

**UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
WILDLIFE SERVICES**

**FINDING OF NO SIGNIFICANT IMPACT
AND
DECISION**

An Integrated Wildlife Damage Management Approach
for the Management of Pigeon, Starling, and Sparrow Damage
In the State of Michigan as Conducted by USDA Wildlife Services

The U.S. Department of Agriculture, Animal and Plant Health Inspection Service (USDA-APHIS), Wildlife Services (WS) program responds to requests for assistance from individuals, organizations and other government agencies experiencing damage caused by wildlife in the state of Michigan. Ordinarily, according to APHIS procedures implementing the National Environmental Policy Act (NEPA), individual wildlife damage management actions may be categorically excluded (7 CFR 372.5(c), 60 Fed. Reg. 6000-6003, 1995). The WS program has completed an environmental assessment (EA) that analyses the potential environmental effects of a proposal to continue a cooperative, integrated wildlife damage management program for the purpose of reducing pigeon (*Columba livia*), starling (*Sturnus vulgaris*), and sparrow (*Passer domesticus*) damage to agriculture, livestock, property, natural resources, and human health and safety in the state of Michigan. The EA analyzed the proposed action and other alternatives with respect to a number of issues affecting the human environment.

WS is the Federal program authorized by law to reduce damage caused by wildlife (Animal Damage Control Act of 1931, as amended (46 Stat. 1486; 7 U.S.C. 426-426c) and the Rural Development, Agriculture, and Related Agencies Appropriations Act of 1988, Public Law 100-102, Dec. 27, 1987. Stat. 1329-1331 (7 U.S.C. 426c) and the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act of 2001, Public Law 106-387, October 28, 2000. Stat. 1549 (Sec 767). Wildlife damage management is the alleviation of damage or other problems caused by or related to the presence of wildlife, and is recognized as an integral part of wildlife management (The Wildlife Society 1992). WS uses an Integrated Wildlife Damage Management (IWDM) approach, commonly known as Integrated Pest Management (WS Directive 2.105) in which a combination of methods may be used or recommended to reduce damage. WS wildlife damage management is but one means of reducing damage and is used as part of the WS Decision Model (Slate et al. 1992, USDA 1997, WS Directive 2.201). All WS wildlife damage management activities are in compliance with relevant laws, regulations, policies, orders and procedures, including the Endangered Species Act of 1973.

Based on the analysis in the EA, I have determined that there will not be a significant impact, individually or cumulatively, on the quality of the human environment as a result of the proposed action.

Monitoring

The Michigan WS program will review its impacts on pigeons, starlings, and sparrows and other species addressed in the EA each year to ensure that WS program activities do not impact the viability of target and non-target wildlife species. In addition, the EA will be reviewed each year to ensure that it and the analysis are sufficient.

Public Involvement

The pre-decisional EA was prepared and released to the public for a 30-day comment period by a legal notice in the *Detroit Free Press* and *The Detroit News* on August 1, 2003. The pre-decisional EA was also mailed directly to agencies, organizations, and individuals with probable interest in the proposed program. No comments were received by WS within the comment period.

Affected Environment

This EA evaluates pigeon, starling, and sparrow damage management to reduce damage to agriculture, livestock, property, natural resources, and human health and safety on private and public lands in Michigan. The areas of the proposed action could include areas in and around buildings and parks, bridges, industrial sites, urban/suburban woodlots, on ship fleets, or at any other sites where birds may roost, loaf, or nest. Damage management activities could be conducted at agricultural fields, vineyards, orchards, farmyards, dairies, ranches, livestock operations, grain mills, and grain handling areas (e.g. railroad yards) where birds destroy crops, feed on spilled grains, or contaminate food products for human or livestock consumption. Additionally, the area of the proposed action could include airports and surrounding property where birds represent a threat to aviation safety.

Objectives

The objectives of the proposed action are to:

- ◆ Respond to 100% of the requests for assistance with the appropriate action (technical assistance or direct control) as determined by Michigan WS personnel, applying the ADC Decision Model (Slate et al. 1992).

- ◆ Hold the lethal take of nontarget animals by WS personnel during damage management to less than 5% of the total animals taken.

