

# Invasive Aquatic Plants Information

Lake Roesiger Community and Boat Club  
10 am, July 16, 2022 at Lake Roesiger Park

# Definitions

<https://www.snohomishcountywa.gov/750/Noxious-Weeds-List>

- Class A noxious weeds are those noxious weeds not native to the state that are of limited distribution or are unrecorded in the state and that pose a serious threat to the state. These weeds are a threat to all counties of the state and eradication is required.
- Class B noxious weeds are those noxious weeds not native to the state that are of limited distribution or are unrecorded in a region of the state and that pose a serious threat to that region. There is a long list of weeds requiring control in Snohomish County.
- Class B designated weeds are common in the county and are not designated by the State Weed Board to be controlled in that county, however the County has chosen to control these weeds and have included them on the County Weed List. Control in Snohomish County is required.
- Class C noxious weeds are designated by the State Weed Board as noxious so any county within the state may control these weeds within the county if they desire. Snohomish County has chosen to only require control of English Hawthorne.

## Timing

- WDFW recommended timing for in-water work is July 15 thru September 15 to minimize fish impacts, although their pamphlet states that control and removal of invasives has no timing restrictions. Note that per WDFW, Lake Roesiger falls into the “Lakes” category at the end of the table as opposed to one of the river tributaries.
- See individual weed pamphlets for “best practice” recommendations based on control method used.
- Before working to remove other plants, please first check for milfoil. If you find any please use the survey tool from the club website to provide a location and request its removal.

Tools you might find handy:

Weed Cutter,

Lake Rake,

Pole Saw,

Lily Pad Ripper,

Trout net (or similar)

Check pond websites – Weeder’s Digest, The Pond Guy, etc.

## Locating the weeds

- There is an interactive map on the Roesiger Invasive Plant Control Project website. Check the right side bar under Aquatic Plant Survey Maps. This lists the plants found during the 2021 survey.
- Under “Details” tab, the middle icon (show contents of map) allows you to select for specific plants. You can also move or zoom in to a specific area
- Click inside the individual tax parcels to find yours.
- Click on the colored area or symbol to get information on the plant(s) found.
- If you find milfoil, please report it via the online reporting survey on the club website.

### Interactive Map

<https://snoco->

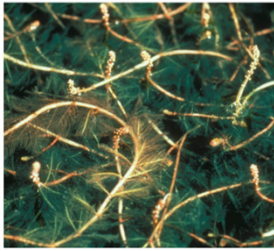
[gis.maps.arcgis.com/home/webmap/viewer.html?webmap=9e0f62acbf2b41b9b9561e5cd7642780&extent=-121.9391,47.9755,-121.8837,47.9984](https://snoco-gis.maps.arcgis.com/home/webmap/viewer.html?webmap=9e0f62acbf2b41b9b9561e5cd7642780&extent=-121.9391,47.9755,-121.8837,47.9984)

### Milfoil Reporting Survey

<https://docs.google.com/forms/d/e/1FAIpQLSerTrwENDuSfVrLwreQ-ZPFDDIPb5rPHP538xzHSTHIFHHA5A/viewform>

## Eurasian Watermilfoil (Class B)

- Eurasian watermilfoil is a perennial, submersed, aquatic plant with dissected leaves. Leaves are finely dissected and typically occur in whorls of 4. Each leaf typically has 12 or more leaflet pairs. Leaves have a feather-like appearance. Of particular concern is that it spreads by plant fragmentation.



Differentiate from:  
common bladderwort,  
common waterweed  
pondweed, string algae  
brittlewort

## Eurasian Watermilfoil Control

- Unless you are trained to remove the plant and have the correct equipment to capture the entire plant (fine meshed bag), please try to avoid disturbing the plant.
- Please use the reporting tool on the club website or alert a member of the club board, or community relations committee to its location.
- Bottom barriers are an option for small areas around docks or swimming areas. A JARPA / HPA may be required.
- Dispose in yard waste or compost away from lake.

### Sources:

Washington State Noxious Weed Control Board  
King County pamphlet  
Snohomish County Aquatic Plants

Chemical control is used on other lakes for large infestations. Thus far Lake Roesiger has avoided that.

## Fragrant Water Lily (Class C)

- Unmanaged fragrant water lily forms dense stands in water that can cover hundreds of acres and persists throughout summer. It can restrict lake-front access, eliminate swimming opportunities, and outcompete native aquatic vegetation.



Also a contributor to middle lake transformation into a wetland or swamp, and can cause a reduction in oxygen content in the water, affecting the fish.

