

STATE Texas
PROJECT NO. F6R3 - Job B-4
PERIOD July 1, 1955 - June 30, 1956

Segment Completion Report

Alvin Flury - Project Leader
Lou Guerra - Assistant Project Leader

TITLE

Inventory of Fish Species Present in Falcon Reservoir.

OBJECTIVES

To determine the species present and their relative numbers in Falcon Reservoir.

PROCEDURE

A. Netting Collections.

1. Ten stations were selected on Falcon Reservoir to represent different locations and ecological conditions. A total of 120 experimental gill nets were set from July 1, 1955 to June 30, 1956. When possible nets were set at each station at monthly intervals.

2. All fish taken in nets were weighed, measured, sexed, and parasites noted. Scales failed to yield any signs by which age could be determined. There were 123 stomachs taken and preserved for later laboratory study.

B. Seining Collections.

1. Six seining collections were made at the three available beaches, with a 30 by 6 foot bag seine. Three rotenone collections were made chiefly in an effort to recover bass fry.

C. Data collected on netting and seining collections was recorded on fish cards and collection sheets. These were filed for further study, tabulation, and analysis.

RESULTS

A. Netting Collections.

1. A total of 1,701 specimens of twenty-one species was taken in 120 experimental gill net sets. (Table 3).

2. The data collected was filed and the "K" factors and stomach analysis will be presented in the job completion report.

B. Seining Collections.

1. A total of 5,640 fish of thirty-three species was taken in six seining and three rotenone collections.

C. All data observed and recorded in making the netting and seining collections was filed and will be used later in making detailed charts and tables for the job completion report. A total of thirty-six species of fish have been recorded during this segment from Falcon Reservoir. Their frequency of occurrence is shown on Table 2.

SUMMARY

One hundred and twenty experimental gill net sets, six seining, and three rotenone collections were made in Falcon Reservoir during this segment. Because of the fluctuating water levels, inflow of flood waters, and general periods of unstable water stages this job was amended to be extended for one more year. Fish collected were weighed, measured, sexed, and parasites noted. Stomach contents of some fish were preserved for later laboratory study. Thirty-six fish species have been recorded from Falcon Reservoir. Three tables are also included in this report.

Table 1. Species List From Falcon Reservoir.

Scientific Name	Common Name
<u>Lepisosteus spatula</u>	Alligator Gar
<u>Lepisosteus platostomus</u>	Shortnose Gar
<u>Lepisosteus productus</u>	Spotted Gar
<u>Lepisosteus osseus</u>	Longnose Gar
<u>Dorosoma petenensis</u>	Threadfin Shad
<u>Dorosoma cepedianum</u>	Gizzard Shad
<u>Astyanax fasciatus m.</u>	Rio Grande Tetra
<u>Ictiobus niger</u>	Black Buffalo
<u>Ictiobus bubalus</u>	Smallmouth Buffalo
<u>Carpionodes carpio</u>	River Carpsucker
<u>Cyprinus carpio</u>	Carp
<u>Hybopsis aestivalis</u>	Speckled Dace
<u>Notropis amabilis</u>	Texas Shiner
<u>Notropis lutrensis</u>	Redhorse Shiner
<u>Notropis jemezanus</u>	Rio Grande Shiner
<u>Notropis proserpinus</u>	Proserpine Shiner
<u>Notropis braytoni</u>	Tamaulipas Shiner
<u>Ictalurus punctatus</u>	Southern Channel Catfish
<u>Ictalurus furcatus</u>	Blue Catfish
<u>Ameiurus melas</u>	Black Bullhead
<u>Pilodictus olivaris</u>	Flathead Catfish
<u>Anguilla rostrata</u>	American Eel
<u>Cyprinodon variegatus</u>	Sea Pupfish
<u>Gambusia affinis</u>	Texas Mosquitofish
<u>Mugil cephalus</u>	Striped Mullet
<u>Menidia beryllina</u>	Tidewaters Silversides
<u>Chaenobryttus coronarius</u>	Warmouth Bass
<u>Morone chrysops</u>	White Bass
<u>Micropterus salmoides</u>	Largemouth Black Bass
<u>Lepomis cyanellus</u>	Green Sunfish
<u>Lepomis macrochirus</u>	Bluegill
<u>Lepomis auitus</u>	Yellowbelly Sunfish
<u>Lepomis megalotis</u>	Longear Sunfish
<u>Pomoxis annularis</u>	White Crappie
<u>Aplodinotus grunniens</u>	Fresh Water Drum
<u>Cichlasoma cyanoguttatam</u>	Rio Grande Perch

Table 2. Fish Caught in Experimental Gill Nets from Falcon Reservoir July 1, 1955 - June 30, 1956.

