

Presqu'île Provincial Park Double-crested Cormorant Management:

Recommendations

November 2004

Presented to the Honourable David Ramsay,
Minister of Natural Resources by the
2004 Presqu'île Double-crested Cormorant
Management Scientific Review Committee

Executive Summary:

This report contains nine recommendations from the Presqu'île Double-crested Cormorant Scientific Review Committee related to management of Double-crested Cormorants (DCCOs) at Presqu'île Provincial Park. The Committee was formed in September of 2004 as a result of the Minister of Environment's requirements for the approval of proceeding with a cull of DCCO at the park in 2004. We were asked to assess the impacts of the cull and to recommend to the Minister of Natural Resources by December 2004 whether to proceed with the cull in 2005 and 2006 or make further amendments to the strategy. The Committee considered the impacts of the cull on DCCOs, non-target species, and vegetation health. We determined that (1) management has reduced the number of DCCO nests in trees on High Bluff Island; (2) the cull had no significant adverse effects to the three main non-target species from management; and (3) it is too early to detect the response of vegetation to management. We accepted that non-lethal techniques alone cannot provide sufficient protection to woody vegetation on High Bluff Island before potentially irreversible loss occurs. Based on our analysis, we recommend the continuation of the full range of available DCCO management techniques at Presqu'île (oiling of eggs in ground nests, removal of tree nests, culling of tree nesting adult DCCOs, and harassment of roosting DCCOs) with specific modifications designed to enhance effectiveness, improve monitoring, and further reduce disturbance to non-target species. We also recommended additions to the strategy, including removal of some of the dead trees that are DCCO nesting sites, expanding DCCO and non-target species monitoring and research, continuing monitoring of all colonial waterbirds and their habitats, and continuing vegetation monitoring. We made five additional recommendations concerning the goals and objectives of management, public education, protection of the islands, review of management actions, and public consultation and input.

Background:

The goal of the provincial parks system is *“To protect a variety of outdoor recreation opportunities and to protect provincially significant natural, cultural and recreational environments in a system of Provincial Parks.”* There are four objectives derived from the goal that provide specific direction for the management of the park system:

- Protection - *To protect provincially significant elements of the natural and cultural landscape of Ontario;*
- Recreation - *To provide Provincial Park outdoor recreation opportunities ranging from high-intensity day-use to low-intensity wilderness experiences;*
- Heritage Appreciation - *To provide opportunities for exploration and appreciation of the outdoor natural and cultural heritage of Ontario; and*
- Tourism - *To provide Ontario’s residents and out-of-province visitors with opportunities to discover and experience the distinctive regions of the Province.*

Park management plans are prepared for individual parks, primarily to identify the contribution that a park makes to the achievement of the four park system objectives and to identify management policies aimed at maintaining or enhancing that contribution.

Presqu’ile Provincial Park contributes to all four of the provincial parks system objectives, and has many significant values that are to be protected. The goal of the park is: *“To protect Presqu’ile Provincial Park’s outstanding natural and cultural heritage, and provide high quality recreational and educational experiences appropriate to and sustainable within the park’s environment.”* The protection objective in the management plan further states that: *“Protection will not be limited to provincially significant features. The entire park will be maintained as a healthy, diverse, and sustainable natural environment, consistent with achieving the park’s other objectives. The restoration of degraded environments will be given a high priority.”*

Tree nesting activity of Double-crested Cormorants (DCCO) has been identified as resulting in the loss of and damage to woodland vegetation on two islands within Presqu’ile Provincial Park, Gull Island and High Bluff Island. The altered area is judged to be a “degraded environment” (Carr and Koh, 2001; Koh and Carr, 2003). The woodland vegetation remaining on High Bluff Island is considered important to the values of the park because it has a species association and habitat not found elsewhere in the park, it provides habitat for significant tree nesting colonial waterbird species, and it is a migratory stop-over for woodland birds and Monarch butterflies. This issue was recognized during the park management planning process, and the park management plan included enabling statements for the preparation of a DCCO management strategy for the park.

