

# Nova Scotia's Wild Plants: How are they doing?

By Mark Elderkin, Wildlife Division



Trillium erectum

## Status of Species

**1663** wild species assessed  
**-535** species non-native exotics (almost 1/3)  
**=1128** native species

## Of the 1128 native species

**22** (2%) "missing" - thought to be extirpated or extinct.  
**209** (19 %) known or thought to be at risk 90 species at risk  
**119** species sensitive to human activities and natural events  
**216** (19 %) species could not be assessed  
(incomplete knowledge of their occurrence here)  
**681** (60 %) species secure and without significant threats

Over the past three years botanists have been assessing the status of Nova Scotia's 1663 species of wild plants. This is the first comprehensive status assessment of all wild plants in the province ever undertaken. This initiative is part of a larger cross-Canada project underway to assess the status of all wild species in the country. Results from the Nova Scotia assessments for plants and other organisms are available in a searchable database. See <http://www.gov.ns.ca/natr/wildlife/genstatus/>. Comprehensive Canadian botanical assessments will become available in 2005.

Our provincial status assessments took several hundred hours to complete. The work involved contributions of information from a variety of sources, including published literature, naturalists, government scientists/biologists, conservation organizations, and universities. We first reported on the process for assessing the general status of wild species in July 2001 (Vol.4 No. 2).

The World Conservation Monitoring Centre, which tracks the state of global resources, recently reported that the top two causes of species extinction on the planet are habitat loss and invasive species. Plants, unlike most animals, are especially vulnerable to these threats given their lengthy growth history on specific sites and limited abilities to move elsewhere. Many of our native species have low tolerance to any disturbance and are sensitive to alteration of their physical environment. Native species may also be sensitive to invasions of exotic species that were accidentally or deliberately introduced and later crowd out native plants in the same habitat.

Results of the Nova Scotia assessments were surprising even to some of the botanists involved. Most surprising perhaps was the realization that of the 1663 wild species assessed, 535 species or nearly one third of those known were non-native exotics. We will probably never know the full impact that exotics have had on the remaining 1128 native species. What is clear, however, is that about 19 per cent of all native species remaining in the province are either known or thought to be at risk (90 species) or sensitive to human activities and natural events (119 species). A further 216 species, or about 19 per cent, could not be assessed because of incomplete knowledge of their occurrence here. The largest group, 681 native species or about 60 per cent, are considered to be secure and without significant threats. The remaining 22 species, or about 2 per cent, are “missing” and thought to be either extirpated or extinct.

These findings will have several implications for directing our efforts to conserve species of wild plants in the years to come. Immediately, the results provide a “first alert” system that can be used to inform decision makers on land use allocation and practices directed through governments and industry. They can also be used to direct our limited dollars and energies through stewardship, inventory, monitoring, research, and recovery to focus our efforts toward those species most imperiled and to prevent others from becoming so.

Finally, the results of this project raise awareness in the public and natural history community, to become involved in plant conservation by gathering and sharing new data that will fill the gaps in our knowledge. Anyone interested might consider getting involved with the Nova Scotia Nature Trust, Wild Flora Society, or the Federation of Nova Scotia Naturalists. By doing so, it is possible that even the rarest of our wild flora will be here for future generations to enjoy. We are especially interested to hear of any sightings of our 22 “missing” plants, which haven’t been seen in at least 30 years. If you have any information about these missing species, please contact DNR or the Museum of Natural History.



Calapogon puchellus



Willow catkin



Ramshead Ladyslipper