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5-YEAR ENVIRONMENTAL MONITORING REVIEW
for
PREDATOR DAMAGE MANAGEMENT in NORTHERN and CENTRAL IDAHO

April 2009

Introduction

In 1996, the Idaho Wildlife Services (WS) program completed an Environmental Assessment (EA) (USDA 1996a) which addressed the need to conduct Predator Damage Management (PDM) and the potential impacts of various alternatives for responding to predator damage in northern and central Idaho. The analysis area encompasses approximately 23 million acres and includes all lands in Adams, Benewah, Bonner, Boundary, Clearwater, Custer, Idaho, Kootenai, Latah, Lemhi, Lewis, Nez Perce, Shoshone and Valley Counties.

The EA identified 4 Alternatives which were analyzed in detail. Alternative 2, the Proposed Action "Current Program Plus Use of the Livestock Protection Collar (LPC)" was selected as the Preferred Alternative. After public review, a Finding of No Significant Impact (FONSI) was issued and Decision signed November 4, 1996.

Purpose of this 5-Year Review

The purposes of this 5-year review are to: **1)** review the results of WS' PDM activities conducted in northern and central Idaho during FY 2004 through 2008 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.

Overview of National Environmental Policy Act (NEPA) Documents Associated with this EA

In 1997, a monitoring report was prepared to review the Federal Fiscal Year[1] (FY) 1996 program activities and to determine if the analysis in the 1996 northern and central Idaho PDM EA and the 1996 southern Idaho PDM EA (USDA 1996b) were consistent with applicable environmental regulations. That review resulted in a new FONSI and Decision issued on October 2, 1997 that addressed both 1996 EAs. In 1999, a Monitoring Report and Supplemental EA (USDA 1999) was prepared which reviewed FY 1998 PDM activities in northern and central Idaho and in southern Idaho and analyzed additional PDM needs. The document determined that the FONSIs and Decisions made in conjunction with both 1996 EAs were still appropriate, and supplemented (amendment) the original EAs' analyses to address: **1)** use of the LPC at the U.S. Sheep Experiment Station at Dubois, Idaho, and **2)** PDM to protect sage grouse and sharp-tailed grouse. The document determined that WS' PDM was not causing any adverse impacts to the quality of the human environment. The supplemental analysis enabled WS to use the LPC on the U.S. Sheep Experiment Station and to conduct PDM to protect sage grouse and/or sharp-tailed grouse, most of which would occur in the southern Idaho EA analysis area. A subsequent FONSI was prepared and Decision was signed on August 6, 1999. A legal notice was published in 7 major newspapers, Statewide on August 13, 1999 informing the public of the availability and public review period for the FONSI and Decision.

Monitoring reports for FYs 1999, 2000, 2001, 2002 and 2003 were prepared to review program activities and to determine if the EA was consistent with applicable environmental regulations. Based on those reviews, there continue 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.

[1] The Federal government Fiscal Year covers the period from October 1 through September 30 of each year.

In October 2004, a 5-year environmental monitoring review (hereafter referred to as the 5-year review) was prepared to examine the results of WS' PDM activities in northern and central Idaho during FY 1999 through FY 2003. Based on that 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 the affected environment remains essentially unchanged. Therefore, revision of the EA was not deemed necessary and the August 13, 1999 Decision remains appropriate. A new FONSI was prepared and the Decision was signed October 6, 2004 (USDA 2004).

Monitoring reports for FY 2004, 2005, 2006, 2007 and 2008 were prepared for the 1996 PDM EA[2], as amended, to review program activities and to determine if the EA was consistent with applicable environmental regulations. Based on each of those reports, the effects of implementing the program have been consistent with the analysis in the EA and the affected environment remains essentially unchanged. Additionally, there were 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 afore-referenced documents are available from the Idaho WS State Office, USDA, APHIS, Wildlife Services, 9134 W. Blackeagle Drive, Boise, ID 83709-1572.

