

Self-Guiding Interpretive Trail



Orchids (*Cypripedium reginae*.) Individual plants develop several stems in a clump because of the rhizome root system. The variation between plants is evident here, with a clump of very pale pink flowers growing beside a plant with deep rose-coloured flowers.

Post # 3

Management of the vegetation within the fen is critical to the protection and enhancement of the orchids and the conservation of a healthy wetland. The area you are in now has a semi-open canopy. It creates a variety of light and shaded habitats, the most suitable conditions for seedling development and new orchid growth. You will notice considerable difference in the temperature, humidity and light conditions as you move along the trail into the dense canopy of the cedar forest ahead.

The cedar, tamarack and competing shrubs are thinned annually. Joe Purdon began this work over 50 years ago and some of the original stumps and brush piles can still be seen. The brush trimmed in the fen is left in small piles or scattered. This minimizes the impact on the site and provides new material which will rot and supplement the organic layer.

As you enter the more dense area, you'll see a large number of orchids in a 20 foot radius; they are all transplants. It was necessary to construct the boardwalk through areas densely populated with orchids to provide a good opportunity to view the flowers closely. Therefore, transplantation of those orchids that were previously under the boardwalk was necessary.

Post #4

The area surrounding this post has been one of the most prolific zones in the orchid colony. Unfortunately, the thick tree canopy has created a less favourable habitat producing many orchids with vegetative stems and without flowers. Because the habitat will deteriorate further if left unmanaged, this area will gradually be thinned in later years to allow the colony to flourish again.

Also seen at this location is another unique fen plant: the pitcher plant. It has a tall, single, bronzy-red flower which grows above the specialized cup-shaped leaves on the ground. This plant is carnivorous. Insects are attracted to the flower, venture into the leaves, but are unable to crawl out because of the recurved hairs. They drown in the water that is collected in the leaf and the plant then digests them and absorbs the nutrients.

A few steps further along the trail you will notice a stake in the ground with a series of letters and numbers on it. This is a marker for the grid, established in the fen during a scientific study. The entire fen was inventoried and the location and number of flowers recorded on a map. That is how fluctuations in orchid numbers from the last count of 16,000 can be determined and how the effectiveness of the management practices can be monitored.

Post #5

The area around this post has many indications of the hydrology of the fen. For example, the stump on the opposite side of the walk

demonstrates how shallow the soil is in this area. Trees spread their roots laterally in a layer of soil between 15 and 70 centimeters. If you look down the holes left from the tree stumps you will see how the underlying water seeps out of the organic muck. This type of underground water body is found in fens and bogs. The difference is that the internal water will remain stagnant under a bog but will flow slowly in and out of a fen, as is the case at Purdon.

This is a natural area. Thank you for leaving it as you found it.

- Use marked trails and stay on boardwalk.
- Do not pick the orchids or other plants.
- Keep pets on a leash.
- Motor vehicles are prohibited.
- Overnight camping, open fire and firearms are not permitted.
- Use at your own risk; this is an unsupervised area.

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Guide to Purdon Conservation Area and the Orchid Trail

Purdon Conservation Area was once part of the property of the late Joe Purdon. In the 1930s, Mr. Purdon discovered a clump of about a dozen Showy Lady's Slipper Orchids growing in the wetland on his farm. His love of the outdoors led him to investigate the nature of wetlands and the special needs of the orchids.

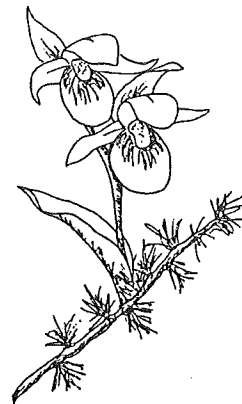
Wetlands are important to the ecosystem. They maintain and improve water quality, protect shorelines from erosion, aid in flood control, provide fish and wildlife habitat, and benefit our economy and society through resource products and outdoor recreation. This wetland contains a marsh and a swamp in the area near the beaver pond, and a fen where the orchids grow.

While working in the fen, Mr. Purdon learned about orchid cultivation and he began to apply beneficial management practices, including thinning the brush to create new areas for orchid development, maintaining appropriate water levels and hand pollinating the plants. For the next fifty years, Mr. Purdon became the steward of this wetland. The orchids multiplied and thrived.

