CORMORANTS
AT TOMMY THOMPSON PARK

Thursday, April 3, 2008
6:30 p.m. to 9:00 p.m.
Mennonite New Life Centre,
1774 Queen Street East

www.trca.on.ca/cormorants
**CORMORANTS AT TOMMY THOMPSON PARK**  
**Thursday, April 3, 2008, 6:30 p.m. to 9:00 p.m.**  
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<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
<th>Presenter(s)</th>
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<tbody>
<tr>
<td>6:30 pm</td>
<td>Register and view displays</td>
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<tr>
<td>7:00 pm</td>
<td>Welcome</td>
<td>Councillor Fletcher Adele Freeman, Director, Watershed Management, TRCA</td>
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<tr>
<td>7:10 pm</td>
<td>Agenda review</td>
<td>Suzanne Barrett, Facilitator</td>
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<tr>
<td>7:20 pm</td>
<td>Tommy Thompson Park overview</td>
<td>Gord MacPherson, Manager, Restoration &amp; Environmental Monitoring Projects, TRCA</td>
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<tr>
<td>7:35 pm</td>
<td>Colonial waterbirds in the Great Lakes</td>
<td>Chip Weseloh, Wildlife Biologist, Canadian Wildlife Service</td>
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<tr>
<td>7:50 pm</td>
<td>Cormorants at TTP</td>
<td>Ralph Toninger, Senior Project Manager, TRCA</td>
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<tr>
<td>8:10 pm</td>
<td>Round-table discussions</td>
<td>All</td>
</tr>
<tr>
<td>8:50 pm</td>
<td>Summary and next steps</td>
<td>Suzanne Barrett</td>
</tr>
<tr>
<td>9:00 pm</td>
<td>Adjourn</td>
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PROPOSED GOAL AND OBJECTIVES FOR CORMORANT STRATEGY

GOAL
Achieve a balance between the continued existence of a healthy, thriving cormorant colony and the other ecological, educational, scientific and recreational values of Tommy Thompson Park.

OBJECTIVES

a. Increase public knowledge and awareness of colonial waterbirds
b. Prevent cormorant expansion to Peninsula D
c. Limit further loss of tree canopy on Peninsulas A, B and C
d. Continue research on colonial waterbirds in an urban wilderness context
CORMORANT ADVISORY GROUP

TRCA
Restoration Services

Federal/Provincial
Canadian Wildlife Service
Ontario Ministry of Natural Resources
Toronto Port Authority
Transport Canada

City of Toronto
Parks, Forestry and Recreation
Public Health

Academia
University of Toronto
York University

Interest Groups
Aquatic Park Sailing Club
Cormorant Defenders International:
  Animal Alliance of Canada
  Zoocheck Canada Inc.
  Canadians for Snow Geese
  Earthroots
  Friends of the Spit
Local Enhancement and Appreciation of Forests (LEAF)
Ontario Nature
Ontario Society for the Prevention of Cruelty to Animals
Outer Harbour Sailing Federation
Toronto Island Residents
Toronto Ornithological Club
<table>
<thead>
<tr>
<th>Event/Meeting Type</th>
<th>Date(s)</th>
<th>Agenda Points</th>
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</table>
| Advisory Group Meeting #1         | January 24, 2008      | • Identify values and interests associated with TTP  
• Discuss existing conditions and concerns  
• Review proposed list of management options (including “do nothing”) |
| Advisory Group Meeting #2         | February 19, 2008     | • Evaluate management options  
• Discuss alternative management approaches |
| Public Meeting                    | April 3, 2008         | • Present existing conditions, concerns and alternative management approaches  
• Provide feedback |
| Advisory Group Meeting #3         | April 23, 2008        | • Review public response  
• Formulate management plan |
| TRCA Authority Board              | April 25, 2008 / May 23, 2008 | • Present report for Authority action |
| Spring Bird Festival              | May 10, 2008          | • Tour of Waterbird Colonies |
| Advisory Group Meeting #4         | tbd                   | • Review implementation workplan |

All reports and meeting notes will be posted on the TRCA website at [www.trca.on.ca/cormorants](http://www.trca.on.ca/cormorants)
Tommy Thompson Park
Public Urban Wilderness
**WILD IN THE CITY**
- Wildness in Urban Setting
- Urban Natural Park
- A wild place that developed despite obstacles
- Humans are part of biodiversity
- Hidden gem
- Out of city experience in the city