Major Issues

Several major issues were contained within the scope of this EA. These issues were consolidated into the following five primary issues to be considered in detail:

- ◆ Effects on target bird species
- ◆ Effects on other wildlife species, including threatened and endangered species
- ◆ Effects on public health and safety
- ◆ Impacts to stakeholders, including esthetics
- ◆ Humaneness and animal welfare concerns of methods used

Alternatives

Four potential alternatives were developed to address the issues identified above. A detailed discussion of the anticipated effects of the alternatives on the issues are contained in the EA. The following summary provides a brief description of each alternative and its anticipated impacts.

Alternatives analyzed in detail

Alternative 1. Integrated Bird Damage Management (BDM) Program (Proposed Action/No Action).

Under this alternative, Wildlife Services would administer an IWDM approach to reduce damage activities to property, agricultural and natural resources, livestock, and public health and safety. Damage management would be conducted on private and public property in Michigan when the resource owner (property owner) or manager requests assistance. An IWDM strategy would be recommended and used, encompassing the use of practical and effective methods of preventing or reducing damage while minimizing harmful effects of damage management measures on humans, target and non-target species, and the environment. Under this action, WS could provide technical assistance and direct operational damage management, including non-lethal and lethal management methods by applying the WS Decision Model (Slate et al. 1992). When appropriate, physical exclusion, habitat modification or harassment would be recommended and utilized to reduce damage. In other situations, birds would be removed as humanely as possible using shooting, trapping, and registered pesticides. In determining the damage management strategy, preference would be given to practical and effective non-lethal methods. However, non-lethal methods may not always be applied as a first response to each damage problem. The most appropriate response could often be a combination of non-lethal and lethal methods, or there could be instances where application of lethal methods alone would be the most appropriate strategy.

Alternative 2. Non-lethal Bird Damage Management Only by WS.

This alternative would require WS to use non-lethal methods only to resolve bird damage problems. Requests for information regarding lethal management approaches would be referred to MDNR, USFWS, local animal control agencies, or private businesses or organizations. Individuals might choose to implement WS non-lethal recommendations, implement lethal methods or other methods not recommended by WS, contract for WS direct control services, use contractual services of private businesses, or take no action. Persons receiving WS' non-lethal technical and direct control assistance could still resort to lethal methods that were available to them. Currently, DRC-1339 and alpha-chloralose are only available for use by WS employees. Therefore, use of these chemicals by private individuals would be illegal. However, the restricted use pesticide, Starlicide®, is similar to DRC-1339 and may be used by certified applicators. Avitrol could also be used by state certified restricted-use pesticide applicators.

Alternative 3. Technical Assistance Only.

This alternative would not allow for WS operational BDM in Michigan. WS would only provide technical assistance and make recommendations when requested. Producers, property owners, agency personnel, or others could conduct BDM using any lethal or non-lethal method that is legal. Currently, DRC-1339 and alpha-chloralose are only available for use by WS employees. Therefore, use of these two chemicals by private individuals would be illegal. However, the

restricted use pesticide, Starlicide®, is similar to DRC-1339 and may be used by certified applicators. Avitrol could also be used by state certified restricted-use pesticide applicators.

Alternative 4. No Federal WS Bird Damage Management.

This alternative would eliminate Federal involvement in BDM in Michigan. WS would not provide direct operational or technical assistance and requesters of WS services would have to conduct their own BDM without WS input. Information on BDM methods would still be available to producers and property owners through other sources such as USDA Agricultural Extension Service offices, universities, or pest control organizations. Requests for information regarding lethal management approaches would be referred to MDNR, USFWS, local animal control agencies, or private businesses or organizations. Individuals might choose to implement BDM themselves, use contractual services of private businesses, or take no action. DRC-1339 and alpha-chloralose are only available for use by WS employees. Therefore, use of these chemicals by private individuals would be illegal. However, the restricted use pesticide, Starlicide®, is similar to DRC-1339 and may be used by certified applicators. Avitrol could also be used by state certified restricted-use pesticide applicators.

Alternatives considered but not in detail with rationale

Lethal Bird Damage Management only by WS

Under this alternative, WS would not conduct any non-lethal control of birds for BDM purposes in the State, but would only conduct lethal BDM. This alternative was eliminated from further analysis because some bird damage problems can be resolved effectively through non-lethal means and at times lethal methods may not be available for use due to safety concerns or local ordinances prohibiting the use of some lethal methods, such as the discharge of firearms. For example, a number of damage problems involving the encroachment of injurious birds into buildings can be resolved by installing barriers or repairing of structural damage to the buildings, thus excluding the birds. Further, such damage situations as immediately clearing a runway of a large flock of injurious birds could not be implemented immediately, while scaring them away through noise harassment might resolve the air passengers' threat at once.

