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September 9, 2011

Wyoming Game and Fish Department  
ATTN: Mark Nelson, Wolf Plan Comments  
5400 Bishop Blvd.  
Cheyenne, WY 82006  
Fax: 307-777-4650

Re: Wyoming Gray Wolf Management Plan Comments

Dear Mr. Nelson,

I'm writing today to provide Defenders of Wildlife's comments and recommendations on the State of Wyoming's proposed wolf management plan (August 4, 2011).

#### Introduction

Defenders of Wildlife (Defenders) is a national non-profit membership organization dedicated to the protection of all native animals and plants in their natural communities. We have more than 1,000,000 members and supporters nationwide and approximately 1,000 members in Wyoming. Founded in 1947, Defenders is one of the country's leaders in science-based, results-oriented wildlife conservation. We stand by our commitment to saving imperiled wildlife and championing the Endangered Species Act, the landmark law that protects them. We work to protect and restore America's native wildlife, safeguard habitat, resolve conflicts, work across international borders and educate and mobilize the public.

Over the last three decades, Defenders has played a leading role in the recovery of wolves in the Northern Rockies, including the administration of the Defenders of Wildlife Wolf Compensation Trust, which has reimbursed ranchers over \$1,400,000 for livestock losses by wolves and grizzly bears since 1987 including more than \$350,000 paid to reimburse Wyoming livestock owners. In 1998, we created the Defenders of Wildlife Proactive Carnivore Conservation Fund, which assists ranchers and farmers with nonlethal, proactive information and methods that help reduce or prevent livestock losses to wolves. These methods include sharing the cost of range riders, livestock guarding dogs, predator deterrent fencing, alternative grazing, and more. Defenders has four staff offices in the Northern Rockies region including a staff wolf biologist in Jackson, Wyoming. We assisted with the restoration of wolves to the region in the 1990s and hosted training workshops and annual interagency wolf management conferences for state, tribal and federal agencies in the region from 1999 to 2005.

We greatly appreciate the opportunity to participate in this public comment period and to submit our comments for consideration.

## Background

The gray wolf (*Canis lupus*) was extirpated from Wyoming by the 1930s until the species was reintroduced in Yellowstone National Park (YNP) by the US Fish and Wildlife Service (USFWS) in 1995 and 1996 under the provisions of the Endangered Species Act (ESA). Public attitudes toward wolves changed significantly over the century from predominantly negative views associated with livestock protection concerns to a majority of support for wolves as a valuable species and integral part of the western ecosystems (McNaught 1987, Bath 1991).

The Northern Rocky Mountain (NRM) wolf population consists of three recovery areas: northwest Montana, where wolves re-established on their own dispersing to the area from southern Canada; central Idaho, primarily from the reintroduction of 31 wolves; and, the Greater Yellowstone wolf recovery area (GYA), where the federal government reintroduced 35 wolves. The GYA includes all of Wyoming, including Yellowstone National Park, the Wind River Reservation, Grand Teton National Park (GTNP), the National Elk Refuge (NER), and adjacent parts of Idaho and Montana.

The US Fish and Wildlife Service's recovery goal for the NRM gray wolf population is: a minimum of 30 or more breeding pairs (an adult male and an adult female that raise at least 2 pups until December 31) comprising 300+ wolves in a metapopulation (a population that exists as partially isolated sets of subpopulations) with genetic exchange between subpopulations (Service 1994; Fritts and Carbyn 1995). Prior to delisting, the involved states are also required to have adequate regulatory mechanisms in place to ensure the long-term conservation of wolves before wolves can be considered for removal from protection of the ESA by the USFWS. This includes provisions described in state wolf management plans. These requirements are intended to assure the gray wolf will not become threatened or endangered again.

The USFWS proposed delisting the NRM population of gray wolves in 2007 and issued a final rule in February 2008 establishing a NRM Distinct Population Segment and delisting that entity in its entirety. The rule was challenged in court and the federal district court in Montana issued a preliminary injunction restoring wolves in the NRM to the endangered species list. The court held that the USFWS acted arbitrarily and capriciously when it approved Wyoming's 2007 statute and wolf management plan, because the State failed to commit to managing for at least 15 breeding pairs and Wyoming's 2007 statute allowed the Wyoming Game and Fish Commission (Commission) to diminish the trophy game area if it "determines the diminution does not impede the delisting of gray wolves and will facilitate Wyoming's management of wolves." In light of that court order, USFWS reexamined Wyoming law, its management plans and implementing regulations and determined that they were not adequate regulatory mechanisms for the purposes of the ESA.

USFWS then attempted to delist the NRM DPS, excluding Wyoming. That rule, which was issued in April 2009, was also challenged in court. Again a federal court struck down the rule after finding that the ESA did not permit piecemeal delisting of a distinct population segment.