Background and Authority

The WS program responds to a variety of requests for assistance from individuals, organizations and agencies experiencing damage and other wildlife-related conflicts. WS is a 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).

Scope of Livestock Losses

According to Statewide data compiled during 2004 to 2008 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 33% (5-year average) of the total death losses attributed to predators (IASS 2005, NASS 2006, 2007, 2008, 2009). A 5-year average of 2,780 adult sheep and 7,700 lambs, valued at an average of $1.44 million were reported killed annually by predators from 2004 to 2008 (IASS 2005, NASS 2006, 2007, 2008, 2009). Coyotes were responsible for most of the predation, killing an average of 6,720 head of sheep and lambs annually, valued at $921,000. Predation by domestic and feral/free ranging dogs, gray wolves, black bears, mountain lions, red foxes, eagles, bobcats (IASS 2005, NASS 2006, 2007, 2008, 2009) and common ravens (MIS 2004, 2005, 2006, 2007, 2008) accounted for most of the other predator losses. Based on reported sheep inventories and lamb crop, these losses represented a 3.7% annual predation loss for lambs (range of 2.9% to 4.3% during the 5-year reporting period) and a 1.3% loss for adult sheep (range of 0.9% to 1.8%). 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). As indicated in the 1996 EA, as amended, less than 10% of the statewide sheep numbers are raised in the northern and central Idaho analysis area, but the statewide data are useful in identifying the relative scope of livestock losses.

In response to requests for assistance from livestock producers and the public in the analysis area from FY 2004 to 2008 (Table 1.), WS personnel documented an annual average of 214 adult sheep, 311 lambs, 16 adult cattle, 103 calves, 26 goats/kids, 69 fowl (domestic chickens, ducks, geese, turkeys, etc.), 7 horses, 1 swine, 1 alpaca/llama, 12 bee hives and 12 domestic dogs killed, injured or damaged by predators with an average annual estimated total value of $161,837 (MIS 2004, 2005, 2006, 2007, 2008). 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.

[2] Monitoring reports for FY 2005, 2006, 2007 and 2008 include program activity reviews from both the 1996 PDM EA, as amended, and 2002 Southern Idaho PDM EA and were combined in to one (1) document for each FY to reduce redundancy and to simplify the environmental monitoring process.

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 1996 EA was tiered, and during the interdisciplinary approach used to prepare the EA. These issues were consolidated into the following 4 issues that were analyzed in detail:

1. Cumulative impacts on viability of wildlife populations.
2. Effectiveness and selectivity of control methods.
3. Risks posed by control methods to the public and domestic pets.
4. Concern about ADC [WS] impacts on Threatened and Endangered (T/E) species.

Table 1. Number of resource-types damaged or threatened and estimated value.

RESOURCE-TYPE DAMAGED or THREATENED	QUANTITY KILLED, INJURED OR AFFECTED/ESTIMATED VALUE[1]					5-YEAR AVERAGE
	FY04	FY05	FY06	FY07	FY08	
Lambs	573/$53,165	270/$24,530	277/$22,890	304/$31,075	130/$16,545	311/$29,641
Adult Sheep	64/$6,660	311/$43,820	266/$31,140	368/$45,475	59/$6,840	214/$26,787
Calves	64/$25,600	52/$28,962	68/$25,600	191/$99,675	142/$62,550	103/$48,477
Adult Cattle	8/$7,000	9/$8,500	5/$5,601	52/$46,750	7/$8,000	16/$15,170
Goats[2]	11/$950	20/$1,305	22/$755	69/$6,958	9/$4,455	26/$2,884
Horses[3]	9/$25,600	5/$2,850	6/$22,500	10/$23,000	3/$800	7/$14,950
Swine[2]	4/$300	0	1/$150	0	0	1/$90
Alpacas/Llamas	0	0	0	2/$5,700	4/$1,800	1/$1,500
Fowl[4]	53/$225	96/$916	75/$615	84/$524	38/$490	69/$554
Bee Hives	0	0	0	0	60/$18,288	12/$3,657
Dogs[5]	10[6]/$3,200	11[7]/$53,500	4[8]/$15,005	15[9]/$2,480	19[10]/$16,450	12/$18,127

