

Swan Sightings Sought for Survey

Manitoba Conservation staff are encouraging people to report trumpeter swan sightings this spring in preparation for an international trumpeter swan survey that will occur in August.

Trumpeter swans (*Cygnus buccinator*) were once common across North America. Their numbers drastically

declined after the arrival of European settlers who hunted the birds for their meat and skin. By 1933, only 77 breeding trumpeter swans remained in Canada. Through intensive conservation efforts that

include habitat protection and reintroductions of the swans in the central United States, the total continental population has increased to 16,000 swans. While not listed as a species at risk in Canada, the bird is listed as Extirpated under Manitoba's *Endangered Species Act*. Manitoba's last wild trumpeter swan breeding record occurred nearly 100 years ago. Human encroachment on the swan's breeding habitats is believed to be the cause of the swan's absence. Recently, captive breeding has occurred in Manitoba at Delta Marsh.

Last year, trumpeter swans were confirmed breeding in Saskatchewan, Ontario, North Dakota and Minnesota according to Bill Koonz, Biodiversity Conservation Section zoologist.

"We expect them to re-establish as breeding birds in the province soon," Koonz said. "They may already be breeding here and we simply are not aware of it yet." He will confirm the number of breeding birds this fall when he leads the province's trumpeter swan survey that occurs every five years. Sightings recorded this spring and

summer may be placed on the list of sites to visit in the fall.

With a wing span that can reach 2.5 metres and a weight of 10 kilograms or more, trumpeter swans are the largest of Canada's swans, a group that

includes the native tundra swan (*C. columbianus*) and exotic mute swans (*C. olor*).

Differentiating between trumpeter and tundra swans can be difficult. The trumpeter has a red border on its lower bill and tundras often have a small yellow patch on their bill by the eye. One of the best ways to identify trumpeter swans from a distance is their distinctive bugling call. "Their trumpet is completely different from any other swan," Koonz said. "It is a resonant, loud, low-pitched, bugle-like sound. If you hear them, it is generally an indication of breeding."

To report a trumpeter swan sighting, call Kareen Hyatt at Manitoba Conservation, 945-7747. ■

Biodiversity Conservation Section Integrates CDC

The Manitoba Conservation Data Centre (CDC) has always been a major component of Manitoba Conservation's Biodiversity Conservation Section. Over time, the section has increasingly relied on the data centre's database, the Biological and Conservation Data System, to manage biodiversity information to the point where the CDC and the section are now synonymous. To reflect this change, BioNet will now report on the activity of the entire Biodiversity Conservation Section.

"Essentially, the CDC hasn't disappeared," said Jim Duncan, acting chief of the Wildlife Branch's Biodiversity Conservation Section. "The long-term goal was to integrate the CDC into the section." Duncan said the merger will increase access to the biodiversity conservation database. Database information will benefit more people and contribute to the planning of more conservation projects enhancing the links between people and biological information.

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Manitoba Conservation
Hon. Oscar Lathlin
Minister



CDC Part of Biodiversity Information Association

"We're now able to focus on biodiversity as a whole as well as species at risk that require specific conservation action," Duncan said. All section staff, including Ken DeSmet, species at risk biologist, have played a major role in the development of the database.

The Biodiversity Conservation Section, and centres that perform the same functions in other provinces and states, are united under the Association for Biodiversity Information. The association promotes the exchange of information between the centres and rolls up provincial and state information into national products. For more information on the network visit the association's Web page at www.abi.org. ■

Caught in the Web

- Over half (59%) of the spiders recorded in Canada can be found in Manitoba. The provincial spider checklist at www.npwrc.usgs.gov/resource/othrdata/spiders/spiders.htm identifies the 483 spiders recorded in Manitoba.
- The Canadian Bird Trends Database at www3.ec.gc.ca/Birds/default.cfm offers information on Canadian bird species including: population trends, range distribution and national conservation designations.
- Literature syntheses on North American grassland birds are available at www.npwrc.usgs.gov/resource/literatr/grasbird/grasbird.htm. The focus of the reports is on managing breeding habitat, particularly in the northern Great Plains.

SPECIES PROFILE: Piping Plover

This winter, Biodiversity Conservation Section zoologist, Bill Koonz, attended a meeting to develop a management plan for piping plovers (*Charadrius melodus*) at Grand Beach Provincial Park. The birds are listed as Endangered both provincially and federally. The beach shores are among four sites in Manitoba where piping plovers are known to nest consistently.

In 1985, the Committee On the Status of Endangered Wildlife in Canada listed the piping plover as Endangered, meaning it is in danger of imminent extirpation. This migratory shorebird resembles a small, pale killdeer with one black band across its white breast. It has a long white eye stripe and a black stripe spans its forehead from eye to eye. Its legs and black-tipped bill are both bright orange.

