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The Policy Behind the Reintroduction of Gray Wolves into Yellowstone

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Introduction

There are howls abounding in Yellowstone National Park. After more than sixty years of being absent from the ecosystem, *Canis lupus* (gray wolf) has been returned to the park. Never before has such an effort to restore a species to its former range caused such a fervor. Wolf supporters are ecstatic to see a more complete ecosystem in place, while wolf opponents are fearful to see a predator return to threaten their livestock. With the charged focus of a mostly Republican Congress, this may very well may be the last time a reintroduction effort can occur. To merely point out that wolves have been released into the park would to be ignoring an enormous effort that began more than twenty years ago. Since 1973 when the gray wolf was listed as an endangered species under the newly enacted Endangered Species Act of 1973 (ESA), there has been an ongoing effort to recover the species. Reintroduction of wolves into Yellowstone has taken much time, energy, and perseverance. With the added burdens of the political process, it is truly a miracle that the reintroduction took place at all.

The Endangered Species Act which gave the legal authority to carry out the reintroduction has weathered many attacks lately. Its renewal will dictate the continued management of the gray wolf, and the many species that are imperiled in the U. S. The Yellowstone wolf reintroduction serves as a success, in the midst of playing out its full story, for the Endangered Species Act. Unfortunately, in the eyes of the ESA's opponents, one such success does not deem a program worthy for reauthorization and continued support. These same opponents are calling for an extensive rewriting of the law that has protected so much of the Nation's natural heritage for years. Even though the ESA has worked imperfectly and slowly, it has saved many species that would have otherwise been lost (Rauber 1996). To understand the complexity of problems facing the Endangered Species Act today, it is necessary to retrace the history of the conservation effort in the United States.

Historical Background

Preservation of species is a relatively new concept in the history of man's management of wildlife. The earliest regulations set in the New England area during the 1620s on deer hunting were not due to a preservation ethic, but to a fear of losing deer as a food source (Bean 1983). A utilitarian value has been wildlife's worth to man since those early times, and only recently has the value of preservation become a focus for all species of plants and animals.

Early Years

Understanding the evolution of the United State's wildlife laws is an essential key to realizing the complex arguments about the Endangered Species Act of today. The first step toward any type of national preservation in this country occurred on 1 March 1872 with the signing of the Yellowstone National Park Act by Ulysses S. Grant (Shelton and Fox 1994). This Act, besides setting aside a vast amount of land for preservation, called for the Secretary of Interior to "make and publish such rules and regulations that would provide against the wanton destruction of the fish and game found within the park, and against their capture or destruction for the purpose of merchandise and profit" (Shelton and Fox 1994). Even with this type of rhetoric present in the enabling act of the park, the Secretary deemed it necessary to publish rules against hunting, trapping, or fishing in the park in 1877 (Adams 1993). This provision however did not prohibit hunting for recreation or for supplying food to visitors and residents of the park. With the lack of any type of an enforcement body within Yellowstone, poaching was rampant.

Before the time that Yellowstone was established, the pioneers of the area used wildlife as a source of food and clothing. Hunting was a necessity to life instead of serving humans as a sport. As the area became more civilized, landowners started to claim rights to the land, but the prominent view continued to be that wildlife was free for the taking (Gilbert 1993). Free-taking prevailed to the point where the belief became that wildlife belonged not only to the landowner, but to all people in common (Gilbert 1993).

With this kind of attitude problems were bound to arise. One of the first clashes between wildlife and landowners concerned agriculture. Some farmers denied hunters access to their lands. After many trials, a compromise was reached between farmers and hunters. Farmers wanted their crops protected from certain wildlife, and hunters were willing to oblige if compensated for their efforts (Gilbert 1993). Consequently the bounty system was adopted in the United States. With this type of payment available for wolves and other species, trapping and hunting escalated.

Yellowstone regulated its game populations by allowing hunting to continue for many years. There was also a prevailing idea that if predators were eliminated, game species would become more abundant and thus more attainable by the hunters visiting the park. In 1883, the first hunter and a pack of hounds were employed to hunt down mountain lions within the park (Adams 1993). Other species of predators, such as grizzly bear and gray wolf, were hunted and trapped by farmers and ranchers of the region without any compensation. These species were viewed as ferocious, evil animals that were incompatible with the human needs of the area. In other words, wolves were seen as a threat to the farmer's livestock and livelihood. Therefore, wolves had to be destroyed. During this same time period, wolf pelts also became very profitable on the fur trade market. Between 1850 and 1885, killing wolves was perfected to a science. Hunters would kill several buffalo within an area of several miles, fill the entrails with strychnine, and wait for the wolves to come (Halfpenny 1995). Once a wolf ate from the carcass it would die nearby allowing the hunter to merely pick up the bodies of the wolves. Profits from furs outweighed the income from bounties so that hunters and trappers were more inclined to shoot for themselves than for the farmers. Either way the agricultural interests benefited. The wolf population suffered, but was not the only species to be decimated by hunters. The elk, deer, and bison populations were also being reduced from overharvesting (Fischer 1995). Some of these species were so reduced that the only populations left in the nation were in Yellowstone. With the prev base for

wolves dwindling, the only option for the wolf was to prey on the increasing herds of livestock found in the surrounding area of the park (Fischer 1995).