[1] Numbers are rounded-off to the nearest whole number.
[2] Includes adults and juveniles.
[3] Includes horses and mules.
[4] Includes domestic chickens, ducks, geese, turkeys, etc.
[5] Dogs are defined as pet dogs (companion, hobby and sporting dogs and hounds) or livestock dogs (herding, stock and guarding dogs).
[6] Seven pet dogs and 3 livestock dogs.
[7] Seven pet dogs and 4 livestock dogs.
[8] Pet dogs.
[9] Thirteen pet dogs and 2 livestock dogs.
[10] Ten pet dogs and 9 livestock dogs.

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*[3]," 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 2004 through 2008 did not exceed the levels analyzed in the 1996 EA, as amended, 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 1996 EA, as amended, (n=21,000), the average number of coyotes killed annually by WS in the analysis area (n=551) and annual average of known mortality from all other non-WS sources (n=1,012) during FY 2004 through 2008 is estimated at 1,563 coyotes[4] (Table 2.) or about 7.4% of the total estimated population. 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 increased 8-fold

[3] Anthropogenic abundant species are those that have benefited from the presence of humans (Conover 2002).
[4] WS killed an average of 551 coyotes per year in the analysis area, and an additional average of 1,012 coyotes were killed annually by sport hunters, fur trappers and private aerial hunting activities.

(59.2%), 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).

Table 2. Number of coyotes killed by Idaho WS and other coyote mortality, by FY.

KNOWN COYOTE MORTALITY	FY04	FY05	FY06	FY07	FY08	5-YEAR ANNUAL AVERAGE
Coyotes Killed by Idaho WS	614	401	593	605	542	551
Coyote Mortality from Sources Other than Idaho WS[2]	923	999	832	1,374	935	1,012[1]
Total	1,537	1,400	1,425	1,979	1,477	1,563[1]

[1] Rounded-off to the lower whole number.

[2] Includes reported statewide harvest by licensed sport hunters and trappers (IDFG 2004, 2005, 2006, 2007, 2008) and coyotes reported taken through private aerial hunting activities (ISADCB no date, 2005, 2006, 2007, 2008)

Effectiveness and Selectivity of Damage Management Methods

Non-target animals killed in the EA analysis area during FY 2004 to 2008 ranged from 2 to 9 individuals annually, with an average of <5 per year, which represents about a 99.4% selectivity for target species. This percentage of non-target animals killed falls within the objectives set in the 1996 EA, as amended, and in USDA (1994).

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

During FY 2004 to 2008, the annual average number of animals killed during PDM by WS in the EA analysis area is 671 (this sum includes an average of 551 coyotes killed annually), with a range of 455 to 808 over the 5 year period. There were no known incidents of domestic pets being 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 other professionals. Furthermore, WS employees continued to share relevant knowledge and experiences with co-workers throughout this 5-year review period. Idaho WS employees participated in additional specialized training at 3 separate WS' State conferences (June 4-7, 2004, June 6-7, 2006 and March 10-13, 2008) to accrue continuing education credits for pesticide applicator's licenses, refresher training in Immobilization and Euthanasia drugs and firearm safety and proficiency to maintain certifications.

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 minimum impact to these species, WS consulted with the U.S. Fish and Wildlife Service (USFWS) (USDI 1992). A review of WS' 1996 Endangered Species Act (ESA) Section 7 consultation during this 5-year review determined that the analysis of potential impacts is still applicable.

Canada Lynx. During the 5-year review period, WS' PDM activities as proposed in the 1996 EA, as amended, were conducted under the 2000 Interim Policy Guidelines for Canada lynx since a Biological Opinion (BO) or other administrative guidance had not been developed by the USFWS. On May 12, 2000, the National WS program initiated formal consultation on the lynx. However, due to numerous delays in completing that consultation, efforts were indefinitely discontinued and on September 26, 2006, WS' Western Regional Office suggested that each individual WS program initiate consultation at their local USFWS office.

WS initiated formal consultation with the USFWS on March 23, 2007 requesting an amendment to the current lynx BO that would incorporate the remaining 13 Counties in Idaho which were not part of the original 2002 BO (USDI 2002). Those 13 Counties reside within the analysis area of the 1996 PDM EA, as amended. The March 23, 2007 formal consultation is still under review by the USFWS and completion is anticipated sometime in 2009. No lynx were taken by WS in the EA analysis area during this 5-year review period.

Gray Wolf. The USFWS released a final Environmental Impact Statement 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 established a nonessential experimental population and was published in the Federal Register (FR) on November 22, 1994 (59 FR 60252-60281). This rule established regulations allowing management of wolves by government agencies and the public to minimize conflicts with livestock and to address impacts on ungulate populations. The USFWS authorized WS to investigate reported wolf predation to livestock and to implement corrective measures, including nonlethal and lethal actions, to reduce 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 northern half of Kootenai and Shoshone Counties) were 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 (this authority was delegated to the IDFG) and the Nez Perce Tribe. This authority took effect February 7, 2005 and provides dog owners and livestock producers, on private property, more flexibility to reduce wolf predation on dogs (pets) and livestock (cattle, sheep, horses, mules, goats, domestic bison and herding and guarding animals[5]). 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.

A Memorandum of Agreement (MOA) was signed between the State of Idaho and the Nez Perce tribe on May 4, 2005 giving the tribe a significant role in wolf conservation. Tribal biologists agreed to monitor wolves within the IDFG McCall Subregion and Clearwater Region and participate with IDFG in other wolf conservation measures. The State and the Tribe agree to make decisions regarding the fair share allocation of wolf harvestable surplus following delisting. The MOA did not transfer or delegate any of IDFG' day-to-day wolf depredation management decision responsibilities to the Tribe.

An MOA between the U.S. Department of the Interior and the State of Idaho, signed on January 6, 2006, gave the State of Idaho the flexibility to take over many of the day-to-day wolf management responsibilities currently performed by the Federal Government. The IDFG 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 (ISADCB) was revised and signed on May 22, 2006. The MOU clarified WS' role in management of wolf predation on livestock and other domestic animals and states that once wolves are delisted they will be managed as follows during the 5-year post delisting monitoring period: "...WS will continue to be responsible for responding to all complaints of wolf predation on livestock and/or any other domestic animals owned by complainants...and for implementing control measures in response to confirmed and probable wolf damage with authorization from the Department." The standard response to confirmed wolf predation would be incremental lethal removal of wolves from the problem area until depredations have been resolved. The MOU also states that WS may handle lethal removal of wolves where IDFG determines that specific wolf behaviors appear to be overly aggressive or determined to be a human safety concern, and where IDFG requests such assistance.

On July 26, 2007, WS requested informal consultation and concurrence of findings pursuant of Section 7 of the ESA with the USFWS on gray wolf populations north of Interstate 90 because when the 1996 informal consultation for the northern and central Idaho PDM EA was conducted there were no areas identified as occupied gray wolf range. Recently wolves have been documented as frequenting areas in northern Boundary County and WS has received requests for assistance to conduct PDM activities. The informal consultation is still under review and is not expected to be completed until later in FY 2009.

On January 28, 2008, the USFWS published in the FR (73 FR 4720-4736) regulations revising the 2005 10(j) rules for the central Idaho and Yellowstone area nonessential experimental population to modify the definition of "unacceptable impact" to wild ungulate populations so that States and Tribes with Service-approved post-delisting

[5] Herding animals include a wide-range of breeds of dogs commonly used for livestock herding (*i.e.* border collie, Australian shepherd, blue healer, dingo, etc.) and guarding animals include livestock guarding dogs (*i.e.* great pyrenees, akbash, maremma, etc.), llamas and donkeys.

wolf management plans can better address the impacts of a recovered wolf population on ungulate herds and populations while wolves remain listed. The revision also modified the 2005 rule to allow persons in States or on Tribal lands with wolf management plans to take wolves that are in the act of attacking legally present stock animals (livestock and riding and packing stock) or dogs on private and Federal lands.

