

**DECISION  
AND  
FINDING OF NO SIGNIFICANT IMPACT**

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

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 Hampshire (USDA 2019). The cooperating agencies that assisted WS in the development of the EA were the New Hampshire Fish and Game Department (NHFG), New Hampshire Department of Agriculture, Markets and Food, New Hampshire Department of Health and Human Services, and the United States Department of the Interior, Fish and Wildlife Service (USFWS). 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 March 12 to April 19, 2019. The document was made available through a Notice of Availability (NOA) published in the *Concord Monitor*, and sent to interested parties through the APHIS Stakeholder Registry. WS also published the document on the program website. Three comments were received. WS responses to comments are included in Appendix B. All correspondence on the EA is maintained at the WS State Office, 59 Chenell Dr, Suite 7, Concord, NH 03301-8548.

**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 Management on Target Mammal Populations
- Issue 2 - Effects of Management on Non-target Wildlife Species Populations, Including T&E Species
- Issue 3 - Effects of Management on Human Health and Safety
- Issue 4 - Humaneness and Animal Welfare Concerns of Methods

**AFFECTED ENVIRONMENT**

Mammals can be found across New Hampshire throughout the year. Therefore, damage or threats of damage associated with mammals could occur wherever mammals occur as would requests for assistance. 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 Hampshire 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 no action/proposed action alternative would continue the current implementation of an adaptive integrated approach utilizing non-lethal and lethal techniques, as deemed appropriate using the WS Decision Model, to reduce damage and threats caused by mammals. WS, in consultation with the NHFG, would continue to respond to requests for assistance with technical assistance, or when funding is available, operational damage management. Funding could occur through federal appropriations or from cooperative funding.

The adaptive approach to managing mammal damage would integrate the use of the most practical and effective methods to resolve a problem as determined by site-specific evaluation. City/town managers, agricultural producers, property owners, and others requesting assistance would be provided information regarding the use of appropriate non-lethal and lethal techniques. To be most effective, damage management activities should begin as soon as mammals begin to cause damage. Mammal damage that has been ongoing can be difficult to resolve since mammals could be conditioned to an area and are familiar with a particular location. Subsequently, making that area unattractive can be difficult to achieve once damage has been ongoing. WS would work closely with those entities requesting assistance to identify situations where damage could occur and begin to implement damage management activities under this alternative as early as possible to increase the likelihood of achieving the level of damage reduction requested by the cooperating entity.

Under this alternative, WS would respond to requests for assistance by: 1) taking no action if warranted, 2) providing only technical assistance to property owners or managers on actions they could take to reduce damages caused by mammals, or 3) provide technical assistance and direct operational assistance to a property owner or manager experiencing damage. The removal of many of the mammal species native to New Hampshire or designated a game species can only legally occur through regulated hunting and trapping seasons, issuance of a wildlife damage permit (NHRSA 541-A) by the NHFG; or through NHRSA 207:26, where an unprotected wild animal which the landowner finds in the act of doing actual and substantial damage to poultry, crops, domestic animals, or the person's property, may authorize a family member, employee, or other person requested lethally remove the animal under the provision of a depredation permit issued by the executive director pursuant to RSA 207:22-c, III. Activities conducted under this alternative would occur in compliance with the New Hampshire General Statutes and the MOU signed between the NHFG and WS.

Property owners or managers requesting assistance would be provided with information regarding the use of effective and practical non-lethal 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 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.

Non-lethal methods can disperse or otherwise make an area unattractive to mammals; thereby, reducing the presence of mammals at the site and potentially the immediate area around the site where non-lethal methods are employed. Non-lethal methods would be given priority when addressing requests for assistance (WS Directive 2.101) and include methods of exclusions, harassment, habitat modification, and live trap and translocation. However, non-lethal methods would not necessarily be employed to resolve every request for assistance if deemed inappropriate using the WS Decision Model, especially when the requesting entity has used non-lethal methods previously and found those methods to be inadequate in resolving the damage or threats of damage. When effective, non-lethal methods could disperse mammals from the area. Employing methods soon after damage begins or soon after threats are identified increases the likelihood that those damage management activities would achieve success in addressing damage. Therefore, coordination and timing of methods is necessary to be effective in achieving expedient resolution of mammal damage.

