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5-YEAR ENVIRONMENTAL MONITORING REVIEW for PREDATOR DAMAGE MANAGEMENT in SOUTHERN IDAHO

Introduction and Summary

In 2002, the Idaho Wildlife Services (WS) program completed an Environmental Assessment[1] (EA) (USDA 2002) which addressed the need to conduct Predator Damage Management (PDM) and the potential impacts of various alternatives for responding to predator damage in southern Idaho. The analysis area encompasses approximately 31 million acres in southern Idaho, including all lands in Ada, Adams, Bannock, Bear Lake, Bingham, Blaine, Boise, Bonneville, Butte, Camas, Canyon, Caribou, Cassia, Clark, Elmore, Franklin, Fremont, Gem, Gooding, Jefferson, Jerome, Lincoln, Madison, Minidoka, Oneida, Owyhee, Payette, Power, Teton, Twin Falls and Washington Counties, as well as a small portion of Custer and Lemhi Counties encompassed by the Little Lost River drainage.

The EA identified 6 Alternatives which were analyzed in detail. Alternative 2, the Proposed Action "Expanded Wildlife Protection Activities" was selected as the Preferred Alternative and a Finding of No Significant Impact (FONSI) was issued and a Decision signed April 16, 2002.

Monitoring reports for Federal Fiscal Years (FYs) 2002, 2003, 2004, 2005 and 2006 were prepared to review program activities and to determine if the EA was consistent with applicable environmental regulations. Based on those reviews, there continues to be no indications that WS' activities are having a significant impact, individually or cumulatively, on the quality of the human environment in the EA analysis area.

Copies of the 2002 PDM EA, FONSI, Decision and monitoring reports are available from the Idaho WS State Office, USDA, APHIS, Wildlife Services, 9134 W. Blackeagle Drive, Boise, ID 83709-1572.

Background

The WS program responds to a variety of requests for assistance from individuals, organizations and agencies experiencing damage and other wildlife-related problems. WS is the Federal program authorized by Congress and directed by law to reduce damage caused by wildlife (Act of March 2, 1931, as amended [46 Stat. 1468; 7 U.S.C. 426-426c], and the Rural Development, Agriculture, and Related Agencies Appropriations Act of 1988, as amended [Public Law 100-202, Stat. 1329-1331]). Wildlife damage management is the alleviation of damage or other problems caused by or related to the presence of wildlife, and is recognized as an integral part of wildlife management (The Wildlife Society 1992).

Purpose of this Review

The purpose of this report is to: 1) review the results of WS' PDM activities conducted in southern Idaho during FY 2002 to 2006 and evaluate the accuracy of the EA analysis, 2) review standard operating procedures designed to minimize or avoid potential adverse environmental effects (Appendix A), and, 3) provide an opportunity for public review.

Scope of Livestock Losses

According to statewide data compiled during 2002 to 2006 by the Idaho Field Office of the National Agricultural Statistics Service (NASS), predation was the single largest cause of death loss for Idaho sheep producers with 29% (5-year average) of the total death losses attributed to predators (IASS 2003, 2004, 2005, NASS 2006, 2007). A 5-year average of 2,740 adult sheep and 8,040 lambs, valued at an average of $1.3 million were reported killed annually by predators from 2002 to 2006 (IASS 2003, 2004, 2005, NASS 2006, 2007). Coyotes were responsible for most of the predation, killing an average of 7,060 head of sheep and lambs annually, valued at $840,000. Predation by domestic and feral/free ranging dogs, black bears,

[1]This EA supersedes the PDM EA that was prepared in 1996 for the same analysis area.

mountain lions, red foxes, gray wolves, eagles, bobcats (IASS 2003, 2004, 2005, NASS 2006, 2007) and common ravens (MIS 2002, 2003, 2004, 2005, 2006) accounted for most of the other predator losses. Based on reported sheep inventories and lamb crop, these losses represented a 3.4% annual predation loss for lambs (range of 2.9% to 3.8% during the 5-year reporting period) and a 1.0% loss for adult sheep (range of 0.6% to 1.6%) (IASS 2003, 2004, 2005, NASS 2006, 2007). These loss levels were sustained with an integrated PDM program in place, however, research results suggest that predation losses in the absence of a PDM program would average about 17% for lambs and 4.5% for adult sheep (USDA 1994).

