



United States
Department of
Agriculture

Animal and Plant
Health Inspection
Service

Wildlife
Services

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**USDA-APHIS
IDAHO WILDLIFE SERVICES
WOLF ACTIVITY REPORT
FISCAL YEAR 2008**

Introduction

This report summarizes Idaho Wildlife Services' (WS) responses to reported gray wolf depredations and other wolf-related activities conducted during Fiscal Year (FY) 2008 pursuant to Permit No. TE-081376-12, issued by the U.S. Fish and Wildlife Service (FWS) June 16, 2006. This permit allows WS to implement control actions for wolves suspected to be involved in livestock depredations and to capture non-depredating wolves for collaring and re-collaring with radio transmitters as part of ongoing wolf monitoring and management efforts.

Methods

Whenever WS receives a report of suspected wolf depredation, or of wolves harassing/chasing livestock or livestock guarding animals, WS typically responds by sending a field employee to conduct an on-site investigation. Results of each investigation are documented on WS Form 200, Wildlife Services Depredation Investigation Report (WSDIR), (see Appendix A). Specific criteria have been agreed upon by the FWS, Nez Perce Tribe (NPT) and WS to classify reported incidents of wolf depredation as either: confirmed, probable, possible/unknown or other (see reverse side of Appendix A for discussion of these criteria). Information regarding the complaint and subsequent investigation findings is communicated as soon as possible to the FWS, NPT and the Idaho Department of Fish and Game (IDFG), as appropriate, by telephone and/or e-mail. If wolf predation is confirmed, the responding WS employee typically implements either nonlethal or lethal control, or a combination thereof, depending on the direction and authorization provided by the IDFG.

Under the provisions of The Privacy Act, WS is prohibited from providing any private information, including the names and addresses of livestock producers who request assistance from WS, to any third party. WS is not allowed to provide copies of completed WSDIRs to anyone (including Federal and State wildlife agencies) other than the livestock producer who requested assistance, unless all personal information related to the cooperator/rancher is redacted from the document. For purposes of filing compensation claims under the Defenders of Wildlife's privately funded compensation program, cooperators are advised to contact the appropriate Defenders of Wildlife representative directly and provide a copy of the WSDIR form to that individual. WS has been providing copies of WSDIRs (that involve reported wolf depredation) to the NPT, IDFG and the FWS, but any information that could be used to determine the identity of individual livestock producers is redacted from these copies. Names of individuals mentioned in this report are all WS employees, unless otherwise noted.

Results: Brief summaries that pertain to those investigations which resulted in a finding of confirmed or probable wolf damage are available on request from the ID WS State Office.

Investigations Summary: WS conducted 186 depredation investigations related to wolf complaints in FY 2008 (as compared to 133 in 2007, an increase of almost 40%). Of those 186 investigations, 129 (~69%) involved confirmed depredations, 34 (~18%) involved probable depredations, 14 (~8%) were possible/unknown wolf depredations and 9 (~5%) of the complaints were due to causes other than wolves.

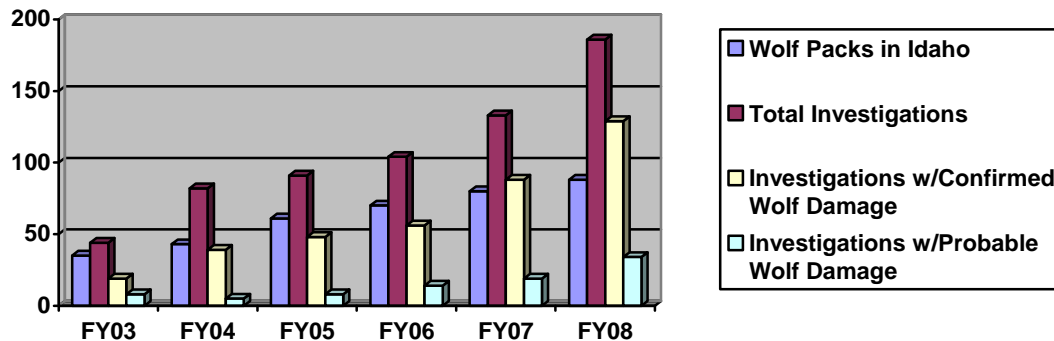


Figure 1. Number of wolf packs in Idaho compared to number of depredation investigations, FY 03-08.

- Based on Idaho WS investigations, the minimum number of confirmed and probable livestock depredations due to wolves in FY 2008 was:

a. Confirmed:

-74 calves (killed), 7 calves (injured) (as compared to 41 calves killed, and 8 calves injured in FY 2007)

-11 cows (killed) (as compared to 10 cows killed and 2 cows injured in FY 2007)

-225 sheep (killed), (as compared to 219 sheep killed and 41 sheep injured in FY 2007) (note: 12 of the 225 sheep confirmed killed were from one depredation incident that occurred just across the state line in Lincoln County, Wyoming)

-13 dogs (killed), 8 dogs (injured) (as compared to 6 dogs killed and 4 injured in FY 2007)

b. Probable:

-23 calves (killed), 1 calf (injured) (as compared to 20 calves killed and 1 calf injured in FY 2007)

-4 cows (killed) (as compared to 3 cows killed in FY 2007)

-63 sheep (killed), 3 sheep (injured) (as compared to 14 sheep killed and 148 sheep missing and presumed dead and 1 injured in FY 2007). (note: 13 of the sheep listed as probable wolf kills were involved in the depredation in Wyoming that is listed above).

