

WOLVES



UNGULATES



THE WOLF is one of the most controversial animals in Alaska today. There are those who hate the species and some who deify it, though much public feeling ranges between the two extremes. Nearly everyone, it seems, has some opinion on this largest species of the canids.

Wolves are controversial because they pursue and consume big game; moose, deer, elk, caribou, sheep and others. Their reputation might be less alarming to some if they confined their predatory activities to lemmings, voles, field mice and an occasional beaver. The fox, another common Alaskan predatory canid, has these food habits and does not provoke the strong feelings often held against wolves.

Predation is an important part of healthy, functioning natural systems. For example, moose populations in some areas completely outstrip the food capacity of their range and then decline. Predation helps to keep this growth in bounds, just as hunting by man does in areas where predation is absent. However, in some circumstances it has been demonstrated that when a population of ungulates (hoofed mammals such as moose, caribou, sheep, deer, elk, etc.) is reduced by other environmental factors—rarely wolf predation by itself—wolves can further reduce and keep ungulate numbers low.

This is the situation in some

parts of Alaska today, specifically Game Units 13, 20A and 5. Hunting has been reduced or eliminated in these areas, but to insure the recovery of ungulate populations, Alaskan wildlife biologists have recommended a substantial but temporary reduction in wolf populations by aerial shooting to allow the ungulates to recover.

For many years wolves were hunted indiscriminately in Alaska, just as elsewhere. Most people considered them vermin. Beginning shortly after statehood in 1959, the Federal government's predator control program of aerial shooting and poisoning was terminated by the state. In 1963 the state officially classified the wolf as a big game animal, giving it a measure of protection and status it never before enjoyed. Closed seasons, restrictions on hunting methods, bag limits and areas closed to the taking of wolves were established. Prior to this action, wolves could be taken by anyone at any time.

Today, it is obvious that these measures have been successful. To the best of our knowledge, wolves in Alaska are now as numerous as they were at the turn of the century.

Wolf densities in Alaska range from a complete natural absence of animals on some islands to a rather dense recorded maximum of one wolf per 25 square miles in portions of southeastern Alaska. (See Survey Inventory Reports and

S.E. Deer Reports for specific information). Although any wolf population estimate can only be approximate for this huge state, biologists suggest there are about 10,000 wolves in Alaska. This estimate is based on intensive studies and surveys in certain portions of the state. Further data has been acquired through regulations which require hunters and trappers to present harvested wolves to a Department of Fish and Game representative for inspection.

Hunters and trappers have legally taken an average of about 1,100 wolves per year in Alaska since 1964. Between 40 and 50 percent of the wolves examined by Department personnel have been less than one year old. Such a high percentage of young wolves is evidence of a highly productive wolf population. Despite this sustained level of harvest by people, wolf populations in Alaska are thriving.

Wolves have a reproductive potential far greater than other big game animals in Alaska, including the species upon which they prey. A female wolf is sexually mature at two years of age, produces five to eight pups per litter, and is capable of breeding every year. That wolves do not regularly outstrip their food supply is due to a high natural death rate, attributable in part to starvation, disease and in-fighting of both pups and

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adults.

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Caribou inhabit most of mainland Alaska, except the southeastern panhandle. Most are found in loose herds. A herd is defined as a group of animals sharing the same calving ground. About half the herds are holding their own or increasing, while the remainder are slowly declining.

One herd, the Western Arctic herd, has declined dramatically from about 240,000 animals in 1970 to nearly 60,000 animals today. Department of Fish and Game personnel are still investigating reasons for the decline. However, it is known that heavy harvests by sustenance users and wolf predation have greatly exceeded the annual addition of new animals to the herd during the past several years. For example, from July, 1975 through June, 1976, mortality from these two sources approached 40,000 animals, while the annual increase was around 7,000-8,000. Sustenance hunting accounted for two-thirds of the kill.

Moose populations are high in some areas of Alaska, and low and declining in other parts of the state. Moose numbers have been declining in central Alaska since the early to mid 1960's. This decline is apparently due to a series of very severe winters, wolf predation,

declines in range quality, and, in some local areas, hunting. Sustenance hunting has not been an important factor in the decline of moose populations.

The moose population in Mt. McKinley National Park, which is unhunted, is also declining, as are populations in other less accessible areas that receive little or no hunting pressure. Obviously, hunting is not always the chief factor responsible for moose declines.

