

Wolf reintroduction to yellowstone park



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Wolf Reintroduction To Yellowstone Park Ted Fessides Ecology, Summer Semester 2011 Professor Thomas Heasley July 15, 2011 Contents

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Yellowstone Park Introduction While highly controversial, the reintroduction of wolves in Yellowstone Park has provided many beneficial ecological changes to the entire parks ecosystem.

After a nearly 70 year absence, in January of 1995, 14 wolves from separate packs were captured in the Canadian Rockies and transported to Yellowstone National Park in the states of Wyoming, Montana and Idaho (Sanders par. 2). The *Canis Lupus* or more commonly known as the gray wolf is the largest wild member in the Canine family. While once covering vast areas of the North American and European continent, the grey wolf was hunted to near extinction in the 1900's due to mostly folk lore and fear.

There were at least 136 confirmed kills between 1914 and 1926, and by the 1970's biologist could find no evidence of a wolf population in Yellowstone Park. (National Park Service par. 1). Wolves were highly populated when the park opened in 1872 but due to predator control measures, lack of legal protection for the species, and the classification as a nuisance animal all played factors that led to their absence in the park.

It was for this reason that the gray wolf was placed on the Endangered Species List in 1974 and it has taken until 2008 and more than 27 million dollars to bring the species back into a suitable population and remove them from the endangered list (Associated Press par. 12). The move to reintroduce

the wolf was very controversial with conservational and environmental groups pushing and supporting the measure but many ranchers and farmers in the area being very wary of it.

But there was no denying that the ecosystem of the park had changed since the wolves' absence, with a large increase in the elk and coyote population but a steady decline in beavers and certain native insects, trees and shrubs. History In 1987 the U. S. Fish and Wildlife Service (USFWS) introduced a plan to Congress to reintroduce an experimental population of wolves into Yellowstone. In 1991 Congress authorized funds to conduct a study of introducing wolves back into the park in a joint plan between USFWS, National Park Service (NPS) and the U.

S. Forest Service (National Park Service par. 4). Finally, in 1994 the Secretary of the Interior signed off on the Final Environmental Impact Statement or FEIS, allowing the reintroduction of wolves into Yellowstone (National Park Service par. 4). In 1995 the Canadian Government allowed capture of 14 gray wolves in the Rocky Mountains in Alberta, Canada. Wolves were captured from many different packs due to the difficulty in trapping an entire pack and also to diversify the DNA pool for future breeding (Sanders par. 3)

The wolves were divided up into three groups and placed into three one acre acclimation pens in the Lamar Valley of the park and readied for a soft release. A soft release involves holding animals temporarily in suitable habitat to get them acclimated to their new surroundings and to discourage widespread dispersment that often happens with hard release, which involves transporting animals to their new home and releasing them

immediately (Sanders par. 35. 38). Hard release is also less successful due to the territorial instincts of wolves, with wolves killing or fighting any other wolf that may enter their territory. The wolves that were released outside the park in Idaho were given a hard release and mostly scattered and did not develop a pack bond like those in the acclimation pens (Sanders par. 39, 41). According to Mike Smith, who works for Yellowstone Park, “ In general, the acclimation has worked very well, In fact of the 31 wolves brought in from Canada, there was only one wolf who did not take to soft release, that wolf was #27 who killed almost 50 sheep a few weeks ago and had to be destroyed” (Hamann par. 5).

While in the acclimation pens the wolves were fed a diet of elk and other road kill with wolves typically consuming 21 to 32 pounds of meat in a single feeding. In March of 1995, three of the packs were released in Yellowstone, but with one issue; the wolves refused to exit through the gate because they had associated it with humans, forcing the park rangers to cut a hole in the side of the enclosure for them to escape (Sanders par. 11). Once the wolves were released two of the packs left the park and set up their territory leaving only one group initially setting up inside the park.

On May 3, 1995 female wolf number nine gave birth to eight puppies, the first wolves to be born in the park in nearly 70 years. The mother and pups were recaptured and taken back to the acclimation pen, until the pups were weaned (Sanders par. 15). The reason for this recapture was because at this time, this wolf and her eight pups counted for almost 50% of the park's wolf population. Since this time there have been no other human interventions preferring to let nature take its course on the population.

In 1996-1997 a second group of wolves was captured and brought to Yellowstone for introduction via soft release with two more acclimation pens being built, bringing the total to four. In the winter of 1997-1998 the reintroduction of wolves was stopped due to the high success of the wolf packs breeding and the pups surviving on their own. The breeding and pup survival was so high in fact that in just ten years the gray wolf was taken off the endangered species list and its status changed to threatened in the reater Yellowstone area. It is estimated that since the initial introduction of 66 wolves in the mid 1990's the population has soared to an estimated 1500 in the Idaho, Wyoming and Montana area surrounding the park (Associated Press par. 1). The Cons of Wolf Reintroduction Of course the reintroduction of the gray wolf had many critics, from neighboring ranchers and farmers concerned for their livestock to residents concerned for their children and pets.

In an open forum meeting in Grangeville, Idaho it was shown how much public education was needed when the local school superintendent raised concerns over rural children at bus stops being targets even though there is not one verified report of a human attack by wolves in North America (Wolf Reintroduction: How the wolves came back par. 4). It was again the fear and folklore surrounding the wolf that made the public uneasy and in need of education. As the debate over wolf reintroduction continued, the rancher's opposition to wolf recovery centered around two fundamental issues.

First, they were concerned about wolf predation and whether or not they, personally, would be able to "manage" depredating wolves. Second, they were concerned about their rights to federal lands--probably their biggest

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concern. A rancher from Dillon, Montana, expresses his fear, " We are more worried about the land grab with the wolf than we are depredation".