As he neared the end of his life, Mr. Purdon wanted to ensure that the wetlands would be enjoyed and appreciated by future generations. Mississippi Valley Conservation

acquired the site in 1984. A scientific study was then commissioned and recommended the creation of a conservation area and outlined a management plan for future development. It also included a detailed inventory of the vegetation and wildlife species and determined that the small clump of Joe Purdon's original orchids had grown to a staggering 16,000 plants.

To protect the fen and yet bring the beauty of the orchids within easy access of the visitor, a wooden boardwalk was constructed through the heart of the colony. The trail from the upper parking lot leads to a scenic lookout over a beaver pond, a picnic area with a pit toilet, and a set of stairs that leads down to the boardwalk. The lower parking lot, picnic area and pit toilet are wheelchair accessible. The platform attached to the boardwalk contains a gift stand which is open during the orchid blooming period, and a series of "orchid trees" that highlight the names of people who support Purdon Conservation Area by "adopting" an orchid.



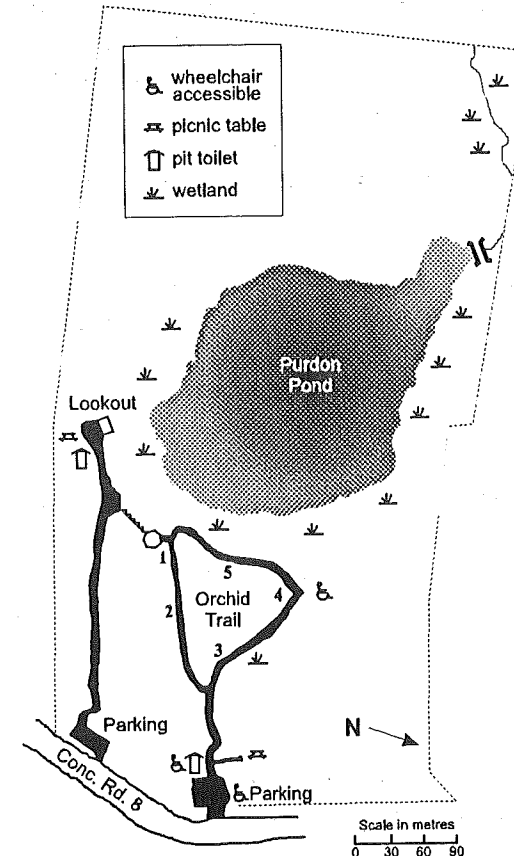
Thanks to the remarkable work begun by Joe Purdon, and continued by Mississippi Valley Conservation, thousands of people are able to experience the wonders of a wetland each year.

The Orchid Trail

Follow the boardwalk and watch for five markers (1-5) along the way.

Post # 1

The hill behind the platform marks the edge of the fen. Water seeps down from the hill and pools under the fen's soft peat layer. The soil, vegetation and boardwalk all float on an underground pond of saturated organic material.



Reach down and touch the surface. You will notice that the moss has a soft, spongy feel. If you push down on the surface, water can be squeezed out. This saturated moss and peat soil mat is typical of a fen. Because it is very difficult to walk on a fen without sinking into muck and water, the boardwalk was constructed with underbraces, creating a snowshoe effect of floating on the soil mat.

This fen is home to many wetland plants, the most spectacular being the Showy Lady's Slipper Orchid (*Cypripedium reginae*.) There are numerous other small flowers, mosses, grasses and wetland trees which you will find at various times of the year.

Post # 2

The most common evergreen trees found in Ontario fens are the white cedar and tamarack, as seen here. The cedar (*Thuja occidentalis sp.*) has a light, soft wood noted for its durability and is considered ideal for construction. In fact, the cedar that was removed from the fen was used in the construction of the picnic area and parking lot facilities. The tamarack, also known as the larch (*Larix laricina sp.*), is less common than the cedar. It has small clusters of needles projecting from the twigs. The needles are soft because they are deciduous and grow new each year, never having a chance to become old and tough. The tamarack is the only coniferous tree in Ontario that has deciduous needles.

If you are here between mid-June and mid-July, a few steps further on the trail are a small patch of blooming Showy Lady's Slipper