

# MANAGEMENT OF COLONIAL WATERBIRDS AT TOMMY THOMPSON PARK

## CORMORANT ADVISORY GROUP MEETING #6

[www.trca.on.ca/cormorants](http://www.trca.on.ca/cormorants)

Tuesday, December 15, 2009  
6:30 p.m. to 9:00 p.m.  
Metro Hall, Room 303  
55 John Street, Toronto

 **TORONTO AND REGION  
Conservation**  
*for The Living City*

  
**Tommy Thompson Park**  
Toronto's Urban Wilderness

**CORMORANT ADVISORY GROUP  
MEETING #6**

**Tuesday December 15, 2009**

**6:30 p.m. to 9:00 p.m.**

**AGENDA**

6:35pm	<b>Welcome and Introductions Review of Previous Meetings</b>	Ralph Toner
7:00pm	<b>Review 2009 colonial waterbird data and 2009 cormorant management strategy</b>	Ralph Toner
7:40pm	<b>Update on York University studies</b>	Gail Fraser
8:00pm	<b>Next Steps</b> <ul style="list-style-type: none"><li>• Completion of the 2009 Cormorant Management Strategy</li><li>• Moving into 2010</li></ul>	Ralph Toner
8:55pm	<b>Wrap-up and next meeting</b>	Ralph Toner



# 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



## 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 2008

<b>Advisory Group Meeting #1</b>	January 24	<ul style="list-style-type: none"><li>•Values and interests of TTP</li><li>•Conditions and concerns of DCCO colony</li><li>•Need for management</li><li>•Strategies to address concerns</li></ul>
<b>Advisory Group Meeting #2</b>	February 19	<ul style="list-style-type: none"><li>•Evaluate management options</li><li>•Propose alternative approaches</li></ul>
<b>Cormorant Webpage launched</b>	March 3	<ul style="list-style-type: none"><li>•Includes background materials, Advisory Group meeting notes and presentations, Public Meeting workbook and meeting notes, relevant links</li></ul>
<b>Public Meeting</b>	April 3	<ul style="list-style-type: none"><li>•Advertised in Toronto Star, The Mirror, TRCA website, TTP information board, TRCA distribution lists, some Advisory Group member websites</li><li>•Canada Newswire press release, Global TV coverage</li><li>•Presentations, facilitated round table discussion, individual workbooks for commenting</li></ul>
<b>Advisory Group Meeting #3</b>	April 23	<ul style="list-style-type: none"><li>•Review public response</li><li>•Discuss 2008 strategy</li></ul>
<b>TTP Spring Bird Festival</b>	May 10	<ul style="list-style-type: none"><li>•Guided tours of cormorant colony</li><li>•Public survey on TTP cormorants</li></ul>
<b>Authority Board</b>	May 23	<ul style="list-style-type: none"><li>•Present 2008 strategy for Authority action</li></ul>
<b>Advisory Group Meeting #4</b>	Dec10	<ul style="list-style-type: none"><li>•Review 2008 strategy and preliminary research results</li></ul>



# Public Consultation Summary 2009

<b>Advisory Group Meeting #5</b>	February 4	•Develop the 2009 Strategy
<b>TRCA Authority Meeting</b>	March 27	•Present the 2009 Strategy for TRCA Authority action
<b>TTP Spring Bird Festival</b>	May 23	•Guided tours of cormorant colony •Public survey on TTP cormorants
<b>Advisory Group Meeting #6</b>	December 15	•Review the 2009 population data and monitoring program •Review 2009 strategy and preliminary research results •Being discussions on a strategic approach for 2010

# Strategic Approach 2009

	<b>Peninsula A</b>	<b>Peninsula B</b>	<b>Peninsula C</b>	<b>Peninsula D</b>
<b>Pre-nesting Deterrents</b>		*	*	*
<b>Post-Breeding Deterrents</b>			*	*
<b>Enhanced Ground Nesting</b>	*	*		
<b>Restoration</b>	*	*	*	*
<b>Experimental Egg Oiling Follow Up</b>		*		

# Colonial Waterbirds of Tommy Thompson Park, 2009



Double-crested  
Cormorant  
7564 nests



Black-crowned  
Night-Heron  
<50 nests



Herring Gull  
<20 nests



Common Tern  
354 nests



Great Egret  
7 nests



Ring-billed Gull  
30,000 nests





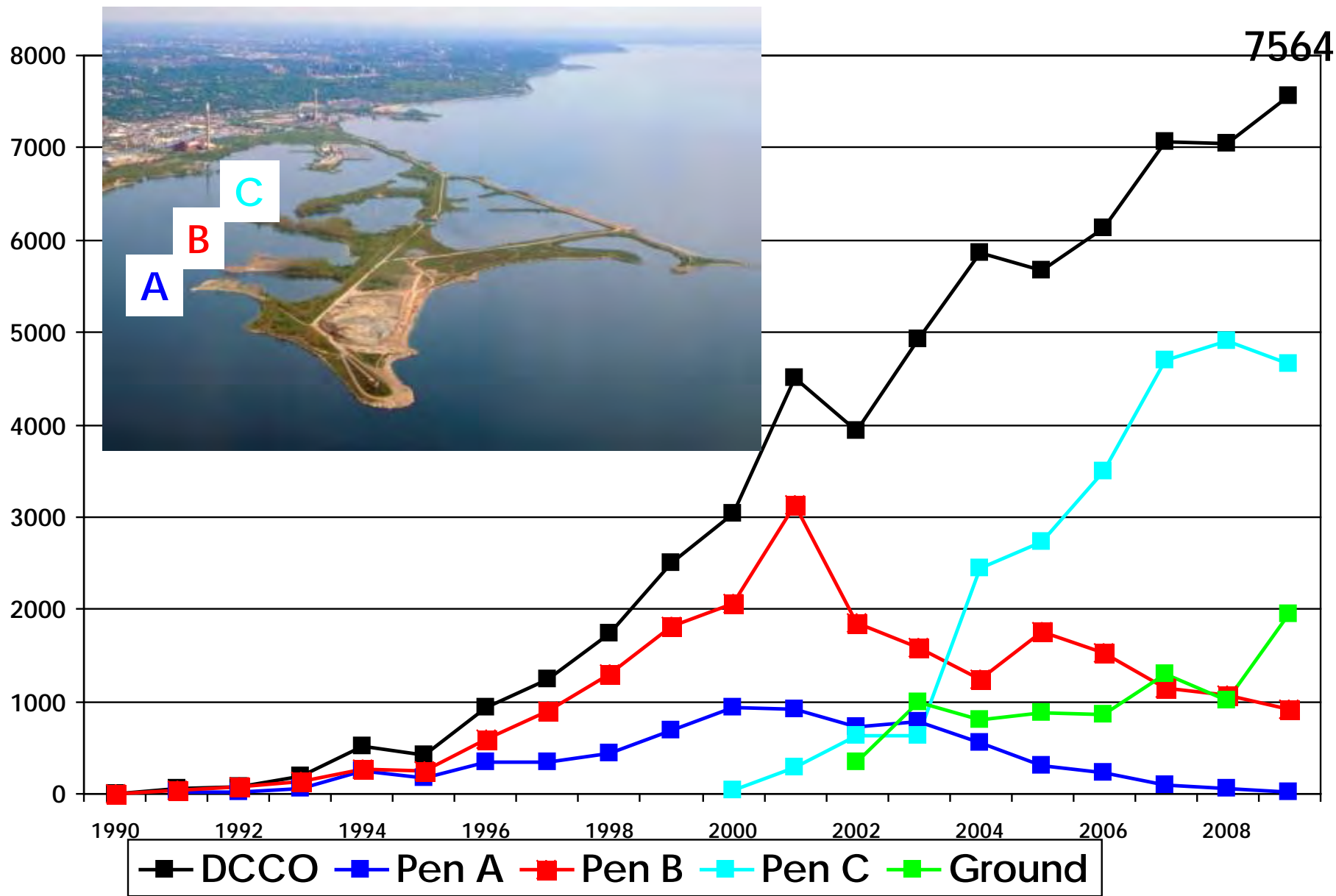


# DCCO Nest Numbers 1998 to 2009

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
A	436	695	933	909	730	779	557	311	228	101	49	22
B	1307	1814	2071	3048	1844	1582	1241	1763	1535	1072	1050	917
B ground					344	990*	809	872	868	1302	1009	1957
C	0	0	30	282	625	633	2439	2728	3494	4584	4906	4668
Total	1743	2509	3034	4237	3543	3942	5046	5674	6125	7059	6717	7564

• Peninsula A =42, and Peninsula B =948

# TTP Nests Numbers by Peninsula

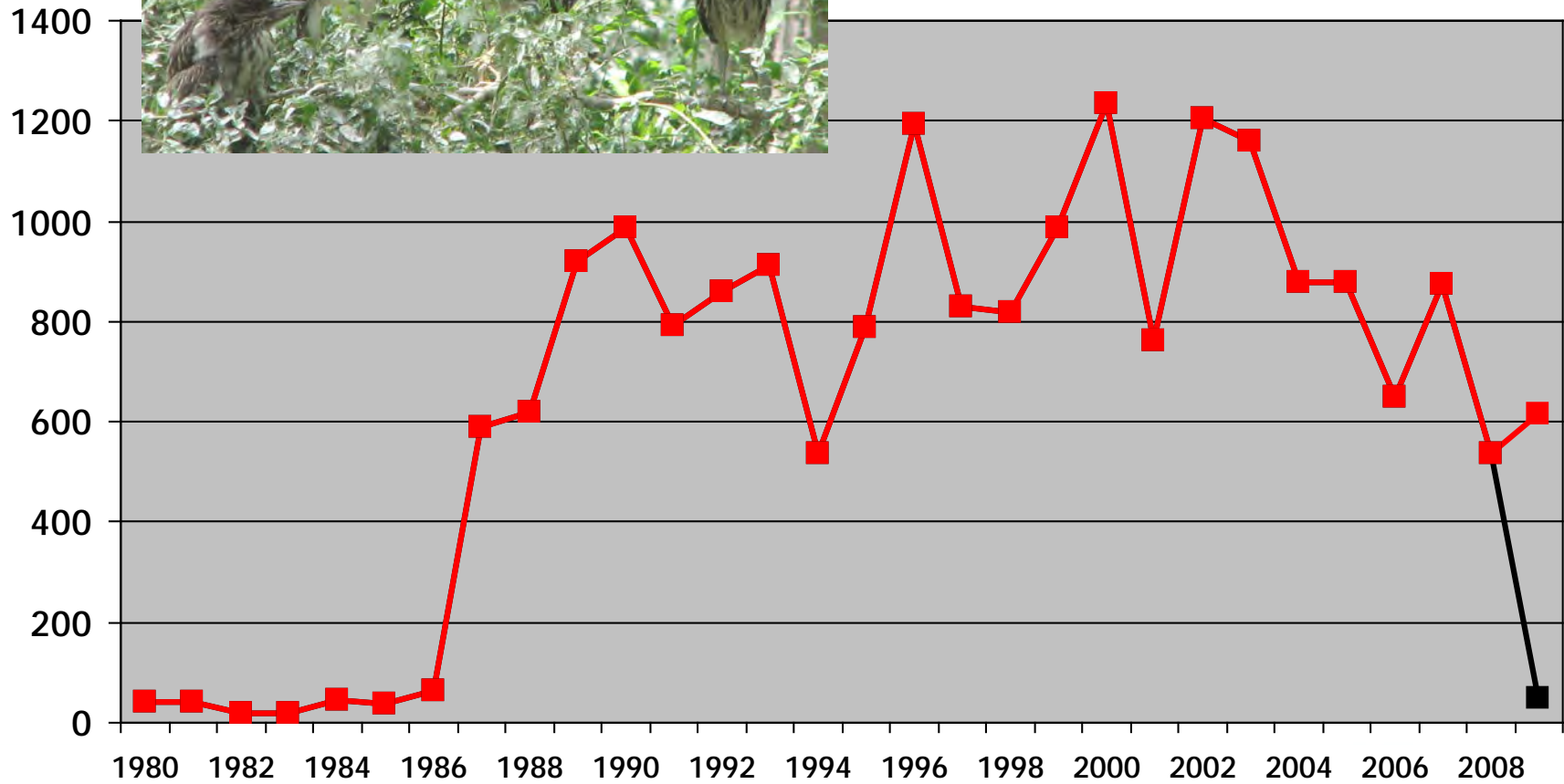


# BCNH numbers by Peninsula

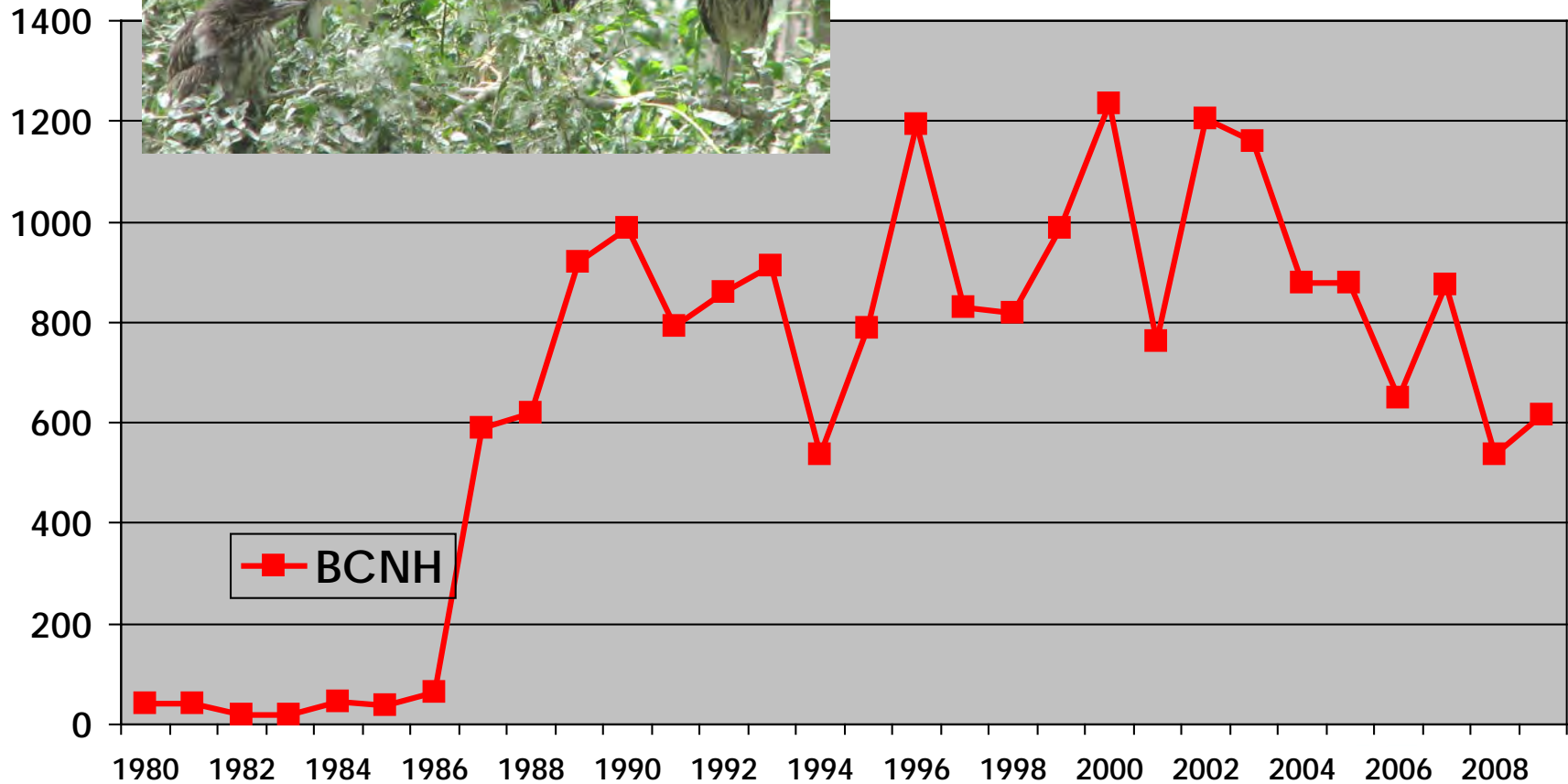
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>A</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>B</b>	15	0	0	0	163	255	278	270	145	146	81	38
<b>C</b>	803	988	1235	762	1040	904	601	610	504	730	455	579
<b>Total</b>	818	988	1235	762	1203	1159	879	880	649	876	536	617

**Note:** Peak count conducted on May 27- June 2  
 Large scale abandonment occurred on between June 15- 30

# BCNH Nest Numbers 1980 to 2009

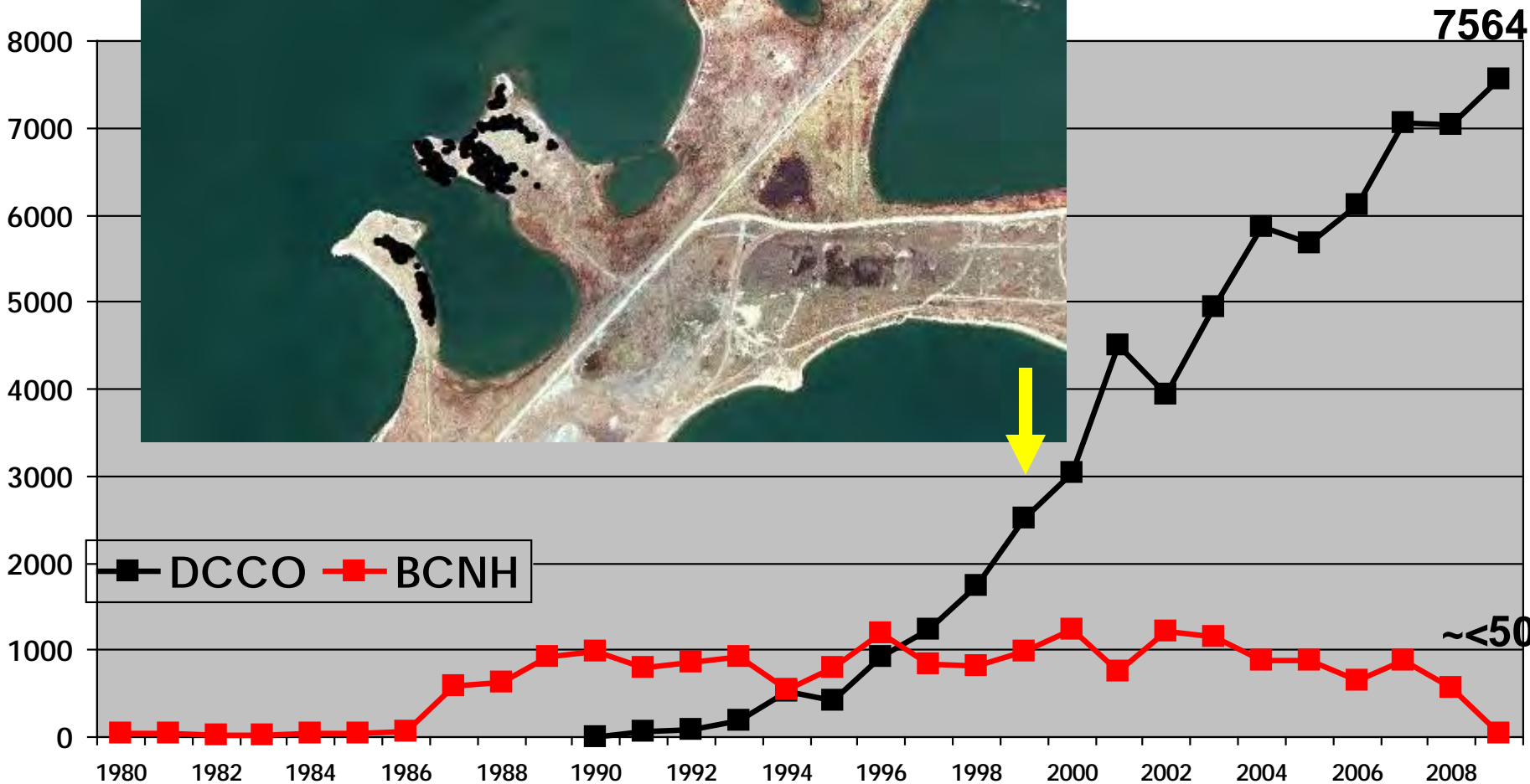


# BCNH Nest Numbers 1980 to 2009

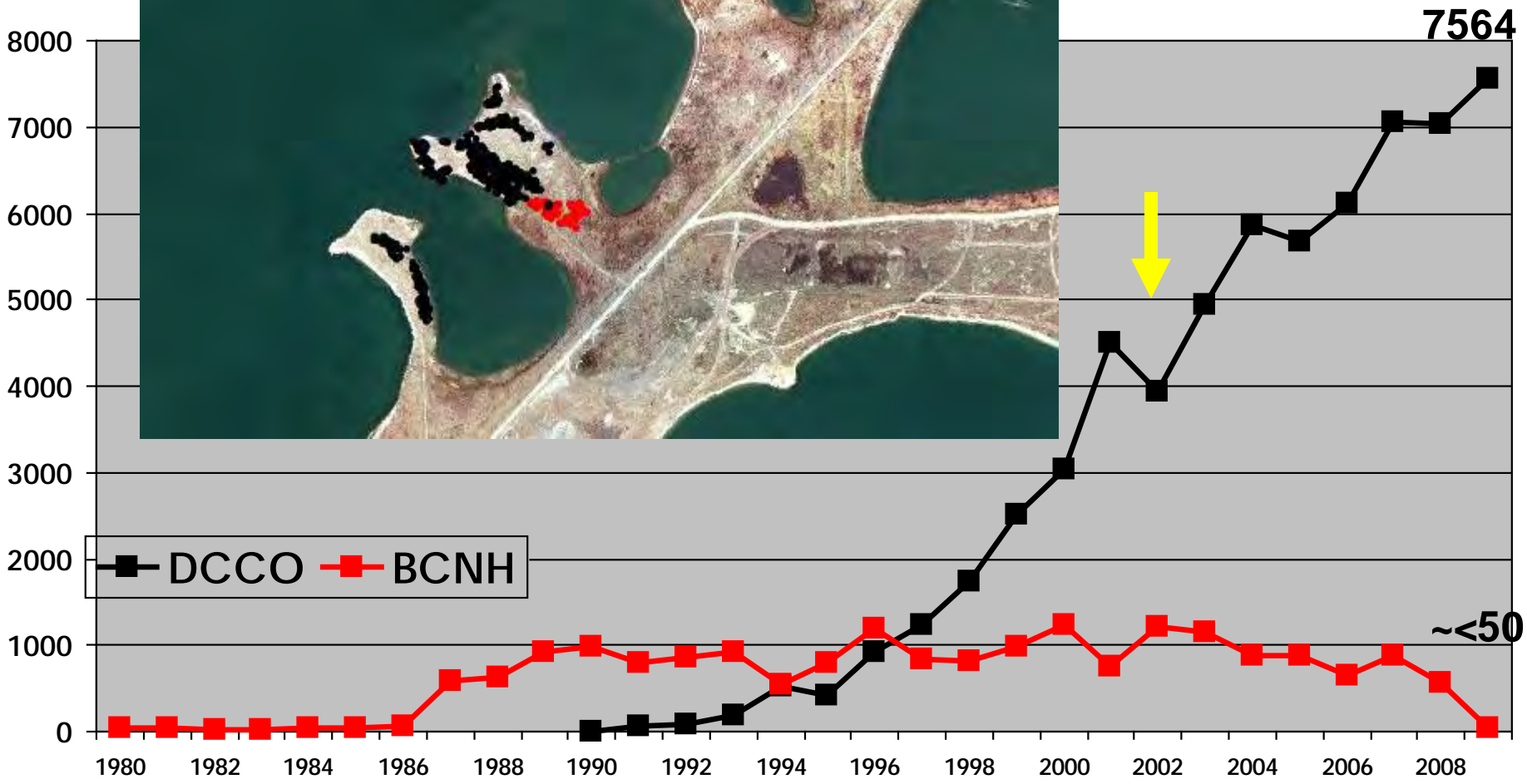




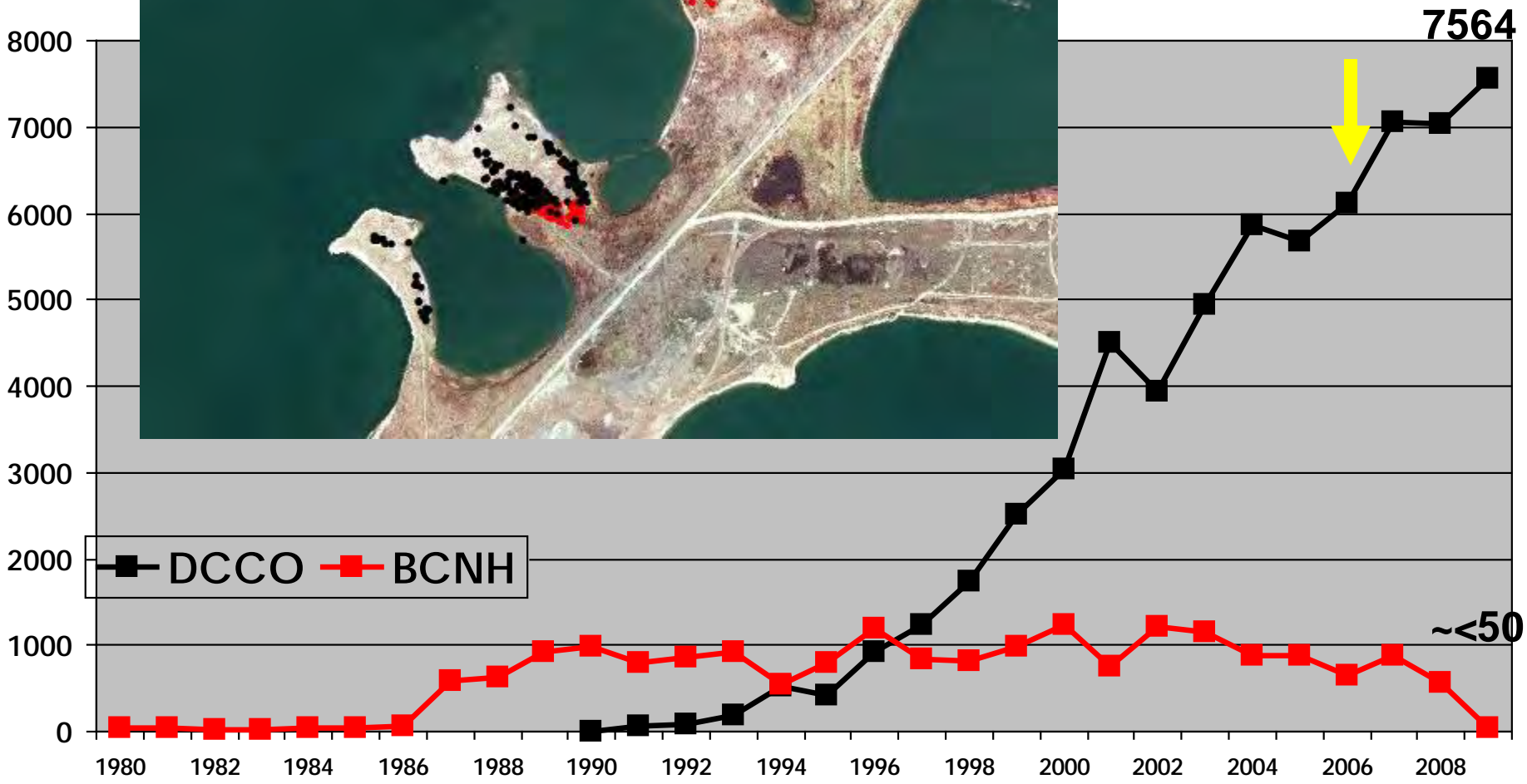
# Nests Numbers of DCCO and BCNH at Tommy Thompson



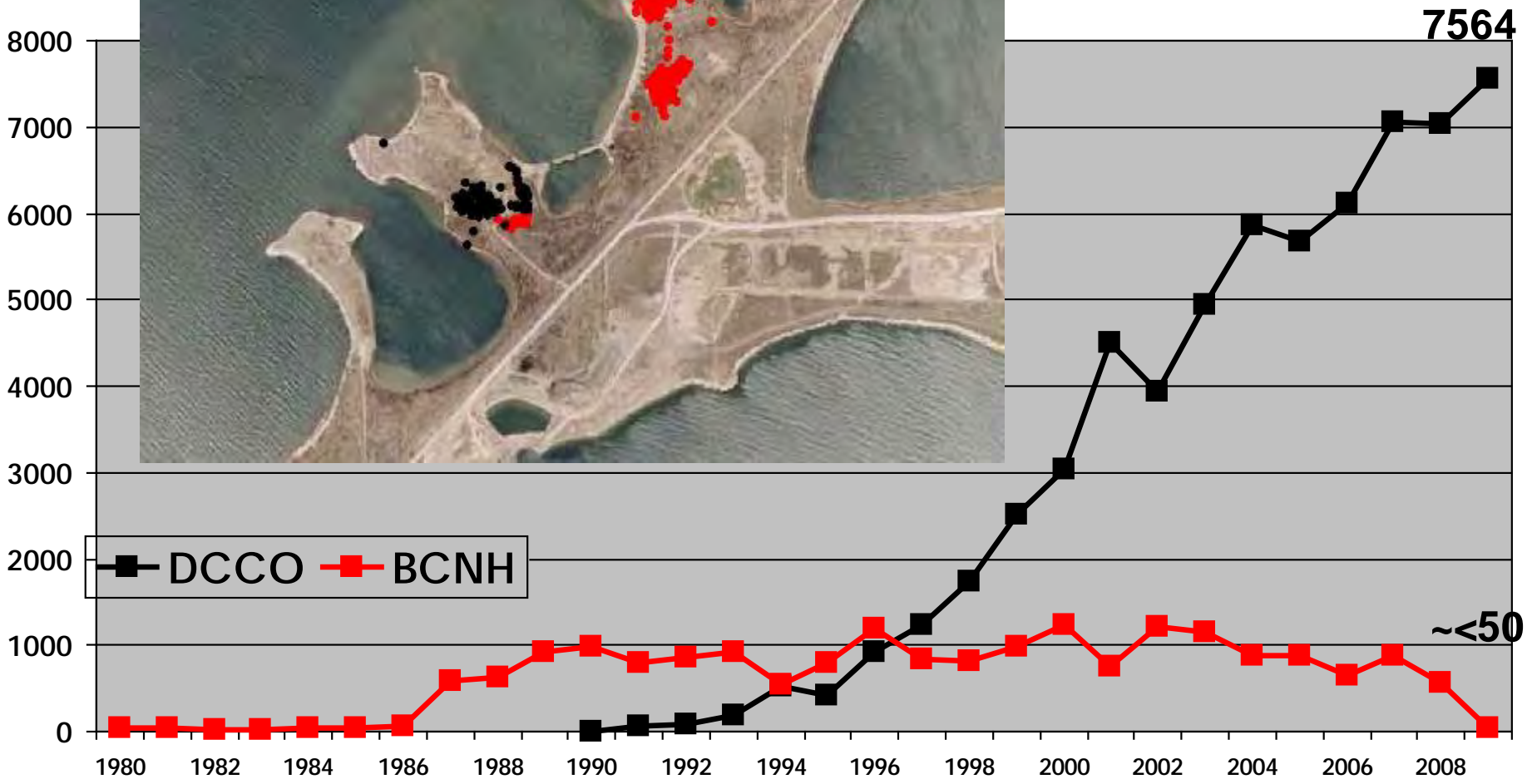
# Nests Numbers of DCCO and BCNH at Tommy Thompson



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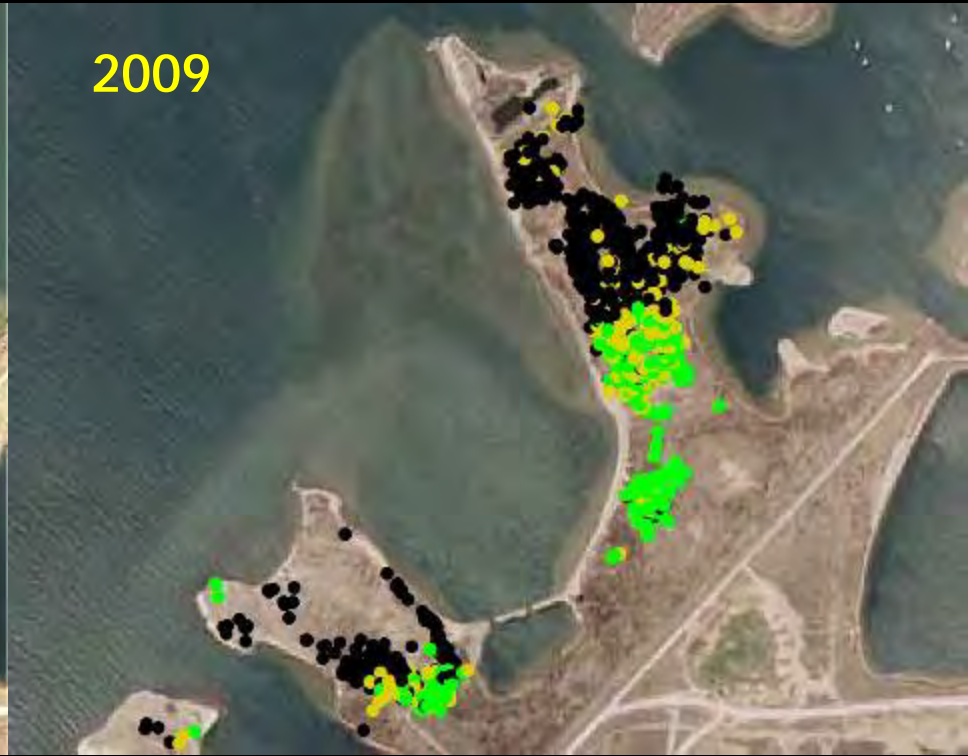


# The Change in Tree Health between 2006 and 2009

2006



2009



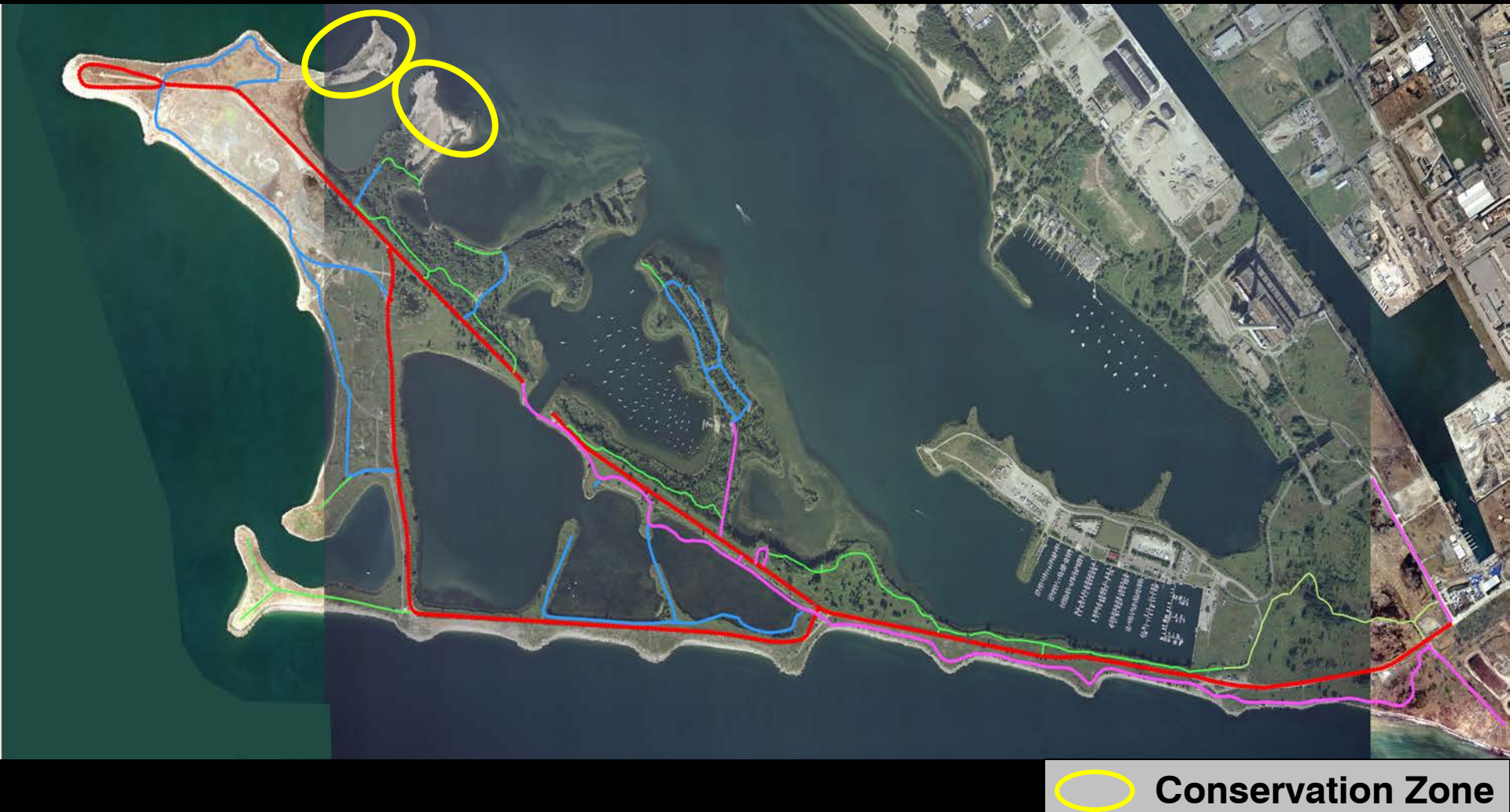
- Live Trees
- Tree in Decline
- Dead or Dying Trees



# Proposed Strategic Approach 2009

	<b>Peninsula A</b>	<b>Peninsula B</b>	<b>Peninsula C</b>	<b>Peninsula D</b>
<b>Pre-Nesting Deterrents</b>		*	*	*
<b>Post-Breeding Deterrents</b>			*	*
<b>Enhanced Ground Nesting</b>	*	*		
<b>Restoration</b>	*	*	*	*
<b>Experimental Egg Oiling (follow-up on nest attendance only)</b>		*		

# Cormorant Conservation Zones

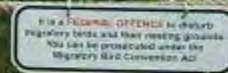






**Restoration Planting on Peninsula A**





**Regulatory Signage to keep park users out of the colonies**



# Enhanced Ground Nesting

- Add structure
- Provide nest building materials
- Decoys
- Minimize disturbance





# Ground Nests at TTP 2008

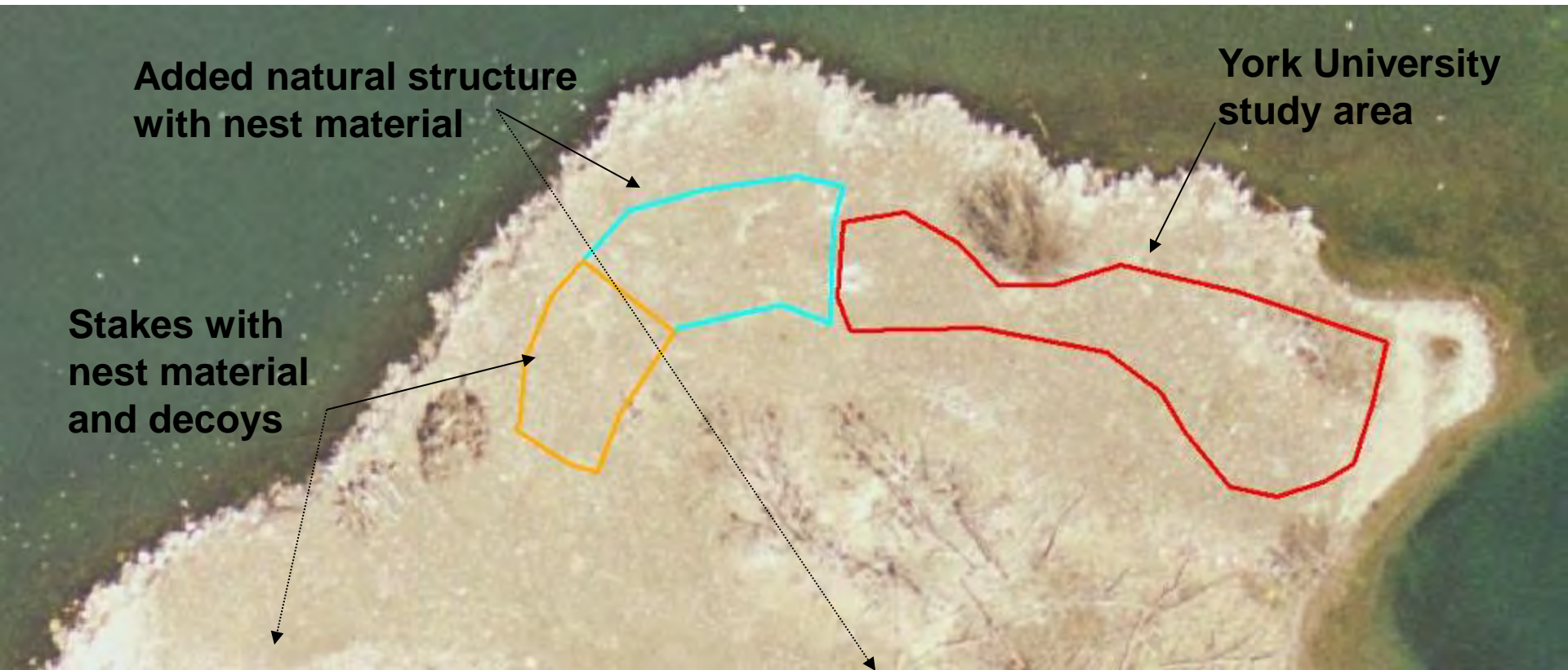
**1074 tree nests  
over 1.3 Ha  
= 0.1 nests/m<sup>2</sup>**

