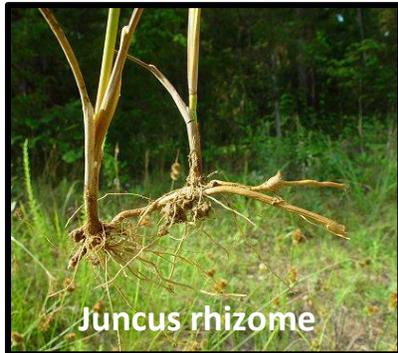


Juncus militaris Bigelow, the Bayonet rush, is a member of the family Juncaceae and native to North America. It and a number of other *Juncus* are characterized in part by the diaphragms evident in the terminal leaf which can be detected by running the leaf between two fingers. It's tough, vigorous rhizomes [underground stems] give it a



Juncus rhizome

competitive edge in shallow waters where other submersed vegetation is minimal or lacking.

This allows for expansive growth and spread of the colonies over time in sandy or coarse sediments, especially when water levels drop. In flowing water the submersed leaves can be quite long resembling a flexuous grass. The flowers contain six straw-colored, pinkish, or



Juncus flowers

reddish tepals [sepals and petals indistinguishable] and white stigmas are attractive when viewed closely.

At Piseco Lake *Juncus militaris* colonies have become more abundant and expansive over time. Dense colonies discourage other vegetation both emersed and submersed. In an effort to curtail or thin its expansion, cutting the top portions of the plant is ineffective, and if done after the fruits [capsules] are mature, simply spreads the seeds which can settle in place or drift away and actually encourage its spread. Hand harvesting or mechanical removal in limited areas can be effective, and laborious, only if the entire plant and connecting rhizomes are completely removed. Even small segments of rhizome if released into the water column can float or drift away facilitating colonization of new sites. The same is true of most other aquatics which produce rhizomes [= vegetative propagation via plant fragments]. If mechanical removal is chosen all parts of the plant should be removed from the water and composted safely away from the shoreline.

Another strategy for removal is by habitat manipulation via shading or a bottom barrier. This can be accomplished in limited areas, especially along beaches, shorelines or docks by covering the *Juncus* colony with a black Plastic, rubber, fiberglass, screen, nylon and weighting it down so that they stay in place. This would be most effective in the early part of the growing season when the plant is

just beginning to grow o during drawdowns. The absence of light will eventually cause the rhizome system to starve and die. This does not preclude elimination of any seeds stored in the sediments. A disadvantage is that decaying vegetation below the sheeting will produce gasses which can cause the sheeting to float.

Chemical control should is not advised.