824	♂	...do	Sept. 27, 1873	...do	10.00	15.75	5.00	Skin.
3825	♂	...do .....	...do .....	...do	11.50	18.50	5.30	...do.
3826	♂	...do .....	...do .....	...do	10.70	17.50	5.10	...do.
3827	♂	...do .....	...do .....	...do	11.20	18.20	5.20	...do.

MACRORHAMPHUS GRISEUS, (*Gm.*) *Leach.*

RED-BREASTED SNIPE.

Observation of this species on the Mouse River during the second week in August, before the general flight of waders took place, led me to infer that it bred in this region, like several other waders not actually caught in the act. During the fall migration, in September, the birds were extremely numerous, frequenting the pools along the river in large flocks; they were unwary, apparently absorbed in their avocations, and large bags could easily be made. Out of a lot of thirty or forty killed, October 1, partly for my legitimate purposes and partly to improve our fare, I selected, carefully measured, and preserved nine individuals, the dimensions of which are subjoined in proof that the supposed *M. scolopaceus* is not a distinct species. The question is fully discussed in the "Birds of the Northwest".

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3458	...	Mouse River, Dak	Aug. 10, 1873	Elliott Cones	11.90	19.25	5.75	Skin.
3459do .....	...do .....	...do	12.00	20.00	6.00	...do.
3858	♂	...do	Oct. 1, 1873	...do	10.25	17.50	5.40	...do. (bill 2.20, leg 3.40).
3859	♂	...do .....	...do .....	...do	11.00	18.50	5.65	...do. (bill 2.50, leg 3.40).
3860	♂	...do .....	...do .....	...do	11.25	19.25	5.80	...do. (bill 2.85, leg 3.85).
3861	♂	...do .....	...do .....	...do	11.50	19.00	5.75	...do. (bill 2.90, leg 4.00).
3862	♂	...do .....	...do .....	...do	11.75	19.50	5.90	...do. (bill 2.90, leg 4.10).
3863	♂	...do .....	...do .....	...do	11.90	19.75	6.00	...do. (bill 2.95, leg 4.00).
3864	♂	...do .....	...do .....	...do	12.25	20.25	6.10	...do. (bill 3.05, leg 4.10).
3865	♂	...do .....	...do .....	...do	12.50	19.50	5.85	...do. (bill 3.25, leg 4.15).

MICROPALAMA HIMANTOPUS, (*Bp.*) *Bd.*

STILT SANDPIPER.

This highly interesting species is not known to breed except in high latitudes, and has usually been regarded as rather rare in the United States. I was delighted to find it on the same lucky pool where I got the Northern Phalarope, for I had never before seen it alive. We can only surmise whether or not it had bred in the vicinity—the date was August 16; but the birds were fully flocking, and seemed to be *en route*. On repassing the pool August 29, returning from the mountains, I saw it again, and added another specimen to the half dozen secured at my first visit. In their general appearance and actions, the birds so closely resembled the Red-breasted Snipe that at gunshot range I at first mistook them for the latter, and did not recognize them until the specimens were in hand. They gathered in the same compact groups, waded about in the same sedate, preoccupied manner, fed with the same motion of the head, probing obliquely in shallow water with the head submerged, were equally oblivious of my approach, and when wounded swam with equal facility. The close structural resemblances of the two species are evidently reflected in their general economy.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4475	Near Rocky Mts.,	Aug. 16, 1874	Elliott Coues	} *9.00	} *16.25	} *5.00	{ Skin.
4476	lat. 49°	.... do .....	.... do				{ do.
4477 do .....	.... do .....	.... do				{ do.
4478 do .....	.... do .....	.... do				{ do. *Average.
4479 do .....	.... do .....	.... do				{ do.
4480 do .....	.... do .....	.... do				{ do.
4644 do	Aug. 29, 1874	.... do .....	....	....	....	.... do.

EREUNETES PUSILLUS, (*Linn.*) *Cass.*

SEMIPALMATED SANDPIPER.

This abundant and familiar little species was noticed at various points along the Line during the month of August.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3479	...	Mouse River, Dak.	Aug. 10, 1873	Elliott Coues	....	....	....	Skin.
4396	West of Sweetgrass Hills, Mont.	Aug. 11, 1874	.... do .....	....	....	....	.... do.
4399 do .....	.... do .....	.... do .....	....	....	....	.... do.
4400 do .....	.... do .....	.... do .....	....	....	....	.... do.

TRINGA MINUTILLA, *Vieill.*

LEAST SANDPIPER.

Observed a little earlier than the preceding species; and I should not be surprised if it bred in the immediate vicinity. Not noticed after the middle of August.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3383	Turtle Mt., Dak	July 30, 1873	Elliott Cones.	.....	.....	.....	Skin.
3384	do	do	do	.....	.....	.....	do.
4370	West of Sweetgrass Hills, Mont.	Aug. 9, 1874	do	5.60	10.75	3.37	do.
4397	do	Aug. 11, 1874	do	.....	.....	.....	do.
4398	do	do	do	.....	.....	.....	do.

TRINGA BAIRDI, *Coues.*

BAIRD'S SANDPIPER.

During the fall migration, in the month of August, this is one of the most abundant Sandpipers in Dakota and Montana. I found it in small flocks along the Mouse River, and thence in suitable places to the Rocky Mountains; sometimes by itself, oftener mixing with several allied species. Its habits, during the season at least, do not appear to be peculiar in any respect. I observed it chiefly on the small saline pools of the prairie, generally near water-courses, but sometimes at a distance from any permanent stream. It is a very quiet, gentle bird, which may be approached with ease.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3543	♂	Mouse River, Dak	Aug. 21, 1873	Elliott Cones.	7.00	15.00	4.80	Skin. Bill, eye, and feet black.
3544	do	do	do	7.00	15.25	.....	do.
3545	do	do	do	7.25	15.25	.....	do.
3546	do	do	do	7.50	16.75	.....	do.
3585	do	Aug. 30, 1873	do	.....	.....	.....	do.
4385	West of Sweetgrass Hills, Mont.	Aug. 10, 1874	do	7.15	15.25	4.75	Skin.
4386	do	do	do	.....	.....	.....	do.
4393	do	Aug. 11, 1874	do	.....	.....	.....	do.
4394	do	do	do	.....	.....	.....	do.
4395	do	do	do	.....	.....	.....	do.
4433	Headwaters of Milk River, Mont.	Aug. 13, 1874	do	7.40	15.25	4.85	do.
4642	Near Rocky Mountains, latitude 49°.	Aug. 29, 1874	do	.....	.....	.....	do.

TRINGA MACULATA, *Vieill.*

PECTORAL SANDPIPER.

