

## AQUATIC WEED CONTROL

Those nasty water weeds taint the look of any landscape. Effective control is possible. Prudence on the controller's part is the key.

**Y**ou have this beautiful pond on an area that you landscape but unsightly weeds dominate the water. Water weeds not only destroy the appearance of ponds, lakes, and streams, they also ruin the impact of the entire landscape.

Lagoons, holding ponds, and ditches, although not landscape features, serve useful functions which are inhibited by weeds.

What do you do? Well, first you should check local regulations to



Before and after. This North Carolina reservoir had a naiad and coontail problem (below). Less than one year after treatment with an aquatic herbicide, the problem was controlled (top).

make sure your planned control measure is acceptable.

Control measures are limited not only by local regulations, but also by desirable plants in the water, and uses, such as swimming, irrigation, fish farming, and air conditioning.

If a lake is part of a natural watershed area, there may be restrictions on the use of certain chemicals or weed-eating fish. Check with your local extension agent before treating, diverting, draining, or filling in any

lake, even if it is on private property.

It should be noted that chemical aquatic weed control is a very difficult science. It may be beneficial to hire a private applicator as the environmental and legal concerns involved are numerous.

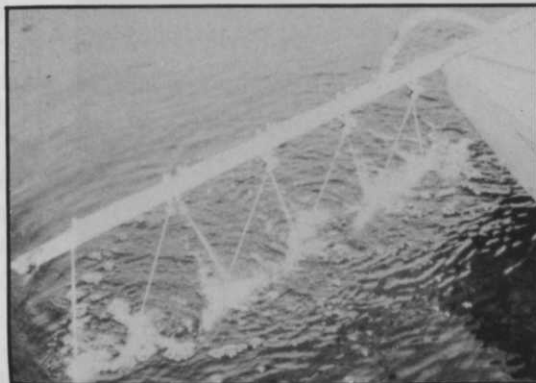
### Preventative control

Before we discuss chemical aquatic weed control, let's discuss what can be done to prevent weed growth in the first place.

# WEED CONTROL GUIDE



Aquatic weeds may reduce or severely restrict water flow (as much as 90 percent) in irrigation canals and drainage ditches.



Application of an aquatic herbicide with a sprayer.

Conditions that may cause an aquatic weed problem are water depth (water less than 8 feet deep is conducive to weed growth), poor circulation of water in the lake and air above the lake, fertilizer runoff, and presence of dead organic material (such as fish, plants, or sewage).

Bottom-rooted aquatic plants require light to grow. The light below 8 feet is inadequate for many aquatic plants. If a lake cannot be deepened, dyes or bottom liners can be added to shade the lake bottom.

Pond aerators add needed oxygen to water and help avoid temperature stratification of water layers. Without mixing, water tends to form layers based on temperature, the warmest layer on top.

By keeping surface water temperatures down through mixing layers, you may discourage algae growth.

Algae does not readily establish until surface water temperature reaches 60 degrees F.

As decaying organic matter removes oxygen from the water, one should avoid throwing debris or clippings into the water. If possible, dead plants should be removed from

treated lakes.

Drawdown, or draining to expose aquatic plants to full sun or freezing temperatures, is used where fish or irrigation aren't factors. Dredging and aquatic weed harvesters are expensive and cause a disposal problem, but they may be the only way to get initial control over a serious aquatic weed problem.

Lakes require some vegetation to produce needed oxygen, to provide cover for fish and wildlife, and to appear a natural part of the landscape.

As such, portions of the lake can be kept shallow to provide for aquatic plants.

Another method is to place plants in removable containers, close to the water's surface.

Desirable native plants, such as rushes, are available from specialized nurseries. These container plants can be removed if necessary during treatment periods.

## Curative control

Whether in a warmer climate where aquatic weed control is perpetual or in the North where control is needed only seasonally, control is similar.

So is the action of the aquatic

herbicide.

Certain aquatic herbicides may be absorbed by roots of nearby trees or plants which extend into the water. Read labels carefully for susceptible land plant species.

**Algae.** Copper compounds (Cutrine-Plus, copper sulfate) are effective and when used at correct rates, do not restrict water use.

If a lake has a history of algae problems, start using copper compounds as soon as water temperatures get above 60 degrees F. Periodic retreatment may be necessary for season-long control.

Copper compounds are often mixed with other aquatic herbicides for control of a variety of weeds.

**Floating Weeds.** Floating weeds are either free-floating or bottom-rooted plants, having leaves on the surface.

They include hyacinths, duckweed, water lettuce, floating fern, and salvinia.

The primary herbicides for floating

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weeds are 2,4-D and Diquat. Sonar (Fluridone) is a broad-spectrum aquatic herbicide pending EPA registration.

**Submersed Weeds.** Weeds which are bottom-rooted and totally under water are called submersed weeds. They include hydrilla, pondweed, watermilfoil, fanwort, naiad, and coontail.

The primary herbicides for submersed weeds are 2,4-D, endothal (Aquathol K), Diquat, and Sonar (pending EPA registration.) Combinations of endothal and Diquat with copper are often used.

**Emerged Weeds.** These are weeds growing in shallow areas with stems and leaves above the water surface. They include cattails, pennywort, alligatorweed, torpedograss, and arrowhead.

Primary herbicides for these are Banvel, 2,4-D, dalapon (Dowpon), Rodeo (glyphosate), Sonar (pending EPA registration), and amitrole.

Products registered for aquatic weeds are also the best to use for ditchbank weed control, since there is always a possibility water containing herbicides in ditches will drift to other locations. Check labels for ditchbank applications.

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