

**Before the President of the United States,
the U.S. Department of the Interior,
U.S. Fish and Wildlife Service, and
the U.S. Department of Agriculture**

Washington, D.C. 20240

**In Re: Petition for Executive Order and Rulemaking)
Banning Aerial Gunning and Poisoning Activities of)
Native Wild Carnivores on Federal Public Lands)**

To:

*The President of the United States, Barack Obama;
Secretary of the Interior, Ken Salazar;
Director, U.S. Fish and Wildlife Service, Sam D. Hamilton;
Secretary of Agriculture, Tom Vilsack; and
Administrator, Animal and Plant Health Inspection Service, Cindy Smith*

Petition for Rulemaking

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TABLE OF CONTENTS

Introduction	3
I. Background	4
II. The U.S. Constitution and the U.S. Supreme Court Favor Wildlife Conservation	6
III. States are not in Compliance with the Airborne Hunting Act; DOI is not Enforcing Compliance with the Airborne Hunting Act; Aerial Gunning is Dangerous, Cruel, and Overused	8
A. The Airborne Hunting Act	8
B. DOI has Failed to Monitor Aerial-Gunning Activities in the US	8
C. Potential Illegal Aerial-Gunning Activities	8
D. Aerial Gunning is an Inherently Dangerous and Reckless Practice	9
E. Aerial Gunning Results in Overkill and is Cruel	10
IV. Sodium Cyanide (M-44s) and Sodium Fluoroacetate (Compound 1080)	11
A. Sodium Cyanide (M-44s)	12
B. Compound 1080 (Livestock Protection Collars)	15
V. WS and National Security Hazards	18
VI. Wild Carnivores Important for Ecosystem Health; Wild Carnivores Engage in Compensatory Behaviors Rendering Predator Control Ineffective	20
A. Carnivores in Ecosystems	21
B. Coyotes and their Compensatory Behaviors	22
VII. The Ugly Economics of Killing Native Carnivores	23
VIII. Non-Lethal Controls to Protect Livestock	24
Conclusion	26
References	27
Airborne Hunting Reform	29
Nixon’s 1972 Executive Order	35

INTRODUCTION

Pursuant to the Right to Petition Government clause contained in the First Amendment of the U.S. Constitution,¹ the Administrative Procedure Act (“APA”),² and the implementing regulations of the U.S. Department of the Interior (“DOI”), the U.S. Fish and Wildlife Service (“USFWS”), the U.S. Department of Agriculture (“USDA”), the Animal and Plant Health Inspection Service (“APHIS”), and Wildlife Services (“WS”), WildEarth Guardians (“Petitioner”) hereby files a petition to ban, through Executive Order and Final Administrative Rulemaking, the airborne shooting of mammalian carnivores,³ commonly called “aerial gunning,” and poisoning of mammalian carnivores on federal public lands. Specifically, this petition seeks:

- (a) A ban on aerial gunning of wildlife by DOI and USDA officials and their agents;
- (b) A ban of aerial gunning of wildlife on federal public lands administered by DOI and USDA;
- (c) A ban on poisoning of mammalian carnivores by DOI and USDA officials and their agents; and
- (d) A ban on poisoning mammalian carnivores on federal public lands administered by the DOI and USDA.

We seek the ban based upon provisions provided by the U.S. Constitution, specifically the Property Clause, Art. IV, § 3, and the Commerce Clause, Art. I § 8, cl. 3, as well as the Airborne Hunting Act, 16 U.S.C. § 742j-1.

¹ U.S. Const., amend. I. (“Congress shall make no law ... abridging ... the right of the people ... to petition Government for a redress of grievances.”). See also, United Mine Workers of Am., Dist. 12 v. Illinois State Bar Ass’n, 389 U.S. 217, 222 (1967) (the right to petition for redress of grievances is among the most precious of the liberties safeguarded by the Bill of Rights); United States v. Cruikshank, 92 U.S. 542, 552 (1875) (the Supreme Court has recognized that the right to petition is logically implicit in, and fundamental to, the very idea of a republican form of government).

² 5 U.S.C. § 553(e) (“Each agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule.”). See also, 5 U.S.C. §552(f) (defining “agency” to include the “executive branch of the Government (including the Executive Office of the President)”).

³ The petition particularly focuses upon native wild mammalian carnivores including but not limited to: badger (*Taxidea taxus*), black bear (*Ursus americanus*), grizzly bear (*Ursus arctos*), bobcat (*Lynx rufus*), coyote (*Canis latrans*), black-footed ferret (*Mustela nigripes*), fisher (*Martes pennati*), Arctic fox (*Alopex lagopus*), gray fox (*Urocyon cinereoargenteus*), jaguar (*Panthera onca*), jaguarundi (*Puma yagouaroundi*) kit fox (*Vulpes macrotis*), red fox (*Vulpes vulpes*) swift fox (*Vulpes velox*), lynx (*Lynx canadensis*), mink (*Mustela vison*), mountain lion (aka cougar) (*Puma concolor*), ocelot (*Leopardus pardalis*), river otter (*Lutra canadensis*), raccoon (*Procyon lotor*), ringtail (*Bassariscus astutus*), hog-nosed skunk (*Conepatus mesoleucus*), hooded skunk (*Mephitis macroura*), Eastern-spotted skunk (*Spilogale putorius*), Western-spotted skunk (*Spilogale gracilis*), striped skunk (*Mephitis mephitis*), long-tailed weasel (*Mustela frenata*), short-tailed weasel (ermine) (*Mustela erminea*), least weasel (*Mustela nivalis*), wolverine (*Gulo gulo*), gray wolf (*Canis lupus*), Mexican wolf (*Canis lupus baileyi*), and red wolf (*Canis rufus*).

Pursuant to APA § 553(e) and those Department of the Interior and Department of Agriculture regulations found at 43 C.F.R. Part 14 and 7 C.F.R. § 1.27, WildEarth Guardians hereby petitions the President, along with the Departments of the Interior and Agriculture, to promulgate regulations to ban the shooting of wildlife from the air, a practice commonly called “aerial gunning,” and to ban sodium cyanide M-44s and Compound 1080 (toxicant delivered via “livestock protection collars”). We further seek to ban aerial-gunning and poisoning activities on the federal public lands that are administered by the DOI and USDA. The APA directs that “each agency (of the Federal Government) shall give an interested person the right to petition for the issuance...of a rule.” 5 U.S.C. § 553.

We request that you initiate a rulemaking process to implement the requested relief within 90 days. In the event you cannot act within that timeframe, we ask that you at least notify us of your timeline for action within that time. We attach proposed regulations.

Standing to File. WildEarth Guardians is an IRS 501(c)(3) non-profit organization incorporated under the laws of New Mexico. WildEarth Guardians protects and restores wildlife, wild rivers, and wild places in the American West. WildEarth Guardians members have both personal and professional interests in America’s wildlands and wildlife. Since 1999, WildEarth Guardians has led efforts to reform WS, including asking it to end aerial gunning of wildlife on several occasions, and through Colorado-based litigation. In 2007, WildEarth Guardians petitioned the Environmental Protection Agency and asked it to banish sodium cyanide M-44s and Compound 1080 for carnivore-killing purposes. We have participated in numerous public comment opportunities related to WS’s actions pursuant to the National Environmental Policy Act (“NEPA”), 42 U.S.C. §§ 4321 *et seq.* As such, WildEarth Guardians is “an interested person” under the APA.

ARGUMENT IN SUPPORT OF PETITION

I. Background

Humans have caused numerous extinctions of species as a result of habitat encroachment and fragmentation, which leads to a loss of dispersal corridors; overhunting; poaching; the change in species assemblages; changes in ecosystem function; disease; and other problems. At risk of extinction are a variety of the world’s taxa including: one-quarter of its mammals, one-eighth of its birds, and one-third of its amphibians (IUCN 2009). Top carnivores face significant risks (Cardillo et al. 2004). Yet, native North American mammalian carnivores are vital to ecological health and ecosystem function, as biologists have reported, in ever increasing numbers of peer-reviewed journal articles (*e.g.*, Beschta and Ripple 2009). Despite their importance, top carnivores such as coyotes, wolves, cougars, and black bears are killed in the tens of thousands annually. This persecution stems from anachronistic belief systems, not the best available science.

WS is an important cause of species imperilment in the U.S. It was a major force in eliminating wolf and grizzly bear populations in the continental United States by 1940. In 2008, it spent over \$120 million to kill more than approximately five million animals— primarily birds, and

hundreds of thousands of mammals such as black and grizzly bears, beavers, mountain lions, coyotes, and wolves.

Currently, WS (as well as states and private individuals), aerial guns, traps and snares animals, and broadcasts a panoply of dangerous toxicants—that harm a variety of taxa on public lands. Between 2004 and 2008, WS killed 13,375,311 animals, including 561,353 mammalian carnivores—particularly coyotes.

Most of WS's budget comes from federal tax dollars, but states and counties also contribute. Additionally, WS receives funding from private cooperators such as the Woolgrowers Association. This biologically and fiscally expensive program burdens wildlife recreationists and taxpayers. The State of Wyoming annually pours approximately \$6 million into carnivore-killing programs, and the State of South Dakota also contributes to a state-funded, carnivore-killing program. In Nevada, hunting license revenues partly go towards killing native wild carnivores in hopes to boost ungulate populations for sport-hunting purposes.

Why the slaughter? To benefit agribusiness and to help states bolster the ungulate-hunting business. Both precepts are misguided. First, the government's own data show that native carnivores kill few livestock (less than 5% each year). Domestic livestock readily die from weather, disease, and birthing problems. With the aid of time-tested non-lethal husbandry techniques, agribusiness can substantially reduce unwanted losses—but it requires that it take responsibility for managing their herds rather than leaving them unattended to the forces of nature. Second, mammalian carnivores face death because of unfounded presumptions that fewer native carnivores will result in more ungulates, ground-nesting birds, or other species. As we discuss below, these conjectures have largely been dispelled by scientific study. For example, ungulate populations are affected by a whole host of causes such as poor winter range conditions, disease, competition from domestic livestock, livestock-borne diseases, over-hunting, habitat fragmentation or loss, too much snow, and drought.

Biologists and federal oversight agencies have long criticized the efficacy of WS's predator-killing programs. They have cited them as unsustainable and environmentally harmful. Some have dubbed the agency's predator-control program the "sledgehammer approach" to wildlife management because of the breadth of extermination.

