

Survey of Provincial Crown Lands in South-eastern Manitoba for Rare and Endangered Plant Species, Phase II

FINAL REPORT

**By: Doris Ames, project manager
Native Orchid Conservation Inc.
Date: December 30, 2003**

Executive Summary:

Between April and November of 2003 we identified 20 locations containing 17 species of special concern and 5 species of cultural significance to First Nation people. During the entire Sustainable Development Innovations (SDIF) funded project period, which ran from April 2002 to November 2003, we identified 30 plant species of special concern (S1-S3) and 7 plant species of cultural significance to F.N. people. Approximately 400ha of land containing rare plants and their habitat was set aside from timber and peat moss harvesting as a result of this survey. This is the final report for the 20-month-phase-II portion of the project funded by SDIF to locate and document the occurrence of rare native plant species and plant species of cultural significance to First Nation people, on Crown land in southeastern Manitoba. This project is now complete. It was also Phase II of a larger survey project undertaken by NOCI that extended from April of 2001 to November of 2003. During this larger survey project we identified 35 plant species of special concern (S1-S3) and 16 plant species of cultural significance to F.N. people. All the locations were forwarded to the CDC and the Forestry Branch.

Introduction:

During the period April 2002 to November 2003, Native Orchid Conservation Inc (NOCI) continued to identify locations containing rare native plant species on Crown land in southeastern Manitoba. Our objectives were to complete survey forms and document GPS locations of rare orchids and other native plant species and forward this data to the Manitoba Conservation Data Centre and the Forestry Branch. We also wished to identify plant species of cultural significance to First Nation people in eastern Manitoba in consultation with tribal elders. As well we hoped to encourage new conservation activities that foster land use and resource use practice/changes and to educate Manitobans on the importance of conservation of rare plant species in Manitoba.

Results and Discussion:

This summer and fall we made an effort to access areas we had not previously explored and to go back to some areas we had visited in the first year but at a slightly different time. Due to the drought conditions this year we were able to drive on forestry and other bush roads that are often impassable. We were able to look at some old clear-cut areas off Forestry Road #1 and Forestry Rd.#13 for instance, to see how the understory

was regenerating, and were delighted to see Showy Lady's-slippers and Closed Gentians in bloom there. We also starting to explore areas in the north and west portions of the province. One highlight of our summer field activities was finding a huge area south of Contour containing hundreds of Grass Pink orchids. Another was finding a few Sparrow's Egg Lady's-Slippers in bloom in the Duck Mountains.

In May, we attended a meeting at Brokenhead Ojibway First Nation and became part of a committee formed by the members of that community to secure protected area status for the Brokenhead Wetlands. This is something our organization originally proposed and has worked towards for a long time. In June, we took members of the committee on a tour of these wetlands to see the rare orchids blooming there. Further to this end, I attended a Parks and Protected Areas Forum to learn how other provinces are managing their special areas. We also attended a meeting on the implementation of the new Species At Risk Act.

This summer we designed a sign to help protect a wetland that contains many Ragged Fringed Orchids and Rose Pogonia. It is located off Moss Spur Road in Sungro Horticulture's peat moss licence area in an area used by hunters and other A.T.V.er's. We wanted to let them know how special the wetland is and to ask them not to drive right through it. Sungro put the sign up for us in August and we are very grateful for their cooperation.

Our survey work and these conservation activities, where we try to protect native plant species by cooperating with the forestry, the CDC, private industry and the different levels of government, should lead to changes for the better in land practices. The Manitoba Conservation Data Centre is preparing a map of all the locations we identified and it will be made available to researchers as will this report. The medicinal plant locations will be available to our F.N. partners. Over the entire duration of our survey project (Phase I and Phase II) we have contributed thousands of volunteer hours. This represents a considerable economic benefit in savings to the taxpayers because the work was done by volunteers. The approximately 400 ha we have managed to identify as rare plant habitat and which is now protected, should help to preserve some of these rare plant species and their habitat and may act as encouragement for others to identify and protect even more.

