CORMORANTS AT TOMMY THOMPSON PARK
PUBLIC MEETING REPORT

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

These notes reflect the general nature of the meeting discussion, as well as comments received by letter or email after the meeting. If there are errors or omissions, please contact Karen McDonald at kmcdonald@trca.on.ca or 416-661-6600, ext. 5248.

1. Introduction

The colonies of Double-crested Cormorants and other waterbirds, including Black-crowned Night-Herons, Ring-billed Gulls and Common Terns, are a significant feature of Tommy Thompson Park (TTP, also known as the Leslie Street Spit) and one of the reasons it is an important ecological site. The large number of cormorants has resulted in the loss of a significant amount of tree cover at TTP, and there are concerns about the effects on the many other species of plants and animals that live there or stop-over to rest and feed during migration.

Toronto and Region Conservation is conducting a process to determine an appropriate strategy to address these concerns. It has established an Advisory Group of stakeholders and experts to assist with the process, and held a public meeting on April 3, 2008 to seek input from the community.

The objectives of the public meeting were to:

1. Provide an overview of Tommy Thompson Park illustrating the full range of values and opportunities it presents
2. Emphasize the importance of colonial waterbirds in general, and Double-crested Cormorants in particular, to TTP
3. Describe concerns associated with the cormorant colony at TTP and the need for action to limit expansion of the colony
4. Provide opportunities for group discussion and individual comments on the proposed goal and objectives, methods and application of the methods

The public meeting was advertised in the Toronto Star, The Mirror (Beaches-Riverdale edition), the TRCA website and at TTP. A Canada Newswire press release was issued and Global TV provided media coverage on April 2. Public meeting invitations were emailed to TRCA and TTP distribution lists. The public meeting was also promoted on some advisory group member websites.

Approximately 80 people attended the meeting. They included citizens, members of various groups (Animal Alliance of Canada, Aquatic Park Sailing Club, Beaches Triangle Residents Association, Cormorant Defenders International, Fatal Light Awareness Program, Fisheries and Oceans Canada, Friends of the Spit, Humane Society of Canada, Ministry of Natural Resources, Tommy Thompson Park Bird Research Station, Toronto Field Naturalists, Toronto Ornithological Club, University of Toronto, Water Rats Sailing Club, Wildlife Rehabilitation Network, York University, Zoocheck Canada), and members of the Cormorant Advisory Group. The meeting was facilitated by Suzanne Barrett, Barrett Consulting, with assistance from Toronto and Region Conservation staff.

Materials available at the meeting included the Tommy Thompson Park Master Plan and Environmental Assessment; Leslie Street Spit - Tommy Thompson Park Important Bird Area Conservation Plan; Canadian Wildlife Service Great Lakes Fact Sheet, The rise of the Double-crested Cormorant on the Great Lakes: Winning the War Against Contaminants; Ministry of Natural Resources, Review of the Status and Management of Double-crested Cormorants in Ontario; TTP Trails Master Plan; TTP Natural Area Enhancement Plan; TTP aerial photographs; Cormorants at TTP Workplan and Backgrounder; Colonial Waterbird Management Glossary; and a selection of reference articles on colonial waterbirds at TTP and related information. Cormorant Defenders International also supplied Notes for TRCA's TTP Public Meeting; and Peaceful Parks distributed a pamphlet, Leslie Spit – Please Give the Birds A Voice.

2. Welcome

Councillor Fletcher welcomed everyone and noted that the City of Toronto is very pleased to have Tommy Thompson Park on its waterfront with its magnificent colonies of waterbirds, including cormorants. She emphasized that the health and longevity of the cormorant colony are of great importance and that she wanted to ensure that they continue to thrive, along with the many other values and uses of the park. She said that she is very pleased with the process so far, and was looking forward to the results of the public meeting.

A. Freeman, on behalf of the TRCA, thanked everyone for attending. She spoke of Tommy Thompson Park as an Environmentally Significant Area and its International Bird Area (IBA) designation. She mentioned that the main reason for the IBA designation is the presence of cormorants and other colonial waterbird populations. She spoke briefly about the loss of forest cover and the diversity of habitats within the park. She also mentioned the great educational opportunities associated with the park. A. Freeman explained that it is TRCA's goal to determine an effective, humane and acceptable management

approach to cormorants at TTP. She said they wanted the process to be transparent and that it is important to consider the input of all stakeholders involved with this issue.

3. Agenda Review and Overview of Process

S. Barrett explained the evening's agenda. She said that the goal for the cormorant strategy is to achieve a balance between healthy cormorant colonies and the other ecological, educational, scientific and recreational values of Tommy Thompson Park. Finally, S. Barrett outlined the composition of the Advisory Group and the target timeline for the process.

4. Presentations

Tommy Thompson Park Overview
G. MacPherson presented a broad overview of TTP including information on the history, Master Plan development, public use, TTP wildlife and context of the park to the Toronto waterfront, as well as the park's significance locally, regionally, nationally and globally. [*This presentation is available for download at www.trca.on.ca/cormorants*].

Colonial waterbirds in the Great Lakes
C. Weseloh presented an overview of the Lake Ontario cormorant population including the TTP colony. He provided information on the diet and estimated fish consumption of cormorants and their effects on tree canopy. The nesting habits of colonial waterbirds and Mute Swans were also presented.

Cormorants at TTP
R. Toninger presented information on the colonial waterbirds of TTP and detailed information on the Double-crested Cormorant and Black-crowned Night-Heron colonies. He also presented the suite of cormorant strategy methods that are being considered and their potential application. [*This presentation is available for download at www.trca.on.ca/cormorants*].

5. Discussions and Comments

Participants were invited to discuss the goal, objectives, potential methods and application of the methods in discussions at ten round-tables facilitated by TRCA staff. These discussions are recorded in Appendix 3. Participants provided individual comments on their individual workbooks by mail, fax or email following the meeting. The individual comments are summarized in Appendix 4. The group discussions and individual comments are summarized below.

Question 1: Proposed 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".

Many participants agreed with the goal, commenting that they liked the idea of keeping the ecological features of TTP balanced. There was recognition that TTP is home to many plants and animals of national,

continental and even global significance, and that it is important to continue to provide for their needs, as well as those of the cormorants.

Some participants expressed concerns that the idea of "balance" is difficult to define and can be interpreted in different ways that might be weighted too much in favour of human activities and against the well-being of the cormorant colony.

It was also suggested that a growing cormorant colony will not interfere with the proposed goal and that damage caused by the cormorants is not enough to warrant action. Changes created by the cormorant colony are natural and should be allowed to proceed without human intervention.

Some people said that their agreement with the goal would depend on the methods used to achieve it, and that they should be minimal and humane to all wildlife.

Suggestions were made to add:

- Encourage other species through enhancement
- Enhance diversity of healthy communities
- Be a world leader on how to humanely live with and celebrate all colonial water birds, including the DCCO
- Enhance the area for natural processes to occur

"I love that in TTP I can bike and see birds living in a colony-a bird city – on a tiny piece of Toronto"

"There is a balance to sharing the very limited and constrained habitat – two peninsulas to the significant DCCOs and two for other birds, other wildlife and forest stands."

"TTP is a sanctuary to a lot of birds and we should limit human action so we can enjoy them in a natural setting."

Question 2a: Proposed Objective "Increase public knowledge and awareness of colonial waterbirds"

There was consensus that this is an important objective. Participants stressed the fact that there is a widespread lack of understanding of colonial waterbirds and TTP provides a wonderful opportunity to increase appreciation and knowledge.

It was noted that no species (and this is especially true in the case of humans) can interact with their surroundings without having an impact on them). We need people to understand and accept that nature is not always pretty.

It was mentioned that there is also a need for more education about management, to counter any misconceptions about it being negative and an interference.

Various suggestions were made about techniques, including opening the trail system during the week, website, media outreach, interpretive signage, displays and booths in the Park, look-out stations, boardwalks to the edge of the colony, and viewing blinds.

Suggestions were made to add:

- Appreciation of colonial waterbirds
- Their role in the present ecosystem and its change over time

"People should come and watch terns and herons fish and see flocks of cormorants flying in to the embayments."

"Many visitors to TTP consider the waterbird colonies a great gift, and proof of Nature's perseverance to reclaim and repair areas of neglect."

"DCCO are beautiful birds that move energy throughout the terrestrial and aquatic ecosystem of the Great Lakes. Their large dense colonies are both inspiring and humbling to witness."

Question 2b: Proposed Objective "Prevent cormorant expansion to Peninsula D"

Many participants agreed that this is a worthwhile objective, recognizing that this would allow the cormorant populations to continue to thrive on the other peninsulas, while protecting the many values and resources associated with Peninsula D. Other participants said that they do not want any interventions in the expansion of the cormorant population.

Of those participants that agreed with this objective, most people recommended that it would be preferable to use the least intrusive methods first, starting with simple human presence (see discussion of potential methods below for more details).

Some people suggested allowing the cormorants to expand to Peninsula D and creating other forest areas for migrating birds.

It was also noted that management activities on the other peninsulas might have the effect of encouraging cormorants to move to Peninsula D. Conversely, deterrence from Peninsula D might encourage them to move to other areas on the park.

"The most benefit to the most species and habitats would come from preventing cormorant nesting on Peninsula D."

"Given that cormorants prefer nesting in undisturbed areas, it is likely that simply encouraging people to get out and enjoy this park will be enough to deter them from nesting on Peninsula D."