During the same decade, the Department of Agriculture became interested in controlling detrimental pest species. In other words, species that were competing or harming farmer's crops were targeted. 1885 was the first year that Congress appropriated funds to the Department of Agriculture to study economic ornithology or bird species that caused problems to agricultural crops (Woolf 1996). The concern for protection from economically damaging wildlife species prompted the creation of the Division of Economic Ornithology and Mammalogy in 1886 (Woolf 1996). This agency was charged as a research body to investigate food habits, distribution, and migrations of North American birds and mammals in relation to agriculture, horticulture, and forestry. A dualism resulted from protecting "good" species while controlling "pest" species in the United States wildlife programs.

The protective dualism of wildlife management was even more noticeable in Yellowstone after the year of 1894. In this year, the Protect the Birds and Animals in Yellowstone National Park Act was passed to prohibit all hunting of animals within the park, except to protect human life (Adams 1993). The Act required strict enforcement and severe penalties for anyone found in violation of the Act. The power of enforcement of the Act was delegated to the U. S. Cavalry who had taken over the protection and regulation of Yellowstone in 1886 (Fischer 1995). Even with the new legislation and an enforcement body to keep watch over the wildlife, the killing of predators continued. A coyote eradication program began in 1896, and other problem causing species were soon targeted (Adams 1993). Populations of gray wolves and grizzly bears actually rose under the watchful eye of the Army within the park, but outside the park the eradication continued.

While the Army was protecting Yellowstone, the Department of Agriculture was expanding its studies to the distribution of plants and animals, while it continued its

duties of investigations of the relations of species to agriculture. By 1905, to reflect its expanding list of charges, a new section of the Division became the Bureau of Biological Survey (Bean 1983). The focus of the Bureau at that time was the control of species harmful to agriculture. To further protect the interests of agricultural and ranching groups, Congress appropriated funds to the Bureau for the control of prairie dogs, wolves, and other species injurious to agriculture and livestock (Gerhardt 1994). By 1914, the Bureau had published directions on the proper method to kill wolves, some of which were used to carry out extermination in Yellowstone. By the time the National Park Service (NPS) was established in 1916, the Bureau had been appropriated \$125,000 to control animals, which addressed the needs of the Yellowstone park superintendent perfectly (Adams 1993). It was deemed that there were too many wolves killing the public's game (Fischer 1995). With the specific goal of eradicating wolves, the National Park Service and the Bureau of Biological Survey joined forces (Fischer 1995). The unfriendly attitude of the NPS toward wolves was in exactly the opposite direction of its own mission statement. The National Park Service Organic Act of 1916 stated that the goal of the service was to "conserve the scenery and the natural and historic objects and the wild life 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" (Shelton and Fox 1994).

Unimpaired wildlife must not have meant those animals seen as damaging by the surrounding agricultural interests. Wolf populations were on the rise as were the big game populations, but the NPS succumbing to pressures from outside interests, continued to kill wolves (Fischer 1995). In 1926, the National Park rangers killed the last known wolf pups in the park, and with them the last known reproduction effort of wolves (Gerhardt 1994). From that time forward wolves were considered extirpated from the park.

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The dualism, that had been rejected by the NPS, was continued by the Bureau. During 1939 the Bureau was transferred to the Department of Interior. It was after the transfer in 1940, under newly evolving ideas of wildlife management, that the Bureau of Biological Survey, and its counterpart the Bureau of Fisheries was merged to form the United States Fish and Wildlife Service (FWS) (Bean 1983). The new federal role was to support the cause of sport hunting, while continuing the role of exterminator. Declines in animal populations forced the states to impose regulations that stopped commercial harvesting. Management was therefore centered towards killing the animals that were seen as depleting game species populations (Gilbert 1993). It was also during the 1930s-1950s that management developed programs to maintain an adequate supply of wildlife on federal lands. These programs included nation wide wildlife conservation, and land rehabilitation efforts based on state and federal cooperation (Gilbert 1993). All of these efforts were to ensure game populations for future hunting generations (Gilbert 1993).

During this change in management, the wolf was still being persecuted. The western states had effectively snuffed out the population of gray wolves by 1940. In 1944, with evidence that game populations would benefit from the presence of wolves,

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Aldo Leopold called for the reintroduction of wolves into Yellowstone National Park (Gerhardt 1994). The destruction of wolves in the park had allowed populations of elk, bison, and deer to rise for a brief period, but with no culling of the herds, except for hunting outside the park, the park's habitat could not sustain the growing ungulate populations. Populations of big game had become cyclic in the absence of wolves, and natural predation was now seen as more beneficial than detrimental (Harting and Glick 1994). The reintroduction of wolves was criticized by area agricultural interests out of fear that again wolves would devastate herds of livestock. With a loss rate of 25% or higher reported for livestock during the time that wolves had inhabited the Yellowstone area, it was no wonder that ranchers were opposed to the idea (Fischer 1995). Consequently due to lobbying by ranchers no action was taken. This attitude changed during the 1960s with the advent of the environmental movement. With the likes of Rachel Carson in the choir, the songs of conservation were sung loudly to Congress. Congress' response was the first of three legislative efforts to save the natural fauna and flora of the country.