- 1 dog (killed), 2 dogs (injured) (as compared to 5 dogs (killed) in FY 2007).

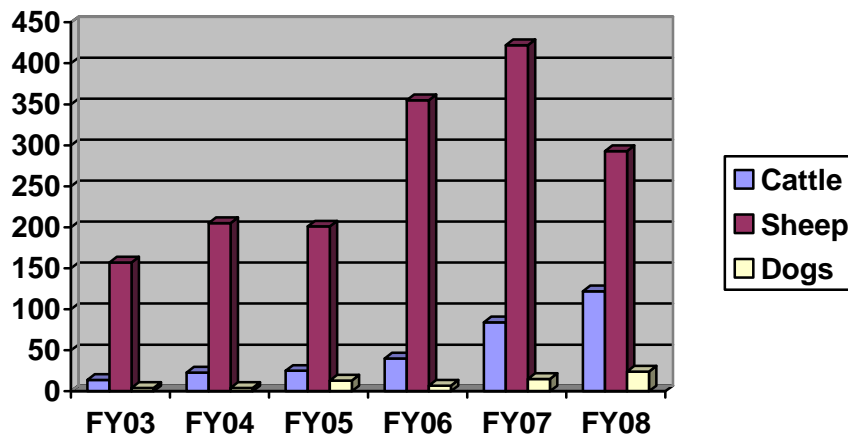


Figure 2. “Confirmed” and “Probable” wolf depredations on cattle, sheep and dogs, FY 03-08.

When wolves commit depredations on livestock, IDFG typically authorizes WS to initiate some form of incremental lethal control to help resolve the depredation activity. Nonlethal control measures may also be implemented or recommended depending on the specific circumstances, but in many cases, particularly with sheep producers, wolf predation has occurred in spite of ongoing nonlethal efforts to prevent wolf depredations. During wolf control actions initiated in FY 2008, 10 wolves were captured, collared and released on site (as compared to 9 in FY 2007 and 11 in FY 2006) and 82 were killed (as compared to 48 killed in FY 2007 and 30 killed in FY 2006).

From October 1, 2007 – March 27, 2008 (when wolves were temporarily delisted), WS killed 11 wolves during control actions. During the 113 days when wolves in Idaho were not protected by the Endangered Species Act (March 28 – July 18), ID WS killed 31 wolves during control actions. (One of the wolves taken by ID WS while wolves were delisted was actually taken in Lincoln Co., WY.) After wolves were relisted by a Federal Court on July 18, and through September 30, WS killed 40 wolves during control actions. None of the 82 wolves killed by ID WS in control actions during FY 2008 were north of I-90 where they are currently listed as endangered.

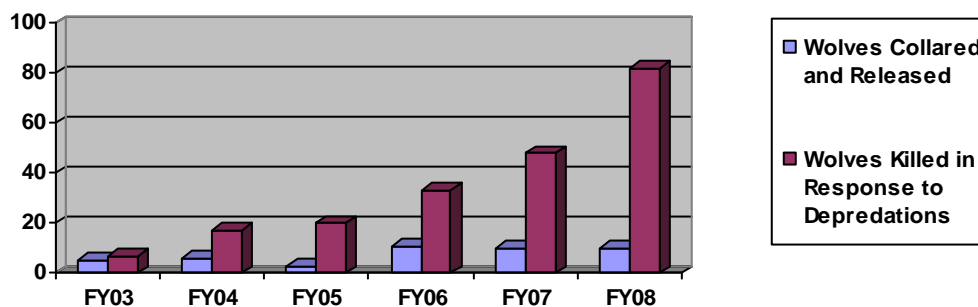


Figure 3. Disposition of wolves during Idaho Wildlife Services wolf control actions, FY 03-08.

Incidental Takes: There were no incidental takes of any wolves during any WS operations in Idaho in FY 2008.

Chronic Depredating Wolf Packs/Individuals Involved in Livestock Depredation: At the time of the initial reintroduction of experimental-nonessential wolves to Central Idaho, the FWS addressed the issue of chronic depredating wolves in their 1994 10j rule [at 50 CFR 17.84(i)(3)(vii)] with this specific language: "*All chronic problem wolves (wolves that depredate on domestic animals after being moved once for previous animal depredations) will be removed from the wild (killed or placed in captivity).*" Significantly, this language does not specify that chronic depredating wolves "may" be removed from the wild, but that they "will" be removed from the wild. Removal of chronic depredating wolves has been required by law since 1994.

Under the 1994 10j rule, wolves that had been involved in as few as 2 confirmed depredations on livestock could be considered "chronic" depredating wolves. The APHIS-WS program in Idaho has historically considered 3 verified depredations in a single year as the threshold for labeling a pack as a chronic depredating pack. (Note that under the FWS definition of chronic depredating wolves, a wolf might be involved in only a single depredation in a year, but could be considered a chronic depredating wolf if it killed livestock even once more in any subsequent year.)