Question 2c: Proposed Objective "Limit further loss of tree canopy on Peninsulas A, B and C"

Some participants said that we should accept the loss of tree canopy on Peninsulas A, B and C and undertake no management activities there. Some suggested that it would be appropriate to undertake habitat restoration activities only.

Other participants suggested that efforts should be made to prevent the loss of further tree canopy on Peninsula C, depending on the methods that would be used (see below).

A few participants supported the objective of limiting forest decline on all Peninsulas.

"Let nature take its course."

"There is no advantage to saving the tree canopy for migratory birds, who have and will continue to choose other options."

"Goal for City of Toronto is to double the canopy cover – TTP can help the city achieve goals."

Question 2d: Proposed Objective "Continue research on colonial waterbirds in an urban wilderness context"

There was widespread support for this objective, as long as research activities do not interfere with the birds or their activities. Participants commented that TTP presents an opportunity to study the natural evolution of a cormorant colony and to develop greater understanding of their interactions with other wildlife. It was also noted that research can provide valuable and interesting information for education programs.

"This one is a 'no-brainer'!"

Question 3: Potential Methods

1. Do nothing: a chosen management option, not a default; continue monitoring, research and education.

Some participants felt that the "do nothing" method should be applied to the entire area of TTP. Others said that it should be used selectively, for example on Peninsulas A and B, or on A, B and C.

Several concerns were raised about the consequences of doing nothing:

- There may be undesirable impacts on other locations, such as the Toronto Islands and the mouth of the Humber River.
- More severe measures may be taken later than the ones that are proposed now.
- There may be continual decline of other species and habitats from TTP.

2. Pre-nesting deterrents: Use a variety of deterrent methods to discourage cormorants from nesting in a specific area, including human presence, scarecrows, predator decoys, inactive nest removal, noise bangers and other auditory techniques.

Many participants felt that it would be appropriate to use pre-nesting deterrents in some areas, providing that the methods are humane for cormorants and do not disturb other wildlife. There was most support for human presence, with other methods being less acceptable or unacceptable, in the following order:

i Human presence for recreation, research and education purposes
ii Decoys and scarecrows
iii Active harassment of birds by people
iv Inactive nest removal
v Noise bangers and other auditory techniques

Specific suggestions were made to move the Bird Research Station from the base to the tip of Peninsula D, and to provide more paths and look-outs for people.

Other participants said that deterrents should not be used, citing a number of concerns:

- Compromises wilderness objectives and other species
- Noise bangers interfere with nature and people
- Inactive nest removal could encourage nest stealing
- May move birds into areas where they are not wanted
- Doubts that they would be effective

3. Post-breeding deterrents: Use a variety of deterrent methods to discourage cormorants from loafing or roosting in a specific area, including human presence, scarecrows, predator decoys, noise bangers and other auditory techniques.

Some participants did not see any value in undertaking post-breeding deterrence, especially if pre-nesting deterrence was effective. Others felt that it could be implemented in specific locations, using the most humane methods.

Comments about the techniques that might be used for post-breeding deterrence were similar to those made about the pre-nesting deterrent techniques.

In addition, specific suggestions were made to accommodate loafing, such as loafing platforms in the water near Peninsula A.

4. Enhanced ground nesting: Encourage ground nesting by creating artificial nests that mimic natural ground nests, accompanied by decoys and auditory techniques as well as protection from predators.

Many participants said that encouraging ground nesting could be a useful technique, although others felt it would not prevent cormorants from nesting in trees. There was discussion about whether it would be necessary or appropriate to protect the ground nests from predators.

5. Egg oiling: Apply non-toxic, food grade oil to eggs within 8-10 days of laying to prevent embryo development.

Participants noted a range of concerns (real and perceived) regarding egg oiling:

- Disturbance to other species
- May be expensive and time consuming
- Compromises urban wilderness
- May cause birds to colonize elsewhere
- Manages the population, not the location, of the cormorants
- May not be compatible with encouraging ground nesting

Some people were unclear about the effects of egg oiling on adult birds:

- Will oil damage the feathers of adult birds so they are unable to dry?
- Will birds will sit on nests too long and starve?

Some people said that egg oiling would be an acceptable technique.

6. Habitat restoration: Rehabilitate, enhance or re-create habitat for flora and fauna in specific areas.

There was a good deal of support for habitat restoration, with some people noting that they were pleased with TRCA's habitat restoration work to date at TTP. Specific suggestions included:

- Create ideal habitat to attract cormorants to A, B and C
- Plant shrubs for Black-crowned Night-Herons elsewhere on TTP
- Create meadows instead of re-planting trees
- Undertake restoration activities when cormorants and other birds aren't nesting
- Research to find out what will be most effective
- Use the natural succession approach

Some people felt that there was no point in trying to restore habitat in the cormorant colony, instead focus on areas of TTP where cormorants are not nesting. It was also suggested that habitat restoration should not be undertaken, instead let the park continue to evolve on its own.

7. Other techniques.

A few people suggested other techniques that should be considered, including:

- Provide loafing platforms on the water
- Provide artificial trees for nesting
- Create another island with lakefill and provide real or fake trees and ground nesting materials
- Sterilize cormorants as a last resort
- Continue to prevent public access from the cormorant colonies

Question 4: Potential Application of the Methods

Participants suggested various combinations of the methods. They can be summarized as follows:

- Leave Peninsulas A and B alone, apply some management on C, and use deterrents on D.
- Enhance ground nesting on A, B, and C, use pre-nesting deterrents on D, undertake restoration on all four peninsulas, and allow the ecosystem to evolve without further interference.

"The approach should minimize intervention, cost and impact on cormorants, while maximizing natural habitat for other significant birds and wildlife that also make the Spit forests their home."

- Enhance ground nesting on A and B, use pre-nesting deterrents on C and D, and undertake habitat restoration on all peninsulas.
- Use all the techniques proposed in combinations that will protect D from cormorant nesting, reduce the stress on the tree canopy of C, and ensure successful breeding of the cormorant colony on A and B.
- Do nothing. Allow cormorants to colonize Peninsula D and use the Baselands as the main forest habitat for migratory birds and other wildlife.

Some people expressed concerns about the effectiveness of any of the methods being proposed, and the possibility that cormorants will be driven off the Spit to other treed areas on the waterfront. It was also suggested that different techniques should be used on each Peninsula to assess their effectiveness. Finally, participants said that it was important to consider the long term, and avoid strategies that would require never-ending management.

Question 5: Any other comments?

Participants emphasized that the cormorants represent a big success story that should be celebrated. TRCA is in a great position to oppose the commonly held negative perception of cormorants. Because cormorants are being shot and harassed across North America, Toronto should be advocating on behalf of the birds.

A number of people expressed doubts that the cormorant population poses any or enough threat to migratory birds or other values at TTP to warrant control. Cormorants should be allowed to nest and breed naturally, and efforts should be concentrated on research and education.

Other people, particularly regular visitors to TTP, indicated that they value the emerging forest canopy at the park and the great variety of animals and plants that live there. They appreciate the waterbird colonies as part of the mix, but do not want them to extend throughout the entire park.

The need for ongoing research, monitoring and reporting was stressed, and some participants requested that TRCA produce an annual report outlining the health of the forest canopy at TTP, the population trends of all colonial water bird species and other related information. This would provide good information to adapt and change management strategies if necessary, and continue the transparency of the process.

"We need an immediate solution to the dramatic increase in cormorant population and the resulting destruction of forest canopy and other habitat at TTP."

"It is unfortunate that instead of celebrating the recovery of this species as a success, now that they are abundant, we feel the need to reduce their numbers."

"TTP is not a museum, it <u>should</u> be changing."

6. Questions and Comments from Plenary Session

Following the discussion period, S.Barrett asked participants if they would like to ask questions and share comments in plenary.

Q: The cormorant colony at TTP can be characterized as "refugee" birds. They have been forced out of their habitats in New York State as well as Presqu'ile Island through culling events. The increase in the population at TTP does not appear to be natural. Does the TRCA have any dialogue with these other wildlife management agencies in terms of controlling their movement from site to site? What is Toronto's position?

A: G. MacPherson reiterated the point that as resource managers, we must find a balance between DCCO habitat and other wildlife habitat and uses at TTP. He also said that we currently have staff that sit on working groups and who attend regional conferences discussing colonial waterbirds. R. Toninger noted that these activities provide opportunities for agencies to share information about colonial waterbirds and their management.. R. Toninger also noted that bi-national agencies share information about colonial waterbirds, including data from colour leg banding and satellite telemetry work. Councillor Fletcher confirmed that the City of Toronto is committed to protecting the cormorant colony, opposed to any lethal culling and will ensure that any management techniques are humane.

Q: What do the TRCA representatives say at meetings where the issue of culling cormorants at other locations is discussed?

A: R. Toninger stated that TRCA shares its data and approaches at these meetings and has noted to the group that culling is not an option at TTP. S. Barrett noted that TRCA has no responsibility to provide comments on the management approaches of other agencies.

Q: What about the management of other colonial waterbirds at TTP, apart from cormorants?

A: R. Toninger replied that Ring-billed Gull management program has been ongoing since the early 1980s. This management strategy has used a variety of methods to discourage gulls from nesting in newly created areas of the park, including visual and noise deterrents, falconry, egg oiling, exclusion fencing and habitat modification. Gull management has been undertaken for a number of reasons: to reduce the impact of nesting gulls on vegetation; to reduce the displacement of more sensitive birds such as Common Terns; and to maintain all options for the implementation of the TTP Master Plan. TRCA [in conjunction with CWS] also conducts population estimates for the gull population every five years. Common Tern and Caspian Tern populations have been enhanced through the creation of reef-rafts, islands and mounds; their populations are monitored annually. R. Toninger also mentioned that the Canada Goose populations at TTP and along the waterfront have been managed since the 1990s.