While engaged in aerial-gunning activities, a pilot and a gunner shoot at animals from low-flying aircraft. Typically, the crew eradicates as many native carnivores as they can find, as testimony below indicates. Aerial gunning comes fraught with accidents. Pilots fly into power lines and trees. Gunners shoot their own engines or other mechanical parts. Pilot Bleazard only reported about the maimed coyotes that day because the gunner had lodged a "high power shot shell" into the airplane's strut. Failure to make a clean kill exacts another cost: aircraft double back, and frequently plummet from their own wind shear turbulence. Since 1973, aerial gunners have experienced 119 accidents that resulted in 70 injuries and 38 fatalities.

As we demonstrate in this petition, sodium cyanide M-44s are a particularly indiscriminate means to kill wildlife. These lethal booby traps, are ubiquitously planted on our federal public lands. They have endangered people, pets, and species protected by the Endangered Species Act

(“ESA”), 16 U.S.C. §§ 1531 *et seq.* Next, Compound 1080, although it kills approximately 50 animals per year, has enormous associated hazards. WS cannot keep track of either of these toxicants, according to federal auditors and review of agency records.

WildEarth Guardians therefore seeks from the Obama Administration, an Executive Order and accompanying Final Administrative Rule to abolish the most egregious, indiscriminate, and cruel means used to kill native carnivores: aerial gunning and the toxicants sodium cyanide (dispensed via M-44 booby traps) and Compound 1080 (dispensed via “livestock protection collars”). In the interim, we seek an immediate moratorium on these activities.

As we show in this petition, aerial gunning activities go unmonitored by the Department of the Interior, that agency charged with execution of the Airborne Hunting Act. WS agents and others have engaged in reckless, even illegal acts when it comes to aerial gunning. As testimony from a whistleblower demonstrates, WS routinely overkills mammalian carnivores in vain attempts to remove a single individual that has preyed upon domestic livestock. Recently, an individual in Idaho took to his “powered parachute,” and allegedly shot and killed a wolf. WS failed several federal audits relative to their failure to maintain their toxicant inventory in a safe manner.

Unbelievably, these programs are funded by American taxpayers. Change is needed now. American wildlife management must not only come into conformance with the best available science, but also respect American values. The majority of citizens long for wildlife conservation, not federally sponsored wildlife extermination.

President Richard Nixon set a precedent for banning sodium cyanide and Compound 1080 for killing native wildlife. In 1972, Mr. Nixon issued Executive Order 11643, which banned the usage of sodium cyanide and Compound 1080, which was used to poison native carnivores, on federal lands. Then EPA Administrator, William D. Ruckelshaus, cancelled all usage of these two toxicants for killing native carnivores by administrative order, noting the acute toxicity of these poisons and their propensity to cause secondary and accidental poisonings. *See* 37 Fed. Reg. 5718 (1972); 40 Fed. Reg. 44726, 44734-35 (1975). Unfortunately, Nixon’s order was overturned by the Reagan Administration and others but because viable non-lethal alternatives (detailed below) to using dangerous toxicants and aerial gunning are available, the time for change is at hand.

We request that the Obama Administration ban the placement toxicants sodium cyanide (M-44s) and Compound 1080 (livestock protection collars) and stop all aerial-gunning activities on federal public lands.

II. The U.S. Constitution and U.S. Supreme Court Favor Wildlife Conservation

The U.S. Constitution’s Property Clause provides that “Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States.” Art. IV, § 3, cl. 2. The U.S. Supreme Court has decided that the Property Clause of the United States Constitution gives Congress “complete power” over federal lands. *See Kleppe v. New Mexico*, 426 U.S. 529, 535 (1976). Under the Property Clause, Congress may preempt traditional state trustee and police powers over wild animals, giving the federal

government authority to regulate and protect wildlife on federal land. See id., 426 U.S. at 535. See also, Wyoming v. United States, 279 F.3d 1214 (10th Cir. 2002); 43 C.F.R. § 24.3.

Also in Kleppe, the Supreme Court determined that Congress intended to protect non-native wild horses because they “contribute to the diversity of life forms within the Nation and enrich the lives of the American people.” Kleppe, 426 U.S. at 535. The Court further stated that, “wild free-roaming horses and burros ‘are living symbols of the historic and pioneer spirit of the West.’” Id., at 535-536. In particular, the Court noted that wild horses and burros had been cruelly treated—used for target practice, harassed, and killed for sport and profit. Thus, the Court declared that killing wild horses and burros amounted to “*senseless slaughter.*” Id., at 536 (emphasis added).

Wild horses, a non-native species, are protected under the Constitution and afforded protections. Therefore, under the reasoning provided in Kleppe, the principals of conservation and protection should be similarly extended to wild American carnivores such as wolves, coyotes, cougars, foxes, and bears. Instead, tens of thousands of wild and domestic animals are “senselessly slaughtered” by the each year from poisons and aerial-gunning activities.

The U.S. Constitution’s Commerce Clause also affords protection to native wildlife. In a more recent case, a federal district court determined that red wolves are “things in interstate commerce” because they have moved across state lines and their movement is followed by “tourists, academics, and scientists” -- among others. Gibbs v. Babbitt, 31 F.Supp.2d 531, 535 (E.D. N.C. 1998). There, the court found that tourism generates substantial revenues as part of interstate commerce, and that interstate commerce can be threatened by intrastate activities such as predator control operations by individuals on private lands. See id. Upon affirming the district court’s opinion, the Fourth Circuit Court of Appeals determined that species conservation was “important to the welfare of our country” and that the federal government had the power “to preserve scarce resources in one locality for the future benefit of all Americans” – even to wild carnivores that could cause harm to livestock and crops. Gibbs v. Babbitt, 214 F.3d 483, 492 (4th Cir.2000). In fact, the Circuit Court specifically noted that wolves’ predation activities were environmentally beneficial.

The U.S. Supreme Court has held that states hold wildlife in trust for its citizens for conservation and protection. See Hughes v. Oklahoma, 441 U.S. 322 (1979). Indeed, the public trust doctrine as it applies to wildlife goes back to English common law.

In sum, the U.S. Constitution and several court decisions have upheld the notion that wildlife should be protected for the benefit of the public by federal oversight. The Supreme Court particularly has noted that our nation’s wildlife should not be “senselessly slaughtered” for fun, sport, or profit. Our wildlife are “living symbols” that have intrinsic values—not only unto themselves but for the benefit of environmental regulation—and thus to humankind through their “ecosystem services,” which are necessary for the function of ecosystems and their by-products such as clean water and air (discussed below).

III. States are Out of Compliance with the Airborne Hunting Act; DOI Does Not Enforce the Airborne Hunting Act; Aerial Gunning is Dangerous, Cruel, and Overused

A. The Airborne Hunting Act

While the Airborne Hunting Act (“AHA”), 16 U.S.C. § 742j-1, generally prohibits the act of shooting of animals from aircraft in a practice commonly called “aerial gunning,” it grants a broad exemption to individuals, states, and the federal government, however. Under the airborne-hunting exemptions, the AHA requires that “States, or any agency thereof” issue aerial hunting permits for these operations, but they must supply *annual* written reports to the Secretary of the Interior. 16 U.S.C. § 742j-1(b). Those reports detail the identity of the shooters, their aircraft, the kinds and numbers of species killed, the locations, and the reasons why the animals have been shot. Congress placed the AHA under the jurisdiction of the Secretary of the Interior both for enforcement purposes, but also required that the Secretary “*promulgate such regulations as he deems necessary and appropriate to carry out such enforcement.*” 16 U.S.C. § 742j-1 (emphasis added).

B. DOI Has Failed to Monitor Aerial-Gunning Activities in the U.S.

On April 30, 2009, WildEarth Guardians submitted a request to the DOI pursuant to the Freedom of Information Act (“FOIA”), 5 U.S.C. § 552. We had asked for all annual reports provided by states pursuant to the AHA for the previous decade. See FOIA #2009-00811.

In July, WildEarth Guardians received a partial response that indicated that the DOI had only a handful of records. Because the agency had segregated our FOIA, it said that it would send records for 2007 and 2008 at a later date. In October, we received those reports. The responses we received show that the DOI had either lost annual reports, or that states had not been in reporting compliance with the AHA for the past decade. [See Exhibit 1].

One can only conclude, because of the paucity of records, that the DOI has not adequately (if at all), examined the practice of aerial gunning in the United States for the past ten years. As a result of its failure to monitor aerial-gunning activities, it appears that those activities are not being scrutinized and that illegal activities are occurring. We elaborate with three examples.

C. Potential Illegal Aerial-Gunning Activities

We have reason to believe that individuals and the federal government itself are aerially gunning wildlife illegally. Aerial-gunning operations in the United States are not in compliance with state and federal laws, and aerial-gunning actions go unmonitored by the DOI.

In June 2009, a WS’s agent, Gary Strader, filed a whistleblower complaint alleging that his federal colleagues had illegally shot mountain lions from airplanes in Nevada for purposes of trophy hunting. Mr. Strader complained that after he exposed these illegal activities to WS officials, he was fired. On June 26, 2009, Judge Craig A. Berg found that the government had illegally fired Mr. Strader under provisions of the Whistleblower Protection Act. Judge Berg concluded that WS had “not provided any evidence to corroborate [its] claim that a lack of funds

was the reason it terminated” Mr. Strader. Case before the U.S. Merit Systems Protection Board, Western Regional Office, Docket Number SF-1221-09-0692-S-1.

In another incident, on October 1, 2009, the *Associated Press* (“AP”) reported that Carl Ball of Idaho illegally shot at a pack of wolves from a powered parachute in June. According to the AP, Mr. Ball was working on a ranch owned by Idaho State Senator Jeff Siddoway. Mr. Ball called Senator Siddoway by cell phone while flying in an attempt to get permission to shoot at a pack of wolves. Senator Siddoway claimed that he was granted permission by the Idaho Department of Fish and Game to shoot the wolves. He then authorized Mr. Ball to do so. Mr. Ball allegedly told Idaho Fish and Game that he probably killed a wolf; that he shot the animal twice; and the wolf secreted itself under a bush and its body was never recovered. Apparently, Mr. Ball has not been prosecuted for his act, despite the fact that four months has passed.

