Since 1975 Aqua-Weed Control Inc. has provided products and services for managing nuisance aquatic plant problems in Michigan’s lakes and ponds. As one of the largest aquatic plant control companies in Michigan, we take customer service seriously!

Aqua-Weed Control Inc. is a second generation family owned business. As a “hands on” owner, I personally supervise, on a daily basis, many of the aquatic weed control projects we are contracted to perform. Few companies can make this claim!

I understand that maintaining your water resource in an ecological and economical manner is important. We value your business and trust in us. We strive to live up to this trust every day!

Dick Pinagel  
Owner

Excellent work, Aqua-Weed keeps our pond clean and weed free. Our pond is the family focus and Aqua-Weed keeps us looking good year round.

- Mr. Rob Trott | Host, Great Lakes Outdoors

The Aqua-Weed Control Difference

Each lake has its own individuality. Some lake management companies take a “one size fits all” approach with their recommendations. Aqua-Weed Control specializes in developing individualized management plans to fit the diverse recreational requirements of your water resource.

We look at each lake and pond as a finger print!

Aqua-Weed Control Inc. works with state regulators, manufacturers, suppliers and academic institutions to ensure that the aquatic weed and algae control techniques we employ are current, safe and offer optimum success.

Other Advantages:

- Aqua-Weed Control does not charge extra for on-site lake consultations or to attend your lake association meeting.
- Aqua-Weed Control will respond to service requests within 24 hours.
- Aqua-Weed Control is the only company in Michigan that routinely notifies each lake front resident within the treatment area at least 24 hours in advance of scheduled plant control applications. Aqua-Weed Control does this at no additional charge!
- Aqua-Weed Control is Michigan based, family owned and operated.
Lakes and Ponds

_Aqua-Weed Control_ services many large and small lakes and hundreds of ponds throughout Michigan using only EPA and MDA approved aquatic herbicides and algaecides.

_Aqua-Weed Control_ employs a large fleet of modern chemical spray boats of various sizes to serve any conceivable customer need. _Aqua-Weed Control_ employs GPS technology and state of the art product application systems.

Water Quality Testing / Lake Consulting

How’s the water quality in your Lake? _Aqua-Test_ by _Aqua-Weed Control_ can provide the answers…

Water quality monitoring is one of the most important things you can do to ensure the continuing health of your lake or pond. Leaky or poorly designed septic systems, fertilizer runoff, burgeoning development, water fowl droppings and other threats can have a dramatic effect on water quality.

_Aqua-Test_ provides water quality analysis on an easy to read report.

_Aqua-Weed Control_ offers EGLE approved aquatic plant mapping services using the AVAS mapping system as well as waterbody Bathymetric mapping.
WHY CONTROL AQUATIC PLANTS?

NUISANCE ALGAE CAN:
- Interfere with recreational use
- Produce unpleasant tastes and odors in water
- Clog filters, pump inlets and other equipment
- Create an ideal breeding site for mosquitoes

NUISANCE AQUATIC PLANTS CAN:
- Multiply very quickly and adapt to varying environmental conditions
- Choke canals and restrict water flow
- Destroy fish habitats
- Interfere with swimming and recreational sports

HOW DOES AQUA-WEED CONTROL HELP?

Treatment can help to:
- Enhance recreation (swimming, boating and fishing)
- Promote native plant biodiversity
- Promote a healthy environment
TREATMENT PROCESS
WHAT NEEDS TO HAPPEN BEFORE TREATMENT?

1. Obtain Permit from EGLE
2. Complete Survey
3. Develop Treatment Plan
4. Shoreline Posting & Treatment

TREATMENT PROCESS
HOW ARE HERBICIDES & ALGAECIDE APPLIED?

Application equipment is employed based on the plants to be controlled and the product type.
**Chara Algae**
- Macro Algae
- Gray-green or yellow
- Often mistaken for a plant.
- Musky odor and gritty, bristly feel

**Filamentous Algae**
- AKA “pond scum” or “slime”
- Greenish mats upon the water’s surface.
- Begins its growth along the edges or bottom of the pond
- “mushrooms” to the surface

**Starry Stonewort**
- Invasive
- Long uneven branches that look angular at each joint.
- May have one star-shaped, cream colored bulb at the base of each cluster of branches.
- Similar in appearance to Chara.

**Pithophora “Horsehair”**
- Commonly grows along the bottom of ponds
- Resembles pads of steel wool
- This algae has a high level of reproductive cells and is difficult to control.