However, after the federal court in Missoula, Montana ruled the delisting efforts of the USFWS were illegal under the provisions of the ESA, Congress approved a rider to the 2011 Department of the Interior (DOI) appropriations bill that nullified the court's ruling and reinstated the April 2009 delisting rule. As a result of that rule, wolves are presently delisted in Montana, Idaho, and portions of Oregon, Washington, and Utah. Wolves remain federally protected in Wyoming pending adoption of a new wolf management plan that USFWS determines meets the criteria of an adequate regulatory mechanism under the ESA.

Another federal court in Wyoming ruled that the USFWS acted arbitrarily and capriciously in rejecting Wyoming's plan, but the court did not expressly sanction that plan. Since that time, DOI has been meeting with Wyoming's congressional delegation and its governor to create a wolf delisting plan for the state. DOI has stated it will publish a delisting rule for Wyoming this fall. However, the state must amend its Wolf Management Plan to comply with the federal delisting criteria before such a rule can be finalized, which is the state's purpose of issuing this revised plan..

#### Wyoming Wolf Management Plan Summary

The stated purpose of the Wyoming Wolf Management Plan is "to establish a framework for wolf management in Wyoming that will provide for a recovered and sustainable population of wolves that is well connected genetically to other subpopulations in the NRM, while minimizing wolf/human conflicts and ensuring the long-term health and viability of big game herds." It is Defenders' goal to secure a sustainable, healthy wolf population in the region that is genetically vigorous and interconnected while minimizing conflicts and managing for the long term health of the species and ecosystems.

There are several improvements in the plan over previous versions. The commitment to genetics monitoring and entering into a genetics MOU with Montana, Idaho, and the USFWS is a significant improvement in the management plan. It is evident that Wyoming Game and Fish Department (WGFD) recognizes the importance of maintaining genetic connectivity and diversity within the wolf population.

The current plan also improves the requirement for lethal take permits changing the duration of the permit to 45-day increments instead of open-ended through the calendar year (p. 20) and requiring reporting of take within 24 hours. Additionally, changes in the language concerning the definition of "doing damage to private property" (page 19) reduces the potential for confusion and is now consistent with language in USFWS 10(j) regulations.

The plan removes language from previous versions of "aggressive management techniques" to protect private property. The plan states that "State statute and Commission regulations no longer

require the Commission to adopt aggressive management techniques; however State statutes remain in place §23-1-304(g) in WGFD 2011 laws.

While there have been several improvements to the Wyoming plan since the versions initially rejected by the USFWS, we believe there are still issues within the plan that weaken its stated objective and undermine the ESA's requirement that states adopt adequate regulatory mechanisms to ensure the long-term conservation of species after federal protections are removed.

In terms of population management after delisting, the State of Wyoming states that it "will commit to manage for at least ten (10) breeding pairs and at least 100 wolves in Wyoming outside YNP and the Wind River Reservation. The State of Wyoming is "also committed to manage wolves by using its statutory and regulatory authority to implement the commitments in this plan, and in cooperation with YNP and Wind River Reservation, to ensure the minimum recovery goals of at least 15 breeding pairs and at least 150 wolves are maintained. Both of these metrics are measured in mid-winter when wolf populations tend to be at their minimum."

Under this plan, as in previous plans rejected by the federal courts and USFWS, wolves will "be managed under the dual classifications of trophy game animal and predatory animal." As such, wolves will be "trophy game animals within the area of northwestern Wyoming identified as the Wolf Trophy Game Management Area (WTGMA)". The plan states that the "boundary and size of the WTGMA will be established by State statute and cannot be diminished through Commission rule or regulation." The new plan also includes a "flex zone" where "from October 15 to the last day of February (28th or 29th) the WTGMA will be seasonally expanded (seasonal WTGMA) to facilitate natural dispersal of wolves between Wyoming and Idaho." During this timeframe, wolves will "be classified as trophy game animals within the seasonal WTGMA. Wolves will be classified as predatory animals in the remainder of the state outside the WTGMA and can be killed on sight in this area at anytime and by anyone.

### **Defenders of Wildlife Summary of Comments**

Defenders of Wildlife supports the restoration of wolves in Wyoming. The August 4, 2011 Draft Revised Wyoming Gray Wolf Management Plan as written by the Wyoming Game and Fish Commission/Department (Commission/WGFD) is not substantively different than the dual-classification plan that was previously rejected in 2004 and again in 2008 by the USFWS.

Our primary concerns with the 2011 Draft Plan are:

- 1) the dual status classification and its implications including the failure to manage a native species (the wolf) throughout the state including on national forests and other federal lands, due to predator designation;
- 2) the potential barrier these management regimes create for dispersing wolves including dispersal to Utah and Colorado;
- 3) the inadequate time period, boundaries, and science behind the flex zone concept, including its function in terms of genetic connectivity;

- 4) the potential, but as yet undefined criteria, for lethal control for “unacceptable impacts to ungulates;”
- 5) the use of lethal control as the “preferred method” of control for livestock depredations, without any priority given to avoiding livestock losses using good husbandry practices or other effective nonlethal methods; and,
- 6) the significantly different principles under which wolves would be managed compared to other trophy game species (grizzly bears, black bears, and mountain lions) in Wyoming.

