

***The Management
of Mountain Goats in
Olympic National Park:***
Some Questions and Some Answers



The Mandate

"...to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

National Park Service Organic Act of 1916

"As a primary goal, we would recommend that the biotic associations within each park be maintained, or where necessary recreated, as nearly as possible in the condition that prevailed when the area was first visited by white man. A national park should be a vignette of primitive America."

A. Starker Leopold
Report on Wildlife Management in the National Parks,
Secretary of Interior's Advisory Board on Wildlife Management

"Manipulation of population numbers of exotic plant and animal species, up to and including total eradication, will be undertaken whenever such species threaten protection or interpretation of resources being preserved in the park."

National Park Service Management Policies 1978

The Problem

Mountain goats (*Oreamnos americanus*) were introduced to the Olympic Peninsula in the 1920s. Although they are found in regions near the Olympics, no evidence exists to suggest they were present here before those introductions. During the 50 years following their introduction, goats have taken up residence in nearly all suitable areas of the Olympic ecosystem. From approximately 12 animals originally, there now exists a population estimated at 1,200, one thousand of which reside in Olympic National Park.

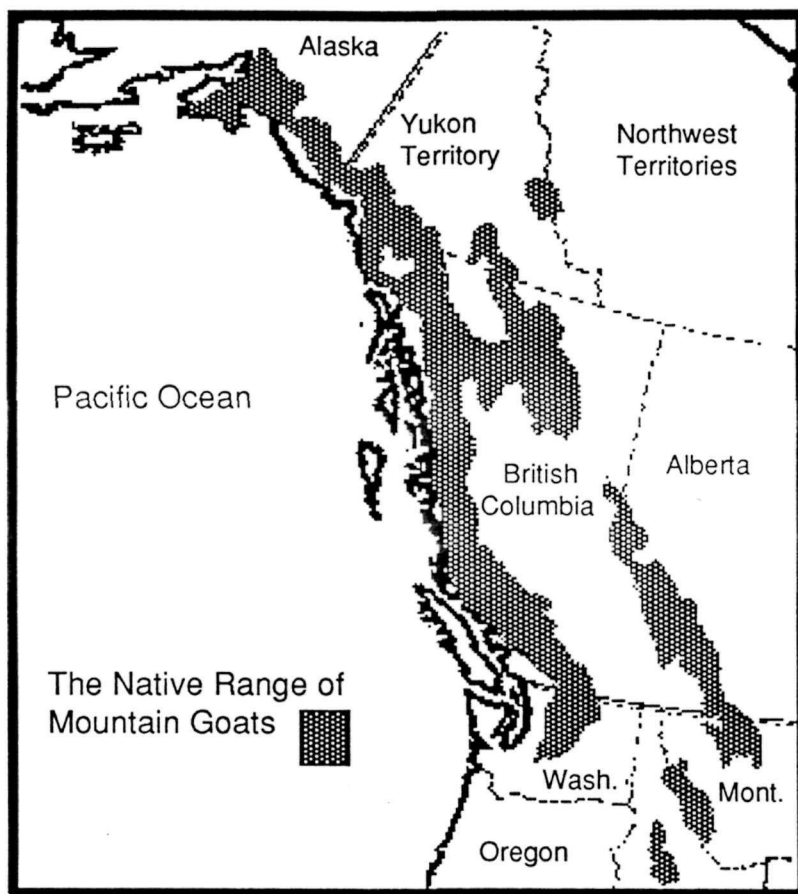
Scientific studies conducted over the last 15 years show that significant changes in subalpine plant communities have occurred where goats congregate. In some areas, goats have lost their fear of humans and in their search for salt are a nuisance to backcountry campers.

In 1981, following public review and comment, the National Park Service adopted an experimental management program aimed at finding ways to control the population by removing goats by live-capture and transport, and sterilization by surgery and hormone implant. Responses of goat populations and vegetation were carefully analyzed.