## Fragrant Water Lily Control Options

- Hand pulling or cutting stems can be successful for small areas if repeated on a regular basis – every 10 days to 2 weeks through the growing season is recommended. Remove all plant parts from the water. It will require a multi-year effort.
  - Manually with a weed cutter – a lake rake or trout net can remove the floating debris
  - Motorized cutter with collector
  - Bottom barriers are an option for small areas around docks or swimming areas. A JARPA / HPA may be required.
- Dispose in yard waste or compost away from lake.

### Sources:

Washington State Noxious Weed Control Board

King County pamphlet

Whatcom County pamphlet



## Fragrant Water Lily Control Options (cont)

- Root removal provides a slightly longer term solution; options include
  - a pole saw for very small areas - this can be used from a dock, small boat, or kayak. A cultivator or similar hooked tool can help dislodge the roots
  - a lily pad “ripper” for larger areas such a boat lane – this can be pulled from a boat or jet ski or from a land based vehicle if you have shore access and a long rope.
- Notes for a lily pad ripper:
  - The ripper can snag on submerged logs
  - Sections of lake bottom may float to the surface with the roots. These should be removed from the lake and disposed of.

It is OK to move the logs but not to remove them (per DNR)

## Fragrant Water Lily Control Options (cont)

- Chemical treatment requires a licensed applicator – this method is included in the IAVMP (see the Snohomish County Lake Roesiger Project website under Resources - page 14).
- Lake Defense Force is experimenting with a method that blasts air into the muck to dislodge the roots from the soil. This may be another option for smaller areas.
- We are always looking for additional methods, please share any success stories.

Middle lake was chemically treated a couple of times in the 1970s

## Slender Arrowhead (Class B)

- Slender arrowhead is an emergent or submersed, perennial, aquatic flowering plant. It has both emergent and underwater leaves. Leaves are basal. Submerged leaves are strap-shaped, up to 20 inches long and 1 inch wide. Flowers are white and sometimes pink and around 1 inch in diameter.



Noxious Weed Board calls it grass-leaved arrowhead. Supplemental written finding lists Lake Roesiger as the primary location.

Differentiate from  
water celery / tapegrass (also non-native)  
water bulrush

## Slender Arrowhead Control Options

- Hand pulling can be successful since the plant has shallow roots. Grab near the base of the plant and pull up. This works in both muck and rocky soils.
- A weed cutter can be used to dislodge roots in mucky soil. The plants then float to the surface where they will need to be gathered.
- Arrowhead has been mentioned as a possible “antidote” to milfoil. From experience, the area where I removed arrowhead last summer was covered in various pond weeds and string algae this spring.
- Dispose in yard waste or compost away from lake.

### Sources:

Washington State Noxious Weed Control Board

### Notes from last month:

The arrowhead was also covered in algae. If the arrowhead is weighed down with algae, it may not float.

## Dealing with Muck

- Aquathusters are not allowed without Hydraulic Project Approval (HPA) per WDFW.
- Aeration is said to help increase dissolved oxygen levels and promote muck decomposition.
- Muck reducer pellets work similar to aeration, promoting muck decomposition.
- While dredging requires an HPA, removing a bucket full or two of muck per day to add to your garden does not .

Still reading white papers and researching aeration:

- Aeration may stir up the muck and/or create algae blooms of the free floating algae.
- Aeration may help reduce the string algae and pond weeds by decreasing available nutrients

Water vacuums (will need a permit (HPA))

One solution for muck lifting (forming an “island”) due to gas bubbles trapped below is to puncture the bubble in multiple locations with a tool handle

## More Information / References

- Noxious Weed Control Board – Pamphlets from various sources  
<https://www.nwcb.wa.gov/>
- Snohomish County Aquatic Plants website  
<https://snohomishcountywa.gov/1106/Aquatic-Plants>
- Aquatic Plant Identification Manual – Dept of Ecology  
<https://fortress.wa.gov/ecy/gisresources/lakes/AquaticPlantGuide/index.html>
- Snohomish County's Lake Roesiger Project Website  
<https://snohomishcountywa.gov/5822/Roesiger-Invasive-Plant-Control-Project>
- Aquatic Plants and Fish pamphlet - Washington Dept of Fish and Wildlife  
<https://wdfw.wa.gov/publications/01728>

## More Information / References

- Department of Fish & Wildlife – Hydraulic Project Approval  
<https://wdfw.wa.gov/licenses/environmental/hpa>
- Department of Natural Resources – Leasing and Land Transactions  
<https://www.dnr.wa.gov/programs-and-services/aquatics/leasing-and-land-transactions>
- Department of Ecology - Aquatic Pesticide Permits  
<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits>