

# Broad Beech Fern

*Phegopteris hexagonoptera*



Status: **Special Concern**

## Threats:

- ◆ Logging operations and forest clearing
- ◆ The mechanization of maple sugar operations
- ◆ Increasing recreational activities in forested areas
- ◆ Hydrological alterations



Photo: John Knouse

## Description:

- ◆ Attractive fern 25-75 cm tall
- ◆ Stem is 1/2 the height of the plant; tan and smooth at the top, dark and scaly at the base
- ◆ Frond is as broad as tall, dull green, twice divided, triangular; tilts backwards; underside is faintly downy; short, scaly hairs may be found on the veins
- ◆ Leaflets are sub-opposite, toothed, widest in the middle and decrease in size towards the plant tip; lowest leaflet points slightly downwards
- ◆ Has a creeping, scaly, slightly pulpy root
- ◆ Round spore clusters are spread along the underside of the frond at leaf edges

## Biology:

- ◆ Fronds emerge in late May
- ◆ Sporangia burst at the end of summer to release spores, which is the main source of reproduction
- ◆ Associated with hardwood trees and Maidenhair Fern

## Habitat:

- ◆ At northern limit of range
- ◆ Prefers to grow in rich, moderately acidic soils, in deciduous forest such as Maple-Beech forests, where the soil is moist or wet
- ◆ Found in Gibson, Morrison and Ryde Geographical Townships

Species at Risk  
STEWARDS' GUIDE SERIES

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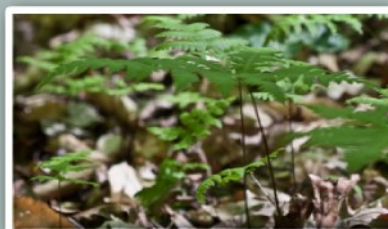
*Phegopteris hexagonoptera*

## STEWARDS' GUIDE SERIES

Status: **Special Concern**

### Broad Beech Fern on Your Property? *Here's What You Can Do:*

- ◆ **Do not disturb.** Promote the conservation or the establishment of rare plants on your property by:
  - ◆ **Designating sensitive areas.** Identify the areas where rare species grow and allow for a protection zone with about a 20 m buffer around it. If possible, avoid all interference in this zone.
  - ◆ **Get professional advice on how to preserve your woodlot to maintain the quality of habitat for rare species.** Avoid draining areas near Broad Beech Fern colonies. These ferns need relatively humid soil to survive.
  - ◆ **Minimizing disturbances associated with forest management activities.** If there is to be selective logging, consider carrying it out in the fall or winter when the ground has frozen. Logs should be piled far from the designated sensitive areas. This can prevent damaging the forest floor and the sensitive plants growing there.
- ◆ **Support sustainable forestry practices when you purchase wood products.** Look for the FSC logo.
- ◆ **See a Broad Beech Fern?** Submit your sighting to the Natural Heritage Information Centre at [nhic.mnr.gov.on.ca/MNR/nhic/species/species\\_report.cfm](http://nhic.mnr.gov.on.ca/MNR/nhic/species/species_report.cfm). Photographs with specific locations or mapping coordinates are always helpful.
- ◆ **Contact the Ministry of Natural Resources.** If you find a Broad Beech Fern on your property, you may be eligible for stewardship programs that support the protection and recovery of species at risk and their habitats. Contact the MNR for more information.
- ◆ **Learn More.** Check out the Species at Risk section on the Ontario Ministry of Natural Resources website at [www.mnr.gov.on.ca](http://www.mnr.gov.on.ca).



### Ontario's *Endangered Species Act*

Ontario's *Endangered Species Act, 2007* came into force on June 30, 2008, making Ontario a North American leader in the protection of species at risk and their habitats.

Compared to Ontario's previous Act, written in 1971, the new ESA 2007 provides:

- ◆ Science-based assessment of species' status
- ◆ Automatic protection of a species and its habitat once it's listed as endangered or threatened
- ◆ Broader protection for species at risk and their habitats
- ◆ Greater support for volunteer stewardship efforts of private landowners, resource users, and conservation organizations
- ◆ A commitment to recovery of species through recovery planning
- ◆ Greater accountability, including government reporting requirements

Ontario is home to more than 30,000 species, most of which have stable populations.

However, more than 180 species in Ontario, 34 of which are found in Parry Sound-Muskoka, are currently considered "at risk" because of threats like:

- ◆ Habitat loss
- ◆ Global changes in insect populations
- ◆ Pollution
- ◆ Invasive species
- ◆ Climate change
- ◆ Over-harvesting
- ◆ Road mortality



Learn more about Species at Risk on the Ontario Ministry of Natural Resources website at [www.mnr.gov.on.ca](http://www.mnr.gov.on.ca).