

WHAT'S NEXT?

Tracking Hoary Marmots



HOARY MARMOTS ARE WIDESPREAD mammals of sub-alpine and alpine habitats found throughout the Cascades and northern Rocky Mountains. Despite their extensive range and high visibility, little is known about the status of this alpine mammal in the Washington Cascades. The two closest relatives of the hoary marmot – the Vancouver Island and Olympic marmots – have experienced declines in recent years. This and possible ramifications of climate change raise concern that regional influences may be present that could also impact hoary marmot populations of the Cascades.

North Cascades National Park biologists will begin a systematic inventory of hoary marmot colonies in June and will continue through early September of 2007. Researchers will collect data needed to map locations of marmot colonies and describe minimum population counts of each colony. This baseline information is essential in estimating current population numbers and monitoring future trends.

NORTH CASCADES NATIONAL PARK SERVICE COMPLEX has new and ongoing research projects for the upcoming years. Many projects include monitoring threatened or endangered species, such as the wolverine and marbled murrelet. This page highlights some of the projects.

Looking for Marbled Murrelets

THE MARBLED MURRELET, A federal- and state-listed threatened species, forages for food in near-shore saltwater habitats and flies inland to nest in forest canopies. Current studies estimate that murrelet populations in Washington, Oregon and California are declining at a rate of 4 to 7 percent annually. North Cascades has data for all wildlife species on the endangered species list, except the marbled murrelet, according to park wildlife biologist Bob Kuntz.

North Cascades will begin a 3-year study on this small diving seabird in 2008, and will conduct radar surveys in drainages with suitable habitat along the western boundary of the park. Park biologists will survey potential nesting habitat to look for murrelets. If they locate murrelets, they will gather site-specific information to determine where and why the birds are present in those areas.



Courtesy of U.S. Fish and Wildlife Service

Although it was typically thought that murrelets did not nest far from the ocean, in recent years they have been spotted further from the ocean and on two occasions, in the park complex. Marbled murrelets have been found as far inland as 84 km from Washington's marine waters. This study will help park biologists understand how murrelets are adapting to the destruction of their original old-growth habitat near the ocean by using suitable nesting habitat further inland, which could help in recovering current murrelet populations in north Puget Sound.

Studying Mysterious Lives of Wolverines

WOLVERINES, THE LARGEST members of the weasel family, prowl through remote areas of the northern Cascades, sensitive not to cross paths with humans. Their elusive nature makes them a difficult species to study and therefore, researchers know very little about their distribution, habitat use and population status in Washington. They are one of the rarest mammals in North America, and are currently listed as a species of concern. The U.S. Forest Service and Washington Department of Fish and Wildlife, however, hope to learn more about the ecology of these carnivores through a cooperative study they began in 2005. The study area is located on Forest Service land adjacent to the eastern boundary of the North Cascades National Park Service Complex.

During the first year of the study (2005/2006 winter season) a yearling female and subadult male were captured approximately 60 days apart at the same trap site. A live-trap method, using a box configuration of native logs, was used to capture, immobilize and place radio collars containing both satellite and VHF radio transmitters on wolverines. They were both outfitted with radio transmitters and then released. The female's radio collar malfunctioned and detached after about one week of data collection. The collar was later recovered in Manning Provincial Park, B.C., some 36 air miles to the north. About two months later

the juvenile female was photographed via a remote camera at the original trap site, the same night the young male was captured. After approximately 70 days with several reliable locations along the North Cascades crest, his collar ceased transmitting. The fate of this wolverine and his collar is currently unknown.

Two more wolverines were trapped and equipped with radio transmitters in the winter of 2006/07. Data from these satellite transmitters showed the wolverines were using a substantial proportion of habitat within the heart of the park complex. In 2007, researchers recaptured three of the wolverines and outfitted them with new radio collars with fresh batteries that are scheduled to be operational beyond the 115-day period of the old collars—perhaps well into the summer.

The Forest Service and Department of Fish and Wildlife hope this study will shed light on the wolverine's seasonal movement patterns, home ranges and habitat preferences. Information gained may also provide evidence supporting a resident wolverine population in the North Cascades and offer insight on den site selection. This is the first-ever study on wolverines in Washington State, and will contribute information to help researchers unravel some of the mysteries of this vulnerable carnivore in order to develop long-range conservation strategies.



Wolverine

Courtesy of U.S. Forest Service

Web Based Resources

National Park Service
www.nps.gov

NPS Nature and Science
www.nature.nps.gov

North Cascades National Park
www.nps.gov/noca

North Cascades Natural and Cultural Resources
www.nps.gov/noca.nat.htm

Natural Notes (First and Second Editions)
www.nps.gov/noca/NatNotes/nn2002.htm
www.nps.gov/noca/NatNotes/nn2005-1.htm

Current Research
www.nps.gov/nwresearch

Homeward Bound
www.nps.gov/noca/journey/home.htm

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