MESSAGE FROM THE DIRECTOR

Dear friends and bird-lovers:

In the world of birds, the year 2002 will most certainly be remembered for the West Nile Virus (WNV). Besides killing dozens of people in various locales, at least 110 bird species in North America were found to be infected with WNV and among the hardest hit were the corvids (e.g. American crows, blue jays, etc.) and the raptors (e.g. great horned owls, red-tailed hawks, etc.). In fact, thousands of dying or dead hawks and owls were admitted to rehabilitation centers and veterinary clinics all over the continent and at this point, we have no idea as to the real impact of the virus on the populations of these species. Christmas Bird Counts and Breeding Bird Surveys should soon give us some idea though.

There are even greater concerns. Last year in New York, a technician was cut while performing a bird necropsy. Days later he was hospitalized with WNV. This is very scary news because it implies that, similar to AIDS, WNV can be transmitted merely by having one's blood come into contact with infected avian blood. It gets worse. Some experiments with captive crows have shown that birds might be able to transfer the virus merely by touching one another, sharing perches, or somehow coming into contact with each other's feces.

The ASCC may have an important role to play in learning more about WNV. Since American kestrels are among those species that can be infected with WNV, we plan to seek research funding to use the kestrel colony to help study the virus and perhaps develop a vaccine. Stay tuned.

David M. Bird

A CARDINAL IN EVERY YARD?

All of these brand-new housing developments and fancy shopping malls might be good for a city's economy, but there is a price to pay. Natural green spaces are lost and with them, a host of bird species. Some birds are adapting though and Josée Rousseau, an M.Sc. student studying under Rodger Titman, the ASCC's Associate Director, wants to know how they are achieving this. Josée has selected three bird species (i.e. northern cardinal, song sparrow, and red-winged blackbird) and she is conducting point count surveys as well as habitat assessments in urban parks and low and medium residential areas to determine their numbers and their breeding habitat requirements in the city of Montreal. She hopes to use the information to find out what these species require to exist in a city environment with the thought that wildlife managers can use it to create more habitat and thereby increase the diversity of bird species in Montreal. With one season completed, Josée will again be peeping through the bushes in search of cardinals, sparrows and blackbirds in the spring of 2003.
TWO KINDS OF BIRDIES ON GOLF COURSES!

What do golfers and birdwatchers have in common.....they both chase birdies and love to see eagles! But... they also share a great love for the outdoors and cherish a clean, healthy environment. The staff and students of the ASCC, want to help make golf courses even better green spaces for wildlife. At the same time, the ASCC is working with golf course superintendents to raise funds for the centre’s conservation programs and for golf course research.

The ASCC is pleased to report that the McGill University “Birdies 4 Birdies” benefit golf tournament is back! Officially sanctioned by the Quebec Golf Association, the 5th Annual tournament was held on Monday, October 7, 2002 at the renowned Beaconsfield Golf Club located in Pointe Claire on the West Island of Montreal. Thanks to the dedicated efforts of Doug and Lynn Meyers, the incredible generosity of Barbara Johnson, and several caring individuals on the organizing committee, we literally sold out the tournament this time and despite some ugly weather in the early morning, the skies cleared just in time for a fabulous raptor flight demonstration carried out by Nicholas Casgrain of Falcon Environmental Services. After the last dollar raised from the entry fees, silent and vocal auctions, and raffle was counted, the event had raised $14,000. Half the money will be used to support the ASCC shrike and kestrel colonies and the other half will go toward two M.Sc. studies on golf course research.

Two McGill students, Marie-Anne Hudson and Isabel Julian, will undertake their M.Sc. thesis research under the supervision of Dr. Bird, beginning in January 2003. Marie-Anne will be comparing the reproductive performance of three selected bird species (American robins, mourning doves, and red-winged blackbirds) nesting on golf courses with and without Audubon certification and in selected green spaces. Isabel will be examining feeding behaviour of birds on golf courses with respect to chemical use in an effort to determine whether the chemicals can be used without impacting upon the birds.

The 6th Annual Birdies 4 Birdies golf tournament will be held on Monday, October 6, 2003 again in the spectacular setting of the Beaconsfield Golf Club. We are naturally grateful for tax-deductible donations of prizes for the raffle table as well as art items and sports memorabilia for the auctions. Contact Dr. Bird if you are interested in helping and/or participating in some manner.

