



FACT SHEET

Office of Water Resources / June 2009

Freshwater Aquatic Invasive Species in Rhode Island Parrot Feather



Parrot feather has rubbery leaves that stay in their form out of the water. Parrot feather can take over a shallow pond.

Species Description and General Information

Parrot feather (*Myriophyllum aquaticum*) is a rooted aquatic plant that colonizes slow moving, nutrient rich waters. Stems rooted in the substrate grow through the water and emerge at the surface, sticking up at heights up to 1 ft above the surface. Emergent leaves are bright green to bluish green and have a waxy surface. Leaves measure 1/2 inch to 2 inches long, and look like a feather divided with 6-18 leaflet pairs along the main vein of the leaf. Leaves are arranged around the stem in whorls of 4-6 leaves. Leaves are stiff and maintain shape out of water like plastic fish tank plants. Submerged leaves are slightly smaller than leaves above the water and have 10-15 leaflet pairs if present. Inconspicuous flowers form in the axils of emergent leaves. Only female flowers are present in the United States, restricting reproduction exclusively to fragmentation.

Why is Parrot Feather Considered an Invasive Species?

Parrot feather has the potential to form dense, monotypic stands that clog waterways, irrigation and drainage canals. Dense growth can impede recreational opportunities including boating, fishing and swimming. Parrot feather competes with native vegetation and can alter the physical and chemical characteristics of a water body by shading the water and slowing water flow. Stands of parrot feather provide ideal breeding areas for mosquitoes.

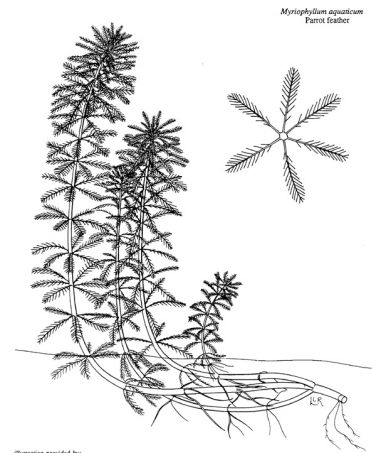
How Did Parrot Feather Become Established in Rhode Island?

Parrot feather is native to South America. Due to its attractiveness, it was likely first introduced to the United States as an aquarium or water garden plant that escaped cultivation or was dumped into a natural water body. Parrot feather was first observed by DEM in Rhode Island at Pocasset Pond in Johnston Memorial Park, Johnston, RI in 2009. Once introduced to a water body, plant fragments carried by currents, waterfowl or boats can spread the infestation throughout a water body. Because of its robust stems and waxy leaves,

plants can survive for long periods of time out of water. Thus, fragments attached to boats, trailers or fishing gear can be transported over long distances and introduced into new water bodies.

What Methods Can Be Used to Control Parrot Feather?

Due to its ability to reproduce through fragmentation, physical control of parrot feather is limited. Mechanical cutting or harvesting can spread plant fragments in a water body, unintentionally exacerbating the infestation. Hand pulling small patches may be effective if entire plants are removed. By law, the manual removal of submerged aquatic vegetation is restricted to that area adjacent to, but no more than fifteen feet from, existing or permitted docks, beaches or swimming areas under the Fresh Water Regulations (Rule 6.02). Manual plant removal outside this area requires a DEM wetlands permit (see below).



Parrot feather is adapted to water level fluctuations and is known to survive on wet river banks and lake shores. Water level draw downs are not an effective control option.

Chemical control of parrot feather is difficult as the waxy coating of the emergent leaves is difficult for herbicides to penetrate. Thus, eradication of parrot feather in a water body is unlikely once established. Several herbicides demonstrate potential for partial control. The DEM Division of Agriculture licenses the applicators that can apply the regulated herbicides to treat target invasive plants. Each herbicide treatment requires a specific permit from the Division of Agriculture. The most appropriate means of selecting a specific treatment plan is to consult a lake manager or licensed herbicide applicator, who can provide treatment options and estimate the associated costs. A more detailed survey of the entire water body will likely be needed to develop the most effective and cost efficient long-term management plan.

Please Help Prevent the Spread of Parrot Feather in Rhode Island!

Learn to identify invasive plant species and be on the lookout for new plants in your lake. It is much easier to manage a small patch of invasive plants than an entire lake covered with plants, so early detection is key! Identification resources are available on the RIDEM website at <http://www.dem.ri.gov/programs/benviron/water/quality/surfwq/aisindex.htm>.

RIDEM also encourages the use of clean boat hygiene practices. Boats (trailers and motors too) should be inspected for plant fragments before launching in the water and after boats have been hauled out of the water. See posted reminders at state boat ramps.

For more information also see:

- Guide to Understanding Freshwater Aquatic Plants, RIDEM
<http://www.dem.ri.gov/programs/benviron/water/quality/surfwq/pdfs/aquaplnt.pdf>
- Aquatic Invasive Species in Rhode Island
<http://www.dem.ri.gov/programs/benviron/water/quality/surfwq/aisindex.htm>
- RI DEM Herbicide permit application
<http://www.dem.ri.gov/programs/bnatres/agricult/pesticide.htm>
- RI DEM Water Quality and Wetland Restoration Team
<http://www.dem.ri.gov/programs/benviron/water/wetlands/pdfs/wqwrteam.pdf>
- RI DEM Wetlands permit application
<http://www.dem.ri.gov/programs/benviron/water/permits/fresh/index.htm>
- The URI Watershed Watch Program
www.uri.edu/ce/wq/ww
- The Rhode Island Natural History Survey
<http://www.rinhs.org/>