**Planktonic “Pea Soup” Algae**
- A microscopic form of algae, suspended in the upper few feet of water.
- This algae often reaches bloom proportions in warm waters.
- Some forms of this algae can be toxic.
- Field testing available

**Lyngbya Algae**
- This is a type of blue-green algae
- Lays on the bottom of the pond ranging from blueish-green, to black, to gray in color.
- This algae will form mucilage masses causing the algae to rise to the surface and also giving it high resistance to chemical control.
Copper Sulfate (Granular)

- A 99% copper sulfate product is available for controlling swimmers itch and algal blooms.
- Copper Sulfate is the most basic copper compound that has been used for years as an algaecide.
- Heavy crystals work their way through the thick bio-mass for better control.

**Treats:** Chara, Starry Stonewort, and Filamentous Algae.

$149.99 per 50 lb bag Pick-up or local delivery only

Algaecides tend to work better on warm, sunny days. Apply at first sign of algae growth to achieve best results.

Cutrine-Plus (Granular / Liquid)

- Cutrine-Plus liquid is the #1 selling algaecide in America!!
- Cutrine-Plus is formulated with a low copper compound ingredient to help reduce the oxygen depletion for wildlife.
- Great for difficult to control algae’s Ex. (Horsehair, Planktonic, and Lyngbya).
- Suggested Rates: Liquid - 2 gal per acre  Granular - 60 lbs per acre

$54.99 per 1 gal bottle  $64.99 per 12 lb container  $116.99 per 30 lb bag

The liquid is best suited for surface algae
The granular formula is best used on bottom forming algae.
**Southern Naiad**
- Ribbon-like leaves, opposite or in whorls of three, mostly less than 1/2 inch long.
- Single seeds are found encased in the leaf sheath.
- Southern Naiad reproduces by seeds and fragmentation.
- Often confused with sago pondweed and Widgeon Grass.

**Eel Grass**
- Appears in mid to late June, has roots buried in mud with tufts of ribbon-like, flaccid leaves.
- It has horizontal stem system connecting tufts of leaves.
- Flower visible later in summer supported by a coiled stalk.

**American Pondweed**
- Usually found close to shore.
- Features floating leaves that are oval with base tapered to distinct petal.
- Generally, plant has sparse leafing. Leaves alternately arranged on stem.

**Clasping-Leaf Pondweed**
- Wide, wavy leaves with a broad base which appears to extend three-quarters of the way around the stem.
- The upper stem is commonly branched and leafy.
- Plants grow a calcium coating on the leaves throughout the summer months.

**Sago Pondweed**
- A perennial plant that has no floating leaves.
- The stems are thin, long and highly branching, tapering to a point.
- The leaves grow in thick layers and originate from a sheath.

**Water Buttercup**
- Submersed stem that is erect in water.
- Tufts of thread-like leaves alternate along the stem.
- Conspicuous yellow or white flowers emerge from the water.

**Eel Grass**
- Appears in mid to late June, has roots buried in mud with tufts of ribbon-like, flaccid leaves.
- It has horizontal stem system connecting tufts of leaves.
- Flower visible later in summer supported by a coiled stalk.
Hydrothol-191 (Granular)

- Our **#1 seller for submersed weed control**!
- It is very effective against a broad spectrum of aquatic weeds, while also controlling algae at the same time.
- Hydrothol the ideal product for use around docks, beaches, boat wells, and back yard ponds.
- Application rate: 3-80 lbs. per acre foot.

**Treats:** Algae, Water Butter Cup, Southern Naiad, Eel Grass, Eurasian Water-Milfoil, Curly-Leaf Pondweed, and Coontail.

$149.99 per 1 gal bottle

$149.99 per 20 lb bag (50’ x 50’ area)

$279.99 2 x 20 lb bag (70’ x 70’ area)

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Aquathol-K (Liquid)

- Controls pondweeds in lakes and ponds.
- Aquathol-K will begin to work on contact with submersed weeds to break down cell structure and inhibit protein synthesis; without this ability the weed dies.

**Treats:** American Pondweed, Clasping-Leaf Pondweed, Sago Pondweed, and Curly-Leaf Pondweed

- Application rates: 1.3—1.9 gal. per surface acre

$149.99 per 1 gal bottle

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*Most pondweeds will develop a calcium layer through the summer. Early season treatments will give the best results.*
**Plants**

**Coontail**
- A non-rooted submerged plant. Leaves are dark green in color and arranged in whorls on the stem.
- Spacing between leaf whorls is highly variable and have forking of the leaves.

**Lily Pads**
- A floating leaf plant with leaves that are oval to elliptical with smooth, un-lobed edges.
- A slimy, gelatinous coating covers the underside of the leaf and stem.
- A white or yellow flower is produced.

