

Segment Completion Report

Investigations Project

State of TEXAS

Project No. F-3-R-6

Name: Fisheries Investigations and Surveys of  
the Waters of Region 5-B.

Job No. B-12

Title: Basic Survey and Inventory of Fish  
Species in Striker Creek Reservoir.

Period Covered:

June 1, 1958 through May 31, 1959

Abstract:

This report covers the second year of Lake Striker's existence. During the second year the water quality improved somewhat and was less variable than the first year. The ratio of game fish and rough fish remained virtually the same although some populations of individual species changed considerably. The general physical condition of the fish has dropped off with the exception of largemouth bass and black crappie. Aquatic vegetation has become very abundant in the upper end of the lake as well as in parts of the open water. Recommendations are made to continue this study on a quarterly basis for another year.

Objectives:

To determine the effects of the poor water quality which exists in the lake on the fish species present. To continue a study of growth rates of game species and certain rough species, to record continued chemical changes in the water.

Procedure:

This period covers the second year of Lake Striker's existence.

Data was collected at bimonthly intervals, generally close to or on the 10th of each month, during this job. Water samples and temperatures were taken in the afternoons at about the same time of day each month. There were six net sets made each collection month at randomly selected locations. Seining collections were also made at randomly selected locations.

1. Limnological Data

Limnological data was taken in the same manner as last year. Water samples were taken with a Foerst water sampler at five foot intervals from surface to bottom and at three locations on the lake. The locations were near the dam, midway between TP&L powerhouse and Brown's Marina and toward the upper end of the open water. Temperatures were taken at the same locations as the water samples. A reversing thermometer was used to obtain this data.

Other limnological conditions recorded were turbidity (Secchi disk), color of water, sky, wind, time and air temperature.

## 2. Netting Collections

Netting collections were made in the same manner as last year. Eight experimental type gill nets with mesh size ranging from 1 to 3 inches were set in six randomly selected locations. The nets were left out overnight. A total of 36 sets made up of 48 nets were made.

A count was made of all rough fish as they were removed from the nets. They were then destroyed and returned to the lake. All game fish were saved and were then measured (both standard and total lengths) and weighed. Coefficients of condition ("K" factors) were determined from this data. The average lengths, weights and condition factors were calculated for each species each month. Spot checks were made on stomach contents and sexual development.

## 3. Seining Collections

Seining collections were also made in the same manner as last year. Seining collections were made with a 26' by 6' by  $\frac{1}{4}$ " mesh bag seine. Seining locations in some areas were much easier to find than last year because lakeshore lot owners have kept the shoreline clean. Other areas are grown up in dense vegetation making seining impossible. A total of 46 seine hauls representing six collections were made. All specimens were preserved in 10% formalin solution and brought back to the laboratory for identification.

### Findings:

#### 1. Limnological Findings

One of the primary objectives of this job was to record chemical changes in the waters. It was determined last year that chemically and physically the waters of Lake Striker varied greatly from month to month, area to area and even at different depths within an area. During the second year the waters stabilized and the variance was little from time to time. It very seldom changed through the depths.

A 11 to 12-inch rain on the watershed during early May 1959, sent a ten foot wall of water through the lake which tended to change the chemical and physical characteristics of the water. Except for the flood, the lake level remained constant through the year.

##### a. Methyl Orange Alkalinity and pH

Table 1 gives the alkalinity and pH for each depth and location on the lake by months. As can be seen there was little variation through the depths and locations for each month. The range of pH this year was 6.0-7.0 and averaged 6.5 which indicated a favorable stabilization and slight improvement. The range last year was 5.0-7.1 and averaged 6.3 which was a wider range and lower average. The pH seems to drop off in the spring months.

Methyl orange alkalinity over the year varied about on the same lines as pH. There was less range than last year and the average was slightly lower. The range this year was from 7 to 42 ppm and averaged 19 ppm. Last year the range was from 3 to 60 ppm and averaged 21 ppm. The alkalinity also dropped off during the spring months.

#### b. Chlorides

The chlorides improved over last year in that they dropped considerably, but it is still high compared to other waters in East Texas. The chloride content gradually increased each month until the flood then it dropped sharply. The range this year was from 49.64 to 226.94 ppm and averaged 166.93 ppm. Last year the range was from 85.10 to 425.52 ppm and averaged 192.51 ppm. The readings each time were fairly stable and the same at all depths in January, March and May. Table 2 gives the chlorides for each depth and location for each month.

#### c. Temperature and Dissolved Oxygen

Table 3 shows the temperatures and dissolved oxygen at the five foot intervals from surface to bottom and at the three locations on the lake for each month. Also, the air temperatures are given. The temperatures followed the usual pattern of being cooler as the depth increased. The widest differences in surface and bottom temperatures was in July and May. The other months the temperatures were fairly uniform. The range was 46.0-88.5°F.

The only pattern dissolved oxygen followed was that it usually was less as the depth increased. The only time it was low was during the month of July and at the bottom levels on other occasions. The range was from 1.0 to 12.6 ppm which is pretty close to last year's range (0.8-12.6 ppm).