The Acts

ESA of 1966

In 1966, the Endangered Species Preservation Act was passed. It was the first attempt of the Federal government to forestall the extermination of species caused by man in the United States (Bean 1983). The Act specifically called for the Secretary of the Interior to "carry out a program in the United States of conserving, protecting, restoring and propagating selected species of native fish and wildlife found to be threatened with extinction" (Bean 1983, Adams 1993). The federal agency that was charged with the daunting task of protecting these selected species was the FWS. The FWS was, at the same time, the leading organization in animal damage control. The agency that had historically been in charge of protecting agricultural and hunting interests

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was now mandated to protect some of the same species persecuted by those two groups. Thus the dualism continued even under the precepts of the new Act.

The new legislation did two specific things for endangered wildlife. It allowed the Secretary to use money from existing legislation to purchase habitat needed by the listed species, and it created a new source of acquistional funds through the Land and Water Conservation Fund (Bean 1983). The Act also charged the Secretary to publish a list of the endangered species in the Federal Register so that every person would have an equal opportunity to review regulations, designation, or revision pertaining to a listed species. Beyond these directives, the other portions of the Act merely suggested what the Secretary might do to enhance the program to save endangered wildlife. There were not any restrictions on taking listed wildlife, no further protections for the habitat purchased, and protection was lent to only native species of the United States (Adams 1993). This Act was seen as a positive first step, but was also viewed as weak and ambiguous in its direction.

In 1968, it was again suggested by Canadian wolf expert, Douglas Pimlott, that wolves be reintroduced to Yellowstone (Fischer 1995). This time the reintroduction suggestion was heard not only by the ranchers, but by a more informed general public. The public's idea of wolves had changed since the time the first reintroduction was suggested. The Endangered Species Preservation Act was one sign, but other signs were just as apparent. Public television programs like *Nature*, National Geographic Specials, and movies and books of the decade presented the wolf as a keeper of nature's balance not the ferocious killer of livestock that had existed for years (Fischer 1995). During the late 1960s and early 1970s, federal agencies slowed the predator control activities that it had carried out since the mid-1880s, and the gray wolf was on its way to protection.

ESA of 1969

Building upon the previously enacted law, Congress passed the Endangered Species Conservation Act three years later. This Act broaden the charges and authority

of the Department of Interior when dealing with endangered species. First the new Act changed the definition of "fish and wildlife" to include "any wild mammal, fish, wild bird, amphibian, reptile, mollusk, or crustacean" (Bean 1983). In terms of the new definition, the Act did not readily change the management of endangered species in the U. S. It did expand the power of the Lacey and the Black Bass Acts so that the prohibition on illegal taking of animals was extended to the include all the newly defined fish and wildlife species listed as endangered (Bean 1983). Any listing of species was to be made by the Secretary with the requirement that only the best and most recent scientific and commercial knowledge be used in the decision. The Act also increased acquistional authority of the Secretary, thus simplifying the purchase of private land, and increasing the amount of money available from the Land and Water Conservation Fund for land acquistion (Bean 1983). The new view towards wolves and the passage of a stronger endangered species program led towards the repel of the bounty system for taking gray wolves, in 1971.

The major amendment to the 1966 Act was that of the extension of the list to include those species that were deemed endangered internationally. The Secretary of Interior was charged with the duty of preparing a list of species endangered worldwide, and to enforce regulations that would make it illegal to import any of those species into the United States (Adams 1993). Under this international motif, the Secretary of Interior and the Secretary of Commerce were directed to enter into agreements in the international forum to protect the worldwide listed species (Adams 1993). This amendment led to the eventual signing of the Convention of International Trade of Endangered Species (CITES) in 1975 (Adams 1993). This treaty was eventually signed by 130 different nations (Williams 1996). Even though this Act was considered to be more far reaching in terms of protecting all endangered species of the world, it was still deemed to have weak enforcement measures. The need for a more comprehensive approach to protection was apparent (Bean 1983).

ESA of 1973

In 1973, the United States Congress passed what has been called the most visionary and far-reaching piece of legislation ever enacted relating to wildlife management (Rauber 1996). Having already shown his favor toward protecting the vanishing species of the nation in an environmental message in 1972, President Nixon signed The Endanger Species Act of 1973 (ESA) into law on 28 December (Kohm 1991). The ESA was passed with little opposition, because it was viewed as a symbolic issue. Few costs were attributed to a protective measure that would save the great natural fauna of the country. Everyone in the nation was riding high on a wave of environmental awareness.

The ESA of 1973 set out not only to remedy the short comings of the two previous acts, but also to make a bold collective statement of importance regarding endangered species (Kohm 1991). The purpose of the Act was "to provide a means whereby the ecosystems upon which endangered species and threatened species depend on may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of ... " previously enacted conventions and treaties (USFWS 1992). There were several new aspects initiated with the ESA. One such provision was that of a broad prohibition of taking on endangered species anywhere in the United States (Kohm 1991). The definition of taking was even broaden to mean such things as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (USFWS 1992). Conducts such as these were made enforceable by larger criminal penalties that could be up to a year in prison and \$20,000 in fines. Civil penalties were raised to fines up to \$10,000 and forfeiture of guns, vehicles, or other equipment used in a violation (Bean 1988). There was also a requirement that no federal agency or department was to jeopardize the continued existence of any endangered species, and that these same agencies must use their own mandated powers to further the

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Act (Bean 1988, Kohm 1991, USFWS 1992, Adams 1993). Within this requirement, the FWS had the direction to comment on any project which might impact a listed species, and had the authority to require the project's leader to cooperate with the FWS in protection measures (Harting and Glick 1994). Protection under the new Act was extended to include not only those species currently endangered with extinction, but also those species deemed likely within the foreseeable future to become threatened with extinction (Kohm 1991, USFWS 1992). The distinction between the two kinds of species protected led to definitions of "endangered" and "threatened" that are continued in the ESA of today. Land acquisition fund limits set forth in the two earlier acts were removed, and the critical habitat concept was introduced (Kohm 1991, Adams 1993). The new Act with its decisive purpose statement was seen as going beyond cataloging rare species to prohibiting activities that might contribute to their loss (Harting and Glick 1994). Many species were listed under the ESA at that time including the gray wolf, but the listing procedures were to soon come under fire (Kohm 1991).