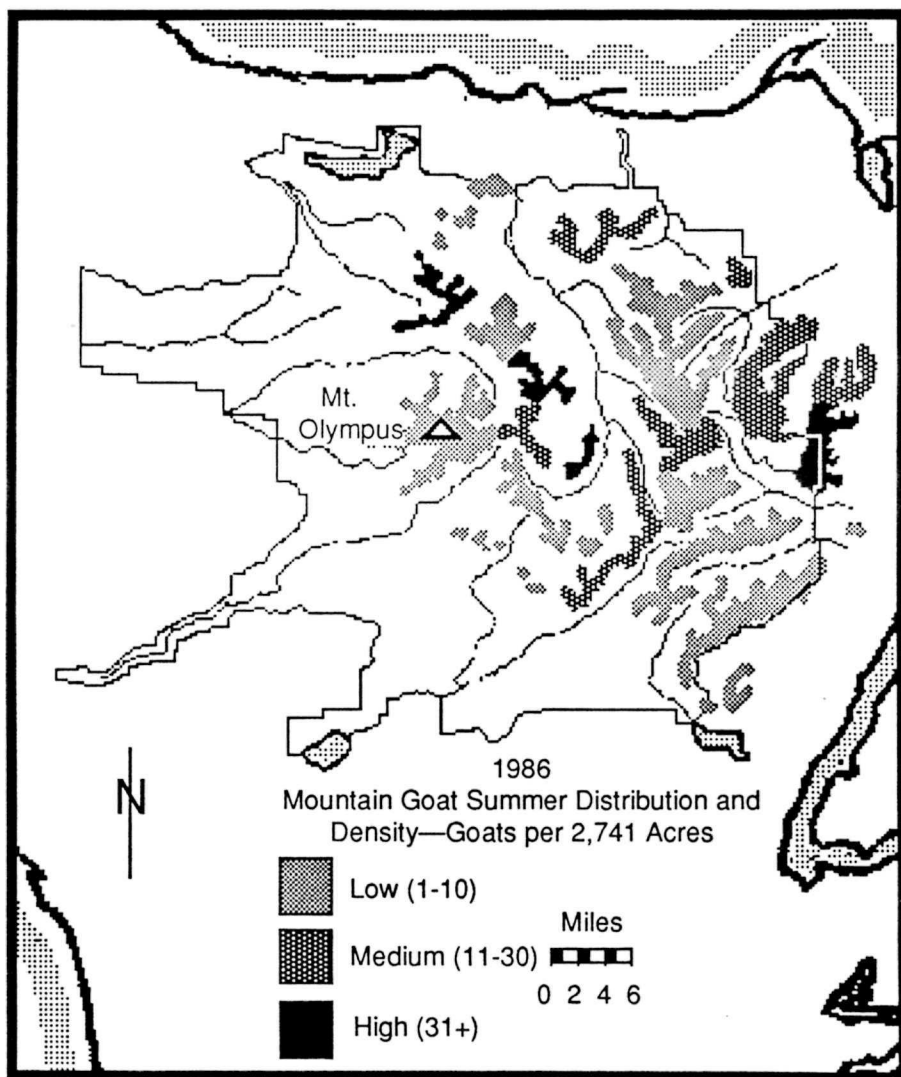
Results of six years of research indicate that the goat problem is indeed a difficult one; that some measures are more efficient, safe and humane than others; and that the Olympic subalpine ecosystem can be restored to its original condition if goats are removed.

The National Park Service is currently developing a management plan for mountain goats in Olympic National Park. An Environmental Assessment has been prepared outlining four management options. These are summarized on page 6 of this brochure. For full details, refer to the Environmental Assessment.

The Native Range



Non-native Range



Management Alternatives

A. No Action

Under this option, present trends would continue. Goats would continue to be studied and would be accepted as "naturalized citizens" in the Olympic ecosystem. Soil loss and changes of natural vegetation patterns would continue. No attempts would be made to mitigate such changes.

B. Control Goats

In this option, levels of "acceptable" impact would be established for different areas of the park and goat sub-populations would be managed to stay within those limits. Some removal would occur. Intensive research and monitoring would occur, first to establish population limits, then to insure that goat populations stayed within those limits. Impacts on soils and vegetation would be reduced but not eliminated.