Like the last species, this one is common in both Territories during the fall migration. It was first seen the latter part of July, in company

with *T. minutilla*, on the pools about the base of Turtle Mountain. Some of the specimens secured were evidently very young birds of the year, but whether bred or not in the vicinity is uncertain.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3371	...	Turtle Mt., Dak ...	July 28, 1873	Elliott Coues.	.....	.....	.....	Skin.
3372	...	do	do	do .....	.....	.....	.....	do.
4392	...	West of Sweetgrass Hills, Mont.	Aug. 11, 1874	do .....	.....	.....	.....	do.
4492	...	Near Rocky Mountains, latitude 49°.	Aug. 16, 1874	do .....	.....	.....	.....	do.
4493	...	do	do	do .....	.....	.....	.....	do.

LIMOSA FEDOA, (Linn.) Ord.

GREAT MARBLED GODWIT.

The breeding-range of this well-known bird remained until recently uncertain, and its eggs were long special desiderata of the National Museum. At Saint Paul, I saw in the collection of the Academy of Natural Sciences of that city a set which had been taken in Minnesota. The bird has been ascertained to breed also in Iowa, and I was satisfied that it did so at Pembina. The birds that I observed in this locality showed by all their actions, readily interpreted by one familiar with the subject, that they were nesting; and I did not hesitate to so assert, though I was not successful in my search for the nest. This was of date June 20, 1873. The species was not observed west of this point.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3071	♀	Pembina, Dak	June 20, 1873	Elliott Coues.	.....	.....	.....	Skin.

LIMOSA HÆMASTICA, (Linn.) Coues.

HUDSONIAN GODWIT.

While in camp at the Two Forks of Milk River, I was shown a specimen of this species, in full plumage, in the collection of my colleague, Mr. G. M. Dawson, Naturalist of the English Commission. It had been taken, I understood, some distance east of this point. I did not myself observe the species.

TOTANUS SEMIPALMATUS, (Gm.) Temm.

WILLET.

Though the specimens preserved were all taken in August alone, I occasionally observed the species at different times during both seasons, Bull. iv. No. 3—7

and at various points from the Red River to the Rocky Mountains. It breeds in this region—in fact, the limit of its northward distribution is only six or seven degrees beyond—as it does in suitable places throughout the United States. I have myself observed it during the breeding-season in New Mexico and North Carolina, as well as in the present region.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3460	...	Mouse River, Dak.	Aug. 10, 1873	Elliott Cones. ....	.....	.....	.....	Skin.
3533	...	do	Aug. 16, 1873	do .....	.....	.....	.....	do.
4491	...	Near Rocky Mountains, latitude 49°.	Aug. 16, 1874	do .....	.....	.....	.....	do.
4508	...	do	Aug. 17, 1874	do .....	.....	.....	.....	do.

TOTANUS MELANOLEUCUS, (Gm.) Vieill.

GREATER YELLOWSHANKS.

Not observed until the last week in July; very abundant, in August and September, throughout the region. This and the succeeding species are almost invariably found together, and frequently associating in the same flock. Their habits are exactly the same. They are generally accounted shy and wary birds in settled districts, and so I have usually found them; but in the wilds of the West they are among the most unsuspecting of the waders, and may be approached without the slightest difficulty.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3539	♀	Mouse River, Dak.	Aug. 19, 1873	Elliott Cones. ....	.....	.....	.....	Skin.
3560	...	do	Aug. 23, 1873	do	14.00	25.00	7.75	do.
3561	...	do	do	do	13.50	24.50	7.90	do.
3560	...	do	Aug. 24, 1873	do .....	.....	.....	.....	do.
3581	...	do	do	do .....	.....	.....	.....	do.
3586	...	do	Aug. 25, 1873	do	13.40	24.75	.....	do.
4286	...	Crossing Milk R., Mont.	July 24, 1874	do .....	.....	.....	.....	do.
4438	...	Headwaters Milk R., Mont.	Aug. 13, 1874	J. H. Batty.	13.50	24.25	7.60	do.
4489	...	Rocky Mts., lat. 49°.	Aug. 16, 1874	do .....	.....	.....	.....	do.
4646	...	do	Aug. 29, 1874	do .....	.....	.....	.....	do.

TOTANUS FLAVIPES, (Gm.) Vieill.

LESSER YELLOWSHANKS.

See remarks under head of the last species, equally applicable here.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3406	♀	Turtle Mountain, Dak.	Aug. 5, 1873	Elliott Coues	.....	.....	.....	Skin.
3461	Mouse River, Dak.	Aug. 10, 1873	do	10.25	20.75	.....	do.
3475	do	do	do	.....	.....	.....	do.
3476	do	do	do	.....	.....	.....	do.
3547	do	Aug. 22, 1873	do	.....	.....	.....	do.
3576	do	do	do	.....	.....	.....	do.
3577	do	do	do	.....	.....	.....	do.
3578	do	do	do	.....	.....	.....	do.
3579	do	do	do	.....	.....	.....	do.
3585	♂	do	Aug. 25, 1873	do	10.40	19.75	.....	do.
3593	do	Aug. 30, 1873	do	10.00	19.50	6.00	do.
4287	Crossing Milk R., Mont	July 25, 1874	do	.....	.....	.....	do.
4288	do	do	do	.....	.....	.....	do.
4481	Near Rocky Mountains, lat. 49°.	Aug. 16, 1874	J. H. Batty	.....	.....	.....	do.
4482	do	do	do	.....	.....	.....	do.
4483	do	do	do	.....	.....	.....	do.
4484	do	do	do	.....	.....	.....	do.
4485	do	do	do	.....	.....	.....	do.
4486	do	do	do	.....	.....	.....	do.
4487	do	do	do	.....	.....	.....	do.
4488	do	do	do	.....	.....	.....	do.
4647	do	Aug. 29, 1874	do	.....	.....	.....	do.
4 48	do	do	do	.....	.....	.....	do.
4649	do	do	do	.....	.....	.....	do.

TOTANUS SOLITARIUS, (Wils.) Aud.

SOLITARY TATTLER.

Occurs in abundance on all the pools and water-courses of the region during the autumnal migration. I have reason to believe that some may breed in this latitude. It is almost never seen in flocks, though numbers may be gathered about the same piece of water.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3407	Turtle Mountain, Dak.	Aug. 5, 1873	Elliott Coues	.....	.....	.....	Skin.
3408	do	do	do	.....	.....	.....	do.
3548	Mouse River, Dak.	Aug. 22, 1873	do	.....	.....	.....	do.
3549	do	do	do	.....	.....	.....	do.
3562	do	Aug. 23, 1873	do	.....	.....	.....	do.
3563	do	do	do	.....	.....	.....	do.
4289	Crossing Milk R., Mont	July 25, 1874	do	.....	.....	.....	do.
4319	Sweetgrass Hills, Mont	Aug. 6, 1874	J. H. Batty	9.00	17.25	5.60	do.
4330	do	do	do	8.40	15.25	4.80	do.
4321	do	do	do	8.40	15.60	4.90	do.
4379	West of Sweetgrass Hills, Mont.	Aug. 10, 1874	Elliott Coues	.....	.....	.....	do.
4380	do	do	do	.....	.....	.....	do.
4381	do	do	do	.....	.....	.....	do.
4446	Headwaters Milk R., Mont.	Aug. 14, 1874	do	.....	.....	.....	do.
4490	Near Rocky Mountains, lat. 49°.	Aug. 16, 1874	do	.....	.....	.....	do.
4644	do	Aug. 29, 1874	do	.....	.....	.....	do.
4645	do	do	do	.....	.....	.....	do.

