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Animal and
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Inspection
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Wildlife
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**DECISION
and
FINDING OF NO SIGNIFICANT IMPACT**

for

**“MANAGEMENT OF BLACKBIRD SPECIES TO REDUCE DAMAGE TO
SUNFLOWER, CORN, AND OTHER SMALL GRAIN CROPS IN THE PRAIRIE
POTHOLE REGION OF NORTH DAKOTA AND SOUTH DAKOTA”**

I. INTRODUCTION

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) prepared an Environmental Assessment (EA) in 1993 (USDA 1993) which addressed the need to conduct integrated blackbird damage management and analyzed potential environmental impacts of various alternatives to reduce blackbird damage to sunflower, corn, and other small grain crops in North Dakota and South Dakota. Sunflower damage alone caused by blackbirds can be economically devastating to agricultural producers in North Dakota and South Dakota with losses exceeding \$5 million dollars annually. Current dispersal and frightening methods have been effective in reducing blackbird damage when used correctly in an integrated damage management approach. An integrated approach is more versatile and decreases habituation to specific management methods. A Finding of No Significant Impact (FONSI) and Decision were issued on August 6, 1993 for the aforementioned EA whereby Alternative 5 (Proposed Action) was selected. The Proposed Action implemented an integrated blackbird damage management program using frightening devices to disperse blackbirds from sunflower fields and cattail management to fragment dense cattail habitat in wetlands used by roosting blackbirds.

North Dakota and South Dakota were selected as the scope of analysis because of the authorities of the various management agencies, the limited scope of blackbird damage management activities in both states, and the lack of accumulative affects of a non-lethal program on the sustainability of local blackbird populations and blackbird metapopulations.

The 1993 EA and resulting Decision/FONSI were revisited in 1998. The 1998 analysis concluded that WS integrated blackbird damage management program was within the scope and affected environment analyzed in the 1993 EA. Based on this conclusion, a new Decision/FONSI was issued on February 20, 1998. Annual monitoring reports have been prepared and issued for WS' blackbird damage management activities conducted during 2002, 2003, 2004 and 2005 to ensure WS' activities are within the scope of the EA, as amended (USDA 2002, USDA 2003, USDA 2004, USDA 2006). Based on the information provided in those monitoring reports, WS' integrated blackbird damage management activities were within the potential impact parameters analyzed in the EA, as amended and the 1998 Decision/FONSI remained valid.

In March 2006, a draft monitoring report for blackbird damage management activities conducted during FY 2005 (USDA 2006) and an amendment to the EA were prepared and provided to the public for review and comment. The amendment analyzes the affected environment and impacts of increasing the maximum number of cattail acres managed under WS' cattail management program (CMP) from 6,000 to 8,000 acres. The FY 2005 Monitoring Report and Amendment reviews information, issues, and data that have become available since the Decision/FONSI was



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issued in 1998 and the last monitoring report completed for FY 2004 activities. The FY 2005 Monitoring Report and Amendment to the EA are two separate analyses, however, they were combined into a single record to simplify WS' environmental processes and reduce the volume of paper.

The EA was prepared to: 1) facilitate planning and interagency coordination, 2) streamline program management, and 3) clearly communicate to the public the analysis of cumulative impacts. WS determined through the National Environmental Policy Act (NEPA) process that an Environmental Impact Statement was not required to conduct the current/proposed blackbird damage management activities in North Dakota and South Dakota. The EA, as amended, ensured WS' actions complied with NEPA, with the Council on Environmental Quality (40 CFR 1500), and with APHIS NEPA implementing regulations (7 CFR 372). All blackbird damage management activities are conducted consistent with: 1) the Endangered Species Act of 1973, including consultation with the U.S. Fish and Wildlife Service (USFWS), 2) Executive Order (EO) 13186¹, EO 12898², and EO 13045³, 3) the Federal Insecticide, Fungicide, and Rodenticide Act, 4) the Clean Water Act, and 5) Federal, State and local laws, regulations and policies. This Decision/FONSI is based on the analysis in the 1993 EA, the 1993 Decision/FONSI, the 1998 Decision/FONSI, annual monitoring reports, and the FY 2005 Amendment to the EA.

