

INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM

I. **Region:** 3; Ohio

II. **Service activity:** Migratory Birds and State Programs Section 7 Consultation on the Implementation of the Public Resource Depredation Order for Double-crested Cormorant Management in the State of Ohio.

III. **Pertinent species and critical habitat:**

A. **Listed species and/or critical habitat within the action area:**

Indiana bat	(<i>Myotis sodalis</i>) [Endangered (E)]
Piping plover*	(<i>Charadrius melodus</i>) [E]
Bald eagle	(<i>Haliaeetus leucocephalus</i>) [Threatened (T)]
Lake Erie watersnake	(<i>Nerodia sipedon insularum</i>) [T]
Karner blue butterfly	(<i>Lycaeides melissa samuelis</i>) [E]
Lakeside daisy	(<i>Hymenoxys herbacea</i>) [T]
Northern monkshood	(<i>Aconitum noveboracense</i>) [T]
Eastern prairie fringed orchid	(<i>Platanthera leucophaea</i>) [T]

* Denotes species with critical habitat designations

B. **Proposed species and/or proposed critical habitat within the action area**

None

C. **Candidate species within the action area:**

Eastern massasauga	(<i>Sistrurus catenatus</i>) [Candidate]
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IV. **Location:** The Double-crested Cormorant (DCCO) Public Resource Depredation Order (PRDO) applies to all lands and freshwaters where DCCOs may be found nesting, loafing, roosting, feeding, and migrating in the State of Ohio. This includes ponds and

lakes (natural and artificial), slow-moving rivers, open coastlines, and small rocky or sandy islands. Nests are built in trees, on structures, or on the ground. Nesting trees and structures are usually standing in or near water, on islands, in swamps, or on tree-lined lakes. Roosts and resting places are often on exposed sites such as rocks or sandbars, pilings, high-tension wires, or trees near favored fishing sites. During migration, DCCOs can be found in any of the areas listed above.

V. Description of proposed action: The proposed action is the control of DCCOs through a combination of non-lethal and lethal techniques under the PRDO as described in Alternative 1 of the Environmental Assessment entitled "Reducing Double-crested Cormorant Damage in Ohio". Currently, two options are available to reduce resource damages associated with DCCOs in Ohio: (1) birds can be harassed (with shotgun blasts, fire crackers, propane cannons, or other scare devices); and (2) the U.S. Fish and Wildlife Service (Service) can issue agencies or individuals a permit to take DCCOs (via shooting, egg oiling/destruction, or nest destruction). Through the 2003 Final Environmental Impact Statement on DCCO management in the United States and its associated regulations (50 CFR 21.48), the Service supplemented these options with an additional one that can be used in the State of Ohio - the PRDO.

The PRDO authorizes State fish and wildlife agencies, Federally-recognized Tribes, and State Directors of the Wildlife Services program of the U.S. Department of Agriculture Animal and Plant Health Inspection Service (collectively termed "action agencies") to take, without a permit, DCCOs found committing or about to commit, and to prevent, depredations on the public resources of fish (including hatchery stock at Federal, State, and Tribal facilities), wildlife, plants, and their habitats. Landowner approval is required and other terms and conditions apply to the PRDO. The specific control actions authorized under the PRDO include:

1) *Shooting:* Shooting DCCOs is a highly targeted specific technique that can be used to reduce local DCCO numbers and/or reinforce non-lethal harassment. In the case of DCCOs, shooting is always conducted with shotguns or rifles. When used by trained personnel, the risk of inadvertently taking nontarget species is minimal. Shooting can be conducted from a distance and while this quality minimizes the likelihood of direct human disturbance to species co-occurring with DCCOs, the noise associated with gunfire could cause indirect disturbance.