In 2001, David Moreno, a WS agent based in Grand Junction, Colorado, told a gathering of Colorado Division of Wildlife officials, ranchers, and members of the Colorado Mule Deer Association (“CMDA”) that livestock producers need to orally vouch that they have had a five-year history of livestock damage from predation in order to gain assistance from WS. Mr. Moreno was apparently trying to assist a hunting group, the CMDA, with coyote-killing schemes to bolster mule deer populations in western Colorado, according to minutes of the meeting taken by a Colorado Division of Wildlife employee. Upon information and belief, we understand that Mr. Moreno offered aerial gunning services to help individuals with *wildlife* management, not livestock protection—a request considered outside of the purview of the federal agency’s jurisdiction based on NEPA documents and memoranda of understanding with the State of Colorado.

CMDA had wrongly blamed coyotes for declining mule deer herd populations and was attempting to collude with WS to get the agency to aerial gun for purposes of wildlife management. CMDA’s suppositions were not based upon scientific evidence. At the time, the Colorado Division of Wildlife had published studies that had cited habitat loss, poor nutrition, and disease as the primary causal agents for the mule deer population decline.

We complained of the coyote-killing proposal to several federal and state officials. As a result, Mr. Moreno and WS were investigated by special agent Jane Quimby of the Federal Bureau of Investigation (“FBI”), an investigator with the USDA’s Inspector General, and the FWS. The outcome of these investigations has not been made public.

D. Aerial Gunning is an Inherently Dangerous and Reckless Practice

WildEarth Guardians has documented 119 aerial-gunning accidents or incidents that have resulted in 70 injuries and 38 fatalities since 1973. In aerial hunts, pilots fly at low altitudes, which leaves little margin for error. In 107 of the plane or helicopter crashes, distracted pilots have flown into power lines, trees or land formations. In some instances, gunners have shot their own aircraft or bullet casings have become lodged in the cabin’s mechanical workings. See www.goAgro.org. [Exhibit 2].

E. Aerial Gunning Results in Overkill & Is Cruel

WS Whistleblower Gary Strader explains how WS carries out aerial gunning programs in testimony captured on yet unpublished documentary footage:

Every area will have their resident coyotes; so, if you've got a band of sheep in an area, and you got resident coyotes, those coyotes may or may not be the ones killing the sheep. The only way to know that if you did or did not get the offending coyote is if the lamb killing stops.

I have seen where a coyote will come 20 miles to a band of sheep and kill and then go back to his home territory. Every day [return and] do it [kill a lamb]. A thousand sheep concentrated in an area will produce scent and sound that will carry for miles. Twenty miles is nothing for a coyote.

So let's say a scenario: a sheepman is losing sheep and he calls Wildlife Services. They send a plane in. They fly around those sheep and shoot the resident coyote, but the killing is still going so. So they may go a little further, they may go 3 or 4 miles and they kill every coyote there. That coyote is coming from 20 miles and is coming at night when the plane's not there. So they [Wildlife Services] make a circle. They kill every coyote within 5 miles. The [lamb] killing is still going on. They kill every coyote within 6 miles. The [lamb] killing is still going on. They have to kill every coyote. All these coyotes they're killing are not bad coyotes. They're not the offending coyote. They have to kill every coyote. They have to keep killing and keep killing and keep killing and keep killing until they get the offending coyote. And when the [lamb] killing stops, they know they got it. But how many coyotes did they kill before the killing stops? They might kill the right coyote the first time, or they may have to kill 100 coyotes before they get the right one.

Aerial gunning results in widespread injury and death of animals—yet, most are innocent of preying on domestic livestock—the reason these permits are generally granted. Gunners shoot every native wild carnivore in an area to prevent potential future conflicts (Mitchell et al. 2004). Research biologists have described WS's work as haphazard and harmful. They dubbed the agency's methods the “sledgehammer” approach to wildlife management to indicate that the scale of predator eradications by WS is biologically harmful and unselective for the species killed (Treves and Karanth 2003, Mitchell et al. 2004, Stolzenburg 2006).

A Utah WS agent, who shoots coyotes from aircraft for a living, unknowingly confessed to a reporter in a Moab bar, “no one wants you to see this shit. It's a killing floor.” (Ketchum 2008).

William Bleazard, a pilot for WS, wrote about an aerial-gunning mission gone awry in his accident report when the gunner had repeatedly shot the craft:

...the first coyote went down and we both wrongly assumed he was dead, the second was still in the pass and as we crossed over him Bruce fired two times and missed. It took four more runs . . . to kill the second coyote it took several passes to finally dispatch this wounded coyote . . . we must have made eight or ten runs before making the killing shot (USDA Aerial-Gunning FOIA response 1998 WS Incident Report). [Exhibit 3].

It is not uncommon for aerial gunners to make several passes in order to kill an animal because they often do not make “clean” kills. When a low-flying, slow-moving craft doubles back into its own wake of air, the turbulence increases the risk of accidents. To underscore: aerial gunners often do not make clean kills, which is cruel. Aerial gunners and pilots engage in reckless acts that cause harm to themselves.

In sum, we ask the Obama Administration to ban aerial gunning of wildlife by DOI and USDA officials and their agents. We also seek a ban of aerial gunning of wildlife on lands administered by the DOI and USDA. Because the Airborne Hunting Act comes under the jurisdiction of the Secretary of the Interior, we ask you to place an immediate moratorium on aerial gunning until the ban goes into effect. The DOI has not scrutinized the practice for at least a decade, and the federal government and individuals are using aerial gunning to commit illegal acts. We request that you initiate a formal investigation into the wolf- and mountain lion-shooting incidents and enforce the AHA. Aerial gunning is a dangerous and reckless practice and it makes no sense to senselessly slaughter native wild carnivore populations via aerial gunning. Furthermore, we ask that the DOI make states come into reporting compliance with the AHA. Based on DOI’s records that we received, many states are not in compliance, and the DOI has failed its duty to enforce the AHA. Therefore, we seek an immediate cessation of aerial gunning activities for the above reasons.

IV. Sodium Cyanide (M-44s) and Sodium Fluoroacetate (Compound 1080)

WS uses sodium cyanide-M-44 devices and Compound 1080-livestock protection collars to kill mammalian carnivores, especially coyotes but many other species, including those that enjoy federal protections such as California condors and bald eagles. Both agents are Category I toxicants, the most acute, according to the EPA (EPA 1994, 1995). These deadly biological agents pose imminent harm to the environment and to people and are considered biological warfare agents.

WS hopes that these toxicants will benefit livestock growers, but risks associated with their use are great (including mishaps involving humans, pets, and protected species). WS has experienced a string of failed Office of Inspector General (“OIG”) audits relative to its toxics program (discussion below). Because any benefits from these toxicants are outweighed by their dangers, WildEarth Guardians petitioned the EPA in January 2007 to ban these toxicants (Docket number, EPA-HQ-OPP-2007-0944). The EPA reviewed our petition and its four addenda and then organized a public comment period from November 2007 to March 2008. It received over 50,000 public comments that favored a ban on the two toxicants.

On January 16, 2009, the EPA made a determination not to cancel or suspend these toxicants; on

January 30th, WildEarth Guardians asked the Administrator Lisa Jackson to reconsider the decision in light of the change in Administrations. Again, we received an adverse decision. In March 2009, the undersigned met with EPA officials in Washington, D.C. They agreed to take another look at the petition. As of this date, no final decision has been rendered.

A. Sodium Cyanide M-44s

M-44s are spring-loaded devices, topped with smelly baits that lure carnivores. When a carnivore tugs on the M-44, a spring shoots a pellet of sodium cyanide into the animal’s mouth. When the cyanide pellet mixes with moisture, it morphs into hydrogen cyanide gas, which is easily absorbed by the lungs (USDA-APHIS-ADC 1997). Death is rapid (Goncharov et al. 2006, Hooke et al. 2006).

Figure 1
USDA-APHIS-WS M-44 Mortalities (2003-2008)
Data from USDA-APHIS-WS

	2003	2004	2005	2006	2007	2008	TOTAL
Badger	4	3	0	0	0	0	7
Bald Eagle	1	0	1	0	0	0	2
Black Bear	1	0	4	2	1	1	9
Bobcat	1	5	15	1	3	0	25
Coyote	13,275	10,630	11,569	12,564	12,871	11,233	72,142
Crow	0	0	4	0	2	1	7
Deer, W-T	0	0	0	0	0	1	1
Dogs	108	117	92	112	90	68	587
Fox, Gray	527	277	301	450	610	626	2,791
Fox, Kit	27	29	25	24	10	6	121
Fox, Red	494	387	353	394	368	389	2,385
Fox, Swift	16	19	8	24	27	27	121
Hogs (Feral)	7	4	7	9	10	11	48
Javelina	2	0	2	0	0	0	4
Marmot	0	1	0	0	0	0	1
Opossum	83	96	64	113	54	69	479
Raccoon	331	291	218	198	189	276	1,503
Raven	4	7	2	2	3	5	23
Ringtail	4	1	2	1	0	0	8
Skunk, Striped	167	113	59	76	34	49	498
Vulture, Turkey	0	0	0	0	0	1	1
Wolves, Gray	1	0	0	1	2	0	4
TOTAL	15,053	11,980	12,726	13,971	14,274	12,763	80,767

Sodium cyanide is acutely toxic to both birds and mammals (USDA-APHIS-ADC 1997), and M-44s kill hundreds of non-target species (e.g., bears, badgers, kit and swift foxes, bobcats, ringtail cats, javelinas, beavers, hawks, and pets) and thousands of target species (particularly coyotes and striped skunks) each year. See <http://www.goagro.org/>.

After only two minutes, a subject that triggers an M-44 device can die (Hooke et al. 2006). M-

44s are highly dangerous for field personnel to place,⁴ and potentially even more dangerous for the unsuspecting humans that might come in contact with them (Petel et al. 2004). Bird deaths from M-44 poisoning are underreported because of birds' ability to leave the vicinity in a few seconds (USFWS 1993).