The largest breeding population of piping plovers, representing approximately 2,800 birds, is found on the Northern Great Plains that stretch from the southern Prairies to Nebraska. Nests are shallow bowls scraped in the sand or gravel and lined with pebbles. Piping plover nests are found on unvegetated or sparsely vegetated sand and gravel beaches near large saline or alkali water bodies. Adults share in incubating for about 28 days. Young plovers can leave the nest to feed with adults within a few hours of hatching, a characteristic common among shorebirds.

Piping plover populations have been monitored since the late 1980s. The North American population is estimated to be 5,400 individuals. Approximately 1,600 adult birds have been counted in Canada. Twenty-four breeding pairs were recorded in Manitoba during a survey in 1996. The National Piping Plover Recovery team, coordinated by the Canadian Wildlife Service, has

established a national goal to reach and maintain a population of 2,296 plovers for three consecutive censuses.

Prairie piping plovers winter along the Gulf of Mexico, particularly along the coastal areas of Texas and Mexico. Piping plovers banded on the Canadian Prairies have been observed in Texas, Florida, Georgia and Alabama.

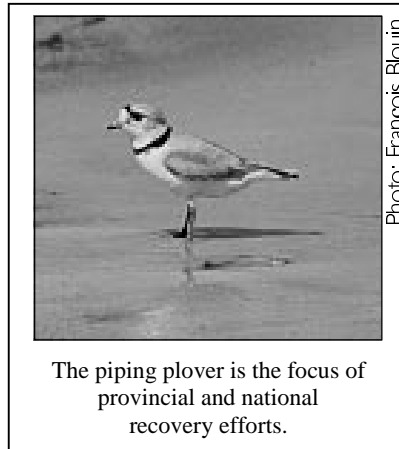


Photo: François Blouin

The piping plover is the focus of provincial and national recovery efforts.

Piping plovers are forced to compete with people for open sand and gravel beaches. Increased recreational use of these areas damages nests, disrupts nesting and leaves eggs and young vulnerable. Stabilized water levels have minimized broad expanses of nesting

habitats that are important to the birds. Agricultural and industrial development also degrade habitat and reduce the quality of existing habitat. Predation by gulls, crows, cats, dogs, raccoons, weasels and foxes also contribute to the bird's decline.

Management plans have been developed for a number of prairie nesting areas. Piping plover habitat is conserved by signing long-term agreements with landowners, fencing off critical shorelines to prevent cattle access and purchasing land where key habitats occur. Public education programs and management of water levels to control vegetation on traditional nesting beaches are also a part of management plans. ■

■ Project Updates

GIS Applied to Grassland Birds

Twelve years of data on 12 grassland bird species in southern Manitoba is being combined with geographical information to develop a multi-species grassland bird management plan.

Ken DeSmet, endangered species biologist, and François Blouin, information manager with the Biodiversity Conservation Section, are overseeing the project that will see occurrence data for the birds combined with geographical information such as soil type, surficial geology, land use, vegetative cover types and other spatial data.

"We need to evaluate the suitability of our data for spatial analysis," DeSmet said. "This project will help us identify the key common areas or "hot spots" that are of great importance to grassland Birds." The project includes four species listed as Endangered or Threatened under Manitoba's Endangered Species Act: burrowing owl (*Athene cunicularia*),

Baird's sparrow (*Ammodramus bairdii*), loggerhead shrike (*Lanius ludovicianus*) and ferruginous hawk (*Buteo regalis*). Additional uncommon or declining grassland birds being examined in the study include grasshopper sparrow (*Ammodramus savannarum*), sprague's pipit (*Anthus spragueii*), chestnut-collared longspur (*Calcarius ornatus*), Say's phoebe (*Sayornis saya*), willet

(*Catoptrophorus semipalmatus*), upland sandpiper (*Bartramia longicauda*), marbled godwit (*Limosa fedoa*) and sharp-tailed grouse (*Tympanuchus phasianellus*).

The project was contracted to Dimark Communications Group, Inc. located in Winnipeg, and will be completed this March. ■



Photo: Manitoba Conservation

The burrowing owl is one of several birds being examined in a multi-species grassland bird management plan.

Wildlife Inventory Reports Now Available

Early this year, Manitoba Conservation started distributing reports from wildlife inventories conducted on five of the province's Wildlife Management Areas (WMA).

The focus of the inventories was to document breeding and migrant bird populations and to identify and map plant communities. More information on these inventories can be obtained by calling Bill Koonz at 945-6811.

Dog Lake WMA

Located 16 km southwest of Ashern, surveyed in 1996.