Lethal methods would be employed to resolve damage only after receiving a request for the use of those methods. The use of lethal methods may result in local population reductions in the area where damage or threats were occurring. Lethal methods are often employed to reinforce non-lethal methods and to remove mammals that have been identified as causing damage or posing a threat to cause damage. The number of mammals removed from the population 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, whether negative impacts are sufficiently reduced to damage, and the efficacy of methods employed.

WS may recommend mammals be harvested during the regulated hunting and/or trapping season in an attempt to reduce the number of mammals causing damage. Managing mammal populations over broad areas could lead to a decrease in the number of mammals causing damage; however population management is not the goal of WS' technical assistance or direct operational assistance. Establishing hunting or trapping seasons and managing wildlife populations is the responsibility of the NHFG.

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

Under this alternative, WS would be restricted to only using or recommending non-lethal methods to resolve damage caused by mammals (found in Appendix B of EA). Lethal methods could continue to be used under this alternative by those persons experiencing damage from mammals without involvement by WS. In situations where non-lethal methods were impractical or ineffective to alleviate damage, WS could refer requests for information regarding lethal methods to the NHFG, local animal control agencies, or private businesses or organizations. Property owners or managers might choose to implement WS' non-lethal recommendations on their own or with the assistance of WS, implement lethal methods on their own, or request assistance (non-lethal or lethal) from a private or public entity other than WS.

### **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 NHFG and/or other private entities.

Despite no involvement by WS in resolving damage and threats associated with mammals, those persons experiencing damage 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 NHFG permits or through NHRSA 207:26 when required, and during the hunting or trapping seasons. All methods described in Appendix B of the EA would be available for use by those persons experiencing damage or threats except for the use of immobilizing drugs and euthanasia chemicals. Immobilizing drugs and euthanasia chemicals can only be used by WS or appropriately licensed veterinarians.

## **CONSISTENCY**

As part of the development of the EA, WS consulted with the USFWS under Section 7 of the ESA. 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 some of the species listed in the state by the USFWS. The USFWS concurred with WS' determinations. The list of species designated as endangered or threatened by the NHFG was reviewed during the development of the EA. Based on the review of species listed, WS determined that the proposed activities would not likely adversely affect those species listed by the state. The NHFG has concurred with WS' determination for listed species.

## **MONITORING**

The WS-New Hampshire 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.

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

Date \_\_\_\_\_

**APPENDIX A  
LITERATURE CITED**

AVMA (American Veterinary Medical Association). 2013. AVMA guidelines for the euthanasia of animals: 2013 edition. American Veterinary Medical Association, Schaumburg, IL, USA.

USDA (U.S. Department of Agriculture). 2019. Environmental Assessment: Mammal Damage Management in the State of New Hampshire. USDA, APHIS, WS, Concord, NH.

## **APPENDIX B RESPONSES TO COMMENTS**

This Appendix contains issues raised by the public during the comment period for the 2019 New Hampshire mammal damage management EA and the WS response to each of the issues. WS received three 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. First, we believe that there should be a greater emphasis on public education. It will be difficult to completely enforce your policies if the public is not knowledgeable about how they themselves can prevent mammal destruction.**

WS agrees with the commenter that education should be emphasized. During calendar year 2018, WS-New Hampshire provided technical assistance to the public through 191 personal consultations, 1,542 written/telephone/hotline consultations, 15 instructional sessions, 14 exhibits, and 621 information transfers for a total of 2,383 educational opportunities reaching an estimated 15,483 parties. Additionally, WS distributed 11,292 leaflets of information on preventing wildlife damage. Page 34 of the EA summarizes WS' view of education as a component of wildlife damage management. WS also collaborates with many organizations, such as the University of New Hampshire Cooperative Extension (page 22 of the EA) to provide outreach and public education on wildlife damage remedies. The commenter did not define in what way education should be greater emphasized. Additionally, WS is not a regulatory program, and therefore, does not "enforce policies." See WS legislative authority on page 20 of the EA.

