BIRDS OF TORONTO

A GUIDE TO THE REMARKABLE WORLD OF URBAN BIRDS

FLAP

TORONTO

LIGHTS OUT TORONTO!

DRAFT

"Indeed, in its need for variety and acceptance of randomness, a flourishing natural ecosystem is more like a city than like a plantation. Perhaps it will be the city that reawakens our understanding and appreciation of nature, in all its teeming, unpredictable complexity" – *Jane Jacobs*, NY Times Magazine, 2004

"What is the use of a house if you haven't got a tolerable planet to put it on?" – *Henry David Thoreau*

American Woodcock

Cover Photo: Jean Iron
A flock of Whimbrel viewed from Colonel Samuel Smith Park on 23 May 2007 frames the Toronto skyline. Since the early 20th century, Toronto ornithologists have noted the unique and impressive spring migration of Whimbrel past the city's waterfront within a narrow 22–27 May time frame. In this short stretch of May, literally thousands of Whimbrel migrate past Toronto each spring, between their South American wintering grounds and their breeding grounds on the tundra coast of the Hudson Bay Lowlands. In some years, as much as one-quarter of the entire eastern North American population is witnessed passing along the Lake Ontario shoreline. Afforded protection by the Migratory Birds Convention Act of 1917, its population is probably still rebounding from the persecution of intense market hunting pressure in the 19th century.

Sharp Shinned Hawk

Welcome and Context

Rose-breasted Grosbeak

Prairie Warbler

Willow Flycatcher

NEED FOR POLICY AND ACTION

Many of North America's migratory bird species are facing significant population decline. Habitat loss, pesticide use, climate change and collisions with buildings and structures all contribute to this decline. As recorded by FLAP, of the 160 different species known to have been killed in Toronto by collision with buildings, at least 64 are classified as 'in decline'. Millions of migratory birds are killed in North America each year as a result of collisions with buildings. Making the city safer for migratory birds will enhance the natural biodiversity with our urban environment and help reduce the decline in North American bird populations. Birds are essential to a healthy ecology: they consume billions of insects daily, pollinate plants and disperse seeds. The beauty and diversity of birds also greatly enhance our experience of nature. They also contribute significantly to our economy as birdwatching has become the second most popular leisure activity in North America, after gardening. One of the key ways to reduce migratory bird deaths is to reduce light pollution, which will also result in energy savings, lower building operating costs and reduced greenhouse gas emissions. By implementing bird-friendly development guidelines, Toronto's environment will be a safer and healthier place for both human and bird populations.

Historical Habitats of Toronto

Originally a landscape dominated by upland hardwood and mixed forest of either Carolinian or Great Lakes–St. Lawrence character, with extensive wetlands at the mouths of the three main rivers that run into Lake Ontario, the area that is now the City of Toronto undoubtedly accommodated a large and diverse population of forest and wetland birds. As the city grew, spreading northwards from the lakeshore, almost all of this forest cover was converted first to agricultural land and then to the expanses of brick and concrete that we now know.

Of course, the majority of forest fauna species were unable to sustain themselves in this new environment although remnants of these populations still persist in any areas that were set aside either for the recreational needs of the burgeoning human population or because the lands were difficult to develop. It is primarily the latter reason that has allowed the city to maintain what is now the most important natural characteristic of modern Toronto – the city ravines.

Lupins in High Park' – Group of Seven painting

CITY RAVINES

The importance of the network of ravines that thread through much of the city is felt primarily by the migrant birds that need to move through the otherwise hostile urban landscape in huge numbers in the spring and fall on their long migration journeys. But it is not just for those fleeting visitors that the foraging and shelter opportunities afforded by the ravines are so important. Locally bred birds – recently fledged and independent youngsters raised in the fragments of habitat that dot the urban landscape – depend on the connectivity of these natural corridors to allow them easy passage to migration staging points on the lakeshore.

In addition to being so important for both foreign and local migrants, these corridors are the routes that allow dispersal of resident birds across the landscape, ensuring genetic health and opportunities for new recruitment. Like the natural history of an island in a sea of concrete,– the denizens of an isolated fragment of forest are in danger of not being able to recover from a local collapse – the isolation obstructs any natural recruitment of dispersing populations from other fragments in the landscape. In this way even the most urban of backyards become important steps along life saving corridors through the city landscape.

Today's Habitats of Toronto

Toronto's ravines and parks represent some of the best remaining forest habitat in the city. Where these areas have been allowed space, like Rouge Park, the forest is still extensive enough to support bird species typically associated with rural areas. These remnants, surrounded by urbanization, cannot sustain the same diversity of birds associated with more intact forest habitats. Nesting birds in the city's natural spaces tend to be those that nest in the mid and upper canopies of the urban forest (Blue Jays, nuthatches, woodpeckers). Ground-nesting birds (Ovenbirds, Ruffed Grouse) are quite under-represented, but where adequate forest understory exists, some birds have managed to persist with certain species (Indigo Bunting, Gray Catbird and Song Sparrow) relatively abundant in the wilder corners of the city's parks and ravines.

Although Toronto has lost much of its woodland cover, new habitat opportunities have arisen. The original forest was dotted with openings caused by wind or fire where meadow, savannah and thicket habitat would thrive for a few years before being swallowed again by the forest. These natural gaps accommodated various bird species (Bobolink, Field Sparrow, Eastern Meadowlark), all of which now find similar open habitat occurring more permanently, although artificially, throughout the city. Hydro corridors and road allowances provide excellent opportunities for some of these species, although as primarily ground-nesting species they remain sensitive to human disturbance.

Despite the loss of continuous natural cover, there is still an enormous variety of birds throughout the city. Some of these species are represented only by the occasional pair that has overcome the odds of nesting in the urban environment (Scarlet Tanager in Sunnybrook Park), but many species seem to thrive in the remaining natural habitat. Then there are those species that have discovered entirely new nesting opportunities created urbanization itself. These local birds, plus the incredible number of migrant birds that pass through, afford plenty of excellent birding opportunities for the patient enthusiast.

Cherry Street oil refineries, aerial, 1930

ASHBRIDGES BAY ...

TRCA TERRESTRIAL NATURAL HERITAGE SYSTEM STRATEGY

Toronto and Region Conservation Authority (TRCA) has developed a plan to enhance and improve the quality of natural habitat across the region through the Terrestrial Natural Heritage System Strategy (2007). Based on a series of models, TRCA has identified natural areas that would be best served by habitat restoration projects. For example, by augmenting existing forest habitat, the correct landscape configurations for forest interior habitat can be accomplished (an important habitat condition for several forest species, like wood thrush); or through creation and enhancement, wetland habitat is established for a variety of wildlife. Regardless of the quantity and size of the various patches of natural habitat in the city, it is essential that residents act as good stewards and promote respectful attitudes to their local natural areas.

North-South American Migration Routes

Migratory birds travel through North America along four major paths – The Pacific, Central, Mississippi and Atlantic Flyways. These flyways delineate main "highways" used by migratory birds that correspond to major geographic features, which have an appropriate north-south alignment (e.g. Oceans, Rocky Mountains, Great Plains). There is extensive variation between species in routes of migration and there is even considerable variation between individuals of the same species.

Breeding location, flight speed, distance of travel and preferred habitats are all factors that contribute to routes taken by the various migratory bird species. Toronto is located where the Atlantic and Mississippi Flyways converge. We know that most birds traveling through Toronto are heading north to the Arctic and Boreal Forest regions, however individuals of the same species may be destined for areas far apart (e.g. Saskatchewan or Quebec). With further research through studies at Tommy Thompson Park Bird Research Station we will be able to learn more about the destinations of Toronto's migrating birds. What we do understand is that birds follow ancient routes and that the ecological integrity of these routes are critical to the survival of migratory bird populations.

NORTH-SOUTH AMERICAN MIGRATION ROUTES

MIGRATORY BIRDS CONVENTION ACT

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Threats Posed by Urbanization

"The wonderfully fine-tuned system that migratory songbirds use to find their way in the darkness is a handicap in this modern world of sprawling cities… Celestial signposts become masked in cities where bright lights shine from skyscrapers and rooftops, literally blinding birds and confusing their navigation system. Especially on foggy nights and nights with low cloud cover, when they cannot see the real stars, birds stream toward the city lights and circle among the buildings and streets, disoriented and exhausted. Before long, the birds fall like rain… Toronto lies on a bird super-highway, and tens of thousands of birds pass overhead in a single hour during the peak of migration." Bridget Stuchbury, *Silence of the Songbirds*

Bird species at risk

Ontario is home to over twenty bird species nationally recognized as being "at risk" of disappearing in Canada and although a few of these rare birds can be found within a short drive from the city, one species can be found in the city. Comfortable nesting on building rooftops and ledges, Toronto has been home to several pairs of Peregrine Falcons since the 1990s. Known for their incredible aerial acrobatics and hunting skills, Peregrine falcons are protected under the federal *Species at Risk Act* (SARA). Proclaimed in June 2003, the purpose of SARA is to prevent wildlife species from becoming extinct and to provide for their recovery. For more information on SARA and species at risk in Canada, visit www.sararegistry.ca.