PEREGRINES ARE THE REAL “SNOWBIRDS”

Thanks to the support of the Canadian Peregrine Foundation based in Toronto, a Ph.D. study by Marcel Gahbauer under the supervision of Dr. Bird and collaborator, Geoffrey L. Holroyd of the Canadian Wildlife Service in Edmonton, Alberta, is revealing some interesting migratory behaviour by juvenile peregrine falcons. Marcel is employing satellite telemetry, which entails placing a transmitter weighing less than 3 percent of the bird’s body weight on the bird’s back, to study the movements of urban peregrine falcons, mostly juveniles.

Between 1997 and 2002, 27 peregrine falcons from Alberta, Ontario, Quebec, New York, and Pennsylvania were fitted with satellite transmitters during the summer months. Nine individuals died or were otherwise lost from communication before the end of summer. Among the others, nine undertook long-distance migrations of 2000 km or more, six migrated shorter distances, two dispersed to locations within 100 km of their origins, and one did not disperse at all. Time of dispersal, in number of days post-fledging, was longer for urban juveniles than those from rural sites. Similarly, captive-bred juveniles dispersed more slowly than those raised in the wild. Among urban peregrines, captive-bred individuals showed a much greater migratory tendency. Regardless of origin, almost all birds studied moved to a coastal location for the winter. Migratory paths were varied, but Florida and the east coast of Mexico were frequented by many. For six individuals, both fall and spring migrations were recorded; all returned to within 50 km of their points of origin. Those which wintered in North America or Mexico returned by similar routes, while those which wintered further south crossed long distances of open water in the fall, but followed terrestrial routes in the spring. To gain a more solid picture though, one, perhaps two more seasons of data collection are planned.
MAKING CITY LIFE MORE FRIENDLY FOR PEREGRINE FALCONS

Part of Marcel Gahbauer’s Ph.D. thesis is examining the mortality of peregrines living in city environments. In short, the urban environment presents a number of challenges to the falcons. There seems to be a number of ways for them to die, for instance. Flying into mirror buildings while chasing a reflection of pigeon prey or a falcon “intruder”, being blown into concrete buildings by wicked wind shears, falling down chimney shafts, fledging off building ledges into downtown traffic, and consuming illegally poisoned pigeons are but a few of these hazards. Perhaps the most dangerous nesting environment is a bridge. Peregrines favour bridges because they are over water and generally free of disturbances. However, more often than not, the young taking their first flight end up drowning in the river.

Thanks to the efforts of managers Pierre Pilotte and Serge Harvey of Jacques Cartier and Champlain Bridges Inc., a federal body in charge of Montreal’s main spans over the St. Lawrence River, Martin Léveillé, a biologist with La Société de la faune et des parcs du Québec, Lyne Martin, the environment manager of the Montreal Port Authority (and a graduate of McGill’s Wildlife Resources program!), the peregrines in the Montreal are getting some serious help.

First, the bridge authority installed two nesting boxes on the Mercier Bridge and one each on the Champlain and Jacques Cartier Bridges in the spring of 2002. One of the Mercier boxes was used and an undetermined number of peregrine fledged. Unfortunately, the Champlain peregrines did not like something about their box, so they abandoned it to a host of pigeons and instead nested on a middle span of the bridge, a spot not healthy for them and definitely not acceptable to the bridge workers. The falcons, defending their three babies, constantly attacked the men. The only solution was to remove the babies and transfer them to a release site in southern Ontario. All three fledged fine, but one was later found dead.

The two pairs nesting only a thousand meters apart in the eastern sector of the Port of Montreal are also getting some help for 2003. In 2002, all three young from the nest on the active flour mill were found mysteriously dead, apparently killed by some kind of impact. The other pair raised two young, having elected to breed in an incredible tiny shelf in a building girder coated with pigeon feces. Two brand new nesting boxes are being installed by the Montreal Port Authority for 2003.

Good and bad news for the Place Victoria pair this past year. They raised only one young again, but this time the same female coupled with a new male! In fact, he is a nasty creature totally unafraid of humans and this aggressive behaviour has rubbed off on the female. Both of them successfully kept Marcel from trapping their youngster to affix a transmitter.

