

# Curly leaf pondweed by the book and what you need to know

Curly leaf pondweed is an aquatic invasive plant species that was introduced to the U.S. in the 1800s and has since spread to many bodies of water. It has a unique life cycle.

Sprouting in autumn from dormant pine-cone like buds, called turions, which lie on the lake bottom, the young plants remain alive under the ice during the winter, giving them a jumpstart on the native plants that remain dormant until spring.

Their competitive advantage over native aquatic plants tends to be even greater in years of little or no snow cover because their growth is more vigorous due to the additional light they receive through the ice.

Curly leaf pondweed can grow in dense stands, thus covering large area of the water surface. The ability of the plant to quickly develop by spring or early summer can create problems for recreation and navigation.

The plant then dies back in late-June to July, and causes additional problems.

The dead plants often accumulate along the lakeshore, and provide an influx of phosphorus from the decomposing plants which commonly results in an algal bloom.

Curly leaf pondweed displaces native plant communities by rapidly growing above native aquatic species, thus impeding and reducing desirable plant production.

Management objectives for curly leaf pondweed control should involve prevention (by reducing the phosphorus load entering the lake from the surround-

ing watershed) and maintenance. Once established, curly leaf pondweed is difficult, if not impossible to completely eradicate.

Management efforts should include keeping beaches free from plant growth, opening boat lanes from the shore to open water, maintaining favorable plant cover for fish populations and restoring the diversity of submerged plant communities.

Established populations of curly leaf pondweed should also be maintained to prevent further spread by fragmentation and control measures should be conducted early in the year before turions are produced.

Because curly leaf pondweed is generally gone by mid-July, management activities should be undertaken in the spring or very early summer to have maximum benefit.

## CONTROL METHODS

The main control methods include:

- Mechanical harvesting — Cutting, harvesting is used as a means to control the plant, although plants will likely reestablish from the remaining roots.

Harvesting consists of cutting curly leaf pondweed approximately five feet below the surface of the water, collecting by conveyor, and storing until disposed of on land.

Harvesting creates open areas of water by removing surface mats.

- Chemical treatment — Several herbicides are available and have been successful for curly-leaf pondweed control.

These herbicides, however are not species selective and will also kill the beneficial native aquatic

vegetation in the treatment area.

- Habitat manipulation — Habitat manipulation such as water level draw down, dredging, or bottom barriers can be used to manage curly leaf pondweed. Fall drawdown can prevent curl leaf pondweed from growing the following summer by exposing turions to freezing temperatures and desiccation, while dredging removes the rooted plants, and bottom barriers prevent the growth of rooted plants in small areas.

Individuals may need a permit to remove rooted aquatic vegetation from their lakefront.

Information on both the Aquatic Plant Management Program and the Public Waters Work Permit Program is available on the DNR Web site at [HYPER-LINK "http://www.dnr.state.mn.us/permits/water/index.html"](http://www.dnr.state.mn.us/permits/water/index.html) <http://www.dnr.state.mn.us/permits/water/index.html> or by calling 651-296-6157.

For additional information on the relationship between aquatic vegetation and water quality contact Randy Anhorn, Administrator/Limnologist at the CLFLWD offices at 651-209-9753 or [randy.ahnorn@clflwd.org](mailto:randy.ahnorn@clflwd.org).

To arrange a free visit with a runoff management professional, contact Anhorn at 651-209-9753 or send an e-mail to: [randy.ahnorn@clflwd.org](mailto:randy.ahnorn@clflwd.org).

Additional information on the CLFLWD's cost-share program can be found at [clflwd.org](http://clflwd.org).

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