In addition, we firmly believe that allowing any species, particularly a cooperative breeder with highly social interactions and pack structure, to be killed during denning and pup rearing and feeding, or as pups, is not consistent with any ethical approach to wildlife management or hunting.

## STATE LEGAL STATUS

We have concerns regarding the dual status classification of wolves (p. 6). Adopting predator status across the vast majority of a state is unjustifiable. It reinforces the misguided perception that wolves are undesirable predators rather than wildlife and not a necessary or worthwhile part of the landscape. It was this attitude that led to the endangerment of wolves in the first place. Wolves are an essential part of healthy ecosystems in the region and should be treated as such.

Predator status is unjustified for protection of livestock. Wolves in predator areas that cause chronic livestock problems can be removed the same as they can be within the WTGMA.

Both Colorado and Utah contain significant tracts of suitable wolf habitat and sufficient numbers of prey to support multiple packs of wolves. However, for wolves to successfully disperse to these areas, the wolf population in Wyoming needs to be maintained at higher numbers than proposed post-delisting. WGFD’s proposed plan, including predator status in most of the state and substantially reduced wolf numbers, makes dispersal to states such as Colorado and Utah highly unlikely.

The line between the WTGMA and the predator area is drawn arbitrarily and not based on any science. Much of the designated predator area includes habitat considered suitable for bears and mountain lions (Wyoming Grizzly Bear Management Plan 2005; Mountain Lion Management Plan 2006; Wyoming Black Bear Management Plan 2007), and should be considered suitable wolf habitat as well (Oakleaf et al. 2006). There is no scientific justification for precluding wolves from their historic habitat. Furthermore, enforcing the flex zone boundary will be difficult and there will be a tendency for violations to occur both knowingly and unknowingly.

## POPULATION MANAGEMENT

The plan states that the Wyoming Game and Fish Department (WGFD) does not expect wolves to “*occupy the seasonal WTGMA long term*” as they “*have rarely persisted*” here (p. 14).

USFWS has reported numerous packs here which have survived for several years including Daniel (2003, 2004, 2006, 2007, 2009, 2010, unknown in 2011), and Dog Creek (2008, 2009, 2010, 2011), and which could potentially contribute significantly to dispersal and genetic connectivity. The Prospect pack exists within the predator zone and has been a viable pack in multiple years (2006, 2007, 2008, 2010, and 2011).

In regard to monitoring, the WGFD states it will “...*maintain at least 10 breeding pairs and 100 wolves by managing for a safety margin of at least 15 breeding pairs and at least 150 wolves in mid-winter*” (p. 5). Population management at numbers barely above the minimum may not provide for an adequate buffer. Population counts need to be done at the same time each year, such as December 31, which is currently used by the USFWS, to be valid in annual population comparisons. Also, pre and post hunt counts, which are currently conducted for big game species, would be prudent for wolves. As numbers of breeding pairs will be vital to the viability of the wolf population, there must be documented proof of breeding pairs to count them towards the required number.

While the plan provides reasonable detail concerning the frequency of monitoring and the ratio of wolves within the population that will be monitored (p. 17), there should be more information in regard to how the counts are conducted and how accurate these methods are as population measures. For example, radio and satellite telemetry has been used both for monitoring wolf movements and for detecting illegal wolf mortalities.

This section does not include use of telemetry for protection against, or for enforcement action against, those who may illegally kill wolves, which is an important element of any wildlife management regulations. In order for this plan to successfully achieve its stated population objectives, the state of Wyoming must ensure that they have effective enforcement capabilities to investigate and prosecute illegal wolf mortality. The fewer wolves there are, the greater the need for heavy penalties and enforcement. A major aspect of any state management plan is its ability to protect wolves from illegal killing. Under this plan, “*Appropriate law enforcement and legal action will be taken*” (p. 22). There is no description of how the state will enforce legal actions against wolf poachers. Will this be prosecuted as the poaching of trophy game and considered “...guilty of a misdemeanor punishable by a fine of not less than five thousand dollars (\$5,000.00) nor more than ten thousand dollars (\$10,000.00), imprisonment for not more than one (1) year, or both” as is the case for antlered elk, antlered deer, antlered moose, horned antelope, bighorn sheep, mountain goat, mountain lion, grizzly bear or black bear?

