

Understanding the Management, Funding, and Staffing of Human-Wildlife Conflicts by State Fish and Wildlife Agencies

Produced by:



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Southwick Associates and the Wildlife Management Institute



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Table of Contents

Table of Contents	i
Tables	ii
Figures	ii
Appendices	ii
Executive Summary	iii
Introduction	1
Methods	2
Review of Statutory Authorities	2
Survey Development	2
Results	4
Review of state rules and statutes	4
Northeast	4
Midwest	5
Southeast	6
West	7
Types of wildlife conflict managed by state agencies	8
Top wildlife conflict species of concern	9
Who responds to HWC in your state?	9
Summary	9
Field Crops	11
Fruit and Nuts	11
Range and Pasture	11
Livestock	11
Threatened and Endangered Species	12
Colonial Birds	12
Urban/Nuisance Species	12
Aviation	12
Threatening Animals	13
Commercial Forestry/Nursery	13
Structures	13
Equipment	13
Landscaping	14
Model of organizational response used by SWAs	14
How HWC is funded	14
Federal funding	15
Providing compensation for HWC management	18
Contract expenditures for HWC	19
HWC information on Agency website	19
Appendices	20

Tables

Table 1. Summary of response types for different conflict species/programs, Northeast AFWA states. These data are a blend of survey results and independent research of state websites.	4
Table 2. Summary of response types for different conflict species/programs, Midwest AFWA states. These data are a blend of survey results and independent research of state websites.	5
Table 3. Summary of response types for different conflict species/programs, Southeast AFWA states. These data are a blend of survey results and independent research of state websites.	6
Table 4. Summary of response types for different conflict species/programs, Western AFWA states. These data are a blend of survey results and independent research of state websites.	7
Table 5. Percentage of respondents (n = 43) reporting their state responds to specific types of HWC.	8
Table 6. Top wildlife conflict species of concern identified by fish and wildlife agencies.....	9
Table 7. Percentage (Number) of respondents reporting who handled categorical HWC issues in the state. For example, in the highlighted gray cell, 80% (n = 32) of 40 survey respondents indicated that the SWA responded to HWC related to field crops in their state.	10
Table 8. Resource categories and conflict descriptions for USDA-APHIS funding.....	16
Table 9. USDA APHIS funding for wildlife damage FY 2022.....	16

Figures

Figure 1. Responding states to AFWA wildlife conflict survey.....	3
Figure 2. Percentage of respondents reporting various funding sources used by their SWA for HWC.	15
Figure 3. Percentage of respondents reporting source of compensation provided to landowners for HWC.	18

Appendices

Appendix A. Questionnaire used to survey state human-wildlife conflict managers.....	20
Appendix B. Detailed information for selected Northeast wildlife conflict management programs.....	26
Appendix C. Detailed information for selected Midwest wildlife conflict management programs.....	30
Appendix D. Detailed information for selected Southeast wildlife conflict management programs.....	37
Appendix E. Detailed information for selected Western wildlife conflict management programs.	44
Appendix F. Websites provided by wildlife conflict managers.	51

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Executive Summary

Human-wildlife conflict (HWC) management is a highly charged, controversial, and expensive series of tasks delegated to state wildlife agencies (SWAs). With the proliferation of some wildlife populations, both in urban and rural areas, comes an expectation from the greater public for SWAs to address these problems. Whether the problem is a squirrel in an attic, elk in a haystack, or wolf harassing a domestic dog, the HWC problems most often fall on the SWA to address. As can be seen in this report, most of the funding comes from the relatively few people who buy hunting and fishing licenses.

- SWAs are responding to a broad scope of human-wildlife conflict; all respondents listed more than one category of conflict type. Responses included:
 - 95% of responding SWAs respond to ungulate depredation.
 - 91% of responding SWAs respond to Beaver, muskrat, otters, and other furbearer conflict.
 - 88% of responding SWAs respond to urban/nuisance conflict and crop damage caused by species other than ungulates.
 - 84% of responding SWAs respond to resident Canada geese conflict.
 - 77% of responding SWAs respond to HWC at airports involving migratory birds and terrestrial invasive species (including feral swine).

- Overall, 78% of responding states have a dedicated work unit for responding to wildlife conflict issues. Many indicated the SWA used both a dedicated work unit staff as well as other staff to respond to HWC.

- HWC response is a mandate to SWAs without a dedicated funding source. Overall, 95% of responding SWAs used their game and fish funds to respond to HWC. With the continued decline in hunting license sales, the inability of SWAs to fully capture their Pittman-Robertson allocation is a possibility. This has the potential to create a situation where a smaller license-based fund is increasingly paying for activities that cannot be avoided. Other sources of HWC funding included:
 - Slightly more than half (56%) used some federal funds.
 - 36% received some state general funds.
 - Only 10% received private donations.

- SWAs are spending large sums of money on human-wildlife conflict. For the 31 states that provided an amount, expenditures totaled \$16,554,694 a year, when averaged over the previous two fiscal years. Direct compensation to landowners was \$6,379,950 (39%), followed by contracts (\$5,176,114; 31%), and supplies/materials (\$4,998,630; 30%).

- There is potentially a slippery slope using hunting license dollars to fund some HWC activities. As not all conflict is related to harvestable species, SWA local wildlife staff (who have a multitude of other responsibilities) are often engaged. Consideration should be given for policy makers to fund more of these HWC activities out of general revenue (e.g., sales tax) accounts.

- Not all species are under state control. While federal funds are often available to mitigate wolf conflict, other species, e.g. migratory birds, are often funded by the SWA or a mixture of funds. This is particularly apparent for cormorant control, airport mitigation (e.g., administering USDA contracts), and resident Canada geese.

Introduction

Human-wildlife conflicts (HWCs) are increasing across the United States. State Wildlife Agencies (SWA) under the Public Trust Doctrine have been given the authority to manage wildlife to include most of the species implicated in HWC. Concomitantly, each SWA has different authorities, policies, levels of species protection, and most importantly, individualized ways of funding and managing HWC mitigation programs. Little information is available summarizing how SWA's fund and staff their programs. Given increased demands for a finite pool of funding, wildlife managers often compete for funds that could otherwise be used for other priority conservation needs.

In many cases, delegated authorities to manage HWC are passed to local units of government or private individuals who are contracted to solve problems. In other cases, SWAs organize and participate directly in HWC mitigation programs. Some SWAs also compensate individuals financially for wildlife damage. As there is no 'one size fits all' approach to HWC management, it is critical for SWAs to learn from each other and develop programs that alleviate conflict in their respective jurisdictions. There is also a need to work with wildlife conflict managers to consolidate information into a single source.

The project was conducted by the Association of Fish and Wildlife Agencies (AFWA), the Western Association of Fish and Wildlife Agencies (WAFWA), Southwick Associates, and the Wildlife Management Institute. The study was funded through AFWA Multi-State Conservation Grant #F23AP00472-00. The AFWA Human Wildlife Conflict Working Group and regional AFWA associations like the WAFWA Human Wildlife Conflict Committee were formed, in part, to address these issues.

The purpose of this project was to survey state wildlife professionals on how wildlife conflict is mitigated, funded, and staffed to gain a comprehensive understanding of HWC management strategies in all 50 states. The objective was to determine the current states of staffing, expenditures, statutes, regulations, and policies related to HWC for 50 state wildlife agencies and provide recommendations that increase effectiveness and delivery of programs nationally. The intended outcome was a comprehensive resource that individual states can use as a reference to guide decisions.

This study follows a comprehensive analysis of feral swine policy across the United States, which was completed in 2023 by the same authors. Please see [Research and Analysis of Policy and Law to Prevent Translocation of Live Feral Swine](#) for that report.

Methods

Review of Statutory Authorities

State agency fish and wildlife websites and associated organizations for all fifty states were reviewed to better understand the statutes, programs, permits, policies, and educational resources available for states to address conflicts between people and wildlife. Summary tables and detailed spreadsheets were developed outlining this information for the four U.S. AFWA regions (Northeast, Midwest, Southeast, West). The information was organized into these broad categories to illustrate how states address human-wildlife conflict issues: Nuisance Wildlife; Agriculture Depredation; Predator Control; and Endangered, Threatened and Protected Wildlife. The summary tables should not be considered a comprehensive overview for each SWA.

Survey Development

We developed a list of points of contact of HWC for each of the 50 states from membership of AFWA and regional HWC committees and used those individuals to form the survey population. We also attended multiple meetings (e.g., AFWA national conference, North American Wildlife and Natural Resources Conference, WAFWA summer conference) to talk about the project, recruit survey pre-testers, and compile a list of appropriate agency contacts.

We subsequently interviewed key agency staff who have experience and knowledge of SWA HWC programs to guide development of data requests, survey questions, and document reviews to determine the current state of HWC in each state.

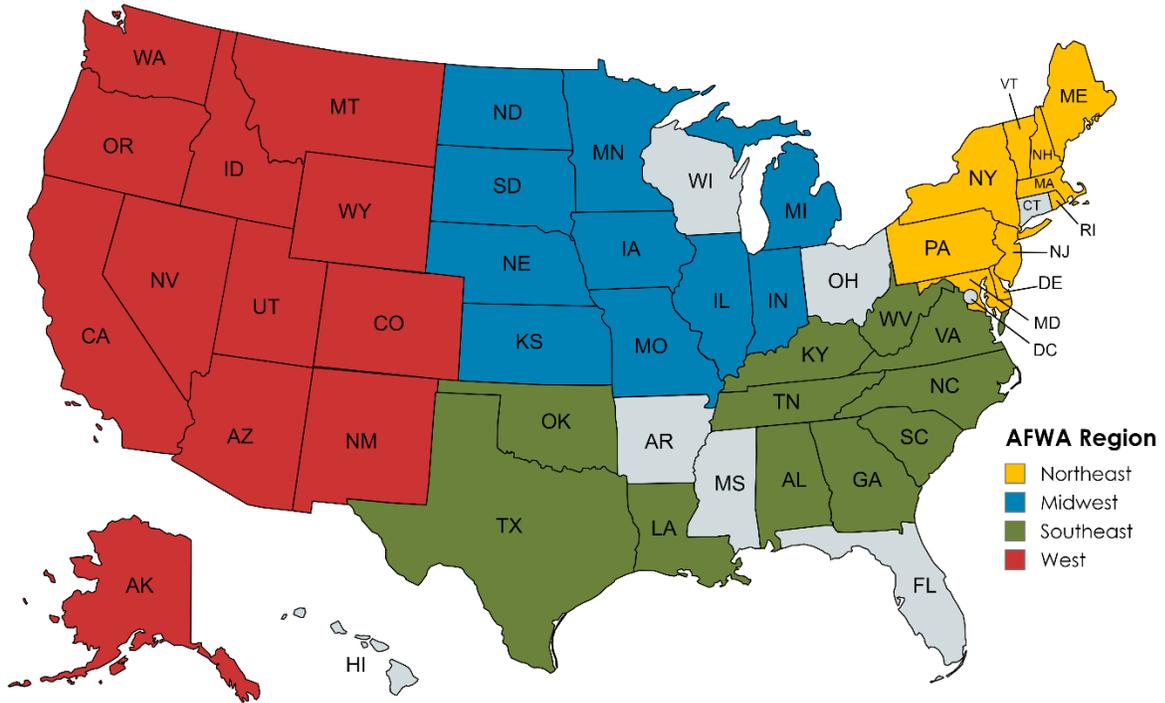
Based on this input and statutory reviews, we developed a draft web-based survey and tested it using 5 state agency conflict managers and adjusted questions and flow as needed. The complete survey is displayed in Appendix A.

A pre-survey notice was emailed in early November to conflict managers, with a request asking if they were the appropriate person, and if not, please indicate to whom the survey should be sent. A handful of changes were made, and we started survey distribution on November 27, 2023. Four additional reminders were sent regularly to encourage the state HWC contacts to complete their survey. On January 22 and 23, phone calls were made to the remaining non-responding state HWC contacts.

We ultimately received responses from 43 state HWC contacts¹ (86% response rate) (Figure 1).

¹ Not all states filled the survey out completely. In those cases, we attempted to obtain the information, but were not successful in all cases. For the states that did not respond, we added a link to their HWC website in Appendix F.

Figure 1. Responding states to AFWA wildlife conflict survey.



Results

Review of state rules and statutes

As expected, individual authorities vary by state, as do the species that fall under different management programs. There was no ‘one size fits all’ approach to conflict management and the tables herein should not be considered fully complete because oftentimes response is nuanced and not fully captured on legal or state websites. In many cases, we aggregated responses across the broad response categories to reduce redundancy and confusion due to terminology differences.

Northeast

For nuisance wildlife control, most states used state-permitted operators to address conflict issues. For agriculture, white-tailed deer, bear, and goose depredation were the most common species mentioned (Table 1). More detailed information on specific programs is provided in Appendix B.

Table 1. Summary of response types for different conflict species/programs, NEAFWA states. These data are a blend of survey results and independent research of state websites.

Group	Control Measures/Programs/Permits
Nuisance Wildlife	Wildlife Control Operators (Licensed by state agency) (CT, DE, MD, ME, NY, NH, NJ, RI)
	Wildlife Control Trappers (VT)
	Nuisance Animal Hotline (MD)
	Wildlife Hazard Management Plan at Airports (MA)
Agriculture Depredation	Nuisance Wildlife Control Permits (NY)
	Agricultural Depredation permits (Canada Geese) (CT)
	Goose Roundup (CT)
	Federal Depredation Permits - Migratory Birds (USFWS)
	Deer Damage Assistance Program (DE)
	Damage to Crops/Orchards: Permission to kill nuisance animals or wild turkeys (ME)
	Animal Damage Statutes/Damage Control Laws (MA) NH)
	Farmer Depredation permit (NJ)
	Black Bear Damage Reimbursement Fund (MD)
	Environmental Assessment of Mammal Damage Management in NJ (USDA Wildlife Services, NJ)
Black Bear Incident Online Reporting (VT)	
White-tailed deer	Deer Crop Damage Permit Program (CT)
	Deer Damage Permits (DE); Deer Management Permit (MD); Deer Damage Permits (NY); Deer Crop Damage Permit Program (CT)
	Agricultural Deer Control Ag Tag Program (PA)
	Deer Management Assistance Program (NY)
Predators	Special Trapping Permit- Coyote, fox (CT)
	Year-round Depredation Order for Coyotes (DE)
	Year-round Open Season for Coyotes (VT)
Endangered, Threatened or Protected Wildlife	Federal Depredation Permits - Migratory Birds (USFWS)

Midwest

In the Midwest, every reporting state indicated using APHIS-WS to address airport conflict. Nuisance wildlife is most often addressed using agency staff and private contractors under permit. For crop damage, all the states used agency staff and most used depredation permitting to address local issues (Table 2). More detailed information on specific programs is provided in Appendix C.

Table 2. Summary of response types for different conflict species/programs, MAFWA states. These data are a blend of survey results and independent research of state websites.

Group	Control Measures/Programs/Permits
Nuisance Wildlife	Nuisance Wildlife Control Permits (IA, IL, KS, MN, NE)
	Wildlife Hotline for Public on Handling Nuisance Wildlife (IN)
	USDA, APHIS activities at airports (all Midwestern states)
	Year-Round Hunting Season for furbearers: Iowa House bill Feb 2023 (IA)
	Nuisance Wildlife Damage Control (KS)
	Resident Canada Geese/ Nuisance Bird Control Permit (KS)
	Commercial Nuisance Wild Animal Control Operators (OH)
Agriculture / Urban Depredation	USDA Pest and Predator Control Act (IL/USDA)
	Black Vulture Depredation Permits (IL)
	Local Depredation Biologist (IA)
	Extra deer depredation licenses or shooting permits (IA)
	Resident Canada Goose Management Program (MI)
	Nuisance/Damage Permit for Canada Goose Contractors (MI)
	Non-Permit for Furbearers (MI)
	Wildlife Damage Management Program (MN)
	MN Department of Agriculture (elk only)
	Animal Damage Control Program/ NE Game and Parks Depredation Program (NE)
	Depredation Control Permits (NE)
Landowner Permits/ Free-Earned Landowner Elk Permit (NE)	
Goose Damage Permit (OH)	
FWS Canada Goose and Blackbird Depredation Order (WI)	
Wildlife Damage Abatement and Claims Program (WI)	
White-tailed deer	Deer Population Control Permits (IL)
	Antlerless Deer Harvest (IN)
	Indiana Private Lands Access Program (IN)
	The Deer Hunter Registry (IA)
	Deer Damage Control Permits (KS)
	Deer Damage Permits (MI)
Predator Control	Antlerless Hunter Database (NE)
	Deer Damage Control Permits (OH)
Endangered, Threatened or Protected Wildlife	Kansas Predator Damage Control Program (KS)
	Bounty program for pheasant nest predators (NE)
	Special permit for taking protected wild animals (MN)

Southeast

In the Southeast, nuisance wildlife is most often addressed using agency staff and private contractors under permit. For crop damage, all the states used agency staff and most use depredation permitting to address local issues (Table 2). Like the other regions, APHIS-WS is contracted to address airport conflict. More detailed information on specific programs is provided in Appendix D.

Table 3. Summary of response types for different conflict species/programs, SEAFWA states. These data are a blend of survey results and independent research of state websites.

Group	Control Measures/Programs/Permits
Nuisance Wildlife	Nuisance Wildlife Control Permits (AL, GA, LA, NC, SC, VA, WV)
	Wildlife Damage Permit (WV)
	Wildlife Control Operators; Nuisance Wildlife Trappers (FL)
	Open Season for nuisance species (TN, VA, TX)
	Suburban Deer Overabundance Permits (TX)
Agriculture Depredation	Deer Population Reduction Program (VA)
	Livestock Protection Depredation Permits (OK)
	Black Vulture Depredation Program/USDA permit) (OK)
	Agricultural Depredation Order - Canada Goose (VA)
White-tailed deer	Wildlife Damage Permit (WV)
	Managed Lands Deer Program (TX)
	Deer Control Permits (KY)
	Deer Management Assistance Program (AK, VA):
Predator Control	Deer Population Reduction Program (VA)
	Urban Archery Season (VA)
	Depredation Permits (TX, AK); Predator Control Permits (AK)
Endangered, Threatened or Protected Wildlife	Virginia Cooperative Coyote Damage Control Program (VA)
	Texas Wildlife Services nuisance coyote control services (TX)
	Special permits for taking protected animals

West

In the West, wildlife conflict is dominated by big game damage and predator management, and to a lesser extent suburban/urban conflict. The Western states are much more likely to provide direct financial compensation for losses, both for agricultural and livestock losses. Control operators, USDA-WS, and education are all used to address nuisance wildlife conflict (Table 4). More detailed information on specific programs is provided in Appendix E.