C. Control/Eliminate Goats

Goats in the interior of the park would be removed. Goat sub-populations along the eastern edge of the Park would be managed as outlined in Alternative B. Active research would be conducted in the controlled areas to determine optimum population limits. Under this option, about 77 percent of the area presently occupied by mountain goats would be returned to a natural state. Recovery of some areas would require active rehabilitation.

D. Eliminate Goats

Goats would be totally eliminated from Olympic National Park using several methods. Goats captured alive would be released by the Washington Department of Wildlife in areas where they naturally occur. In areas where live-capture is impossible, shooting would take place. Removal of all goats from the park would require between five and thirty years. Impacts to vegetation would be reversed; disturbance of soils would cease, but recovery of affected areas would require active rehabilitation.

Frequently-asked Questions

1. Why do you have to remove the goats?

Prior to their introduction, no mountain goats lived in the Olympic Mountains. Laws governing the mission of the National Park Service and policies adopted to carry out the mission emphasize the preservation of naturally-occurring ecosystems in national parks. Where natural processes are changed by the presence of exotic plants or animals, the Park is required to do what it can to restore the ecosystem. Removing goats from Olympic National Park would be such an action.

2. Are they really causing these changes?

Yes. Evidence collected over the last 15 years shows that mountain goats are responsible for accelerated soil erosion and changes in plant community composition. Some areas frequented by goats have been denuded of all plant life. In one goat wallow, approximately 45 tons of soil has been displaced.

3. What would happen if you didn't do anything?

One of the management options is "No Action." Biologists have determined that with no action, goat populations would continue to grow until they occupied all areas of suitable habitat. Severe impacts from grazing and trampling that are now limited to a few areas in the park would be found throughout the park. Natural recovery wouldn't occur.

4. Do you have to shoot them?

No. However, shooting is the most cost-effective and safe way to control goat populations. As a method of removal, shooting could be used initially or it could be used after live-capture and removal methods are no longer successful.

Frequently-asked Questions

5. Why can't we hunt them?

For reasons of visitor safety and the maintenance of natural ecosystems, hunting is prohibited in Olympic National Park by law. Such laws would have to be changed by Congress to allow hunting. Public hunting is also not considered a viable option because of the inaccessibility of most of the goat sub-populations.

6. Why not import predators like wolves?

Evidence shows that wolves, if reintroduced to the Olympics, probably wouldn't effectively control mountain goat populations because other food species are more available.

7. Can I adopt a goat?

No. Programs in other national parks that allow the public to "adopt" animals have involved animals such as burros and domestic goats. Mountain goats are wild and should remain wild. Mountain goats to be transplanted would be distributed by the Washington Department of Wildlife to areas where they occur naturally.

8. Why not sterilize them?

If male sterilization were used, nearly every male goat would have to be treated—this is probably impossible from a technical standpoint. Sterilization has been used on some female goats in the Olympics. These methods are costly and studies show that in order to be effective, nearly half of all females would have to be sterilized. Research on sterilization will continue.

9. Where are you sending the goats? Do they survive?

In the past, goats removed from the Olympics have been distributed by the Washington Department of Wildlife to places in Washington where natural populations of goats occur. Several other states have also received Olympic goats. Survival rates among the transplants are high.

10. How much will all this cost?

Dollar costs for the various management options vary greatly. Removal costs are greatest for live-capture techniques (\$500-\$1,000 per animal), and lowest for aerial shooting (\$30-\$50 per animal). Sterilization costs run from \$600-\$800 and upward per goat.

How do I participate in the decision?

The National Park Service is seeking your comments on mountain goat management in Olympic National Park. An Environmental Assessment on the problem and the options listed above has been prepared. Copies can be obtained by writing to the address listed below. After reviewing the Environmental Assessment, send your comments to:

**Superintendent, Olympic National Park, 600 East Park Ave.,
Port Angeles, WA 98362.**

Public hearings will be held at which you are invited to present your views.