In regard to unregulated public take, the state of Wyoming is proposing to manage wolves under *significantly* different principles than other trophy game species (grizzly bears, black bears, and mountain lions) (p. 20 and p. 23). Specifically, all other large predators in Wyoming are managed as trophy game statewide (including grizzly bears when they are delisted). Wolves should be managed under similar conditions as the management of all other large predators, including a de-emphasis on lethal control and counting human-caused mortality against the hunt quota. The cooperative breeding and pack structure should be accounted for in wolf management, and a moratorium should be placed on wolf killing during late pregnancy, denning,

and pup rearing seasons. We reaffirm our position that Wyoming should not establish a predator zone for wolves that allows the species to be randomly killed without a hunting permit or as a consequence of documented livestock losses. Wolves, like other trophy game species, should be managed as such statewide. There is no discernable reason to manage wolves any differently than these other species.

In regard to regulated public harvest, the WGFD states: “*Seasons will close when the mortality quota is reached*” (p. 20). It is unclear if this will be a mortality quota or a hunting quota and if all forms of mortality will be considered during hunting season as we recommend. There is also a discrepancy in the reporting requirements (p. 22 and p. 27)--24 hours for hunter harvest and “*72 hours to allow the Department to appropriately investigate the scene*” in cases of defense of life or property. This could potentially lead to abuse and the staging of a scene implying the take was in defense of life or property. We recommend reporting within 24 hours for any take of wolves, including defense of life and property, to ensure an intact and undisturbed scene and an accurate investigation. This is not unprecedented – Montana requires reporting of wolf kills within 12 hours through its wolf hunt regulations.

We have additional questions regarding the WGFD’s definitions: “*Hunting may be extended beyond this time at the discretion of the Commission to...reduce wolf populations in areas that experience persistent livestock depredation* (p. 2)”. What is the definition of “persistent livestock depredation”? Will it be assessed annually, monthly or by depredation episode? Will the WGFD treat all packs (past, present and future) in an area as per their actual involvement in depredations or based on the persistence of depredations in an area over time and without regard to actual wolf pack involvement in livestock losses? Only animals that come into conflict with livestock should be considered for management removal.

One key element of any state wolf management plan is adequate accommodation of genetic and connectivity needs. The plan states “*Outside refuges such as national parks, legal protection across broad landscapes and public education will facilitate those [habitat] connections*” (p. 23). Designating wolves as a predator which could result in removal in almost 90% of the state is completely contradictory to this statement.

Furthermore, the proposed plan does not allow for sufficient dispersal. In managing wolf populations for approximately 100 wolves outside Yellowstone National Park and Wind River Reservation, there will be very little dispersal. It has been shown that as the number of wolves increases, dispersal distances increase as well. In reducing wolf populations as suggested in the current proposed plan, dispersal distances will decrease (Jimenez et al. in prep). The WGFD states: “*Specific linkage corridors are not needed in Wyoming, because all suitable wolf habitat occurs as one contiguous block in northwest Wyoming*”; however, dispersal could be effectively blocked due to potential elimination of wolves from important habitats due to predator status. Results of habitat selection studies indicate suitable wolf habitat extends beyond northwest Wyoming to include all of the Wind River Range, the Wyoming Range and the Big Horn Mountains (Oakleaf 2006).

The WGFD states: “*Isolation is unlikely if dispersal is not restricted*” (p. 23); and “*While the seasonal expansion area is in TGMA status, this area will be managed to facilitate natural dispersal*” (p. 49). Predator status inherently restricts dispersal, and the flex zone does not allow enough protection for adequate effective dispersal. From 1995-2004 while wolves were under federal protection, there were only 4 effective wolf dispersals in the GYA. Approximately 60% of dispersals occur between October and February, the time period when the flex zone is considered WTGMA. Banking the maintenance of genetic connectivity on the potential for 2.4 wolves (60% of 4) to disperse while they can still be hunted is risky.

The rate of dispersal will directly impact the level of connectivity between wolf subpopulations in the region. The WGFD states: Connectivity “*will be accomplished by encouraging the incorporation of effective migrants into the GYA population*” (p. 23). It is unclear how wolves can be “encouraged” to be effective migrants. Relocation and translocation are impractical, expensive methods, and wolves have very strong homing tendencies. Unless soft release methods are used, which are labor intensive and expensive, wolves often return to the area of capture (Bradley et al. 2005).

The draft plan states, “*Analyses conducted by VonHoldt et al. (2010) confirmed genetic variability and connectivity within the NRM metapopulation were more than adequate when the NRM wolf population was much lower than the current number ( $\geq 5.4$  migrants per generation at a population of ~835 wolves in 2004 vs. ~1,614 wolves in 2010)*” (p. 24)”. USFWS data indicates that there are 3.3-5.4 effective migrants per generation not “ $\geq 5.4$  migrants per generation” as stated by the WGFD (USFWS pers. comm.). If Wyoming, Montana, and Idaho reduce the wolf populations to levels declared in their respective management plans, this will be nowhere near the ~835 wolves at which genetic variability and connectivity has been confirmed. At current migration rates in and out of Wyoming, with the population levels managed for 100 wolves outside Yellowstone National Park and the Wind River Reservation, existing levels of genetic connectivity will likely not be maintained.

