

Extra Report to NWT CIMP
Project “General Status Ranking of all Vascular Plants in the NWT”

Funded in 2003-04

Background

This project is part of commitments made as part of the *Accord for the Protection of Species at Risk in Canada*. It contributes to the next report on the General Status Ranking of Wildlife to be published in 2005, and is consistent with a workplan established for this work and agreed upon by all jurisdictions in Canada.

In the Northwest Territories (NWT), as in the rest of Canada, these ranks are used to provide lists of rare or “may be at risk” species to help in the protection of biodiversity during a wide array of activities including impact assessment of development projects, land use planning, determination of monitoring priorities and general ecological management programs.

Update

The general biological status of all vascular plants was ranked between Fall 2003 and March 2005 as part of the workplan on General Status towards the 2005 report. These draft ranks are now ready for a final review by all wildlife co-management Boards and by other experts on plants in the NWT.

The work included a complete verification and update of NWT plant taxonomy (species level), updating the number and geographic location of plants collected in the NWT, listing and evaluating potential threats to each species, describing trends and uncertainties if applicable, providing draft ranks, and providing copies or information on all references used during the work. All this information is noted in a new version of the NWT Species Monitoring Infobase. This version will be available to the public on the internet by December 2005.

The contribution from NWT CIMP was used to cover costs associated with preliminary taxonomic work, literature and collection searches on all subsets, and detailed drafting of ranks.

A summary of ranks and findings is provided in the table below.

Vascular Plants in the Northwest Territories -Summary

General Status ranks	Abundance equivalence	Number of species	% of NWT plants
At Risk	Rare and At Risk	0	0%
May be at Risk	Rare (less than 5 sites)	146	15%
Sensitive	Uncommon (6-20 sites)	194	19%
Secure	Common/Abundant	577	57%
Undetermined	Unclear	87	9%
NATIVE VASCULAR PLANTS		1004	
Exotic	Not native to NWT but now present	86	8%
ALL VASCULAR PLANTS		1090	
Presence Expected	Not yet detected but expected	20	2%
Not Assessed	Not in the NWT - taxonomy revised	152	
Number of plant species reviewed		1262	

Next steps

This information is now available for review. It is expected that the review will not change many ranks. The draft ranks are available to all and can be used, for example, to investigate areas with high probability of finding rare plants, to track our knowledge on plants, and to report on the advances of exotic species or of species normally found further south. The relatively high percentage of rare plants (15%) in the NWT may be explained by the:

- **Relatively small numbers of botanical surveys in the NWT:** as more areas are surveyed for rare plants, many species will be moved from “rare” to uncommon or abundant. Work during the Pipeline EA has already resulted in changing the ranks of some species. Many botanical surveys are also performed for which we have no verified specimen. These voucher specimen are essential to determine and confirm the presence of a rare plant. Rare plants are not usually easy to identify in the field.
- **Relatively large number and types of special areas:** These areas include unglaciated zones, hot springs, old growth forest stands, salt plains, alvars, sand dunes, pingos, extensive muskegs and fens, freshwater and saltwater deltas, screw slopes, calcareous cliffs, exposed silt beds, alpine refugia, prairie remnants, and others: The NWT and Yukon are known for their zones that were not glaciated during the last glacial event. These are rich in Berigian wildlife. Also the NWT, as an extension of the prairie ecosystems further south, offers areas called prairie remnants. The geological history of the NWT explains the high concentration of alvars, hot springs, pingos, salt plains, alpine refugia,, etc. Old growth forests are present in regions with low fire frequencies such as in the Deh Cho. All these zones and areas have higher probabilities of sheltering rare vascular plants.
- **Edge effect:** The NWT is at the edge of many species distribution. Some species typically found in eastern and southern Canada, are found in low numbers here. Some species typically found in Asia-Alaska-Yukon (Berigian) are found at the eastern edge of their distribution here. These species may be abundance elsewhere, but are rare in the NWT. Details on this “edge effect” are noted in the Infobase.