

Limnological Aspects of Recreational Lakes

by K. M. Mackenthun, W. M. Ingram, and R. Porges, Public Health Service Publication No. 1167, Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402, 1964, 176 pp., \$1.25.

Aquatic weed controllers, alert! THE book has finally been written. Biologists and water purity experts of the Robert A. Taft Sanitary Engineering Center in Cincinnati, Ohio, a division of the Public Health Service, have gleaned information from many previous and scattered works on aquatic weeds and pests which affect water supplies. They've put it together in a volume slanted toward the future needs of society which demands clean recreational waters.

In a nutshell, L. A. R. L. is not a how-to-do-it handbook, but rather a how-to-figure-out-what-to-do treatise. It is designed for anyone who must, says the Foreword, "interpret biological phenomena of recreational lakes." This includes commercial weed controllers, extension agents, water pollution inspectors, water commission agents, and lake managers. The book is simply written, and can be understood with a minimum of biological background. Terms are well defined in the text and there is a 3-page supplementary glossary.

The authors examine physiochemical factors in "healthy and unhealthy" lakes. They discuss productivity in terms of animals, plants, and weeds. Factors causing excessive weeds are clearly explained.

There is an excellent section on specific weeds, well illustrated with 29 plates, and including keys to important species of algae and higher weedy plants.

A chapter on animals which affect water use discusses such pests as midges, mosquitoes, leeches, swimmers' itch organism, and snails.

An important chapter tells about sampling and testing techniques used by the PHS and others to determine chemical, physical, and energy factors influencing lake conditions. This

section gives valuable insight into weed problems.

Weed growth of a lake is part of its productivity. When excessively fertile, or for other reasons, a lake may overproduce, and if the water has an intended use which the weed crop hampers, the extra growth must be controlled. Authors point out the uses of various chemicals, their effects and side effects. There are seven mechanical and chemical spray rigs pictured in this chapter on control. Plans for a spray outfit are included.

A quick look at the voluminous references in each chapter shows how much source material was used, and gives many leads for readers' edification.

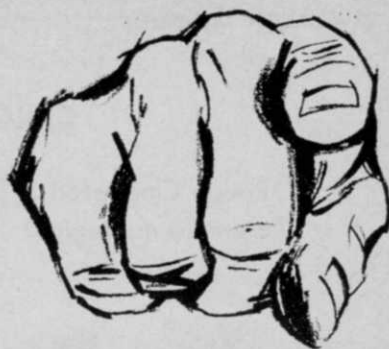
In our opinion authors Mackenthun, Ingram, and Porges have done an admirable job on this much-needed book. An aquatic weed controller couldn't make a better investment for \$1.25.

Arps PTO Stump Cutter For One-Man Operation

Only one man is needed to operate the new "Stump Master" stump cutter from Arps Corp., according to the maker. Designed for mounting on any hydraulically equipped 3-point hitch tractor of 40 hp. or more, Stump Master can be controlled by four hydraulic levers located on the driver's panel so he does not have to leave the tractor.

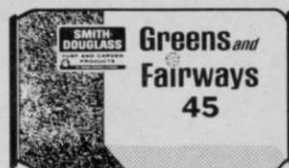
A heavy-duty ball clutch power shaft connected to the rear PTO of the tractor powers the 36-in.-diameter steel cutting wheel. Carbide-tipped cutting teeth are said to be capable of reducing a cubic foot of wood per minute.

Easy maneuverability marks Stump Master, Arps maintains. A pivot allows the hydraulic cylinder to swing the entire cutting unit through an arc of 30°, increasing the cutting range and eliminating excessive tractor maneuvering. Safety-shielded, the Stump Master can be used in limited spaces and is designed for highway and forestry departments, municipal maintenance, landscape contractors, etc. Arps Corp., New Holstein, Wis. 53061, offers illustrated data on this new cutter.

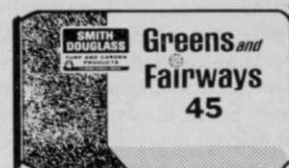


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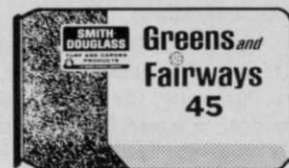
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