

CDC Explores Hudson Bay Coast

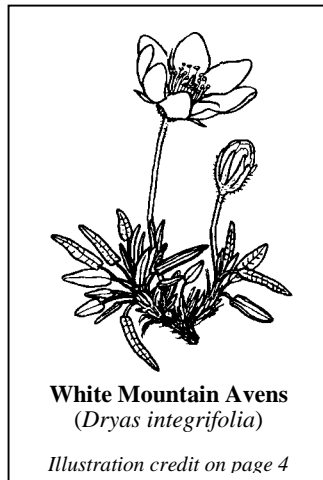
This summer, Manitoba Conservation Data Centre (CDC) special projects botanist Liz Punter travelled north to conduct two separate plant inventories.

The Hudson Bay Coastal Ecological Inventory Project, a multi-agency, multi-year inventory, first took Punter north on June 10 for a 10-day canoe trip on the Owl River through Wapusk National Park. Punter collected botanical information for the inventory that was designed to increase ecological understanding of the Hudson Bay coastal area.

She was accompanied by five other researchers: Jack Dubois and Kim Monson from the Manitoba Museum who conducted small mammal surveys; University of Manitoba Natural Resources Institute student Ryan Brooks and his assistant Evan Richardson, a U. of M. honors zoology student, who investigated the vegetation types represented in satellite images; and her canoeing partner Jörg Tews, a graduate student from the University of Erlangen, Germany, who studied the vegetation of open forest and tundra communities.

The canoe trip started at Herchmer, 150 km south of Churchill and finished 100 km to the northeast at the Owl River estuary on Hudson Bay.

"This canoe trip was an opportunity presented to us by Parks Canada. The area was uncharted as far as the CDC was concerned," Punter said noting the remote park is difficult to access. Helicopter and canoe were the only practical means of reaching the area they explored. The park's vegetation illustrates the transition from subarctic to arctic tundra habitats and represents the northern limit of the range for a number of plant species and communities, resulting in a diverse flora.



White Mountain Avens
(*Dryas integrifolia*)

Illustration credit on page 4

"We were able to sample riverbank, floodplain and upland habitats," Punter said. The area had an early spring, resulting in a lot of plants flowering along the riverbank. New southern records were established for Lapland rose-bay (*Rhododendron lapponicum*) and white mountain avens (*Dryas integrifolia*).

(Continued page 2, "Hudson Bay Exploration")

Staffing Changes at CDC

Recent organizational changes within the Manitoba Wildlife Branch have resulted in a number of changes at the Manitoba CDC. Carol Scott, manager of the Manitoba CDC since it began operating in 1994, has accepted the position of chief of Habitat and Land Management, one of four sections of the Wildlife Branch.

Dr. Jim Duncan, zoologist with the CDC since its inception, replaces Scott as both acting chief of the newly renamed Biodiversity Conservation Section and as acting manager of the CDC within this section.

Bill Koonz, who has been with Manitoba Natural Resources for over 30 years, brings his extensive experience in wildlife management to the position of acting zoologist with the CDC.

Scott said she appreciates the opportunity to have been a part of the CDC's development.

(Continued page 3, "Changes at CDC")

The Manitoba Conservation Data Centre was initiated by:

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



Dragonfly Survey Takes Off

Fifty-seven people are participating in the Manitoba dragonfly survey (see Bionet Vol. 4, No. 1). CDC acting manager Jim Duncan is pleased but not surprised by the number of people interested in dragonflies.

"I knew the survey would pique public interest," Duncan said. "Dragonflies are charismatic microfauna. You can't help but notice them — they are beautiful and readily observable."

In July, Duncan attended an international workshop for dragonfly scientists at Wolf Ridge, Minnesota. He joined people from Australia, Austria, Germany, Sweden and the United States to exchange information on dragonfly conservation.

"Everybody agreed that dragonflies are valuable indicators of terrestrial and aquatic habitat quality," Duncan said. Workshop field trips provided Duncan with new techniques for collecting dragonflies. On one field trip, a new species for Minnesota was recorded.

