

specifically with the control of depredating birds. Section 21.41 outlines procedures for issuing depredation permits. Sections 21.43 through 21.47 deal with special depredation orders for specific species of migratory birds to address particular problems in specific geographical areas. While the Service has the primary responsibility for regulating DCCO management, on-the-ground management activities are largely carried out by entities such as State fish and wildlife agencies, wildlife damage control agencies such as the Wildlife Services program of the U.S. Department of Agriculture Animal and Plant Health Inspection Service (APHIS/WS) and, in some cases, by private citizens.

This proposed rule is directly related to the DEIS on DCCO management that was completed in November 2001 and made available for public comment via a **Federal Register** notice of December 3, 2001 (66 FR 60218). Copies of the DEIS may be obtained by writing us (see **ADDRESSES**) or by downloading it from our Web site at <http://migratorybirds.fws.gov/issues/cormorant/deis/deis.html>. The Wires *et al.* report "Status of the double-crested cormorant in North America," mentioned in a **Federal Register** notice of November 8, 1999 (64 FR 60826), may also be downloaded at <http://migratorybirds.fws.gov/issues/cormorant/status.pdf>.

APHIS/WS was a cooperating agency in the development of the DEIS. Additionally, States and Canadian provinces were involved through the International Association of Fish and Wildlife Agencies. The DEIS examined six management alternatives for addressing conflicts with DCCOs: (A) No action, (B) Nonlethal control, (C) Increased local damage control, (D) Public resource depredation order, (E) Regional population reduction, and (F) Regulated hunting. The proposed action/preferred alternative in the DEIS was alternative D. This alternative is intended to enhance the ability of resource agencies to deal with immediate, local concerns by giving them more management flexibility. To address DCCO populations from a broader and more coordinated perspective, a population objectives approach will need to be considered over the longterm. In the future, if supported by biological evidence and appropriate monitoring resources, the Service may authorize management that focuses on setting and achieving regional population goals. At that time, a cormorant management plan will be developed. Until then, our strategy will

continue to focus on alleviating localized damages.

In addition to establishing a public resource depredation order, alternative D would make two other changes to the current management program. It would also revise 50 CFR 21.47, the depredation order for double-crested cormorants at aquaculture facilities, and revise Director's Order 27. The establishment of the public resource depredation order and the revision of the aquaculture depredation order require us to amend the regulations in 50 CFR, part 21, governing the issuance of migratory bird permits. This proposed rule outlines those amendments, clarifying the proposed action presented in the DEIS.

The Service received many comments as a result of the public review of the DEIS. In consideration of these comments, we are proposing to make some modifications to the proposed action. A description of these changes follows. In this proposed rule, the public resource depredation order will: (1) Apply to 24 States (those States where Interior and Southern DCCO populations present the greatest risk to public resources); (2) apply specifically to State fish and wildlife agencies, federally recognized Tribes, and APHIS/WS, rather than to "State, Tribal, and Federal land management agencies" as stated in the DEIS, in order to streamline cormorant control activities and give more responsibility to APHIS/WS, the primary Federal agency responsible for alleviating wildlife damage conflicts; (3) apply only to land and freshwater (not saltwater), since all of the documented fisheries impacts occur in freshwater; and (4) allow egg oiling, egg and nest destruction, cervical dislocation, shooting, and CO<sub>2</sub> asphyxiation instead of "shooting, egg oiling or destruction, and nest destruction." Although we do not believe these modifications will result in significant changes to our analysis in the DEIS, we will address any changes to our impact analysis, as appropriate, in the Final EIS.

#### Population Status of the Double-Crested Cormorant

The information in this section is derived from the DEIS (to obtain a copy, see **ADDRESSES**). The DCCO is the most abundant and widespread of six native species of cormorants that occur in the United States. Population increase and range expansion in recent years have followed significant declines in DCCO numbers that occurred in the 1960s and early 1970s, largely due to negative reproductive effects (*e.g.*, eggshell thinning) associated with

organochlorine contaminants such as DDT (Postupalsky 1978, Weseloh *et al.* 1983, Weseloh *et al.* 1995). Factors contributing to the resurgence of DCCO populations include reduced levels of environmental contaminants, increased food availability in breeding and wintering areas, and reduced human persecution associated with MBTA protection (Ludwig 1984, Vermeer and Rankin 1984, Price and Weseloh 1986, Fox and Weseloh 1987, Hobson *et al.* 1989, Weseloh *et al.* 1995, Wires *et al.* 2001). Tyson *et al.* (1999) conservatively estimated the total population of DCCOs in the United States and Canada at greater than 1 million birds, including breeding and nonbreeding individuals, but probably closer to 2 million. We estimate that the current continental population of DCCOs is approximately 2 million birds. Although historical information about DCCO populations is limited (Hatch 1995), we can conclude, based on available estimates of past breeding numbers, that population levels are greater now than in the past. The long term sustainability of DCCO populations is unlikely to be affected by the management actions authorized in this proposed rule. This will be ensured by regular resource monitoring activities as described in the EIS.

According to Breeding Bird Survey (BBS) data, DCCOs in the United States increased at a statistically significant average rate of 7.9 percent per year between 1975 and 2000 (Sauer *et al.* 2001). Within this period, growth rates of regional populations varied substantially. Five different breeding populations are generally recognized: Atlantic, Interior, Southern, and Pacific Coast and Alaska. Recent population expansion has blurred the boundaries for the Interior, Atlantic, and Southern populations (Hatch and Weseloh 1999, Wires *et al.* 2001).

*Atlantic.* Approximately 23 percent of the DCCO breeding population is found in the Atlantic region (Tyson *et al.* 1999), which extends along the Atlantic coast from southern Newfoundland to New York City and Long Island (Wires *et al.* 2001). Atlantic DCCOs are migratory and occur with smaller numbers of great cormorants (*Phalacrocorax carbo*). From the early 1970s to the early 1990s, the Atlantic population increased from about 25,000 pairs to 96,000 pairs (Hatch 1995). While this population declined by 6.5 percent overall in the early to mid-1990s, some colonies were still increasing during this period. The most recent estimate of the Atlantic population is ≥85,510 breeding pairs (Tyson *et al.* 1999).