

STATE Texas

Project No. F-6-R-2, Job B-5

PERIOD July 1, 1954 to June 30, 1955

Segment Completion Report

by

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TITLE

Inventory of the fish species present in some small lakes in the Rio Grande Valley.

OBJECTIVES

To determine the species present and their relative numbers in the above waters.

PROCEDURE

a. Netting Collections

1. Two net stations were established in each of the three lakes studied. Twenty-one experimental gill net sets were made in both Delta Orchards Lake and Olmito Lake during the period and twenty-six were made in Bentsen Lake.
2. Two 100 x 8 foot gill nets with 2 inch square mesh and three 100 x 8 foot nets with 3 inch square mesh were set in Bentsen Lake in an attempt to control rough fish.
3. No hoop or fyke nets were set.
4. All fish taken in these nets were weighed, measured, sexed and parasites noted. Stomachs were collected and preserved for laboratory study.

b. Seining Collections

1. A bag seine 30 x 6 feet with 1/4 inch was used to make two collections in Lake Bentsen and two collections in Delta Orchards. No suitable seining beach has been found in Olmito Lake.

- c. Data recorded from the fish taken in netting and seining was recorded and filed for use in making the detailed job completion report.

RESULTS

a. Netting Collections

1. From Lake Bentsen a total of 866 fish of 12 species were taken, from Delta Orchards Lake 1523 fish of 14 species were taken and from Olmito Lake 1055 fish of 16 species were taken.
2. The five 2 and 3 inch mest nets set in Lake Bentsen took 241 fish of 9 species.
3. No fish were taken in hoop or fyke nets.
4. Information gathered from the fish was recorded and filed for future use on the job completion report.

b. Seining Collections

1. The two seining collections from Bentsen Lake produced 1081 fish of 8 species. The two from Delta Orchards Lake produced 343 fish of 6 species.

- c. A total of 18 species of fish were recorded from Lake Bentsen, 17 from Delta Orchards Lake. Data concerning the fishes condition and size was recorded and will be used in the job completion report. The attached tables show the numbers and percentages of the fish taken from the different lakes.

SUMMARY

All fish taken from three small lakes in the lower Rio Grande Valley (Lake Bentsen, Delta Orchards Lake and Olmito Lake) were weighed, measured, sexed and parasites noted. Data collected will be presented in job completion report. Fish lists show the numbers and percentages of each species of fish taken from the three lakes during the second segment.

Table 1

Results of Seining and Netting Collections in Lake Bentsen

Species	Seining	Netting	Total	Percent
<i>Lepisosteus spatula</i>	0	13	13	.667
<i>Lepisosteus productus</i>	0	29	29	1.489
<i>Lepisosteus osseus</i>	0	9	9	.462
<i>Dorosoma cepedianum</i>	825	71	896	46.019
<i>Astyanax fasciatus</i>	84	0	84	4.314
<i>Ictiobus bubalus</i>	0	344	344	17.668
<i>Carpionodes carpio</i>	0	18	18	.924
<i>Hybopsis aestivalis</i>	9	0	9	.462
<i>Notropis lutrensis</i>	109	0	109	5.598
<i>Ictalurus furcatus</i>	0	115	115	5.906
<i>Ameiurus melas</i>	0	1	1	.051
<i>Cyprinodon variegatus</i>	12	0	12	.616
<i>Menidia beryllina</i>	31	0	31	1.592
<i>Micropterus salmoides</i>	0	16	16	.821
<i>Lepomis cyanellus</i>	1	0	1	.051
<i>Lepomis macrochirus</i>	0	4	4	.205
<i>Aplodionotus grunniens</i>	0	243	243	12.480
<i>Cichlasoma cyanoguttata</i>	10	3	13	.667
Total	1081	866	1947	

Table 2

Results of Seining and Netting Collections in Delta Orchards Lake

Species	Seining	Netting	Total	Percent
<i>Lepisosteus spatula</i>	0	72	72	3.734
<i>Lepisosteus productus</i>	0	10	10	.518
<i>Lepisosteus osseus</i>	1	17	18	.934
<i>Dorosoma cepedianum</i>	309	94	403	20.903
<i>Astyanax fasciatus</i>	3	0	3	.155
<i>Ictiobus bubalus</i>	0	487	487	25.259
<i>Carpiodes carpio</i>	0	52	52	2.697
<i>Notropis lutrensis</i>	7	0	7	.363
<i>Ictalurus furcatus</i>	0	361	361	18.724
<i>Mugil cephalus</i>	0	60	60	3.112
<i>Menidia beryllina</i>	20	0	20	1.037
<i>Micropterus salmoides</i>	0	3	3	.155
<i>Pomoxis annularis</i>	0	281	281	14.575
<i>Lepomis cyanellus</i>	0	2	2	.104
<i>Lepomis macrochirus</i>	3	5	8	.415
<i>Aplodionotus grunniens</i>	0	140	140	7.261
<i>Cichlasoma cyanoguttata</i>	0	1	1	.052
Total	343	1585	1928	

Table 3

Results of Netting Collections in Olmito Lake

Species	Netting	Percent
<i>Lepisosteus spatula</i>	20	1.974
<i>Lepisosteus productus</i>	229	22.606
<i>Dorosoma cepedianum</i>	126	12.438
<i>Ictiobus bubalus</i>	381	37.611
<i>Carpionodes carpio</i>	87	8.588
<i>Ictalurus furcatus</i>	5	.494
<i>Ictalurus punctatus</i>	2	.197
<i>Ameiurus melas</i>	25	2.468
<i>Mugil cephalus</i>	5	.494
<i>Micropterus salmoides</i>	5	.494
<i>Pomoxis annularis</i>	24	2.369
<i>Lepomis macrochirus</i>	36	3.554
<i>Lepomis auritus</i>	20	1.974
<i>Aplodionotus grunniens</i>	37	3.653
<i>Cichlasoma cyanoguttata</i>	11	1.086
Total	1013	