Q: If we keep the cormorants from taking over Peninsula D, what will happen? Will they move to the base of the Spit or to the Toronto Islands?

A: We do not know what will happen when cormorants have exhausted the habitat they currently occupy at TTP. We are aware which habitat types cormorants prefer and can identify potentially suitable habitats in the area, but habitat alone may not determine if cormorants will use a specific area. The general consensus is that human presence on the Toronto Islands will deter cormorants.

Q: Will aspects of this meeting be published?

A: S. Barrett stated that a summary of the meeting will be published on the TRCA website and that the TRCA's intent is to be as transparent as possible throughout this process.

C: It's great that there will be no cull at TTP. The cormorant population at TTP is relatively new and therefore requires further research to determine if management actions are necessary.

More time is required to determine the possible actions, if any, of the TRCA. The presence of cormorants at TTP provides a great learning and research opportunity.

C: Thank you for running such a transparent process, for bringing in the community and stakeholders from all sides of the issue and for having a well organized meeting with excellent presentations.

7. Questions Received by Email or Letter after the Meeting

Q: It appeared from the data presented that the number of cormorants levels off as each peninsula reaches capacity. Do we expect the cormorants to stay on peninsulas A, B and C? Will the numbers increase, stabilize or decrease without intervention?

A: We do not know what will happen when cormorants have exhausted the habitat they currently occupy at TTP. There is additional forest available at TTP that may be suitable for cormorant nesting, but habitat alone may not determine if cormorants will use a specific area. We believe that without intervention cormorants will continue to expand to the bases of peninsulas B and C, and move to Peninsula D. Their numbers will probably continue to increase as long as nesting habitat is available.

Q: Is the habitat on the ground on peninsulas A, B and C suitable for some other species of flora and fauna? Is it possible that there will be increased diversity if the peninsulas are left alone?

A: Colonial waterbird habitat is by its nature low in biodiversity, but it is important to understand that this does not make the habitat any less valuable. Vegetation sampling has indicated only a handful of plant species that persist within the colonies. Fauna surveys and incidental observations in the colonies have indicated very low to no usage by species other than colonial waterbirds. Micro-fauna studies have not been conducted. The succession of colonial waterbird habitat is a very long process in naturally occurring habitat due to the alteration of soils, vegetation, micro-fauna, etc. and is likely a significantly longer process at TTP, due to the nature of the site as constructed fill.

Q: How many birds does TRCA wish to remove from Tommy Thompson Park? How many are too many?

A: TRCA is not currently concerned with the number of cormorants at TTP, but rather their expansion into areas that conflict with other park resources, values and uses. We are concerned that the increasing population and the high recruitment rate of breeding individuals will exhaust the available habitat quickly and result in further forest loss.

Q: What are the consequences of selective egg oiling? Will the cormorants compensate with some other strategy for increasing reproduction?

A: TRCA has been managing colonial waterbirds for over 30 years and has successfully controlled the Ring-billed Gull population from significant expansion at TTP. It is our experience with other species that oiling is undetectable and does not cause further egg laying. With proper technique and careful monitoring, cormorant populations should not increase reproductive effort.

Q: What are the effects of egg oiling on adult cormorants?

A: TRCA has successfully used egg oiling to control Ring-billed Gulls, Canada Geese and Mute Swans without significant negative effects on adult individuals. No evidence is available that suggests adults birds experience any long-term adverse effects resulting from egg oiling. Egg oiling techniques limit the amount of oil sprayed (i.e. approximately 6ml oil/egg) and only the eggs themselves are sprayed – we do not broadcast spray the entire nest. Oil is quickly absorbed by the eggs, thereby limiting the amount of oil that contacts the adult bird. We will monitor adult birds with egg-oiled clutches and adapt egg oiling management if adverse effects are noted.

Q: What are the purposes of encouraging ground nesting? Are there any negative impacts on cormorants or other species?

A: As trees succumb to nesting pressure and are not available for nesting, many cormorants switch to ground nesting. As our main concern is the loss of tree cover, encouraging ground nesting helps to address this concern if we can persuade tree nesting cormorants to move to the ground thereby reducing the stress on the trees. We are not aware of any negative impacts to cormorants or other species, in fact since 2002 cormorants have naturally nested on the ground with Ring-billed and Herring Gulls.

Q: Have you tried using deterrents on any of the peninsulas? What were the results?

A: TRCA has a long history of successfully using deterrents to limit Ring-billed Gull nesting (see Section 6). When cormorants first began nesting on Peninsula C, human presence was used to discourage nesting, however, TRCA staff presence could not keep up with the nesting activity of the birds. Inactive nest removal was used successfully for a period, until again, the nesting activity of cormorants negated the removal of the nests. Use of deterrents on Peninsulas B and C is further complicated by the presence of Black-crowned Night-Herons which are not a target species. It is our experience that deterrents will be successful if used in conjunction with other management techniques and monitored carefully allowing for adaptations in techniques when required.

Q: The TTP Master Plan and Environmental Assessment states "…the Master Plan's direction is based on a natural succession or ecological approach, augmented by minimal intervention and management…" Why then are we even having this discussion?

Q: If people are pleased with the way TTP has evolved without human intervention, what makes us think that we should start interfering now?

A: It is important to remember that TTP is a man-made peninsula that did not exist prior to the decimation of the cormorant population in the 1960s and 70s. It is also important to note that a significant amount of planning and habitat restoration has occurred at the park in order to promote natural succession. The list of habitat work completed by TRCA to date is long; all of the aquatic habitat features, including wetlands, have been consciously created – they did not just naturally appear. Terrestrially, thousands of trees, shrubs and plants have been installed; essential habitats such as hibernacula, log tangles, habitat piles and reptile nesting areas, to name a few, have been created by TRCA staff. Invasive species management is undertaken annually and is critical due to the urban influences of the city on the natural habitats. The Ring-billed Gull management program is in its 24th year and actively restricts the nesting areas of gulls and controls the population through noise deterrents and egg oiling. Canada Geese populations at the park have been controlled by egg oiling and noise deterrents since the early 1990s.

The Master Plan and Environmental Assessment Addendum (1992) were finalized when cormorants had just begun to nest at TTP and although it was noted that colonization by cormorants were expected to continue, the extent of the colonization and the habitat alterations by cormorant nesting were not known at the time. The first goal of the Master Plan is to "conserve and manage the natural resources and environmentally significant area of the site" (p.64). The Environmentally Significant Area (ESA # 120) includes the cormorant colonies, and the flora and fauna of TTP are natural resources. TRCA is responsible for conserving and managing the entire site, including cormorants. While the Master Plan and Environmental Assessment Addendum (1992) is the guiding document for the park, the designation of TTP as an Important Bird Area in 2000 and the subsequent Conservation Plan (2001) provides specific direction regarding colonial waterbirds and notes that "The Steering Committee encourages the TRCA to proceed with full implementation of the Master Plan, and, where required, integrate objectives and actions from this IBA conservation plan to the Master Plan." (p.43). Goal # 2, "*To protect significance of the Leslie Street Spit for colonial and other resident and migrating birds and other wildlife*" includes a number of action strategies to achieve this including management of the colonies and discouragement of cormorant nesting with the heron colony, so that no species are lost and populations of Common Tern, Caspian Tern and Black-crowned Night-Heron are stable or increased.

8. Next Steps

S. Barrett noted that TRCA will summarize the findings of the evening and post them to the website. At the next Advisory Group meeting the findings of the public meeting will be discussed and a draft management strategy developed. The draft management strategy will be posted on the website for public review and comment. The final management strategy will presented to the Authority Board with an additional opportunity for public comment.

Appendix 1. Participant workbook

GOAL AND OBJECTIVES

QUESTION 1: PROPOSED GOAL	COMMENTS
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.	

QUESTION 2: PROPOSED OBJECTIVES	COMMENTS
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	

POTENTIAL CORMORANT STRATEGY METHODS

QUESTION 3: POTENTIAL METHODS	COMMENTS
1. Do nothing • A chosen management option, not a default • Continue monitoring, research and education activities	
2. Pre-nesting deterrents • Use a variety of deterrent methods to discourage cormorants from nesting in a specific area. • Methods include: human presence, scarecrows, predator decoys, inactive nest removal, noise bangers and other auditory techniques	
3. Post-breeding deterrents • Use a variety of deterrent methods to discourage cormorants from loafing or roosting in a specific area. • Methods include: human presence, scarecrows, predator decoys, noise bangers and other auditory techniques.	
4. Enhanced ground nesting • Encourage ground nesting by creating artificial nests that mimic natural ground nests. • Use decoys and auditory techniques to encourage ground nesting. • Protect ground nesting area from predators.	

5. Egg oiling • Apply non-toxic, food grade oil to eggs within 8-10 days of laying to prevent embryo development.	
6. Habitat restoration • Rehabilitate, enhance or re-create habitat for flora and fauna in specific areas.	
7. Other • Would you like to suggest any other techniques?	

POTENTIAL APPLICATION OF METHODS IN TTP

Method	Peninsula A	Peninsula B	Peninsula C	Peninsula D
Pre-nesting Deterrents			*	*
Post-Breeding Deterrents	*	*	*	*
Enhanced Ground Nesting	*	*		
Egg Oiling	*	*	*	
Restoration	*	*	*	*

QUESTION 4: POTENTIAL APPLICATION OF METHODS COMMENTS

ANY OTHER COMMENTS?