Air temperatures at the time of taking water samples ranged from 63-91°F. No severe weather was encountered as it was last year.

#### d. Turbidity

As time went on from the spring rains of 1958, the lake became less turbid until the flood of May 1959. In July 1959, the turbidity was 36 to 39 inches Secchi and decreased every month until it became 84 inches Secchi in March 1959. Then it abruptly came back up to the all time high of 8 inches Secchi after the May flood.

Generally speaking the waters of Lake Striker have become more or less stabilized the second year with less range in the extremes of the water analysis. The quality has improved a little but still is classed as being poor for biological productivity.

### 2. Fish Findings

Both netting and seining collections yielded 36 species of fish representing 12 families. This includes 4 species not found last year but excludes 6 species collected last year but not this year. Combining the list and assuming that all species are still present there are 42 species of fish that have been found in Lake Striker. It is doubtful that these six species are now present. Table 4 lists each species phylogenetically for both years. The names are from Hubb's A CHECKLIST OF TEXAS FRESHWATER FISHES, dated December 1958.

#### a. Netting Results

Table 5 gives the tabulation of the bimonthly netting on Lake Striker. This table lists the number of fish of each species caught by nets each collection month, the total for the year, percent of each species both for this year and last year and the change in percentage from last year. Also the game fish and rough fish are totaled and percentage

of each is given and compared to last year. There were 23 species collected by gill nets, 12 rough species and 11 game species, which includes eight species collected every trip. The rough fish catch predominated the game fish catch every month. The average percentage of rough fish and game fish was roughly 74% and 26% respectively, which is what it was last year. Again, as last year, it was found that the rough fish were more active in the winter months as concluded by the high percentage of those caught then.

A total of 1,534 fish were caught by gill nets over the year (1,918 last year for eleven months). This includes 1,130 rough fish (1,426 last year) and 404 game fish (492 last year). Gizzard shad again had the highest numbers with 532 (574 last year) being caught. Spotted suckers were next with 227 (91 last year) followed by bluegills with 154, yellow bullheads with 116, black bullheads with 102 and largemouth bass in sixth place with 93 being caught. The number of species caught each month ranged from 12 to 17 and averaged about 14.

Concerning the fish populations in the lake, there were two major changes but they tend to offset each other. The black bullhead population fell about 10% but the spotted sucker population rose about 10%. Other appreciable changes were gizzard shad up nearly 5% and bluegills up 3%. Both crappies were up but the bass went down. Overall there was little change since the total game fish population came up 0.69% and the rough fish population fell 0.69%. These figures are taken from the actual fish netted and the figures for the individual species probably aren't as accurate as they are for the total of all species combined.

#### b. Seining Results

Table 6 gives the numbers of fish collected by the bag seine each month. Seining yielded 23 species (28 last year) and a total of 3,099 specimens. Again the most abundant species collected was the brook silversides. The spottail shiner and the red shiner are very abundant also. These three species and the bluegill were the only ones collected every time. There were comparatively few game fish collected by seining, with cyprinids (minnows) making up about 56% of the fish numbers collected by seining. This is a good indication of the food, not including shad, available for bass and other predator species.

The number of species collected each month ranged from 7 to 18 and averaged about 13.

#### c. Growth Rates

An attempt was made to record growth of some game species. Only two species (largemouth bass and channel catfish) made definite gains each time. There were so many spawns or age groups involved in the other species that no trend could be seen. Table 7 shows the growths of these species as indicated by standard lengths.

#### d. Condition of Fish

Generally speaking, the physical condition of the largemouth bass and black crappie improved over last year but other game fishes (warmouth, bluegill, spotted sunfish, yellowbelly and white crappie) fell off greatly (Table 8). Though the average weights were up on some species their condition factor (length-weight relationship) was down. This is a direct result of the poor water quality and increase in numbers. The black crappie is more adaptable to clear acid waters than the white crappie and is thus making gains. Last year, when the lake was impounded, there was a large fauna of invertebrates which has decreased sharply as the lake has developed.

## e. Food Habits

As before, no intensive study was made of the food habits of the fish in Lake Striker. Spot checks were made on some of the game fish to get an idea of the main diets of these fish. The majority of the stomachs checked were empty. The bass fed on crawfish and fish, consisting mainly of shad and sunfish, and also including spotted sucker, chub sucker and unidentified fish remains. Some bass had as many as five shad in their stomachs. Warmouths ate crayfish and unidentified fish. Crappie ate shad, unidentified fish, and insects. Channel catfish showed signs of feeding on the bottom since they quite often had mud and gravel in their stomachs, along with vegetation, crustaceans, shad and unidentified fish.

## f. Sexual Development and Spawning Activity

Some of the bass checked in July were spent and bass with immature eggs began showing up in September. By March they were very ripe and in May they were flowing and some were spent. The channel catfish checked in May were gravid and were nearing a spawn. The sunfish were gravid at most any time of the year. Several of the suckers were flowing in March. The flood of early May might have interrupted or delayed some spawning activity.

