

## Osmundaceae

### Royal Fern Family

A family of large coarse plants, these are our largest pteridophyte species. Stipes arise from rhizomes covered in persistent frond bases. Stipes are pubescent but without scales, bearing stipules at their bases. Fertile fronds may be separate from vegetative fronds, or fronds divided between sterile and fertile portions. Sporangia are not arranged in sori, but in short stalked clusters.

### *Osmunda* L. royal ferns

A single genus finds its way to eastern North America; three species grow in Nova Scotia. All have pinnate or bipinnate fronds.

Key to species

- A. Fronds twice-pinnate; fertile pinnae carried at the top. *Osmunda regalis*
- aa. Fronds pinnate; sterile fronds deeply divided, lobes nearly entire. B
  - B. Fertile pinnae near the middle of sterile fronds; no woolly pubescence at the base of pinnae. *O. claytoniana*
  - bb. Fertile fronds on separate stipes; pinnae with a tuft of pubescence in the axils. *O. cinnamomea*

### *Osmunda cinnamomea* L. Cinnamon Fern; osmonde cannelle



A common species, its fertile fronds are cinnamon-coloured, comprising minute sporangia appressed to the axis. Sterile fronds have pinnae subtended by clusters of pale pubescence. Fiddleheads emerge covered in pale or white coloured tomentum.

Spores in spring.

Grows in poorly-drained soils as found in bogs, swamps, coastal barrens and even low-lying pastures and wet conifer woods.

Photo by Sean Blaney

Very common throughout the province.

Elsewhere from NF to ON, south to TX and FL; South America; Eurasia.



Photo by David Mazerolle

***Osmunda claytoniana* L.**

**Interrupted Fern; osmonde de Clayton**



Photo by Beth Cameron

FronDS resemble the species above, but with both fertile and sterile pinnae on the same stipe in this species. Brown or rusty coloured sporangia arise midway down the stipe, “interrupting” the green sterile blade, hence the common name.

Spores are produced from spring to early summer.

The species grows in moist but well-drained sites, base of slopes, stony soils.

It is common throughout the province, although less so than Cinnamon Fern.

NF to MB, south to MS and GA; Asia.



Photo by David Mazerolle

***Osmunda regalis* L.**

**Royal Fern; osmonde royale**



Photos by Sean Blaney



Resembles a small tree. This fern is much-branched. Pinnules completely separate from each other, attach to the rachis by short petioles. Sporangia borne at the tip of the same stipe which bears the sterile pinnae. Our plants belong to var. *spectabilis* (Willd.) Gray.

Spores produced in spring and early summer.

Associated with open water, streams and lakeshores, marshes or wooded swamps.

Common throughout NS, forming large colonies where found.

NF to MB, south to FL and TX, south.