Equisetaceae
Horsetails

Another ancient family of plants, there is but a single extant genus. Annual or perennial, all have jointed hollow stems, marked by ridges. Coarse texture is further enhanced by the presence of silica crystals in the epidermis. Leaves are reduced to scales forming whorls, which may or may not be photosynthetic. Branches when present are also in whorls. Sporangia are arranged on whorled stalks forming a terminal cone. Plants reproduce by spores and creeping rhizomes. Sterile hybrids produced with some species. Key below is based on sterile stems after Magee and Ahles (1999).

A. Stems evergreen, unbranched, or with only short sparse apical branches. B

B. Stems >3mm in diameter; sheath teeth soon deciduous. *Equisetum hyemale*

bb. Stems <3mm in dia.; sheath teeth persistent. C

C. Sheath teeth 3; stems branched and twisted. *E. scirpoides*

cc. Sheath teeth 5 or >5; stems stiffly erect. *E. variegatum*

aa. Stems deciduous, often branching. C

D. Lateral branches further branched; sheath teeth on the main stem joined and fused into 3–4 lobes. *E. sylvaticum*

dd. Lateral branches simple; sheath teeth all distinct. E

E. Sheath teeth below the lower branches on the main stem usually white-hyaline. *E. pratense*

ee. Sheath teeth below the lower branches of the main stem mostly black or dark brown. F

F. Sheath teeth on main stem white on the margins. *E. palustre*

ff. Sheath teeth on main stem brown or black. G

G.Stems to 4mm in dia.; central cavity of stem two-thirds its dia.; branches solid. *E. arvense*

gg. Stems >4mm; central cavity four-fifths the dia; branches hollow. *E. fluviatile*

***Equisetum arvense* L.**
Field Horsetail; prêle des champs

Photo by Roger Lloyd

This pale green horsetail produces separate sterile and fertile stems. Sheath teeth are dark brown. Sterile stems are branching, especially at the top of the plant. Cones are brown and yellow, terminal on deciduous stems.

Vegetative stems appear later in the season. Spores produced in May.

Common throughout in low-lying fields, banks and often weedy, especially in heavy rich soils.

Especially common from Digby, Kings and Colchester counties to Cape Breton.

Widely found in northern hemisphere.

Photo by Roger Lloyd

***Equisetum fluviatile* L.**
Water Horsetail; prêle fluviatile

This large robust species produces its terminal cones atop the mostly unbranched stems. Branches if present, are long and spindly.

Spores produced midsummer.

Frequents the edges of ponds and streams.

Common throughout the province.

NF to AK, south to OR and VA. Eurasia.

Photos by Roger Lloyd

Photo by Roger Lloyd

***Equisetum hyemale* L.**

Scouring Rush; prêle d'hiver

Photo by Jamie Ellison

Our largest most robust species, the hollow unbranched stems may reach 60cm in height. Nodes have untoothed sheaths, bearing a dark band around the base and furrowed longitudinally. Colonial, it is conspicuous where found.

Grows in sandy, gravelly soil, on banks or in low areas; often in calcareous regions.

Scattered, mostly from Digby County, through the Annapolis Valley, northward to Cape Breton.

Photo by Ross Hall

NF to AK, south to Central America; Eurasia.

Equisetum X *litorale* Kuhl.
prêle littorale

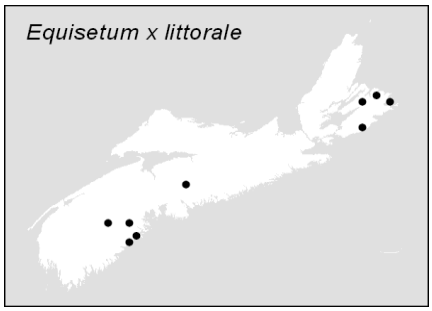
Photo by Roger Lloyd

Stems are hollow, with elongated sheaths at the nodes. Teeth number 7–14, dark and narrow. The plant branches mostly from the midsection. Hybrid of *E. arvense* and *E. fluviatile,* it is found wherever those species occur together. It resembles *E. palustre*, the long primary internode and solid branches should separate it.

Although cones mature in early summer, the misshapen spores are not dispersed.

Frequents ditches, meadows and streamsides, Queens County to Cape Breton.

NF to BC, south to CA, IL and VA.