The USFWS published in the FR on February 27, 2008 (73 FR 10514-10560) proposing delisting of wolves in the Northern Rocky Mountains (NRM) Distinct Population Segment (DPS), including populations north of I-90. Thirty days later (March 28, 2008) wolves were officially delisted, however, on July 18, 2008, the U.S. Federal District Court in Missoula, Montana, issued a preliminary injunction that immediately reinstated temporary ESA protections for gray wolves in the NRM DPS. On September 22, 2008 the U.S. Department of Justice filed a motion to the Federal District Court in Missoula, Montana requesting that the February 27, 2008 NRM DPS wolf delisting final rule be vacated and remanded back to the USFWS for further consideration and action. The USFWS, in consultation with its State and other partners, concluded that the best and most timely way to resolve the delisting issue was to get the final rule back in its hands to closely review the Court's ruling, the final rule, the administrative record, any new information and then consider whether modifications or some other action might be warranted. On October 14, 2008, the Court granted the USFWS' motion for voluntary remand and vacatur. During the periods wolves were listed, delisted, and re-listed, wolf depredation management decisions and WS' actions were authorized by the USFWS and/or IDFG.

During FY 2004 through 2008, WS investigated 385 incidents of reported wolf predation to livestock in the northern and central Idaho EA analysis area (Table 3.). Of those investigations, 279 (72%) were determined to be confirmed or probable wolf predation. A total of 1,158 domestic animals (219 cattle, 889 sheep, 3 horses and 47 dogs) were determined to be confirmed/probable wolf kills or injuries (Table 2.). Seven investigations occurred in the area where wolves are listed as endangered and the remaining investigations were conducted south of Interstate 90 in the nonessential experimental population area. The investigations north of I-90 did not result in confirmed predation and no control actions were implemented, however WS did assist with trapping efforts, under the USFWS authorization, to attempt radio-collaring a wolf.

Table 3. Number of wolf predation investigations, investigations that resulted in confirmed or probable wolf predation, livestock and dogs killed or injured and reports from the public concerning their safety by FY.

Results	FY04	FY05	FY06	FY07	FY08	TOTAL
Investigations	59	66	65	78	117	385
Investigations Determined to be Confirmed and/or Probable	28	41	46	64	100	279
Cattle Killed/Injured[1]	14	23	30	59	93	219
Sheep Killed/Injured[2]	193	112	139	342	103	889
Dogs Killed/Injured	1[3]	11[4]	6[5]	5[6]	11[7]	47
Horses Killed/Injured	0	0	0	3	0	3
Reports of Concerns for Human Safety[8]	0	0	2	0	6	8

[1] Includes adult cattle and calves.
[2] Includes ewes, buck and lambs.
[3] Recreational dog (hound).
[4] Seven recreational dogs (hounds) and 4 livestock guarding dogs.
[5] Four recreational dogs (hounds) and 2 livestock guarding dogs.
[6] Three pet dogs and 2 livestock guarding dogs.
[7] Livestock guarding dogs.
[8] Wolf predation investigation reports are not completed for this type of wolf incident.

In response to the reported wolf predation investigations and resulting damage management actions (Table 4.), 139 wolves were killed, 27 wolves were trapped, radio-collared and released on site, and 12 wolves[6]. were trapped and released on site. All wolves killed by WS were individuals from the nonessential experimental population and management activities were authorized by the USFWS or IDFG and coordinated with the Nez Perce Tribe biologists, as appropriate. When comparing the annual Statewide estimated populations with the annual number of wolves killed by WS during this 5-year review period, WS only removed an average of 4.2% of the population (annual range of 2.8% to 7.0%). The IDFG determined that WS' wolf damage management did not adversely affect wolf populations or recovery (S. Nadeau, IDFG, pers. comm. 2009).

