

# How Private Companies Can Effectively And Profitably Use Aquatic Weed Killers

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Forty years ago Dade County, Florida was in the midst of a building boom. Native rock used for building miles of roads and thousands of building blocks were dug from many rock pits. These pits, which were at that time in outlying, isolated areas, are today beautiful lakes surrounded by fine homes.

Many bought these expensive lake-front properties so they could enjoy various sports such as swimming, boating and fishing. Within a few years an unforeseen menace "aquatic weeds" took over preventing further enjoyment of these sports. The residents tried underwater mowing, sea cows, and copper sulfate but had little success. After many disappointments and trials they resorted to chemical control. At first this was satisfactory but in about two years weeds grew again—as thickly as before in nearly all cases.

In 1960 our company began some weed control work on home lawns. Both home owners and I soon learned that herbicides can kill our turf grasses as well as weeds. The next year we started doing some industrial weed control along railroad sidings, fences, gasoline storage plants, etc. Our methods were effective; however, the industry had no idea of the cost for this service because no one had previously done this in the area.

Education is needed to help promote the idea that chemical industrial weed control and aquatic weed control is more effective as well as cheaper than mechanical methods. I believe there is a vast potential market for aquatic weed

control service. Reputable operators must be encouraged to study and take advantage of the training that is available from the U. S. Department of Agriculture, state researchers and chemical producers and distributors.

Before the industry can prosper we need information on estimating, pricing, and other costs. The study of equipment and materials must be stepped up if the industry is to thrive. More operator competition is needed. Reliable, hardworking competitors must let the public know that they are competent to carry out aquatic weed control services.

I can compare this industry with the lawn spray industry of which I am well familiar. Just a few years ago there were only a few spray operators and they did not know what they were doing. Today we have many reputable companies in the business. Most are well trained through the Extension Service and various organizations such as the Horticulture Spraymen Association of Florida, and Florida Pest Control Association. Consequently, today, practically every home owner knows that chinch bugs can be chemically controlled and he accepts the fact that an expert can do the job more effectively and economically, and with more safety than the home owner can do it himself.

In 1963 we started doing some aquatic weed control work in the Miami area. After the first year we realized that aquatic weed control needs more than a "clean-out" job and then "forget it until it grows back again." Now when we sell an aquatic weed control clean-out job we also sell the cus-

tomer a one year service plan whereby we inspect the waterway every 60 days and when we see the first indication of growth returning we immediately spot spray these areas and have found that this is a most effective way to control elodea, southern naiad, pond weed, duck weed, hyacinths, etc. For this service we make a monthly charge which includes material and application.

To intelligently estimate the cost of the original clean-out or the follow-up service control, one must be able to identify all of the existing aquatic weeds and know what material will effectively control them. Before the successful operator can estimate a job he must ask himself the following questions: (1) How many gallons of water are in this given area? (this can be determined by length x width x depth.) (2) Is the water static or is there little or no water flowing in or out of the lake? (This would cause dilution and loss of chemical). (3) What is the pH of the water? (4) Is the depth of the water great enough to darken the water and discourage germination of seeds? (5) What type of soil is in this area—is it marl, muck, or sand? (6) What record must I keep on each job to know why I was successful or why I failed? (7) What is the fish population and what herbicide can I use to protect the fish? I have tried to do this alone and pioneering can put you into bankruptcy if you don't have "lots of money" in reserve.

Much of our work is with home-owned groups and we usually advise them to elect their officers and set up a corporation. It is the corporation's duty to enroll each member, collect dues and account for all monies. We then have our attorney draw up an agreement specifying in detail what

weeds we will control and explain that we can not control torpedo grass that usually grows along the banks. We also stipulate the monthly payments and the dates they are to be paid.

It is important to use proper equipment in order to control aquatic weeds effectively. Most of our work is on small lakes and canals and we use an aluminum boat with an air driven out-board propeller engine. So many of these water ways are completely clogged with weeds it is almost impossible to navigate with an out-board motor boat. The propeller on a regular out-board motor has a tendency to muddy the water which makes the chemical less effective.

This air boat type engine is ideal for going very slowly along the banks and in shallow areas. We use a small John Beane pump powered by a Wisconsin engine that pumps out of a 65 gallon tank. We use the pump to fill the tank out of the lake. The only disadvantage with this type of equipment is that it must be unloaded from a truck and assembled before each job.

Dade County has an aquatic weed control boat that is considerably larger than ours. It is of fiber glass construction and it too, has an airplane propeller type engine. A 200-gallon tank with a 15 G.P.M. pump is mounted on this boat, the latter being carried on a trailer which is pulled by a four wheel drive truck. After disconnecting the trailer from the truck a boom which extends from the front end of the truck is used to remove the boat from the trailer. The boat is then taken to the lake and lowered into the water.

I think we should start now to prepare for legislation to regulate the weed control industry—for this will surely come. Good legislation can help us to make this a great industry.