

November 1979

BIRD CONTROL AND ENDANGERED SPECIES

Denis S. Case
Ohio Department of Natural Resources

Follow this and additional works at: <http://digitalcommons.unl.edu/icwdmbirdcontrol>



Part of the [Environmental Sciences Commons](#)

Case, Denis S., "BIRD CONTROL AND ENDANGERED SPECIES" (1979). *Bird Control Seminars Proceedings*. 3.
<http://digitalcommons.unl.edu/icwdmbirdcontrol/3>

This Article is brought to you for free and open access by the Wildlife Damage Management, Internet Center for at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Bird Control Seminars Proceedings by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

BIRD CONTROL AND ENDANGERED SPECIES

Denis S. Case
Ohio Department of Natural Resources
Division of Wildlife
Columbus

The potential exists for a conflict to occur between endangered species and almost any type of human endeavor. Detrimental effects on endangered species are possible even as a result of efforts to benefit other endangered species. The types of possible conflicts range from potential problems that are easily solved in early planning processes to major brouhahas involving nearly every conceivable agency and party.

Relative to bird control, it is important to understand the true magnitude of the situation and to develop a factual perspective. According to Ziswiler (1967), 169 species and subspecies of birds have become extinct since the year 1600. The extinction of only six of these bird forms is attributed to active destruction by man as pest species. The only one of these native to North America was the Carolina parakeet (*Conuropsis carolinensis*), but even here it is unlikely that the parakeet's demise was due solely to bird control activities (Laycock, 1975).

In Ohio there are 76 species classified as endangered, seven of which are birds. Of the 76 species, none is endangered as a result of bird control work, although four of them are endangered through secondary effects of pesticides (Table 1). While these figures are for Ohio, the same general pattern is true both nationally and worldwide. Not suprisingly then, while pest control may be a paramount cause for some endangered species, it is not a very significant causal factor in the general problem of endangered species.

Table 1. Causes of Endangered Species in Ohio.

Cause	Number of Species Affected*	Percent of Species Affected
Habitat Destruction	65	86
Always Rare	8	11
Pesticides	4	5
Illegal Killing	2	3
Past Exploitation	1	1
Unknown	1	1
Regulated Hunting	0	0

* A species may be endangered from more than one cause.

In organizing specific material for this presentation, it appears that there are three distinct situations concerning bird control and endangered species.

1. There can be the classic situation of involvement of a non-target species, with the added difficulty of the non-target species being endangered. If only the numbers of endangered species are considered, it would appear that this might be a fairly common situation. As of August, 1979 there are 667 federally designated endangered species, 200 of which occur in the United States. In addition, there are endangered species designated at the state level, the numbers of which may be few or as in the case of Texas, may reach nearly 500.

If other factors are considered, however, one might expect conflicts with endangered species to occur infrequently, and in fact this is the case. Endangered species are, after all, comparatively rare, and so the likelihood of encountering one is not high. Also, they often have unique habitat requirements, which usually are not associated with populated or intensive agricultural areas; in other words, those areas in which pest control activities are most likely to occur.

There has been only one apparent instance in which an endangered species has been detrimentally affected by a bird control effort. As part of the recovery program for peregrine falcons (*Falco peregrinus*), young hatched in captivity are being released in urban areas. One peregrine released in Baltimore this year was found dead. Analysis by the U.S. Fish and Wildlife Service, Animal Health Lab in Madison, Wisconsin has shown traces of strychnine-treated grain in the viscera (Tom Cade, pers. comm.). It is highly likely that the peregrine was a victim of secondary poisoning from an urban pigeon control project. This problem may become aggravated as more peregrines are released in urban areas.

2. The second situation with which a bird control operator may be faced would be a circumstance in which the target animal itself was an endangered species. Consider that there are 212 species of birds (67 of which are native to the United States) designated as endangered by the federal government and another 30 bird species in this region alone, designated by state governments; and it would not be too surprising to come across one or more of them involved in a nuisance or damage situation. If the bird was on the federal list of endangered animals, there would be no problem for the pest control operator. There would be simply no possibility for control. The Endangered Species Act makes no provision whatsoever to control an endangered bird, even by nonlethal methods.

As examples, in some of the western states bald eagles (*Haliaeetus leucocephalus*) are occasionally involved in sheep depredation. Any action taken against a bald eagle in this situation would be a violation of Federal law; and this may even include scaring the birds. If an endangered sharp-shinned hawk (*Accipiter striatus*) was raiding a chicken yard in Ohio, the alternatives are to put the flock under wire or work in some other way with the chickens, for there is no option to control the hawk. These kinds of problems are best left to federal and state wildlife agencies.

