

STATE Texas  
PROJECT NO. F-4-R-2 Job. B-3  
PERIOD June 1, 1954 - Oct. 31, 1955

FILE

## SEGMENT COMPLETION REPORT

BY

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### TITLE

To check on Commercial Catch of Rough Fish from Lake Whitney, Texas.

### OBJECTIVES

To determine the effectiveness of commercial fishing on the control of rough fish and predatory species and the value of the local fishery as well as the relative abundance and seasonal variation by species in the commercial catch.

### METHODS

The commercial fishermen were supplied forms to be filled out on which they recorded the amount and weight of each species that were netted. The forms were collected each month by mail or by personal contact with the fishermen.

### DISCUSSION

The only type of commercial fishing allowed on Lake Whitney is by state contract. The operator is bonded and compelled to submit a monthly report of his catch. He is limited to specific devices which may be used and the contract states which species of fish that may be taken from the lake.

There have been only two commercial fishermen on Lake Whitney. Hoop nets are the only gear allowed. Buffalo, carp, suckers, gar, and shad are the rough fish that can be taken. Gar and shad are seldom, if ever, caught in hoop nets in this lake. All other fish must be released immediately and without harm if possible.

Neither fisherman worked the lake throughout the entire period. One fisherman began netting the lower end of the lake in July, 1954 and continued through May, 1955. He did no more netting until October of that year. Another fisherman began netting Bear Creek Area, located about mid-lake, in November of 1954 and continued through June of 1955. The flooded fields and lowlands located in the mid-lake region produced the most fish per net set. Both fishermen set between 10 and 15 hoop nets baited with cottonseed cake. The percentage that each species represents in the net catch is not necessarily a true representation of the abundance of that species in the lake as carp are apparently more susceptible to baiting than the other two species.

The seasonal variation in the percentage of each type of fish caught by the commercial fishermen was not conclusive as neither fisherman netted the lake for a continuous 12 month period. But the data collected indicated that smallmouth buffalo were caught in the greatest numbers during the colder months of the year. Conversely carp were taken in larger quantities during the warmer months.

A total of 93,491 pounds of rough fish was harvested, worth \$16,521 on the retail market. The amount of harvest and the value of each species is given in Table 1. Carp were the most abundant species caught representing 91.26 percent by number and 91.42 percent by weight of the total harvest. The number of each species caught is given in Table 2.

The type of nets to be used in the harvest of rough fish by commercial fishermen is a topic that is widely, and sometimes heatedly, discussed in some localities. Fishing and boating traffic on Lake Whitney is quite heavy. The local feeling toward the use of gill nets in that area, other than for biological surveys, is far from sympathetic. Any commercial fishing gear used in that lake has to be well hidden and inconspicuously run. The hoop nets are well adapted to such use and also return a high harvest per man-hour used in working them.

It is recommended that this study be continued, and that a larger harvest of rough fish be netted if it is practical.

#### SUMMARY

1. A 17 month study was made of the commercial catch of rough fish from Lake Whitney.
2. About 93,000 pounds of rough fish were taken from the lake by the use of hoop nets.
3. The retail market value of the harvest was \$16,521.39.
4. Carp composed 91 percent and smallmouth buffalo 8 percent of the catch.

Table 1. Pounds of Harvest and Market Value of Fish Caught by Commercial Fishermen, Lake Whitney, Texas, July 1, 1954 Through October 31, 1955.

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Species	Total Pounds Caught	Avg. Retail Price Per Lb. Not Dressed	Total Value
Carp	85,468	17½	\$14,956.90
Smallmouth Buffalo	7,778	19½	1,516.71
Carp sucker	245	17½	47.78
TOTALS	93,491		\$16,521.39

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Table 2. Numbers of each Species Caught and the Percentage of the Entire Catch that they Represent.

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Species	Total Number Caught	Percent By No.	Percent By Wt.
Carp	36,984	91.26	91.42
Smallmouth Buffalo	3,427	8.46	8.32
Carpsucker	114	0.28	0.26
TOTALS	40,525	100.00	100.00

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