

How to Conduct an Aquatic Plant Survey

Purpose

Surveying of a lake or pond to document aquatic plant growth serves several purposes:

- Provides objective baseline data to more accurately attain a long-term perspective
- May identify unique lake or pond resources and ensure protection
- If conducted regularly, these surveys may document or track rare or endangered plant species, or detect newly introduced invasive exotic plants

Recommended Methods

Essential tools for conducting a successful plant survey:

- Boat
- Plant key or guide
- Paper/writing utensil
- Map of waterbody
- Plastic zip-lock bags

Optional gear:

- Rake to pull up plants
- Snorkel gear
- View scope (VTDEC has loaners)
- Polarized sunglasses



Visual aquatic plant survey (VTDEC)

Conducting a survey:

- Surveys are best conducted with at least one other person; one person steers or paddles the boat while the other can look for aquatic plants.
- Choose a calm day for best visibility.
- Boat around the shoreline of the lake and out to as deep as plants are growing (approximately the 15-foot depth) and note the plant species and their density.
- Pay special attention to boat access areas, inlets and outlets, shallow bays, and any flow-restricting structures such as dams.
- Notes about shoreline vegetation, development, or any other factors that may affect the quality of the water are also valuable.
- If there is any question regarding identification, pull one of the plants out of the water for further examination. If you are still unsure or may suspect it is an exotic invasive species, place a representative piece in a wet paper towel and a plastic ziplock bag, include your name and contact information, date and the name of the water body the sample was collected from and mail the sample to the address below:



Lakes and Ponds Management and Protection Program
Department of Environmental Conservation
Watershed Management Division
1 National Life Drive, Main 2, Montpelier, VT 05620-3522
ATTN: Plant Sample

Aquatic Plant Identification Guides

Aquatic and Wetland Plants of Northeastern North America. Crow & Hellquist. Two Volumes.

Aquatic Plants of the Upper Midwest. Skawinski, Paul. Third Edition.

Vermont Invasive Patroller Survey Data Sheet



Waterbody: _____ Town: _____
 Area Surveyed: _____
 Latitude/Longitude (if possible): _____ Map with Location? _____
 Survey Date: _____ Total Survey Hours: _____ # Surveyors: _____
 Name: _____
 Street Address: _____ Town: _____ State: _____ Zip: _____
 Phone: _____ Email: _____
 Additional Surveyor Names: _____

Water Conditions:

Relative Water Level (Check one)	Water Clarity (Check one)	Light Conditions (Check all that apply)	Surface Conditions (Check all that apply)
<input type="checkbox"/> High <input type="checkbox"/> Normal	<input type="checkbox"/> Good <input type="checkbox"/> Fair	<input type="checkbox"/> Clear <input type="checkbox"/> Partly Cloudy	<input type="checkbox"/> Calm <input type="checkbox"/> Rippled

Survey of Aquatic Invasive Species:

Please check the box for species that were already known to exist in the waterbody and observed during the survey.

Aquatic Plants	<input type="checkbox"/> Brittle naiad (BN)	<input type="checkbox"/> Curly-leaf pondweed (CLP)	<input type="checkbox"/> Eurasian watermilfoil (EW)
<input type="checkbox"/> European frogbit (EF)	<input type="checkbox"/> Starry stonewort (SS)	<input type="checkbox"/> Water chestnut (WC)	<input type="checkbox"/> Variable-leaf watermilfoil (VLM)
Aquatic Animals	<input type="checkbox"/> Asian clam (AC)	<input type="checkbox"/> Spiny waterflea (SWF)	<input type="checkbox"/> Zebra mussel (ZM)
Watch List			
<input type="checkbox"/> Hydrilla (H)	<input type="checkbox"/> Brazilian waterweed (BW)	<input type="checkbox"/> Fanwort (F)	<input type="checkbox"/> Parrot feather (PF)

Please note if the species has reduced or expanded its location: _____

New Suspicious Species Observed? - Indicate location (lat/long), approximate size of plant bed or colony, if applicable,

Native or Invasive Species Submission - Request for Confirmation	Sample Submitted to VT DEC (Y or N)	Location (indicate on Map of lake)
1a. Name:		
1b. Identifiable Features:		
2a. Name:		
2b. Identifiable Features:		
3a. Name:		
3b. Identifiable Features:		