MANAGEMENT OF COLONIAL WATERBIRDS AT TOMMY THOMPSON PARK

CORMORANT ADVISORY GROUP MEETING #11

Tuesday December 4, 2012
6:30 to 9:00 p.m.
Metro Hall, Room 303, 55 John Street, Toronto

The Living City Foundation

Toronto and Region Conservation for The Living City

AGENDA

6:30pm	**Welcome**	Ralph Toninger
6:35pm	**Review of 2012 colonial waterbird data and cormorant management strategy**	Ralph Toninger
7:30pm	**Update on York University studies**	Gail Fraser
7:45pm	**Proposed Strategic Approach for 2013** • Work plan for 2013 season • Discussion • Timeline • TRCA Board Meeting	Ralph Toninger
8:45pm	**Wrap-up and next meeting**	Ralph Toninger

GOAL & OBJECTIVES

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.

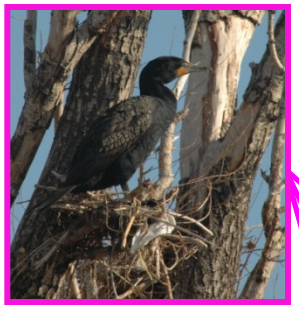
OBJECTIVES

- Increase public knowledge, awareness and appreciation of colonial waterbirds
- Deter cormorant expansion to Peninsula D
- Limit further loss of tree canopy on Peninsulas A, B and C
- Continue research on colonial waterbirds in an urban wilderness context

PUBLIC CONSULTATION SUMMARY

Advisory Group Meeting #10	January 19, 2012	• Review the 2011 population data and monitoring program • Review 2011 strategy and research results • Develop the 2012 Strategy
TRCA Board	March 30, 2012	• Present the 2012 Strategy for TRCA Board action
Colonial Waterbird Interpretation and Presentations	March – November, 2012	• Winter Waterfowl event • Spring Bird Festival • Butterfly Festival • York University • Centennial College • University of Toronto • Winged Migration classes
Advisory Group Meeting #11	December 3, 2012	• Review the 2012 population data and monitoring program • Review 2011 strategy and research results • Develop the 2013 Strategy