This summer, in conjunction with this project, we conducted a number of activities that served to educate Manitobans and others about the need to conserve rare native plant species. We built three new displays and took them to malls throughout the City of Winnipeg as well as to the Manitoba Orchid Society's orchid show and to the Tall Grass Prairie Days in August. I wrote two articles, published in the Whiteshell Echo, on native plants found on the Whiteshell Provincial Park hiking trails. We published two newsletters with articles on rare native plant species. A powerpoint presentation on the identification of native orchids in the field was given by one of our volunteers to seniors at the Stay Young Centre on the Asper Jewish Community Campus. We were also asked to give that same presentation to a gardening group in Williams, Minnesota as part of their wildflower festival. We made many improvements and additions to our

website www.nativeorchid.org including photos, articles and scanned images of native orchid seed pods that should be helpful to people who want to be able to identify orchids when they are not in bloom. Most importantly we have begun work on a field guide for Manitoba Orchids, as none presently exists. This should help Manitobans to appreciate these beautiful flowers and to understand the need to protect them. We also conducted six field trips over the spring and summer where we had a chance to introduce 80 Manitobans to these plants and their habitat and talk to them about the need for their conservation.

Our survey work in documenting rare plant locations, and as an N.G.O. in successfully cooperating with resource harvesters, forestry, the CDC and others, should promote innovation in the environment and sustainable development industries as these groups are often seen to be at loggerheads with environmental N.G.O.'s. Our work with the Brokenhead Ojibway First Nation to protect the Brokenhead Wetlands and our cooperation with resource harvesters and government should help to encourage environmentally sound decisions and actions.

We believe the project was a success but it was not without its challenges. The survey areas are huge and Manitoba summers are short, hot and often full of bugs. The bush and bog is rough terrain and we relied on our amphibious A.T.V. (Argo) fitted with tracks, to get us into the worst places. The tracks do much less damage to the understory plants than wheels. A satellite phone, an emergency survival kit containing a first aid kit and food, a GPS, good topographical maps and a compass are necessities when going on these trips. We need many more people involved in this work. It would be a wonderful learning experience for students. We would like to see this work continue because so much of our province hasn't been botanically surveyed for many years. We need to know what's out there before we can make realistic plans to protect it. At the very least, the areas slated for resource harvesting throughout the province should continue to be looked at before they are assigned. It is our hope that eventually GIS mapping may be able to be used as sort of a coarse screen to eliminate some of the areas, so that the area to be ground-truthed could be cut down to a more manageable size.

Next Steps:

I realize that botanical survey work is very time consuming and can be expensive but I wonder if more volunteers might be used to get some of it done without such heavy costs. Perhaps the CDC could coordinate groups of knowledgeable volunteers who live in different areas of the province who would look for rare plants in the field, photograph them, take a GPS reading and report their findings to the CDC the way we did. They could fill out plant survey forms too. Then in the summer CDC staff could go out and verify unusual findings. Horticultural groups and other N.G.O.'s might be as glad to do this work as we are, and the only cost would be a few simple GPS units and one or two trips in the summer by staff to various regions to verify findings. After all Manitoba is lucky enough to have one of the highest rates of volunteerism in Canada.

Acknowledgements:

In conclusion, I would like to thank our partners who made this survey possible: The C.P.Loewen Family Foundation, Manitoba Conservation (Data Centre and Forestry), Brokenhead and Buffalo Point Ojibway First Nations, SunGro Horticulture, Manitoba Hydro, Environment Canada (Habitat Stewardship Program for Species at Risk), and Manitoba Conservation (Sustainable Development Innovations Fund). All of your representatives without exception were encouraging and helpful to us throughout the whole three years. All of us who participated in this project learned so much and really enjoyed the work. Thank you for having faith in us and in our organization. Thank you also to the many people who helped us and shared their knowledge of rare plant locations with us so generously. I am thinking especially of Ian Ward and Lorne Heshka, Peter Taylor and Birnie and Nora Reid. Also special thanks to Jason Greenall and Elizabeth Reimer from the CDC, Nestor Ewacha and Tim Swanson from Manitoba Conservation (Forestry), Lawrence Smith from the Brokenhead Ojibway First Nation and Pat Rakowski from Environment Canada (Habitat Stewardship) whose wise advice we benefited from many times. We are also grateful to our member volunteers, especially Mary and Jac Wiebe who were always ready to rescue us when we got stuck in the winter in timber sales and to let us know about their many interesting findings. We couldn't have done it without you. It is our hope that this project might encourage others to become involved in the documentation and conservation of rare plant species in Manitoba.

