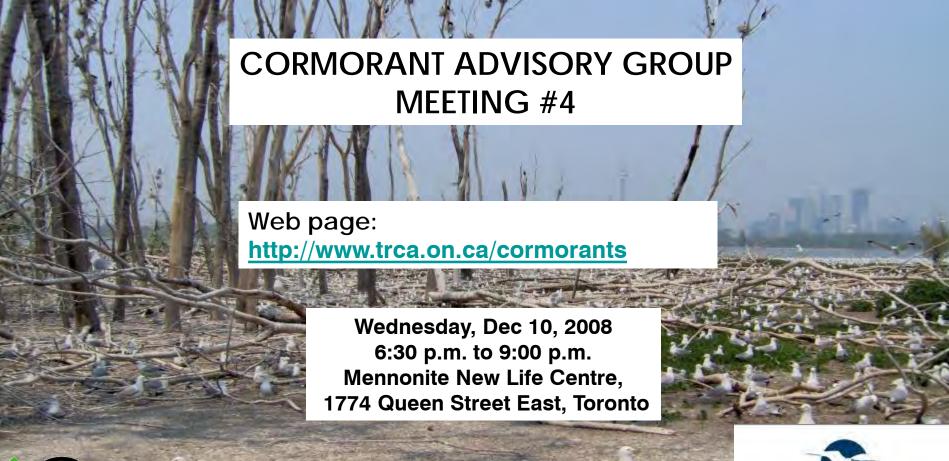
MANAGEMENT OF COLONIAL WATERBIRDS AT TOMMY THOMPSON PARK







Toronto's Urban Wilderness

CORMORANT ADVISORY GROUP

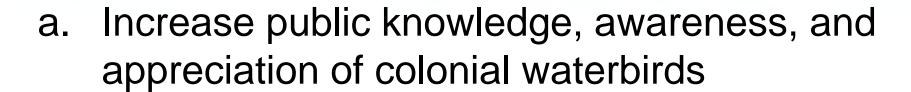
MEETING #4

Wednesday December 10, 2008 6:30 p.m. to 9:00 p.m. AGENDA

6:35pm	Welcome and Introductions	Suzanne Barrett
6:45pm	Review of Previous Meetings	Suzanne Barrett
7:00pm	Review of 2008 colonial waterbird data and 2008 cormorant management strategy	Ralph Toninger
7:40pm	Update on York University studies	Gail Fraser
8:00pm	Next Steps •Completion of the 2008 Cormorant Management Strategy •Moving into 2009	Ralph Toninger
8:55pm	Wrap-up and next meeting	Suzanne Barrett

PROCESS - DOUBLE-CRESTED **CORMORANTS AT TOMMY** THOMPSON PARK

- November 2007: TRCA embarked on a process to involve stakeholders and public in assessing need for management of cormorant populations
- Goal: to 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



Deter 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

Public Consultation Summary

Advisory Group Meeting #1	January 24	 Values and interests of TTP Conditions and concerns of DCCO colony Need for management Strategies to address concerns
Advisory Group Meeting #2	February 19	Evaluate management optionsPropose alternative approaches
Cormorant Webpage launched	March 3	 Includes background materials, Advisory Group meeting notes and presentations, Public Meeting workbook and meeting notes, relevant links
Public Meeting	April 3	 Advertised in Toronto Star, The Mirror, TRCA website, TTP information board, TRCA distribution lists, some Advisory Group member websites Canada Newswire press release, Global TV coverage Presentations, facilitated round table discussion, individual workbooks for commenting
Advisory Group Meeting #3	April 23	Review public responseDiscuss 2008 strategy
TTP Spring Bird Festival	May 10	 Guided tours of cormorant colony Public survey on TTP cormorants
Authority Board	May 23	Present 2008 strategy for Authority action
Advisory Group Meeting #4	Dec10	Review 2008 strategy and preliminary research results

ADVISORY GROUP

MANDATE

- Provide input and advice
- Ensure that all perspectives are considered
- Provide linkages with other stakeholders

TRCA

Restoration Services

Federal/Provincial

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

City of Toronto

Parks, Forestry and Recreation

Academia

University of Toronto York University

Interest Groups

Aquatic Park Sailing Club

Cormorant Defenders International:

Animal Alliance of Canada

Canadians for Snow Geese

Earthroots

Zoocheck Canada Inc.

Friends of the Spit

Ontario Nature

Toronto Island Residents

Toronto Ornithological Club

Local Experts

Advisory Group Meetings achieved:

- Better understanding of the range of values that TTP represents to different stakeholders.
- Improved understanding of significance and values associated with waterbird colonies, including cormorants, at TTP.
- Development and refinement of the goal and objectives.
- Majority agreement that some form of management is necessary, providing that the methods are humane to cormorants and do not affect other wildlife at TTP.
- Refinement of proposed management techniques for use on each of the four peninsulas.
- Advice on consultation with the public.

