Science, Economics, and Rhetoric: Environmental Advocacy and the Wolf Reintroduction Debate, 1987-1999

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Abstract—This paper examines the arguments employed in the debate over reintroduction of wolves into Idaho, Montana, and the Yellowstone National Park Ecosystem; and in Arizona and New Mexico. The study reviews common rhetorical themes used by advocates and opponents of wolf reintroduction and identifies a significant rhetorical shift in the debate. Advocates opposed to wolf reintroduction have turned to scientific appeals in their efforts to shift public opinion; on the other hand, proponents of reintroduction increasingly use aesthetic arguments and personal narratives in their public discourse.

In his classic book, The Singing Wilderness, Sigurd Olson described a winter night encounter with two timber wolves in Minnesota. "Although thrilled to hear them once again," wrote Olson, "I was saddened when I thought of the constant war of extermination which goes on all over the continent." Reflecting on the hatred of wolves that he witnessed throughout his life, Olson concluded, "I wondered if the day would ever come when we would understand the importance of wolves. . . . We seem to prefer herds of semidomesticated deer and elk and moose, swarms of small game with their natural alertness gone" (Olson 1957). Olson did not live to see the great shift in how many Americans think about wolves. "To many," observed naturalist Robert Busch, "the wolf is the very symbol of wilderness, the symbol of freedom, and a reminder that there is Something Out There stronger than ourselves" (Busch 1994). But those who distrust the wolf are equally opinionated. "They're vicious animals, and they kill for fun," said one Idaho rancher. "Wolves will kill cows and sheep before going after wildlife-but they'll also kill domestic dogs, coyotes, and spawning salmon" (in Brock 1995).

The cultural hatred of wolves that guided wildlife policy during most of the 20th century and that led to the extermination of nearly all wolf populations in the continental United States was firmly rejected by the passage of the Endangered Species Act of 1973. According to the *Harvard Environmental Law Review*, when a species is listed as endangered the Federal Government "has an affirmative

Our purpose is to examine the continuing public debate that began in 1987 regarding the reintroduction of the Rocky Mountain gray wolf into Idaho, Montana, and the Yellowstone Ecosystem, as well as the debate over the reintroduction of the Mexican gray wolf into parts of Arizona and New Mexico. We believe that this particular environmental debate is unique in two significant areas when compared to other wildlife controversies, especially those that concern the protection of endangered plants and animals. At one level, the wolf debate centers on the concept of reintroduction rather than preservation, altering the rhetorical situation which guides and constrains public argumentation. Nearly all other species named by the Endangered Species Act inhabit the geographical area where they are protected. Wolves, however, are being placed into ecosystems where they were declared extinct; or they are being protected as they recolonize other areas. At another level, the debate concerns attitudes toward and treatment of a wild animal with which humans have deep emotional ties, both positive and negative.

These two differences have fostered a compelling change in public argumentation, which we define as the claims and evidence used by advocates to shape the beliefs and attitudes of the general public. While historical opposition to wolves centered around Old World fears and hatred of the animals, contemporary anti-wolf advocates have increasingly focused upon scientific, economic, and political arguments. In contrast, the early advocates for wolves in the 20th century, conservationists like Aldo Leopold and Sigurd Olson, argued for ecological harmony and scientific balance. But the supporters of wolf reintroduction have increasingly turned to personal narratives, anecdotes and aesthetic appeals. A significant theme in recent pro-wolf discourse is an explicit construction of wolves as human-like creatures; advocates are anthropomorphizing this species. Opponents, too, have claimed the wolf has evil human traits; but we argue that the

duty to utilize means necessary for bringing the species back from the brink of extinction" (Bader 1989). But the case of the wolf presents some unique questions for those who must create, implement and enforce wildlife policy. What happens when a species has become extinct in a given location? Does the federal mandate extend to *reintroducing* a species, even if it is not considered endangered in other regions? Does reintroduction of a species threaten the ecological relationships that have developed since the extinction? Can a species declared extinct ever be restored to its original population? Although scientists are eager to present their responses to such questions, the final answers can only emerge in a complex debate that addresses the political, economic and social consequences of such actions.

In: McCool, Stephen F.; Cole, David N.; Borrie, William T.; O'Loughlin, Jennifer, comps. 2000. Wilderness science in a time of change conference—Volume 2: Wilderness within the context of larger systems; 1999 May 23–27; Missoula, MT. Proceedings RMRS-P-15-VOL-2. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.

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contemporary focus of supporters and opponents has shifted from traditional strategies. This shift may have occurred as a way to adapt to the opposition, but leaves supporters and opponents still arguing about different issues.