Table 4. Summary of response types for different conflict species/programs, WAFWA states. These data are a blend of survey results and independent research of state websites.

Group	Mitigation Programs/Permits	Damage Reimbursement/Compensation
Nuisance Wildlife	Lethal Take/Removal by Agency Staff (UT, NM)	
	Encourage homeowners to remove attractants and erect exclusion fencing (AZ)	
	Wildlife Service License/ Wildlife Control Operators (WA, OR, AZ)	
	Local animal control, animal rescue, or law enforcement (ID)	
	Report Wildlife Encounters Online Form (CA)	
Agriculture Depredation	Mitigation Permits/ Kill Permits/ Population Management Hunts (MT, NM, AZ, UT, WA)	Big Game Compensation Program (ID, UT, WA, WY)
	Depredation Prevention Hunting Seasons (WY)	Wolf Depredation Compensation and Financial Assistance Grant Program (OR)
	Elk or Pronghorn Private Land Use System Program (AZ, NM)	Wolf depredation compensation fund (CO)
	Private Lands Only Cow Elk Permits (UT)	Habitat Partnership Program (CO)
	Limited Population Management Zones (AZ)	Certified Crop Adjuster value losses (WA)
	Game Damage Hunts and Management Seasons (MT)	Wildlife Damage Assistance, Materials and Compensation (WY)
		Depredation Assistance Program (NM)
		Elk/Pronghorn Private Land Use System Programs (NM)
		Elk or Pronghorn Private Land Use System Programs (AZ): Mexican Wolf Arizona Livestock Loss Board - Depredation Compensation (AZ)
		Big Game Prevention Program (ID); Big Game Compensation Program (ID)
Predators	Canada Goose Depredation Permits via USFWS (ND, MT)	Wildlife damage compensation program (WY) - Game Bird Damage
	Nest and Egg Control Order/County Exception (CA)	Coyote predator control program (UT)
	Crop Damage/Nuisance Wildlife Permit (HI)	Compensation for mountain lion, bear, wolf or
	Wildlife Damage Specialists (SD)	Compensation for cougar and wolf losses on
	Mountain Lion Depredation Law (CA)	commercially raised sheep, horses, and cattle only (WA)
	Oregon Wolf Depredation Compensation and Financial Assistance Grant Program (OR)	
	Mountain Lion Depredation Permits (CA)	
	Predator Control Permit (OR)	
Nuisance Wildlife Website (WY)		

Types of wildlife conflict managed by state agencies

All respondents (n = 43) indicated their state responds to a wide array of HWC. This first question just probed the types of conflict addressed; not what entity was responsible for responding. The most common responses were ungulate depredation (95%), furbearers (91%), nuisance/urban wildlife conflict (88%), and crop damage by other species (88%) (Table 5). Those respondents who indicated “other” types of HWC reported black vultures (n = 1), aquatic invasive species (n = 1), or left the conflict type blank (n = 2).

Table 5. Percentage of respondents (n = 43) reporting their state responds to specific types of HWC.

Type of Human Wildlife Conflict (HWC)	Percent
Ungulate depredation, including fence and crop damage	95%
Beaver, muskrat, otters, other furbearers	91%
Nuisance/Urban wildlife	88%
Crop damage by other species (bears, raccoons, waterfowl, cranes, turkeys, other birds)	88%
Resident Canada geese	84%
Public safety (e.g. airports)	77%
Migratory birds	77%
Terrestrial invasive species / feral swine	77%
State-listed Threatened and Endangered species that cause wildlife conflict	74%
Predator control (bears, cougars, wolves)	65%
Nuisance species that are unprotected by state authority (e.g., statute)	56%
Other	9%

Top wildlife conflict species of concern

Thirty-eight respondents provided responses to the question requesting the top 3-5 species of concern in their SWA (Table 6). Respondents identified 21 species of concern and 6 categories of species. The most common wildlife conflict concern was deer (all species), followed by bears. Geese (resident and migratory), elk, and beaver were also commonly identified.

Table 6. Top wildlife conflict species of concern identified by fish and wildlife agencies.

Species of concern	Number of responses
Deer (white-tailed or mule)	28
Black bear	26
Elk	13
Geese, Canada geese or resident geese	12
Beaver	10
Coyote	9
Wolf	7
Turkey	6
Raccoon	5
Mountain lion	5
Alligator	4
Feral hogs	4
Cormorants	3
Grizzly bear	2
Bats	2
Moose	2
Brown bear	1
Pronghorn	1
Bobcat	1
Mute swans	1
Fox	1
Colonial waterbirds	1
Diseased wildlife	1
Rabies vectors	1
Meso-carnivores	1

Who responds to HWC in your state?

Summary

Respondents were presented with 13 types of HWC and were asked to indicate who is responsible for responding. Respondents were asked to 'check all that apply' because more than one entity may respond to any individual HWC type. The number of survey respondents varied by HWC category.

Overall, SWAs were most likely to respond to threatened and endangered species (91%), threatening animals (87%), and crop damage (80%). As expected, APHIS-WS has a large role in airport conflict (95%)

and colonial birds (86%); this finding reinforced the importance of this agency regarding helping SWAs address an array of HWC issues. Interestingly, landowners (or their agent) assumed responsibility in many states for landscaping (84%), equipment (82%), structures (80%), crop damage (80%), fruit and nuts (76%), livestock (72%), commercial forest damage (68%). Finally, states relied heavily on private contractors under permit to address urban/nuisance conflict (69%) and damage to landscaping (62%) (Table 7).

Table 7. Percentage (Number) of respondents reporting who handled categorical HWC issues in the state. For example, in the highlighted gray cell, 80% (n = 32) of 40 survey respondents indicated that the SWA responded to HWC related to field crops in their state.

Category	Number of responses	State fish and wildlife agency	APHIS-WS	Other state agency	Private contractor hired by state	Private contractor under permit	Landowner (or their agent)
Field Crops	40	80% (32)	43% (17)	25% (10)	0% (0)	25% (10)	80% (32)
Fruit and Nuts	33	75% (25)	32% (11)	21% (7)	0% (0)	24% (8)	76% (25)
Range/Pasture	30	66% (20)	37% (11)	20% (6)	0% (0)	33% (10)	77% (23)
Livestock	39	72% (28)	67% (26)	41% (16)	8% (3)	31% (12)	72% (28)
Threatened and Endangered Species	35	91% (32)	54% (19)	9% (3)	0% (0)	23% (8)	26% (9)
Colonial Birds	35	66% (23)	86% (30)	11% (4)	0% (0)	29% (10)	23% (8)
Urban/Nuisance	39	77% (30)	62% (24)	13% (5)	8% (3)	69% (27)	67% (26)
Aviation	41	46% (19)	95% (39)	7% (3)	2% (1)	32% (13)	20% (8)
Threatening animals	39	87% (34)	54% (21)	13% (5)	8% (3)	21% (8)	46% (18)
Commercial Forestry/nursery	38	79% (30)	45% (17)	13% (5)	0% (0)	37% (14)	68% (26)
Structures	40	68% (27)	45% (18)	15% (6)	10% (4)	58% (23)	80% (32)
Equipment	38	68% (26)	39% (15)	16% (6)	8% (3)	53% (20)	82% (31)
Landscaping	37	57% (21)	43% (16)	8% (3)	5% (2)	62% (23)	84% (31)

Field Crops

Forty SWAs answered this category. Eighty percent (80%) of respondents (n=32) indicated the SWA responded to HWC issues involving field crops. In addition, 80% also indicated that the SWA advised the landowner (or their agent) on how to deal with the conflict issue. APHIS-WS also responded to field crop-related HWC in 43% of the responding states (n=17). A smaller percentage of respondents indicated that other state agencies (25%) or private contractors under permit (25%) responded to HWC concerning field crops. None of the respondents reported that the SWA hired private contractors at state expense to respond. Thirty-one of 40 survey respondents reported that more than one agency/approach dealt with HWC in field crops.

Fruit and Nuts

Thirty-three SWAs answered this category. Seventy-five percent (75%) of respondents (n=25) indicated that the SWA responded to HWC concerning fruit and nuts. In addition, 76% indicated that the SWA (n=25) advised the landowner (or their agent) on how to deal with the conflict issue. APHIS-WS also responded to fruit and nut crop-related HWC in 32% of the responding states. A smaller percentage of respondents indicated that other state agencies (21%) or private contractors (24%) under permit responded to fruit and nut crop wildlife conflict. None of the respondents reported that the SWA hired private contractors at state expense to respond. Twenty-three of the 33 respondents indicated that more than one agency/approach dealt with HWC in field crops.

Range and Pasture

Thirty SWAs answered this category. Two-thirds (66%) of respondents (n=20) indicated that the SWA responded to HWC concerning range and pasture. In addition, 77% indicated that the SWA (n=23) advised the landowner (or their agent) on how to deal with the conflict issue. APHIS-WS also responded to range and pasture-related HWC in 37% of the responding states. A smaller percentage of respondents (33%) indicated that permits were issued to respond to range and pasture HWC. None of the respondents reported that the SWA hired private contractors at state expense to respond. Twenty-two of the 30 respondents indicated that more than one agency/approach dealt with HWC in range and pasture in their state.

Livestock

Thirty-nine SWAs answered this category. Seventy-two percent (72%) of respondents (n=28) indicated that the SWA responded to HWC concerning livestock. In addition, 72% indicated that the SWA (n=28) advised the landowner (or their agent) on how to deal with the conflict issue. APHIS-WS also responded to livestock-related HWC in 67% of the responding states. A smaller percentage of respondents (31%) indicated that permits were issued to respond to livestock-related HWC. Eight percent of the respondents reported that the SWA hired private contractors at state expense to respond. Thirty-two of the 39 respondents indicated that more than one agency/approach dealt with HWC concerning livestock.

Threatened and Endangered Species

Thirty-five SWAs answered this category. Ninety-one percent (n=32) indicated that the SWA responded to HWC concerning threatened and endangered wildlife species. In addition, 23% indicated that the SWA (n=8) advised the landowner (or their agent) on how to deal with the conflict issue. APHIS-WS also responded to threatened and endangered wildlife species-related HWC in 54% of the responding states. A smaller percentage of respondents (23%) indicated that permits were issued to respond to threatened and endangered wildlife species conflict. None of the respondents reported that the SWA hired private contractors at state expense to respond. Twenty-eight of the 35 respondents indicated that more than one agency/approach dealt with HWC concerning threatened and endangered wildlife species.

Colonial Birds

Thirty-five SWAs answered this category. Sixty-six percent of respondents (n=23) indicated that the SWA responded to wildlife conflict concerning colonial bird species. In addition, 23% indicated that the SWA (n=8) advised the landowner (or their agent) on how to deal with the conflict issue. APHIS-WS also responded to colonial bird species-related HWC in 86% of the responding states. A smaller percentage of respondents (29%) indicated that permits were issued to respond to colonial bird species conflict. None of the respondents reported that the SWA hired private contractors at state expense to respond. Twenty-five of the 35 respondents indicated that more than one agency/approach dealt with HWC concerning colonial birds.

Urban/Nuisance Species

Thirty-nine SWAs answered this category. Seventy-nine percent of respondents (n=30) indicated that the SWA responded to HWC concerning urban/nuisance species. In addition, 67% indicated that the SWA (n=26) advised the landowner (or their agent) on how to deal with the conflict issue. APHIS-WS also responded to urban/nuisance animal-related HWC in 62% of the responding states. A strong percentage of respondents (69%) indicated that permits were issued to respond to urban/nuisance animal conflict. Eight percent of the respondents reported that the SWA hired private contractors at state expense to respond. Thirty-one of the 39 respondents indicated that more than one agency/approach dealt with HWC concerning urban/nuisance animals.

Aviation

Forty-one SWAs answered this category. Forty-six percent of respondents (n=19) indicated that the SWA respond to wildlife conflict concerning aviation-related conflict. In addition, 20% indicated that the SWA (n=8) advised the landowner (or their agent) on how to deal with the conflict issue. APHIS-WS responded to aviation-related HWC in 95% of the responding states. A smaller percentage of respondents (32%) indicated that permits were issued to respond to aviation-related HWC. Two percent of the respondents reported that the SWA hired private contractors at state expense to respond. Twenty-three of the 41 respondents indicated that more than one agency/approach dealt with HWC concerning aviation-related wildlife conflict.

Threatening Animals

Thirty-nine SWAs answered this category. Eighty-seven percent (n=34) indicated that the SWA responded to HWC concerning threatening species (e.g., predators, moose). In addition, 46% indicated that the SWA (n=18) advised the landowner (or their agent) on how to deal with the conflict issue. APHIS-WS also responded to threatening animal conflict in 54% of the responding states. A smaller percentage of respondents (21%) indicated that the SWA issued permits to respond to threatening animal-related HWC. Eight percent of the respondents reported the SWA hired private contractors at state expense to respond. Twenty-five of the 39 respondents indicated that more than one agency/approach dealt with HWC concerning threatening animals.

Commercial Forestry/Nursery

Thirty-eight SWAs answered this category. Seventy-nine percent (n=30) indicated that the SWA responded to HWC concerning commercial forestry/nursery conflict. In addition, 68% indicated that the SWA (n=26) advised the landowner (or their agent) on how to deal with the conflict issue. APHIS-WS also responded to commercial forestry/nursery-related HWC in 45% of the responding states. A smaller percentage of respondents (37%) indicated that the SWA issued permits to respond to commercial forestry/nursery animal conflict. None of the respondents reported that the SWA hired private contractors at state expense to respond. Twenty-eight of the 39 respondents indicated that more than one agency/approach dealt with HWC concerning commercial forestry/nursery conflict.

Structures

Forty SWAs answered this category. Sixty-eight percent (n=27) indicated that the SWA responded to wildlife conflict concerning structures. In addition, 58% indicated that the SWA (n=23) advised the landowner (or their agent) on how to deal with the conflict issue. APHIS-WS also responded to structure-related HWC in 45% of the responding states. A strong percentage of respondents (58%) indicated that the SWA issued permits to respond to structure-related HWC. Ten percent of the respondents indicated that the SWA hired private contractors at state expense to respond. Thirty of the 40 respondents indicated that more than one agency/approach dealt with HWC concerning structures.

Equipment

Thirty-eight SWAs answered this category. Sixty-eight percent (n=26) indicated that the SWA responded to HWC concerning equipment. In addition, 82% indicated that the SWA (n=31) advised the landowner (or their agent) on how to deal with the conflict issue. APHIS-WS also responded to equipment-related HWC in 39% of the responding states. A strong percentage of respondents (53%) indicated that the SWA had issued permits to respond to equipment-related HWC. Eight percent of the respondents reported that the SWA had hired private contractors at state expense to respond. Twenty-seven of the 38 respondents indicated that more than one agency/approach dealt with HWC concerning equipment.

Landscaping

Thirty-seven SWAs answered this category. Fifty-seven percent (n=21) indicated that the SWA responded to HWC concerning landscaping. In addition, 84% of respondents indicated that the SWA (n=31) advised the landowner (or their agent) on how to deal with the conflict issue. APHIS-WS also responded to landscaping-related animal conflict in 43% of the responding states. A strong percentage of respondents (62%) indicated that the SWA issued permits to respond to landscaping-related HWC. Five percent of the respondents reported that the SWA had hired private contractors at state expense to respond. Twenty-seven of the 37 respondents indicated that more than one agency/approach dealt with HWC concerning landscaping.

Model of organizational response used by SWAs

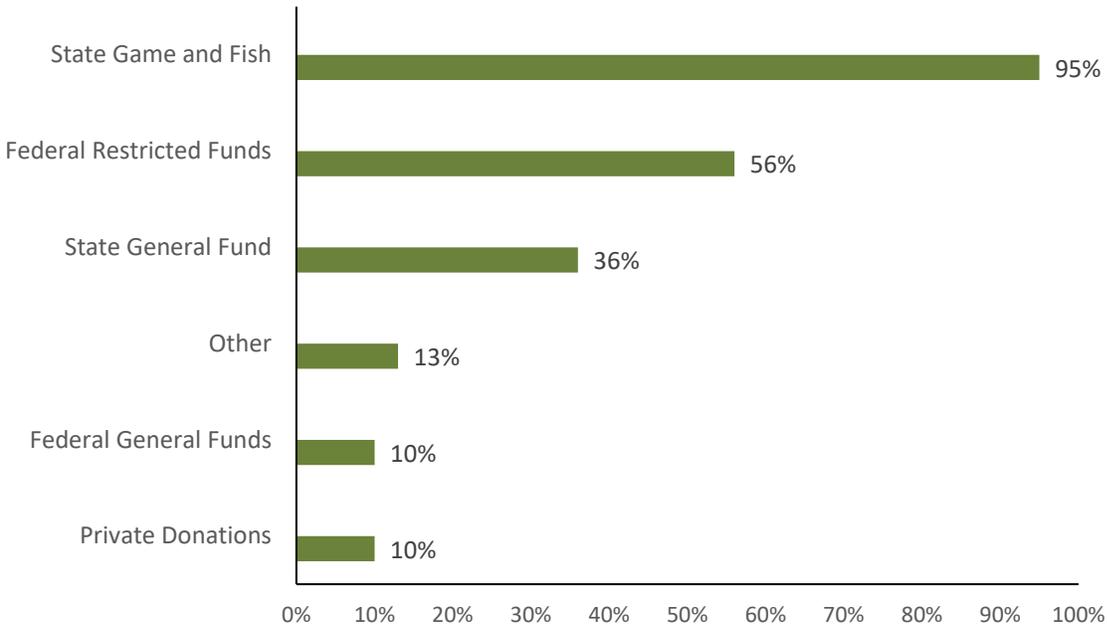
Forty respondents provided information about the organizational structure used to respond to HWC in their agency. Overall, 78% (n = 31) have a dedicated work unit for responding to wildlife conflict issues, including 20 respondents that indicated the SWA used both a dedicated work unit staff as well as other staff to respond to HWC. Seventeen of 40 respondents (43%) reported that the SWA contracted for direct response to some HWC. Eleven of 40 respondents (28%) reported that their SWA used licensed hunters as “agents of the state” to respond to some HWC issues.

Wildlife agencies with a dedicated work unit averaged 12.1 FTEs in the unit. For the 20 respondents who indicated that their state fish and wildlife agency had non-work unit staff responding to HWC, an average of 71 employees spent 0% - 25% of their time responding to wildlife conflict, with most respondents (13/18 respondents) reporting that less than 11% of the time of non-work unit staff was spent on HWC.