II. PURPOSE OF THE AMENDMENT AND MAJOR ISSUES

The Amendment examines potential environmental impacts of WS' proposed and amended program as it relates to: 1) conducting blackbird damage management activities outside the original scope of the Prairie Pothole Region of North Dakota and South Dakota, 2) increasing the maximum cattail acres treated annually from 6,000 to a maximum of 8,000 acres to meet an increase in assistance requests from agricultural producers experiencing blackbird damage and, 3) new issues and data that have become available from public comments, research findings, and data gathering since the issuance of the 1998 Decision/FONSI and the monitoring report covering activities conducted in FY 2004.

The primary sunflower growing physiographic region in North Dakota and South Dakota occurs in the PPR. Analysis in the original EA addressed blackbird damage management activities in the PPR where sunflower production and blackbird damage was traditionally the highest. Since the 1998 Decision/FONSI was signed, however, requests for assistance for blackbird damage management to protect crops in North Dakota and South Dakota have occurred outside the PPR. The Amendment addresses the environmental impacts of conducting blackbird damage management activities in all physiographic regions of North Dakota and South Dakota, including the PPR.

The Amendment also identifies and analyzes increasing the maximum cattail acres treated under WS' CMP from 6,000 acres to a maximum of 8,000 acres annually. Requests for blackbird damage management assistance from agricultural producers in North Dakota and South Dakota through the CMP have exceeded the 6,000 acre maximum analyzed in the original EA. Treating up to 8,000 acres of cattails with a glyphosate-based herbicide will allow WS to meet the need of increased requests for assistance from agricultural producers while not adversely affecting the environment.

The EA, as amended, describes the alternatives and issues considered and evaluated. Through public comments, new research findings, and data gathering, additional issues have been identified since the 1998 Decision/FONSI and the monitoring report prepared for FY 2004. Newly identified issues addressed in the

¹ Executive Order 13186 directs federal agencies to protect migratory birds and strengthen migratory bird conservation by identifying and implementing strategies that promote conservation and minimize the take of migratory birds through enhanced collaboration between WS and the USFWS, in coordination with state, tribal, and local governments. A National-level MOU between the USFWS and WS is being developed to facilitate the implementation of Executive Order 13186.

² Executive Order 12898 promotes the fair treatment of people of all races, income levels and cultures with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

³ Executive Order 13045 ensures the protection of children from environmental health and safety risks since children may suffer disproportionately from those risks.

FY 2005 Monitoring Report and Amendment relating to blackbird damage management activities in North Dakota and South Dakota include:

- Reduction of Cattail Habitat to Blackbird Populations Sustainability
- Potential Effects of Glyphosate and the Fragmentation of Cattail Habitat on Non-target Wetland Wildlife Species
- Eutrophication and Biological Oxygen Demand (BOD) in Managed Wetlands
- Spread of Non-native Noxious Wetland Plants Subsequent to Treating Cattails with Glyphosate
- Potential for Polluting Wetlands with Chemicals
- Potential Effects of WS' Blackbird Damage Management Program on Human Health and Safety and Non-target Wildlife
- Effects of WS' Blackbird Damage Program including the use of Glyphosate on Threatened and Endangered Species
- Effects of Treating Cattails with Glyphosate on Non-Target Plants
- Glyphosate in the Environment Causes Genetic Damage to Amphibians and Alters Communities of Subsoil Fungal Organisms
- The Surfactant POEA is Three Times as Toxic as Glyphosate and Could Impact Wetland Insect Populations

III. PUBLIC INVOLVEMENT AND COMMENTS

Notice of availability letters were mailed to 64 State and Federal agencies, Tribal governments, private individuals, and organizations that had expressed an interest in or were identified by WS to potentially have an interest in blackbird damage management in North Dakota and South Dakota. The letter indicated the FY 2005 Monitoring Report and Amendment were available for public comment. Interested parties were provided 18 days to respond to the letter and receive a copy of FY 2005 Monitoring Report and Amendment. Parties could request the document by sending a request to the WS State Office in Bismarck, North Dakota by mail, by facsimile, by phone, or by e-mail. The letter generated requests from three State agencies and two organizations. Those requesting the document were given notice through a cover letter accompanying the Monitoring Report and Amendment that comments would be accepted for a 30-day period or until March 28, 2006.