The EPA's M-44 use restrictions under the Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA"), 7 U.S.C. §§ 136 *et seq.*, prohibit use in areas where federally listed threatened or endangered species occur. See EPA Registration No. 56228-15. Despite this fact, WS and the USFWS executed a biological opinion allowing for their use in lynx core areas in Colorado (USFWS 2005). In its Biological Opinion of 1993, the USFWS noted that WS killed several non-target species of concern with M-44s: grizzly bears, kit and swift foxes, and ringtails. The agency found that M-44s could potentially jeopardize the continued existence of jaguarundi, ocelot, and California condors, among other species (USFWS 1993). In August 1998, Montana, Fish, Wildlife and Parks documented that a grizzly bear died from an M-44. [Exhibit 4]. Bobcats are killed by M-44s. Bobcats are closely related to Canada lynx, a threatened species. Therefore, lynx could potentially be harmed by M-44s. [Figure 1].

WS's Colorado environmental assessment states, "although the M-44 is selective for canids, APHIS-WS takes some nontargets other than canids on rare occasions" (USDA 2005). But M-44s may be selecting for the wrong canids, as a study at the Hopland Research and Extension Center showed that younger coyotes were more likely to be attracted to M-44s than were older animals—the ones more likely to be implicated in livestock losses (Sacks et al. 1999, Mitchell et al. 2004). WS likely indiscriminately kills animals that were never involved in livestock conflicts (Treves and Karanth 2003).

Despite federal regulations, WS has a track record of killing threatened or endangered species such as wolves and condors, as well as failing to adequately post notices, resulting in dead pets and causing primary and secondary exposure to humans. In 1994, the EPA promulgated twenty-six use restrictions governing the placement of M-44s under FIFRA. Nevertheless, APHIS has, on a number of occasions, violated FIFRA and the ESA or the Bald and Golden Eagle Protection Act, 16 U.S.C. § 668.⁵ By their very nature, M-44s are indiscriminate. As a result, pets and humans have been put into danger. In each of the instances that follow, the use restrictions for M-44s were violated by WS:

- In 1994, in New Mexico, WS illegally placed several M-44's in the Gila National Forest. The New Mexico Department of Agriculture fined WS \$1,000 and suspended the license of the trapper and his supervisor.
- In 1994, in Oregon, Amanda Wood Kingsley was exposed to sodium cyanide after her dog triggered an M-44 on her private property. Ms. Wood suffered secondary poisoning after she gave her dog mouth-to-mouth. WS illegally placed the device there without her knowledge or permission.

⁴ In Australia, sodium cyanide applicators must have a respirator on hand, special clothing, and an antidote kit (Petel et al. 2004), whereas Wildlife Services personnel are simply warned not to travel with cyanide capsules in the glove box or in tool boxes and to carry an antidote kit (USDA-APHIS 2001).

⁵ See WS's kill tables: http://www.aphis.usda.gov/wildlife_damage/prog_data/prog_data_report.shtml.

- On March 3, 1999, while irrigating his farm in Crawford, Colorado with his three-year old daughter and his dog, Paul Wright witnessed his dog's death after it had triggered an M-44 illegally placed on Mr. Wright's private property. A lawsuit was filed February 2000 in federal court and the matter settled in 2001. The USDA paid the Wrights \$9,500.
- In May 1999, a Virginia couple lost their dog, Rufus, to an M-44.
- In December 1999, two bird-dogs were killed by sodium cyanide during a bird-hunting trip in New Mexico on state lands.
- In January 2000, a dog died from M-44 poisoning in Estacada, Oregon.
- In May 2001, Maggie and Johnny Watson's dog in Gardner, Colorado was poisoned by an M-44. Other neighbors' dogs may have also been similarly poisoned.
- On February 4, 2002, Danielle Clair's dog died by an M-44 in Philomath, Oregon.
- On May 3, 2003, Dennis Slaugh, while recreating on federal public land in Uintah County, Utah, triggered an M-44. He thought he was brushing off an old survey stake. The device fired onto his chest, and according to a letter written by his wife to Rep. Peter DeFazio, the powder hit his face and went into his eye. Reportedly, he has been severely disabled ever since his encounter with cyanide (Ketchum 2008).
- On February 21, 2006, FWS biologist Sam Pollock was secondarily poisoned from handling his dog, Jenna, who was lethally asphyxiated by an M-44 illegally set by WS to kill coyotes on U.S. Bureau of Land Management land near Vernal, Utah. Pollock became ill with a headache and faintness, and noticed a metallic taste in his mouth. Mr. Pollock filed a tort claim that was denied. In March 2008, the EPA issued a notice of warning to WS that found that WS violated FIFRA on at least two counts, including placing the M-44 in a public recreation area and within 50 feet of a public road or pathway, and warned that future violations would result in enforcement actions.
- In April 2006, Sharyn and Tony Aguiar's two-year-old German shepherd was killed at a rock quarry in Utah. The couple filed a tort claim lawsuit against WS, but it was also denied. In a June 21, 2006, internal memorandum to colleagues, Barbara Knotz and Jeff Green, then Utah State Director of WS, Michael J. Bodenchuk, wrote: "After investigation of the M-44 device in this case followed all applicable laws, regulations and policies and no negligence occurred on our part. It is unfortunate that a dog was killed in this area. I have concerns about the government settling cases with dog owners because it is all too easy for someone to intentionally take a dog into an area posted with signs with the intention of getting the dog killed. I recommend against settling this claim." (Emphasis added.) [Exhibit 5].

Director Bodenchuk's egregious comments concerning members of the public purposely poisoning their pets to gain compensation reveals an astonishing mindset from a top WS official.

This statement *was redacted* from documents sent by WS sent to WildEarth Guardians, but not in documents we received from the EPA.

This list of incidents may represent only a sampling of cases—where individuals have come publicly forward. Often people living in rural communities are afraid to speak out when incidents occur. In each of these cases, WS denied any culpability.

B. Compound 1080 LPCs

In 1972, President Richard Nixon banned Compound 1080 (sodium fluoroacetate, FCH_2COOH), which was used to poison predators and prairie dogs and others, but in 1985, the Reagan administration brought this toxicant back in the limited form of Livestock Protection Collars (also known as “LPCs”) to kill coyotes. The formula consists of one percent sodium fluoroacetate (USDA-APHIS-ADC 1997, Appendix P, p. 272).

At present, Compound 1080 is registered for use only in the following 11 states: Idaho, Montana, New Mexico, Ohio (on a case-by-case basis), Pennsylvania, South Dakota, Texas, Utah, Virginia, West Virginia, and Wyoming, according to officials at the EPA and APHIS. Of those states, Idaho, Utah, Virginia, West Virginia, Ohio, and Pennsylvania are operating under a state label (confidential personal communication, government official, 12/5/06). In 1998, California and Oregon banned Compound 1080.

Compound 1080 is colorless, odorless, tasteless, and quite water soluble; some countries consider this toxin as a threat to water supplies in the event of chemical warfare (Osweiler 1984). Compound 1080 is poisonous in small amounts. In humans, 2 to 10 mg/kg constitutes a lethal dose (Goncharov et al. 2006). In other words, 182-910 milligrams could kill a 200-pound person. The latency period for Compound 1080 to take affect is hours; in one study on animals between 5.3 to 14.6 (Hooke et al. 2006). Connolly (1998) described a shorter period, one half to two hours. Death to humans takes three to five hours (Goncharov et al. 2006).

Death by Compound 1080 is slow and unpleasant. Symptoms include convulsions, heart blockage, respiratory failure, hallucination, pain, and deep depression (Eason 2002, Goncharov et al. 2006). In January 2004, the USFWS found a wolf that had been illegally poisoned by Compound 1080 in Idaho. According to a federal agent, the wolf, which was found near a rock slide, exhibited abrasions on its paws from convulsions, its teeth were clenched, and its body rigid.

Although it has been studied for decades, there is only one fool-proof remedy: ethanol (Goncharov et al. 2006). Alcohol must be administered immediately to be effective because it is a competitive inhibitor (Goncharov et al. 2006). No antidote exists.

Livestock protection collars strap Compound 1080 onto the necks of sheep or goats (USDA-APHIS-ADC 1997, Connolly 1998). The collars do not protect the individual that wears the collar, but aim to “target” the predator that bites the collar. While the intention to target the individual animal involved in livestock losses makes more sense than broad-scale indiscriminate killing methods, livestock protection collars have inherent problems. The collars are easily lost;

they readily rip and spill their toxic contents; and safe disposal is problematic. Moreover, both poisoned livestock and predator carcasses often go undiscovered.

Spills associated with livestock protection collars occur. All of the contents of the spill may not be found, particularly if the carcass of the sheep or lamb is dragged. While some soil micro-organisms can break down 1080, conditions such as extreme cold or drought might cause 1080 residue to persist in the soil for several weeks or months (Eason 2002).

Furthermore, livestock protection collars can be easily lost or punctured by vegetation or barbed wire. In one study, 107 collars were either inadvertently lost or punctured, while only 57 were pierced by coyotes (Watson 1990). Connolly (1998) suggests that coyotes can bury collars or drag them away from sheep carcasses and that about half of missing collars were not recovered in research studies.

Livestock protection collars routinely go missing, according to WS's records. WildEarth Guardians reviewed 1990s records from Texas and found that, of the 1,787 sheep or goats that were collared, 1,655 livestock protection collars were returned to storage, while 156 were reported as missing. The numbers do not add up, as $1,787 - 1,655 = 132$. The numbers of missing collars or disposed collars equals 156. This means that at least twenty-four collars containing an acutely toxic substance went uncounted. [Exhibit 6].

In at least two instances, more collars were returned to storage than were reported as used. WS Cooperator Agreement 20269 indicates that 21 animals on that Texas ranch were collared; yet 36 collars were returned to storage. Agreement 72193 indicates that 6 animals on that ranch were collared; yet 10 were returned to storage. [Exhibit 7 & 8]. We cannot know from these records where other discrepancies have occurred, such as if fewer collars were returned to storage than were actually used.

Moreover, of the 1,787 livestock protection collars applied in this Texas sample, only 56 coyotes were "suspected killed by LPC." Of that number, only 3 coyote carcasses were recovered. In other words, 53 Compound 1080-tainted coyote carcasses were not recovered, which poses risks for scavenging animals. Two agreements indicate that the livestock killed while wearing those collars were also not recovered (agreements 29295 and 64202.) [Exhibits 9 & 10].

The Texas FOIA also indicated that several collars were punctured by cactus, mesquite trees, and fences. Agreement 64202, for example, states, "most of torn collars had prickly pear [cacti] punctures." [Exhibit 10] When they accidentally burst it is virtually impossible for applicators to recover the disseminated poison, with consequent environmental contamination.

