

## Thelypteridaceae

### Marsh Fern Family

Predominantly tropical, only four species reach NS, of the 900 described species. Formerly included with *Dryopteris*, they are now separated from this genus on the bases of indument (needle-like hairs) on the frond and the absence of scales within the blades. Rhizomes are scaly only at the top; blades no more than twice-pinnate. Veins extend to the margins on the pinnae. Sori are central on the pinnae, round or rarely elongated along the veins. Indusia are kidney-shaped if present.

Key to the genera

Blades once-pinnate; rachis grooved; pinnae not connected along the rachis; indusia present.

*Thelypteris*

Blades twice-pinnate; rachis not grooved; pinnae connected by tissue along the rachis; indusia absent.

*Phegopteris*

### ***Phegopteris* (C. Presl) Fée**

#### **Northern Beech Fern**

Only three species are included, with a single NS species. Pinnae are deeply lobed with the blades 2–3 times pinnate. Each pinnae is joined by a wing along the rachis. Scales are present on the rachis and costae, triangular in outline. Indusia are absent.

***Phegopteris connectilis* (Michx.) Watt.**

**Northern Beech Fern; phégoptère du hêtre**



Deltate blades are widest at the base and longer than broad. The lower pair of pinnae angle downward. Scaly stipe is brown. Sori are small, arranged along the veins near the margins of the pinnae.

Spores produced June to August.

A woodland fern, especially likely to be found in shade, in ravines, cliffs and hillsides.

Photo by Sean Blaney

Scattered to common throughout.

Greenland to AK, south to OR, CO and NC. Eurasia.

## ***Thelypteris* Schmidel**

Twenty-one of the 875 species reach North America; NS hosts only three, all of wet soils in forests or wetlands. Rhizomatous, the simple blades are once divided and often pubescent. Rachis and costae have reddish or tan scales. Sori are round, covered with tan indusia (in our species.).

Key to species

- |  |                                   |
|--|-----------------------------------|
| A. Lower pinnae greatly reduced in size, much shorter than the central ones. | <i>Thelypteris noveboracensis</i> |
| aa. Lower pinnae only slightly reduced in size, from the central ones.       | B                                 |
| B. Pinnule veins forked; costae with tan scales.                             | <i>T. palustris</i>               |
| bb. Pinnule veins not forked; costae without scales.                         | <i>T. simulata</i>                |

### ***Thelypteris noveboracensis* (L.) Nieuwl.**

#### **New York Fern ; thélyptère de New York**



Photo by Sean Blaney

A colonial fern, it forms light green patches, especially in sandy or acidic sites. Blades are tapering at both ends. Sori are round, unlike those of Lady Fern with which it grows, which are elongated.

Spores throughout the summer.

Grows in drier sites than most *Thelypteris* species in shady locales while Hay-scented Fern frequents only sunlit sites.

Common throughout NS.

NF to ON, south to OK, LA and GA.

***Thelypteris palustris* (Salisb.) Schott.**  
**Marsh Fern; thélyptère des marais**



*Photo by Alex Wilson*

A soft, fragile fern, on delicate stems, it is easily bent with disturbance. Sterile and fertile fronds are dimorphic. Fertile fronds are longer with thicker, inrolled pinnules. The round sori are covered by pubescent indusia. Entire plant is finely puberulent and ours is named var. *pubescens* (Lawson) Fern., differing only slightly from the Eurasian plants. It resembles the following species, but for the pinnae carried horizontal and forking veins.

Spores produced from June to October.

Look for it in ditches, meadows and in bogs, restricted to moist settings.

Common throughout the province.

NF to MB, south to TX and FL.

***Thelypteris simulata* (Davenp.) Nieuwl.**

**Bog Fern; Massachusetts Fern; thélyptère simulatrice**



*Photo by Reta Cook*

Resembles New York fern, but for the pinnae angled downward and the presence of unforked veins. Blades are stiffly pubescent with short hairs on the upper surfaces.

Spores from June to October.

Shady habitats such as riparian zones, where it replaces the other two *Thelypteris* species.

Scattered in Shelburne and Yarmouth counties, less frequent eastward to Lunenburg and Guysborough counties and inland,

Ranges coastally from NS to ON, variously south to TN and AL.