

Wildlife Services Research Needs Assessment

The National Wildlife Research Center (NWRC) is the research arm of the USDA Animal and Plant Health Inspection Service (APHIS), Wildlife Services program. Scientists at the NWRC conduct research to develop and evaluate tools and information to resolve conflicts between humans and wildlife. To help establish research priorities at the NWRC, every 5 years the Wildlife Services' Deputy Administrator requests feedback from the program and its stakeholders. This feedback helps to determine the NWRC's research focus, hiring priorities, and resource allocation. Thus, your participation in this process is very important, and we value your feedback. Please take 15 minutes to complete the following assessment.

Thank you in advance for taking the time to complete this research needs assessment.

Demographics

Please identify your current employment status.

* 1. I am employed by:

- Agricultural Research Service
- Bureau of Land Management
- APHIS-Animal Care
- Department of Defense
- APHIS-Biotechnology Regulatory Services
- National Oceanic and Atmospheric Administration
- APHIS-Plant Protection & Quarantine
- National Park Service
- APHIS-Veterinary Services
- U.S. Fish and Wildlife Service
- APHIS-Wildlife Services-NWRC
- U.S. Geological Survey
- APHIS-Wildlife Services-Operations

Other (please specify)

* 2. Which of the following best describes your principal job:

- WS Assistant State Director
- NWRC Research Grade Scientist
- WS Biologist
- non-NWRC Research Scientist
- WS District Supervisor
- non-WS Biologist
- WS Executive (SES)
- non-WS Executive
- WS Manager
- non-WS Manager
- WS State Director
- non-WS Technician
- WS Technician

Other (please specify)

* 3. What is your work zip code:

ZIP:

* 4. If you are a Wildlife Services employee, please indicate your region or NWRC. If you are not a Wildlife Services employee, check N/A:

- Eastern Region
- NWRC
- Western Region
- N/A

5. Which of the following best describes your age?

18-24 years

41-59 years

25-40 years

60 years or more

Research Needs

What do you anticipate your top 3 research needs/priorities, in order of importance (1 = most important), will be during the next 5 years to address human-wildlife conflicts in your state or region? Give a brief description of the problem, background on the magnitude and/or location of the problem, and the importance of research in this area.

1. Top Research Need:

	5
	6

2. Second Research Need:

	5
	6

3. Third Research Need:

	5
	6

Importance of different areas of human-wildlife conflict

Wildlife damage management involves various types of conflict. Please indicate the likely importance of each of the following areas of conflict in your state or region during the next 5 years in terms of impact on production and/or economics, human health and safety, property damage, etc.

1. Importance of predation on each of the following in your state or region:

	Highly important	Moderately important	Minimally important
Cattle	jn	jn	jn
Sheep	jn	jn	jn
Swine	jn	jn	jn
Goats	jn	jn	jn
Poultry	jn	jn	jn
Furbearers (farm raised)	jn	jn	jn

Other (please specify)

2. Importance of wildlife damage to each of the following crops/agriculture commodities in your state or region:

	Highly important	Moderately important	Minimally important
Fruit	jn	jn	jn
Grains & cereals	jn	jn	jn
Nuts	jn	jn	jn
Seeds	jn	jn	jn
Vegetables	jn	jn	jn
Forestry	jn	jn	jn
Aquaculture	jn	jn	jn

Other (please specify)

3. Importance of wildlife disease issues impacting each of the following in your state or region:

	Highly important	Moderately important	Minimally important
Dairies	jn	jn	jn
Feedlots	jn	jn	jn
Public health	jn	jn	jn
Wildlife health	jn	jn	jn
Poultry	jn	jn	jn
Livestock	jn	jn	jn

Other (please specify)

4. Importance of wildlife impacts on each of the following in your state or region:

	Highly important	Moderately important	Minimally important
T&E species	jn	jn	jn
Sport fisheries	jn	jn	jn
Big game	jn	jn	jn
Upland birds	jn	jn	jn
Waterfowl	jn	jn	jn