In accordance with the direction in the *Presqu’ile Provincial Park Management Plan (2000)*, a DCCO management strategy was developed for the park in 2002. The Cormorant Management Scientific Review Committee (henceforth, “the Committee”) had considerable discussion about the goal and objectives of the strategy, and recommendations are in part based on the following:

- i) The goal of the strategy is found in the park management plan: *to deal with cormorant impacts on specific park values (vegetation, terrestrial habitat, other bird species).*
- ii) The objectives of the strategy are to:
 - control DCCO nesting activity and remove nearly all DCCO from woody vegetation on the islands;
 - protect woodland vegetation on the islands to protect the full diversity of species now present on the islands, including DCCO;

- reduce further colonization of DCCO in the woodlands; and
- prevent avoidable disturbance to non-target colonial waterbirds during management.

The 2002 strategy allowed for oiling of DCCO eggs in ground nests on Gull Island and removal of DCCO tree nests from the western woodland on High Bluff Island. The strategy was first implemented in 2003, following an amendment expanding egg oiling to ground nests on both islands. DCCO management actions in 2003 included oiling of eggs in ground nests on both Gull Island and High Bluff Island, and removal of tree nests in the western woodland of High Bluff Island. In the spring of 2004, the Ontario Parks branch of the Ministry of Natural Resources (MNR) proposed a major amendment to the strategy that added culling of tree nesting adult DCCO as a management technique, and expanded tree nest management to all wooded areas on High Bluff Island.

In May of 2004, the Minister of Environment received a request that the proposed *Amendment to the Management Strategy for Double-crested Cormorants at Presqu'île Provincial Park* be made subject to the requirements of the *Environmental Assessment Act*. The Minister of Environment subsequently denied this request, and enabled MNR to proceed with the cull of up to 6000 cormorants in 2004.

As part of the decision to deny the request for an individual environmental assessment, the Minister of Environment requested the following from MNR to assess the need for a cull beyond 2004:

- *As part of the annual monitoring report, assess the effects of the 2004 cull on the cormorants, other nesting colonial waterbirds and the health of the island's woody vegetation; and*
- *Create or utilize an existing scientific committee to assess the impact of the cull and to recommend to the Minister of Natural Resources by December 2004 on whether to proceed with the cull in 2005 and 2006 or make further amendments to the strategy.*

Culling actions were implemented between May 6 and June 7, 2004, with a total of 6030 birds culled. Also in 2004 and in accordance with the approved strategy, eggs in 3284 ground nests were oiled, 2098 tree nests were removed, and roosting DCCO were harassed.

Ontario Parks formed the six member scientific committee in September of 2004, including internal and external researchers and specialists representing an appropriate range of interests and expertise in cormorant management, colonial waterbird biology, botany and impacts to vegetation at the site. The terms of reference for the Committee is attached (Appendix A). The scientific committee was given the following mandate:

- i) assess the impact of the cull that occurred in 2004 as part of the DCCO management at Presqu'île Provincial Park; and
- ii) prepare recommendations for the remaining years of the strategy.

The Committee was provided with copies of documents related to the planning process for the DCCO management strategy, results and observations from implementation of the strategy in 2003 and 2004, and results of vegetation assessment research on High Bluff Island (see Literature Cited section).

Review of the Issue:

The Committee held three face to face meetings. These meetings were on September 16, October 4, and October 28, 2004.

The September 16, 2004 meeting included presentations by park staff on the background and implementation details of the DCCO management program at Presqu'île to date. During the October 4, 2004 meeting, the Committee discussed the goal and objectives of the management program and the impacts of the cull, and drafted three potential management scenarios for 2005 for further discussion. These scenarios were further modified during the October 28, 2004 meeting and a fourth scenario was added.

The Committee was presented with a written submission on October 20, 2004, by eight organizations and / or individuals. The document was copied to the Minister of Natural Resources and the Office of the Environmental Commissioner. The submission identified two significant authors of the document (Barry Kent MacKay, Animal Protection Institute and Liz White, Animal Alliance of Canada) and six contributors (Doug McRae, Important Bird Area Presqu'île Steering Committee; AnnaMaria Valastro, Peaceful Parks Coalition; Ainslie Willock, Canadians for Snow Geese; Melissa Tkaychuk, Earthroots; Jim Richards, Second Marsh Defence Association; and George Peck, Research Associate, Department of Ornithology, ROM).

