

JOB COMPLETION REPORT

As required by

FEDERAL AID IN FISHERIES RESTORATION ACT

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Federal Aid Project No. F-4-R-9

FISHERIES INVESTIGATION AND SURVEYS OF THE WATERS OF REGION 2-A

Job No. E-4 A Study of Crappie in Lake Whitney

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## ABSTRACT

A study of crappie in Lake Whitney was continued in an effort to learn something of the size of the crappie population, the reasons for the recent small harvest, the movement of tagged crappie, the ecological factors influencing their distribution and to develop satisfactory methods for sampling crappie fry.

Average weight of crappie has increased slightly as shown by gill net collections but the weight of each crappie is still critically low. The per cent of number has increased which tends to indicate that the size of the crappie population is satisfactory and that the crappie spawn has been successful.

One thousand forty-four crappie were taken in wire traps, 152 crappie were taken in gill nets, and 534 were taken on hook and line. A total of 1578 crappie was tagged during the year and 79 or 5.00 per cent of these were recaptured.

The recorded movement of tagged crappie ranged from no movement to 21 miles. The greatest length of freedom was 580 days. This crappie was recaptured at the same place of release. Fish tagged No. D-118 remained free for 177 days before being recaptured at the place of release. After recording the tag number the fisherman returned this fish to the water where it remained 237 days before another fisherman again recaptured it at the place of the original tagging. This individual showed no travel during the 354 days between tagging and final capture.

It is intended that the crappie study continue and all the data which has been gathered be compiled in order that a long range, year to year, movement of the crappie can be predicted. Further emphasis will be placed on the study of crappie spawning success, satisfactory method for sampling crappie fry, improvement of methods for capturing greater numbers of crappie for tagging purposes.

## JOB COMPLETION REPORT

State of Texas

Project No. F-4-R-9 Name: Fisheries Investigations and Surveys of the Waters of Region 2A

Job No. E-4 Title: A Study of Crappie in Lake Whitney.

Period Covered: November 1, 1961 - October 31, 1962

### Objectives:

To determine the population of crappie in Lake Whitney and the reasons for the recent small harvest. Study the pattern and extent of travel of tagged or marked crappie and the ecological factors influencing their distribution. To develop satisfactory methods of sampling crappie fry.

### Techniques Used:

The tagging of crappie in Lake Whitney during the period covered by this report, continued along the same general lines as in previous segments. A majority of the traps used were constructed of No. 9 gauge 6 inch mesh concrete reinforcement wire, covered with one-inch mesh poultry wire. The wire traps were five feet long and 23 inches in diameter, and were of either single throat or double throat construction. The throat openings were from three to five inches in diameter.

All of the traps were built in the fisheries laboratory headquarters and transported to the lake. Traps were then set in selected areas considered to be good places to take crappie. The traps were left in these locations as long as fish were taken but when no fish were caught, the traps were moved to a new location. All traps were left in continuous operation until it became necessary to make repairs or the trap was lost through flood or theft. Yellow colored wooden markers were attached to the traps to identify them as belonging to the Texas Game and Fish Commission.

The painting of traps was continued in this segment of work. Yellow traffic paint was applied to two traps, but the use of anti-fouling bottom paint of copper green color was discontinued.

"Gang nets" were used in addition to the wire traps. The gang net is made up of a series of hoop nets attached together by small mesh leads. Two of the gang nets were used during the crappie spawning season.

Two of the small mesh wire traps, one-half inch by one-half inch hardware cloth, constructed during the previous segment, were used for sampling crappie fry.

Gill net collections were made in the area in order to determine the population ratios and to take tagged crappie. The information also served as a check on the effectiveness of the traps in taking crappie.

In addition to nets, traps, and seines; hook and line sampling was also used to take crappie for tagging or recapture after tagging. This method of taking crappie was used to check the effectiveness of the traps in catching crappie, to help in determining where to locate the wire traps, and to capture more crappie for tagging.

Rotenone and minnow seines were used in an attempt to sample crappie fry. Rotenone was used to take samples of fish from the deeper waters which could not be sampled with the common sense minnow seine. Minnow seines were used to sample shallow water areas.

A recording fathometer was used to locate underwater brush piles that could be used for protection by the crappie, indicating a favorable site for the wire traps. In other recordings, the graphs were examined in an attempt to determine the location of fish and what depths they occupied. In conjunction with the fathometer recording, the temperature of the water was taken at two foot intervals with a Whitney direct reading electric thermometer.

Printed posters were distributed to all major camps on the lake. Along with the posters, each camp operator was furnished cards that could be filled out by fishermen who caught a tagged fish. These cards, when properly filled out and returned to the investigator, yielded information concerning length, weights, date, and place of recapture, including the tag number of each tagged fish taken.

Strap type, monel-metal, jaw tags were placed on the left premaxillary of all fish tagged. This is the same method of tagging used in past segments of the crappie study. The tag size used were either No. 1 or No. 3. Data recorded for each tagged individual were; total length in millimeters, tag number, and the weight recorded in grams. Date and place of capture and release were also recorded.

#### Findings:

Data presented in Table 1 shows the number and percentage by species of the total trap catch, from each area of the lake. A total of 1,043 crappie were trapped which represents 45.84 per cent of the total catch, compared with 55.36 per cent in 1960-1961. Eight hundred twenty-six bluegills were trapped which represents 36.31 per cent, an increase over the previous year's 27.11 per cent.

Gill nets were set in order to obtain comparative data and to serve as a check on the existing fish populations, (Table 2). The catch of crappie was 13.39 per cent of the total fish taken in gill nets while the wire traps took 45.84 per cent crappie. An increase in total number of crappie is noted in this segment of work. One hundred fifty-two crappie were netted which represents 13.39 per cent of the total catch, as compared with 86 crappie or 6.74 per cent during the previous segment.

Data, pertaining to crappie (Table 2), show an increase through all columns listed. Under heading, Per Cent of Total Weight, crappie show an increase from 3.43 per cent (Table 3) to 7.99 per cent. The average weight of crappie gained slightly, (0.05 pounds) over the previous net samples. An increase in fish per 100 feet of net is noted. During 1960-61 the number of fish per 100 feet of net was 1.87 which increased to 3.71 fish per 100 feet of net during this segment of work.

A decrease in the number of shad is noted. The catch of shad during 1960-61 was 807 or 63.25 per cent of the total catch. Netting during the 1961-62 segment yielded 577 shad which was 50.83 per cent of the total catch.

Freshwater drum increased from 0.32 to 4.41 per cent of the total number. This increase is believed to be due to the change in the method of sampling for crappie fingerlings.

It is believed that gill nets are a more effective method of sampling the population of crappie for relative abundance, but traps still provide more crappie for tagging purposes.

The hook and line method was used as a supplement to the wire traps. This method of obtaining fish in large numbers is usually unreliable, but was very helpful during this segment. A total of 534 crappie were taken by this method (Table 4).

Rotenone and minnow seines were used in an attempt to sample crappie fry. Sampling with rotenone was used in places that were inaccessible to seining. Two rotenone samples were taken. One sample was taken near the White Bluff Area, (Map 1), and the other sample was taken from Mesquite Creek. Only two crappie fry were taken from the sample near White Bluff and none from the sample in Mesquite Creek. Due to heavy rains on the watershed the lake was rising and very muddy but the slough that was sampled did not contain as much silt as did the lake proper. Water was backed into a brushy slough which had heavily vegetated banks. The crappie fry were taken near the grass covered bank.

Minnow seines did not take any crappie fry.

A recording fathometer was used in an attempt to locate schools of fish and to find what depths they occupied but this was unsuccessful because no schools were located.

In Table 3, consolidated data from gill net collections are broken down to show both area of netting and ratio of crappie to all other species caught. The areas which were netted show 152 crappie compared to 983 fish of other species.

Trapping and tagging of crappie is shown on Table No. 4 along with the recapture data. Data shown on this table is given by areas which were worked during this segment and the months that the work was accomplished.

In the Nolan River a total of 176 crappie or 11.15 per cent of the total catch were taken in wire traps. Four of the tagged crappie were recaptured or 5.06 per cent of the total tags returned.

The number of crappie tagged in the upper lake totaled 765 or 48.48 per cent of the entire number tagged. Fifty-seven crappie were recaptured in this area which represents 72.15 per cent of the total tags returned. Hook and line proved very successful, contributing 534 of these crappie for tagging purposes.

That part of the lake designated as the Middle Lake Area produced 632 fish, all from traps, or 40.05 per cent of the total tagged fish. Fishermen and traps recaptured 16 fish or 20.25 per cent of the tags returned in this area.

Traps caught 5 fish from the lower lake area which composed 0.32 per cent of the total tagged fish. Two of the fish were recaptured which represents 2.54 per cent of the total fish recaptured in this area. No fish were taken on hook and line from the lower lake area.

Information concerning all tagged crappie recaptured either by fishermen, traps, or gill nets is listed in Table No. 5. The longest distance traveled is 21 miles. This crappie (tag No. C-5242) was tagged and released near Lakeside Village then traveled downstream to the Dam. Water level was above normal and very muddy in the Upper and Middle Lake Area when this crappie was caught. This crappie may have traveled downstream in order to leave the muddy condition in these areas or could have traveled this distance at any time during the 276 days it remained free.

Next longest distance traveled is 13 miles (tag No. C-5168) which originated at Redwood Lodge and terminated in Plowmans Creek 133 days later. This crappie moved upstream before being caught and was taken during March which tends to show a spawning migration movement.

Crappie tagged No. C-5678 was tagged and released in the Nolan River then traveled downstream to Lakeside Village before being recaptured. This fish remained free for only eleven days but traveled eight miles.

Another crappie (tag No. D-105) which moved a considerable distance was tagged at Juniper Cove and traveled five miles upstream to the White Bluff Area before being recaptured approximately 300 days after tagging.

