

# CORMORANTS AT TOMMY THOMPSON PARK

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

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

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

  
**TommyThompsonPark**  
Toronto's Urban Wilderness

# CORMORANTS AT TOMMY THOMPSON PARK

Thursday, April 3, 2008, 6:30 p.m. to 9:00 p.m.

Mennonite New Life Centre, 1774 Queen Street East, Toronto

6:30 pm	<b>Register and view displays</b>	
7:00 pm	<b>Welcome</b>	Councillor Fletcher Adele Freeman, Director, Watershed Management, TRCA
7:10 pm	<b>Agenda review</b> <b>Overview of process</b>	Suzanne Barrett, Facilitator
7:20 pm	<b>Tommy Thompson Park overview</b>	Gord MacPherson, Manager, Restoration & Environmental Monitoring Projects, TRCA
7.35 pm	<b>Colonial waterbirds in the Great Lakes</b>	Chip Weseloh, Wildlife Biologist, Canadian Wildlife Service
7:50 pm	<b>Cormorants at TTP</b>	Ralph Toner, Senior Project Manager, TRCA
8:10 pm	<b>Round-table discussions</b> <ul style="list-style-type: none"><li>•Goal and objectives</li><li>•Potential methods</li><li>•Application of methods</li></ul>	All
8:50 pm	<b>Summary and next steps</b>	Suzanne Barrett
9:00 pm	<b>Adjourn</b>	



# PROPOSED GOAL AND OBJECTIVES FOR CORMORANT STRATEGY

## GOAL

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



## OBJECTIVES

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





# CORMORANT ADVISORY GROUP

## **TRCA**

Restoration Services

## **Federal/Provincial**

Canadian Wildlife Service

Ontario Ministry of Natural Resources

Toronto Port Authority

Transport Canada

## **City of Toronto**

Parks, Forestry and Recreation

Public Health

## **Academia**

University of Toronto

York University

## **Interest Groups**

Aquatic Park Sailing Club

Cormorant Defenders International:

Animal Alliance of Canada

Zoocheck Canada Inc.

Canadians for Snow Geese

Earthroots

Friends of the Spit

Local Enhancement and Appreciation of  
Forests (LEAF)

Ontario Nature

Ontario Society for the Prevention of  
Cruelty to Animals

Outer Harbour Sailing Federation

Toronto Island Residents

Toronto Ornithological Club

## PROCESS FOR CORMORANT STRATEGY TIMELINE

<b>Advisory Group Meeting #1</b>	January 24, 2008	<ul style="list-style-type: none"> <li>• Identify values and interests associated with TTP</li> <li>• Discuss existing conditions and concerns</li> <li>• Review proposed list of management options (including “do nothing”)</li> </ul>
<b>Advisory Group Meeting #2</b>	February 19, 2008	<ul style="list-style-type: none"> <li>• Evaluate management options</li> <li>• Discuss alternative management approaches</li> </ul>
<b>Public Meeting</b>	April 3, 2008	<ul style="list-style-type: none"> <li>• Present existing conditions, concerns and alternative management approaches</li> <li>• Provide feedback</li> </ul>
<b>Advisory Group Meeting #3</b>	April 23, 2008	<ul style="list-style-type: none"> <li>• Review public response</li> <li>• Formulate management plan</li> </ul>
<b>TRCA Authority Board</b>	April 25, 2008 May 23, 2008	<ul style="list-style-type: none"> <li>• Present report for Authority action</li> </ul>
<b>Spring Bird Festival</b>	May 10, 2008	<ul style="list-style-type: none"> <li>• Tour of Waterbird Colonies</li> </ul>
<b>Advisory Group Meeting #4</b>	tbd	<ul style="list-style-type: none"> <li>• Review implementation workplan</li> </ul>

All reports and meeting notes will be posted on the TRCA website at [www.trca.on.ca/cormorants](http://www.trca.on.ca/cormorants)



# Tommy Thompson Park

## Public Urban Wilderness



**TommyThompsonPark**

Toronto's Urban Wilderness

Member of Conservation Ontario

Toronto and Region Conservation  for *The Living City*

## **WILD IN THE CITY**

- Wildness in Urban Setting \*\*\*\*\*
- Urban Natural Park\*\*\*\*
- A wild place that developed despite obstacles
- Humans are part of biodiversity
- Hidden gem
- Out of city experience in the city

## **ECOLOGICAL VALUES**

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

## **RESEARCH**

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

## **CITY ENVIRONMENT**

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

## **RECREATION & TOURISM**

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

## **EDUCATION**

- Education\*\*\*\*
- Experience natural processes
- Turn on kids to career interests
- International case study



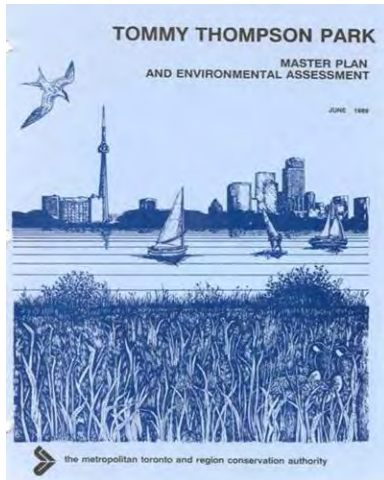
- **Construction of the Leslie Street Spit began in 1959**
- **Dispose of rubble and fill from the construction industry**
- **Expand port related facilities**
- **Create opportunities for dredged material disposal**