Amendments to ESA

There have been several amendments to the ESA of 1973, but three amendments in particular stand out as the major adjusters of the Act (Rauber 1996). The first such amendment was passed in 1978 to address several aspects of the Act. The first aspect to be added was an exemption process. Under Section 7 of the ESA, all federal agencies were to consult with the FWS when any action proposed could jeopardize the continued existence of an endangered species. A conflict had erupted not long after the ESA passage that involved pitting an endangered snail darter against the completion of a hydroelectric dam. Once the Supreme Court decide in favor of the snail darter in the case of TVA vs. Hill, it was clear that the welfare of endangered species was held above all other considerations (Kohm 1991). To prevent this type of conflict from occurring again, Congress directed that a committee should be formed to review applications of exemption under Section 7. The committee technically called the Endangered Species Ale Alerice Contractional Constitution (Constitution) (Co

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Committee (termed the God Squad) was to be composed of the Secretary of Agriculture, the Secretary of the Army, the chairman of the Council of Economic Advisors, the Environmental Protection Agency administrator, the National Oceanic and Atmospheric Administrator and one individual from each affected state (Barker 1993). The committee process was designed to allow economics to be taken into account along with the survival of the species. Only through the exemption process can the costs of protecting a species overrule its protection (Barker 1993). To be considered exempt the committee must determine that there is " no reasonable and prudent" alternative to the proposed action, and that the benefits of the action clearly outweigh preservation of the species it threatens (Kohm 1991). The process is complicated, and few developers or federal agencies have put their projects through the exemption.

The second aspect changed in the ESA of 1973 was that of the listing process. The substantial change required that at the time a species is listed as endangered or threatened its critical habitat should be designated and economic factors considered in any area designated as critical habitat (Kohm 1991). There were also several provisions added to make hearings and local announcements a requirement before the listing of any species. Due to these changes not a single species was listed during the first year of the Reagan Administration (Bean 1983, Kohm 1991).

In 1982 however Congress relaxed the cumbersome procedures and attempted to speed up the process by allowing the Secretary of Interior to publish preliminary findings within ninety days after receiving a listing petition. The 1982 amendment also allowed the listing procedure to continue without a designated critical habitat listing (Kohm 1991). Despite measures to unburden the listing procedures, a tremendous buildup of candidate species waiting for review resulted. Again in 1988 the ESA was amended. The 1988 amendment gave the Secretary use of emergency listing powers to prevent candidate species from further population reductions or possible extinction (Kohm 1991). The ESA being applied to species today is the final result of many trials and tribulations of past experience, and yet controversy is still present within the Act.

ESA of Today

The ESA's authority for listing species resides mainly with the Secretary of Interior, but the procedures may also involve the Secretaries of Commerce and Agriculture under certain circumstances (USFWS 1992). The National Marine Fisheries Service shares the responsibility of administering listing with the FWS by being responsible for most marine species. The FWS administers the listing of the remaining plant and animal species (Kohm 1991). The ESA gives the Secretary of Interior explicit instructions under which to consider a species for listing. These are (1) the present or threatened destruction, modification, or curtailment of its habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; and (5) other natural or manmade factors affecting its continued existence (USFWS 1992, Adams 1995). If any of these five factors are found to be applicable to a species, then that species could be listed by the Secretary. A regulation that first appeared in the 1969 Act was reemphasized in the ESA of 1973, and is still present today. Any determination for listing must be made solely on the basis of the best scientific and commercial data available at the time. The Secretary also is given a gradient under which a species can be listed. The choices are either endangered or threatened. To be considered as an endangered species, the species must be "in danger of extinction throughout all or a significant portion of its range" (USFWS 1992). A threatened species is one which "is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range" (USFWS 1992). Under these definitions that began in the ESA of 1973, the gray wolf was listed as an endangered species (Gerhardt 1994).

Once a species is listed or concurrent with the listing procedure, an area of critical habitat must be designated, even though this provision was relaxed somewhat in

1982, it remains mandated in the current ESA (USFWS 1992). The Secretary is mandated to designate such an area, again based on the best data available and after taking into consideration the economic impact, and any other relevant impacts (USFWS 1992). After the delineation of critical habitat, the Secretary may add the species to the Endangered Species list. He may also issue regulations to provide for the conservation of the listed species above and beyond those already enacted by other federal and state agencies. Lastly, in cooperation with other federal agencies as mandated by the ESA, the Secretary must prepare a recovery plan for a listed species. A recovery plan, however, may be abandoned if it is deemed that a plan would not promote the conservation of the species. This provision must include site-specific management plans to protect the species and its habitat, an objective and measurable criteria for the species removal from the list, and estimations on the amount of time and money required to meet the goals set forth in the plan. These regulations and requirements must be met before any such action is taken (Harting and Glick 1994, USFWS 1992). Through all these provisions, the ultimate goal of the ESA is to remove species from the list.