## g. Annotated Checklist of Fish Species.

1. Lepisosteus productus - spotted gar - this is the only fish population that didn't change percentagewise from last year, according to netted numbers. This fish is probably beneficial to the lake in its present numbers.
2. Amia calva - bowfin - this fish doubled in numbers caught from last year but overall it increased only 0.25% of the total population.
3. Dorosoma cepedianum - gizzard shad - this is the most commonly collected fish in the lake and increased over last year.
4. Esox americanus - grass pickerel - only one of this species was collected.
5. Carpiodes carpio - river carpsucker - only one of this species was collected which is new for the lake.
6. Moxostoma poecilurum - blacktail redhorse - this species is not too common.
7. Minytrema melanops - spotted sucker - this is the second most commonly collected species and its numbers increased 10% over last year.
8. Erimyzon sucetta - chubsucker - this is one of the more common species in the lake even though their numbers decreased from last year.
9. Cyprinus carpio - carp - only four specimens were collected this year and they again were of a large size.
10. Notemigonus crysoleucas - golden shiner - collected in large numbers by seining and once by netting. They appeared mostly during the winter months.
11. Notropis fumeus - ribbon shiner - this shiner is very common, though collected on only four occasions.

12. Notropis umbratilis - redbfin shiner - a total of three were found twice.
13. Notropis brazosensis - Brazos River shiner - not collected this year. Probably is gone from the lake.
14. Notropis roseus - weed shiner - not collected this year. Probably is gone from the lake.
15. Notropis blennius - river shiner - not collected this year. Probably is gone from the lake.
16. Notropis venustus - spottail shiner - the fourth most commonly collected species. It appeared every month and in good numbers.
17. Notropis lutrensis - redhorse shiner - this is the third most commonly collected species in the lake. It also appeared every month and in good numbers.
18. Notropis stramineus - sand shiner - very common, was collected every month except one.
19. Notropis atrocaudalis - blackspot shiner - not collected this year. Possibly is gone from the lake.
20. Notropis volucellus - mimic shiner - not collected this year. Possibly is gone from the lake.
21. Pimephales vigilax - parrot minnow - collected every month except one and in good numbers.
22. Hybognathus nuchalis - silvery minnow - only one was collected which is a new species for the lake.
23. Ictalurus punctatus - channel catfish - the channel cat began showing up in pretty good numbers which is encouraging.
24. Ictalurus melas - black bullhead - even though this fish was collected every month, and in large numbers, it still declined 10% from last year.
25. Ictalurus natalis - yellow bullhead - this fish also was collected every time, and in large numbers, but declined only 1.56% from last year. Was not collected by seining.
26. Fundulus chrysotus - redspot topminnow - not collected this year. May be present in the upper end.
27. Fundulus notatus - blackstripe topminnow - fairly common.
28. Gambusia affinis - common mosquitofish - quite numerous in the summer.
29. Labidesthes sicculus - brook silversides - the most commonly collected fish species by seining. They were very abundant during the winter.

30. Micropterus salmoides - largemouth bass - though this species fell slightly from last year it is still quite abundant and many nice ones are caught by fishermen.
31. Micropterus punctulatus - spotted bass - this is a new species to the list. They are not too common.
32. Chaenobryttus gulosus - warmouth - both numbers and condition of this species dropped considerably from last year.
33. Lepomis cyanellus - green sunfish - only two small specimens were collected by seining.
34. Lepomis punctatus - spotted sunfish - second only to bluegill in the sunfish group in numbers, by seining. Only nine collected by netting.
35. Lepomis microlophus - redear - there were three taken by netting, which is new to the netting list, and only two by seining.
36. Lepomis macrochirus - bluegill - the third most common fish by netting and also high on the seining list. Their condition is down from last year.
37. Lepomis auritus - yellowbelly - rarely caught by nets.
38. Lepomis megalotis - longear - frequently collected by netting and rarely by seining.
39. Pomoxis annularis - white crappie - their numbers are up slightly but their condition is down greatly.
40. Pomoxis nigromaculatus - black crappie - both numbers and condition are up. They are becoming fairly common.
41. Ammocrypta vivax - Arkansas sand darter - a new species to the list, four were collected.
42. Etheostoma gracile - slough darter - only two were collected by seining.

### 3. Vegetation

Aquatic vegetation has become quite a problem during the latter months of this segment. The clear waters are very conducive for vegetation growths. Also the fallen timber and submerged underbrush in the upper end makes access for control almost impossible. The principal aquatic vegetation encountered were as follows:

Parrot feather	<u>Myriophyllum brasiliense</u>	Very abundant
Coontail	<u>Ceratophyllum sp.</u>	Very abundant
Sawgrass	<u>Zizaniopsis miliacea</u>	Very abundant
Cattail	<u>Typha sp.</u>	Common

The May flood swept out a lot of the vegetation (Figure 3) but was hardly noticeable. It is highly desirable to keep boat roads open and the open water clear of vegetation if at all possible.