How HWC is funded

The majority (30 of 40 respondents; 75%) reported that SWA used multiple funding sources to address HWC. Ninety-five percent of respondents indicated their SWA used state game and fish license appropriations (Figure 2). Slightly more than one-third (38%, n = 15) indicated their SWA had access to state general fund appropriations for HWC. In addition, four respondents indicated their SWA had other state-restricted funds for some specific types of HWC. Fifty-six percent (n = 22) of respondents reported that their SWA had some form of federal restricted funds available while 4 respondents (10%) reported their SWA received federal general fund appropriations. Respondents from 4 SWAs (10% of total) indicated that private funds were available to their agencies. One respondent reported that their SWA had some county funds available for some HWC costs. Thirty-one respondents (78%) reported that their SWA spent an average of \$161,426 annually on supplies and materials for HWC relief (derived from responses to question 12). The 31 states reported a total of \$4,998,630 in expenditures.

Figure 2. Percentage of respondents reporting various funding sources used by their SWA for HWC.



Federal funding

While not a comprehensive analysis, we examined USDA-APHIS state-level budgets to estimate the federal role in HWC management. Overall, USDA-APHIS distributes funds across four broad categories, 1) Agriculture, 2) Health and Safety, 3) Property, and 4) Natural Resources (Table 8)².

While these funds are not distributed to the states, they are still used to directly address HWC issues in an array of areas. During FY22, a total of \$156,053,818 was provided to USDA-WS staff across the 50 states³. California received the most money (\$9,715,306), and Rhode Island the least (\$237,384) (Table 9). The dollars depicted in Table 9 include cooperative funding, which is often provided by SWAs. However, a complete breakdown was not available from USDA-APHIS.

A detailed breakdown of how and where monies are spent can be found at, [USDA APHIS | Program Data Reports](#).

² Source: [USDA APHIS | Program Data Reports](#)

³ Additional funds are allocated to U.S. Territories, which are not included in this report.

Table 8. Resource categories and conflict descriptions for USDA-APHIS funding.

Resource Category	Conflict Description
Agriculture	Protecting Livestock from Predators
	Aquaculture
	Invasive Species Management
	Beaver Damage Management
	Managing Wildlife Species to Protect Agriculture
	National Rabies Management Program
	Wildlife Disease Activities
Health and Safety	Airport Wildlife Hazards
	Invasive Species Management
	Managing Wildlife Species to Protect Health and Safety
	National Rabies Management Program
	Wildlife Disease Activities
Property	Invasive Species Management
	Beaver Damage Management
	Managing Wildlife Species to Protect Property
	Airport Wildlife Hazards
Natural Resources	Threatened and Endangered Species Protection
	Managing Wildlife Species to Protect Natural Resources
	Invasive Species Management
	National Rabies Management Program

Table 9. USDA APHIS funding for wildlife damage FY 2022.

State	Agriculture	Human Health and Safety	Property	Natural Resources	Total
Alaska	\$0	\$2,488,463	\$195,267	\$141,579	\$2,825,309
Alabama	\$444,783	\$1,111,082	\$615,437	\$422,203	\$2,593,505
Arkansas	\$709,036	\$161,192	\$413,213	\$239,026	\$1,522,467
Arizona	\$584,188	\$1,407,543	\$370,756	\$0	\$2,362,487
California	\$2,599,176	\$1,090,422	\$4,195,007	\$1,830,701	\$9,715,306
Colorado	\$1,624,773	\$1,595,083	\$418,219	\$57,590	\$3,695,665
Connecticut	\$0	\$274,077	\$0	\$7,110	\$281,187
Delaware	\$0	\$201,742	\$54,993	\$31,634	\$288,369
Florida	\$27,443	\$3,740,040	\$913,591	\$1,103,806	\$5,784,880
Georgia	\$461,282	\$706,494	\$632,929	\$642,449	\$2,443,154
Hawaii	\$671,129	\$4,242,899	\$699,241	\$401,078	\$6,014,347
Iowa	\$35,524	\$535,154	\$397,430	\$0	\$968,108
Idaho	\$2,393,661	\$76,393	\$76,394	\$38,070	\$2,584,518
Illinois	\$148,611	\$1,669,929	\$812,945	\$1,492,264	\$4,123,749

Table 9 (Cont.)

State	Agriculture	Human Health and Safety	Property	Natural Resources	Total
Indiana	\$27,696	\$808,796	\$195,452	\$366,707	\$1,398,651
Kansas	\$178,165	\$786,534	\$438,804	\$82,232	\$1,485,735
Kentucky	\$256,432	\$168,693	\$226,745	\$85,923	\$737,793
Louisiana	\$474,921	\$668,466	\$385,540	\$573,818	\$2,102,745
Massachusetts	\$32,908	\$938,140	\$65,817	\$126,257	\$1,163,122
Maryland	\$141,486	\$1,401,912	\$359,575	\$1,337,361	\$3,240,334
Maine	\$59,239	\$802,255	\$269,961	\$143,873	\$1,275,328
Michigan	\$816,805	\$1,008,456	\$188,544	\$703,571	\$2,717,376
Minnesota	\$905,790	\$325,749	\$312,167	\$749,299	\$2,293,005
Missouri	\$408,313	\$2,242,605	\$1,813,172	\$418,313	\$4,882,403
Mississippi	\$1,809,735	\$769,818	\$1,654,742	\$107,225	\$4,341,520
Montana	\$3,467,612	\$297,879	\$7,412	\$123,443	\$3,896,346
North Carolina	\$333,494	\$2,613,924	\$2,173,834	\$288,358	\$5,409,610
North Dakota	\$1,086,021	\$953,350	\$157,409	\$45,574	\$2,242,354
Nebraska	\$603,902	\$632,093	\$464,397	\$77,528	\$1,777,920
New Hampshire	\$132,818	\$409,049	\$410,611	\$132,085	\$1,084,563
New Jersey	\$32,269	\$1,763,313	\$382,231	\$241,982	\$2,419,795
New Mexico	\$3,118,938	\$699,587	\$189,382	\$33,311	\$4,041,218
Nevada	\$1,616,389	\$477,861	\$0	\$300,093	\$2,394,343
New York	\$137,495	\$2,059,196	\$1,512,514	\$511,984	\$4,221,189
Ohio	\$111,015	\$1,522,052	\$787,238	\$430,260	\$2,850,565
Oklahoma	\$2,034,823	\$904,796	\$861,875	\$507,882	\$4,309,376
Oregon	\$2,735,095	\$318,705	\$1,257,906	\$280,857	\$4,592,563
Pennsylvania	\$398,299	\$1,691,382	\$1,174,796	\$359,910	\$3,624,387
Rhode Island	\$0	\$161,708	\$0	\$75,676	\$237,384
South Carolina	\$1,026,860	\$801,924	\$2,371,629	\$343,016	\$4,543,429
South Dakota	\$542,833	\$104,904	\$30,210	\$0	\$677,947
Tennessee	\$2,134,054	\$1,647,001	\$1,851,174	\$300,605	\$5,932,834
Texas	\$3,500,725	\$2,643,561	\$425,751	\$1,425,026	\$7,995,063
Utah	\$1,260,497	\$791,089	\$21,026	\$198,687	\$2,271,299
Virginia	\$672,317	\$2,590,256	\$735,045	\$706,764	\$4,704,382
Vermont	\$64,536	\$301,181	\$301,181	\$130,496	\$797,394
Washington	\$169,739	\$1,377,631	\$1,311,934	\$2,134,124	\$4,993,428
Wisconsin	\$1,988,478	\$1,386,816	\$482,466	\$664,086	\$4,521,846
West Virginia	\$231,315	\$1,634,240	\$261,770	\$7,430	\$2,134,755
Wyoming	\$2,679,379	\$364,431	\$310,000	\$184,955	\$3,538,765
Grand Total	\$44,889,999	\$57,369,866	\$33,187,732	\$20,606,221	\$156,053,818

Footnotes

1) All funding includes funding in Federal (congressional appropriation), Federal Cooperative (cooperative agreements with other federal agencies) and Cooperative funding (includes non-federal dollars) in each amount reported.

2) The amounts may or may not include state cooperating agency funds.

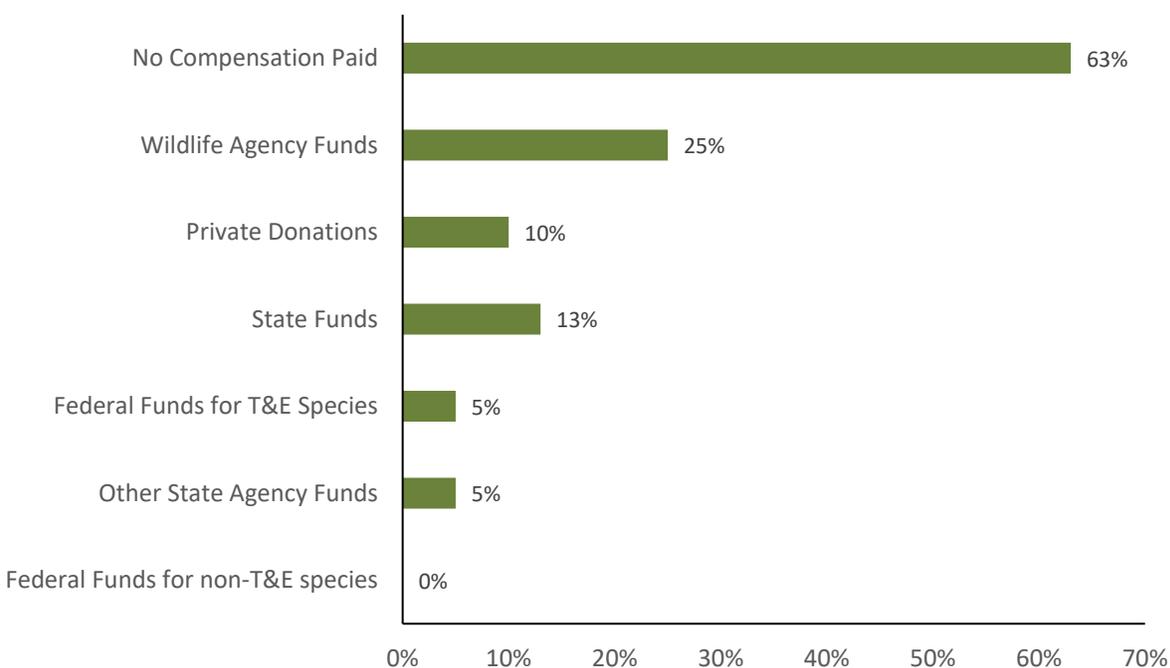
3) These funds may or may not include an additional appropriation of "Farm Bill" funds in FY2022.

Providing compensation for HWC management

Sixty-two percent of respondents indicated that their SWA did not pay compensation for any type of HWC. Sixteen of 40 respondents (40%) reported their SWA had funds for compensation to individuals related to HWC. Six SWAs had multiple funding sources for compensation of HWC. Respondents indicated that the SWA used State Game and Fish funds in 10 states. State general funds were used in 5 states while other state agencies provided funds for HWC compensation in 2 states. Federal funds for Threatened and Endangered species (e.g., wolves) compensation were reported by respondents from 4 states. Two respondents reported that their SWA received private funds for compensation of HWC (Figure 3).

Of the 14 respondents that provided financial information about compensation in their SWA, the total compensation amount averaged \$455,710 annually per state when averaged over the last 2 fiscal years. Total compensation paid annually by the 14 SWAs was \$6,379,950 when averaged over the last 2 fiscal years.

Figure 3. Percentage of respondents reporting source of compensation provided to landowners for HWC.



Contract expenditures for HWC

Respondents were asked to report the total expenditures on contracts for HWC mitigation in the last 2 completed fiscal years (to normalize annual expenditures). Annualized, 30 respondents reported an average of \$172,537 annually in contract expenditures while 14 respondents did not answer the question. Values ranged from \$0 to \$850,000 annually over the last 2 completed fiscal years for responding SWAs. Total annual contracts paid by the 30 SWAs was \$5,176,114 when averaged over the last 2 fiscal years.

HWC information on Agency website

Overall, 36 respondents reported that their SWA provided HWC information on their agency website. Most of the provided links were for big game depredation, urban/nuisance, and living with bears (Appendix F).

Appendices

Appendix A. Questionnaire used to survey state human-wildlife conflict managers.

Start of Block: Intro

The purpose of this project is to survey wildlife professionals on how wildlife conflict is mitigated, funded, and staffed. The project is being conducted by the Association of Fish and Wildlife Agencies (AFWA), WAFWA, Southwick Associates, and the Wildlife Management Institute. The study was funded through an AFWA Multi-State Conservation Grant. We intend to develop a document that could be used as a reference guide by all state fish and wildlife agencies as they develop and enhance these important, but controversial programs. The scope of the project goes beyond traditional big game depredation issues that most states manage. We will also be asking you about nuisance/urban wildlife, airports, and furbearer programs, among others. For the purposes of this project, we are using 'wildlife conflict' as a catch-all phrase. The survey addresses all types of conflict from elk in a haystack to a raccoon in a person's basement. We also recognize statutes, rules, and policies vary across the states, and we ask that you answer the questions to the best of your ability. As you go through the questions, feel free to add other information as appropriate. We are also available to answer any questions.

End of Block: Intro

Start of Block: Questions

- 1) Which types of wildlife conflict does your state manage? Please check all that apply, even if it is entirely managed by a different Agency, Department, Division, or Section.
 - Ungulate depredation, including fence and crop damage
 - Nuisance/Urban wildlife
 - Crop damage by other species (e.g., bears, raccoons, waterfowl, cranes, turkeys, other birds)
 - Predator control (bears, cougars, wolves)
 - Terrestrial invasive species / feral swine
 - Public safety (e.g., airports)
 - Resident Canada geese
 - Nuisance species that are unprotected by state authority (e.g., statute)
 - Beaver, muskrat, otters, other furbearers
 - Migratory birds
 - State-listed Threatened and Endangered Species that cause wildlife conflict
 - Other (please list):

3) If your agency contracts wildlife conflict mitigation to another agency or organization, what was the total expenditure (\$) on contracts in the last 2 completed fiscal years?

\$ _____

4) If your agency mitigates wildlife conflict using agency personnel, what model of organizational response does your agency use? This could be in addition to contracted wildlife mitigation responses. **Please select all that apply.**

- Dedicated work unit(s) for directly responding to wildlife conflict issues.
- Dedicated work unit(s) for directly responding (may be only one person) but utilizes other (local) staff to respond to wildlife conflict.
- DO NOT** have a dedicated work unit for direct wildlife conflict resolution but includes direct wildlife conflict as part of duties of staff.
- We contract for direct response to wildlife conflict.
- We sometimes use licensed hunters as “agents of the state” to respond to some wildlife conflict issues.

If you answered 4A:

5) You said there is/are a dedicated work unit(s) for responding to wildlife conflict issues. About how many full-time equivalent employees (FTEs) are in that unit(s)? If you have records of hours spent, **1 FTE is equivalent to 2080 hours in a fiscal year.**

_____ full-time staff

If you answered 4B:

6) You said there is a dedicated work unit for responding (may be only one person), but utilizes other (local) staff to respond to wildlife conflict.

How many FTE’s have been in the dedicated work unit in the last 2 fiscal years?

How many non-dedicated agency staff responded to wildlife conflict in the last 2 fiscal years?

If you answered 4C:

- 7) You said there are no staff dedicated to wildlife conflict, to the best of your knowledge how many employees respond to conflict and about what percentage of their time is spent in this area. We realize this varies across work areas, so we ask that you estimate to the best of your ability.
- Number of employees who respond _____
 - Percent of time (aggregated) _____
- 8) What are the sources of funds for expenditures related to wildlife conflict mitigation? Include only funds that pass-through state fish and wildlife agency budgets and accounting. Please select all that apply. By Federal, we are referring to funds like Pittman-Robertson appropriations. **Please select all that apply.**
- State general fund appropriation
 - State game and fish fund (license) appropriation
 - Federal general fund appropriation
 - Federal restricted fund appropriation (PR, DJ, or other federal grants)
 - Private donations
 - Other (please list): _____
- 9) Does your agency provide funds, or use funds from other sources for compensation to individuals related to wildlife conflict/damage. Examples would be compensation for big game depredation or reimbursement to livestock owners from predators. **Please select all that apply**
- Yes, Wildlife agency provided funds
 - Yes, State provided funds (like General Revenue)
 - Yes, Another state agency provides funds
 - Yes, Federal funds for non-T&E species (includes but not limited to PR, DJ, federal grants)
 - Yes, Federal funds for T&E species (e.g., grants for wolf damage).
 - Yes, Private donations
 - No

Display This Question:
If Does your agency provide funds, or use funds from other sources for compensation to individuals r... != No
Carry Forward Selected Choices from "Does your agency provide funds, or use funds from other sources for compensation to individuals related to wildlife conflict/damage. Examples would be compensation for big game depredation or reimbursement to livestock owners from predators. Please select all that apply."

If the answer to 9 is yes, please answer the questions below as appropriate. If money was not spent in any of the areas, just leave it blank.

10) To the best of your knowledge, about how much money has been spent over the last 2 completed fiscal years paying for wildlife conflict/damage?

- Wildlife agency provided funds \$ _____
- State provided funds (like General Revenue) \$ _____
- Another state agency provides funds \$ _____
- Federal funds for non-T&E species (includes but not limited to PR, DJ, federal grants). \$ _____
- Federal funds for T&E species (e.g., grants for wolf damage). \$ _____
- Private donations \$ _____

Answer only if you have a compensation program

11) Is there anything we should know about your state's wildlife damage/conflict compensation program? If not, please go to the next questions.

12) What was the total expenditure (\$) for supplies and materials for wildlife conflict mitigation in your state fish and wildlife agency in the last 2 completed fiscal years?

\$ _____

13) Concerning the wide range of potential wildlife conflict types that your agency directly mitigates (either internally or externally), what are the top 3-5 species of concern that lead to on-the-ground response for your agency at the present time?

14) Does your agency have wildlife conflict mitigation techniques available on your agency website, or a reference to other online resources that you would like to share?

- Yes (please provide weblink) _____
- No

15) Are there specific types of wildlife conflict mitigation training that is needed?

Appendix B. Detailed information for selected Northeast wildlife conflict management programs.