In response to requests for assistance from livestock producers and the public during FY 2002 to 2006, WS personnel documented an average of 372 adult sheep, 920 lambs, 10 adult cattle, 155 calves, 14 goats/kids, 193 fowl (domestic chickens, ducks, geese, turkeys, etc.), 93 commercial game birds, 34 pets, 5 horses and 80 bee hives killed, injured or damaged annually by predators (MIS 2002, 2003, 2004, 2005, 2006) with an average annual estimated total value of about $223,648. These losses represent only a fraction of the actual losses that likely occurred, and serve more as an indicator of what kinds of predator damage occurred rather than an indication of damage magnitude.

Major Issues Analyzed in Detail

Cooperating agencies helped identify a variety of issues deemed relevant to the analysis in the EA. Issues relating to the reduction of wildlife damage were raised during the scoping process for USDA (1994), to which the 2002 EA was tiered, and during the interdisciplinary approach used to prepare the EA. These issues were consolidated into the following 6 issues that were analyzed in detail:

1. Cumulative impacts on viability of wildlife populations.
2. Effectiveness and selectivity of damage management methods.
3. Risks posed by damage management methods to the public and domestic pets.
4. Concern about WS impacts on Threatened and Endangered (T/E) species and other species of special concern.
5. Cost-effectiveness of WS activities.
6. Concerns about aerial hunting activities.

Cumulative Impacts on Viability of Wildlife Populations

Cumulative effects are the sum of impacts on a species population from all causes, including mortality caused by Idaho WS PDM activities. Generally, WS only conducts PDM on species 1) whose populations are relatively high or considered "*anthropogenic abundant*[2]" (Conover 2002), 2) after they have caused damage and 3) after WS has received a request from the resource owner/manager to conduct PDM. WS' take of targeted predator species during FY 2002 through 2006 did not exceed the levels analyzed in the 2002 EA and current total take is having a low magnitude of impact on those species killed by WS.

Coyote predation continues to be the most common predator problem in the EA analysis area, and more coyotes are taken than any other predator species. Based on the coyote population estimate used in the 2002 EA, the average number of coyotes killed annually by WS in the analysis area and from all other non-WS sources statewide during FY 2002 through 2006 (WS killed an average of 4,375 coyotes per year in the analysis area, and an additional 2,462 coyotes were killed by sport hunters and trappers, Idaho Department of Fish and Game (IDFG) contracted trappers and private aerial hunting activities) is about 25.1%. Pitt et al. (2001) used an "individual-based" computer model to mimic natural coyote populations and assess impacts to populations in relation to varying degrees of proportion removed. The model did not observe a population decrease until more than 60% of the population was removed annually (Pitt et al. 2001). Even if the cumulative number of coyotes killed in Idaho doubled, that level of mortality would still fall below the level where coyote populations would begin declining (Connolly and Longhurst 1975, Connolly 1995, Pitt et al. 2001).

Effectiveness and Selectivity of Damage Management Methods

Non-target animals killed in the EA analysis area during FY 2002 to 2006 ranged from 19 to 40 individuals annually, with an average of < 25 per year, which represents about a 99.5% selectivity for target species. This percentage of non-target animals killed falls within the objectives set in the 2002 EA and in USDA (1994).

[2] Anthropogenic abundant species are those that have benefited from the presence of humans (Conover 2002).

Risks Posed by Damage Management Methods to the Public and Domestic Pets

During FY 2002 to 2006, the number of animals killed during PDM by WS in the EA analysis area ranged from 3,471 to 5,544 annually, with an average of 4,717 animals per year. There were no known incidents of domestic pets being harmed or killed, and there were no reports received of injuries to the public resulting from WS' use of PDM methods. When comparing this information with the total usage of PDM methods, overall risk posed to the pubic and domestic pets is considered extremely low.

