

#### Manitoba Conservation Data Centre Newsletter

# **Bio** Net

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## COSEWIC Adds Species at Risk

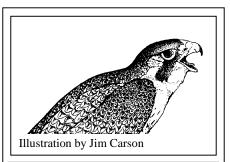
A record number of species were reviewed at this year's Committee On the Status of Endangered Wildlife In Canada (COSEWIC) meeting held in Ottawa in April. COSEWIC reviews only species of national concern or interest. Of the 88 species reviewed, 13 can be found in Manitoba.

Carol Scott, chief of the Conservation Data and Nongame Management section of the Wildlife Branch, attended the meeting as Manitoba's representative Staff of the CDC and others within Manitoba Natural Resources reviewed each species report prior to the meeting and made recommendations for designations. Current designations were confirmed and retained for the American black bear (Ursus americanus) (Not At Risk), the polar bear (Ursus maritimus) (Vulnerable), the least bittern (Ixobrychus exilis) (Vulnerable), and the small white lady's slipper (Cypripedium candidum) (Endangered).

Other Manitoba species assessed and listed for the first time included:

Great Plains toad (*Bufo* cognatus)
 (Vulnerable) — Reaching lengths of
 10 centimetres, this is the
 province's largest toad.

- Sprague's pipit (Anthus spragueii) (Threatened) —This grassland bird breeds in southern Manitoba and is threatened by overgrazing and occasional brownheaded cowbird nest parasitism.
- Yellow rail (Coturnicops noveboracensis) (Vulnerable) —This small ground-dwelling marsh bird is threatened primarily by wetland drainage.
- Barn owl (*Tyto alba*) (Ontario population Endangered; BC population Vulnerable; Manitoba sightings considered accidental)
   —These owls are easily distinguished by their heart-shaped face. (Continued page 2, "Species of Concern")



National recovery efforts resulted in COSEWIC downlisting the peregrine falcon (Falco peregrinus anatum) from Endangered to Threatened in Canada.

#### Workshop Well Attended

This year's Biodiversity Field Inventory Workshop was held at Oak Hammock Marsh on April 13 and attracted 68 participants. The Wildlife Branch hosted the workshop organized by the Conservation Data Centre, the Habitat and Land Management Section of the Wildlife Branch and Partners in Flight Manitoba. The day was composed of four sessions chaired by CDC staff. Each session featured five presentations on biodiversity inventories planned or underway in the province.

"For the most part, we managed to bring in new presenters with a pretty diverse range of inventory subjects," said Jason Greenall, the CDC's botanist/ecologist.

The first session focussed on wide-ranging inventories that included the monitoring of neotropical migrant birds and a study of tiger beetles and ants.

(Continued page 2, "Workshop Highlights)

#### The Manitoba Conservation Data Centre was initiated by:

- Manitoba Museum
- Manitoba Natural Resources
- The Nature Conservancy of Canada
- The Nature Conservancy (United States)

Manitoba Natural Resources Hon J. Glen Cummings Minister



## Workshop Highlights

(Cont'd from front page)

The second session involved presentations on the province's prairie and aspen parkland terrestrial ecosystems. At this session, presentations included the urban stewardship program and an inventory of biodiversity in wooded riparian corridors.

After lunch, the third session shifted focus from land to inventories involving aquatic ecosystems. Participants heard about the effects of agriculture on stream biota and updates were given on some of the province's inventories involving fish. The last session of the day included studies in the boreal and Hudson Bay lowland regions. Presenters spoke on vegetation mapping in Wapusk National Park and on forest insect biodiversity in eastern Manitoba.

"Interest in the workshop was even greater this year than last year which is good news. We're not only getting interest from researchers willing to share their plans, but we are also receiving additional support from corporate sponsors and other conservation organizations who recognize the importance of this workshop," Greenall said. "This inventory workshop is a good way to identify who is doing what in Manitoba." Greenall anticipates that the workshop will be held again next year in the spring.

