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C. T. Yoder

1. S. Marks

N. O. Levardsen

5-in

## INSTITUTE FOR FISHERIES RESEARCH

DIVISION OF FISHERIES MICHIGAN DEPARTMENT OF CONSERVATION COOPERATING WITH THE UNIVERSITY OF MICHIGAN

June 12, 1951

## Report No. 1287

CATTAIL CONTROL IN HATCHERY PONDS

## By

## Norman O. Levardsen

In hatchery ponds, cattails frequently become a nuisance. Once established, they quickly reduce the productive volume of a pond and not too infrequently take over an area. When this occurs and preferably before, some means of control is indicated.

Although the control of cattails by under-water cutting is less spectacular than chemical control of other species, it is still the cheapest and most effective means of control. One purpose of cutting is that it leads to starvation of the rootstock. Removal of leaves prevents the formation of food materials which can be stored in the rootstock. During flowering, the rootstocks contain a minimum quantity of stored food and cutting of the leaves at this time prevents the formation of new reserves and storage in the underground parts. Regrowth is low due to a small amount of stored food.

To achieve maximum value from a program of under-water cutting, several suggestions are offered. The matter of timing is important. Flowering or the first appearance of flower heads, should be the sign to begin cutting. This may occur in Michigan, depending on location, from

ALBERT S. HAZZARD, PH.D. DIRECTOR mid-June to mid-July. If cuttings are made previous to this time, more regrowth is apt to occur than if cut later since root reserves have not reached the low level that they do during flowering. It would appear more satisfactory to concentrate cuttings over a two-or three-week period than to spread the same effort over a six-to eight-week period.

It is suggested that the cattail plants be cut as near the bottom as possible. One reason for this is that if the water level drops shortly after cutting, the cut stubs will not be exposed.

A corn hook has been found useful for small areas or when working from a boat. No doubt a soythe could be used to advantage in certain areas. A more pleasing appearance is created when the out plants are removed, but this is not economically justifiable in many cases. Even if the plants are left where out, they are less objectionable than when uncut in a hatchery pond.

Although excellent control can be obtained from one outting, a small degree of regrowth will occur and this should be removed. Small elumps here and there along the margin of some hatchery ponds adds to the scenic value of the area but it is from such clumps as these that pends become invaded and eventually worthless in fish production. Clean shorelines are required for a minimum amount of trouble from this and other encroaching aquaties.

> INSTITUTE FOR FISHERIES RESEARCH Norman C. Levardson

Approved by A. S. Hazzard Typed by B. A. Lowell - 2 -