3. The third situation is one in which bird control is a vital part of the effort to assist an endangered species. This turns out to be the most frequent situation. An excellent example is the cowbird (*Molothrus ater*) control program initiated to reduce nest parasitism on the very endangered Kirtland's warbler; (*Dendroica kirtlandii*). All the Kirtland's warblers in the world could be contained in a single shopping bag. Nest parasitism by cowbirds has exceeded 70% in some years with documented losses in warbler production of 36%. Since initiation of the cowbird control program on the warbler's nesting grounds in 1972, nest parasitism has usually been below 5% (Mayfield, 1978). Control involves the straight-forward approach of trapping the cowbirds with the standard blackbird or modified Australian crow trap.

Sometimes creativity in bird control is called for. Pearly-eyed thrashers (*Margarops fuscatus*) compete with the endangered Puerto Rican parrot (*Amazona vittata*) for nest cavities and also attack eggs in parrot nests. Paradoxically, one means of control is to actually place nest boxes of a preferred design for the thrashers within the parrot's nesting territory. The thrashers not only adopt the alternative sites, but also keep other thrashers out of the area through their territorial defense behavior (Snyder and Taapken, 1978).

There are many more examples. In Ohio we control great horned owls (*Bubo virginianus*) that attempt to usurp bald eagle nests, and we have initiated a control pro-

gram involving ring-billed gulls (*Larus delawarensis*) that have begun to take over the nesting ground for common terns (*Sterna hirundo*).

In summary, the probability of becoming inadvertently and directly involved with an endangered species in bird control work is remote, but it does exist. The most likely situations would appear to involve endangered birds of prey (hawks and owls), so if one of them is part of your problem or is in your project area, extra caution is advised. This is probably most true for pigeon control problems.

If you suspect a problem or want to be certain that none exists, check with the appropriate wildlife agency. Direct conflicts with endangered species can almost always be avoided. Although conflicts like the Tellico Dam with the snail darter (*Percina tanasi*) make the headlines, the other 5,000 consultations which resulted in an adequate solution for all parties have gone unreported.

ACKNOWLEDGEMENTS

I wish to thank the following for providing information and benefit of discussion in the preparation of this paper: Dr. Carl Becker, Illinois Department of Natural Resources; Dr. Tom Cade, Cornell University; Messrs. Donald Donahoo and James M. Engel, U.S. Fish and Wildlife Service; Mr. James B. Hale, Wisconsin Dept. of Natural Resources; Mr. Carrol Henderson, Minnesota Department of Natural Resources; Mr. Robert A. Hodgins, U.S. Fish and Wildlife Service; and Dr. Sylvia Taylor, Michigan Department of Natural Resources.

LITERATURE CITED

- Cade, Thomas J. 1979. Personal Communication. Cornell University, Ithaca, New York.
- Laycock, G. 1975. The Parakeet Mystery. *S. Carolina Wildl.* 22(3): 14-16,38-40.
- Mayfield, H.F. 1978. Brood Parasitism: Reducing Interactions Between Kirtland's Warblers and Brown-headed Cowbirds. *In: S. A. Temple (ed.). Endangered Birds.* U. Wisc. Press. 466pp.
- Snyder, N.F.R. and J.D. Taapken. 1978. Puerto Rican Parrots and Nest Predation by Pearly-eyed Thrashers. *In: S.A. Temple (ed.). Endangered Birds.* U. Wisc. Press. 466 pp.
- Ziswiler, V. 1967. *Extinct and Vanishing Animals.* Springer-Verlag, New York.

DISCUSSION

- Q:** You indicated the problem with endangered species had to do with habitat. Maybe you would want to take a minute and tell us a little more about that.
- A:** This is true, not only for endangered animals but with game animals, fish, and wildlife generally. Loss of habitat is the critical thing. It just makes sense. It's also one of the major tenets of pest control. Rather than try and control the animal's itself, often the most beneficial and efficient way is to try to control the animal's habitat--take away one of those essential ingredients that it needs. That is the nuts and bolts.
- Q:** We are from time to time asked to deal with the gulls, birds that get on the sanitary landfills, around air fields, and so forth. What are some of the things that we need to be aware of relative to habitat manipulation?

A: You're asking about a pest control situation, and that's a little out of my area. When it comes to habitat, let's say relative to ring-billed gulls, I'm working to preserve that habitat and to get the animals out of there. So we just remove ring-billed gull nests and leave the area open for common terns. There's interspecific competition there--the ring-bills just beat the hell out of the common terns basically. So that's what we do in response.

Q: What do you do with the cowbirds?

A: They are killed. They're collected out of a large screened-in trap, a standard blackbird trap, and placed in a bag and killed with exhaust on the spot. I think there have been close to 20,000 cowbirds collected since 1972 in the Kirtland's Warbler breeding ground area.

Q: Is it not possible for the Secretary of Interior to approve some non-lethal methods of control under the Endangered Species Act?

A: The way it is presently written, that's not true. The definition for "take" under this federal law is very broad--you can't harass, kill, possess, attempt to take, attempt to harass, and so forth. The only exceptions to that "take" provision were for economic hardship and commercial ventures.