Crappie tagged No. C-5589 was tagged at Redwood Lodge Slough and traveled upstream approximately two miles toward Steel Creek before being recaptured. This crappie remained free for 146 days.

Three of the tagged crappie traveled one and one-half mile each while 15 fish traveled one mile each. Eighteen of the tagged crappie moved only one-half mile each and one traveled only one-fourth mile.

A total of 37 crappie, recaptured during the year, traveled less than one-fourth mile or no travel at all and are listed in the distance traveled column of Table 5 as "none".

The longest period of freedom, for a tagged crappie from this segment, is approximately 580 days, (Tag No. C-1740). This fish was tagged May 25, 1960 and was recaptured December 1961. Information concerning length and weight of this fish was not given; therefore its length and weight change can not be determined. This fish was recaptured at the same place that it was released.

Fish tagged No. D-118 remained free for 117 days before being recaptured at the place of release. After recording the tag number the fisherman returned this fish to the water where it remained free 237 days before another fisherman again recaptured it at the place of the original tagging. This crappie showed no travel during the 354 days between tagging and final capture.

Crappie tagged No. C-4431 remained free for 307 days before recapture in the Nolan River where it had been released. Fish tagged D-105 remained free for 300 days before recapture.

Five other crappie, tag numbers C-5221, A-4229, C-5065, C-5067, and C-5041 remained free for 251, 224, 216, 215, and 206 days respectively. All other crappie remained free for shorter periods and are listed in the days of freedom column of Table 5.

Table No. 6 is a week by week list of the water level of Lake Whitney. As shown on this table the water varied from the low of 516.48 to a high of 523.53 feet.

Table 7 is a tabulation of gill net data from the previous segment of work which is used for comparison to Table No. 2.

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Table 1. Fish caught in wire traps in Lake Whitney, November 1961 - October 1962.

Species	Nolan River	Lakeside	Cedar Creek	Big Rocky	Total
Spotted gar	5	3	0	0	8
Longnose gar	7	39	9	0	55
Gizzard shad	18	41	15	0	74
Smallmouth buffalo	10	0	1	0	11
River Carpsucker	9	2	1	0	12
Carp	16	14	3	0	33
Channel catfish	21	9	13	0	43
Flathead catfish	0	1	4	0	5
White bass	20	48	9	0	77
Largemouth bass	8	20	13	1	42
Bluegill sunfish	101	326	389	10	826
Crappie	176	231	632	4	1043
Freshwater drum	18	19	9	0	46
Totals	409	753	1098	15	2275

Table 2. Results of gill net collections, Lake Whitney, November 1, 1961 - October 31, 1962.

Species	Number	Per Cent of Total Number	Weight in Pounds	Per Cent of Total Wt.	Average Weight in Pounds	Fish Per 100 Feet of Net	Weight (lbs) Per 100 Feet of Net
Spotted gar	1	0.09	1.00	0.13	1.00	0.02	0.02
Longnose gar	69	6.08	154.06	20.53	2.23	1.68	3.76
Gizzard shad	577	50.83	274.55	36.60	0.47	14.08	6.69
Smallmouth buffalo	8	0.70	19.08	2.54	2.38	0.19	0.47
River carpsucker	39	3.44	49.69	6.62	1.27	0.95	1.21
Carp	4	0.35	6.74	0.90	1.68	0.10	0.17
Channel catfish	34	3.00	25.82	3.44	0.75	0.83	0.62
Flathead catfish	1	0.09	6.74	0.90	6.74	0.02	0.17
White bass	179	15.77	119.18	15.89	0.66	4.37	2.91
Largemouth bass	9	0.79	10.14	1.35	1.12	0.22	0.24
Redear sunfish	1	0.09	0.30	0.04	0.30	0.02	0.01
Bluegill sunfish	11	0.97	2.12	0.28	0.19	0.27	0.05
White crappie	152	13.39	59.95	7.99	0.39	3.71	1.46
Freshwater drum	50	4.41	20.88	2.79	1.04	1.22	0.51
Totals	1135	100.00	750.25	100.00			

Table 3. Crappie and other species caught in gill nets in Lake Whitney, November 1961 - October 1962

CRAPPIE							
Area	Feet of Netting Used	Per Cent of Nets Set in Area	Fish Caught Other Than Crappie	Number Crappie Caught	Per Cent of Total Crappie Caught	Average Length in Millimeters	Average Weight in Grams
Nolan River	300	7.32	87	4	2.63	177.5	131.2
Raymon Creek	500	12.20	148	45	29.61	197.4	198.8
Lakeside Village	2,300	56.09	584	90	59.21	186.3	187.5
White Bluff	400	9.76	92	3	1.97	200.0	151.0
Cedar Creek	200	4.88	10	8	5.26	108.7	46.2
Big Rocky	400	9.75	62	2	1.32	212.5	225.0
Totals	4,100	100.00	983	152	100.00		

Table 4. Summary of crappie tagging and recapture data, Lake Whitney, November 1961 - October 1962.

Area	Period	Number Traps Used	Number Trapped	Number Taken on Hook and Line	Total Crappie Tagged	Per Cent of Total Tagged	Number of Crappie Recaptured	Per Cent of Recapture in Area
Nolan River	Jan. Feb. March							
	April May 1962	6	176	0	176	11.15	4	5.06
Upper Lake	Nov. 1961 thru Oct. 1962	10	231	534	765	48.48	57	72.15
	Nov. 1961 thru Oct. 1962	12	632	0	632	40.05	16	20.25
Lower Lake	Feb. 1962	5	5	0	5	0.32	2	2.54
Totals		33	1044	534	1578	100.00	79	100.00

Table 5. Tagged crappie recaptures in Lake Whitney, November 1, 1961 through October 31, 1962

Tag No.	Tagging Information			Recapture Information		
	Date	Location	Date	Location	Days of Freedom	Distance Traveled
D-105	12-19-60	Juniper Cove	11- -61	White Bluff	300=	5 Miles
D-118	12-30-60	Near Lakeside V.	12- -61	Near Lakeside V.	354=	None
A-4161	9-27-61	Bluff #8 Marker	2- -62	No Information	90=	?
A-4229	9-28-61	Mesquite Creek	5-10-62	Mesquite Creek	224	None
A-4263	9-30-61	Near Lakeside V.	11-19-61	Near Lakeside V.	50	1 Mile
C-1740	5-25-60	Near Lakeside V.	12- -61	Near Lakeside V.	580=	None
C-3010	5-28-62	Mesquite Creek	6-24-62	Near Lakeside V.	27	1½ Mile
C-3013	5-30-62	Bluff #8 Marker	9-29-62	Hillcrest	122	1 Mile
C-3097	6-26-62	Redwood Slough	7-2-62	Hillcrest	6	½ Mile
C-3237	7-17-62	Bluff #8 Marker	7-18-62	Bluff #8 Marker	1	None
C-4431	5-3-61	Nolan River	3- 5-62	Nolan River	307	None
C-4986	8- 4-61	Bluff #8 Marker	10-27-61	Hillcrest	84	1 Mile
C-5032	10- 5-61	Bluff #8 Marker	3-12-62	Hillcrest	158	1 Mile
C-5041*	10- 6-61	Near Lakeside	3-24-62	Lakeside Barge	169	½ Mile
C-5041*	10- 6-61	Near Lakeside	5- 1-62	Lakeside Slough	206	½ Mile
C-5058	10- 6-61	Near Lakeside	6-23-62	Mesquite Creek	260	1½ Mile
C-5065	10- 6-61	Near Lakeside	5-10-62	Lakeside Barge	216	½ Mile
C-5067	10- 6-61	Bluff #8 Marker	5-9-62	No Information	215	?
C-5142	10-17-61	Near Lakeside	2-16-62	Near Lakeside V.	122	½ Mile
C-5166	10-25-61	Redwood Slough	12- 1-61	Cedar Creek	38	1 Mile
C-5167	10-25-61	Redwood Slough	-----	Hillcrest	---	1 Mile
C-5168	10-25-61	Redwood Slough	3- 6-62	Plowman Creek	133	13 Miles
C-5205*	11- 1-61	Near Lakeside	2- 6-62	Circle "D"	98	1 Mile
C-5205*	11- 1-61	Near Lakeside	2- 7-62	Lakeside Barge	99	½ Mile
C-5207	11- 2-61	Redwood Slough	3-10-62	Hillcrest	128	½ Mile
C-5214	11- 2-61	Bluff #8 Marker	1-31-62	Redwood Slough	90	1 Mile
C-5221	11- 9-61	Bluff #8 Marker	7-18-62	Near Hillcrest	251	1 Mile
C-5242	11-14-61	Near Lakeside	8-17-62	At Dam	276	21 Miles
C-5255	12- 5-61	Near Lakeside	1- 3-62	Near Lakeside	29	None
C-5276*	12- 7-61	Bluff #8 Marker	June '62	Cedar Creek	190=	½ Mile
C-5399*	1-25-62	Near Lakeside V.	5-1-62	Lakeside Slough	96	1 Mile
C-5399*	1-25-62	Near Lakeside V.	5-17-62	Lakeside Barge	112	1 Mile
C-5406	1-30-62	Lakeside Barge	2-24-62	Near Lakeside	25	None
C-5408	1-30-62	Lakeside Barge	3-18-62	Lakeside Barge	48	None
C-5412	1-30-62	Lakeside Barge	4-10-62	Near Lakeside	70	½ Mile

Table 5. (continued) Tagged crappie recaptures in Lake Whitney, November 1961 - October 1962.

Tagging Information			Recapture Information		
Tag No.	Date	Location	Location	Days of Freedom	Distance Traveled
C-5425*	1-31-62	Redwood Slough	Hillcrest	28	1/2 Mile
C-5425*	1-31-62	Redwood Slough	Katy R.R. Bridge	136	1 1/2 Mile
C-5446	2- 6-62	Lakeside Barge	Lakeside Barge	11	None
C-5452	2- 6-62	Lakeside Barge	Lakeside Barge	27	None
C-5458	2- 6-62	Lakeside Barge	Lakeside Barge	27	None
C-5459	2- 6-62	Lakeside Barge	Near Lakeside	57	1/2 Mile
C-5480	2- 6-62	Lakeside Barge	Lakeside Barge	71	None
C-5484	2- 6-62	Lakeside Barge	Lakeside Barge	10	None
C-5494	2- 6-62	Lakeside Barge	Lakeside Barge	28	None
C-5506	2- 6-62	Lakeside Barge	Near Lakeside	30	None
C-5509	2- 6-62	Lakeside Barge	Lakeside Barge	11	None
C-5517	2- 7-62	Lakeside Barge	Lakeside Barge	9	None
C-5527	2- 7-62	Lakeside Barge	Lakeside Barge	13	None
C-5552	2-13-62	Near Lakeside	Lakeside Village	29	1 Mile
C-5553*	2-13-62	Lakeside Barge	Lakeside Barge	58	None
C-5553*	2-13-62	Lakeside Barge	Lakeside Slough	64	None
C-5556	2-13-62	Lakeside Barge	Lakeside Barge	36	None
C-5562	2-14-62	Lakeside Barge	Lakeside Barge	19	None
C-5564	2-14-62	Lakeside Barge	Near Lakeside	84	1/2 Mile
C-5567*	2-14-62	Lakeside Barge	Near Lakeside	63	1/2 Mile
C-5567*	2-14-62	Lakeside Barge	Near Lakeside	78	1/2 Mile
C-5574	2-14-62	Lakeside Barge	Mooney Slough	50=	1 Mile
C-5576	2-14-62	Lakeside Barge	Lakeside Barge	21	None
C-5580	2-14-62	Little Rocky Creek	Little Rocky Creek	31	None
C-5587	2-14-62	Redwood Slough	Cedar Creek	1	1 Mile
C-5589	2-14-62	Redwood Slough	Near Steel Creek	146	2 Miles
C-5617	2-21-62	Near Lakeside V.	Near Lakeside V.	63	None
C-5650	3- 5-62	Nolan River	Nolan River	33	None
C-5664	3- 5-62	Nolan River	Nolan River	51	None
C-5672	3- 5-62	Near Lakeside V.	Lakeside Barge	44	1 Mile
C-5678	3- 7-62	Nolan River	Lakeside Barge	11	8 Miles
C-5714	3-14-62	Lakeside Barge	Lakeside Barge	13	None
C-5720	3-14-62	Lakeside Barge	Lakeside Barge	35	None
C-5725	3-14-62	Lakeside Barge	Lakeside Barge	15	None

Table 5. (continued) Tagged crappie recaptures in Lake Whitney, November 1961 - October 1962

Tag No.	Tagging Information			Recapture Information			Days of Freedom	Distance Traveled
	Date	Location	Date	Location	Date			
C-5766	3-27-62	Lakeside Barge	4-30-62	Lakeside Barge				
C-5771	3-27-62	Lakeside Barge	4-5-62	Lakeside Barge			34	None
C-5773	3-27-62	Lakeside Barge	5-5-62	Nolan River			9	None
C-5778	4-9-62	Nolan River	5-4-62	Lakeside Slough			26	None
C-5829	4-9-62	Lakeside Village	4-18-62	Lakeside Barge			26	None
C-5831	4-9-62	Lakeside Village	4-24-62	Lakeside Slough			9	None
C-5834	4-9-62	Lakeside Village	4-13-62	Near Lakeside			15	None
C-5842	4-11-62	Lakeside Village	6-19-62	Lakeside Barge			62	½ Mile
C-5878	4-17-62	Lakeside Barge	5-4-62	Near Lakeside V			63	None
C-5890	4-24-62	Lakeside Barge	6-28-62	Near Lakeside			10	½ Mile
C-5897	4-24-62	Lakeside Barge	5-2-62	Near Lakeside			65	½ Mile
C-5903	4-24-62	Lakeside Barge	5-7-62	Lakeside Barge			8	½ Mile
C-5939	5-2-62	Near Lakeside V.					5	½ Mile

\* These fish were recaptured more than once.  
 = approximate number of days

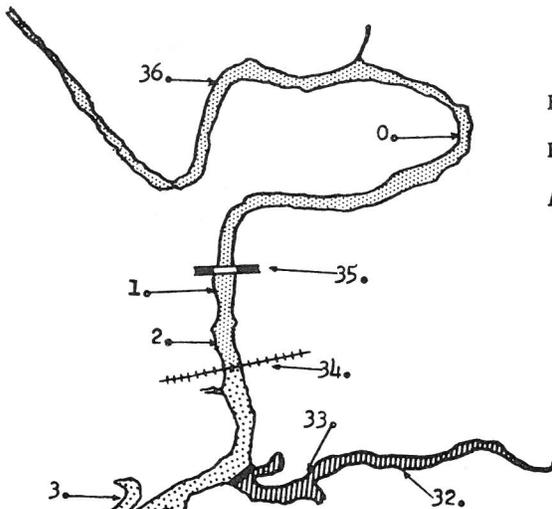
Table 6. Lake Whitney Water Level Elevations, November 1961 - October 1962