To increase the effectiveness and selectivity of methods used by WS, several "hands-on" training sessions were provided to field employees by WS supervisors and wildlife capture professionals, and WS employees continued to share relevant knowledge and experiences with co-workers throughout the year. Idaho WS employees participated in additional training at 3 separate state conferences (June 3-6, 2002, June 4-7, 2004 and June 6-7, 2006) to accrue continuing education credits for pesticide applicator's licenses and Immobilization and Euthanasia certifications, and firearm safety and proficiency.

Concern about WS Impacts on Threatened and Endangered (T/E) Species and Other Species of Special Concern

A common concern among members of the public and wildlife professionals, including WS personnel, is the effect of PDM on Federally designated T/E species and other species of special concern. To help ensure no impact to these species, WS consulted with the U. S. Fish and Wildlife Service (USFWS) (USDI 1992, USDI 2002). A review of the 2002 Endangered Species Act (ESA) Section 7 consultation during this 5-year review determined that the analysis of potential impacts is still applicable.

Canada Lynx. From October 1, 2001 to March 28, 2002, WS' PDM activities conducted in the 2002 EA analysis area were performed under the 2000 Interim Policy Guidelines for Canada lynx since a Biological Opinion (BO) or other administrative guidance had not been issued by the USFWS. However, Idaho WS initiated formal consultation in February 2002 to assess potential impacts of PDM activities on lynx in the EA analysis area. The USFWS's (March 28, 2002) response stated that WS' PDM activities *are not likely to jeopardize the continued existence of the Canada lynx* and an incidental take statement from the BO affirmed that WS' level of anticipated take *is not likely to result in jeopardy to the lynx* (USDI 2002). No lynx were taken by WS during this 5-year review period.

Gray Wolf. The USFWS released a final Environmental Impact Statement (EIS) in May 1994 (USDI 1994), which led to a nonessential experimental population Final Rule (50 CFR Part 17.84) for reintroduction of gray wolves in central Idaho. The final rule was published in the Federal Register (FR) (59 FR 60252-60281) on November 22, 1994. This rule established regulations allowing management of wolves by government agencies and the public to minimize conflicts with livestock and a peer-review process to address impacts on ungulate populations. The USFWS authorized WS to investigate reported wolf predation to livestock and other domestic animals, and to implement corrective measures, including nonlethal and lethal actions, to reduce further predation. All wolves located south of Interstate 90 in the analysis area are considered part of the nonessential experimental population, whereas wolves located north of Interstate 90 (Boundary, Bonner and the northern halves of Kootenai and Shoshone Counties) are afforded full protection under the ESA.

On January 6, 2005, the USFWS published a FR notice (70 FR 1286-1311), expanding management authority of the nonessential experimental population of wolves in Idaho to the State of Idaho (IDFG) and the Nez Perce Tribe. This authority, also known as the new 10(j) rule, took effect February 7, 2005 and provides dog owners and livestock producers, on private property, more flexibility to reduce wolf predation on dogs and livestock (cattle, sheep, horses, mules, goats, domestic bison and herding and guarding animals (*i.e.*, llamas, donkeys and certain breeds of dogs commonly used for herding or guarding livestock). It also allows any livestock producer and public land permittee who is legally using public land under a valid Federal land-use permit, to take a wolf on public lands if attacking livestock or herding and guarding animals. The IDFG has accepted the lead decision-making role in managing the nonessential experimental population of wolves in Idaho. WS still has the responsibility to investigate reports of wolf predation to livestock and other domestic animals, and to conduct wolf depredation management actions in consultation with IDFG. A Memorandum of Understanding (MOU) between IDFG and the Idaho State Animal Damage Control Board was revised in 2006 to clarify WS' role in management of wolf predation on livestock and other domestic animals.

During FY 2002 through 2006, WS investigated 171 incidents of reported wolf predation to livestock in the analysis area (Table 1), averaging about 34 per year, but increasing from 16 incidents to 70 incidents per year during this time. More than 63% of the investigations were determined to be confirmed or probable predation. A total of 570 domestic animals (50 cattle, 509 sheep and 11 dogs) were determined to be confirmed/probable wolf kills or injuries (Table 1).

