The Olympic Goat Controversy: A Perspective

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Abstract: Mountain goats (Oreamnos americanus) introduced into Olympic National Park are multiplying and causing soil erosion and changes in floral composition. Park managers want the goats removed or, if necessary, killed. But the Fund for Animals, a national humane society, argues that the present goat population should be left undisturbed as a replacement of a presumed indigenous stock that disappeared long ago. (I side with the park managers.) The debate underscores the value of both logic (or reason) and sentiment (or emotion) in making wildlife management decisions.

Introduction

The 20-year experience of the National Park Service (NPS) in dealing with the mountain goats of Olympic National Park is a useful case history in wildlife management. It is well documented (NPS 1987, 1988; Carlquist 1990; Houston et al. 1991*a*, 1991*b*). The NPS has concluded that, if nonlethal means of preventing damage by goats should prove infeasible, goats must be shot. The Fund for Animals (1992) disagrees. In this paper I examine the arguments offered by both sides in the debate.

Background

Goats were translocated during the 1920s from Canada and Alaska to the Olympic Peninsula (Fig. 1). In 1937

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Resumen: Las cabras de montaña (Oreamnos americanus) introducidas en el Parque Nacional Olímpico se están multiplicando y causando ersión del suelo y cambios en la composición florística. Quienes manejan los Parques quieren que las cabras sean removidas y si es necesario eliminadas. Sin embargo la fundación para los animales, una sociedad nacional humanitaria, argumenta que la presente población de cabras debe ser dejada sin perturbar como reemplazodel supuesto stock indígena que desapareció bace tiempo. (yo estoy de parte de los que manejan el parque.). El debate toma en cuenta tanto el valor lógico (o de la razón) como el sentimental (o emotivo) para tomar decisiones de manejo de la fauna silvestre.

they numbered about 25 (Scheffer 1949:237) and by 1983 about 1200 (Houston et al. 1986). Although 155 goats are known to have been removed between those years, the population grew at an average rate of about 9% a year.

But the soils and biotas of the park had evolved on a goat free "land-bridge island" (Newmark 1987). By the late 1980s, the park's drier regions were beginning to show changes as a result of goat grazing, wallowing, and trampling. Goats were even "mining" bare soil where hikers had urinated! Most conspicuous were changes in floral composition, such as the disappearance of lichen and moss cover, which stabilizes bare soil surfaces in the absence of vascular plants (NPS 1987:7–8). And the NPS perceived threats to certain unique endemic plants—nine species and varieties—growing in areas used by goats.

Between 1981 and 1989, humans removed 509 animals from the goat population (Houston et al. 1991*b*: 89). Of these, 360 were captured alive, 28 accidentally killed during capture, 19 shot for research, 99 killed by

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Figure 1. Native range of the mountain goat in northwestern North America, 1988 (National Park Service map).

sport hunters outside the park, and 3 killed by poachers (Fig. 2). At the end of 1990 the estimated population on the peninsula was only 389 ± 106 (172 goats seen). That total showed clearly that removals by humans outnumbered natural recruitment.

The NPS also tested population control by contraception (NPS 1987:46–47). Later, an independent fivemember panel comprised of veterinarians, wildlife biologists, and a reproductive physiologist evaluated the potential of goat control by contraception (Scientific Panel 1992). Panel members visited the goat range, studied past research by the NPS, and brought to bear their collective experience with the application of contraceptives to overabundant wild or feral animals. They concluded that "current contraceptive or sterilant technologies will not eliminate mountain goats from ONP."

Although the reestablishment of wolves (*Canis lupis*) in the park would impose a degree of control on the goat population, the NPS has never included this possibility in its management plans. (The last Olympic wolf was killed in the 1920s.) Students at Evergreen State College have suggested that the Peninsula could support at least 40–60 wolves (Students 1975:57).

In 1987 the NPS released an environmental assessment that gave preference to settling the goat contro-



Figure 2. Two mountain goats, tranquilized by aerial darting, are removed from Olympic National Park, 1988 (National Park Service photo by Richard W. Olson).

versy by removing all goats from the core of the park and thereafter removing—by capturing or killing—any that appeared along its borders (NPS 1987:52–54, 65– 67). Later, the NPS announced that it would release in 1993 a Final Environmental Impact Statement (Interagency Goat Management Team 1992:6).

Conflict: Factual Considerations

The Fund for Animals (1992), a national society of 150,000 members, claims that goats occupied the Olym-

Conservation Biology Volume 7, No. 4, December 1993 pic Peninsula into the nineteenth century. If so, the present population is a replacement or "restoration" (my term) entitled to protection. The Fund builds its case partly on a model drawn by anthropologist R. Lee Lyman (1988) and partly on "documented and scientific historical evidence." Lyman examined the known distribution of goats in five northwestern states in relation to the postulated distribution of Pleistocene ice lobes. From a "dispersal model" of goat occurrences at various times and places, he concluded that by 10,000 years ago goats could have reached the Olympics. He suggested that, if goat remains dating from the recent thousand years ever should be found here, the NPS should rethink its policy, quit calling the planted animals exotics, and leave them undisturbed. The Fund for Animals also points to narratives published between 1844 and 1917 that mentioned the goat as a member of the Olympic fauna.

