A proposal for better cormorant control in Ontario

A presentation to:
Rideau Lakes Municipal Services Committee Meeting
March 14, 2016
Background

• 30 species of cormorants worldwide

• Double-crested cormorant most common in North America

• Large, black, visible yellow-orange throat patch, long neck, long hooked bill, long tail

• Fish eating migratory bird

• Nest in colonies

• Native to Ontario
Cormorant colonization in Ontario (1913-1945)
Lake Ontario cormorant populations remain near all-time high

Cormorant numbers have stabilized in the eastern and central basins of Lake Ontario
Cormorant colonies in Lake Ontario

- 28 colonies
- 24 on Canadian side of Lake Ontario
  - 8 in Kingston basin
  - 13 east of Brighton

Source: Environment Canada
Ecological Concerns - Vegetation

- **Physical**: breaking branches, stripping foliage, loss of canopy cover
- **Chemical**: Guano kills trees and herbaceous vegetation at breeding and roosting sites

*Destroys entire ecosystems, including threatened island ecosystems*
Ecological Concerns – Other wildlife

- Other colonial waterbirds, including great blue heron, great egret, black-crowned night heron
- Over 60% of the black-crowned night heron colonies on Lake Ontario have been impacted by cormorants

Source: Environment Canada
## Ecological Concerns – Fish Consumption

<table>
<thead>
<tr>
<th># of DCCO</th>
<th>Fish consumed per day</th>
<th># of days</th>
<th>Fish consumed per season</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>x 1 lb</td>
<td>x 169 d (15 Apr - 1 Oct)</td>
<td>= 169 lb</td>
</tr>
<tr>
<td>9,444 adults (4,722 pairs)</td>
<td>x 1 lb</td>
<td>x 169 d</td>
<td>= 1,596,036 lb</td>
</tr>
<tr>
<td>9,444 young (2.0 young/nest)</td>
<td>x 1 lb</td>
<td>x 103 d (20 Jun - 1 Oct)</td>
<td>= 972,732 lb</td>
</tr>
</tbody>
</table>

**Total consumption in the Kingston Basin**

= 2,568,768 lb  
= 1,147 tons

*Source: Environment Canada*
Ecological Concerns – Fish Consumption

*Little Galloo Island 1999-2003*

- Recreational species: 
  - #: 3.8%; Wt: 26.4%
- Commercial species: 
  - #: 40.4%; Wt: 46.9%
- Prey species: 
  - #: 49.1%; Wt: 26.4%

Role of the Round Goby?

<table>
<thead>
<tr>
<th>Name</th>
<th>Number</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rank</td>
<td>%</td>
</tr>
<tr>
<td>Alewife</td>
<td>26.4</td>
<td>1</td>
</tr>
<tr>
<td>Yellow perch</td>
<td>37.3</td>
<td>2</td>
</tr>
<tr>
<td>Cyprinids</td>
<td>10.6</td>
<td>3</td>
</tr>
<tr>
<td>Pumpkinseed</td>
<td>53.6</td>
<td>4</td>
</tr>
<tr>
<td>Three-spine stickleback</td>
<td>1.5</td>
<td>5</td>
</tr>
<tr>
<td>Rock bass</td>
<td>49.3</td>
<td>6</td>
</tr>
<tr>
<td>Smallmouth bass</td>
<td>260.1</td>
<td>7</td>
</tr>
<tr>
<td>Slimy sculpin</td>
<td>3.3</td>
<td>8</td>
</tr>
<tr>
<td>Trout-perch</td>
<td>6.0</td>
<td>9</td>
</tr>
<tr>
<td>Brown bullhead</td>
<td>250.0</td>
<td>10</td>
</tr>
<tr>
<td>Other sport fish</td>
<td>577.1</td>
<td>11</td>
</tr>
<tr>
<td>Others (goby, etc.)</td>
<td>20.8</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: USGS
Social, economic and cultural concerns

- **Natural capital & Biodiversity**
  - Healthy ecosystems
  - Healthy fish stocks

- **Ecosystem Services**
  - Fisheries
    (recreational, commercial, tourism)
  - Recreation & Tourism
  - Aesthetics
  - Property Values

- **Health and safety**
Cormorant Control

- **Culling** – most rapid means of reducing adult breeding birds from the population
- **Egg Oiling** – effective on ground nests to reduce population growth
- **Nest Removal** – reduces reproductive success and population growth; more time consuming
- **Harassment** – time consuming, expensive, and not proven to be effective
Barriers to cormorant control in Ontario

- Protection under Ontario’s Fish & Wildlife Conservation Act
- Opposition from animal rights groups
- Ineffective/absent management not addressing the actual problem

Source: Environment Canada

**Graph:**
- Number of nests over time (1979-2009)
- Western basin
- Central basin
- Eastern basin
- Total

**Legend:**
- Period of egg oiling, culling and nest removal at Presqu’ile

**Notes:**
- Data shows increase in cormorant nests over the years, with significant spikes in 1999 and 2004.
Cormorant control in other jurisdictions?

- New York is one of many US states with an active cormorant control program
- Effective cormorant control on Canadian federal lands (e.g. Point Pelee National Park)

Source: Environment Canada

<table>
<thead>
<tr>
<th>Waterbody</th>
<th>Canada</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern basin</td>
<td>62%</td>
<td>38%</td>
</tr>
<tr>
<td>Central basin</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Western basin</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Lake Ontario total</td>
<td>88%</td>
<td>12%</td>
</tr>
</tbody>
</table>
The Solution

- **Active control**: culling, egg oiling and nest removal

- **Additional tool**: remove the unnecessary protection of double-crested cormorants under the Fish and Wildlife Conservation Act
  
  - Accomplished by adding cormorants to the list of species under section 5 (2)(a) that includes American crows, brown-headed cowbird, common grackle, house sparrow, red-winged blackbird and starling

*Photo credit: Jill Roedding*
Conclusion

• Cormorants experienced rapid range expansion and population growth... resulting in enormous ecological, social, cultural and economic impacts

• Lack of proper control by the Ontario government has perpetuated these impacts

• Not seeking the extinction of cormorants

• Asking for all possible tools be used to control harmful cormorant populations, including:
  • Culling, egg oiling, and nest removal
  • Unnecessary legal protection should be removed
How can you help?

Support the OFAH and OCFA’s request for better cormorant control in Ontario
THANK YOU!

[Logos for ONTARIO FEDERATION OF ANGLERS AND HUNTERS and OCFA - Ontario Commercial Fisheries’ Association]