

**DECISION
AND
FINDING OF NO SIGNIFICANT IMPACT**

**ENVIRONMENTAL ASSESSMENT: MAMMAL DAMAGE
MANAGEMENT IN THE STATE OF NEW JERSEY**

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) program completed an Environmental Assessment (EA) on alternatives for reducing mammal damage to agricultural resources, natural resources, property, and public health and safety in New Jersey (USDA 2019). The United States Department of the Interior, Fish and Wildlife Service (USFWS) cooperated in the development of the EA. The EA documents the need for action and assesses potential impacts on the human environment of three alternatives to address that need.

PUBLIC COMMENTS

The EA was made available for review and comment from February 28 to April 1, 2019. The document was made available through a Notice of Availability (NOA) published in the *Times of Trenton*, and sent to interested parties through the APHIS Stakeholder Registry. WS also published the document on the program website. Seven comments were received. WS responses to comments are included in Appendix B. All correspondence on the EA is maintained at the WS State Office, 140-C Locust Grove Road, Pittstown, NJ 08867-4049.

ISSUES ASSOCIATED WITH MAMMAL DAMAGE MANAGEMENT ACTIVITIES

The EA analyzed a range of management alternatives in context of issues relevant to the scope of the analysis including:

- Issue 1 - Effects of Damage Management Activities on Target Mammal Populations
- Issue 2 - Effects of Damage Management on Nontarget Wildlife Species Populations, Including T&E Species
- Issue 3 - Effects of Damage Management on Regulated Harvest of Mammals
- Issue 4 - Effects of Damage Management Activities on Human Health and Safety

AFFECTED ENVIRONMENT

Mammals can be found across New Jersey throughout the year. Therefore, damage or threats of damage associated with mammals could occur wherever mammals occur as would requests for assistance to manage damage or threats of damage. Assistance would only be provided by WS when requested by a landowner or manager and WS would only provide direct operational assistance on properties where a Memorandum of Understanding (MOU), Cooperative Service Agreement (CSA), or other comparable document had been signed between WS and the cooperating entity.

Upon receiving a request for assistance, the proposed action alternative, or those actions described in the other alternatives could be conducted on private, federal, state, tribal, and municipal lands in New Jersey to reduce damage and threats associated with mammals. Areas where damage or threats of damage could occur include, but would not be limited to agricultural fields, vineyards, orchards, farms, aquaculture facilities, grain mills, grain handling areas, railroad yards, waste handling facilities, industrial sites, natural resource areas, park lands, and historic sites; state and interstate highways and roads; property in or adjacent to subdivisions, businesses, and industrial parks; timberlands, croplands, and pastures; private

and public property where burrowing mammals cause damage to structures, dikes, ditches, ponds, and levees; public and private properties in rural/urban/suburban areas where mammals cause damage to landscaping and natural resources, property, and are a threat to human safety through the spread of disease. The areas could also include airports and military airbases where mammals are a threat to human safety and to property; and areas where mammals negatively affect wildlife, including T&E species.

DESCRIPTION OF THE ALTERNATIVES

The following three alternatives were developed to respond to the issues identified in Chapter 2 of the EA. A detailed discussion of the effects of the alternatives on the issues is described in the EA under Chapter 3 (USDA 2019); below is a summary of the alternatives.

Alternative 1 - Continue the Current Adaptive Integrated Mammal Damage Management Program (No Action/Proposed Action)

The proposed action/no action alternative would continue the current implementation of an adaptive integrated approach utilizing nonlethal and lethal techniques, as deemed appropriate using the WS Decision Model (USDA 2019), to reduce damage and threats associated with mammals. Under this alternative, WS could respond to requests for assistance for managing damage and threats associated with mammals by: 1) taking no action, if warranted, 2) providing technical assistance to property owners or managers on actions they could take to reduce damage or threats of damage, or 3) providing technical assistance and direct operational assistance to a property owner or manager experiencing damage or threats of damage. Direct operational assistance could be provided when funding is available through federal appropriations or cooperative funding. WS response to requests for assistance is dependent upon on those persons initiating the request.

Property owners or managers requesting assistance would be provided with information regarding the use of effective and practical nonlethal and lethal techniques under this alternative. Property owners or managers may choose to implement WS' recommendations on their own (i.e., technical assistance), use contractual services of private businesses, use volunteer services of private individuals or organizations, use the services of WS (i.e., direct operational assistance), take the management action themselves without consulting another private or governmental agency, or take no action. Direct operational assistance would only be conducted by WS after a MOU, CSA, or other comparable document listing all the methods the property owner or manager will allow to be used on property they own and/or manage was signed by WS and those requesting assistance.