In order to illuminate the rhetorical dimensions of the wolf reintroduction debate, this essay reviews the issues surrounding the management of wildlife, especially concerns related to the wolf. Next, we explore the status of the Rocky Mountain and the Mexican gray wolf and plans to reintroduce this species in the West. Finally, we analyze the debate itself and evaluate the rhetorical strategies used by various advocates on both sides of the issue. We believe that this analysis merits interest at two levels. For those who study environmental issues and public policy, this paper will help explain the process of policy-making in a consequential and unique case study. For those who study public discourse, this paper will reveal how advocates use different forms of argumentation based on the demands of the situation.

It is important to note that we do not purport to assess either the validity of scientific management methods used in current reintroduction efforts or the evidence offered by opponents. Rather, we focus on how proponents and opponents of reintroduction present their arguments to public audiences. Toward that end, we examine arguments advanced in public statements such as essays, speeches, interviews, books and pamphlets, all discourses that address a general audience. We claim that, ultimately, all issues related to environmental management are decided by public, and therefore political, argument rather than by scientific information. Without the scientific information, decision-makers have no logos for their claims, but without interpretation of such information by partisans, policy cannot be made.

Of course, implicit in this claim is an assumption that policy should be made about certain issues. Consistent with Aristotle's claim, all advocates use the available means to persuade policy-makers of appropriate choices by employing the three classical genres of rhetorical proof. Arguments of pathos focus on popular emotions about wolves. Opponents portray them as conniving and thieving, while proponents paint them as family-oriented and loving. Arguments of ethos focus on the motives of those proposing and opposing introduction. Opponents claim proponents do not care about economic losses, while proponents claim opponents are selfish and uncaring about future generations, of maintaining nature the way it was meant to be. Arguments of logos focus on what scientific research shows us to be true about wolves. Proponents point out that wolf packs mimic human families, while opponents point to the number of sheep and cattle lost to wolf predation.

Wolves, Wilderness, and Wildlife Policy

Throughout the 20th century, the value of wilderness and wildlife has been an issue of contention at the local, state and federal levels of government. Numerous works have detailed the historical and contemporary development of wilderness policy (see, for example, Hays 1975; Nash 1982). Rather than reiterate those accounts, we will instead explore the place of the wolf in American culture. From the very beginning of

wilderness policy, certain animals took precedence for preservation. "The good animals—the fishable, huntable trophy animals-had a bureau devoted to their protection; the bad ones did not," noted Limerick (1987). "In fact, the bad animals were attacked by the government. . . . Ranchers joined hunters in condemning the nonhuman carnivores, and government rallied to the cause—trapping, poisoning, and shooting." Chase detailed the history of predator killings in Yellowstone National Park and quoted from Vernon Bailey, who in 1915 set up a predator control program in the park. Finding "wolves common, feeding on young elk," Bailey wrote, "their numbers have become alarming. . . . It is strongly recommended that the Biological Survey continue their campaign in this region without abatement until these pests are greatly reduced in numbers" (Chase 1987). Chase cited other Yellowstone officials to reflect the evolution of Park policy in regard to predators. Writing in 1932, the Park Superintendent noted, "We have always assumed that the elk and the deer and the antelope were the type of animals the park was for. . . . To me a herd of antelope and deer is more valuable than a herd of coyotes" (Chase 1987). In response to criticisms of the predator control program in 1930, the Director of the Park Service Stephen Mater claimed, "In Yellowstone, if Mr. Albright didn't kill off his 200 to 300 coyotes a year it might result in being the developing ground for the covotes and wolves spreading out over the country and the cattle or sheep men getting much greater losses than they ordinarily would" (cited in Chase 1987). By the early 1930s, most cougars and wolves were gone from the park, exterminated because of their predatory nature. The attitudes of those who controlled Yellowstone Park were common throughout the region; predator control programs flourished in the West in the 1920s and 1930s. According to one source, between 1884 and 1918 in Montana, 80,730 wolves were killed for cash bounties (Carey 1987); and between 1897 and 1908 in Wyoming, 10,819 bounties were paid for wolves (Watkins 1987). By the 1950s, "the wolf was no longer seen in the Rockies in packs. The survivors were loners, most likely subdominant individuals that had dispersed from packs in Canada" (Steinhart 1988).

With the rise of an "ecological conscience" in the 1950s and the development of environmentalism in the 1960s, wildlife preservation became a popular theme. Two of the animals associated closely with the American West, the bear and the buffalo, received special attention. As Limerick observed:

The sentiment of the nineteenth century had fixed on buffalo and bears as the representatives of Western animals. The vast numbers of the buffalo and the strength of the grizzly were both emblems of Western distinctiveness--of the power and magnetism of Western nature. Into the twentieth century, those two animals remained symbols of the 'real West'; their survival was a central statement that intervention came in time, before the real West was entirely lost; and past and present remained linked in the continued life of the West's classic animals (1987).

Unfortunately for the wolf, no such romantic cultural images were found in white society. Indeed, the wolf presented a frightening image for many, probably because of Old World legends. According to one authority, "the wolf has consistently personified the darkest side of the human race. . . . Babylonians and Greeks spun yarns about supernatural wolves that devoured human souls; Dante used the animal

as a symbol of greed in the *Inferno*; and today, we flock to see werewolves on the silver screen" (Carey 1987).