HOW DID WE DO TODAY? Do you have any feedback on this evening's session?

Your name (optional): **Affiliation (if any):**

Please place your comment sheets in the box on the registration desk before you leave.
Or you may send them no later than April 10, 2008 to:

TRCA
5 Shoreham Drive
Downsview, ON M3N 1S4
Attention: Ralph Toninger

or by fax to 416-667-6277

or email ttp@trca.on.ca

Thank you for participating!

Appendix 2. Advisory Group members present on April 3, 2008

Adele Freeman, TRCA
Gord MacPherson, TRCA
Ralph Toninger, TRCA
Karen McDonald, TRCA
Wayne Reeves, City of Toronto
Janette Harvey, City of Toronto
John Almond, Ministry of Natural Resources
Chip Weseloh Canadian Wildlife Service
John Carley, Friends of the Spit
Paul Scott, Aquatic Park Sailing Club
Cathryn MacFarlane, Aquatic Park Sailing Club
Liz White, Animal Alliance of Canada*
Ainslie Willock, Canadians for Snow Geese*
Amber Ellis, Earthroots*
Julie Woodyer, Zoocheck*
Glenn Coady, Toronto Ornithological Club
Lynne Freeman, Toronto Ornithological Club
Gail Fraser, York University
Mart Gross, University of Toronto
Eric Davies, University of Toronto
Suzanne Barrett, Barrett Consulting (facilitator)

(* denotes member of Cormorant Defenders International)

Appendix 3. Summary of group discussions

QUESTION 1: PROPOSED 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.**	
Table 1:	• Like the idea of keeping ecological features balanced • Control must be balanced • Habitat changes may limit population • Find out what habitat cormorants like and do not like • The goal is too perfect - no one can disagree with it
Table 2:	• Good goal • Add - encourage other species through enhancement i.e. migratory birds • Enhance diversity of healthy communities
Table 3:	• Goal is too general to comment • Recreation/education would create over-use and overcrowding. Large school groups would harm habitat • Growing cormorant colony will not interfere with proposed goal • Concern if vehicle travel increases • Do nothing option is a great opportunity for scientific research
Table 4:	• Expect defoliation would cause a decrease in recreation • What is the harm in defoliation? • Instead of TTP, do reforestation in other places in the city • Damage is not enough; does not warrant action • TTP is a sanctuary to a lot of birds and we should limit human action so we can enjoy them in a natural setting • TTP is a place for many bird species • Do nothing
Table 5:	• Concerns with human interactions • Concerns if inhumane methods are used
Table 6:	• Why are cormorants important? (this was explained by an Advisory Group member) • Support this goal with reservations, willing to accept minimal management *** • Concern about conflict between people vs natural ecosystem; believe it is hard to please all, also believe if conflict is left to resolve itself humans would win, therefore agree that some marginal management is needed (the only way)*** • Why do people need to use TTP at all? Maybe give this area to the birds, believe if this is a unique nesting area (one of the few in the Toronto region) then let them have it and we can find other places to cycle

Table 7:	• Good luck! • Priorities incorrect • Concerned about displacing cormorant populations • Concerned about co-population of egrets and herons – would not want to lose them • Restoration should be one goal – consider DCCO impact on fish • Artificial phenomenon – premature to achieve balance • Strategy about how to build a park is flawed
Table 8:	• What do we mean by balance? • Does goal include all objectives? • It's a little vague but a good start • Need to streamline goal • Because the goal is too vague the TRCA can change to make cormorants low priority and recreation high so we will lose the cormorant colony
Table 9:	• What criteria are used to determine balance? • Pre-supposes human management • Does not allow for nature to be dynamic • Need more social tolerance for nature to play out • Area has evolved over time
Table 10:	• Agree that human presence should be used to maintain population size • Skeptical that increasing public use will not deter from ecological integrity like the cormorants are doing • Problems with trail system • Human traffic as deterrents vs. other methods • APSC is not in the right location • Question recreational values – ok with walkers, etc but not sailors • So what if they deforest? It's natural, change environment naturally and cycles – here now, gone next year • Tiny price to pay (deforestation) for such a great asset (especially since it's a fill site)

QUESTION 2: PROPOSED OBJECTIVES	
a) Increase public knowledge and awareness of colonial waterbirds	
Table 1:	• Show that cormorants are part of a cycle – natural progression • Show positive side of cormorants
Table 2:	• Good (consensus)
Table 3:	• Table agrees – worthy objective • Public lack of understanding – learning opportunity
Table 4:	• Good idea – wide variety of birds – did not know the scope of diversity • Cormorants perceived as scapegoat of the birds – need to change this image
Table 5:	• Add appreciation • Needs good signage and interpretive staffing • Reasonable and worthwhile objective

Table 6:	• Add the word “appreciation” here*** • Important to stress education*** • Toronto should strive to be a leader in this and then get the message out *** • Need to increase public knowledge of management, the public may see management as negative and interference, there is a need to straighten this out.
Table 7:	• Positive
Table 8:	• Consensus - all for it!
Table 9:	• Good thing • People should come & watch terns and herons fish and see flocks of cormorants flying to the embayments • Need for more education around colonial water birds because most people do not get to see them • Incredible area for shorebirds as well • Cormorants have resulted in less sand on the shoreline • Lack of trust in human intervention
Table 10:	• Why should other species that came on their own be managed? Let nature take its course – cyclical • Use trail system during the week • Website – encourage media stories • Interpretive signage • Displays and booths in park • People must understand that it is natural • 1800’s large #s cormorants, not unique to now • Some people are biased that presence of cormorants is bad but nature is not always pretty • Humans mess up nature too • Ground nesters face predation, this is natural
b) Prevent cormorant expansion to Peninsula D	
Table 1:	• This peninsula is worth preserving • Let cormorants go to Pen D and build another area for migrating birds • Is there any over population?
Table 2:	• Move bird banding station to tip of D and maintain existing trails to achieve this; open Pen D during the week • Great
Table 3:	• Need to know <u>how</u> Pen D will be preserved** • Prevention could cause disruption on other ecological areas on TTP • Some tactics would disrupt other wildlife
Table 4:	• They will sort themselves out without interference • Human presence most humane method of prevention
Table 5:	• Move bird banding station to tip on peninsula D • Lots of human activity; public presence on D less invasive than other methods
Table 6:	• Good goal if actions are minimal, eg high people traffic, and not invasive methods • Move the TTP bird research station to the tip of D***
Table 7:	• If no action, can study further the habits of cormorants • Encourage tree species that cormorants don’t favour (cormorant resistant trees) • Don’t prevent. Make Peninsulas A and B cormorants resistant • Prefer to keep cormorants on C**
Table 8:	• Consensus – all for it! i.e. human presence

Table 9:	• Agreement with prevention** • Dependant on how or what methods** • Management activities on A, B, C will move birds to D
Table 10:	• Let them do their thing, no manipulating
c) Limit further loss of tree canopy on Peninsulas A, B and C	
Table 1:	• Instead of going to TTP to see forest, people could go to Toronto islands
Table 2:	• Deter by having fake predators • Encourage ground nesting • Once trees gone they will naturally move to the ground • Agree - consensus • Add habitat restoration as an objective
Table 3:	• Some methods could lead to more lethal management techniques • Let nature take it's place • Don't want never-ending management • Habitat restoration in certain areas • Do nothing - Let them be • City goal is to double canopy cover – TTP has the same percentage as rest of city – it can help the city achieve goals
Table 4:	• Not discussed
Table 5:	• This objective is out of proportion, cormorants should just be able to nest here if it is the only place for them, the population will be naturally controlled***
Table 6:	• Feel there is already a natural buffer*** • Do not support this objective very much***
Table 7:	• Encourage, restore tree canopy
Table 8:	• May drive birds to other areas (pen D) using deterrents • Just accept that A,B,C are the way they are going to be • How long does it take to regenerate? • This objective may take away from other objectives
Table 9:	• Leave birds alone on A,B,C • Dependant on methods • Agree with objective
Table 10:	• Let nature take its course • No egg oiling - it will promote movement to D and is inhumane • Should not be any management activity on A, B, C
d) **Continue research on colonial waterbirds in an urban wilderness context**	
Table 1:	• All in favour – consenus
Table 2:	• Not discussed
Table 3:	• Yes
Table 4:	• Absolutely **
Table 5:	• Not discussed
Table 6:	• This one is a "no brainer" – important • Opportunity to link to education**

Table 7:	• Study trees that are cormorant friendly and persist
Table 8:	• Consensus
Table 9:	• 3 participants in agreement with objective • Opportunity for scientific study of a natural evolving colony
Table 10:	• Agree, opportunity to view colony not being interferred with

QUESTION 3: POTENTIAL METHODS	
1. Do nothing	• **A chosen management option, not a default** • **Continue monitoring, research and education activities**
Table 1:	• Human presence is almost doing nothing
Table 2:	• Yes-if you use scare techniques this will just move the birds to another area • No • Perhaps do nothing in one area, as a control, and not others
Table 3:	• Least expensive • Group in favour of this option • Human intervention will cause future problems • Historically TRCA management has been successful
Table 4:	• Support for the entire park** • Limit people – put wildlife needs first • Nothing in the colonies, restoration in other places
Table 5:	• Concern that if nothing happens, more severe measures will be taken later on than the ones that are proposed now • Leave A,B,C alone, and increase human activity on D
Table 6:	• Tons of support for this method *** • This would also free up money for other places/projects
Table 7:	• Not an option, something must be done *** • Tree growth and loss natural • Monitoring, research and education not part of “do nothing” option
Table 8:	• Due to time and effort already, you need to do something • Already collected data and done analysis for some time, therefore have background information so now should implement
Table 9:	• Concern regarding potential impact on other locations (ie Toronto Islands and mouth of Humber) if “do nothing” method is applied to entire park
Table 10:	• On A, B, C