## DISTRIBUTION

WGFD has no authority to require reporting of wolf take or presentation of skull and pelt for genetic sampling in areas designated as predator status (p. 25) as this area is under the management of the Department of Agriculture. A legislative change would be necessary specifically giving the WGFD the authority to collect genetic material in the predator area. Such a legislative change is unlikely. WGFD should not concede its authority and responsibility to manage wolves throughout the state in the first place.

## WOLF CONFLICT MANAGEMENT

In regard to compensation for livestock losses, there is no quantifiable justification for paying up to seven times the confirmed loss of livestock (p. 27). This type of inflated compensation is extremely troubling and will likely encourage poor livestock husbandry as producers are better rewarded for losing livestock than taking preventative measures to avoid predation. The state of



Wyoming does not compensate other species at such an exaggerated rate of loss. Instead, WGFD should use these funds to create incentives for good management practices that help producers prevent livestock losses and pay compensation based on a fair market value for those losses that cannot be prevented. Unsupervised livestock on allotments are often left for days or weeks or even months at a time and carcasses of dead livestock are often never found to determine cause of death. Thus, producers are likely compensated for losses not related to predation such as larkspur poisoning or other natural causes of death. And unless the causes of depredation are addressed with proper deterrents, the whole scenario is likely to be repeated over and over again with both loss of livestock, loss of funding and loss of wolves. The most practical solution is to proactively resolve these problems rather than throw money at them after losses have occurred.

Sixteen claims of wolf depredation for 60 cattle from (July 1, 2009- June 30, 2010) amounted to \$72,604 of compensation paid by the state—15% of the total amount paid out for damage by wildlife. In comparison, 24 grizzly bear claims paid \$106,070.88 and 28 elk claims paid \$52,522.76. This underscores how exaggerated wolf conflicts are in comparison to other wildlife impacts, and why wolves should not be managed differently simply because they can impact human activities because many species impact humans. Further, reported numbers of livestock lost to wolves differ between the USFWS and the WGFD. In Fiscal Year 2010, the WGFD reported 60 cattle killed by wolves; however, the USFWS reported a total of 20 cattle killed in 2009 and only 7 cattle killed through July 9, 2010. The 2010 USFWS Wyoming Wolf Recovery Annual Report counts only 26 cattle depredations (0.11 cattle/wolf). These cattle depredations were corroborated by WGFD. Livestock losses due to disease, bad weather, other predators, and even theft were much higher than losses due to wolves. Wolf impacts on livestock are manageable and do not justify excluding wolves from most of the state.

We are aware of only one peer reviewed research study addressing missing cattle and that study was conducted under a worst case scenario for livestock losses to wolves. Livestock were in a dense, remote forest with nearly constant presence of wolves and little to no human supervision. This study identified an eight actual losses to one documented loss to wolves ratio under these extreme conditions (Oakleaf et al, 2003). By exaggerating the rate of livestock losses to wolves at these unreasonable levels, Wyoming has created a strong incentive for livestock owners to over-report livestock losses to gain additional compensation for non-existent losses. If the state of Wyoming is going to pay compensation for livestock losses after wolves are delisted, it should be based on reasonable criteria, not the current multiplier that rewards livestock owners for unconfirmed losses to wolves and leads to undocumented blame being placed on wolves for losses that are above reasonable estimates.

Relying almost exclusively on traditional lethal control measures to attempt to address wolf and livestock conflicts and paying far over documented loss has not reduced conflicts. Furthermore, these lethal control methods are expensive (e.g. requiring significant resources including helicopters, airplanes, vehicles, and other resources), can be dangerous for personnel, and have failed to reduce livestock. Unless preventative strategies are addressed, new wolves moving into this vacant habitat are likely to prey on livestock in less than a year after the former pack was

killed (Bradley and Pletcher 2005). While wolves account for less than 1% of livestock losses in areas where wolves and livestock share the land, the controversy over these losses is often played out in the political arenas and media outlets, which in turn, often must be addressed by agency managers. This takes significant agency time and resources and results in a perpetual spiral of conflict.

Instead of continuing to follow this failed pattern, the State should consider managing wolf-livestock conflicts in a way that minimizes livestock losses, while at the same time sustains the state's wolf population and reduces overall conflict. Some of the most effective methods include: assisted removal of dead or dying livestock, increased human supervision of livestock when possible, using livestock guarding dogs during certain times of the year, installing different types of fencing and lighting and using a variety of scare devices. The effectiveness of these deterrents is highly dependent on a number of factors, including type, number, and age of livestock, grazing and pasture conditions, and season (Stone et al. 2009). Most sheep losses are due to insufficient husbandry practices which normally should include daily supervision by livestock owners or herders.