Native American culture, however, viewed the wolf very differently. In their book profiling prominent wolf researchers, Mike Link and Kate Crowley discussed Native beliefs about wolves. With the exception of the Navajo story about the relationship between witches and wolves, native views of the wolf are quite positive (Link and Crowley 1994). Other conservationists also contrast European views with Native views (Busch 1994, McIntyre 1993). As Colorado Senator Ben Nighthorse Campbell pointed out, "according to the traditions and myths of my own people, the American Indian, the wolf was not to be feared . . . Rather, the wolf was respected and revered, for his intelligence, his family and even 'tribal' orientation, his cleverness, and his coordinating skills in the hunt." Referring to wolves as "our wild cousins," he added that "people can learn valuable lessons from these animals and that wolves deserve the same reverence and good will to which we accord the buffalo and the beaver, the bear and the eagle" (in McIntyre 1993).

Given the historic domination of white over Native society, it is not surprising that wolves were systematically destroyed in the American West with little public outcry. Not until the 1970s did society seriously reconsider the consequences of the wolf extermination, and as Senator Campbell pointed out, reconsider the traditional Native view of the wolf (in McIntyre 1993). In fact, the positive characteristics Senator Campbell attributes to the wolf are the same characteristics used by contemporary advocates of reintroduction.

The Politics of Wolf Reintroduction

In 1975, the Northern Rocky Mountain Wolf Recovery Team was set up to study methods to reintroduce the gray wolf in the Rocky Mountain region. The group had representatives from the U.S. Fish and Wildlife Service, the National Park Service, and other state and federal authorities (Owens 1988). After 12 years of research, public comment and analysis, the Northern Rocky Mountain Wolf Recovery Plan was completed in 1987. The ultimate goal of any recovery plan is eventually to *delist* the particular species from endangered and threatened status. Each plan must contain an "Implementation Schedule" which specifically identifies the organization or agency task assignments, priorities, and funding necessary to achieve the declared objectives (Bader 1989). In the case of the gray wolf, the planning team set up a specific list of criteria for reintroduction sites and three areas were designated as appropriate locations: six million acres in central Idaho, the Bob Marshall ecosystem in Montana, and the Greater Yellowstone ecosystem.

The plan evoked an immediate outcry in the region as ranchers and hunters joined forces to oppose the reintroduction, particularly that planned for the Yellowstone system. The controversy was further fueled by public remarks made by Frank Dunkle, the director of the U.S. Fish and Wildlife Service. In September 1987 he reportedly told a timber industry meeting that he "would not allow the Fish and Wildlife Services to fund any wolf recovery work. 'The wolf stops at my desk'" (cited in Bader 1989). Later that year, the

Casper [WY] Star-Tribune quoted Dunkle as telling the Wyoming Wool Growers that "the only wolves I will bring to Wyoming or that I will sponsor to Wyoming. . . are on [my] tie" (cited in Bader 1989). Although no formal change in the wolf recovery implementation plan was made by Dunkle, the Harvard Environmental Law Journal claimed that Dunkle's negative comments "effectively reverse[d] the Recovery Plan" (Bader 1989).

Ironically, at the same time in 1987, red wolves, the ancestors of the gray wolf (McIntyre 1993), were being reintroduced into the wild in North Carolina (Rennicke 1999) in what has become a highly successful effort (Hochberg 1998). By the mid-1970s, the red wolf population was so decimated that some wolves were mating with covotes. In an effort to save the species, biologists identified 17 full-blooded red wolves and successfully bred 14 of them. From that small population, the red wolf group grew; this led to the release of four breeding pairs into the Alligator River National Wildlife Refuge in late 1987, with additional releases in later years (McIntyre 1993). This effort appeared to have significantly less opposition and publicity than the Yellowstone effort and is described as "incredibly successful" by one biologist associated with the program. "And it has been a model for endangered species restoration in general. It's a real success story for conservation" (Kelley in Hochberg 1998). Now, however, with the red wolf population thriving, some complaints that the wolves are "harassing and killing livestock and pets and other wild animals as well" are emerging. Despite this, "one survey concluded that in the five North Carolina counties where wolves live, most residents are in favor of the program" (Hochberg 1998).

Other areas in the U.S. have been recolonized by wolves. In Wisconsin, where the last "documented" wolf was "hit by a car, then bludgeoned to death with a tire iron" in 1958, some people began reporting wolf sightings in 1975. The wolves "simply walked back," moving in from Minnesota where the wolf population was increasing because of protection by the Endangered Species Act. The Wisconsin Department of Natural Resources reports approximately "178 to 184 wolves in 47 packs" in its most recent count (Rennicke 1999). Minnesota is well-known for its-relatively speakinghealthy wolf population of 2000-2400 animals that descended from southward-migrating wolves. The wolf's status in Minnesota is officially "threatened," and it may soon be removed from the Endangered Species List (Rennicke 1999). Wolves have also migrated from Canada into Glacier National Park, and now number about 85 in northern Montana (Rennicke 1999). Most recently, the U.S. Fish and Wildlife Service stated that "reintroduction of gray wolves to the Olympic Peninsula is feasible" via Olympic National Park ("Gray Wolf Reintroduction" 1999).