Finally, most of the LPCs destroyed in the Texas sample were burned. We are concerned that the method of burning is also laxly regulated. One record indicated that the propellant used to burn LPCs was diesel. The agency does not ensure that LPCs are properly or safely destroyed through incineration. Of the 68 records we reviewed, only 3 were buried, but it is unclear if they were buried properly and away from water sources, and whether they were or are buried on public lands.

The EPA and WS rely on private individuals to properly dispose of Compound 1080 once a spill has occurred. Livestock producers, who have been trained by licensed applicators, are expected to incinerate or bury everything that has come into contact with Compound 1080. Those that bury the toxicant must do so under three feet of soil (Connolly 1998). The burial site is supposed to be one-half mile from human habitation and away from water sources; no more than 10 collars can be buried at one site; and the sites must be ten feet apart from each other (Connolly 1998). Relying on livestock producers to properly dispose of Compound 1080, without any oversight by certified personnel, presents potential problems, including theft or improper disposal, which could cause unintentional human poisonings to occur.

Because carcasses and spills associated with Compound 1080 must be handled as hazardous waste (Mitchell et al. 2004), and because the EPA and WS rely upon individuals who may or may not be properly trained to handle this toxicant or who purposely do not handle this the waste from this toxicant properly, environmental risks could and probably do occur. LPCs are routinely lost or may be stolen. Animals contaminated with Compound 1080 are not found. The toxicant is spilled onto the ground when collars are inadvertently ripped.

In 1989, a newly-hired predator-control agent to the Wyoming office of the Wyoming Department of Agriculture found that those officials had hoarded Compound 1080 despite the ban. They sold 1080 to private individuals who used it to poison wildlife, including bald and golden eagles (Robinson 2005). In 1991, the USFWS and the EPA raided the offices of the Wyoming Department of Agriculture; the USFWS subsequently engaged in a law enforcement action that led to several convictions (Robinson 2005). But that did not end illegal poisonings.

In 2001, approximately 60 pets were poisoned by 1080 in Grand Junction, Colorado and the investigating police officer, David Palacios, who handled the poisoned animals experienced, “flu like symptoms, only 10 times worse” (Lofholm 4/12/01). The Grand Junction police and federal investigators were never able to apprehend the culprit who ultimately dumped the poison into the local sewer system (Lofholm 3/15/01, 4/12/01).

The USFWS found that Compound 1080 used in livestock protection collars is a “direct exposure risk to grizzly bears and gray wolves” and thus made jeopardy determinations under the ESA related to Compound 1080 for those species (USFWS 1993). WS found that Compound 1080 may affect golden eagles, bald eagles, ocelot, San Joaquin kit fox, ocelot, and jaguarundi (USDA-APHIS-ADC 1997).

While birds, such as vultures, ravens, magpies, hawks, and even mammals can flee an area in seconds, because Compound 1080 takes hours to act, their poisoned corpses may not be found readily. Sodium fluoroacetate is, in fact, “highly toxic to birds and mammals” (USFWS 1993).

Furthermore, Compound 1080 can cause secondary poisoning to predators and even to herbivores (USFWS 1993, Eason 2002). But while Compound 1080 can be eliminated through metabolization by animals that receive non-toxic doses, carrion poisoned with 1080 can be toxic for many months (Eason 2002). The EPA’s reregistration eligibility determination for 1080 states that scavengers, including those that are threatened and endangered, could be affected by Compound 1080 if those animals consume the meat around the head or neck of dead livestock

that wore livestock protection collars (EPA 1995). Despite the foregoing, WS claims that while non-target species have been known to scavenge from a sheep or goat carcass wearing the collar, “none were known to be poisoned by Compound 1080” (USDA-APHIS-ADC 1997). WS has now been contradicted and discredited by newer information.

Because we are concerned about the toxicity of Compound 1080 and potential for primary and secondary poisonings; the likelihood that livestock protection collars will be inadvertently punctured or lost; and the potential for 1080 to be used as a weapon of terror, WS must stop the manufacture, distribution, and use of this dangerous toxin.

In sum, we ask the Obama Administration to ban the poisoning of wildlife through the usage of sodium cyanide M-44s and Compound 1080. We seek to ban the manufacture, use, and distribution of these toxicants by DOI and USDA officials and their agents. We also seek a ban of these toxicants on lands administered by the DOI and USDA.

V. WS and National Security Hazards

In 2002, Congress passed the Public Health Security and Bioterrorism Preparedness and Response Act, which required the Secretary of Agriculture to regulate biological agents that could “through acts of bioterrorism” affect the domestic agricultural economy (USDA OIG 2006). To prevent terrorists from causing domestic harm, the USDA issued a safety document for farmers. In it, the Department expressed concerns about the safety of the milk supply, crops, aircraft used to spray pesticides, greenhouses, cattle, and poultry (USDA 2006). In addition, Congress and oversight agencies are likely concerned by food and water safety issues. WS uses biological agents, such as strychnine and Compound 1080, that could easily taint water and food.

Between 2002 and 2006, WS failed numerous federal audits for its failure to safely inventory, store, and control access to harmful biological agents. In 2007, WS itself acknowledged that it has endured a “wake of accidents,” and in 2008, the EPA warned WS of its failure to comply with another federal pesticide safety law.

In 2002, the OIG found that APHIS had lost 60 pounds of strychnine-treated bait and over 2,000 sodium cyanide capsules (Fleischman 2002). The following year, WS apparently found these missing and highly dangerous toxins, but it failed to put in place an adequate chemical inventory and tracking system (OIG 2004a). In her 2002 statement before Congress, Joyce Fleischman, Acting Inspector General for the USDA, reported that she found the Animal and Plant Health Inspection Service unaccountable at a state level for its inventory and control of its hazardous pesticides and drugs used on wildlife (Fleischman 2002).

In the 2004 OIG report, Assistant Inspector General Robert Young found WS in the same predicament. Materials had been stored in such a way as they could be stolen and used for unauthorized purposes, and they posed a safety threat (OIG 2004a). That year, the Inspector General also found that WS’s aircraft were not secured from potential terrorists (OIG 2004b).

In 2005 and 2006, the USDA OIG again failed WS in audits because the agency was not in compliance with the Bioterrorism Preparedness and Response Act. In the first, the OIG found

that WS had not secured “dangerous biological agents and toxins” (OIG 2005). In the second, the OIG found that WS was not in compliance with regulations; unauthorized persons had access to toxicants; individuals using toxicants had inadequate training; and that inventories of hazardous toxicants were open to theft, transfer, or sale (OIG 2006). Of the sites OIG visited, none were in compliance (OIG 2006).

In 2007, WS’s aerial gunning program crashed twice. In June, a Utah operation ended in two fatalities, and then in September, a Texas operation resulted in two serious injuries. See www.goAGRO.org. [Exhibit 2]. Embarrassed by subsequent media attention, WS acknowledged its operational problems across its entire program in November. It stated:

In the wake of several accidents in WS’ programs, WS is conducting a nationwide safety review focusing on aviation and aerial operations, explosives and pyrotechnics, firearms, hazardous chemicals, immobilization and euthanasia, pesticides, vehicles, watercraft, and wildlife disease activities. The review will be conducted by subject matter experts from WS, federal and state government, and private industry. We expect the review to be completed in the next year (USDA-APHIS-WS 2007).

After WS’s disclosure, WildEarth Guardians (then Sinapu) and Public Employees for Environmental Responsibility (“PEER”) requested that WS conduct the national safety review with public transparency. WS dismissed our concerns. In a November 14th response, Deputy Administrator William Clay wrote that the agency itself would select auditors who “demonstrated professional expertise” and who were “unaffiliated” with the agency. WS planned to embed the outside auditors with agency insiders. Mr. Clay told WildEarth Guardians and PEER that the public would have the opportunity to “read the final [national safety review] document” upon completion. The safety review issued on August 4, 2008. The document failed to look at public safety issues—an enormous omission given the Inspector General reports—but it did look at employee safety matters. In the instance of the aerial gunning program, for instance, the report found that the agency operated in the highest caliber and worthy of a “gold standard.” The report stated:

It is the opinion of the Aviation Resource Management Survey (“ARMS”) Team that the WS aviation program is being operated in a safe, efficient, and effective manner. The WS aviation program meets the requirements of the ICAP [Interagency Committee on Aviation Policy] Gold Standard Certificate program (USDA 2008b).

Despite its self-congratulating appraisal in the wake of two new fatalities and two new serious injuries to federal agents engaged in the act of aerial gunning, the WS aviation safety review team recommended that the agency make several new hires to increase the safety capacity of the aerial gunning program.

In March 2008, the EPA dispatched a notice of warning letter to WS pursuant to FIFRA because it had improperly placed M-44s on federal public lands in Utah. As a result of WS’s negligence, Sam Pollock, a USFWS biologist, who was rabbit hunting with his dog, Jenna, was exposed to sodium cyanide after Jenna had asphyxiated and died. Jenna triggered an unmarked M-44 device. Mr. Pollock witnessed Jenna gagging, frothing, and vomiting, and then saw the spent M-

44. After handling Jenna's body, Mr. Pollock reported symptoms consistent with cyanide poisoning.

In sum, WS's lack of control over its lethal biological agents has directly harmed people, and has led to several failed audits from federal oversight agencies that have expressed concern about WS's failure to comply with the Bioterrorism Act. The aerial gunning program has caused the death or physical impairment of its own employees. Its flawed use, storage, and tracking system of lethal toxicants has led two federal agencies to sanction WS. It even acknowledged that it has experienced a "wake of accidents" and called for a national safety review, the outcome of which, because of its closed-door process, its failure to look at public safety issues, and recommendations, seems less than a scrupulous inspection. Because its program endangers the public—and recklessness documented by the OIG indicates threats to national safety, its own employees, and the environment, we request that aerial gunning and poisoning activities cease on federal public lands.

VI. Wild Carnivores Important for Ecosystem Health; Wild Carnivores Engage in Compensatory Behaviors Rendering Predator Control Ineffective

Wild native carnivores such as coyotes, bears, wolves, and mountain lions are killed primarily for two reasons: livestock protection and ungulate (or other species) recruitment. In Nevada, for example, WS kills carnivores in hopes that it will increase herds of ungulates (1999 Predator Damage Management in Nevada, Environmental Assessment at 11 and 13; and 2004 EA Amendment at 6). Yet, in its own document, WS admits that, "it is more likely that prey abundance controls predator populations" (1999 NV EA at 74).