Table 1. Number of wolf predation investigations, investigations that resulted in confirmed or probable wolf predation, and number of livestock and dogs killed during FY02-06.

RESULTS	FY2002	FY2003	FY2004	FY2005	FY2006	TOTAL
Investigations	16	10	26	49	70	171
Confirmed/Probable	7	4	20	30	48	109
Cattle Killed/Injured[1]	0	1	9	14	26	50
Sheep Killed/Injured[2]	13	4	87	141	264	509
Dogs Killed/Injured	1[3]	1[4]	3[4]	3[4]	3[4]	11

[1] Includes calves and adult cattle.
[2] Includes lambs, ewes and bucks.
[3] Stock/herding dog.
[4] Livestock guarding dog(s).

In response to the reported wolf predation investigations, WS initiated 73 wolf damage management actions (Table 2) to reduce further predation. As a result of those actions, 41 wolves were killed; 5 were trapped, radio-collared and released on site; 2 wolves were trapped, re-collared and released on site; 1 wolf was trapped and released on site because it was too young and neck diameter too small; and 1 wolf was trapped, not collared and released on site because of concerns about possible heat exhaustion. All wolves killed by WS were individuals from the nonessential experimental population and management activities were authorized by the IDFG and coordinated with the USFWS and Nez Perce Tribe biologists, as appropriate. The percent of wolves killed by WS in the EA analysis area each FY as compared to the statewide minimum estimated population ranged from 0.0% to 3.0% and averaged 1.5% over the 5-year period. The USFWS has determined that WS' wolf damage management did not adversely affect wolf populations or recovery.

Table 2. Number of wolf damage management actions and results by FY.

RESULTS	FY2002	FY2003	FY2004	FY2005	FY2006	5-YEAR TOTAL
Control Actions[1]	3	2	11	22	35	73
Wolves Killed	2	0	6	13	20	41
Wolves Captured and Released	1[2]	0	2[3]	2[4]	4[5]	9

[1] For the purpose of this Table, Control Actions involve WS implementing 1) trapping as a method to capture a wolf for collaring and releasing and/or euthanizing, 2) shooting from the ground, and 3) the use of aerial operations as lethal methods, but **does not** include WS use of Radio Activated Guards, less-than-lethal munitions, pyrotechnics, harassment or other nonlethal approaches.
[2] Trapped, radio-collared and released on site.
[3] Two wolves were trapped and released on site (1 wolf was radio-collared while the other was too young and neck diameter too small to collar).
[4] One wolf trapped, collared and released on site and another wolf was released without collaring because of concerns about possible heat exhaustion.
[5] Two wolves were trapped, radio-collared and released on site and 2 wolves were trapped, re-collared and released on site.

During this 5-year review period, one non-target wolf was killed by WS PDM methods. On May 12, 2006, a dead wolf was discovered in a WS neck snare that had been set to reduce coyote damage. The snare had a break-away locking-device incorporated, but for whatever reason, the wolf did not exert enough pull on the snare to free itself. IDFG and USFWS Law Enforcement were immediately notified of the incident and it was determined that "reasonable due care" had been exercised by WS in using the break-away locking device and no violation or warning was issued.

Northern Idaho Ground Squirrel. The northern Idaho ground squirrel was listed as threatened on April 5, 2000. This species is endemic to west-central Idaho and is only known to exist in Adams and western Valley County (USDI 2003). Informal consultation with the USFWS was initiated during the preparation of the 2002 PDM EA and the USFWS concurred with WS that PDM activities are not likely to adversely affect the Idaho northern ground squirrel.

From FY 2002 to 2006, WS conducted PDM activities (Table 3) for the protection of the Idaho northern ground squirrel at the request of the USFWS after their biologists and biologists from the IDFG and Payette National Forest identified specific ground squirrel colonies that were suspected as having possible predation. No northern Idaho ground squirrels or other non-target species were captured or injured during these predator management activities.

Table 3. Results of PDM activities conducted for the protection of the Idaho ground squirrel.

