



**STAFF REPORT
ACTION REQUIRED**

City of Toronto’s Migratory Bird Policies – Bird Friendly Development Guidelines

Date:	March 6, 2007
To:	Planning and Growth Management Committee
From:	Chief Planner and Executive Director, City Planning Division
Wards:	All
Reference Number:	Pg070017

SUMMARY

This report presents the progress made on the City’s migratory bird policies in 2006, summarizes the success of the City and its community stakeholders in developing and implementing these policies and recommends further action for Council’s consideration on the City’s migratory bird policy issue.

Over the past 12 months City staff along with interested community partners and stakeholders, developed migratory bird policies in a comprehensive, three-pronged approach. For the injured birds, the City assists in their rescue, rehabilitation and release. For the public, an awareness campaign that draws attention to the dangers the urban environment poses to migrating birds has been launched. Finally, the “Bird-Friendly Development Guidelines” provides architects, planners, urban designers, building owners and managers, tenants and homeowners with a comprehensive list of possible options that can be implemented in new or existing developments to make them less dangerous for migratory birds.

To further enhance the work accomplished over the past year, it is recommended that the City produce a “Bird-Friendly Rating and Acknowledgement System” that will rate participating buildings on efforts to implement the Bird-Friendly Development Guidelines and recognize these efforts. It is also recommended that the City develop a ‘made in Toronto’ Light Pollution Policy that reflects the specific context of Toronto, sets out the goal and objectives of the City’s Light Pollution Policy and offers possible options of implementing such a policy while taking into consideration the interests of concerned stakeholders.

RECOMMENDATIONS

The City Planning Division recommend that:

1. Council adopt the Bird-Friendly Development Guidelines in order to encourage better design and operation of both new and existing buildings and help reduce the number of migratory bird deaths in the City;
2. The Chief Planner and Executive Director of City Planning develop a method for rating a building that implements the City's "Bird-Friendly Development Guidelines" along with a means of acknowledging such efforts; and,
3. The Chief Planner and Executive Director of City Planning develop a 'Light Pollution Policy' for Council's consideration that reflects the specific context of Toronto, sets out the goal and objectives of the City's Light Pollution Policy and offers possible options of implementing such a policy while taking into consideration the interests of concerned stakeholders.

Implementation Points

In developing a Bird-Friendly Building rating system and acknowledgement system and a Light Pollution Policy, City Planning staff will establish working groups with knowledgeable members of the community and appropriate City staff.

Financial Impact

These recommendations and report will have **no** financial impact beyond what has already been approved in the current year's budget.

DECISION HISTORY

In April 2005 Council passed a Motion directing staff to report on ways the City could reduce migratory bird deaths. A staff report titled "Preventing Migratory Bird Deaths Resulting from Collision with Buildings", went before the Planning and Transportation Committee (January 9) and subsequently to Council (January 31, February 1, 2) in 2006.

At the Planning and Transportation Committee a number of amendments were made to the report including: a request for guidelines that incorporate the needs of migratory birds and can be incorporated into the Site Plan Review process; a request for a report in one year's time on progress made in this area including a review of daytime bird collisions and a review of light pollution policies and by-laws enacted in other jurisdictions. This report responds to these requests.

1. Motion passed by Council, April 2005:
www.toronto.ca/legdocs/2005/minutes/council/cc050412.pdf
2. Decision Document of the January 9, 2006 Planning and Transportation meeting:
<http://www.toronto.ca/legdocs/2006/minutes/committees/plt/plt060109.pdf>
3. Amended Report adopted by Council, January 31, February 1 and 2, 2006:
<http://www.toronto.ca/legdocs/2006/agendas/council/cc060131/agenda.pdf>

ISSUE BACKGROUND

Urban areas pose serious dangers to migrating birds. The City of Toronto has already initiated efforts to address this issue by directing staff to work with the community to develop policies designed to reduce migratory bird deaths in Toronto. This report presents the progress made on this issue thus far and recommends further action.

COMMENTS

Achievements of the Lights Out Toronto! Public Awareness Campaign

In January 2006, Council decided to “institute an annual campaign to be known as “Lights Out Toronto!” in order to promote public awareness of migratory birds in the city and the dangers buildings and lighting pose to them”. Subsequently, a working group of concerned community stakeholders was struck to develop such a campaign.