Conclusions and Recommendations:

During Lake Striker's second year of existence the growth of game fish has slowed down. The game fish-rough fish ratios have remained virtually unchanged but the numbers are up. However, the condition of the fish has dropped off due to the poor water quality and increased numbers. Sports fishing as a whole has remained good. Aquatic vegetation has become a problem in the upper end.

Considering the above conclusions it is therefore recommended that:

1. Sport fishing pressure be kept high.
2. Efforts should be made to keep all boat roads and channels as well as the open water areas clear of vegetation.
3. Studies of the fish populations should be continued but only on a quarterly basis.
4. Continued studies should be conducted on the water to see if time will improve the quality.

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Approved by Marion Toole  
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Date August 24, 1959

Table 1. Methyl Orange Alkalinity and pH at Different Depths and Locations on Lake Striker.

Date	1958		1958		1959		1959		1959		Remarks		
	July 10	September 10	November 10	January 12	March 10	May 11	pH	Alk	pH	Alk			
Lower end near dam													
0	6.6	27	6.7	33	6.6	18	6.7	30	6.5	10	6.2	8	pH range this year 6.0-7.0
5	6.6	23	6.7	33	6.7	18	6.7	30	6.5	10	6.2	8	pH range last year 5.0-7.1
10	6.5	21	6.6	28	6.6	19	6.7	30	6.5	10	6.2	8	Average pH this year 6.5
15	6.3	22	6.6	33	6.6	18	6.7	30	6.4	10	6.0	8	Average pH last year 6.3
20	6.6	42	6.5	36	6.2	14	6.7	28	6.2	7	6.0	8	
Mid lake													
0	6.7	21	6.7	33	6.7	20	6.7	26	6.2	10	6.4	8	Alkalinity range this year 7-42 ppm
5	6.6	23	6.7	29	6.8	18	6.7	26	6.5	8	6.2	8	Alkalinity range last year 3-60 ppm
10	6.6	25	6.6	31	6.7	18	6.7	26	6.4	8	6.2	8	Average alkalinity this year 19 ppm
15	6.4	25	6.6	30	6.6	18	6.7	26	6.4	8	6.2	8	Average alkalinity last year 21 ppm
20	6.4	42	6.6	25	6.6	18	6.7	26	6.2	8	6.2	8	
Upper end of open water													
0	6.7	20	7.0	30	6.6	14	6.7	26	6.5	8	6.4	8	
5	6.8	21	6.8	28	6.6	18	6.7	26	6.5	8	6.2	8	
10	6.3	24	6.7	28	6.6	27	6.7	26	6.5	8	6.2	8	
15			6.4	25	6.4	15	6.7	22	6.2	8	6.4	8	

\* Expressed in parts per million.

Table 2. Chlorides at Different Depths and Locations on Lake Striker.

Depth	1958			1959			Remarks
	July	September	November	January	March	May	
0	141.84 ppm	163.12 ppm	170.21 ppm	212.76 ppm	226.94 ppm	49.64 ppm	Range this year 49.64-226.94  Range last year 85.10-425.52
5	148.93	177.30	184.39	212.76	226.94	49.64	
10	156.82	184.39	177.30	212.76	226.94	49.64	
15	156.82	198.58	184.39	212.76	226.94	49.64	
20	156.82	198.58	170.21	212.76	241.13	49.64	
0	156.82	191.48	170.21	* 212.76	226.94	49.64	Average this year 166.93  Average last year 192.51
5	156.82	191.48	177.30	* 212.76	226.94	49.64	
10	156.82	191.48	163.12	* 212.76	226.94	49.64	
15	156.82	191.48	177.30	212.76	226.94	49.64	
20	92.20	205.67	177.30	212.76	226.94	49.64	
0	156.82	156.02	163.12	212.76	226.94	49.64	Upper end of open water
5	156.82	191.48	170.21	212.76	226.94	49.64	
10	156.82	191.48	170.21	212.76	226.94	49.64	
15		191.48	170.21	212.76	226.94	49.64	

Lower end  
near the  
dam

Midlake

Upper end  
of  
open water

Table 3. Temperatures and Dissolved Oxygen at Different Depths and Locations on Lake Striker.

