

The Wonder of Wild Orchids

by Doris Ames (Native Orchid Conservation Inc.)

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The other day I read an article by a learned fellow rejecting the idea that orchids are rare in Manitoba. He went so far as to warn us "city slickers" not to get all "googily" over them. This was too much for me. I feel it's time to speak out in defense of orchid enthusiasts everywhere.

In case you think I might be a fanatic about orchids, let me reassure you. I have noticed the moccasin-flower's uncanny resemblance to the mooseberry flower immortalized in old TV cartoons (some of you will be old enough to remember it). I have also been put in my place by my very own brother after I showed him a striped coralroot (*Corallorhiza striata*): "you mean you made me walk all that way to see this?" But I digress.

Manitoba's 39 orchid species range from the ethereal, three-inch-high fairy-slipper (*Calypso bulbosa*) to the grandly pristine western prairie fringed-orchid (*Platanthera praeclara*), and include the many insignificant "little green jobs" such as Hooker's orchid (*Platanthera hookeri*). All have their points of interest. Many are beautiful, and some are extremely rare.

Orchids show great structural variety, especially in their modified petals or lips. They use intriguing mechanisms to attract insects and display endless ingenuity in ensuring these creatures do the job of pollinating them. Grass-pink (*Calopogon tuberosus*), for example, has its lip uppermost and sports a "beard" of golden hairs to conceal a spring-loaded trap from its confused pollinator. He's been used, and he's out of there - without a taste of nectar - before he knows what hit him. An orchid's subtle or sometimes heady scent is geared to a very specific insect. For example, western prairie fringed-orchid (*P. praeclara*) has a powerful scent at night, and markings visible only under ultraviolet light. This, combined with its long spur, might lead you to believe that its natural pollinator is a night-flying moth - but with orchids, appearances can be deceptive.

Orchids constitute one of the largest plant families, with approximately 20,000 species worldwide. And while these plants are masters at adapting themselves to all kinds of habitats, this does not mean their survival here is assured.

Manitoba was covered with glaciers as recently as 10,000 to 20,000 years ago, and all the orchid species here have come from somewhere else. These species are still evolving as they try to find their niche in our landscape; species such as lady's tresses (*Spiranthes*) and lady's-slippers (*Cypripedium*) are developing before our eyes. The plants are facing heavy selective pressures, adding to the fascination of this plant family here.

Additionally, because of the harsh climate, orchids in the temperate zone are nearly all terrestrial, growing out of the earth. In tropical countries, the species is stable and well-established, and many forms of orchids, such as air plants (epiphytes), can grow there. For these various reasons, I think the future for the orchids in our bogs, prairies, and woodlands may be far more at risk than for those of South America.

Human activities have had a profound effect on the orchid's habitat, whether that is bog, fen, prairie, or woodlands. Many experts believe our native orchids, and other plant species as well, are in steep decline. We need to protect such rare and endangered plants and to preserve their habitat.

Native orchids are very difficult to grow from seed because this must be done under sterile laboratory conditions. However, people wishing to try growing native orchids can order seedlings from reputable nurseries such as Hole's Greenhouses in Alberta. I do not recommend digging the plants up in the wild. They are hard to transplant and many fail during the first five years. Some lady's slipper varieties are extremely slow growing at first and some clumps are as much as 50 years old. It is tragic to see them fail due to unnecessary transplanting.

Lab-propagated seedlings are robust, and growing them does not diminish the already inadequate gene pool. It is illegal to dig up plants along main highways and parks or to dig up plants anywhere which are on the federal government's endangered species list. That list includes the western prairie fringed orchid, small white lady's slipper, and Great Plains ladies'-tresses.

To see native orchids in Manitoba, you need look no further than a cedar bog in late April or early May to find fairy slippers, and along the sides of our main highways and parks in June for large yellow lady's slippers (*Cypripedium parviflorum* var. *pubescens*), small yellow lady's slippers (*C. parviflorum* var. *makasin*) and showy lady's-slippers (*C. reginae*). Moccasin-flowers (*C. acaule*) and the coralroots (*Corallorhiza* spp.) can be found in coniferous forests in May and June. Western prairie fringed orchid (*Platanthera praeclara*) and the small white lady's slipper (*C. candidum*) can be found near Tolstoi, Manitoba. Also in May and early June, you can find round-leaved orchids (*Amerorchis rotundifolia*) ram's head lady's-slippers (*C. arietinum*) in bogs and fens. The exquisite lady's tresses (*Spiranthes* spp.) and the rattlesnake plantains (*Goodyera* spp.) can be found in August and September in coniferous forests and elsewhere.

One can find dragon's mouth (*Arethusa bulbosa*), grass-pink (*Calopogon tuberosus*), and rose pogonia (*Pogonia ophioglossoides*) in rough and quaking bogs in remote areas, but this search is best conducted with the help of experienced guides. Some of the more unusual varieties or "little green jobs" are difficult for the inexperienced to spot.

Native Orchid Conservation Inc. conducts field trips to its study areas for its members at different times of the year.

You can learn more about wild orchids by checking out computer websites such as Native Orchid Conservation Inc. (www.nativeorchid.org). Or try the Orchid Mall (www.orchidmall.com).

The following books are good sources of information on native orchids:

(The first two books are out of print but can be found in second-hand bookshops)

1. *Orchids of Minnesota*, Welby R. Smith, 1993.
2. *Guide to the Orchids of North America*, Dr. W. Petrie, 1981.
3. *Plants of the Western Boreal Forest and Aspen Parkland*, Johnson, Kershaw, MacKinnon and Pojar, 1995.
4. *Orchids of Manitoba, A Field Guide*, 2nd Edition. Doris Ames, et al., 2016.



Western prairie fringed-orchid



Showy lady's-slipper



Slender lady's-tresses



Hooker's rein-orchid



Moccasin-flower



Large yellow lady's-slipper

If you would like to learn more about native orchids and help with their conservation, please join us. Write to Native Orchid Conservation Inc., P.O. Box 40057, Winnipeg, MB R2C 4P3, phone 204-223-8209, email president@nativeorchid.org. (Updated November 2016).

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