**Northern Watermilfoil**
- Unlike Eurasian Watermilfoil, look for dark-green feathery leaves that are grouped in fours around a hollow stem.
- Leaves are made up of 5 to 10 pairs of leaflets.
- Leaves are rigid when removed from water and stems.

**Eurasian Watermilfoil**

**Invasive**
- Stalks of tiny, reddish flowers may extend above or on the water surface.
- Plants may reach lengths of 10 ft. or more. Plant stems and leaves may become calcified in hard water.
- Has been shown to hybridize with Northern Milfoil.

**Elodea**
- A submersed weed with broad oval leaves, usually three in number, arranged in whorls around the stem.
- Whorls are compact near the growth tip with spacing between the whorls gradually increasing further down the stem.
- Differs from Hydrilla with three leaves and smooth texture on leaf.

**Curly-Leaf Pondweed**

**Invasive**
- Leaves often look “crinkled” and are thin and membranous with veins plainly visible.
- Appears early in the spring.
- Very fast growing and easy to kill.

**Lily Pads**

**Invasive**
- A floating leaf plant with leaves that are oval to elliptical with smooth, un-lobed edges.
- A slimy, gelatinous coating covers the underside of the leaf and stem.
- A white or yellow flower is produced.

**Northern Watermilfoil**
- Unlike Eurasian Watermilfoil, look for dark-green feathery leaves that are grouped in fours around a hollow stem.
- Leaves are made up of 5 to 10 pairs of leaflets.
- Leaves are rigid when removed from water and stems.
**Navigate (Granular)**

- Navigate is a granular formulation of 2,4-D
- This product attaches to the plant on contact and trans-locates into the root system to provide season long control.
- Treatment of Lily Pads should be done in early summer when the pad first appears at the surface and will require follow up treatments throughout the summer.

**Treats:** Northern Watermilfoil, Eurasian Watermilfoil, Coontail, and Lily Pads.

- 50 lb bag will treat up to 200’ by 100’ area

$259.99 per 50 lb bag

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**Reward (Liquid)**

- Reward controls over 15 aquatic weeds, making it one of the broadest-spectrum aquatic herbicides available.
- Reward acts fast by interfering with photosynthesis, which doesn't allow the plants to survive. Reward can be used on submersed plants, as well as some emergent plants.

**Treats:** Eurasian Watermilfoil, Elodea, and Curly-Leaf Pondweed

- Application rates: 1-2 gallons per surface acre

$163.99 per gallon

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Navigate is best applied early in the season. Plants will disappear 3-4 weeks after treatment.

Reward works best when used on a calm, sunny day. Sunlight helps to activate the product, which increases the desired results.
Duckweed
- Small floating green leaves that are often mistaken for algae.
- Reproduction is by means of fragmentation. Duckweed tends to grow in quiet, undisturbed water.
- Often duckweed is found in ponds mixed with Watermeal.

Watermeal
- The smallest of flowering plants, granular in size, is usually abundant when present and displays no roots.
- Watermeal tends to grow in quiet, undisturbed water.
- Watermeal is an aggressive invader of ponds and is often mixed in with Duckweed.

Fanwort (Cabomba)
- Invasive
- A submerged weed except for a few small alternately arranged elongated floating leaves.
- The submerged leaves are opposite, attached by a single petiole, but above the petiole form a finely divided "fan-shaped" leaf.

Cattails
- A long and slender plant with grass-like stalks up to 10 feet in height.
- Inhabits wet lowlands and water up to 4 feet deep.
- Cattails also provide good cover for wildlife.

Phragmites
- Invasive
- Fast growing aggressive plant that can take over take wetlands and beaches.
- Can grow up to 18 feet tall.
- Require repeated treatments to control.
- Do not cut until plant is dead or before seeds form on top.

Flowering Rush
- Invasive
- Can be mistaken for a common reed until flowers appear.
- Blooms between July and August
- Grows along wet shorelines or in shallow water
Flumioxazin (Granular)

- Flumioxazin delivers fast and selective control of tough invasive and nuisance plants.
- Flumioxazin is formed into quick-dissolve granules that mix effortlessly in water for easy use.
- Flumioxazin dissipates quickly from the water column and does not accumulate in sediment.

**Treats:** Fanwort, Watermeal, Eurasian Watermilfoil, and Duckweed.

Application Rates: 1.1 lbs per acre foot

[Price: $150.99 per 1 lb, $719.99 per 5 lb]

A Pond infested with Duckweed and Watermeal is fully controlled 21 days after treating with Flumioxazin.