TRINGOIDES MACULARIUS, (*Linn.*) Gray.

SPOTTED SANDPIPER.

The ubiquitous "teeter-tail", or "peet-weet", occurs in summer throughout the region, as it does in most other parts of North America.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen and remarks.
2236	Pembina, Dak	June 4, 1873	Elliott Cones.	.....	.....	.....	Skin.
3481	Mouse River, Dak	Aug. 10, 1873	.....do .....	.....	.....	.....	do.
4431	West of Sweetgrass Hills, Mont.	Aug. 12, 1874	.....do .....	.....	.....	.....	do.

ACTITURUS BARTRAMIUS, (*Wils.*) Bp.

BARTRAMIAN TATTLER.

This interesting bird is extremely abundant over all the prairie of the Red River region. I found it upon my arrival at Pembina, June 1, and it breeds during this month. I took eggs from the second to fourth week of June, and found newly hatched birds early in July. The first week in June, a female was killed, with an egg in her ready for extrusion. During the breeding-season, they seem to scatter indiscriminately over the prairie; yet there are particular spots, generally depressed, therefore slightly more fertile, which they particularly affect. They appear to leave the country sooner than most of the waders; I saw none after the fore part of September, though the majority of the waders continued plentiful through most of this month. They make up in flocks before their departure.

In the Missouri and Milk River regions, they are not nearly so numerous—in fact, none were observed after leaving the former river; the prairie waders which breed further westward being chiefly the Long-billed Curlew.

A tolerably full and, I think, perfectly reliable biography of this species will be found in my "Birds of the Northwest".

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen and remarks.
2847	Pembina, Dak	June 4, 1873	Elliott Cones.	.....	.....	.....	Egg, cut from oviduct.
2874	♀	.....do	June 6, 1873	.....do .....	.....	.....	.....	Contained egg. Bill yellow, with black ridge and tip; feet dull yellow; eye dark brown.
2875	♂	.....do .....	.....do .....	.....do	11.50	22.25	6.40	Skin.
2943	♂	.....do	June 11, 1873	.....do	12.00	21.00	6.25	do.
2944	♂	.....do .....	.....do .....	.....do	11.20	22.00	6.50	do.
2945	♂	.....do .....	.....do .....	.....do .....	.....	.....	.....	do.
2949do .....	.....do .....	.....do .....	.....	.....	.....	Set of 4 eggs.

List of specimens—Continued.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2999	♂	Pembina, Dak	June 16, 1873	Elliott Coues	12.75	22.00	6.75	Skin.
3000	do	do	do	do	11.75	21.50	6.25	do.
3001	♀	do	do	do	12.50	22.75	6.60	do.
3002	do	do	do	do	12.25	21.50	6.60	do.
3003	do	do	do	do	12.25	22.50	7.00	do.
3016	♀	do	June 17, 1873	do	do	do	do	do.
3017	do	do	do	do	do	do	do	do.
3018	do	do	do	do	do	do	do	do.
3019	♀	do	do	do	do	do	do	do.
3020	do	do	do	do	do	do	do	do.
3021	♀	do	do	do	do	do	do	do.
3022	do	do	do	do	do	do	do	do.
3048	♀	do	June 19, 1873	do	do	do	do	do.
3072	do	do	June 20, 1873	do	do	do	do	do.
3101	do	do	June 22, 1873	do	do	do	do	do.
3102	do	do	do	do	do	do	do	do.
3111	do	do	do	do	do	do	do	Set of 4 eggs.
3214	do	do	June 28, 1873	do	do	do	do	Skin.
3215	do	do	do	do	do	do	do	do.
3253	do	20 miles west of Pembina Mts.	July 14, 1873	do	do	do	do	Skin (young).
3334	do	25 miles east of Turtle Mt.	July 18, 1873	do	do	do	do	do.
3353	do	Turtle Mt.	July 23, 1873	do	do	do	do	do.
3540	do	Mouse River, Dak.	Aug. 19, 1873	do	do	do	do	Skin.
4030	do	Quaking Ash River, Mont.	June 26, 1874	do	do	do	do	do.
4037	do	do	do	do	do	do	do	Four eggs.
4038	do	do	do	do	do	do	do	Skin. (Parent of eggs 4037.)

NUMENIUS LONGIROSTRIS, Wils.

LONG-BILLED CURLEW.

Breeds in moderate numbers about Pembina, the only locality where it was observed during the first season. The next year it was found in profusion over the prairie adjoining the Missouri above Buford, and the lower portions of the Milk River and its tributaries. It seemed, like the Bartramian Tattler, to affect particular localities, where colonies of twenty or thirty pairs would take up their abode for the summer, and make the air resound with their piercing and peculiarly lugubrious cries when disturbed. They were found decidedly shy and watchful; and being naturally stout, tough birds, they proved rather hard to kill. One of the most disastrous shooting exploits I ever attempted was directed against these same birds, as some of my friends who witnessed the discouraging negative results will remember. There seems to be a considerable latitude in the period of laying; I took a fresh set of eggs July 4th, having the day previous captured some young birds.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4100	do	Near mouth of Milk River, Mont.	June 30, 1874	Elliott Coues	do	do	do	Skin.
4125	do	Frenchman's River, Mont.	July 3, 1874	do	do	do	do	Skin (young).
4130	do	do	July 4, 1874	do	do	do	do	Set of 4 eggs.

ARDEA HERODIAS, *Linn.*

GREAT BLUE HERON.

Observed during our passage down the Red River.

NYCTIARDEA GRISEA NÆVIA, (*Bodd.*) *Allen.*

AMERICAN NIGHT HERON.

One individual seen under the same circumstances as the last.

BOTAURUS MINOR, (*Gm.*) *Boie.*

AMERICAN BITTERN.

Apparently rather common on Mouse River in September, several individuals being observed and two secured.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen and remarks.
3703	♂	Mouse River, Dak...	Sept. 2, 1873	Elliott Coues	28.00	45.00	11.00	Iris yellow; bill pale greenish-yellow, with black ridge and dark coral stripe; legs dull yellowish-green; claws brown.
3738do.....	Sept. 8, 1873	.....do.....	23.50	38.00	9.50	

GRUS AMERICANA, (*Linn.*) *Temm.*

WHITE or WHOOPING CRANE.