The depredations listed below include both confirmed and probables, but all packs in the following list were implicated in at least 3 confirmed depredations on livestock during FY 08.

- 1) Steel Mountain Pack: 11 depredations/33 sheep killed - 6 wolves killed following depredations
- 2) Packer John Pack: 10 depredations/1 cow, 20 sheep and 1 dog killed - 5 wolves killed following depredations
- 3) Pass Creek Pack: 8 depredations/10 calves killed - 6 wolves killed following depredations
- 4) Moores Flat Pack: 8 depredations/1 cow, 4 calves and 25 sheep killed - 1 wolf killed following depredations
- 5) Basin Butte Pack: 7 depredations/5 calves and 36 sheep killed - 7 wolves killed following depredations
- 6) B-327: 7 depredations/8 cows and 1 calf killed
- 7) Doublespring Pack: 6 depredations/8 calves and 3 sheep killed - 6 wolves killed following depredations
- 8) Hard Butte Pack: 6 depredations/1 cow, 1 calf, 18 sheep and 1 dog killed - 3 wolves killed following depredations
- 9) High Prairie Pack: 6 depredations/3 calves and 8 sheep killed - 5 wolves killed following depredations

- 10) Applejack Pack: 5 depredations/1 cow, 1 calf, 5 sheep and 1 dog killed - 2 wolves killed following depredations
- 11) Lemhi Pack: 5 depredations/1 cow, 3 calves and 4 sheep killed
- 12) Sweet/Ola Pack: 5 depredations/4 calves killed
- 13) Black Canyon Pack: 4 depredations/4 calves killed
- 14) Galena Pack: 4 depredations/5 calves killed - 3 wolves killed following depredations
- 15) Jureano Mountain Pack: 4 depredations/1 cow and 4 calves killed - 1 wolf killed following depredations
- 16) Stolle Meadows Pack: 4 depredations/5 calves killed - 4 wolves killed following depredations
- 17) SW-64 Pack: 4 depredations/4 calves killed - 1 wolf killed following depredations
- 18) Buffalo Ridge Pack: 3 depredations/6 calves killed - 8 wolves killed following depredations
- 19) Picabo Pack: 3 depredations/5 calves and 15 sheep killed
- 20) Timberline Pack: 3 depredations/5 sheep killed

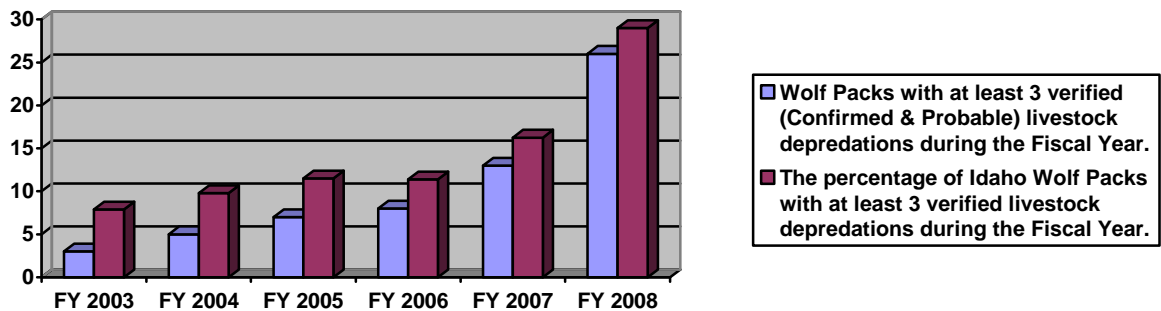


Figure 4. Number of verified “chronic” depredating wolf packs in Idaho from FY 03-08.

The data in Figure 4. indicate that the proportion of Idaho’s wolf packs implicated in “chronic” depredations is increasing each year. This is likely related to the fact that as the increasing wolf population continues to spread out into marginal habitat, they are increasingly coming into greater conflict with livestock.

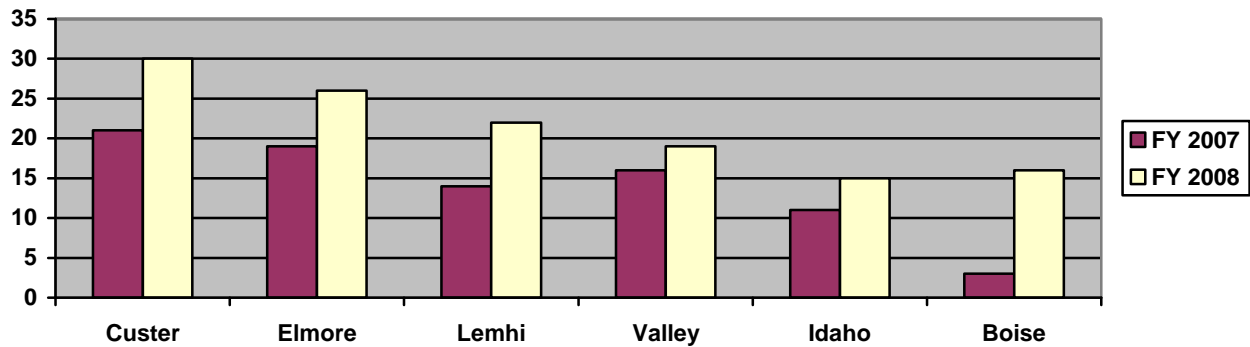


Figure 5. Counties with a minimum of 15 confirmed and/or probable wolf depredations in FY 2008 compared to the same data from 2007. (Counties not pictured but with verified wolf depredations in FY 2008 include: Adams -9, Blaine -7, Fremont - 5, Camas -2, Gem - 2, Shoshone -2, Butte -1, Caribou - 1, Clark - 1 and Clearwater -1)