The most effective approach to resolving any animal damage problem is to use an adaptive integrated approach (IWDM) that may call for the use of several methods simultaneously or sequentially. This approach is used by WS for providing both technical and direct operational assistance. WS personnel use a thought process for evaluating and responding to requests for assistance detailed in the WS Decision Model. IWDM may incorporate both nonlethal and lethal methods depending upon the circumstances of the specific damage problem. Nonlethal methods disperse or otherwise make an area where the damage is occurring unattractive or unavailable to the species causing the damage, thereby reducing the presence of those species in the area. Nonlethal methods would be given priority when addressing requests for assistance. However, nonlethal methods would not necessarily be employed to resolve every request for assistance if deemed inappropriate by WS' personnel using the WS Decision Model. When effective, nonlethal methods would disperse mammals from the area resulting in a reduction in the presence of those mammals at the site.

Lethal methods remove individuals of the species causing the damage, thereby reducing the presence of those species in the area and the local population. Lethal methods are often employed or recommended to

reinforce nonlethal methods and to remove mammals that have been identified as causing damage or posing a threat of damage as part of an integrated approach. The number of mammals removed from the population using lethal methods under the proposed action would be dependent on the number of requests for assistance received, the number of mammals involved with the associated damage or threat, and the efficacy of methods employed. WS may recommend mammals be harvested during regulated hunting and/or trapping seasons or lethally removed under nuisance wildlife regulations in an attempt to reduce the number of mammals causing damage.

Alternative 2 - Non-lethal Mammal Damage Management Only by WS

Under this alternative, WS would provide those persons requesting assistance with managing damage and threats associated with mammals with technical assistance only. Technical assistance would be provided as described above under Alternative 1. This alternative would place the immediate burden of operational damage management work on the resource owner, other governmental agencies, private businesses and/or private individuals. Those persons experiencing damage or threats could take action using those methods legally available to resolve or prevent damage associated with mammals as permitted by federal, state, and local laws and regulations or those persons could take no action.

Alternative 3 - No Mammal Damage Management Conducted by WS

This alternative would preclude any and all activities by WS to reduce threats to human health and safety, and to alleviate damage to agricultural resources, property, and natural resources. WS would not be involved with any aspect of mammal damage management. All requests for assistance received by WS to resolve damage caused by mammals would be referred to the NJDFW, NJDEP, local law enforcement or animal control authorities, and/or private entities. Despite no involvement by WS in resolving damage and threats associated with mammals, those persons experiencing damage caused by mammals could continue to resolve damage by employing those methods legally available since the lethal removal of mammals to alleviate damage or threats can occur despite the lack of involvement by WS. The lethal removal of mammals could occur through the issuance of permits by the NJDFW, when required, and during the hunting or trapping seasons.

CONSISTENCY

Based on the provisions and protective measures established in the EA, WS determined that activities conducted pursuant to the proposed action may affect but would not likely adversely affect those species listed in the state by the USFWS, including their critical habitats. As part of the development of the EA, WS consulted with the USFWS under Section 7 of the ESA. The USFWS concurred with WS' determinations. The list of species designated as endangered or threatened by the NJDFW was reviewed during the development of the EA. Based on the review of species listed, WS determined that the proposed activities may affect but would not likely adversely affect those species listed by the state.

MONITORING

The WS-New Jersey program will annually review its effects on mammals and other non-target species addressed in the EA to ensure those activities do not impact the viability of wildlife species. In addition, the EA will be reviewed each year to ensure that the analyses are sufficient.

CUMULATIVE IMPACTS OF THE PROPOSED ACTION

No significant cumulative environmental impacts were identified from any of the three alternatives, including the proposed action. Under the proposed action, the lethal removal of mammals by WS would

not have significant impacts on statewide mammal populations when known sources of mortality were considered. No risk to public safety was identified when activities were provided and expected by requesting individuals under Alternative 1 since only trained and experienced personnel would conduct and/or recommend damage management activities. There would be a slight increased risk to public safety when persons who reject assistance and recommendations conduct their own activities under Alternative 2 and when no assistance was provided under Alternative 3. However, under all of the alternatives, those risks would not be to the point that the effects would be significant. The analysis in the EA indicates that an integrated approach to managing damage and threats caused by mammals would not result in significant cumulative effects on the quality of the human environment.

