



Submerging diver, left, rides diving plane toward lake bottom for look at weed infestation. Pilot George Harris (in airboat) is able to maneuver while towing the diver because the towline is attached to a special hitch in keel of boat under operator's chair. Above, diver Henry Carsner explains what he found to son Jim who is mapping the infestation.

How We Use Scuba Divers In Aquatic Weed Control

Identification of weed species is prerequisite to the accurate selective control of weeds. This fact is no less true in aquatic weed control.

The problem of making a visual identification of weeds when they are under water is solved with scuba (self-contained underwater breathing apparatus) equipment.

The Northwest Weed Service of Tacoma, Washington, uses such equipment to facilitate before- and after-treatment surveys of weed beds in infested waters.

With a survey map marked out in squares, an experienced diver in a skin-tight suit, foot flippers, face mask, scuba unit, and wrist compass can examine the bottom of a lake to determine the extent of the infestation, and the species and density of the weeds. Colored pencils plot coded information on the survey map to help applicators when they put down the chemical. Marker buoys laid by the diver assist boat drivers to get on the right course.

Aquatic weeds usually grow in individual beds of single species and only in certain marginal zones in a lake. These beds can be accurately determined on the spot using underwater equipment. Beyond marginal zones, any chemical applied to deep, cold water would be of no use. Chemicals applied to known re-

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sistant species is likewise valueless.

Some lakes are fed by cold springs. We have found it to be to our advantage to find these pitfalls before chemicals are applied and wasted, swept to the weedless depths by cold currents. Knowledge of hidden facts about underwater conditions helps us bid for contracts with greater accuracy, because we know, for example, where we do not need to apply chemicals to do a complete job, and still make a reasonable profit.

Northwest also uses a diving

plane: a flattened, heavy, wing-like, waterproofed, plywood board, which is towed behind our air-drive propeller-driven craft, for faster underwater searches. The plane is efficient for post-treatment examinations where checks are made to see that the job has been complete.

Sometimes weeds which are resistant to the chemical which has been applied will crop up from beds of dead plants. Prompt discovery and identification of such resistant species make later control plans easier.

Northwest Weed Service has found the diving units have paid for themselves many times over, by keeping the applicators informed and prepared.



Typical of modern, custom-designed equipment used by aquatic weed control companies is this barge belonging to Modern Weed Control Service of Grand Rapids, Mich. Owner Vic Scholl is pleased with the Douglas Fir plywood device which is 8 feet long and 2 feet wide.