



**FINDING OF NO SIGNIFICANT IMPACT
AND
DECISION
FOR
BIRD DAMAGE MANAGEMENT AT LIVESTOCK FEEDING FACILITIES
IN THE
KANSAS WILDLIFE SERVICES PROGRAM**

The U.S. Department of Agriculture, Animal and Plant Health Inspection Service (USDA-APHIS), Wildlife Services (WS) program has completed an environmental assessment (EA) that analyzes alternatives for resolving bird damage problems at livestock feeding facilities in Kansas. The EA is tiered to the programmatic Environmental Impact Statement (EIS) for the Wildlife Services Program¹. 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 which is to implement an Integrated Wildlife Damage Management approach that uses or recommends a combination of lethal and nonlethal management methods, and that the action does not constitute a major federal action. Because no substantive changes to the EA were necessary as a result of public or interagency comments, the Predecision EA is hereby adopted as the Final EA.

Individual actions of the type encompassed by this analysis are categorically excluded under the APHIS Implementing Regulations for compliance with the National Environmental Policy Act (NEPA) (7 CFR 372.5(c)). APHIS Implementing Regulations also provide that all technical assistance furnished by WS is categorically excluded (7 CFR 372.5(c)) (60 Federal Register 6,000, 6,003 (1995)). WS decided to prepare the EA to assist in planning bird damage management (BDM) activities at livestock feeding facilities by the program in Kansas and to clearly communicate with the public the analysis of cumulative impacts for a number of issues of concern in relation to alternative means of meeting needs for such management in the State. This analysis covers WS's plans for current and future BDM actions wherever they might be requested at livestock feeding facilities within the State of Kansas.

Public Involvement

A predecisional EA was prepared and released to the public for a 30 day comment period. Notice of availability of the predecisional EA was published in the Wichita Eagle, the Salina Journal, the Great Bend Tribune, the Garden City Telegram, Manhattan Mercury, Topeka Capital Journal, and the Kansas City Star for three days each between December 8 and 15, 2000. In addition, 47 copies of the predecisional EA were mailed to a number of environmental and animal protection organizations, American Indian Tribes, known interested private individuals, and agencies with known jurisdiction or presumed interest in bird damage management issues. Four comment letters were received in response to the predecisional EA: one from the U.S. Fish and Wildlife Service, one from the [REDACTED], one from a livestock feeding facility manager, and one from a private animal protection organization. Although many concerns raised in the comments received were already addressed in the EA, some of the comments indicated areas that warranted additional clarification or treatment. These are:

1. DRC-1339 bait use might kill native sparrow species that winter near and around feedlots.

The EA concluded that primary poisoning hazards to nontarget birds due to DRC-1339 use would be minimal. This is primarily due to the label requirement that observations be made to determine if any nontarget species are feeding on untreated prebait prior to administering toxic bait material. Thus, the risk of significant effects on native sparrow species is low. In addition, sparrows are much more resistant to DRC-1339 poisoning. The LD₅₀ for house sparrows is 320-448 mg/kg, whereas for starlings and blackbirds, it is only 3.8-4.2 and 1.8-3.2 mg/kg, respectively (DeCino et al. 1966). Although LD₅₀ data for other sparrow species are not available, it is likely that those species are similarly more resistant to DRC-1339 poisoning, which probably further reduces the potential for any to be adversely affected should they happen to consume bait treated at the levels used to kill blackbirds and starlings. Nevertheless, the label requirements provide an additional degree of protection to avoid significant adverse impacts on native sparrow species.