The goal of the 2006 Lights Out Toronto! (LOT!) public awareness campaign was to introduce and raise the profile of the dangers posed by the urban environment to migrating birds and get people involved in this issue. In order to achieve this goal, several objectives were identified and all of these objectives were met in 2006 as outlined below:

- Developing informative brochures on the dangers the urban environment poses to migratory birds and how they can be mitigated.
 - Two brochures were developed, one was specifically on LOT!, of which 40,000 were printed. The other was on bird-friendly policies in general, of which 10,000 were printed.
- Printing a fridge magnet for distribution to the public.
 - 20,000 magnets were printed with the LOT! logo and website.
- Running ads in TTC vehicles during the migratory seasons.
 - 330 advertisements were produced for TTC vehicles. They ran twice for 4 weeks, once during the spring migratory season and again in the fall.

- Running elevator ads in office towers within the Target Area.
 - A 15 second elevator ad ran in 826 elevator screens in the downtown Target Area for a total of 8 weeks.
- Sending out email alerts to all City staff during the migratory seasons.
 - A ‘bird migration season’ alert was sent out to all City staff every two weeks during the migratory seasons. Each alert featured a different migratory bird, what one can do to reduce migratory bird deaths and directed staff to the LOT! website.
- Running advertisements in various community publications.
 - LOT! ads were taken out in “Spacing” magazine and the “Toronto Green Holiday Guide”.
- Giving presentations to the downtown business community.
 - Staff presented the City’s migratory bird policies at BOMA membership meetings.
- Sending out media releases.
 - Media releases were prepared and sent out for the spring and fall launches of the LOT! campaigns.
- Sending out written communications to building owners and managers informing them of how they can help reduce bird deaths.
 - During the fall migratory season, BOMA-Toronto distributed a letter from the Mayor referring to the City’s migratory bird policies and encouraging BOMA-Toronto’s 700 members to participate by turning off their lights.
- Engaging the public at select events.
 - The Toronto Environmental Volunteers distributed LOT! material at City Environment Days and at their information booth at the CNE.
- Developing a comprehensive website explaining the issue and resources and information helpful for those interested in reducing migratory bird deaths.
 - A “Lights Out Toronto!” webpage was developed for the public awareness campaign and added to the City’s website. It features City policies and stakeholder initiatives, photos of different migratory birds that fly through the region, ways citizens can help reduce migratory bird deaths, what to do if one finds an injured migratory bird, downloadable copies of LOT! brochures, and other relevant information. The website had over 4000 hits between mid-April and the end of December 2006.

FLAP, a key partner in the City’s migratory bird policies, depends heavily on the work of volunteers offering their time and energy for rescue, rehabilitation and release efforts. Thus, a key component of the public awareness campaign is providing information on how people can get directly involved in these efforts.

This year, FLAP has experienced a significantly greater interest in members of the public volunteering their time to bird rescue; most of this new interest was generated by the 2006 LOT! public awareness campaign. At the end of 2005, FLAP had 194 bird rescue volunteers in its database. Between January and December 2006, 223 new bird rescue volunteers came forward. Over 150 of these new volunteers received some of form bird rescue training, either through a weekend workshop or from one or more mornings of on-the-street training. Twenty of the new volunteers became regular bird rescue patrollers. FLAP now has a total of 417 bird rescue volunteers in their database.

Sixty-five percent of the new volunteers heard about FLAP and *Lights Out Toronto!* through the media, especially after dead migratory birds were displayed at the Royal Ontario Museum and at Metro Hall, and after the launch of *Lights Out Toronto!* in April by Mayor Miller and in September by Deputy Mayor Pantalone. Literature distribution resulted in 25% of new volunteers, and TTC ads generated 15% of the response.

The 2007 public awareness campaign will include the above and in addition, the following new initiatives are currently being considered: development of a comprehensive “Guide to the Birds of Toronto”, which will include a wide variety of information on birds and birding in the Toronto area that will be useful to residents and promote Toronto as a birding destination for tourists; online “Resources for Parents and Educators” that will include a bedtime story for children, lesson plans for teachers of various levels and resources for university-level students and researchers; new TTC advertisements to compliment the 2006 ads; and, a LOT! educational display for public events. All of the initiatives planned for 2007 are dependant on the success of acquiring outside funding.

Rescue, Rehabilitation and Release Efforts

In April 2005 staff were directed to report on how the City could assist in the rescue, rehabilitation and release of injured migratory birds. Staff reported back in January 2006 identifying key stakeholders presently involved in this work. This report was adopted by Council directing staff to work with concerned and qualified stakeholders in identifying best practices for the rescue, rehabilitation and release of injured migratory birds.

A working group was established to discuss the ongoing issues involved in the rescue, rehabilitation and release of injured migratory birds and how to best coordinate the efforts of the stakeholders involved. Through this working group the following practices were developed.