May 2, 1975. #12554

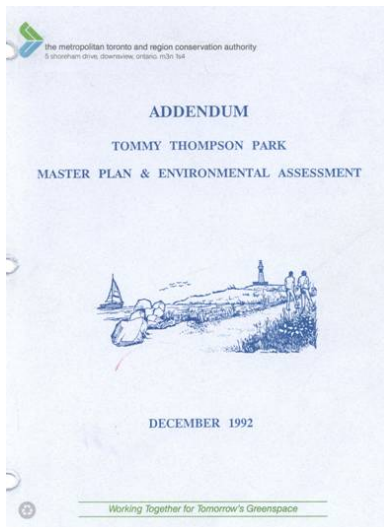


# Master Plan (1989) and Addendum (1992)

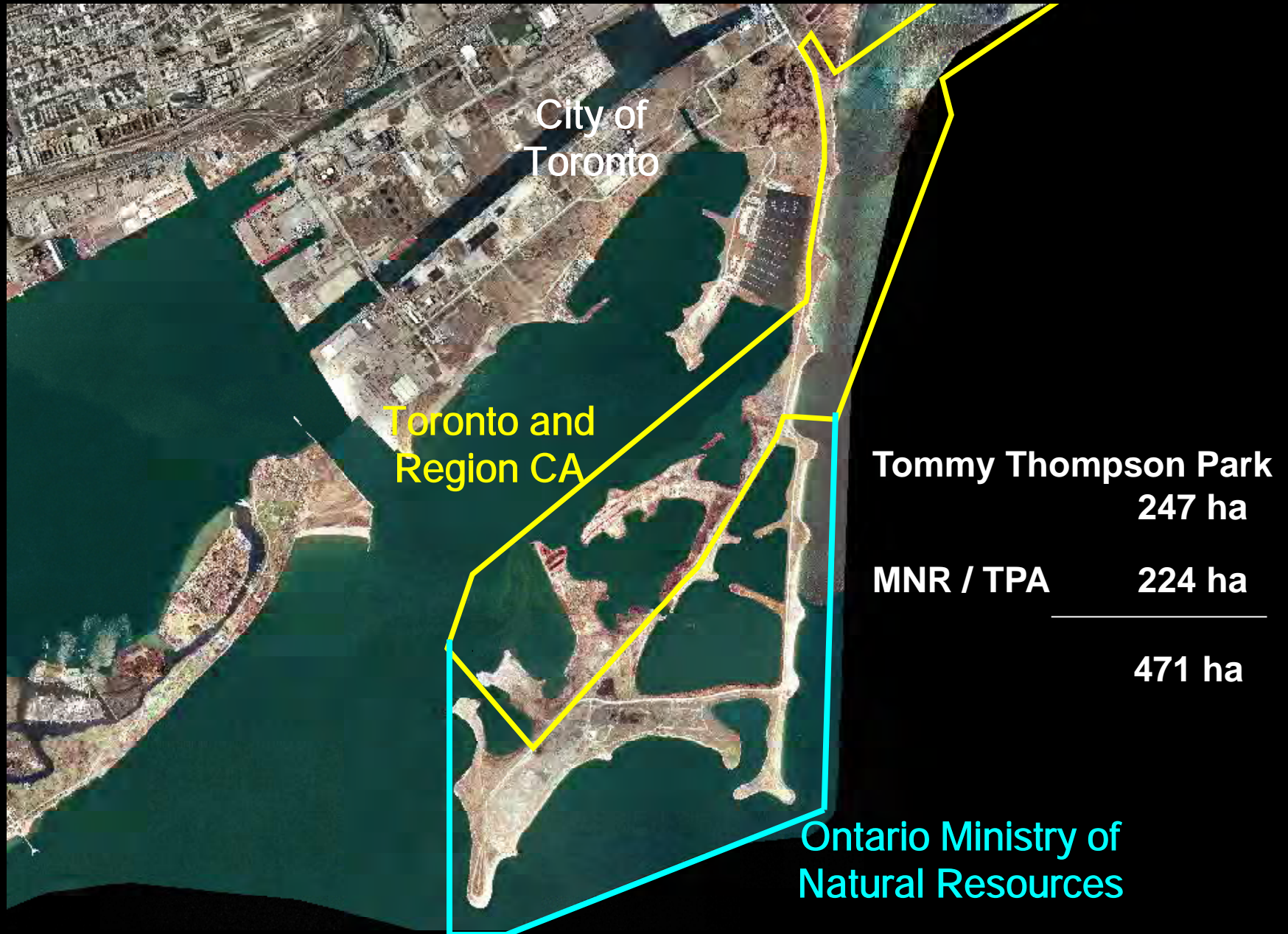


## The goals of the Master Plan are to:

- To conserve and manage the natural resources and environmentally significant areas;
- To provide a unique, water-oriented open space which will assist in meeting regional needs;
- To develop public awareness regarding the significance of the Lake Ontario waterfront and Tommy Thompson Park.



# Tommy Thompson Park





# Tommy Thompson Park

## 2007 Interim Management

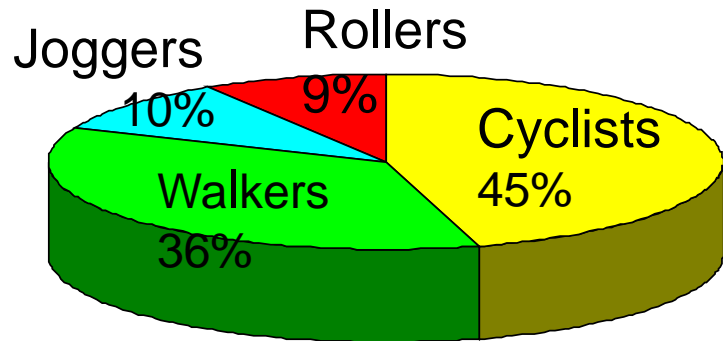
- Open to the public weekends and holidays
- Shuttle Van Service from May to October
- Volunteer Naturalist from May to October
- Aquatic Park Sailing Club
- Habitat and wildlife management





# Interim Management Program

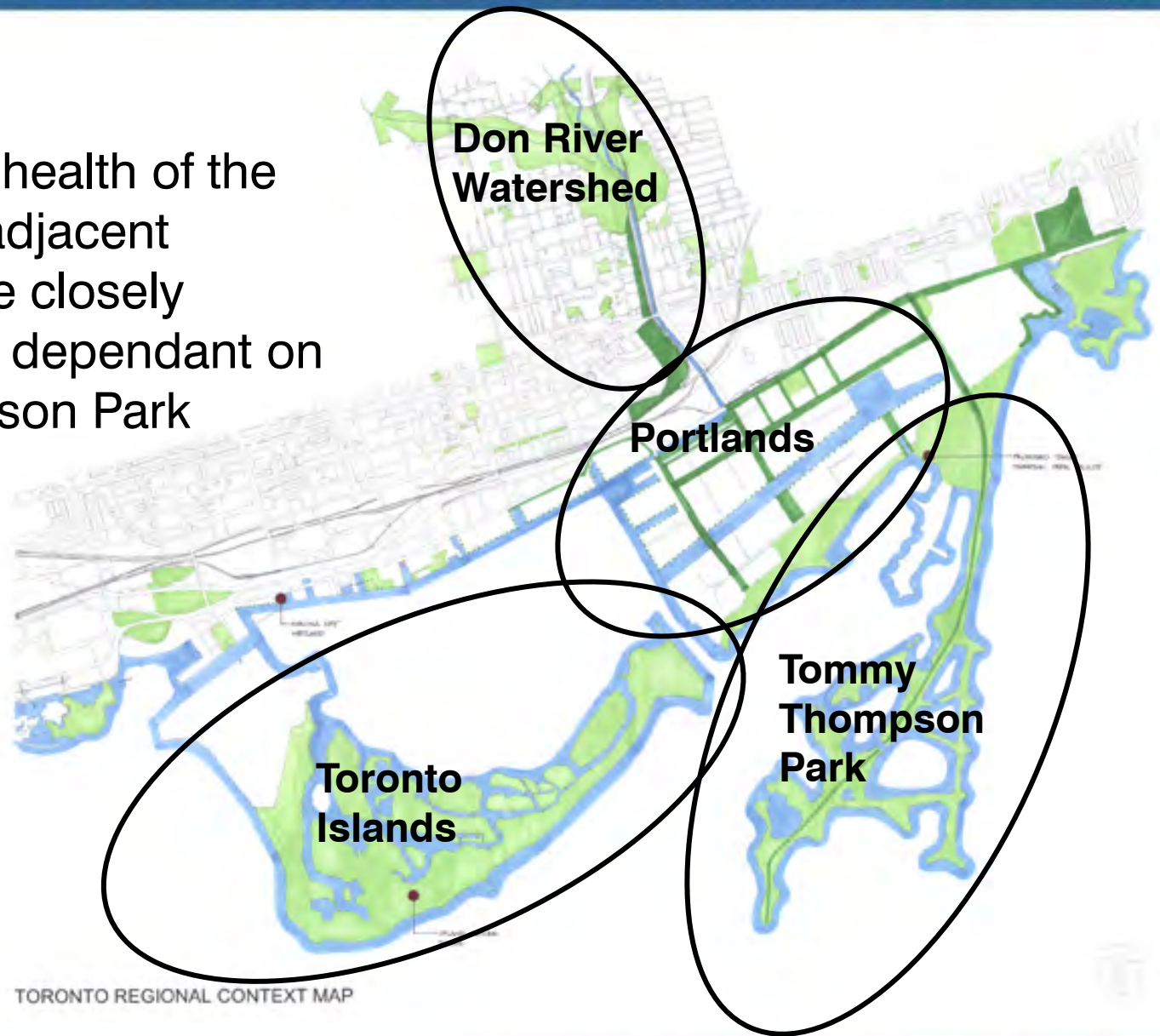
Approximately 250,000 people visit TTP annually







The ecological health of the shoreline and adjacent watersheds are closely connected and dependant on Tommy Thompson Park