White Cranes were frequently observed in the Mouse River country in August, September, and October, but always at a distance; and I was not so fortunate as to secure any specimens. There is no reason to doubt their breeding in this section. To the best of my recollection, none were seen in the Missouri or Milk River region during the second season.

GRUS CANADENSIS, (*Linn.*) *Temm.*

BROWN or SANDHILL CRANE.

- Commonly observed after leaving Pembina, especially during the latter part of the season. In July, I noticed, in one of the topographical camps, the remains of a young bird, which had been caught alive. It appears to breed over the whole region, in prairie country. In the latter part of September and early in October, both this and the Whooping Crane appeared to be migrating southward, chiefly in the nighttime, when their hoarse, rattling croak often broke the stillness, or sounded strong amidst the honking of the geese, the whistling of the rushing wings of the wildfowl, and the slender pipe of the waders that completed the throng of numberless migrants.

PORZANA CAROLINA, *Linn.*

SORA RAIL.

Observed during the migration in September along the Mouse River, where it appeared to be rather common. Its nesting in this region was not determined.

FULICA AMERICANA, *Gm.*

COOT.

Extremely abundant. Almost all the pools and reedy sloughs of the prairie throughout the region from the Red River to the Rocky Mountains and Upper Missouri country generally are tenanted by one or more pairs of these very common-place birds. The sets of eggs taken varied from ten to twelve in number, and there is a good deal of difference in the coloration, the ground varying from pale clay color to light creamy-brown, while the spotting consists sometimes of mere points, sometimes of sizable spots. The first set of eggs taken, June 20, contained embryos which would have been hatched in a day or two; others, taken the first and second weeks in July, were fresh; and, again, newly hatched young were found so late as July 26. Unless two broods are reared, as is not probable, there is a latitude of a full month in the time of laying. The birds were still abundant when I left the country, the second week in October.

The nests of this bird differ a good deal in location and amount of material employed. One particularly examined at Pembina consisted of a bulky mass of stout reed-stems, about 15 inches across and 8 in depth; it was lined with the softer tops of the reeds. This one was in a slough of considerable depth; it floated on the water—rather, it was placed on a matted platform of floating, broken-down reeds, and was moored to the growing plants. Other nests, in very shallow water or around the edges of pools, were stationary.

The newly hatched young are curious-looking creatures, covered with black down striped with rich golden-yellow or orange; bill vermilion-red, black-tipped; feet dark.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3064	...	Pembina, Dak.	June 20, 1873	Elliott Cones. ....	.....	.....	.....	Set of 11 eggs.
3364	...	Turtle Mountain, Dak.	July 26, 1873	...do .....	.....	.....	.....	Young, newly hatched.
3365	...	do	do .....	...do .....	.....	.....	.....	do.
3838	♂	Mouse River, Dak. .	Oct. 1, 1873	...do	16.00	28.50	7.50	Skin.
4118	...	Near mouth Milk River, Mont.	July 1, 1874	...do .....	.....	.....	.....	Set of 12 eggs.
4176	...	Frenchman's River, Mont.	July 8, 1874	...do .....	.....	.....	.....	Set of 10 eggs.
4672	...	Headwaters Milk River, Mont.	Aug. 30, 1874	...do .....	.....	.....	.....	Skin.

Family ANATIDÆ.

SWAN, GEESE, and DUCKS.

A few words of comment upon the general subject will place it in clearer light than that which the series of isolated remarks furnishes, and render lengthy accounts of the several species unnecessary. During the autumnal migration, vast bands of water-fowl enter Montana and Dakota from the north. The nature of the country is such that the birds stopping for rest and food necessarily come together in immense numbers; for superimposed upon their gregarious disposition is the circumstance that the water supply is precarious or isolated, the country at large wholly unsuited to their wants. The result is, that the most slender streams, often mere threads, with scarcely strength to flow, or even broken into chains of sloughs, and all the temporary water-holes formed in depressions of the prairie, become thronged with the birds. This gives an impression of extraordinary numbers of these birds, but it should be recollected that we have here the percentage of birds due to large areas concentrated in particular spots. Duck-shooting under these circumstances becomes a somewhat special branch of the art.

Another circumstance is, that the parallel of 49° is about on the edge of the breeding-ground of those species which regularly migrate northward to breed. A large number of the Ducks, and some of the Geese, as is well known, nest indiscriminately in any part of the United States; but aside from these, all of which of course occur in the present country as well as elsewhere, there are a number of species of truly boreal breeders, which begin to drop deserters at about this latitude. As a result, nearly all of the Ducks of North America, except the maritime and thoroughly Arctic ones, nest within our limits. They choose the ponds and prairie sloughs, and the little pools in the mountains; and during the latter part of the season, these places assume the appearance of a farm-yard puddle, from the quantity of droppings and cast feathers.

In general, throughout this Report, the tabular lists of specimens afford a tolerably fair index to the abundance or scarcity of the several species secured; but this fails altogether in the cases of the birds of this family, few of which seemed worth the trouble of preparing or the expense of transportation, although large numbers were shot as legitimate objects of sport or to vary our fare.

CYGNUS BUCCINATOR, *Rich.*

TRUMPETER SWAN.

Observed on a few occasions in Dakota late in September and during the first half of October, during the migration. It appears to pass chiefly by night, but I saw a small lot flying in the daytime near Fort Stevenson. The species is said to breed in the Yellowstone country, and also in Minnesota.

The other species of Swan, *C. americanus*, was not recognized, though it doubtless occurs during the migration.

The same remark applies to a species of Goose, *Anser albifrons gambeli*.

ANSER HYPERBOREUS, *Pall.*

SNOW GOOSE; WHITE BRANT.

Abundant during the migrations. On a former occasion, I noted their spring migration in Southern Dakota, at Fort Randall, from the latter part of March through most of April. In the fall, I saw none until October.

BRANTA CANADENSIS, (*Linn.*) *Gray.*

CANADA GOOSE.

Whilst steaming up the Missouri in June, 1874, I saw several broods of goslings swimming near the banks. At a pool in Montana, west of Frenchman's River, a colony had established themselves to breed; and during the time when neither old nor young could fly, several dozen were killed with clubs by some people attached to one of the surveys. The frequent nesting of the species in *trees*, in various parts of the Northwest, is perfectly well attested, though the fact did not come under my own observation. Birds apparently from the north were common along the Mouse River in the latter part of September; a few had made their appearance the last of August, and their numbers were augmented during the month.

BRANTA BERNICLA, (*Linn.*) Scop.

BRANT; BLACK BRANT.

Observed only during the migration.

