Newsletter of Native Orchid Conservation Inc.



Native Orchid Conservation Inc.

Upcoming Board Meeting:
Wednesday, December 1, 7:30 PM
Location: Powerland Computers,
562 St. Mary's Rd
All are welcome to attend.

Orchid of the month: Calypso bulbosa ('Fairy or Venus Slipper')

NOCI Website: www.nativeorchid.com

For more information on NOCI, please contact Bud Ewacha at 253-4741

As we publish our last "Native Orchid News" of the millennium, the only opening statement that comes to mind is that this has been without doubt one of the most beautiful autumns of the millennium. It would seem that at least in the City of Winnipeg, any person who ever had any intention of doing fall cleanup, will have beat old man winter by at least three weeks! Of course, on a sober note, as we quickly approach the new century, we must all wish that what people and organizations have started in terms of conservation and habitat preservation, will lead to sustainable development practices and policies that will preserve our natural world for future generations to witness and enjoy. At the turn of this century, who could have foreseen the loss of habitat, loss of species, loss of wilderness that resulted from the industrial machine of the 20^{th} Century. Let us hope that we are on the right track to survival. We are one of the many groups and organizations dedicated to leaving the wild world intact and flourishing for generations to come.

Native Orchid Conservation Inc. continues to get great publicity by way of articles and events. You may want to get a copy of "Manitoba Gardener", Fall 1999, as it contains a very attractive and informative article entitled 'The wonder of wild orchids' by our own Doris Ames. Bud Ewacha is also in the limelight. Bud had an article published in the Prairie Garden magazine and in the June 1999 edition of Nature Saskatchewan. But it is Bud's article entitled 'The Need for Preservation of the Gull Lakes Wetlands', June 1999, named

best scientific article of the year by the editorial board of Blue Jay Magazine that really has us going. Congratulations Bud!

Another highlight is the success of the October S.A.G. Conference (Science Advisory Group, of the Manitoba Dept. of Education) where NOCI unveiled our new educational displays "Insect Eating Plants of Manitoba", and "The Monarch Butterfly and the Milkweed". We found Science teachers to be very positive toward our new display and keen to enter to win a NOCI classroom visit to their school complete with interactive group workbooks on a number of topics. "... And the winner is:" Cheryl Marsh of Springfield Heights Elementary School in Winnipeq.

We are very much looking forward to the new year. As in the past year, our displays will be seen in many visible locations such as the Fort Whyte Centre, the Manitoba Orchid Show, the Living Prairie Museum, and a number of shopping malls. We are planning an extended number of field trips from May to September of 2000 and will publish the specifics both in an upcoming Newsletter and on our website.

Please take the time to review the enclosed 2000 membership registration. We are very proud of what has been accomplished in the short history of Native Orchid Conservation Inc. and look forward to great things with your support. Please note that NOCI has full charitable status as a conservation organization. If you are interested in attending a NOCI Board meeting, we meet the first Wednesday of every month at Powerland Computers on St. Mary's Road. We appreciate the convenient premises kindly provided by Wes Penner and his staff at Powerland.

Orchid of the Month (see cover photo):

Fairy Slipper (Calypso bulbosa)

'Calypso', circumpolar in distribution, is found across the boreal forest region. Calypso is named for the beautiful nymph in Homer's Odyssey. Bulbosa is the Latin meaning "bulbed," as this plant rises from a bulbous corm. The single leaf is ovate, solitary, basal, 2-6 cm long and 2-4.5 cm wide. The Calypso Flower is solitary, pendent, and terminates on a 5-15cm tall stem (in this region). The sepals, which are 1-2 cm long and 2.5-5 mm wide, are purplish-pink to purplish-white. The Calypso petals are similar to the sepals. The Labellum is whitish-pink, and streaked with purple. The "apron" has a brush of yellow hairs near the opening to the labellum. It is hard to mistake the Calypso as it is unique in appearance. Calypso flowers from late April to early May in our area. Calypso is known to be pollinated by Bumblebees. The bees are attracted by the yellow bristles assuming a reward of pollen or nectar, but upon visiting the flower, find neither.

Calypso is said to be in decline in particularly the southern part of its range. This may be attributed to global warming and/or modern forest practices. In Manitoba, you can find Calypso in the Sandilands Forest Reserve (NOCI study area), the Gull Lake Wetlands, throughout eastern Manitoba, and north as far as the Hayes River.

The following, as contributed by Doris Ames, discusses some orchid wonders. Orchid afficionados will certainly appreciate the content, but at the same time, it serves as a nice 'Orchid-101' overview for those who to this point have just seen the orchid as a strange and beautiful flower.

ORCHID FACTS

Plants have adapted themselves to survive in nearly every type of habitat on earth. Some have become very specialized. Orchids are an example of a plant species that has developed specialized flowers to attract specific insects and to ensure that these insects pollinate them. Manitoba has 39 species of orchids.

The Showy Lady's-Slipper, for example, has a structure called a column consisting of fused stamens and pistils. Only orchids have this kind of structure. The column is located in the centre of the flower. The Showy Lady's-Slipper also has two anthers with two sticky masses of pollen called pollinia. The lower petal is modified into a showy lip. The beautiful snow-white sepals and petals and the large pink lip, combined with it's subtle fragrance, make this flower irresistible to bees. Pollination occurs in the following manner.

The bee lands on the lip and enters through the opening in the centre. It soon finds out there is no nectar but it can't get out again because the rim of the lip is incurved. Struggling to get out, it finally sees the lines pointing to the escape openings at the base of the pouch. As it squeezes through the narrow passage, it's thorax comes into contact with the stigma. This forces it to deposit any pollinia it may have picked up from a previous visit to another Showy Lady's-Slipper. When it finally squeezes out, it's thorax rubs against the anthers and it picks up more pollinia to be delivered to the next flower it visits. The bee never gets any nectar and the edible pollinia always remain out of reach on it's back. Eventually the bee learns to avoid these flowers but not before it has pollinated several plants.

Other species of orchids have different tricky ways to ensure their pollination. We do not understand just how it is done in many cases. Research is going on all over the world about orchids and their pollinators. Manitoba's two endangered orchids, the Western Prairie Fringed Orchid(Platanthera praeclara) and the Small White Lady's-Slipper(Cypripedium candidum), are both being studied at present. We need to remember that all native orchids are uncommon and should not be picked or transplanted.

Orchids adapt themselves for survival in many other interesting ways. This makes them fascinating subjects for study by people around the world. Some orchids are even edible. Vanilla extract, used to flavour baked goods and icing, is made from the seed capsule of the tropical Vanilla orchid.

For further reading try:

Johnson, Kershaw, McKinnon, Pojar

Plants of the Western Boreal Forest and Aspen Parkland
1995. Lone Pine Publishing and Can. Forest Service, Canada

You can learn more about wild orchids by viewing our website at $\underline{www.nativeorchid.com}$. For information on exotics, check out $\underline{www.orchidmall.com}$

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