We encourage the State to provide not only information and training, but when appropriate, to also hire wolf specialists whose duties would include providing technical assistance to livestock operators to implement the methods and to supply or loan equipment like fladry, turbofladry, lighting sensors, alarm systems, monitoring devices, and other practical tools to ranchers who are in high priority wolf conservation areas. The wolf specialists should also work with other wolf managers and researchers to determine which methods are most effective in reducing livestock losses to wolves as this information is vitally important for national and international wolf conservation programs. For more information regarding these methods, please see: [www.defenders.org/coexistence](http://www.defenders.org/coexistence). Additionally, Defenders staff are available to assist the state of Wyoming in training and implementing these nonlethal methods as we are doing in Idaho, Montana, Oregon, Washington, New Mexico and Arizona.

## MANAGEMENT ACTIONS

*“Removal by means of lethal control will be the preferred method to alleviate livestock depredation problems”* (p. 28). If lethal control was an effective method of control, there would not continually be livestock depredations in the same areas. Simply removing or killing wild predators can result in their being replaced by outlying predators and an endless cycle of lethal control and livestock losses without ever attempting to address or prevent these conflicts in a nonlethal manner. We are not against all lethal control, or are non-lethal methods a replacement for lethal control in appropriate circumstances. However, non-lethal deterrents have proven to be effective in many situations, and lethal control should not be the first and only response to wolf and livestock conflicts. For grizzly bears, nonlethal deterrents including relocation, fencing, and removal of the attractant are all methods currently employed by the WGFD and are mandated for use before lethal control actions take place. The WGFD should similarly predominantly employ non-lethal wolf deterrents.

## WOLF/OTHER WILDLIFE INTERACTIONS

### Elk (p. 30-34)

WGFD has routinely ignored results from its own studies in drafting this wolf plan. The plan also largely ignores studies performed in the areas outside of YNP where there are numerous other factors at hand, including elk feedgrounds, citing studies from YNP and other areas instead. It is impossible to accurately compare areas with and without feedgrounds as both wolf and elk/ungulate behavior is vastly different in these areas.

A study of caribou by Bergerud (1988) indicates that if humans disturb the natural ability for caribou to move, the impacts of predation can greatly increase. WGFD alters the natural movement of elk by drawing them to feedgrounds where they are concentrated in higher than natural numbers on smaller areas than they would be in a natural situation. Currently elk populations are maintained at levels higher than the ecosystem can support with the winter feeding of approximately 13,000 elk at 22 state managed feedgrounds and another 7,000 elk fed on the National Elk Refuge. With “near elimination of natural over-winter mortality” winter mortality rates on the feedgrounds (1-2%; Dean et al. 2004) are significantly lower than mortality rates in an unmanipulated system.

Elk have been “over objective” in Wyoming for many years, but there is no concerted effort to bring them down to objective levels. Wildlife populations naturally fluctuate, including calf/cow ratios, which were low before wolves were reintroduced. These calf/cow ratios rebounded, then declined again. In 2010, according to WGFD population counts, elk numbers statewide were more than 21,200 animals above the objective—counting only 28 of 35 herds (7 herd units were not counted). Additionally, elk herd objectives, as set by the WGFD, have increased in some areas, which is counter-intuitive since it is known there has been a long term drought and other natural phenomena which would indicate a reduction in carrying capacity for elk. In areas such as Sunlight Basin, part of the Clark’s Fork herd unit, overall elk numbers remain the same, but calf/cow ratios are down. Cow elk tags are still issued in this area to reduce pressure on winter range (Wyoming Wildlife 2010). If there is a need to reduce the pressure on winter range, it follows that elk numbers are too high for the ecosystem to support. In the 2010-2011 hunting season, a supplemental season for antlerless elk was conducted from Jan 1-31 in 7 hunt areas outside Cody—an area within which at least 44 wolves in 6 packs have home ranges. In March, 2011, WGFD released a press statement stating a decline in calves in the Cody herd unit—which encompasses a large portion of these hunt areas while harvest increased 2% from 2005-2009.

The claim that calf/cow ratios are declining largely due to wolves is erroneous. These claims include calf/cow ratios in the Gros Ventre River drainage (Jackson Elk Herd) where there are 3 elk feedgrounds. In 1995, prior to wolf reintroduction, WGFD recorded a low of 19 calves per 100 cows in the Jackson elk herd, whereas in 2007 the ratio was 25 calves per 100 cows. In 2007, the population of wolves with home ranges in the area of the Jackson herd unit was at least 69 wolves in 7 packs. In 2010, the USFWS reports at least 59 wolves in 6 packs in the same area, yet WGFD says calf/cow ratios are still declining due to wolves. Long term declines of calf/cow

ratios have been documented in areas with and without wolves and were documented even before wolves returned to the area, clearly indicating that there are factors other than wolves responsible for this decline. The response by WGFD has not been to decrease antlerless elk hunts, but to eliminate spike elk from the quota.