ANAS BOSCHAS, (*Linn.*)

MALLARD.

Breeds abundantly throughout the region in suitable places. Flappers about a week old were seen at Pembina June 20.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3065	♀	Pembina, Dak	June 20, 1873	Elliott Cones.				Skin; parent of Nos. 3066-7.
3066		do	do	do				Ducklings.
3067		do	do	do				do.

DAFILA ACUTA, (*Linn.*) *Jewyns.*

SPRIGTAIL.

This beautiful Duck, equally attractive on and off the table, is abundant throughout the region, not only during the fall migration, but in the summer. By the middle of August, the young birds are full-grown, in fine feather, and in the best possible condition for the table. Many pairs were found breeding in pools in the Milk River region, especially in the vicinity of Frenchman's, early in July. At this period, the young and old were equally unable to fly, as the former had not got their feathers and the latter had lost theirs. When disturbed in the pools at such time, they had the habit of creeping slyly out on the prairie, and squatting so low, like Grouse, that they were often lost, even when the herbage was quite scanty. Many were captured by hand or killed with sticks.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3068	♂-O	Pembina, Dak	June 20, 1873	Elliott Coues .....	.....	.....	.....	Skin.
3069		.....do .....	.....do .....	.....do .....	.....	.....	.....	.....do.

CHAULELASMUS STREPERUS, (*Linn.*) *Gray.*

GADWALL.

Abundant throughout the region, where it breeds, like nearly all the other *Anatine*. Young still unfledged were observed late in August.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3405	---	Turtle Mt., Dak	Aug. 5, 1873	Elliott Coues .....	.....	.....	.....	Skin.

MARECA AMERICANA, (*Gm.*) *Steph.*

WIDGEON.

Abundant throughout; breeding. Young still unable to fly were seen until the middle of September.

QUERQUEDULA CAROLINENSIS, (*Gm.*) *Steph.*

GREEN-WINGED TEAL.

Extremely abundant throughout. It enters the country by thousands, in August, among the earliest arrivals of water-fowl from the north. I have little doubt that some breed in Northern Dakota; but as the only

"teals" eggs I took were not identified satisfactorily, and as I saw no birds not in perfect feather, I cannot state positively that it does so. This was a favorite bird with me for shooting for the table, where I always thought it looked better than it did in my collecting-chest. "Two and a half teal, broiled, on toast," became my well-known limit for supper; but I never succeeded in "preserving" the third bird without mutilation.

QUERQUEDULA DISCORS, (*Linn.*) *Steph.*

BLUE-WINGED TEAL.

Arrives early, in the fore part of August, like the Green-wing, and becomes very abundant. It also doubtless breeds.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3558	Mouse River, Dak ..	Aug. 23, 1873	Elliott Coues.	.....	.....	.....	Skin.

SPATULA CLYPEATA, (*Linn.*) *Boie.*

SHOVELLER.

Abundant throughout. Found breeding on Mouse River, where young about half-grown were taken August 10.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3480	Mouse River, Dak ..	Aug. 10, 1873	Elliott Coues.	.....	.....	.....	Skin (young).

FULIGULA AFFINIS, *Eyton.*

LESSER SCAUP DUCK.

The Scaups which I found breeding numerously in the Upper Missouri and Milk River region appeared to be chiefly, if not wholly, of this species, as several species examined certainly were. At some points, they were extremely abundant, outnumbering the other Ducks.

The *F. marila* undoubtedly occurs, during the migration at least, if not also in the breeding-season.

FULIGULA COLLARIS, (*Donovan*) *Bp.*

RING-NECKED DUCK.

Specimen seen in Mr. Dawson's collection.

FULIGULA VALLISNERIA, (*Wils.*) *Steph.*

CANVAS-BACK DUCK.

The breeding resorts of this celebrated and much over-rated bird were for a long time considered uncertain, and its eggs have not long been known. They were discovered, I think, by the late Mr. R. Kennicott in the northwest part of British America. Mr. W. H. Dall speaks of the Canvas-back as breeding abundantly on the Yukon, and Dr. J. S. Newberry found it "more numerous than any other Ducks" in the Cascade Mountains in summer. At Turtle Mountain, in July, I saw several broods of partly grown young; a number were secured, with a parent bird, so that there is no doubt of the correctness of the identification. In most of the region, however, the bird is less numerous than the Red-head.

FULIGULA FERINA AMERICANA, (*Eyt.*) *Coues.*

RED HEAD DUCK.

Abundant throughout, but whether breeding or not was left undetermined. None were seen or at least recognized excepting in the migrating season.

BUCEPHALA ISLANDICA, (*Gm.*) *Bd.*

ROCKY MOUNTAIN GOLDEN-EYE.

I was greatly interested to find this species breeding in the Rocky Mountains. A brood of young, accompanied by the female, was seen on one of the little side-pools, surrounded by timber, at our camp on Chief Mountain Lake; the old bird and two of the young, out of five or six, were secured by one of the officers of the military escort, who made over the flappers to me, but seemed so disinclined to part with the old one that I did not press the matter, although I greatly desired the specimen. This is, I believe, the first recorded instance of the occurrence of the species during the breeding-season in the United States.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4542	---	Rocky Mountains,	Aug. 21, 1874	Elliott Coues.	.....	.....	.....	Skin (very young).
4543	---	.....do.....	.....do.....	.....do.....	.....	.....	.....	.....do.

BUCEPHALA CLANGULA, (*Linn.*) *Coues.*

GOLDEN-EYE.

Supposed, on good grounds, to occur during the migrations, though not observed, at any rate not recognized, by myself.

BUCEPHALA ALBEOLA, (*Linn.*) *Baird.*

BUFFLE-HEAD.

This Duck is among the commonest species after the fall migration; and I have reason to believe that it nests, in limited numbers, in Northern Dakota, as it certainly does in the Milk River country. At Turtle Mountain I found young birds in July, but they were able to fly, and may not have been hatched on the spot.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3410	...	Turtle Mount'n, Dak.	Aug. 7, 1873	Elliott Coues	.....	.....	.....	Skin.

HISTRIONICUS TORQUATUS, (*Linn.*) *Bp.*

HARLEQUIN DUCK.

It was my good fortune to determine the breeding of this Duck in the Rocky Mountains of the United States. There is in the National Collection an egg cut from a bird taken by Dr. Hayden somewhere in the mountains May 31, warranting inference of the fact here established. Broods of flappers were discovered on a clear brawling stream near the camp on Chief Mountain Lake, and several of them, including the mother of one of the broods, were secured. The nest was not found. It was probably in the hollow of a tree near the spot. The birds showed great powers of swimming and diving in the turbulent stream, where they seemed as much at home as the family of Dippers (*Cinclus*) that was seen with them. When disturbed, the old bird flew away low over the water, while others sank back quietly till only the head remained in view, much like Grebes. Some sought refuge behind and beneath a little cascade, screened by the whole volume of water that leaped over a projecting rock. One of the broods was seen swimming quietly in a pool near the lake.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4528	Rocky Mts., lat. 49°	Aug. 20, 1874	Elliott Coues	.....	.....	.....	Skin.
4553	do	Aug. 22, 1874	do .....	.....	.....	.....	do.
4554	do	do	do .....	.....	.....	.....	do.
4555	♀	do	do	do .....	.....	.....	.....	do.