Many times, as can be seen with the recovery of gray wolves, once a species is listed, it can take years for any action to be taken. This is mostly the result of a lengthy, but needed provision in the ESA. In Sec. 4 subparagraph 3A of the ESA, a required publication in the Federal Register of each finding is to be made by the Secretary (USFWS 1992). Such a publication is then subject to a period of public review and comment. Any petition submitted to the Secretary during the comment period must be addressed, and can, if found to provide enough evidence, warrant a revision of the proposed action. Then the newly changed action is again published in the Federal Register to undergo public review and comment. The public review is essential to ensure that proposed actions can be modified before any actual implementation, but it can also be a hindrance to the Department of Interior when trying to fulfill their duty of conservation. This provision is necessary to provide the general public and interests groups of all kinds a forum in which to voice their opinions. It also provides the federal and state agencies involved in the proposed actions a medium in which to view the needs of the affected public sectors. The public review may on occasion stop the listing of a species; it may cause a reevaluation of critical habitat; it can stop certain protections from being taken; it can stop recovery plans; in short, it can end any action proposal anywhere during the process of the ESA. This provision is another one of the main controversial points of the ESA today. To view the actual process of an endangered species being brought to the point of the recovery plan being enacted, the reintroduction of wolves into Yellowstone National Park is a good place to start.

History of Reintroduction

Under the ESA of 1973, all federal agencies were mandated to consult with and with the assistance of the Secretary, utilize their authorities in furtherance of the Act by carrying out programs for the conservation of endangered and threatened species. The National Park Service's role had already been established as a conservational agency by 1940 with the enactment of the management policy of allowing "nature to take its course". It was also very easy to insure that the NPS was complying to the ESA regulations, since both the FWS and the NPS were and are under the direction of the Secretary of Interior. Once the gray wolf was listed as endangered in 1973, the next step was to develop a recovery plan. The critical habitat had been considered and defined to be the area including Yellowstone and the surrounding United States Forest Service (USFS) lands. Anthropological and historical evidence verified that wolves were members of Yellowstone's fauna at least 1000 years ago (Harting and Glick 1994). In 1974, after several years of supposed increased wolf sightings inside and outside the park, a biologist was hired to conduct a survey within the park (Fischer 1995). After twelve months of intensive searching for wolves, the conclusion was that there was "no viable wolf population within Yellowstone" (Weaver 1978). After the report was published in 1978, a call for the reintroduction of wolves into Yellowstone surfaced.

This time the suggestion had the power of the ESA behind it. During the time of the aforementioned survey, the FWS formed a committee, the Northern Rocky Mountain Wolf Recovery Team, to prepare a recovery plan. This committee's report was finished in 1980, but as the plan was circulated and reviewed its inadequacies became apparent. The most important questions were not addressed, such as: where should the recovery take place, what should be the goals for population recovery, and what would be the management plans for problem wolves (Fischer 1995). Due to the recovery team's initial failure, a new team leader was hired in 1981 and a few team members were replaced. The team's first action was to research and define areas in the West where wolves could be restored. The second step was to define how the newly identified areas of restoration would be managed. The proposal management plan was published in 1982 (Fischer 1995). In terms of the ESA, 1982 was also the year of an important amendment to the Act. The 1982 amendment, as stated earlier, relaxed the burdensome complications of the listing process, but the amendment also held a provision to allow agencies to tailor plans to meet specific local needs (Fischer 1995). Reintroduction programs could now rely on an experimental population designation to aid in crafting flexible recovery plans (Fischer 1995). This designation would allow the recovery plan to eventually proceed at a future date, but as for 1982, no designation would convince the ranching interests to allow any wolf reintroductions (Fischer 1995).

A major component in the reintroduction process was the role of the public and interest groups. When the 1982 management program announced which lands would be receiving wolf populations, the livestock industry erupted with a plethora of complaints and arguments. Under political pressures, the NPS stated that its priorities would not include reintroduction of wolves into Yellowstone in 1983. Such a statement was in direct violation of the ESA, but the NPS bowed to the livestock industry. Once again a new plan was formulated and published in November of 1983. This plan was deemed stronger, because it named three areas of recovery, a recovered population goal, and a

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system to control problem wolves. After public review and comment on this plan, a final draft of the plan was written and published in October 1985. The plan recommended natural recovery in northwestern Montana and central Idaho, and called for reintroduction of wolves in Yellowstone under an experimental population designation (Fischer 1995). During 1986 and 1987, much time was spent gaining public support, and trying to get the recovery plan approved by the FWS. Finally in August of 1987, the regional director of the FWS in Colorado signed the plan shifting the responsibility of recovery to the NPS. The NPS director, at that time, suggested the recovery should begin with the writing of an environmental impact statement (EIS) under the National Environmental Policy Act of 1969 (NEPA). NEPA calls for an agency to prepare an EIS when undertaking actions that will significantly affect people or the environment (Shelton and Fox 1994). This suggestion was to take a considerable amount of time and money for it to come to fruition. Beginning in September 1987 and lasting until November 1991, a cyclic process of the House approving funds for the NPS to start an EIS, and the Senate rerouting those funds to studies relating to wolves continued. When \$348,000 was finally appropriated, the FWS, NPS, and USFS wasted no time addressing the process of the EIS. While the first draft EIS was being written, the combined agencies held over 34 public meetings between April 1992 and August 1992 (Fischer 1995). In July 1993, the draft EIS was published, and the comment period began. One of the main concerns of conservationists was the experimental population designation. Some groups considered the designation illegal. By definition, an experimental population designation is reserved for species reintroduced outside the current range of the species, and for reintroduced populations that are completely separated by geographic barriers from the natural population (Harting and Glick 1991). After several reliable and confirmed sightings of wolves in and around Yellowstone, the groups contended that the reintroduced population was not separate. The groups wanted the reintroduction to take place under full protection of the ESA. Another point of concern was that wolves already