Ranchers, loggers and other industrial interests that utilize federal lands were concerned that the lands they were accustomed to using would be restricted from further use because of the wolf.

Neither this concern regarding land use rights nor the concern over depredation could be answered easily (Wolf Reintroduction: How the wolves came back par. 6). To help alleviate the ranchers concerns, Defenders of Wildlife, a nonprofit organization supporting wolf reintroduction launched a program to compensate ranchers and farmers who lost livestock to wolf depredation. AS of 2002 DOW had paid out approximately 270, 000 dollars to ranchers in the Northern Rockies region (Wolf Management par. 7). Another major concern was that of native species population with the reintroduction of the wolf.

There was much concern over what would happen to the native population of elk, bison and other carnivores, such as the grizzly bear, coyotes, red foxes and others that live in the park. It was speculated that their populations would all drop dramatically with the reintroduction, as wolves can overhunt large animals like deer and antelope. To go along with that concern was also those of the big game hunters who claimed that the wolves would be directly competing for the same big game animals they were, which in turn would decrease the numbers of hunters and the money they spend and contribute to the greater Yellowstone area.

One other large issue is the large amount of money it takes to reintroduce a species. This is money that the government could use towards larger and more important issues facing this country. As stated earlier it is estimated that as of 2008 approximately 27 million dollars of federal money has been spent to support the reintroduction of wolves to Yellowstone Park (Associated Press par. 12) Pros of Wolf Reintroduction One of the biggest pros since the reintroduction of the gray wolf into the greater Yellowstone area is that of the economic impact it has had on the region.

A survey conducted in 2005 by Yellowstone staff estimates that wolves bring in approximately 22 to 48 million annually (John W. Duffield 17). This is done by the wolf presence, which leads to increased visitation to Yellowstone Park, which in turn leads to increased spending in the communities surrounding the park, and increased recreational enjoyment for residents and visitors alike. Another benefit of the wolf reintroduction is an improvement on the ecosystem of Yellowstone; in 1995 when the wolves were reintroduced there was only one colony of beavers in Yellowstone Park.

Ten years later there are nine colonies of beavers, all due to wolf depredation on elk. After the removal of wolves from the park the elk herds grew, these larger herds grazed heavily on willow and elm trees which the beavers depended on. Another factor was that with the wolves out of the park the elk did not have any pressure from predators pushing them around the park, which in turn led to them staying in one area and over grazing (Farquhar par. 2). Because of the increased beaver population and dispersement through the park, their dams have many positive effects on the ecosystem, such as, “ they even out the seasonal pulses of runoff; store

water for recharging the water table; and provide cold, shaded water for fish, while the now robust willow stands provide habitat for songbirds” (Farquhar par. 12). The dams also trap sediment, replenish ground water, and cool water temperature which has a direct effect on Yellowstone cutthroat trout, moose, waterfowl, muskrats and other rodents and numerous insects and amphibians (Ecological benefits of wolves par.) Another benefit was that a study done by University of California at Berkley found that decreased snowfall and increased wolf population has greatly benefited other carnivores and scavengers from ravens to grizzly bears. “ Instead of a boom and bust cycle of elk carrion availability-as existed before wolves and when winters were harder-there's now a more equitable distribution of carrion throughout winter and early spring” said Chris Wilmers in the on-line journal Public Library of Science Biology.

He added that scavengers that once relied on winter-killed elk for food now depend on wolf-killed elk. This benefits ravens, eagles, magpies, coyotes and bears (grizzly and black), especially as the bears emerge hungry from hibernation’ (Farquhar par. 23). The most recognized and well-documented ecological benefit of wolves is that they have resumed the important role of maintaining healthy wildlife herds in the northern Rockies by selecting young, old, physically impaired, or diseased animals.

By reducing prey numbers, dispersing these animals on the landscape, and removing sick animals, wolves also may reduce the transmission and prevalence of wildlife diseases such as chronic wasting disease and brucellosis (Ecological benefits of wolves par 2). Summary The return of the wolf to the greater Yellowstone area has had significant ecological benefits in <https://assignbuster.com/wolf-reintroduction-to-yellowstone-park/>

a relatively short period of time. Ecological concerns contributed to the decision to return wolves and should play a role in how states manage this keystone species.

Although it is easy to focus on the perceived negative impacts of wolves, it is important to recognize the actual benefits they provide to our ecosystem. By regulating wildlife herds and reducing the prevalence of diseases, revitalizing riparian areas, reducing coyote densities, providing food for scavengers and indirectly improving conditions for a host of other species, wolves play an essential role in maintaining the ecological health and integrity of the landscape. From an economic standpoint, the cost of reintroduction is far outweighed by the benefits of increased tourism and the money they spend.

When it comes to livestock depredation, wolves garner a great deal of attention yet they are only one of many concerns for ranchers in the greater Yellowstone area and have less of an impact than often is perceived.

Livestock is more likely to be lost because of inclement weather, disease, and domestic dogs than it is by wolves. Environmental Issues The thing I was most impressed by from writing this report was that of how by introducing one species into an ecosystem or should I say reintroducing a species was the snowball effect it had on other species in that system.

I knew of the reintroduction of the wolves to Yellowstone Park but I thought it was only about returning a native species to its original habitat. I was amazed at how the ecosystem has not only grown but flourished with their reintroduction. Wolf reintroduction has grown the local economy in the greater Yellowstone Area through tourism and increased recreational

activity. It has benefited the ecosystem through increased beaver numbers which in turn has improved the stream live. Through the decrease in the elk population the trees and shrubs have been able to grow benefiting numerous woodland animals.

This story is one of the greatest conservation stories of the 20th century that continues today. Works Cited Associated Press. " Western Wolves coming off the endangered list. " 27 February 2008. msnbc. com. 9 July 2011 . "

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