A Target Area (from Bloor Street to the waterfront and from University Avenue to Jarvis Street), was identified as the focus for rescue efforts of injured migratory birds. Injured birds in need of rehabilitation found by volunteers are gathered at ‘holding stations’ set up throughout the Target Area. They are then collected by a specially-equipped ‘rescue van’ provided by Earth Rangers and taken to Toronto Wildlife Centre (TWC), where they are given medical attention. The City provided a temporary parking spot for the rescue

van in the Hagerman Lot behind City Hall for the duration of the spring and fall migratory seasons.

Staff provide support to the work of FLAP through detailed mapping of the Target Area, which was divided into 7 patrol zones. FLAP volunteers are assigned to a specific zone in which dead and injured birds are collected. The address, species and time of discovery are recorded for each bird. This information provides data that can be used to map the locations of addresses that will need to be the focus of rescue efforts in future migratory seasons.

In 2006, approximately 5,500 dead and injured birds were recovered by FLAP volunteers. The numbers of these birds break down as follows (in approximate numbers): 2200 perished; 1500 admitted to TWC; 1800 not seriously injured (only stunned or disoriented) and taken outside the city and released. Of the 1500 admitted to the TWC, the vast majority were rehabilitated and later released.

During their patrols, volunteers were also able to distribute information packages on the City's migratory bird policies to the approximately 200 addresses within the Target Area.

Fundraising

The 2006 budget for LOT! was \$40,000 and this was raised solely from outside sources. The following organizations contributed in 2006: Toronto Hydro - \$15,000; Canadian Wildlife Service - \$15,000; Building Owners and Managers Association of Toronto (BOMA) - \$5000; and, Cadillac Fairview - \$5000. The \$5000 contributed by Cadillac Fairview was managed by FLAP for LOT! as Cadillac Fairview donated these monies to FLAP who could not then subsequently pass it on to the City. The rest of the \$35,000 was managed by the City.

Fundraising will continue to be a crucial aspect of LOT! as an ongoing campaign. Uncommitted funding thus far could top \$50,000 and potential donors include: Toronto Hydro; Canadian Wildlife Service; United States Fish and Wildlife Service; BOMA; Cadillac Fairview; and the Trillium Foundation. Committed donors for 2007 include: Animal Alliance of Canada; Zoocheck Canada; and, World Society for the Protection of Animals. The LOT! stakeholders are continuing to actively seek out potential donors and City staff provides support in terms of managing any monies received for LOT! to ensure that they are used in accordance with Council approved policy.

The City's Role

The City provides 'in kind' support as opposed to financial contributions for the efforts detailed above. These include: providing meeting space for stakeholder working groups and bird-rescue training workshops; facilitating and coordinating stakeholder meetings; managing the City's website; managing all City correspondence on this issue; coordinating fundraising efforts; and, managing the LOT! budget. In addition, the city

provides staff expertise in the development of an ongoing Communications Plan for LOT! and graphic design and production support for media and written materials.

Bird-Friendly Development Guidelines

The January 2006 report directed staff to develop means for incorporating the “needs of migratory birds into the Site Plan Review process with respect for facilities for lighting, including floodlighting, glass and other bird-friendly design features and that guidelines be established for that purpose.” Subsequently, a working group was struck that included local architects, developers, building management corporations, academics, bird advocacy groups and City staff. This stakeholder working group met several times throughout 2006 and managed to compile a comprehensive set of design-based development and operational options presented in an attractive, professional format for distribution to the public.

The “Bird-Friendly Development Guidelines” (delivered to Council members and available online at www.toronto.ca/lightsout/) provide strategies to address the issue of bird collisions in two general categories – glass and light pollution. During daylight hours, strikes occur because birds cannot perceive images reflected in glass as reflections, and thus will fly into windows that they think are trees or sky. Clear glass also poses a danger as birds cannot perceive clear glass as a solid object. Birds will strike clear glass while attempting to reach habitat and sky seen on the other side. The impact of striking a reflective or clear window in full flight often results in death. While bird strikes occur throughout the year, they rise dramatically during the annual spring and fall migrations because many species of migratory birds travel at night navigating by light from the moon and stars. Light emanating from urban areas obscures their natural cues and draws migrating birds into the unfamiliar urban environment.

The Bird-Friendly Development Guidelines, which are completely voluntary, provide a list of strategies available to developers, building managers and owners, architects, landscape architects, urban designers and professional planners wishing to make new and existing buildings less dangerous to migratory birds. The specific context of each development will influence the strategies selected. These strategies may be applied to any type of development including high and low rise residential, commercial, industrial and institutional projects. The Bird-Friendly Development Guidelines are a component of the Toronto Green Development Standard.