HIERARCHY OF THREATS

It is estimated that as many as 1.5 billion birds are killed annually across the United States as a direct result of human impact. This does not include the impact caused by habitat destruction from urban sprawl or the effects of global warming or invasive species. It is a credit to the resilience of the avian fauna of the world that we still have the fortune of seeing them. Through modifications in our actions we can reduce these losses.

Collisions with:	**(in millions)**
– Motor vehicles	60–80
– Power lines	0.1– 174
– Comunication towers	4 –50
– Buildings	100 – 1,000
– Wind generators	0.01 – 0.04
Recreation hunting	120
Nuicance bird control	2
Scientific research	0.02
Indirect pesticide poisoning	72
Electrocution	0.01 – 0.1
House cats	118
Total	**476.14 – 1616.16**

Modified from: The Bird Almanac: A Guide to Essential Facts and Figures of the World's Birds, David M. Bird, Ph.D, Key Porter Books, page 55, 2004.

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Passenger Pigeon

"The beauty and genius of a work of art may be reconceived, though its first material expression destroyed; a vanished harmony may yet again inspire the composer; but when the last individual of a race of living things breathes no more, another heaven and another earth must pass before such a one can be again." William Beebe

City's Migratory Bird Policies

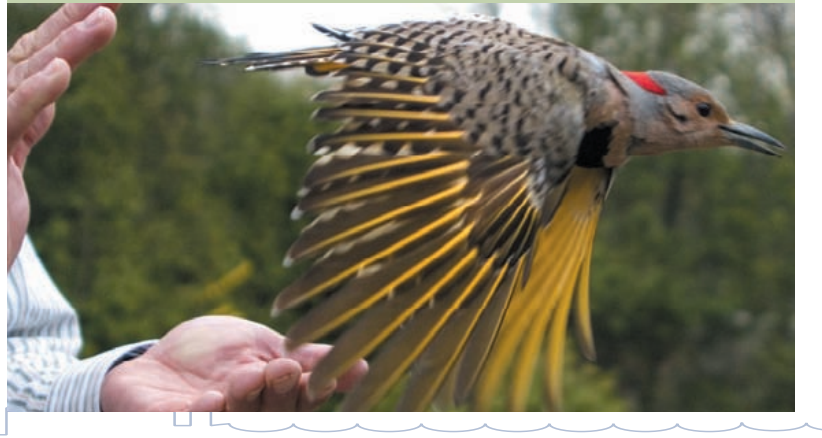
The City of Toronto adopted Migratory Bird Protection Policies in January 2006. They are the result of an initiative taken by City Council on April 12, 13 and 14, 2005 when it adopted Motion J(17) regarding the "Prevention of Needless Deaths of Thousands of Migratory Birds in the City of Toronto". The City subsequently launched "Lights Out Toronto!", a public awareness campaign aimed at drawing attention to this issue and to ways that individuals, businesses, property owners and managers can help reduce migratory bird deaths. The City is also participating in the rescue, rehabilitation and release of injured migratory birds. In City-owned buildings, a 'lights-out' policy for after work hours and on weekends has been in place since 2005. In addition to these steps, "Bird-Friendly Development Guidelines" were also created and released in the spring of 2007.

RESCUE, REHABILITATION AND RELEASE EFFORTS

The City of Toronto established a working group to address 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.

A Target Area in the downtown core (from Bloor Street to the waterfront and from University Avenue to Jarvis Street), was identified to be the focus of monitoring dead and injured migratory birds. The Target Area is divided into patrol zones and FLAP volunteers are assigned to a specific zone in which dead and injured birds are collected. (see www.flap.org) 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. City Planning provides mapping and analysis of the data collected in the Target Area.

Injured birds in need of rehabilitation found by volunteers are gathered at 'holding stations' set up throughout the Target Area and then taken to Toronto Wildlife Centre (www.torontowildlifecentre.com) where they are given medical attention. Birds that are only stunned and determined not to be in need of rehabilitation are taken outside the city for release. Dead birds are collected and given to the Royal Ontario Museum for research purposes at the end of each migratory season.

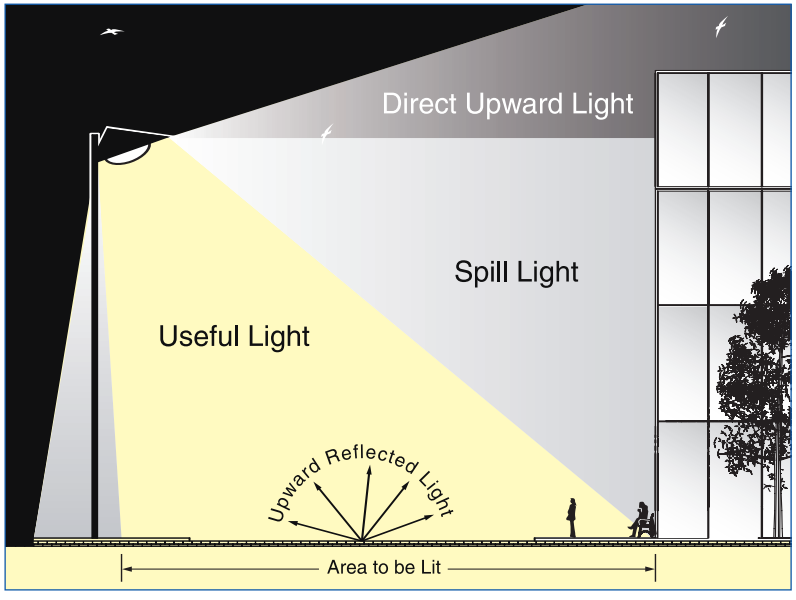


Lights Out Toronto!

In January 2006, Council launched 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 Lights Out Toronto! (LOT!) public awareness campaign is intended to introduce and raise the profile of the dangers posed by the urban environment to migrating birds and to get people involved in this issue by offering them options for helping to reduce migratory bid deaths. The campaign, which coincides with the spring and fall migratory seasons, includes ads in transit vehicles, in various community publications and on televisions in downtown office tower elevators. A comprehensive website (www.toronto.ca/lightsout(was also developed where people can go for detailed information on how to get involved. See

Funding continues to be a crucial aspect of LOT! as an ongoing effort. Toronto Hydro, Canadian Wildlife Service, Building Owners and Managers Association of Toronto (BOMA-Toronto), Cadillac Fairview Corporation, Animal Alliance of Canada, Cormorant Defenders International, and World Society for the Protection of Animals have all contributed to the campaign.



CITY OF TORONTO LIGHT POLLUTION POLICY

In April of 2007, the City of Toronto began developing a Light Pollution Policy (LPP). "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.

A working group including the City, Toronto Hydro, Ontario Science Centre, lighting experts and wildlife advocacy organizations will work together to develop strategies to reduce light pollution in the specific context of Toronto.

The objectives are to:

- **Eliminate direct upward light – Direct upward light is projected directly upward by inefficient lighting fixtures.**
- **Reduce spill light – Spill light spills beyond areas that need to be lit for safety and security reasons but is not projected directly upward.**
- **Optimize useful light – Useful light is used to illuminate urban areas that need to be lit for safety.**

Bird-Friendly Development Guidelines

In January 2006 City Council directed City Planning staff to develop a means of 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." A working group was struck that included local architects, developers, building management corporations, academics, bird advocacy groups and City staff to achieve this task.

The "Bird-Friendly Development Guidelines provide strategies to address the issue of bird collisions in two general categories – glass and light pollution.

The Guidelines, which are completely voluntary, provide strategies for 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.

Song Sparrow

The Bird-Friendly Development Guidelines are a component of the Toronto Green Development Standard. Copies of the Bird-Friendly Development Guidelines can be found at www.toronto.ca/lightsout

Bird-Friendly Rating and Acknowledgement 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.

In April of 2007, the City of Toronto began developing a system of rating buildings that have implemented the "Bird-Friendly Development Guidelines. Along with this rating system, a means of acknowledging these efforts is also being developed.