But the controversy surrounding wolves in Yellowstone has been heated since inception and has escalated as more groups entered the reintroduction debate. Although supportive of the plan, William Penn Mott, the Director of the National Park Service, announced in 1987 that the plan would be put on hold until approval was gained from the congressional delegations of Idaho, Montana, and Wyoming (Watkins 1987). In response to the actions by Mott and Dunkle, Congressman Wayne Owens of Utah introduced a bill in the U.S. House of Representatives to restore wolves to Yellowstone Park within three years. According to Owens,

the bill was intended to provide "a thorough public discussion of the wolf issue," which had been blocked by opponents (Owens 1988). In July 1989, Owens introduced a second bill, requiring an environmental impact statement to examine the ecological impact of wolf reintroduction in Yellowstone Park. The bill directed the Park Service to complete the impact statement by the end of 1991 and then implement some form of reintroduction within six months ("Bill Calls" 1989).

Opponents responded to the growing public sentiment in favor of wolves at various levels. For example, at the request of Senators Malcom Wallop of Wyoming and Conrad Burns of Montana, the Interior Department ordered the National Park Service to stop distributing "Wolf Pac," a series of articles regarding wolves and the issues of reintroduction. According to one source, critics claimed that the materials "fail to adequately address possible adverse effects of wolf reintroduction, such as local livestock losses and effects on public recreation" ("Yellowstone Wolf" 1990). In April 1990, the National Park Service banned sales of a poster depicting wolves in Yellowstone Park from retailers in both Yellowstone and Glacier National Parks. Some individuals believed that the posters were an implicit endorsement of wolf reintroduction.

In order to reconcile supporters and critics of the recovery plan, Senator James McClure of Idaho introduced a compromise bill into the U.S. Senate in May 1990. McClure's bill would have placed three breeding pairs of wolves in the Idaho and Yellowstone locations but would also have "delisted" them as endangered once they roamed outside the core areas ("McClure Says" 1990). This plan would allow ranchers to shoot wolves legally if they threatened livestock, an action illegal under other recovery policies.

Both supporters and critics of wolf reintroduction were suspicious of McClure's bill; finally, a compromise was reached by a House-Senate committee in October 1990. A ten-member committee representing different interests was created in order to formulate a recovery policy and submit it to the Secretary of the Interior by May 15, 1991. According to the legislation, once the "wolf management committee" made its recommendations, Congress would have final approval of the policy ("Diverse Group" 1990).

Although planning for reintroduction of wolves continued, a number of lawsuits were filed by ranching and agricultural groups, who sought to block the return of the wolf because it threatened their livelihoods. In January 1995, a federal judge in Wyoming denied an injunction requested by the American Farm Bureau and the Mountain States Legal Foundation, thus opening the way for the wolf release. Finally, after another attempt to block the reintroduction in the courts was rejected, four wolves were released in Idaho on January 15, 1995. School children in Idaho painted radio collars for the wolves and also provided names for them, including "Moon Star Shadow, a two-to-three year old;" "Chat Chaaht, a 76-pound, four-to-five year old dark gray male;" "Akiata, a dark gray-black, 75 pound three-year old;" and "Kelly, an 82 pound five-old dark gray female" (Barker and Burns 1995).

In much the same way the Mexican gray wolf finally gained reintroduction into Arizona and New Mexico. In March 1998 the first 11 wolves were released into the Southwest; but between their release and November, five of

the wolves were shot to death, and two are presumed to be dead. As of March 15, 1999, "in addition to the six wolves still roaming the wild, 11 Mexican wolves are being held in acclimation pens in the Blue Range Wolf Recovery Area" ("Defenders Applauds" 1999). In May 1999 biologists released 14 more Mexican gray wolves into a remote section of the Apache National Forest on the Arizona-New Mexico border. Transported initially by helicopter, the wolves were placed in specially designed saddlebags and carried by pack mules to a site more isolated than the earlier wolf releases ("Group Decides" 1999).