Date	Lake Elevations (m.s.l.)*
November 1, 1961	520.02
November 8, 1961	519.92
November 15, 1961	519.84
November 22, 1961	519.84
November 29, 1961	519.84
December 6, 1961	519.85
December 13, 1961	520.02
December 20, 1961	520.03
December 27, 1961	520.04
January 3, 1962	519.86
January 10, 1962	519.66
January 17, 1962	519.88
January 24, 1962	519.95
January 31, 1962	520.08
February 7, 1962	519.89
February 14, 1962	519.67
February 21, 1962	519.39
February 28, 1962	519.55
March 7, 1962	519.37
March 14, 1962	519.31
March 21, 1962	519.10
March 28, 1962	518.84
April 4, 1962	518.78
April 11, 1962	518.70
April 18, 1962	518.35
April 25, 1962	518.11
May 2, 1962	518.33
May 9, 1962	517.94
May 16, 1962	517.27
May 23, 1962	516.85
May 31, 1962	516.48
June 6, 1962	515.96
June 13, 1962	518.86
June 20, 1962	520.19
June 27, 1962	520.16
July 5, 1962	519.96
July 11, 1962	519.46
July 18, 1962	519.53
July 25, 1962	519.92
August 8, 1962	521.29
August 15, 1962	519.98
August 22, 1962	520.19
August 29, 1962	520.12
September 5, 1962	520.20
September 12, 1962	523.53
September 19, 1962	520.34
September 26, 1962	520.08
October 3, 1962	519.94
October 10, 1962	521.85
October 17, 1962	519.81
October 24, 1962	520.02

\* Normal surface elevation is 520.00 m.s.l.

Table 7. Results of gill net collections, Lake Whitney, November 1, 1960 through October 31, 1961

Species	Number	Per Cent of Total Number	Weight in Pounds	Per Cent of Total Wt.	Average Weight in Pounds	Fish Per 100 Feet of Net	Weight (lbs) per 100 feet Of Net
Spotted gar	2	0.15	3.23	0.37	1.61	0.04	0.07
Longnose gar	134	10.50	285.60	32.78	2.13	2.91	6.20
Gizzard shad	807	63.25	325.38	37.36	0.40	17.55	7.07
Smallmouth buffalo	8	0.62	24.05	2.76	3.00	0.17	0.52
River carpsucker	14	1.10	22.01	2.53	1.57	0.30	0.47
Carp	5	0.39	7.79	0.89	1.55	0.11	0.16
Channel catfish	77	6.04	95.09	10.92	1.23	1.68	2.06
White bass	111	8.70	65.96	7.57	0.59	2.41	1.43
Largemouth bass	10	0.78	6.48	0.74	0.64	0.22	0.14
Bluegill sunfish	18	1.41	3.96	0.46	0.22	0.39	0.08
White crappie	86	6.74	29.93	3.43	0.34	1.87	0.65
Freshwater drum	4	0.32	1.57	0.19	0.39	0.08	0.03
Totals	1,276	100.00	871.05	100.00			



BRAZOS  
RIVER  
AREA

NOLAN RIVER

UPPER  
LAKE  
AREA

MIDDLE  
LAKE  
AREA

LOWER  
LAKE  
AREA

- 0. Kimball Bend
- 1. Kimball Rec. Area
- 2. Indian Lodge
- 3. Flowman Creek
- 3.1 Raymond Creek
- 4. Mesquite Creek
- 5. Lakeside Village
- 6. Circle "D" Dock
- 7. Steel Creek
- 8. Cedron Creek
- 9. King Creek
- 10. Nob Hill
- 11. Rocky Creek Lodge
- 12. Little Rocky Lodge
- 13. Sportsman's Park
- 14. Towash Creek
- 15. Whitney Creek
- 16. State Park
- 17. Katy Railroad Bridge
- 18. Elm Canyon Lodge
- 19. Hillcrest Camp
- 20. Redwood Lodge
- 21. Deep Canyon
- 22. Wann Resort
- 23. Cherokee Lodge
- 24. Waldock's Lodge
- 25. T & L Boat Dock
- 26. Gay's Juniper Cove
- 27. Cedar Creek Lodge
- 27.1 **Air Force Base**
- 28. Herringtons Park
- 28.1 Bluff #8 Marker
- 29. Helm Lodge
- 30. Pioneer Lodge
- 30.1 Bear Creek
- 31. White Bluffs
- 32. Nolan River
- 33. Wall's Place
- 34. Santa Fe Railroad Bridge
- 35. Kimball Highway Bridge
- 36. John Roach's Place

