Report of Fisheries Investigations

Resurvey of Waters of Region 8-B

by

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Project Leader

Dingell-Johnson Project F-6-R-5, Job B-11
July 1, 1957 - June 30, 1958

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Job Completion Report

State of TEXAS

Project No. F-6-R-5 Name: Fisheries Investigation and Survey of Waters of Region 8-B.

Job No. B-11 Title: Resurvey of Waters of Region 8-B.

Period Covered: July 1, 1957 through June 30, 1958.

Abstract:

1. A new dam at Lake Corpus Christi began to catch water during the end of this segment, and the water has cleared to some extent. Most of the water hyacinths have been removed. There seems to be smaller buffalo and more carp than previously. On May 26, 1958, 100,000 largemouth bass fry were stocked.

2. During this segment Casa Blanca Lake came up approximately 11 feet and went over the spillway for the first time. Thermal stratification occurred in deeper waters. ırpsucker remained the most numerous species netted. Threadfin shad seem to have in- reased while silversides and bluegills have decreased. Black bass apparently spawned in the spring.

3. The water level on Falcon Lake remained virtually unchanged during this segment. In spite of a good increase in numbers of white bass, from practically nothing to over 15 percent, the general trend of increased numbers of rough fish continued.

Procedure:

Three bodies of water were resurveyed during this segment: Lake Corpus Christi, Casa Blanca Lake, and Falcon Lake. Netting and seining collections and water analyses were made and general physical and ecological changes were noted. No seining collections were made on Falcon Lake, and water analyses were made only on Casa Blanca Lake. As nearly as possible the netting, seining, and water analyses stations were the same as those used during the original surveys, being changed only as much as necessary to conform to higher water levels. Turbidity readings by Secchi disk were also made on Lake Corpus Christi at special stations set up for that purpose.

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Approved by Marion Toole
Director Inland Fisheries Division

te April 13, 1959

Lake Corpus Christi

Physical Description:

At a spillway level of 74 feet above sea level the lake has an area of about 5450 acres and an estimated volume of 30,000 acre feet when the original survey was made (1953-55). During this segment the Lower Nueces Water Supply District completed a new dam about $\frac{1}{4}$ mile downstream from the old dam which will raise the water level to 88 feet and produce a lake with an area of about 16,730 acres and a volume of about 185,920 acre feet. The dam is designed so that adjustments and additions to the gates can be made to raise the water level to 94 feet and later to 104 feet. There was no significant change on the lake bottom or shoreline between the original survey and the completion of the new dam. The new dam was dedicated on April 26, 1958, and began impounding water shortly afterward, inundating extensive brush covered flats and plowed fields. By the end of the segment the water had reached a level of 82.26 feet and was still rising rapidly.

During the last of February and the first of March a flood occurred on the lake with a crest of 83.89 feet on March first. Although five concrete base slabs were not in place, the new dam restricted the flow and caused this unusually high crest. See Table I for water levels.

The water has definitely cleared since the new dam was closed. However, no exact comparison is possible since all measurements made during the original survey were by the Jackson Turbidimeter, while the resurvey data were collected by means of Secchi disk readings. The limits of the Jackson Turbidimeter are 25 ppm., and few of the original survey readings were this clear. All resurvey readings were less than 25 ppm., so the Secchi disk was used instead. Table II shows the turbidity readings and Map I shows the locations of the stations.

Aquatic Vegetation:

Submerged vegetation is still practically nonexistant, probably due to the high turbidity of the water of the old lake. Emergent rooted vegetation (Scirpus) has grown well, producing several large stands. (See Projects F-6-R-2 and 3, Job E-2.) These will probably be killed by the high water when the lake fills. The most noticeable change on the lake since the original survey is the removal of over 600 of the estimated 700 acres of water hyacinths then present on the lake. Part of this was removed by work under Project F-1-D and part by the high water in February and March.

Fish Population:

The population of fish as shown by gill netting collections has apparently not changed appreciably when compared to the catch during the same months of the original survey. An increase in the number of carp present seems evident from reports of commercial fishermen and from our own netting samples. Other apparent changes in numbers of fish are probably due to sampling error inherent in the netting procedure. The smallmouth buffalo is the only species which showed any significant change in average length,

eight, or "K" factor. The average weight of the buffalo was about $\frac{1}{2}$ of that found during the original survey, falling from slightly over $2\frac{1}{2}$ pounds to slightly over $1\frac{1}{4}$ pounds. Tables III, IV, and V show the netting results of twelve nets set in the resurvey, and Table VI shows the lengths, weights, and "K" factors of the fish taken. Commercial fishing records show 4,951 pounds of buffalo, 160 pounds of carp, and 900 pounds of gar removed during this segment.