Appropriate window applications for the first 12 metres above grade are essential for a building to be considered bird-friendly

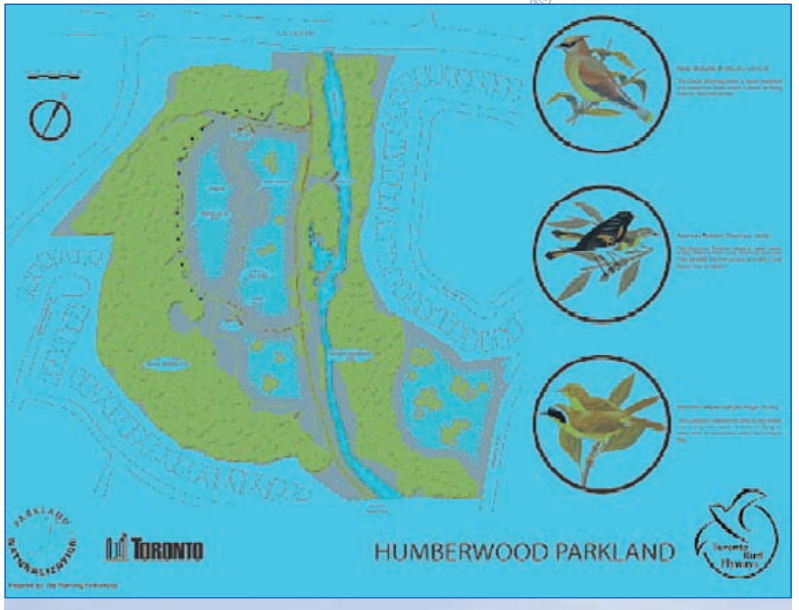
This is a good example of a design that projects sufficient visual markers for birds to perceive as a solid object. Very few dead and injured birds are found at this facade. photo credit: FLAP

Toronto's Bird Flyways Project

Toronto's ravine system attracts many bird species. During migration birds use them as travel corridors, and year round they are used as habitat for breeding and raising young. The City of Toronto has initiated the Toronto Bird Flyways Project which enhances bird habitat in 3 parks in our ravine system; Humberwood Park in the Humber Valley, Milne Hollow Park in the Don Valley and Woodlands Park in the Rouge Valley.

The Toronto Bird Flyways Project includes planting native trees, shrubs and wildflowers and installing habitat structures to provide additional food and shelter for birds. The project compliments other habitat restoration work by the City of Toronto and its partners at sites throughout Toronto and will enhance bird flyway corridors that connect to larger continental ecosystems.

The Toronto Bird Flyways Project also provides great opportunities for bird watchers to watch and learn about local and migratory birds through art and interpretive signage.

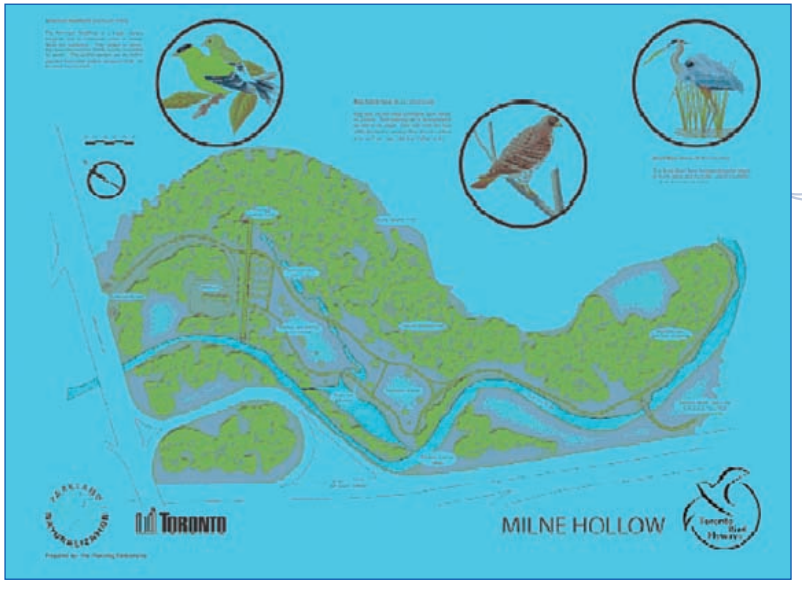


Humberwood Bird Flyway

Milne Hollow Bird Flyway offers a 1km trail circuit including a wetland lookout, informative interpretive signs and a new forest succession demonstration area. Based in the Don Valley watershed, this old ski hill has been restored to provide diverse habitat for many bird species.

Woodlands Bird Flyway

Humberwood Bird Flyway provides habitat for a variety of resident and migratory bird species with its diverse riparian landscape, whose trail connects with the larger Humber trail system. Delightful pieces of larger-than-life creative art representing bird nests, birds and their habitats are scattered across the landscape.



Milne Hollow Bird Flyway

Woodlands Bird Flyway is a unique part of the distinguished Rouge Park, Toronto's largest park, alive with natural and cultural heritage. Woodlands Park connects to an extensive trail system through pristine wooded areas and colourful wildflower meadows teeming with birds.

toronto ZOO

Doing It For the Birds

The Toronto Zoo is the home of 350 birds representing over 100 species. Nestled into the Rouge Park, the Zoo is proud of its mission to conserve natural habitat. Its 710 acres supplies nesting space for over 70 species of native birds including warblers, Wood Thrush, Indigo Buntings, Baltimore Orioles and Rose-breasted Grosbeaks. Conservation has become a focus in modern zoos. Besides working on Species Survival Plans and captive breeding programs for exotic birds, the Toronto Zoo has been a part of captive breeding and recovery of native species. The Zoo joined the Trumpeter swans re-introduction program in 1993. At least one pair has bred on the property since 1995. Since 1997, Toronto Zoo has worked with the Eastern Loggerhead Shrike Recovery team in an attempt to bolster the flagging numbers in Canada. At this time up to 100 shrikes are released annually to aide the recovery efforts in Ontario. Collisions of birds with glass are a problem everywhere. Toronto Zoo has worked on covering their most offensive windows with one way viewing film.

At the Zoo, the displays are found on the upper plateau between the two branches of the Rouge River. The valley areas have been preserved for the native wildlife.

Song Sparrow

One of the aims of the Toronto Zoo is to show not just the animals, but the animals in their native environments. The organic form of the pavilions creates an exterior profile which flows naturally into the surrounding landscape. Other structures, such as restaurants and service buildings have all been designed in a similar manner. All the animals and plants are displayed zoogeographically, so they are placed with animals and plants from the same geographical region.

THE TORONTO ZOO IS OPEN YEAR ROUND!
Take Hwy 401 to Meadowvale Road in Scarborough (Exit #389 eastbound or westbound)
- Go north on Meadowvale Road and follow signs to Zoo Main Parking Lot

- For TTC (public transit) call 416-393-4636 or www.ttc.ca

- For GO Train info call 416-869-3200 or www.gotransit.com

- For more info call 416-392-5929 or www.torontozoo.com

The Toronto Zoo is owned by the City of Toronto, and operated by a Board of Management. The Board consists of five members of the Zoological Society of Toronto and six members appointed by Toronto City Council. Events and admission prices are subject to change without notice.

Directions to Toronto Zoo: Hwy 401 to Meadowvale Road in Scarborough (Exit #389). Go north on Meadowvale Road and follow signs to Zoo Main Parking Lot. For public transit call 416-393-4636 or www.ttc.ca. For GO Train call 416-869-3200 or www.gotransit.com. For more information call 416-392-5929 or www.torontozoo.com

Northern Flicker *(Colaptes auratus)*

Migrating at night back to Toronto and the rest of southern Ontario in late March and early April, the Northern Flicker is a sure sign of spring. Their brown and black barred and spotted bodies, black bib, conspicuous white rump and yellow/golden under wings are key identification features. Males can be easily distinguished from females by the distinctive black mustache on their cheek. Their loud rapid call, often describes as wik-a-wik-wik-a-wik-a is common in early spring as flickers begin establishing territories and attempt to attract mates.

Flickers are members of the woodpecker family but, unlike most woodpeckers that feed on trunks and branches of trees, flickers are commonly observed foraging on the ground in search of their favourite food, ants! However, they also feed on other invertebrates and even switch over to fruit in late fall and winter. They are well adapted to a variety of habitats and are commonly found in woods, forest edges, rural, suburban and urban areas. They nest in cavities, usually excavating a new cavity each year in trees, snags, hydro poles, fence posts and even nest boxes often providing future homes for many other cavity nesting species. Look for them in the many ravines and parks throughout Toronto and don't be surprised if you see one working away at an anthill in your own backyard!