2. Barn owls (*Tyto alba*) might die from secondary poisoning from eating starlings or blackbirds killed by DRC-1339.

The EA addressed in detail the potential for secondary poisoning and concluded that this type of effect was highly unlikely. Although owls are more sensitive to DRC-1339 than most other scavenging bird species, there are several factors that minimize or eliminate the potential for owl species to be adversely affected. Cunningham et al. (1979) concluded that more than 90% of DRC-1339 is excreted or metabolized shortly after ingestion. Starlings fed amounts of the chemical at dosages from 3.16 mg/kg (which is close to the LD₅₀ for starlings) to 100 mg/kg (more than 25 times the LD₅₀) all retained about 1 to 2 parts per million residues at

¹ USDA (U.S. Department of Agriculture), Animal and Plant Health Inspection Service (APHIS), Animal Damage Control (ADC). 1994. Animal Damage Control Program, Final Environmental Impact Statement. Anim. Plant Health Inspection Serv., Anim. Damage Control. Riverdale, MD. Volumes 1, 2 & 3.



death. This indicates scavenging birds subsisting wholly on DRC-1339-killed starlings are being exposed to a continuous 1-2 ppm level of DRC-1339 in their diet. The authors concluded that a scavenging owl would have to either ingest 2-3 times its own body weight in dead starlings at one time to receive a lethal dose, or would have to feed primarily on DRC-1339-killed starlings for more than 30 days to reach chronic toxicity levels. We believe these potentialities are highly unlikely and therefore conclude that the risk to barn owls from secondary poisoning is low with DRC-1339. It is important to note however, that, regardless of the decision reached here by WS, DRC-1339 (in the form of Starlicide) and Avitrol can be used by other certified applicators. This means that, even if WS selected the no action alternative, it would probably not further alleviate concerns of this nature regardless of how well founded or unfounded those concerns are.

3. The killing of several million red-winged blackbirds in KS could contribute to the decline in the nesting populations of red-winged blackbirds indicated by Breeding Bird Survey (BBS) data for the Dakotas.

The EA analyzed impacts on red-winged blackbird populations under one scenario in which it was assumed that the wintering blackbirds in KS originated in the Northern Prairie region. However, the EA also presented information on band returns that indicates wintering blackbirds most likely come from a broad region of the northern U.S. and Canada. Therefore, it is unlikely that WS activities in KS will contribute significantly to the potential decline that is apparent in the Dakotas. Appendix C of the EA shows BBS trend information for Kansas, the Central BBS Region, and the U.S. as a whole. Those data indicate a stable trend for KS, and slightly declining trends for the U.S. and Central BBS regions over a 30-year period. However, when the trend graphs are considered in conjunction with population estimates, it is apparent that populations are still high overall. In contrast to the BBS trends, Appendix C also showed Christmas Bird Count (CBC) data indicating an overall *increase* in this species' population over the entire CBC survey. Therefore, the available population trend information appears to be conflicting to a degree. Nevertheless, it seems clear that red-winged blackbirds as a species are still abundant and it is unlikely that WS's actions would significantly affect that abundance. Continued monitoring of cumulative effects should serve to detect if this conclusion remains warranted over subsequent years.

4. Has any thought been given to funding research on new feed bunk modifications before resorting to lethal removal of millions of blackbirds and starlings?

Funds for this type of research are currently not available. Current funds for WS's National Wildlife Research Center (NWRC) are earmarked for other types of wildlife damage research. The best information available at present was obtained by consulting with the leading expert on this subject at the NWRC who conveyed the opinion that exclusion methods (including feed bunk modifications) to reduce starling depredations at livestock feeding operations is usually the least cost-effective solution. Nevertheless, WS would consider new research if outside sources of funding or additional appropriations from Congress become available.

5. More effort should be applied toward removing the "drawing card" for the birds [which is] the food.

This comment appears to suggest an alternative that would eliminate the livestock feed that is the attraction for the blackbirds and starlings. Such an alternative would result in the elimination of the livestock feeding facilities themselves. WS did not consider this alternative in the EA because it was clearly outside the scope of the decision capable of being made by this agency.

6. The preferred alternative overly relies upon the use of DRC-1339, which is a short term method of control and has not been shown to result in control of the predating bird population.