	July		September		November		January		March		May	
	Depth	Temp D O	Temp D O	Temp D O	Temp D O	Temp D O	Temp D O	Temp D O	Temp D O	Temp D O	Temp D O	
Lower end near the dam	0	85.6 F 2.0 ppm	84.2 F 5.2 ppm	65.7 F 9.0 ppm	46.8 F 10.4 ppm	56.8 F 8.0 ppm	79.2 F 6.2 ppm	0	83.7 F 3.8 ppm	82.4 F 5.0 ppm	83.3 F 5.4 ppm	83.7 F 3.8 ppm
	5	83.7 F 3.4	82.4 F 4.8	64.8 F 6.6	46.8 F 9.2	57.8 F 11.0	79.2 F 6.2	10	83.5 F 3.4	82.4 F 4.8	82.4 F 5.0	83.5 F 3.4
	10	82.8 F 1.4	82.4 F 4.8	64.0 F 6.0	46.0 F 9.2	56.8 F 10.0	72.3 F 5.8	15	82.8 F 1.4	82.4 F 4.8	82.4 F 4.8	82.8 F 1.4
	15	77.4 F 1.0	82.2 F 1.4	64.0 F 5.0	46.0 F 8.0	56.1 F 7.2	70.9 F 5.6	20	77.4 F 1.0	82.2 F 1.4	82.2 F 1.4	77.4 F 1.0
	20											
Midlake	0	86.2 F 5.2 ppm	86.0 F 5.4 ppm	66.0 F 9.0 ppm	46.2 F 8.0 ppm	57.2 F 11.4 ppm	79.2 F 7.4 ppm	5	84.2 F 6.0 ppm	86.0 F 5.2 ppm	86.0 F 5.4 ppm	84.2 F 6.0 ppm
	5	84.2 F 6.0	86.0 F 5.2	65.5 F 9.0	46.2 F 8.0	57.2 F 10.2	73.8 F 5.6	10	83.5 F 6.2	83.1 F 5.6	83.1 F 5.6	83.5 F 6.2
	15	82.4 F 1.2	82.8 F 4.4	64.4 F 8.4	46.0 F 8.4	57.2 F 11.2	72.0 F 3.4	20	77.9 F 1.2	78.4 F 4.6	78.4 F 4.6	77.9 F 1.2
	20											
Upper end of open water	0	88.5 F 8.0 ppm	88.0 F 6.6 ppm	65.3 F 6.6 ppm	47.1 F 11.0 ppm	59.5 F 9.0 ppm	76.3 F 6.6 ppm	5	88.2 F 6.8 ppm	85.3 F 7.2 ppm	85.3 F 7.2 ppm	88.2 F 6.8 ppm
	5	88.2 F 6.8	85.3 F 7.2	64.8 F 7.4	46.8 F 8.0	59.4 F 7.0	74.5 F 5.4	10	85.6 F 5.8	64.8 F 5.8	64.8 F 5.8	85.6 F 5.8
	15											
Air temperature	91	91	81	63	72	90						

Table 4. A Checklist of Lake Striker Fish Species.

		1958	1959
I.	Family LEPISOSTEIDAE - Gars		
	1. <u>Lepisosteus productus</u> - spotted gar	x	x
II.	Family AMIIDAE - Bowfins		
	2. <u>Amia calva</u> - bowfin	x	x
III.	Family CLUPEIDAE - Herrings		
	3. <u>Dorosoma cepedianum</u> - gizzard shad	x	x
IV.	Family ESOCIDAE - Pickerals		
	4. <u>Esox americanus</u> - grass pickeral	x	x
V.	Family CATOSTOMIDAE - Suckers		
	5. <u>Carpionodes carpio</u> - river carpsucker		x
	6. <u>Moxostoma poecilurum</u> - blacktail redhorse	x	x
	7. <u>Minytrema melanops</u> - spotted sucker	x	x
	8. <u>Erimyzon sucetta</u> - lake chubsucker	x	x
VI.	Family CYPRINIDAE - Shiners and minnows		
	9. <u>Cyprinus carpio</u> - carp	x	x
	10. <u>Notemigonus crysoleucas</u> - golden shiner	x	x
	11. <u>Notropis fumeus</u> - ribbon shiner	x	x
	12. <u>N. umbratilis</u> - redbfin shiner	x	x
	13. <u>N. brazosensis</u> - Brazos River shiner	x	
	14. <u>N. roseus</u> - weed shiner	x	
	15. <u>N. blennius</u> - river shiner	x	
	16. <u>N. venustus</u> - spottail shiner	x	x
	17. <u>N. lutrensis</u> - redbhorse shiner	x	x
	18. <u>N. stramineus</u> - sand shiner	x	x
	19. <u>N. atrocaudalis</u> - blackspot shiner	x	
	20. <u>N. volucellus</u> - mimic shiner	x	
	21. <u>Pimephales vigilax</u> - parrot minnow	x	x
	22. <u>Hybognathus nuchalis</u> - silvery minnow		x