Tables of Special Plant Locations - SETS Project - 2001April-2003November

SPECIES OF SPECIAL CONCERN

Species		SRANK ¹	Locations
<i>Acorus calamus</i>	Sweet Flag	SR	AF,AK,AM,AT,BT,BS
<i>Asarum canadense</i>	Wild Ginger	S3?	C
<i>Calopogon tuberosus</i>	Grass Pink	S2	K,Y,AD,AE,AW,BH
<i>Chelone glabra</i>	Turtlehead	S2S3	P,H,AJ,AS,AU,AW
<i>Chimaphila umbellata</i>	Pipsissewa	S3S4	F,G,Q,R,S
<i>Corallorhiza striata</i>	Striped Coralroot	S3?	B,C,E,F,H,J,N,V,W
<i>Cuscuta gronovii</i>	Common Dodder	S1	AX
<i>Cypripedium arietinum</i>	Ram's Head Lady's-slipper	S2?	E,N,P,BA,BB
<i>Cypripedium reginae</i>	Showy Lady's-Slipper	S3?	I,N,O,T,H,K,BS,BR,BH
<i>Dicentra cucullaria</i>	Dutchmans Breeches	S1	AC
<i>Epigaea repens</i>	Trailing Arbutus	S3?	A,B,F,G,BI

Species		SRANK¹	Locations
<i>Gaultheria procumbens</i>	Teaberry	S3S4	F,G,L,Q,R,S
<i>Gentiana andrewsii</i>	Closed Gentian	S2->S4	T,AV,BR,BQ
<i>Gentianella propinqua</i>	Four-part Dwarf Gentian	S3	BQ
<i>Gerardia tenuifolia</i>	Gerardia	S2S3	AP,AQ,BL,BQ
<i>Goodyera tessellata</i>	Tesselated Rattlesnake-orchid	S2	F,G,L,M,R,S,U,V,AL,BI
<i>Heuchera richardsonii</i>	Richardson's Alumroot	S3->S5	AG,BP
<i>Humulus lupulus</i>	Hops	S3->S4S5	AN
<i>Impatiens noli-tangere</i>	Western Jewelweed	S2	BK
<i>Linium lewisii</i>	Wild Flax	S1->S4	BC
<i>Liparis loeselii</i>	Loesel's Twayblade	S3?	H,I,K,N
<i>Lycopodium clavatum</i>	Running Pine	S2->S4	AL
<i>Lycopodium tristachyum</i>	Ground Cedar	S2	F
<i>Malaxis monophylla</i>	White Adder's Mouth	S2?	H,T,E,F
<i>Malaxis paludosa</i>	Bog Adder's Mouth	S2?	AY,AZ
<i>Malaxis unifolia</i>	Green Adder's Mouth	S2?	F,E,AZ
<i>Nymphaea tetragona</i>	Small White Water Lily	S2	AR,Z,AG,AI
<i>Oenothera nuttallii</i>	White Evening Primrose	S4	AO
<i>Ostrya virginianum</i>	Ironwood	S2	AH
<i>Platanthera hookeri</i>	Hooker's Orchid	S2	A,B,D,E,J,L,N,O,V,P
<i>Platanthera lacera</i>	Ragged Fringed Orchid	S2	AA
<i>Platanthera orbiculata</i>	Large Round-leaved Orchid	S3	B,E,H,N
<i>Pogonia ophioglossoides</i>	Rose Pogonia	S1	K,W
<i>Sanguinaria canadense</i>	Bloodroot	S3?	AB
<i>Spiranthes magnicamporum</i>	Great-Plains Ladies-tresses	S1?	BQ