Compensation for Bird Damage Losses

The Compensation alternative would require the establishment of a system to reimburse persons impacted by bird damage. This alternative was eliminated from further analysis because no Federal or State laws currently exist to authorize such action. Under such an alternative, WS would not provide any direct control or technical assistance. Aside from lack of legal authority, analysis of this alternative in the FEIS indicated that the concept has many drawbacks (USDA 1997):

- It would require larger expenditures of money and labor to investigate and validate all damage claims, and to determine and administer appropriate compensation.
- Compensation would most likely be below full market value. It is difficult to make timely responses to all requests to assess and confirm damage, and certain types of damage could not be conclusively verified. For example, it would be impossible to prove conclusively in

individual situations that birds were responsible for disease outbreaks even though they may actually have been responsible. Thus, a compensation program that requires verification would not meet its objective for mitigating such losses.

- Compensation would give little incentive to resource owners to limit damage through improved cultural, husbandry, or other practices and management strategies.
- Not all resource owners would rely completely on a compensation program and unregulated lethal control would most likely continue as permitted by State law.
- Compensation would not be practical for reducing threats to human health and safety.

Short Term Eradication and Long Term Population Suppression

An eradication alternative would direct all WS program efforts toward total long term elimination of bird populations on private, State, local and Federal government lands wherever a cooperative program was initiated in the State.

Although generally difficult to achieve, eradication of a local population of feral domestic pigeons, English sparrow or European starlings may be the goal of individual BDM projects in fulfillment of Executive Order 13112 on Invasive Species (see Subsection 1.7.2.7). This is because feral domestic pigeons, English sparrows and European starlings are not native to North America and are only present because of human introduction. However, eradication as a general strategy for managing bird damage will not be considered in detail because:

- Eradication is not acceptable to most people.
- Because European starlings are migratory, eradication would have to be targeted at the entire North American populations of this species to be successful. That would not be feasible or desirable.

Suppression would direct WS program efforts toward managed reduction of certain problem populations or groups. In areas where damage can be attributed to localized populations of birds, WS can decide to implement local population suppression as a result of using the WS Decision Model. Furthermore, it is not realistic or practical to consider large-scale population suppression as the basis of the WS program. Typically, WS activities in the State would be conducted on a very small portion of the sites or areas inhabited or frequented by problem species. Problems with the concept of suppression are similar to those described above for eradication.

Use of Bird-proof Feeders in Lieu of Lethal Control at Dairies and Cattle Feeding Facilities

A method proposed by Animal Protection of New Mexico, Inc. for excluding birds at dairies and cattle feeding facilities in that State, is a “bird-proof” feeder that involves the installation of 1/8” thick steel panel feed troughs covered by parallel 4-6 inch spaced steel cables or wires running

from the outer top edge of the trough up at a 30-45 degree angle to the top of the head chutes that cattle use to access the feed. Vertical canvas strips are hung from the cables. The feeder was reportedly designed for use with horses. A copy of a diagram of this system was sent to Mr. Jim Glahn, Bird Control Research Biologist, National Wildlife Research Center (NWRC), who has nearly 12 years of experience researching problems caused by European starlings at livestock feeding operations, and to the Extension Wildlife Specialist and Livestock Specialist at New Mexico State University (Dr. John Boren, Dr. Ron Parker, NMSU Coop. Ext. Service, pers. comm. 1999) for opinions regarding the potential effectiveness and practicality of the feeder. Concerns expressed were:

- no efficacy data were available on the effectiveness of the design in excluding European starlings. Unresolved concerns were that the cables could provide temporary perching sites for the birds and birds might enter the trough from the rear where the cows insert their heads through the chutes to access feed (Boren and Parker).
- a major flaw in the design is the spacing of the cables at 4-6" which would allow European starlings to drop through. Reducing the spacing to 2" as recommended by Johnson and Glahn (1994) would likely interfere with the delivery of feed to the troughs. This is because the feed mixture currently used by most dairies is a mixture of chopped alfalfa hay and corn silage with a grain component. The alfalfa/corn silage portion would likely hang up on the cable or wire strands of the troughs and much would fall outside the troughs, with increased feed waste a result (Glahn).
- the spacing of the canvas strips is not specified, and canvas would deteriorate quickly from cattle licking and weather (Glahn).
- altering from an open platform feeding system to enclosed troughs would pose problems with removal of rejected or spoiled feed. The troughs would likely require substantial increases in manual labor to clean versus the current method of using a tractor-mounted blade or front-end loader (Boren and Parker; Glahn).
- the cable/wire barriers would likely hinder the application of injectable medicines which is currently achieved by use of the "lockup" feeding chutes that restrain the cows by the head and neck for this purpose (Boren and Parker).
- feed consumption might be reduced, at least temporarily, due to reluctance of cows to put their heads into a semi-enclosed environment (Boren and Parker).
- the conversion to the suggested feed trough design would likely be substantial. Most dairy/feedlot managers would be reluctant to convert considering initial cost and the added inconveniences discussed above (Boren and Parker).

