

STONEWORTS

Chara and *Nitella*

NATIVE TO MAINE

Habitat: Stoneworts are found in the submerged plant community. They grow on soft sediments in depths up to 10 meters.

Description: Stoneworts are macro algae that resemble higher plants. The stems are comprised of chains of single tube shaped cells; no connective tissue is present. Instead of true roots, there is a simple rhizoid structure. Both have slender "branches" of cells arranged in whorls along the main stem. The stems may grow to a height of 0.5 meter.

The following characteristics help to distinguish the two genera:

Chara (Muskgrass): When fresh from the water, *chara* has a distinctively skunky odor. The stems, usually dark green in color, are ridged and often encrusted with calcium carbonate, feeling rough and crusty to the touch.

Nitella: No skunky odor. The stems and branches of *nitella* are generally bright green, translucent and smooth to the touch.

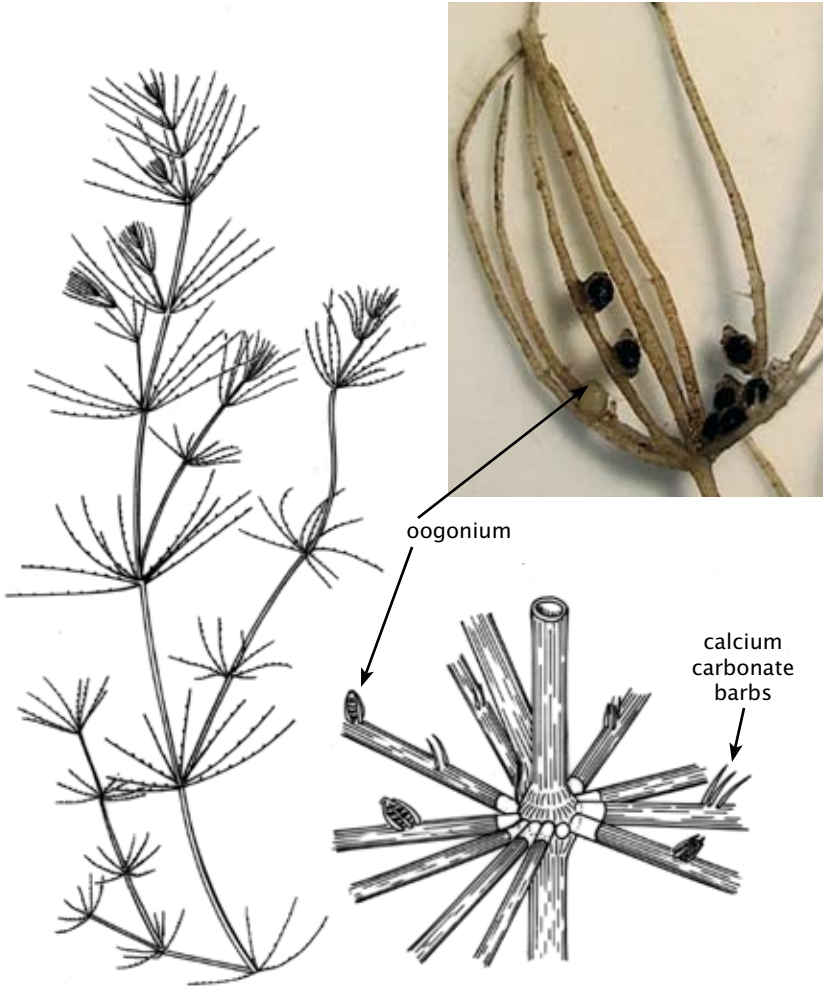
Range: Stoneworts are native to Maine and New England. They occur throughout most of the United States.

Annual Cycle: Stoneworts reproduce vegetatively through rhizoids and fragments, and sexually with male reproductive structures (antheridium) and female structures (oogonium). Rhizoids and stem fragments overwinter in and on the sediment. Growth begins when the water warms in the spring and continues through late fall.

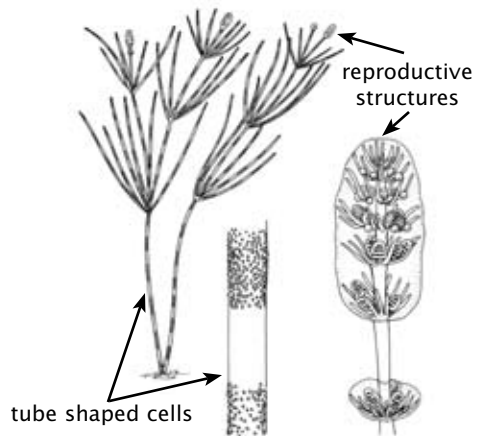
Value to the Aquatic Community: Stoneworts provide cover and food opportunities to fish and invertebrates. Muskgrass is a favorite food of many waterfowl species. Algae and invertebrates that collect on the thickly growing tangles of stonewort stems are also attractive to waterfowl.

Look Alikes: Stoneworts may be confused with European naiad, Maine's native naiads, and some fine-leaved pondweeds.

EUROPEAN NAIAD
LOOK ALIKES



Muskgrass (*Chara*) has a skunky smell and feels rough



Nitella has no odor and feels smooth