There are three true toad species in Manitoba. Like all toads, the Great Plains toad will secrete a toxic substance when disturbed to deter predators.

## A Jump in Toad Sightings

In 1983, one year after publishing *The Amphibians and Reptiles of Manitoba*, Bill Preston, then curator of herpetology and ichthyology at the Museum of Man and Nature, heard a Great Plains toad for the first time in Manitoba. "It has a pulsating, metallic trill that's quite different from any of the other frog calls," Preston said. He first heard this toad species in Oklahoma while working on his doctorate.

According to CDC zoologist

Jim Duncan, less than a dozen known

occurrences have been mapped for the toad in Manitoba—until now. Recent heavy rainfalls in southern Manitoba have resulted in almost 40 additional sightings of these blotchy, olive-colored

toads that have prickly looking skin. "We've had more sightings of breeding toads identified this year than any other," Duncan said. The Great Plains toad is an irruptive breeder, meaning it does not breed on an annual cycle.

"These toads breed only after heavy and violent rain," Preston said. "They carry on calling some time after, up to three or four weeks." Ken DeSmet, endangered species biologist with Manitoba Natural Resources, first heard the toads calling the evening of May 15 while at his home near Melita.

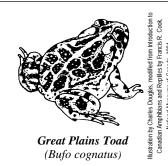
"I was surprised when I heard them," DeSmet said. He had spoken with Preston and didn't anticipate hearing the toads until the weather had warmed up. "I could hear these calls so I raced out in the truck and there were a whole pile of them."

The toads are adapted to the broad expanses of prairie habitats and

according to Preston, their calls can be heard up to four kilometres away. Preston said the toads have probably always been in the area, but just haven't announced their presence with calls. They can spend weeks

at a time underground during dry conditions. Despite recent sightings, the Great Plains toad will remain a species of concern in the province.

"While it appears the toad is more abundant than previously thought, it still warrants close attention due to its limited range in Manitoba," Duncan said. The Great Plains toad was recently listed nationally as Vulnerable by COSEWIC.



#### Species of Concern (cont'd from front page)

Manitoba species reviewed and found to be Not at Risk included Cope's gray treefrog (*Hyla chrysoscelis*), the gray wolf (*Canis lupus*) and a fish called the weed shiner (*Notropis texanus*).

Two species that occur in Manitoba have been downlisted. The Caspian tern (*Sterna caspia*), classified as Vulnerable in 1978, has been removed from the COSEWIC listings because of great population increases.

The peregrine falcon (Falco peregrinus anatum) was downlisted from Endangered to Threatened because recovery efforts have improved this species' numbers. Its population stability is still uncertain in southern Canada.

With the recent species additions, there are currently 339 species listed nationally as species at risk. ■

### CDC Project Updates

#### Biodiversity at Risk Indicator

Last winter the Manitoba CDC's zoologist Jim Duncan made an information request of his own to professor Edward Cloutis' class of advanced geographic information system (GIS) students at the University of Winnipeg. The CDC was among a group of organizations that presented practical projects upon which the students could apply their skills and gain experience. Julia Tse, Alex Morrison and Michael Chubey chose to work on a biodiversity at risk indicator for the CDC that would combine species distribution and status rankings with GIS map products.

"We have a lot of valuable information at the CDC including current and up to date range maps and conservation

status ranks for Manitoba species," Duncan said. "We would like to be able to combine this information to develop a biodiversity impact planning tool."

Tse said she and her partners divided the province into 104 latitude-longitude degree blocks that allowed species distribution maps to be transcribed for the province's 24 species of amphibians and reptiles. A species' presence was weighted with its conservation status rank. When rank and distribution were combined areas of conservation priority or hot spots were identified.

"We identified how to use the GIS and how to use raw data to make it visual," Tse said. "When people look at a map, it is easier to understand."

