



## *Frequently Asked Questions about the Northern Idaho Ground Squirrel*

### **What does the northern Idaho ground squirrel look like?**

The northern Idaho ground squirrel is a small, terrestrial, burrowing mammal. It is smaller than other squirrel species, averaging 8-9" in length. It has reddish-brown spots that dot its dark undercoat, a short narrow tail, tan feet and ears, and a grey-brown throat.

### **How does the northern Idaho ground squirrel differ from other Idaho squirrels?**

The northern Idaho ground squirrel is known from 42 sites in Adams and Valley counties in Idaho, but only 29 are now occupied. This species has the most restricted geographical range of any ground squirrel in North America with many of the population sites being found northwest of Council, Idaho. (In contrast, the southern Idaho subspecies of this squirrel is found primarily north of the Payette River in the low rolling hills and valleys of Gem, Payette, and Washington counties.) The northern Idaho ground squirrel emerges from the ground in late March or early April and remains active above ground until late July or early August when it returns to its underground burrow. The southern Idaho ground squirrel emerges in late January or early February and ceases above-ground activity in late June or early July. Columbian ground squirrels overlap in distribution with the northern Idaho ground squirrel, but prefer more moist areas with deeper soils. The southern species are about twice as large as the northern Idaho ground squirrel.

### **What kind of food does the northern Idaho ground squirrel prefer?**

This ground squirrel eats large amounts of grass seeds to store energy for the winter. While it may consume 45 to 50 different plant species, it prefers poa grass seeds. Some roots, bulbs, and flower heads are minor components of the squirrel's diet.

### **What kind of habitat does the northern Idaho ground squirrel use?**

Typical northern Idaho ground squirrel habitats are dry, open meadowlands, surrounded by older ponderosa pine and Douglas-fir forests, at 3,000 to 5,400-foot elevations.

### **Where does the northern Idaho ground squirrel occur?**

The northern Idaho ground squirrel occurs on both private and Payette National Forest lands near Council, Idaho, and is restricted to Adams and Valley counties. This squirrel has the most restricted range of any North American ground squirrel species. Its entire range is only 20 by 61 miles. Extremely small, isolated populations exist on public and private lands in Adams and Valley counties of west-central Idaho, near Council.

### **What are the primary reasons for decline of the northern Idaho ground squirrel?**

Loss of habitat -- as well as habitat fragmentation -- are the main reasons for the decline of the northern Idaho ground squirrel. This species depends upon meadows and shrub/grassland, and does well in habitat that is bordered by coniferous forests of older ponderosa pine and Douglas fir. By contrast, the squirrels become extirpated from areas with high densities of small trees. Habitat

fragmentation occurs mainly when young pine and fir regenerate and block exchange between populations of adult animals, particularly adult males that tend to wander to other population sites or to new unoccupied habitat. In addition, the conversion of land from meadow and shrub/grasslands to agricultural crops, residential, and recreational facilities has also impacted local populations of squirrels.

The species is also threatened by land use changes, fire suppression activities, recreational shooting, poisoning, genetic isolation and drift, construction and recreational development, and random naturally occurring events, as well as competition from the larger Columbian ground squirrel (*S. columbianus*)

**Why was the northern Idaho ground squirrel listed as a threatened species?**

The squirrel, which occurs only in Idaho, has the most restricted range of any North American ground squirrel species. Its entire range is 20 by 61 miles (32 by 108 kilometers). Small, isolated populations exist on public and private lands in Adams and Valley Counties of west-central Idaho, near the town of Council. In 1985, the total northern Idaho ground squirrel population at 18 known sites was about 5,000 squirrels. By 1998, when the species was proposed for listing under ESA, less than 1,000 individuals were known to exist.

A spring 2002 estimate, based on intensive monitoring, habitat enhancement measures, and discovery of populations by surveys, indicated about 450 to 500 animals at 29 population sites.

14 sites: National Forest lands (Council/New Meadows Ranger Districts)	48%
12 sites: Private lands	41%
1 site: Municipal property (town of Bear, Idaho)	4%
2 sites: State of Idaho lands	7%

**What is "recovery?"**

Recovery is the process by which the decline of an endangered or threatened species is arrested or reversed, and threats neutralized so that its survival in the wild can be ensured. The goal of the Endangered Species Act is the recovery of listed species to levels where protection under the Act is no longer necessary.

