| Table 6. | Chronicle of Mortalities of Largemouth Bass Caught in Keowee B.A.S.S. |
|----------|---|
| | Tournament and Hatchery Controls Retained in Pools and Hatchery |
| | Ponds 30 May-14 June 1973. |

| | Ро | ols | Hatchery Ponds | | | | | | | | |
|-------|----------|---------|----------------|---------|--|--|--|--|--|--|--|
| Day | Controls | Tourney | Controls | Tourney | | | | | | | |
| 1 | | 3 | | 1 | | | | | | | |
| 2 | | 5 | | 1 | | | | | | | |
| 3 | | | | 1 | | | | | | | |
| 4 | | 3 | | 1 | | | | | | | |
| 5 | 1 | 6 | | 1 | | | | | | | |
| 6 | | | | | | | | | | | |
| 7 | | | | | | | | | | | |
| 8 | | 5 | | | | | | | | | |
| 9 | 1 | 2 | | | | | | | | | |
| 10 | | 2 | | | | | | | | | |
| 11 | | 4 | | | | | | | | | |
| 12 | | | | | | | | | | | |
| 13 | | 3 | | | | | | | | | |
| 14 | | 2 | | 1 | | | | | | | |
| TOTAL | 2 | 30 | 0 | 5 | | | | | | | |

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TEXAS BASS CLUBS¹

by

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ABSTRACT

A 1972 survey was taken of Texas bass clubs to determine the number and location of organizations, their membership, club objectives, tournament regulations, fishing success and estimated harvest of bass from Texas reservoirs. Questionnaires were sent to 206 clubs, and reports were received from 170 of the groups during this study. The 170 reporting organizations collectively held 1,755 tournaments in 1972. Harvest records revealed an average catch per unit effort of 0.17 bass and/ or 0.28 lb. per man-hour. Harvest from tournament lakes was, in most cases, less than 0.50 lb. per acre and was not considered harmful to bass populations at this time.

This study was supported in part by Federal Aid in Wildlife Restoration, Texas Dingell-Johnson Project F-26-R.

INTRODUCTION

In recent years Texas has experienced an upsurge in the popularity of competitive bass fishing clubs. The increasing number of competitive bass fishermen and their improved methods of taking largemouth bass have resulted in a dispute with nontournament anglers who claim these clubs overharvest bass from the public reservoirs of Texas. This study was designed to determine the number and location, membership, objectives and tournament regulations of clubs in Texas and estimate their fishing success and harvest.

I would like to thank Mr. Neil E. Carter for his suggestions in the preparation and review of the manuscript.

MATERIALS AND METHODS

The names and addresses of the competitive bass fishing clubs of Texas were obtained with the assistance of the Texas Parks and Wildlife Department's game wardens, biologists and information-education officers and the Texas Association of Bass Clubs. A questionnaire was designed to provide information that would fulfill the objectives of this study and determine the lakes primarily utilized for club tournaments (Figure 1). This questionnaire was sent to all bass clubs to be completed and returned to the Department for analysis.

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Figure 1. Questionnaire sent to Texas bass clubs, 1972.

RESULTS

In 1972, 206 competitive bass fishing clubs were identified. Survey questionnaires were returned by 170 of these organizations. They reported a total membership of 16,086 fishermen. Projecting these figures, nearly 19,500 fishermen in Texas were members of competitive bass fishing clubs in 1972. In other words, competitive bass

fishermen comprised about 1.3 percent of the 1.5 million licensed fishermen in the State.

Bass clubs were distributed statewide (Figure 2). The main concentrations were located in the larger cities and in the eastern half of the State where the majority of Texas' reservoirs occur.

These organizations were generally conservation-oriented, and most had similar club objectives. Their bylaws usually included the abatement of pollution and littering, promotion of fellowship among sportsmen, enjoyment of fishing and the outdoors, promotion of water safety and the observance of game and fish laws. Most clubs also were vitally interested in research and management aimed at maintaining or improving bass fishing.

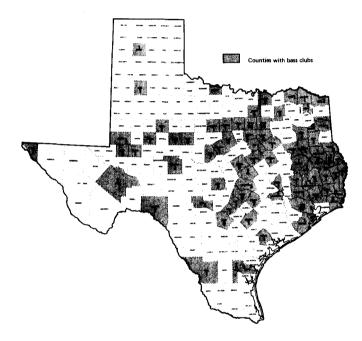


Figure 2. County distribution of Texas bass clubs, 1972 (Numbers represent quantity of bass clubs found in each county).

