

Callitrichaceae

water-starwort family

Another monogeneric aquatic family, these plants are all annual herbs. Leaves are typically opposite and sessile, the stems lax or tenuous, slender and with few branches. Flowers are axillary, sessile or arising on short pedicels. The perianth is absent. Staminate flowers have 1–3 erect stamens; pistillate flowers produce ovaries cleft in four locules and bearing a pair of persistent styles. Fruits are dehiscent in four nutlets, each with a single seed.

Callitriche L.

Water-starworts

Mature fruits are required to identify these species and magnification to examine details.

Key to species

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|---|------------------------------------|
| A. Plants wholly submerged; leaves linear with a single vein; fruits deeply furrowed midway. | <i>Callitriche hermaphroditica</i> |
| aa. Plants with broad floating leaves and submerged linear ones; floating leaves with 3 veins; fruit merely shallowly furrowed at suture. | B |
| B. Fruits wingless; commissural groove absent. | <i>C. heterophylla</i> |
| bb. Fruits winged; commissural groove present, between the wings. | <i>C. palustris</i> |

Callitriche hermaphroditica L.

callitriche hermaphrodite



Photo by Sean Blaney

Plants are totally submerged, bearing linear or narrowly lanceolate leaves. Fruits are deeply cleft, 2mm tall.

Flowers from August through December throughout its range.

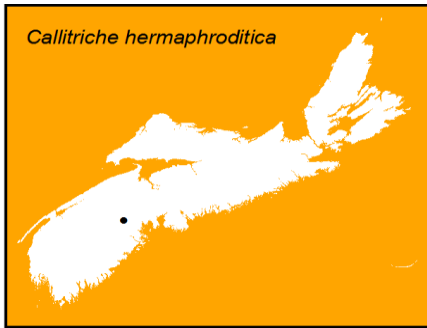
Grows in quiet alkaline or brackish waters.



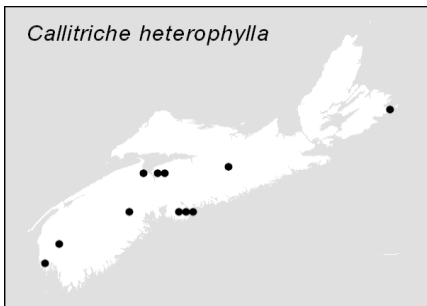
Photo by Sean Blaney

Collected only once from Lunenburg Co.

Ranges from Greenland to AK, south to CA and NM; NY; AL.



***Callitriche heterophylla* Pursh**



Fruits are smaller on this species, about 1mm tall. The commissural groove is very shallow. Sometimes there are pits and other markings on the fruit's surface, only visible with a lens.

Flowers from April to December, throughout its range. No data available on NS material.

Limited to muddy substrate in quiet waters.

Collected from Yarmouth Co. to eastern Cape Breton.
Absent along the Northumberland Strait.

Ranges from Greenland throughout North America but for SK and ND; Greenland.

***Callitriche palustris* L.**
callitriche des marais



Photo by Martin Thomas



Photo by Martin Thomas

Another small species, with very slender stems, this one has few branches. Floating leaves may be present. If so, they are obovate with up to three veins and tapering at the base to a short petiole. The fruits are dimpled rather than grooved and ovoid, widest at the apex.

April to November flowers.

Often stranded on the mud or silt of ephemeral pools.

Scattered throughout the province but more frequent northward.

Ranges from Greenland to AK, south to CA, TX and VA.