DECISION AND FINDING OF NO SIGNIFICANT IMPACT

I have carefully reviewed the EA prepared for this proposal and the input from the public involvement process. I find the proposed action alternative (Alternative 1) to be environmentally acceptable, addressing the issues and needs while balancing the environmental concerns of management agencies, landowners, advocacy groups, and the public. The analysis in the EA adequately addresses the identified issues, which reasonably confirm that no significant impact, individually or cumulatively, to the quality of the human environment are likely to occur from the proposed action, nor does the proposed action constitute a major federal action. Therefore, the analysis in the EA does not warrant the completion of an Environmental Impact Statement (EIS).

Based on the analyses in the EA, the need for action and the issues identified are best addressed by selecting Alternative 1 and applying the associated standard operating procedures. Alternative 1 successfully addresses (1) mammal damage management using a combination of the most effective methods and does not adversely impact the environment, property, human health and safety, target species, and/or non-target species, including T&E species; (2) it offers the greatest chance of maximizing effectiveness and benefits to resource owners and managers; (3) it presents the greatest chance of maximizing net benefits while minimizing adverse effects to public health and safety; and (4) it offers a balanced approach to the issue of humaneness when all facets of that issue are considered. Further analysis would be triggered if changes occur that broaden the scope of damage management activities that affect the natural or human environment or from the issuance of new environmental regulations. Therefore, it is my decision to implement the proposed action/no action alternative (Alternative 1) as described in the EA.

Based on the analyses provided in the EA, there are no indications that the proposed action (Alternative 1) would have a significant impact, individually or cumulatively, on the quality of the human environment. I agree with this conclusion and therefore, find that an EIS should not be prepared. This determination is based on the following factors:

1. Mammal damage management, as conducted by WS in the State, is not regional or national in scope.
2. The proposed action would pose minimal risk to public health and safety. Based on the analyses in the EA, the methods available would not adversely affect human safety based on their use patterns and standard operating procedures.
3. There are no unique characteristics such as park lands, prime farm lands, wetlands, wild and scenic areas, or ecologically critical areas that would be significantly affected. WS' standard operating procedures and adherence to applicable laws and regulations would further ensure that WS' activities do not harm the environment.

4. The effects on the quality of the human environment are not highly controversial. Although there may be some opposition to mammal damage management, this action is not highly controversial in terms of size, nature, or effect.
5. Based on the analysis documented in the EA and the accompanying administrative file, the effects of the proposed damage management program on the human environment would not be significant. The effects of the proposed activities are not highly uncertain and do not involve unique or unknown risks.
6. The proposed action would not establish a precedent for any future action with significant effects.
7. No significant cumulative effects were identified through the assessment. The EA analyzed cumulative effects on target and non-target species populations and concluded that such impacts were not significant for this or other anticipated actions to be implemented or planned.
8. The proposed activities would not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, nor would they likely cause any loss or destruction of significant scientific, cultural, or historical resources.
9. WS has determined that the proposed program would not adversely affect any federally listed T&E species currently listed in the State. In addition, WS has determined that the proposed activities would not adversely affect state-listed T&E species.
10. The proposed action would comply with all applicable federal, state, and local laws.

The rationale for this decision is based on several considerations. This decision takes into account public comments, social/political and economic concerns, public health and safety, and the best available science. The foremost considerations are that: 1) mammal damage management would only be conducted by WS at the request of landowners/managers, 2) management actions would be consistent with applicable laws, regulations, policies and orders, and 3) no significant effects to the environment were identified in the analysis. As a part of this Decision, the WS program would continue to provide effective and practical technical assistance and direct management techniques that reduce damage and threats of damage.

Willie D. Harris, Director-Eastern Region
USDA/APHIS/WS
Raleigh, North Carolina

Date

APPENDIX A
LITERATURE CITED

Houben JM. 2004. Status and management of coyote depredations in the eastern United States. *Sheep & Goat Research Journal*. 19:16-22.

Howery L, DeLiberto TJ. 2004. Indirect effects of carnivores on livestock foraging behavior and production. *Sheep & Goat Research Journal*. 19:53-57.

USDA (U.S. Department of Agriculture). 2019. Environmental Assessment: Mammal Damage Management in the State of New Jersey. USDA, APHIS, WS, Pittstown, NJ.