Tournament regulations for bass clubs were similar in nature. Of the 170 reporting organizations, 136 clubs enforced a 12-inch minimum size limit on bass taken during tournaments. Other clubs had size limits of 10, 11, 13, 14 or 15 inches. In 1972 the State's daily bag limit on largemouth, smallmouth and spotted bass was reduced to 10 fish in the aggregate with a minimum length limit of 10 inches. This change resulted in 156 of the reporting clubs enforcing the new 10 fish limit. Others had smaller limit requirements. Organizations located in West Texas, which has limited bass fishing, were especially cautious in their regulations. They enforced bag limits that ranged from one to five fish and length limits of either 14 or 15 inches.

Other bass club tournament regulations included fishing with artificial lures only, no trolling, no littering, only two men per boat and the use of life preservers by members.

Some groups prohibited culling of fish from stringers. Others would not allow return of fish to a tournament lake unless the fish were in condition to swim away.

The reporting bass clubs collectively held 1,755 tournaments in 1972, or an average of 10.3 events (ranged from 1 to 15) per club per year. In general, most organizations held one tournament per month. When all State clubs were taken into account, an estimated 2,120 tournaments were held on Texas lakes in 1972.

Data from only 74 bass clubs were usable in catch per unit of effort statistics. An average catch rate during tournaments of 0.17 fish (ranged from 0.01 to 0.59) and/or 0.28 lb. (ranged from 0.05 to 1.18) per man-hour was found for these clubs. Tournament catches averaged 59 bass (ranged from 2 to 405) that weighed 98.75 lbs. (ranged from 3 to 606). Expanding these data to include all bass clubs, an estimated total harvest of 128,000 bass (209,350 lbs.) was taken in 1972 from Texas reservoirs.

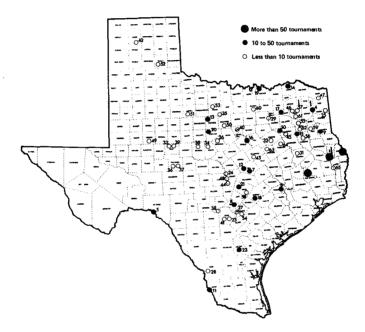


Figure 3. Distribution of tournament lakes in Texas, 1972 (Numbers indicate name of tournament lakes - See Table 1 for numerical key).

Reporting clubs listed 65 Texas lakes as tournament sites (Figure 3). Lakes Sam Rayburn, Toledo Bend, and Livingston were the main tournament locations. Other heavily used tournament lakes were Lake O' the Pines, Amistad and Somerville.

Reservoirs that produced the largest average tournament catches (over 200 lbs./tournament) in 1972 were Lakes Amistad, Tawakoni, Toledo Bend and Caddo (Table 1). Other impoundments that showed good catches (100 to 200 lbs./tournament) were Sam Rayburn, Lake O' the Pines, Livingston, Possum Kingdom, Texarkana, Dunlap and Bastrop. Reported harvest of bass indicated clubs usually took less than 0.50 lb. per acre from tournament lakes, except for Lakes McQueeney, Bastrop and Dunlap where yield was estimated to be 1.86, 1.81 and 0.74 lbs. per acre respectively. It should be pointed out that harvest data were not obtained for all tournament lakes in the State. Also, harvest results were not complete for all lakes that had data reported; and, therefore, average harvest values may be affected by extreme sample values.

from Texas reservoirs, 1972 (minimum and maximum harvest Summary of largemouth bass tournament reported tournament harvest is in parenthesesp. Table 1.