While sampling dragonflies along the highway on his drive to the workshop, Duncan may have documented a new species for Manitoba. He is awaiting confirmation on what he believes to be a band-winged meadow hawk (*Sympetrum semicinctum*). "This proves that there are still new records for the province waiting to be documented."

Duncan eagerly anticipates the review of dragonfly occurrences already submitted to the CDC. "I'm estimating that at least 25 per cent of the 90 species known to occur in Manitoba were reported or collected in 1999."

Anyone interested in registering with the provincial dragonfly survey can contact Duncan at (204) 945-7465. ■

Hudson Bay Exploration (cont'd from front page)

Punter also recorded occurrences of silverberry or wolf-willow (*Elaeagnus commutata*) and blue-eyed grass (*Sisyrinchium montanum*) that she didn't expect to see at these northern latitudes in northeastern Manitoba.

Punter's second trip in mid-July took her to the Cape Churchill Wildlife Management Area (WMA) that borders Wapusk National Park to the west. Here she spent five days 30 km east of Churchill exploring the vegetation on the southern portion of Christmas Lake Esker, a gravelly deposit made by glacial meltwater streams. Two interesting finds were alpine azalea (*Loiseleuria procumbens*) and purple mountain heather (*Phyllodoce coerulea*), species that are more commonly found further north.

The esker area was used for military training in the 1940s and 1950s and evidence of vehicle tracks was still apparent in the vegetation.

While investigating this area, Punter was accompanied by Darryl Hedman, a wildlife biologist with Manitoba Natural Resources in Thompson who alerted Punter to the presence of bears. "You need someone to be with you at all times," Punter said. "When I'm looking at the ground, I'm not looking for polar bears and it's amazing how fast they can move!"

Nestor One Goose Research Camp, 60 km southeast of Churchill in Wapusk

National Park, acted as Punter's base for the next five days while she studied vegetation on the beach ridges and adjoining areas.

While the last ice sheets melted approximately 10,000 years ago, the land Punter studied is still uplifting at a rate of about 60 cm a century in some areas in response to reduced pressure from glaciers.

"The beach ridges south of Cape Churchill are much younger geologically. They are more open and subject to wind exposure so they have less vegetation than those around Churchill," Punter said. Vegetation that could be found on the beach ridges included dwarf shrubs and the occasional dwarfed white spruce (*Picea glauca*). While conducting plant inventories in this area, Punter was accompanied by park warden John Henderson.

Punter's inventories are being recorded in the CDC's Biological and Conservation Database. Information from the fieldwork will be used to develop plant inventories for the Cape Churchill WMA and Wapusk National Park, to assist with WMA and park management including restoration, interpretive materials and other related research projects.

Manitoba Natural Resources, Parks Canada and Manitoba Hydro provided support for this project. ■

Caught in the Web

- Learn more about Wapusk, Canada's newest National Park, at parkscanada.pch.gc.ca/parks/manitoba/wapusk.
- You can explore the network of Canadian CDCs with a visit to the Web site for the Association for Biodiversity Information Canada at www.abi-canada.ca.

■ CDC Project Updates

Alonsa WMA and Pasture Biodiversity Inventory

Fieldwork on the biodiversity inventory of the Alonsa Wildlife Management Area (WMA) and the Alonsa Prairie Farm

Rehabilitation Administration (PFRA) Community Pasture wrapped up at the end of August after approximately 11 weeks. A tremendous amount of data was collected by field staff members Marilena Kowalchuk, Lisa Schaldemose and Julie Sveinson despite very wet spring conditions due to above-average rainfall.

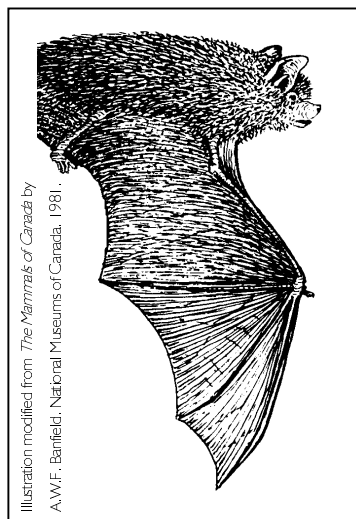
Previously, a standard inventory included plant communities, plants, birds and small mammals. This year, other taxonomic groups were included to supplement programs in the Wildlife Branch.