MEDICINAL PLANT SPECIES

Species		SRANK	Locations
<i>Acorus calamus</i>	Sweet Flag	SR	AF,AK,AM,AT,BT,BS
<i>Arctostaphylos-uva-ursi</i>	Bearberry	S5	F,G,M,Q,R,S,U
<i>Asarum canadense</i>	Wild Ginger	S3?	C
<i>Chimaphila umbellata</i>	Pipsissewa	S5	F,G,Q,R,S
<i>Coptis trifolia</i>	Goldthread	S5	B,E,W,N

Species		SRANK Locations	
<i>Cypripedium reginae</i>	Showy Lady's-Slipper	S3	I,N,O,T,H,K,BS,BR,BH
<i>Drosera rotundifolia</i>	Sundew	S5	P
<i>Gaultheria procumbens</i>	Teaberry	S3S4	F,G,L,Q,R,S
<i>Heuchera richardsonii</i>	Richardson's Alumroot	S5	BP,AG
<i>Humulus lupulus</i>	Hops	S3	AN
<i>Ledum groenlandicum</i>	Labrador Tea	S5	A,B,C,E,H,J,N,O,P,T,W
<i>Monarda fistulosa</i>	Bergamot	S5	H
<i>Monotropa uniflora</i>	Indian Pipe	S4	H,E,U,F,G,L
<i>Polygala senega</i>	Seneca Root	S4	H
<i>Sanguinaria canadense</i>	Bloodroot	S3?	AB
<i>Sarracenia purpurea</i>	Pitcher Plant	S5	C,E,O,P

(1)the notation Sm->Sn indicates the S-rank changed from m to n during the course of this project.

