

## Comments submitted by Linda Wires on Proposed Double-crested Cormorant hunt in Ontario

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*Professional background:* My name is Linda Wires and I am a Conservation Biologist in Minneapolis, Minnesota. I have studied and monitored waterbirds in North America for the last 20 years, mostly while employed as a Research Fellow at the University of Minnesota and as a Project Coordinator for the US Fish and Wildlife Service, Integrated Waterbird Management and Monitoring Program. I have extensive experience monitoring colonial waterbirds, especially Double-crested Cormorants (DCCO) in the US Great Lakes, and I have been coordinating and reporting on monitoring efforts in this area since the late-1990s. I also have extensive experience researching human conflicts with fish-eating birds, and have worked with colleagues around the world studying and managing human-cormorant interactions. As part of this work, I have reviewed and commented on every management proposal developed for DCCOs in the US since 2003, and I have also stayed abreast on management of other cormorant species in other parts of the world (Europe and Asia). I have published several papers on numerous aspects of DCCO monitoring, research and management, and have hosted and participated in many workshops and symposia to address conflicts with DCCOs. Finally, in 2014 I had a book published by Yale University Press, *The Double-crested Cormorant: Plight of a Feathered Pariah* (Wires 2014). This book provides a detailed history of the species in North America since the arrival of European settlers to the continent. It includes a rigorous review of the science undertaken to document the cormorant's alleged impacts to resources, and examines whether the management that occurred through 2012 was supported by science. The book was specifically written to enhance understanding of cormorants and their presumed impacts, and as a resource for wildlife managers trying to resolve human-cormorant conflicts.

*Comments:* I can honestly state that of all the many proposals for cormorant management that I have reviewed, *this proposal from the Ontario Ministry of Natural Resources and Forestry is by far the most ill-conceived and irresponsible approach I have seen to date.* It essentially misses all key criteria for a reasonable and rational approach to resolving conflicts with a native wildlife species. I highlight a few points below in support of my objections.

*No distinction between real and perceived impacts.*

- 1) The proposal details do not provide a clearly defined problem statement. Instead, the same old concerns that have been expressed about cormorants in North America since the arrival of European settlers (Wires 2014) appear to be the impetus for this plan. What evidence do you have to show that any of these concerns are valid? Why now? At what locations might they be occurring? At what scale? In what time period? By not distinguishing between real impacts and concerns that may not be valid, you are simply authorizing large scale persecution of a native species that has an important ecological role in Ontario waters.
- 2) Detrimental to fish populations, island habitats and other species. Again, where is the evidence that detrimental impacts are occurring? I have reviewed hundreds of scientific studies that examined the DCCO's interaction with fish, forests and other species. Based on my review, diminishing DCCOs in the VAST majority of locations is not going to benefit these resources. Please see Wires (2014) chapters 12, 13 and 15 specifically for studies and review. As well, consider that DCCOs consume

many exotic fish species and in this regard provide beneficial ecological services. Moreover, a recent analysis by Wyman et al (2018) indicates that managing DCCOs may negatively impact other co-nesting colonial waterbirds.

#### *Unclear goals for hunting season*

- 1) What is the hunting season supposed to accomplish? Since it is being considered as an approach to addressing concerns about impacts to fish and other natural resources, I assume you will want to see positive benefits in these resources. But no plan is identified to describe how changes to fisheries, island habitat and other species will be measured.
- 2) What is your population target for DCCOs? What are the criteria for evaluating this essential part of the management intended? Nothing is identified.
- 3) Is the goal just some sort of hunter satisfaction? Even if this is the goal, no plan is described as to how this will be evaluated.

#### *Far too liberal bag limit*

- 4) The bag limit of 50 birds / day / hunter is far too liberal. If participation is broad, this could easily result in massive losses in one season. Consider an example from the US. In the state of South Carolina, a similar approach was instituted via a special permit under the Public Resource Depredation Order beginning in 2014. This permit allowed unlimited take of cormorants on just two inland lakes for one month in winter. During 2014 and 2015, about 900 individuals were issued permits, and approximately 26,000 cormorants were killed in just two seasons (Wires 2015; Petersen 2016). Though the Canadian proposal has bag limits of 50 birds per day, it is far more liberal in that: a) it allows hunting the entire time DCCOs are present in Ontario; b) there is no information to suggest that sites where hunting will be allowed will be limited; and c) it allows hunting during the breeding season, when far more birds are vulnerable because they are easier targets as they sit on nests, and additional mortality occurs to chicks and eggs when a parent is lost. Thus, if even 100 people were to hunt regularly, the potential for very large numbers of birds to be destroyed rapidly is very high.

#### *Great Lakes population trends not clearly understood*

- 1) You note that cormorants in the Great Lakes “began to increase rapidly from the 1970s to the early 2000s, with the latest information indicating Great Lakes populations have since stabilized or declined slightly.” However, in US waters, data from biennial monitoring efforts indicate that DCCOs have declined fairly steadily since their peak numbers in 2005. Monitoring by F. Cuthbert and L. Wires (unpubl. data) regularly undertaken for the USFWS document a 36% decline in US Great Lakes between 2005 and 2016.
- 2) Ontario has not conducted a Great Lakes DCCO survey since 2007-2009, a decade ago. Thus the province does not have up-to-date data on Ontario’s population size or Canadian Great lakes trends.