State	Licensed Wildlife Control Operators
Connecticut	<u>Wildlife Control Operator</u> : Licensed NWCOs in Connecticut must complete a comprehensive training course and pass a state exam which assesses their knowledge of NWCO regulations, policies, and procedures; animal identification, habits, and life histories; recommended wildlife control practices; and humane handling and euthanasia. NWCOs can advertise services and charge fees for the purpose of controlling nuisance wildlife.
Delaware	<u>Commercial Nuisance Wildlife Control Operators</u> : The Division may certify and permit commercial nuisance wildlife control operators to resolve human/wildlife conflicts. The Division permits certified Nuisance Wildlife Control contractors to trap and remove protected wildlife causing property damage or presenting health risks.
Maryland	<u>Maryland Licensed Wildlife Damage Control Operators</u> : Wildlife damage control operators listed by county are on their website.
Maine	<u>Animal Control Operator</u> : An agent can help resolve conflicts with a wide variety of wildlife found around the home – anything from mice to coyotes. There are several agents that specialize in certain species (such as beavers or bats. Problems with species that doesn't fall into one of the categories on the list, or moose, deer, bear, or turkey, please contact your regional wildlife biologist or district game warden.
New Hampshire	<u>Wildlife Control Operator</u> : Anyone trapping wildlife outside of the regular season in New Hampshire must be licensed as a Wildlife Control Operator (WCO) by the NH Fish and Game Department.
Vermont	<u>Wildlife Control Trappers</u> : VT has list of licensed trappers to assist landowners with human-wildlife conflicts.

Agriculture Depredation Control/Permits

	<u>Agricultural Depredation permits for Canada Geese</u> : To prevent current or future agriculture depredation from occurring, the CT DEEP maintains a Canada Goose Agricultural Depredation Management Program that allows persons actively involved in commercial agriculture (actual or potential gross annual income of \$2,500 or more from commercial cultivated production of livestock and poultry, grain, forage, fruit, vegetables, flowers, ornamental plants, or Christmas trees) to conduct lethal resident Canada goose damage management actions.
Connecticut	<u>Goose Round-ups</u> : An effort to provide more tools for the alleviation of resident goose problems in urban areas, the Connecticut State Legislature passed Public Act 03-192 in 2003. This Act allows municipalities, private homeowner associations, and certain non-profit groups to conduct goose round-ups. These operations, conducted during the flightless molting period, can immediately relieve an area of nuisance geese. Geese are herded into portable nets and euthanized, and the meat is donated to soup kitchens and the needy
	<u>Deer Crop Damage Permit Program</u> : The Deer Crop Damage Permit Program provides commercial agriculturalists with a minimum annual gross income of \$2,500 and an actual or potential loss of this income from their cultivated agricultural crops, the opportunity to reduce damage caused by deer when the firearms deer hunting seasons are closed.
	<u>Special Trapping Permit</u> : Issued to qualified wildlife control operators, hired by the landowner or municipality, to target problem foxes or coyotes responsible for damage or threaten public health or safety threats. Affected landowners or municipalities must fill out and submit to the Wildlife Division an application to trap foxes or Coyotes Causing Severe Damage or Public Safety Threat.

Delaware	<p><u>Deer Damage Assistance Program</u>: Level 1: Farmers experiencing crop damage from deer can apply for the Deer Damage Assistance Program (DDAP): farmers who have participated in the Severe Deer Damage Assistance Program and are still experiencing significant crop damage from deer may consider applying for the Extreme Deer Damage Assistance Program. Level 2: Severe Deer Damage Assistance Program: farmers unable to meet antlerless harvest goals within the normal harvest season may apply for the Severe Deer Damage Assistance Program (SDDAP). Level 3: Extreme Deer Damage Assistance Program. Applicants must agree to a damage inspection by the Delaware Department of Agriculture and/or Delaware Division of Fish and Wildlife and demonstrate a minimum of 10% yield loss due to deer damage. This program requires farmers to work with an external consultant to develop a Deer Management Plan that outlines harvest goals and methods to reduce deer damage.</p> <p><u>Deer Damage Permits</u>: Farmers experiencing deer damage to their crops can apply for and receive a permit to harvest deer outside the regular hunting season. Harvest of antlerless deer, specifically mature does, is the most effective way to help reduce a local deer population. If established deer hunting seasons do not provide adequate regulation of the deer population, commercial farming operations can apply for increased antlerless deer harvest opportunities.</p>
Massachusetts	<p><u>Animal Damage Statute</u>: An owner or tenant of land or, if authorized by such owner or tenant, any member of their immediate family or employee, may, upon such land: (1) kill or attempt to kill, by means other than poisoning or trapping, any wild bird damaging his property, including domesticated animals, poultry and game on game-rearing farms or preserves, provided that such killing is not contrary to any federal law, rule or regulation. (2) hunt or take by other means, except by poison or snare, any mammal which he finds damaging his property except grass growing on uncultivated land. No such owner or tenant shall authorize any person, other than a member of their immediate family or a person permanently employed by him, to place traps for the protection of said property other than during the open season, unless such owner or tenant has first obtained from the director a permit authorizing him so to do, which permit the director is hereby authorized to issue in his discretion, unless such authorized person holds a trapping license. All deer so killed shall be turned over to any environmental police officer and shall be disposed of by the director of law enforcement.</p>
Maryland	<p><u>Resident Canada Geese</u>: Property owners to conduct certain control methods with the appropriate authorization. Most permits are issued to destroy nests and to oil and addle eggs; authorization is also given to kill geese on farms or other agricultural facilities where geese damage commercial crops; and in some cases, permits may be given to landowners suffering damage. At qualifying sites, communities are issued federal permits for goose roundups; and the meat is processed and donated to food pantries.</p> <p><u>Deer Management Permit</u>: Maryland landowners or agricultural lessees that are experiencing severe economic loss from deer to commercially grown crops (includes row crops, truck crops, pasture, nursery stock, orchards and certain tree plantings) may be eligible to receive a Deer Management Permit (DMP). DMP's allow the permittee to remove deer from the designated property outside the established deer hunting seasons and/or deer bag limits. These permits are issued by the Wildlife and Heritage Service.</p>
Maine	<p><u>Crop/Orchard Damage Statute</u>: Permission to kill nuisance animals or wild turkeys. Except as provided in section 12404, the cultivator, owner, mortgagee or keeper of any orchard or growing crop, except all types of grasses, clover and grain fields, may take or kill wild animals or wild turkeys night or day when the wild animals or wild turkeys are located within the orchard or crop where substantial damage caused by the wild animal or wild turkey to the orchard or crop is occurring.</p>
New Hampshire	<p><u>Wildlife Damage Control Statute</u>: State law allows a person to kill "any unprotected bird or wild animal which the person finds in the act of doing actual and substantial damage to poultry, crops, domestic animals, or the person's property." The NH Fish and Game Department strongly recommends that the public take a different approach, one that is beneficial to both the state's wildlife and a homeowner's property. These New Hampshire statutes establish a wildlife damages control program to respond to conflicts between wildlife and people. A person who suffers loss or damage to livestock, bees, orchards, or growing crops, by bear or mountain lion, may receive compensation from the state. The statutes allow a person to kill any unprotected bird or wild animal doing damage to poultry, crops, domestic animals on the person's property.</p>

	<p><u>State depredation permits:</u> Farmers experiencing crop damage by Canada geese, may apply for a free permit from NJ Division of Fish and Wildlife by calling 908-735-8793. This permit allows for the control of geese between May 1 and August 31.</p>
New Jersey	<p><u>Farmer Depredation permit:</u> Farmers experiencing deer damage (permits to shoot wild deer) may apply for a Deer Depredation Permit which allows for the take of deer outside of the normal hunting season. Eligible property includes farmland assessed cultivated fields and tree farms. Cultivated fields includes pasture lands which have been seeded within the 12 months prior, and land on which crops are grown. Prior to applying for a permit farmers can explore the use of a noise cannon.</p>
New York	<p><u>Deer Management Assistance Program:</u> To address deer overabundance, landowners and municipalities can pursue more intensive deer population reduction on their land or within their boundaries through two special permit programs: 1) The Deer Management Assistance Program (DMAP) provides antlerless deer harvest tags that the landowner or municipality can distribute to licensed hunters for use on specific parcels of land. The hunters can use the tags on those properties during deer hunting seasons in addition to the regular tags they receive with their licenses. Deer Damage Permits allow taking of deer outside of hunting seasons under certain conditions and may allow the use of specialized techniques to increase success. These permits are issued in situations where adequate population control and damage reduction cannot be achieved through hunting, even with DMAP.</p>
Pennsylvania	<p><u>Agricultural Deer Control Tag Program:</u> The Agricultural Deer Control Program, formerly known as "Red Tag," is a special permit for deer control related to agricultural depredation. An Agricultural Deer Control permit authorizes landowners or lessees to enlist the aid of hunters for the purpose of removing deer causing damage on agricultural lands, outside of the regular deer hunting seasons.</p> <p><u>Agricultural damage depredation permit:</u> Depredation permits to be issued to qualified agricultural landowners to authorize them to secure the assistance of sub-permittees, not otherwise individually qualified by section 2121 of the act (relating to killing game or wildlife to protect property) themselves, to destroy game or wildlife causing agricultural damage on lands owned, leased or otherwise controlled by the agricultural landowners.</p>
Rhode Island	<p><u>Bird Depredation and Control Permits:</u> A person may petition and be issued a depredation permit/order or control permit/order from the director, or his or her designee, in accordance with applicable federal law, for the taking of birds when found committing depredations upon agricultural crops, livestock, or wildlife, or when concentrated in such numbers and manner as to constitute a health or public safety hazard or other nuisance.</p> <p><u>Deer Damage Permits:</u> Special Permits may be issued to commercial operators only for control of deer in locations where they are causing significant damage to crops.</p>
Vermont	<p><u>Wildlife Depredation Permit:</u> Wildlife depredation permits are issued under the authority of 10 V.S.A §4138. Depredation permits are issued only to properly accredited persons or institutions for the purposes of preventing the propagation of game or food fish and may take, permit or cause to be taken at any time wild animals which are doing damage.</p> <p><u>Deer Depredation:</u> A person, including an authorized member of the person's family, an authorized regular on-premises employee, or an agent who holds a Vermont hunting license and who is designated by the person, may take, on land owned or occupied by the person, up to four deer per year that the person can prove were doing damage to the following: 1) a tree that is being grown in a plantation or being cultivated for the purpose of harvesting an annual or perennial crop or producing any marketable item; or 2) a crop-bearing plant; or 3) a crop, except grass.</p>

Federal Programs/ Depredation Permits

Connecticut	<u>Federal Goose Depredation Permits (USFWS)</u> : The USFWS also issues goose depredation permits to qualifying individuals and municipalities. These permits allow for the removal of geese, typically 1-2 per day, in conjunction with active non-lethal methods. The removal of 1-2 geese per day, up to the number allowed by the permit, serves as negative reinforcement to on-going hazing activities.
Delaware	<u>Federal Depredation Permit for Migratory Geese</u> : For needs outside of the regulated hunting season and any other state-specific goose control programs, the U.S. Fish and Wildlife Service issues goose depredation permits to qualifying individuals and municipalities. These permits allow for the removal of geese, typically 1-2 per day, but must be done in conjunction with active non-lethal methods. Please see Federal Migratory Bird Depredation Permit for information and the permit form.
Massachusetts	<u>Federal Depredation Permits</u> : The U.S. Fish and Wildlife Service issues permits allowing for the lethal removal of Canada geese (typically 1-2 per day), in conjunction with active non-lethal methods, to qualified applicants.
New Jersey	<p>USDA Wildlife Services for Canada Geese: Canada geese are native, migratory birds that are protected along with all other native birds. However, in some situations a landowner may be eligible for assistance with the management of Canada geese and some other species from USDA Wildlife Services. The NJ office of USDA Wildlife Services</p> <p>Federal Depredation permits: Farmers experiencing crop damage by geese may also apply for a federal depredation permit from the US Fish & Wildlife Service.</p>

Nuisance Wildlife

Delaware	<u>Year-round Depredation Order (Coyotes)</u> : In 2014, a statewide hunting and trapping season was established for coyotes as well as a year-round Coyote Depredation Order that allows landowners to harvest coyotes when there is an imminent threat of them causing injury to humans, livestock or domestic animals. Annually, fewer than five coyotes are harvested in Delaware.
Maine	<u>Nuisance Furbearers Control</u> : Any person owning or leasing and operating any property, and any employee of that person, may, while on that person's premises, kill and take a furbearer that is worrying, wounding, or killing the domestic animals or livestock on the property, or destroying or mutilating agricultural crops or fruit trees on the property; or otherwise causing clear-and-immediate economic damage to any property belonging to that person; or creating a potential health hazard; provided that, except in the case of rabbits, the carcass of the furbearer shall be presented to the department within twenty-four (24) hours of taking.
Massachusetts	<u>Environmental Police Radio Program</u> : Handles issues related to moose in populated areas: If a moose is in a densely populated area, leave the moose alone and contact the nearest Mass. Wildlife District Office or the Environmental Police to report the sighting and get advice. The Environmental Police Radio Room can be reached 24 hours a day, 7 days a week
Maryland	<p><u>Wildlife response team</u>: MD DNR staff on call 24 hours a day seven days a week to respond to emergencies. DNR staff also provides aversive conditioning for black bears.</p> <p><u>Nuisance Animal Hotline</u>: MD DNR has contracted with the USDA Wildlife Services to establish a public access nuisance animal hotline. Wildlife Service specialists are available to provide technical guidance or facilitate contacts with professional Nuisance Wildlife Cooperators. Individuals that are experiencing problems with coyotes or other wildlife species are encouraged to call the hotline</p> <p><u>Black Bear Damage Reimbursement Fund</u>: The Black Bear Conservation Stamp Program began in 1996. Authorized by the Maryland General Assembly, the stamp generates funds that are used to compensate farmers who have reported damage to agricultural crops caused by black bears. The Black Bear Damage Reimbursement Fund compensates landowners who have suffered agricultural damage as a result of black bears.</p>
Rhode Island	<u>Nuisance Wildlife Control Statute</u> : A person may lawfully kill, or cause to be killed, any wild animal or wild turkey, night or day, found in the act of attacking, worrying or wounding that person's domestic animals or domestic birds or destroying that person's property. A person who kills a wild animal or wild turkey by authority of this section shall report the incident to the Maine Warden Service
Vermont	<u>Open Season for Coyotes</u> : Year-round hunting season

Appendix C. Detailed information for selected Midwest wildlife conflict management programs.

State	Licensed Wildlife Control Operators
Illinois	<p><u>Nuisance Wildlife Control Permits for WL Control Operators:</u> A Class A Nuisance Wildlife Control Permit authorizes you to charge a fee for removing certain types of mammals and game birds when they are causing damage to property or risks to human health or safety.</p> <p><u>Wildlife Control Operator:</u> If wildlife are causing damage to your home or property, and all non-lethal methods of control have been unsuccessful, a licensed nuisance wildlife control operator (NWCO) can be hired to trap and remove the animal or bird. Class A NWCO’s are licensed to remove most game mammals, furbearing mammals, other mammals, and game birds Class D NWCO’s are licensed to remove migratory birds (e.g., geese, ducks, raptors, and woodpeckers)</p>
Indiana	<p><u>Nuisance Wild Animal Control Permit- Wildlife Control Operators:</u> This permit is given to control a nuisance wild animal protected by state law. Those who provide a service to the public or charge a fee for nuisance wild animal control services must pass a test before obtaining a permit and pay a \$25.00 fee for the permit. Migratory birds, including Canada geese and woodpeckers, are federally protected and cannot be taken under the authority of this permit</p>
Ohio	<p><u>Commercial Nuisance Wild Animal Control Operators:</u> Ohio DNR maintains a current list of licensed Commercial Nuisance Wild Animal Control Operators in Ohio</p>
South Dakota	<p><u>Wildlife Damage Specialists:</u> SD GFP staff members assist with trapping coyotes that have killed livestock; assisting with the construction of electric fence to protect growing crops from Canada goose damage, or assistance regarding deer damage to stored-feed supplies. Twenty-seven full-time wildlife damage specialists, numerous seasonal positions, and assisting GFP staff provide the “boots-on-the-ground” delivery of the important WDM programs and services. These programs provide direct assistance to South Dakota producers and landowners when wildlife damage concerns arise. The depredation assistance that GFP primarily provides includes assistance with beaver, Canada geese, coyote, deer, elk, fox, mountain lions, nuisance animals, pheasant, pronghorn antelope, turkey, as well as other wildlife species.</p>
Agriculture Depredation Control/Permits	
Illinois	<p><u>Deer Removal Permits:</u> Deer removal permits may be issued to municipalities to control damage caused by deer in localized areas, such as golf courses, nurseries, orchards, parks, and natural areas, at the time the damage is occurring. Deer Removal Permits may be issued to landowners for properties that are not incorporated within municipal boundaries to help reduce damage caused by deer, where excessive damage to agricultural crops, nurseries, orchards, or vineyards is current and ongoing.</p> <p><u>Deer Population Control Permits:</u> Deer population control permits are issued to agencies, organizations, associations, and municipalities to authorize the reduction or control of deer numbers by nontraditional or nonhunting methods.</p>
Indiana	<p>Indiana DNR allows increased harvest of antlerless deer on a county-by-county basis to provide opportunities for hunters to take additional deer in these types of situations</p> <p><u>Indiana Private Lands Access Program:</u> Allowing access to private land for hunting increases the potential to reduce the local deer population and subsequent deer damage. The Indiana Private Lands Access Program (IPLA – formerly known as APPLE) offers financial incentives to landowners who allow controlled public hunting access on their private property. This program is funded in part by the federal Farm Bill under the Voluntary Public Access and Habitat Incentive Program (VPA-HIP). The program’s focus is on providing hunting opportunities on private property across Indiana. All IPLA hunts are administered through the reserved hunt draw system.</p> <p><u>Special Permit for Canada Geese:</u> Contact your DNR urban wildlife biologist for information on obtaining a special permit to trap, relocate or kill nuisance Canada Geese outside the legal hunting seasons; contact information is available on our website at www.wildlife.IN.gov</p>