APPENDIX B RESPONSES TO COMMENTS

This Appendix contains issues raised by the public during the comment period for the 2019 New Jersey mammal damage management EA and the WS response to each of the issues. WS received seven comment letters regarding the EA. Substantive issues raised in the letters are numbered and are written in bold text. The WS response follows each comment and is written in standard text.

1. Deer are herbivores and they are commonly found in areas. Does that mean that we must diminish deer populations completely?

WS does not remove wildlife simply due to their presence in an area. Section 1.2 of the EA, titled *Need For Action*, describes the typical complaints that WS receives about deer damage or threats of damage. The WS proposed action is a response to minimize or reduce deer damage as referenced in section 1.2.

On page 79 of the EA, WS states under the heading, *WS' Impact on Biodiversity*, that it does not attempt to eradicate any species of native wildlife. The section further explains local impacts to target species. Additionally, WS' average annual removal of 25.6 deer does not diminish a state deer population that is estimated at 112,126 deer.

2. Also, it is stated that beavers are a huge threat to resources. However, beavers creating dams are their natural way to keep their habitat. Beavers are keystone species, they are needed to keep the rest of wildlife intact.

Page 5 of the EA discusses damage caused by beaver while performing their natural behavior. It is not clear what the commenter meant by stating the beaver “keep the rest of wildlife intact.” However, most of WS beaver dam removals involve new dams where wetlands have not been established as defined by the USACE and the EPA (40 CFR 232.2) (see *Effects of Beaver Dam Removal on the Status of Wetlands* on page 81 of the EA).

3. The only animal that can take down cattle would be a wolf. There are currently no known breeds of wolf in New Jersey.

Page 13 of the EA: Houben (2004) analyzed the National Agricultural Statistics Service's (NASS) predator loss surveys for sheep, goat and cattle in the southern and eastern United States. He found that predation was the leading cause of mortality in sheep and lambs, resulting in a \$610,444 loss for the region during 1999. In addition, he noted over \$10 million loss of cattle due to predation during 2000. Coyotes, which more heavily prey on lambs and calves than adults, accounted for 60.7% of the sheep loss and 70.1% of the cattle loss due to predation (Houben 2004). Howery and DeLiberto (2004) noted predators can force livestock away from high-quality habitat into lower-quality habitat and/or smaller foraging areas. They conclude this could have a negative impact on the livestock's weight and condition as well as its productivity which has a direct correlation to forage intake.

4. People should keep their pets inside at night. To say a dog or cat was killed by another mammal and therefore those mammals need to be eradicated is not sound logic and not the responsibility of WS.

WS does reference confining pets on page D-1; however, pets can still be directly or indirectly (e.g. parasites, pathogen transmission) affected by wildlife while on a leash or otherwise controlled by a human outdoors.

- 5. I oppose the use of traps and snares or other such devices. They are inhumane. Typically the animal suffers for days in agonizing pain or eats off a limb to escape then dies of horrid pain from infection.**

WS' use of traps and snares would comply with all federal and state regulations (e.g. trap check frequencies), as well as WS Directive 2.450. Additionally, WS identified "humaneness" as an issue in this EA. The analysis of the alternatives as they pertain to humaneness is discussed starting on page 75 of the EA.

- 6. "Livetraps would be checked frequently in accordance with NJ Game Code (NJAC 7:25-5.12 (i))." I am in favor of live traps specifically and uniquely for the method of relocation. I am skeptical of State Game Codes with regards to checking live traps. Oftentimes animals die of starvation or cold or heat from being in a live trap indefinitely.**

WS' use of traps and snares would comply with all federal and state regulations (e.g. trap check frequencies), as well as WS Directive 2.450.

- 7. ...iowa beef processors is not in new jersey and it is not even in business anymore so to cite this as a reason for aphis to be in nj is spurious and lying.**

The EA references the Iowa Beef Processor as an example of damage that can be incurred by burrowing wildlife. Woodchucks are found in both Iowa and New Jersey and exhibit the same behavior in both states; therefore, the example is relevant to New Jersey.

- 8. I also note diversion in aphis reports. They cite what is going on in Missouri, ny state, etc. when what counts in a plan for nj is what is going on in nj totally and fully. They attempt to make decisions for nj based on what Missouri allows.**

Missouri is referenced once in the EA for the same reason as the Iowa Beef Processor as described above in comment #7. New York examples are cited several times due to the close proximity to New Jersey, similar wildlife species, and similar/overlapping damage issues. Evaluating lessons learned from other states allows WS to more fully prepare and mitigate damage concerns in New Jersey.