Whitman County Extension
Weeds

Washington State University
WHITMAN COUNTY EXTENSION

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STEVE'S Weed of the Month

Parrotfeather

Also Known As: parrot feather, parrot's feather, parrotfeather water milfoil, Brazilian water milfoil, water-feather

Parrot Feather is a Class B Noxious Weed: Non-native species that are either absent from or limited in distribution in some portions of the state but very abundant in other areas. The goals are to **contain** the plants where they are already widespread and **prevent** their spread into new areas.

Parrotfeather (*Myriophyllum aquaticum* (Vell.) Verdc.), indigenous to South America, is an aquatic plant that gets its name from the feather-like leaves that are arranged around its stem in whorls of four to six. Parrotfeather has both submersed and emergent leaves. The emergent leaves are distinctive: bright green, they resemble miniature fir trees as they protrude several inches above the water surface in a stiff stance. In contrast, the submersed leaves are reddish, limp and more finely dissected. Stems of the plant are stout, woody and they branch and root at the nodes allowing for formation of fragments. Parrotfeather has an extensive range: it can reach depths exceeding six feet, while emergent stems can elongate and spread across the water and to the shore. Rhizomes provide support for adventitious roots and provide buoyancy for emergent growth.

Photo by: Richard Old, XID Services, Inc., Bugwood.org

While parrotfeather plants usually flower in the spring, some may flower in the fall. The small white flowers are inconspicuous and form where the emergent leaves attach to the stem. Because parrotfeather plants in North America are exclusively female, the plant produces no fruit/seeds and spreads solely through plant fragmentation and rhizomes. Plant fragments spread via water currents, water vessels, and waterfowl and other wildlife. Parrotfeather is found in lakes, ponds, and slow-moving water

bodies, such as streams and canals, where it can displace native aquatic plants and form dense mats of intertwined rhizomes that alter aquatic ecosystems. The mats can clog waterways, impede boats and provide a breeding ground for mosquitoes.

Photo by: Nancy Loewenstein, Auburn University, Bugwood.org

Photos by: Leslie J Mehrhoff, University of Connectticut, Bugwood.org

Photo by: John M Randall, The Nature Conservancy, Bugwood.org

Photo by: Leslie J Mehrhoff, University of Connecticut, Bugwood.org

Control Methods

Mechanical/Manual: Because parrotfeather can rapidly spread through stem fragmentation and rhizomes, use of mechanical control methods (e.g., cutting, harvesting, underwater tilling) is not recommended. Small ponds can be drained in the summer to eliminate parrotfeather; however, proper authorities should be consulted before any such action is taken.

Chemical: Special permits are required in order to apply herbicides to aquatic sites in Washington.

More information can be found in the PNW Weed Management Handbook

Use pesticides with care. Apply them only to plants, animals, or sites listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

DOE language: Although parrotfeather is considered by some to be susceptible to herbicides, it is difficult to achieve complete control. The emergent stems and leaves have a thick waxy cuticle and it requires a wetting agent to penetrate this cuticle. Often the weight of the spray will cause the emergent vegetation to collapse into the water where the herbicide is washed off before it can be translocated throughout the plant. Westerdahl and Getsinger report excellent control of parrotfeather with several herbicides including 2,4-D, diquat, and endothall. Fair control was obtained with glyphosate. The Monsanto Company suggested that applying a 1 3/4 percent solution of Rodeo® (aquatic version of Roundup®) with surfactant to the plants in the summer or fall when water levels are low would give about 95 percent control of the plants. Control of parrotfeather may be achieved with low-volatility ester of 2,4-D at 4.4-8.9 kg ha, sprayed onto the emergent foliage. The granular formulation of 2,4-D was needed to control parrotfeather for periods greater than 12 months. It is more effective when applied to young, actively growing plants. More recently imazapyr and triclopyr have been used to manage parrotfeather. For more information on Parrotfeather visit: http://www.ecy.wa.gov/programs/wq/plants/weeds/aqua003.html

Biological: While no biological agents are currently available for parrotfeather control, potential agents do exist and are being researched. Due to the plant's woody stems and high tannin content, most grazers ─ including grass carp ─ find it unpalatable.

Questions: contact Steve Van Vleet or phone (509) 397 - 6290