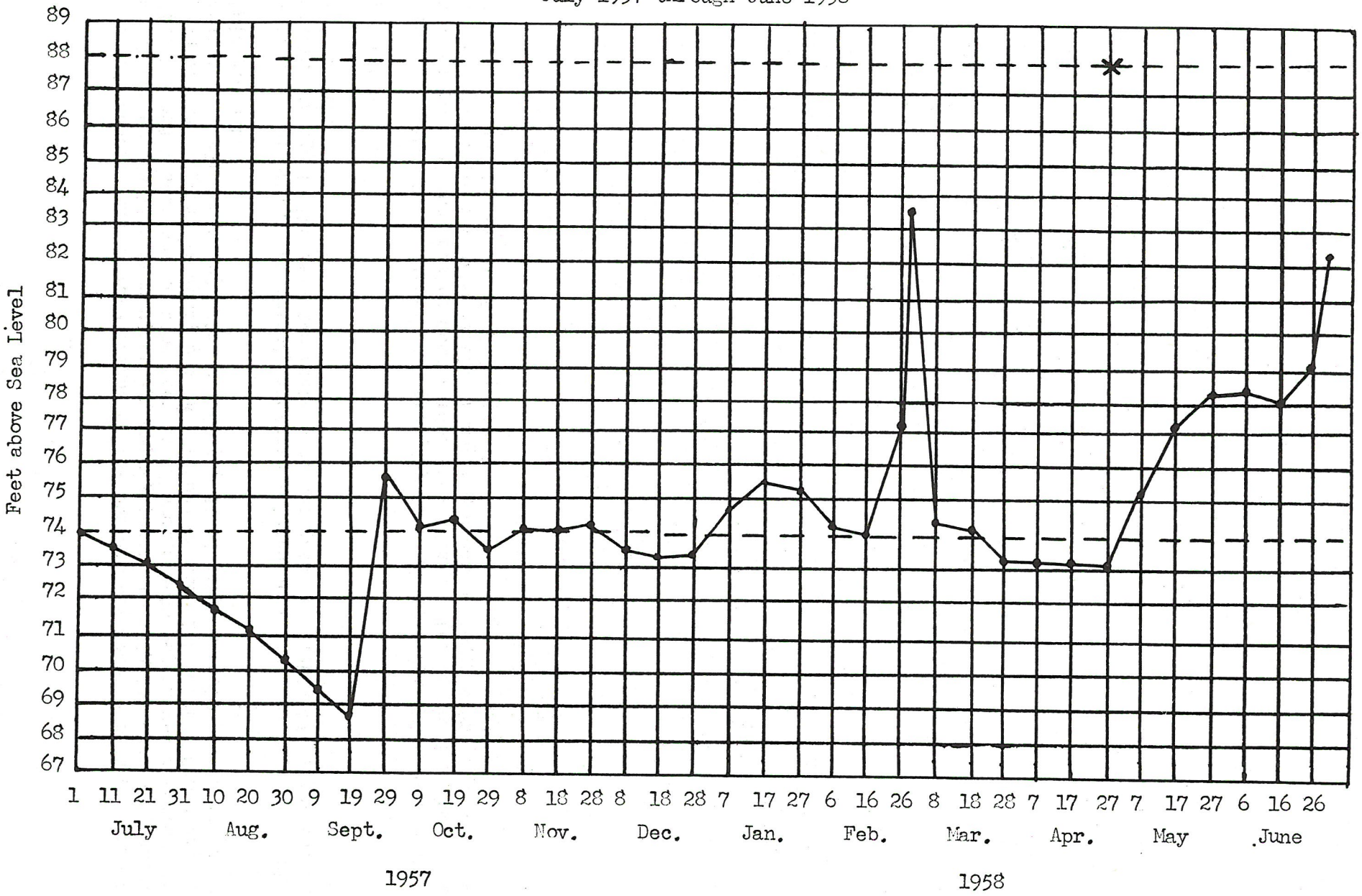
The seining collections apparently indicate a decrease in numbers of small fish, but no significant change in the relative numbers of the species. Table VII shows the seining collection results.

