



When a plant interferes with the use of a pond—fishing, swimming, or boating—that plant becomes a weed.

Catch a Mess of Fish Instead of Weeds

Losing a prize-winning bass because of pond weeds is disheartening. But pesky aquatic plants can be controlled with a bit of effort.

"People tend to neglect their ponds or take them for granted," says David Bayne of Auburn University's Department of Fisheries and Allied Aquacultures. "But ponds are living ecosystems similar to gardens in that they really need some regular maintenance and care."

The best way to take care of a pond is to prevent unwanted aquatic growth, beginning when the pond is constructed. Normal rainfall should fill the pond, yet not cause excessive overflow. Bayne also recommends steep edges, at least 2 feet deep.

Fertilization is essential for pond maintenance, Bayne says. Fertilizer promotes the growth of microscopic algae that are suspended in the water. These serve as a food base for fish and to color the water. The resulting "bloom" prevents sunlight from penetrating the water and promoting unwanted plants.

Adding fertilizer won't actually rid

a pond of weeds already established, though. Most likely the weeds will simply grow faster, Bayne says.

But you can and should fertilize regularly in the absence of a weed problem. This will prevent weeds from growing. Irregular fertilization promotes an increase in the fish population by providing—and then taking away—extra nutrients.

He recommends fertilizing initially in February or March, then at regular intervals determined by the "white object test." If you put a white object into the pond, it should disappear from sight at a depth of 18 to 24 inches. If it does not disappear, apply fertilizer again.

To control pond weeds, two biological control methods are often used. One is the alligatorweed flea beetle, which controls alligatorweed. It is available through the U.S. Army Corps of Engineers.

Another is the plant-eating grass carp, often confused with the common carp. But unlike the latter, grass carp do not muddy the water by disturbing the pond bottom.

Grass carp can control most submerged aquatic plants, in addition to small floating plants such as duckweed, Bayne says.

"If I had a new pond, I would put in the minimum stocking rate of grass carp just to maintain the pond and to keep it from developing any serious weed problems," Bayne advises. Grass carp are available from commercial fish producers.

Because the grass carp is not native to this country, its use is restricted in some states. Check with your state game agency for details.

Herbicides offer another alternative. "Remember that the product you use has to be registered for that use," Bayne cautions. And be sure to read and understand the label before you apply the chemical.

Bayne emphasizes the importance of checking with a weed specialist to determine what specific weed problem your pond has and the best treatment. Identifying plants is difficult because so many look similar.