occurring in the area would be treated as a part of the experimental population (Harting and Glick 1991). After answering all public comments, a final draft of the EIS was published and subsequently signed into approval by Secretary of Interior Bruce Babbit on 15 June 1994 (USFWS 1994). By November 1994, the Wolf Recovery Team had written the rules for managing the experimental population and filed all the paperwork dealing with the legal suits being filed. The Sierra Club Legal Defense Fund, the Sierra Club, and the National Audubon Society filed suit to change the designation of reintroduced wolves from experimental to endangered. The plaintiffs did not want to stop the reintroduction, but did want the wolves under the most protective care that the ESA allowed (Shelton 1994). Full protection would keep ranchers from harassing or killing wolves that were found in the act of harming livestock or wildlife (Halfpenny 1995). The American, Wyoming, Idaho, and Montana Farm Bureaus with the aid of Mountain States Legal Foundation also filed a suit for an injunction halting the reintroduction until a hearing could be held (Shelton 1994). On 3 January 1995, a U.S. District court judge determined that the livestock industry's injunction relied on an emotional appeal instead of scientific fact and therefore denied the injunction (Shelton 1995a). Fourteen wolves were to be reintroduced to Yellowstone in acclimation pens on 12 January 1995, but before the action could actually take place the American Farm Bureau Federation struck again (Shelton 1995b, Halfpenny 1995). The Farm Bureau had filed an emergency appeal in a Denver, Colorado court the day before the wolves were to be released in the pens. The court ordered a 48 hour stay preventing the release of the animals within the park, but by 7 PM on 12 January 1995 the stay was lifted. At 10:30 PM on that same night, the wolves were released into the acclimation pens (Shelton 1995b). The culmination of efforts that had begun in 1973 was finally reached on 21 March 1995 when the acclimation pens were opened and the first wolves padded freely again in Yellowstone (Shelton 1995c).

The wolf release into Yellowstone was just one part of the recovery plan. The plan is designed to assist in recovery of an entire population of wolves. The goal is to have 10 breeding pairs in each of 3 general areas (northwestern Montana, central Idaho, and Yellowstone) for three successive years. Only natural population growth would be encouraged in northwestern Montana, no actual reintroduction actions would be taken. The other two area's reintroduction actions would be taken by capturing packs of wolves in Canada, transporting and then releasing the wolves. These actions would continue for 3-5 years or until a breeding population was established in both areas (USFWS 1994). The choice to reintroduce wolves into these two areas was based on many considerations, including public concerns and wolf biological needs. The public was concerned about depredations on domestic animals, predation on big game populations, effects on hunting, and potential land-restrictions (USFWS 1994). The nonessential experimental population designation allows managers to reduce local concerns and yet provide protection to allow the population to increase. The biological aspects considered during the plan are too numerous to mention in this paper, but one of the main considerations in choosing the two areas for reintroduction applies to the population needs. The proximity of the two areas, their relative undeveloped status, and the historical range of the wolf were some of the reasons the areas were chosen. Another reason was that individuals would be able to disperse into nearby populations. Corridors provided by the undeveloped, proximate areas would allow the dispersion to continue once the populations were established therefore creating a more genetically diverse and healthier population.

Reintroduction success today stands at 37 wolves roaming the park and 14 others roaming the wilderness in central Idaho. A few wolves have been injured by man, and one has died of natural causes. The process is far from over, and the final conclusion will depend upon man's tolerance of a species with whom he must share the land. When that hurdle is finally overcome, then man will have completed the reintroduction.

Parties Involved

As can be seen by the lengthy tale of the Yellowstone reintroduction process, many parties were involved. To a large extent these parties fall into three major categories: federal agencies, public interest groups, and political persons. Of these three groups, federal agencies, other than the FWS, have the least amount of actual power over the actions taken in regards to the ESA, and the processes that are mandated by it. All federal agencies are mandated by law to follow the provisions of the ESA, and even charged to the extent that they must use their mandated powers to further the Act. The agencies must also follow and abide by the opinions of the Secretary of Interior when carrying out actions that fall under the jurisdiction of the ESA. It is true that agencies and their employees are the authors of actions taken by their respective services, but these actions come only after being mandated to write action proposals. It must be kept in mind, that the procedures that have been enacted in the ESA, and other qualifying legislation, are there to provide a system of checks for preventing actions of potential harm to society. In essence, federal agencies, such as the FWS, NPS, and USFS, involved with actions taken under the ESA are allowed to proceed with their proposals only when the appropriate measures have been approved by every group involved. In other words, the NPS and USFS, were allowed to carry out the reintroduction processes only after the agencies had written suitable plans and management rules. As in the case of the Yellowstone and Central Idaho plan, the two agencies cooperated to formulate the action and the applying rules to expedite the process. The approval of such plans by the leaders of the respective agencies does not guarantee immediate implementation of the action. A variety of constituent influences, widely varying perceptions of individual species, and the power of the media, put enormous pressures on regulatory agencies (Kellert and Clark 1991).