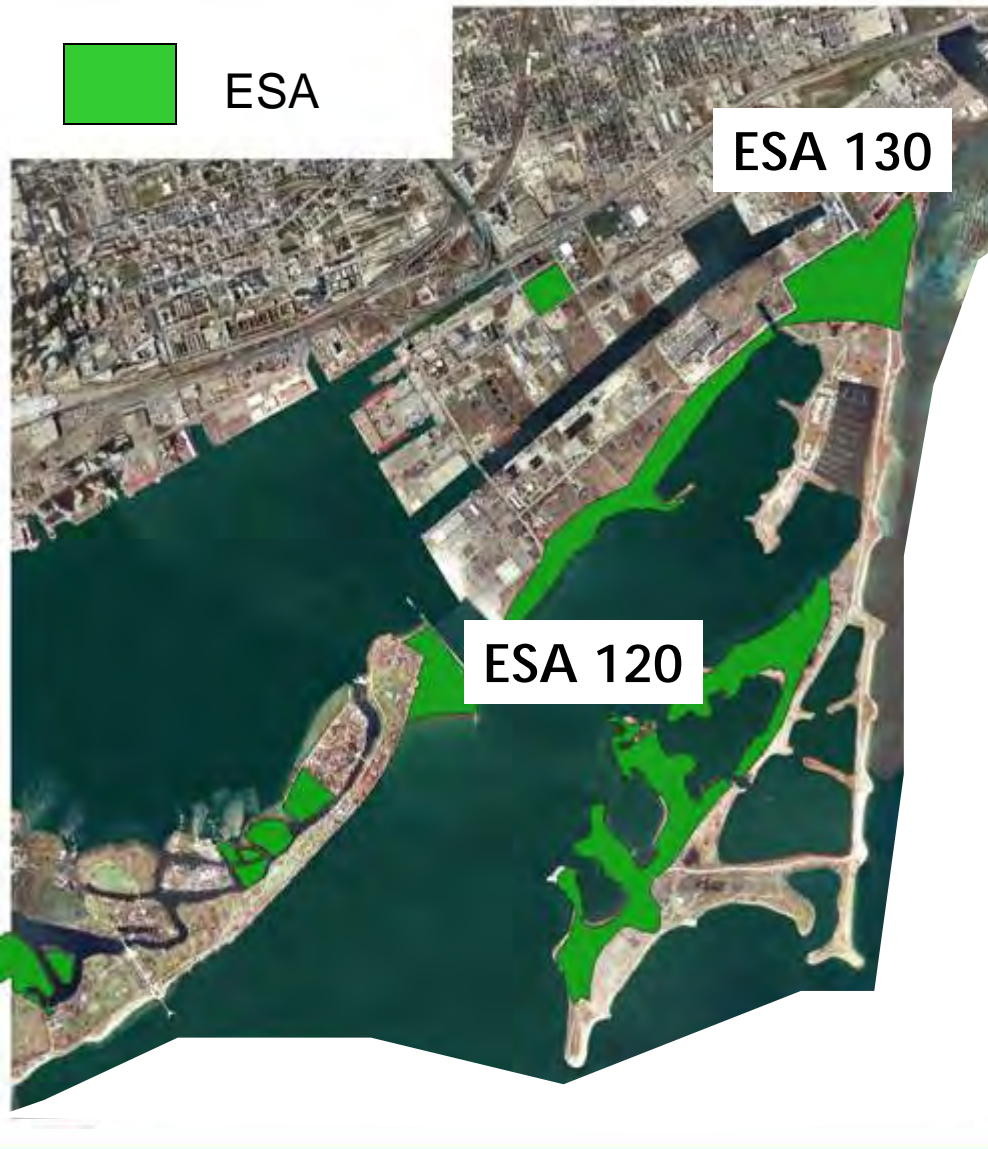




# Local and Regional Context



ESA







## IMPORTANT BIRD AREAS OF CANADA



IMPORTANT BIRD  
AREAS OF CANADA



LES ZONES IMPORTANTES  
POUR LA CONSERVATION  
DES OISEAUX AU CANADA

### Leslie Street Spit Tommy Thompson Park Important Bird Area Conservation Plan

Written for the Leslie Street Spit IBA Stakeholders

by

William G. Wilson, Edward D. Cheskey, and the IBA Steering Committee

July 2001



A Natural Legacy 2000 program • Un programme de La nature en héritage 2000

- Toronto's only **Important Bird Area** –globally significant
- 7 Species of **Colonial Nesting Waterbirds**  
The largest colony of Double-crested Cormorants in the Great Lakes  
Largest colony of Black-crowned Night-Herons in Canada!
- Concentration area for **migratory bird species**.
- Significant overwintering area for **waterfowl**.

# Nesting Pairs of Colonial Waterbirds at TTP 2007



Double-crested  
Cormorant  
7,241



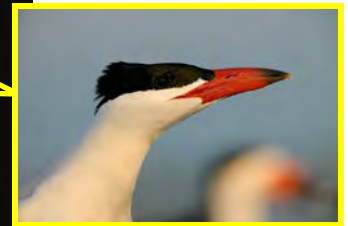
Black-  
crowned  
Night-Heron  
876



Common Tern  
376



Great Egret  
5

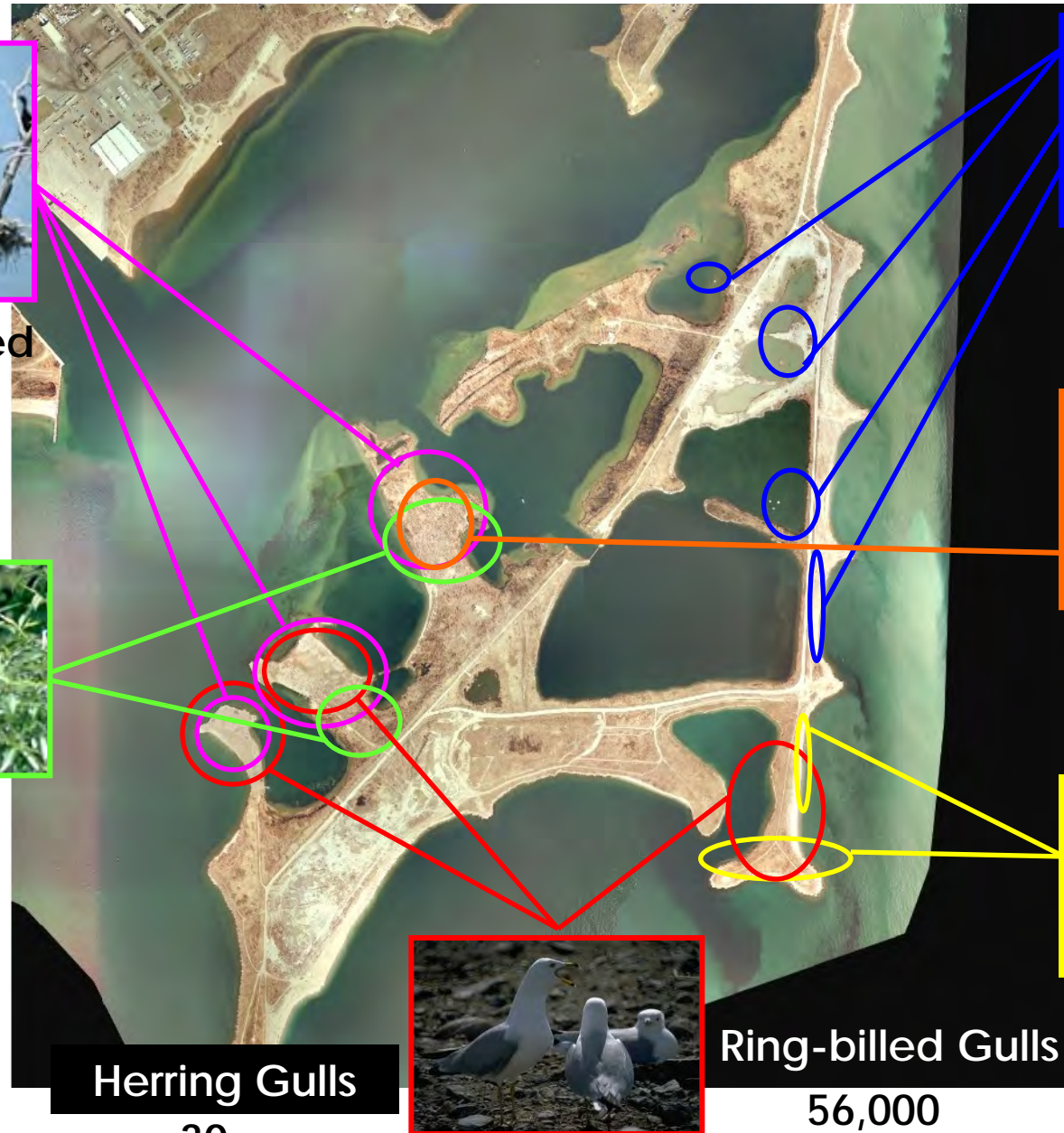


Caspian Tern  
few



Ring-billed Gulls  
56,000

Herring Gulls  
30

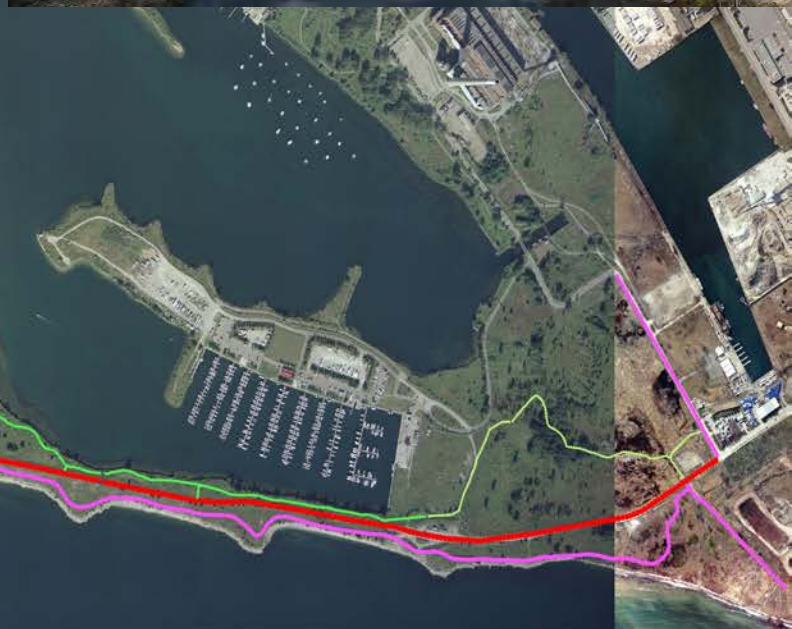






# Embayment D

# Park User Experience





# Tommy Thompson Park Bird Research Station (TTPBRS)

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



- Since 2003 more than 30,000 birds have been banded
- In 2007 staff & volunteers raised just under \$30,000
- Since 2003 over 100 volunteers have contributed more than 16,000 hours to TTP programs

