RES.#A17/12 - MINUTES

Moved by:	Ben Cachola		
Seconded by:	Glenn Mason		

THAT the Minutes of Annual Meeting #1/12, held on February 24, 2012, be approved. CARRIED

DELEGATIONS

- (a) A delegation from Ms. Liz White, Director/Leader, Animal Alliance/Environment Voters, speaking in regard to item AUTH7.1 Double-Crested Cormorants.
- (b) A delegation from Mr. Barry MacKay, Director, Zoocheck Canada, speaking in regard to item AUTH7.1 Double-Crested Cormorants.
- RES.#A18/12 DELEGATIONS

Moved by:Glenn MasonSeconded by:Ronald Chopowick

THAT above-noted delegations (a) and (b) be received.

CARRIED

PRESENTATIONS

(a) Years of Service Awards were presented to staff.

SECTION I - ITEMS FOR AUTHORITY ACTION

<u>RES.#A19/12</u> - DOUBLE-CRESTED CORMORANTS Management Strategy for 2012. Management of Double-crested Cormorants at Tommy Thompson Park

Moved by:Glenn MasonSeconded by:Ronald Chopowick

THAT staff be directed to continue to work with the Cormorant Advisory Group to assist Toronto and Region Conservation Authority (TRCA) in addressing management concerns regarding colonial waterbirds at Tommy Thompson Park;

THAT staff be directed to work with the Ontario Ministry of Natural Resources, Canadian Wildlife Service, and any other required regulatory agency to seek approval for the 2012 management strategy for colonial waterbirds at TTP;

THAT staff be directed to implement the proposed management strategy for 2012;

THAT staff be directed to continue to actively participate in local, regional and binational committees/working groups addressing the management and protection of colonial waterbirds and these groups be circulated the management strategy;

AND FURTHER THAT staff report back to the Authority annually regarding the management of Double-crested Cormorants at Tommy Thompson Park.

CARRIED

BACKGROUND

Tommy Thompson Park (TTP) is an urban wilderness park located at the foot of Leslie Street in the City of Toronto. It supports the largest colony of Double-crested Cormorants (DCCO) in the Great Lakes Region, plus diverse communities of bird, fish, reptile, amphibian, mammal, and vegetation species. It has been formally designated as a globally significant Important Bird Area (IBA) and an Environmentally Significant Area (ESA #120). The Master Plan that guides the development of TTP includes the goal of conserving and managing the natural resources and environmentally significant areas of the park. While the DCCO colony adds to the diversity of the park and is environmentally significant, there are concerns about the impacts of DCCO on tree health and biodiversity in other areas at TTP.

TRCA began a process to ensure the TTP Master Plan goals and objectives were upheld and the concerns are addressed. TRCA initiated the involvement of stakeholders and the public to create a management strategy for DCCO at TTP. The process started in November 2007 with the establishment of the Cormorant Advisory Group, and lead to the development of the 2008 Cormorant Management Strategy which was approved by the TRCA Board in 2008 as per Resolution #A110/08:

THAT staff be directed to continue to work with the Cormorant Advisory Group to assist Toronto and Region Conservation Authority (TRCA) in addressing management concerns regarding colonial waterbirds at Tommy Thompson Park (TTP);

THAT staff be directed to work with the Ontario Ministry of Natural Resources, Canadian Wildlife Service and any other required regulatory agency to seek approval for the 2008 management strategy for colonial waterbirds at TTP;

THAT staff be directed to implement the proposed management strategy for 2008;

THAT staff be directed to continue to actively participate in local, regional and binational committees/working groups addressing the management and protection of colonial waterbirds;

AND FURTHER THAT staff report back to the Authority next year regarding the management of Double-crested Cormorants at Tommy Thompson Park.

Since 2008 TRCA staff have annually sought approval from the TRCA Board to adopt the management strategy and have subsequently reported back on the Strategic Approach at the end of the breeding season:

- In 2009 as per Resolution #A22/09,
- In 2010 as per Resolution #A23/10, and
- In 2011 as per Resolution #A49/11.