All of this effort to reduce wolves and eliminate them from many areas still may not make it easier for human hunters to find elk. “If, for the most part, humans are the major predator in a system, removing other causes of predation may result in only a marginal increase in human harvests. If canids are removed from an ecosystem, or reduced in number, does the prey they eat become available to man or do these animals die from other natural causes? For example, canids often specialize on young animals. If removal of canids results in a greater rate of predation by other predators (e.g. bears, birds of prey) or increased natal mortality from starvation or disease, canid reduction alone is unlikely to result in greater human harvests of adult animals” (IUCN 1990).

#### Moose (p. 29)

The plan states that “...*the Jackson moose herd has experienced both a decline in trend count and in recruitment beginning in 1999-2001*” (p. 29). Results from a collaborative study with WGFD, USFWS and University of Wyoming of the Jackson moose herd demonstrate that, “Habitat quality appeared to be the primary factor limiting population growth while the effects of predation appeared to be less important” (Becker 2008). In the late 1980s and early 1990s, calf/cow ratios and moose trend counts began to decline, and it is believed that the forest fires of 1988 had a greater impact on moose than initially believed (Wyoming Game and Fish Department 1991). Moose populations have fluctuated since the early 1990s; however, as recently as 2007, moose populations were near counts similar to those of the late 1970s while calf/cow ratios were the lowest observed during the last 30 years (Becker 2008).

The plan further states “*Recent studies confirm that moose are an important component of winter diets for wolves in the Jackson area, supporting this contention*” (p. 29). Moose are important component of winter diets in some packs in Jackson. Predation studies in the Jackson from 2000-2007 indicate prey composition is 95% elk, 4% moose, 0.7% deer and 0.3% bison (Jimenez and Stevenson 2003 and 2004; Jimenez et al. 2005 and 2006). In January 2010, a USFWS/Grand Teton National Park collaborative study was initiated on different wolf packs in a different geographical area from the previous predation studies. The study intentionally investigated wolf predation in areas of low wintering elk densities. 2010 results indicate prey composition rates were 34% moose, and preliminary results from 2011 show prey composition was 38% moose, with the remainder being elk (65%) and mule deer.

#### Bighorn sheep (p. 29)

The plan indicates wolf predation risk for bighorn sheep populations at Whiskey Mountain (p. 29). There is no indication that wolves are preying on bighorn sheep in this area. A cooperative study which included WGFD stated, “Wolves...have not been reported as a significant source of mortality in bighorn sheep populations” (Sawyer and Lindzey 2002) and in the most recent

report available from WGFD (2004), "...no Whiskey Basin bighorn sheep have been lost to wolves or grizzlies."

### All ungulates

The Commission has defined "unacceptable impact" as "*any decline in a wild ungulate population or herd that results in the population or herd not meeting the state population management goals or recruitment levels established for the population or herd in Commission regulation*" (p. 35). Furthermore, the Commission, being a political body, could arbitrarily set population management goals that are not biologically based. The definition of "unacceptable impacts" is highly subjective as a management directive. The WGFD should apply specific, scientifically documented criteria to indicate when a decline in ungulate populations is caused by wolves and when the impact of wolves is cause for concern about the health of the affected herd.

### PUBLIC EDUCATION AND INFORMATION

We applaud the commitment of WGFD to continued public education and information on wolves. We hope this will be a fair and balanced approach to education using sound science and not anecdotal evidence such as highlighting allegations that wolves are "devastating ungulate populations across the state". Education regarding the many benefits of wolves to an ecosystem should be included in materials and presentations for the public. We are willing to assist with providing both materials and review of draft information. This is an area where a balanced committee of stakeholders may be beneficial in helping review and develop educational programs adopted by the state.

### ECONOMIC IMPACTS

There is no solid data verifying decreased sales of big game hunting licenses due to impacts by wolves. Total statewide sales of elk licenses have increased during 2005-2009 (Wyoming Game and Fish 2010). There were slight reductions in sales of licenses in 2003 and 2004 (Wyoming Game and Fish Department 2005). WGFD (2005) points to "...the lingering effects of prolonged drought still significantly impacted WGFD revenues. During the last five years of drought, license sales have declined by nearly 20 percent."

Revenues collected from sales of elk licenses have increased in the past 5 years from \$7,565,022 in 2004 to \$8,649,005 in 2009 (Wyoming Game and Fish 2010), and hunter success for elk has remained generally the same (average 41.6%). There have been declines in sales and revenues from moose licenses (2004: 798 sold; license revenue \$214,029; 2009: 596 sold; license revenue \$138,389); however, causes of declines in moose populations are being debated and include decreased extent and quality of habitat, parasites, predation and disease.