Dr. Boren and Dr. Parker suggested that, at a minimum, a replicated field study should be conducted to address these concerns before such a system is implemented. Mr. Glahn expressed

the opinion, based on Twedt and Glahn (1982) and Feare (1984), that exclusion methods to reduce starling depredations at livestock feeding operations are usually the least cost-effective solution.

Despite the above concerns about the bird-proof feeder system recommended by APNM, Inc., similar type systems could be recommended by WS under the current program should any become available that are effective, practical, and economically feasible for producers to implement.

Finding of No Significant Impact.

The analysis in the EA indicates that there will not be a significant impact, individually or cumulatively, on the quality of the human environment as a result of implementing the proposed action and that these actions do not constitute a major Federal action. I agree with this conclusion and therefore find that an Environmental Impact Statement need not be prepared. This determination is based on the following factors:

- 1) Pigeon, starling, and sparrow damage management as conducted by WS in the State of Michigan is not regional or national in scope.
- 2) Based on the analysis documented in the EA, the impacts of the proposed action will not significantly affect public health or safety. Risks to the public from WS methods were determined to be low in a formal risk assessment (USDA 1997, Appendix P).
- 3) The proposed action will not have a significant impact on unique characteristics such as park lands, wetlands, wild and scenic areas, or ecologically critical areas. Built-in mitigation measures that are part of WS's standard operating procedures and adherence to laws and regulations will 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 certain individuals may be opposed to managing pigeons, starlings, and sparrows, this action is not controversial in relation to size, nature, or effects.
- 5) Mitigation measures adopted and/or described as part of the proposed action minimize risks to the public, prevent adverse effects on the human environment, and reduce uncertainty and risks. Effects of methods and activities, as proposed, are known and do not involve uncertain or unique risks.
- 6) The proposed action does not establish a precedent for future actions, including future pigeon, starling, and sparrow damage management that may be implemented or planned within the State.
- 7) No significant cumulative effects were identified through this assessment. Effects on target bird species, other wildlife species and wildlife habitat would be minimal. The EA discussed cumulative effects of WS 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 within the State.

- 8) This action will not adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places and will not cause loss or destruction of significant scientific, cultural, or historic resources. WS wildlife damage management would not disturb soils or any structures and, therefore, would not be considered a “Federal undertaking” as defined by the National Historic Preservation Act.
- 9) WS determined that the proposed project would not adversely affect Federally or State listed threatened or endangered species in Michigan.
- 10) The proposed action is consistent with local, state, and Federal laws that provide for or restrict WS wildlife damage management. Therefore, WS concludes that this project is in compliance with Federal, state and local laws for environmental protection.

Decision and Rational

I have carefully reviewed the EA prepared for this proposal and the input from the public involvement process. I believe that the issues identified in the EA are best addressed by selecting Alternative 1 (Integrated Bird Damage Management Program (Proposed Action/No Action)) and applying the associated mitigation measures discussed in Chapter 3 of the EA. Alternative 1 is selected because (1) it offers the greatest chance at maximizing effectiveness and benefits to resource owners and managers while minimizing cumulative impacts on the quality of the human environment that might result from the program’s effect on target and non-target species populations; (2) it presents the greatest chance of maximizing net benefits while minimizing adverse impacts to public health and safety; and, (3) it offers a balanced approach to the issues of humaneness and aesthetics when all facets of these issues are considered. Therefore, it is my decision to implement the proposed action as described in the EA. Copies of the EA are available upon request from the Michigan WS State Office, 2803 Jolly Road, Suite 160, Okemos, MI 48864.

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Director, Eastern Region
USDA-APHIS-WS

Date

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