5. Importance of wildlife impacts on each of the following in your state or region:

	Highly important	Moderately important	Minimally important
Nuisance wildlife	jn	jn	jn
Property	jn	jn	jn
Golf courses	jn	jn	jn
Aviation safety	jn	jn	jn
Automobile safety	jn	jn	jn
Transportation infrastructure	jn	jn	jn

Other (please specify)

Involvement with different areas of human-wildlife conflicts

In your capacity as a wildlife professional, please indicate the likely level of your involvement in each of the following areas of human-wildlife conflicts during the next 5 years.

1. Your likely involvement working with predation by each of the following on sheep:

	Major Involvement	Moderate Involvement	Minimal Involvement
Bears	jn	jn	jn
Coyotes	jn	jn	jn
Feral Swine	jn	jn	jn
Feral Dogs	jn	jn	jn
Mountain Lions	jn	jn	jn
Wolves	jn	jn	jn
Raptors	jn	jn	jn

Other (please specify)

2. Your likely involvement working with predation by each of the following on cattle:

	Major Involvement	Moderate Involvement	Minimal Involvement
Bears	jn	jn	jn
Coyotes	jn	jn	jn
Feral Dogs	jn	jn	jn
Mountain Lion	jn	jn	jn
Wolves	jn	jn	jn

Other (please specify)

3. Your likely involvement working with following livestock disease issues:

	Major Involvement	Moderate Involvement	Minimal Involvement
Birds	jn	jn	jn
Rodents	jn	jn	jn
Raccoons	jn	jn	jn
Opossums	jn	jn	jn
Deer	jn	jn	jn
Feral Swine	jn	jn	jn

Other (please specify)

4. Your likely involvement working with predation by each of the following on poultry:

	Major Involvement	Moderate Involvement	Minimal Involvement
Coyotes	jn	jn	jn
Foxes	jn	jn	jn
Mustelids	jn	jn	jn
Feral Dogs/Cats	jn	jn	jn
Raccoons	jn	jn	jn

Other (please specify)

5. Your likely involvement working with the following poultry disease issues:

	Major Involvement	Moderate Involvement	Minimal Involvement
Birds	jn	jn	jn
Raccoons	jn	jn	jn
Rodents	jn	jn	jn
Feral Dogs/Cats	jn	jn	jn

Other (please specify)

6. Your likely involvement working with each of the following on conflicts involving aquaculture and fisheries:

	Major Involvement	Moderate Involvement	Minimal Involvement
Cormorants	jn	jn	jn
Hérons & Egrets	jn	jn	jn
Gulls	jn	jn	jn
Pelicans	jn	jn	jn

Other (please specify)

7. Your likely involvement working with each of the following on conflicts involving fruit crops:

	Major Involvement	Moderate Involvement	Minimal Involvement
Starlings	jn	jn	jn
Songbirds	jn	jn	jn
Rodents	jn	jn	jn
Deer	jn	jn	jn

Other (please specify)

8. Your likely involvement working with each of the following on conflicts involving grain and cereal crops:

	Major Involvement	Moderate Involvement	Minimal Involvement
Blackbirds/Starlings	jn	jn	jn
Crows/Ravens	jn	jn	jn
Misc. Songbirds	jn	jn	jn
Rodents	jn	jn	jn
Deer	jn	jn	jn
Feral Swine	jn	jn	jn

Other (please specify)

9. Your likely involvement working with each of the following on conflicts involving field and vegetable crops:

	Major Involvement	Moderate Involvement	Minimal Involvement
Blackbirds/Starlings	jn	jn	jn
Crows/Ravens	jn	jn	jn
Misc. Songbirds	jn	jn	jn
Rodents	jn	jn	jn
Coyotes	jn	jn	jn
Deer	jn	jn	jn
Feral Swine	jn	jn	jn

Other (please specify)