2) *Egg oiling and destruction:* DCCO eggs have been destroyed in attempts to reduce recruitment into populations and to eliminate colonies at specific locations. Egg oiling is a method of suppressing reproduction of nuisance birds by spraying a small quantity of 100% corn oil on eggs in nests. The oil prevents exchange of gases and causes asphyxiation of developing embryos. The Environmental Protection Agency has ruled that use of corn oil for this purpose is exempt from registration requirements under the Federal Insecticide, Fungicide, and Rodenticide Act. This method is extremely target-specific. However, it requires direct physical contact with DCCOs, their eggs, or their nests, which necessitates immediate

human presence at nest and roost sites. Such control efforts are typically conducted on foot by a small number of personnel in order to minimize incidental disturbance to other species, especially at nest colonies.

3) *Nest destruction*: Nest destruction involves the removal of nesting materials during the construction phase of the nesting cycle. Nest destruction on the ground simply involves the physical breakup of nest structures. Tree nests present a greater challenge. Nests can be destroyed manually or by use of high pressure water to dislodge nests from trees.

4) *Cervical dislocation*: Cervical dislocation is sometimes used to euthanize birds that are captured by hand or in live traps and when relocation is not a feasible option. The bird is stretched and the neck is hyper-extended and dorsally twisted to separate the first cervical vertebrae from the skull. The American Veterinary Medical Association approves this technique as a humane method of euthanasia. In the case of DCCOs, this is a secondary technique that will generally be used only when damage control personnel are already on site using other methods such as egg oiling.

5) *CO₂ asphyxiation*: CO₂ is sometimes used to euthanize birds which are captured by hand or in live traps and when relocation is not a feasible option. Live birds are placed in a container such as a plastic 5-gallon bucket or chamber and sealed shut. CO₂ gas is released into the bucket or chamber and birds quickly die after inhaling the gas. This method is approved as a euthanizing agent by the American Veterinary Medical Association. In the case of DCCOs, this is a secondary technique that will generally be used only when damage control personnel are already on site using other methods such as egg oiling.

Carcasses of dead DCCOs will be composted at two sites in Ohio: Green Island and West Sister Island. Some carcasses will also be sent to a landfill for disposal.

VI. Determination of effects:

A. Description of effects of the action on species and critical habitats in Items III:

Piping plover (*Charadrius melodus*) [E]: The Great Lakes breeding population of the piping plover is listed as endangered in Ohio. Piping plovers nest on sandy beaches, sandbars, dredge disposal islands, and drained floodplains. They are generally solitary nesters but may nest with terns. Activities authorized by the preferred alternative could lead to harassment (i.e., incidental take) of piping plovers. Piping plover critical habitat has been designated in Ohio, but it does not include any of the DCCO control sites.

Bald eagle (*Haliaeetus leucocephalus*) [T]: The bald eagle was proposed for delisting in 1999 and the comment period was reopened in 2006. The aquatic habitat preferences

of the bald eagle make it likely to co-occur with DCCOs in Ohio. Because bald eagles are a widely recognized bird, the risk of direct take of bald eagles is low. However, it is possible that eagles could be harassed indirectly by activities associated with the preferred alternative (because of human disturbance in the vicinity of their nests or roosts). The only DCCO control site that is currently used by bald eagles is the Mercer State Wildlife Refuge in the vicinity of the Grand Lakes-St. Mary DCCO control site; the refuge has an active eagle nest.

Lake Erie watersnake (*Nerodia sipedon insularum*) [T]: The Lake Erie watersnake is a Federally-threatened species that occurs on the islands of the western basin of Lake Erie. The snake is known to occur on Green Island, one of the DCCO control sites, and the following activities there might affect the snake: the DCCO composting site could affect watersnake breeding habitat or hibernacula, and noise/harassment/hazing activities aimed at DCCOs could cause temporary disturbance to watersnakes (but is not likely to rise to the level where take occurs).

Indiana bat (*Myotis sodalis*) [Endangered (E)]: No suitable habitat for this species occurs in the areas where DCCO control will be conducted, and the preferred alternative will have no effect on this species.

Karner blue butterfly (*Lycaeides melissa samuelis*) [E]: No suitable habitat for this species occurs in the areas where DCCO control will be conducted, and the preferred alternative will have no effect on this species.