Fiscal Year	Number of Ground Squirrel Colony Sites where PDM was Conducted	Project Dates	Species and Number Killed			
			Badger	Red Fox	Coyote	Striped Skunk
2002	1	May 6-20	1			2
2003	3	May 14 – July 28[1]	3	5	3	
2004	3	Oct. 23, 2003 – July 28, 2004[1]	4	6	3	
2005	1	April 12 – Aug. 15[1]		7		
2006	2	June 2 – July 19[1]	5		1	
5-Year Total			13	18	7	2

[1] PDM activities were conducted intermittently throughout this time period.

Grizzly Bear. When WS becomes involved in capturing a grizzly bear, WS closely coordinates that activity with appropriate USFWS and IDFG personnel. From FY 2002 to May 21, 2006, WS worked under the terms of a 1999 MOU where WS has lead agency responsibility for capture of nuisance grizzly bears, while the IDFG has responsibility for immobilization, handling and release of grizzly bears. A new IDFG MOU was signed on May 22, 2006, and the updated agreement also specifies that WS has lead agency responsibility in working cooperatively with IDFG personnel to capture, immobilize, handle and release any grizzly bears involved in livestock depredations.

Potential risks to grizzly bears from use of the LPC in Idaho are mitigated by the EPA labeling requirement that WS contact the local USFWS office[3] to obtain written approval before using the LPC in specific areas in Idaho. WS did not use the LPC or M-44 devices in areas occupied by grizzly bears during FY 2002 to 2006.

During FY 2002 to 2006, WS responded to 6 reports of grizzly bear predation on livestock. All predation investigations occurred on livestock grazing allotments in the Caribou-Targhee National Forest. Four investigations involved cattle (1 calf confirmed and 1 cow probable grizzly predation, and 2 cows inconclusive as grizzly predation) and 2 involved sheep (3 sheep confirmed and 1 sheep inconclusive as grizzly predation). Five of the 6 investigations resulted in "no action" by WS for various reasons, but 1 required corrective action and WS contacted the Grizzly Bear Recovery Coordinator, as required in WS' USFWS Section 10 subpermit, and was authorized to live trap the bear for relocation. Equipment was set and an adult male grizzly was captured the following day. IDFG personnel assisted WS with immobilizing, transporting and relocating the bear. Idaho WS had no adverse effect on grizzly bears or grizzly bear recovery during this 5-year review period.

Cost-effectiveness of WS Activities

The benefit:cost ratios discussed in the 2002 EA ranged from 2.4:1 to 12:1. During this 5-year review, there were no indicators to suggest that the benefit:cost ratio fell below the minimum ratio (2.4:1) as analyzed in the 2002 EA.

Concerns about Aerial Hunting Activities

Aerial hunting is an important PDM method used in Idaho. The amount of time spent aerial hunting varies depending on the severity of losses and the weather, and low-level aerial activities are restricted to visual flight rules and are impractical in high winds or at times when predators are not visible. Further, WS PDM activities, including aerial hunting, are only conducted on those areas where the landowner or lessee has signed an agreement for control or where work plans have been discussed with appropriate State and Federal land management agencies.

During FY 2002 to 2006, WS fixed-wing and helicopter aerial activities did not result in any fuel spills or fires and there were no reports of threats to human health or safety, with the exception of a non-fatal aircraft crash that occurred

[3] WS will continue to rely on information provided by USFWS, the IDFG and local resource managers with the Forest Service to determine where grizzly bears may occur.

during routine coyote aerial hunting activities on December 20, 2004. The fixed-wing aircraft was a rented aircraft and was considered a total loss by the insurer. The Pilot-in-Command and the single crew member were transported by private vehicle to a local hospital where they were examined by an emergency room physician and released that same day. Each employee fully recovered from their injuries and returned to work shortly after the accident. The crash occurred on private property near Terreton, Idaho and did not result in causing any major environmental damage (gas or oil spillage, or fire) to wildlife habitat, other than a few small sagebrush plants were crushed by the aircraft. There were no reports of the public, other WS employees, wildlife or domestic animals being injured from the accident. The aircraft was disassembled and removed from the area by the insurance company a few days after the accident.