UNGULATES AND WOLVES

Wolf populations can persist at relatively high levels even after ungulate prey has undergone a substantial reduction in numbers. They are resourceful predators and can resort to alternate prey species such as small mammals while continuing to obtain some ungulates even when ungulate numbers are very low. This can result in extremely low numbers of ungulates for relatively long periods.

It is popularly held that wolves take only weak, sick or old individuals in prey populations. Scientific data show that young and old ungulates are more susceptible to wolf predation than other animals, but that under certain conditions (i.e. low prey-base, lack of buffer species, high predator density, unusual weather conditions, etc.) all sex and age classes are vulnerable to predation. The relatively high loss of young animals

is often the most obvious negative effect that wolves have on ungulate populations.

The most important point to remember is that, under some circumstances, wolves can reduce and limit ungulates. Public opinion has made a pendulum swing from the days when the effects of wolf predation were all "bad;" to the days when these effects were considered to be all "good." Today, we must realize that neither is completely true, and that wolves are an intriguing and desirable part of the wildlife scene. Nevertheless, they can sometimes keep ungulate numbers at undesirably low levels and they are a major factor the Board of Game must consider when allocating big game surpluses. In fact wolves play a key role in the allocation process; often consuming all the available surpluses.

WOLF MANAGEMENT

Wolf management can mean many things. At one end of the spectrum, it can mean complete protection. For example, in some parts of the continent, including parts of Alaska, wolves are legally protected and may not be taken under any circumstances. Management can also mean protection from over harvest. In most parts of Alaska wolves may be hunted or trapped only during certain seasons. Occasionally, and at the other end of the spectrum, it can

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mean active programs to limit wolf numbers in a specific geographic location for a period of time.

Part of the published wolf management policy of the Alaska Department of Fish and Game deals with those situations where a limiting of wolf numbers may be necessary:

The Department recognizes that situations may arise requiring the removal of a wolf or the reduction in numbers in response to a specific problem. Control will be implemented only after an investigation by Department personnel has determined a valid need exists.

Whenever substantial conflicts arise between humans and wolves over the use of prey, the wolf population will be managed to minimize such conflicts. The various recreational and aesthetic values of the wolves will be considered equally with similar values of the prey species in the final management decision.

Whenever possible, control will be effected by hunting and trapping. When control by the Department or its designees is necessary, humane methods will be employed. Poison bait and other nonselective means of control will not be used. Boun-

ties are not considered a desirable means of effecting control.

Today, there are several areas within Alaska where wolves are limiting the numbers of their ungulate prey. An example is Western Arctic Alaska—the range of the Western Arctic caribou herd—discussed earlier.

In mid 1976, caribou hunting was closed there altogether by the Alaska Board of Game. A short while later, a very limited (permit-only) harvest of 3,000 bulls was sanctioned, in an effort to meet the sustenance needs of some of the people.

Wolf predation, however, has continued unabated. The number of wolves in the northwest Arctic has adjusted itself to the large number of caribou that were once there. However, with their ability to maintain large populations even in the face of declining prey, this large number of wolves has probably not declined significantly. These wolves now consume considerably more caribou than are annually added to the herd.

Plainly, for the herd to grow, the number of wolves that inhabit the area must be reduced.

Over the long haul, wolves and caribou in the northwest Arctic might indeed reach a balance, even if at some lower level. We believe, however, it is important to use every available management tool

now to increase the herd so that the needs of Alaskans can be met.

Temporary reductions in wolf numbers are being carried out in other areas of the state as well as the Western Arctic range. In each case, department biologists have documented a decline in ungulate populations that cannot be arrested without reducing mortality from wolf predation. Once ungulate populations have reached a higher level, wolf reduction will no longer be necessary.

CONCLUSION

Years of Wolf research in many areas of North America have shown that wolves are an important part of natural systems. From both an ecological and an aesthetic point of view, Alaska would be much the poorer without them.

For many Alaskans, wolves are an embodiment of the frontier that Alaska represents. If ever wolves are banished from this land, a significant part of this will be gone. Yet, today, we believe we must reduce their numbers for a time in certain problem situations. However, it is recognized that one of the chief goals of Alaskan wolf management is now, and will always be to insure their existence as an integral component of the natural fauna of Alaska.

Alaska

FISH *tales* & GAME *trails*

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