



# Whatcom Weeds

Whatcom County Noxious Weed Control Board 901 W. Smith Road Bellingham WA 98226  
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## GIANT SALVINIA

### *Salvinia molesta*

**THREAT:** Giant salvinia is an aquatic plant native to southeastern Brazil, which grows in freshwater. It was probably introduced into the U.S. for use in fish aquariums and/or landscaping. This plant is a federally listed noxious weed. Giant salvinia reproduces vegetatively, in this country. As plants mature, the stems fragment, with each fragment producing more growth. In this way, giant salvinia reproduces rapidly, capable of doubling its numbers in 2 to 10 days. New plants can grow from very small plant fragments. Giant salvinia grows in still and slow-moving water and can withstand dewatering, as dormant buds. Giant salvinia does not appear to survive the formation of ice on the water, although it can tolerate freezing air temperatures. The thick mats formed by giant salvinia can grow up to 3 feet deep and become very large (one has been measured to be 96 square miles in area). These mats can displace native vegetation, prevent sunlight from entering the water, cause oxygen depletion of the water body (affecting the survival of fish and invertebrate species), clog water intakes and diminish recreational use of the water.



**DESCRIPTION:** Giant salvinia is a floating, rootless aquatic fern. It has horizontal stems that float just below the surface of the water. At each node on the stem, the plant produces a pair of floating leaves. These leaves are green, oval to ovate in shape, and ½ to 1 inch in diameter. A highly divided, brown leaf is also produced and these dangle below the stem, sometimes being mistaken for roots. The upper surfaces of the floating leaves are covered in rows of white, bristly hairs. These hairs split into four tiny strands that rejoin at the tips, giving the hairs an eggbeater-like appearance (4 species of salvinia share this characteristic and all are on the federal noxious weed list; only giant salvinia has been found in the U.S., so far). When young the green leaves float flat on the water. As the plants age, the leaves fold and compress into upright chains.



**MANAGEMENT OPTIONS:** Like all aquatic weeds, control is difficult and eradication may be unrealistic. To prevent the spread of any aquatic plants, trailers, boats and fishing gear should be carefully inspected to avoid transporting plant materials between water bodies. Small infestations can be manually or mechanically removed, but care must be taken to prevent plant fragments from escaping and further spreading the plant. The use of herbicides may be effective on small areas but may not control large infestations. Work is currently underway to test a biological control agent.

*Photos courtesy of Scott Robinson and US Army Corp of Engineers*