Epilogue: Cormorants, Humans and the Symposium Process

DAVID N. NETTLESHIP[1] AND DAVID C. DUFFY[2]

[1]Canadian Wildlife Service, Environment Canada
Bedford Institute of Oceanography, P.O. Box 1006
Dartmouth, Nova Scotia, Canada B2Y 4A2

[2]Alaska Natural Heritage Program
and Department of Biology
University of Alaska
Anchorage, Alaska 99501, USA

Abstract.—A short note to conclude this special publication on the biology, conservation and management of the Double-crested Cormorant in North America. The major accomplishment has been to bring all sides of the cormorant issue together (biologists, fish farmers, managers) to review opinions and the evidence on problems related to cormorants and human activity. General agreement was reached that the acquisition and wise use of knowledge remains the sole direction to attaining real solutions. The overall aim to provide an objective view of the nature of the conflict and possible remedies to resolve them was achieved, as was the establishment of lines of communication between the principal interest groups.

Key words.—Aquaculture, colonial waterbirds, cormorant, Double-crested Cormorant, fish farming, management, *Phalacrocorax auritus*, policy, symposium.

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> "The principal complaint against the Double-crested Cormorant is that it eats fish. The mere fact that a bird or mammal eats fish is often considered sufficient to condemn it without more ado, quite regardless of the fact that many fish eat fish, and that some other fish are of no commercial value, so that the habits of a fish-eating creature, when carefully inquired into, may be found to be beneficial, even from the point of view of man's narrow self-interest." (H. F. Lewis 1929:84)

This symposium "The Double-crested Cormorant: Biology, Conservation and Management" achieved two goals: it brought three sides of the cormorant pest issue together—managers, fish farmers, and scientists—and it laid bare the full range of scientific and political opinions on the problems associated with cormorants and human activity. As in any wildlife issue, these ranged from the perception that there is no problem to the opposite extreme, that control methods and actions are essential. The nature of this dichotomy of position is evident in press releases and articles calling for the immediate halt of the "bird slaughter" at fish ponds and natural lakes (e.g., Bayer 1989, National Audubon Society 1992, Williams 1992, Zimmerman 1992, Sheppard 1994/95, Canadian Press 1995) to claims of the wholesale destruction of aquaculture developments (e.g., Thomas 1987, Broadway 1988, Conniff 1991, Charlier 1992). An objective view was the principal aim of the symposium, a position that was clearly attained.

Although the need for further research on the cormorant problem at fish farms was proposed (Erwin 1995) and questioned (Nisbet 1995), there is a consensus on the need to know and to understand events in nature including the Double-crested Cormorant's place in the living system and our relationship to it. Beyond this, however, we may have missed a larger picture. The findings derived from the present symposium and what may come out of it can serve as prototypes for resolving environmental conflicts through reasoned interactions and cooperation between users, managers, and scientists. The scientists stressed the need for objective measurements of cormorant predation and the effect of control measures, while the managers stressed the need for science behind their management techniques. Both fish farmers and managers were open to new ways of

managing cormorants around fish farms, based on cormorant biology.

If we can maintain the lines of communication and share insights, a similar process may work for other issues as well—such as logging, predator control, and wetlands management—where controversy is the current norm and the science is disconnected from the search for workable solutions. No matter what the environmental issue or the extent of the injury, the pursuit and attainment of knowledge remain the only route to travel where meaningful solutions are required. The task is made no greater by adopting this common sense approach, though the results are likely to be long-lasting and beneficial over both the short- and long-terms.

LITERATURE CITED

Bayer, R. D. 1989. The cormorant/fisherman conflict in Tillamook County, Oregon. Studies in Oregon Ornithology No. 6. Gahmken Press, Newport, Oregon.

Broadway, R. 1988. Mississippi menace: cormorants threaten aquaculture industry. Research Highlights, Mississippi Agricultural and Forestry Experiment Station 51(12):1-2.

Canadian Press. 1995. Massacre of birds worst ever, says U.S. government official. The Mail-Star (Halifax, Nova Scotia) 21 July 1995:A2.

Charlier, T. 1992. Fish-eating birds overstay their protected welcome. The Commercial Appeal (Memphis, Tennessee) 20 April 1992:A1.

Coniff, R. 1991. Why catfish farmers want to throttle the crow of the sea. Smithsonian 22(4):44-50, 52, 54-55.

Erwin, R. M. 1995. The ecology of cormorants: some research needs and recommendations. Pages 240-246 *in* The Double-crested Cormorant: biology, conservation and management (D. N. Nettleship and D. C. Duffy, Eds.). Colonial Waterbirds 18 (Special Publication 1).

Lewis, H. F. 1929. The natural history of the Double-crested Cormorant (*Phalacrocorax auritus auritus* (Lesson)). Ru-Mi-Lou Books, Ottawa, Ontario.

National Audubon Society. 1992. Audubon calls for halt of bird slaughter at fish ponds. Public Affairs release (8 July 1992), National Audubon Society, New York, New York.

Nisbet, I. C. T. 1995. Biology, conservation and management of the Double-crested Cormorant: symposium summary and overview. Pages 247-252 *in* The Double-crested Cormorant: biology, conservation and management (D. N. Nettleship and D. C. Duffy, Eds.). Colonial Waterbirds 18 (Special Publication 1).

Sheppard, Y. 1994/95. Cormorants and pelicans: scapegoats for a fishing industry gone bad. Birds of the Wild 3(4):30-35.

Thomas, W. 1987. Pond owners are fed up. In war, it's either fish or fowl in Mississippi. The Commercial Appeal (Memphis, Tennessee) 10 October 1987:A1, A7.

Williams, T. 1992. Killer fish farms. Audubon 94(2):14-22.

Zimmerman, M. 1992. Something fishy on farm - birds killed for doing what comes naturally: eating fish. The Orlando Sentinel (Orlando, Florida) 5 January 1992.