**What are recovery plans?**

Recovery plans are documents prepared for listed species that detail the specific tasks needed to recover those species. They provide a blueprint for private, Federal and State cooperation in the conservation of threatened and endangered species and their ecosystems.

**Are recovery plans required by law?**

Yes. The Endangered Species Act requires the development of recovery plans for listed species unless such a plan would not promote the conservation of a particular species.

Section 4(f) of the Act requires that during plan development, the Service provide an opportunity for public review and comment. Information presented during the public comment period has been considered in the preparation of this final recovery plan, and is summarized in the appendix to the recovery plan.

**Who writes a recovery plan?**

Recovery plans may be written by U.S. Fish and Wildlife Service biologists, and may use the expertise of individuals from other Federal or State agencies or private contractors. Recovery plans are sometimes prepared with the assistance of recovery teams, contractors, State and Federal agencies, and other interested parties.

Based on comments and new information received during the public comment and peer review period, the Service established a Technical Working Group to finalize the recovery plan for the northern Idaho ground squirrel. The group included biologists from the Service, US Forest Service, Idaho Department of Fish and Game, and Albertson College of Idaho. Additional peer review was provided by academia and research individuals who are familiar with the biology and ecology of the northern Idaho ground squirrel.

Recovery plans are published by the Service, and represent the official position of the U.S. Fish and Wildlife Service only after they have been signed by the Regional Director or director as approved. Approved recovery plans are subject to modification as dictated by new findings, changes in species status, and completion of recovery tasks.

**What is the goal of a recovery plan?**

The goal of all recovery plans is to provide a framework for the recovery of a species in its natural habitat so that protection by the Endangered Species Act is no longer necessary. Recovery plans describe actions considered necessary to recover and/or conserve listed species. Time and costs associated with implementing the measures needed for recovery are addressed in the recovery plan, as well as any other pertinent priorities.

**What are the final northern Idaho ground squirrel recovery plan goals?**

The ultimate goal of this final recovery plan is to increase the population size and establish sufficient numbers of "metapopulations" (a network of semi-isolated populations with some level of regular or intermittent migration and gene flow among them, in which individual populations may go extinct but then be re-colonized from other populations; greater than 500 individuals). Specific recovery criteria and actions needed are available in the recovery plan, as well as a recap of recovery actions to date.

The final recovery plan recommends protecting and increasing the population size of Idaho ground squirrels; establishing additional metapopulations and dispersal corridors; enhancing open-meadow habitats; and developing effective translocation efforts to increase genetic diversity of wild populations. The plan also calls for additional research, establishment of a captive propagation program, and continuation of field research and monitoring efforts.

When might recovery occur for the northern Idaho ground squirrel?

The northern Idaho ground squirrel would be eligible for delisting consideration when populations are self-sustaining, secure, and meet the criteria listed in the final recovery plan. If recovery actions are implemented, positive responses at each potential metapopulation site might enable delisting consideration processes to begin in 2010.

**How much will northern Idaho ground squirrel recovery cost?**

The estimated cost of squirrel recovery is approximately \$288,800 per year beginning in 2003, and is estimated to total about \$2.22 million if recovery actions are successful and the species is delisted as anticipated in 2010.

**Can recovery plans be revised once they have been published?**

Yes. The Act recommends updating the plans, especially in response to new information, or as recovery tasks are completed. These revisions should be made at least every five years.

Where may I obtain a copy of the final recovery plan or get more information?

Copies of the final recovery plan are available in bound book or CD format at the Service's Snake River Fish and Wildlife Office, 1387 S. Vinnell Way, Boise, Idaho 83709, (208) 378-5243.

Recovery plans approved by the Service are also available online at

<http://endangered.fws.gov/recovery/recplans/index.htm>.

**For more information, visit these U.S. Fish and Wildlife Service websites:**

<http://endangered.fws.gov/recovery>

<http://pacific.fws.gov>

<http://idahoes.fws.gov>