Environmental legislation throughout the 1970s forced government and citizens to address the major national problems, such as the growing number of endangered

species (Noss and Cooperrider 1994). As can be seen by the reintroduction of gray wolves, public interest groups can have tremendous effect on policy. Public interest groups use a variety of methods to make their concerns known, including protests and lawsuits (Noss and Cooperrider 1994). Throughout the entire saga of recovery, several groups repeatedly showed a vested interest. The two main groups fighting for their voices to be heard were the livestock industry and conservationists. The conservationists included the Defenders of Wildlife, Sierra Club, National Audubon Society, National Wildlife Federation, The Wolf Fund, and Wolf Action Group. The list on the livestock industry's side is no less daunting. It included the American Farm Bureau Federation and its constituent groups from Wyoming, Montana, and Idaho; many stockgrower associations; and a group called the Abundant Wildlife Society. These groups merely scratch the surface of the interested parties. Both sides showed that with effective lobbying policies could be changed.

The livestock industry for many years successfully thwarted the finalization of the recovery plan. Once the plan was passed the industry interests moved to the next logical step of stopping funding measures that related to the EIS process. This successively slowed the reintroduction plans for five years. Even when the EIS process was finished, and the reintroduction was no longer a question of if but when, the livestock industry tried to block any such action further by lawsuits. In the end, the effort was not successful in stopping reintroduction, but it was successful in gaining concessions on management issues. The unwavering stand of the livestock industry protected their livelihood, and earned them respect for the methods used in rallying support.

Another method used by a few extreme public organizations is that of county ordinances. Technically federal power to regulate public and private lands, in regards to endangered species, exempts any local laws, but the County Supremacy Movement has made federal agencies change some of their management policies. Change is usually brought about through intimidation, and it has worked in the local land owner's favor

(Dowie 1995). The conservationist groups in areas like Catron County, New Mexico and Salmon, Idaho have been forced to rethink and enhance the means in which they normally operate (Williams 1996).

When the ESA of 1973 was first passed, the environmental movement was strong across the entire nation. The public consensus, even in the western states, was to protect those species that needed protecting. When the gray wolf was listed as an endangered species, the rhetoric for saving every species was no longer solid. Conservation groups got the support they needed from other parts of the nation to lobby effectively for the listing of the gray wolf, but recovery would be a different matter entirely. Conservation groups were forced for the first time to listen to the opposing side of the issue, and from that information make decisions concerning their own needs. Conservationist also learned that standing solely on a piece of legislation no longer guaranteed success. Once the conservation groups realized that gaining support for their arguments meant educating and enlisting grassroots elements in the affected areas, their lobbying efforts were much more successful. Compromises suggested by such groups as the Defenders of Wildlife and The Wolf Fund made the recovery and reintroduction plans much more suitable for support. The lobbying effort exhibited by both sides proves the point that through governmental channels citizens can change policies. As a whole society plays a bigger role than most people imagine. By using votes to elect candidates of their choice, the public has the power to influence the persons appointed to positions who ultimately make the decisions that regard policy.

Such people, put in power by the public, are deciding the fate of future recovery and reintroduction plans. The people that have true power over the ESA are those that are in positions of political power. The gray wolf reintroduction was not stalled because of the actions of people in management positions, and only partially stalled by the actions of organizations against the reintroduction. The reintroduction took years to complete because of the powerful political influence of a handful of politicians. Funding for the EIS was blocked for years by the senior Senator from Idaho, Jim McClure (Rep.) (Fischer 1995). Even before funding was blocked, the political appointee positions of Secretary of the Interior, the Assistant Secretary of the Interior for Fish and Wildlife and Parks, and the Director of the NPS, under pressure from delegations from the western states, said that they would not pursue a reintroduction (Fischer 1995). The senators and representatives from the three states involved did a very good job of delaying the recovery actions by means of pressuring, intimidation, and budget constraints. Even these political forces could not keep the reintroduction from happening. When Jim McClure finally retired from the Senate, the livestock industry no longer had a puppet in the appropriations committee to do their dirty work (Fischer 1995). The power held by political persons can be immense when dealing with resources, organizational goals, and bureaucratic conservatism. Powers such as this can reach to the inner functions of the ESA and influences of all three groups are what make the ESA process so time consuming, and yet so valuable.

Reauthorization Topics

The ESA has been reauthorized several times since its enactment in 1973, and again in 1994 was brought up for reauthorization in Congress. Since that time not much movement has taken place on passage of the reauthorization. At this time in Congress, a Republican delegation is out to essentially gut the power of the Act, and with those actions put an end to conservation efforts that have been evolving for more than twenty years.

