

Bruce and Grey Fern Checklist

Bruce and Grey counties are rich in ferns. About forty species can be found in forests, wetlands, rock faces, crevices, and pastures. This checklist illustrates 38 ferns and has been updated to reflect name changes.

Many ferns are favoured by the calcium-rich dolostone of the Niagara Escarpment. Botanists have excellent opportunities to view many species of ferns along the Bruce Trail and in notable locations such as Inglis Falls Conservation Area, Hope Bay Forest Provincial Nature Reserve, Bayview Escarpment Provincial Nature Reserve, Massie Hills Management Area, the Nels Maher Side Trail on Kemble Mountain, and Bruce's Caves Conservation Area near Oxenden.

Ferns are an ancient form of life. They have been around for about 360 million years. Royal and Cinnamon Ferns have been on Earth since the time of the dinosaurs! All ferns lack flowers and seeds, and reproduce through spores. Some also reproduce vegetatively. Spores are produced in small structures called sporangia which are often grouped together in sori.

The fern prints on this checklist show the distinctive outlines, or overall shape (including ferns with a separate fertile frond) which are a first indicator in identifying the species of fern. About 15 ferns, including Walking, Sensitive, American Hart's-tongue, and Northern Maidenhair are easily identified by shape. For others, the pattern of the sporangia on the fronds is an important clue in identifying fern species. Some ferns, such as Ostrich, Sensitive, Royal and Cinnamon have a separate fertile frond where the sporangia are found. Other ferns such as Marginal Wood, Lady, and Evergreen Wood have sori in characteristic patterns on the underside of the fronds.

Different habitats favour different species of ferns. Ferns found in rich deciduous forests include Northern Maidenhair, Lady, Rattlesnake, and Sensitive Ferns. Goldie's and Narrow-leaved Glade Ferns are great finds in rich woodlands. Ostrich, Sensitive, and Marsh Ferns prefer wet or at least damp habitats while if the soil is more acidic and bog-like, Cinnamon, Royal, and Interrupted ferns may be present. The rocky outcrops common along the Niagara Escarpment are home to Marginal Wood, Northern Holly, Male, and Limestone Maidenhair Spleenwort ferns. If the dolostone is sufficiently cool and shady, you may find the less common Green Spleenwort. There are several species of ferns which are evergreen. These include Polypody, Walking, Christmas, and Crested Wood ferns. Bracken and Rattlesnake Fern are common along the edges of trails.

The Bruce Trail is an excellent place to spot American Hart's-tongue Fern. This fern is uncommon on the Saugeen Bruce Peninsula, rare in Bruce, and common in Grey. Look for it on shady boulders along the Niagara Escarpment. Another uncommon fern is Walking Fern. It prefers cool dolostone outcroppings. Its triangular shape is distinctive; and, like a strawberry runner, the tip can root in moss and start a new plant. If you're lucky to come across a profusion of these unique ferns, the rock may have a shaggy look to it.

The prints in this checklist were made by the late Nels Maher, a printer by trade and a renowned local naturalist. Nels had an in-depth knowledge of ferns, orchids, and fungi. He and his wife Jean, a teacher, did much to promote all facets of nature in Bruce and Grey. They led outings, wrote articles, and contributed to the writing of several Owen Sound Field Naturalist's publications, including *The Ferns of Grey & Bruce*. At the family farm near Durham, Nels and Jean started a fern garden, which is lovingly maintained by children and grandchildren.

More detailed information about ferns and how to identify them will be found in the forthcoming 3rd Edition of *Ferns Bruce & Grey*.



BULBLET BLADDER FERN
(*Cystopteris bulbifera*)



MAIDENHAIR FERN
(*Adiantum pedatum*)



CRESTED WOOD FERN
(*Dryopteris cristata*)



L: SPINULOSE WOOD FERN
(*Dryopteris carthusiana*)



MARGINAL WOOD FERN
(*Dryopteris marginalis*)



MALE FERN
(*Dryopteris filix-mas*)



GOLDIE'S FERN
(*Dryopteris goldieana*)



HART'S TONGUE FERN
(*Asplenium scolopendrium*)



OSTRICH FERN
(*Matteuccia struthiopteris*)



ROYAL FERN
(*Osmunda regalis*)



CINNAMON FERN
(*Osmundastrum cinnamomea*)



INTERRUPTED FERN
(*Claytonia claytoniana*)



BRACKEN FERN
(*Pteridium aquilinum*)



SENSITIVE FERN
(*Onoclea sensibilis*)



NEW YORK FERN
(*Parathelypteris noveboracensis*)



MARSH FERN
(*Thelypteris palustris*)



CHRISTMAS FERN
(*Polystichum acrostichoides*)



NORTHERN HOLLY FERN
(*Polystichum lonchitis*)



LADY FERN
(*Athyrium filix-femina*)



NARROW-LEAVED
GLADE FERN
(*Homalosorus pycnocarpus*)



SILVERY GLADE FERN
(*Deparia acrostichoides*)



VIRGINIA CHAIN FERN
(*Anchistea virginica*)



GREEN SPLEENWORT
(*Asplenium viride*)



FRAGILE FERN
(*Cystopteris fragilis*)



SMOOTH CLIFFBRAKE FERN
(*Pellaea glabella*)



MAIDENHAIR SPLEENWORT
(*Asplenium trichomanes*)



STELLER'S ROCKBRAKE
(*Cryptogramma stelleri*)



PURPLE-STEMMED CLIFFBRAKE
(*Pellaea atropurpurea*)



HAY SCENTED FERN
(*Dennstaedtia punctilobula*)



ROCK POLYPODY
(*Polypodium virginianum*)



WALKING FERN
(*Asplenium rhizophyllum*)



NORTHERN BEECH FERN
(*Phegopteris connectilis*)



COMMON OAK FERN
(*Gymnocarpium dryopteris*)



EBONY SPLEENWORT
(*Asplenium platyneuron*)



RATTLESNAKE FERN
(*Botrypus virginianus*)



CUT-LEAVED GRAPE FERN
(*Sceptridium dissectum*)



LIMESTONE OAK FERN
(*Gymnocarpium robertianum*)



WALLRUE SPLEENWORT
(*Asplenium ruta-muraria*)