

WILD CELERY FACT SHEET

Created by Progressive Companies / Water Resources Group

Vallisneria americana, commonly known as wild celery or eelgrass, is a submerged aquatic plant native to North America. It plays an important role in freshwater ecosystems, providing food for migratory waterfowl and habitat for fish and invertebrates, stabilizing sediment, and improving water quality. However, its rapid growth and expansive coverage can raise concerns for navigation and recreational activities in affected water bodies.

Wild celery can form dense mats that may obstruct waterways, making navigation challenging for boaters. These thick patches can reduce visibility and maneuverability, posing risks for boaters who may not be able to detect shallow areas or obstacles. In addition, *Vallisneria* is shallow-rooted and can be easily dislodged, allowing it to float and accumulate along shorelines.

While most aquatic plants can be effectively controlled with herbicides, treating wild celery is often less successful, as treatment typically only suppresses growth rather than eliminating the plant entirely. Further, wild celery has a robust rhizome system that allows it to regenerate even after herbicide application, making season-long control challenging.

The most common method employed to manage its growth is the application of chelated copper, a form of copper complexed with organic compounds, which enhances its efficacy and reduces toxicity to non-target organisms. Chelated copper acts as an herbicide by disrupting the photosynthetic process in aquatic plants. The effectiveness of chelated copper is highly dependent on application timing and concentration. Optimal results are typically observed when applied in late spring or early summer when *Vallisneria* is actively growing. Even so, the remaining plant mass and relatively quick regrowth present continuous management challenges.

The Michigan Department of Environment, Great Lakes, & Energy (EGLE) requires a permit be obtained prior to applying herbicides to lakes in Michigan. The permits specify approved herbicides, dosage, use restrictions, and areas of the lake where treatments are allowed. For wild celery, only two treatments in the same area are permitted per year.

Another option for controlling wild celery is mechanical harvesting, which involves the physical cutting and removal of the plant. This method is particularly suitable for large sections of the lake ranging from two to eight feet in depth that exhibit dense growth, especially in areas away from developed shorelines where herbicide treatment is not permitted. In most cases, harvesting does not require a permit. Still, there are limitations to this method such as cost, non-selective plant removal, uncaptured plant fragments, and the need to transport plant material for disposal.

While wild celery does offer ecological benefits, its dense growth can interfere with recreation and navigation. Both chemical and mechanical management strategies have their place, though each comes with limitations that require careful consideration. Boaters navigating through areas with heavy vegetation should trim up their motors to prevent damage and reduce the risk of becoming stuck. If you have concerns about wild celery or other aquatic vegetation in your lake, it's best to speak with your lake management consultant to determine the most appropriate and environmentally responsible course of action.