LAKE WHITNEY



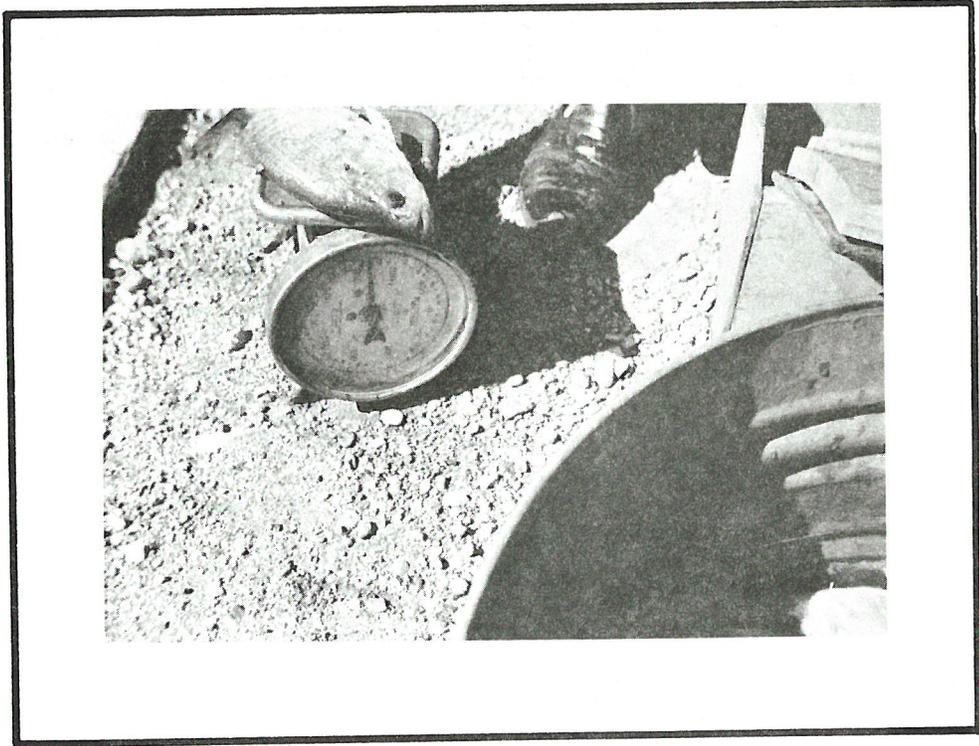


FIGURE 1. WEIGHING A CRAPPIE

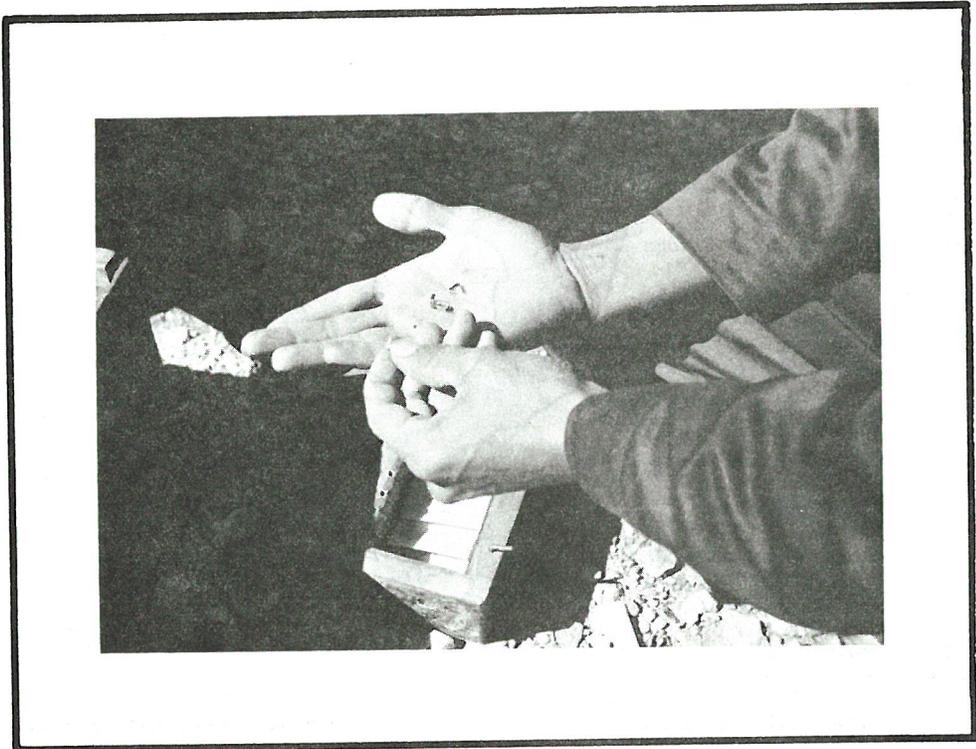


FIGURE 2. CRAPPIE TAGS