Stocking Records:

On May 26, 1958, 100,000 largemouth bass fry from the Tyler Hatchery were released into the upper part of the lake by Game Warden Frank Henze. The water had risen a little over four feet above the old lake level, inundating areas of heavy brush and weeds which would provide suitable cover and food for them.

Table I. Lake Corpus Christi Water Levels

July 1957 through June 1958



Note: 74' - Crest of old dam.
88' - Crest of new dam, incomplete until April, 1958.

Table II. Secchi Disk Readings in Inches on Lake Corpus Christi, May and June 1958.

		Stations											
Date	Lake Level	1	2	3	4	5	6	7	8	9	10	11	12
5-19-58	78.84	24	18	15	28	23	28	28	-	-	-	-	-
6-18-58	78.26	18	18	15	18	21	21	24	10	13	9	14	25

* Map I. Shows the location of the Stations.

Map 1. Lake Corpus Christi.

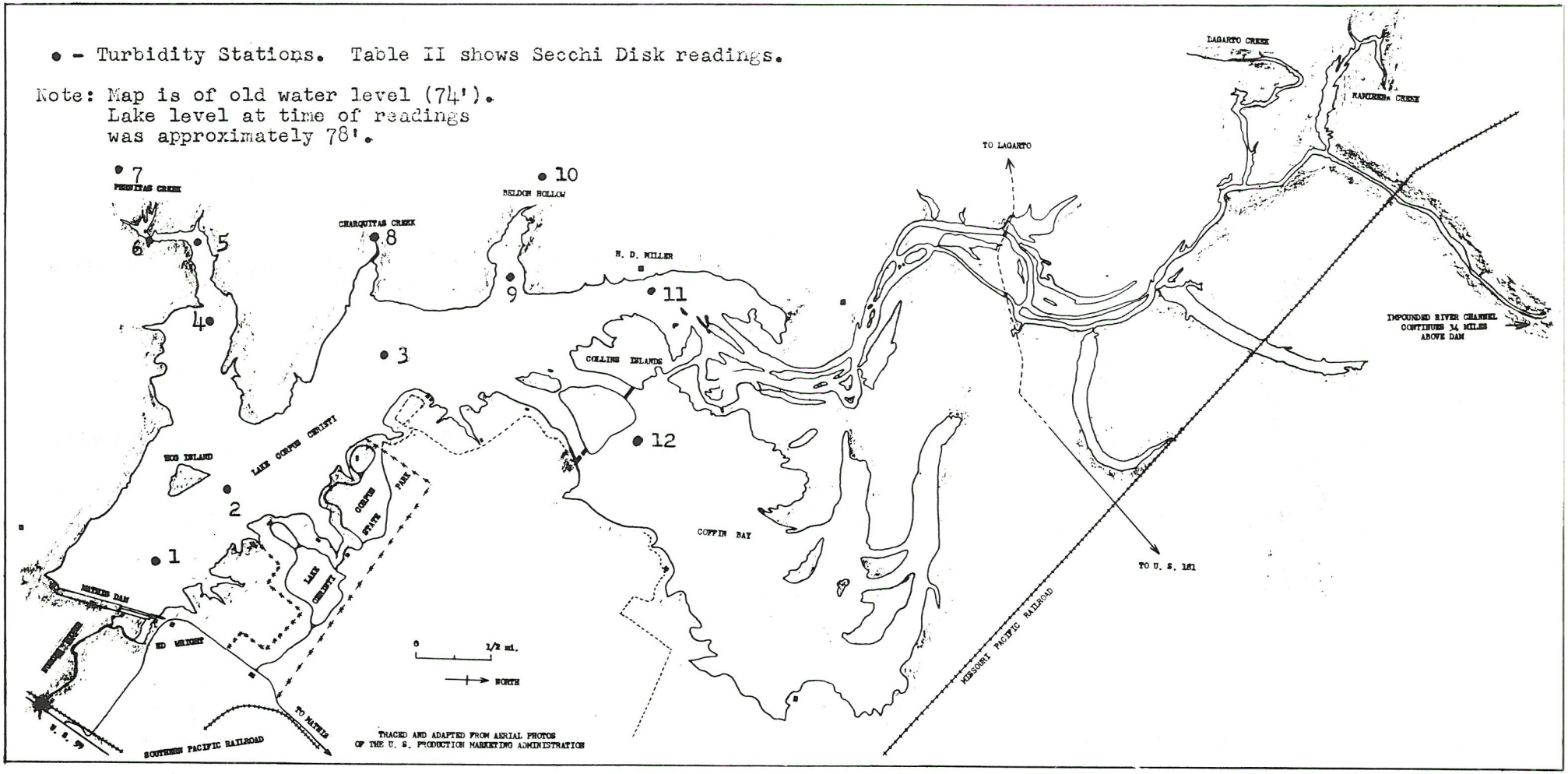


Table III. Numbers of Fish Caught in Lake Corpus Christi, Oct. 1957

Species	Stations 1	2	3	4	5	6	7	9**	Total	Percent
AG	-	1	-	1	1	-	1	-	4	2.18
SG	-	-	-	2	-	1	-	-	3	1.64
LNG	-	1	-	-	2	-	-	1	4	2.19
GS	1	2	-	-	16	3	-	-	22	12.02
SMB	-	4	6	1	-	-	18	-	29	15.84
Carp	-	-	2	1	-	1	7	-	11	6.02
*CC	-	1	-	4	-	-	3	-	8	4.37
*BC	1	-	3	1	6	10	-	-	21	11.47
*BGS	-	1	-	1	-	-	1	-	3	1.64
*WC	3	16	10	6	5	2	6	-	48	26.23
FWD	10	3	6	2	7	2	-	-	30	16.40
Total	15	29	27	19	37	19	36	1	183	100.00
Station %	8.19	15.85	14.75	10.39	20.21	10.39	19.67	0.55	100.00	
Rough Fish	11	11	14	7	26	7	26	1	103	
% Rough Fish	77.33	37.93	51.85	36.84	70.27	36.84	72.22	100	56.28	
* Game Fish	4	18	13	12	11	12	10	-	80	