Northern Flicker

CHECKLIST OF THE BIRDS OF THE GREATER TORONTO AREA (2007)

The Greater Toronto Area encompasses the City of Toronto, the Regional Municipalities of Halton, Peel, York and Durham and the corresponding Canadian waters of Lake Ontario. Since records have been kept, a total of 398 bird species has been recorded within this area and confirmed breeding evidence has been obtained for 195 of these species.

* – confirmed breeding species
(*) – confirmed historical breeding species (pre-1960)
[*] – confirmed introduced breeding species not yet completely established
Source: Toronto Ornithological Club – Records Committee

DUCKS, GEESE & SWANS
- ☐ Fulvous Whistling-Duck
- ☐ Greater White-fronted Goose
- ☐ Snow Goose
- ☐ Ross's Goose
- ☐ Brant
- ☐ Cackling Goose
- ☐ *Canada Goose
- ☐ *Mute Swan
- ☐ [*]Trumpeter Swan
- ☐ Tundra Swan
- ☐ *Wood Duck
- ☐ *Gadwall
- ☐ Eurasian Wigeon
- ☐ *American Wigeon
- ☐ *American Black Duck
- ☐ *Mallard
- ☐ *Blue-winged Teal
- ☐ Cinnamon Teal
- ☐ *Northern Shoveler
- ☐ *Northern Pintail
- ☐ Garganey
- ☐ *Green-winged Teal
- ☐ *Canvasback
- ☐ *Redhead
- ☐ Ring-necked Duck
- ☐ Tufted Duck
- ☐ Greater Scaup
- ☐ *Lesser Scaup
- ☐ King Eider
- ☐ Common Eider
- ☐ Harlequin Duck
- ☐ Surf Scoter
- ☐ White-winged Scoter
- ☐ Black Scoter
- ☐ Long-tailed Duck
- ☐ Bufflehead
- ☐ Common Goldeneye
- ☐ Barrow's Goldeneye
- ☐ *Hooded Merganser
- ☐ *Common Merganser
- ☐ *Red-breasted Merganser
- ☐ *Ruddy Duck

PARTRIDGES, GROUSE & TURKEYS
- ☐ (*)Gray Partridge
- ☐ *Ring-necked Pheasant
- ☐ *Ruffed Grouse
- ☐ Spruce Grouse
- ☐ Willow Ptarmigan
- ☐ Greater Prairie-Chicken
- ☐ *Wild Turkey

NEW WORLD QUAIL
- ☐ (*)Northern Bobwhite

LOONS
- ☐ Red-throated Loon
- ☐ Pacific Loon
- ☐ *Common Loon

GREBES
- ☐ *Pied-billed Grebe
- ☐ Horned Grebe
- ☐ *Red-necked Grebe
- ☐ Eared Grebe
- ☐ Western Grebe

SHEARWATERS & PETRELS
- ☐ Northern Fulmar
- ☐ Black-capped Petrel
- ☐ Greater Shearwater

GANNETS
- ☐ Northern Gannet

PELICANS
- ☐ American White Pelican
- ☐ Brown Pelican

CORMORANTS
- ☐ *Double-crested Cormorant
- ☐ Great Cormorant

HERONS & BITTERNS
- ☐ *American Bittern
- ☐ *Least Bittern
- ☐ *Great Blue Heron
- ☐ *Great Egret
- ☐ Snowy Egret
- ☐ Little Blue Heron
- ☐ Tricolored Heron
- ☐ Cattle Egret
- ☐ *Green Heron
- ☐ *Black-crowned Night-Heron
- ☐ Yellow-crowned Night-Heron

IBISES
- ☐ Glossy Ibis
- ☐ White-faced Ibis

HAWKS, KITES & EAGLES
- ☐ *Osprey
- ☐ Swallow-tailed Kite
- ☐ Bald Eagle
- ☐ *Northern Harrier
- ☐ *Sharp-shinned Hawk
- ☐ *Cooper's Hawk
- ☐ *Northern Goshawk
- ☐ *Red-shouldered Hawk
- ☐ *Broad-winged Hawk
- ☐ Swainson's Hawk
- ☐ *Red-tailed Hawk
- ☐ Ferruginous Hawk
- ☐ Rough-legged Hawk
- ☐ Golden Eagle

VULTURES
- ☐ Black Vulture
- ☐ *Turkey Vulture

CARACARAS & FALCONS
- ☐ *American Kestrel
- ☐ *Merlin
- ☐ Gyrfalcon
- ☐ *Peregrine Falcon

RAILS, GALLINULES & COOTS
- ☐ Yellow Rail
- ☐ *King Rail
- ☐ *Virginia Rail
- ☐ *Sora
- ☐ Purple Gallinule
- ☐ *Common Moorhen
- ☐ *American Coot

CRANES
- ☐ Sandhill Crane
- ☐ Whooping Crane

PLOVERS
- ☐ Black-bellied Plover
- ☐ American Golden-Plover
- ☐ Semipalmated Plover
- ☐ (*)Piping Plover
- ☐ *Killdeer

OYSTERCATCHERS
- ☐ American Oystercatcher

STILTS & AVOCETS
- ☐ Black-necked Stilt
- ☐ American Avocet

SANDPIPERS & PHALAROPES
- ☐ *Spotted Sandpiper
- ☐ Solitary Sandpiper
- ☐ Greater Yellowlegs
- ☐ Willet
- ☐ Lesser Yellowlegs
- ☐ *Upland Sandpiper
- ☐ Eskimo Curlew
- ☐ Whimbrel
- ☐ Long-billed Curlew
- ☐ Black-tailed Godwit
- ☐ Hudsonian Godwit
- ☐ Marbled Godwit
- ☐ Ruddy Turnstone
- ☐ Red Knot
- ☐ Sanderling
- ☐ Semipalmated Sandpiper
- ☐ Western Sandpiper
- ☐ Least Sandpiper
- ☐ White-rumped Sandpiper
- ☐ Baird's Sandpiper
- ☐ Pectoral Sandpiper
- ☐ Purple Sandpiper
- ☐ Dunlin
- ☐ Curlew Sandpiper
- ☐ Stilt Sandpiper
- ☐ Buff-breasted Sandpiper
- ☐ Ruff
- ☐ Short-billed Dowitcher
- ☐ Long-billed Dowitcher
- ☐ *Wilson's Snipe
- ☐ *American Woodcock
- ☐ *Wilson's Phalarope
- ☐ Red-necked Phalarope
- ☐ Red Phalarope

GULLS, TERNS & SKIMMERS
- ☐ Laughing Gull
- ☐ Franklin's Gull
- ☐ *Little Gull
- ☐ Black-headed Gull
- ☐ Bonaparte's Gull
- ☐ Heermann's Gull
- ☐ Mew Gull
- ☐ *Ring-billed Gull
- ☐ *California Gull
- ☐ *Herring Gull
- ☐ Thayer's Gull
- ☐ Iceland Gull
- ☐ Lesser Black-backed Gull
- ☐ Slaty-backed Gull
- ☐ Glaucous Gull
- ☐ *Great Black-backed Gull
- ☐ Sabine's Gull
- ☐ Black-legged Kittiwake
- ☐ Ivory Gull
- ☐ *Caspian Tern
- ☐ *Black Tern
- ☐ *Common Tern
- ☐ Arctic Tern
- ☐ Forster's Tern
- ☐ Black Skimmer

SKUAS
- ☐ Pomarine Jaeger
- ☐ Parasitic Jaeger
- ☐ Long-tailed Jaeger

AUKS, MURRES & PUFFINS
- ☐ Dovekie
- ☐ Thick-billed Murre
- ☐ Razorbill
- ☐ Black Guillemot
- ☐ Ancient Murrelet

PIGEONS & DOVES
- ☐ *Rock Pigeon
- ☐ Band-tailed Pigeon
- ☐ Eurasian Collared-Dove
- ☐ White-winged Dove
- ☐ *Mourning Dove
- ☐ (*)Passenger Pigeon (Extinct)

CUCKOOS & ANIS
- ☐ *Yellow-billed Cuckoo
- ☐ *Black-billed Cuckoo

BARN OWLS
- ☐ Barn Owl

TYPICAL OWLS
- ☐ *Eastern Screech-Owl
- ☐ *Great Horned Owl

- ☐ Snowy Owl
- ☐ Northern Hawk Owl
- ☐ Burrowing Owl
- ☐ *Barred Owl
- ☐ Great Gray Owl
- ☐ *Long-eared Owl
- ☐ *Short-eared Owl
- ☐ Boreal Owl
- ☐ *Northern Saw-whet Owl