**CITY ENVIRONMENT**
- Safe environment for planes
- Symbol of hope and regeneration
- Demonstrates re-use of waste material
- Place that won’t be developed
- Identity for city

**ECOLOGICAL VALUES**
- Opportunity for North American biodiversity
- Space for natural processes
- Sanctuary for all wildlife
- Ecological center of organization
- Intrinsic value of nature
- Nature preservation
- Corridor
- Rich ecosystem taken over by nature
- Important Bird Area (IBA)
- Place where DCCO are not harassed
- Provincial biodiversity

**RESEARCH**
- Laboratory for ecological studies
- Colonization laboratory
- Ecological research
- Train next generation of biologists
- Intellectual challenge
- Data on DCCO colony

**RECREATION & TOURISM**
- Recreation opportunity
- Views of City
- Protection for Outer Harbour recreation activities
- Share the love of wilderness
- Green
- Open
- Solutions to creating a green space model
- Exploration of evolving nature
- Part of chain of waterfront parks
- One of the largest natural parks in Toronto
- Exercise and health
- We should be ‘lake people’
- A place to meet neighbors
- Public accessibility
- Solitude and quiet
- Tourism opportunity

**EDUCATION**
- Education
- Experience natural processes
- Turn on kids to career interests
- International case study
• Construction of the Leslie Street Spit began in 1959

• Dispose of rubble and fill from the construction industry

• Expand port related facilities

• Create opportunities for dredged material disposal
The goals of the Master Plan are to:

- To conserve and manage the natural resources and environmentally significant areas;

- To provide a unique, water-oriented open space which will assist in meeting regional needs;

- To develop public awareness regarding the significance of the Lake Ontario waterfront and Tommy Thompson Park.
Tommy Thompson Park
2007 Interim Management

- Open to the public weekends and holidays
- Shuttle Van Service from May to October
- Volunteer Naturalist from May to October
- Aquatic Park Sailing Club
- Habitat and wildlife management
Approximately 250,000 people visit TIP annually

- Joggers: 10%
- Cyclists: 9%
- Rollers: 9%
- Walkers: 45%
- Joggers: 36%
The ecological health of the shoreline and adjacent watersheds are closely connected and dependant on Tommy Thompson Park.
Local and Regional Context

ESA

ESA 130

ESA 120

Toronto and Region Conservation for The Living City
• Toronto’s only **Important Bird Area** – globally significant

• **7 Species of Colonial Nesting Waterbirds**
  - The largest colony of Double-crested Cormorants in the Great Lakes
  - Largest colony of Black-crowned Night-Herons in Canada!

• Concentration area for **migratory bird species**.

• Significant overwintering area for **waterfowl**.
Nesting Pairs of Colonial Waterbirds at TIP 2007

- Double-crested Cormorant: 7,241
- Caspian Tern: few
- Black-crowned Night-Heron: 876
- Herring Gulls: 30
- Ring-billed Gulls: 56,000
- Great Egret: 5
- Common Tern: 376
Tommy Thompson Park Bird Research Station (TTPBRS)

• 1 of 25 Canadian Migration Monitoring Network (CMMN-RCSM) Stations

• Since 2003 more than 30,000 birds have been banded

• In 2007 staff & volunteers raised just under $30,000

• Since 2003 over 100 volunteers have contributed more than 16,000 hours to TTP programs
Winged Migration Education Program

“I loved watching the birds and learned the great things about nature. I took some pictures and I will never forget the memory of the beautiful birds.” Grade 6 student

• Winged Migration is a teaches youth about bird migration and the natural world
• In 2007, 1363 students visited TTP
• Funding provided by the TD Friends of the Environment Foundation, and Imperial Oil Foundation.
Wildlife
Summing Up

• TTP is ecologically significant at a local, regional, national and global scale

• TTP is in the largest city in Canada

• Man-made landform

• Urban influences compromise natural functions

• TTP supports a large number and variety of recreation users
Tommy Thompson Park Cormorant Colonies
Nest Count Surveys

• Detailed nest surveys have been completed since 1990

• All nests are identified (DCCO, BCNH, GREG) and counted

• All trees are tagged and surveyed by GPS

• Each tagged tree is checked annually
Nests Numbers of DCCO and BCNH at Tommy Thompson

