Newsletter for Biodiversity Conservation in Manitoba

BioNet

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Updating National Species at Risk

Jim Duncan, acting chief of the Wildlife Branch's Biodiversity Conservation Section (BCS), attended Committee On the Status of Endangered Wildlife In Canada (COSEWIC) meetings in Ottawa at the end of April to participate in updating the listing of Canadian Species at Risk.

"The section provides important information for status reports on species that occur in Manitoba," Duncan said. "These reports are brought to the committee for its consideration when evaluating species status." Manitoba is one of 28 voting members on COSEWIC. Every province and territory has representation on the committee that also includes wildlife experts from museums, universities, national conservation organizations and federal agencies.

COSEWIC has listed Canada's boreal woodland caribou as a Threatened species.

The committee reassessed the status of 123 species based on modified criteria established by the International Union for the Conservation of Nature (IUCN). "The criteria adopted by COSEWIC will increase the value of Canada's species at risk designations to the international conservation community," Duncan said. The new criteria also allow wildlife managers to account for the status of species' populations beyond Canada's borders.

As a result of the status reassessment, one species was downlisted, 105 species retained their current status and 17 species were uplisted to a category of higher risk. Two of these species are found in Manitoba.

Western silvery aster (*Aster sericeus*) moved from Special Concern to Threatened meaning it is likely to become endangered if limiting factors are not reversed. This perennial plant is named after the silvery hairs on its leaves. It grows primarily in and around Birds Hill Park but it also occurs in southern Manitoba. Habitat loss due to human activities or natural events is believed to be a threat to the plant.

The boreal population of woodland caribou (*Rangifer tarandus caribou*) that occurs in Manitoba was also uplisted from Special Concern to Threatened. These animals are widely dispersed from Bird River to Lynn Lake in 27 herds. Habitat change and fragmentation are the primary threats to the woodland caribou.

Species reassessments will continue when the committee next meets in November 2000. A complete listing of the 353 COSEWIC listed species can be found at www.speciesatrisk.gc.ca/Species/English/SearchRequest.cfm. ■

New Web Site for Wildlife Branch

The new Web site for the Wildlife Branch of Manitoba Conservation is on-line. François Blouin, information manager for the Biodiversity Conservation Section oversaw the development of the new site.

"We wanted something useful to the public and easy to access and browse through," Blouin said. "We have a lot of information to offer. The challenge was selecting and categorizing the information to address people's needs. By having representatives from every program in the Wildlife Branch on the development committee, we were able to better target the information that is the most wanted and needed."

The Web site features information on services provided to Manitobans by the Wildlife Branch. It also includes updates on species at risk, problem wildlife and wildlife diseases in the province as well as information on the conservation management of Manitoba's plants, animals and wildlife habitats.

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Manitoba Conservation
Hon. Oscar Lathlin
Minister

Snakes and Culverts

The greatest attractions to Manitoba's Narcisse Wildlife Management Area north of Winnipeg are the hibernaculae that house the world's largest concentration of red-sided garter snakes (*Thamnophis sirtalis parietalis*). Unfortunately, the highway that brings people to the hibernaculae during the fall is also the site of snake mortality from the wheels of vehicles.

"Some 10,000 snakes are run over on Highway 17 just north of Narcisse each fall," said Bill Koonz, Biodiversity Conservation Section zoologist. That's approximately one-sixth of the snakes believed to amass at the Narcisse snake dens in the fall. "Some 500 to 1,000 snakes are killed in the spring as well. Fall mortality is high because the snakes are more lethargic at that time of year and they like to lie on the warm pavement. In the spring the animals are in a hurry to get to their feeding grounds and are less likely to loiter on the roadway."