The NPS rests its case on the present distribution of mammals in western Washington and on the unreliability of reports of Olympic goats before 1925.

First, the goat is one of 11 species of mammals native to the Cascade Range of Washington that are *not* native in the Olympic Range only 120 km away (Dalquest 1948; Scheffer 1949). Among the missing are six species characteristic of alpine or subalpine habitats. Conversely, one mammal species (*Marmota olympus*) native to the Olympics is not recorded from the Cascades. Geologic clues indicate that continental ice in the Puget Sound Basin would have isolated the high Olympics from the high Cascades long before the first goats reached North America, perhaps 40,000 years ago (NPS 1987:7, 17; Kruckeberg 1991:2–33).

Second, early reports of Olympic goats cannot be taken seriously. For example, John Dunn visited the Indians living near Cape Flattery and reported that they "manufacture some of their blankets from the wool of the wild goat" (1844:231). But ethnologist Erna Gunther later learned from descendants of those Indians that "the mountain goat does not occur on the Olympic Peninsula.... Mountain-goat wool was bought in Victoria [British Columbia] through the Klallam" (1936:117). Albert B. Reagan, Indian Agent at Lapush in the early 1900s, excavated middens along the seacoast, where he found remains of bighorn sheep and mountain goat "usually only in the ladle form of the horns" (1917:16). These, again, would surely have been trade goods. Eight years earlier, Reagan (1909) had published a list of the animals of the Olympic Peninsula; it did not include the goat.

Two other narratives briefly mentioned Olympic goats (Seattle Press 1890:20; Gilman 1896:138). The first, composed after a five-month crossing of the Olympic Range in winter and spring (the first crossing ever) stated simply that "one goat was seen by the party." The second included "mountain goat" and "pelican," among other species, as "game animals" of the Olympics. These narratives can hardly be taken as zoological records.

The strongest evidence—albeit negative—that goats were not indigenous comes from the published accounts of the dozen or more zoologists who explored the Olympics between 1895 and 1921 on expeditions of the U.S. Biological Survey and the Field Museum of Natural History (Hall 1932:74). These explorers reported no goats.

Ethical Considerations

But the goat controversy is basically a clash of human values—the sort of controversy that is settled through agreement rather than discovery. Informed public opinion will ultimately determine whether Americans want a goat-free Olympic Park at the cost of routinely exiling or killing goats. The Fund for Animals has chosen unwisely to offer what it calls "historic and scientific evidence" (1992) in defending its case. Would not the Fund gain wider public support by relying purely on moral persuasion? Philosopher Mary Midgley has asked (1983: 33), "What does it mean to say that scruples on behalf of animals are merely emotional, or emotive or sentimental? What else ought they to be?"

Two lessons can be read in the Olympic Park experience with its unwanted goats.

First, national park managers will increasingly deal with exotic species as they deal with wildfires, hurricanes, and floods: with patience yet with steady resolve to maintain indigenous biosystems as nearly natural as possible. While "natural" as a state unperturbed by humans has long been an unreality—an abstraction—it is still useful as a goal. And all land managers need goals, however visionary or remote.

Second, animal welfare, an umbrella term for kindness to animals, humaneness, animal protection, anticruelty, and (lately) animal rights, will continue to grow in American thought. As a societal endeavor to win greater consideration for the interests of all living things, animal welfare began in the 1960s to draw energy from the "liberation" and "ecology" movements of that era (Scheffer 1991:29-30). The significance of the animal welfare ethic for national park managers is that they will increasingly become more sensitive to public opinion-a set of preferences compounded of sentiment (or emotion) and logic (or reason). Park managers will increasingly turn for advice to social scientists, who will sample public attitudes and preferences with respect to park uses; will develop new technologies for interpreting park values; will assist in the drafting of regulations; and will join in mediating disputes over the status of exotic species, such as goats.

Conclusions

The planting of foreign goats in the Olympics seemed a good idea at the time and even 10 years later (1935) when I first worked as a biologist in the Olympic National Forest. But today, public attitudes toward natural areas and their biota are changing. The more we humans shape and color the landforms around us according to the designs of each new generation, the more we treasure those fragments kept undesigned. Wild places. Places to which we respond with all our senses, places where we bond with the earthly systems that nourish our civilization and our species. If a personal thought may be injected here it is this: the humane removal of goats is a small price to pay for keeping the Olympics wild.

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