Advisory Group Ongoing concerns:

- The effectiveness and acceptability of egg oiling.
- The compatibility of encouraging ground nesting with the use of egg oiling.
- The use of certain deterrent techniques (eg noise) makers).
- Potential effects of management on other colonial nesting birds.

Public Meeting

- Support for consultative, transparent process.
- Support for overall goal, although some concern that "balance" can be interpreted in different ways.
- Most people endorsed objectives to increase public knowledge, awareness and appreciation of colonial waterbirds and to continue research.
- Considerable support for deterring cormorants from nesting on Peninsula D, using least intrusive methods.
- Range of opinions on limiting further loss of tree canopy on other peninsulas, and methods to accomplish this.
- Methods should ensure humane treatment of cormorants and avoid disturbance of other species.
- Of the proposed methods, egg oiling had least amount of support.
- Participants suggested applying various combinations of methods on each peninsula.

May 23, 2008 Authority Meeting Summary

- Gord MacPherson presented 2008 Cormorant Management Plan
- 10 delegations
- 15 correspondence items
- Recommendation carried



May 23 TRCA Authority Board meeting



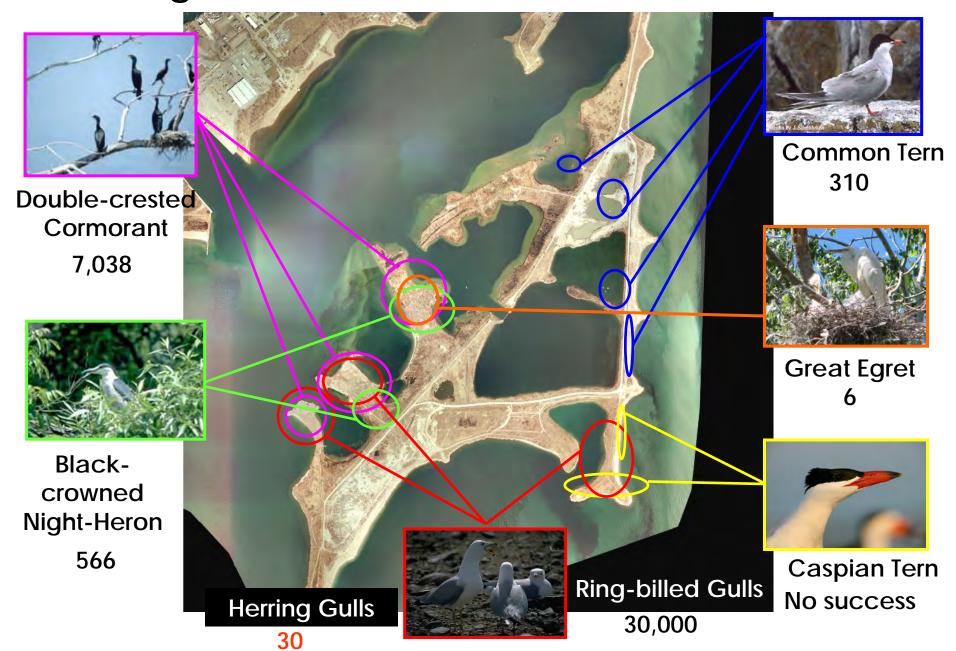
RECOMMENDATIONS

- ...continue to work with the Cormorant Advisory Group... in addressing management concerns regarding colonial waterbirds at TTP;
- ... work ...with regulatory agencies to seek approval for the 2008 management strategy...;
- ...implement the proposed management strategy for 2008;
- ...continue to actively participate in ... committees/working groups addressing the management and protection of colonial waterbirds;
- ...staff report back to the Authority next year regarding the management of Double-crested cormorants at TTP.