***Equisetum palustre* L.**
prêle des marais

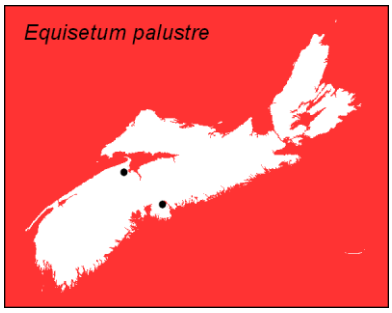
Photo by Sean Blaney

Stems hollowed only slightly, less than ½ the diameter. Branches are recurved, arising only from the midstem nodes. Teeth dark 5–10, with papery white margins.

Of wetlands, marshes and swamps. A single collection each from Kings County and Halifax Co.

Elsewhere across Canada, south to C, IL and NY. Eurasia.

Photo by Roger Lloyd



***Equisetum pratense* Ehrh**

Meadow Horsetail; prêle des prés

Sterile stems are hollow in the centre, at least one–third the diameter. Fertile stems unbranched and brown, becoming green and branching after spores mature.

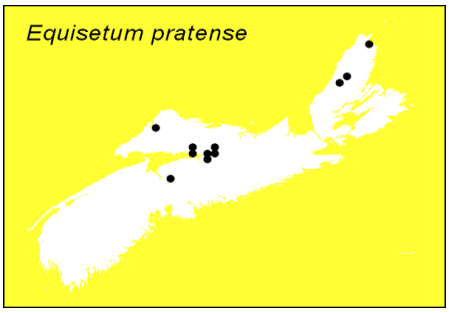
Uncommon and limited to alluvial thickets, pastures and treed streamsides, including gravelly bars.

Known from several streams in Hants, Colchester and Cumberland counties, in addition to Victoria and Inverness Cos.

Photo by Sean Blaney

NF to AK, south to CO, IL and NJ.

Photo by Roger Lloyd



***Equisetum scirpoides* Michx.**

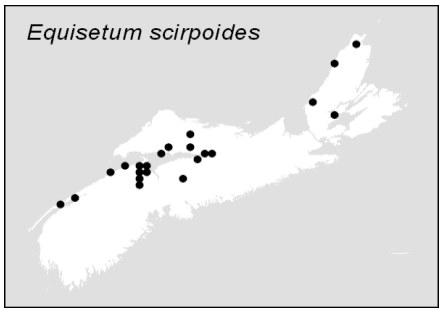
Dwarf Scouring Rush; prêle faux-scirpe

Prostrate at the base, this plant has many wiry ascending sterile stems. Sheaths have only three teeth. Cones are merely 5mm in height.

Wooded banks and mossy slopes. Typical of alkaline habitats and often overlooked.

Photo by Sean Blaney

Photo by Roger Lloyd



Not often seen in the Atlantic counties. Annapolis County to Cumberland County and northern Cape Breton.

Ranges from NL to AK, south to WY, IL and NY. Eurasia.

***Equisetum sylvaticum* L.**
Wood Horsetail; prêle des bois

Photo by Roger Lloyd

Similar to *E. arvense*, but for its reddish sheaths and branching stem branches. Cones developing early and persisting throughout the season.

Spores in June.

Wet soils and shady conditions.

Common throughout the province, Digby Co. to Cape Breton.

NF to AK, south to WY, IL and NC; Eurasia.

***Equisetum variegatum* Schleicher**
prêle panachée

Photo by Sean Blaney

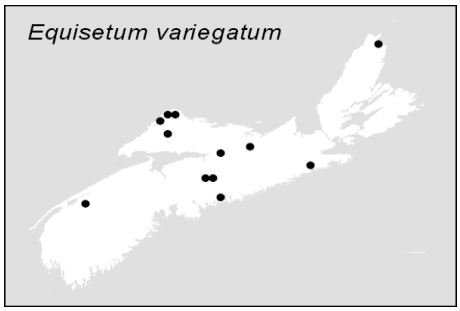
Evergreen stems, are carried stiffly erect and only branching near the base. Ridges on the stem are furrowed, bearing two rows of siliceous tubercles. Sheaths are slightly recurved and with a black stripe at the tip.

Of wetlands or wet seeps.

Wide–ranging in NS, with disjunct localities: Halifax County, Cumberland Co., Victoria Co.

Circumboreal to UT, IL and NJ.

Photo by Roger Lloyd


Equisetum variegatum