Sections 1.3.2 and 2.3.9 of the EA presented information from studies and from analyses of program activities in other states that indicates use of DRC-1339 can be cost-effective in reducing feed losses at livestock feeding facilities. At this time, overall population control is not the primary goal of bird damage management. Reduction of damage is the primary goal.

7. Several studies are currently underway to evaluate efficacy and environmental issues associated with DRC-1339 and until these study results are final, it is impossible to fully evaluate the use of DRC-1339.

With respect to the use of DRC-1339 proposed in the EA, there is a substantive body of scientific literature and study results to support the conclusions that are presented therein. The U.S. Environmental Protection Agency has approved and registered this chemical for this use which provides considerable support for concluding that the method is effective and will not result in significant environmental harm.

8. An Executive Order on migratory birds was issued by the President on January 11, 2001 that may change the scope of the EA because it requires additional procedures/conditions to be incorporated.

The new EO requires each Federal agency that takes actions that are likely to have a measurable negative effect on migratory birds to develop a Memorandum of Understanding (MOU) with the U.S. Fish and Wildlife Service (FWS) to promote conservation of migratory bird populations. The EO allows each agency to take up to two years to develop the MOU. Thus, the MOU does not impose any immediate requirements on federal agencies. Lethal bird management efforts as proposed in the EA involve primarily starlings which are not classified as "migratory birds" protected under the Migratory Bird Treaty Act. That species is thus not affected by the MOU. With regard to the blackbird species that would be targeted, a Standing Depredation Order is in place

approved by the FWS and allows for the lethal control of those species when they are causing damage, about to cause damage, or are concentrated in numbers that cause a nuisance. Thus, the FWS either has no jurisdiction (in the case of starlings) or has already authorized through the Standing Depredation Order the types of actions proposed in the EA. In keeping with the spirit of the EO, WS agrees to meet the first of the two conditions requested by the FWS in their comments, which is to provide notice to the Service in advance of conducting any lethal control actions as proposed in the EA, or to provide an annual report on the number of individuals of each species intentionally taken. A second condition requested by the FWS includes training for our employees on ways to minimize take and to conserve and restore migratory bird habitat. WS does not manage or control migratory bird habitat. Thus, we feel it would be more appropriate to wait for the MOU to be established to clearly identify the role we may have in that regard.

9. The EA does not show that the Kansas economy or individual feedlot operators will suffer in the absence of bird damage management.

The decision to provide BDM does not require a showing of harm to the economy of the entire State. WS is authorized to provide assistance to individuals when they have problems with wildlife. The EA presents an estimate of the value of feed losses that can be attributed to blackbirds and starlings in Section 1.3.2. Section 2.3.9 presents information from studies and from analyses of program activities in other states that indicates BDM can be cost-effective in reducing feed losses at livestock feeding facilities.

10. There is no evidence provided that killing small percentages of starling and blackbird populations does not hurt those species. The 2-3% that WS kills are perhaps enough to seriously damage the species. The relies in part on surveys of bird populations published in 1967 [through] 1987. Those data are too old to be used in a current analysis.

The EA addresses impacts on populations of these species in Section 4.1.1. Included in that analysis was BBS and CBC population trend information that does not indicate these species are being or would be seriously harmed. The older population estimates cited in the EA are still useful, particularly when viewed in concert with the BBS and CBC trends which go back in time to 1966 or approximately around the time that the population estimates began. In combination, the trends and estimates indicate these populations have not declined or changed precipitously as suggested by the commenter. See Section 4.1.1 for the complete analysis. Although there are inherent problems to some degree with any data set involving wildlife populations over broad areas, WS is confident that the overall conclusions of effect based on the data and analyses used are within reason.

11. The WS Decision Model cannot be a "mitigation" measure since its use is not documented in each case. The public must know when and how it is implemented to accept it as a mitigating measure.