More important, the law firm of Fasken Martineau DuMoulin LLP, faced with budget cuts, was forced to close the doors on the annual Peregrine Falcon Information Centre, likely forever. Through this centre over the years, Fasken Martineau DuMoulin has been very generous to the ASCC and we are confident that despite the closing, Jean Masson and Michel Beaulieu of Magil Laurentienne will not turn their backs on the falcon tenants.
FLAME RETARDANTS: A NEW CHEMICAL THREAT FOR WILDLIFE...AND HUMANS

They are found in your computers, telephones, electronic home appliances, automotive parts, carpets and other textiles. They are found in our bodies. These persistent chemical compounds known as polybrominated diphenyl ethers (PBDEs) function as flame retardants to prevent combustion of everyday products. Unfortunately, these chemicals do not break down easily, they can be stored in body fat, and they can magnify up the food chain just like DDT does. Residues of brominated flame retardants have been found in polar bears, various fish species, peregrine falcon eggs, as well as in human breast milk. Increases in the accumulations of PBDEs in the environment are quite alarming because they are known endocrine-disruptors which can affect the normal working of the thyroid gland, for example. Some scientists claim that they affect the brain and may in fact be carcinogenic.

The ASCC, in collaboration with Kim Fernie of the Canadian Wildlife Service in Burlington, Ontario and Laird Shutt of the National Wildlife Research Centre now located at Carleton University in Ottawa, initiated a preliminary study of the effects of PBDEs on nestling kestrels this past summer. While the results are not yet completely analyzed, Dr. Bird is pursuing research grant money to undertake a more thorough study of the impact of flame retardants on raptorial birds in both field and laboratory.

“HE STUDIES DUCKS AND I STUDY THE BIRDS WHO EAT THEM!”

That saying refers to Rodger Titman, the Associate Director of the ASCC, who adores waterfowl, and to David Bird, the Director, who loves birds of prey. Ever since completing his Ph.D. on territorial behaviour in mallard ducks, Rodger has studied ducks. Currently he has three graduate students conducting their thesis research on waterfowl.

Tina Newbury, who is on maternity leave, is examining the effects of low-level military flight training on the behaviour of waterfowl flocks, mostly goldeneye, staging each spring in Labrador within the flight zones. To date, she has found that the disturbance from the jets can lead to panic flights which alters the ducks’ daily time budgets. Such constant movement might decrease their fat reserves and in turn, affect their energy levels available for producing eggs and nesting activity in general. Her study is funded by the Department of National Defence.

Claude Drolet is also studying wintering behaviour in goldeneye, but his study area is further south. He is compiling activity budgets to compare energetics of these ducks wintering in the Lac St. Louis region near Dixie Island, Dorval to those staging in Tadoussac in the St. Lawrence River.

With the help of funding from Parks Canada, tall, lanky Shawn Craik is studying brood movements, habitat use, and survival rates of the red-breasted merganser in Kouchibouguac National Park, New Brunswick. Brood rearing is a critical period for waterfowl species in which newly hatched birds learn critical life skills from parents. Since broods are generally secretive, habitat used throughout the rearing period remains the least understood component of the annual cycle in waterfowl. Therefore, management of specific waterfowl populations remains extremely difficult in cases where information concerning habitat preferences throughout the entire year is lacking. Shawn’s 3-year study will examine daily movements of female red-breasted mergansers and their broods in using radio telemetry and will explore habitats used by broods following departure from a nesting colony.
WE CANNOT DO IT WITHOUT YOU!!

It is a fact that the ASCC is only able to carry out its good work with the kind help of various organizations and institutions, as well as deeply caring individuals. We cannot express strongly enough our gratitude to you all for helping us to help the birds. For the past year, we would particularly like to acknowledge the generosity of the Kenneth M. Molson Foundation, the Hylcan Foundation, and the Beaconsfield Golf Club. We are also grateful to the following institutions, companies and organizations:

Canadian Wildlife Service; Charles River; Department of Natural Resource Sciences of McGill University; Falcon Environmental Services; Fasken Martineau DuMoulin LLP; Fondation de la Faune du Québec; Gault Nature Reserve; Hagen Avicultural Research Institute; Kelly Fund of the Province of Quebec Society for the Protection of Birds, Inc.; Montreal Pest Control; Rolf C. Hagen, Inc., Senior Citizens’ Heritage Club; St. Lawrence Valley Natural History Society; and L’Union Québecoise pour La Rehabilitation des Oiseaux de Proxi

We also extend our appreciation to the following kind individuals:

Sheila Arthur; Lina Bardo; Estelle Bolker; Lynn Butler-Kisber; Ellen Cray; Ron Claudi; Johann Dion; Elizabeth Edwards; Dorean Estey; John Noble Fawcett; Patrick Franche; L.H.B. Gagné; Grant Gehlsen; M. Gehlsen; Margaret Hill; George Kyle; Maria Landry; Peter Landry; Alexander Maconochie; Audrey McGregor; Paololeti Gracioppo Panarello; Phyllis Pinchuk; George Riley; Muriel Roman; Margaret Sifton, Michael Spencer; Margaret Stronach; Kenneth Thorpe; Wanda Trineer; Terry Van Patter; Russell Williams (MNA, Nelligan).