WS's Programmatic Environmental Impact Statement ("PEIS") adds, "of all agricultural communities, the program probably affects the ranching industry the most, particularly the sheep industry" (USDA-APHIS-ADC 1997, Chapter 4, p. 130). WS then acknowledges that "predator control is one of the most controversial aspects" of its work (USDA-APHIS-ADC 1997, Chapter 3, p. 82). WS provides enormous resources to protect sheep from predators. Yet, as we discuss below, this effort is misplaced and ineffective. Wild carnivores take only between one and five percent of annual production of animals held for human food production, and livestock producers likely exaggerate the numbers of livestock killed by carnivores (Baker et al. 2008)

In the 2009 documentary film, *Lords of Nature: Life in a Land of Great Predators*, former Secretary of the Interior Bruce Babbitt, states, "the paradigm of ranching was to clean the rangeland of all threats, and that meant creating a silent landscape." Unfortunately, that ranching paradigm continues.

Individuals, states, and WS kill native wild carnivores. Yet, the import of wild carnivores to the very functionality of the earth's ecosystems is ignored at our peril. From predation, life flowers in abundant, diverse, and healthy forms:

A. Carnivores in Ecosystems

The scientific consensus for the last several decades has generally concluded that carnivores modulate prey populations and make them more vigorous (Murie 1940, Leopold 1949, Reprint 1977, Connolly 1980, Logan and Sweanor 2001, Peckarsky et al. 2008). Carnivores increase biological diversity and functionality of those systems (e.g. McLaren and Peterson 1994, Smith et al. 2003, Mezquida et al. 2006, Ripple and Beschta 2006, Peckarsky et al. 2008). By modulating deer populations, mountain lions prevent overgrazing near fragile riparian systems. The result: more cottonwoods, rushes, cattails, wildflowers, amphibians, lizards, and butterflies, and deeper, but narrower stream channels (Ripple and Beschta 2006).

In the Yellowstone ecosystem, wolves act as a buffer to the effects of climate change by not only creating greater amounts of carrion, but making it available year round, and the scavengers that benefit include bald and golden eagles, grizzly bears, ravens and magpies, and coyotes (Wilmers and Getz 2005). Wolves therefore benefit themselves and other numerically rare species such as grizzlies and eagles. Wilmers and Getz (2005) write, “wolves extend the timescale over which scavenger species can adapt to the changing environment” (p. 574). Wolves may be important in protecting extraordinarily rare species such as grizzly bears, whose major food source, whitebark pine, is disappearing because of global warming (Constible et al. 2008).

Mosnier et al. (2008) found that intensively killing bear and coyote populations to protect a threatened and isolated population of caribou in Canada only benefited the caribou for a short duration. The authors suggest that most studies that have looked at predator-prey populations failed to do so for extended periods (Mosnier et al. 2008). Lethal control measures failed to help these caribou in the long-term because coyotes and bears were mobile over long distances, they benefited from alternative prey (moose), and were fed by hunters who inadvertently supplemented their diet when they left gut piles behind.

Scientific understanding regarding the ecological role of coyotes has similarly increased since 1997. Despite their persecution, coyotes play important keystone roles in their ecosystems. Coyotes increase biological diversity by preying upon medium-sized carnivores such as skunks, house cats, foxes, and raccoons. This predation indirectly benefits ground-nesting birds (Crooks and Soule 1999), even greater sage-grouse (Mezquida et al. 2006), a species under consideration for listing under the ESA. Coyotes indirectly protect kit fox populations by reducing red fox densities (because red foxes are small, they can easily enter kit fox dens, whereas coyotes are too big) (Cypher and Spencer 1998). By competing with medium-size predators, coyotes increase diversity of various rodent species (Henke and Bryant 1999).

The simplistic notion that predators alone control prey species' numbers is unsupported in the scientific literature (e.g., White et al. 1987, National Research Council 1997, Stenseth et al. 1997, Gill 1999, Unsworth et al. 1999, Ballard et al. 2001, Pojar and Bowden 2004, Cougar Management Guidelines Working Group 2005, Peckarsky et al. 2008). Prey species populations' decline can result from a variety of factors, including competition with domestic livestock, livestock-borne diseases, over-hunting by humans, fire suppression, and habitat fragmentation or loss; too much snow (making foraging difficult), drought, late season frosts, other stochastic events, and carrying capacity (National Research Council 1997, Gill 1999,

Ballard et al. 2001, Pojar and Bowden 2004, Cougar Management Guidelines Working Group 2005). A study on Sonoran pronghorn found that drought, not predation, is the primary cause for the decline of this endangered species (Bright and Hervert 2005). The size of the prey population can drive the size of the predator population, and those populations cycle over time (e.g., McLaren and Peterson 1994, Stenseth et al. 1997, Peckarsky et al. 2008).

In short, carnivores increase both the richness and complexity of animal life and indirectly contribute to better ecosystem function, free work known as “ecosystem services”.⁶ Despite these benefits, WS and others spend hundreds of millions of dollars annually in attempts to eradicate or scale back predator populations. Not only can this imperil native species and destabilize ecosystems, it has resulted in unintended consequences with generalists such as coyotes, which have increased their range several-fold as discussed below. WS, states, and individuals justify eradicating or suppressing carnivore populations based on spurious economic arguments and to bolster populations of ungulates.

B. Coyotes & Compensatory Behaviors: The Boomerang Effect

Coyotes enjoy few state and no federal protections. Poisoned, hunted by artifice, strafed from the air, hounded, snared, and trapped in staggering numbers, Finkel (1999) estimated that 400,000 coyotes are killed each year in the U.S., or about one coyote each minute—by actions from individuals, state agencies, or WS.

While several entities expend extraordinary resources to exploit coyote populations, these canids have proved incredibly resilient. Killing coyotes does not work, and these expensive control programs are not supported by empirical science. Studies indicate that coyotes compensate for population losses using several strategies:

- Emigration. In an area where coyotes have been killed, an initial decrease in the coyote population density prevails, but soon individual migrants or even packs fill in the void (Knowlton 1972, Crabtree and Sheldon 1999).
- More breeders. Killing regimes result in the reproductive release of reproductively suppressed females. In stable populations, only the alpha pair (dominant) of coyotes breed, not subordinate members of the pack (Crabtree and Sheldon 1999). With exploitation, reproductively repressed females are behaviorally allowed to breed

⁶ Ecosystem services are the resources and processes that are supplied by the natural world. The benefits are myriad but include clean air and water, functioning soil systems, decomposition of waste, moderation of weather and other stochastic events, pollination and seed dispersal to name a few. Priceless, yet these services are in danger from anthropogenic threats. E.O. Wilson stated “Why should we care? What difference does it make if some species are extinguished, if even half of all the species on earth disappear? Let me count the ways. New sources of scientific information will be lost. Vast potential biological wealth will be destroyed. Still undeveloped medicines, crops, pharmaceuticals, timber, fibers, pulp, soil-restoring vegetation, petroleum substitutes, and other products and amenities will never come to light. ...In amnesiac reverie it is also easy to overlook the services that ecosystems provide humanity. They enrich the soil and create the very air we breathe. Without these amenities, the remaining tenure of the human race would be nasty and brief. The life-sustaining matrix is built of green plants with legions of microorganisms and mostly small, obscure animals - in other words, weeds and bugs” (Wilson 1992), pp. 346-47.

(Crabtree and Sheldon 1999). Stable populations of coyotes tend towards older family structures and lower reproductive rates than hunted populations, while exploited populations are characterized by younger adult members, and larger numbers of breeding members, and increased litter sizes (Knowlton et al. 1999).

- Larger litters. Coyote control can result in a smaller group size, which increases the amount of food per coyote, which leads to higher litter survival rates, as the increase in food availability improves conditions for breeding females and their pups (Goodrich and Buskirk 1995).

Despite over a century of persecution, coyotes have expanded their range three-fold (Crabtree and Sheldon 1999). Killing coyotes to benefit other species is often a disguise used to justify predator control. Empirical studies cited above show that coyote-killing operations result in a change in coyote breeding and migration strategies, which overcome killing operations. Because coyotes have proved to be so resilient in the face of relentless persecution by WS and others, it makes little biological sense to use lethal control measures to protect livestock.

Wild native carnivores are critical ecosystem actors. They contribute to biological diversity, ecosystem function, and they even buffer climate change. Because of their import, we request that the Obama administration ban the most egregious, indiscriminate, and cruel forms of native carnivore killing on federal public lands: an end to aerial gunning and poisoning by sodium cyanide and Compound 1080.

VII. The Ugly Economics of Killing Native Carnivores

While WS continues to emphasize extermination over practical non-lethal solutions, biologists, economists, and federal oversight agencies have criticized the efficacy of WS' practices. Few producers actually experience losses from wildlife, yet the killing program is broad-scale, and worse, in the past decade an escalating number of endangered species have been killed. WS remains out of sync with most Americans' view of sustainable and responsible wildlife management in the 21st Century. While Americans spend billions of dollars each year on recreational wildlife pursuits, especially watching wildlife, WS spends millions to kill them.

Berger (2006) found that despite WS's efforts to kill five million predators at a cost of \$1.6 billion for the period 1939 to 1998, it had little effect: 85 percent of U.S. sheep producers went bankrupt in that time period. Two different geographic areas, one where coyotes existed, and one where they were absent, showed identical declines in the sheep industry because of unfavorable market conditions, but not from predator-caused losses (Berger 2006). The most important factors to sheep production are the price of hay, farmhand wages, and lamb prices – these three factors represented 77 percent of production variations from year to year (Berger 2006).

Livestock losses are variable not only between producers, but on the same producer over time (Baker et al. 2008). Cost-benefit analyses of predator-killing programs must consider if lethal methods create compensatory versus additive mortality, the variability of livestock's market value and demand, livestock replacement costs, and the fluctuating costs of animal control

programs (Baker et al. 2008, p. 144). Preemptively killing carnivores in an area can lead to increased immigration rates, increased potential for introducing new diseases, and increased female fecundity and juvenile survival (Baker et al. 2008).