USFWS (1994) livestock loss estimates of 1-32 cattle per year and from 17-110 sheep per year are actual estimates and not the multiplier of 7 used by the WGFD in calculating compensation payments. Paying strictly for confirmed livestock losses, as opposed to paying the cost for up to

seven times the confirmed loss of livestock, would greatly reduce the economic costs due to livestock compensation.

## ADDITIONAL CONCERNS

### Aerial gunning

*“Aerial gunning of wolves inside the TGMA directed by WGFD will be allowed to control livestock depredations, to achieve ungulate management objectives if wolves are determined to be a significant cause for not meeting those objectives, or to address human safety issues. However, other Agency directed aerial gunning for routine wolf population maintenance inside the TGMA is prohibited”* (p. 49). Without lengthy, in-depth studies of elk mortality in the area of concern, it is impossible to determine if wolves are *“..a significant cause for not meeting those [population] objectives...”*. Using aerial gunning to kill wolves and artificially boost elk and deer numbers is anathema to sound wildlife management and has been routinely repudiated by the American public.

### Predator zone on national forests

We are particularly opposed to the proposed management of wolves as predators on National Forest System lands in Wyoming. The national forests exist in part for the maintenance of wildlife. Wildlife is one of the core purposes of the National Forest System under the Multiple Use Sustained Yield Act, which establishes “the policy of the Congress that the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes.” 16 U.S.C. 528. The Supreme Court has confirmed that federal agencies have the authority to direct wildlife management on federal lands. *See Kleppe v. New Mexico, 426 US 529 (1976)*. Congress has given the U.S. Forest Service certain responsibilities toward wildlife on federal lands, for example that the Forest Service must “provide for the diversity of plant and animal communities.” 16 U.S.C. 1604(g)(3)(B). The Forest Service has confirmed those responsibilities through regulations and policies. Predator status is inconsistent with the Forest Service’s authorities and obligations toward wildlife as it essentially amounts to the non-management of a large wildlife species across large tracts of National Forest System lands, and is designed to preclude habituation of many of those lands by a native wildlife species.

There is no justification for proactively preventing wolves from occupying National Forest System lands that provide suitable habitat, as the national forests in Wyoming do. National forests serve as important long term bulwarks of wildlife habitat, and provide habitat that is hard to come by under other ownerships. Wildlife, including wolves, can be managed on national forests by the state but should not be eliminated, or effectively left unmanaged, as through predator status. The potential impacts of wolves on livestock grazing on the national forests can be addressed through non-lethal preventative measures backed up by lethal removals when necessary. The public expects its national forests to provide habitat for native wildlife. We strongly encourage WGFD to include national forests in Wyoming within the TGMA.

## CONCLUSION

In summary, our primary concerns with the 2011 Draft Plan are: 1) the dual status classification; 2) the potential barrier for dispersing wolves including dispersal to Utah and Colorado; 3) the flex zone concept, including its function in terms of genetic connectivity; 4) the potential for lethal control for “unacceptable impacts to ungulates”; 5) the use of lethal control as the “preferred method” of control for livestock depredations; and, 6) the significantly different principles under which wolves would be managed compared to other trophy game species (grizzly bears, black bears, and mountain lions) in Wyoming.

We recommend changes to the plan in order to facilitate responsible management of wolves as wildlife instead of management simply to control wolves. Our recommended amendments are:

- 1) management of wolves as trophy game statewide including on the national forests in Wyoming, both of which would include elimination of the flex zone;
- 2) mandatory use of non-lethal control methods for livestock conflicts before lethal control is initiated;
- 3) compensation of fair-market value for confirmed losses instead of payment for up to 7 livestock losses;
- 4) requirement of results from a scientifically acceptable study documenting wolves as primary cause of “unacceptable impacts” to ungulates and public involved process of decision making prior to removal of wolves;
- 5) reporting within 24 hours for any take of wolves, including defense of life and property, to ensure an intact and undisturbed scene and an accurate investigation.

We are concerned that this plan will not function as a wildlife management plan but rather as a wildlife control plan. It is our hope that the State of Wyoming will manage for a successful, healthy and sustainable wolf population while continuing to benefit from the millions of tourists who flock to the region annually to see wolves and other native species. We also hope that the state will embrace new and traditional nonlethal deterrents to help ranchers and farmers reduce livestock losses to wolves and other native species. Coexistence with wolves, as with other native wildlife, can be achieved if those involved are willing to collaboratively seek and implement win-win solutions. We appreciate the opportunity to submit our comments and hope that our comments will be considered in the final draft. We look forward to working with the state of Wyoming to ensure a long term healthy population of wolves and resolve conflicts to help local residents coexist with wolves.

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