GOATSUCKERS
- ☐ *Common Nighthawk
- ☐ Chuck-will's-widow
- ☐ *Whip-poor-will

SWIFTS
- ☐ *Chimney Swift N/S

HUMMINGBIRDS
- ☐ *Ruby-throated Hummingbird
- ☐ Rufous Hummingbird

KINGFISHERS
*Belted Kingfisher

WOODPECKERS
- ☐ *Red-headed Woodpecker
- ☐ *Red-bellied Woodpecker
- ☐ *Yellow-bellied Sapsucker
- ☐ *Downy Woodpecker
- ☐ *Hairy Woodpecker
- ☐ American Three-toed Woodpecker
- ☐ Black-backed Woodpecker
- ☐ *Northern Flicker
- ☐ *Pileated Woodpecker

TYRANT FLYCATCHERS
- ☐ Olive-sided Flycatcher
- ☐ *Eastern Wood-Pewee
- ☐ Yellow-bellied Flycatcher
- ☐ *Acadian Flycatcher
- ☐ *Alder Flycatcher
- ☐ *Willow Flycatcher
- ☐ *Least Flycatcher
- ☐ Gray Flycatcher
- ☐ *Eastern Phoebe
- ☐ Vermilion Flycatcher
- ☐ Ash-throated Flycatcher
- ☐ *Great Crested Flycatcher
- ☐ Variegated Flycatcher
- ☐ Western Kingbird
- ☐ *Eastern Kingbird
- ☐ Scissor-tailed Flycatcher
- ☐ Fork-tailed Flycatcher

SHRIKES
- ☐ *Loggerhead Shrike
- ☐ Northern Shrike

VIREOS
- ☐ White-eyed Vireo
- ☐ Bell's Vireo
- ☐ *Yellow-throated Vireo
- ☐ *Blue-headed Vireo
- ☐ *Warbling Vireo
- ☐ Philadelphia Vireo
- ☐ *Red-eyed Vireo

CROWS & JAYS
- ☐ Gray Jay
- ☐ *Blue Jay
- ☐ Black-billed Magpie
- ☐ Eurasian Jackdaw
- ☐ *American Crow
- ☐ *Common Raven

LARKS
- ☐ *Horned Lark

SWALLOWS
- ☐ *Purple Martin
- ☐ *Tree Swallow
- ☐ *Northern Rough-winged Swallow
- ☐ *Bank Swallow
- ☐ *Cliff Swallow
- ☐ Cave Swallow
- ☐ *Barn Swallow

CHICKADEES & TITMICE
- ☐ *Black-capped Chickadee
- ☐ Boreal Chickadee
- ☐ Tufted Titmouse

NUTHATCHES
- ☐ *Red-breasted Nuthatch
- ☐ *White-breasted Nuthatch

CREEPERS
- ☐ *Brown Creeper N/S

WRENS
- ☐ Rock Wren
- ☐ *Carolina Wren
- ☐ Bewick's Wren
- ☐ *House Wren
- ☐ *Winter Wren
- ☐ *Sedge Wren
- ☐ *Marsh Wren

KINGLETS
- ☐ *Golden-crowned Kinglet
- ☐ *Ruby-crowned Kinglet

GNATCATCHERS
- ☐ *Blue-gray Gnatcatcher

THRUSHES
- ☐ Siberian Rubythroat
- ☐ Northern Wheatear
- ☐ *Eastern Bluebird
- ☐ Townsend's Solitaire
- ☐ *Veery
- ☐ Gray-cheeked Thrush
- ☐ Swainson's Thrush
- ☐ *Hermit Thrush
- ☐ *Wood Thrush
- ☐ Fieldfare
- ☐ *American Robin
- ☐ Varied Thrush

MOCKINGBIRDS & THRASHERS
- ☐ *Gray Catbird
- ☐ *Northern Mockingbird
- ☐ *Brown Thrasher

STARLINGS
- ☐ *European Starling

PIPITS
- ☐ American Pipit

WAXWINGS
- ☐ Bohemian Waxwing
- ☐ *Cedar Waxwing

WOOD-WARBLERS
- ☐ *Blue-winged Warbler
- ☐ *Golden-winged Warbler
- ☐ Tennessee Warbler
- ☐ Orange-crowned Warbler
- ☐ *Nashville Warbler
- ☐ Northern Parula
- ☐ *Yellow Warbler
- ☐ *Chestnut-sided Warbler
- ☐ *Magnolia Warbler
- ☐ Cape May Warbler
- ☐ *Black-throated Blue Warbler
- ☐ *Yellow-rumped Warbler
- ☐ Black-throated Gray Warbler
- ☐ *Black-throated Green Warbler
- ☐ Townsend's Warbler
- ☐ Hermit Warbler
- ☐ *Blackburnian Warbler
- ☐ Yellow-throated Warbler
- ☐ *Pine Warbler
- ☐ Kirtland's Warbler
- ☐ *Prairie Warbler
- ☐ Palm Warbler
- ☐ Bay-breasted Warbler
- ☐ Blackpoll Warbler
- ☐ *Cerulean Warbler
- ☐ *Black-and-white Warbler
- ☐ *American Redstart
- ☐ *Prothonotary Warbler
- ☐ Worm-eating Warbler
- ☐ Swainson's Warbler
- ☐ *Ovenbird
- ☐ *Northern Waterthrush
- ☐ *Louisiana Waterthrush
- ☐ Kentucky Warbler
- ☐ Connecticut Warbler
- ☐ *Mourning Warbler
- ☐ *Common Yellowthroat
- ☐ *Hooded Warbler
- ☐ Wilson's Warbler
- ☐ *Canada Warbler
- ☐ Painted Redstart
- ☐ *Yellow-breasted Chat

TANAGERS
- ☐ Summer Tanager
- ☐ *Scarlet Tanager
- ☐ Western Tanager

EMBERIZIDS
- ☐ Green-tailed Towhee
- ☐ Spotted Towhee
- ☐ *Eastern Towhee
- ☐ American Tree Sparrow
- ☐ *Chipping Sparrow
- ☐ *Clay-colored Sparrow
- ☐ *Field Sparrow
- ☐ *Vesper Sparrow
- ☐ (*)Lark Sparrow
- ☐ Lark Bunting
- ☐ *Savannah Sparrow
- ☐ *Grasshopper Sparrow
- ☐ *Henslow's Sparrow
- ☐ (*)Le Conte's Sparrow
- ☐ Nelson's Sharp-tailed Sparrow
- ☐ Fox Sparrow
- ☐ *Song Sparrow
- ☐ *Lincoln's Sparrow
- ☐ *Swamp Sparrow
- ☐ *White-throated Sparrow
- ☐ Harris's Sparrow
- ☐ White-crowned Sparrow
- ☐ Golden-crowned Sparrow
- ☐ *Dark-eyed Junco
- ☐ Lapland Longspur
- ☐ Chestnut-collared Longspur
- ☐ Snow Bunting

CARDINALS & ALLIES
- ☐ *Northern Cardinal
- ☐ *Rose-breasted Grosbeak
- ☐ Blue Grosbeak
- ☐ Lazuli Bunting
- ☐ *Indigo Bunting
- ☐ Painted Bunting
- ☐ *Dickcissel

BLACKBIRDS
- ☐ *Bobolink
- ☐ *Red-winged Blackbird
- ☐ *Eastern Meadowlark
- ☐ *Western Meadowlark
- ☐ Yellow-headed Blackbird
- ☐ Rusty Blackbird
- ☐ *Brewer's Blackbird
- ☐ *Common Grackle
- ☐ *Brown-headed Cowbird
- ☐ *Orchard Oriole
- ☐ Bullock's Oriole
- ☐ *Baltimore Oriole

FINCHES
- ☐ Brambling
- ☐ Pine Grosbeak
- ☐ *Purple Finch
- ☐ *House Finch
- ☐ *Red Crossbill
- ☐ *White-winged Crossbill
- ☐ Common Redpoll
- ☐ Hoary Redpoll
- ☐ *Pine Siskin
- ☐ Lesser Goldfinch
- ☐ *American Goldfinch
- ☐ *Evening Grosbeak

OLD WORLD SPARROWS
- ☐ *House Sparrow

Peregrine falcons

In 1995 Toronto became home to the first sighting of the peregrine falcon in Southern Ontario in over 40 years. Found on every continent except Antarctica, the peregrine falcon is the fastest creature on earth, with hunting speeds of up to 350 kmh.