10. Your likely involvement working with each of the following on conflicts involving habitat destruction/degradation:

	Major Involvement	Moderate Involvement	Minimal Involvement
Deer	jn	jn	jn
Feral Swine	jn	jn	jn
Cormorants	jn	jn	jn
Nutria	jn	jn	jn
Beavers	jn	jn	jn

Other (please specify)

11. Your likely involvement working with each of the following on conflicts involving impacts on T&E species:

	Major Involvement	Moderate Involvement	Minimal Involvement
Feral Swine	jn	jn	jn
Raccoons	jn	jn	jn
Foxes	jn	jn	jn
Coyotes	jn	jn	jn
Wolves	jn	jn	jn
Feral Dogs	jn	jn	jn
Feral Cats	jn	jn	jn
Crows/Ravens	jn	jn	jn

Other (please specify)

12. Your likely involvement working with each of the following on conflicts involving property damage (buildings, landscape):

	Major Involvement	Moderate Involvement	Minimal Involvement
Feral Swine	jn	jn	jn
Deer	jn	jn	jn
Bears	jn	jn	jn
Raccoons	jn	jn	jn
Woodpeckers	jn	jn	jn
Vultures	jn	jn	jn
Rodents	jn	jn	jn

Other (please specify)

13. Your likely involvement working with each of the following on conflicts involving impacts on human health:

	Major Involvement	Moderate Involvement	Minimal Involvement
Waterfowl	jn	jn	jn
Other Birds	jn	jn	jn
Raccoons	jn	jn	jn
Skunks	jn	jn	jn
Bats	jn	jn	jn
Feral Dogs	jn	jn	jn

Other (please specify)

14. Your likely involvement working with each of the following on conflicts involving aviation safety:

	Major Involvement	Moderate Involvement	Minimal Involvement
Geese	jn	jn	jn
Gulls	jn	jn	jn
Raptors	jn	jn	jn
Starlings	jn	jn	jn
Other Birds	jn	jn	jn
Coyotes	jn	jn	jn
Deer	jn	jn	jn

Other (please specify)

15. Your likely involvement working with each of the following on conflicts involving transportation infrastructure (roads, bridges):

	Major Involvement	Moderate Involvement	Minimal Involvement
Birds	jn	jn	jn
Beavers	jn	jn	jn
Feral Swine	jn	jn	jn
Coyotes	jn	jn	jn

Other (please specify)

16. Your likely involvement working with each of the following on conflicts involving automobile safety:

	Major Involvement	Moderate Involvement	Minimal Involvement
Deer	jn	jn	jn

Other (please specify)

Methods/tools/Information needed to manage human-wildlife conflicts.

Please indicate the likely level of need in your state or region during the next 5 years for research to develop, improve, and/or evaluate each of the following methods/tools/information.

1. Methods/tools/Information-Predator Management

	high need	moderate need	minimal need
Toxicants	jn	jn	jn
Repellents	jn	jn	jn
Traps	jn	jn	jn
Trap Monitors	jn	jn	jn
Contraceptives	jn	jn	jn
Shooting	jn	jn	jn
Aerial shooting	jn	jn	jn
Shooting with night vision technologies	jn	jn	jn
Exclusion Devices/Fencing	jn	jn	jn
Scare Devices	jn	jn	jn
Economics	jn	jn	jn
Genetics	jn	jn	jn
Other (please specify)	<input type="text"/>		

2. Methods/tools/Information-Bird Management

	high need	moderate need	minimal need
Toxicants	jn	jn	jn
Repellents	jn	jn	jn
Contraceptives	jn	jn	jn
Exclusion Devices	jn	jn	jn
Scare Devices	jn	jn	jn
Economics	jn	jn	jn
Genetics	jn	jn	jn
Other (please specify)	<input type="text"/>		