Table 4. (Continued) A Checklist of Lake Striker Fish Species

		1958	1959
VII.	Family AMEIURIDAE - Freshwater catfishes		
	23. <u>Ictalurus punctatus</u> - channel catfish	x	x
	24. <u>I. melas</u> - black bullhead	x	x
	25. <u>I. natalis</u> - yellow bullhead	x	x
VIII.	Family CYPRINODONTIDAE - Topminnows		
	26. <u>Fundulus chrysotus</u> - redspot topminnow	x	
	27. <u>F. notatus</u> - blackstripe topminnow	x	x
IX.	Family POECILIIDAE - Mosquitofish		
	28. <u>Gambusia affinis</u> - common mosquitofish	x	x
X.	Family ATHERINIDAE - Silversides		
	29. <u>Labidesthes sicculus</u> - brook silversides	x	x
XI.	Family CENTRARCHIDAE - Basses and sunfishes		
	30. <u>Micropterus salmoides</u> - largemouth bass	x	x
	31. <u>M. punctulatus</u> - spotted bass		x
	32. <u>Chaenobryttus gulosus</u> - warmouth	x	x
	33. <u>Lepomis cyanellus</u> - green sunfish	x	x
	34. <u>L. punctatus</u> - spotted sunfish	x	x
	35. <u>L. microlophus</u> - redbreast sunfish	x	x
	36. <u>L. macrochirus</u> - bluegill	x	x
	37. <u>L. auritus</u> - yellowbelly sunfish	x	x
	38. <u>L. megalotis</u> - longear sunfish	x	x
	39. <u>Pomoxis annularis</u> - white crappie	x	x
	40. <u>P. nigromaculatus</u> - black crappie	x	x
XII.	Family PERCIDAE - Darters		
	41. <u>Ammocrypta vivax</u> - Arkansas sand darter		x
	42. <u>Etheostoma gracile</u> - slough darter	x	x

Table 5. Tabulation of Bimonthly Netting on Lake Striker.

No.	Species	Jul	Sept	Nov	Jan	Mar	May	Total	%	% last year	Change from last year
1.	<u>Lepisosteus productus</u>	6	8	2		1	27	44	2.87	2.87	0.0
2.	<u>Amia calva</u>				1		5	6	0.39	0.16	+ 0.25
3.	<u>Dorosoma cepedianum</u>	69	131	124	51	97	60	532	34.68	29.93	+ 4.75
4.	<u>Esox americanus</u>						1	1	0.07	0.16	- 0.09
5.	<u>Carpiodes carpio</u>			1				1	0.07	0.0	+ 0.07
6.	<u>Moxostoma poecilurum</u>	2		7				9	0.59	0.31	+ 0.29
7.	<u>Minytrema melanops</u>	6	7	15	85	83	31	227	14.79	4.74	+ 10.05
8.	<u>Erimyzon sucetta</u>	4	3	20	13	36	11	87	5.67	7.82	- 2.15
9.	<u>Cyprinus carpio</u>	1				2	1	4	0.26	2.87	- 2.61
10.	<u>Notemigonus crysoleucas</u>				1			1	0.07	0.0	+ 0.07
11.	<u>Ictalurus punctatus</u>	4	11	7	2		9	33	2.15	0.26	+ 1.89
12.	<u>I. melas</u>	9	17	38	9	8	21	102	6.65	16.89	- 10.24
13.	<u>I. natalis</u>	34	27	20	6	12	17	116	7.56	9.12	- 1.56
14.	<u>Micropterus salmoides</u>	5	22	15	22	13	16	93	6.06	7.77	- 1.71
15.	<u>M. punctulatus</u>		6	1	1			8	0.52	0.0	+ 0.52
16.	<u>Chaenobryttus gulosus</u>	6	5	1		2	9	23	1.50	3.02	- 1.52
17.	<u>Lepomis punctatus</u>						9	9	0.59	2.71	- 2.12
18.	<u>L. microlophus</u>		1	1			1	3	0.20	0.0	+ 0.20
19.	<u>L. macrochirus</u>	73	25	15	10	10	21	154	10.03	6.83	+ 3.20
20.	<u>L. auritus</u>	4	2					6	0.39	1.82	- 1.43
21.	<u>L. megalotis</u>	5	5	2				12	0.78	0.21	+ 0.57
22.	<u>Pomoxis annularis</u>			6	1	2	4	13	0.85	0.16	+ 0.69
23.	<u>P. nigromaculatus</u>	1	6	23	3	5	12	50	3.26	2.35	+ 0.91
	Total	229	276	298	205	271	255	1,534	100.00	100.00	
	Game fish number	98	83	71	39	32	81	404			
	Rough fish number	131	193	227	166	239	174	1,130			
	Game fish percent	42.79	30.07	23.83	19.02	11.81	31.76	26.34			+ 0.69
	Rough fish percent	57.21	69.93	76.17	80.98	88.19	68.24	73.66			- 0.69
	Game fish percent last year	44.83	21.64		9.82	7.27	25.31	25.65			
	Rough fish percent last year	55.17	78.36		90.81	92.73	74.69	74.35			

Table 6. Tabulation of Bimonthly Seining on Lake Striker.