In the 1960s it was discovered that the falcon and other raptors faced extinction as a result of extensive use of DDT after WWII. A ban of the chemical in the 1970s along with breeding programs to reintroduce the peregrine back into the wild has had a remarkable impact on the species. Today the number of peregrines has increased and is no longer considered endangered in most areas, but still remains on the list of threatened species.

The natural habitat of the peregrine is historically cliffs sides, but with today's urban landscape, towers act as artificial cliffs and have become suitable nesting sites for the peregrine. The abundance of urban pigeons has also encouraged the peregrine to remain in this ideal habitat.

Peregrine falcons can be seen in various locations in the downtown core, as well as a few suburban locations.

Peregrine Falcon nest

Best viewing: April to July (nesting season)

Nesting sites:

- King St. and Victoria St., since 1995 (King St./Leader Lane)
- South side of Sheraton Hotel, since 2004 (York St./ Adelaide)
- Bloor St. and Islington Ave. (Bloor St./Eagle Road, Etobicoke)

Peregrine activity:

- Bay St./Bloor St.
- Yonge St./Eglinton Ave.

Chance sightings: August–March

For detailed information visit www.peregrine-foundation.ca

Map of Viewing Sites

Where the map points out Tommy Thompson Park have a note saying see page 31.

Breeding Birds

Northern Cardinal *(Cardinalis cardinalis)*

The Northern Cardinal is today, one of the most common bird species found throughout Toronto's urban and suburban environments. One hundred years ago it was a different story as cardinals were a rare sight in southern Ontario, the northern limit of their range restricted to south of the Great Lakes. Urbanization and bird feeders have provided the missing requirements and their successful range expansion farther northward into Ontario continues today.

Cardinals are now year round residents in the city and are at home in backyard trees, shrubs and vines as well as the tangles, thickets and bushes found in our parks and ravines. The male is instantly recognizable with his brilliant red plumage, black face and bib. The female is of similar size and shape but is more cryptically coloured in buffy yellows with duller reds on the wings and tail. Their loud whistling song – 'cheer cheer cheer' begins on the first warm day in late February and continues on through much of the summer. Nesting begins in early April continuing as late as September. Successful pairs may raise more than one brood during the summer. Pairs may stay together for several years but divorces have been recorded! Cardinals are mainly seedeaters but fruit and invertebrates make up an important part of their diet at different times of the year. During their fall feather molt, cardinals must find fruit and insects high in carotenoid pigments to maintain their rich, red plumage.

Northern Cardinal

Wintering Birds

bird xxx

Migratory Birds

The birdlife of Toronto reaches peak abundance and diversity during the annual spring and fall migration periods. From March to June in the spring and from August to November in the fall, hundreds of thousands of birds of over 200 different species reach the City of Toronto. Toronto is a prime location to witness the migration spectacle, as birds naturally concentrate on the edge of large water bodies such as Lake Ontario. Many species are nocturnal migrants and are drawn into the city by light pollution. The presence of greenspaces such as Tommy Thompson Park and the Don River Valley offer safe resting grounds. Migratory birds play a vital role in ecosystems, consuming vast quantities of insects and rodents, spreading seeds and pollinating flowers during their short stays.

On any morning in Toronto during the peak of migration in May and September, it is possible to see a tremendous variety of migratory birds including many species of brightly coloured warblers, as well as Scarlet Tanagers, Indigo Buntings and Rose-breasted Grosbeaks, to name a few. While songbirds are plentiful in the forests and meadows of the city, waterbirds, including loons, ducks and shorebirds, find refuge in our rivers and streams and on the lakeshore. Migrating hawks, falcons and eagles are common sights in the city, particularly in the autumn. In late fall, nocturnal Northern Saw-whet Owls silently pass through Toronto on their southward migration. At Tommy Thompson Park Bird Research Station on the Toronto lakeshore, these owls are monitored through capture and banding. On November 1, 2003 a remarkable 61 Northern Saw-Whet Owls were banded in just a few hours!

bird xxx

You may not realize that during a morning of observing, one can view over 100 species of birds at any of Toronto's birding hotspots! Many of these vibrant bird species are visitors to Toronto, passing through the city on their way to northern nesting grounds. There are two types of migrants, neotropical and temperate. Neotropical migrants, such as the Cape May Warbler, are species that breed in North America and migrate to tropical areas in Central and South America to spend the winter. Conversely, temperate migrants, such as the White-throated Sparrow, migrate a shorter distance from northern breeding grounds to winter in the United States.

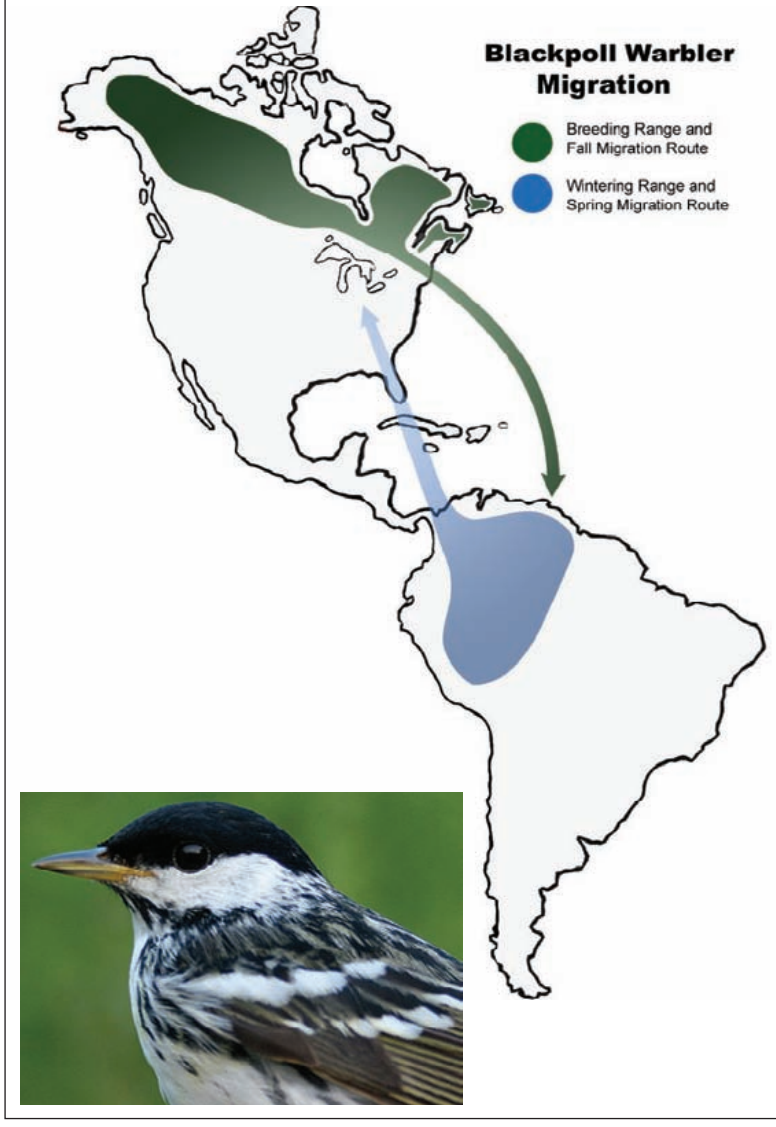
The forests, grasslands and wetlands found in Toronto are critical to the survival of migratory birds. Imagine the city as an immense bed & breakfast, providing the rest, shelter and food necessary to keep birds going. Preserving habitats along migration routes, especially where birds concentrate, is vital to healthy bird populations. Migrating from Latin America to the boreal forest of northern Canada is a perilous journey for birds, fraught with hazards such as habitat loss, storms, cats, and collisions with man-made structures. The obstacles facing migrating birds have been increasing in recent decades, which have resulted in a steady decline for many species. The Rusty Blackbird is a common visitor to Toronto in spring and fall, though far less common than a half-century ago, as the species has declined by an estimated 90 per cent since the mid-20th century.

