EURASIAN WATERMILFOIL

Myriophyllum spicatum

**THREAT:** Eurasian watermilfoil (also called Eurasian milfoil) is an aquatic plant native to Europe and Asia. It may have been introduced to North America as early as the late 1800s and was first identified in Washington in 1965. At one time, it was widely sold as an aquarium plant. Eurasian watermilfoil spreads through plant fragments and forms dense mats of vegetation. Infestation can completely change the physical and chemical characteristics of the infested water body, leading to changes such as increased sedimentation and depleted oxygen. This plant can impact all uses of the aquatic system, including recreational uses, water movement, and fish and wildlife habitat. Because of its early spring growth, it can outgrow and shade native aquatic vegetation. This plant also creates excellent habitat for mosquito larvae. Although Eurasian watermilfoil produces seed, reproduction is primarily through plant fragmentation. Even tiny plant fragment can produce a new plant and an entire lake can become infested within two years of the initial introduction.

**DESCRIPTION:** Eurasian watermilfoil is a submersed perennial plant. It is very adaptable, growing in both still and flowing water, and tolerates a wide range of temperature, salinity and pH. It can grow in water 1 to 10 meters deep and can survive under ice. Eurasian milfoil has featherlike leaflets, arranged in whorls of 4 (rarely 5) around the stem. Each leaflet usually has 12 or more pairs of leaflets, which can help distinguish it from other milfoils. The plants begin growth early in the spring, growing towards the surface. Once near the surface, the plants branch extensively, forming dense mats. When plant growth reaches the surface (usually in mid to late July in Washington), the plants flower. The tiny pinkish flowers occur on reddish spikes that extend several inches above the surface of the water. After flowering, the plants tend to become brittle, breaking apart easily and further spreading the infestation. In colder areas, the plants die back to the root crowns in the fall. However, in western Washington, Eurasian watermilfoil may overwinter in an evergreen form.

**MANAGEMENT OPTIONS:** Like all aquatic weeds, control is difficult and eradication may be unrealistic. To prevent the spread of any of these plants, trailers, boats and fishing gear should be carefully inspected to avoid transporting plant materials between water bodies. Aquarium plants should never be discarded in sewer systems or water bodies. Accurate identification of Eurasian watermilfoil is essential before control work can begin, as it resembles other aquatic plants, including some native species. Control efforts can include chemical and mechanical measures, although success is usually limited. Cutting the plants will open up the water body, but does not kill the plant, and needs to be done at least twice a season. All plant pieces must be removed from the water as escaped plant fragments will spread the infestation. Underwater rototilling has been used with some success in Canada, with control lasting for two years. Grass carp prefer other plants to Eurasian watermilfoil and will only eat it when other vegetation is gone. Water drawdowns have also been used to control populations, but success depends on several variables (degree of desiccation, substrate type, temperature and presence of snow). For small bodies of water or small areas within larger water bodies (such as at boat launches or swimming areas), bottom barriers can be installed to prevent all plant growth. A weevil native to North America feeds on both Eurasian watermilfoil and the native milfoil but is not present in high enough numbers to control Eurasian watermilfoil. Research is continuing on this possible biocontrol agent. Contact the weed control board for site-specific chemical recommendations.