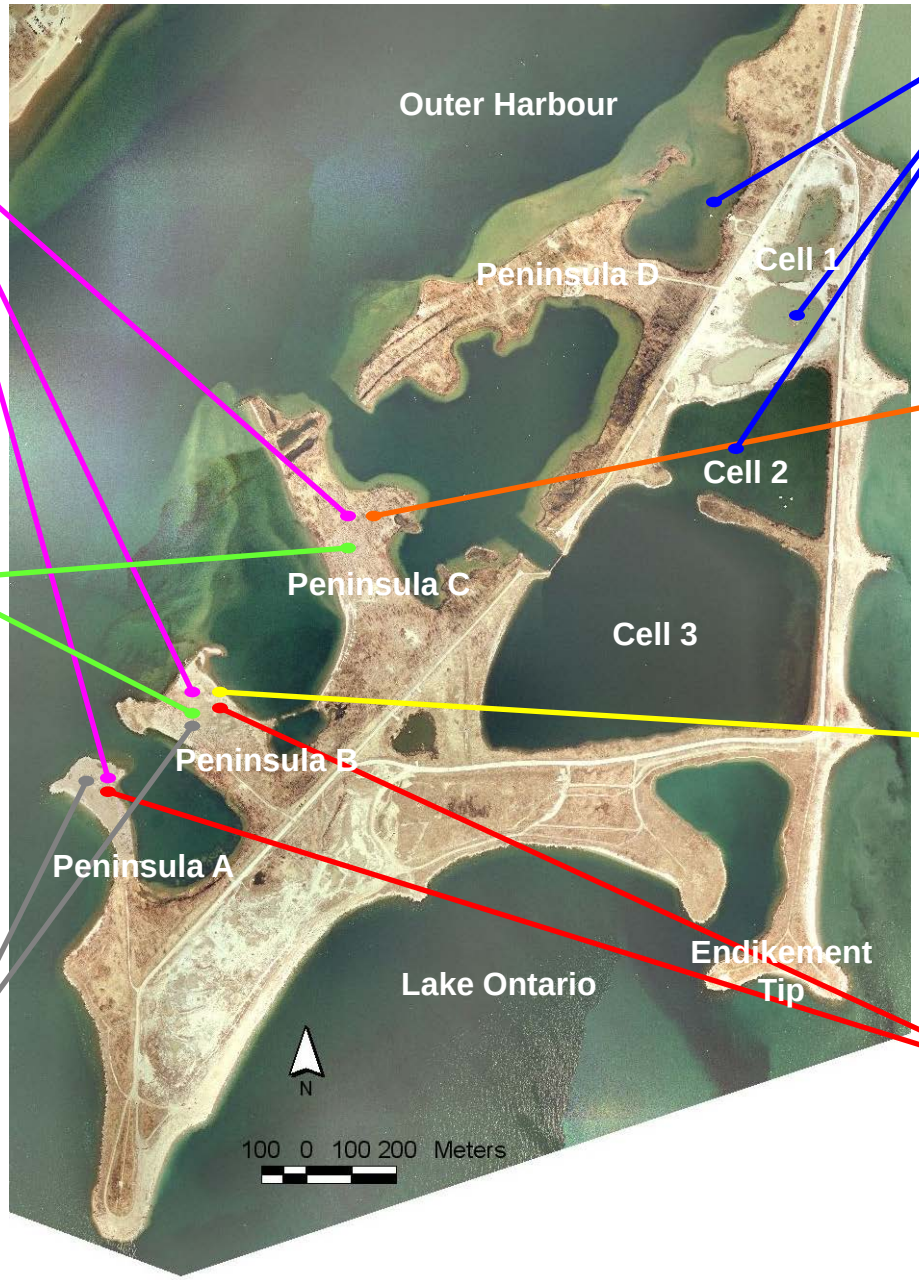
COLONIAL WATERBIRDS OF TTP, 2012



DCCO
11,741 nests

BCNH
410 nests

HEGU
Not Counted



COTE
~24 nests

GREG
8 nests

CATE
~5 nests

RBGU
~32,000 nests

DCCO NESTS BY PENINSULA

DCCO NEST DENSITY (# Nests/Tree)				
	2009	**2010**	**2011**	**2012**
Peninsula A	22	19.5	19	0
Peninsula B	5.12	4.82	6.64	5.99
Peninsula C	5.40	6.01	6.30	6.20

	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
A	933	909	730	779	557	311	228	101	49	22	39	19	13
B	2071	3048	1844	1582	1241	1763	1535	1072	1050	917	781	1262	982
B ground			344	948	809	872	868	1302	1009	1957	3310	4547	5812
C	30	282	625	633	2439	2728	3494	4584	4609	4668	5304	5546	4934
Total	**3034**	**4237**	**3543**	**3942**	**5046**	**5674**	**6125**	**7059**	**6717**	**7564**	**9434**	**11374**	**11741**