Livestock Protection Collar (LPC) Use

During this 5-year review period, Idaho WS did not use or transfer any LPCs in the EA analysis area. However, 4 collars were disposed of on May 21, 2004 through the Idaho State Department of Agriculture Pesticide Disposal Program at the Caldwell, Idaho collection site. All remaining LPCs are currently stored under lock and key at a secure location.

Compliance and Monitoring

WS' PDM activities have been conducted in a manner consistent with all applicable environmental regulations, including the ESA and the National Environmental Policy Act. APHIS, WS representatives will continue to meet at least annually with cooperating local officials from the BLM, USFS, USFWS, The Nez Perce Tribe, IDFG and Idaho State Animal Damage Control Board, as applicable, regarding conduct of PDM activities. Substantial changes in the scope of work or changes in relevant guidance documents or environmental regulations may trigger the need for further analysis.

RESULTS OF THE 5-YEAR REVIEW

The WS program described in the 2002 EA continued during FY 2002 through 2006 and based on a 5-year review of PDM activities, the effects of implementing the program have been consistent with the analysis in the EA and are not having a significant impact, individually or cumulatively, on the quality of the human environment, and that the affected environment remains essentially unchanged. Therefore, revision of the EA is not deemed necessary and the April 16, 2002 Decision remains appropriate.

Mark D. Collinge

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5/18/07
Date

Literature Cited and References

Connolly, G. E. 1995. The effects of control on coyote populations: another look. Pages 23-29 *in* D. Rollings, C. Richardson, T. Blankenship, K. Canon, and S. Henke, editors. Coyotes in the southwest: a compendium of our knowledge. Texas Parks and Wildlife Department, Austin, Texas, USA.

Connolly, G. E., and W. M. Longhurst. 1975. The effects of control on coyote populations. Division of Agricultural Sciences, Bulletin 1872. University of California, Davis, USA.

Conover, M. 2002. Resolving human-wildlife conflicts: The science of wildlife damage management. CRC Press Company, Lewis Publishers, New York, New York, USA.

IASS. 2003. 2003 Idaho agricultural statistics. Idaho Agricultural Statistics Service. 2224 Old Penitentiary Road, Boise, Idaho, USA.

IASS. 2004. 2004 Idaho agricultural statistics. Idaho Agricultural Statistics Service. 2224 Old Penitentiary Road, Boise, Idaho, USA.

IASS. 2005. 2005 Idaho agricultural statistics. Idaho Agricultural Statistics Service. 2224 Old Penitentiary Road, Boise, Idaho, USA.

MIS. 2002. Idaho WS program statewide overview reports for FY2002. United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services, Idaho WS State Office, 9134 W. Blackeagle Drive, Boise, Idaho, USA.

MIS. 2003. Idaho WS program statewide overview reports for FY2003. United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services, Idaho WS State Office, 9134 W. Blackeagle Drive, Boise, Idaho, USA.

MIS. 2004. Idaho WS program statewide overview reports for FY2004. United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services, Idaho WS State Office, 9134 W. Blackeagle Drive, Boise, Idaho, USA.

MIS. 2005. Idaho WS program statewide overview reports for FY2005. United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services, Idaho WS State Office, 9134 W. Blackeagle Drive, Boise, Idaho, USA.

MIS. 2006. Idaho WS program statewide overview reports for FY2006. United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services, Idaho WS State Office, 9134 W. Blackeagle Drive, Boise, Idaho, USA.

NASS. 2006. Agriculture in Idaho. Issue 5-06, March 1, 2006. National Agricultural Statistics Service, Idaho Field Office, Boise, Idaho, USA.

NASS. 2007. Idaho crop & livestock producers' news. February 16, 2007 Issue. National Agricultural Statistics Service, Idaho Field Office, Boise, Idaho, USA. (www.usda.nass.gov/Statistics_by_State/Idaho/Publications/Special_Reports/pdf/loss_sheep_2007.pdf

Pitt, W. C., F. F. Knowlton, and P. W. Box. 2001. A new approach to understanding canid populations using an individual-based computer model: preliminary results. Endangered Species Update 18:4.