1993

DCCO

BCNH
Nests Numbers of DCCO and BCNH at Tommy Thompson

1999


DCCO
BCNH
Nests Numbers of DCCO and BCNH at Tommy Thompson

[Graph showing the trend of DCCO and BCNH nests from 1980 to 2006, with a peak in 2004 and a decline afterwards.]
Nests Numbers of DCCO and BCNH at Tommy Thompson

2002

- DCCO
- BCNH
Nests Numbers of DCCO and BCNH at Tommy Thompson

2002

Graph showing the number of nests for DCCO and BCNH from 1980 to 2006.
Nests Numbers of DCCO and BCNH at Tommy Thompson

2006

- DCCO
- BCNH

Graph showing the number of nests for DCCO and BCNH from 1980 to 2006.
The Change in Tree Health between 1996 and 2006

- **Live Trees**
- **Dead or Dying Trees**
Deforestation on Peninsula A from 1990 to 2007
Tree Canopy at TTP Based on 2006 Ecological Land Classification Data

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<tr>
<td>TTP land area</td>
<td>151</td>
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<tr>
<td>TTP forest area</td>
<td>37</td>
</tr>
<tr>
<td>Future Forest</td>
<td>4</td>
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24% of TTP is Forested
Forest Cover Lost or in Decline

9.0 Ha

24% of the total forest area at TTP is in decline
At the current rate of DCCO growth an additional 1 Ha of forest would be colonized by 2010.
Potential Objectives

a. Increase public knowledge and awareness of colonial waterbirds

b. Prevent cormorant expansion to Peninsula D

c. Limit further loss of tree canopy on Peninsulas A, B and C

d. Continue research on colonial waterbirds in an urban wilderness context
a. Increase public awareness and knowledge of colonial waterbirds

- Public Meeting
- TRCA Website
- Annual Spring Bird Festival May 10, 2008
- Interpretive Signage
- Viewing Blinds and Platforms
- Tours and School Groups
b. Prevent Cormorant Expansion to Peninsula D

• Protect Existing and Planned Uses

• Maintain and Enhance Research and Education Opportunities

• Provide Urban Wilderness Experience for Park Users
c. Limit further forest canopy loss on the peninsulas

- Other species
- City and Waterfront targets
- Migratory stop over
- Aesthetics
- Diversity of experience for users
d. Continue research on colonial waterbirds in an urban wilderness context

• Support partnerships between TRCA and local naturalist groups, universities and government agencies

• Play a significant role in local and regional research

• Support the existing Tommy Thompson Park Bird Research Station (TTPBRS)
Proposed Techniques

1. Do nothing
2. Pre-nesting deterrents
3. Post-breeding deterrents
4. Enhanced ground nesting
5. Egg oiling
6. Habitat restoration
Do nothing

• Not a default, but a chosen management option

• Continue monitoring, research, and education activities

• Scale
  – Entire area
  – Targeted areas
Deterrents

Pre-nesting and Post Breeding

• Human Presence
  • Public use
  • Staff activities

• Artificial Predators / technological devices

• Noisemakers
  • Staff controlled
  • Automatic devices
Pre-nesting deterrents

• method to discourage cormorants from nesting in a specific area

Post-breeding deterrents

• method to discourage cormorants from loafing or roosting in a specific area
Encourage Ground Nesting

• Create artificial structures that:
  - Are attractive for nesting pairs
    - decoys
    - recordings
  - Provide protection from the environment and predators
Application of a non-toxic, food grade oil to eggs within 8-10 days of laying to prevent hatching
Revegetation and Habitat Restoration in Impacted Areas

• Plant nodes in strategic areas

• Soil amendment and seeding in specific areas
Proposed Strategic Approach
## Proposed Strategic Approach

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<tr>
<th></th>
<th>Peninsula A</th>
<th>Peninsula B</th>
<th>Peninsula C</th>
<th>Peninsula D</th>
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<tbody>
<tr>
<td><strong>Pre-nesting Deterrents</strong></td>
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<tr>
<td><strong>Post-Breeding Deterrents</strong></td>
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<tr>
<td><strong>Enhanced Ground Nesting</strong></td>
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<td><strong>Egg Oiling</strong></td>
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<td><strong>Restoration</strong></td>
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Thank you!
Discussion Questions

1. Goal
2. Objectives
3. Methods
4. Application of Methods