To illustrate the level that wolf depredations have reached, there were 78 verified wolf depredations in just 3 counties (Custer, Elmore, Lemhi) in FY 2008. There were 70 verified wolf depredations in the entire state of Idaho in FY 2006. In FY 2003 (a year after wolf populations in Idaho reached recovery levels), the total of verified wolf depredations in Idaho was 27. In FY 2008, there were 30 in Custer County alone. This year during the month of August, WS investigated 43 verified wolf depredations. That's almost equal to the number documented during the entire fiscal year of 2004 (45).

D. Other Wolf-Related Activities: Idaho WS staff participated along with representatives from FWS, IDFG and the NPT Wolf Recovery Program in numerous wolf-related training, outreach, and other activities during the year. These functions included:

1. November 12-13, 2007. Rick Williamson provided information on wolf damage management during the Idaho Cattle Association Meeting in Sun Valley.
2. November 15, 2007. Rick Williamson attended a meeting with IDFG, FS, several sheep producers and Defenders of Wildlife (DOW) in Twin Falls about an upcoming project in Blaine County where DOW would put employees in place to protect sheep bands from the Phantom Hill Pack.
3. November 27-28, 2007. Rick Williamson and Mark Collinge attended the Interagency Wolf Managers meeting in Missoula, MT.
4. January 8, 2008. Mark Collinge, Todd Grimm and Rick Williamson attended the Idaho Wolf Managers meeting in Boise.
5. January 17, 2008. Doug Hansen spoke to the Weiser River Cattleman's Association about wolf depredations in western Idaho.
6. January 19, 2008. Todd Grimm and Rick Williamson spoke about wolf damage management to attendees at a Washington Cattle Association meeting in Colville, WA.
7. February 5-6, 2008. Rick Williamson attended the Idaho Governor's Office of Species Conservation wolf damage compensation meeting in Boise.
8. March 19, 2008. Mark Collinge presented a paper titled "Relative risks of predation on livestock posed by individual wolves, black bears, mountain lions, and coyotes in Idaho" at the 23rd Vertebrate Pest Conference in San Diego, CA.

9. March 26, 2008. Rick Williamson attended a meeting with IDFG, FS, several sheep producers and DOW in Twin Falls about the upcoming Blaine County project where DOW would put employees in place to protect sheep bands from the Phantom Hill Pack.
10. April 7-11, 2008. Rick Williamson attended the North American Wolf Conference in Chico, MT.
11. April 15, 2008. Rick Williamson met with the Blaine County Commission in Ketchum to discuss WS' role in wolf damage management.
12. May 14, 2008. Rick Williamson was interviewed by ABC News while he necropsied a calf that was reported as a wolf kill.
13. June 2, 2008. Rick Williamson attended a meeting with IDFG, FS, several sheep producers and DOW in Hailey about the upcoming Blaine County wolf project.
14. June 12, 2008. Rick Williamson met with and trained 10 FS and DOW employees on use of less than lethal munitions to harass wolves from livestock.
15. June 16, 2008. Rick Williamson gave a presentation about wolf management tools and techniques to the Idaho Outfitters & Guides Association in Challis.
16. June 24, 2008. Rick Williamson was interviewed by Best Friends Magazine about the Blaine County Wolf Project.
17. June 26, 2008. Todd Grimm, Doug Hansen and Rick Williamson discussed wolf damage management with a group of educators at the Idaho Rangeland Resource Commission Rangeland Ecology class in McCall.
18. June 28-29, 2008. Rick Williamson gave a presentation on wolf management tools and techniques at the National Trappers Association meeting in Nephi, UT.
19. July 22, 2008. Rick Williamson attended a meeting with IDFG, FS, several sheep producers and DOW in Sun Valley about the ongoing nonlethal wolf control project in Blaine County.
20. August 7, 2008. Todd Grimm and Rick Williamson attended Governor Otter's Trail Ride where wolf depredations were a main topic.
21. August 25, 2008. Rick Williamson attended a meeting with IDFG, FS, several sheep producers and DOW in Sun Valley about the ongoing nonlethal wolf control project in Blaine County.
22. August 25, 2008. Rick Williamson was interviewed by NBC News and an independent film maker about the impact of wolves on livestock.
23. September 19, 2008. Todd Grimm spoke to a group of concerned citizens and several State legislators in Boise about wolf/livestock conflicts.