The Wildlife Society. 1992. Conservation policies of The Wildlife Society: A stand on issues important to wildlife conservation. The Wildlife Society, Bethesda, Maryland, USA.

USDA. 1994. Animal damage control program, final environmental impact statement. USDA-APHIS-ADC [WS] Operational Support Staff, 4700 River Road, Unit 87, Room 2D-07.3, Riverdale, Maryland, USA.

USDA. 2002. Environmental assessment. Predator damage management in southern Idaho. United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services, Boise, Idaho, USA.

USDI. 1992. Biological opinion [July 28, 1992]. United States Department of the Interior, United States Fish and Wildlife Service, Washington, D.C., USA.

USDI. 1994. The reintroduction of gray wolves to Yellowstone national park and central Idaho: final environmental impact statement. United States Department of the Interior, United States Fish and Wildlife Service, Washington D. C., USA.

USDI. 2002. Section 7 consultation for the Idaho wildlife services' predator damage management activities in 34 southern Idaho counties File # 140.0000 FWS # 1-4-02-F-0058. Snake River Basin Office, Columbia River Basin Ecoregion. United States Department of the Interior, United States Fish and Wildlife Service, Boise, Idaho, USA.

USDI. 2003 Recovery plan for the northern Idaho ground squirrel (*Spermophilus brunneus brunneus*). United States Fish and Wildlife Service, Region 1, Portland, Oregon, USA.

Appendix A

WS' Southern Idaho Predator Damage Management EA Quality Assurance Checklist[4]

Effects on Target Species Populations

- ✓ Management actions were directed toward localized populations or groups and/or individual offending animals, depending on the species and magnitude of the problem.
- ✓ The total number of predators killed did not exceed the quantitative or qualitative levels analyzed in the 2002 Environmental Assessment (EA) and Predator Damage Management (PDM) activities are having no significant impact on those species targeted.

Effects on Non-target Species Populations

- ✓ The relatively few non-target animals captured were released at the capture site unless the Wildlife Services (WS) employee determined that they would not likely survive.
- ✓ Impact of PDM on non-target animals is negligible and there has been no significant impact on these species' populations.
- ✓ Traps and snares were set at least 30 feet from exposed carcasses (with the exception of sets made for the capture of mountain lion and black bear) to avoid or minimize risk of capturing scavenging bird species.
- ✓ WS personnel are experienced and trained to select the most appropriate method for taking targeted predators and excluding non-target animals.
- ✓ Breakaway snare locks were implemented into the program to facilitate the self-release of deer or elk that might be inadvertently captured.
- ✓ Pan tension devices are used on foothold traps and foot/leg snare devices to minimize the likelihood of capturing non-target species unless such use would preclude capture of the intended target animal.

Protecting human safety

- ✓ Conspicuous, bilingual warning signs alerting people to the presence of damage management devices were placed at major access points when devices were set in the field.
- ✓ No injuries or illnesses to members of the public occurred as a result of WS activities.

Use of Pesticides

- ✓ All pesticides used were registered with the Environmental Protection Agency (EPA) and Idaho State Department of Agriculture (ISDA).
- ✓ To the best of the knowledge of the project or program manager, WS employees followed label directions for pesticide use during the reporting period.
- ✓ No violations of pesticide laws or regulations were noted or documented during field inspections by program or project managers or by State or Federal pesticide regulators.

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[4] Checklist of Standard Operating Procedures to minimize or avoid adverse environmental effects.

- ✓ WS employees that used pesticides during the reporting period were trained and, for restricted use pesticides, certified to use such pesticides in accordance with EPA and ISDA approved programs and participate in continuing education programs to keep abreast of developments and to maintain their certifications.

- ✓ Pesticide use, storage and disposal conform to label instructions, other applicable laws and regulations and Executive Orders 12898 and 13045.

- ✓ Material Safety Data Sheets for pesticides are provided to all WS personnel involved with specific PDM activities.

- ✓ Most pesticide use is primarily restricted to private property.

Historic Preservation

- ✓ WS determined this program's actions are not the kind of actions with potential to affect historic resources.