François Blouin, the CDC's information manager said the work done by Tse and her classmates will enhance the CDC's GIS analytical capabilities. "The beauty of an indicator like this lies in our ability to quickly focus on areas of greatest concern to assist in ecosystem based management and planning," Blouin said.

Duncan looks forward to subsequent students expanding the indicator to include other species and criteria. "This project is an example of an adaptive management tool that takes advantage of GIS capabilities and student enthusiasm for conservation." ■

# Caught in the Web

- ■Definitions of terms and risk categories used in conjunction with COSEWIC designations can be found at www.cosewic.gc.ca/COSEWIC
- Environment Canada's Science Horizons program provided funding for a youth internship at the CDC. Visit the Web-site at www.ec.gc.ca/sci hor/index.html for additional details on this program. The intern is assisting with this year's biological inventory taking place at Alonsa. She will also assist with GIS mapping and report writing.
- Nature North Zine is a Web-site that refers to itself as the place to learn about wildlife in Manitoba. The mission statement of this "zine" or electronic magazine, is conservation through awareness. Doug Collicutt, the independent biologist who developed Nature North with business partner Thomas Keep, recently received digital species lists from the CDC. Visit this site at www.naturenorth.com

#### Welcome Dr. Martin Raillard

The CDC recently received a visit from Dr. Martin Raillard, a newly appointed wildlife biologist in the Canadian Wildlife Service's Environmental Conservation Branch. He will be instrumental in the development and implementation of a Species at Risk program in Environment Canada's Prairie and Northern Region. He will work with a number of provincial and federal agencies, including the Manitoba Wildlife Branch and its Conservation Data Unit to create teams that will develop and implement recovery plans for species at risk.

"There is going to be a huge amount of work." Raillard said. "The Conservation Data Centre is going to be crucial to this work. They have the best database for species trends and for identifying where species are."

Raillard has a strong background in environmental monitoring, wildlife management/research, GIS and remote sensing

#### ■ Staff and Volunteer Updates

This summer the Manitoba Wildlife Branch, in conjunction with the Canadian Wildlife Service and Prairie Farm Rehabilitation Administration (PFRA), will undertake an inventory of the Alonsa Wildlife Management Area and PFRA Community Pasture. The CDC welcomes three additional staff members who will be conducting this year's inventory.

Marilena Kowalchuk is on a seven month term internship program with the CDC through Environment Canada's Science Horizons program. She is a University of Manitoba graduate with a BSc in botany and she worked on a similar inventory last summer at Narcisse. Lisa Schaldemose received her BSc in zoology and recently completed her master's degree at the Natural Resources Institute. She worked on the Gardenton PFRA

Pasture inventory in 1997. Julie Sveinson majored in botany to achieve her BSc at the University of Manitoba. She is beginning a master's degree in September and she greatly anticipates the field research associated with her position.

Special project botanist Elizabeth Punter will be spending a great part of her summer along the Hudson Bay Coast conducting a botanical inventory. Watch future issues of the *BioNet* for key findings from her inventory.

Randi Janzen, a grade 12 student at Shaftesbury High School, recently completed a 10 week term with the CDC where she assisted with Web-site development. She was involved in the BRIDGE program (Building Relationships In a Diverse Global Economy) sponsored by Assiniboine South School Division, the St. James Assiniboia

School Division and Human Resources Development Canada. "I finished my compulsory courses early and I needed something to do for a semester," Janzen said. She requested that she be placed with Manitoba Natural Resources.

Four days a week, Janzen gathered images and incorporated them into the field guide section of the CDC's Website. She also catalogued the images in a database. "I learned a lot, not only about computers but about animals," Janzen said. Her computer skills and her quick adaptation to new technology were great attributes to the project. She is currently looking for a full-time position involving computers, specifically data entry. Wildlife staff wish her well.

Volunteer opportunities exist for people with biological training and/or experience with GIS and computer databases.

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