



Corps crews spraying water hyacinths in Lake Natchez, La.

LOUISIANA'S FIGHT FOR CONTROL

Operation Aquatic Weeds

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THE GROWTH and spread of aquatic vegetation has been a continuing problem in Louisiana since the late 1880's. There are approximately 8 million acres of lakes, reservoirs fresh water streams and marshes in the state which are subject to infestation by aquatic plants. More than 230 genera of vascular aquatic plants and 25 algae species

have been collected in the state.

Over the years, numerous physical, chemical and biological controls have been used to combat adverse effects from aquatic vegetation on navigation, drainage and water supply, recreation and public health. These include harvesting, draw-downs, herbicide treatments, use of nutria, alligatorweed flea beetles



Feeding damage by Alligatorweed Flea Beetle.

and, recently, water hyacinth weevils.

There has been a wide variance in results obtained from the different methods. Harvesting of water hyacinths and alligatorweed has been partially successful but progress is very slow and disposal areas along stream banks often become unavailable. Harvesting or cutting submersed vegetation in most water areas is not practical because of numerous snags and large amounts of debris that result from a lack of clearing prior to formation of lakes and reservoirs.

Drawdowns have been employed in many of the lakes for fisheries management and to control the growth of submersed vegetation. Some have proven successful, but in many cases it has not been possible to control the water level to the degree necessary to achieve effective results.

Biological controls have been tried without any marked success until recently. Within the last two years, the spread of the alligatorweed flea beetle *Agasicles hygrophila*, which was introduced into the United States as a result of research funded by the Aquatic Plant Control Program of the Corps of Engineers, has begun to reduce the total alligatorweed infestation in the state.

Clearance was obtained in August 1972 for release of the water hyacinth weevil, *Neochetina eichhorniae* and they will be introduced and distributed throughout the state as soon as sufficient populations are available.

At present, in Louisiana, the most effective and economical method of combating problems associated with undesirable aquatic plants is with environmental protection chemicals. Applications are generally accomplished by two man crews who either work in waterways within commuting distance of their home stations, or, in isolated areas, from a quarterboat with complete living facilities. Each crew is equipped with an outboard motorboat and motor, spray pump driven by an aircooled gasoline engine and other necessary equipment.

Until recently, 10 gallon per minute piston type pumps were used, but within the last year several crews have been furnished 20 gallon per minute pumps. This is permitting these crews to treat areas more quickly and has increased the distance that the spray pattern can reach.

In order to permit our crews to spray continuously and eliminate
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LOUISIANA'S FIGHT

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mixing herbicide and chemical in a mixing tank, a metering-mixing device is located on the suction side of the pump. This measures concentrated herbicide thru a metering disc and mixes it with water drawn from overboard. The opening in the metering disc has been sized and the pump calibrated to apply a one-half percent, by weight, solution of 2,4-D amine. This is applied to water hyacinths at the rate of 2 to 4 pounds of the active ingredient per acre of

vegetation.

The present status of our aquatic plant control program is as follows:

Water hyacinths have been cleared from most of the principal waterways in Louisiana. But because of reinfestation occurring from seed germination and reintroduction from inaccessible areas, retreatment two to three times each year are required.

Alligatorweed quantities have been reduced significantly during the last two years as a result of several adverse factors affecting this plant. These include: feeding damage by

the alligatorweed flea beetle; a combined effect of beetle feeding and 2,4-D application; and, improved growth competition from water hyacinths.

Submersed weed problems from a number of species are increasing in many of the waters of the state as a result of increased light penetration that occurs after removal of surface vegetation. To combat this, the Corps of Engineers is funding research at the University of Southwestern Louisiana for control of *egeria densa*, and at Northwestern State University of Louisiana for a study of Cabomba.

Another facet of Corps of Engineers research in Louisiana is field testing of a laser system for control of water hyacinths. In October 1972, the Corps of Engineers waterways experiment station ran preliminary testing of the laser system in a field location in southeast Louisiana to determine any operational problems connected with the field use of the laser system. In the spring and summer of 1973, additional field treatment of water hyacinths will begin and effects of these treatments on the plants will be determined. □

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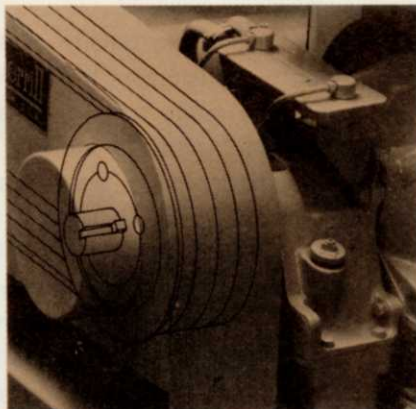


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A distributor advisory board which will assist in retail marketing strategy has been formed by Bolens Division of FMC Corp., Port Washington, Wis.

The distributor board, composed of eight representatives, will aid Bolens in its planning, product development, pricing and other related areas, according to Charles F. Bartlett, Bolens general sales/marketing manager.

Serving on the council are Ralph Jenkins, vice president and general manager, Stull Equipment Co., Chester, Pa.; Richard Miller, division manager, Hayward Distributing Co., Columbus, Ohio; Jack Peart, sales manager, Farmers Supply and Equipment, Brampton, Ontario, Canada; Carey Sellers, dealer sales manager, E. J. Smith & Sons, Charlotte, N.C.

Also John Mercep, sales manager, O. P. E., R. M. Wade & Co., Portland, Ore.; Tom Lesnett, vice president and general manager, Stull Company, Coraopolis, Pa.; Glenn Blackwell, vice president and general manager, Modern Distributing Co., Springfield, Mo.; and Don Fenton, sales manager, Baxley & Burton Power Equipment, South Windsor, Conn.