Wildlife biologist Ron Larche supplied staff with a bat detector to record bat calls that will be computer analysed to identify the species.

"Fifteen minutes after dusk, we took the bat detector to grassland, woodland and wetland areas twice during the inventory," Kowalchuk said. "There was only one instance when we heard bats."

At the request of Jim Duncan, they also inventoried the dragonfly species present in the pasture and WMA.

Terrestrial snails were collected for Dr. Vince Crichton's examination to detect if they carry the brainworm parasite (*Pneumostrongylus tenuis*). The life cycle of this parasite requires both snail and animal hosts, most commonly deer and moose. Deer are unaffected by the parasite, however, an infected moose will eventually be weakened by the parasite that blocks blood vessels to the animal's brain.



Bat calls were recorded during this summer's biodiversity inventory.

Funding and logistical support for this inventory came from the Canadian Wildlife Service, PFRA, Environment Canada's Science Horizons Internship Program, the Wildlife Branch and Western Region of Manitoba Natural Resources and the Alonsa Conservation District.

Schaldemose and Sveinson have neared completion of their work on the project, and Kowalchuk's internship with the CDC will continue until December, when the final report will be completed. ■

Changes at CDC (Cont'd from front page)

"Watching the CDC develop over the past five years has been a rewarding experience," Scott said. "The farsightedness of our four founding partners and the faith shown by the foundations, businesses, government agencies and nonprofit organizations

who provided start up funding are to be commended."

Scott's new position was formerly held by Cathy Johnson who has accompanied her husband to Indiana where he is pursuing a PhD at Purdue University. ■

Rare Plant Surveys

CDC special projects botanist Liz Punter visited known populations of three of Manitoba's plant species at risk to assess their condition this summer.

Two days were spent in southwestern Manitoba searching the dry, sandy soils for the nationally Threatened hairy prairie-clover (*Dalea villosa* var. *villosa*) and Vulnerable buffalograss (*Buchloë dactyloides*). While there, Punter investigated reported sightings of the two plants and she also explored habitats similar to those of known occurrences to locate any additional populations. She was able to confirm two reports of hairy prairie-clover made in the 1940s.

The assessment of small white lady's-slipper (*Cypripedium candidum*) populations took Punter to Brandon, the Interlake and southeastern Manitoba. "There weren't as many plants flowering this year as there were in previous years," Punter said. "This may have been a response to frost damage in 1998. But overall, there was a reasonably good show of flowers."

Punter's review of rare plant population status has an additional purpose. This October, COSEWIC is holding a special meeting to reassess certain designated plant and animal species to determine if the designations are still appropriate. This meeting is proactive in regard to the upcoming legislation of the federal species at risk act. Once the act is legislated, COSEWIC designated species will be among those to be designated nationally. Hairy prairie-clover and small white lady's-slipper are two plant species on the list for review by COSEWIC in October. ■

■ Staff and Volunteer Updates

While on holidays this summer, Liz Punter was among 4,000 delegates who attended the International Botanical Congress in St. Louis, Missouri, August 1 to 7. Taking place once every six years, the congress was last held in North America in 1969 in Seattle, Washington. ■

New CDC volunteer Kevin Clarke, an environmental studies graduate from the University of Manitoba, is using his recently acquired GIS training from Red River College to map the distribution of dragonflies in the province using information submitted by provincial dragonfly survey volunteers. ■

The staff members of the CDC congratulate information manager François Blouin on his marriage August 21 to Dana, a fellow biologist working as a resource management assistant with the Manitoba Habitat Heritage Corporation. We wish you both much happiness in the years ahead! ■

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

The illustration on the front page by Dagny Lid was modified from *Vascular plants of continental Northwest Territories, Canada* by A.E. Porsild and W.J. Cody, National Museums of Canada, 1980.

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