- ✓ WS consulted with the State Historic Preservation Office and has determined that the program is not likely to affect historic properties or archeological sites.

Native American Cultural Issues

- ✓ No activities were conducted on Native American tribal lands and actions would only be conducted on tribal lands at the request of the tribe.

Humaneness

- ✓ Euthanasia procedures (*e.g.*, CO_2 gas, gunshot to the brain) that minimize pain were used to kill captured target species slated for lethal removal.

- ✓ Pan tension devices are used on foothold traps and foot/leg snare devices to minimize the likelihood of capturing non-target species that are lighter in weight than the target species, unless such use would preclude capture of the intended target animal.

- ✓ Research continued to improve the selectivity and humaneness of management devices.

Endangered, Threatened and Sensitive Species

- ✓ No non-target take of any listed threatened or endangered species occurred.

- ✓ "Reasonable and Prudent Alternatives" (RPAs) or "Reasonable and Prudent Measures with Terms and Conditions" (RPMs) from the 1992 and 2002 or other Biological Opinion from the U. S. Fish and Wildlife Service (USFWS) were applicable to this action; to the best of the knowledge of the project or program's manager, all of the RPAs and/or RPMs were met during the reporting period.

- ✓ If foothold traps were used in the immediate vicinity of concentrations of bald eagles, WS personnel conducted daily checks for trapped target individuals.

- ✓ Neck snares were not used for coyotes, black bears or mountain lions in areas occupied by grizzly bears.

- ✓ All foothold traps larger than #3 Soft Catch were checked at least daily in areas identified by the USFWS as "occupied gray wolf range."

- ✓ M-44s were not used in areas identified by USFWS as documented and occupied gray wolf territories.

- ✓ For Federal lands, sensitive species were addressed during the Work Planning process.

Land Management Issues/Conflicts

- ✓ WS developed Work Plans in coordination with the Bureau of Land Management (BLM), U.S. Forest Service (USFS) and Idaho Department of Lands (IDL) officials before conducting activities on BLM, USFS or IDL lands.
- ✓ Work conducted on BLM, USFS or IDL lands was in accordance with the developed Work Plans referenced above.
- ✓ Vehicle access was limited to existing roads or trails unless otherwise authorized by the land management agency.
- ✓ No conflicts with public land recreationists or other users occurred during the reporting period.
- ✓ Actions in Wilderness Study Areas were conducted in accordance with BLM's Interim Management Policy for Lands Under Wilderness Review (H-8550-1, III. G. 5).
- ✓ No pesticides were used in, and no preventive control work was conducted in any wilderness area.

Additional Measures to Minimize Impacts

- ✓ The WS Decision Model was used to identify the most appropriate PDM strategies and their impacts.
- ✓ Preference is given to nonlethal damage management methods when practical and effective.

Mark D. Collinge

Mark Collinge, State Director
APHIS, Wildlife Services, Idaho

5/18/07
Date

PUBLIC NOTICE

5-YEAR ENVIRONMENTAL MONITORING REVIEW
for
PREDATOR DAMAGE MANAGEMENT in SOUTHERN IDAHO

The U.S. Department of Agriculture, Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) program conducts annual environmental monitoring for Environmental Assessments (EAs) to evaluate the effects of implementing proposed actions and to determine whether the FONSIs and Decisions are consistent with the analysis in the EAs. In 2002, WS prepared an EA on predator damage management in southern Idaho. A FONSI was developed and a Decision was signed April 16, 2002. Annual monitoring for Federal Fiscal Years 2002, 2003, 2004, 2005 and 2006 was conducted to review program data and to determine if the EA was consistent with applicable environmental regulations. Based on a 5-year review of that monitoring, there continues to be no indications that WS' activities are having a significant impact, individually or cumulatively, on the quality of the human environment. Therefore, revision of the EA is not deemed necessary and the April 16, 2002 Decision remains appropriate. Copies of the EA, FONSI and Decision, and 5-year environmental monitoring review report may be obtained from APHIS-WS, 9134 W. Blackeagle Drive, Boise, Idaho, 83709-1572, or by telephone at 208-378-5077.