Iowa	<p><u>Wildlife Damage Management</u>: Provide private landowners with the guidance and assistance they need to effectively deal with wildlife damage. A DNR wildlife biologist can answer questions and provide technical advice on how to deal with crop damage. A depredation biologist visits the property to evaluate the extent of the wildlife damage and work to find a solution to reduce or stop the damage.</p> <p><u>Deer Depredation Permits</u>: Providing technical advice on how to exclude or deter the animals causing damage; Providing extra deer depredation licenses for hunters who hunt your property; Working with neighbors to keep wildlife populations at acceptable levels; Providing you (the landowner or tenant) or your designee with permits to shoot deer outside of existing seasons (all deer taken must be recovered and processed for consumption); To qualify for extra deer depredation licenses or shooting permits the landowner or tenant must enter into an agreement with the DNR that outlines the goals and timeframe in which deer numbers will be reduced and how normal hunting practices will be used to keep deer numbers at desired levels.</p> <p><u>The Deer Hunter Registry</u>: is a list of antlerless deer hunters who have expressed an interest in helping landowners meet their harvest goals. These goals are specified in management agreements with the Iowa DNR, and some landowners may need additional hunters to assist them with these harvest goals. Hunter contact information is provided to landowners who request this information, and landowners have the option to contact any or all hunters on their list.</p>
Kansas	<p><u>Deer Damage Control Permits/Deer Damage Hotline</u>: The Bill of Rights of the Kansas Constitution provides landowners with rights to protect their property. This includes lethal control options landowners may use to address deer damage. Site-specific assistance is available from any district wildlife biologist (DWB) or natural resource officer (NRO) from the Kansas Department of Wildlife and Parks (KDWP). Permits authorizing lethal control measures and possession of a deer carcass outside normal deer hunting seasons may be issued.</p> <p><u>Resident Canada Goose Permits</u>: In some urban and suburban areas in Kansas, Canada goose populations have increased substantially during the past 20 years. Some of these geese remain in Kansas to nest and are called "resident Canada geese." In some situations, destruction of nests and eggs may be warranted. Such actions require a permit from the Kansas Department of Wildlife and Parks.</p>
Michigan	<p><u>Resident Canada Goose Management Program</u>: A program that has been developed to give private landowners (including businesses and other commercial entities) options to address their goose-human conflicts on their sites. A list of private nuisance animal control firms that are specifically permitted and trained to handle resident Canada geese</p> <p><u>Nuisance/Damage Permit for Canada Goose Contractors</u>: Contractors may destroy Canada goose nests and eggs, round up/capture and hold, kill, and transport Canada geese only by permit issued by the DNR.</p> <p><u>Deer Damage Permits</u>: Deer damage shooting permits may be issued statewide to owners of specific lands with significant agricultural or horticultural crop damage documented by the Department. These permits are issued by a local field office for crop damage. Deer Damage Shooting Permits are issued to resolve agricultural or horticultural damage occurring on properties outside of deer hunting seasons. They are only valid outside of deer hunting season and within a specified time period determined by the local Wildlife Division staff. The local staff may make a site visit prior to issuing kill tags to assess the extent of the damage. Individuals who use these permits may keep the harvested deer or donate it, but above all, the carcass must not go to waste.</p>
Minnesota	<p><u>Wildlife Damage Management Program</u>: This program was initiated by the State Legislature in 1993 to provide landowners relief from wildlife damage. It combines both short and long-term abatement measures that in combination provide the greatest damage reduction at the lowest possible cost. It is funded through the Game and Fish Fund. To provide emergency wildlife damage abatement materials to eligible producers or growers and to reduce damage and increase tolerance of wildlife on private lands. All producers or growers must enter into a cooperative damage management agreement. Short term projects are usually in response to an emergency and include issuing shooting permits, repellent applications, temporary fences or the creation of lure/food plots. Long term projects may include hunt management, fence construction or other abatement materials.</p>

Nebraska	<p><u>Nebraska Department of Agriculture: Animal Damage Control Statutes:</u> For the purpose of carrying on an organized animal damage control program within their respective counties, the county boards may cooperate with USDA state agencies, private associations, and individuals in the control of coyotes, bobcats, foxes, badgers, opossums, raccoons, skunks, and other predatory animals in this state that are injurious to livestock, poultry, and game animals and the public health.</p> <p><u>Nebraska Game and Parks:</u> Utilizes a variety of tools in response to depredation, including technical advice, abatement materials and supplies and/or damage-control permits. Not all responses will be appropriate and/or legal for all species.</p> <p><u>Depredation Control Permits:</u> Damage-control permits are only issued for wildlife currently causing damage, such as deer, antelope, elk, turkey, gamebirds and other wildlife species. Damage-control permits are utilized in instances when normal hunting does not provide enough relief from damage, typically due to timing or access issues. These permits must be requested by a landowner and damage must be inspected.</p> <p><u>Antlerless Hunter Database:</u> The Nebraska Game and Parks Commission’s Antlerless Hunter Database connects hunters who wish to harvest antlerless deer with landowners who are experiencing damage from deer on their property. Hunters who wish to be considered for this program may sign up on the program page, which landowners may view as a list.</p> <p><u>Landowner Permits:</u> Qualifying landowners in Nebraska have additional hunting opportunities for big game and small game.</p> <p><u>Landowner Elk Permit:</u> A person who owns or leases at least 80 acres of agricultural land qualifies for an either-sex elk permit following the verification of 10 general permit holder or special depredation season antlerless elk harvests on that property. When the tenth harvest is recorded, a free permit will be issued, at no charge, to either the qualifying landowner or one of their immediate family members.</p>
North Dakota	<p><u>Wildlife Services Program:</u> A cooperative effort of state and federal governments administered by USDA through a memorandum of understanding with the North Dakota Agriculture Commissioner, Game and Fish and the Department of Water Resources. Wildlife damage to crops and other property most often involved coyote depredation of livestock, blackbird and waterfowl damage to sunflowers and small grain crops, and damage to trees, shrubs, and flooded cropland caused by beavers. Wildlife Services also responds to skunk complaints, squirrel damage to trees, and rabbit damage to gardens. Wildlife Services also works with civilian and military authorities to evaluate and assist with a variety of wildlife hazards on airport facilities.</p>
Ohio	<p><u>Goose Damage Permit:</u> If non-lethal tactics have been used in the past, without success, the Division of Wildlife may issue a lethal permit to allow the landowner to destroy nests, conduct a goose roundup, or shoot geese.</p> <p><u>Deer Damage Control Permits:</u> Ohio Administrative Code – 1501:31-15-08 (Deer Damage Control Permit) authorizes the Ohio Division of Wildlife to issue deer damage control permits under certain conditions and guidelines. While the OAC allows any landowner to apply for a permit, the application of a permit does not guarantee the landowner a permit even if damage is occurring. The Division of Wildlife personnel and partners, including SWCD Wildlife Specialists, provide guidance on handling complaints of crop losses or property damage caused by deer and issuance of permits. These permits allow permittees and their approved shooters to kill an agreed upon number of deer during the dates and under the conditions specified on the permit. In most situations the permits are used to allow the shooting of deer outside of Ohio’s deer hunting seasons. Deer Damage Permits are intended as a tool for landowners to modify deer behavior in conjunction with reducing deer numbers on a particular property in an effort to alleviate and reduce property damage caused by deer.</p>

	<p><u>Wildlife Damage Management Program:</u> SDGFP operates a program that assists private landowners with all types of wildlife damage conflicts. Specific to big game species, the program primarily works with deer, elk, and pronghorn. Because 100% of the funds used to operate the Wildlife Damage Management (WDM) program are derived from the sale of hunting licenses, landowners are required to sign an agreement with SDGFP that states. The producer agrees to allow reasonable, free public hunting access to non-family members who obtain proper permission, and the producer agrees not to charge any person or entity a fee or payment for hunting access for the species. The majority of these programs focus on developing long-term solutions to wildlife damage conflicts when possible. Other programs try to reduce the negative impacts that wildlife have caused and prevent further damage if possible. The South Dakota Legislature established a funding mechanism for the program in 1999, which established a five-dollar surcharge on most hunting licenses. One-half of the monies go towards the operation of the WDM program and the other one-half for leasing private land for public hunting access. Every year, SDGFP works cooperatively with several thousand private landowners across the state to reduce wildlife conflicts and spends approximately \$1.5 million to operate the WDM program.</p>
South Dakota	<p><u>Depredation Hunts:</u> In situations where a large number of big game animals are causing damage and the affected landowner and SDGFP agrees, depredation hunts may be implemented. Any interested hunters may register for a chance in a random drawing, and if selected for a hunt, antlerless deer or antlerless elk may be taken on the affected property. Depredation hunts may only occur after traditional hunting seasons have closed and the selected hunters may retain all parts of the harvested animal. By using hunters to disrupt the animals' activities, it serves as a hazing technique to help keep the animals away from the immediate area. The utilization of this management tool fluctuates greatly, primarily because of the severity of winter weather and local deer and elk populations. Hazing techniques (i.e. use of pyrotechnics and propane cannons) to haze animals away from immediate areas where they are causing significant damage</p>
	<p><u>Kill Permits:</u> SDGFP does not issue kill permits to landowners for big game species. In warranted situations, SDGFP may issue kill permits to SDGFP staff (SDCL 41-6-29.1) to remove big game animals that are causing damage. The permit will specify the species, number of and type of animal allowed to be removed (antlerless or antlered). The permit will also outline any criteria that must be followed. Carcasses are donated to Sportsmen Against Hunger and distributed to needy families.</p>
	<p><u>Big Game Protecting Fencing and Stackyard Program:</u> SD Game and Fish will provide up to \$10,000 of cost-share assistance to producers to construct permanent protective stackyards or can provide protective portable panels that protect stored livestock-feeds (i.e. hay, corn, silage, etc.) from deer and elk during the winter months. These two programs are very popular and provide long-term solutions. SDGFP will also provide cost-share assistance to construct temporary fences around tree-plantings that are experiencing deer damage. Both of these programs allow for reimbursement for labor (up to 30% of the entire project cost). Some producers choose to be reimbursed for labor and others utilize the full amount to purchase the fencing materials. SDGFP will also provide protective cable to be installed along the top wire of fences to protect them from elk damage when the animals cross the fence.</p>
	<p><u>Elk Food Plot and Hay land Contracts:</u> SDGFP will provide up to \$6,000 for food-plots and up to \$3,000 for hay land contracts, respectively. Both of these programs pay the landowner if they experience heavy elk usage during the growing season to alfalfa and other growing season crops or to areas which the producer has an annual history of using mechanical equipment to harvest grass hay. These hay land areas cannot be grazed by livestock.</p>
Wisconsin	<p><u>Wildlife Damage Abatement and Claims Program:</u> Wisconsin has a program that assists agriculture producers when wildlife damage agricultural resources. The Wildlife Damage Abatement and Claims Program (WDACP) provides damage prevention assistance and partial compensation to farmers when wild deer, bear, geese, turkeys, elk and cougar damage agricultural crops, depredate livestock or damage commercial apiaries (beehives). Through this program, wildlife managers issue agricultural damage shooting permits to farmers for removal of deer (and occasionally bear, geese and turkeys) that cause damage. Non-lethal materials like trapping and relocation services or temporary fencing may also be available through the program.</p>

Federal Programs/Depredation Permits

<p>Illinois</p>	<p><u>Black Vulture Depredation Permits</u>: Illinois Farm Bureau (IFB) has obtained a statewide depredation permit for black vultures from the U.S. Fish and Wildlife Service (USFWS). IFB will work with USDA Wildlife Services to issue federal sub-permits to livestock farmers who are experiencing issues with black vultures on their land. IFB will also work with the Illinois Department of Natural Resources (IDNR) to secure the necessary state permits for farmers seeking approval.</p> <p><u>Pest and Predator Control Act</u>: The Department of Agriculture of the State of Illinois is authorized to enter into an agreement with the Bureau of Sport Fisheries and Wildlife, United States Department of the Interior, covering cooperation with funds, facilities and personnel in conducting a program which will prevent or minimize the economic depredations of wild and feral animals and commensal rodents, starlings and bird pests, abate their nuisances and reduce the transmission of disease to persons, domestic animals and wild life</p>
<p>North Dakota</p>	<p><u>Special Canada Goose Permit</u>: Canada geese are migratory birds that are protected by international treaties, the federal government and the states. The U.S. Fish and Wildlife Service has issued a Special Canada Goose Permit to North Dakota Game and Fish Department that allows the lethal-take of Canada geese that are causing agricultural depredation problems within the state. The Department’s permit allows Game and Fish to issue sub-permits to agricultural producers and their designated agents so that they may legally take geese that do not respond to non-lethal deterrents; nests and eggs can also be taken. The intent of the permit is not broad-scale population control, but rather to reduce numbers of geese in localized areas during the growing season through a combination of non-lethal and lethal measures.</p>
<p>Wisconsin</p>	<p><u>USFWS Canada Goose and Blackbird Depredation Order</u>: The USFWS has established depredation orders to facilitate management of conflicts with resident Canada Geese and blackbirds. The depredation orders eliminate the fees and consultation requirements of permits but require registration with the WDNR and USFWS before conducting management of resident Canada geese. Depredation orders require annual reporting of birds taken and nests/eggs oiled, addled, or destroyed.</p>

Nuisance Wildlife

<p>Illinois</p>	<p><u>White-tailed Deer Urban Hunting Programs</u>: Prior to implementing an urban hunting program, city ordinances must be examined to determine if they prevent firearm discharge within the city which would preclude gun deer hunting and if ordinances exist allowing the use of bow and arrow for an archery season.</p>
<p>Indiana</p>	<p><u>Nuisance Coyotes</u>: Landowners may take coyotes year-round on their private property by trapping or shooting without possessing a wild animal control permit from the DNR and without having a hunting or trapping license. Additionally, a landowner does not need to possess a wild animal control permit from DNR to give another individual written permission to shoot or trap coyotes on the landowner’s property. Wolves in Indiana are protected under federal law. State law allows a resident landowner or tenant to kill a wolf if it poses a threat to people or while it is causing damage to property owned or leased by the landowner or tenant. Any wolf killed must be immediately reported to federal and state wildlife officials.</p>
<p>Indiana</p>	<p><u>Nuisance Wildlife Removal - Small Mammals</u>: A resident landowner or tenant can legally capture these species of wild animals listed above without a permit on the property that he/she owns or rents if the animal is: Causing or threatening to cause damage to property, or Posing a health or safety threat to people or domestic animals</p> <p><u>Nuisance Wildlife at Airports</u>: USDA Wildlife Services works with military and civilian airports to manage wildlife which pose hazards to aircraft and human safety. Airport assistance ranges from technical assistance to biologists stationed at the airport to provide direct management assistance. Wildlife Services biologists and specialists conduct hazard assessments", provide management recommendations, and provide training to airport staff. Wildlife Services biologists are onsite at three Indiana airports to provide wildlife hazard consultation and management services.</p>

Iowa	<p><u>Nuisance Wildlife at Airports:</u> USDA Wildlife Services manages wildlife damage at two civil airports, one general aviation airport and two Iowa Air National Guard bases. Typical services range from conducting wildlife hazard assessments or developing a wildlife damage management plan to full- or part-time on-site presence conducting wildlife damage management activities. Habitat modification has been an integral tool used in Iowa to reduce wildlife strikes. These modifications include implementing crop-free zones around runways, standing water drainage, constructing wildlife fences, in addition to training airport personnel in habitat management techniques.</p>
Kansas	<p><u>Nuisance Wildlife Damage Control:</u> A program that is governed by the Kansas Department of Wildlife and Parks. It is designed to help citizens find someone who is knowledgeable in this control. A list of Nuisance Wildlife Damage Control permit holders by region is available. Allows legal occupants and landowners, after attempting to resolve the problem using non-lethal methods, to kill animals in or around buildings or causing damage to their property.</p> <p><u>Kansas Predator Damage Control Program:</u> In Kansas there is a County agricultural Extension agent in each of our 105 counties. The producer who has damage goes to these agents just as they go to them for help on other farm problems. After checking the report of livestock loss the county agricultural Extension agent, in many cases, can provide information so the producer can solve the problem. The program in Kansas is unique because it is the only state that has an organized statewide program that is administered through the State Cooperative Extension Service and where that program is the only form of a governmental predator program in the state. The state Forestry, Fish and Game Commission cooperates with Extension through a Memorandum of Understanding that is reviewed once a year.</p> <p><u>Nuisance Bird Control Permit:</u> Nuisance birds may be controlled when found depredating or about to depredate upon ornamental or shade trees, agricultural crops, livestock, or wildlife, or when concentrated in such numbers and manner as to constitute a health hazard or other nuisance.</p> <p><u>Nuisance Wildlife at Airports:</u> USDA-WS conducts wildlife damage management activities at airports to assess, identify, manage, and monitor any and all wildlife-related threats and hazards in and around Dwight D. Eisenhower International Airport (ICT) and Colonel James Jabara Airport (AAO). WDM program that addresses the need for managing conflicts caused by nuisance wildlife in and around ICT and AAO in Wichita, Kansas.</p>
Michigan	<p><u>Damage and Nuisance Animal Control Permit by Animal Control Operators:</u> This permit, issued by a Conservation Officer or Wildlife Biologist at one of the offices listed at the end of this circular, is provided to the landowner, lessee, or their designated agent and is not transferable. The permits are issued, following inspection, on a case-by-case basis usually for crop damage purposes. Wildlife Removal by Animal control operators: The nuisance animal laws in Michigan allow for the removal of wildlife animals immediately through trapping. When trapping an animal is caught, trapped, and released to another environment suitable for them to survive and away from our properties.</p>

	<p><u>Nuisance Bears:</u> Homeowners and farm owners kill the majority of nuisance bears, which is allowed in state law. This option can only be used if the bear is causing significant property damage or creating an immediate danger to people or animals. Destroying a bird feeder or unsecured trash cans is not a viable reason to shoot a bear. When a bear is shot by a property owner it should be reported as soon as possible to a conservation officer.</p> <p><u>Taking animals causing damage:</u> Owners and occupants may take certain animals. A person or the person's agent may take bats, snakes, salamanders, lizards, weasel, mink, squirrel, rabbit, hare, raccoon, bobcat, fox, opossum, muskrat, or beaver on land owned or occupied by the person where the animal is causing damage. The person or the person's agent may take the animal without a license and in any manner except by artificial lights in the closed season or by poison. Raccoons may be taken under this subdivision with artificial lights during the open season. Special permit for taking protected wild animals. The commissioner may issue special permits under section 97A.401, subdivision 5, to take protected wild animals that are damaging property or to remove or destroy their dens, nests, or houses. You can take some animals which are normally protected by Minnesota Statute without a license or permit if they are doing damage. If you are the landowner, manager, or occupant of the property where the animal is causing damage. You must notify a Conservation Officer within 24 hours when you take a protected nuisance animal.</p> <p><u>Predator Control -Coyotes:</u> Suggestions on the MN DNR website should prevent most coyote problems. However, if depredation occurs or aggressive coyote behavior is observed, removal of the coyotes may be necessary. Coyotes are unprotected in Minnesota and may be taken at any time by shooting or trapping. The MN DNR does not trap, shoot, or relocate coyotes. Where necessary, removal of coyotes is the responsibility of the landowner or tenant. For information on pest control contractors or trapping techniques for coyote removal, contact your local DNR Wildlife office or Conservation Officer. In cities with ordinances prohibiting the use of certain traps and/or firearms, you may need a city permit, or assistance from the city animal control agency.</p>
Minnesota	<p><u>Prairie Dog Control:</u> GFP implemented a new online registration system for landowners and producers that request assistance with prairie dog control. Landowners simply fill out their information and use the mapping feature to identify the area where the prairie dogs encroached onto their property from adjacent public land and they are then registered for GFP's assistance.</p> <p><u>Predator Control Services:</u> SD Game, Fish and Parks entered into a cooperative agreement in 2009 with USDA-Wildlife Services (USDA-W) in regards to aerial predator control in South Dakota. Currently, USDA-W is responsible for most aerial predator control operations while GFP provides predator control services via ground-control methods. Working with livestock producers to resolve predator impacts to their operations is the largest component of the ADC portion of GFP's WDM program. High coyote populations and large numbers of livestock across the state produces a significant demand for GFP's predator control services.</p> <p><u>Kill Permits:</u> SDGFP may also issue kill permits to municipalities (SDCL 41-6-29.1) that desire to lethally remove urban deer. One requirement for participating municipalities is that they have an urban deer management plan in-place prior to requesting a kill permit from SDGFP. All removed deer are required to be salvaged and given to food pantries or donated to the Sportsmen Against Hunger program.</p>
South Dakota	<p><u>Nuisance Animals:</u> Wisconsin DNR's written authorization is needed for a landowner or property manager to lethally remove or destroy any animal classified as a furbearing animal, game animal or bird, protected animal, or an animal or bird listed as endangered or threatened. The WDNR's written authorization is required to live trap and relocate white-tailed deer, elk, black bear, or any wild animal or bird classified as threatened or endangered. Written authorization is also required to relocate any wild animal to WDNR controlled lands. Authorization from the WDNR is not required to lethally remove or destroy unprotected species; cowbirds, crows, grackles, or red-winged blackbirds causing damage or nuisance; or muskrats damaging dikes, dams, shorelines, or roadways. State law also authorizes landowners or occupants of land to shoot or trap beaver, coyotes, fox, raccoons, woodchucks, rabbits, and squirrels on the lands they own or occupy, year-round without a hunting or trapping license. All other rules regarding method of take still apply.</p>
Wisconsin	

Appendix D. Detailed information for selected Southeast wildlife conflict management programs.

