Hawaii Division of Aquatic Resources

Salvinia molesta Information Sheet



Salvinia molesta (Giant Salvinia, karibaweed) is a perennial floating aquatic fern that is native to Brazil, and thrives in nutrient rich, warm slow-moving freshwater. It was first introduced to the State of Hawaii as an ornamental aquatic plant, but it quickly spread by unintentional means through aquarium releases, fishing and boating gear. Giant Salvinia grows in dense mat structures and can double in size in under a weeks' time. To compound this issue, it may reproduce from tiny spores as well as from small fragments. Giant Salvinia has no predator in Hawaii to keep its growth rate in check.

In 2002 Lake Wilson (Wahiawa Reservoir) Oahu, *Salvinia* had completely covered the entire surface of the 325-acre lake. It took only two months to go from 30% coverage to 100% coverage within the lake. The *Salvinia* was so thick that it hindered boat movement within the game fishing lake. *Salvinia* posed a threat to the ecosystem of the lake by reducing oxygen levels and sunlight to the rest of the lake below. If left unchecked the mats degrade the water quality for fish and other organisms, and shade out native plants. By 2003 the state invested more than a million dollars in a clean-up effort that involved multiple interagency and volunteer efforts to manually remove the weed from the lake. The remaining weeds were sprayed with aquatic herbicides. No *Salvinia* has been reported in Lake Wilson since this cleanup effort.

Salvinia molesta has since been banned for sale within Hawaii. Giant Salvinia has proven to be incredibly invasive in other parts of the United States and is regulated by the Federal Noxious Weed Program. In 2013 Salvinia was added to the List of 100 of the World's Worse Invasive Alien Species by the International Union for Conservation of Nature.