Public Arguments in Favor of and Against Wolf Reintroduction

The public debate concerning wolf reintroduction in Yellowstone National Park began in 1987, when the Recovery Team presented its final report to the Director of the U.S. Fish and Wildlife Service. While critics of the plan focused initially on logical appeals utilizing political and economic arguments, supporters tended to rely on logical appeals utilizing ecological arguments based in aesthetics (such as the logic of wholeness, completeness, naturalness, or balance). Peter Steinhart typified such a response. "What seems most thrilling about the return of wolves is the possibility that listening to their nighttime howls," he wrote in Audubon, and "receiving their cold yellow gaze through the gloom of pines, provides a chance to cross into an unseen world" (1988). Congressman Owens claimed that an urbanized society must have areas "where natural forces still predominate, where bison graze freely and grizzly bears roam unrestrained." Lack of wolves in the park, concluded Owens, makes the Yellowstone experience incomplete (1988). Photographer Jim Brandenburg observed, "the wolf represents knowledge of nature that we'll never have. The wolf seems to know something that the other animals don't understand" (cited in Steinhart 1988). Rupert Cutler, president of The Defenders of Wildlife, told The New York Times, "The wolf is a symbol of the American wilderness and represents all we have lost in 200 years of exploitation of nature in America" (Shabecoff 1990).

For many advocates, reintroduction of wolves makes sense from an ecological perspective. "Nature has a way of striking a balance between animals and their food sources," wrote Congressman Owens, "but, without wolves in Yellowstone, that balance has been disturbed" (1988). In a letter to the New York Times, Michael Robinson argued that mountain lions and grizzly bears were not "enough to keep the elk population down" in Yellowstone Park (1989). Indeed, the National Park Service reported that "wolf kills could improve the health of [elk] herds, which often grow too large to be sustained in the restricted range of the park" (Shabecoff 1990). In a published debate on wolves in *Outdoor Life*, Gregory McNamee summarized the importance of the ecological argument. "The environmentalists won because reputable biological opinion is undivided: Wolves play an essential role in the forest ecosystem, a role that does not admit stand-ins" (McNamee 1997).

Since 1995, when implementation of wolf recovery finally began, there appears to be less emphasis on ecological appeals and more discussion of the bonds that wolves and humans share. For many supporters, the wolf evokes strong emotional images of humankind, and reintroduction thus becomes highly personal. One wolf researcher told a National Public Radio reporter "things about wolves that I did not know at all-how social they are for instance." In the report, aired nationally, Diane Boyd described wolves in these highly admiring terms:

They have a pretty structured social ranking system: dominance hierarchy prevents a lot of hassles such as, in human cultures, jealousies, murders, divorces, those sorts of things. They seems to have worked it out. They're a good family. They take turns all helping raise the young. They hunt because they have to. They aren't doing it for recreation. And they play, and they seem to have a sense of humor (A. Chadwick 1996).

In another national forum, the pages of National Geographic magazine, Douglas Chadwick also portrayed wolves in human terms. "Their family structure more closely resembles ours than do those of primate societies," wrote Chadwick. "Loyalty and affection toward kin are two of a wolf's most observable characteristics. Curiosity is another. The way wolves learn, communicate, and amuse themselves stretch our definition of animal capabilities" (D. Chadwick, 1998). In seeing wolves as models for human behavior, researchers tend to name the animals, creating an even closer bond. One researcher told Chadwick that biologists were instructed to avoid naming specific animals to "avoid any hint of attachment." Yet two paragraphs later, while observing a wild wolf, the researcher told Chadwick, "I guess that's not Two. It has got be Joey. . . I mean Number 56" (D. Chadwick, 1998). College students in Wisconsin who help on a wolf research project have nicknamed the animals they observe as "Fred" and "Jude." Fred, who was the "star of the program," disappeared and was never found. His mate was found dead after being hit by a car. And Jude, who had been captured and re-released, was found dead near her den, pregnant. "It was a tough loss," according to the research leader, Dr. Jack Stewart of Northland College. "You try to keep some scientific objectivity with these wolves and not develop a relationship that's too personal, but sometimes that's impossible" (Rennicke 1999). Yet even in the most celebrated event of wolf reintroduction, the first wolves to be released into the Idaho wilderness had acquired names from school children in the state.

The emotional response that advocates have when they hear or see wild wolves has become a prominent feature of their discourse. Kevin McHugh, of The Defenders of Wildlife, reported his response to the howling of the Mexican gray wolves. "I can't describe a pack's howling. I believe that it is a personal experience that no one can describe. . . . The song hits me on a deep, emotional, level. Twice I have stood there and had my breathing become short and jerky during the song" (1998). Just imagining the howling wolf will lead to their acceptance, claimed one advocate. Arguing for the reintroduction of the Mexican gray wolf, Wayne Suggs, Jr. of the Mexican Wolf Coalition concluded, "to hear a wolf howl in the wild invokes the deepest emotion for those who can feel it. They'll help put the wild back into the wilderness" (Bordonaro 1995).

Opponents of reintroduction have used a variety of persuasive strategies to shape public opinion. Most significant, they have attacked wolf recovery at political, economic and scientific levels of analysis. Although political and economic concerns have been common themes in recent environmental debates, scientific evidence has usually been marshalled by those seeking ecological protection.