TTP DCCO – ALL NESTS BY PENINSULA

TTP DCCO – TREE NESTS BY PENINSULA

8000
7000
6000
5000
4000
3000
2000
1000
0

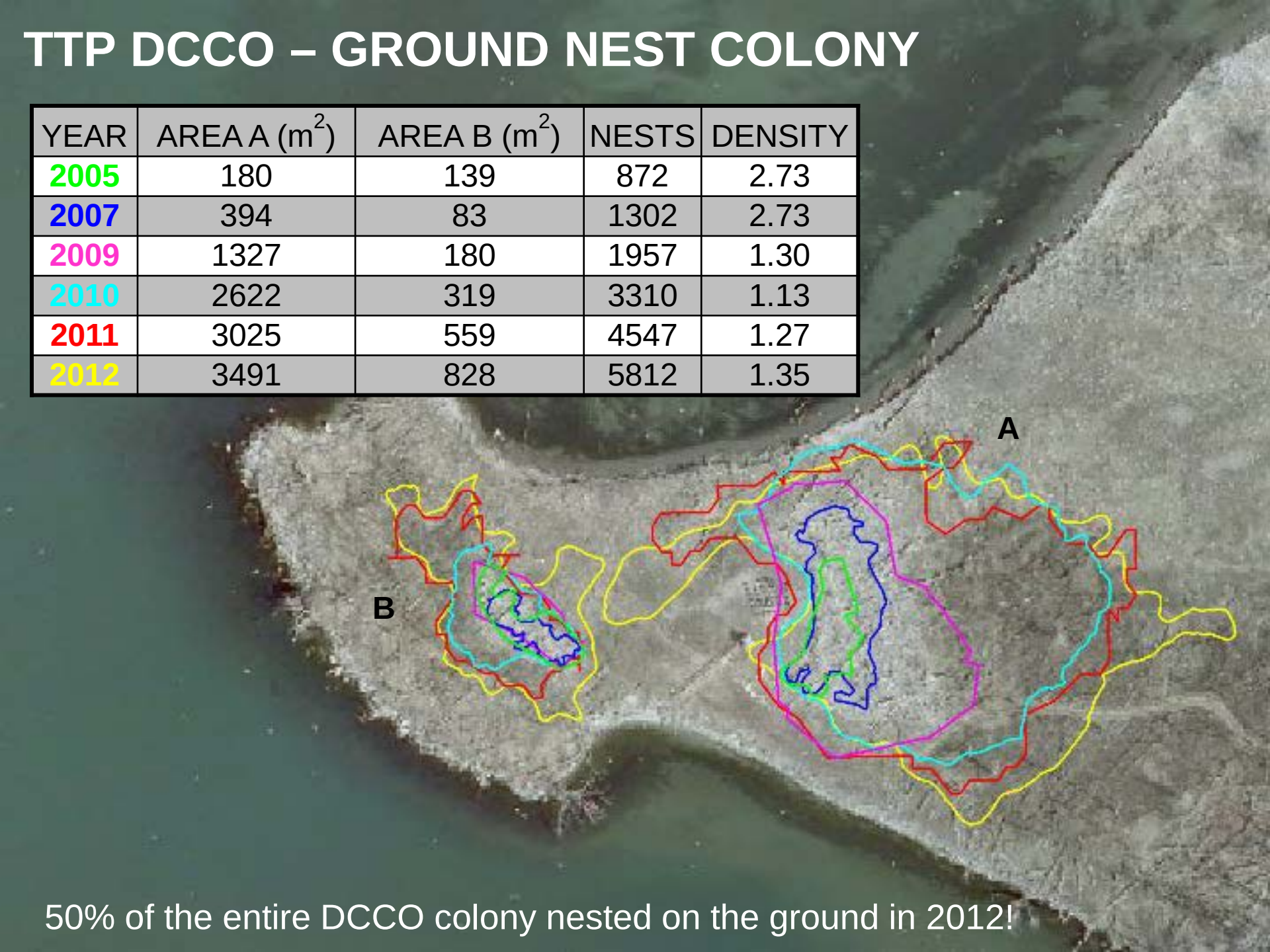
1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012

5,929

Pen A
Pen B
Pen C
DCCO Tree Nests Total

TTP DCCO – GROUND NEST COLONY

YEAR	AREA A (m^2)	AREA B (m^2)	NESTS	DENSITY
2005	180	139	872	2.73
2007	394	83	1302	2.73
2009	1327	180	1957	1.30
2010	2622	319	3310	1.13
2011	3025	559	4547	1.27
2012	3491	828	5812	1.35



50% of the entire DCCO colony nested on the ground in 2012!

ANNUAL DCCO POPULATION CHANGE (PERCENTAGE)

	2007	2008	2009	2010	2011	2012
Overall	15.25	-4.84	12.61	24.72	20.56	3.23
Peninsula A	-55.70	-51.49	-55.10	77.27	-51.28	-31.58
Peninsula B	-30.16	-2.05	-12.67	-14.83	61.59	-22.19
Pen B Ground	50.00	-22.50	93.95	69.14	37.37	27.82
Peninsula C	31.20	0.55	1.28	13.62	4.56	-11.03

BCNH NESTS BY PENINSULA

Peak nest count data collected during the last week of May, first week of June annually

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
A	0	0	0	0	0	0	0	0	0		0	0	0
B	0	0	163	255	278	270	145	146	81	38	3	100	10
C	1235	762	1040	904	601	610	504	730	455	546	431	323	400
Total	**1235**	**762**	**1203**	**1159**	**879**	**880**	**649**	**876**	**536**	**584***	**434**	**423**	**410**

