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*Pecora Symp. (1978)  
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SYMPOSIUM ON USING SATELLITE DATA IN WILDLIFE MANAGEMENT

The use of Landsat satellite images, aerial photographs and other remotely sensed data in wildlife management programs will be the main subject of the Fourth Annual William T. Pecora Memorial Symposium Oct. 10-12, 1978, at Sioux Falls, S.D.

Scientific papers to be presented at the meeting will discuss using satellite images of Earth to assess habitats of deer, geese, wild turkeys and other species of wildlife; inventorying and tracking the migration of whales, dolphins, birds and other wildlife; and other applications of remote sensing in solving wildlife management problems.

More than 300 scientists and specialists in remote sensing and wildlife management from government, universities, wildlife organizations and private industry in the United States, Canada, Australia and other nations are expected to attend the symposium at the Downtown Holiday Inn in Sioux Falls.

This year's symposium is being sponsored by the National Wildlife Federation in cooperation with the U.S. Geological Survey, the National Aeronautics and Space Administration, the U.S. Fish and Wildlife Service, the Canadian Wildlife Service and the International Association of Fish and Wildlife Agencies.

The annual remote sensing symposia are named in honor of the late William T. Pecora, director of the USGS and undersecretary of the interior. Pecora was a motivating force in the development of NASA's Landsat Earth resources survey satellite program and in the establishment of the Interior Department's EROS (Earth Resources Observation Systems) program managed by the USGS.

The EROS program is aimed at developing and demonstrating the use of Landsat images and other satellite and aircraft remote sensing data in a wide variety of natural resource and environmental studies and projects. The symposium agenda again this year includes tours of the EROS Data Center near Sioux Falls. The Data Center is a major depository of satellite and aircraft remotely sensed data and images, reproductions of which are available at nominal cost to anyone in the world.

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Opening-session speakers include Thomas L. Kimball, Washington, D.C., executive vice president of the National Wildlife Federation; and Dr. H. William Menard, director of the USGS at the Survey's National Center in Reston, Va. The keynote address at a luncheon on the opening day will be given by Dr. W. Leslie Pengelly, Missoula, Mont., president of The Wildlife Society.

Other scheduled speakers include Robert Herbst, assistant secretary of the interior for fish and wildlife and parks; Robert A. Frosch, administrator of NASA; and Russell W. Peterson, director of the Office of Technology Assessment in the U.S. Congress.

"Wildlife management," Kimball said, "has only recently embraced remotely sensed data, especially those acquired by satellites such as Landsat. Through use of these sophisticated technologies, resource managers accomplish many of their important tasks more quickly and efficiently than through more traditional techniques. And the more use we make of these technologies, the more innovations for their use will be established."

Prepared papers scheduled to be presented at the symposium include those by:

- \* DAVID S. GILMER, U.S. Fish and Wildlife Service, Jamestown, N.D., and JOHN E. COLWELL and EDGAR A. WORK of the Environmental Research Institute of Michigan, Ann Arbor, said satellite sensors can assess waterfowl habitat conditions in the Prairie Pothole region of south-central Canada and the north-central United States. This information can be used in setting annual hunting regulations.
- \* EDWIN F. KATIBAH, University of California at Berkeley, and WALTER GRAVES, California Department of Fish and Game, Chico, said Landsat images and aerial photographs are being used to select suitable habitat areas for introduction of wild turkeys as game birds in various parts of the state. The wild turkey is not native to the state and was first introduced on Santa Cruz Island in 1877.
- \* ERWIN E. KLAAS and ROBERT E. FREDERICK, both Iowa State University in Ames; and WILLIAM H. ANDERSON, EROS Data Center, Sioux Falls, S.D., said Landsat images were used to calculate the amount of food available to fall-migrating lesser snow geese using the DeSoto National Wildlife Refuge in Iowa and Nebraska as a waystop. The geese feed in harvested fields within a radius of about 30 miles of the refuge.
- \* ROBERT G. BEST and SIGNE SATHER-BLAIR, both from South Dakota State University, Brookings, said Landsat imagery is particularly suited for photointerpretation of winter wildlife habitat in northern Plains States because of the high contrast on Landsat images between snow cover and vegetation emerging through the snow. Many species of birds and other wildlife depend on vegetation for food, shelter and cover during the winter.

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- \* DAVID A. MOUAT, University of Arizona, and R. ROY JOHNSON, Grand Canyon National Park, said their two agencies are cooperating on a program to inventory and assess the vegetation of the park through use of remote sensing, as part of wildlife management in the park. Many areas of the park are too inaccessible to be assessed by other methods.
- \* GERALD P. SCOTT and HOWARD E. WINN, University of Rhode Island, Kingston, said aerial photographs can be used to inventory humpback whales in their breeding areas in the western North Atlantic Ocean. Large white areas on their pectoral fins are visible from the air, even when the whales are under water.
- \* ROY FRYE, KIRBY BROWN, CARL FRENTRESS, DON MCCARTY, C. A. MCMAHAN and SUE ANDERSON, all with the Texas Parks and Wildlife Department, Austin, said their agency has developed a system for using Landsat data in making maps showing types of vegetation, for use in wildlife management programs and in delineating ecological management units. Maps have been published for eight areas in central, eastern and southern Texas, and additional maps are planned to complete coverage of the state.

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(Note to Editors Only: Copies of abstracts and papers presented at the symposium will be available to the news media at the symposium office in the Downtown Holiday Inn in Sioux Falls. For further information prior to the symposium, contact Don Finley of the USGS at 703-860-7444 or Mike Berger of the NWF at 202-797-6881. At the symposium, contact Phyllis Wiepking of the EROS Data Center at 605-594-6546 or 605-339-2000, or Mike Berger at 605-339-2000.)