

Hydrocharitaceae

tapegrass family

A family of about 80 species, arranged in 17 genera, these annuals or perennials are wholly or partly aquatic. The leaves may be aerial, floating or submersed, whorled or in two ranks. Stems are sometimes absent. If present they may be rhizomatous, The flowers are unisexual, with both monoecious and dioecious species represented. The fruits are berrylike with many seeds. Only two genera reach Nova Scotia, including three species. Some species of other genera have invaded waterways of North America and may be expected to reach our waters.

Key to genera

Stems present; leaves numerous, short, less than 2cm long. *Elodea*

Stems absent; leaves few and basal, may reach 1m in length. *Vallisneria*

***Elodea* Michx.**

Truly aquatic herbs, these plants are known from both temperate and tropical fresh waters. Two species reach Nova Scotia and are occasionally reported. The leaves are whorled and ribbed. Flowers are unisexual, and the species are dioecious.

Key to species

Leaves oblong to ovate, obtuse. *Elodea canadensis*

Leaves lanceolate and acute. *E. nuttallii*

***Elodea canadensis* Michx.**

Waterweed; élodée du Canada



Photo by Sean Blaney

The leaves are sessile and mostly in threes. They range in width from 2–5mm. Inflorescences are unisexual, the peduncles of the staminate ones often abscising at anthesis. Stamens 7–9, joined proximally forming a tube, pedicels dropping before or during anthesis. The pistillate flowers are larger, forming fusiform seeds to 5mm long.



Photo by Ross Hall

Supposedly flowering throughout the summer, rarely seen in our material.

Calm sluggish waters. Calcareous.

Common in Colchester and Cumberland counties. Known from Kings Co.

NS to SK; BC to AK, south to CA and FL

***Elodea nuttallii* (Planch.) St. John**
Western Waterweed; élodée de Nuttall

Differing mainly in leaf shape, this species has sharply pointed lanceolate leaves.

Flowering from July to September.

Sluggish streams and tolerant of brackish estuarine waters.

So far known from a site near Truro. (Catling and Wojtas, ----). No extant collections in Nova Scotia.

Elsewhere from NS to MB south to NM and AB; western.

***Vallisneria* L.**
tapegrass

A genus of about 10 species of wholly submersed plants, sometimes forming underwater lawns of stoloniferous and rhizomatous plants. Perennial, they bear basal linear leaves, sheathed at the base. There are several rows of lacunae on either side of the midvein. The inflorescence is long-pedunculate and cymose. The staminate and pistillate flowers are on different plants.

***Vallisneria americana* Michx.**
Tapegrass; vallisn erie d'Am rique



Photo by Ross Hall



Photo by Ross Hall



The long ribbonlike leaves are only 3–8mm wide. Tiny flowers are borne on slender pedicels, the staminate ones very short and remaining submerged. The solitary pistillate flower scapes project to the water surface. After pollination they become coiled, pulling the fruit below the surface.

Flowers from July to October.

Found only in quiet waters.

Locally abundant: Shortts Lake, Colchester Co. Along the Musquodoboit River, Halifax Co.; Lake Killarney, Cumberland Co. Reported from northern Cape Breton.

Ranges from NS to MB, south to SD, TX and FL; west coast.

ORANGE-listed in NS.