

A Field Guide to Explore this Exhibition

Artist Jennifer Wanner has taken one plant from each of the 13 botanical collages in this exhibition and combined them into this image, *Periculum - Canada*. Take this sheet with you as you look at the individual artworks. Can you see the flower of the Eastern Mountain Avens (4) in the collage that represents Nova Scotia? What about the roots of the American Ginseng (7) depicted in the collage representing Ontario and Québec? Sometimes plants appear in more than one work!



1. Furbish's Lousewort (New Brunswick)
2. Yukon Draba (Yukon)
3. Hairy Braya (Northwest Territories)
4. Eastern Mountain Avens (Nova Scotia)
5. Gulf of St. Lawrence Aster (Prince Edward Island)
6. Barrens Willow (Newfoundland and Labrador)
7. American Ginseng (Ontario)
8. Porsild's Bryum (Nunavut)
9. Green-scaled Willow (Québec)
10. Limber Pine (Alberta)
11. Western Prairie Fringed-orchid (Manitoba)
12. Victoria's Owl-clover (British Columbia)
13. Slender Mouse-ear-cress (Saskatchewan)

Plant Species in *Periculum* – Canada

1. Furbish's Lousewort (*Pedicularis furbishiae*), New Brunswick

In 1980 this perennial herb was the first plant in Canada to be designated as nationally endangered by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). Lousewort was thought to have been extinct until surveys in Maine were done for a dam project in 1977; therefore, it is considered a Lazarus taxon (a species believed to be extinct, only to reappear).

2. Yukon Draba (*Draba yukonensis*), Yukon

This small herbaceous biennial mustard is endemic to one meadow complex in southwestern Yukon and found nowhere else on earth. It is endangered due to industrial activities, nearby human habitation, invasive species and trampling by humans and forest encroachment. It has no legal protection in Canada.

3. Hairy Braya (*Braya pilosa*), Northwest Territories

Hairy Braya is an extremely rare endemic plant that is believed to be a glacial relic and is only found in an area that remained ice-free during the last ice age. It is endangered by the loss of habitat through very rapid coastal erosion and saline wash resulting from storm surges and permafrost melting.

4. Eastern Mountain Avens (*Geum peckii*), Nova Scotia

This endangered perennial herb occurs only in eastern North America. Its habitat has declined due to encroachment by woody vegetation that has been exacerbated by the artificial drainage of sites, trampling by nesting gulls, all-terrain vehicles, road maintenance and residential/tourism development. Fewer than 9,000 mature individuals remain with most found on private land.

5. Gulf of St. Lawrence Aster (*Symphyotrichum laurentianum*), Prince Edward Island

This threatened annual halophyte (a plant that grows in high saline waters) is a rare endemic of the Gulf of St. Lawrence and is found in Prince Edward Island, Québec and New Brunswick. Threats to this aster are both natural, such as flooding, overwash and competition from other plants, and anthropogenic such as development and recreation vehicles.

6. Barrens Willow (*Salix jejuna*), Newfoundland and Labrador

The Barrens willow is endemic to the limestone barrens of the Great Northern Peninsula of Newfoundland, and plays a significant role as a food source or shelter to a number of invertebrate species. It is endangered by habitat loss and degradation from land use activities. An individual specimen may live up to 100 years.

7. American Ginseng (*Panax quinquefolius*), Ontario

This long-lived forest perennial is found in Ontario and Québec. Aboriginal people have used it for a wide range of medicinal purposes, including a cure-all when other treatments have failed. The main threats to this endangered species are its small population sizes with low reproductive potential, habitat loss and degradation associated with clearing, logging, grazing and harvesting for commercial purposes.

8. Porsild's Bryum (*Haplodontium macrocarpum*), Nunavut

This threatened moss is found in Nunavut, British Columbia, Alberta, Newfoundland and Labrador. Its disjointed distribution is believed to represent the remnants of a much wider range that was fragmented by glaciation. The main threats to this species are drought, wildfire, temperature extremes, recreational activities and industrial activity. Only one out of 10 known locations is protected.

9. Green-scaled Willow (*Salix chlorolepis*), Québec

This threatened species is only found in Gaspésie Provincial Park. However, one important population site is highly exposed to pedestrian traffic because some hikers take shortcuts around obstacles, thereby trampling the willow.

10. Limber Pine (*Pinus flexilis*), Alberta

Limber pine is a slow-growing, long-lived endangered species that occurs in Alberta and British Columbia. The oldest tree on record in Alberta is 991 years old. These trees can provide us with climate change information that dates back farther than any historical records. Threats to the species include White Pine Blister Rust (an introduced pathogen), Mountain Pine Beetle and climate change. Two-thirds of Limber Pine trees are expected to be lost over the next 100 years.

11. Western Prairie Fringed-orchid (*Platanthera praeclara*), Manitoba

The Tall Grass Prairie Preserve in southeastern Manitoba is the only Canadian site for this endangered species and contains 50 percent of the world's population. Threats to the species include loss of native prairie habitat, draining of wetlands, herbicide applications, illegal removal of plants, overgrazing and annual haying before plants have produced seed.

12. Victoria's Owl-clover (*Castilleja victoriae*), British Columbia

Victoria's Owl-clover is a newly described species (2007) that was previously misidentified as Paintbrush Owl-clover.

Approximately 98 percent of the global population of this small, endangered annual herb is found on one Canadian site. The primary threats are habitat loss and/or degradation due to urban/residential development, recreational activities and invasive species.

13. Slender Mouse-ear-cress (*Halimolobos virgata*), Saskatchewan

This threatened biennial (a plant that takes two years to grow from seed to fruition and then dies) from the mustard family is found in Alberta and Saskatchewan. It appears to be unable to grow on previously turned soil. Other limiting factors include the loss of habitat as a result of urban and industrial development (such as oil and gas activities) and agriculture, invasion by non-native species, all-terrain vehicle recreation and other human activities.