# Winged Migration Education Program



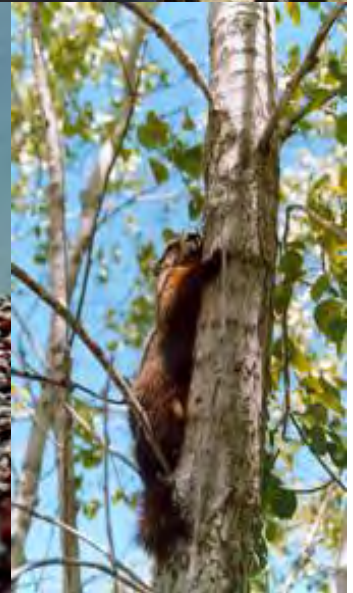
*"I loved watching the birds and learned the great things about nature. I took some pictures and I will never forget the memory of the beautiful birds."  
Grade 6 student*

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





# Wildlife





# Summing Up

- TTP is ecologically significant at a local, regional, national and global scale
- TTP is in the largest city in Canada
- Man-made landform
- Urban influences compromise natural functions
- TTP supports a large number and variety of recreation users





**Tommy Thompson Park Cormorant Colonies**





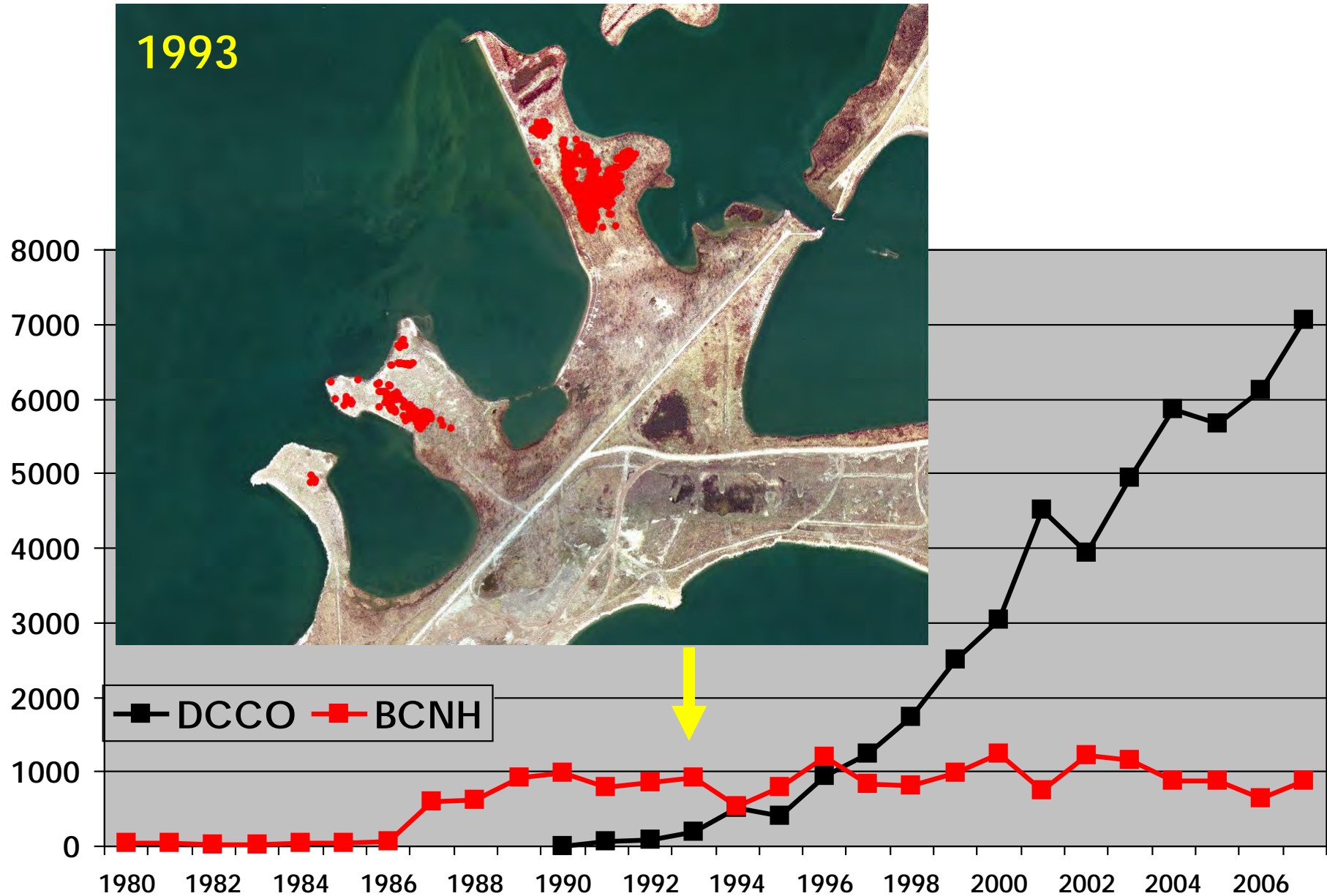
# Nest Count Surveys

- Detailed nest surveys have been completed since 1990
- All nests are identified (DCCO, BCNH, GREG) and counted
- All trees are tagged and surveyed by GPS
- Each tagged tree is checked annually