Researchers find no correlation between the number of coyotes killed and the number of lambs lost (Knowlton et al. 1999, Mitchell et al. 2004). Simply put: WS is both expensive and biologically harmful, but benefits producers little. WS's claim that predator control benefits the livestock industry go unproven, according to independent biologists and the Government Accountability Office ("GAO"). Furthermore, losses are unevenly distributed and localized. The GAO writes, "*A small proportion of producers absorb high losses, whereas the vast majority of producers sustain less serious economic damage*" (GAO 2001, p. 36). In other words: Few livestock producers are actually affected by predation. Meanwhile, WS is killing thousands of native animals for the benefit of a few in agribusiness, and yet, the USDA's own reports show that predators kill few livestock.

WS has developed few innovative or practical new methods in recent years despite millions of dollars of taxpayer investment and knowledge that few in agribusiness actually experience losses from predators—especially when compared to unintended mortality from other causes such as weather, birthing problems, or disease (Keefover-Ring 2009b, p. 8-10, 60-67)

WS claimed in its 1997 PEIS that it expended most of its resources to protect sheep from predators (Keefover-Ring 2009a), but according to the National Agricultural Statistics Service ("NASS"), the sheep inventory in the U.S. has dropped markedly from 29,826,000 in 1950 to 10,201,000 in 1993 (the year General Agreement on Tariffs and Trade (GATT) passed) to 5,747,000 in 2009. Wild carnivores, however, kill only between one and five percent of the annual production of animals held for human food production, and survey questionnaires completed by stock producers likely exaggerate the numbers of livestock killed by carnivores (Baker et al. 2008). NASS's data show that 0.18% of cattle are killed by carnivores in the U.S., while approximately 3% of sheep die from predation (Keefover-Ring 2009b at 9-11).

The GAO (2001) finds that WS's predictions, that its program activities limit damage to agribusiness, cannot be made "with certainty" and the program benefits are variable (p. 3-4). The GAO (2001) "found no independent studies that rigorously assessed the costs and benefits of the WS program" (p. 3-4, 27, 32, 35-36). Instead, the only studies conducted were by the agency itself or with collaborating researchers.

Because native carnivore killing operations are biologically and socially expensive, we seek a ban on the two most egregious forms of killing: aerial gunning and poisoning from Compound 1080 and sodium cyanide M-44s.

VIII. Non-Lethal Methods to Protect Livestock

Non-lethal methods of protecting livestock reduce losses, and lessen controversy in society. These methods, practical and reasonable, are supported in this petition, because they are not only economically feasible, the mirror the values of most Americans who want to see native carnivores conserved, not eradicated. There is a precedent: Marin County, California stopped

their appropriations to WS and instead invested \$40,000 per year in non-lethal alternatives. Ranchers experienced nearly a 50 percent decrease in livestock losses (Brenner 2005).

Because the extinction crisis looms, especially large for mammalian carnivores, non-lethal methods can conserve them. On the other hand, large-scale carnivore killing threatens populations at the species level (Treves and Karanth 2003). Unfortunately, livestock producers are not required to use these methods, and few economic incentives favor these methods because producers enjoy highly-subsidized lethal predator controls. Treves and Karanth (2003) state that, “A consensus is emerging that multiple nonlethal defenses must be deployed simultaneously, must be designed and installed with a particular species in mind, and must be modified periodically to avoid habituation by target species” (p. 1495).

To avoid predation, livestock husbandry practices prove useful. Treves and Karanth (2003) suggest that, “Risk increases where more livestock are present, when sick or pregnant animals roam far from humans or buildings, when carcasses are left exposed, when humans are distant or absent, and when herds roam near cover” (p. 1495). Changing human and livestock behavior can reduce the risk of predation.

Sheep, because of their docile nature and inability to defend themselves against predators, require special protections (Knowlton et al. 1999). Human herders and several types of guard animals (llamas, some breeds of dogs, and burros) can be used—especially to guard against coyotes and black bears (Andelt 1996, Treves and Karanth 2003). Also, sheep and goats can be bonded with cattle, which more aggressively defend themselves (Andelt 1996).

During lambing and calving season, livestock housed behind barriers such as fences (sometimes electric), barns, pens, or sheds are more protected (Andelt 1996, Treves and Karanth 2003), but barriers can be breached and should be coupled with other non-lethal methods (Treves and Karanth 2003). Research on synchronizing the birthing season with that of wild prey species has also proven effective. Because coyotes (even breeding coyotes) generally do not specialize on sheep, ranchers can minimize their livestock losses by concentrating sheep into small, well-guarded areas (Sacks and Neale 2002).

Scaring devices, like strobe lights, flashing highway lights, firecrackers, sirens, shock collars (for wolves), and noisemakers or fladry (flags tied to ropes or fences), offer yet other alternatives (Shivik et al. 2003). Aversive conditioning methods also provide means to prevent predation (Shivik et al. 2003). New studies on conditioned taste aversion show promise in protecting eggs, crops, and fruit from mammals (Baker et al. 2005a, Baker et al. 2005b, Baker et al. 2007). Finally, the removal of livestock carcasses prevents scavengers from habituating to the taste of domestic animals (Andelt 1996). The use of two or more methods together has been proven to be the most effective (Andelt 1996).

CONCLUSION

Because unseemly wildlife- and domestic-animal killing events occur on federal public lands, we ask the Obama Administration to curb these acts using its powers under the Constitution, the APA, and various administrative regulations. Native carnivores are critical ecosystem actors that

contribute to biological diversity. Yet they are slain in senseless slaughter for spurious reasons that have been discounted by biologists. Our federal public lands should be a haven for wild native wildlife, not a killing field. Therefore, we ask that the Obama Administration take action on our petition, sign an Executive Order, initiate an accompanying rulemaking process to ban aerial gunning and poisoning via sodium cyanide and Compound 1080 on federal public lands in the next 90 days, and in the interim period, place an immediate moratorium on these activities. If you cannot act within the 90 day timeframe, we ask that you inform us of your timeline for action.

Proposed regulations to reform aerial gunning and Pres. Nixon's 1972 Executive Order follows this petition.

Please contact us if you have comments or questions.

Dated this 27th day of November, 2009.



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AIRBORNE HUNTING REFORM

I. Findings and Declaration of Purposes and Policy.

A. Findings.

- (1) In 1971 Congress enacted the Airborne Hunting Act, 16 U.S.C. § 742j-1, generally prohibiting airborne hunting, in response to public outcry over the practice of shooting wolves, eagles, hawks, coyotes, and other native wildlife from aircraft;
- (2) Congress hoped and intended that the original Airborne Hunting Act would reduce the objectionable and dangerous practice of shooting native wildlife from aircraft;
- (3) The original Airborne Hunting Act has not fulfilled Congress' desires due to some states' overly permissive permitting, the lack of enforcement by the Department of the Interior, and the use of airborne hunting as a common but costly, indiscriminate, and pre-emptive predator-control technique by the Department of Agriculture's Wildlife Services program;
- (4) Airborne hunting is unsafe to those individuals participating in the practice as over 100 aircraft engaged in airborne hunting have had accidents resulting in the unnecessary and tragic loss of human life;
- (5) Airborne hunting is unsafe and unduly annoying to individuals on the ground who are exposed to low-flying aircraft and errant bullets;
- (6) Airborne hunting inadvertently harms other wildlife such as deer, pronghorns, and birds. Aerial-gunning crafts fly low to the ground and their noise and visual disturbance disrupt wildlife behavior, including foraging, courtship, and feeding. Airborne hunting conducted during the winter months, when it most frequently is, can even affect wildlife survival;
- (7) Airborne hunting is unnecessarily cruel to the targeted animals as airborne hunters, particularly those using fixed-wing aircraft or hunting over rough or wooded terrain, often cannot make a clean kill and leave injured wildlife to die of their wounds;
- (8) Airborne hunting of native predators, particularly wolves and coyotes, is an economically inefficient subsidy and inefficacious method of addressing conflicts between native predators and domestic livestock;
- (9) Airborne hunting of native predators to increase populations of ungulate wildlife, such as caribou, deer, moose, and elk, is a biologically misguided

approach to maintaining healthy and naturally sustainable native wildlife populations;

- (10) Both airborne hunting and the animals subjected to airborne hunting have effects upon interstate commerce within the meaning of the Commerce Clause of the Constitution, Article I, Section 8, and are thus subject to federal regulation; and
- (11) On federal lands, both airborne hunting and the animals subjected to airborne hunting are properly regulated under the United States' power to make all needful rules and regulations respecting the property of the United States within the meaning of the Property Clause of the Constitution, Article IV, Section 3.

B. Purposes. The purposes of this Act are to provide for more effective enforcement of the prior prohibition of airborne hunting, to subject permits waiving this prohibition to more rigorous federal scrutiny, to protect human health and safety from the inherent risks of airborne hunting, and to end the use of airborne hunting as a method of native predator control because: new understanding establishes that it is neither an economically efficient nor needed subsidy to protect livestock interests; it is unwise native wildlife management because it is biologically unsound; and it is unnecessarily cruel.

C. Policy.

- (1) It is declared to be the policy of Congress to end the airborne hunting of native wildlife, particularly predators, and to subject any exceptions to this policy to federal permitting authority.
- (2) It is further declared to be the policy of Congress that this Act be applied to the full extent of federal authority over all federal property and lands consistent with the Property Clause of the Constitution, Article IV, Section 3, and over all non-federal property and lands consistent with the Commerce Clause of the Constitution, Article I, Section 8.

II. Definitions. For the purposes of this Act:

- (1) The term “airborne hunting” includes any effort or attempt to shoot, for the purposes of capturing or killing, any bird, fish, reptile, or mammal from an aircraft.
- (2) The term “aircraft” means any contrivance used for flight in the air.
- (3) The term “animal” means any bird, fish, reptile, or mammal.

- (4) The term “harass” means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.
- (5) The term “native” used before the terms “wildlife” or “predator” means any bird, fish, reptile, or mammal that is occurring in its historic range or current natural habitat and excludes exotic or feral, birds, fish, reptiles, or mammals.
- (6) The term “person” means an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal Government, of any State, municipality, or political subdivision of a State, or of any foreign government; any State, municipality, or political subdivision of a State; or any other entity subject to the jurisdiction of the United States.
- (7) The term “predator” means any bird, fish, reptile, or mammal which preys on other animals.
- (8) The term “shoot” means any effort or attempt to use a firearm or other device that fires a bullet or projectile.
- (9) The term “wildlife” means any species of bird, fish, reptile, or mammal.