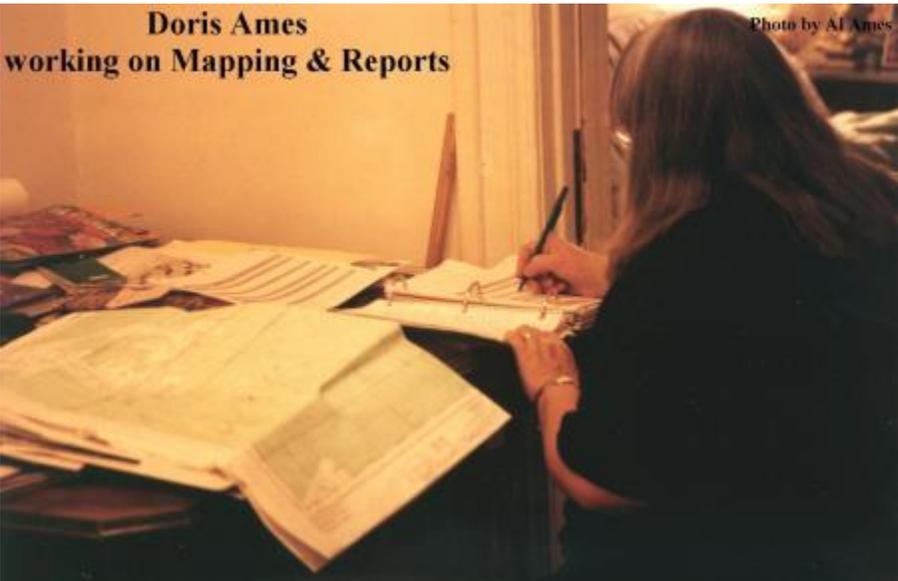
**Timber Sales
Logging North of #308**

Photo by Doris Ames



**Doris Ames
working on Mapping & Reports**

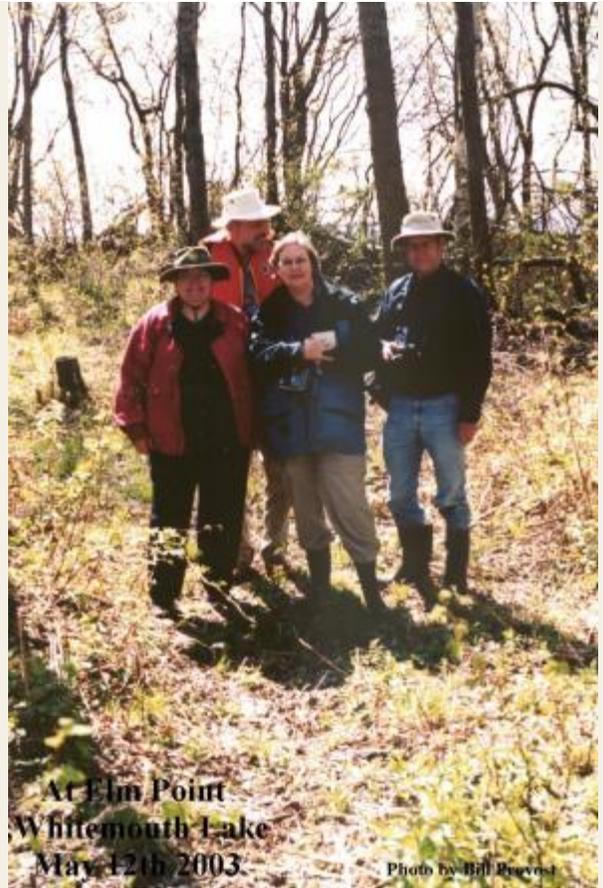
Photo by Al Ames



**Hooker's Orchid Pods
South of #15**



Photo by Richard Reeves



**At Elm Point
Whitemouth Lake
May 12th 2003**

Photo by Bill Reeves



Dutchman's Breeches

Photo by Eugene Reimer

**Finding Coralroot
Contour
May 27th 2003**

Photo by Eugene Reimer



**Manitoba Orchid
Display Board
Jan. 31 2003**

Photo by Richard Reeves







Sweet Flag

Photo by Eugene Reimer



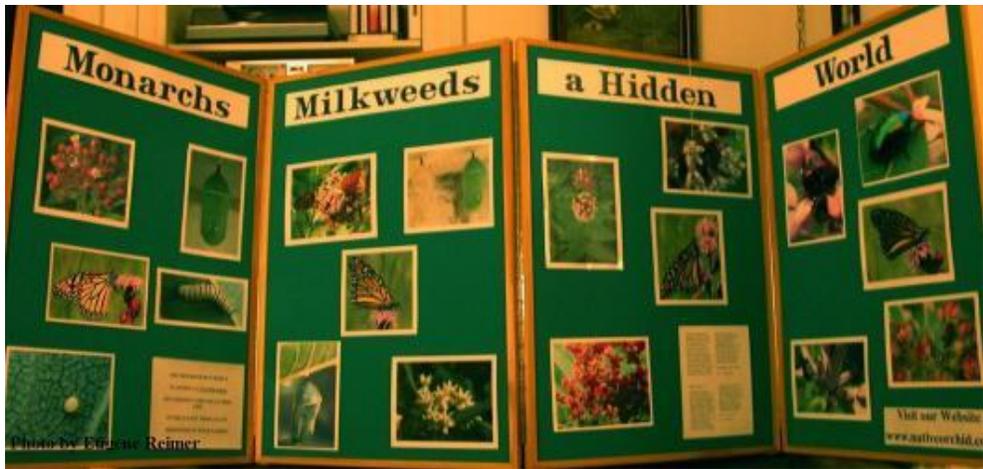
Pale Jewel Weed

Photo by Eugene Reimer



Showy Lady's Slippers

Photo by Eugene Reimer



Moss Spur Road Sign

Photo by Eugene Reimer



At Top of Baldy Mountain

Photo by Richard Reeves

