September 2026

SHAVEHEAD LAKE

PLANT CONTROL SUMMARY

PREPARED FOR:
SHAVEHEAD LAKE IMPROVEMENT BOARD
CASS COUNTY, MI

PROGRESSIVE COMPANIES

SHAVEHEAD LAKE IMPROVEMENT BOARD

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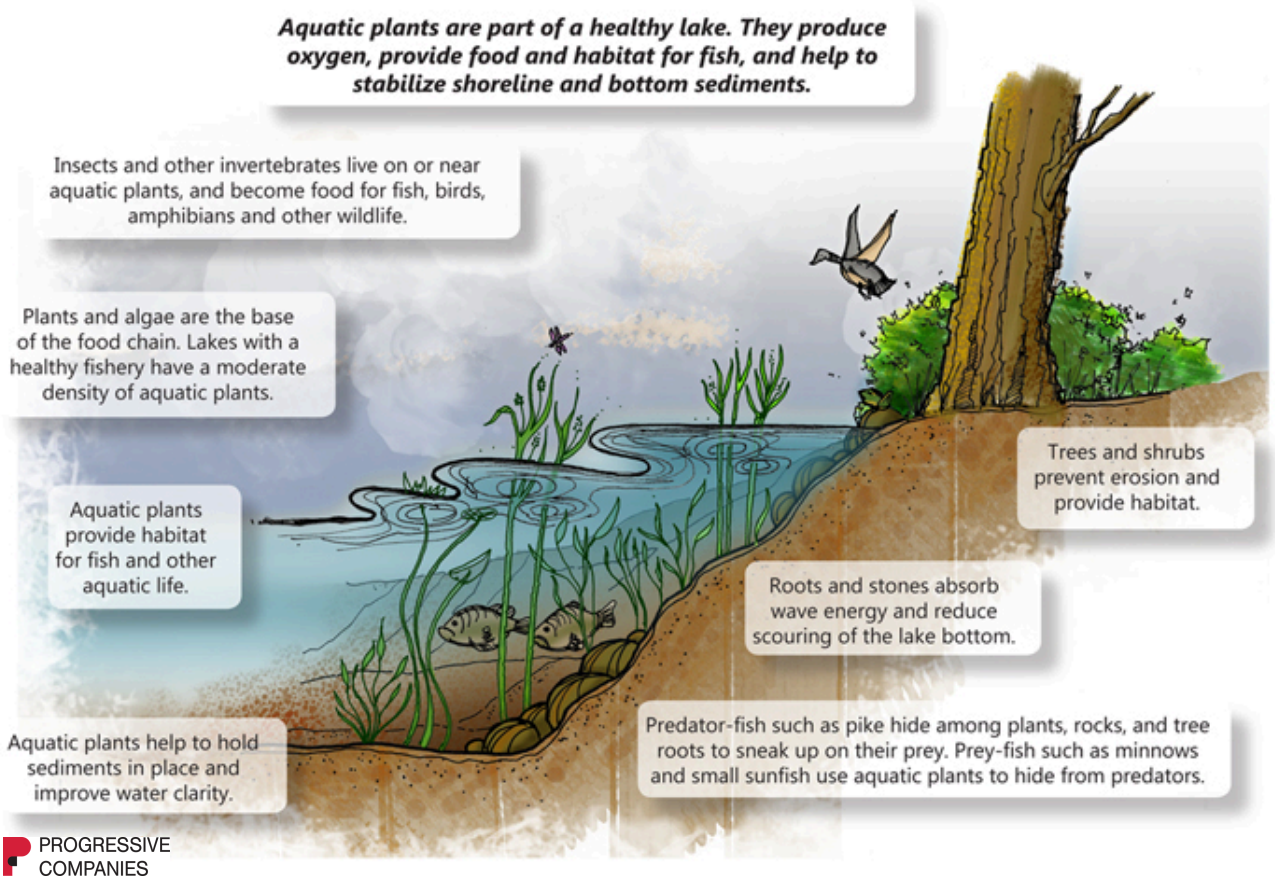
AQUATIC HERBICIDE APPLICATOR

SOLitude Lake Management



PROGRAM SUMMARY

A nuisance aquatic plant control program has been ongoing on Shavehead Lake since 2023. The primary objective of the program is to prevent the spread of invasive aquatic plants while preserving beneficial native plant species. This report contains an overview of plant control activities conducted on Shavehead Lake in 2026.