The overall goal of the Double-crested Cormorant Strategic Approach, as established by the Cormorant Advisory Group in 2007, is to achieve a balance between the continued existence of a healthy, thriving cormorant colony and the other ecological, educational, scientific and recreational values of TTP. The objectives of the Strategic Approach are to 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; and continue research on colonial waterbirds in an urban wilderness context. To achieve these goals and objectives the five main management actions established in 2010 were carried throughout 2011 (Attachment 1).

The management techniques employed in 2011 have not changed significantly since management began in 2008, with slight modifications. A professional tree service company was hired in an attempt to improve inactive nest removal efficiency. However, due to unsafe conditions resulting from poor tree health and nest height, it was determined that the existing nest removal technique was the most efficient. The "2011 Management Summary and 2012 Management Strategy" provides details on management actions and is available upon request.

Pre-nesting deterrent techniques took place between March 29 and May 30, 2011 on Peninsula C following the scale of escalating deterrents including active nest removal using the conservative protocol for estimating embryo development prepared by the Humane Society of the United States. Pre-nesting deterrents have been limited by nesting Black-crowned Night-Herons (BCNH) and deterrents were not carried out on Peninsula B due to their presence. Deterrents have focused on areas with healthier trees, and have avoided areas traditionally occupied by BCNH to ensure they are not impacted by DCCO management.

Several post breeding deterrent sessions occurred in September throughout Peninsula C following the fledging of chicks. The deterrents mainly took place within areas of heavy roosting to decrease further impacts to tree health and limit prospecting behaviour. Human presence and general contact with the roost tree proved to be sufficient to flush the majority of DCCO from their loafing positions and did not require further escalation.

Public knowledge, awareness and appreciation for DCCO at TTP were improved through the installation of a specialized camera that remotely uploaded pictures of the ground nesting colony to the TTP website (www.trca.on.ca/birdcam). The camera provided staff, researchers and the public with views of the colony over the course of the breeding season. A viewing blind that was installed on Peninsula C was successful in providing the public with good views in close proximity of the tree nesting areas without disturbing the birds. Additionally, staff interpreted the colony at various public events, including a Colonial Waterbird hike at the annual Spring Bird Festival.

Overall, the 2011 Management Strategy was successful in meeting the objectives of the Strategic Approach.

- Cormorants were effectively deterred from expanding their nesting areas beyond the existing colonies, including onto Peninsula D;
- Ground nesting continues to increase and now represents 40 per cent of the entire TTP DCCO population;
- Tree nesting has not significantly increased;
- Colonial waterbird research continued through the work of York University; and
- Public knowledge, awareness and appreciation of colonial waterbirds was improved through targeted site interpretation by staff at various park events and formal hikes, as well as the introduction of the web camera and a viewing blind.

In 2011 the DCCO population numbered 11,374 nests on three of four peninsulas. The increase in nest numbers was mainly due to ground nesting on Peninsula B which increased 37 per cent from 2010. Overall the ground nest population has increased 351 per cent since management efforts began in 2008 and in 2011, 40 per cent of the TTP DCCO nested on the ground, therefore their nests are not affecting the tree health. In 2011 tree nesting increased by 11.5 per cent with only 48 new trees occupied by DCCO. Tree nesting appears to be levelling off, with no significant increase in 2011 and no new areas were occupied by tree nesting cormorants thereby helping to limit the further loss of forest canopy.

RATIONALE

An extremely high level of concern has been expressed regarding DCCO populations and their management. Concerns have been raised from both sides, on the one hand calling for management and the preservation of forest canopy, and on the other hand for protection of the birds and their nesting colonies. TRCA has an obligation to manage Tommy Thompson Park as directed by the Master Plan for Tommy Thompson Park as approved under the Environmental Assessment Act. To meet the intent of the Master Plan, TRCA staff feel that there is a strong rationale for undertaking a strategic approach to the management of Double-crested Cormorants at Tommy Thompson Park.

Since November 2007, TRCA has involved stakeholders and the public in assessing the need for management and developing a strategy for DCCO at TTP. Generally, throughout the process there has been agreement that some form of management is appropriate, providing that the methods are humane to cormorants and do not affect other wildlife.

To date, results from the annual population counts have shown an increase in the ground nesting colony and a leveling off in the tree nesting colonies. This suggests that the pre- and post-nesting deterrents that have taken place as part of the 2009 to 2011 Strategic Approaches have been successful in changing the nesting behaviour of DCCO. Unfortunately, since there is no control area in the colony, this hypothesis cannot be refuted or accepted. As such, TRCA has developed an adaptive 2012 Strategic Approach (Attachment 2) that will focus on monitoring and reduce the amount of active pre-nesting deterrents to help quantify the effect deterrents have on increasing the ground nesting colony. The reduction in pre-nesting deterrents within the tree nesting colony will help inform staff if deterrents are necessary to achieve continued growth in the ground nesting colony, or if ground nest enhancements are enough to achieve the continued increase.

DETAILS OF WORK TO BE DONE

A suite of techniques will be utilized in an integrated and adaptive approach to achieve the goal and objectives of the 2012 Strategic Approach, which maintains the original goal and objectives from 2008. Attachement 2 provides an overview of the 2012 Strategic Approach.

Increase Public Knowledge, Awareness and Appreciation

- TRCA website, including images from the remote camera. Improvements will be made to photo cataloguing and photo interpretation so the public is more informed on the status of nesting. Efforts will also be made to include video of nesting cormorants on the website;
- Conduct interpretive tours for school and interest groups, and at TTP special events;
- Improve opportunities to view colonial waterbirds with viewing blinds and platforms;
- Present information at conferences and forums; and
- Participate in working groups on colonial waterbirds.

Inactive Nest Removal

• Remove nests from trees on Peninsulas B and C during the winter, prior to the breeding season.

Enhanced Ground Nesting

- Place simulated natural nests in ground nesting areas on Peninsulas A and B;
- Deploy DCCO decoys and play auditory breeding calls to attract DCCO to ground nest areas; and
- Erect predator exclosures to improve ground nesting success and colony establishment.

Pre-nesting Deterrents

- The expansion of tree nesting DCCO beyond the existing colonies on Peninsulas B and C will be prevented. Deterrents within the core of the tree nesting colonies on Peninsula B and C will not be undertaken.
- DCCO will be prevented from nesting on Peninsula D;
- Deterrent techniques will remain the same as 2011 and employed on an increasing scale of activity to ensure expansion of the tree nesting area does not occur; and
- Staff will monitor the effects deterrent activities have on the DCCO colony as well as on non-target species.

Post-breeding Deterrents

- Deterrent activities will take place on Peninsula C and D to reduce loafing; and
- Techniques will be the same as 2011 and will be employed on an increasing scale of activity.

Monitoring, Research and Reporting

- Undertake annual nest census for colonial waterbirds in late May;
- Conduct annual tree health surveys on Peninsulas A, B, C and D in late August;
- Continue to collaborate with York University on DCCO research;
- Complete annual summary report; and
- Meet with Cormorant Advisory Group to review data and discuss whether changes are required for 2013.

FINANCIAL DETAILS

Funds are available in the Tommy Thompson Park Interim Management account 210-19 in the approved 2012 budget.

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Attachment 1 2011 Strategic Approach Matrix

	Peninsula A	Peninsula B	Peninsula C	Peninsula D
Inactive Nest Removal (prior to 2011 breeding season)		*	*	
Enhanced Ground Nesting	*	*		
Pre-nesting Deterrents			*	*
Post-breeding Deterrents			*	*
Restoration		*	*	*

Attachment 2

2012 Proposed Strategic Approach Matrix

	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			*	*