3. Methods/tools/Information-Deer Management

	high need	moderate need	minimal need
Toxicants	jn	jn	jn
Repellents	jn	jn	jn
Contraceptives	jn	jn	jn
Exclusion Devices	jn	jn	jn
Scare Devices	jn	jn	jn
Economics	jn	jn	jn
Genetics	jn	jn	jn

Other (please specify)

4. Methods/tools/Information-Rodent Control

	high need	moderate need	minimal need
Toxicants	jn	jn	jn
Repellents	jn	jn	jn
Contraceptives	jn	jn	jn
Exclusion Devices	jn	jn	jn
Scare Devices	jn	jn	jn
Economics	jn	jn	jn
Genetics	jn	jn	jn

Other (please specify)

5. Methods/tools/Information-Invasive Species Control

	high need	moderate need	minimal need
Toxicants	jn	jn	jn
Repellents	jn	jn	jn
Contraceptives	jn	jn	jn
Exclusion Devices	jn	jn	jn
Scare Devices	jn	jn	jn
Economics	jn	jn	jn
Genetics	jn	jn	jn

Other (please specify)

6. Methods/tools/Information-Reproductive Control

	high need	moderate need	minimal need
Species specificity	jn	jn	jn
Oral Delivery	jn	jn	jn
Minimize adverse effects	jn	jn	jn
Economics	jn	jn	jn
Other (please specify)	<input type="text"/>		

7. Methods/tools/Information-Wildlife Disease Management

	high need	moderate need	minimal need
Basic information on disease ecology	jn	jn	jn
Basic information on wildlife epidemiology	jn	jn	jn
New sample collection methods	jn	jn	jn
Optimized surveillance strategies	jn	jn	jn
Wildlife adapted laboratory diagnostic tests	jn	jn	jn
Wildlife adapted field diagnostic quick tests	jn	jn	jn
Economics	jn	jn	jn
Genetics	jn	jn	jn
Other (please specify)	<input type="text"/>		

8. Methods/tools/Information-Wildlife Ecology & Population Biology

	high need	moderate need	minimal need
Improved spatial sampling methods	jn	jn	jn
Improved demographic estimation methods	jn	jn	jn
Animal movement information	jn	jn	jn
Genetics	jn	jn	jn
Other (please specify)	<input type="text"/>		

NWRC Services

While research and development of new methods is the primary mission of the NWRC, the staff and infrastructure of the Center are valuable assets to the wildlife management community. Please indicate the likely importance of each of the following activities and services to your job during the next 5 years.

Highly Important-->need arises on a recurring basis

Moderately Important-->need arises one or a few times during the year

Not Important-->rarely or never a need for the service or consultation

1. Service-Services

	Highly important	Moderately important	Not important
Library: general assistance	jñ	jñ	jñ
Library: photographic images	jñ	jñ	jñ
Library: literature searches	jñ	jñ	jñ
Library: reprint requests	jñ	jñ	jñ
Analytical chemistry	jñ	jñ	jñ
Genetic analysis	jñ	jñ	jñ
Disease diagnostics	jñ	jñ	jñ
Disease diagnostics (surge capacity)	jñ	jñ	jñ
Economic impact of wildlife damage	jñ	jñ	jñ
Cost effectiveness of management	jñ	jñ	jñ
Immobilization & euthanasia training	jñ	jñ	jñ
Pesticide registration assistance	jñ	jñ	jñ
Other (please specify)			
<input style="width: 250px; height: 20px;" type="text"/>			

2. Service-Consultations

	Highly important	Moderately important	Not important
Management plans	jñ	jñ	jñ
NEPA: basic ecological information	jñ	jñ	jñ
NEPA: Quality Assurance	jñ	jñ	jñ
Disease surveillance plans	jñ	jñ	jñ
Disease sampling strategies	jñ	jñ	jñ
Risk assessments	jñ	jñ	jñ
Statistical	jñ	jñ	jñ
Effectiveness of management methods	jñ	jñ	jñ
Other (please specify)	<input type="text"/>		