The alliance opposing wolf reintroduction includes the Wyoming, Montana and Idaho Farm Bureaus and the region's wool growers and cattle growers. Although some hunters have voiced objections, hunting organizations have not systematically attempted to prevent reintroduction. The opposition focused on the plan to reintroduce wolves into the Yellowstone ecosystem, and less so on the plan to manage natural recovery of wolf populations in the Selway-Bitterroot Wilderness in Idaho and Montana and the Bob Marshall Wilderness in Montana. The difference between the first area and the other two is that Yellowstone National Park is ringed with human development, including farming and ranching areas. In addition, opponents argued that the wolf was extinct from Yellowstone already and that to reintroduce it into the park would be tantamount to "play[ing] God" ("The Genetic Dilemma" 1990).

The Montana Farm Bureau's main objection to reintroducing wolves in the Yellowstone area was that "every place that wolves have been found, they have been associated with the killing of livestock" ("Position Paper" 1990). Despite the success of the model program set up in Minnesota, where farmers and ranchers are monetarily compensated for loss of livestock due to wolf predation—primarily sheep and cattle (see Steinhart 1988)-Yellowstone area livestock growers have argued that compensation is not enough, that they "need flexibility to manage" their livestock by killing "problem animals" themselves (Cecil and Richert 1990). Furthermore, despite the claims of the National Park Service that it would attempt to reintroduce the wolf only after seeking "a political consensus" and then addressing "socioeconomic considerations and local concerns," area opponents argued that potential livestock losses "may seem immaterial to someone who lives in New York" (Shabecoff 1990). "Wolf introduction is not a national question," Idaho Farm Bureau President Thomas Geary testified before the Senate, "it is an intensely local issue" (Tracy 1990). One area rancher argued that local control was important and reported being afraid-not of the wolf, but of "the wolf's bodyguard-the federal government" (quoted in Cecil and Richert

But in addition to the simple and obvious economic objection to reintroduction, the three Farm Bureaus presented a more complex argument, which appears to go to the heart of the Endangered Species Act. "If we introduced a pure bred gray wolf into the Yellowstone and Central Idaho," the Idaho Farm Bureau claimed, "we might actually lead to the demise of the wolf" (Press Release, Idaho Farm Bureau Federation 1990). According to the Endangered Species Technical Bulletin (1990), "biochemical analyses of tissues from 72 Minnesota gray wolves (Canis lupus) indicated that more than 50 percent may contain mitochondrial DNA from coyotes (Canis latrans). If this is true, these hybrids can only be the result of male gray wolves mating with female coyotes." Farm Bureau spokespersons seized on the report's conclusion that "this has serious implications for the conservation of pure gray wolves in Minnesota" (Endangered Species Technical Bulletin 1990), as a way of using the Federal Government's own research findings to halt the recovery

and reintroduction plans. The three Farm Bureaus filed a petition with the Secretary of the Interior, Manuel Lujan, and John Turner, the Director of the Fish and Wildlife Service, to remove Canis lupus from the Endangered and Threatened Species List, as well as to review its status. The gray wolf, the petition argued, "may not be genetically pure because of hybridization with coyotes" and claimed a review of the current scientific literature "indicates that scientists have suspected hybridization between wolves and coyotes for some time." These research findings, argued a spokesperson from the Wyoming Farm Bureau, proved that "there are scientific questions which need to be resolved" because of the "questions hybridization creates with an animal which cannot be protected under the aegis of the Endangered Species Act" (Bourret 1990). The Idaho Farm Bureau argued that the wolf to be reintroduced, the Northern Rocky Mountain Wolf, was a subspecies of the gray wolf, extinct in Yellowstone although plentiful in other regions. Thus, the Bureau concluded, any other subspecies placed in Yellowstone would be nonnative and such placement would be "contrary to management policies" of the Endangered Species Act (Tracy 1990). In addition, since the gray wolf has apparently crossbred with coyotes in Minnesota and elsewhere, introduction of any "pure" gray wolf in Yellowstone risked hybridization in the Rocky Mountain West, thus jeopardizing survival of the breed. Farm Bureau opponents concluded that because Canis lupus is plentiful elsewhere, protection of the breed mandates not placing the wolf in Yellowstone (Tracy 1990).

To bolster its claim that wolves and coyotes have crossbred and thus become disqualified as an endangered species, the Farm Bureau petition chose "what we consider to be an appropriate scientific name for the cross between a covote and a wolf. That name is 'Canis irregularis.' The common name we have selected is 'woyote'" (Bourret 1990). Without acknowledging that these two terms had no basis in actual scientific decisions, the Farm Bureaus used the labels in their articles and pamphlets about wolves, with the result that some newspaper editorialists adopted the terms as legitimate. The original Farm Bureau petition admitting that it had "selected" this name for hybrid wolves, was altered in a Wyoming Farm Bureau pamphlet to read that "a more realistic name for the wolf-coyote hybrid would be the 'Woyote,' Canis irregularis" ("The Genetic Dilemma" 1990). By the time this argument was repeated in one rural Idaho newspaper, it had become a discussion of "trying to protect not only wolves, but coyotes and a new group that has been dubbed the 'woyote'" (emphasis added, "Gray Wolves Not Extinct" 1990).