Manitoba Conservation has teamed up with Manitoba Hydro and Manitoba Highways to push pipes under a stretch of highway about a kilometre long. The 30 centimetre (12 inch) wide pipes will act as tunnels that let the snakes safely traverse the section of highway. This is the first time a wildlife conservation project of this nature has occurred in Canada. "Culverts have been used in Europe to help frogs and toads cross under busy motorways," Koonz said. "I haven't heard of this being done in Canada for garter snakes." ■

Services Highlighted

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Visitors can learn how to apply for wildlife permits, view the hunting and the trapping guides and read about the legislation that governs wildlife management in Manitoba. The Web site also offers answers to frequently asked questions and increases the appreciation of Manitoba's outdoors by identifying wildlife viewing opportunities and a list of monitoring programs in which to get involved. The Biodiversity Conservation on-line database can be accessed by clicking on "Managing animals, plants and habitats" then on "Species at Risk".

In the period between the site's introduction on April 7 and May 31, the Web site hosted over 3,500 visitors. The site is located at www.gov.mb.ca/natres/wildlife/index.html. ■

National Peregrine Falcon Survey

This year the Manitoba Peregrine Falcon Recovery Project team will boost up survey efforts across the province as part of the national peregrine falcon (*Falco peregrinus anatum*) survey. The national survey occurs every five years to monitor the results of recovery efforts on the population. The project staff, along with Manitoba Conservation, Manitoba Hydro and local reputable bird watchers, are visiting potential and previously used nest sites.

Since 1981, peregrine falcons raised in captivity have been released in Canada to counter population declines that began in the 1940s as a result of pesticide use, primarily DDT, and habitat loss. The peregrine falcon was listed by COSEWIC as Endangered in 1978 but successful recovery efforts resulted in it being downlisted to Threatened, meaning the species will become endangered if limiting factors are not reversed, in 1999. It is presently listed as Endangered in Manitoba under *The Endangered Species Act*.

According to Tracy Maconachie, provincial coordinator of the Peregrine Falcon Recovery Project, there are two confirmed pairs of nesting peregrine falcons in the province: one in Winnipeg and one in Brandon.

Information required for the survey will be provided by the recovery project's annual monitoring efforts. "Because we don't have a lot of birds, we keep track of everything," Maconachie said.

The team records nesting sites, number of eggs laid, nest success and fate of nestlings. The recovery team also bands chicks when they reach 21 to 24 days old. These bands are valuable when monitoring the birds on their migration to South America and for identifying birds that return to the province.

In addition to contributing to the national survey, information from the Peregrine Recovery Project team is entered into the Biodiversity Conservation Database to help monitor the status of the birds in the province. ■

Volunteer Nocturnal Owl Survey Goes National

Ten years ago Jim Duncan and his wife Patsy initiated a volunteer-based nocturnal owl survey under the auspices of Manitoba Conservation.

"At the time we were involved in an intensive field study of the great gray owl (*Strix nebulosa*)," Duncan said. More help was needed to learn about other owl species in Manitoba so the Duncans started a volunteer-based nocturnal owl monitoring project. Duncan said they encouraged others to become involved in the survey. "People who are actively involved with wildlife are more likely to promote wildlife conservation."

The great gray owl is among the 11 owl species found in Manitoba.

The nocturnal owl survey started in southeastern Manitoba in 1991 with 21 survey routes. Growing public interest resulted in its expansion to more than 90 routes across the province in 1999.

As a result of the survey, there are now hundreds of documented owl sites in the province. The survey has significantly increased provincial records for the northern saw-whet owl (*Aegolius acadicus*), boreal owl (*Aegolius funereus*) and great gray owl.

Owl data entered into Manitoba's Biodiversity Conservation Database has spawned two University of Manitoba graduate level studies that will contribute to the future conservation and management of owl species in Manitoba and elsewhere.

Manitoba's owl survey has influenced owl enthusiasts in British Columbia, Alberta, Saskatchewan, Ontario and the Maritimes to conduct their own provincial surveys. Consequently, this triggered interest by the provinces and Canadian Wildlife Service to better standardize owl survey methods across the country.