While we thank all of those who participated in the 5th Annual Birdies 4 Birdies Golf Tournament, there are some individuals and organizations who simply stand out from year to year to make this event a big success. In no particular order, they are:

Doug and Lynn Meyer; Barbara Johnson; Gerry Wittenberg; Turfcare Products Canada Ltd.; Royal Montreal Golf Club (Blake McMaster); Bigelow Sand (Brent Bigelow); Golf Ile Perrot; Elm Ridge Golf Course (Erie Ward); Centre de Golf le Versant; Club de Golf de la Vallée du Richelieu; Club de Golf Montcalm; Macdonald Athletics (Bill Ellyett) Price Waterhouse Cooper (Michael Macey); Investors Group; Wayne St. Thomas; Nu-Grow Corporation; Country Club de Montréal; Club de Golf Lachute; Hillsdale Golf and Country Club; Parkway Pontiac (Diane Hoy, Richard Hoy and Harry Hoy); Cedarrubber Golf and Country Club; Nutrite; Optima; Flamingo Plus; McGill Athletics (Robert Dubeau); Club Ile Perrot; Club de Golf St. Jérome; Paramount Paving; Borough of Pointe Claire; O.J. Company; Flamingo 2000 Ltd.; Beaconsfield Golf Club; Quebec Turfgrass Research Foundation; Martlet Foundation (Tom Thompson); Randy Tieman; Yvon Cournoyer; Helena Hudson

“WE DO A LOT FOR A LITTLE!!”

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www.nrs.mcgill.ca/ascc

THE TALON: Editor: Dr. David M. Bird; Assistant Editor: Helen Rimmer
Watermark: drawing by Vern Montpetit

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BIRD COURSE ENJOYS BIGGEST SUCCESS YET!

The 2002 edition of the Bird Course, with its field trips, laboratory sessions and lectures aimed at a general audience, attracted a record 23 participants! This was the first year that the ASCC partnered with McGill University’s Program for Continuing Professional Development. Dr. Kevin Wade of the Department of Animal Science was extremely helpful in making our course the success that it was. In 2003, the course will run from Monday, May 19 through to Friday, May 23. Interested parties should contact Rodger Titman at 514-398-7933 ph; 514-398-7990 fax; titman@nrs.mcgill.ca, or simply visit our web site.

ASSISTANTS MAKE THE DIFFERENCE!

The ASCC has always been blessed with a superb army of volunteers and part-time employees who assist Ian Ritchie, the centre’s hard-working technician. Last year’s crop was no exception. The following are thanked for their dedication:

Dominique Dufault; Hugo Gee; Tina Newbury; Guillaume Szor; Chantal Duval; Bruce Rodrigue; Marilyn Simard; Conor McKenna; Vanessa Roy; Veera Harnal; Genevieve Perreault; Yulie Truong; Victoria Lukasek; Lina Bardo; Deepak Dahatri; Marie-Anne Hudson; Marlene Parkinson, Marie Kubecki and Joanne Ten Eyck.

SIX FLEDGLINGS ON THEIR WAY!

Six graduate students with the ASCC earned their M.Sc. degrees in 2002! They include:

1) Bill Druker, supervised by Dr. Titman, worked on the behaviour of endangered Hawaiian crows held in captivity as part of a breeding program;

2) Marc Pauze, jointly supervised by Drs. Bird and Titman, evaluated the impact of nesting red-tailed Hawks and great horned owls on duck populations in prairie habitat enhanced by the Institute for Wetland and Waterfowl Research operated by Ducks Unlimited;

3) Alain Fontaine, jointly supervised by Drs. Bird and Titman, studied habitat use by the red-tails as part of the study above under the joint supervision of Drs. Titman and Bird;

4) Joanna Coleman, supervised by Dr. Bird with the assistance of Dr. Laird Shutt of the Canadian Wildlife Service, examined habitat selection as well as the impacts of organochlorine chemicals on urban-nesting sharp-shinned Hawks in the Montreal area;

5) Jovette Bouchard, supervised by Dr. Titman, used DNA testing to determine the rate of egg-dumping by certain female red-breasted mergansers into the nests of other females in the Tern Islands of Kouchibouguac National Park, New Brunswick;

6) Oliver Love, supervised by Drs. Bird and Shutt, examined the adrenocortical response of nestling American kestrels.