2. Pre-nesting deterrents	• **Use a variety of deterrent methods to discourage cormorants from nesting in a specific area.** • **Methods include: human presence, scarecrows, predator decoys, inactive nest removal, noise bangers and other auditory techniques**
Table 1:	• Sounds artificial • Compromises wilderness objectives and other species • Noise bangers interfere with nature and people • Inactive nest removal could encourage nest stealing • Human presence is OK – as long as there aren't too many people
Table 2:	• Scarecrows won't work • Support for moving bird banding station • Concern for other species i.e. BCNH • BCNH fluctuate naturally, so don't take action on their account
Table 3:	• Noise bangers will disturb other wildlife • Scarecrows and decoys acceptable • OK with nest removal (pre-clutch)
Table 4:	• Peripheral / collateral damage to other species • Let them nest • Will affect all birds (negative)
Table 5:	• Human activity is good – consensus • Auditory deterrents affect all wildlife so they shouldn't be used • Passive deterrents are OK • More lookouts would be useful to attract more people
Table 6:	• Believe the use of human presence is a good method, if this works why spend $ on other methods • Not morally against the other techniques, but if human presence works use that • Don't agree with the removal of inactive nests • Would deterrents differ for ground and tree nesters?
Table 7:	• Not sure they are effective – doesn't hurt to try • Would they disturb other species? • Agree with some sort of deterrents – control the amount of area they use to nest
Table 8:	• Use only on D • Want cormorants to remain • May move birds into areas where not wanted
Table 9:	• Moving into the colony will risk birds moving into other locations
Table 10:	• On D, public during week only viable option • Why prevent them from D? – their colonization is natural

3. Post-breeding deterrents	• **Use a variety of deterrent methods to discourage cormorants from loafing or roosting in a specific area.** • **Methods include: human presence, scarecrows, predator decoys, noise bangers and other auditory techniques.**
Table 1:	• Sounds artificial • Compromises wilderness objectives and other species • Noise bangers interfere with nature and people • Inactive nest removal could encourage nest stealing • Human presence is OK – as long as there aren't too many people
Table 2:	• Yes this can be effective** • No • Cormorants need a place to rest, sleep, eat. Use only on C. • Allow them to loaf on A and B and create loafing platforms on the water in proximity to A
Table 3:	• Why post-breeding deterrents if pre-nesting deterrents succeed? • Do option 2 before 3
Table 4:	• Does it make a difference to the trees?
Table 5:	• Not comfortable with the interference • Same position on types of deterrents as with pre-nesting • Can we encourage the birds to stay on ground more, away from the trees? • Scarecrows put in the trees to try and keep the birds out
Table 6:	• Be careful if this one is used, ensure that the birds are not just being displaced elsewhere and thereby affecting other habitat/areas. • This option does not "make sense" to the group so they do not support it***
Table 7:	• No – concerned about effect on other birds *****
Table 8:	• Should not happen in A and B - no trees already • May scare them into C and D where we don't want as many
Table 9:	• Moving into the colony will risk birds moving into other locations
Table 10:	• Noise bangers not useful - harmful
4. Enhanced ground nesting	• **Encourage ground nesting by creating artificial nests that mimic natural ground nests.** • **Use decoys and auditory techniques to encourage ground nesting.** • **Protect ground nesting area from predators.**
Table 1:	• Encourage ground nesting - use as a balance • Not necessary to protect ground nests from predators because cormorants are so populous
Table 2:	• On A and B – 2 people agree, with emphasis on A • No – doesn't think it will work
Table 3:	• Ground nesting will not work if trees available • What types of ground nesting?
Table 4:	• Create artificial nesting grounds • Don't think it would prevent them from nesting in the trees • Creating more ground nests only slows down inevitable, they will go back to trees

Table 5:	• Reasonable • Make island for ground nesting to deter predators • Put dead trees up on island for nesting • Auditory and visual decoys are good
Table 6:	• Need to identify key sensory characteristics for cormorants that would attract them to ground nests*** • Control of predators should be used with this method (most agree) • May work if you are trying to keep them out of D and keep them on A, B and C • Place the ground nests in other disturbed area of TTP and allow them to nest there • Some do not support this on C
Table 7:	• Recognize that coyotes can eat them on the ground – natural predators • Agree*****
Table 8:	• Consensus – everybody likes idea on A and B • But ground nesting may promote predation
Table 9:	• In favor of ground nesting on Peninsulas A & B in combination with nesting platforms
Table 10:	• Good but we don't need to introduce nests • Might work – try it
5. Egg oiling	• **Apply non-toxic, food grade oil to eggs within 8-10 days of laying to prevent embryo development.**
Table 1:	• Disturbance to other species • OK but concerned about cost, tree climbing, etc • Compromises "urban wilderness"
Table 2:	• Yes – on C but last resort (cost and labour intensive) • No – will cause birds to scatter and colonize elsewhere
Table 3:	• Oiling only manages population, not population destination in terms of area • Least acceptable • Totally acceptable ****
Table 4:	• Against it – affects the birds negatively • Affects other species
Table 5:	• Not an acceptable option 7:1
Table 6:	• Site specific, useful in C, potentially in D if they move there • Some believe that this should not be used anywhere • If you encourage ground nesting then oiling should not be done (group felt that ground nesting is not a way to manage population numbers but rather save trees and provide adequate nesting space)*** • Is it cost effective to oil tree nests?
Table 7:	• If start, must continue, expensive, time consuming, must be consistent • Not a good idea, are there other ways? • Select areas, careful of BCNH and forest cover • Expensive, may damage adults • Low success – nests too high in trees • Contradicts encouraging ground nesting • Concern with oil getting onto the birds

Table 8:	• Won't work – especially in trees • Can't have enhanced ground nesting and egg oiling as potential methods together • Check eggs before oiling – see if viable chick is there
Table 9:	• Egg oiling will result in birds looking for other nesting locations** – this point of view expressed for methods 2 & 3 as well. • Negative way of solving problem, we should look for a more positive solution.
Table 10:	• Consensus – NO • Concern that adults may die on nests from starvation
6. Habitat restoration	• **Rehabilitate, enhance or re-create habitat for flora and fauna in specific areas**
Table 1:	• Should be considered • Use lighter hand – determine succession stages
Table 2:	• Apply to C except A and B for erosion control • Everywhere – great, more forest, more bird habitat • Area of study – leave as is • Guano keeps peninsula intact – protects so plants ultimately could thrive in this type of soil
Table 3:	• Business as usual….Keep going! • Group happy with past and current restoration
Table 4:	• Yes, find different species of trees (native) that can grow • Create ideal habitat to attract cormorants to A,B,C
Table 5:	• Plant Siberian elms on A,B,C • Plant shrubs for BCNH somewhere else on TTP • Create meadow instead of replanting trees • Do not replant while there is ground nesting, wait until completely deserted by birds • Plant a new forest
Table 6:	• Waste of money (majority agree) • Research to see what is effective (i.e. what will survive when planted if used to nest in) • This may disturb ground nesters • What areas would be restored? • Don't heavily invest in this until it is known what can live here and wait to see effect on ground nesting***
Table 7:	• Yes ****** • Why Siberian elm thriving? • Provide alternative trees to nest – better habitat
Table 8:	• Consensus • Ammonia, nitrogen and phosphates are a problem for restoration? • Sell guano as fertilizer
Table 9:	• Restoration should be carried out when birds are not nesting • Soil amendments needed • Allow for wet areas to move nutrients off site
Table 10:	• Consensus – great idea

7. Other	• **Would you like to suggest any other techniques?**
Table 1:	• Sterilize birds as last resort
Table 2:	• Provide loafing platforms on water in conjunction with deterrents
Table 3:	• Techniques applied to cormorants should be considered for Great Egret, Great Blue Heron, etc if necessary
Table 4:	• Guano collection for fertilizer
Table 5:	• None
Table 6:	• None
Table 7:	• None
Table 8:	• None
Table 9:	• Artificial trees and platforms for nesting • Alternatives for other types of nesting
Table 10:	• Continue monitoring and research • Natural predators (raccoons) on ground nesting cormorant eggs

POTENTIAL APPLICATION OF METHODS IN TTP

Method	Peninsula A	Peninsula B	Peninsula C	Peninsula D
Pre-nesting Deterrents			*	*
Post-Breeding Deterrents	*	*	*	*
Enhanced Ground Nesting	*	*		
Egg Oiling	*	*	*	
Restoration	*	*	*	*

QUESTION 4: POTENTIAL APPLICATION OF METHODS	
Table 1:	• Let Pen D go and use Baselands as main forest habitat for migratory birds