ERISMATURA RUBIDA, (*Wils.*) *Bp.*

RUDDY DUCK.

Common, and breeding in suitable localities throughout the region. At Turtle Mountain, it was nesting in numbers in the pools, where the young were observed, still unable to fly, the latter part of July and early in August. Several specimens of various ages were secured.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3368	Turtle Mt., Dak	July 28, 1873	Elliott Cones.	.....	.....	.....	Skin (young).
3369	do	do	do .....	.....	.....	.....	do
3381	do	July 30, 1873	do .....	.....	.....	.....	Skin.
3411	do	Aug. 7, 1873	do .....	.....	.....	.....	Skin (young).

MERGUS CUCULLATUS, *Linn.*

HOODED MERGANSER.

This is the only species of the genus actually observed by the Commission, though the other two doubtless also occur, at least during the migrations. It breeds in this region.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3409	♂	Turtle Mt., Dak	Aug. 5, 1873	Elliott Cones.	18.00	26.00	7.50	Skin.
3412	♂	do	Aug. 7, 1873	do .....	.....	.....	.....	do.
3866	♂	Mouse River	Oct. 1, 1873	do	18.25	26.00	7.25	do.

PELECANUS TRACHYRHYNCHUS, *Lath.*

WHITE PELICAN.

An old female, in sickly condition, was shot from the steamer as we neared Pembina, and I heard of one or two other specimens shot on the Red River about this point in May. The species was only once again observed, namely, at La Rivière de Lac, near Mouse River, early in September. A few individuals were seen, but the locality did not appear to be a breeding-place, nor did I find any such elsewhere.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
2773	♀	Red River, near 49°.	May 31, 1873	Elliott Cones	.....	.....	.....	Skeleton.

* Stomach contained about fifty crawfish (*Cambarus couesi* Streets); pouch diseased, from attacks of parasites.

GRACULUS DILOPHUS, *Sco.*

DOUBLE-CRESTED CORMORANT.

Once observed on the Red River, near Pembina, late in May.

LARUS ARGENTATUS SMITHSONIANUS, *Coues.*

AMERICAN HERRING GULL.

A specimen was shot by Mr. J. H. Batty near Fort Benton, Mont. Some of the large Gulls observed in September during our boat voyage down the Missouri may have been of this species, but all that were fully identified were *L. delawarensis*.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
4700	Near Fort Benton, Mont.	Sept. 8, 1874	J. H. Batty	.....	.....	.....	Skin (young).

LARUS DELAWARENSIS, *Ord.*

RING-BILLED GULL.

A considerable flock of this species was seen hovering over Rivière de Lac about the middle of September, and two specimens were secured. It was not again identified to my satisfaction until the following season, when it was seen in considerable numbers on a large pool close by Chief Mountain.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3745	Near Mouse R., Dak.	Sept. 12, 1873	Elliott Coues	.....	.....	.....	Skin.
3746	do	do	do	.....	.....	.....	do.
4623	Rocky Mts., lat. 49°	Aug. 28, 1874	J. H. Batty	.....	.....	.....	do.

LARUS FRANKLINI, *Rich.*

FRANKLIN'S ROSY GULL.

The egg of this species has been described by Prof. Alfred Newton, from a specimen taken in the adjoining British Province of Manitoba, and a specimen was shot on Turtle Mountain July 30, fully fledged, yet so young that I judged it had been hatched not far from the spot. No breeding colonies, however, of this or indeed any other Gull were observed by me in any portion of the region surveyed.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3379	Turtle Mt., Dak	July 30, 1873	Elliott Coues	13.75	33.75	9.75	Skin. Bill, 1.10; tarsus, 1.65; middle toe and claw, 1.65.

HYDROCHELIDON LARIFORMIS, (Linn.) Coues.

BLACK TERN.

This, the only representative of the *Sterninae* observed by the Commission, was found breeding at Pembina in June, and subsequently seen during August along the Mouse River. On one of the prairie sloughs at Pembina—the same that I have spoken of as the breeding resort of the Yellow-headed Blackbirds—a colony of perhaps twenty pairs was established. As usual during the breeding-season with Terns, the birds were very fearless when their nesting-place was invaded, and I regret to say that the colony was broken up in consequence, as I desired to secure a good series of specimens in full dress. No eggs were found until the latter part of the month. It required sharp scrutiny to discover them, as they lay, without any preparation for their reception, directly upon the soaking, matted masses of last year's reeds, and were closely assimilated in color. They were indifferently two or three in number, oftener the latter; average samples measured 1.35 in length by 0.95 in breadth. The coloration is not peculiar in comparison with that of other Terns' eggs.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3023	Pembina, Dak	June 17, 1873	Elliott Coues	.....	.....	.....	Skin.
3024	do	do	do .....	.....	.....	.....	do.
3025	do	do	do .....	.....	.....	.....	do.
3026	do	do	do .....	.....	.....	.....	do.
3027	do	do	do .....	.....	.....	.....	do.
3028	do	do	do .....	.....	.....	.....	do.
3029	do	do	do .....	.....	.....	.....	do.
3030	do	do	do .....	.....	.....	.....	do.
3031	do	do	do .....	.....	.....	.....	do.
3032	do	do	do .....	.....	.....	.....	do.
3033	do	do	do .....	.....	.....	.....	do.
3034	do	do	do .....	.....	.....	.....	do.
3035	do	do	do .....	.....	.....	.....	do.
3036	do	do	do .....	.....	.....	.....	do.
3037	do	do	do .....	.....	.....	.....	do.
3038	do	do	do .....	.....	.....	.....	do.
3039	do	do	do .....	.....	.....	.....	do.
3162	do	June 25, 1873	do .....	.....	.....	.....	do.
3163	do	do	do .....	.....	.....	.....	do.
3164	do	do	do .....	.....	.....	.....	do.
3172	do	do	do .....	.....	.....	.....	do.
3186	♀	do	June 27, 1873	do .....	.....	.....	.....	Skin, with 3 eggs.
3462	Mouse River, Dak ..	Aug. 10, 1873	do .....	.....	.....	.....	Skin.
3463	do	do	do .....	.....	.....	.....	do.
3478	do	do	do .....	.....	.....	.....	do.

PODICEPS AURITUS CALIFORNICUS, (*Heerm.*) *Coues*.