This submission to the Committee included the following five recommendations that the Committee was urged to make to the Minister:

1. Cease cormorant management activities including egg oiling, disturbance, nest destruction and culling;
2. Continue low impact monitoring and study of all colonial birds and how they interact in an environment without human harassment;
3. Continue to protect the island and the birds from unauthorized visits and vigilante action;
4. Actively educate park visitors and the local public about the islands and the bird colony and promote it as an ecotourism possibility with potential financial benefits. Such initiatives might include "live from the islands" closed circuit TV and boat tours; and
5. Expand the consultation base and share information and scientific data so that issues such as the cormorant cull can be debated in detail with all interested and informed parties.

Four of the contributors to the submission attended the October 28, 2004, Committee meeting for a face to face discussion. The main concerns stated verbally by these individuals were:

- their philosophical difference of opinion on wildlife management and their recommendation for no management;
- lack of clarity and disagreement with the justification for management; and
- a belief that management had severe negative impacts on non-target colonial bird species.

Assessment of the Impacts of the Cull:

The Committee reviewed and discussed the results of DCCO management actions at Presqu'île in 2003 and 2004 (Table 1). The impacts of the cull were assessed from three perspectives: DCCO nesting, numbers and nesting success of non-target species, and vegetation health.

Table 1. DCCO Management Interventions at Presqu'île

Activity	Year		
	2002	2003	2004
eggs oiled	0	28648	26311
nests removed	0	3980	2098
adults culled	0	0	6030

Tree nesting of DCCOs

At Presqu'île, DCCOs nest both on the ground and in trees. The total number of DCCO nests in the park (ground and tree nests) was reduced from 12082 nests to 6940 nests from 2002 to 2004; this is a 43% reduction. After management was completed in 2004 there were 3656 DCCO nests in trees on High Bluff Island, compared to 4631 nests in trees in 2003 and 6893 nests in 2002 (Table 2). This is a 47% reduction in the total number of DCCO tree nests from 2002 to 2004.

Table 2. DCCO Nesting at Presqu'île

Site	Nest Location	Number of Nests by Year		
		2002	2003	2004
High Bluff Island	tree	6893	4631	3656
	ground	3491	2948	1683
Gull Island	ground	1698	1117	1601
Total	tree	6893	4631	3656
	ground	5189	4065	3284
	all	12082	8696	6940

Numbers and Nesting Success of Non-target Species

Nest count data and nesting success data for three non-target species are included in Table 3 and Table 4. Based on both quantitative data and qualitative observations from MNR monitoring of the three main non-target species (Great Egret (GREG), Great Blue Heron (GBHE) and Black-crowned Night-Heron (BCNH)), there did not appear to be any significant negative impacts from DCCO management on GBHE and GREG nesting success from 2003 to 2004 (Table 4). In 2004, both species nested on High Bluff Island in record numbers and produced record numbers of young. There may have been some negative impacts to BCNH but it does not appear to be significant, based on historical nesting data (the 2003 nest count was the highest recorded to date and does not reflect average nesting numbers pre management) (Table 3).

Table 3. Nest Count Data for three Non-target Species from 1998 to 2004*

Species	Number of Nests Observed						
	1998	1999	2000	2001	2002	2003	2004
Great Blue Heron	1	5	14	NA	12	38	63
Great Egret	0	1	2	3	3	5	10
Black-crowned Night-Heron	NA	NC***	NC	NA	73	80	59

* compilation of data from Canadian Wildlife Service and Ministry of Natural Resources

** Not available (NA)

*** Not counted (NC) to avoid disturbance to Great Blue Herons and Great Egrets

A fourth non-target species, a Red-tailed Hawk, was observed nesting in the trees among the herons and DCCOs in 2003. It abandoned its nest midway through the season. The hawk was not observed nesting in 2004. This may have been a result of the management activities. There are some incidental records that indicate that this species was present in some previous years, but it was not actively monitored.