In addition, as part of the public review and comment process, the public was notified through notices published in the Legal Notice section of area newspapers. Notices were published for three consecutive days in daily newspapers and once in weekly newspapers. In North Dakota, Legal Notices were published in the Bismarck Tribune, Bismarck; Devils Lake Daily Journal, Devils Lake; Dickinson Press, Dickinson; The Forum, Fargo; Grand Forks Herald, Grand Forks; Jamestown Daily Sun, Jamestown; Minot Daily News, Minot; Valley City Times-Record, Valley City; Williston Daily Herald, Williston; and The Daily News, Wahpeton. In South Dakota, Legal Notices were published in the Aberdeen American News, Aberdeen; Argus Leader, Sioux Falls; Arlington Sun, Arlington; Brookings Register, Brookings; Capital Journal, Pierre; Daily Republic, Mitchell; The Plainsman, Huron; Rapid City Journal, Rapid City; and Watertown Public Opinion, Watertown. The published notice stated that WS was accepting public comments for a 30-day period ending on March 28, 2006. The notices stated that copies of the FY 2005 Monitoring Report and Amendment could be obtained by sending a request to the State office by mail, by phone, by facsimile or by an e-mail address published in the notice. WS received three requests for the

document from the published notices in newspapers. Two requests for the document were received from private individuals and one request was received from a water resource district in North Dakota.

As a result of the notice of availability letter and the published legal notices, WS received comments from one State agency in support of WS blackbird management program and one comment from a private individual concerned about the destruction of native wetlands and native wetland vegetation. WS does not advocate, condone, or recommend the destruction of wetlands either through draining and/or by chemical contamination. WS' involvement with wetlands (*i.e.*, cattail management to reduce blackbird damage) consists of treating emergent hybridized cattail (*Typha x glauca*) vegetation using a glyphosate aquatic herbicide to disperse blackbirds from specific wetlands. Depending on water depth in wetlands, emergent vegetation treated by WS will likely regrow within four-years post-treatment. WS' treatments restore wetlands to a historically natural state of sparse vegetation that was present in North Dakota and South Dakota before the hybridization of the common cattail (*T. latifolia*) and narrow-leaved cattail (*T. angustifolia*). Hybridization of the two cattail species created dense, monotypic stands of hybrid cattails that dominate vegetation in wetlands today. The use of glyphosate to manage cattails in wetlands is neither destructive to the wetland nor causes significant contamination of water or soils within the wetland. WS' activities and the issue of native wetland destruction and contamination were fully identified and analyzed in the FY 2005 Monitoring Report and Amendment. Comments received did not identify additional issues outside those already analyzed in the FY 2005 Monitoring Report and Amendment.

IV. AGENCY AUTHORITIES

WS is the Federal agency directed by law and authorized by Congress to reduce damage to agriculture, natural resources, property, and to resolve public health or safety concerns caused by wildlife. The primary statutory authorities for the APHIS-WS program are the Act of March 2, 1931 (46 Stat. 1468; 7 U.S.C. 426-426b) as amended, and the Act of December 22, 1987 (101 Stat. 1329-331, 7 U.S.C. 426c).

Under the Act of March 2, 1931, and 7 U.S.C. §426c, APHIS may carry out wildlife damage management programs, or enter into cooperative agreements with states, local jurisdictions, individuals and public and private agencies whereby they may fund and assist in carrying out such programs. WS activities are conducted at the request of and in cooperation with other Federal, state, and local agencies, private organizations, and individuals. Accordingly, WS' authorities support and authorize its mission of providing Federal leadership and expertise to reduce problems caused by injurious and/or nuisance wildlife.

V. ALTERNATIVES ANALYZED IN DETAIL

Five alternatives were developed and analyzed in the EA, as amended. The following summary provides a brief description of each alternative.