State	Licensed Wildlife Control Operators
Georgia	<u>Wildlife Control Permits:</u> Four different permits for controlling wildlife in certain nuisance situations. Previously, homeowners had no legal recourse other than to pay private contractors or solicit assistance from WRD offices. These permits provide an option to individuals who can handle these problems themselves. These permits (verbal and written) are: Nuisance wildlife control when wildlife is damaging personal property; Deer control on airports; Furbearer control on property managed under a bona fide management plan; Feral hog control. Region offices provide authorization of these permits. Georgia DNR initiated a nuisance alligator program that allows licensed agent trappers to capture and harvest specific nuisance alligators four feet or larger.
Kentucky	<u>Nuisance Wildlife Control Operators:</u> Individuals who are permitted to provide professional wildlife control assistance for a fee.
Louisiana	<u>Nuisance Wildlife Control Operations:</u> Permits are issued to individuals who provide services for a fee. Nuisance wildlife control operators are permitted to handle most species except deer, bears, migratory birds, and alligators.
Oklahoma	<u>Nuisance Wildlife Control Operators:</u> Except as otherwise provided in this title, no person shall trap, capture, possess, transport, relocate or euthanize any nuisance wildlife for commercial purposes under rules promulgated by the Oklahoma Wildlife Conservation Commission without first procuring a nuisance wildlife control operator permit from the Director of Wildlife Conservation. A nuisance wildlife control operator permit may be issued only to those persons who have successfully completed the nuisance wildlife control operator certification examination provided by the Department of Wildlife Conservation. Employees of any federal, state, county or local governmental entity designated to control nuisance wildlife while on duty shall be exempt from the nuisance wildlife control operator permit and testing requirements set forth in this section. The permit fee is \$75.
Tennessee	<u>Animal Damage Control Permit/Operator:</u> TWRA does not assist landowners with capturing nuisance wildlife. Wildlife Officers typically do not trap or remove nuisance wildlife but will provide technical assistance to landowners. ADC operators, permitted by TWRA, will assist landowners in trapping and/or removing nuisance wildlife at the landowner's expense. TWRA does not have regulatory authority over these individuals and does not guarantee the quality of service they perform. Landowner/tenant can legally capture some species of nuisance wildlife without a permit if the animal is discovered to be causing damage. Some animals are protected by law. Captured animals must be released or euthanized on the same property. A permitted ADC operator may transport the animal to an approved release site.
Virginia	<u>Local animal control agencies:</u> Individuals authorized to handle nuisance wildlife calls but do so at the discretion of local government. Most wildlife nuisance technical assistance provided by the DWR is via telephone conversations or e-mail correspondence. When nuisance animal issues arise, there are liberal regulations that allow citizens to address problems themselves.
West Virginia	<u>Nuisance Animal Control:</u> There are two ways for landowners and homeowners to deal with wildlife damage: 1) If necessary, consult with a WV DNR biologist or Natural Resources Police Officer to determine legal options, refer to online sources or printed materials that focus on wildlife damage control, and take care of the problem yourself, or 2) Hire a professional, licensed Wildlife Damage Control Agent to manage the problem. <u>Wildlife Damage Permit:</u> Issued from the WV DNR district office. Needed to trap or kill nuisance animals on private property. Nuisance wildlife removed from a building must be released on the same property. Moving animals to another location is prohibited.

Agriculture Depredation Control/Permits

Alabama	<p><u>Wildlife Damage Permits</u>: Available to people experiencing damage to property by feral hogs or other wildlife. Contact a local Wildlife and Freshwater Fisheries District Office for more information regarding this permit.</p> <p><u>Nuisance Wildlife Regulation</u>: Alabama game and fish regulations allow for permits to take protected wildlife causing crop damage, property damage, or concern for human safety.</p>
Arkansas	<p><u>Deer Management Assistance Program</u>: Assists landowners and hunting clubs with the management of their local deer herds. Participants collect and submit biological data from the deer harvested on their property. In return, participants are provided with a customized, property-specific report with future harvest recommendations based on the club's management goals.</p>
Florida	<p><u>Deer Depredation Permit</u>: This permit authorizes the killing of deer that are causing damage to crops where less lethal means of control are either ineffective or not feasible. These permits are only issued to landowners or authorized lessees of property with agricultural rights.</p>
Kentucky	<p><u>In-Season Control Permits for Damage Deer Control Permits</u>: May be issued to landowners who are experiencing damage to their property. These permits are issued to landowners who need additional deer permits during the hunting season and are for antlerless deer only. The purpose of deer control permits are to help mitigate damage in areas where the number of antlerless deer legal for harvest is limited due to zone restrictions. If you are a landowner receiving severe damage to your property caused by deer, you may contact your local private lands biologist (PLB) or conservation officer (CO) to request a site visit.</p> <p><u>Out-of-Season Control Permits for Damage</u>: If damage is extreme and outside the hunting season framework landowners may be issued permits to take deer out of the season. These are used in extreme cases and the landowner must have explored all options above before these permits can be issued.</p>
Louisiana	<p><u>Louisiana Department of Fish and Wildlife Deer Management Assistance Program</u>: Provides professional technical assistance to participating hunting clubs and private landowners and managers to manage their local deer populations and habitats through prescribed deer harvests.</p>
Mississippi	<p><u>Deer Management Assistance Program</u>: A comprehensive deer management program, consisting of data collection and cooperater education. Using this, the Mississippi Department of Wildlife, Fisheries and Parks tries to put the landowner/cooperator in a better position to manage their lands for a healthy deer herd, while maintaining habitat integrity. The program is continuously interactive and open for modification. Data from the program are used to develop site specific harvest recommendations and have prompted numerous research projects to help better understand deer biology.</p>
Oklahoma	<p><u>Wildlife Depredation Permit</u>: The ODWC is authorized to issue permits to landowners, lessees, or their designated agents and to any entity of state, county, or local government to control nuisance or damage by any species of wildlife including, but not limited to beaver, coyote, deer, bobcat, raccoon, and crow under rules promulgated by the Oklahoma Wildlife Conservation Commission. The permits may be issued without limitation by statewide season regulations, bag limits or methods of taking. A permitted landowner, lessee or a designated agent of the landowner or lessee may, with a valid permit can control wildlife and feral swine at night to protect marketable agricultural crops, livestock, or processed feed, seed or other materials used in the production of an agricultural commodity.</p>
North Carolina	<p><u>Depredation Permits</u>: For big game species or endangered, threatened, or special concern will only be issued by an official of the Wildlife Resources Commission. Wildlife Control Agents are not allowed to issue permits for these species.</p>
South Carolina	<p><u>Depredation Permits</u>: Where severe or persistent damage occurs, depredation permits may be issued to shoot deer at times other than legal hunting seasons. Depredation or nuisance permits may be available during non-hunting seasons to reduce local densities and remove offending animals.</p> <p><u>Trapping</u>: Several techniques are available for capturing deer (e.g., cage traps, drop nets, cannon nets, net guns, and dart guns). All methods require authorization by the state wildlife agency.</p> <p><u>Depredation Permits</u>: Where severe or persistent damage occurs, depredation permits may be issued to shoot deer at times other than legal hunting seasons. Depredation permit will be required for anyone trapping or shooting wildlife during the closed season.</p>

Tennessee	<p><u>Big Game Damage Control:</u> The owner of lands may destroy any wild animals, wild birds, or wild fowl when they are destroying property upon such lands. Any person, before destroying any big game is required to obtain a permit. The permit is issued by an officer of the wildlife resources agency. Big game is defined as deer, wild turkey and bear. The landowner should contact the TWRA regional office in which the property is located and an officer will be assigned to contact the landowner.</p>
Virginia	<p><u>Open Season on Nuisance Species:</u> There is a continuous open season for killing nuisance species of wild birds and animals. A landowner may trap or shoot fur-bearing animals upon his own land during closed season when these animals are causing damage to crops or property, or are posing a threat to human health or safety, or are otherwise causing a nuisance.</p> <p><u>Agricultural Depredation Order:</u> Allows agricultural producers including landowners, operators, and tenants actively engaged in commercial agriculture to use certain lethal methods to control Resident Canada geese on lands that they personally control and where geese are damaging agricultural crops. The agricultural depredation order was developed through the Environmental Impact Statement on Resident Canada geese developed by the USFWS. The Agricultural Depredation Order is somewhat different in that it is administered by the state agencies and state authorization is required to conduct this control.</p> <p><u>Deer Management Options:</u> For instances where non-lethal deer management has not worked, the VDWR has created 5 management options available to landowners and/or municipalities. These five programs, Deer Management Assistance Program (DMAP), Damage Control Assistance Program (DCAP), Kill Permits, Deer Population Reduction Program (DPOP), and Urban archery season all require meeting with a DWR representative to determine if an area qualifies for one of the programs. Deer Management Assistance Program (DMAP): DMAP is a site-specific deer management program that increases a landowner’s or hunt club’s management options by allowing a more liberal harvest of antlerless deer than offered under general hunting regulations. The primary goal of DMAP is to allow landowners and hunt clubs to work together on a local level to manage their deer herds. Landowners/hunt clubs have the option to increase, decrease, or stabilize deer populations on their property enrolled in DMAP. These objectives are accomplished by harvest strategies that control the numbers of antlerless deer taken, primarily through the issuance of DMAP tags. DMAP tags can be used only to harvest antlerless deer.</p> <p><u>Damage Control Assistance Program:</u> A site-specific deer damage management program designed to increase a landowner’s management options by allowing a more liberal harvest of antlerless deer than offered under general hunting regulations. The primary objective of DCAP is to provide site-specific assistance to control crop depredation or other property damage by deer. A landowner who demonstrates damage from deer can use a kill permit at the time of damage or may defer removing deer until the hunting season using DCAP tags. DCAP permit tags can be used only to harvest antlerless deer. DCAP is not available in cities and counties east of the Blue Ridge in which the general firearms deer season is full season either-sex (except Fairfax County).</p> <p><u>Kill Permits:</u> Killing of deer damaging fruit trees, crops, livestock or personal property or creating a hazard to aircraft or motor vehicles, the DWR is authorized to permit owners or lessees of land to kill deer where deer cause commercial or personal property damage. Under the kill permit system, a landowner/lessee who sustains deer damage must report the damage to the local conservation police officer for investigation.</p> <p><u>Deer Population Reduction Program:</u> A site-specific urban deer management tool that allows managers of public properties with unique deer management needs (e.g., parks, airports) to use hunters to kill antlerless deer outside of traditional established seasons or with weapons generally reserved for other seasons.</p> <p><u>Urban Archery Season:</u> An urban archery season helps reduce deer-human conflicts in urban areas while providing additional hunting recreation. Only antlerless deer may be taken during this season. No special hunting licenses or permits are required beyond archery and big game licenses.</p>
West Virginia	<p><u>Agriculture Depredation:</u> Deer or other wildlife are causing damage to cultivated crops, fruit trees, commercial nurseries, homeowners' trees, shrubbery or vegetable gardens, the owner or lessee of the lands on which damage is done may report the finding to the natural resources police officer or biologist of the county in which the lands are located or to the director. The director shall then investigate the reported damage and if found substantial, shall issue a permit to the owner or lessee to kill one or more deer or other wildlife in the manner prescribed by the Director.</p>

Federal Programs/Depredation Permits

	<p><u>Canada Goose Depredation Permit</u>: A permit is required for take of any state listed species or any bird species protected by the federal Migratory Bird Treaty Act. This permit authorizes landowners (and their employees and agents) to take birds and nests to reduce depredation to commercial agricultural operations.</p>
Florida	<p><u>Bear Depredation Permit</u>: Authorizes the lethal take of black bears that are causing property damage where less lethal means to control the damage are either ineffective or not feasible and the FWC is unable to capture and remove the bear. These permits are only issued to landowners or authorized lessees of property with landowner permission. The permittee should understand that this permit is intended to provide temporary relief from property damage. It is incumbent upon the landowner or lessee to seek more long-term means of eliminating property damage in the future. This could be accomplished through construction of electric fencing in certain cases, use of guard animals, or by allowing hunting on the lands where property damage is occurring during an established bear hunting season.</p>
Louisiana	<p><u>Federal Depredation Order</u>: There is no open hunting season for blackbirds, cowbirds, and grackles. Under federal law, a year-round depredation order allows take of those species that are depredating or about to depredate ornamentals or shade trees, agricultural crops, livestock, and wildlife, or when concentrated in such numbers as to cause a health hazard. Non-lethal control methods have been previously attempted. Non-toxic shot is used for take and must be reported to the USFWS.</p>
Oklahoma	<p><u>Black Vulture Depredation Program</u>: Oklahoma Department of Agriculture, Food and Forestry has obtained a master depredation permit through the USDA and the U.S. Fish and Wildlife Services and is now offering sub-permits to Oklahoma residents free of charge to dispose of black vultures attacking their livestock. The ODAFF statewide depredation permit allows livestock producers an opportunity to apply for a livestock protection depredation sub-permit — allowing 5 legal “takes” of black vultures at no charge to the livestock owner.</p>
South Carolina	<p><u>Federal Permits</u>: Additional permits may be required when dealing with Federally-protected birds. A depredation permit is not required when capturing any nuisance furbearer or squirrel causing property damage within one-hundred yards of a home.</p>
Tennessee	<p><u>Federal Permits</u>: Individuals experiencing animal damage caused by a federally protected species, you must obtain a permit from USFWS prior to destroying such wildlife.</p>
Texas	<p><u>Depredation Permits</u>: The depredation permit may be issued to individuals who have evidence clearly showing certain protected wildlife is causing serious damage to commercial agricultural, horticultural, or aquacultural interests, or presents a threat to public safety (e.g., airport runways). A depredation permit authorizes the killing of protected wildlife identified on the permit at any time during the period of validity of the permit, irrespective of open seasons and lawful shooting hours.</p>
Virginia	<p><u>Federal Nest and Egg Depredation Order</u>: Allows landowners to destroy resident Canada goose nests and eggs. This order can be used by landowners in Virginia. No permit is required, but you must register with the USFWS in order to conduct this activity.</p>

Nuisance Wildlife

Alabama	<p><u>Nuisance alligator control permits</u>: Allows permitted hunters to kill or remove of nuisance alligators.</p> <p>Nuisance Wildlife Control Operators: Permits are available for the remediation of nuisance wildlife situations. Types of services provided vary among operators and may include service fees.</p> <p><u>Alabama Trapper and Predator Control Association</u>: Endeavors to preserve and promote trapping through trapper education and public awareness. Their website includes a list of individuals willing to remove nuisance wildlife such as raccoons, opossums, beavers and other furbearers.</p>
Arkansas	<p><u>Depredation Permit</u>: Required to trap nuisance game animals other than beaver, coyote, muskrat, nutria, opossum, raccoon, squirrel, and striped skunk outside of the trapping season. A Depredation Permit is required to shoot any nuisance wildlife at night. Landowners or their designees with Depredation Permits may use any trapping method legal for use in the fur-trapping season. No permit is necessary to shoot nuisance nongame wildlife (with some exceptions) or beaver, muskrat, nutria, or squirrel. During the day or to trap and kill them when causing property damage. Arkansas property owner or tenant is allowed to take one squirrel, rabbit, raccoon, opossum, beaver or skunk per incident that is causing damage to their property without a permit.</p> <p><u>Live traps</u>: Nuisance animals, other than bear or alligator, may also be removed by landowners (or their designees) at any time without a Depredation Permit with the use of live traps. Trapping in towns must be in compliance with municipal ordinances. Live captured nuisance wildlife must be released unharmed on private land with landowner permission in the county of capture or adjacent to the county of capture outside a municipalities boundaries within 24 hours.</p>
Florida	<p><u>Nuisance Animal Law</u>: Florida law requires that “nuisance” animals that are trapped be humanely killed or released on the same contiguous property where they were caught. This prevents ecological disturbances and disease spread. It is prohibited for private individuals to take, remove, and kill nuisance wildlife such as deer, bears, bobcats, alligators, some birds, and their nests and eggs, turkeys, and others without the necessary permits. Furthermore, it is prohibited to remove state or federal-listed animals with special concerns as well as those identified as endangered and threatened species.</p> <p><u>Nuisance Animal Removal Services/Nuisance Wildlife Trappers</u>: The FWC does not license nuisance wildlife trappers. Wildlife trappers may voluntarily register to have their name and contact information added to the Wildlife Trapper List.</p> <p><u>Florida Fish and Wildlife Commission's Wildlife Assistance Program</u>: The FWC's Wildlife Assistance Biologists work with individuals and communities experiencing conflicts with wildlife to find sustainable resolutions and to develop strategies to coexist with native wildlife.</p>
Kentucky	<p><u>Nuisance Wildlife</u>: Kentucky Department of Fish and Wildlife Resources does not have the capacity to resolve nuisance or damage situations directly, they make available 1) self-help technical resources on this webpage and 2) verbal guidance from our staff, if necessary, to help remedy these situations. Landowners may deal with nuisance wildlife through scare tactics, repellents, fencing and exclusion, or removal via shooting or trapping.</p> <p><u>Fur trapper</u>: Landowners and farmers who have problems with furbearers (mink, muskrat, beaver, river otter, weasel, raccoon, opossum, gray fox, red fox, bobcat, coyote, or striped skunk) may request assistance from a fur trapper during the legal trapping season. Fur trappers are private individuals and are not employed by the Agency.</p> <p><u>KY Extension Service</u>: Provides a wide range of information on prevention and control of wildlife damage. County agents and specialists receive up-to-date training on handling a variety of wildlife damage situations. The KDFWR provides information and advice on managing wildlife populations and preventing damage from resident wildlife species, including white-tailed deer, coyote and beaver. The KDFWR also issues permits to kill nuisance animals when other appropriate control methods fail.</p>
Louisiana	<p><u>Nuisance Alligator Live Trap/Release</u>: Licenses issued for nuisance alligator hunters across the state to capture nuisance alligators and minimize conflicts between alligators and humans.</p>