Aquatic plants are an important component of lakes. They produce oxygen during photosynthesis, provide food, habitat and cover for fish, and help stabilize shoreline and bottom sediments. There are four main aquatic plant groups: submersed, floating-leaved, free-floating, and emergent. Each plant group provides important ecological functions. Maintaining a diversity of native aquatic plants is important to sustaining a healthy fishery and a healthy lake. Invasive aquatic plant species have negative impacts on the lake's ecosystem. It is important to maintain an active plant control program to reduce the establishment and spread of invasive species within Shavehead Lake. Plant control efforts in 2026 consisted of four aquatic plant surveys and three aquatic herbicide treatments.

PLANT CONTROL

Plant control activities are coordinated under the direction of an environmental consultant, Progressive Companies. Scientists from Progressive conduct GPS-guided surveys of the lake to identify problem areas, and georeferenced plant control maps are provided to the plant control contractor. GPS reference points are established along the shoreline of the lake. These waypoints are used to accurately identify the location of invasive and nuisance plant growth areas.



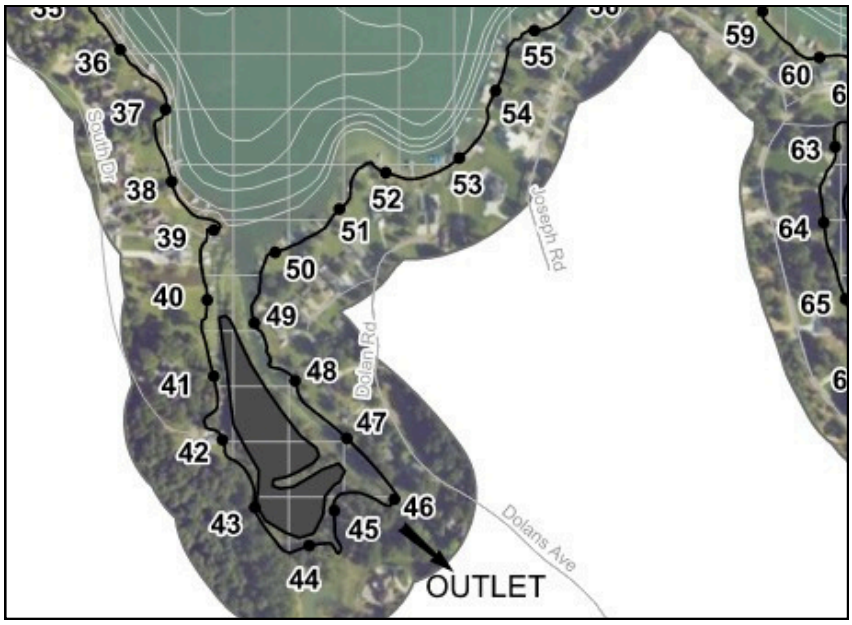
Eurasian milfoil
Myriophyllum spicatum



Curly-leaf pondweed
Potamogeton crispus



Starry stonewort
Nitellopsis obtusa



Primary plants targeted for control in Shavehead Lake include Eurasian milfoil, curly-leaf pondweed, and starry stonewort. These plants are non-native (exotic) species that tend to be highly invasive and have the potential to spread quickly if left unchecked. Plant control activities conducted on the lake in 2026 are summarized in Table 1.

In Michigan, an Aquatic Nuisance Control (ANC) permit must be acquired from the Department of Environment, Great Lakes, and Energy (EGLE) before herbicides are applied to inland lakes. The permit lists the herbicides that are approved for use, maximum dose rates, use restrictions, and indicates specific areas of the lake where herbicides may be applied. Permit requirements are designed to protect public health and the environment. The contracted herbicide applicator on Shavehead Lake, SOLitude Lake Management, holds the ANC permit for the lake.