By NANCY DORMAN-HICKSON

Controlling Weeds In Farm Ponds

Chemical	Weed(s)	Remarks
Copper sulfate (various trade names)	Planktonic algae, filamentous algae (pondmoss), <i>Chara</i> , <i>Nitella</i>	Apply snow or powder on a clear day at early growth. Corrodes steel and irritates eyes. If problem continues, check for source of excess nutrients. Break up floating mats of algae before treatment. Make uniform application when plants are young. Copper is toxic to fish.
Chelated copper compounds (Cutrine Plus)	Filamentous algae, planktonic algae (pondmoss), <i>Chara</i> , <i>Nitella</i>	More stable in water and provides longer lasting weed control than copper sulfate, but is more expensive. Use of treated water is restricted for some plants. Break up floating mats of algae prior to treatment. Copper is toxic to fish.
Dalapon (Dowpon M, Dalapon 85)	Cattails, most grasses	Spray to wet foliage early in the season before seedheads form. Add a non-ionic surfactant at rate of 1-2 qt. per 100 gallons of spray mix. Repeat as needed. Avoid water contact with Dalapon; apply to plants.
Diquat (Diquat herbicide H/A, Weedtrine-D)	Filamentous algae, bladderwort, cattail, coontail, duckweed, elodea, pondweed, naiad, waterhyacinth, watermilfoil	Use only in clear or clean water with little or no outflow. Check label for application. With submerged plants, apply early in season and pour directly on water in strips 40 feet apart. Apply in 20-foot strips late in season after weeds have surfaced. Use low-to-medium rate for all labeled floating weeds except duckweed in spray volume of 150 to 200 gallons of water plus 1 pt. of surfactant. Use the high rate in a spray volume of 50 to 150 gallons of water per acre. For top kill, apply 100 gallons of spray solution plus 1 pt. Ortho X-77 surfactant per acre. Thorough wetting of foliage is essential. Make application before flowering and repeat as needed. After diquat treatment, do not drink pond water, water stock, or use for irrigation for 14 days.
Endothall (Aquathol)	Coontail, naiad, pondweed, watermilfoil	Inject below surface or broadcast over weedy area. Rate depends on weed species and application method. Spot treatment requires higher rate. Works best in spring after weed growth begins and water temperature is about 65° F. After endothall treatment, do not drink water, water stock, or use for irrigation for 25 days. Do not swim in pond for 3 days.
Fluridone (Sonar 4-A.S., Sonar 5P)	Alligatorweed, arrowhead, bladderwort, coontail, elodea, fanwort, hydrilla, naiad, pondweed, watermilfoil	Use rate depends on water depth and type of reservoir. Can be sprayed on or injected below surface. Granular form can be spread on water surface. Apply during spring or summer when weeds are growing in still bodies of water with little or no outflow. May injure marginal shore plants or trees. After fluridone treatment, do not drink within 1/4 mile of intake or use water for irrigation within 30 days.
Glyphosate (Rodeo, Pondmaster)	Alligatorweed, cattail, cutgrass, maidencane, phragmites, spatterdock, torpedograss	Don't use galvanized equipment with glyphosate. Apply when plants are in full bloom. Repeat for alligatorweed. Rates depend on target weed and application method. Rodeo requires approved non-ionic surfactant. Pondmaster has a surfactant. After glyphosate treatment, do not drink within 1/4 mile of intake.
Simazine (Aquazine)	Filamentous algae, planktonic algae (pondmoss), <i>Chara</i> , coontail, naiad, <i>Nitella</i> , watermilfoil	Use only in ponds with little or no outflow. Treat between April 1 and May 15. Apply slurry of powder and water in bucket at several locations around pond. May kill shoreline trees. Retreatment may be needed. May kill or suppress desirable plankton algae. After simazine treatment, do not drink water, water stock, or use water for irrigation for 365 days. Do not swim for 6 hours.
2,4-D (Aqua-Kleen, Weedtrine, others)	Arrowhead, bladderwort, coontail, duckweed, spatterdock, waterhyacinth, waterlily, watermilfoil, waterprimrose, watershield	Broadcast over weed-infested areas when plants are actively growing. Rate depends on amount of weeds, depth of water, and species. Cover foliage well, while plants are actively growing. Apply when leaves are fully developed above the water line and plants are actively growing. Thorough wetting of foliage essential when applying liquid spray. Granules more effective on waterlilies. Read label for restrictions after treating with 2,4-D.
Grass carp (<i>Ctenopharyngodon idella</i>)	Filamentous algae, bladderwort, <i>Chara</i> , coontail, elodea, floating duckweed, naiad, <i>Nitella</i> , pondweed, watermilfoil	Grass carp differs from common carp. Some states prohibit; check with state game and fish agency. Results usually evident after second growing season. Comparatively inexpensive weed control. Sold by commercial fish dealers. Slower than chemical control. Stock bass ponds with large (8- to 12-inch) grass carp. For slight weed problem, use 5/A.; for moderate problem, 10 to 15/A.; for heavy problem, 15 to 20/A. Stock ponds without bass with small grass carp. For slight weed problem, 6 to 8/A.; for moderate problem, 12 to 18/A.; for heavy problem, 18 to 20/A.
Alligatorweed flea beetle (<i>Agasicles hygrophila</i>)	Alligatorweed	Freezing or temperatures exceeding 90°F, insecticides, and flooding impede effectiveness. Obtain through U.S. Army Corps of Engineers. Beetles should be released together in the same location. Slower than chemical control. Approximately 200 beetles per surface acre of alligatorweed should be used.

For specific treatment rates, refer to herbicide label. The information for this chart came primarily from Auburn University's circular, ANR-48. For a copy, write the Department of Fisheries and Allied Aquacultures, College of Agriculture, Alabama Agricultural Experiment Station, Auburn University, AL 36849.