Table 2:	• No post breeding deterrents on A or B (all); one for C (option only if other loafing areas are provided) • Try methods on A and B – not on C and D • No egg oiling • Egg oiling on C • No restoration on A and B
Table 3:	• Combination of 2-4-6 (pre-nesting deterrents, ground nesting and habitat restoration) are acceptable to most at table • Consensus that oiling not favoured
Table 4:	• Pre-nesting deterrents – don't use anywhere • Post-breeding deterrents – don't use anywhere • Excited about doing nothing - colony will level out on own • Enhanced ground nesting worth a try
Table 5:	• No oiling
Table 6:	Pre-nesting deterrents: • D-agree, i.e., the human presence of station at tip • C- believe this is just slowing down what is going to happen, trees are dying already, so a waste of money Post-breeding deterrents: • do not agree with A,B, and C, only with D if they do in fact begin to nest there Enhanced ground nesting: • agree with this, believe it can be done cheaply Egg oiling: • Do not agree with this, especially if you are encouraging ground nesting. • Concerned only if it is cruel or stressful to the bird (it was explained that the adult birds are not harmed in the oiling). • Concerned if it caused stress to other birds in the area due to human disturbance. Restoration: • needs to be in context with the site • believe in a buffer zone • see this as pointless, birds will continue to nest here and destroy the area again
Table 7:	• Contradiction – why enhance ground nesting on A and B then oil?? • Great – restoration on all Peninsulas • Start on D and move backwards • Is there funding for restoration?
Table 8:	• Nothing on A and B • No pre-nesting deterrents on C, but post-breeding is OK • Maybe if it works we should use deterrents for all • Egg oiling – highly disruptive
Table 9:	Egg Oiling (A,B,C) • Against egg oiling because of birds moving to other areas • Concern due to ethical reasons Pre- Breeding Deterrents (C,D) • In favor of deterrents • Dependant on techniques due to potential risk to other birds • Auditory techniques are good Post –Breeding Deterrents (A,B,C,D) • Concern regarding moving birds • Deterrents and habitat management are a preferable start to management rather than oiling Enhanced Ground nesting (A,B) • In favor during non-nesting season to minimize disturbance to colony

	Restoration (A,B,C,D) • In favor during non-nesting periods
Table 10:	• Take more kids out to the park • Focus ground nesting on B to see if they will go back from C • Pre-nesting – only public traffic • Post-breeding – no noise deterrents • Ground nesting – maybe no need – try then monitor • Egg oiling – No • Restoration – should we interfere with natural processes? – let things arrive on their own

ANY OTHER COMMENTS?	
Table 1:	• Interpretation of presentations and materials is that TRCA wants to decrease cormorants (not wanted) to increase black crowned night herons (wanted) • Pro – 'let it go' • Lots of discussion about scientific questions and research needs
Table 2:	• Do nothing should be pursued province wide • TRCA has mandate to leave area alone to go through succession • Would you have target # of birds that would achieve a balance? • Are we being effective at achieving objectives? Can we continue to do this monitoring? • Annual report with comparative stats on species, tree health, peninsulas, relevant banding stats • Monitoring of trees on D
Table 3:	• none
Table 4:	• none
Table 5:	• During presentation cormorants were presented only as a fish-eating birds; it was not discussed that they were eating mostly invasive species • The nest slide was showing 100+ nests in a tree as a bad thing, but is it really? That is just what they do, part of their natural function
Table 6:	• Need much heavier media presence, maybe use one person to be the "face" of TRCA (Gord M. was suggested)
Table 7:	• none
Table 8:	• Big success story with cormorants on rise with so many other animals on the decline
Table 9:	• Management will displace birds to other areas • We should increase colony size and stabilize it • We should only stabilize colony size, not increase it • Spit is a diverse water bird colony and tourist attraction • Interpretive centre on peninsula D is excellent for education and raising awareness
Table 10:	• TRCA should fight negative perception of cormorant colonies – TRCA is in great position to oppose this viewpoint • IBA real-life test • Unique that it's developed from fill site to this unique habitat • Unique throughout world – that this is so close to urban center, yet TTP feels like a million miles away • Encourage university studies – case study • Presentations were biased • Facts were interpreted as negativity towards cormorant colonies

Facilitators

Table 1: Karen McDonald
Table 2: Cassandra Bach
Table 3: Facilitator Danny Moro
Table 4: Jason Morris
Table 5: Jordan Webb
Table 6: Violetta Tkaczuk
Table 7: Lindsay Code
Table 8: Mike Correa
Table 9: Paul Biscaia
Table 10: Ryan Rivet

Appendix 4. Summary of individual comments

Individual comments were submitted by 42 people.
An * indicates that that more than one person said the same thing. (For example: Agree** would mean that 3 people made the same comment.)

QUESTION 1: PROPOSED 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.

- Good
- Agree**
- Recreational values should not take precedence
- Recreational values are not jeopardized by DCCO
- Educational focus can be on succession, dynamics of ecosystems especially in urban environments rather than on biodiversity i.e. trees are important
- I feel that this statement is stacked against DCCO. The presence of the DCCO is not something on the other side of the balance of these other goals. The goal should be different. Something like to enhance the area for natural processes to occur.
- Worried about the word "balance" because often in so many contexts human interests override those of wildlife. Would like to see a true bird sanctuary at TTP with no harassment of any bird species. Love that in TTP I can bike and see birds living in a colony-bird city- on a tiny piece of Toronto.
- Rather than a "balance" created artificially through human intervention, would like it to be natural balance established and dynamically changing by nature. Instead of intervening with natural forces, we should be appreciating and educating people about natural forces and the role EVERY species plays in the interdependences and long term dynamics of all ecosystems. Like all wildlife, cormorants bring gifts to their ecosystem which should be taught, recognized and celebrated, they deserve their own habitat and to be left alone.
- Achieving a balance between the existing cormorant colony and the park objectives can only be accomplished with significant harassment of the birds and the oiling of eggs. Do not agree with this. This is a young ecosystem and it should be allowed to develop and evolve without human interference or 'balance'. The goal should be to a 'world leader on how to humanely live with and celebrate all colonial water birds, including the DCCO' as Cormorant Defenders International suggests.
- No species (and this is especially true in the case of humans) can interact with their surroundings without having an impact on them).
- DCCO are beautiful birds that move energy throughout the terrestrial and aquatic ecosystem of the Great Lakes. Their large dense colonies are both inspiring and humbling to witness. We are asking that your office protect the waterbird colony at the Leslie Spit, and allow it to evolve naturally without human intervention.
- There is a certain balance to sharing the very limited and otherwise constrained habitat – two peninsulas to the significant DCCOs and two for other birds, other wildlife and forest stands that would otherwise eventually be eliminated by DCCO expansion.
- Support promoting the Leslie Street Spit and its healthy and diverse ecosystem for both aquatic and terrestrial species. The TRCA has a unique opportunity to showcase these habitats and conditions.

QUESTION 2: PROPOSED OBJECTIVES

c) Increase public knowledge and awareness of colonial waterbirds

- Agree*****
- Good
- Great
- Good resource – increase knowledge promote use for academic institutions
- Good idea – but don't led one-sided guy like Chip Weseloh inform people
- Important to let public know cormorants are NATIVE, ie belong in ecosystem
- DCCO need all the help they can get in this political climate of harassment/slaughter where ever they go. There is so much awareness to do about these beautiful, fascinating bird
- Use factual, complete and unbiased info to educate public, including how DCCO contribute to the ecosystem now and over time. Their guano makes future flora more healthy.
- Change statement to: "increase public knowledge and <u>appreciation</u> of colonial waterbirds <u>and their role in the present ecosystem and its change over time</u>"
- Support educational (interpretive) programs including look-out stations, boardwalks to the edge of the colony and viewing blinds with sight-holes.
- Support the opportunity to increase public awareness, knowledge and appreciation of colonial waterbirds and the habitat they create. TTP is the ultimate "urban wilderness" experience for TRCA to protect and promote.

d) Prevent cormorant expansion to Peninsula D

- Good
- No*
- Agree*
- If done by foot – traffic and post breeding deterrents
- Agree with human traffic only**, use of paths and lookouts along D
- You could encourage DCCO to remain at other locations but to prevent them would not be a good idea
- Human activity should already accomplish this
- This seems like a humane method of wildlife control (human presence). It would end the need for other methods of control intervention
- Ok, but not a high priority
- Agree with moving banding station to the tip of D to discourage cormorants from nesting there**
- Create narrow paths for humans and provide viewing station on D to look at cormorants and other birds on Peninsula C**
- Provide fruit bearing bushes to entice small migratory birds and mammals.
- Given the predominance and likely persistence of DCCO on two of the peninsulas at the Spit, and their arrival on a third, it would seem that the most benefit to the most species and habitats would come from preventing cormorant nesting on D, where they do not as yet nest.

d) Limit further loss of tree canopy on Peninsulas A, B and C

- Good
- Agree
- No*
- Do nothing on A, B and C including no oiling of the eggs, no destruction of tree nests and no use of deterrents.
- Fine – but depends on methods.
- Don't agree, there is no advantage to saving the tree canopy for migratory birds, who have and will continue to chose other options.
- If you do, these areas will be artificially maintained. The spit should not be a zoo.
- Encourage ground nesting instead.
- This doesn't seem like a real point of concern – there are many areas of the park that is heavily forested. An animal habitat evolves to fit and so a result of the natural habits of the animal inhabitants. As in the case of the DCCO habitats.
- Not a concern; TTP is human made, rather see TRCA focus efforts on protecting other areas in the GTA.
- DCCO are responsible for loss or decline of 24% (9ha) of canopy cover, but tree cover itself only covers 24% (37 ha) of the park and only one additional hectare is expected to be lost by 2010.
- The tree species being affected are cottonwood and poplar, two relatively fast growing species.
- Plant native materials which are less attractive to DCCO.
- No intervention before or during cormorant usage months. After they leave 1. Plant shrub species less attractive to birds (cormorants) to preserve green 2. Facilitate ground nesting sites to save trees. 3. Prevent public access to A,B,C. 4. Deeper richer soils will make trees stronger.
- Support deterring cormorant arrival next spring and thereafter from Peninsula C, which is home of the regionally rare Great Egret, breeding on the northern edge of its range, and is one of two large concentrations of nesting for Black-crowned Night Herons.

e) Continue research on colonial waterbirds in an urban wilderness context

- Agree***
- Good*
- Excellent – increase funding.
- Yes – interesting scenarios going on, unique.
- Research is always beneficial and might lead to findings that lay to rest the concerns of those who want to cull – control DCCO populations.
- This presents an opportunity to study cormorants in a natural succession environment.
- Why are cormorants being placed as villains? Research must include all wildlife in the ecosystem and how the interdependencies work to refine balances, clearer understanding will provide more answers. Not singling out one species will benefit all.
- Good if it does not interfere with the birds or their activities.