"By being the first province to undertake a nocturnal owl survey, Manitoba acted as a catalyst to adopt a national protocol," said Kurt Mazur, Manitoba Conservation's avian ecologist. "A national survey method allows us to look at trends in owl populations across a larger geographic area."

Mazur and Duncan were part of the federal/provincial committee that established a standard national nocturnal owl survey protocol at a meeting held in Winnipeg last fall. This spring, Manitoba instituted the newly developed protocol under Mazur's guidance.

The new survey design increases data reliability by not using tape-recorded playback and by increasing the distance between survey stops to one mile. Volunteers have responded favourably to the new survey method.

Mazur and his fellow committee members are already looking beyond Canada's borders for owl survey protocol consistency. Committee representatives made a presentation to attendees of the Raptor Research Foundation annual meeting in Mexico last year.

"We'd really like to see this protocol, or a version of it, adopted across North America," Mazur said.

To volunteer with the owl survey at the end of March and beginning of April, contact Kurt Mazur at 945-6816. ■

Loggerhead Shrike Recovery Team Member in Manitoba

Amy Chabot-Vogel, a private consultant with the Canadian Wildlife Service, spent three weeks in the province this summer visiting historic nesting sites of eastern loggerhead shrikes (*Lanius ludovicianus migrans*). These birds are listed as Endangered by COSEWIC. The Manitoba population is currently fluctuating around 12 pairs.

Chabot-Vogel is part of the loggerhead shrike recovery team established by the Committee on the REcovery of Nationally Endangered Wildlife (RENEW). The purpose of the species teams is to prevent species at risk from becoming even more imperiled.

"We're trying to expand survey efforts beyond the urban areas," Chabot-Vogel said. She surveyed loggerhead shrike nesting sites around Winnipeg for breeding pairs and to evaluate shrike habitat. Her work will help pinpoint conservation efforts for next year.

François Blouin, BCS information manager, and Ken DeSmet, species at risk biologist, are also involved with the project. Blouin is currently monitoring the known shrike breeding area north of Winnipeg. Together, and in collaboration with the Manitoba Cattle Producers Association, Chabot-Vogel, Blouin and DeSmet will develop a habitat stewardship initiative for the loggerhead shrike in an attempt to establish a sustainable population in southeastern Manitoba. ■

Alonsa Inventories Wrap-Up

The report on a flora and fauna inventory conducted near Alonsa by the Biodiversity Conservation Section is now complete. The inventory occurred during June and August 1999 on the Alonsa Wildlife Management Area (WMA) and the Alonsa Prairie Farm Rehabilitation Administration (PFRA) Community Pasture.

Overall, 314 plant species and 141 animal species, including 98 birds and 17 mammals, were documented in the two study areas. Four of the identified plant species are listed by the Biodiversity Conservation Section as being rare or uncommon in the province: yellow star grass (*Hypoxis hirsuta*); plains rough fescue (*Festuca hallii*); showy lady's slipper (*Cypripedium reginae*); and Canada hawkweed (*Hieraciaum canadense*). Animal species considered uncommon included: American white pelican (*Pelecanus erythrorhynchos*); black-crowned night heron (*Nycticorax nycticorax*); and upland sandpiper (*Bartramia longicauda*). ■

National Vegetation Classification

A Canadian National Vegetation Classification was the topic of discussion at a meeting in Hull, Quebec, attended by BCS ecologist, Jason Greenall. He joined other provincial representatives as well as those from national agencies and nongovernment organizations. The Conservation Data Centre (CDC) umbrella group, the Association for Biodiversity Information (ABI), was a key workshop organizer.

The main objective of the workshop was to discuss and endorse a national approach and accompanying standards for classification in Canada.

The group concluded that the International Classification of Ecological Communities (ICEC), designed by ABI, is the best available model for use in Canada, as it affords the creation of a single, North American classification. Several Canadian CDCs, including Manitoba, are already using this system that the United States recently adopted as its national standard for terrestrial community classification.