Mississippi	<p><u>Nuisance Animal Law</u>: Nuisance animals may be hunted, trapped, taken, killed, chased, or pursued on private lands. Landowners and any leaseholders may hunt nuisance animals year-round at any time of day or night with no weapon/caliber restrictions on property titled in their name or otherwise owned, or leased by them. The following species are defined as "nuisance animals" in the State of Mississippi: Beaver, coyote, fox, nutria, skunk, feral swine</p>
	<p><u>Nuisance Species Depredation</u>: Nuisance species (including feral swine) may be taken by landowners or lease holders 'year-round at any time of day or night with no weapon / caliber restriction on private lands.</p>
	<p><u>Depredation Permits</u>: A state Depredation Permit is required for taking wildlife causing damage.</p>
North Carolina	<p><u>Wildlife Damage Control Agents</u>: Upon completion of a training course designed for the purpose of reviewing and updating information on wildlife laws and safe, humane wildlife handling techniques, and demonstration of a knowledge of wildlife laws and safe, humane wildlife handling techniques, an individual with no record of wildlife law violations may apply to become a Wildlife Damage Control Agent</p>
Oklahoma	<p><u>Nuisance goose control</u>: Measures are separated into two designations. NWCO's that are designated as "A" are permitted to manage nuisance geese via egg /nest manipulation, and harassment. Those designated as "B" are permitted to trap and relocate nuisance geese.</p>
Tennessee	<p><u>Nuisance Species Depredation</u>: The following species are not protected by law because they are non-native invasive populations with the potential to damage property, pose a human health risk, and have detrimental effects on native wildlife. house (English) sparrow, European starling; rock pigeon, nutria; feral swine. Landowners may shoot feral swine without limit, year-round, during the day, with any weapon and ammunition which is legal for taking big and small game. Landowners may trap with bait outside of big game seasons. Bait may not be used during big game hunting seasons without an exemption from the Tennessee Wildlife Resources Agency. All targeted animals must be dispatched before removal from traps.</p>
Texas	<p><u>Texas AgriLife Extension - Texas Wildlife Services</u>: The Texas wildlife services program provides statewide leadership in the science, education and practice of wildlife management to protect the state's agricultural, industrial and natural resources, as well as the public's health, safety and property. The goal of Wildlife Services is to protect the state's agricultural, industrial, and natural resources and the public's health, safety and property from damage caused by wildlife. Texas Wildlife Services accomplishes this through a cooperation with federal, state, and private entities, servicing both rural and urban areas, utilizing technical assistance and direct control services in this specialized field of wildlife management.</p>
	<p><u>Suburban Deer Overabundance Permits</u>: TPWD has the power to issue trapping and transporting surplus of white-tailed deer permits, specifically listing "Property Owners' Associations" as permitted recipients of these permits. Local community measures include: Trap and translocate, euthanasia, or trained sharpshooters.</p>
Virginia	<p><u>Virginia's First Bear Smart Community</u>: The Wintergreen Bear Smart program is governed by a seven-person council, made up of full-time residents. The council assessed the conditions that were contributing to the habituation of bears to people such as bird feeding and unsecured garbage. Another important task was to gain the cooperation of other Wintergreen community organizations to support the new Bear Smart program.</p>
West Virginia	<p><u>Wildlife Damage Control Agents</u>: Licensed by the WV DNR to help control wildlife damage for a fee.</p>

Predator Control

Arkansas	<u>Predator Control Permits</u> : Allows a permit holder to conduct year-round shooting during the day and night and trapping of bobcat, coyote, gray fox, opossum, raccoon, red fox, and striped skunk on private land for the purpose of removing predators that impact game species such as wild turkey and northern bobwhite.
Georgia	<u>Coyote Control</u> : If non-lethal methods are not working and coyotes continue to cause conflicts, lethal removal is an option. Coyotes can be removed from property year-round through trapping or hunting. To hire someone to trap and remove coyotes, a list of nuisance wildlife control operators is on the GA DNR website.
South Carolina	<u>Depredation Permits</u> : Nuisance coyotes can also be taken year-round with a depredation permit. A depredation permit is not required when controlling nuisance furbearers within 100 yards of a property owner’s residence. There is no closed hunting season for coyotes on private lands with a valid hunting license. As last resort, shooting is effective for dealing with a black bear that poses an immediate threat to safety. Nuisance bear should be reported to an SC DNR field office.
Texas	<u>Coyote/Mountain Lion Depredation</u> : The TPWD provides expertise and advice on urban wildlife issues but does not implement nuisance coyote control. No hunting license is required to hunt depredating coyotes on private property with landowner authorization. Texas Wildlife Services, in partnership with local governments, does provide nuisance coyote control services in some urban areas. In some cities, such as Austin, Texas Cooperative Extension assists with coordinating nuisance coyote control and public education. Mountain lions are classified as nongame animals; they are not protected and can be harvested at any time.
Virginia	<u>Virginia Cooperative Coyote Damage Control Program</u> : A cooperative program between the Virginia Department of Agriculture and Consumer Services and USDA-WS to provide assistance to livestock producers in an effort to minimize the impacts from coyote depredation.
West Virginia	<u>Coyote Control</u> : Coyotes causing severe damage to pets or livestock or posing a threat to public health and safety, may be removed using regulated in-season trapping and hunting methods or, outside the season through special permits issued to professional nuisance wildlife trappers.

Appendix E. Detailed information for selected Western wildlife conflict management programs.

State	Licensed Wildlife Control Operators
Arizona	<u>Wildlife Control Businesses:</u> Lists businesses with a Wildlife Service license who can remove and relocate nuisance wildlife or give advice to resolve conflicts with wildlife for a fee.
Oregon	<u>Wildlife Control Operator Permit:</u> Required for any individual, business owner, or the business owner’s designee charging a fee to control furbearers, unprotected mammals (excluding moles) and western gray squirrels causing damage, creating a public nuisance or posing a public health or safety concern in incorporated city limits and associated urban development areas.
Washington	<u>Wildlife Control Operator:</u> WDFW enlists the help of private citizens who have skills and training in the capture and handling of many wildlife species that commonly generate wildlife complaints. Typically, these individuals are referred to as Wildlife Control Operators (WCOs), and there are many WCOs throughout the state. A WCO must be certified through WDFW and conform to its regulations, but they are not state employees and operate as private entities, setting their own fees.
Agriculture Depredation Control/Permits	
<u>Wildlife Damage:</u> A.R.S. 17-239 allows for any person experiencing property damage from wildlife to take reasonable measures to alleviate the damage but does not include taking game mammals. If those measures don’t alleviate damage, the person may file a report with the Department director. The Department will investigate, present findings in a report, and provide technical advice and assistance in anti-depredation measures. If harvest is found to be necessary to relieve the damage, special seasons or special bag limits may be established with either reduced fees or waiver of license fees. If a hunt is not practical, the person may be issued a special permit for taking wildlife, provided that the edible portions are turned over to the Department for delivery to a public institution or charitable organization. Arizona does not pay for crop depredation or damage or provide materials to prevent damage (i.e. fencing). They provide technical advice for the landowner, but it is incumbent upon them to pay for and install any fencing or equipment. They also do not offer “Landowner Tags” or “Private Land-Only Tags.” Primary efforts are directed towards using hunters to help address depredation issues.	
<u>Elk or Antelope Private Land Use System Programs:</u> The Department can enter into cooperative (3-5 year) agreements with landowners who are experiencing impacts from wildlife (primarily elk) to provide seed, fertilizer, and/or mineral salt as a form of mitigation. The amount of seed and fertilizer is based on the amount of acreage affected, number of animals, and duration of the estimated impact. The funds for this program are very limited and cannot exceed a value of \$5,000/landowner and the total program budget is approximately \$40,000/year.	
Arizona	<u>Non-permit Tags:</u> Over-the-counter non-permit-tags for elk are available in some hunt areas and can be valid for antlered, antlerless, or any-elk. Elk numbers in these hunt areas are very low and elk may not be present year-round; therefore, hunt success is expected to also be low. The general and archery-only elk over-the-counter non-permit-tags are for very specific and limited locations where the Department is attempting to create areas with few or no resident elk.
<u>Limited Population Management Zones:</u> Certain areas of the state have been identified as “Limited Population Management Zones” which are areas the Department does not want resident elk herds due to conflicts with private landowners and/or the management focus is on other wildlife such as pronghorn or deer.	
<u>Population management hunts/Depredation Hunts:</u> are designed to allow the Department to achieve supplemental harvests of wildlife when traditional harvest strategies have not met their objectives. Population management hunts are typically for very specific locations and dates and the legal method of take and legal animal will be identified (antlerless elk, antlered elk, etc.). They are comparable to what other states call “Depredation Hunts.”. They are usually implemented with short turn-around and hunters are randomly drawn from a “Hunter Pool”.	
<u>Mexican Wolf Arizona Livestock Loss Board - Depredation Compensation:</u> Federal grant funds awarded to the Department are made available to Arizona livestock producers incurring impacts from Mexican wolves based on application/funding programs established by and administered through the AZ/NM Mexican Wolf/Livestock Coexistence Council (Council) or the Arizona Livestock Loss Board (ALLB). Funds are directed to Arizona livestock producers incurring confirmed depredation who apply for market-based compensation through Council or ALLB programs. Awarded grant funds had initially been directed through the Council’s depredation compensation program with funds more recently being directed through comparable ALLB depredation compensation programs. The ALLB, established through state legislation in 2015, administers Board-approved funding using processes developed to review and approve all submitted applications based on criteria developed by the ALLB. Since initiating its depredation compensation program in 2016 and through the end of 2017, the ALLB has approved a total of 20 applications from participating Arizona livestock producers, representing a total payout of \$31,300 tied to confirmed wolf depredations.	

AZ/NM Mexican Wolf/Livestock Coexistence Council - Conflict Prevention: Federal grant funds awarded to the Department are made available to Arizona livestock producers incurring impacts from Mexican wolves based on application/funding programs established by and administered through the AZ/NM Mexican Wolf/Livestock Coexistence Council (Council). These funds are directed to Arizona livestock producers submitting applications to the Council through its annual application “pay-for-presence” funding program. The Council provides funds to approved applicants based on an established funding formula that attempts to provide partial compensation to impacted producers based on Mexican wolf population levels/distribution relative to producer livestock operations. In addition, funds are also directed to promote implementation of proactive conflict avoidance activities and measures (e.g. range riders, fencing, etc.) by livestock producers in areas impacted by wolves. Since 2012 and through the end of 2017, a total of \$207,000 has been provided to 58 AZ livestock producer applications to the AZ/NM Council “pay-for-presence” programs.

Black Bear and Mountain Lion Depredation on Livestock: Livestock owners who have livestock attacked or killed by bear or mountain lion may take the depredating animal to prevent further damage. A license or tag is not required to take the offending animal. but the livestock operator shall notify the Department within 5 days of setting traps or initiating pursuit. Within 10 days after taking, the livestock operator shall file a written report with the department with: 1) the name and address of livestock operator experiencing depredation losses, 2) number, ages, and kinds of livestock lost, 3) numbers and location of bears or lions taken, 4) sex and estimated age of each bear or lion taken, and 5) location and date of livestock depredation. No portion of the animal may be retained or sold. The livestock operator may contract with another person to take the depredating bear or lion.

California Mountain Lion Depredation Permits: California state law requires the California Department of Fish and Wildlife to issue permits to kill mountain lions that attack domestic animals. Depredation Permit (mtn lion): The officer will fill out a Wildlife Incident Report. If a lion is responsible, he or she will then issue the homeowner a Depredation Permit, and contact the local USDA Wildlife Services’ county trapper to come out to track and kill the lion. Mountain Lion Depredation: On December 15, 2017, California Department of Fish and Wildlife issued an amendment to the Mountain Lion Depredation, Public Safety, and Animal Welfare Policy that now allows CDFW to tailor their response to the specific circumstances of a depredation incident, providing a wider variety of management tools and greater protection for livestock, people and mountain lions. As a result of these efforts the California Department of Fish and Wildlife’s has amended their Policy to provide additional protection to endangered mountain lion populations in the Santa Ana and Santa Monica mountains.

Wolf Depredation Compensation Fund: Subject to annual appropriation by the general assembly, the division may expend money from the fund to compensate owners of livestock or livestock guard or herding animals that suffer damages due to wolf depredation.

Colorado Habitat Partnership Program: The Colorado Parks and Wildlife Habitat Partnership Program (HPP), funded by revenue from the sale of big game licenses, works through local committees to develop partnerships among landowners, land managers, sportspersons, the public and Colorado Parks and Wildlife (CPW) to reduce conflicts caused by deer, elk, pronghorn and moose to agriculture. HPP also assists CPW to meet game management objectives for deer, elk, pronghorn and moose. The purpose of the Habitat Partnership Program (HPP) is to reduce wildlife conflicts, particularly those associated with forage and fences, to assist Colorado Parks and Wildlife (CPW) in meeting game management objectives, to assist with private land conservation efforts, and enhance migratory corridors. HPP efforts are primarily aimed at agricultural operators, and focus on problems and objectives for deer, elk, pronghorn and moose. Committees review projects that solve an immediate problem; for example, fence repairs. They also review projects that are longer term, such as habitat projects that take more planning time, implementation is more complex and results take longer. However, these types of projects, especially projects larger in scale and scope, are more valuable, cost-effective and have become a priority for HPP, including habitat improvement, game damage issues, conservation easements, research and monitoring, information and education.

Hawaii Crop Damage/Nuisance Wildlife Permit: Hawaii Department of Land and Natural Resources - Administrative Rules (HAR) §13-124-7 Crop damage, nuisance, and threat to human health and safety permits. (a) The board or its authorized representative may issue permits to destroy or otherwise control game birds, game mammals, or introduced wild birds causing substantial damage to agricultural or aquacultural crops, indigenous plants or wildlife, or pose a threat to human health and safety under the following conditions: (1) An authorized agent of the department has investigated the complaint and is satisfied that substantial damage has occurred or is likely to occur; (2) Permits to control game mammals and game birds on parcels larger than 300 acres, maybe issued only when it has been determined that public hunting is not a reasonable and appropriate method of control;

Idaho	<p><u>Big Game Prevention Program:</u> Damage prevention is the highest priority of IDFG's depredation program and a shared responsibility of both IDFG and the landowner. By law, landowners who wish to be compensated for damage also have an obligation to take all reasonable steps necessary to prevent or reduce damage to their property. It is essential that landowners and IDFG work together to resolve big game depredations. Cooperation and understanding are critical for solving depredation problems. Early notification of depredation activity or damage is essential to IDFG and landowner cooperative solutions. IDFG will work with landowner to provide hazing materials, pyrotechnics, materials for protecting stored forage, construction of permanent stack yards.</p>
	<p><u>Big Game Compensation Program:</u> In 1990 Idaho lawmakers enacted legislation establishing a cooperative program among landowners, IDFG, and sportsmen to limit damage caused by wildlife. The wildlife damage law specifies that landowners and IDFG are to work cooperatively to prevent as much wildlife damage as possible. When damages cannot be sufficiently reduced or prevented, landowners can file a claim for compensation for the damage. IDFG pays compensation for four types of damage: crops, use of privately owned rangeland forage (plants grown for livestock feed, livestock (cattle, sheep, goats) destroyed by black bears, mountain lions or delisted grizzly bears; Berries, bees, beehives and honey damaged by black bears, grizzly bears on private land. In order to be compensated for a claim, landowners must notify IDFG verbally or electronically that damages are occurring within 72 hours of discovering the damages and must follow up this verbal notification with a written notice, which may be electronic, within twenty (20) days of discovering the damage.</p>
	<p><u>Kill Permits:</u> In certain situations, the Department may issue a kill permit to a landowner. The permit will specify the species, number of and type of animal allowed to be harvested (antlerless or antlered). The permit will also outline any criteria that must be followed. Disposal of the carcasses is at the discretion for the Director, with a the landowner allowed first refusal on 1 animal.</p>
	<p><u>Depredation Hunts:</u> In situations in which the Department see increased populations of wildlife within a given area that are causing damage to private property, the Department can establish a depredation hunt. The hunt structure and hunt area are established at the regional level to address the concern. The area can include only one landowner or a much larger area. One half (½) of the hunters are selected from a public list. The landowner can select the other ½ of the hunters receiving a tag.</p>
Montana	<p><u>Supplemental Game Damage Licenses:</u> These licenses are issued for antlerless animals to hunters and are generally used as an alternative to kill permits. Landowners can select some or all of the hunters issued supplemental game damage licenses, depending on an area's license quota. Issuance of these licenses have various criteria, one of which is the number of animals harvested on the property cannot exceed twelve. Game damage hunts are generally used to address damage issues on a single property when there are sufficient animals to use public hunting. If a game damage hunt is deemed necessary, the regional supervisor must obtain approval for the hunt from the Fish and Wildlife Commissioner for the hunting district where the hunt is proposed. Hunters selected to participate in game damage hunts are selected from the department's game damage hunt roster. The hunt roster allows individuals to apply for the opportunity to be randomly selected to participate in game damage hunts in the hunting district they applied for.</p>
	<p><u>Game Damage Hunts and Management Seasons:</u> Management seasons are similar to game damage hunts but larger in scale and often involving multiple landowners. They can occur anytime from August 15 to February 15. Management seasons are used to address recurring game damage problems as well as being a proactive tool to help prevent game damage from large concentrations of animals expected due to seasonal migrations, extreme weather conditions, restricted hunting access on adjacent properties.</p>

