

# Fragrant Water Lily

*Nymphaea odorata*

Waterlily Family

## Non-Designated Noxious Weed: Control Recommended

### Identification Tips

- Perennial floating aquatic plant, typically found in 3 to 6 feet of water
- Sweet-scented showy white to pink flowers with many petals
- Round, green leathery leaves up to 10 inches across with a slit on one side
- Leaves float on the surface of the water, rarely sticking up above it
- Leaf stalk attached at base of slit
- Straight, flexible stalks attach to thick submerged rhizomes

### Biology

- Usually flowers June to October  
After fertilization, flower stalk curls like a corkscrew, drawing the flower underwater
- Reproduces by floating seeds and thick, fleshy rhizomes
- Seeds move by wind and wave action and rhizome pieces can break off, establishing in a new locations
- Grows in shallow, freshwater ponds and lake edges
- Can tolerate a wide range of pH; prefers mucky to silty lake/pond bottoms
- Dies back in the fall and decays on the water's surface

### Impacts

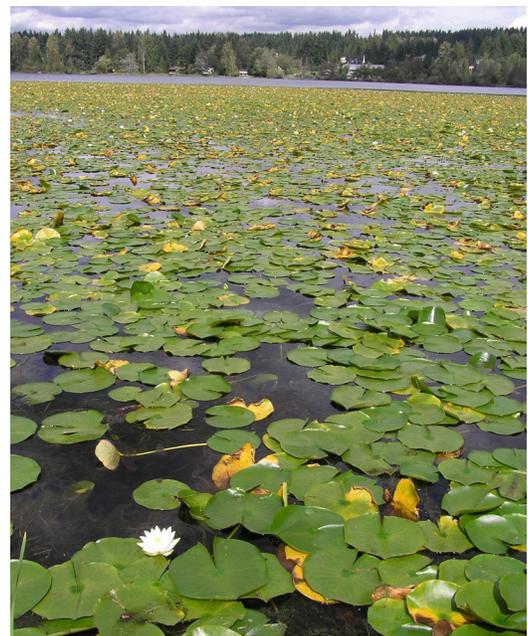
- Spreads quickly and widely: one rhizome can cover up to a 15-foot diameter circle within five years
- Drownings in King County have been attributed to swimmers getting tangled in dense water lily stems
- Fouls boat motors and restricts passage for non-motorized boats
- Stagnant mats create mosquito breeding areas and increase water temperatures by absorbing sunlight
- Contributes to algal growth and water quality problems

### Distribution

- Found in many lakes throughout King County and numerous wetlands and ponds



*Native to the eastern United States, water lily was introduced in Washington in the late 1800s and has been intentionally planted for decades; however, it has proven to be invasive and damaging to waterbodies here.*



*Water lilies grow in dense patches, excluding native species and depleting oxygen.*



### Questions?

## What You Can Do

While there is no legal requirement for controlling fragrant water lily in King County, the King County Noxious Weed Control Board recognizes this plant as invasive and recommends prevention of spread into uninfested areas and control in waterbodies where feasible.

## Control Methods

The preferred method for water lily control is one that takes a multifaceted and adaptive approach. Survey the area for weeds, set priorities, check on permitting issues and select the best control methods for the site and conditions. Permits are generally required for any control methods (hand-pulling, mechanical, chemical) done in natural waterbodies such as lakes and wetlands. Contact the King County Noxious Weed Control Program for permit guidance.



*No way out: fragrant water lily clogs swimming areas, boat launches and other recreational areas.*

**Prevention:** Don't plant water lily in natural waterbodies. It is legal to buy this species for use as an ornamental planting, but it should be restricted to small self-contained private ponds or man-made water features.

**Manual:** Dig up small isolated patches, making sure to get the entire rhizome. Hand pulling can be successful for a small area if repeated on a regular basis; however, this method is impractical for large infestations. Make sure to remove all pulled/cut plant pieces from the water. It can be composted on land or placed in a yard waste bin. Another option is a carbohydrate depletion technique in which all emerging leaves are consistently removed. Typically it takes two to three growing seasons to kill the plants. All manual control methods that disturb lake bottoms, wetlands or streambeds require at a minimum an HPA pamphlet permit from the WA Dept. of Fish and Wildlife (Publication # APF-1-98).

**Mechanical:** An opaque bottom barrier can be used to suppress growth in small areas such as a boat launch or around a swimming area. Underwater rototilling of the rhizomes using a backhoe mounted to a barge and cutting and harvesting using boat-mounted cutters are options for large-scale removal and control. These methods require approval from the WA Dept. of Fish and Wildlife.

**Chemical:** Herbicides may be the most effective, cost effective option for eradication of large infestations. Professional, licensed contractors are available to hire for this method. In Washington state specially formulated aquatic herbicides are only available for purchase to licensed applicators. Applying herbicides to water requires a permit from WA Dept. of Ecology in most cases. **NEVER apply non-aquatic herbicide formulations to water since most of them include ingredients that are toxic to aquatic organisms.** When using a chemical application, monitor the area of treatment for new plants germinating from the seed bank for several years after application. Eradicate any new growth using one of the manual control methods listed above. Please contact the King County Noxious Weed Control Program if you have questions.