**1009 ground nests  
over 600m<sup>2</sup>  
= 1.7 nests/m<sup>2</sup>**





# PENINSULA A - 2009 GROUND NEST ENHANCEMENTS





# Peninsula B Ground Nest Colony





# Peninsula B Ground Nest Colony





# Peninsula B Ground Nest Enhancement









# Peninsula A: woody debris for ground nest enhancement





# Peninsula A: woody debris ground nest enhancement





# Peninsula A: stakes & nesting material





# Peninsula A: York University study area





## **Researcher access tunnel and blind on Peninsulas A & B**





# Peninsula A: stakes and tires with nesting material





# Peninsula A: stakes and tires with nesting material





# Peninsula A: ground nest enhancements





**DCCO Decoy**



**DCCO decoy in tire with RBGU eggs**



# Peninsula A Ground Nest Enhancements



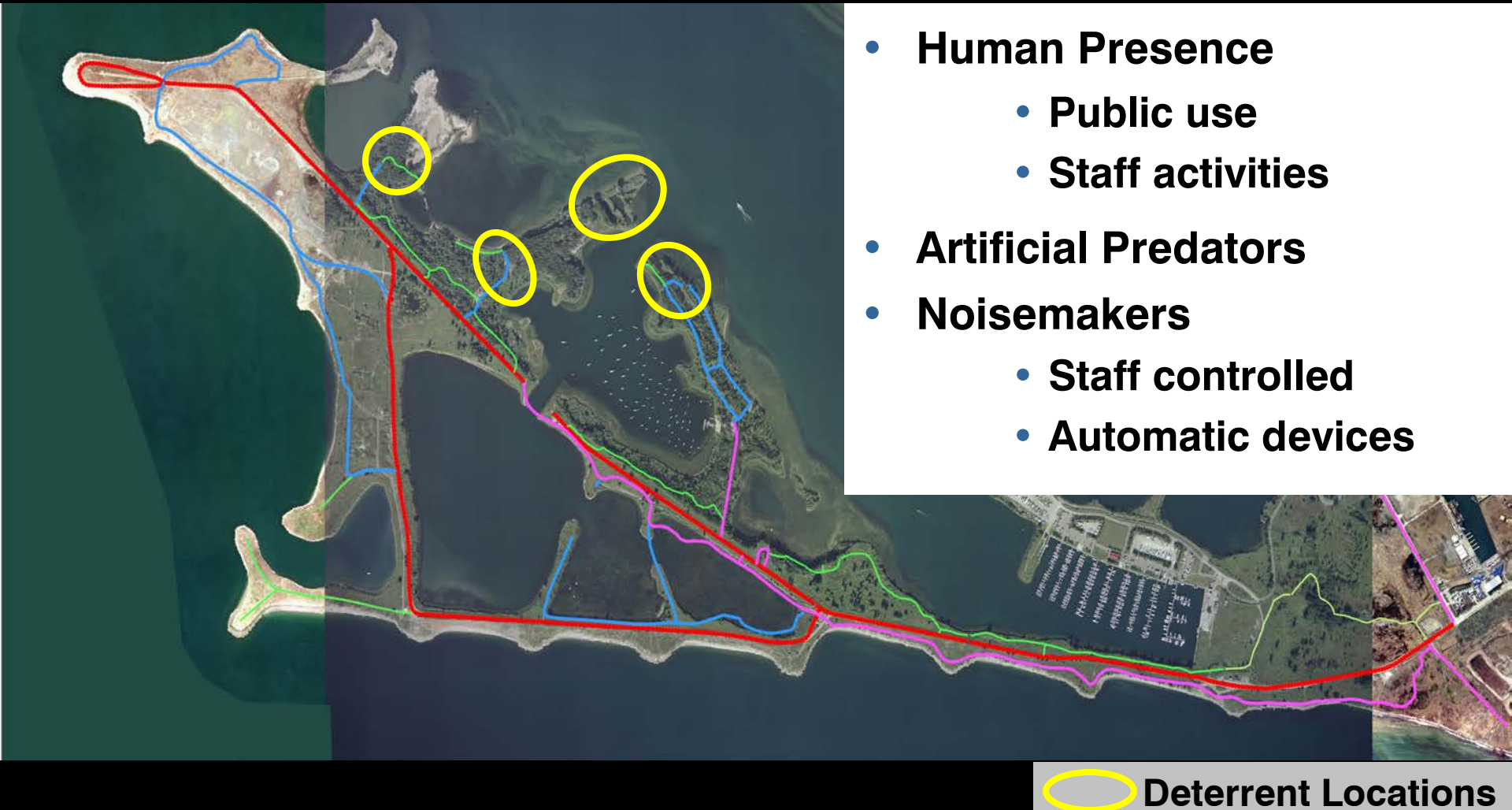


**Live DCCO in the ground nest enhancement area on Peninsula A**



# Pre-Nesting Deterrents

- Least intrusive methods favoured
- Techniques will escalate if necessary
- Caution around other nesting species



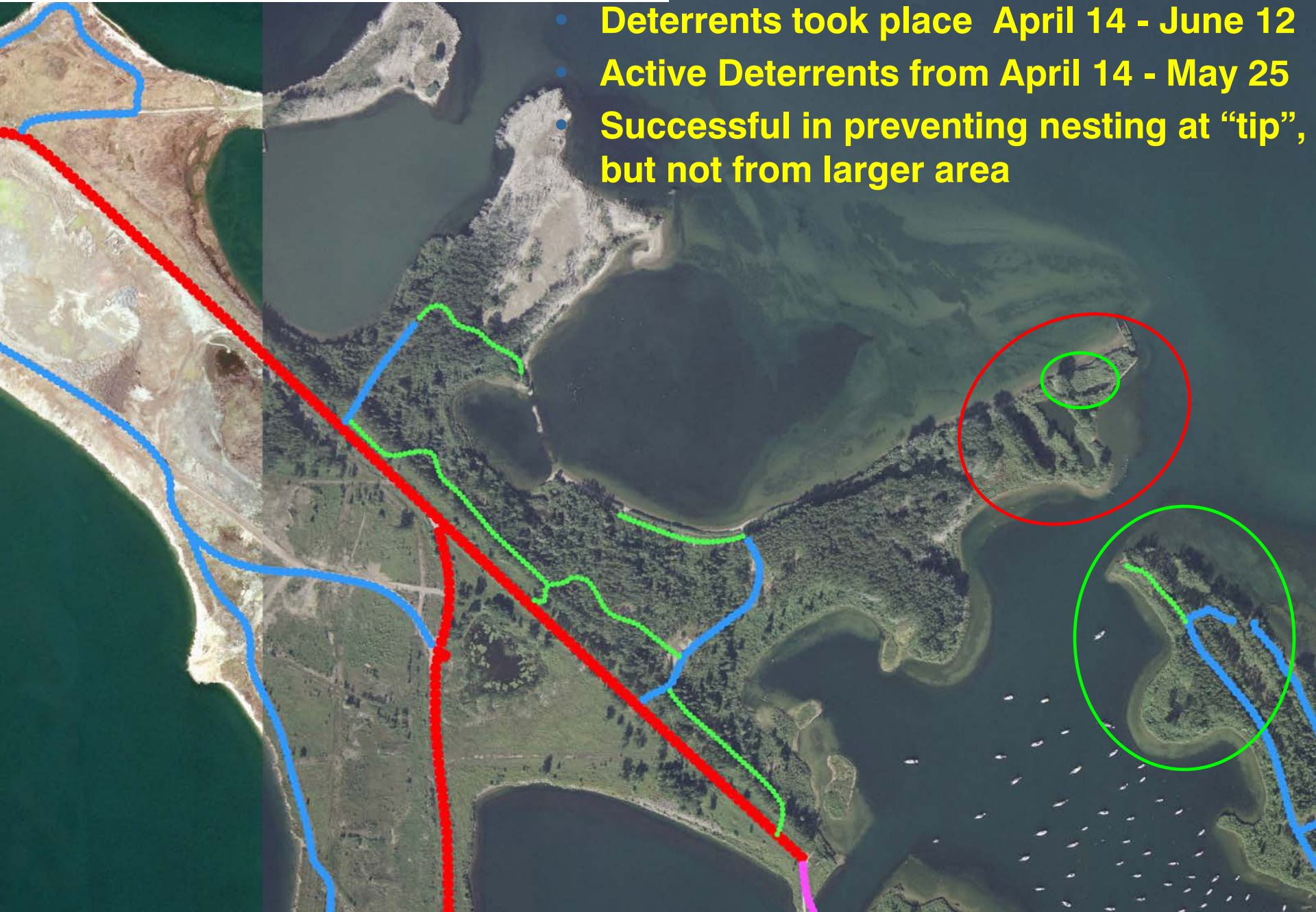
- **Human Presence**
  - Public use
  - Staff activities
- **Artificial Predators**
- **Noisemakers**
  - Staff controlled
  - Automatic devices

 Deterrent Locations



# Pre-Nesting Deterrents - 2009

- Deterrents took place April 14 - June 12
- Active Deterrents from April 14 - May 25
- Successful in preventing nesting at “tip”, but not from larger area





# Monitoring Locations

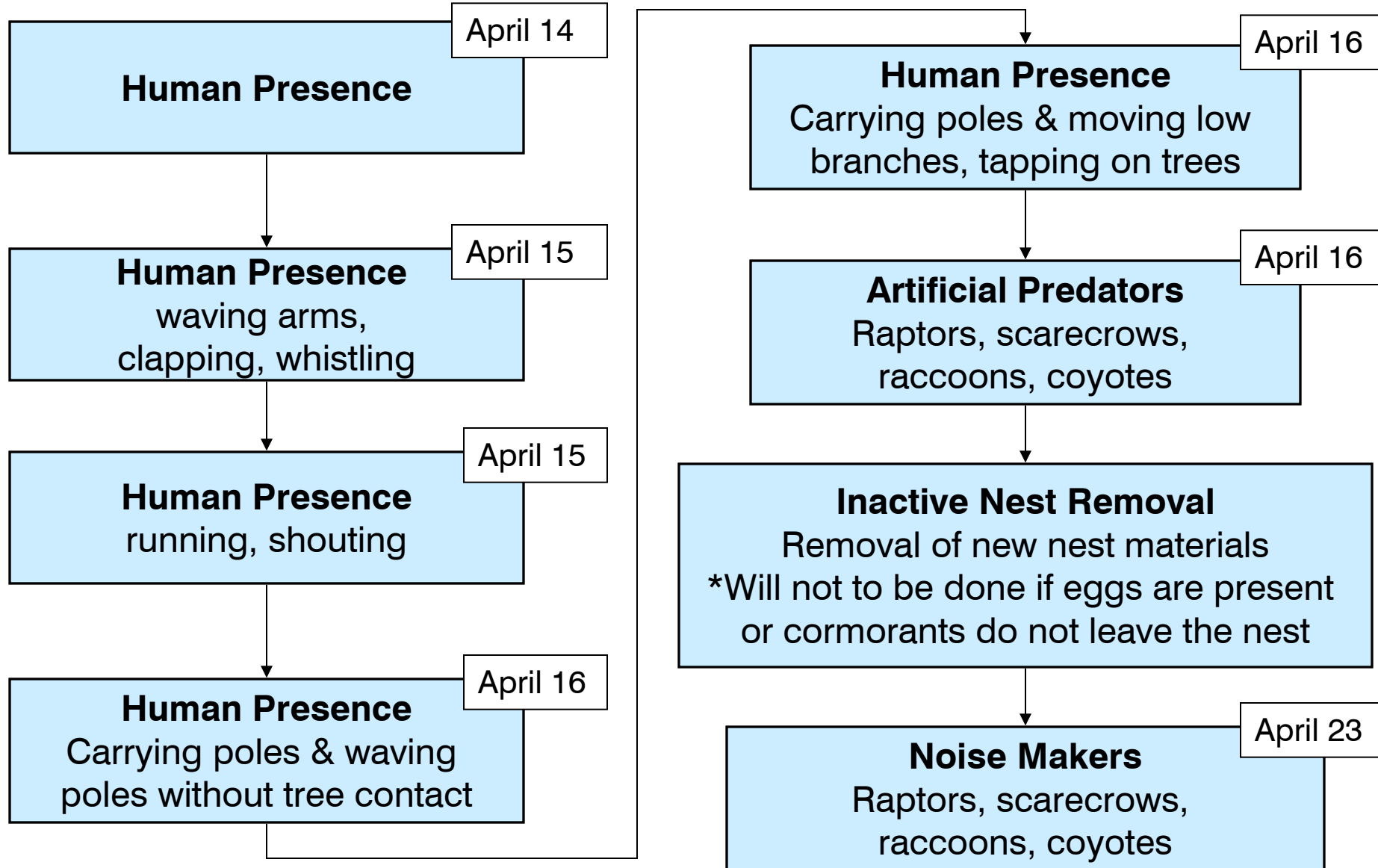
- 74 person hours spring 2009
- 28 minute average session
  - pre-deterrent
  - active-deterrent
  - post-deterrent



- Spring Deterrent Monitoring Locations
- Fall Deterrent Monitoring Locations



# Deterrent Escalation





## Removal of inactive nest materials





## **Artificial Predators - Hawk Kite -**



# Artificial Predators - Owl Decoy -





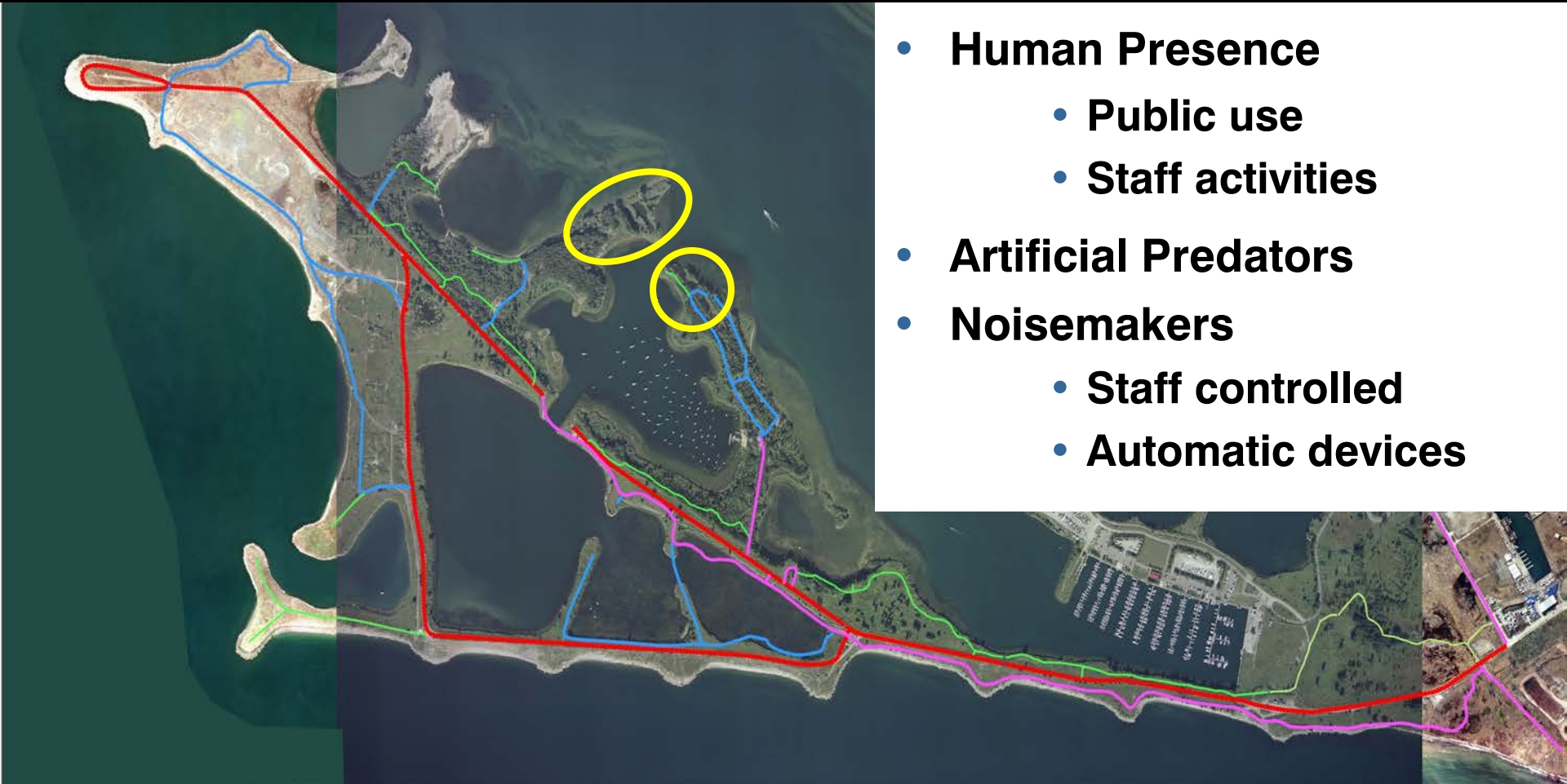
# Artificial Predators - Scarecrows -





# Post-Breeding Deterrents

- Least intrusive methods favoured
- Techniques will escalate if necessary



- **Human Presence**
  - Public use
  - Staff activities
- **Artificial Predators**
- **Noisemakers**
  - Staff controlled
  - Automatic devices



# Restoration

- Soil amendments
- Tree & shrub planting
- Herbaceous planting/seeding
- Plant tending until established
- Protection from herbivory, loafing



# 2009 Season Summary

- **Prevented Expansion onto Peninsula D**
- **Ground nests increased by 94% from 2008 (from 14% to 26%)**

**No nesting on Peninsula A**

**Prospecting ?**

- **Number of trees used increase however tree nests decreased**
- **Large scale abandonment by BCNH**





# Where are We Going

**Enhanced Ground Nesting  
Predator exclusion**

**Address BCNH Abandonment**

**Escalate Nesting Deterrents**

**Active Nest Removal**





A photograph of three black birds, likely cormorants, sitting on a nest made of dry sticks and twigs. The birds have dark plumage and bright yellow-orange beaks and throats. One bird in the foreground is looking directly at the camera, while the other two are slightly behind it. A white speech bubble with a black outline is positioned to the left of the birds, containing the text 'Thank you!'.

Thank you!

Gail Fraser  
Chip Weseloh  
Dave Moore  
Ann Gray  
John Almond  
Patrick Hubert  
Leslie Coates  
Wayne Reeves  
John Carley  
Lynne Freeman  
Mark Carabetta  
Cathryn MacFarlane  
Paul Scott  
Glenn Coady  
Liz White  
Julie Woodyer