

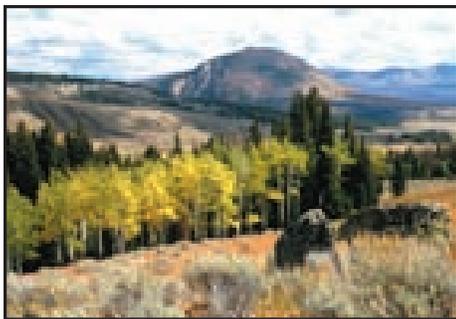


Northern Rocky Mountain Science Center Biological Resources Central Region

***Mission:** The Northern Rocky Mountain Science Center uses a multidisciplinary approach to research in the montane ecosystems of the northern Rocky Mountains. Research focuses on science needed by the land management bureaus of the Department of the Interior as well as other federal and state land management agencies responsible for making resource management decisions.*

Center Overview

The Northern Rocky Mountain Science Center conducts integrated, interdisciplinary research in support of natural resource management in the Northern Rocky Mountains of Montana, Wyoming, and Idaho. We produce and disseminate scientific information needed for decision-making in collaboration with Federal and State land management agencies, Native American tribes, academic institutions, and organizations. Our Center is based at Montana State University–Bozeman with field stations at West Glacier and Missoula, Montana. We involve each of the four major disciplines



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of USGS – biology, geology, geography, and hydrology – in pioneering new approaches for conducting integrated science. This interdisciplinary approach is enhanced by close working relationships with faculty of Montana State University, the University of Montana, scientists of the National Park Service and U.S. Forest Service, and other researchers in the region.

Scientific Projects – Our scientific efforts are organized into major projects that are long-term, multi-investigator efforts to address large problems through a series of conceptually linked studies. We address scientific questions relevant to natural resource management through an approach that involves characterization and description of natural resources and of factors affecting them, hypothesis-driven research to understand cause-and-effect relationships, modeling and prediction of natural resource conditions under various management scenarios, and

delivery of useful information to managers of natural resources, the scientific community, and the public.

Our projects are:

- **Conservation requirements for wildlife of the Northern Rocky Mountains** – Grizzly bear population biology in Yellowstone and Northern Continental Divide ecosystems, control of brucellosis and other wildlife diseases, ecology of bison, elk, pronghorn antelope, bighorn sheep and other ungulates, and trumpeter swans
- **Understanding changes in natural resources of the Northern Rocky Mountains** – Evaluation of forest fire fuels, forest fire severity and effects of fire, climate change and its environmental consequences in mountain ecosystems, patterns of land surface change,

impacts of browsing by animals on plant communities, loss of amphibian populations, and effects of geology, hydrology, and coal-bed methane development on wetland dynamics

- **Development and delivery of natural science information for the Northern Rocky Mountains** – Regional node of the National Biological Information Infrastructure (NBII), development of natural sciences learning tools, and development of decision support tools for wetland management.

Partners – Major partners include Montana State University, the National Park Service, the U.S. Fish and Wildlife Service, the Bureau of Land Management, the U.S. Forest Service, the University of Montana, Montana



Department of Fish, Wildlife and Parks, Wyoming Game and Fish Department, and Idaho Department of Game and Fish. We also collaborate with numerous partners through the Interagency Grizzly Bear Committee, Greater Yellowstone Coordinating Committee, Greater Yellowstone Interagency Brucellosis Committee,

Rocky Mountains Cooperative Ecosystem Studies Unit, Northern Yellowstone Cooperative Wildlife Working Group, Pacific Flyway Council, Montana Wetland Council, Big Sky Institute, and other joint ventures. Our role in all of these activities is to provide objective scientific information that can be used by others in making natural resource management decisions.

Importance to Montana – The Center brings USGS scientific capabilities to focus on natural resource issues that are important to the State of Montana:

- We conduct studies in collaboration with State agencies to meet their information needs
- We involve faculty and students of the State University System in our research projects
- We work with Montana State University on joint ventures, including

the Big Sky Institute, Montana Water Center, and Cooperative Ecosystem Studies Unit

- Our scientists participate as affiliate faculty in academic activities of Montana's universities, and we have established a USGS adjunct scientist program to recognize and

promote collaboration with university faculty

- The regional NBII node will help provide access to natural resources information to managers, scientists, educators, and the public
- We have an annual operating budget of approximately \$2 million in appropriated funds and annually bring in additional funding for research from other sources.

Information:

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USGS Home Page
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BRD Central Region Home Page
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