As the commenter stated additionally, the model is not a documented process, but a mental problem-solving process. It is similar to the same thought process used by any profession in solving problems. WS presented this concept as a "mitigation" built into the program's standard operating procedures, because it allows for the most practical, effective, and environmentally sound methods to be used or recommended in most situations. WS does not plan to require documentation of this thought process for each and every case in which it is used as such a requirement would increase the administrative burden on the program and hinder the ability to provide service.

12. A commenter provided a number of suggestions for adapting the "bird-proof feeder" concept to livestock feeding facilities.

This alternative method was considered in Section 3.3.3. WS consulted with a leading expert on this concept and reached the conclusion that its cost to implement and maintain over many miles of feed troughs per facility and the problems that would be likely to occur would mean it would not be accepted by facility managers. Because of the potential problems, it would likely not be accepted even if the cost of implementing it was paid from government or other outside entities. Nevertheless, WS encourages other entities to provide funds for research on this concept.

13. A commenter questioned the adequacy the EA's analysis of the effect of firearms and pyrotechnics use on human safety.

The EA cited the formal risk assessment of WS's operational management methods (including firearms and pyrotechnics) which found that risks to human safety were low (USDA 1994, Appendix P). Therefore, no significant impacts on human safety from WS's use of these methods is expected.

14. A commenter questioned the safety of Avitrol and whether it might cause cancer, citing the statement in the EA that this chemical has not been "specifically tested as a cancer-causing agent."

The EA cited information from the EPA on this topic which indicated that, although Avitrol has not been specifically tested as a cancer-causing agent, the chemical was found not to be mutagenic in bacterial organisms. This is currently the best scientific information available on this subject. Regardless of whether it is a carcinogen, however, the controlled and limited circumstances in which Avitrol is used would prevent exposure of members of the public to this chemical or contamination of water supplies.

15. A commenter questioned the appropriateness of using data on the phosphorus content of penguin chick carcasses to indicate the amount of phosphorus in blackbird and starling carcasses for purposes of analyzing the potential to cause eutrophication in wetland roosting areas.



We believe the margin for error in the information used in the analysis was acceptable and would most likely lead to the same conclusions even if data specific to blackbirds and starlings were available. Phosphorus content in blackbird and starling carcasses would have to be more than three times as high as the highest range reported in penguin chick carcasses before a change in conclusions might be suggested. This is unlikely. Also, the EA pointed out that the amount of phosphorus involved in carcasses or bird droppings is probably a relatively small percentage of the amount already available in wetland cattail marsh systems, which suggests that the birds, whether killed or not, would not contribute substantially to the phosphorus load in the marsh. Thus the conclusion of no probable significant effect on this issue is supported several ways by the analysis.

16. A commenter stated that killing [by any method] is never humane.

The issue of humaneness of control methods was analyzed in detail in the EA. We acknowledge that some people will not agree that any lethal methods are humane. The EA discusses how this issue is a matter of individual perception and that those perceptions vary substantially among individuals. The EA acknowledges that some persons will continue to believe that any lethal methods are inhumane, despite any rationales or conclusions presented in the analysis.

Major Issues

Public comments and input on WS's bird damage management activities in other areas and input from other state and federal agencies within Kansas identified several issues deemed relevant to the scope of this EA. These issues were consolidated into the following six primary issues that were considered in detail:

1. Effects on target bird species populations
2. Effects on nontarget species populations, including T&E species
3. Effects on human health and safety
4. Effects on water quality/wetland ecosystems
5. Effects on aesthetic values of wild bird species
6. Humaneness of lethal bird control methods

In addition to the identified major issues considered in detail, eleven other issues were considered but not in detail with rationale and further analysis.

Alternatives Analyzed in Detail

Five potential alternatives were developed to address the issues identified above. Four additional alternatives were considered but not analyzed in detail. A detailed discussion of the anticipated effects of the alternatives on each issue considered in detail is described in Chapter 4 of the EA. The following summary provides a brief description of each alternative and its anticipated impacts.