No.	Species (includes last year species)	Jul	Sept	Nov	Jan	Mar	May	Total
1.	<u>Dorosoma cepedianum</u>	53	27	1	4		22	107
2.	<u>Esox americanus</u>							0
3.	<u>Notemigonus crysoleucas</u>		27	12	73		1	113
4.	<u>Notropis fumeus</u>	40	68	2	29			139
5.	<u>N. umbratilis</u>	2	1					3
6.	<u>N. brazosensis</u>							0
7.	<u>N. roseus</u>							0
8.	<u>N. blennius</u>							0
9.	<u>N. venustus</u>	20	162	180	138	22	34	556
10.	<u>N. lutrensis</u>	32	47	232	194	48	14	567
11.	<u>N. stramineus</u>	37	105	43		1	13	199
12.	<u>N. atrocaudalis</u>							0
13.	<u>N. volucellus</u>							0
14.	<u>Pimephales vigilax</u>		22	73	6	10	47	158
15.	<u>Ictalurus melas</u>							0
16.	<u>I. natalis</u>							0
17.	<u>Fundulus chrysotus</u>							0
18.	<u>F. notatus</u>	10	10	6			3	29
19.	<u>Gambusia affinis</u>	16	54	1	1			72
20.	<u>Labidesthes sicculus</u>	101	56	375	327	89	1	949
21.	<u>Micropterus salmoides</u>		3	1	1		11	16
22.	<u>Chaenobryttus gulosus</u>						1	1
23.	<u>Lepomis cyanellus</u>						2	2
24.	<u>L. punctatus</u>	51	11	2			20	84
25.	<u>L. microlophus</u>		1				1	2
26.	<u>L. macrochirus</u>	8	22	5	3	2	45	85
27.	<u>L. megalotis</u>	3	3					6
28.	<u>Etheostoma gracile</u>		1				1	2
29.	New species to the list							
	<u>Lepomis auritus</u>		3					3
30.	<u>Pomoxis annularis</u>					1		1
31.	<u>Hybognathus nuchalis</u>				1			1
32.	<u>Ammocrypta vivax</u>			4				4
	Totals	373	623	937	777	173	216	3,099
	Total last year	219	980		430		228	Meaningless
	Number of species	12	18	14	11	7	15	
	Number of species last year	14	12		6		13	

Table 7. Standard Lengths in Millimeters of Some Species Showing Growth.

	(last segment)						
	May 1958	July	September	November	January	March	May 1959
Largemouth bass	Number Range Average 13 158-400 260.9	5 240-290 273.20	18 153-308 224.33*	14 215-340 277.40	22 213-355 278.54	13 225-375 296.76	16 195-352 260.12
Warmouth	9 110-175 150.9	6 107-164 142.66	6 105-162 126.33	9 100-195 116.66	10 95-195 110.60	2 114-154 134.00	7 150-174 160.14
Bluegill	20 95-144 127.2	20 94-138 104.10	18 90-108 100.72	9 100-195 116.66	10 95-195 110.60	10 94-107 100.70	5 92-140 116.60
White crappie	Number Range Average	3 190-258 232.00	3 106-233 151.33	2 134-227 180.50	4 95-130 111.25		
Black crappie	1 190 190.00	6 183-212 199.16	18 160-233 210.50	1 140 140.00	5 115-235 186.20	8 96-224 128.12	
Channel catfish	5 163-210 185.6	3 200-240 220.00	11 200-305 250.63	7 230-480 300.28	2 225-286 255.50	9 255-310 274.44	

\* Average brought down by the spring hatch of bass.

Table 8. Data on Condition of Netted Fish from Lake Striker.

Species	Number	Number last year	Range standard length	Range last year	Average standard length	Average last year	Weight range	Range last year	Average weight	Average last year	"K" range	Range last year	Average "K"	Average last year
Largemouth bass	88	142	153-375	81-400	266.31	225.6	86-1985	15-1814	606.23	332.8	1.81-4.00	1.84-4.00	2.78	2.69
Warmouth	21	58	105-174	95-175	143.00	127.5	42-255	44-244	124.47	99.8	3.24-4.84	3.71-6.07	3.90	4.73
Bluegill	72	65	90-195	91-144	106.12	119.2	20-132	32-143	47.18	92.3	3.00-6.00	3.40-7.00	4.11	4.81
Channel catfish	32	0	200-480	-	265.62	-	118-2268	-	335.40	-	1.26-2.05	-	1.51	-
White crappie	12	3	95-258	144-234	163.00	187.00	16-624	120-434	210.16	235.7	1.46-4.26	2.50-4.00	2.76	3.29
Black crappie	39	41	96-235	105-308	186.41	159.4	15-595	40-765	300.94	155.4	1.70-6.59	2.66-4.73	3.76	3.49
Spotted bass	8	0	224-274	-	240.12	-	278-567	-	367.25	-	2.29-2.98	-	2.61	-
Spotted sunfish	5	41	97-128	88-109	106.40	69.8	32-108	32-66	56.40	46.7	3.02-5.15	3.91-6.47	4.42	4.69
Yellowbelly sunfish	2	29	124-127	92-132	125.50	127.1	81-88	40-123	84.50	100.7	4.24-4.30	4.55-7.01	4.27	5.83

