

Original: Fish Division ✓
cc: Institute for Fisheries Research
Education-Game
Mr. Washburn

INSTITUTE FOR FISHERIES RESEARCH Mr. J. G. Marks
DIVISION OF FISHERIES Mr. R. S. Marks
MICHIGAN DEPARTMENT OF CONSERVATION Mr. Stanley Shust
COOPERATING WITH THE
UNIVERSITY OF MICHIGAN

ALBERT S. HAZZARD, PH.D.
DIRECTOR

ADDRESS
UNIVERSITY MUSEUMS ANNEX
ANN ARBOR, MICHIGAN

May 21, 1946

REPORT NO. 1046

POST CARD QUESTIONNAIRE RETURNS ON THE DEPARTMENT'S
BAIT-MINNOW PROGRAM
(RESULTS OF PARTIAL RETURNS)

by

G. N. Washburn

Since the Fish Division of the Conservation Department this year decided to undertake further investigation of culturing bait minnows and its associated problems, it was felt that specific information regarding the desires and needs of the state's minnow dealers should be obtained.

A simple card-type questionnaire (return postage paid) was mailed to each licensed dealer in the state on Thursday, April 18. By May 17, a lapse of 29 days, a sufficient number of cards had been returned warranting a tabulation of the data and the interpretation of the same, the results of which are presented below.

A total of 901 cards (one to each 1945 licensed dealer) was mailed and to date (May 17), 342 have been returned, representing 37 per cent of the total mailed. Three of the cards were returned unanswered and an additional two were found to be incomplete. Therefore, the tabulations which follow are based on 337 returns.

Item 1.

Are you able to obtain an adequate supply of bait minnows at all times?

Yes ____; No ____.

Number of dealers indicating a scarcity of minnows.....	317
Percentage of total.....	94
Number of dealers indicating no scarcity of minnows.....	20
Percentage of total.....	6

Item 2.

In what size groups of minnows does the greatest scarcity occur?

0-2 1/2" ____; 2-3 1/2" ____; 3-6" ____; 6-12" ____.

Per cent of dealers indicating a scarcity in the 0-2 1/2" size...	22
Per cent of dealers indicating a scarcity in the 2-3 1/2" size...	40
Per cent of dealers indicating a scarcity in the 3-6" size.....	66
Per cent of dealers indicating a scarcity in the 6-12" size.....	28

In the above tabulation, some dealers indicated a scarcity in all size groups while others specified certain ones. Thus there is a discrepancy in the total percentage.

Item 3.

Do you think that the Conservation Department should raise bait minnows as a demonstration to determine if a private concern can do the same successfully? Yes ____; No ____.

Number of dealers favoring the state's program.....	317
Per cent of total.....	95
Number of dealers against the program.....	17
Per cent of total.....	5

Item 4.

If a demonstration is conducted, would you be interested in purchasing minnows at a reasonable rate from the Department's surplus?

Yes ___; No ___.

Number of dealers interested in purchasing minnows.....	313
Per cent of total.....	93
Number of dealers not interested in purchasing minnows.....	22
Per cent of total.....	7

Item 5.

If the Department of Conservation undertakes the culture of minnows, which of these species do you prefer? Chubs ___; Suckers ___; Others (state kind) ___.

Number of dealers listing chubs.....	273
Per cent of total.....	80
Number of dealers listing suckers.....	163
Per cent of total.....	48
Number of dealers listing shiners [✓]	142
Per cent of total.....	42
Number of dealers listing other minnows [✓]	21
Per cent of total.....	6

In the above tabulation many dealers listed more than one species with no particular preference. The significant point to bear in mind, however, is the frequency in which certain species are listed.

✓ Includes common shiners, golden shiners, and Great Lakes shiners.

✓+ Includes mud minnows, muddlers, dace and blunt-nosed minnows.

Practical application of the data presented in Item 2.

It can be noted that in Item 2, a scarcity of minnows occurs in all size groups and in order to supply this demand the average minnow culturist would have to have available a stock of minnows representing size groups as follows: Fourteen per cent of the total stock should fall into the 0 to 2 1/2 inch class; twenty-five per cent in the 2 to 3 1/2 inch size; forty-two per cent in the 3 to 6 inch class and 18 per cent in the 6 to 12 inch size. The above figures were derived in the following manner. There were 77 dealers reporting a scarcity of minnows in the 0 - 2 1/2 inch class; 135 listed a scarcity in the 2 to 3 1/2 inch size; 225 dealers listed the 3 to 6 inch size and 97 in the 6 to 12 inch size. This makes a total of 534 items entered. The percentage of each size group was calculated as a proportionate of this figure.

Based on returns to date it seems evident that the great majority of the minnow dealers in the state recognize that an acute shortage of bait exists and are in favor of the Department's program to learn more about the propagation of these fish.

INSTITUTE FOR FISHERIES RESEARCH

G. N. Washburn

Report approved by A. S. Hazzard

Report typed by E. F. Livingston