Lakeside daisy (*Hymenoxys herbacea*) [T]: No suitable habitat for this species occurs in the areas where DCCO control will be conducted, and the preferred alternative will have no effect on this species.

Northern monkshood (*Aconitum noveboracense*) [T]: No suitable habitat for this species occurs in the areas where DCCO control will be conducted, and the preferred alternative will have no effect on this species.

Eastern prairie fringed orchid (*Platanthera leucophaea*) [T]: No suitable habitat for this species occurs in the areas where DCCO control will be conducted, and the preferred alternative will have no effect on this species.

Eastern massasauga (*Sistrurus catenatus*) [Candidate]: No suitable habitat for this species occurs in the areas where DCCO control will be conducted, and the preferred alternative will have no effect on this species.

B. Explanation of actions to be implemented to reduce adverse effects: Several factors will reduce the likelihood of adverse effects on listed species. Action agencies must abide by the following terms and conditions to undertake activities under the PRDO, and if they do not, the Service may suspend the privilege of the agencies to take action under the PRDO:

- 1) Specific provisions in the PRDO regulations (50 CFR 21.48 (d)(8)) must be followed to protect piping plovers and bald eagles. The discharge/use of firearms to kill or harass DCCOs, or the use of other DCCO harassment methods, is prohibited within 1,000 feet of nesting or migrating piping plovers and piping plover critical habitat, and within 750 feet of active bald eagle nests. Use of other DCCO control activities (egg oiling and destruction, cervical dislocation, CO₂ asphyxiation, and nest destruction) is prohibited within 500 feet of nesting or migrating piping plovers and piping plover critical habitat, and within 750 feet of active bald eagle nests.
- 2) The May 2003 U.S. Fish and Wildlife Service Lake Erie watersnake management guidelines for construction, development, and land management activities (which are included in the Environmental Assessment) will be applied to the compost sites on Green Island and West Sister Island. Specifically, the compost sites will not be placed over any likely watersnake hibernacula and will be located >21m from the shoreline to prevent disruption of summer habitat potentially used by Lake Erie watersnakes. Because the preferred alternative is intended to protect vegetation on the Ohio Lake Erie islands, it is likely to be beneficial to the Lake Erie watersnake by protecting ground cover that is critical for shelter from predators and for thermoregulation during the hot part of summer days.
- 3) When shotguns are used to take DCCOs, non-toxic shot will be used to lessen the likelihood of lead poisoning of non-target wildlife.
- 4) The incidental take of any listed species must be reported to the Service.

VII. Effect determination and response requested:

A. Listed species/designated critical habitat:

Determination

No effect/no adverse modifications

Concurrence

Indiana bat (*Myotis sodalis*) [Endangered (E)]

Karner blue butterfly (*Lycaeides melissa samuelis*) [E]

Lakeside daisy (*Hymenoxys herbacea*) [T]

Northern monkshood (*Aconitum noveboracense*) [T]

Eastern prairie fringed orchid (*Platanthera leucophaea*) [T]

May affect, but is not likely to adversely affect species/adversely modify critical habitat
Piping plover (*Charadrius melodus*) [E] Concurrency

Bald eagle (*Haliaeetus leucocephalus*) [T]

Lake Erie watersnake (*Nerodia sipedon insularum*) [T]

May affect, and is likely to adversely affect species/adversely modify critical habitat
NONE Concurrency

B. Proposed species/designated critical habitat:

Determination

No effect on proposed action/no adverse modifications of proposed critical habitat
NONE Concurrency

Is likely to jeopardize proposed species/ adversely modify proposed critical habitat
NONE Concurrency

C. Candidate species:

Determination

No effect Concurrency
Eastern massasauga (*Sistrurus catenatus*) [Candidate]

Is likely to jeopardize candidate species Concurrency
NONE

Stephen D. Mills
Signature

March 1, 2006
Date

VIII. Reviewing Ecological Services Field Office evaluation:

A. Concurrence X Nonconcurrency _____

B. Formal consultation required _____

C. Informal consultation required _____

D. Informal conference required _____

E. Remarks

Angela L. Zimmerman
Signature

March 8, 2006
Date