



Chara spp. (CARR-a)

Muskgrasses, stoneworts, charas

Chara - (L.) a plant

The guide inspected the plant. It was grayish-green, coated with lime and smelled like a skunk. There aren't many plants you can recognize simply by their scent, but she knew Chara was one of them. The skunky odor was pungent.

Description: This unusual type of algae has a growth form that resembles a higher plant, but a close look reveals each joint of the stem is a single cell with no conductive tissue. Muskgrass is simple in structure and has rhizoids rather than true roots. These plants range in size from ankle-high to knee-high. The main branches of muskgrass have ridges. They are often encrusted by calcium carbonate, giving the plant a harsh, crusty feel. The side branches develop in whorls like the spokes of a wheel.

Muskgrass can reproduce vegetatively by spreading rhizoids as well as sexually. The male reproductive structure, called antheridium, and female reproductive structure, called oogonium, are located at the base of branches. Each pear-shaped oogonium is capped with five cells.

Similar species: Muskgrass is similar in appearance to nitella. However, the branches of nitella are smooth and look like they're made of green gelatin, while those of muskgrass are harsh and ridged. With a magnifying glass, you can also see differences in the oogonia: the oogonia of muskgrass have a cap of five cells; those of nitella have ten cells.

Origin & Range: Native; common throughout Wisconsin; range includes most of U.S.

Habitat: Muskgrass is usually found in hard waters. It prefers muddy or sandy substrate and can often be found in deeper water than other plants.

Through the Year: Muskgrass overwinters by rhizoids and fragments. Growth begins when the water warms in spring and continues through the fall.

Value in the Aquatic Community:

Muskgrass is a favorite waterfowl food – more than 300,000 oogonia have been found in the stomach of a single duck. Algae and invertebrates found on muskgrass provide additional grazing. It is also considered valuable fish habitat. Beds of muskgrass offer cover and are excellent producers of food, especially for young trout, largemouth bass and smallmouth bass.

A Closer Look

The roots of muskgrass slow the movement and suspension of sediments. The dense stands of muskgrass can retain water, which has a cooling effect on the soil and can also reduce the amount of oxygen that enters the water.