Alternative 1 - No Action

This alternative precludes WS from conducting blackbird damage management activities in North Dakota and South Dakota. The Act of March 2, 1931 (46 Stat. 1468; 7 U.S.C. 426-426b) as amended, and the Act of December 22, 1987 (101 Stat. 1329-331, 7 U.S.C. 426c) authorize WS to conduct wildlife damage management. This Alternative violates WS statutory obligation to provide or assist with wildlife damage management.

Alternative 2 - Frightening Devices only

Under this alternative, WS would recommend, distribute, and loan frightening devices to reduce blackbird damage. Frightening devices, such as pyrotechnics, propane exploders and electronic distress calls, would be recommended and/or made available to agricultural producers experiencing blackbird damage to

agricultural crops. Frightening devices use auditory stimuli to disperse birds from specific areas through negative association with the stimulus. Birds, however, quickly habituate to the stimuli (Conover 1982, Pfeifer and Goos 1982). Selection of this alternative would prevent WS from utilizing other available damage management techniques, that when used with frightening devices, are more effective in reducing blackbird damage.

Alternative 3 - Habitat Management only

This alternative would restrict WS to conducting an operational CMP without making available frightening devices or operationally using other non-lethal techniques to reduce blackbird damage. Fragmenting selected cattails in wetlands near agricultural crops can effectively disperse blackbirds from those wetlands by reducing available cattail habitat in the specific wetland. The most effective method for reducing cattail vegetation is the use of a systemic aquatic herbicide, such as glyphosate, which is registered by the U.S. Environmental Protection Agency (EPA) for that purpose. Agricultural producers could continue to use cultural practices (*i.e.*, plowing, mowing, burning) to reduce cattails in wetlands used by blackbirds. Selection of this alternative would limit the availability of harassment techniques that, when used in conjunction with cattail management, can be more effective than using a single technique to reduce blackbird damage.

Alternative 4 - Aerial Hazing only

The aerial hazing alternative would require WS to conduct aerial operations using small aircraft to disperse blackbirds from agricultural fields. Disrupting the behavior and feeding patterns of blackbirds can be accomplished using an aircraft. Given the scope of the blackbird damage problem in North Dakota and South Dakota, numerous aircraft would be required to effectively disperse blackbirds from agricultural fields. However, the use of aircraft to disperse birds can be extremely hazardous. The low-level flight needed to effectively disperse birds along with the flocking behavior of blackbirds significantly increases the likelihood of birds striking the aircraft. These bird strikes can result in catastrophic failure of the aircraft which could place pilots and crews in significant harm. Given the concern for aerial safety, the hazing of birds does not currently fit within the use profile for WS' aircraft or contract aircraft. For this reason, aerial hazing will not be considered as a viable alternative or as a component of any other alternative.

Alternative 5 - Integrated Management (Proposed Action)

The integrated management alternative⁴ would incorporate methodologies described in Alternative 2 and Alternative 3. WS would incorporate frightening devices, cattail management techniques, and technical assistance in a non-lethal integrated management approach to reduce blackbird damage to agricultural crops in North Dakota and South Dakota. This alternative includes the use of an aquatic glyphosate to treat up to 8,000 acres of cattails annually in North Dakota and South Dakota along with loaning and distributing frightening devices and providing technical assistance to agricultural producers as needs are identified and requested by agricultural producers experiencing losses from blackbirds, and as funding permits. The EPA (1993) has concluded the effects of glyphosate on invertebrates, birds, mammals, and humans are minimal. Therefore, the current program is not likely to significantly impact human or animal health and safety and the environment.

VI. DECISION RATIONALE

The rationale for my 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.

⁴ The original analysis of an integrated damage management program included the use of aerial hazing. However, due to safety concerns, aerial hazing will not be considered as part of an integrated management plan.

The foremost considerations are that: 1) blackbird damage management will only be conducted by WS at the request of landowners/managers, 2) management actions are consistent with applicable laws, regulations, policies and orders, and 3) no adverse impacts to the environment were identified in the analysis. As a part of this Decision, the North Dakota/South Dakota WS program will continue to provide effective and practical technical assistance and direct management techniques that reduce damage. I have also adopted the Amendment as final as comments received did not identify issues or environmental effects not addressed in the FY 2005 Monitoring Report and Amendment.