BCNH PEAK NEST NUMBERS 1980 TO 2012

Peak nest count numbers

Mid-season nest numbers

1400
1200
1000
800
600
400
200
0

1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012

NEW DCCO NEST TREES 2012

NEW DCCO NEST TREES			
	2010	2011	2012
Peninsula A	-	-	-
Peninsula B	7	25	7
Peninsula C	37	23	29
TOTAL	44	48	36

DCCO NEST TREE OCCUPATION

TREES OCCUPIED WITH DCCO				
	2009	**2010**	**2011**	**2012**
Peninsula A	1	2	1	1
Peninsula B	179	162	190	164
Peninsula C	865	883	885	796
TOTAL	**1045**	**1047**	**1076**	**961**

CHANGE IN TREE OCCUPANCY			
	2010	**2011**	**2012**
Peninsula B	-10%	+17%	-14%
Peninsula C	+2%	+0.2%	-11%
Overall	+0.2%	+3%	-11%

STRATEGIC APPROACH 2012

	Peninsula A	Peninsula B	Peninsula C	Peninsula D
Inactive Nest Removal (prior to 2012 breeding season)		*	*	
Enhanced Ground Nesting	*	*		
Pre-Nesting Deterrents		*	*	*
Post-Breeding Deterrents			*	*

DCCO CONSERVATION ZONES

DCCO DETERRENT AREAS

INACTIVE NEST REMOVAL

- 2012 nest removal was done with forestry poles
- Nests were relocated to the Peninsula B Ground Nest colony to bridge the two areas

Year	Nests Removed
2001	31
2002	281
2003	647
2004	~400
2010	32
2011	236
2012	183

PRE-NESTING DETERRENTS

- Pre-nesting deterrents were largely scaled back
- Active nest removal took place in strategic locations on Peninsulas B and C
  - To prevent DCCO expansion into new trees
  - May 7 to June 8
  - 145 nests removed
    - 99 nests on Peninsula C
    - 46 nests on Peninsula B
  - Prior to removal, nests were closely monitored ensure eggs were no greater than 10 days old

MANAGEMENT SUMMARY

Peninsula A

- Enhanced ground nests – 36 nests with 18 decoys arranged around the base of the last nesting tree

Peninsula B

- Enhanced ground nests - woody debris and nests collected during inactive nest removal placed between 2 ground nest colonies to merge
- Active nest removals in strategic locations
- Tree nesting decreased by 22% (280 nests)
- Ground nesting increased by 27% (1265 nests)

Peninsula C

- Active nest removals in strategic locations
- Tree nesting decreased by 11% (612 nests)

2012 SEASON SUMMARY

- Prevented expansion onto Peninsula D
- Ground nests increased 476% from 2008 (from 15% of the total colony in 2008 to 50% in 2012)
- Tree nests decreased on both Peninsulas B and C
- Overall population increase of only 3%, supported by the expansion in the ground nest colony
- Webcam on Peninsula B
- Viewing blind on Peninsula C with views of DCCO, BCNH and GREG
- BCNH population holding steady
- GREG population holding steady

UPDATE ON YORK U RESEARCH

2013 PROPOSED STRATEGIC APPROACH

	Peninsula A	Peninsula B	Peninsula C	Peninsula D
Inactive Nest Removal (prior to 2013 breeding season)		*	*	
Enhanced Ground Nesting	*	*		
Pre-Nesting Deterrents		*	*	*
Post-Breeding Deterrents			*	*

DCCO CONSERVATION ZONES

DCCO DETERRENT AREAS

TO CONSIDER FOR 2013

- Should we take a year off from putting decoys on Peninsula A?

AUTHORITY BOARD

January 25, 2012

Black Creek Pioneer Village

1000 Murray Ross Pkwy, Downsview

SPRING BIRD FESTIVAL

Saturday May 11, 2013
8 a.m. to 4 p.m.

- Early bird hikes
- Family walks, guided bird hikes
- **Colonial waterbird hikes**
- Baillie Bird-a-thon
- Bird banding demonstrations
- Children's activities
- Educational displays
- Grand opening of TTP infrastructure