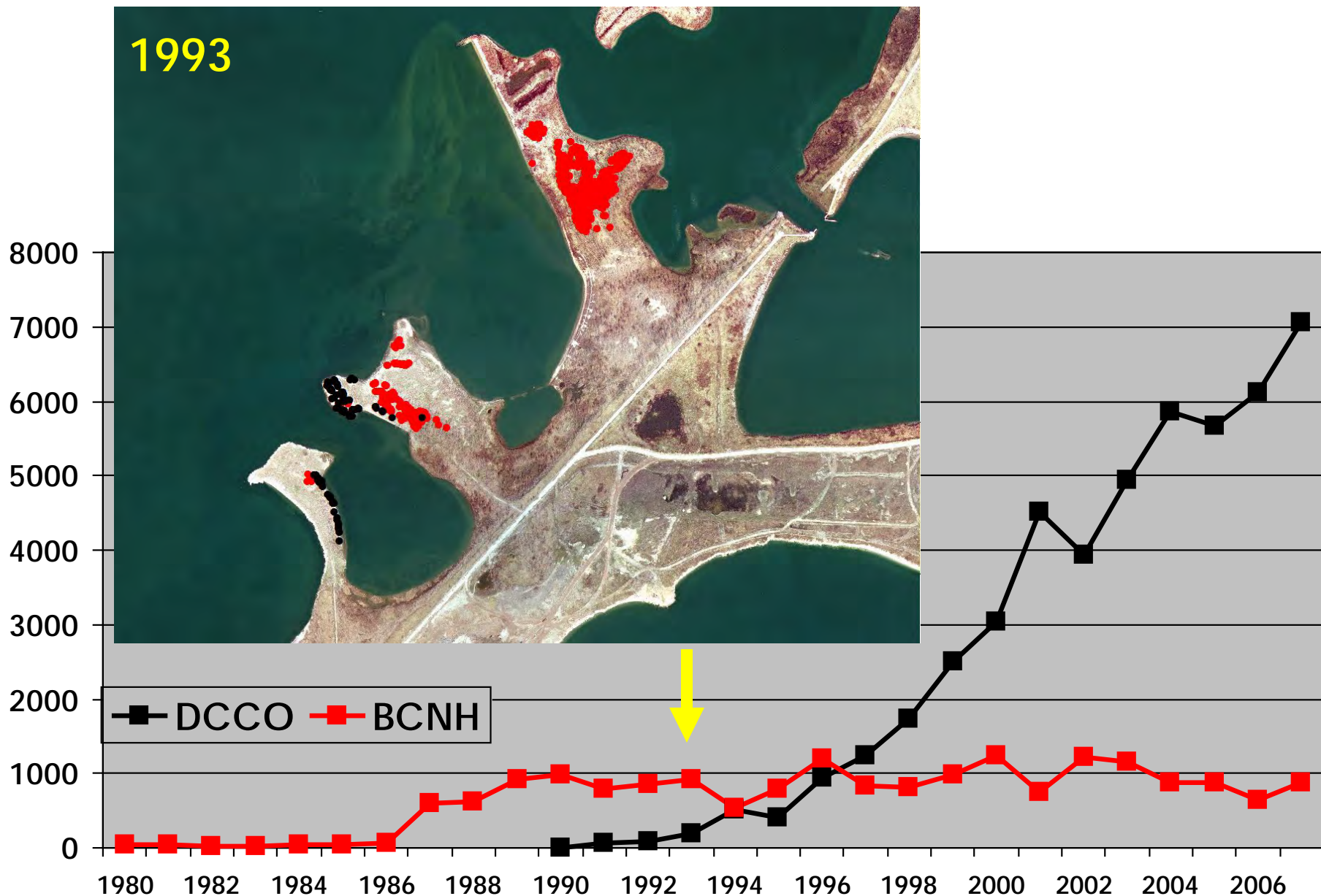




# Nests Numbers of DCCO and BCNH at Tommy Thompson

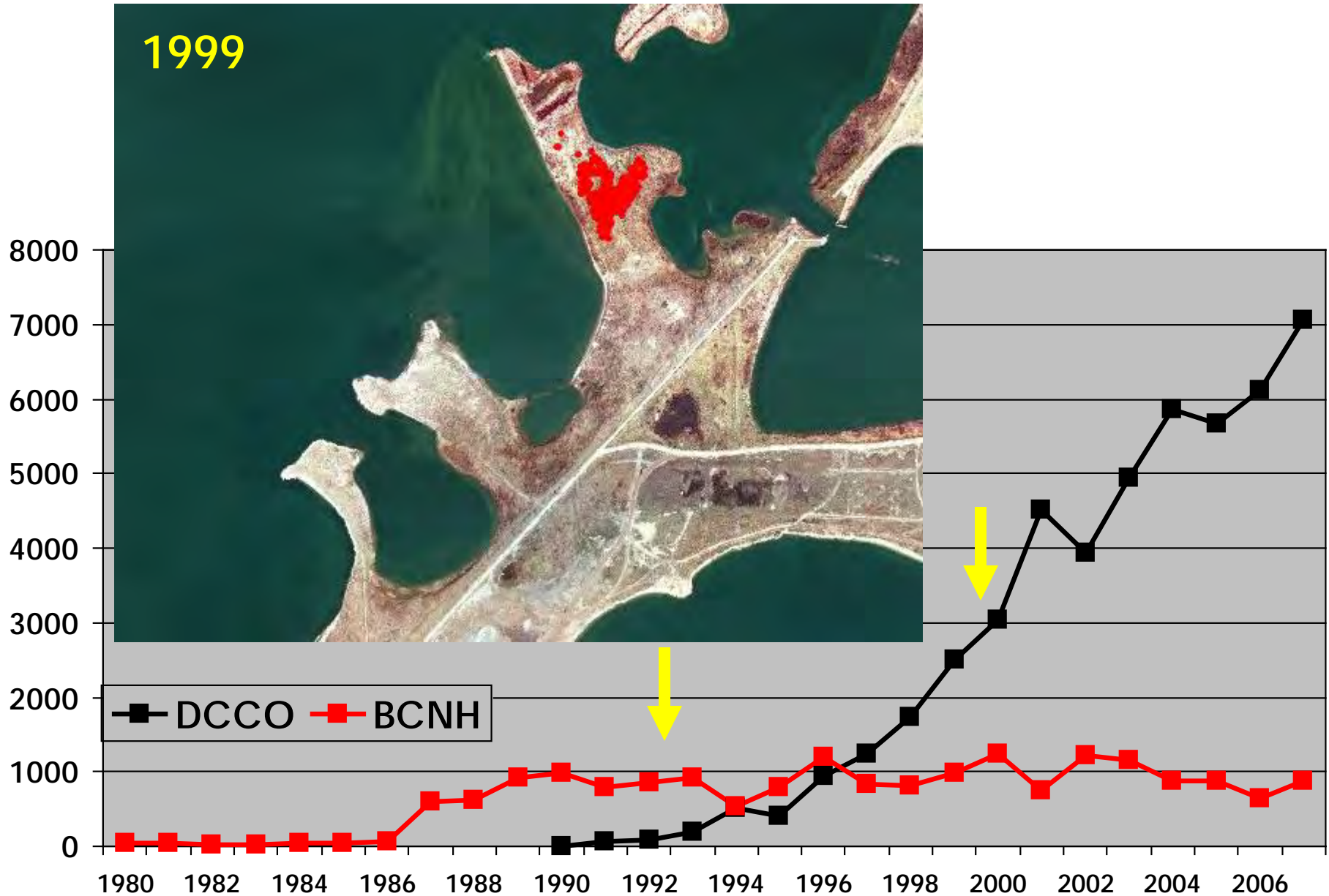


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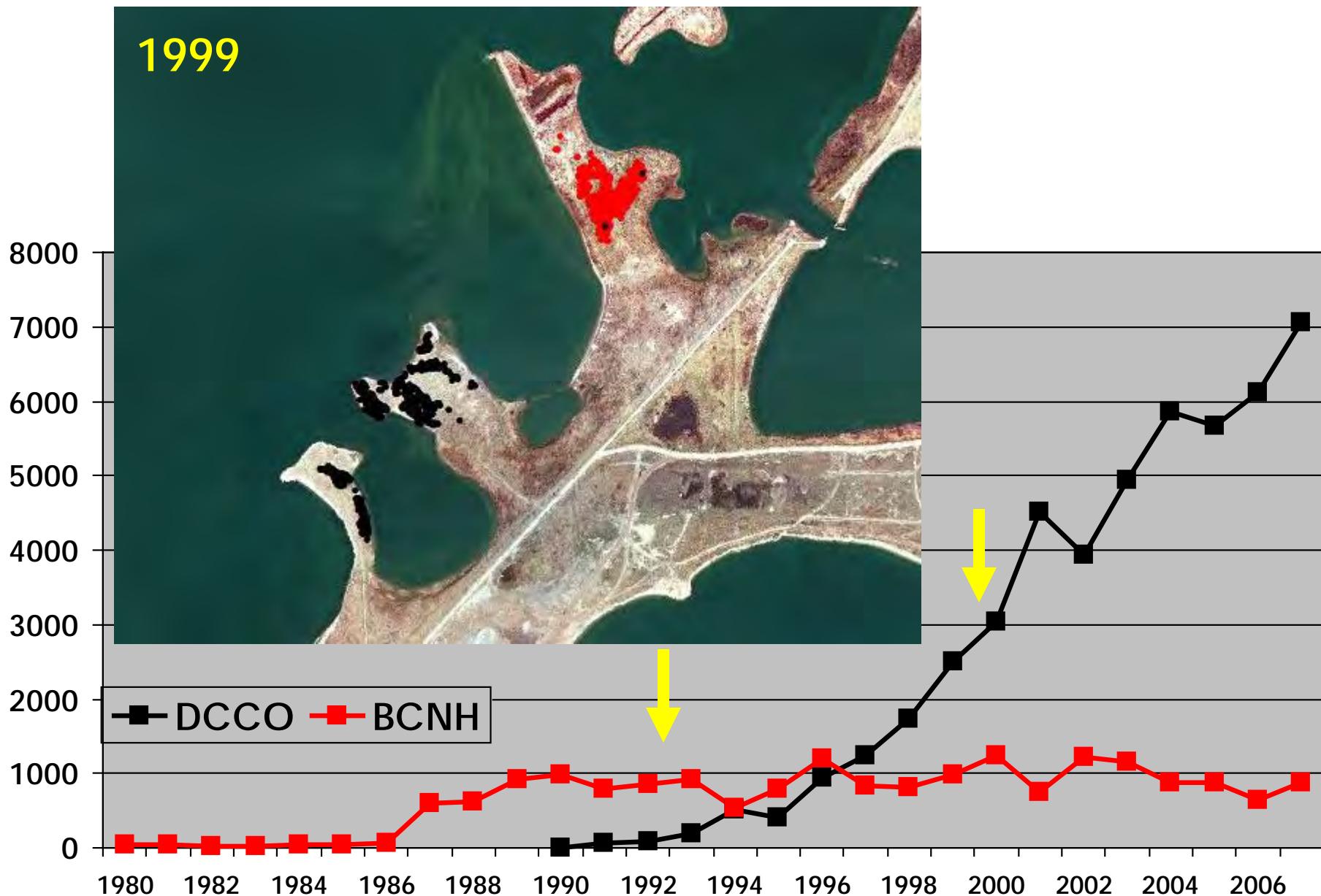




