A SELECTED BIBLIOGRAPHY:
REMOTE SENSING APPLICATIONS IN
WILDLIFE MANAGEMENT

U.S. GEOLOGICAL SURVEY
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REMOTE SENSING APPLICATIONS IN WILDLIFE MANAGEMENT

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ABSTRACT

Citations of 165 selected technical reports, journal articles, and other publications on remote sensing applications for wildlife management are presented in a bibliography. These materials summarize developments in the use of remotely sensed data for wildlife habitat mapping, habitat inventory, habitat evaluation, and wildlife census. The bibliography contains selected citations published between 1947 and 1979.

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INTRODUCTION

Wildlife populations experience significant fluctuations as man's influence or encroachment into various wildlife habitats increases. These changes necessitate greater attention to management techniques for the protection of wildlife resources. Habitat analysis and population censusing have become important tools for wildlife managers. Habitat analysis provides a better understanding of wildlife needs within various habitat types, and censusing produces data that can be used to evaluate the status of wildlife populations. These techniques can be used to determine the relationship between wildlife populations and habitat, thus improving the management of wildlife resources.

Remotely sensed data can be applied to both habitat analysis and wildlife censusing. Historically, remote sensing techniques were restricted to visual observations from aircraft for the purpose of wildlife census or habitat assessment, but remote sensing techniques may now be applied through the use of aerial photographs, computer processing of satellite data, telemetry, and thermal infrared data. Habitat analysis involves inventorying and mapping habitat types from remotely sensed data such as color-infrared aerial photographs.

In recent years there has been a proliferation of documented applications of remote sensing to wildlife management. This bibliography presents a representative selection of these publications including technical reports and articles selected from major periodicals, and symposium proceedings. The bibliography, which has 165 citations published between 1947 and 1979, is organized by the following subject headings:
1. Wildlife Habitat Mapping, Inventory and Evaluation.--Papers addressing the use of remote sensing techniques to identify, map, and analyze wildlife habitats; it is subdivided into Terrestrial, Wetlands, and Aquatic applications.

2. Wildlife Censusing.--Presents articles that utilize remote sensing methodology in population studies; subheadings include General Methodology, Mammals, Birds, and Fish.

3. General Wildlife Applications.--Contains papers that address overviews of management applications or papers not relating to other specific categories in the bibliography.
OBTAINING COPIES OF CITED DOCUMENTS

Publications, reports, and documents cited in this bibliography may be procured from a variety of sources. Authors will often provide copies or reprints of their published materials; institutions, corporations, and university departments or libraries can often provide copies of documents on loan or in exchange for copying costs.

Certain items in this bibliography are followed by an accession number with an NTIS prefix. This number is a purchase order number for documents available from the National Technical Information Service of the U.S. Department of Commerce. NTIS is a centralized source for the public sale of U.S. Government-sponsored research, development, and engineering reports and other analyses prepared by Federal agencies and their contractors or grantees. Documents are available in either paper copy or microfiche format. For current prices and ordering information, write to:

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Give the NTIS accession number and other bibliographic details.
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Wildlife Censusing

General Methodology


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