- 2. Prevention is key. It appears as though most of the topics covered in this draft are retroactive. While it is important to point out how the agency will approach problems after they occur, if initial actions are taken, property damage and transmission of diseases can be prevented to a greater degree.**

**If the public is informed of the ways that they can avoid conflicts with wildlife, then the issues that led to this environmental assessment could be lessened. This may lead to a smaller initial cost to offset greater long-term management and treatment cost. Building on this and through proactive public education, treatment could cost much less to the state when the public expends their own time and effort to prevent these issues and may even lead to long-term cooperation and trust between landowners and the wildlife service.**

WS agrees in theory with the commenter regarding prevention. However, WS is provided a very small federal allocation for its program in New Hampshire. Some of this funding is used to provide educational/outreach opportunities. For example, the Oral Rabies Vaccination program of WS spends significant effort to educate the public on the dangers of feeding wildlife and maintaining safe distances from rabies vector species. Additionally, WS proactively reaches the general public through a variety of ways such as annual exhibits at farm, forest, and agricultural shows, workshops at the University of New Hampshire and the New Hampshire Department of Markets and Foods, and county extension agents. WS publishes information on our website, as well as the New Hampshire Fish and Game website and in their Hunter's Digest on common wildlife damage issues and wildlife disease threats. WS posts information posters on kiosks at state wildlife manage units, state parks and federal lands, and WS provides brochures to county offices, agriculture and feed stores, and some community stores/restaurants.

The majority of WS' funding in New Hampshire is provided as cooperative funding through cooperators (e.g. anyone that request WS assistance and reimburses WS for costs incurred) that have already

experienced wildlife damage. WS does provide recommendations to existing cooperators on how to avoid future wildlife conflicts. For example, WS may provide advice to an airport on how to manage its landscape to deter certain species of wildlife from entering an active airfield. WS also remains proactive in wildlife disease surveillance. In calendar year 2018, WS submitted 355 disease samples for testing of swine brucellosis, tularemia, rabies, pseudorabies, leptospirosis, classical swine fever, and avian influenza in birds and mammals.

- 3. This [commenter is referring to proactive management] would best be enhanced through the development of measures of success, such as fewer complaints and costs in comparison with a baseline derived from the numbers of each from before the EA is implemented.**

WS does evaluate measures of success using the WS Decision Model (see Figure 2.1 in the EA). Additionally, WS tailors its program development and outreach priorities based on the number and type of technical assistance calls it receives each year.

- 4. Your data suggests that there are an increasing number of species, beginning and already adapting to human environments, with the possibility of causing health problems. This is a major concern that can be addressed with regulated trapping based on scientific data.**

New Hampshire already has a regulated trapping season for many mammals included in the EA. Trapping regulations and seasons are strictly and solely under the authority of the NHFG. WS regularly recommends trapping as an option for wildlife damage management. However, there are some properties where public trapping is prohibited due to security and safety reasons (e.g. active airfield). The EA also includes several species that cannot be legally trapped per NHFG regulations. Therefore, WS considers other methods to resolve damage caused by those species.

- 5. Consideration must be implemented on the use of traps that are efficient, safe to the user, and ensure animal welfare until dispatching of the animal.**

WS addressed safety and humaneness issues on pages 73 and 78 of the EA, respectively.

- 6. Many of the trapped animals (in urban environments) do not relocate well in rural environments and are already under stress of being trapped. It is doing them a favor to dispatch them after trapped instead of relocating them. This is the one major issue that needs to be addressed. I believe that you should consider public education on this factor before passing any further animal trapping management options in urban areas.**

WS addressed trap and translocation of mammals on page 41 of the EA.