When considering the welfare of wildlife it is common to think only of nature reserves, parks and wilderness areas. However, in the case of migratory birds, the actions of city governments and residents across North America will be critical to their survival.

bird xxx

The Blackpoll Warbler is perhaps the most compelling example of songbird migration in the western hemisphere, illustrating the sensitive interconnection of environments and human activities across great distances. Every fall, Blackpoll Warblers migrate from the boreal forest through the Great Lakes to the Atlantic coast in the northeast. Once there, they gorge on insects to double their weight. After fattening up, they wait for suitable winds and then launch into a 3-day, non-stop journey over the Atlantic Ocean to South America! The perils of migration are no more apparent than in this story of a tiny bird traveling over 8,000 kilometres from Alaska to South America in just a few short weeks. Here in Toronto, the Blackpoll Warbler is a common visitor in spring and fall when thousands feed on insects and rest in our greenspaces in preparation for the next leg of their incredible migration.

Blackpoll Warbler migration route



When to see Calendar

January

SUN	MON	TUE	WED	THU	FRI	SAT
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

February

SUN	MON	TUE	WED	THU	FRI	SAT
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

March

SUN	MON	TUE	WED	THU	FRI	SAT
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

April

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

May

SUN	MON	TUE	WED	THU	FRI	SAT
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

June

SUN	MON	TUE	WED	THU	FRI	SAT
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

July

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

August

SUN	MON	TUE	WED	THU	FRI	SAT
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

September

SUN	MON	TUE	WED	THU	FRI	SAT
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

October

SUN	MON	TUE	WED	THU	FRI	SAT
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

November

SUN	MON	TUE	WED	THU	FRI	SAT
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

December

SUN	MON	TUE	WED	THU	FRI	SAT
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Tommy Thompson Park / Leslie Street Spit

Tommy Thompson Park (TTP) is a man-made peninsula and the largest area of existing natural habitat on the central Toronto waterfront. Tommy Thompson Park has been designated as a globally significant Important Bird Area (IBA) by Birdlife International and is also considered an Environmentally Significant Area (ESA). The geographical situation of the park and its natural features make it very suitable for incredible numbers of migrating birds, nesting colonial waterbirds and overwintering waterfowl. A variety of waterfowl also nest at the park, including the first record of a Canvasback duck nesting in Ontario. Migrant shorebirds also use TTP as a stopover and the recently completed shorebird wetland on the Toplands will provide more staging and foraging opportunities to help stabilize shorebird populations. TTP is open to the public on weekends and holidays. For more information visit www.trca.on.ca/ttp or call 416-661-6600.

Colonial Waterbirds at TTP

If you visit TTP during breeding season you will likely encounter at least one of the eight species of colonial waterbirds that nest at the park. Over six per cent of the world's breeding population of Ring-billed Gulls nest at TTP. Herring Gulls and Greater Black-backed Gulls also nest at the park, but in lesser numbers. Caspian Terns are another ground-nester at the park, however their population fluctuates annually. Common Terns have nested successfully on artificial floating "reef-rafts" for over three decades and have recently started nesting on the tern island designed for them in the Cell One Wetland. The Common Tern population at TTP represents about two per cent of global population of breeding adults. The largest breeding colony of Double-crested Cormorants on the Great Lakes nest in the cottonwood trees on three peninsulas at the park. Also nesting in the cottonwood trees are Great Egrets and, at its peak, over 30 per cent of the national breeding population of Black-crowned Night Herons. From mid-April until September, the nesting areas used by these species are off limits to the public due to the sensitivity of the birds to human disturbance; however most locations can easily viewed with binoculars or a scope. All of these birds can be seen foraging throughout TTP and the Toronto waterfront.

Tommy Thompson Park Bird Research Station

The Tommy Thompson Park Bird Research Station (TTPBRS) was established in 2003 to address a need for avian monitoring/research and public education in the GTA. The core program of the station is the Migration Monitoring Program (MMP), which monitors populations of poorly understood boreal bird species. The MMP operates daily in spring and fall through a combination of standardized bird surveys and bird banding and to date over 300, 000 birds of more than 300 species have been recorded and over 25, 000 banded. Other monitoring programs include Nocturnal Owl Monitoring, Monitoring Avian Productivity and Survivorship (MAPS) and the Great Lakes Marsh Monitoring Program. Data from these programs help conservation agencies protect birds and their environments at local, national and international levels. For more information visit www.ttpbrs.blogspot.com or call 416-661-6600.

Bird Viewing Tours

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Eastern Bluebird

SURPRISES IN THE CITY – MAKING MUCH OF THE FOLLOWING NESTING SPECIES

Pileated Woodpecker (at least 15 pairs)

Cooper's Hawk (at least 8 pairs within the city)

Eastern Screech-owl (over 20 pairs throughout the city)

Wood Thrush (approximately 30 territories throughout the city, not including the relatively healthy population that exists at Rouge Park).

Bird xxx

Conclusion

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Resources for Parents and Educators, Students, Policy-Makers

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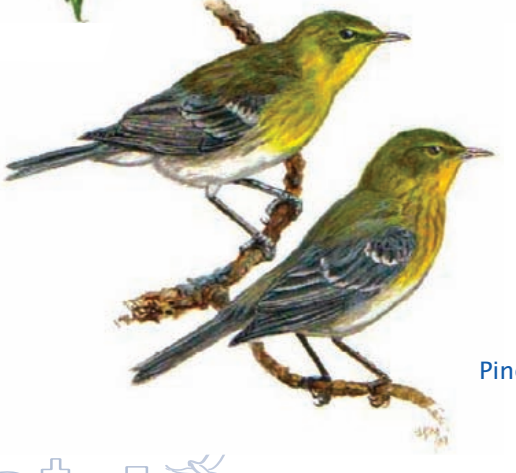
Bird xxx



Pine Warblers

What to do if you find an injured bird

If you find a bird that has hit a window:

- Gently place the bird inside an unwaxed paper bag with tissue inside to give the bird something to perch on. The tissue also helps keep the bird dry. For birds larger than your fist, place inside a cardboard box.
- Fold the top of the paper bag and use a paperclip to prevent the bird from escaping. Do not puncture holes in the bag. Paper bags allow sufficient airflow.
- Do not handle the bird more than necessary
- Do not give the bird food or water
- Place the bird in a dark and quiet space
- Contact the Toronto Wildlife Centre at 416-631-0662 or visit www.torontowildlifecentre.com
- Wash your hands thoroughly after handling the bird

What to do if you find a baby or fledgling bird

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Become a bird rescue volunteer

The Fatal Light Awareness Program (FLAP), the City of Toronto, and other Lights Out Toronto! partners ask for your help to rescue injured migratory birds or to drive birds to a rehabilitation centre during the day. Most of the live birds our volunteers pick up are able to recover and are returned to the wild. A few hours of your time during the day or night could really help. Contact: www.flap.org

Common Starling

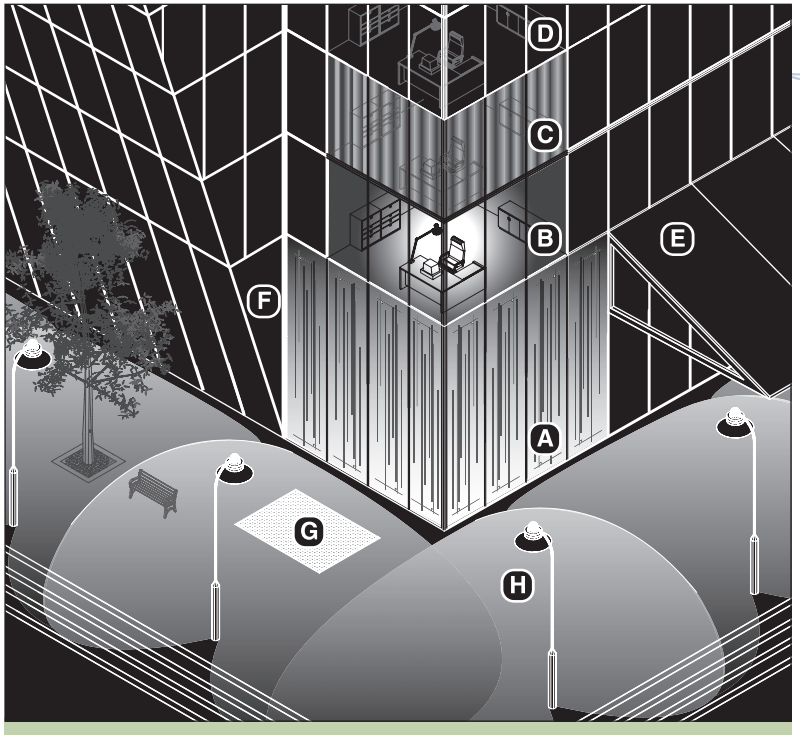
HEALTH PRECAUTIONS

It is important to remind the public that one can acquire several diseases from wildlife and should always take care to practice proper hygiene when handling animals and birds. If disposing of a dead bird found in your yard, use gloves or put your hand inside of a plastic bag to pick up the bird. Double-bag the carcass and dispose of it in the garbage. Carefully remove gloves and thoroughly wash your hands with soap.