The U.S. Fish and Wildlife Service argued that DNA analysis of western wolves showed no evidence of cross-breeding, and refused to remove the wolf from the Endangered Species list ("Wolf Delisting Denied" 1991). Although this specific attempt to turn scientific research against wolf reintroduction failed, it was again used by wolf opponents in their effort to block the release of Mexican gray wolves into the Southwest. In December 1998, a coalition of ranching groups, including the New Mexico Cattle Growers and the New Mexico Farm and Livestock Bureau, filed suit asking that future wolf releases be stopped. "The lawsuit contends that even without recent releases of wolves, the rare animals already inhabit portions of New Mexico and Arizona. And the lawsuit contends Mexican gray wolves are contaminated

with the genes of dogs and coyotes" ("Enviro Groups Can" 1998)

As a result of four public hearings, the Wolf Management Committee designed a plan that would "place up to 10 breeding pairs of wolves in Yellowstone, Glacier and central Idaho wilderness" and would allow states to "manage the species" as "experimental [and] nonessential" in other areas. The committee held three additional hearings for comments on the proposed plan (Davis 1991), although it had already forwarded the plan to the Interior Department and Congress ("Wolf Meeting Set" 1991). The meetings drew typical testimony from both supporters and opponents of wolf reintroduction. Supporters worried that the proposed plan "would allow ranchers to shoot wolves at will and weaken the Endangered Species Act," while Montana Congressman Ron Marlenee "vowed, 'no wolves, no way, nowhere" ("Wolves Should Be Listed" 1991). Both sides opposed the plan. A representative of the Wolf Recovery Foundation argued that "the rancher becomes judge, jury and executioner without fear of penalty from destroying an endangered species." But one rancher said "we do not want either the grizzly or the wolf but if we must have them, then take them from the endangered species list so we can protect our livestock" (Ratliff 1991). By "delisting" wolves from the Endangered Species List once they leave designated introduction areas, the committee created what it saw as a compromise. But by defining the wolf as "nonessential" outside these areas, the committee gave ranchers permission to destroy the animals if they determined that they were losing livestock to wolves.

Jim Zumbo charged that pro-wolf advocates view the animals as "romantic figures. We yearn for the primitive, the natural, the world that existed 'before our time'" (1997). But in Zumbo's opinion, this perspective will in fact diminish the long-term health of the wolf population. Zumbo has opposed wolf reintroduction for many years and used the pages of Outdoor Life to take his case to the sporting community. He reported that wolves were already in the Yellowstone ecosystem prior to government intervention, and they should be allowed to reestablish their populations naturally. Utilizing a scientific perspective, Zumbo argued that the "wild wolf in the Rockies is genetically different than the wolves" that come from Canada. "By diluting the Yellowstone gene pool," Zumbo concluded, "we'd effectively cause the pure American wolf to become extinct" (1997). Zumbo also turned to science to describe the adverse impact wolves will have on big game populations. He cited research indicating that one wolf kills an average of "one big-game animal-or the equivalent weight in smaller animals-about every four days." For Zumbo, the logical conclusion is troubling.

A pack of 10 wolves kills the equivalent of 75 big-game animals per month. Extrapolate that number to 100 wolves—the Yellowstone objective—and that population would kill the equivalent of 9,000 big-game animals a year. And that's only the beginning (Zumbo 1997).

Discussion

In previous environmental and wildlife debates, pro-nature advocates (and support of the Wolf Recovery Plan would be pro-nature) have stressed a rhetoric of logos, placing emphasis on scientific and technical justifications centered

in the aesthetics and desirability of the completeness of nature. As much as possible, these arguments have presented a world-view that does not place humans at the top of a hierarchy of good and bad animals (and other parts of nature), but instead places humans in the natural world, as part of it. On the other hand, pro-human arguments (such as opposition to the Recovery Plan) have utilized a rhetoric of logos centered on economic and political concerns, issues that necessarily require all of the natural world to be managed in ways that benefit humans as humans. Part of the opposition to the Wolf Recovery and Reintroduction Plan for the Rocky Mountain West does concentrate on economic arguments. But opponents recognized that in light of the depredation compensation fund established in Minnesota, economically based arguments would not be sufficient to halt reintroduction of wolves into Yellowstone. Consequently, opponents have strategically chosen to strengthen their position by arguing from a scientific and political standpoint, using evidence gathered by wolf reintroduction supporters.