III. Repeal and Replacement of Prior Law.

The Airborne Hunting Act of 1971, 16 U.S.C. § 742j-1, is repealed in its entirety and replaced by this Act.

IV. Prohibition. Any person who –

- (A) while airborne in an aircraft shoots or attempts to shoot for the purpose of capturing or killing any bird, fish, reptile, or mammal; or
- (B) uses an aircraft to harass any bird, fish, reptile, or mammal; or
- (C) knowingly participates in using an aircraft for any purpose referred to in paragraphs (A) or (B);

shall be fined not more than \$50,000 or imprisoned not more than one year, or both.

V. Exceptions.

(1) Subject to the limitations in paragraph (2) of this Section, the Secretary of the Interior is authorized to issue permits excepting any person from the prohibitions of Section IV provided that the permit:

(A) specifies the time, place, and manner during which the permitted airborne hunting may occur; and

(B) provides a limit on the type and number of animals that may be shot.

(2) The Secretary of the Interior may issue a permit excepting any person from the prohibitions of Section IV only if the Secretary makes a finding, published in the Federal Register, that the issuance of such a permit is necessary to:

(A) protect human health and safety;

(B) protect threatened or endangered species listed under the terms of the Endangered Species Act, 16 U.S.C. §§ 1531, *et. seq.*;

(C) protect significant natural resources from irreparable harm; or

(D) conduct scientific research that cannot be reasonably conducted by other means.

Neither the exception for the protection of human health and safety, nor the exception for the protection of significant natural resources allows the Secretary of the Interior to issue a permit authorizing the airborne hunting of native predators or native wildlife to protect domestic livestock or crops. The Department of Agriculture's Wildlife Services Agency or other agencies of the Department of Agriculture shall no longer conduct, fund, permit, authorize, or assist any airborne hunting. The Secretary of the Interior's decision to issue a permit excepting any person from the prohibitions of Section IV must comply with the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321, *et. seq.*, the Endangered Species Act, 16 U.S.C. §§ 1531, *et. seq.*, and all other applicable laws. The Secretary of the Interior's decision to issue a permit is subject to judicial review under the APA, 5 U.S.C. §§ 701-706.

VI. Enforcement.

The Secretary of the Interior shall enforce the provisions of this Act and shall promulgate such regulations as necessary and appropriate to carry out such enforcement within one-year of the date of enactment of this Act. Any employee of the Department of the Interior authorized by the Secretary of the Interior to enforce the provisions of this section may, without warrant, arrest any person committing in his presence or view a violation of this Act or of any regulation issued hereunder and take such person immediately for examination or trial before an officer or court of competent jurisdiction; may execute any warrant or other process issued by an officer or court of competent jurisdiction for enforcement of the provisions of this Act; and may, with or without a warrant, as authorized by law, search any place. The Secretary of the Interior is authorized to enter into cooperative agreements with State fish and wildlife agencies or other appropriate State authorities to facilitate enforcement of this Act, and by such agreements to delegate such

enforcement authority to State law enforcement personnel as he deems appropriate for effective enforcement of this Act, provided; however, that the Secretary of the Interior may not delegate the authority to issue permits to any State or other person. Any judge of any court established under the laws of the United States, and any United States Magistrate-Judge may, within the jurisdiction of that court upon proper oath or affirmation showing probable cause, issue warrants in all such cases.

VII. Forfeiture.

All birds, fish, reptiles, or mammals shot or captured contrary to the provisions of this Act, or of any regulation issued hereunder, and all guns, other firearms or devices for shooting bullets or projectiles, aircraft, and any other equipment used to aid in the shooting, attempting to shoot, capturing, or harassing of any bird, fish, reptile, or other animal in violation of this Act or of any regulation issued hereunder shall be subject to forfeiture to the United States.

VIII. Certain Customs Laws Applied.

All provisions of the law relating to the seizure forfeiture, and condemnation of a vessel for violation of the customs laws, the disposition of such vessel or the proceeds from the sale thereof, and the remission or mitigation of such forfeitures, shall apply to the seizures and forfeitures incurred, or alleged to have been incurred, under the provisions of this Act.

CONTENTS

**CHAPTER 10. ENVIRONMENTAL SAFEGUARDS ON ACTIVITIES
FOR ANIMAL DAMAGE CONTROL ON FEDERAL LANDS**

PARAGRAPH	PAGE
1. PURPOSE	10-1
2. GENERAL	10-1
3. RESTRICTIONS ON USE OF CHEMICAL TOXICANTS	10-1
APPENDIX	
A. Executive Order 11643, Environmental Safeguards On Activities for Animal Damage Control on Federal Lands	10A-1

CHAPTER 10, ENVIRONMENTAL SAFEGUARDS ON ACTIVITIES
FOR ANIMAL CONTROL ON FEDERAL LANDS

1. PURPOSE

To implement Executive Order 11643 by issuing instructions to carry out its provisions and policy.

2. GENERAL

Executive Order 11643 (see app. A) restricts the use on Federal lands of chemical toxins for the killing of predatory mammals or birds, chemical toxicants which cause any secondary poisoning effects for the purpose of killing other mammals, birds or reptiles and both types of toxicants in any Federal programs of mammal or bird damage control programs. All such Federal programs shall be conducted in a manner which contributes to the maintenance of environmental quality, and to the conservation and protection, to the greatest degree possible, of the Nation's wildlife resources, including predatory animals.

3. RESTRICTIONS ON USE OF CHEMICAL TOXICANTS

a. The policy explicitly set forth in section 1 of the Executive order will be followed by all stations. For purposes of this chapter "metropolitan areas," referred to in section 2(a)(2) of the Executive order, refers to any populated area which includes residences, industries, landfills, transportation facilities, communication facilities, and other facilities that serve the populated area or buildings.

b. Those stations desiring to invoke the provisions of section 3(b) of the Executive order should communicate with Central Office via appropriate channels. The Director of Engineering Service, DM&S (138), is hereby delegated authority to permit the emergency use of chemical toxicants on VA property after consultation with appropriate officials of the agencies set forth in section 3(b) of the Executive order. Each such instance will be recorded in writing with full description of the circumstances and the reasons for permitting the use of the chemical toxicants. Normally, the use of chemical toxicants will be authorized only when essential:

- (1) to the protection of the health or safety or human life;
- (2) to the preservation of one or more wildlife species threatened with extinction, or likely within the foreseeable future to become so threatened; or
- (3) to the prevention of substantial irretrievable damage to nationally significant natural resources.

October 12, 1972

MP-1, Part I
Chapter 10
Appendix A

EXECUTIVE ORDER 11643

Environmental Safeguards on Activities for Animal Damage Control on Federal Lands

By virtue of the authority vested in me as President of the United States and in furtherance of the purposes and policies of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) and the Endangered Species Conservation Act of 1969 (16 U.S.C. 668aa), it is ordered as follows:

SECTION 1. Policy. It is the policy of the Federal Government to (1) restrict the use on Federal lands of chemical toxicants for the purpose of killing predatory mammals or birds; (2) restrict the use on such lands of chemical toxicants which cause any secondary poisoning effects for the purpose of killing other mammals, birds, or reptiles; and (3) restrict the use of both such types of toxicants in any Federal programs of mammal or bird damage control that may be authorized by law. All such mammal or bird damage control programs shall be conducted in a manner which contributes to the maintenance of environmental quality, and to the conservation and protection, to the greatest degree possible, of the Nation's wildlife resources, including predatory animals.

Sec. 2, Definitions. As used in this order the term:

(a) "Federal lands" means all real property owned by or leased to the Federal Government, excluding (1) lands administered by the Secretary of the Interior pursuant to his trust responsibilities for Indian affairs, and (2) real property located in metropolitan areas.

(b) "Agencies" means the departments, agencies, and establishments of the executive branch of the Federal Government.

(c) "Chemical toxicant" means any chemical substance which, when ingested, inhaled, or absorbed, or when applied to or injected into the body, in relatively small amounts, by its chemical action

may cause significant bodily malfunction, injury, illness, or death, to animals or man.

(d) "Predatory mammal or bird" means any mammal or bird which habitually preys upon other animals or birds.

(e) "Secondary poisoning effect" means the result attributable to a chemical toxicant which, after being ingested, inhaled, or absorbed, or when applied to or injected into, a mammal, bird or reptile, is retained in its tissue, or otherwise retained in such a manner and quantity that the issue itself or retained part if thereafter ingested by man, mammal, bird, or reptile, produces the effects set forth, in paragraph (c) of this section.

(f) "Field use" means use on lands not in, or immediately adjacent to, occupied buildings.

Sect. 3 Restrictions on Use of Chemical Toxicants

(a) Heads of agencies shall take such action as necessary to prevent on any Federal lands under their jurisdiction, as in any Federal program of mammal or bird damage control under their jurisdiction.

(1) the field use of any chemical toxicant for the purpose of killing a predatory mammal or bird; or

(2) the field use of any chemical toxicant which causes any secondary poisoning effect for the purpose of killing mammals, birds, or reptiles.

(b) Notwithstanding the provisions of subsection (a) of this section, the head of any agency may authorize the emergency use on Federal lands under his jurisdiction of a chemical toxicant for the purpose of killing predatory mammals or birds, or of a chemical toxicant which causes a secondary poisoning effect for the purpose of killing other mammals, birds, or reptiles, but only if in each specific case he makes a written finding, following consultation with the Secretaries of the Interior, Agriculture, and Health, Education, and Welfare, and the Administrator of the Environmental Protection Agency, that any emergency exists that cannot be dealt with by means which do not involve use of chemical toxicants, and that such use is essential:

(1) to the protection of the health or safety of human life;

(2) to the preservation of one or more wildlife species threatened with extinction or likely within the foreseeable future to become so threatened; or

(3) to the prevention of substantial irretrievable damage to nationally significant natural resources.

Sec. 4. Rules for Implementation of Order. Heads of agencies shall issue such rules of regulations as may be necessary and appropriate to carry out the provisions and policy of this order.

Richard Nixon

THE WHITE HOUSE
February 8, 1972