Bird-Friendly Offices

There are many things that can be done to make any structure bird-friendly, as can be seen in this diagram taken from the "Bird-Friendly Development Guidelines" (page 37). In particular, tenants of buildings can do two things to help reduce migratory bird deaths: one, encourage your building managers and owners to implement the bird-friendly guidelines; and two, when working late use task lighting (B) or draw blinds (C) in offices, and ensure that lights are turned off after leaving (D).

These simple steps will help to reduce light pollution and thereby reduce the numbers of migrating birds being confused by urban light during the migratory seasons. These steps will also help reduce unnecessary energy use.



COMPREHENSIVE BIRD-FRIENDLY SITE STRATEGY

A – Apply treatment to glass to make it visible to birds
B – Use task lighting after dark
C – Draw blinds after dark
D – Turn lights off after work
E – Use an awning to mute reflections on lobby windows
F – Angle glass to project reflections downward
G – Use bird-friendly ventilation grates
H – Use fixtures that project light downward

Bird-Friendly Homes

Before you consider making your garden bird-friendly you should first start by making your home safe for birds. Windows pose one of the greatest dangers to birds as they reflect trees and other vegetation and birds often confuse reflections for the real thing and subsequently fly into windows.

Window Treatments

Homeowners often affix a single, black hawk-shaped silhouette to their picture window in an attempt to protect birds. Unfortunately, this rarely does the trick. Birds do not perceive the hawk silhouette as a predator. The silhouette only covers a small portion of the window and unless the bird is headed for that particular spot, the silhouette will not deter the bird from hitting the window. Hawk silhouettes or other stickers can form a visual barrier for birds provided they cover at least 80 per cent of the glass surface. Exterior screens, sunshades and grilles, perforated window film, multiple rows of ribbons, beads, even old CDs hung outside the window can also help create visual markers for birds.

When windows at the front and back of your home face each other or when two windows meet at a corner they give the impression of a clear passage. Interior plants placed near windows also attract birds. To help reduce this dangerous illusion draw drapes and close blinds whenever possible.

Externally-applied window decals

Window treatments

Lighting

Whenever possible, minimize light both in and outside the home. If you must incorporate exterior decorative or security night lighting around your yard, be sure to use shielded light which directs the light downward to help avoid light escaping into the night sky.

Bird Feeders

The placement of bird feeders in relation to windows is crucial. As the distance between bird feeders and windows increase, so do bird collisions. Placing your feeders within one metre or less of any glass surface will help minimize these strikes. Not only are bird feeders usually placed in the worst possible locations, the layout of our interior living space can also contribute to the likelihood of birds colliding with windows.

Bird feeders are a great way to supply food for wintering birds and early returning migrants. Project FeederWatch is a winter survey of birds visiting backyard feeders in North America and the data collected helps scientists track changes in bird populations. To find out more and participate as a Citizen Scientist visit Bird Studies Canada at bsc-eoc.org

CLEANING TIPS FOR BIRD FEEDERS AND BATHS

1. To prevent the spread of disease between birds, clean and disinfect your bird feeders and baths every two weeks. Immerse each feeder or birdbath in a nine-to-one water/bleach solution. Rinse it thoroughly making sure to get rid of all bleach and old seed.
2. Rake or sweep up any husks and uneaten hulls on the ground surrounding your feeders.
3. To prevent mold, resist filling your feeders to the top. Unless you have an extraordinarily busy yard, there is no need to fill your feeders more than 1/4 full.

Bird-Friendly Gardens

Gardening for birds is an easy way to enjoy nature in your own backyard. The number and diversity of birds attracted will depend on the landscape type, maintenance practices and proximity to natural features. More birds will frequent yards with more natural landscapes, especially if located near other natural features like woodlots, meadows or water bodies.

Birds spend much of their time foraging for seeds, nuts, fruit and insects. Diet depends on the species and changes with the seasons and the availability of natural food. By growing a diversity of native plants that fruit at different times and hold their seeds or berries into winter, gardeners can help feed birds naturally. Birds are exposed to pesticides through drift and food contamination, so it is critical for all birds, especially those that eat insects, to keep your backyard chemical free. Chemical fertilizers reduce soil-dwelling insect and worm populations, so should also be avoided. Replace your chemical arsenal with ecological knowledge and help the environment and birds!

Shelter from weather and predators is also important. Layers of vegetation, groupings of evergreens and dense shrubs, as well as brush piles, provide summer cover and excellent winter shelter. With a little research and planning, your backyard will become a small bird sanctuary in no time!

www.wildaboutgardening.org
www.birds.cornell.edu/birdhouse

White-throated Sparrow

Partners and Further Information

Canadian Peregrine Foundation: www.peregrine-foundation.ca
City of Toronto: www.toronto.ca
Environment Canada: www.ec.gc.ca
Toronto and Region Conservation Authority: www.trca.on.ca
Toronto Zoo: www.torontozoo.com
Royal Ontario Museum: www.rom.on.ca
Lights Out Toronto! Stakeholders Working Group: www.toronto.ca/lightsout
Fatal Light Awareness Program (FLAP): www.flap.org
Toronto Ornithological Club: www.torontobirding.ca

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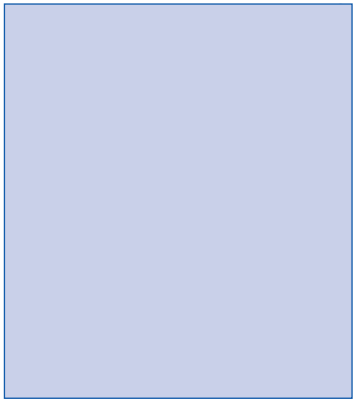

Barry Kent MacKay, based in Markham, Ontario, is an artist, activist, naturalist, writer and a pioneer in wildlife rehabilitation. He is well known and respected for his Nature Trail column, which was published weekly in the Toronto Star for 25 years.

Barry is the Canadian Representative of the Animal Protection Institute, based in Sacramento, California; a founding director of Animal Alliance of Canada and of Zoocheck-Canada; a life member of the Wilson Ornithological Society, and an honorary life member of the Second Marsh Defense Association; a member of the Toronto Ornithological Club and of the Ontario Field Naturalists.

Barry has devoted his life and career to the study of natural history, and the protection of birds and other wildlife. As a naturalist, Barry has participated in numerous activities related to bird and nature study: helping a University of Toronto professor to conduct fish censuses in small streams; being the park naturalist for Presqu'ile Provincial Park; leading bird hikes or teaching courses; as a fast sketch artist promoting interest in wildlife during 16 years of appearances on a nationally syndicated children's television show; collecting for the Royal Ontario Museum and for the Western Foundation of Vertebrate Zoology in Costa Rica; illustrating the reptiles and amphibians of the Toronto Zoo; illustrating a few scientific papers in various technical journals and participating in a fruitless search for the critically endangered, possibly

extinct, Eskimo Curlew in historic migration sites in northern Newfoundland and Labrador. As a writer, he is well known and respected for his Nature Trail column, published weekly in the Toronto Star for the past 24 years. As well, his writings and articles have appeared in numerous magazines such as Birds of the Wild; Defenders; BirdWatchers' Digest; Seasons; Mainstream; and Animal Issues; and as feature articles in The Toronto Star and various other publications, large and small.

He has also illustrated several books such as Wrens, Mockingbirds and Dippers of the World, A Field Guide to the Birds of the Galapagos and Songbirds: Celebrating Nature's Voices. He is currently illustrating another book in which he is portraying all the birds endemic to Hispaniola. He wrote and illustrated a book entitled Bird Sounds, and he wrote and illustrated the Birdwatcher's Companion. In 1968 the Book Society published 'Eighty More Land Birds to Know', written and illustrated by a youthful Barry Kent MacKay. "I try to forget that one," laughs Barry, but he is pleased to admit that one of his proudest moments came when his mentor, Roger Tory Peterson, chose one of his oil paintings of Ruddy Turnstones as an illustration for The Audubon Society Baby Elephant Folio, Audubon's Birds of America. Wash drawings by Barry appeared in Birds of the Oshawa – Lake Scugog Region. "It was," says Barry, "an early demonstration of what both artists and photographers, but too few bird book editors, have always known: that art and photography can nicely compliment each other in a single volume."