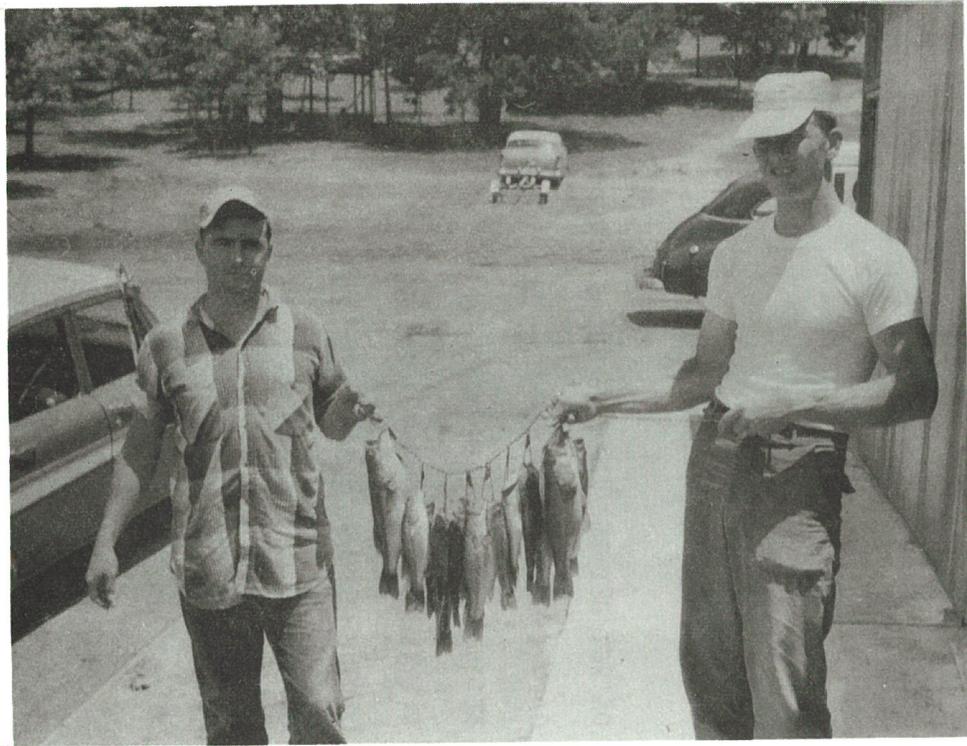


Figure 1. Results of a few hours fishing.

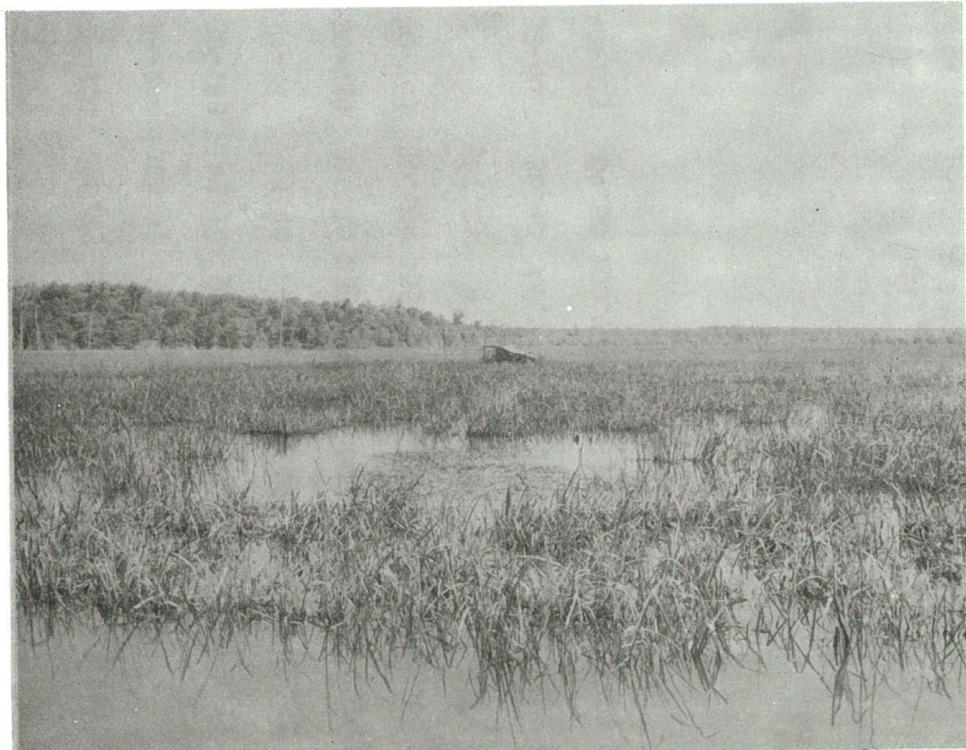


Figure 2. Area just above US 79 on Lake Striker showing sawgrass and moss.



Figure 3. Sawgrass and moss caught in the trees after a flash spring flood.



Figure 4. Some more sawgrass and moss in the trees in the upper end of Lake Striker.