AMERICAN EARED GREBE.

I was much interested to find this species (not common in collections, and until recently supposed to be exclusively Western) breeding abundantly on Turtle Mountain, one of the easternmost localities where it has been observed. Toward the latter part of July and during the first two weeks of August, the young, still unable to fly, and in charge of the parents, were observed at the locality mentioned, and at points along the Mouse River. Some old birds in full breeding-dress were secured. With these the change begins in August, but traces persist for several weeks. I noticed nothing peculiar in the habits of the species.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3367	Turtle Mountain, Dak.	July 28, 1873	Elliott Coues.	12.50	22.50	5.25	Skin. Iris scarlet; edge of eyelids orange; bill black; feet olivaceous, blackish on outer side and on soles.
3392do.....	Aug. 1, 1873	...do.....	.....	.....	.....	Skin.
3454	♂	Mouse River, Dak.	Aug. 10, 1873	...do.....	14.00	24.00	.....	...do.
3471do.....	...do.....	...do.....	13.10	22.50	.....	...do.
3529do.....	Aug. 16, 1873	...do.....	.....	.....	.....	...do.
3530	♂-♀	...do.....	...do.....	...do.....	.....	.....	.....	...do.
3531do.....	...do.....	...do.....	.....	.....	.....	Skin; young of Nos. 3529-30.
3559do.....	Aug. 23, 1873	...do.....	12.00	23.50	4.75	Skin.
3566do.....	...do.....	...do.....	13.25	22.25	.....	...do.
3574	♀	...do.....	Aug. 24, 1873	...do.....	12.80	21.85	.....	...do.
3575do.....	...do.....	...do.....	.....	.....	.....	...do.
3584do.....	Aug. 25, 1873	...do.....	11.30	20.50	.....	...do.
3716do.....	Sept. 2, 1873	...do.....	11.60	22.00	4.75	...do.
3741do.....	Sept. 9, 1873	...do.....	.....	.....	.....	...do.
3742do.....	...do.....	...do.....	.....	.....	.....	...do.
4670	Headwaters of Milk River, Mont.	Aug. 30, 1874	...do.....	.....	.....	.....	...do.
4671do.....	...do.....	...do.....	.....	.....	.....	...do.

PODICEPS CORNUTUS, *Gm.*

HORNED GREBE.

Like the last species, the Horned Grebe was found breeding in the Red River region. On the 20th of June, 1873, I took a set of four newly laid eggs from one of the prairie sloughs near Pembina. They were deposited on a matted bed of decaying reeds soaking in the water. Later in the same season, during the latter part of July, newly hatched young were observed swimming on the pools about the base of Turtle Mountain. In this locality, and elsewhere, in August and September, the two species were generally found together; and both were very abundant.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3063	Pembina, Dak	June 20, 1873	Elliott Coues.	.....	.....	.....	Set of 4 eggs.
3361	Turtle Mountain, Dak.	July 26, 1873	do .....	.....	.....	.....	Skin.
3362	do	do	do .....	.....	.....	.....	do.
3363	do	do	do .....	.....	.....	.....	do.

PODILYMBUS PODICEPS, (*Linn.*) *Lawr.*

DABCHICK.

Observed in the same situations as the last two species, but less frequently than either of them. Chicks still unfledged were taken so late as August 7. The streaking of the head of the young bird, supposed to be peculiar to this species, and once made the basis of a new species, is shared by others, as *P. cornutus*, for example.

List of specimens.

Coll. No.	Sex.	Locality.	Date.	Collector.	Length.	Extent.	Wing.	Nature of specimen, and remarks.
3413	Turtle Mountain, Dak.	Aug. 7, 1873	Elliott Coues.	.....	.....	.....	Skin (young).
3455	Mouse River, Dak ..	Aug. 10, 1873	do	14.00	24.75	.....	Skin.

BIBLIOGRAPHICAL APPENDIX.

Besides the several general works on North American Ornithology which bear in due part upon the Birds of the region surveyed, the following special treatises since Lewis and Clarke, relating to the Avifauna of the Boundary and adjacent portions of the country, may be advantageously consulted :—

1831. **Swainson, W., and Richardson, J.** Fauna Boreali-Americana; or the Zoology of the northern parts of British America: [etc.] Part Second, The Birds. By William Swainson, Esq., [etc.] and John Richardson, M. D., [etc.] London: John Murray. 1831. 4to. pp. lxvi, 524, pls. 24-73, woodcuts 41.

This remains the standard treatise on the Birds of British America, and is particularly full in accounts of the Ornithology of the Saskatchewan Region.

1837. **Townsend, J. K.** Description of Twelve New Species of Birds, chiefly from the vicinity of the Columbia River. < Journ. Acad. Nat. Sci. Phila. vii, 1837, pp. 187-193.

1839. **Townsend, J. K.** List of the Birds Inhabiting the Region of the Rocky Mountains, the Territory of the Oregon and the North West Coast of America. < Journ. Acad. Nat. Sci. Phila. viii, 1839, pp. 151-158.