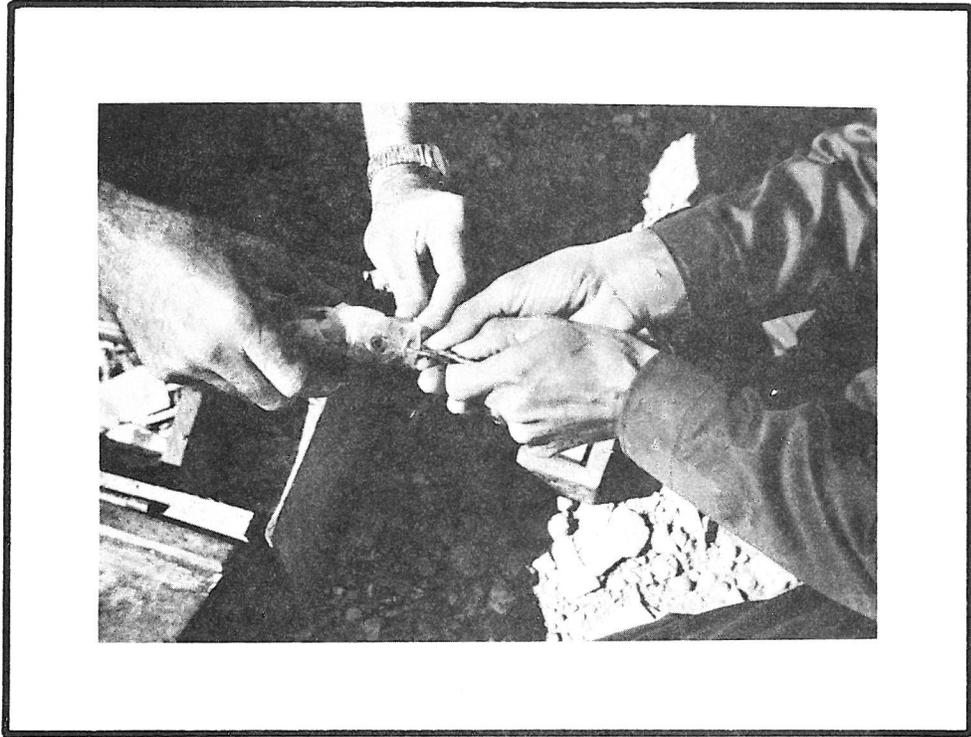


FIGURE 3. TAGGING A CRAPPIE

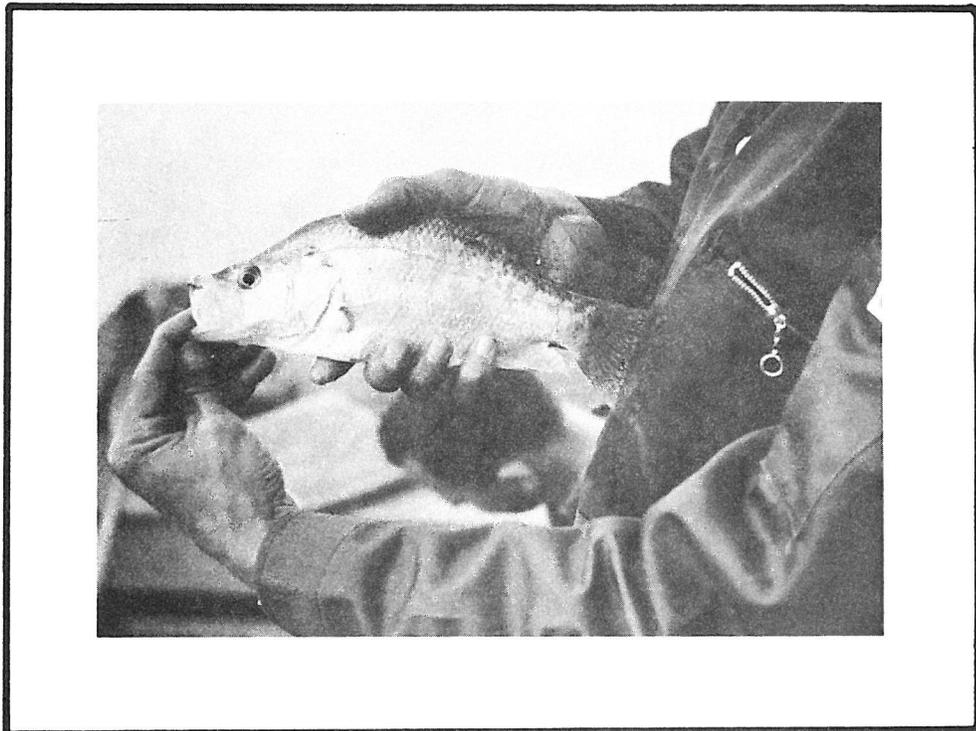


FIGURE 4. A TAGGED CRAPPIE.  
TAG IS ATTACHED TO LEFT PRE-MAXILARY.