Conclusions/Recommendations:

WS conducted 186 wolf-related investigations in Idaho during FY 2008, compared to 133 investigations during FY 2007 (~40% increase from FY 2007). WS spent approximately \$526,000 of appropriated and cooperative funds responding to complaints of reported wolf predation, conducting control and management actions, (salary and benefits, vehicle usage, travel and supplies) and for other wolf-related costs (equipment and supply purchases, meeting attendance, etc). Of the 186 reported wolf depredation investigations conducted in FY 2008, 129 (~69%) involved confirmed wolf predation. The control actions that followed confirmed depredations involved the lethal removal of 82 wolves (compared to 48 in FY 2007) and the radio collaring and release of 10 wolves.

The 163 depredation investigations conducted by ID WS that resulted in “Confirmed” or “Probable” wolf-related damage was up about 50% from the 107 incidents in 2007. Confirmed and probable cattle losses rose more than 60% from FY 2007 levels. Verified (“Confirmed” & “Probable”) damage to sheep was 32% lower than FY 2007 levels.

The decline in the number of sheep killed by wolves in 2008 may be due in part to operational changes implemented by some sheep producers. Some producers in problem areas added extra herders and additional guard dogs, and the sheep were usually bedded at the site where the herders camped, instead of farther away. While this practice did not appear to decrease the total number of wolf depredation incidents statewide, (there was actually a 37.5% increase in the number of verified depredation incidents on sheep, from 40 in FY 2007 to 55 in FY 2008), it may have lessened the average number of sheep killed during the depredations. In years past, some wolf depredations on sheep would result in 70 – 100 dead sheep. In FY 2008, the highest number of sheep killed in a single event was 33. Most of the depredations on sheep resulted in less than 5 sheep killed. There were only 5 depredations where more than 10 sheep were killed.

Another explanation for part of the decline in sheep killed by wolves in FY 2008 would be the project implemented in the Wood River Valley area by DOW, in cooperation with 4 sheep producers, the Forest Service, IDFG, the Blaine County Commission and WS. This project was implemented to reduce the likelihood of depredations on sheep by the Phantom Hill pack, which had a history of chronic depredations on sheep in this area. The project employed 3 full-time and very motivated personnel, plus additional part-time staff, paid by DOW, who used fladry to pen and protect the sheep at night, and who also monitored the Phantom Hill wolf pack and harassed wolves away from the sheep whenever they got near. The Phantom Hill pack was around several bands of sheep on multiple occasions throughout the summer, but there was only 1 depredation which resulted in 1 sheep killed by a wolf. In FY 2007, the Phantom Hill pack was involved in killing at least 10 sheep in at least 3 depredations. They were also involved in at least 2 depredations in the fall of 2007 (FY 2008) when at least 6 sheep were killed, several months before the research project began.

Wolf depredations on cattle increased in every season and in practically every part of the State. Late winter snows kept deer and elk (and wolves) at lower elevations later in the spring. When cattle producers began spring calving operations, wolves were around to take advantage of young calves. But the depredations continued into the summer and fall at rates higher than in previous years. Overall, verified wolf depredations on cattle rose 64% from 61 in FY 2007 to 100 in FY 2008. This is probably related primarily to the annual increase in the proportion of Idaho’s wolf packs that become involved in depredations on livestock.

Another (speculative) possibility regarding increased wolf depredations on cattle is that in some areas, the wild prey base (elk and deer) may now be low enough that wolves are relying to a greater extent on livestock at certain times of year. Any livestock within some packs’ territories during these times may be at increased risk of predation.

The area between Boise and Mountain Home, just at the edge of the Boise National Forest, continues to be an area of high wolf/livestock conflict. In FY 2008, wolves from the Moores Flat pack and High Prairie pack, and possibly dispersing wolves from other packs, were involved in at least 14 depredations which resulted in 1 cow, 7 calves and 32 sheep being killed. Almost all of the depredations took place on private ranches that are marginal wolf habitat, because of

the presence of livestock almost year around. While WS was able to remove 6 wolves from the area during FY 2008, wolf depredations continued on into the fall (FY 2009). WS recommends that when wolves commit depredations in this area, that IDFG allow for more aggressive removals.

Another high conflict area in FY 2008 was between Smith's Ferry and Donnelly where private ranch land adjoins lands controlled by the Boise and Payette National Forests and the Idaho Department of Lands. This area is occupied by the Packer John pack to the South and Stolle Meadows pack to the North. B-327 was involved in several depredations just east of Cascade. There were at least 21 wolf depredations on livestock resulting in 9 cows, 6 calves, 20 sheep and a guard dog killed as well as 2 calves and 3 guard dogs injured. Almost all of the depredations in this area took place on private land.

The area around Stanley saw more wolf depredations than usual in the late summer/early fall. The Basin Butte pack and Galena pack were responsible for 11 depredations which resulted in 10 calves and 36 sheep killed.

WS radio collared a member of the Doublespring pack in late winter because of the probability that the pack would have livestock conflicts in the Pahsimeroi. This pack was involved in at least 6 depredations which resulted in at least 8 calves and 3 sheep killed. Most, if not all, of this pack was killed after the depredations.

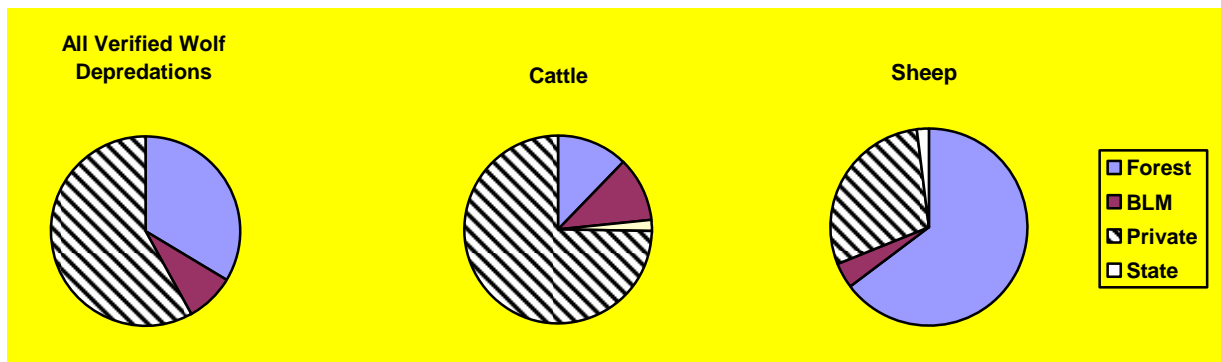


Figure 6. Land status where verified wolf depredations occurred in Idaho in FY 2008.

As indicated in Figure 6., almost 60% of all of the verified wolf depredations in FY 2008 took place on private land. About 3/4 of all verified cattle depredations and just under 1/3 of all verified sheep depredations took place on private land. This data does not necessarily indicate that wolves kill cattle on private land at a higher rate than they do on public property, but it may be indicative that remains of wolf-killed cattle are more difficult to detect on public land grazing allotments than on fenced private pastures. Many wolf-killed cattle on public lands grazing allotments are probably never discovered (Oakleaf 2002).

In 2008, IDFG gave the responsibility for issuing control action orders to the Supervisor for the IDFG Region where a depredation took place. Previously, this decision was the responsibility of the Large Carnivore Manager at the IDFG Headquarters in Boise. Having Regional Supervisors issue take authorizations seems to have been a productive move. The Regional Supervisors, for the most part, are more familiar with the properties and livestock producers in their respective Regions and allowing them to decide what actions WS should take in control circumstances has, in general, allowed for greater efficiency.

WS continues to strongly recommend that in those cases where our program's efforts are unsuccessful in resolving chronic wolf depredation problems within 45 days of the most recent depredation, particularly if an implicated wolf pack, or group of wolves, has a history of livestock depredations from more than one previous year, that additional flexibilities, such as expanding the "45-day rule", be allowed in dealing with these problems. As an example, attempts to remove depredating wolves during the summer grazing season are sometimes complicated by human recreational activity and the presence of livestock and/or nontarget wildlife species during trapping operations. If WS efforts to remove depredating wolves during the summer months are unsuccessful, and it may reasonably be expected that depredations will reoccur during the next grazing season, then WS would like to have the flexibility to reinstate control efforts several months later, during the winter months when implicated wolves may be more vulnerable to removal. We believe 50 CFR 17.84(n)(4)(xi)(B) and (C) and (H) can be reasonably interpreted to allow this flexibility. Wolf removal under these circumstances would be conducted to avoid conflict with human activities, or to prevent wolves with abnormal behavioral characteristics (such as killing 20 or more sheep in a single incident) from passing on or teaching these traits to other wolves. This approach could benefit wolf recovery efforts by reducing the likelihood of future depredations from these packs, along with an expected reduction in both negative publicity and local animosity towards wolves in the affected areas.

With another delisting of wolves in sight, and the IDFG poised to use sport harvest to help control wolf numbers, many wolf advocacy groups have expressed concern about the State's wolf population being drastically reduced in short order. However, a review of the last 5 years of data on wolf take by the Idaho WS program indicates that of 200 wolves taken, only 32 (16%) were taken by shooting from the ground using conventional hunting methods, as compared to 69 (~35%) taken by trapping. Furthermore, almost half of the wolves taken by WS were taken by aerial hunting (99, ~50%). WS employs highly skilled and trained field personnel, and these employees have access to telemetry equipment as well as databases that track the most up-to-date wolf sightings. Yet despite these advantages (advantages that sportsmen will not have), only a small fraction of the wolves taken by WS are taken using the conventional methods likely to be employed by sport hunters.

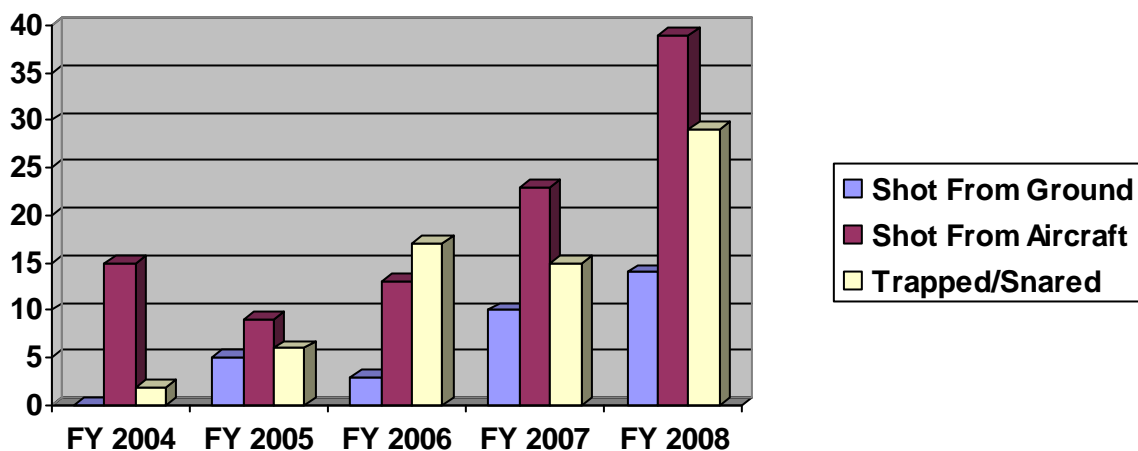


Figure 7. Method of take for wolves killed by Idaho WS from FY 03-08

Hunting from the ground is not the most effective way to take wolves, and after the public is allowed to begin hunting wolves, it would seem likely that wolves will become even more difficult to hunt as they become more wary of humans. Winter harvest levels of 28-47% are sustainable in wolf populations (Mech 2001), but based on WS experience and information regarding wolf harvest in Alaska (where most wolves are taken by trapping and snaring, rather than hunting), we believe it is highly unlikely that hunting alone could be used to accomplish that level of removal in Idaho.

Given the continually increasing number of wolf depredations on livestock in Idaho, it will be difficult for the Idaho WS program to continue the same level of responsiveness to wolf damage complaints unless changes occur. One change, which would seem unlikely in the current economic climate, would be obtaining additional resources to supplement the WS workforce in order to meet the increasing demand for service. Another option, which is more likely achievable, would be for Idaho wolf managers to exercise more of the flexibility allowed under current rules to reduce the number of wolves and problem packs to a more manageable level. The Idaho Fish and Game Commission has recommended managing Idaho's wolf population at a biologically sustainable level of about 500 animals, rather than the current 800-850 level in Idaho. The data in Figure 8. suggest that if Idaho's wolf population could be maintained at around 500 wolves, WS' wolf-related expenditures would be about half what they were in FY 08.

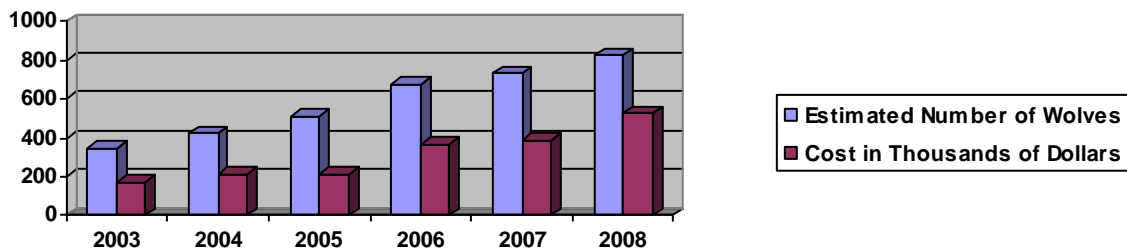


Figure 8. Estimated minimum number of wolves in Idaho compared with WS wolf-related expenditures since FY 2003.

The Idaho Fish and Game Commission has also directed the IDFG *"To develop and aggressively utilize all available tools and methods to control wolf-caused depredation of domestic livestock."* The strategy being implemented in Wyoming for wolf damage management is an example of actions which might approach the charge given by the Idaho Fish and Game Commission. Two years ago, wolf managers in the State of Wyoming began implementing a very aggressive approach to deal with depredating wolves. Instead of continuing with an extended incremental removal approach, which was deemed inefficient and not as effective, the decision was made to move toward a much more aggressive incremental removal. When previously identified chronic depredating packs began preying on livestock, those packs were targeted for removal soon after depredations began again by those packs. In the first year of this approach (2007), confirmed wolf depredations on livestock were reduced >55% compared to the previous year (Jimenez et al. 2008), and depredations in 2008 were likewise reduced significantly from 2006 levels.

Of the estimated 88 wolf packs in Idaho in FY 2008, WS was able to verify that at least 35 of them were involved in livestock depredations. Twenty-six of the packs as well as one individual, B-327, were involved in at least 3 depredations each and were responsible for almost 87% of the total cattle losses and 67% of the total sheep losses. These 26 packs were involved in at least 132 livestock depredations (~81% of the all the verified wolf depredations in Idaho in FY 2008). WS lethally removed 73 wolves, 89% of the total take by WS, in response to the depredations caused by these 26 packs. Employing the approach used in Wyoming for the last 2 years on at least the worst, if not most, of the remaining chronic depredating packs from 2008 would be consistent with the recent charge to IDFG from the Fish and Game Commission. Wolf removal efforts in Idaho are often more challenging and difficult than they are in Wyoming, because most of Wyoming's depredating wolves can be effectively taken through aerial hunting, whereas a greater proportion of Idaho's wolf problems must be addressed through ground control efforts. A combination of much more aggressive depredation control actions and liberal public hunting and trapping seasons will likely be needed to realistically achieve the Idaho Fish and Game Commission goal of managing for a population of around 500 wolves.