1839. **Townsend, J. K.** Narrative of a Journey Across the Rocky Mountains to the Columbia River, [etc.] Philadelphia. 1839. 8vo. pp. viii, 352.
The Appendix, pp. 331-352, contains a catalogue of the Birds observed in Oregon.
- 1839-41. **Maximilian, Prinz zu Wied.** Reise in das innere Nord-Amerika in den Jahren 1832 bis 1834. Coblenz. 2 vols. 4to. Vol. i, 1839; vol. ii, 1841. French translation, Paris, 8vo, 3 vols., 1840-1843.
Particularly full on the Birds of the Upper Missouri Region.
1850. **Cabot, J. E.** Lake Superior: its Physical Character, Vegetation and Animals [etc.] By Louis Agassiz. Boston: Gould, Kendall and Lincoln. 1850. 1 vol. 8vo.
Chap. VIII. Report on the Birds collected and observed at Lake Superior. By J. E. Cabot. pp. 383-385. German translation of the same, in Naumannia, ii, Heft ii, 1852, pp. 64-66.
1852. **Hoy, P. R.** Notes on the Ornithology of Wisconsin. <Trans. Wisc. State Agric. Soc. 1852, pp. 841-364. Also, <Proc. Acad. Nat. Sci. Phila. vi, 1853, pp. 304-313, 381-385, 425-429.
Treats of 283 species.
1854. **Barry, A. C.** [On the Ornithology of Wisconsin.] <Proc. Bost. Soc. Nat. Hist. v, 1854, pp. 1-13.
Annotated list of 218 species.
1855. **Head, J. F.** Some Remarks on the Natural History of the Country about Fort Ripley, Minnesota. <Ninth Ann. Rep. Smiths. Inst. for 1854, 1855, pp. 291-293.
Treats briefly of about 60 species.
1857. **Kneeland, S.** On the Birds of Keweenaw Point, Lake Superior. <Proc. Bost. Soc. Nat. Hist. vi, 1857, pp. 231-241.
Treats briefly of 147 species.
- 1858-9. **Maximilian, Prinz zu Wied.** Verzeichniss der Vögel, welche auf einer Reise in Nord-America beobachtet wurden. <Journal für Ornith. vi, 1858, pp. 1-29, 97-124, 177-205, 257-284, 337-354, 417-445; vii, 1859, pp. 81-96.
1859. **Blakiston, T.** Scraps from the West. <Newman's Zoologist, xvii, 1859, pp. 6318-6325, 6373-6376.
Field-notes on birds of the Saskatchewan, &c.
1860. **Cooper, J. G., and Suckley, G.** The Natural History of Washington Territory. 4to.
A reissue, under another name, of parts of the xii. vol. of the Pacific Railroad Survey Reports, and containing a general treatise on the Ornithology of Washington Territory.
1861. **Bell, K.** Catalogue of Birds collected and observed around Lakes Superior and Huron in 1860. <Canadian Nat. and Geol. vi, 1861, pp. 270-275.
From the Report of the Geological Survey for 1860. 77 species.
- 1861-2. **Blakiston, T.** On Birds collected and observed in the Interior of British North America. <The Ibis, iii, 1861, pp. 314-320; iv, 1862, pp. 3-10.
More particularly of the Saskatchewan Region.
1862. **Hayden, F. V.** On the Geology and Natural History of the Upper Missouri. <Trans. Amer. Philos. Soc. (2), xii, 1862, pp. 1-218. Repub. Phila. C. Sherman & Son. 1862. 4to.
Contains, pp. 151-176, an extended and important article on the Birds.
1863. **Blakiston, T.** On the Birds of the Interior of British America. <The Ibis, v, 1863, pp. 39-87, 121-155.
A nearly complete and fully annotated list of the Birds of British America, superseding his previous fragmentary accounts.

1864. **Lord, J. K.** List of Birds collected and presented by the British North American Boundary Commission to the Royal Artillery Institution. <Proc. Roy. Art'y Inst. 1864, pp. 110-126.

87 species.

1865. **Hoy, P. R.** Journal of an Exploration of Western Missouri in 1854, under the Auspices of the Smithsonian Institution. <Nineteenth Ann. Rep. Smiths. Inst. for 1864, 1865, pp. 431-438.

The narrative relates largely to birds, and concludes with a nominal list of 153 species observed.

1865. **Lord, J. K.** Catalogue of Birds, Nests and Eggs collected in North-West America. <Proc. Roy. Art'y Inst. 1865, pp. 337-339.

1868. **Allen, J. A.** Notes on Birds observed in Western Iowa, [etc.] <Mem. Bost. Soc. Nat. Hist. i, pt. iv, art. xiii, 1868, pp. 488-526.

1868. **Brown, R.** Synopsis of the Birds of Vancouver Island. <Ibis, 2d ser. iv, 1868, pp. 414-428.

Annotated list of 153 species.

1868. **Gunn, D.** Notes of an Egging Expedition to Shoal Lake, West of Lake Winnipeg. <Twenty-second Ann. Rep. Smiths. Inst. for 1867, 1868, pp. 427-432.

1869. **Cooper, J. G.** Notes on the Fauna of the Upper Missouri. <Amer. Nat. iii, 1869, pp. 294-299.

1869. **Cooper, J. G.** The Fauna of Montana Territory. <Amer. Nat. ii, 1869, pp. 596-600; iii, 1869, pp. 31-35, 73-84; also p. 224.

These articles include field-notes on many of the birds of Dakota and Montana.

1871. **Stevenson, J.** A List of the Mammals and Birds collected in Wyoming Territory by Mr. H. D. Smith and Mr. James Stevenson, during the expedition of 1870. <Rep. U. S. Geol. Surv. (Hayden's) for 1870, 1871, pp. 461-466.

Nominal list of 124 species of birds.

1871. **Trippe, T. M.** Notes on the Birds of Minnesota. <Proc. [Comm.] Essex Inst. vi, 1871, pp. 113-119.

Annotated list of 138 species.

1872. **Allen, J. A.** Notes of an Ornithological Reconnaissance of Portions of Kansas, Colorado, Wyoming and Utah. <Bull. Mus. Comp. Zool. iii, No. 6, 1872, pp. 113-183.

Contains much important matter.

1872. **Bruhlin, T. A.** Unsere gefiederten Wintergäste. <Zool. Gart. xiii, 1872, pp. 157, 158.

Notes on a few winter birds of Wisconsin.

1872. **Holden, C. H., and Aiken, C. E.** Notes on the Birds of Wyoming and Colorado Territories. By C. H. Holden, Jr. With additional Memoranda by C. E. Aiken. Edited by T. M. Brewer. <Proc. Bost. Soc. Nat. Hist. xv, 1872, pp. 193-210.

142 species treated.

1873. **Coues, E.** Notes on Two little-known Birds of the United States. <Amer. Nat. 1873.

Centronyx bairdi and *Neocorys spraguei*; observations made by the Boundary Commission.

1873. **Merriam, C. H.** Report on the Mammals and Birds of the Expedition. <Sixth Ann. Rep. U. S. Geol. Surv. (Hayden's) for 1872, 1883, pp. 661-715.

Treats of numerous birds of Wyoming, Idaho, &c.

1873. **Trippe, T. M.** Notes on the Birds of Southern Iowa. <Proc. Bost. Soc. Nat. Hist. xv, 1873, pp. 229-242.

Treats of 162 species.

1874. **Allen, J. A.** Notes on the Natural History of Portions of Dakota and Montana Territories, etc. < Proc. Bost. Soc. Nat. Hist. xvii, 1874, pp. 33-86.

Birds, pp. 44-68. Annotated list of 118 species.

1874. **Coues, E.** Birds of the Northwest: A Handbook of the Ornithology of the Region drained by the Missouri River and its Tributaries. Washington: Government Printing Office. 1874. 1 vol. 8vo. pp. xii, 791.

1874. **Coues, E.** On the Nesting of Certain Hawks, etc. < Amer. Nat. viii, 1874, pp. 596-603.

Field-notes made by the Boundary Commission in Montana in 1874.

1874. **Hoy, P. R.** Some of the Peculiarities of the Fauna near Racine [Wisconsin]. < Trans. Wisc. Acad. ii, 1874, pp. 120-122.

1875. **Grinnell, G. B.** Report of a Reconnoissance of the Black Hills of Dakota, made in the Summer of 1874. By William Ludlow, [etc.] Washington. Government Printing Office. 1875. 4to. p. 121.

Zoological Report by George Bird Grinnell. Birds, pp. 85-102. Field-notes on 110 species.