QUESTION 3: POTENTIAL METHODS	
1. Do nothing	• **A chosen management option, not a default** • **Continue monitoring, research and education activities**

- Agree***
- Bad idea.
- Do not agree.
- This option would be best.
- Leave A, B, and C alone, except for enhancements.
- Maybe a partial approach – restoration in other areas.
- Support this approach – unique educational opportunity to understand natural systems way of population control i.e. carrying capacity.
- It makes sense to me to continue studying, monitoring, research and education activities as the focus of the opponents of DCCO have not be proven. There does not seem to be any real harm or threat posed by DCCO.
- Support this; what is fascinating about the spit is how it has evolved on its own, would like to continue to see this process.
- Agree, let nature take its course, populations self regulate without the need of human interference******* (8 people. one sheet)
- This is the option that we believe will be the most effective in the long run and would like to see the TRCA adopt.
- The Spit is home to a number of species of fauna and flora of national, continental and even global significance, some of which are likely threatened by continued expansion of DCCOs. Therefore, no action may lead to continual decline of other species and habitats.

2. Pre-nesting deterrents	• **Use a variety of deterrent methods to discourage cormorants from nesting in a specific area.** • **Methods include: human presence, scarecrows, predator decoys, inactive nest removal, noise bangers and other auditory techniques**

- OK
- Human presence scans most viable.
- Oppose any harassment.
- Support only on D.
- Noise not a desired method.
- Only human activity*
- Quit harassing the wildlife – if you don't, you are like the DCCO chasing other species.
- Is it possible to do this only on D without bothering birds on other Pens? Where will all the birds go if they are not able to nest in TTP? Even if they are kept away from D, they'll likely have no trees to nest in on the other Pens soon and have to leave anyways.
- This would effect all the birds in the areas so would be a deterrent for all birds to nest at the park*
- Support this on peninsula D, do NOT support use of noise bangers and auditory techniques.
- Do not use lethal methods******* (8 people. one sheet)
- We have no specific issue with increased human presence if it is in the form of people actively enjoying he park, but not if it is specifically there to harass the birds. TRCA will have to ensure that

other birds nesting in the area will not be affected by these decoys and scarecrows. We are not in favour of noise bangers as they can result in significant amounts of stress. Removing inactive nests might have some effect, as long as it will not significantly increase nest stealing. • Continual harassment or disturbance can cause such extreme stress in DCCO that they abandon ideal nesting sites permanently. It forces birds into less optimal habitat, and may contribute to nest failure and loss of body mass. A stressed population is never a healthy one. • For cost and welfare reasons, the least intrusive deterrents should be used.

3. Post-breeding deterrents	• **Use a variety of deterrent methods to discourage cormorants from loafing or roosting in a specific area.** • **Methods include: human presence, scarecrows, predator decoys, noise bangers and other auditory techniques.**
• OK • Inhumane – where will they go? • No* * don't seem to be a permanent solution • If you want people to walk in some colonies after they breed, that wouldn't be too unnatural and acceptable or humane. • Keep them in spots where the damage has already been done – why deter? • Do not support the sue of noise bangers and auditory techniques. • Support only on D and only for the post breeding period. • We have no specific issue with increased human presence if it is in the form of people actively enjoying the park, but not if it is specifically there to harass the birds. TRCA will have to ensure that other birds nesting in the area will not be affected by these decoys and scarecrows. We are not in favour of noise bangers as they can result in significant amounts of stress.	

4. Enhanced ground nesting	• **Encourage ground nesting by creating artificial nests that mimic natural ground nests.** • **Use decoys and auditory techniques to encourage ground nesting.** • **Protect ground nesting area from predators.**
• OK* • Do not support. • No – It wouldn't prevent the use of trees – would maybe increase or encourage more DCCO. • Yes – this sounds like a great idea – using decoys seems too far fetched – protecting ground nesting is another great idea, but not in all areas. • This sounds good because the birds can still come and thrive in TTP. • Use to encourage in A and B – keep from emigration treed sites. • Only support protecting ground nesting, not the use of decoys* • Artificial nests and trees for DCCO seem like a practical intervention and idea to try. Ground nests would need fences to protect against predators. • Support on A, B and C, but not the removal or management of natural predators, support no interference with this as predators are a natural part of this evolving ecosystem. • This could be a management option, as long as some tree nesting was allowed. Studies would have to be conducted to see if nesting mortality rates due to predators are increased.	

5. Egg oiling	• **Apply a non-toxic, food grade oil to eggs within 8-10 days of laying to prevent embryo development.**

- OK
- No*
- No******* (8 people, one sheet)
- Stop harassing the wildlife.
- If the birds have bred they should be allowed to raise their young. Pre-nesting deterrents are kinder.
- No point to do this in sites with encouraged ground nesting, but may have application on peninsulas with trees remaining.
- This is dangerous to adult birds as oil damages the birds feathers and makes them vulnerable to illness – an inability to dry themselves naturally*
- Very strongly say no*
- Egg oiling results in the death of the developing embryo and is therefore a form of lethal culling.
- Egg oiling interferes with natural reproductive instincts and causes disturbances similar to harassment.
- Given that cormorants do not eat for the extended period of time that they sit on the nest, starvation can occur.
- If less intrusive techniques are found to be insufficient, I would support going up the scale of deterrence to include egg-oiling, to avoid the local extirpation of other key species and their forest habitat from C and D.
- Concern that egg oiling is still being presented as an option for ground nesters. This will only be viable if you do this AT NIGHT.

6. Habitat restoration	• **Rehabilitate, enhance or re-create habitat for flora and fauna in specific areas.**

- OK
- Yes; in areas that do not disturb the colony.
- Yes, shrubs, meadow which are less attractive to cormorants on D*
- Yes – find species of trees that are suitable for that habitat – increase biodiversity – maybe effects on overall canopy would be reduced.
- Yes – but I doubt the competence of those who would do this.
- This is a wonderful idea for many, many reasons and should be kept included in whatever plan is implemented.
- Examine natural succession – do not detract from payoff of ground nesting.
- Why not focus reforestation work and efforts on areas that aren't traditional DCCO breeding ground? There are many areas of TO that could benefit from increased forest canopy. It seems a waste to focus reforestation on a habitat of birds that kill trees. It doesn't seem like a major problem.
- Do not support, the spit evolved beautifully on its own until now, lets allow it to continue
- Agree, providing it is consistent with the surrounding ecology and does not displace existing wildlife/game*
- It appears from the information presented about Middle Island that the cormorants are not interested in younger trees. The trees on the former runways appear to be healthy. It would therefore seem that there is no risk that we will increase the population by planting new trees.
- Support the planting of native shrub species that are less attractive to cormorants to provide some greenery.

7. Other	• **Would you like to suggest any other techniques?**

- Make sure that all the people who take care of the park care about humane approach to the wildlife.
- I liked the idea of having strategic trails in the park.
- Seems like human presence as a deterrent e.g. moving of research station on D is the best avenue.
- TTP provides a great opportunity to study NATURAL succession and ecological processes in an urban environment, compared to other highly managed natural areas.
- Create another island with landfill, etc… plant or provide real or fake trees and ground nesting materials.
- Signage to teach the value of all habitat dwellers, including DCCOs.
- Programs which teach appreciation of all wildlife and the contributions each makes to the ecosystem and other members of the ecosystem over time.
- Support the protection of the colonies on A, B and C by continuing to prevent public access to the colonial birds when they are nesting.

POTENTIAL APPLICATION OF METHODS IN TTP

Method	Peninsula A	Peninsula B	Peninsula C	Peninsula D
Pre-nesting Deterrents			*	*
Post-Breeding Deterrents	*	*	*	*
Enhanced Ground Nesting	*	*		
Egg Oiling	*	*	*	
Restoration	*	*	*	*

QUESTION 4: POTENTIAL APPLICATION OF METHODS

- Concern about effectiveness of the methods in limiting the colonies area and further tree damage without driving the DCCO to other treed areas.
- It'd be nice if they were permitted to loaf post-breeding at least on A. Deterrents on C seem to be problematic.
- Would like to stress that less management is better. If people are pleased with the way TTP has evolved without human intervention that we are concerned with protecting it, what makes us think that we should start interfering now?
- Egg oiling and noise makers are inhumane due to the psychological trauma caused to the birds and I urge you to refrain from using these methods.