Table 4. Nesting Success of Non-Target Species

Species	Maximum Nest Count		Number of Successful Nests		Number of Fledged Young		Number of Fledged Young per Nest	
	2003	2004	2003	2004	2003	2004	2003	2004
Great Blue Heron	38	63	25	38	37	75	1.48	1.97
Great Egret	5	10	4	10	10	26	2.5	2.6
Black-crowned Night-Heron *	80	59	Not known	Not known	Not known	Not known	Not known	Not known

* Black-crowned Night-Heron nest productivity is not known. This is due to the extreme sensitivity of this species to disturbance. Nests were counted only three times during the breeding season. Nest contents were not closely examined - a nest was deemed active as soon as it was determined if it contained eggs or chicks.

Vegetation Health

It is too early to detect the response of the vegetation to DCCO management. Typically a lag time exists between changes in disturbance intensity and a response from the affected vegetation. At the earliest, changes may be detected in the spring of 2005 but could possibly take several years. Recovery is typically dependent on a combination of the severity and length of the disturbance. Also, rates of recovery can differ for each plant species.

The High Bluff Island woodlands are highly disturbed from past agricultural use (80 years ago) and recently from the presence of two superabundant species, DCCOs and White-tailed Deer.

Vegetation health of the western woodlot on High Bluff Island was assessed in 2000 and again in 2002 prior to DCCO management. In 2002, the western woodlot was highly degraded and continued DCCO activity has increased the damage since that time. Recovery would be a long-term process but this process could be accelerated with active restoration techniques. Currently the understory component of the forest remains intact (especially at the southern edge) and is a good structural base from which recovery could take place. The eastern woodlot is in relatively good health and would probably not require any active efforts for a full recovery.

Consideration of Management Options:

The Committee considered four potential management scenarios in making our recommendations. For each scenario, the Committee considered how it addressed the goal and objectives of the strategy and the following two “givens” that were agreed upon at the October 28, 2004 Committee meeting:

- i) DCCOs remain as an abundant tree nesting species on High Bluff Island; and
- ii) further loss of woody vegetation cannot be avoided at present DCCO numbers.

The potential management scenarios were:

- egg oiling, nest removal and harassment (similar to 2003 management);
- egg oiling, nest removal, harassment and culling (similar to 2004 management);
- cull only; and
- no management (do nothing alternative).

The first option (similar to 2003 management) was eliminated, primarily because it would not have an immediate effect on the number of adult DCCOs nesting in trees. The nesting urge in DCCOs (and many birds) is so strong that nest removal alone can not reduce the number of birds in the trees fast enough to make a substantial reduction in bird use of the trees. Large numbers of nests can be dislodged but many birds keep right on building new nests. Even in culling, when dead birds collapse in their nests (as opposed to falling to the ground), new birds often build nests right on top of them. The third option (cull only) was eliminated, primarily because it does not address recruitment from ground nests and would not adequately reduce guano deposition. Using only culling (i.e. no oiling) would allow young birds from ground nests to develop and enter the late summer / autumn population at High Bluff. In 2004, that would have been about 3300 nests (which would have produced about 6000+ young). The fourth scenario (no management) was rejected because it would not meet the two “givens” noted above or the goals and objectives of the strategy.

Our preferred scenario includes the full suite of management actions currently available and appropriate for use at the park: egg oiling, nest removal, culling and harassment. Management is expected to achieve the goal and objectives of the DCCO management strategy most effectively by allowing for the use of this integrated program with specific timing of actions and modifications from 2004. This scenario is expected to address the two “givens” agreed upon by the Committee.

Committee Recommendations:

DCCO Management Recommendations

1. The Committee recommends that culling of tree nesting adult DCCOs on High Bluff Island be continued as a management action in 2005 with the following modifications from 2004:

- remove nests with poles until the cull is started;
- start culling activities later in the season (the start date for the cull should be approximately 1.5 to 2 weeks after the presence of full clutches in the nests);
- investigate the impacts of culling near dawn (early morning) and dusk (late afternoon) on the sex ratio of birds taken;
- cull up to 5500 adult DCCO. This number is based on the previous year’s (2004) tree nest count (3656 tree nests) plus 50% to account for re-nesting of DCCOs in the trees; and
- use non-toxic ammunition if available.

Composting of carcasses should continue in the same manner as in 2004 in accordance with the requirements of the Ministry of Environment’s Provisional Certificate of Approval for a Waste Disposal Site.

Egg oiling of ground nests, nest removal and harassment of roosting DCCOs should continue with the following modifications from 2004:

- add nest removal to the period before culling;
- explore other ways to remove high-level nests (e.g., cherry pickers); and

- delay a decision on harassment of roosting birds until September or until the size of the roosting GBHE, BCNH and GREG population can be assessed.
- 2.** The Committee recommends the following additions to the strategy:
- dead trees not used by non-target species should be limbed and some of the main trunk of the tree (bole) removed. The remaining trunk or bole can remain for wildlife habitat. Removal should occur in the non-breeding season. Prior to removal, occupancy of dead tree branches should be monitored for the last 15 to 20 minutes of daylight to ensure branches are not being used as roost perches by non-target species, during breeding and post-breeding;
 - expand the monitoring done in 2004 by adding:
 - identification and tracking of any colour-banded DCCO
 - monitoring of DCCOs and non-target species on management and non-management days
 - monitoring of heron roosting during breeding season and immediate post-breeding season (i.e. well before planned DCCO roost harassment) to determine both the duration of occupancy of High Bluff Island by adult and young herons and to determine if it is a regional heron roost (i.e. do larger numbers of herons congregate and roost there than what are resident there during the breeding season)
 - monitoring of other habitats in the park for non-target species nesting (e.g. marsh areas); and
 - continue and expand research opportunities:
 - investigate the possible use of other locations for control sites to compare nesting habits of non-target species
 - test night-time laser disturbance as an alternative DCCO harassment technique
 - be open to other research opportunities aimed at determining Great Lakes Basin metapopulation (source / sink) dynamics (e.g., DNA analysis to determine natal sites).
- 3.** Continue the monitoring and study of all colonial waterbirds and their habitats and selected non-target species.
- 4.** Continue the monitoring of woody and herbaceous vegetation on High Bluff Island as part of the evaluation of the effects of DCCO management actions.

Additional Recommendations:

- 5.** Clarify the goals and objectives of DCCO management at Presqu'île by clearly stating them in the management strategy.
- 6.** Actively educate park users and the local public about the islands, the bird colony and the effects of humans on the environment.
- 7.** Continue to protect Gull Island and High Bluff Island from unauthorized visits and vandalism.
- 8.** Continue formation of an annual technical review committee of scientists from government and universities.
- 9.** Include greater public consultation and input and share information (e.g., post draft annual report as an information notice on the EBR; entertain presentations from special interest groups on the actions on High Bluff Island).

Closing Remarks:

The scientific review committee recognizes the controversial nature of invoking management on traditionally non-game species. Balancing various mandates for perpetuation and protection of natural resources against legitimately held social values is not an easy task for public land managers, planners, or scientists. Invariably, the best available science will be interpreted differently by individuals who hold divergent core beliefs.

At our third meeting, special interest groups made their case that recent DCCO increases are part of a natural process, which should be allowed to continue without human intervention. Other credible sources have previously argued that Great Lakes DCCOs have benefited from drastic human alteration of natural systems. These differences in well reasoned opinion, backed in part by science, which can never be perfect, illustrate the unavoidable blending of science and social value that is natural resource management.