Most of the recent public argumentation for reintroducing wolves fails to detail a specific rationale for the plan. Whereas earlier pro-nature appeals focused on a logic of completeness, more recent pro-wolf discourse reveals a rhetoric of pathos. Wolves are discussed in terms of human characteristics, in a manner unlike any other wild creature. In one sense, anthropomorphizing the wolf allows humans to relate more closely to it, but in another sense, the creature is still apart from human sensibilities. One would not know this from the arguments, however. Opponents have claimed that wolf reintroduction was a "done deal," arguing that from the outset federal officials were biased in favor of the return of the wolf; thus, most have long since abandoned arguments that wolves are evil and have instead embraced a rhetoric that focuses on numbersnumbers of livestock lost, numbers of pets lost, numbers of game animals lost. For instance, five ranchers near Salmon, Idaho have attached "transmitter-bearing ear tags" to 231 of their calves in an attempt to "prove to government biologists" that "wolves in the vicinity like the taste of beef" ("Ranchers try" 1999). As the Lemhi County Extension Agent Bob Loucks pointed out, "I keep telling [the ranchers] no one will believe you until you have proof-and your methodology has to be beyond reproach" ("Ranchers try" 1999); so the ranchers have chosen the same kind of tracking devices used on wolves. Advocates, however, speak of reintroduction in personal, aesthetic and spiritual perspectives, de-emphasizing science, politics and economics.

It appears that presumption has shifted so strongly to the notion of saving endangered species that supporters see no need to offer a detailed case for protection and preservation policies. Because wolves have been reintroduced in several areas, the debate has shifted from the value of reintroduction to the impact of reintroduction. Opponents therefore focus on losses they have suffered as a result of reintroduction, hoping either that the wolf will be removed as an endangered species, or that additional efforts will be aborted. Advocates focus on restoration of nature.

Despite the shift in presumption, proponents continue to argue in favor of the wolf's presence in the wilderness. And they do so in ways that increasingly humanize the wolf. In researching this essay, we have yet to locate publicly

distributed wolf research reports that do not in some way point out the similarities between wolf society and human society. Perhaps, as humans, we are incapable of studying other species without comparing them to ourselves; and if we identify traits we view positively, we cannot avoid wanting to see more of those traits-and therefore of those animals. At least part, if not much, of our ambivalence about wolves may be that each time we look into our dog's face, we see her "wild cousins," the wolves. One children's book points out that "scientists tell us that the domestic dog is descended from the gray wolf. Some breeds . . . certainly do look wolfish. Others, however, like the Pekingese or the Boston terrier, have been bred to look quite unlike their immediate ancestor. Yet, even these have been blessed with a wolf's nature. And it's a good thing" (Ryden 1994). The author goes on to detail why, and the characteristics she highlights are those described with favor in other descriptions of wolf behavior, such as those mentioned by Senator Campbell and other advocates.

The public research reports about wolf behavior argue strongly for protection of wolves and expansion of wolf habitat; perhaps this conclusion is inescapable for those who study pack behavior. Perhaps too, those who study wolf society are keenly aware of the fragile hold the few existing packs have on life and freedom; they argue anthropomorphically to create a climate of acceptance for the wolf's presence that will prevent a return to the extermination mentality of the early days of this century. Despite the seeming inevitability of reintroduction and recolonization, human intentional extermination of wolves and human unintentional encroachment on wolf territory have endangered the wolf's existence. Those who argue from an aesthetic of completeness argue from a stance that does not place the human above the wolf, but places the human with the wolf. McIntyre made the point that "in social customs and subsistence lifestyle, wolves were the prime role models for early humans;" and he reported that in 1925, Carveth Read wrote that a human "is more like a wolf" than "like any other animal." McIntyre added, "perhaps we should think of ourselves as naked wolves rather than naked apes" (1993).

Wildlife agency officials face a dilemma. If opponents successfully remove the wolf from the Endangered Species List in return for acceptance of breeding pair introduction into Yellowstone and elsewhere, wolves that wander outside the Park(s) can, and probably will, be destroyed. This could mean certain extinction of the species by human hands. And yet there are other biologists who argue that "natural recolonization is much better than the wolf reintroduction program that's underway now in Yellowstone and elsewhere" (A. Chadwick 1996). Recolonization seems to have occurred in the northern U.S. without human assistance, yet the Endangered Species Act protection afforded wolves in Minnesota has certainly aided potential recovery. Implicit in this argument, however, is the assumption that wolves will continue a healthy enough existence in Canada to be able to continue to move south. Should that condition change, recovery efforts in the United States will certainly be adversely affected.

If federal and state wildlife agencies prevail in wolf recovery, they will face continued opposition and, presumably, lawsuits from area ranchers and farmers concerning depredation. Eventually, long-term success of wolf recovery means delisting the wolf as an endangered species—but opponents will claim economic hardship as a result of recovery. The place of the wolf, according to The Defenders of Wildlife, "is one of the severest tests of how willing humankind is to share this planet with other forms of life" (in Begley 1991). The wolf recovery and reintroduction controversy highlights the continuing conflict between a human-centered view of nature and a holistic view of nature, between the belief that humans must and should subdue nature for their own benefit and the belief that humans and nature must coexist for their mutual protection.

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