Alternative 1. Lethal Control by WS at Livestock Feeding Facilities Using DRC-1339 Only. This alternative would restrict the WS program's involvement to lethal control of damaging bird species by using DRC-1339 chemical toxicant when assisting livestock feeding facilities in Kansas. Alternative 1 would benefit individual facilities without posing significant adverse risks to native wildlife populations or T&E species, and very low risks of adverse impacts to public health or safety or to wetland ecosystems. Despite the lack of significant impact on target bird populations, some persons would still view this alternative as having adverse effects on aesthetics. Some persons would also still view the use of DRC-1339 as inhumane despite the apparently peaceful death it causes in target birds.

Alternative 2. Technical Assistance Only by WS. This alternative would not allow for WS operational BDM at livestock feeding facilities in Kansas. WS would only provide technical assistance and make recommendations when requested. Facility managers or state agencies could still conduct BDM using traps, shooting, Avitrol, Starlicide (which contains DRC-1339) or any nonlethal method that is legal. Alternative 2 would likely result in less benefit to individual facilities. It could pose somewhat more risk to nontarget species if facility managers rejected technical assistance recommendations and resorted to less selective lethal management methods. Risks of adverse impacts to public health or safety or to wetland ecosystems would still be low. Some persons would view this alternative as having less adverse effect on aesthetic values of birds than the proposed action or alternative 1, despite the likelihood that impacts on bird populations would be similar due to availability of methods similar to those that would be used by WS under alternatives 1 and 3. Some persons would probably view this alternative as more humane than the proposed action or alternative 1 simply because WS would not engage in any operational lethal control. However, as pointed out in the EA, lethal controls similar to those that would be used by WS would most likely occur anyway.

Alternative 3. BDM by WS at Livestock Feeding Facilities Using an Integrated Wildlife Damage Management Approach. Under this alternative, the WS program would provide a combination of technical assistance and operational BDM to reduce or minimize bird damage problems at requesting livestock feeding facilities in the State. An Integrated Wildlife Damage Management (IWDM) approach would be implemented which would allow use of any legal technique or method, used singly or in combination,

to meet requestor needs for resolving conflicts with birds. Alternative 3 would benefit individual facilities without posing significant adverse risks to native wildlife populations or T&E species, and very low risks of adverse impacts to public health or safety or to wetland ecosystems. Despite the lack of significant impact on target bird populations, some persons would still view this alternative as having adverse effects on aesthetic values of wild birds. Some persons would also still view WS's use of any lethal methods as inhumane despite the emphasis on DRC-1339 use which apparently causes a relatively non-stressful and peaceful death in target birds.

Alternative 4. Nonlethal BDM Only by WS. This alternative would not allow any lethal BDM by WS at livestock feeding facilities in Kansas. The only methods that could be operationally employed by WS would be harassment or scaring devices or installation of exclusion techniques. As stated in the EA, WS does not have the funding to construct or install exclusion devices which would be extremely costly per facility (see Section 2.3.9), so this alternative would probably only result in WS's use of scaring devices. Since most facility operators have already tried those techniques, it is likely they would not request services from WS if harassment/scaring were the only methods to be used. Facility managers or state agencies could still conduct BDM using traps, shooting, Avitrol, Starlicide (which contains DRC-1339) or any nonlethal method that is legal. Impacts on the issues analyzed would be similar to those for Alternatives 2 and 5.

Alternative 5. No Federal WS BDM at Livestock Feeding Facilities (The "No Action" Alternative) Consideration of the No Action alternative is required under 40 CFR 1502.14(d), and provides a baseline for comparing the potential effects of all the other alternatives. This alternative would prevent involvement by the WS program in BDM on livestock feeding facilities in Kansas. 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 from other sources such as the Cooperative Extension Service. Facility managers or state agencies could still conduct BDM using traps, shooting, Avitrol, Starlicide (which contains DRC-1339) or any nonlethal method that is legal. Impacts on the issues analyzed would be similar to those for Alternatives 2 and 4.