Even within the Committee, no member wants to see DCCOs taken in large numbers, but we accept that non-lethal techniques alone cannot provide protection to woody vegetation before potentially irreversible loss occurs. We accepted two “givens” in our deliberations. First, DCCOs remain as an abundant tree nesting species on High Bluff Island. Second, further loss of woody vegetation cannot be avoided at present DCCO numbers. Our analysis of the 2004 cull led us to conclude that significant adverse impacts to the viability of non-target waterbirds were not evident; numbers of tree nesting DCCOs were reduced, but not eliminated; and the level of tree use by DCCOs was lowered by the 2004 program. In consideration of the park goals and objectives, the 2004 DCCO management program at Presqu’île likely made substantial progress in the desired direction with minimal un-anticipated consequences. We recommend that a similar program with the full range of available management techniques be delivered in 2005, with the inclusion of minor modifications designed to enhance effectiveness, improve monitoring, and further reduce non-target species disturbance.

Literature Cited and / or Reviewed by the Committee:

Carr, Laurie W. and Saewan Koh. 2001. Preliminary Assessment of Vegetative Damage by the Common Cormorant, Northwest Forest, High Bluff Island, Presqu’île Provincial Park.

Koh, Saewan and Laurie W. Carr. 2003. Follow-up Assessment of Tree Damage: Effect of Double-Crested Cormorant on the Western Forest, High Bluff Island, Presqu’île Provincial Park.

Ontario Parks. 2000. Double-crested Cormorants at Presqu’île Provincial Park: an analysis of their effects.

Ontario Parks. 2004. Amended Management Strategy for Double-crested Cormorants at Presqu’île Provincial Park.

Ontario Parks. 2004 (draft). Annual Report on the Management of Double-crested Cormorants at Presqu’île Provincial Park, 2004.

Ontario Parks. 2004. Annual Report on the Management of Double-crested Cormorants at Presqu’île Provincial Park, 2003.

Note: Other relevant information was also reviewed, including the April 15, 2004 letter addressed to the Minister of Environment requesting that the DCCO management program be subject to the *Environmental Assessment Act*, and the associated submission to MNR.

Recommended By:

The 2004 Presqu'ile Double-crested Cormorant Management Scientific Review
Committee

For further information, please contact:

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Appendix A (Committee Terms of Reference)

Presqu'île Provincial Park Double-crested Cormorant Management Strategy 2004 Review Committee

Terms of Reference

1. Purpose

In accordance with direction from the Ministry of Environment, the Ministry of Natural Resources (MNR), Ontario Parks is establishing a scientific committee to assess the cull that occurred in 2004 as part of the Double-crested Cormorant (DCCO) management at Presqu'île Provincial Park and prepare recommendations for the remaining years of the strategy. The purposes of this terms of reference are to:

- Provide background context and identify the Minister of Environment's requests;
- Outline the review committee's operation and membership; and
- Identify the committee's schedule and deliverables.

2. Background

In May of 2004, the Minister of Environment denied a request that the proposed Amendment to the Management Strategy for Double-crested Cormorants at Presqu'île Provincial Park be made subject to the requirements of the *Environmental Assessment Act*. This decision enabled MNR to proceed with the cull of up to 6000 cormorants in 2004. Culling actions were implemented between May 6 and June 7, 2004.

As part of this decision, the Minister of Environment requested the following from MNR to assess the need for a cull beyond 2004:

- As part of the annual monitoring report, assess the effects of the 2004 cull on the cormorants, other nesting colonial waterbirds and the health of the island's woody vegetation, and
- **Create or utilize an existing scientific committee to assess the impact of the cull and to recommend to the Minister of Natural Resources by December 2004 on whether to proceed with the cull in 2005 and 2006 or make further amendments to the strategy.**

In order to ensure an appropriate range of interests are represented a new committee has been formed including internal and external researchers and specialists familiar with cormorant management, colonial waterbird biology, botany and impacts to vegetation at the site.

3. Committee Operation and Membership

The role of the Committee is to assess the impact of the 2004 cull and to prepare recommendations on whether to continue with the culling technique in 2005 and 2006 or make further amendments to the strategy.

The committee shall consist of 8 to 10 members, including a balance of experts from MNR, other government agencies, universities and independent researcher companies. One member will be chosen by the committee to facilitate discussions.

Committee members are expected to attend each meeting, either in person or via conference call. Members may have alternate representatives. The facilitator will be appointed at the first committee meeting.

The Committee will attempt to reach consensus on all recommendations. It is understood that there may be certain circumstances which require casting a vote. The quorum at meetings shall be a majority of members.

The MNR shall provide support and liaison to the Committee, including provision of a secretariat function, and shall assign additional staff resources to support the Committee as required. Two assigned staff persons shall be ex-officio members of the Committee and may participate in Committee discussions.

Minutes shall be kept of all meetings and copies of Committee approved minutes shall be sent to the South Eastern Zone Manager and Managing Director of Ontario Parks as soon as practical after each meeting. Minutes of Committee meetings will not be shared with the public without Ministry review and approval.

Committee members shall be subject to Ministry directives regarding confidentiality, conflict of interest, and workplace discrimination and harassment. Members must be aware of potential conflict of interest and must declare such during their tenure on the Committee. Members finding themselves in conflict must declare a potential conflict and remove themselves from participating in all associated committee discussions.

Where necessary, the committee may consult with other MNR staff, other Ministry staff (e.g. Ministry of Environment), additional outside agencies, academics and other experts in the field.

4. Schedule and Deliverables

The Committee will meet as necessary during formulation of recommendations. There will be at least two face to face meetings:

- September 16, 2004.

This will include:

- a presentation by ex-officio members on the 2002 Presqu'île cormorant management strategy and 2004 major amendment process, the implementation of the DCCO management program
- discussion of the role of the committee and deliverables
- discussion of information required by the committee to formulate recommendations.

- October 4, 2004.

The committee will review the draft annual report and discuss issues related to assessing the 2004 management actions (cull).

Draft recommendations from the Committee will be provided in writing to the South Eastern Zone Manager and Manager, Planning and Research Section by November 1, 2004.

Comments will be returned to the Committee by November 15, 2004.

Recommendations from the Committee to the Minister shall be in writing by November 30, 2004.

The rationale for recommendations along with pros and cons, and any reservations, shall be noted.

Recommendations of the Committee may become public information, and should be written as if this will be the case.

The *Freedom of Information and Protection of Privacy Act* (FIPPA) provides the public with a right of access to government held information and to the protection of the privacy of individuals. The Committee and the ministry agree that these rights must be preserved and the Committee agrees that no personal information will be disclosed without proper authority.

Applicable reference material will be made available to the Committee during the review, including:

- 2004 Amended Management Strategy for Double-crested Cormorants at Presqu'ile Provincial Park
- 2004 Annual Report on the Management of Double-crested Cormorants at Presqu'ile Provincial Park (in progress)
- Double-crested Cormorants at Presqu'ile Provincial Park: an analysis of their effects (Ontario Parks, 2000)
- Preliminary Assessment of Vegetative Damage by the Common Cormorant, Northwest Forest, High Bluff Island, Presqu'ile Provincial Park. (Carr, Laurie W. and Saewan Koh, 2001)
- Follow-up Assessment of Tree Damage: Effect of Double-Crested Cormorant on the Western Forest, High Bluff Island, Presqu'ile Provincial Park. (Koh, Saewan and Laurie W. Carr, 2003)
- Annual Report on the Management of Double-crested Cormorants at Presqu'ile Provincial Park, 2003 (Ontario Parks, 2004)

5. Remuneration and Expenses

Other government agency and non government Committee members will be remunerated for time spent on Committee related business (per diem).

Committee members shall be eligible for reimbursement of expenses incurred on Committee business. Eligible expenses include travel, meals, accommodation, and other out of pocket expenses:

- Reasonable hotel accommodation (the Government of Ontario rate should be requested).
- Mileage compensation for use of private automobile at current government rates (kilometre usage must be recorded).
- Meals up to a prorated maximum of \$33.75 per day without receipts, and above that limit if receipts and explanation are provided.
- Receipted out of pocket expenses for parking fees and long distance telephone calls.

Expenses must be submitted on a Travel Expense Invoice with relevant receipts and documentation attached, to the assigned Ministry staff person.

The Committee will not undertake any expenditure, contracts for service or financial commitments related to the mandate of the Committee without the express written approval of the appropriate authority within the Ministry.