FINDING OF NO SIGNIFICANT IMPACT

Based on a review of information available since the completion of the 1993 EA, as amended, the 1998 Decision/FONSI, and the analyses provided in the FY 2005 Monitoring Report and Amendment, there continues to be no indications that WS' blackbird damage management activities in North Dakota and South Dakota are having a significant impact, individually or cumulatively, on the quality of the human environment. I agree with this conclusion and therefore, find that an Environmental Impact Statement should not be prepared. This determination is based on the following factors:

1. Blackbird damage management, as conducted by WS in North Dakota and South Dakota, is not regional or national in scope.
2. WS' blackbird damage management activities pose minimal risk to public health and safety, including children. WS' activities do not uniquely pose public health and safety hazards to peoples of any race, income level, or cultures. No injuries to any member of the public are known to have resulted from these activities in the analysis areas.
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.
4. The effects on the quality of the human environment are not highly controversial. Although there is some opposition to the use of glyphosate, this action is not highly controversial in terms of size, nature, or quantity applied, or effect.
5. Based on the analysis documented in the 1993 EA, as amended, the 1998 FONSI and Decision, the subsequent annual monitoring reports, and the accompanying administrative files, the effects of blackbird damage management activities on the human environment would not be significant. The effects of these activities are not highly uncertain and do not involve unique or unknown risks.
6. These activities do not establish a precedent for any future action with significant effects.
7. No significant cumulative effects were identified through the EA, as amended, the 1998 FONSI and Decision, the annual monitoring reports, or through this review. The amount of cattail acres treated annually by WS through the cattail management program would not adversely impact the viability of any species' populations.
8. None of the blackbird damage management activities would 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. An informal Section 7 consultation with the USFWS confirmed that the blackbird damage management activities carried out by WS would not likely adversely affect any threatened or endangered (T/E) species.

10. All blackbird damage management activities are carried out in compliance with Federal, State and local laws imposed for the protection of the environment.

DECISION

I have carefully reviewed the FY 2005 Monitoring Report and Amendment and comments regarding blackbird damage management activities conducted by WS in North Dakota and South Dakota. I find the current program 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 FY 2005 Monitoring Report and Amendment adequately addresses the identified issues which reasonably confirm that no significant impact, individually or cumulatively, to wildlife populations or the quality of the human environment have occurred or are likely to occur from the proposed action, nor does the proposed action constitute a major Federal action. Therefore, the analysis in the EA, as amended, remains valid and does not warrant the completion of an Environmental Impact Statement. Based on the 1993 and 1998 Decision/FONSI and the monitoring reports, the issues identified are best addressed by continuing the current/proposed action, Alternative 5, using non-lethal integrated blackbird damage management methods. Alternative 5 successfully addresses blackbird damage management using a combination of the most effective methods and does not adversely impact the environment, human health and safety, property, and/or non-target species, including T/E species. Further analysis would be triggered if changes occur that broaden the scope of blackbird damage management activities, that affect the natural or human environment, or from the issuance of new environmental regulations.

All blackbird damage management activities and programs conducted by WS will continue in compliance with applicable Federal, State, and local laws, regulations, policies, orders and guidelines, including all WS Directives, the Endangered Species Act, the Federal Insecticide, Fungicide and Rodenticide Act, NEPA, the Clean Water Act, North Dakota Administrative Code Section 33-16-02.1-11, and South Dakota Administrative Rules 74:51:01:58-62. Activities will be conducted with all applicable minimization measures in North Dakota and South Dakota where WS has been requested to provide assistance as described in the *Management of Blackbird Species to Reduce Damage to Sunflower, Corn, and Other Small Grain Crops in the Prairie Pothole Region of North Dakota and South Dakota* EA, as amended. For additional information or questions regarding this FONSI or Decision, please contact Ryan Wimberly, USDA-APHIS-WS, 2110 Miriam Circle, Ste A, Bismarck, ND 58501, telephone (701) 250-4405.



for Jeffrey S. Green
WS Western Regional Director
USDA-APHIS-Wildlife Services

4/24/06
Date

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