Strategic Approach 2008

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

Nesting Pairs of Colonial Waterbirds at TTP 2008



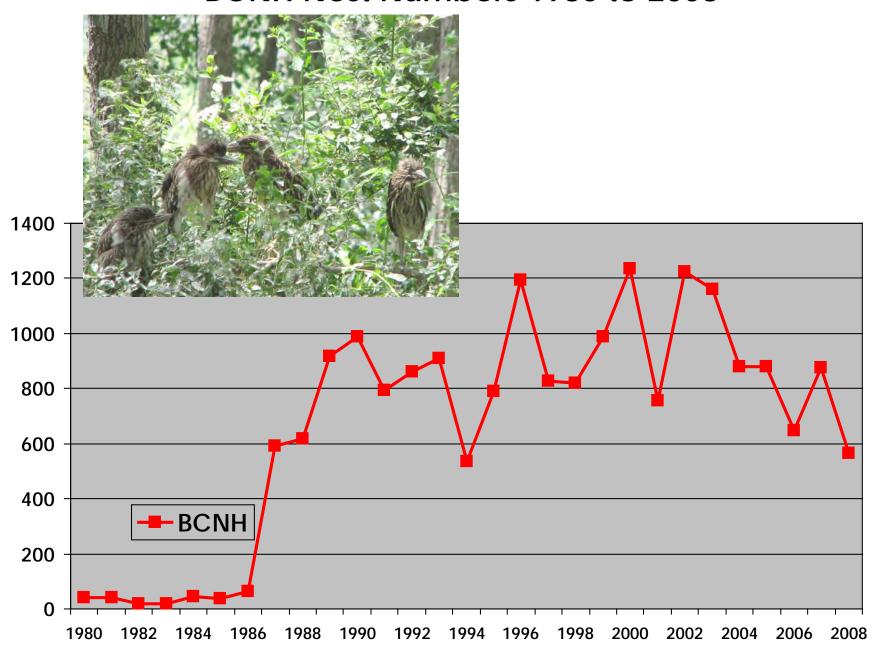


DCCO Nest Numbers 1998 to 2008

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
A	436	695	933	907	730	779	557	311	228	101	49
В	1307	1814	2071	3138	1844	1582	1241	1763	1535	1139	1074
B ground					344	990*	809	872	868	1302	1009
С	0	0	30	281	625	633	2439	2728	3494	4699	4906
Total	1743	2509	3034	4510	3543	3942	5855	5674	6125	7241	7038