Fluridone (Liquid)

- Fluridone uses a systemic action which controls the roots all season long.
- This product is very water soluble and will naturally move throughout the pond for excellent control.

**Treats:** Fanwort, Watermeal, Eurasian Watermilfoil, and Duckweed.

Application Rates: 8 oz for 1/4 acre pond

1 quart for 1 acre pond

[Price: $283.99 per 8 oz, $863.99 per quart]

*Fluridone is best applied early in the season. Split treatment into 2 doses, 14-21 days apart. Full results will be seen 60-90 days after initial treatment.*

Shoreklear Plus (Liquid)

- Shoreklear Plus is a systemic herbicide which kills the plant roots for multi-year control.
- Works great for ponds, beaches, and anywhere emergent weeds grow.
- Shoreklear Plus has a non-ionic surfactant included which gives you **two products for the price of one!**

**Treats:** Cattails, Phragmites, Flowering Rush, Lily pads, and Bulrush.

Application rates: 1 gallon treats up to 1/2 an acre

[Price: $74.99 per gallon]

*Root bulbs are most susceptible to herbicides during late summer and early fall. Cattails are best treated later in the season just as the tips are starting to turn brown.*
**Muck Destroyer** (Natural Bacteria Packets)

- Muck Destroyer is formulated to attack organic buildup (muck).
- Made with natural bacteria and enzymes, it offers a safe alternative to dredging.
- **Muck Destroyer goes to work fast, breaking down organic material.**
- With regular use, results can be seen within a few months.

- Suggested Rates: 2 lbs. per 1000 sq. ft

**Benefits:**
- Improve water clarity
- Reduce organic “muck” layer
- Reduce overall nutrient levels

**Guide to applying Muck Destroyer:**
Begin treatments when lake temperatures are above 50°F. Broadcast the pellets evenly over the area you wish to treat. Each bucket treats a 50’ x 20’ area 5 times. This product should be reapplied every 2-4 weeks.

For maximum effect, apply Muck Destroyer or Clarity Blast 1 week after a herbicide or algacide application.

**Paradise Blue** (Liquid)

- Paradise Blue Pond Dye is a highly concentrated organic water dye that will color the water a deep rich blue.
- The coloring will remain visible for up to four months.

- Use 1—2 quarts per surface acre, 4’ - 6’ deep.

**Clarity Blast** (Water Soluble Packet)

- Clarity Blast is a mixture of natural bacteria and enzymes.
- Clarity Blast will attack suspended organics found in the water column and bottom organic material (muck).
- With regular use, Clarity Blast will leave water clean, clear and healthy.

- 2 packets per 1/4 acre pond, every 2 weeks.

**Cut through tough weeds in minutes!**

- Cut in deep or shallow water.
- Cut at the base of the weed.
- Very little resistance because it slices the weeds rather than dragging them.
- Razor sharp cutting edge!
- Includes 25 feet of rope and blade sharpener.
- Clears 4’ path each throw!

**Weed Razer™**

- 8 in. 37 in. 11.

**Muck Destroyer**

- **$117.99 per 10 lbs container**

**Paradise Blue**

- **$34.99 per quart**

**Weed Razer™**

- **$144.99 per Weed Razer**
Applicators and other handlers should wear long-sleeves and long pants, waterproof gloves, shoes plus socks and protective eyewear. Refer to product label for any other required safety equipment.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated. Follow manufacturer's instructions for cleaning & maintaining equipment.

Storage and Disposal

Store in the original container in a cool, dry place, preferably in a locked storage area. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur.

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal Law.

Dispose or Recycle containers according to the product label.

Always refer to the product label before applying!
Did You Know

Aqua-Weed Control is one of the largest recyclers of aquatic pesticide containers in Michigan!

- Annually we recycle thousands of plastic containers!
- Over 2200 Lbs. of cardboard every year!
- More then 100 wooden pallets annually!

What our customers are saying...

Excellence, quick response when issues arise. Friendly, knowledgeable staff.
- Betsy and Jay Barasch | Strawberry Lake Homeowners

Aqua-Weed does an outstanding job. Your dedication to customer satisfaction & quality work is a model for other companies to emulate. Keep up the great work!
- Mr. Bill Crantas | President, Taggett Lake Association

We have always had excellent service.
- Ms. Sharon Miller | Village Manager, Village of Wolverine Lake

I am very pleased with the excellent weed control service that Aqua-Weed Control has provided our lake over the years. I highly recommend them.
- Mr. Tom DeSantis | President, White Lake Citizens League

Excellent responsiveness and quality of work.
- Mr. Paul Hausler | Lake Manager, Progressive AE