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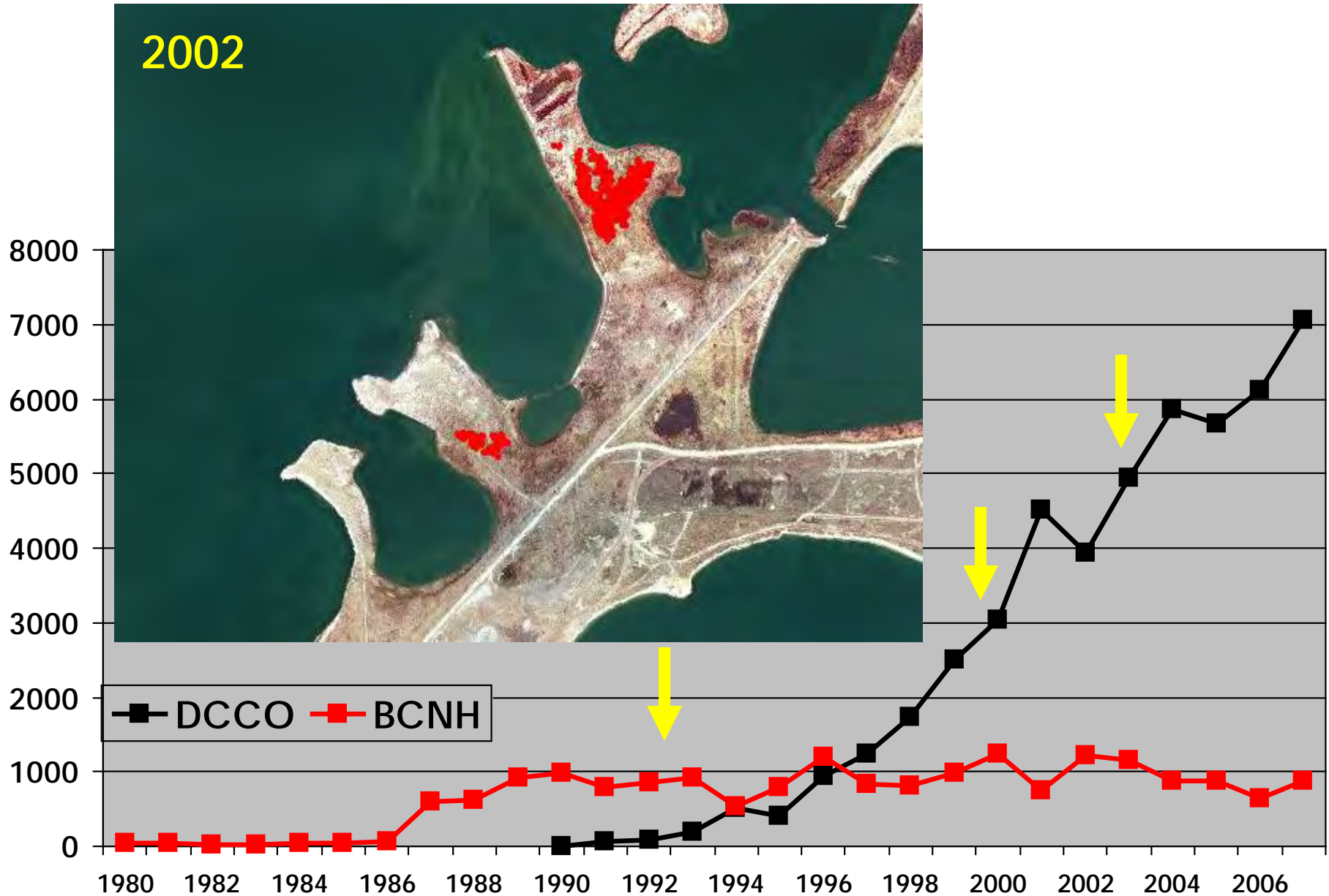


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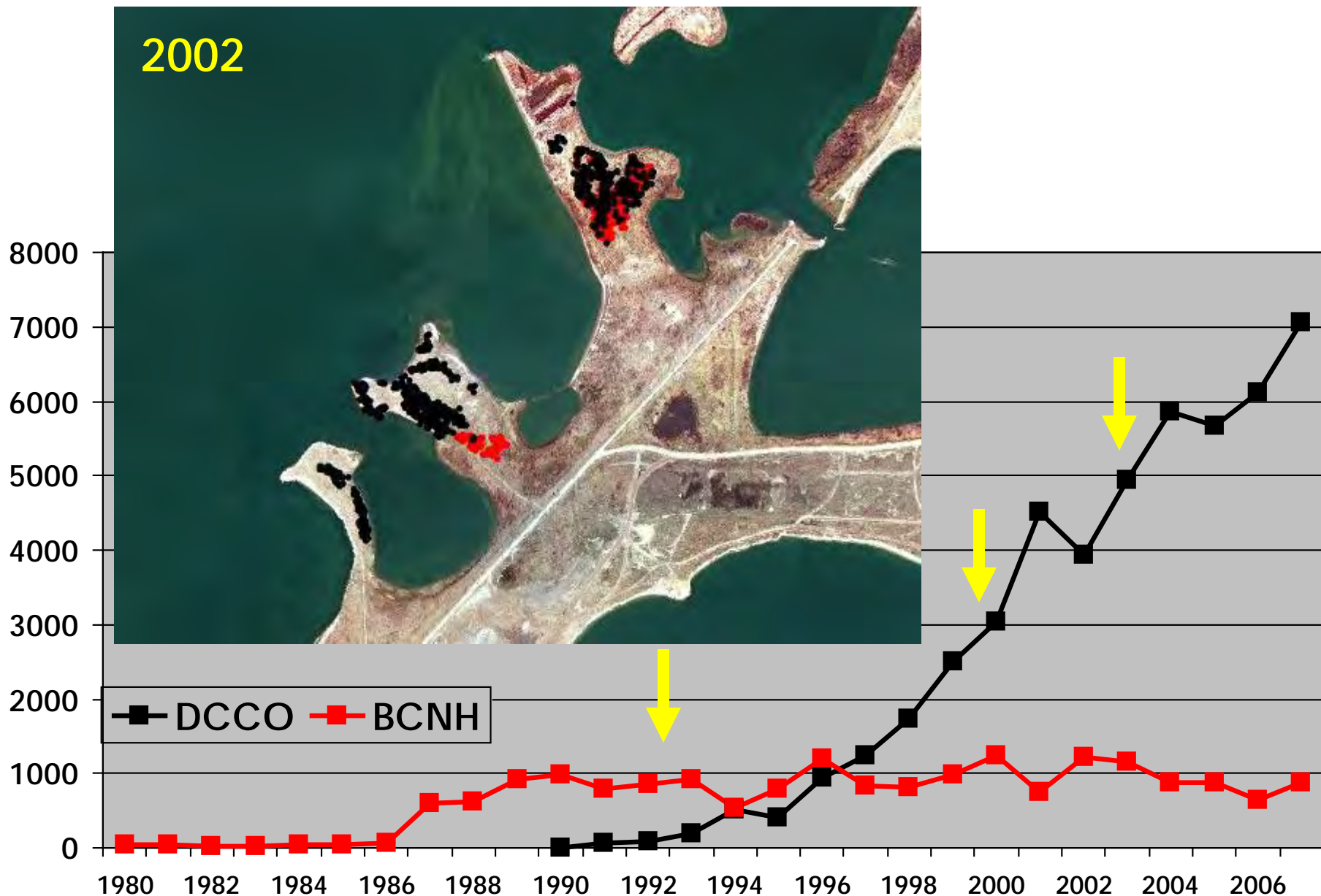