Alternatives considered but not analyzed in detail were:

- 1. Compensation for Bird Damage Losses.** This alternative would require the establishment of a system to reimburse livestock feeding facility operators for damage caused by birds. This alternative was eliminated from further analysis because no federal or state laws currently exist to authorize such action and because of other drawbacks discussed in the EA and the WS programmatic EIS.
- 2. Short Term Eradication and Long Term Population Suppression.** An eradication alternative would direct all WS program efforts toward total long term elimination or suppression of populations of bird species that cause damage at livestock feeding facilities in the State. This alternative was eliminated from further analysis because all federal and state agencies with jurisdiction over or interest in bird management oppose eradication of native wildlife species, and, with respect to nonnative starlings, would generally be impossible to achieve. Long term population suppression is not a desired goal of state or federal agencies at this time but could be implemented for localized areas prone to certain types of bird damage under the proposed action or alternative 1. The impacts of localized reduction of target bird concentrations are analyzed in the EA.
- 3. Use of bird-proof feeders in lieu of lethal control at dairies and cattle feeding facilities.** This alternative would require that WS install or require use of bird-proof feeders at livestock feeding facilities in place of any and all lethal BDM activities at such sites. This alternative was eliminated from further analysis because of concerns raised by experts consulted by WS as described in the EA and because the use of such feeders can already be recommended by WS under the other alternatives if determined to be practical and effective.
- 4. Nest and Roost Habitat Alteration.** The manipulation of cattail roost sites where blackbirds and starlings roost at night was considered as a possible remedy for damage by these species at livestock feeding facilities. WS does not have the authority to conduct or require habitat alteration in such areas. One commenter (from [REDACTED]) stated they are making significant progress at reducing the area of cattail roosting sites, but also stated the belief that this would not result in significant reduction in wintering starling and blackbird concentrations in the area. The EA stated that this alternative may, at some point in the future, be a viable alternative if agreed to by managers or owners of areas where roost sites are located.

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. I agree with this conclusion and therefore find that an EIS need not be prepared. This determination is based on the following factors:

1. Bird damage management, as proposed by WS for livestock feeding facilities in Kansas, is not regional or national in scope.
2. The proposed action would pose minimal risk to public health and safety. No injuries to any member of the public are

known to have resulted from WS bird damage management activities in the State. There would be some beneficial impacts on health and safety of facility employees that would outweigh the risk of adverse impacts.

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. The EA analyzes the potential for BDM actions to cause adverse effects on water quality or to accelerate eutrophication of wetland roosting sites and concluded that these types of adverse effects are highly unlikely.
4. The effects on the quality of the human environment are not highly controversial. Although there is some opposition to certain methods of bird control, this action is not highly controversial in terms of size, nature, or effect.
5. Based on the analysis documented in the EA, the effects of the proposed BDM 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 on the quality of the human environment were identified through this assessment.
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. An evaluation of the proposed action and its effects on T&E species determined that no significant adverse effects would occur to such species.
10. The proposed action would be in compliance with all Federal, State, and local laws imposed for the protection of the environment.

Decision

I have carefully reviewed the EA and the input resulting from the public involvement process. Because no substantive changes to the EA were necessary as a result of public or interagency comments, the Predecision EA is hereby adopted as the Final EA. I believe the issues and objectives identified in the EA would be best addressed through implementation of Alternative 3 (the Integrated Wildlife Damage Management approach). Alternative 3 is therefore selected because it offers the greatest flexibility in achieving effectiveness while minimizing cumulative adverse impacts on the quality of the human environment with respect to the issues raised for consideration in this process. The KS WS program will implement the Integrated Wildlife Damage Management Approach as described in the EA and in compliance with all applicable mitigation measures listed in Chapter 3 of the EA.

For additional information regarding this decision, please contact Tom Halstead, 232 Ackert Hall, telephone (785)532-1549.

/s/

1/22/01

Michael V. Worthen, Regional Director
APHIS-WS Western Region

Date

References:

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