Species	1st. Segment		2nd. Segment		3rd. Segment		Total	Percent of Total
	Nets	S and R.	Nets	S and R.	Nets	S and R.		
<i>L. spatula</i>	120		479		53		659	2.255
<i>L. platostomus</i>	2						2	.006
<i>L. productus</i>	5		6		2		13	.044
<i>L. ossens</i>	24		33		5		63	.215
<i>D. petenensis</i>		1		1			13	.044
<i>D. cepedianum</i>	659	3517	245	3993	64	2950	11428	39.118
<i>A. fasciatus m.</i>		863	1	216		204	1284	4.395
<i>I. niger</i>	1					1	2	.006
<i>I. bubalus</i>	179		1313	49	825		3530	12.083
<i>Carp. carpio</i>		551			13	613	13	.044
<i>C. carpio</i>	45		66	2	8		121	.414
<i>H. aestivalis</i>		33		24			60	.205
<i>N. amabilis</i>		33				3	36	.123
<i>N. jemezianus</i>		1		149		8	169	.578
<i>N. lutrensis</i>		12		57		10	70	.239
<i>N. proserpinus</i>		3		113		15	2189	.989
<i>N. braytoni</i>		161			1		23	.078
<i>I. punctatus</i>	17		4	1	90		1042	3.566
<i>I. furcatus</i>	488		451	11		2	9	.030
<i>A. melas</i>	2		1	2		4	9	.030
<i>A. olivaris</i>	62		32		2		96	.328
<i>P. rostrata</i>		1					1	.003
<i>A. variegatus</i>		1		19		5	25	.085
<i>G. affinis</i>		240		1319		327	1886	6.455
<i>M. cephalus</i>		2		2089	3		7	.024
<i>M. beryllina</i>		1854				1395	5338	18.272
<i>C. coronarius</i>			3		10		13	.044
<i>M. chrysops</i>			2		6		8	.027
<i>M. salmoides</i>			5		12		17	.058
<i>L. cyahellus</i>	2	119	1	12	3	37	174	.595
<i>L. macrochirus</i>	8	18	60	52	15	6	159	.544
<i>L. auritus</i>		1	2	1	1		5	.017
<i>L. megalotis</i>					1		1	.003
<i>P. annularis</i>	7	1	1		3		12	.041
<i>A. grunniens</i>	336	345	1143	111	581	47	2563	8.773
<i>C. cyanoguttatam</i>	2	23	18	31	3	5	82	.280
Total	1959	7780	3868	8256	1701	5650	29214	99.984

Table 3. Fish Caught in Experimental Gill Nets from Falcon Reservoir July 1, 1955 - June 30, 1956.

Species	Number of Specimens	Standard Length Range	Standard Length Average	Weight Range in Grams	Weight Average	"K" Factor Range	"K" Factor Average
<u>L. spatula</u>	53	318-1300	405.36	227-11049	686.2	0.51-0.95	0.78
<u>L. productus</u>	2	290-558	427.66	709-1701	1257.0	0.69-1.03	0.87
<u>L. Osseus</u>	2	255-670	493.37	113-1649	1135.2	0.50-0.80	0.88
<u>D. cepedianum</u>	64	135-230	174.13	28-312	170.0	1.01-3.25	2.19
<u>T. bubalus</u>	825	140-700	238.33	28-5040	2872.6	0.92-3.35	2.15
<u>Carp. carpio</u>	13	175-310	230.98	156-567	365.6	1.84-3.45	2.71
<u>C. carpio</u>	8	173-389	210.11	148-612	377.6	1.82-3.49	2.73
<u>T. furcatus</u>	90	172-515	307.45	140-709	453.6	0.58-1.98	1.28
<u>P. olivaris</u>	2	160-360	260.00	227-1361	794.00	1.64-2.55	2.10
<u>M. cephalus</u>	3	406-410	408.00	794-801	797.3	1.93-2.45	3.56
<u>C. coronarius</u>	10	110-143	152.33	113-178	143.5	2.33-4.78	3.56
<u>L. chrysops</u>	6	114-167	133.00	58-198	124.66	1.69-3.68	3.17
<u>M. salmoides</u>	12	136-357	148.33	253-987	638.33	1.63-3.18	2.78
<u>L. cyanellus</u>	3	145-166	153.33	113-170	141.50	3.68-4.21	3.94
<u>L. macrochirus</u>	15	102-134	127.33	43-85	65.3	2.46-5.73	4.11
<u>P. annularis</u>	3	114-167	136.00	36-177	125.0	1.77-4.32	3.06
<u>A. grunniens</u>	581	70-357	220.00	85-1134	645.0	0.92-4.34	2.64
<u>C. cyanoguttatam</u>	3	105-110	107.50	57-85	71.0	4.83-7.34	6.09