- Do not proceed with post nesting deterrents or egg oiling (8 people one sheet).
- Know it is difficult to stand alone when other government partners, from Canada and the US, are slaughtering DCCOs. TRCA can be a better model, creating a safe refuge for DCCOs, leading the way for other levels of government to follow. You will get lots of support from the community if you choose to side with fully protecting DCCOs.
- Importance of educating public about value of ALL wildlife, we have a chance her to be a "beacon of light", understanding and hope for DCCO. Need to demonstrate that Toronto is a bird friendly city. Signage which supports appreciation and lookouts along narrow paths on D. Any work to be done after DCCO migrate south.
- Support the use of human presence on D to discourage expansion. We support enhanced ground nesting on three peninsulas, restoration on all peninsulas and allowing the ecosystem to evolve without any other interference.
- The Humane Society of Canada would like the TRCA to follow its mandate and only use the lightest touch when managing this unique wilderness park. The cormorants are a natural piece of this wilderness, and should not be vilified by their presence. We are not in favour of any techniques that would result in the death or overt stress of the birds.
- I am in favour of using a variety of strategies in different locations to see how they work including:
  - Keep the cormorants from moving to Peninsula D by methods 2 and 3.
  -Plant trees and shrubs to screen the dead trees from casual users and compensate for habitat loss.
  -Egg oiling in selected locations, perhaps on peninsula C.
  -Habitat restoration on one peninsula.
- I support a strategy of using all non-lethal techniques to manage the cormorant population at Tommy Thompson Park. I also support the detailed investigation of a cull, as undertaken off Sandbanks. We need to ensure that Peninsula D is protected from any cormorant nesting activities now and in future and Peninsula C is managed to discourage nesting in this area.
- I support the TRCA's management direction to use a strategy of all available non-lethal techniques to manage the cormorant population at Tommy Thompson Park to see that:
  - Peninsula D is protected from any cormorant nesting activities now and in future.
  - Peninsulas A & B are dedicated as areas to encourage increased ground nesting for the cormorant colony.
  - Peninsula C is to be significantly managed through all available techniques to attempt to ease the stress on the remaining tree canopy in the hope of its preservation and to discourage nesting in this area with the hope that the contrast breeding success rate will move the colonies concentration to Peninsulas A&B.
  - Peninsulas A&B are protected from predation as a management technique to encourage the movement of the colony here through increased successful breeding.
- I understand that all the available non-lethal techniques are enhanced ground nesting (Peninsula A&B), pre-nesting deterrents, post-nesting deterrents, egg oiling and habitat restoration. Each should be used at the discretion of the TRCA to maximize the preservation of habitat and concentrate the cormorant colony at peninsula's A and B. Please take this note as my personal support of this activity in the hope that migratory species habitat be enhanced and preserved and that a balance of park values is met.********
- I support preventing DCCO nesting on Peninsula D, and deterring their arrival in spring from Peninsula C. For cost and welfare reasons, the least intrusive deterrents should be used. If less intrusive techniques were insufficient, I would support egg-oiling. This approach would minimize intervention, cost and impact on cormorants, while maximizing natural habitat for other significant birds and wildlife that also make the Spit forests their home.

ANY OTHER COMMENTS?

- I don't believe that the DCCO population poses any or enough threat to warrant any concentrated effort for DCCO control. I believe they should be allowed to breed and nest naturally. Efforts should be concentrated on study and research into the habits and effects on DCCO habitation.
- Decision should be guided by the research and information as per CDI's comprehensive report: "A critical analysis of Point Pelee National Park's rationale for killing the Middle Island cormorants".
- "I rescue injured migratory birds that tragically hit Toronto's buildings. I've released some survivors during fall migrations at the spit. I do not believe DCCOs jeopardize migratory birds at the spit."
- TTP is an urban wilderness and I support TRCA to promote and protect it as is.
- Because DCCOs are being shot, harassed, eggs oiled across North America, Toronto should be advocating on behalf of the birds. "Management" is a misnomer for destruction and cruelty in all its forms where DCCOs are concerned. The two presentations demonstrated a recommendation toward this cruelty and in humanity to these birds and is capable of untold damage to their genome, long term survival, their ecosystems natural development and change, and their cohabitant's survival. TRCA seems to want to make every natural area into a people based park at the expense of our animals and ecosystem. This disturbs me greatly. TRCA should be looking at functional biodiversity not only species diversity. TTP is not a museum it should be changing.
- Please abandon the practice of management, control and rather educate, learn and enhance the habitat to accommodate the natural evolution of a developing ecosystem without interfering with the DCCO, other colonial water birds, mammals and the biodiversity that occurs as a result of their natural presence on the Spit.
- It is unfortunate that instead of celebrating the recovery of this species as a success, now that they are abundant, we feel the need to reduce their numbers to a somewhat arbitrary "comfortable" level.
- "We join Cormorant Defenders International and support 'promoting the Leslie Street Spit and its healthy and diverse ecosystem for both aquatic and terrestrial species. TTP is the ultimate "urban wilderness" experience for TRCA to promote and protect"
- TTP is a fine example of ecological succession: with colonial plant communities arriving in the area only to be succeeded by other species until more mature communities become established. Observation of ecological succession has shown that biological diversity increases during the early stages after colonization has become established. And indeed, visitors to this park can now view more than 400 different species of plants, 314 species of birds, 19 mammals and 12 herptile species. However, also true is that as communities naturally progress, diversity tends to decrease due to increased competition, with opportunistic species leaving for easier areas elsewhere and the establishment of locally superior competitors.
- The few people I have talked to who use the Spit from time to time for walking, biking and casual birding want the park to be more attractive. They are in favour of reducing the population of cormorants and planting trees.
- I am a frequent visitor to TTP and I'm concerned with the ongoing destruction of the tree canopy on Peninsula C.
- We need an immediate solution to the dramatic increase in cormorant population and the resulting destruction of forest canopy and other habitat at Tommy Thompson Park. I urge this as a regular user of Tommy Thompson and city of Toronto taxpayer whose enjoyment of the park is being eroded by this under-managed population, whose size is beyond any reasonable levels. Thank you for your attention to this important environmental concern.
- So much of most of the other peninsulas, islands and shorelines of the Great Lakes, on both the Canadian and American sides, have been developed for residential, recreational and industrial purposes, that wildlife and natural habitat are greatly constrained, making the Spit an exceptional opportunity for species recovery and recreational uses. Unfortunately, this constraint pits defenders of various conservation and recreational values against each other, who must struggle

over too little habitat and outdoor space to adequately meet their goals. Normally, these groups should be natural allies in conserving and managing lands sensitively and with minimal conflict.

- I am writing to express my concern about the number of cormorants that are now living on several of the "fingers" on the Leslie Spit. I am very supportive of wildlife but am concerned that the cormorant population has now grown to such a large extent that the bird droppings are killing off the trees where they live and nest. I am supportive of controlling the population of these birds.
- I would also request that TRCA produce an annual report each Fall outlining the health of the forest canopy at Tommy Thompson Park, the population trends of all colonial water bird species, etc. in an effort to be transparent regarding the hopeful success of the program. Thank you for your efforts now and in the future.********
- The research conducted to date has been very thorough.
- Need better data on the effectiveness of the control methods
- Each season the numbers should be tallied and success/failures of methods evaluated. In any words, be prepared to combine, include and eliminate strategies as results come in.

HOW DID WE DO TODAY? Do you have any feedback on this evening's session?

- Thank you so much for running a process that is transparent and includes a range of voices.
- This presentation did not allow questions to the speaker's presentations. I strongly felt it was one sided, especially when Chip Weseloh spoke about the effect the DCCO have on the fisheries, an aspect of no concern fro the Leslie's spit management. – I felt that you did your best to suppress the entire group from hearing a variety of different views by all. I felt it was very biased. The MNR wants the DCCO dead and your job seemed to see that this was what will happen.
- Fine
- The speakers were excellent! Well spoken, clear and really knew their stuff. You could tell that they held peoples attention and addressed the audience perfectly – not experts but interested.
- The group round tables were nice,
- The presentation by Canadian Wildlife Service was biased and presented swayed stats by only comparing cormorant numbers from the 70s until now, not discussing their large numbers in the early 1900s,
- Very happy to participate. Jason Morris was a wonderful facilitator. I didn't like Chip Weseloh's presentation, painted a bias against DCCOs with no questions or comments afterwards and just before groups broke into discussion.
- The presentations were all well organized and executed. You provided a good opportunity for public involvement.
- BOTH presentations were biased, incomplete and at times inaccurate. Bird counts of 2007 showed the DCCOs are not "hyperabundant", a term which implies nature can't control their numbers, yet this was implied in the stats presented. There is NO reason to assume that DCCOs were not here and abundant in past centuries, stats were not kept and this was wrong information presented as fact. The statistics were presented, clearly, to support the inhumane and ineffective (long term) egg-oiling and "management", rather than to support our migratory birds and allow the natural progression of TTP's ecosystem development. I sincerely hope you will look at your philosophy of intervention and "management" policies and place them in a humane alignment with nature and the public.
- We were disappointed that the presentations didn't present a more complete, unbiased point of view. The round table discussions were well done and the documentation of the discussion was excellent. It was also efficient to follow the outline. A week to respond in written form from the meeting date is short, given that some people already came from out of town to attend the meeting. This public forum was well organized and well done in our opinion.
- It is clear that the people at the meeting are participants in organised groups. I saw one non-white person in the room and yet I see considerable diversity on the Spit. This is one of the indicators that the group was not representative of the people who use the Spit.
- I do not agree with the method of consultation which was used at the meeting. There is no reason to

discuss or achieve a consensus on the overall goal or even on the objectives listed on the form. That method of consultation is intended for the development of a strategic plan. It is not appropriate for a public discussion of a particular issue.

- The presentations were excellent and kept to the allotted time. There was not enough opportunity for questions and discussion.
- I believe that there should be more public consultation on the specific questions of cormorants and habitat. The questions should be worded in a straightforward way. A variety of techniques should be used including surveys, phone-ins, web-based discussion and information sessions at the park.
- Please advise when this is on the website.