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Appendix A

U.S. DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE WILDLIFE SERVICES		REPORT NUMBER I : : 200
WILDLIFE SERVICES DEPREDATION INVESTIGATION REPORT		
SPECIES	NAME OF INVESTIGATOR(S)	DATE COMPLAINT RECEIVED
NAME AND ADDRESS OF LIVESTOCK OWNER/LEASEE		DATE INVESTIGATED
		TELEPHONE NUMBER
		COUNTY
LAND OWNERSHIP <input type="checkbox"/> STATE <input type="checkbox"/> BLM <input type="checkbox"/> TRIBAL <input type="checkbox"/> PRIVATE <input type="checkbox"/> FS <input type="checkbox"/> OTHER (Specify)		TYPE OF LIVESTOCK/PROPERTY <input type="checkbox"/> SHEEP <input type="checkbox"/> CATTLE <input type="checkbox"/> OTHER (Specify)
<input type="checkbox"/> HORSE <input type="checkbox"/> BEES		
LOSSES AND/OR PROPERTY DAMAGE (See criteria on reverse side of form)		
No. Confirmed	No. Probable	No. Possible/Unknown
		No. Other (Specify)
SITE DESCRIPTION/PHYSICAL EVIDENCE PRESENT (i.e., tracks, scat, hair, blood, signs of struggle, scrapes, etc.)		
CARCASSES/PROPERTY DAMAGE CHARACTERISTICS (i.e., puncture marks, feeding patterns, measurements between canines, signs of hemorrhage, etc.)		ESTIMATED TIME SINCE PREDATION/DAMAGE OCCURRED (Days/hours)
ACTIONS TAKEN		DATE STARTED DATE ENDED
NAME OF WS INVESTIGATOR		SIGNATURE
NAME OF DISTRICT SUPERVISOR		DATE
NAME OF STATE REPRESENTATIVE		SIGNATURE
DISPOSITION OF CARCASS/PARTS		DATE

CRITERIA FOR CLASSIFICATION OF REPORTED DEPREDATION INCIDENTS

Reported wolf, bear, or lion depredation incidents should be classified as either **confirmed**, **probable**, **possible/unknown**, or **other**, based on the following criteria. *For MIS reporting purposes, "reported" damage may often include incidents described as **probable**, **possible/unknown**, and/or **other**, if the cooperator first reported these incidents as predation.*

CONFIRMED – Depredation is **confirmed** in those cases where there is reasonable physical evidence that an animal was actually attacked and/or killed by a predator. The primary confirmation factor would ordinarily be the presence of bite marks and associated subcutaneous hemorrhaging and tissue damage, indicating that the attack occurred while the victim was alive, as opposed to simply feeding on an already dead animal. Spacing between canine tooth punctures, feeding pattern on the carcass, fresh tracks, scat, hairs rubbed off on fences or brush, and/or eye witness accounts of the attack may help identify the specific species or individual responsible for the depredation. Predation might also be confirmed in the absence of bite marks and associated hemorrhaging (i.e., if much of the carcass has already been consumed by the predator or scavengers) **if** there is other physical evidence to confirm predation on the live animal. This might include blood spilled or sprayed at a nearby attack site or other evidence of an attack or struggle. There may also be nearby remains of other victims for which there is still sufficient evidence to confirm predation, allowing reasonable inference of confirmed predation on the animal that has been largely consumed.

PROBABLE – Having some evidence to suggest possible predation, but lacking sufficient evidence to clearly confirm predation by a particular species, a kill may be classified as **probable** depending on a number of other factors such as: (1) Has there been any recently confirmed predation by the suspected depredating species in the same or nearby area? (2) How recently had the livestock owner or his employees observed the livestock? (3) Is there evidence (telemetry monitoring data, sightings, howling, fresh tracks, etc.) to suggest that the suspected depredating species may have been in the area when the depredation occurred? All of these factors, and possibly others, should be considered in the investigator's best professional judgment.

POSSIBLE/UNKNOWN – Lacking sufficient evidence to classify an incident as either confirmed or probable predation, the **possible/unknown** classification is appropriate if it is unclear what the cause of death may have been. The investigator may or may not have much of a carcass remaining for inspection, or the carcass may have deteriorated so as to be of no use. The investigator would want to consider if the area has been frequented by a predator, or if the habitat is one which the predator is likely to use. Possible predation may include cases where counts show that abnormal numbers of livestock are missing or have disappeared above and beyond past experience, and where other known cases of predation have occurred previously in the area.

OTHER – Cause of livestock deaths should be classified as **other** when it is discovered that the cause of death was not likely caused by the animal originally reported to Wildlife Services during a request for assistance. Examples of **other** may include cases where the cause of death is confirmed or is likely due to predation by some other animal or cause determined at the time of the investigation such as red fox instead of coyote or other causes such as, bloat, poisonous plants, stillborn, disease, lightning strike, vehicle collision, etc. If the specific other cause of death can be determined, it should be written in the space provided for Other.