#### *Assessing population level impacts of hunting*

- 1) As migratory birds, cormorants in Ontario are part of a larger population. They comprise a significant proportion of the Great Lakes population. Since Ontario does not have up-to-date

baseline data on DCCO numbers, how will you track the impact hunting may have, both in Ontario waters and Great Lakes-wide?

- 2) Because it takes two parents to raise a clutch, hunting during the breeding season will result in high chick and egg mortality through the death of at least one parent. This will occur through starvation or predation by gulls facilitated by human disturbance and removal of a parent. No mention of any precautions to avoid such inhumane circumstances is even made. Years ago culling at a colony by OMNR was videotaped and made available to the public. The fact that chicks were being abandoned and or orphaned during the operation was terrible PR for the OMNR and led to the cull being stopped. Much of the public will be horrified by the aftermath of such an undertaking and I imagine the strong group of animal rights activists will do all they can to publicize such information. This seems like the OMNR is opening a can of worms that will cause an amazing amount of trouble and distrust of the agency among many Ontarians.
- 3) In addition to impacts to cormorants, no mention of the potential for massive disturbance to co-nesting species is made. How are all of these impacts going to be monitored and what precautions undertaken to avoid them?

*Disregard for the US Cormorant management experience.*

In 2003, the USFWS finalized an Environmental Impact Statement (EIS) to evaluate options for managing conflicts with DCCOs. The EIS resulted in the primary tools for cormorant management utilized between 2003 and 2016, the expanded Aquaculture Depredation Order and the Public Resource Depredation Order. These regulations had no requirement for science-based evidence of impacts, and their implementation, along with limited use of depredation permits, led to roughly three quarters of a million DCCOs and an untold number of eggs and nests being destroyed between 2003 and 2016. Finally, in 2016, the U.S. District Court for the District of Columbia ruled on a lawsuit brought against the USFWS for continuing with cormorant management under the depredation orders without rigorously evaluating the effect of the depredation orders on DCCOs and other affected resources (i.e. fish populations) or examining other management alternatives. The Court found in favor of the plaintiffs and the depredation orders were vacated in May 2016. Currently, limited management occurs only under individual depredation permits and is not permitted to protect free swimming wild fish.

- 1) This effort was ultimately not sustainable for several reasons. One major one was that the USFWS did not conduct the rigorous science needed to evaluate the effects this management was having on cormorants and other resources. Though the destruction of huge numbers of birds and eggs pleased certain groups of the public sector, it's impossible to link the scale of destruction with changes in targeted resources because the necessary monitoring did not take place. This is partly because it is really hard and expensive to do the monitoring, and partly because documenting the impacts of management was not that high of a priority, as long as some members of the public were pleased. As noted, this ongoing approach to management was found to be flawed by the Court, and the USFWS was exposed for overstepping the bounds of the National Environmental Policy Act. Given this context, the fact that Ontario's proposed approach is far less rigorous than the demonstrably flawed measure the US implemented should give the OMNR reason to pause and reflect.
- 2) Moreover, hunting was initially considered in the EIS but ultimately rejected for the following reason: "The proposed action [depredation orders] is preferable to hunting largely for ethical reasons. From purely biological and economic perspectives, hunting might prove an effective way to

kill numerous DCCOs at minimal expense to the government. However, we have serious reservations about authorizing a non-traditional species to be hunted when it cannot be eaten or widely utilized and feel that there are more responsible and socially acceptable ways of dealing with migratory bird conflicts.” Launching an open season on a nongame animal that can’t be utilized violates all the ethics that surround hunting. It simply perpetuates the idea that cormorants are bad birds that harm human interests and should be killed. Such an approach has the potential to leave a legacy far worse than the one the USFWS will be remembered for.

*Disregard for the successful approach taken and significance of the colony at Tommy Thompson Park.*

- 1) The nonlethal management at TTP is possibly the best example of living with cormorants worldwide. The research and management techniques here have been ground breaking and have established Toronto as a leader in alternative management practices. In addition, the colony there is a spectacular natural resource in the heart of a thriving urban environment. What is the plan for this colony? Will it be protected?

*Concluding remarks:* As noted above, most of the basic elements of a serious management plan are missing from this proposal. Unfortunately, as a result, the OMNRF emerges as highly unprofessional, misguided and naïve. This is surprising because in the past the OMNRF has proceeded much more carefully and embraced a higher standard for decision making and conflict resolution that included science and ethics. Because not even a clear description of the problem is provided, it’s difficult to offer meaningful suggestions for resolution. However, it sounds like the same perception of a problem that has been with us for a long time is at the root of this proposal. But by allowing an open season on cormorants, the OMNRF returns to a 19<sup>th</sup> century anti-predator mentality that sets a wicked precedent for the mismanagement of fish-eating birds. I hope you will reconsider this plan, and start with a rigorous statement of the problem, which will guide the direction to pursue. A perceived problem as outlined in the proposal may require a very different solution than the one now being considered.

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