

JOB PROGRESS REPORT

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FEDERAL AID IN FISHERIES RESTORATION ACT

TEXAS

Federal Aid Project No. F-2-R-17

REGION 2-B FISHERIES STUDIES

Job No. E-8: Productivity Study of the Fishery
of the
San Marcos River

Project Leader: Robert L. Bounds

J. R. Singleton
Executive Director
Texas Parks and Wildlife Department
Austin, Texas

Marion Toole
D-J Coordinator

Eugene A. Walker
Director, Wildlife Services

September 24, 1970

ABSTRACT

Electrofishing techniques and sampling site locations were the primary objectives of this segment of the job. However, personnel adjustments impeded the progress of the study. Although some electrofishing techniques were developed and new personnel obtained experience in the operation, it is felt that insufficient data has been collected to date. Therefore this particular facet of the study will be continued in the next segment.

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Federal Aid Project No. F-2-R-17

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Job No. E-8: Productivity Study of the Fishery
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Project Leader: Robert J. Hounds

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Marion Poole
D-1 Coordinator

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JOB PROGRESS REPORT

State of TEXAS Name: Region 2-B Fisheries Studies
Project No. F-2-R-17 Title: Productivity Study of the Fishery
of the San Marcos River
Job No. E-8
Period Covered: February 1, 1969 to January 31, 1970

Objectives:

1. To relocate the study area to a more suitable site.
2. To determine the most efficient population estimate method through electro-fishing techniques.

Procedures:

Twelve potential study sites were electrofished in an effort to determine maximum efficiency of the electrofishing equipment. Time of day or night, length of time, specific conductance, species and number of fish collected, voltage, amperage and pulse frequency was recorded for each unit of operation.

Findings:

The first portion of this segment was spent attempting to locate an area in which to conduct this job and to further develop electrofishing techniques. Twelve sites on 6 streams in Region 2-B were surveyed for possible use before personnel changes within Project F-2 caused a virtual standstill on this job. The Project Leader, primary investigator for this job, was promoted to a Regional Supervisor position and one of the Assistant Project Leaders resigned his position. This left only one person with electrofishing experience on the Project, therefore, most of the objectives for this segment were not attained.

The 12 sites tested during this segment were subjected to 21 units of electro-fishing for a total of 28.45 hours which produced 5553 fish of 14 different species.

During these tests valuable electrofishing experience was gained and possibly the best electrofishing techniques were developed, but the data collected is incomplete and further testing will be necessary before a primary study area can be designated and a comprehensive report can be made. No attempt will be made to elaborate on the inconclusive data collected during this segment, but it is presented in Table 1 of this report and will be incorporated in the segment 18 progress report.

Recommendations:

It is recommended that this job be continued so that those objectives not attained during this segment be completed during the next segment.

Prepared by: Robert L. Bounds
Project Leader

Approved by: Marion Toole
Coordinator

Date: September 24, 1970

Richard L. White
Inland Fisheries Supervisor

TABLE 1
SUMMARY OF ELECTROFISHING OPERATIONS

Date	Day or Night	River System	County	Generation time (hours)	Conductance (micromhos)	Voltage	Amperage	Pulses/second	Spotted Gar	Longnose Gar	Shad	Trout	River Carpsucker	Gray Redhorse Sucker	Spotted Sucker	Carp	Channel Catfish	Bullhead Catfish	Flathead Catfish	Spotted Bass	Largemouth Bass	Sunfish	Total
4/2 69	D	Llano	Kimble	1.75	400	150	3	15	1	-	34	-	-	16	10	7	-	-	-	-	31	60	159
4/2 69	N	Llano	Kimble	1.25	400	150	3	15	-	6	122	-	9	30	9	3	4	-	-	-	36	49	268
4/3 69	D	Maynard Creek	Kimble	1.5	450	150	3	10	-	-	-	-	-	-	-	-	2	-	-	-	44	186	232
4/3 69	N	Maynard Creek	Kimble	1.5	450	150	3	10	-	-	-	-	-	-	-	-	1	-	-	-	38	292	331
4/28 69	D	Guadalupe	Comal	2.5	310	150	3	20	-	4	35	6	6	305	-	-	-	-	-	2	15	43	416
4/28 69	D	Guadalupe	Comal	1.0	310	150	3	20	-	-	34	14	-	207	-	-	-	-	1	-	2	20	278
4/28 69	N	Guadalupe	Comal	1.5	310	150	3	20	-	8	295	4	4	433	-	-	2	-	-	-	12	50	808
5/6 69	N	Guadalupe	Comal	1.3	310	150	3	20	-	-	38	13	1	276	-	-	-	-	-	1	-	-	329
5/12 69	D	Lampasas	Lampasas	.66	550	100	4	20	-	3	31	-	-	6	-	15	4	-	-	-	27	14	100
5/12 69	N	Lampasas	Lampasas	1.0	550	100	4	20	-	11	29	-	8	5	-	-	7	-	1	-	12	19	92
5/13 69	D	Lampasas	Lampasas	.5	975	75	3	20	-	-	-	-	-	-	-	1	-	-	-	-	2	-	63
5/13 69	D	Lampasas	Lampasas	.66	550	125	4	20	-	-	-	-	1	-	-	3	1	6	-	-	11	91	113
5/19 69	D	Guadalupe	Comal	1.5	310	150	2.5	20	-	20	25	-	-	630	-	1	7	-	-	3	4	37	727
5/19 69	N	Guadalupe	Comal	1.5	310	150	3	20	-	27	275	-	-	198	-	-	1	-	1	-	-	29	531

TABLE 1 (Cont.)
SUMMARY OF ELECTROFISHING OPERATIONS

Date	Day or Night	River System	County	Generation Time (Hours)	Conductance (micromhos)	Voltage	Amperage	Pulses/second	Spotted Gar	Longnose Gar	Shad	Trout	River Carpsucker	Grey Redhorse Sucker	Spotted Sucker	Carp	Channel Catfish	Bullhead Catfish	Flathead Catfish	Spotted Bass	Largemouth Bass	Sunfish	Total
6/6 69	D	Guadalupe	Comal	2.5	310	150	3	20	-	2	54	3	1	158	-	-	-	-	-	10	2	139	370
5/6 69	D	Guadalupe	Comal	1.33	310	150	3	20	-	11	29	13	8	5	-	-	7	-	1	-	12	19	105
9/23 69	N	Guadalupe	Kerr	1.00	390	140	6	15	-	-	72	-	1	11	-	-	-	-	2	-	-	-	86
9/24 69	D	Guadalupe	Kerr	1.5	335	150	2.5	20	-	-	146	-	-	16	-	-	-	-	-	1	2	52	217
12/16 69	D	Guadalupe	Comal	2.0	335	150	4	16	-	-	45	-	-	14	-	-	-	-	-	2	7	24	92
12/16 69	N	Guadalupe	Comal	1.0	335	175	3	14	-	11	33	-	3	110	-	-	-	-	-	-	5	19	181
12/17	D	Guadalupe	Comal	1.0	335	150	4	20	-	-	89	-	-	24	-	-	-	-	-	-	-	2	115
Totals				28.45					1	103	1386	53	42	2444	19	30	37	6	6	19	262	1145	5553

