



The Craig Campbell Fern Walk

Ferns can look different in different seasons or different life cycle stages. Most ferns have feather-like, or **pinnate**, fronds can be divided up to three times, resulting in a lacy appearance.



Photo by T. Woodcock

Pinnate



Photo by T. Woodcock

Twice-Divided



Photo by T. Woodcock

Thrice-Divided

Pinnae may be incised all the way to the center rib, or **rachis** (left). They are called **toothed** if incised less than halfway to the rachis, or **pinnatifid** if incised more than halfway to the rachis (right).



Photo by T. Woodcock



Photo by T. Woodcock

We remind you to remain on the trail and avoid damaging any vegetation.



The Craig Campbell Fern Walk Station 1

At this station are specimens of two of our most common woodland ferns.

Crested Woodfern (*Dryopteris cristata*, also known as Crested Shield Fern; right) and Intermediate Woodfern (*Dryopteris intermedia*; below).

Both species prefer moist woods, with Crested Woodfern growing in wetter areas.

The Crested Woodfern (right) is a hybrid of two other woodfern species, one of which is thought to be extinct.



The Intermediate Woodfern is similar in appearance to the above, with serrate edges on the pinnae.

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The Craig Campbell Fern Walk Station 2



Ostrich fern (*Matteucia struthiopteris*) grows in moist forests and along streams. It is one of our largest ferns, potentially exceeding one meter in height. It has thick green fronds, which surround the shorter, brownish fertile frond.



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The Craig Campbell Fern Walk Station 2



Bracken (*Pteridium aquilinum*) is a tall, common and widespread fern that is found in forests and also in drier open areas in many parts of the world. It can form thick stands known as 'brakes'.



Bracken is an excellent example of a fern in this area that has thrice-divided fronds.

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The Craig Campbell Fern Walk Station 2



Sensitive Fern (*Onoclea sensibilis*) grows in moist lowland forests. It is distinctive for its wavy-edged pinnae that are not fully divided. It is difficult to mistake for any other fern species in this area.

It is named for its high sensitivity to frost.



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The Craig Campbell Fern Walk Station 3

Cinnamon fern (*Osmundastrum cinnamomeum*) is a large fern that grows in wet areas and forested stream banks.

This family has sori born on separate fertile fronds. The fern's name derives from the reddish-brown, powdery appearance of the tall reproductive fronds (below) which are present in the summer.

Sterile green fronds are bipinnate or deeply bipinnatifid (right).



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The Craig Campbell Fern Walk Station 3



Photo by A. Fraser

Bulblet Bladder Fern (*Cystopteris bulbifera*) is a delicate fern with widely spaced, feathery fronds. It especially prefers wet seepage areas, particularly those with calcareous (i.e. limestone) rocks and soils.

The underside of the rachis bears fleshy “bulblets”, each of which can produce a new fern.

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The Craig Campbell Fern Walk Station 3



Field Horsetail (*Equisetum arvense*) is common in many habitats around the world. While many are associated with wetland areas, others readily grow in drier habitats.

Horsetails are a widespread group closely related to ferns. In the distant past, tree-sized horsetails and ferns made up the forest.



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The Craig Campbell Fern Walk Station 4



Christmas Fern (*Polystichum acrostichoides*) is so called because it is a shining and vibrant green fronds, even in late December. It is one of our most common woodland ferns. It is once-divided, and the pinnules each have a characteristic lobe



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The Craig Campbell Fern Walk Station 4



Interrupted Fern (*Osmunda claytoniana*) is related to Cinnamon Fern, and looks quite similar when not in reproductive phase. It also prefers moist habitats and forested wetlands.

Rather than having separate fertile fronds, fertile pinnae are found midway along a rachis, adjacent to non-fertile pinnae. This apparent 'interruption' in the sterile green pinnae gives the fern its name.



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The Craig Campbell Fern Walk Station 4



Photo by T. Woodcock

Lady Fern (*Athyrium filix-femina*) is a delicate fern that grows in most moist upland forests.

The fronds are long, with pinnae very short toward the tip. Contrast this pattern with New York Fern (Station 5), found in similar habitats.



Photo by T. Woodcock

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The Craig Campbell Fern Walk Station 5



Photo by T. Woodcock



Photo by T. Woodcock

New York Fern (*Thelypteris noveboracensis*) grows in mixed forests and wetland margins, often found growing in large colonial stands. In some stands, such as at this station, it is mixed with abundant Christmas Fern.

Pinnae are longest in the middle of the frond, shorter and downward-pointing at the base.

Sori are small and crescent-shaped on the back of the pinnules.



Photo by T. Woodcock

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The Craig Campbell Fern Walk Station 5

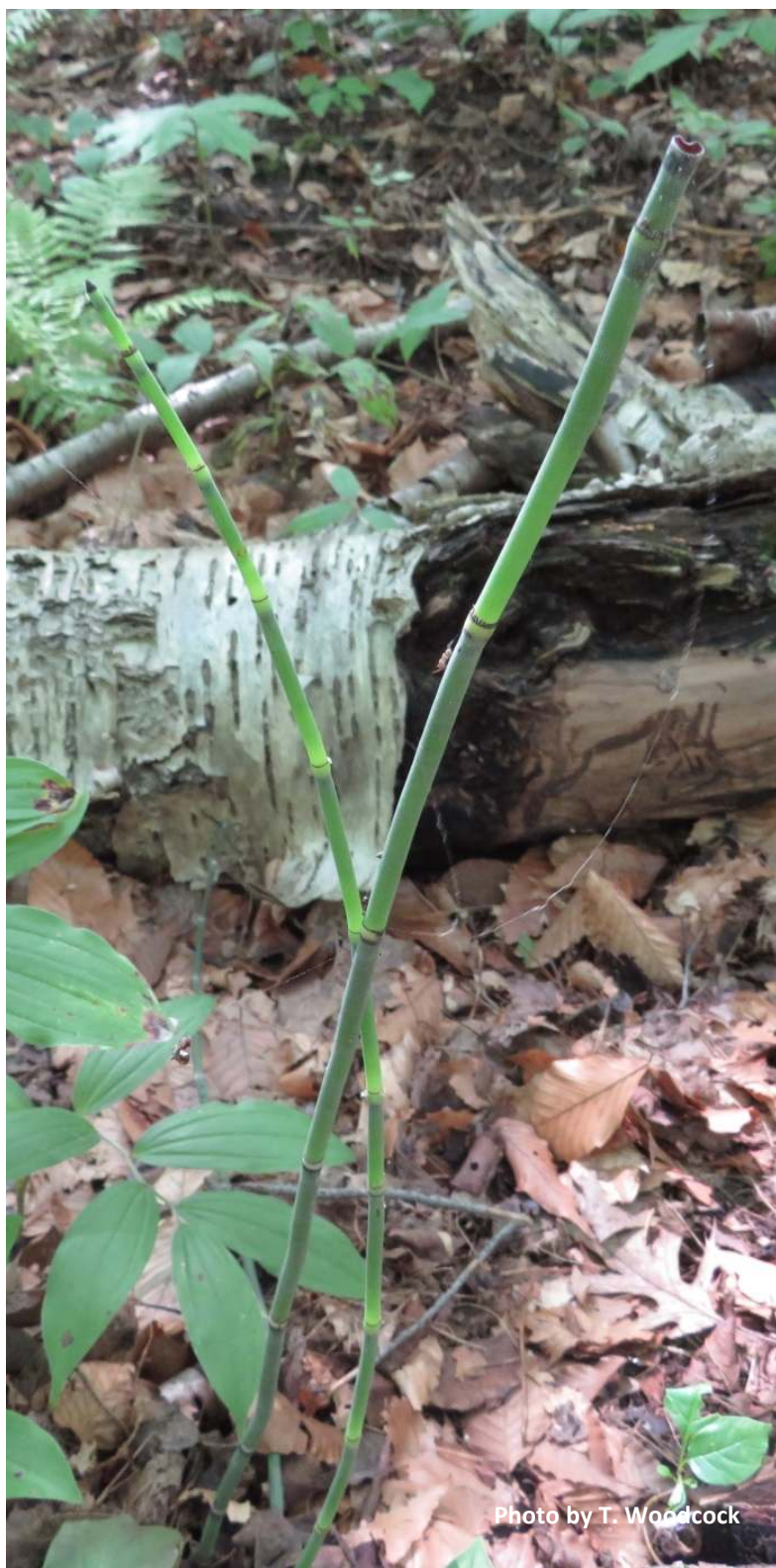


Photo by T. Woodcock

Rough Horsetail (*Equisetum hyemale*), also known as Scouring-rush, is found throughout much of the world. It resembles a rough green straw (left). The silica-rich stalks can be used to “scour” cookware, wood flooring, etc.

Less common and so small it's easily overlooked, you may also see Dwarf Scouring-rush (*Equisetum scirpoides*) in this area (below).

Both species are found in moist wooded areas.



Photo by T. Woodcock

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