New Mexico	<p>Landowner Takings: Under certain conditions, New Mexico allows landowners to take immediate action and kill animals that pose a threat to property (including crops) or life. District Officers conduct investigations of all landowner takings to insure the taking was legitimate and meets the criteria outline in statute and rule. Department Culling: Using Department staff to cull animals is an option in isolated cases. This option is used sparingly and only to remove small numbers of animals.</p> <p>Population Management Hunts: Population management hunts are used to address temporary concentrations of animals in localized areas or regions. Population management hunting permits are issued to hunters. These hunts may utilize either (1) all public hunters or (2) a combination of public hunters (assigned by the Department) and transferable authorizations given to landowners, who may then give/sell these authorizations to hunters of their choosing. In either case, hunters must purchase a hunting license prior to going hunting. Population management hunts are most commonly used during winter or very early spring.</p> <p>Depredation Assistance Program: Through the Depredation Assistance Program, the Department has the ability to work with landowners to develop long-term solutions to their wildlife complaints. This program is funded by a fee charged to big game hunters when they purchase their license. This fund is statutorily dedicated and can only be spent to resolve depredation complaints on private deeded land. Direct compensation is not allowed. Interventions take many forms, but must provide a fiscally responsible, long-term solution to the landowner's wildlife complaint. Examples of projects funded include: PVC pipe for top wire of fence to increase visibility and encourage animals to jump over fence; fence repair; wildlife resistant fencing; wildlife fence crossing in areas of high activity; seed and/or fertilizer to offset forage eaten by wildlife; electric fencing to protect bee hives, chicken coops, etc.</p> <p>Elk/Antelope Private Land Use System Programs: The Department also has programs designed to recognize the contributions private land makes to wildlife. These are voluntary programs for landowners that are willing to accept wildlife on their private deeded acreage. Through the Elk or Antelope Private Land Use System Programs, participating landowners may receive transferable landowner authorizations for elk or antelope. These authorizations may be given or sold by the landowner to hunters of their choosing. Through the Open Gate program, participating landowners may receive a lease payment for allowing access for the general public to hunt, fish or trap on their deeded property. In some cases, landowners choose to enter into one of these programs rather than enter the depredation program. Landowners may find these programs appealing when animal numbers are only slightly above their tolerance level.</p>
Oregon	<p>Wildlife Services: ODFW, USFWS, and USDA Wildlife Services can provide technical assistance and non-lethal tools to help minimize wolf-livestock conflicts in many situations. Supplies such as fladry, fencing, and RAG devices may be available, as well as funding for carcass removal projects, range riders, and other non-lethal tools and practices. Producers are encouraged to contact their local ODFW office to determine funding and supply availability for their area.</p> <p>Oregon's Wolf Depredation Compensation and Financial Assistance Grant Program: The Oregon Department of Agriculture implements Oregon's Wolf Depredation Compensation and Financial Assistance Grant Program. Participating counties form local committees which then apply for grants to compensate producers for wolf-caused losses as well as non-lethal measures. Information for this program is available by contacting your local compensation committee or the ODA Animal Health and Identification Division</p>
Utah	<p>Depredation Hunts: Public antlerless depredation hunts can be called on short notice with public hunters contacted through a depredation pool; Legislative Mandate: Landowner has right to lethally remove protected wildlife from cultivated property if he/she notified the division in writing and 72 hours passed with resolution</p> <p>Cooperative Wildlife Management Unit Program: Landowners (with min. 5,000 contiguous acres) are issued transferrable antlered vouchers valid for private property with percentage of permits allotted for public draw with full access for public applicants (for example: if unit chooses 90% private/10% public split for bull elk, they receive 10 permits and 9 are transferrable vouchers and 1 permit goes to public draw; and 0/100 antlerless split with 10 cow elk permits with 0 transferrable vouchers and 10 for public draw); Landowner Association (LOA) program - For Limited Entry units only. A Landowner Association must be formed that includes over half of the private land classified as big game habitat within the unit. The LOA is then issued transferrable vouchers that are valid for the entire unit. Permit allocation is based off acres enrolled vs. acres of available habitat in the unit. Landowners are required to allow one public hunter on their property for every voucher received but this has proven difficult to enforce.</p> <p>Mitigation Permits: Issued to landowner/lessee for harvest of animals causing depredation during a general or special season. Free antlerless permits issued to landowner or lessee valid on private property for deer/pronghorn/elk; Mitigation Vouchers: Antlerless vouchers landowner/lessee can sell for profit or give away; Private Lands Only Cow Elk Permits: over the counter antlerless elk permit only valid on private land with liberal season dates in effort to put hunting pressure on elk harbored on private property. Permits successful at re-distributing elk populations across public and private land and reducing damage for landowners.</p>

Crop Depredation Compensation: When cultivated crop depredation occurs we are legislatively mandated to reimburse the landowner if requested. The majority of our crop depredation deals with alfalfa and we quantify damage using a count method, but we also deal with other crops such as winter wheat, orchards, corn, sunflower, etc. We can also pay for stored crops, labor to repair fence damage, and damage to irrigation equipment. Our annual statewide budget for depredation currently sits at \$700,000. Half of the money in that budget comes from license sales and the other half from the state general fund (taxpayers). Most years we typically pay around \$500k in depredation payments and we use the remaining \$200k for permanent solutions such as providing materials for stackyard fences.

Washington	<p><u>Certified Crop Adjuster:</u> Property owners who experience repeated crop damage from deer and elk and who are working with the department to mitigate losses may be eligible to file a damage claim and receive cash compensation. Damages payable under this section are limited to the lost or diminished value of a commercial crop – whether growing or harvested – and will be paid only to the owner of the crop at the time of damage. Department staff and crop owners must use state licensed and federally certified crop adjusters that are on contract. The department or the owner can accept the evaluation, or the department or the owner may hire a separate adjuster to conduct a separate evaluation. In that case, the party hiring the adjuster is responsible for payment of all the fees. The adjuster must be state licensed/federally certified. The state also has a cooperative fencing program to provide fencing materials at no cost to commercial agriculture producer in exchange for their erecting the fence to specifications set by the state, and then they waive all future crop damages from deer and elk for a period of no less than 25 years (life of the fence).</p>
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Wyoming	<p><u>Wildlife Damage Assistance, Materials and Compensation:</u> Wyoming Statute 23-1-901 and Wyoming Game and Fish Commission (Commission) Chapter 28 Regulation Governing Big or Trophy Game Animal or Game Bird or Gray Wolf Damage Claims directs the Wyoming Game and Fish Department (Department) to investigate and provide monetary compensation to private landowners for specific damages caused by big game, trophy game and game birds. Wyoming's wildlife damage compensation program is one of the most comprehensive and liberal programs in the United States. Wyoming's hunting license non-refundable fee application fee (\$15 for nonresidents, \$5 for residents) goes toward supporting wildlife by providing funding to pay for wildlife damage claims. Damage claim payments are paid to individuals, in accordance with state statutes and commission regulation, who experience confirmed damage caused by game birds, big game and trophy game to private property. An individual can claim actual damages to land, growing cultivated crops, extraordinary damage to grass, livestock, stored crops, seed crops, improvements and beehives and honey. In order for landowners to receive damage payments they must allow hunting access to their property for the species causing the damage. They also must notify Game and Fish within 15 days of discovering the damage so Game and Fish can investigate, confirm and evaluate damages and associated compensation amount. Last year, Game and Fish paid about \$1.165 million to individuals for big game, trophy game and game bird damages.</p>
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Federal Programs/ Depredation Permits

California	<p><u>Migratory Bird Permit/Depredation Order:</u> A Migratory Bird Depredation permit or other authorization must be obtained from the U.S. Fish and Wildlife Service (FWS), and State laws must be consulted and adhered to, prior to initiating actions to remove waterfowl or handle their nests and eggs.</p>
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California	<p><u>Nest and Egg Control Order/County Exception:</u> May occur under the terms and conditions of a permit issued by the Department. Registration is required by the U.S. Fish and Wildlife Service. County Exception for permit for Canada Geese: Nests and eggs of Canada geese may be destroyed without a permit issued by the department only in the following counties: Sonoma, Napa, Solano, Marin, Contra Costa, Alameda, San Francisco, San Mateo, Santa Clara, Santa Cruz, San Benito, Monterey, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange and San Diego counties.</p>
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Wyoming	<p><u>Canada Goose Permits:</u> The Wyoming Game and Fish Department (WGFD) has been issued a special statewide permit by the U.S. Fish and Wildlife Service. This permit allows the WGFD to destroy eggs and nests of breeding Canada geese. In most cases, eggs are 'oiled'-100% corn oil (a substance exempted from regulation by the U.S. Environmental Protection Agency) is applied to eggs in the nest; the oil prevents the eggs from developing and hatching. The WGFD allows landowners and land managers to conduct egg control activities under the statewide permit and provides guidance and technical assistance to sub-permittees.</p>
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Nuisance Wildlife

Alaska	<p><u>Report Wildlife Encounters Online Form</u>: Form on Alaska Department of Game and Fish Website to report wildlife encounters and human-wildlife conflicts, aggressive or orphaned animals.</p>
Alaska	<p><u>Nuisance Wildlife Permits</u>: Permits are needed from Alaska Department of Game and Fish before a person can kill, destroy, relocate, or haze (systematically harass) wild animals that are creating a nuisance or a threat to public safety. Also, any person who kills a wild animal in defense of life or property must file a report and surrender to ADF&G or the Alaska Wildlife Troopers certain animal parts within a prescribed time period.</p>
Alaska	<p><u>Defense of Life or Property Game Animal Kill Report</u>: State regulation (5 AAC 92.410(b)) requires any person killing a game animal in defense of life or property (DLP) to submit a written report to the Department of Fish and Game within 15 days of the incident. This form, properly filled out, satisfies that requirement. Persons shooting game under this DLP regulation also must salvage the skull and hide (for bears, wolves, etc.) or meat (for moose, caribou, etc.) and surrender it to the state. For bears, the salvaged hide must have the claws attached.</p>
Arizona	<p><u>Nuisance Urban Deer, Elk, Bighorn Sheep</u>: The main tool used to handle urban deer, elk, and javelina issues is to encourage homeowners to remove attractants and to erect exclusion fencing. We may implement some of the special hunts listed above, limiting the legal method of take to archery, exerting hunting pressure in those areas as a form of aversive conditioning and possibly reducing the population. The tolerance for hunting in and around neighborhoods is decreasing. We may also haze specific animals, with the possibility of capturing and relocating them or lethally removing them if there is a public safety risk. We may be moving towards capturing and relocating deer in towns where we would not be able to implement a hunt. We have been capturing and relocating bighorn sheep from a copper mine and the adjacent town where they have become a hazard to motorists, resulting in many wildlife/vehicle collisions.</p>
California	<p><u>Nuisance Wildlife</u>: Nongame and fur-bearing mammals that are injuring crops or other property may be taken at any time or in any manner in accordance with this code. In some cases, a permit is required. It is unlawful to use snares, hooks, or barbed wire to remove from the den, or fire to kill in the den, any immature predatory mammal. Predators that are relocated by the department must be tagged.</p>
California	<p><u>Control Order for Resident Canada Geese at Airports and Military Airbases</u>: Federal Regulations (USDA Animal and Plant Health Inspection Service/APHIS)</p>
Colorado	<p><u>Nuisance Wildlife Laws</u>: If wildlife is causing damage to crops, real or personal property, or livestock - a person (or any employee or agent of the landowner) may hunt, trap, or take the following wildlife on lands owned or leased by the person without securing a license to do so: Black-billed magpies, common crows, starlings, English or house sparrows, common pigeons, coyotes, bobcats, red foxes, raccoons, jackrabbits, badgers, marmots, prairie dogs, pocket gophers, Richardson's ground squirrels, rock squirrels, thirteen-lined ground squirrel, porcupines, crayfish, tiger salamanders, muskrats, beavers, exotic wildlife, and common snapping turtles.</p>
Hawaii	<p><u>Wildlife Control Permits</u>: When wildlife harm crops, health, or are otherwise a nuisance as described in HAR 13-124-17, the Hawaii Department of Land and Natural Resources may issue permits for nuisance wildlife control outside of normal hunting areas, seasons, or limits. Full permit conditions and guidelines may be provided by the administering branch staff member.</p>
Nevada	<p><u>Predator Damage Management</u>: USDA APHIS-WS in Nevada (WS-Nevada) responds to requests from the public, government agencies, tribes, private enterprise, and other entities for assistance with managing damage and threats from wildlife. This EA focuses on those species commonly referred to as predators since they prey upon other animals for some portion of time. For this EA, the following species are included as predators even though they may be statutorily defined into several types of mammals: coyote, common raven, badger, mountain lion, striped skunk, raccoon, bobcat, red fox, free-ranging/feral dogs, kit fox, black bear, free-ranging/feral cats, gray fox, spotted skunk, mink, weasels, ring-tailed cat (Section 1.3). WS-Nevada applies and recommends an integrated wildlife damage management approach (IWDM), which incorporates biological, economic, environmental, legal, and other information sources into its decision-making process. WS-Nevada's current IWDM activities include many methods for managing wildlife damage including education, advice, and implementation of non-lethal and lethal options</p>

Oregon	<p><u>Predator Control Permit</u>: A WCO permit is not required for the onsite capture and the onsite euthanasia of species defined as “predatory animals”. Predatory animals" means coyotes, rabbits, rodents, and feral swine which are or may be destructive to agricultural crops, products and activities (ORS 610.002 & 610.105). This definition is applicable where wildlife is taken under the authority of one who owns leases, occupies, possesses or has charge or dominion over the land. Beavers, muskrats and western gray squirrels causing damage on private property are defined as predatory animals under ORS 610.002. A private property owner that chooses to trap (excluding “Predatory animals”) and lawfully remove an animal from his or her property needs an ODFW permit, but not a WCO permit. Such permits are free of charge and can be obtained by contacting the nearest ODFW office.</p>
Washington	<p><u>Special Trapping Permit</u>: Washington has banned the use of a body gripping trap for capture or killing of wildlife. But there are exceptions for nuisance wildlife abatement. Trapping activity by an individual in a nuisance wildlife situation must comply, where applicable, with the requirements under WAC 220-417-030 and adhere to RCW 77.36.030 & 77.15.190. Trapping is a viable option if you cannot resolve a conflict with an animal by other means, such as removing the attractant, installing a barrier, or applying a scare tactic. It should, however, be considered the last option, because trapping it presents many problems for both the animals and the trapper.</p>

Appendix F. Websites provided by wildlife conflict managers.

State	Website
Alabama	https://www.outdooralabama.com/wildlife-management-programs/alabama-nuisance-animal-control
Alaska	https://www.adfg.alaska.gov/index.cfm?adfg=reportwildlifeencounter.main
Arizona	https://www.azgfd.com/wildlife-conservation/living-with-wildlife/
Arkansas	https://www.agfc.com/education/nuisance-wildlife/
Colorado	https://cpw.state.co.us/aboutus/Pages/GameDamage.aspx
Connecticut	https://wildlifehelp.org/agency/connecticut-department-energy-and-environmental-protection
Delaware	WildlifeHelp.org
Florida	https://myfwc.com/conservation/you- conserve/wildlife/
Georgia	www.georgiawildlife.com
Idaho	https://idfg.idaho.gov/conservation/big-game-depredation
Indiana	wildlife.in.gov
Iowa	https://www.iowadnr.gov/Hunting/Landowner-Assistance/Wildlife-Damage-Management
Kansas	https://ksoutdoors.com/Services/Wildlife-Damage-Control
Maine	https://www.maine.gov/ifw/fish-wildlife/wildlife/living-with-wildlife/avoid-resolve-conflict/index.html
Maryland	https://dnr.maryland.gov/wildlife/Pages/plants_wildlife/wildlifeproblems.aspx
Massachusetts	https://www.mass.gov/problems-with-wildlife
Michigan	https://www.michigan.gov/dnr/managing-resources/wildlife/nuisance-wildlife
Minnesota	https://www.dnr.state.mn.us/livingwith_wildlife/index.html
Mississippi	https://www.mdwfp.com/wildlife-hunting/nuisance-wildlife/
Missouri	mdc.mo.gov
Montana	https://fwp.mt.gov/conservation/living-with-wildlife
Nebraska	https://outdoornebraska.gov/hunt/hunting-programs/landowner-hunting-programs/depredation/
New Jersey	https://dep.nj.gov/njfw/wildlife/need-help-with-wildlife/
New York	https://www.dec.ny.gov/animals/7005.html
North Carolina	https://www.ncwildlife.org/Have-A-Problem/Preventing-Wildlife-Conflicts
North Dakota	https://gf.nd.gov/private-lands/landowner-resources/depredation
Ohio	https://ohiodnr.gov/buy-and-apply/special-use-permits/nuisance-wildlife-permits
Oklahoma	https://www.wildlifedepartment.com/law/nwco-operators
Oregon	https://www.dfw.state.or.us/wildlife/living_with/
Rhode Island	https://dem.ri.gov/natural-resources-bureau/fish-wildlife/learn-about-ri-wildlife
South Carolina	https://www.dnr.sc.gov/wildlife/alligator/nuisance.html
South Dakota	https://gfp.sd.gov/landowner-programs/
Tennessee	tnwildlife.org
Texas	https://tpwd.texas.gov/business/permits/land/wildlife_management/depredation/
Texas	https://tpwd.texas.gov/publications/pwdpubs/media/pwd_bk_w7000_0134.pdf
Texas	https://tpwd.texas.gov/huntwild/hunt/resources/bear_safety/
Vermont	www.vtfishandwildlife.com
Virginia	https://dwr.virginia.gov/wildlife/nuisance/
Washington	https://wdfw.wa.gov/species-habitats/living
West Virginia	https://wvdnr.gov/plants-animals/nuisance-wildlife/
Wisconsin	https://dnr.wisconsin.gov/topic/WildlifeHabitat/damage
Wyoming	https://wgfd.wyo.gov/Wildlife-in-Wyoming/More-Wildlife/Urban-and-Nuisance-Wildlife