PLANT CONTROL

TABLE 1. SHAVEHEADLAKE 2026 PLANT CONTROL ACTIVITIES

Date	Plants Targeted	Acreage
May 14	E. milfoil, curly-leaf	8.25
June 15	curly-leaf, starry stonewort	8.50
August 24	starry stonewort	4.25
Total		**21.00**

In 2026, 21 acres of Shavehead Lake were treated with aquatic herbicides throughout the season. Eurasian milfoil and curly-leaf pondweed were treated in the channels for the first treatment of the year in May. Curly-leaf pondweed was treated along the drop-off in June on the west side of the lake. Starry stonewort was treated twice in the southeast channel.

Starry stonewort is currently growing in areas along the lake's drop-off at depths of 15 feet or greater. At these depths, treatments can have limitations regarding long-term effectiveness, as the herbicide may not adequately reach the target area through the water column. Additionally, starry stonewort is present at moderate densities in several areas, making it difficult to ensure the herbicide will reach the target species before drifting occurs.

Fragmentation is the primary means by which starry stonewort spreads to new areas of a waterbody. Frequent rake sampling to identify starry stonewort locations for treatment could inadvertently increase the risk of fragmentation and further spread. Shavehead Lake also has a good diversity and abundance of native aquatic plants, which can help limit the establishment and spread of starry stonewort.

Caution should be exercised while continued monitoring is carried out to track the location and density of starry stonewort. Unnecessary disturbance of the plants should be avoided to help minimize the potential for fragmentation and further spread. If starry stonewort is observed in shallower water, where treatment can be applied more effectively and with less risk of drift, treatment will be recommended.

PLANT INVENTORY SURVEY

In addition to the surveys of the lake to identify invasive plant locations, a detailed vegetation survey of Shavehead Lake was conducted on August 12 to evaluate the type and abundance of all plants in the lake. The table below lists each plant species observed during the survey and the relative abundance of each. At the time of the survey, 17 submersed species, three free-floating species, and nine emergent species were found in the lake. Shavehead Lake maintains a good diversity of beneficial native plant species.

TABLE 2. SHAVEHEAD LAKE 2026 PLANT INVENTORY DATA

Common Name	Scientific Name	Group	Percentage of sites where present
Illinois pondweed	*Potamogeton illinoensis*	Submersed	63
Slender naiad	*Najas flexilis*	Submersed	43
Chara	*Chara* sp.	Submersed	35
Water stargrass	*Heteranthera dubia*	Submersed	25
Sago pondweed	*Stuckenia pectinata*	Submersed	16
Wild celery	*Vallisneria americana*	Submersed	10
Richardson's pondweed	*Potamogeton richardsonii*	Submersed	7
Ribbon-leaf pondweed	*Potamogeton epihydrus*	Submersed	6
Thin-leaf pondweed	*Potamogeton* sp.	Submersed	5
Starry stonewort	*Nitellopsis obtusa*	Submersed	3
Small pondweed	*Potamogeton pusillus*	Submersed	3
Bladderwort	*Utricularia vulgaris*	Submersed	2
Curly-leaf pondweed	*Potamogeton crispus*	Submersed	2
Coontail	*Ceratophyllum demersum*	Submersed	1
Elodea	*Elodea canadensis*	Submersed	1
Submersed bulrush	*Schoenoplectus subterminalis*	Submersed	1
Green milfoil	*Myriophyllum verticillatum*	Submersed	1
White waterlily	*Nymphaea odorata*	Floating-leaved	33
Yellow waterlily	*Nuphar* sp.	Floating-leaved	29
Water shield	*Brasenia schreberi*	Floating-leaved	1
Bulrush	*Schoenoplectus* sp.	Emergent	42
Arrowhead	*Sagittaria latifolia*	Emergent	39
Purple loosestrife	*Lythrum salicaria*	Emergent	27
Cattail	*Typha* sp.	Emergent	15
Pickerelweed	*Pontederia cordata*	Emergent	10
Phragmites	*Phragmites australis*	Emergent	7
Swamp loosestrife	*Decodon verticillatus*	Emergent	3
Iris	*Iris* sp.	Emergent	2
Arrow arum	*Peltandra virginica*	Emergent	1

Exotic invasive species