Peninsula A 42, and Peninsula B 948

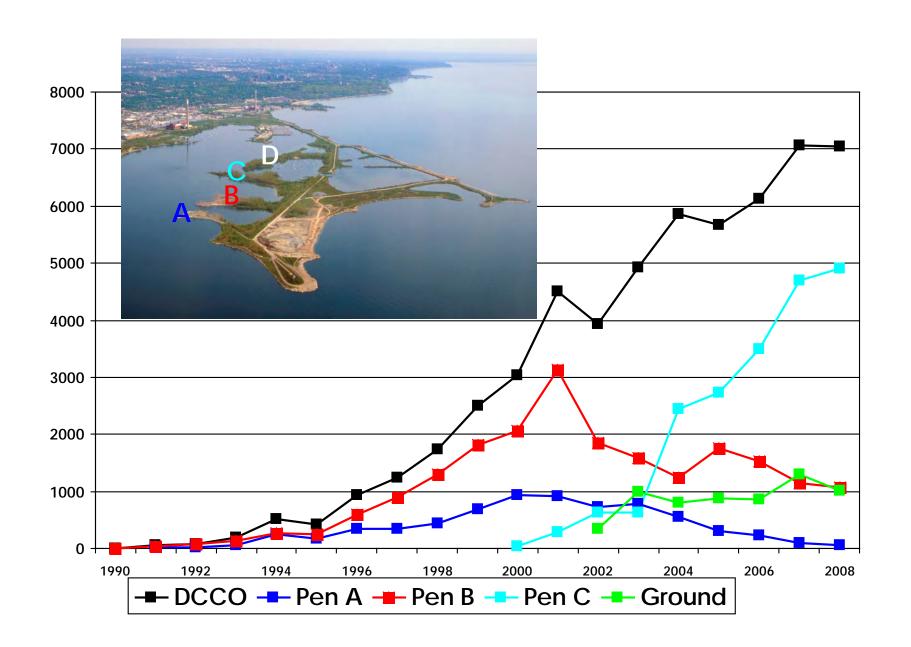
BCNH Nest Numbers 1980 to 2008

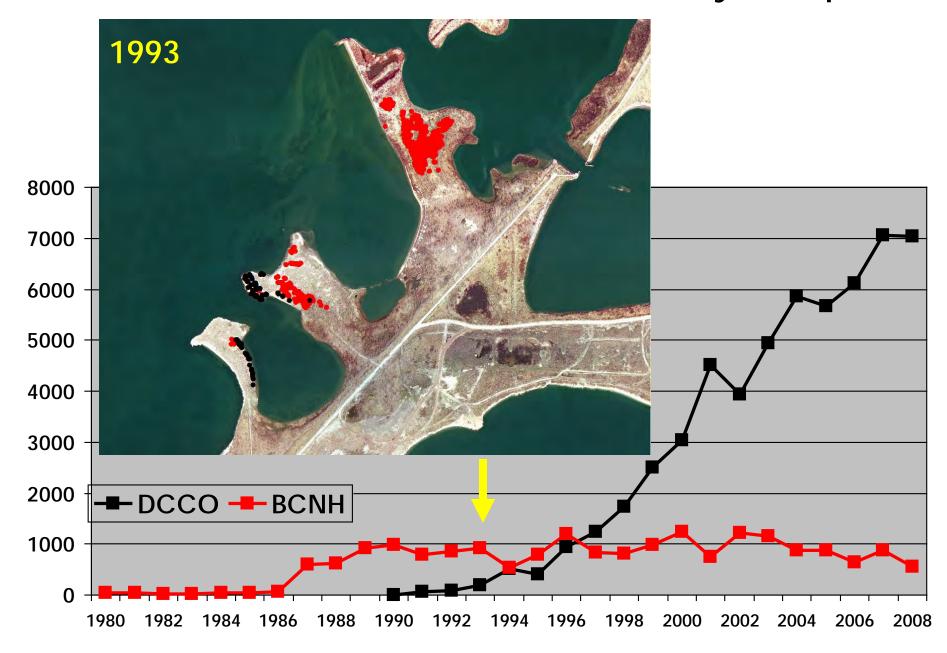


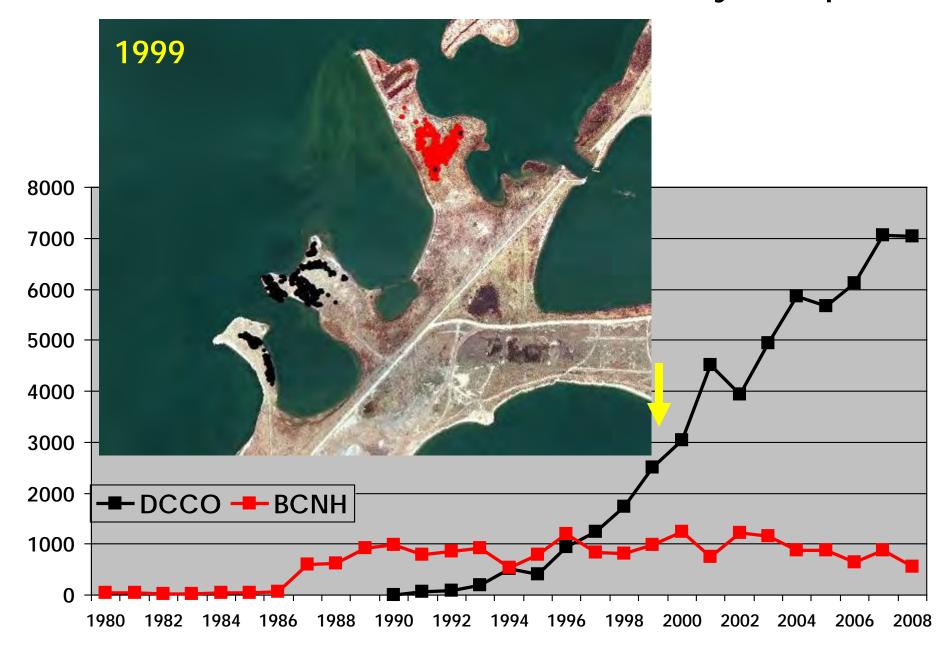
BCNH numbers by Peninsula

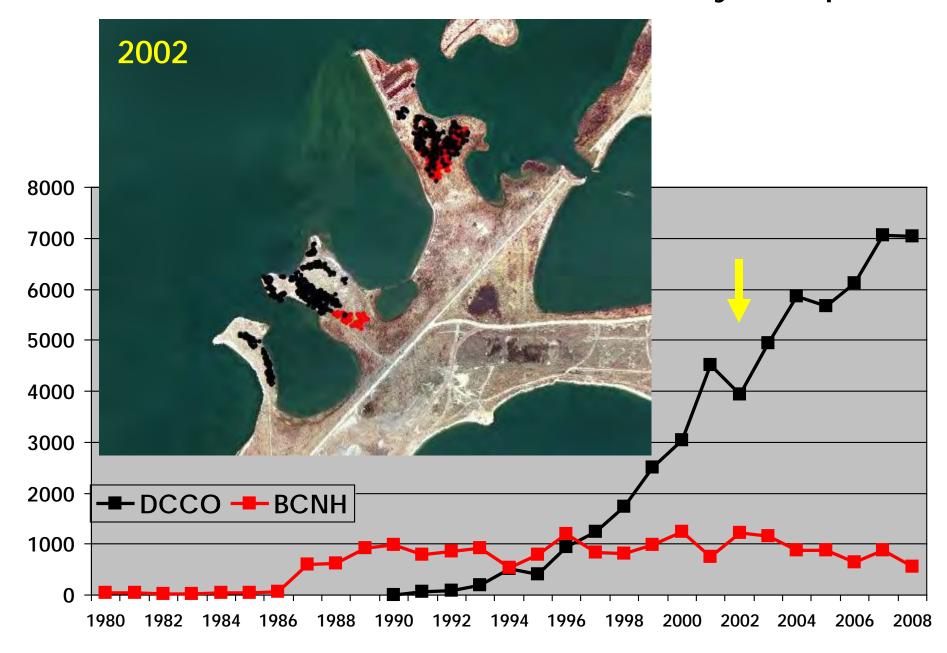
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
A	0	0	0	0	0	0	0	0	0	0	0
В	15	0	0	0	163	255	278	270	145	147	86
С	803	988	1235	758	1040	904	601	610	504	769	480
Total	818	988	1235	758	1223	1159	879	880	649	916	566

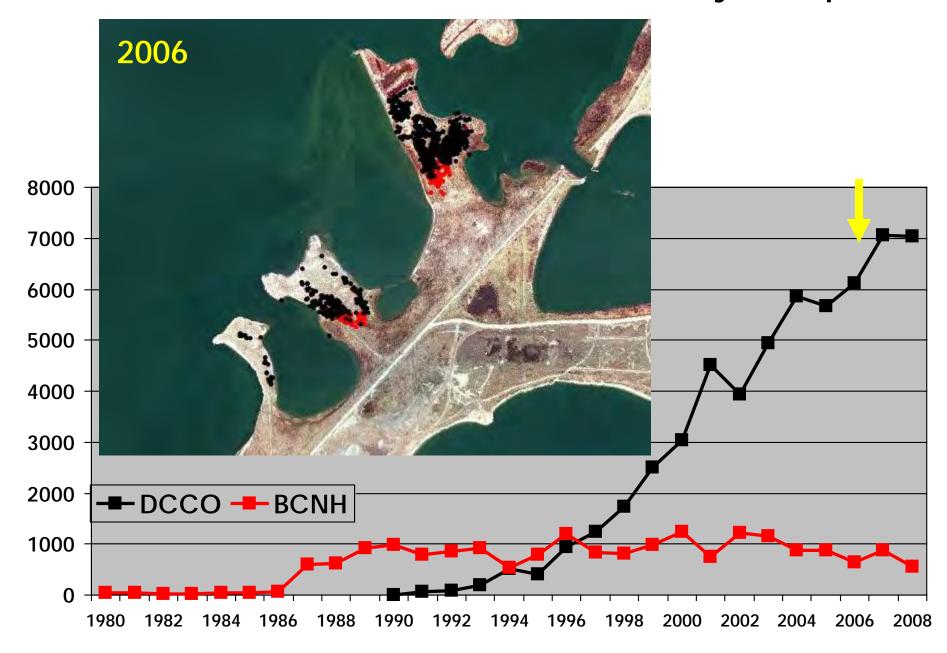
TTP Nests Numbers by Peninsula

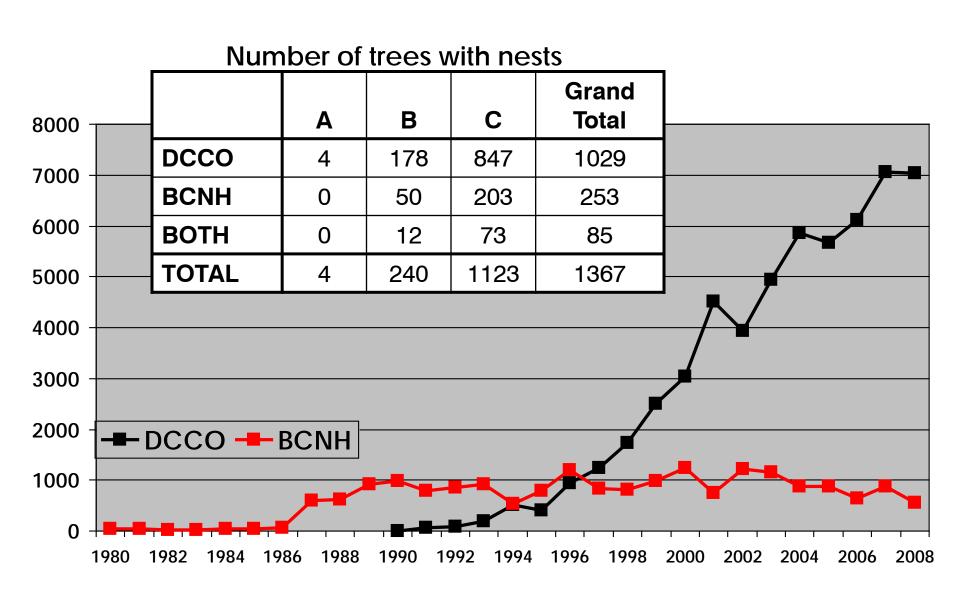














Trees Nested in per Year

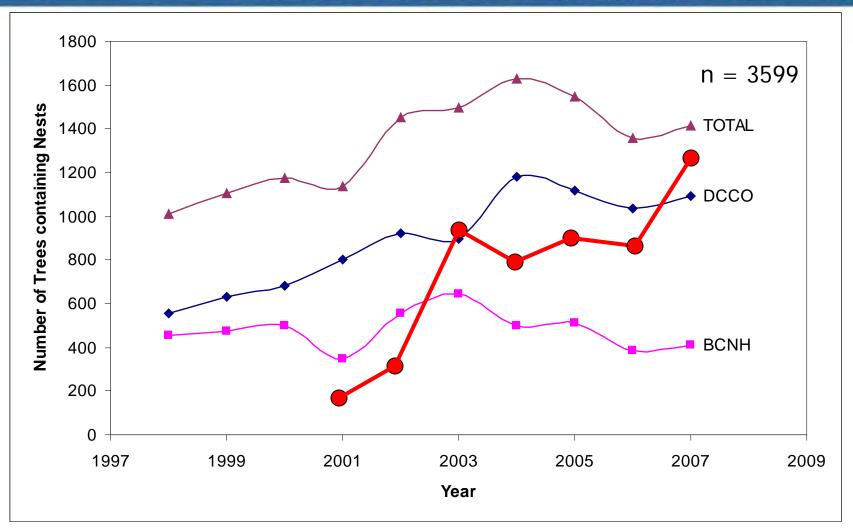
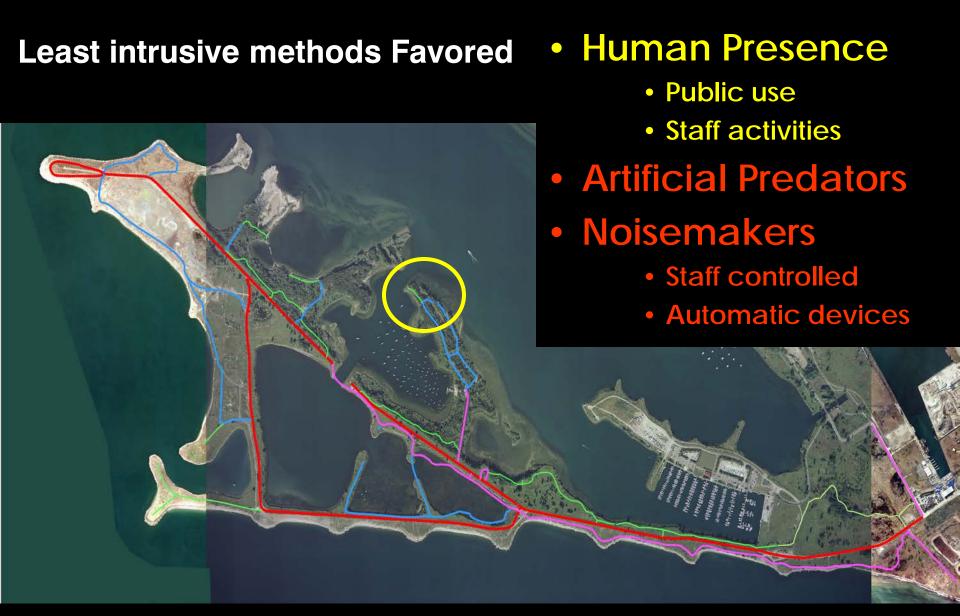
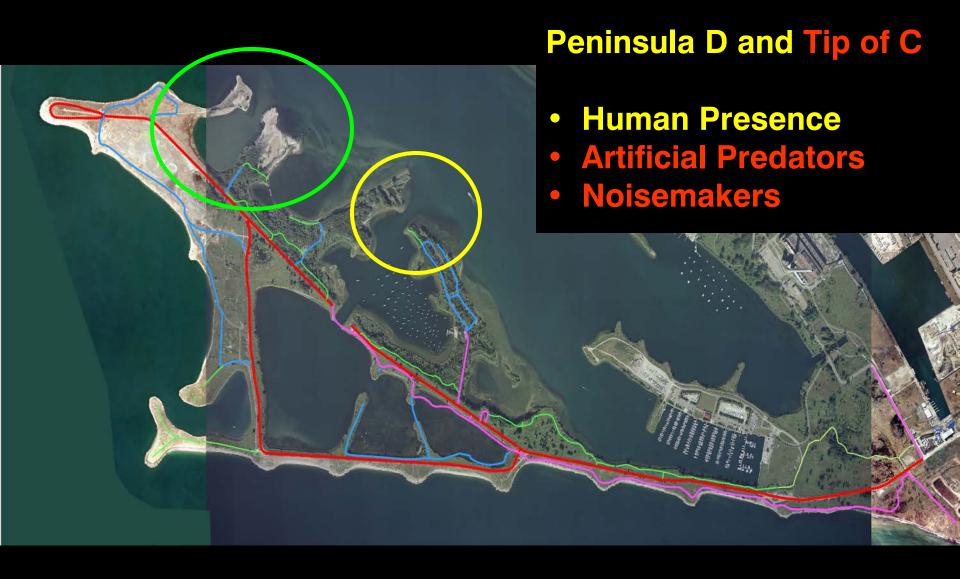


Figure 1: Figure 1: Summary of the number of TRCA trees containing nests Source TRCA Data produced by University of Toronto (Eric Davies, Michelle Thomas, Mart Gross)

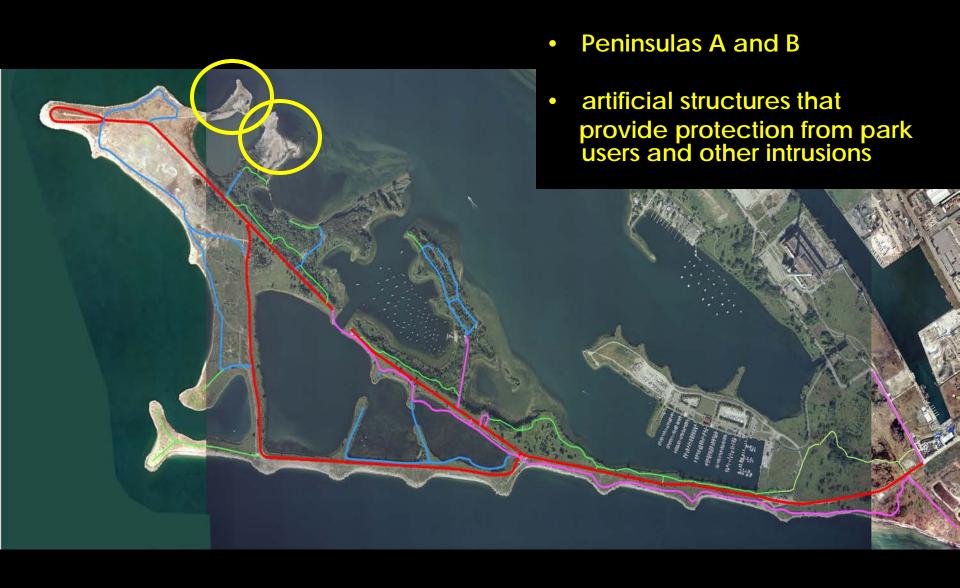
Pre-nesting Deterrents on Peninsula D



Post-Breeding Deterrents



Enhanced Ground Nesting



Restoration

- Revegetate with trees, shrubs and meadow species
- Natural Area Enhancement Plan





Implications for Management and Monitoring

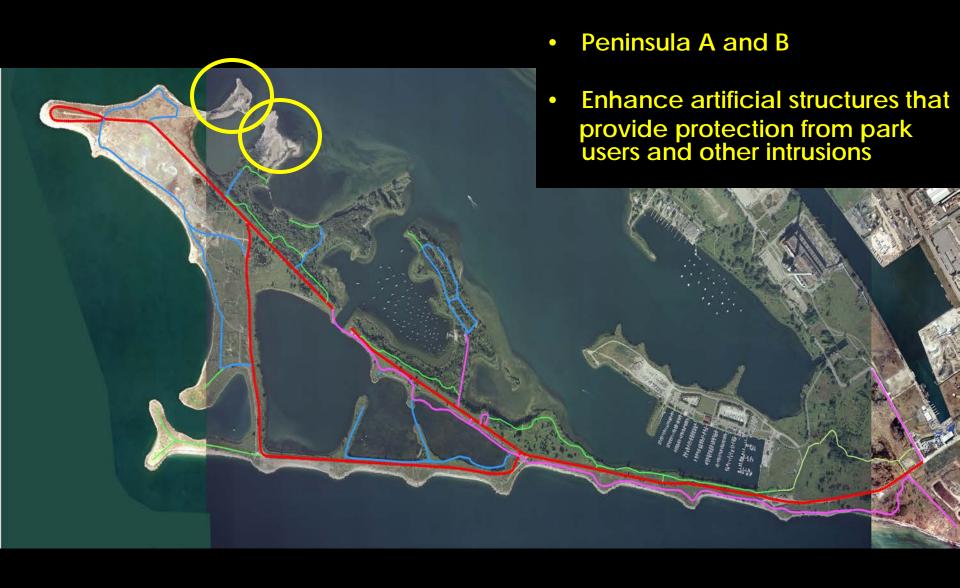
- Recommend activities that require being in the colony occur at night
- How areas adjacent to colony are accessed is important (water vs land)
- Quantify overall disturbance to colony
- Control observer based disturbance
- Predator control?

Additional Data Available for Analysis

- Productivity
- Fledging
- Nest attendance
- Average hatching date
- Social Behaviours

Next Steps

Enhanced Ground Nesting



Encourage Ground Nesting

Techniques include; decoys recordings natural and artificial structures providing nesting materials

Provide protection from the public, the environment, urban influences (raccoons, unauthorized activities)







Successful Ground Nest Enhancements



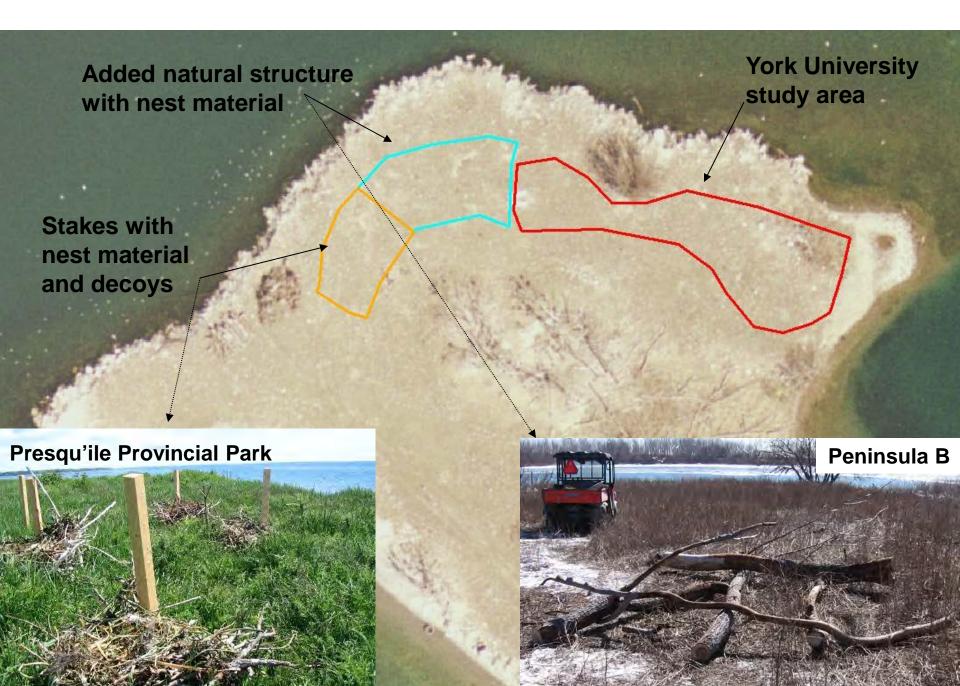
Cormorant Decoy



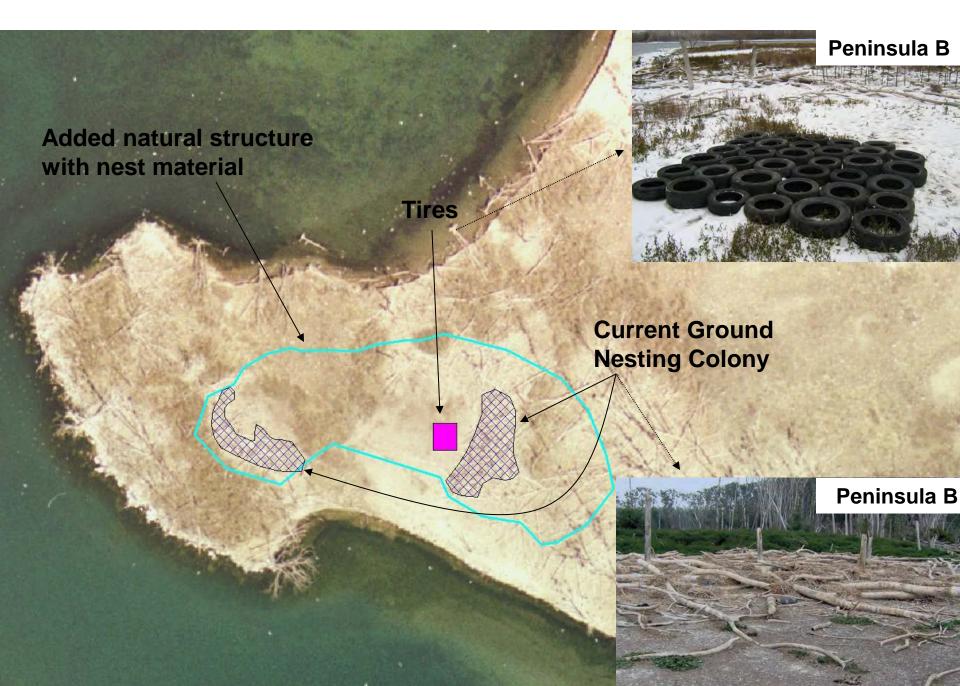
Current Ground Nest Enhancements at TTP



PENINSULA A - 2009 GROUND NEST ENHANCEMENTS



PENINSULA B - 2009 GROUND NEST ENHANCEMENTS



Revegetation and Habitat Restoration in Impacted Areas

Plant nodes in strategic areas

Soil amendment and seeding in specific areas





Restoration



HABITAT RESTORATION ON Peninsulas A and B - 2009





Proposed Strategic Approach 2009

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

2009 Timeline

- Wednesday February 4 Advisory Group Meeting to discuss 2009 Strategy
- Friday March 27 Authority Meeting to approve 2009 Strategy
- Late Fall Advisory Group Meeting to review 2009 Strategy