One of the problems being discussed is the listing process. When the ESA was brought up for reauthorization, a moratorium was passed to stop all listing procedures until the ESA was reenacted. At that time, there were 796 species of plants and animals in the United States listed as threatened or endangered. Another 3000 plus species are considered candidates for listing, but with the present moratorium many of these species will be lost before receiving any protection (Noss and Cooperrider 1994). Worse yet is that 40% of all species listed as endangered do not have a recovery plan at all (Harting and Glick 1994). The Alaskan Republican Representative, Don Young, proposed to saddle the ESA with so many regulations that it would essentially be impossible to enforce: therefore, negating the need to list any more species (Kosova 1995). Young's position as chairman of the House Resource Committee gives him the political power carry out such a plan. The pointless and useless changes that such measures would create have been viewed as too radical by most moderate Republicans, and have been disregarded (Kosova 1995).

The biggest problem cited for such a backlog of species and what seems to be a lack of action on the species protected is a lack of funding. The amount spent on endangered species in one year was less than one eighth the cost of a single B-2 bomber, and equal to half the amount lost by the USFS on subsidized timber sales (Harting and Glick 1994). The backlog of candidate species exists because of purely political reasons. Agencies have never been given the resources to implement the ESA fully (Harting and Glick 1994). The essential funding questions should be directed towards conservation or preservation needs. Extreme views range from putting all endangered species in zoos to giving endangered species a designated area, and blowing them up (Kosova 1995). These views do not match those of main stream America. Many biologists have suggested that the ESA be used to protect endangered ecosystems instead of species. This type of management would eliminate the need for individual listing and yet provide habitat for a wide range of species (Schlickeisen 1994). More importantly such an amendment would create a national mandate for all agencies to join in ecosystem management on public lands.

Public and private land management are also under fire in the rewriting process and with good reason. The ESA seemingly pits managers against developers, animals against jobs, and conservation against private land owners. Of the three conflicts the one

receiving the most attention is that of private land owner rights. The Republican delegation from the western states is calling for incentives to make it easier for private land owners to comply with the ESA (Kosova 1995). Amendments allowing for other uses of land, occupied by endangered species, that would not cause further detriment to the animal, are being sought (Kosova 1995). Tax incentives and habitat restoration grants have been proposed to offset the costs of owning land that houses an endangered species. There is also a call to require the government to pay landowners if the ESA devalues even a portion of the property by 20% (Rauber 1996). Any conservation initiative within reason that encourages cooperation instead of the "shoot, shovel, and shut up" syndrome that has plagued private land owners is desirable (Adams 1995). Future programs must include measures to insure that property rights are upheld, costs of recovery efforts are shared, and incentives toward compliance are passed (Carlton 1986).

Public land management creates a great deal of controversy on its own due to the fact that so many groups have a vested interest in the programs established. Many mining, timber, grazing, and development groups believe that the current policies under the ESA are proportionately in favor of animal rights to the land than owner property rights (Kosova 1995). Helen Chenoweth an Idahoan Republican representative stated that "people want environmental regulations, but not at the expense of economic hardship and the health of family" (Kosova 1995). Compared to its far-reaching implications the ESA has blocked few land use proposals (Kellert and Clark 1991).

Conclusion

Most of the problems that our nation faces in wildlife management, including the endangered species policies, stem directly from human population growth and our inability to mesh land uses that achieve economic return while retaining wildlife populations (Meslow 1993). The Endangered Species Act provides a legislative mechanism for the preservation of species, but it has many provisions that are in need of repair. The ESA has been under attack in Congress the past few years, and for good

reason. The development of the ESA was during an environmentally and emotionally charged period of history. Many of the provisions first enacted only rhetorically addressed the needs of the species endangered. As the program grew, more and more provisions were added to the ESA, until the program was viewed by the general public as a monster, capable of affecting livelihoods, not just conserving certain species. The ESA controversy is not about the individual species. It is about the balance between the consumptive and nonconsumptive uses of natural resources and about the allocation of those resources among users (Adams 1993). It is an ecosystem argument; a "how much" rather than "whether or not". In view of this argument, management must begin to address a more ecosystem wide approach, instead of merely setting land aside and then managing for a certain species. This kind of management shift is an enormous task and the FWS must not be left to do the job alone (Williams 1996). A prerequisite for a shift of this magnitude and for the success of reauthorization of the ESA accordingly must be a fortitude on the part of the enforcers and the implementers. These two groups must also bring information to the masses which include concerned citizens, elected officials, and the press corps (Williams 1996). If any one of the preceding constituents is lost, the law will be removed and the protection afforded thus far will be lost. As constituencies of interest groups grow, managers will need to be more and more adept at quantifying ecological and aesthetic values into economic and developmental values. Convincing industry that habitat is also good for business will soon be the only option remaining for species preservation. As the United States moves into the 21st century, most if not all of the conflicts presented in this paper will be magnified. Humans have been relying on legislation to preserve species instead of developing a needed conservation ethic. The wording of the ESA of 1973 shows the dilemma humans have with qualifying the different values we hold towards wildlife. The ESA states "that endangered species of fish, wildlife, and plants are of esthetic, ecological, educational, historical, recreational, and scientific value to the nation and its people" (Norton 1986, USFWS 1992). With a

little care and forethought most effects caused by human activities could be minimized so that the survival of clearly endangered species would be insured (Norton 1986). We, as logical and reasoning humans, must not forget that every species serves some purpose on this planet other than of servitude. As Aldo Leopold once wrote: "The last word in ignorance is the man who says of an animal or plant: What good is it?" (Leopold 1949).

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