[6] These wolves were determined to be too young and neck diameter too small to fit with radio transmitter collars.

Table 4. Results of wolf damage management actions by FY.

RESULTS	FY04	FY05	FY06	FY07	FY08	5-YEAR TOTAL
Wolves Killed	14	19	18	30	58	139
Wolves Captured, Collared and Released	5	3	10	6	3	27
Wolves Captured and Released Without Collaring	1	3	1	0	7	12
Total	20	25	29	36	68	178

During this 5-year review period, 3 (three) non-target wolves were killed by WS PDM methods. On May 12, 2006, a dead wolf was discovered in a WS neck snare that had been set intended for coyotes to reduce confirmed predation[7]. The snare had a break-away locking-device, 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. On January 31, 2007, 2 wolves were accidentally killed by M-44 devices that were set on private property in response to coyote depredation. Law enforcement officials were immediately notified and the USFWS and ISDA law enforcement personnel conducted an investigation. In a January 16, 2009 response letter from the Environmental Protection Agency (EPA) (EPA 2009) to Ms. Wendy Keefover-Ring, EPA stated that "EPA has no reason to believe,...that any of those takes [wolves killed by M-44s] were inconsistent with label directions, applicable reasonable and prudent measures identified by FWS or FWS regulations applicable to experimental nonessential populations."

Northern Idaho Ground Squirrel. Northern Idaho ground squirrels are endemic to west-central Idaho and are only known to exist in Adams and western Valley County (USDI 2003). Informal consultation with the USFWS was initiated in 2002 and the USFWS concurred with WS that PDM activities are not likely to adversely affect the northern Idaho ground squirrel.

The USFWS released the northern Idaho ground squirrel Final Recovery Plan on July 28, 2003 which outlines a recovery strategy for the species (USDI 2003). Included in the strategy is a predator management task that seeks to: 1) identify site-specific predators, 2) assess seasonal impact of predators on known northern Idaho ground squirrel populations, and 3) implement predator management actions.

From FY 2004 to 2008, WS conducted PDM activities (Table 5.) 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 5. 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 Removed			
			Badger	Red Fox	Coyote	Total
2004	3	Oct. 23, 2003 – July 28, 2004[1]	4	6	3	13
2005	1	April 12, - Aug. 15, 2005[1]		7		7
2006	2	June 2, - July 19, 2006	5		1	6
2007	2	May 25, – Aug. 10[1]	4	1	6	11
2008	3	Nov. 6, 2007 – Aug. 8, 2008[1]	2	3	1	6
5-Year Total			15	17	11	43

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

[7] This particular incident was previously reported in the Southern Idaho PDM EA 5-year review (USDA 2007) report, but because the take occurred in an area that was included in both EAs analysis area, it will also be reported in this 5-year review.

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 MOU between IDFG and ISADCB was signed on May 22, 2006 that specifies WS has the lead in investigating depredations and trapping bears in depredation situations.

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[8] to obtain written approval before using the LPC in specific areas in Idaho. WS did not use the LPC in areas occupied by grizzly bears during FY 2004 to 2008.

On July 26, 2007, WS requested informal consultation and concurrence of findings pursuant to Section 7 of the ESA with the USFWS on grizzly bears in northern Idaho because when the 1996 informal consultation was prepared WS did not conduct any PDM activities in the Bitterroot, Selkirk or Cabinet-Yaak Recovery zones, nor in designated grizzly bear distribution areas. The informal consultation is still under review and is not expected to be completed until later in FY 2009. In addressing grizzly bear damage management, WS will continue working under the conditions of a subpermit issued by the USFWS' Grizzly Bear Recovery Coordinator.