During the meeting, the Canadian Forest Service announced its launch of a three-year program to prepare a national synthesis of forest types described in existing regional Forest Ecological Classifications (FECs). The forest service will work with ABI's Central Ecology staff, ABI-Canada ecologists and others to undertake crosswalking (translating between classification systems) between provincial FECs and the ICEC to develop a Canadian Forest Ecosystem Classification.

Parks Canada also decided to undertake pilot vegetation inventories in some national parks using methodology consistent with the ICEC approach.

"ABI-Canada's ecologists are excited about the opportunity to assist in developing a national classification of forest communities, and to then continue the process in non-forested areas," said Greenall. "A seamless approach across Canada and North America will have many applications, and is exactly what we have been working toward." ■

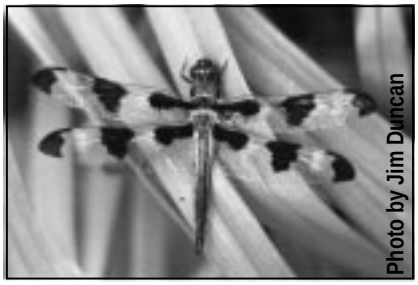
Dragonfly Reference Book Underway

The provincial dragonfly survey, first announced by the Biodiversity Conservation Section over a year ago, has received tremendous public response. As a result, a working group has been established to develop Manitoba's first dragonfly reference book.

"We're bringing together all available information in the province that celebrates dragonflies, Manitoba's charismatic microfauna, and we're creating a resource for the public and people interested in the biology of dragonflies," said Jim Duncan, acting chief of the Wildlife Branch's Biodiversity Conservation Section.

The reference book will contain information on the general biology of dragonflies and damselflies and provide a listing of the more than 90 species that have been documented in Manitoba. It will also include range maps, color photos and illustrations.

(Cont'd on page 5, "Provincewide Survey Support")



The twelve-spotted skimmer (Libellula pulchella) is one of Manitoba's many dragonfly species.

Botanist to Study Rare Plants

Biodiversity Conservation Section special project botanist, Elizabeth Punter, conducted surveys of six rare plants in southwestern Manitoba this July.

Two species nationally listed as Special Concern by COSEWIC are: smooth goosefoot (*Chenopodium subglabrum*) and buffalo grass (*Buchloë dactyloides*). The only occurrence of smooth goosefoot was recorded in the province in the 1950s. Buffalo grass has only been found in the Souris River Valley.

Western spiderwort is one of the plants botanist Elizabeth Punter is seeking this summer.

While updating information on these two species, Punter will take the opportunity to identify any additional occurrences of Threatened hairy prairie-clover (*Dalea villosa*) and western spiderwort (*Tradescantia occidentalis*). The status of all of these species was recently reviewed by COSEWIC.

"We require more field work on these plants to make sure we've identified their habitat parameters, threats to populations and habitats, and land ownership and land use in the area," Punter said. "The information will be useful in developing recovery programs for these species."

Punter will also be looking for monkeyflower (*Mimulus glabratus*) that prefers seepage areas in the southern part of the province and white-flowered parsley (*Lomatium orientale*) that, like buffalograss, grows in the Souris River Valley. These species are considered rare in the province and Canada. Any information compiled on their status will contribute to candidate species reports for consideration by COSEWIC.

The rare plant survey in southern Manitoba is being funded in part though the World Wildlife Fund's Endangered Species Program and the Government of Canada's Millennium Partnership Program called Natural Legacy 2000. This is a nationwide initiative to conserve wildlife and habitats on private and public lands.

A summary of Punter's findings will be prepared for funding partners and new information will be entered into the Biodiversity Conservation Database. Reports on the two candidate species will also be developed. ■

Provincewide Survey Support

(Cont'd from page 4)

"This is a real grassroots project," Duncan said. "There are 250 people, so far, who are contributing to the development of this book." Volunteer dragonfly monitors can be found all across southern Manitoba and as far north as Churchill.