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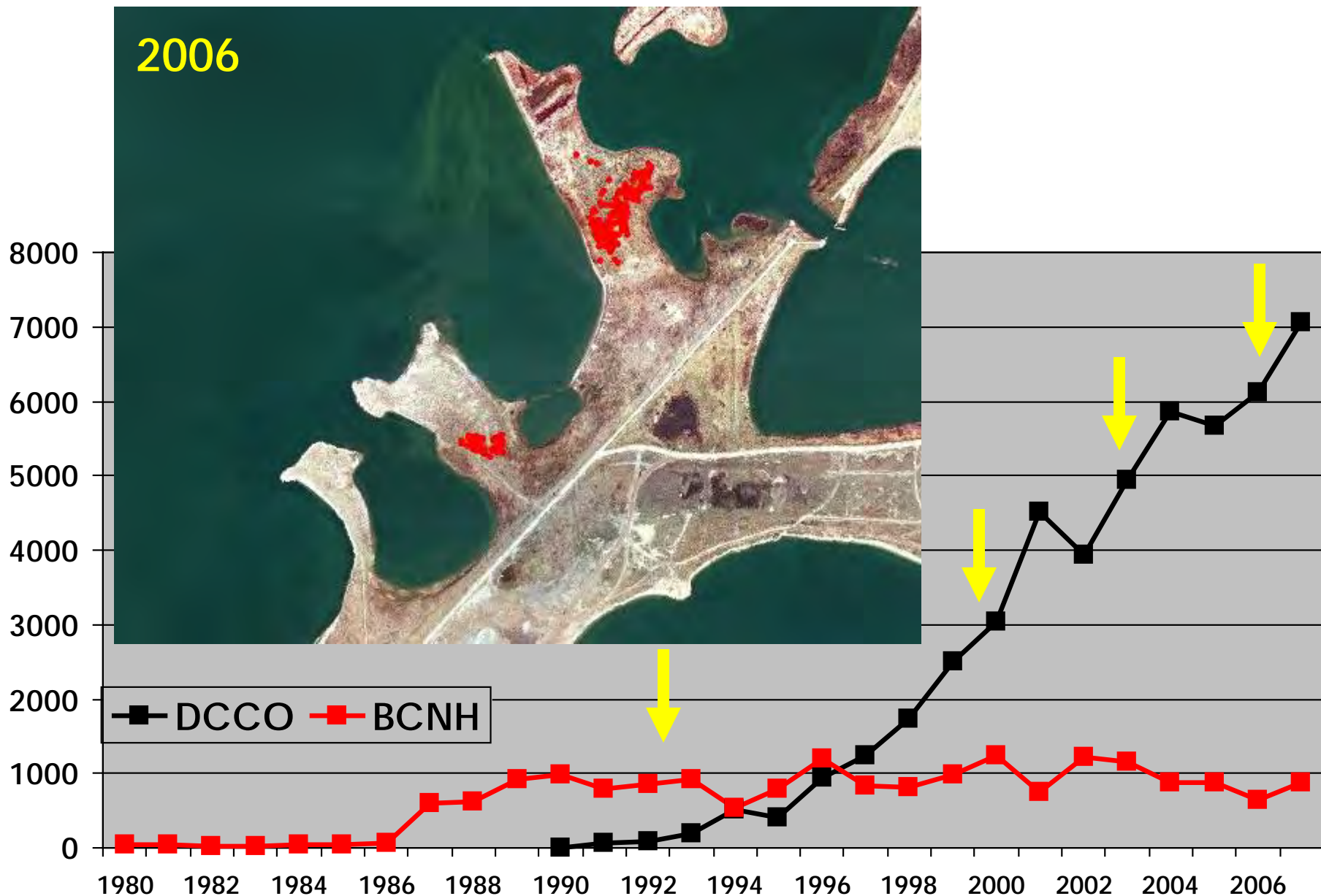


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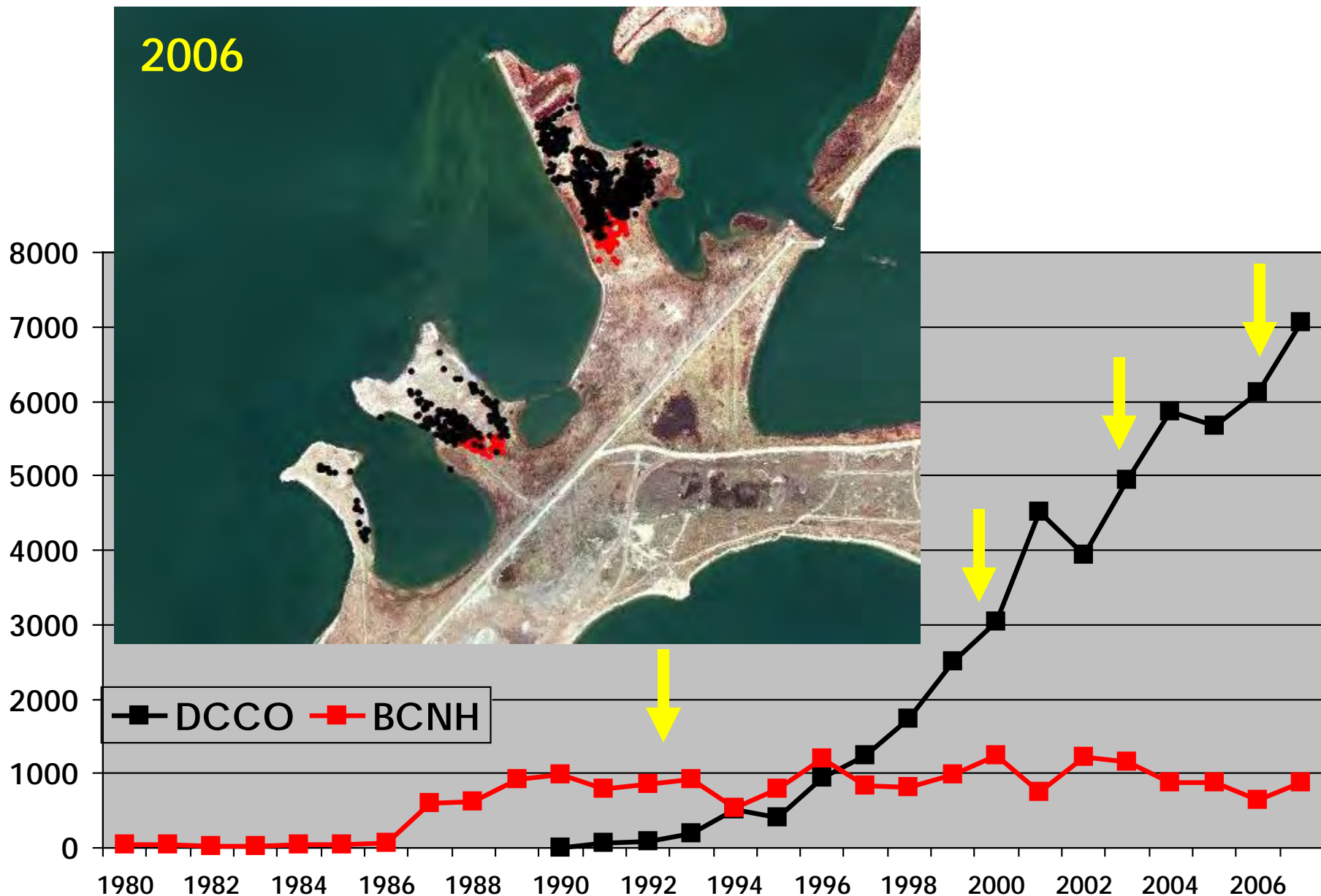




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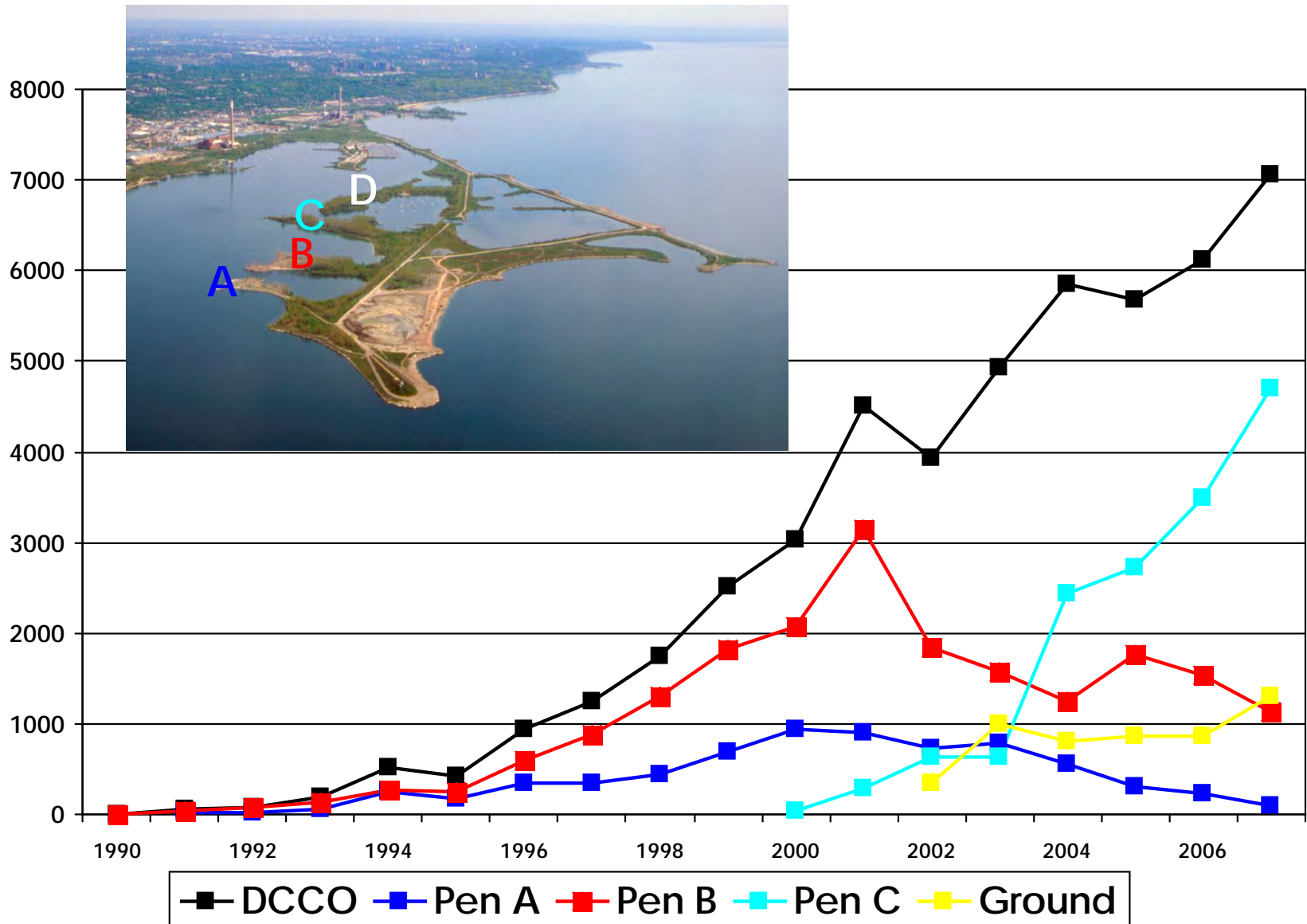


# Nests Numbers of DCCO and BCNH at Tommy Thompson





# Nests Numbers by Peninsula



# The Change in Tree Health between 1996 and 2006

- Live Trees
- Dead or Dying Trees

1996



2006





# Deforestation on Peninsula A from 1990 to 2007







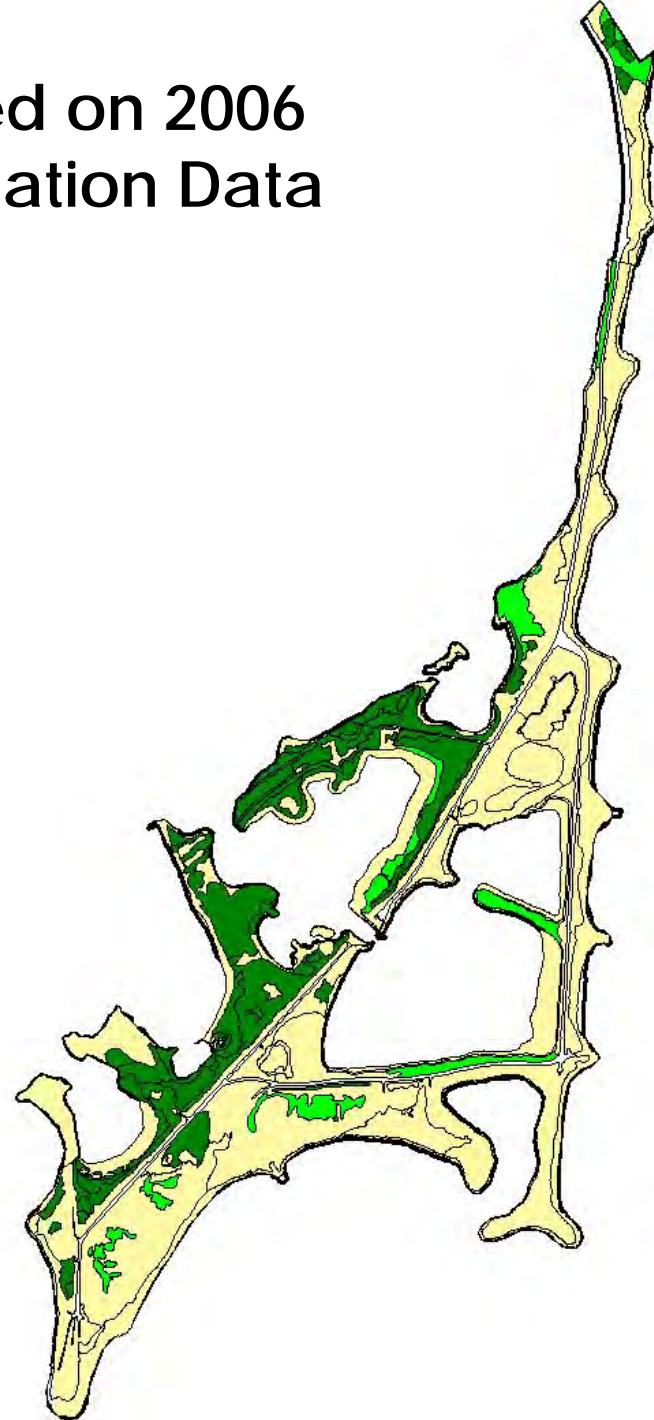




# Tree Canopy at TTP Based on 2006 Ecological Land Classification Data

	Ha
TTP land area	151
TTP forest area	37
Future Forest	4

24% of TTP is Forested







**Forest Cover Lost  
or in Decline**

**9.0 Ha**

**24%  
of the total  
forest area at TTP  
is in decline**



**At the current rate of DCCO growth an additional 1 Ha of forest would be colonized by 2010**





# Potential Objectives

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

# **a. Increase public awareness and knowledge of colonial waterbirds**

- Public Meeting
- TRCA Website
- Annual Spring Bird Festival  
May 10, 2008
- Interpretive Signage
- Viewing Blinds and Platforms
- Tours and School Groups







## **b. Prevent Cormorant Expansion to Peninsula D**

- **Protect Existing and Planned Uses**
- **Maintain and Enhance Research and Education Opportunities**
- **Provide Urban Wilderness Experience for Park Users**

## **c. Limit further forest canopy loss on the peninsulas**



- **Other species**
- **City and Waterfront targets**
- **Migratory stop over**
- **Aesthetics**
- **Diversity of experience for users**



# **d. Continue research on colonial waterbirds in an urban wilderness context**

- **Support partnerships between TRCA and local naturalist groups, universities and government agencies**
- **Play a significant role in local and regional research**
- **Support the existing Tommy Thompson Park Bird Research Station (TTPBRS)**





# Proposed Techniques

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





## Do nothing

- **Not a default, but a chosen management option**
- **Continue monitoring, research, and education activities**
- **Scale**
  - **Entire area**
  - **Targeted areas**



# Deterrents

## Pre-nesting and Post Breeding

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







## Pre-nesting deterrents

- method to discourage cormorants from nesting in a specific area

## Post-breeding deterrents

- method to discourage cormorants from loafing or roosting in a specific area

# Encourage Ground Nesting

- Create artificial structures that:
- Are attractive for nesting pairs
  - decoys
  - recordings
- Provide protection from the environment and predators







# Egg Oiling

**Application of a non-toxic, food grade oil to eggs within 8-10 days of laying to prevent hatching**



**Ground Nesting**



**Tree Nesting**



# Revegetation and Habitat Restoration in Impacted Areas

- Plant nodes in strategic areas
- Soil amendment and seeding in specific areas





# Proposed Strategic Approach



# Proposed Strategic Approach

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



A photograph of three black cormorant chicks on a nest made of dry sticks and twigs. The chicks are dark with lighter-colored beaks and throats. One chick in the foreground has a small white tag on its leg. A speech bubble is overlaid on the left side of the image.

Thank you!



# Discussion Questions

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