WS only responded to one (1) reported grizzly bear depredation during the 5-year review period. A Bonner County rancher reported that a llama had possibly been killed by a grizzly bear in October 2007. WS and IDFG personnel investigated the incident but were unable to confirm that a grizzly bear was responsible. WS provided technical assistance and made recommendations to the rancher on exclusionary fencing and bear harassment techniques. No further action was taken.

Idaho WS had no adverse effect on grizzly bears or grizzly bear recovery during this 5-year review period.

Bald Eagle. On August 8, 2007 bald eagle populations (with the exception of the Sonoran Desert bald eagle DPS of Arizona, which was re-listed as threatened on May 1, 2008) in the lower 48 States was officially removed from the endangered species list (72 FR 37345-37372) since the USFWS determined that protection under the ESA was no longer warranted. However the bald eagle still remains federally protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The USFWS has developed National Bald Eagle Management Guidelines to advise Natural Resource agencies when and under what circumstances the protective provisions of these Acts may apply to their activities to help avoid violations.

LPC Use

During this 5-year review period, Idaho WS did not use or transfer any LPCs in the EA analysis area. However, 4 LPCs 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.

Aerial Hunting Risks

Aerial hunting is an important PDM method used by WS in Idaho during this 5-year review period. 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 this 5-year review period, WS' fixed-wing and helicopter aerial activities did not result in any fuel or oil spills or fires and there were no reports of incidents or threats to human health or safety.

[8] WS will continue to rely on information provided by USFWS, IDFG and local Forest Service (USFS) resource managers to determine where grizzly bears may occur.

Coordination with Federal and State Agencies

Annual Work Plan meetings were held with officials from the Challis/Salmon, Idaho Panhandle, Nez Perce and Payette U.S. National Forests (USFS); the Boise, Coeur d'Alene (Cottonwood Field Office) and Idaho Falls BLM District Offices; and the Eastern and Payette Lakes Area offices of the Idaho Department of Lands. No major concerns or issues related to WS' PDM activities on Federal or State lands were raised or expressed by any of the public lands officials.

Compliance and Monitoring

WS' PDM activities have been conducted in a manner consistent with all applicable environmental regulations, including the ESA and the NEPA. 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 ISADCB, as applicable, regarding 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 1996 EA, as amended, continued during FY 2004 through 2008 and based on this 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 October 6, 2004 FONSI and Decision remains appropriate.

Mark D. Collinge

Mark D. Collinge, State Director
Idaho WS Program

4/1/09
Date

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Appendix A

WS' Northern and Central Idaho Predator Damage Management EA Quality Assurance Checklist[9]

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 1996 Environmental Assessment (EA), as amended, 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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[9] 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 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, wolves 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 property 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 — 4/1/09

Mark Collinge, State Director
APHIS, Wildlife Services, Idaho

Date

The below notice was published in The Idaho Statesman on Tuesday, April 7 through Thursday, April 9, 2009.

NOTICE OF AVAILABILITY

The U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services (WS) program has issued a 5-year environmental monitoring review for an Environmental Assessment (EA) that was prepared in 1996 and entitled "Predator Damage Management in Northern and Central Idaho." FONSIs and Decisions associated with this EA were prepared and signed on November 4, 1996, August 6, 1999 and October 6, 2004. The EA evaluated alternatives and potential impacts to the environment and selected an integrated wildlife damage management approach to protect livestock, natural resources, property and human health and safety from damage caused by predator in northern and central Idaho. The purposes of this 5-year monitoring report are to: 1) review data from WS' predator damage management conducted in northern and central Idaho during FY 2004 to 2008 and evaluate the accuracy of the EA analysis, 2) review standard operating procedures designed to minimize or avoid potential adverse environmental effects, and 3) provide an opportunity for public review. Copies of the EA, FONSIs and Decisions, 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. The 5-Year Review is also available at the following website address:
http://www.aphis.usda.gov/regulations/ws/ws_nepa_public_notice/FONSI_ID_5yr.shtml

OPPORTUNITY FOR PUBLIC COMMENT
Open Dates: April 7 – May 7, 2009