Selective Cutting - Effects on Orchid Growth - Overview

By Doris Ames

This is a 5-year project to study the effects of selective cutting of trees on the growth of native orchids and other understory plants, in the Sandilands Provincial Forest area of Manitoba.

Populations of native orchids are declining for a variety of reasons, including man-made and natural disturbances. Our goal is to preserve and, if possible, increase the number of native orchids in a cedar bog located in the Sandilands Forest Reserve. This area contains 13 species of native orchids. (See list below.) Some of them have been declining over the past 15 years.

We began in 1997, by selectively and carefully, cutting and skidding out some of the large trees in this forest, in order to let more sunlight reach the forest floor. The next step in 1998 and 1999 was to set up a number of test plots so that we could study the effects of this cutting on the understory plants, especially the native orchids. Detailed records of each plant species growing there, including variety, numbers, size, flowers, seedpods etc., were kept, as well as light levels at different times of the year. Amounts of debris etc were also indicated for each plot. We have four control plots where conditions have not been altered. These plots will continue to be monitored for five years to see if the decline in orchid numbers can be reversed. Dr. Karen Johnson, of the Manitoba Museum of Man and Nature is our scientific advisor.

The project will be of benefit to all of us by helping to preserve a beautiful part of our natural heritage. The results will be of interest to both professional and amateur botanists. Botany and Entomology Departments at the Manitoba Museum of Man and Nature and the University of Manitoba have expressed interest in the results of this study.

This is a huge project for any volunteer group to undertake. It requires many hours of field work under difficult conditions during the summer months. Travel expenses are high. We received a \$7,000.00 grant form the Manitoba Dept. of Sustainable Development but these funds will almost surely prove to be insufficient for the full five years. Because of the complex nature of this project we may have to extend it to six years.

We need help with this interesting project, and would welcome student volunteers and others with an interest in plants to join us. Financial donations from those who cannot work in the field would be much appreciated.

If you would like to see this unusual area for yourself, join us on our field trips this spring and summer. For further information, please contact our president Doris Ames, 117 Morier Ave, Winnipeg MB R2M0C8, Telephone 204-947-9707,

ORCHID SPECIES LIST

Common Name	Botanical Name
Small Round-Leaf Orchid	Amerorchis rotundifolia
Fairy Slipper	Calypso bulbosa
Striped Coralroot	Corallorhiza striata
Early Coralroot	Corallorhiza trifida
Ram's Head Lady's Slipper	Cypripedium arietinum
Large Yellow Lady's Slipper	Cypripedium calceolus var. pubescens
Small Yellow Lady's Slipper	Cypripedium calceolus var. parviflorum
Showy Lady's Slipper	Cypripedium reginae
Lesser Rattlesnake Plantain	Goodyera repens var. ophiodes
Hooker's Orchid	Platanthera hookeri
Tall Leafy Green Orchid	Platanthera hyperborea
Blunt-Leaf Orchid	Platanthera obtusata
Large Round-Leaf Orchid	Platanthera orbiculata