bs./acre 0.38 0.22 0.20 0.33 0.19 0.06 0.25 0.05 0.05 0.10 1.81 0.35 0.03 0.03 0.14 0.19).50 0.07 0.02 0.02 0.09 0.01 .86 Estimated Harvest 0.16 0.11 ł ١ -Fotal lbs. 43,802 10,958 1,327 1,888 2,327 931 1,520 1,017 721 3,662 1,627 3,132 114 738 7,917 11,368 2,169 714 2,284 548 850 306 116 6,115 556 ſ ſ 1 (31-200 (8-19) 48-200) (3-368) (70-132 14-416) 9-111) 55-606 46-210) 59-409) (10-71) 125-293) (12 - 173)Average Harvest 45-462 26-70) (841) 15-85) 70-96 (41-75) (3-55) (29-81)12-68) 20-92) (3-22) 1 1 1 Ĵ Weight (lbs.) Fournaments 86.6 80.0 59.8 45.1 228.7 101.7 85.0 76.0 348.0 222.6 232.0 21.0 83.1 84.6 21.4 42.3 49.8 14.5 122.3 42.8 34.0 110.6 49.3 14.3 92.3 65.1 ł ł ł Number with Harvest Data 6 6 \$ 4 $\frac{\infty}{2}$ <u>2</u> 2 2 1 \square 5 Reported Number 236 84 62 20 66 50 4 44 34 31 28 27 Ξ Ξ Acres) 90,000 34,000 12,500 15,250 6,000 25,500 15,760 36,700 36,700 1,**59**0 91,200 18,930 113,400 75,000 6,430 8,240 3,800 98,905 21,900 3,450 23,200 22,000 18,700 65,000 11,460 4,610 1,656 22,745 Size 400 ake O' the Pines Stillhouse Hollow Lake Hubbard Creek **Corpus Christi** Sam Rayburn Ray Hubbard **Coledo Bend** Cedar Creek Casa Blanca **AcQueeney** ivingston Name Somerville Pat Mayse awakoni alaveras **3uchanan** Palestine Murvaul Whitney Amistad exoma Canyon **astrop** roctor Caddo alcon Belton ravis Leon Number 2 $\overline{\mathbf{c}}$ 4 S

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DISCUSSION

Reports received from bass clubs probably reflected accurate harvest statistics. Most clubs maintained good catch records in order to qualify their top six fishermen for a prestige state club championship tournament. Even competition between individual club members for trophies, prize monies and/or best fisherman honors was enough incentive for clubs to maintain meticulous tournament records.

In 1972 largemouth bass tournament harvests from Texas lakes, in addition to nontournament harvests, were probably not detrimental to bass populations. Creel and cove rotenone surveys conducted on Lake Bastrop, a noted bass fishing lake, give some support to this statement. Three cove rotenone samples (acres sampled = 5.8) were made in 1973 and a standing crop of 32.7 lbs. per acre for largemouth bass was estimated (Provine, personal communications). Tournament harvest (1.81 lbs./acre; 1972 harvest estimate based on Lake Bastrop tournament data obtained by this study) was 5 percent of this 1973 standing crop figure. Total estimated harvest (9.85 lbs./acre; 1972 harvest based on Lake Bastrop creel survey data) was 30 percent of the 1973 standing crop (Provine, 1973). No actual estimates of sustainable yield for largemouth bass in Lake Bastrop are known. But, considering the relatively small fraction of the stock being harvested by all fishermen, it is doubtful the level of sustainable yield is being overshot. It appears, at least in Lake Bastrop, fishing has not reached a point that would cause a decline in recruitment of bass.

Accurate tournament statistics may prove to be the most significant contribution bass clubs can make to fish management programs. Few states, if any, have sufficient staff to monitor the bass fishery of all their tournament lakes year after year. But, bass clubs can furnish this service, Bass angling quality indices such as percent of successful tournament fishermen, average weight of fish caught, pounds per man-hour, etc., are obtainable from bass club harvest records. Fish conservation agencies should make efforts to obtain these data for lake management purposes.

THE USE OF ANTIMYCIN (FINTROL) IN FARM PONDS IN GEORGIA¹

by

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ABSTRACT

The results from the use of antimycin A in Georgia fish ponds as a fish toxicant within the period 1968-1974 are presented in the following paper. Concentrations of antimycin at 0.4 to 0.6 parts per billion (ppb) were found to be the most desirable range for reducing populations of scalefish in attempting to improve balance and/or to improve fishing. For controlling all sizes of scalefish in catfish ponds, concentrations of 2.0 and 4.0 ppb seemed effective. The gravity flow method of application by boat was found to be adequate, but other means of application could be used successfully.

INTRODUCTION

Antimycin A (Fintrol) was first field tested as a piscicide about 10 years ago (Walker, et. al. 1964). In Georgia it was not used extensively prior to 1968. However, since that time it has been widely used in ponds in central and west central Georgia ponds. Antimycin has been used largely for selective removal of excessive numbers of intermediate bluegills (*Lepomis macrochirus*) and to eradicate scalefish populations in ponds managed primarily for channel catfish. Its application in Georgia reservoirs has

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