Whitemud Watershed WMA

Located north of Carberry, surveyed in 1995.

St. Malo and Rat River WMAs

Located near St. Malo, surveyed in 1997.

Mars Sandhill WMA

Located 8 km east of Libau, surveyed in 1997. ■

Wild Species Status Monitoring

The country's wildlife ministers signed the *National Accord for the Protection of Species at Risk* in 1996. A commitment under the accord, one that CDC's across Canada have been instrumental in fulfilling, was a provincial and federal report on the general status of wild species in Canada to be available by September 2000.

Since 1994, staff of the Biodiversity Conservation Section have been actively compiling and reviewing information on the status of the province's wildlife species. These efforts have enabled Manitoba to provide the relevant information in a timely and efficient manner in anticipation of the first general status report.

The Internet based, national report will include national and provincial general status ranks for birds, mammals, reptiles, amphibians, fish, butterflies and vascular plants. BioNet will provide details on the report and its Web address once it becomes available. ■

Staff List

Biodiversity Conservation Section

Wildlife Branch ■ Manitoba Conservation
Box 24 ■ 200 Saulteaux Crescent ■
Winnipeg ■ Manitoba ■
Canada ■ R3J 3W3

Phone ■ (204) 945-7743

Fax ■ (204) 945-3077

E-mail ■ fblouin@nr.gov.mb.ca

Web site ■ www.gov.mb.ca/natres/cdc

Dr. James Duncan

Acting Chief
(204) 945-7465
jduncan@nr.gov.mb.ca

Elizabeth Punter

Special Projects Botanist
(204) 945-8481
epunter@nr.gov.mb.ca

Jason Greenall

Botanist/Ecologist
(204) 945-2912
jgreenall@nr.gov.mb.ca

François Blouin

Information Manager
(204) 945-6998
fblouin@nr.gov.mb.ca

Bill Koonz

Acting Zoologist
(204) 945-6811
wkoonz@nr.gov.mb.ca

Ken DeSmet

Endangered Species Biologist
(204) 522-3719
kdesmet@nr.gov.mb.ca

Ecoregional Stitching Workshop

Jason Greenall, botanist/ecologist for the Biodiversity Conservation Section, recently attended a workshop in Calgary with colleagues from Alberta, Saskatchewan, Montana, Colorado and Minnesota. Over two days, attendees reviewed ecoregion classification systems to develop a map of prairie ecoregions with smooth transitions between adjacent provinces and states. The Nature Conservancy and Nature Conservancy Canada cosponsored the meeting and will use the information to begin ecoregional planning exercises in each of the ecoregions delineated at the meeting.

"Our goal was to meld together different ecoregional classification systems that had been used by Canada and the United States," Greenall said. "We had to come to some consensus about the kinds of boundaries we would use for ecoregional planning." Greenall added that each country had

developed its own classification system using slightly different criteria at slightly different scales.

When formulating boundaries, participants considered geographic elements such as climate, landforms, past and current vegetation and patterns of disturbance. Several data sets were combined to develop a draft map of ecoregions across the northern portion of the North American Great Plains. The prairie ecozone in Manitoba was divided into two ecoregions for the purposes of this project: tall grass prairie and aspen parkland.

Manitoba has worked with The Nature Conservancy and neighboring states to complete an ecoregional conservation plan for the tall grass prairie region. The aspen parkland planning exercise will begin later this year.

Staff and Volunteer Updates

After 32 years of dedicated service to the wildlife cause, **Ron Larche**, nongame/protected species biologist, retired from the Biodiversity Conservation Section, Wildlife Branch, in January 2000. Ron's considerable expertise has enhanced the conservation of Manitoba's wildlife. We wish Ron every success in his well-deserved retirement. ■ New volunteer **Susan Hertam** is completing a BSc. in ecology at the University of Manitoba. She is working from her home to prepare a computer presentation on Manitoba's biological diversity for use by section staff. ■ New volunteer **Karin Newman** is converting four years of mixed grass prairie inventory data into plant community information compatible with the provincial vegetation classification. The information she works on will be

added to the Biological and Conservation Data system and used in upcoming ecoregional planning efforts. She has a B.Sc. in biology from the University of Winnipeg. ■ **Kareen Hyatt** joined the section via the OnSite program and will be working with section staff until the summer. She is coordinating the province's amphibian monitoring program, answering public inquiries and managing data including GIS mapping. Kareen has a degree in environmental studies and political science from the University of Winnipeg. ■ **Luc Blanchette**, who joined the section through the OnSite program, has found full-time employment as a teacher in Winnipeg. We thank him for his contributions, especially his amphibian work, and we wish him all the best! ■

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