For new developments consideration of the guidelines should begin early in a project’s design evolution and eventually be incorporated into the Site Plan Agreement. For existing buildings, the viability of options will depend on the design of the existing building and site. Some options will be easier to implement than others.

The guidelines will be distributed to members of BOMA-Toronto and the members of the Greater Toronto Homebuilders Association / Urban Development Institute. City Planning staff will be made aware of the guidelines’ relevance and applicability to development applications through a series of workshop seminars. The guidelines will

also be made available to the general public through the LOT! website where they can be downloaded and printed.

Staff were also requested to report back on any increased costs that impact the construction industry from the implementation of the practices and policies respecting migratory birds. The City has contracted consultants to undertake a cost-benefit analysis of the Green Development Standard, of which the Bird-Friendly Development Guidelines are a component. An analysis of the impact on the development industry of the Bird-Friendly Development Guidelines will be undertaken concurrently to the cost-benefit analysis of the Green Development Standard. This study is due to be complete later in 2007.

Bird-Friendly Building Rating and Acknowledgment System

While developing the Bird-Friendly Development Guidelines, the stakeholder working group felt that to encourage innovative and creative implementation of bird-friendly design into new and existing developments, a means of the City to acknowledge this would be very helpful. First, a method of determining if a building is indeed bird-friendly would have to be developed along with a rating system that categorizes the level of bird-friendliness. Once a building is rated and then acknowledged by the City as such, it would enable building owners and managers to market their building as bird-friendly, which will give them incentive to incorporate such 'green' features into their developments while competing in an increasingly environmentally concerned and aware marketplace.

It is recommended that the Chief Planner prepare a "Bird-Friendly Rating and Acknowledgement System" that will rate participating buildings on efforts to implement the Bird-Friendly Development Guidelines and publicly recognize these efforts.

Light Pollution

At the January 9, 2006 meeting of the Planning and Transportation Committee, a report on "Preventing Migratory Bird Deaths Resulting from Collision with Buildings" was considered. Among other amendments, a recommendation was added directing staff to "prepare a report in one year's time on progress made, such report to review daytime strikes [*sic*], and investigate light pollution policies and by-laws enacted in other municipal jurisdictions'. This is a response to this request.

"Light Pollution" is unnecessary artificial light. Poorly designed exterior lighting fixtures and inefficient interior lighting operations are significant sources of light pollution. The adverse effects of light pollution include: obscuring of the night sky to urban residents; interference with astronomical observatories; disruption of natural ecosystems; and energy waste and subsequent increase in greenhouse gas production.

Light pollution comes in three forms, each reducing the quality of urban life. "Artificial sky glow" is the unnatural brightening and obscuring of the night sky. "Light trespass" is

light crossing over property lines, shining into yards and through windows. “Glare” is caused by overly bright lights in street, parking lot and exterior building lighting fixtures. Inefficient interior lighting operations also contribute to all three forms of light pollution. Light pollution policies generally identify strategies for minimizing artificial sky glow, light trespass and glare, which then may be followed by a by-law or ordinance.

Several communities and jurisdictions in North America have developed light pollution policies based on the desire to improve the quality of life for their residents, conserve wildlife populations, and reduce energy consumption. Where municipalities have passed light pollution by-laws and ordinances, they generally develop a light pollution policy first.

In general, light pollution by-laws and ordinances permit reasonable uses of outdoor lighting for night time safety, security, enjoyment and commerce; curtail and reverse the degradation of the night time environment and increase visual access to the night sky; preserve the night sky for astronomical purposes; conserve energy and resources; and, help protect wildlife populations.

Richmond Hill, Ontario and Saanich, BC have passed by-laws regulating light pollution as they are home to astronomical observatories and are attempting to reduce interference with their work. Several counties in Florida have instituted lighting ordinances along coastal areas to reduce the negative impact of light on sea turtle nesting areas. The county of Maui, Hawaii has also instituted outdoor lighting standards to preserve their night sky for astronomical purposes as well as protecting sea turtle and sea bird populations. The City of Calgary is addressing the issue through a program to retrofit residential street lights with new, lower-wattage, flat lens fixtures. Flat-lens fixtures use less energy, helping to keep operating costs down. Calgary estimates that after six to seven years they will regain the cost of installing the new fixtures from energy savings.

It is recommended that over the next year, the Chief Planner prepare a draft of a Light Pollution Policy for Council's consideration and that community stakeholders and appropriate City staff be invited to participate. This draft will reflect the specific context of Toronto, set out the goal and objectives of the City's Light Pollution Policy and offer possible options of implementing such a policy while taking into consideration the interests of concerned stakeholders.

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SIGNATURE

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ATTACHMENTS

Attachment 1: Bird Friendly Development Guidelines