Joining Duncan on the working group are Tom Reaume, Marjorie Hughes, Bill Koonz, Brent Elliott and Lee-Ann Hemphill. The group hopes to have the book available by 2005.

Anyone interested in contributing to the dragonfly survey can contact Bill Koonz, Biodiversity Conservation Section biologist at (204) 945-6811. ■

Upcoming Events

- Central Mountain and Plains Section of the Wildlife Society Meeting, August 9-12, 2000, Falcon Lake, Manitoba
- Prairie Conservation and Endangered Species Conference, February 22-25, 2001, Winnipeg, Manitoba
- Raptor Research Foundation Fall Annual General Meeting, October 24–27, 2001, Winnipeg, Manitoba

New Publications

- Flora of North America Editorial Committee. 2000. *The flora of North America, north of Mexico*. Volume 22. Oxford University Press, Oxford and New York. ***Treats a number of monocot families***
- Remphrey, W. *Woody plants in the prairie landscape*. CD ROM. 1999. ***Bill Remphrey is a professor in Plant Science, Agriculture Faculty, University of Manitoba.***
- Marles, R.J., C. Clavelle, L. Monteleone, N. Tays, and D. Burns. 1999. *Aboriginal Plant Use in Canada's northwest Boreal Forest.* UBC Press, Vancouver, British Columbia. ***Robin Marles is a botany professor at Brandon University.***

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■ Staff and Volunteer Updates

BCS staff were part of Manitoba Conservation's speakers who helped to make this year's National Wildlife Week more special for school children in Manitoba. Over 600 school-aged children heard presentations from BCS staff about biodiversity and the importance of conservation.

National Wildlife Week was declared in 1947 by an act of Parliament. It is a celebration of wildlife heritage and takes place in the week surrounding April 10, the birth date of the late Jack Miner, one of the founders of Canada's conservation movement. ■

Bill Koonz, BCS zoologist, was among the many helping hands at this year's Envirothon taking place at Oak Hammock Marsh. This was the fourth year of the program that has experienced growing participation with every year.

Envirothon is an ecological challenge for teams of five students in grades nine to 12. The purpose of Envirothon, which started in the United States in 1979, was to encourage learning about the natural environment, promote stewardship of natural resources and offer students hands-on experience in environmentally oriented activities.

This year's winning team, from Winnipeg's Vincent Massey High School, will attend the national competition at Acadia University in Wolfville, Nova Scotia. ■

Biodiversity Conservation Section staff welcome Terence Smith, a new On-Site employee. Smith has a degree in ecology from the University of Manitoba. He has been responding to calls from the public about urban wildlife and working with the geographic information system.

He said his work with the section is already proving valuable and informative. "I'm interacting with people in the field. I certainly didn't know how diverse this section was," Smith said. ■

Kareen Hyatt left the section at the end of April for a new job with Advanta Seeds. Her contributions are greatly appreciated and we wish her all the best in her new position. ■

New volunteer Tom Reaume is impressing the Biodiversity Conservation Section staff with his artistic talents. He has worked on a number of projects that deal with flora and fauna including an illustrated Checklist of Mammals of Manitoba. Reaume will contribute his time to the development of the Manitoba Dragonfly Book project.■

Volunteer Karin Newman has returned to the field this summer, working for the Critical Wildlife Habitat Program. She will be monitoring mixed grass prairie grazing projects and conducting plant and animal inventories at Westbourne and Lakeview Community Pastures.

Newman hopes to return to the BCS in the fall to enter additional occurrences of mixed grass prairie sites in the Biological Conservation Database. ■

This issue of Bio☼Net will be followed by an issue in the autumn of 2000. We have adopted this change to provide more timely updates on our activities.