* % Game Fish	26.67	62.07	48.15	63.16	29.73	63.16	27.78	-	43.72	

** No fish caught at Station 8.

Table IV. Weights of Fish Caught in Lake Corpus Christi, October 1957

Species	Stations 1	2	3	4	5	6	7	9**	Total	Percent
AG	-	2410	-	1134	1049	-	907	-	5500	7.06
SG	-	-	-	1491	-	1351	-	-	2842	3.66
LNG	-	316	-	-	4022	-	-	624	4962	6.37
GS	39	995	-	-	1687	302	-	-	3023	3.89
SMB	-	995	4008	343	-	-	13653	-	18999	24.42
Carp	-	-	778	311	-	390	3749	-	5228	6.72
*CC	-	345	-	1395	-	-	1460	-	3200	4.11
*BC	145	-	3430	1474	5811	7557	-	-	18417	23.67
*BGS	-	35	-	32	-	-	180	-	247	0.32
*WC	709	1423	2177	1117	956	480	877	-	7739	9.94
FWD	2000	256	2147	264	2446	538	-	-	7651	9.84
Total	2893	6775	12540	7561	15971	10618	20826	624	77808	100.00
Station %	3.71	8.71	16.12	9.71	20.53	13.65	26.76	0.81	100.00	
Rough Fish	2039	4972	6933	3543	9204	2581	18309	624	48205	
% Rough Fish	70.48	73.39	55.29	46.86	57.63	24.31	87.91	100	61.95	
*Game Fish	854	1803	5607	4018	6767	8037	2517	-	29603	
* % Game Fish	29.52	26.61	44.71	53.14	42.37	75.69	12.09	-	38.05	

** No fish caught at Station 8.

Note: Weights are given in grams.

Table V. Numbers and Weights of Fish Caught in Lake Corpus Christi, November 1957.

Species	Stations 1		2		3		4		5		6		Total		Percent	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
AG	-	-	1	1332	-	-	-	-	-	-	-	-	1	1332	0.96	3.27
SG	-	-	-	-	1	270	-	-	1	709	4	3261	6	4240	5.77	10.40
GS	1	50	1	41	2	320	-	-	-	-	1	125	5	536	4.81	1.31
SMB	-	-	2	94	8	2605	-	-	2	2013	-	-	12	4712	11.54	11.54
Carp	-	-	-	-	1	964	-	-	-	-	-	-	1	964	0.96	2.36
*CC	-	-	-	-	-	-	2	660	2	405	1	170	5	1235	4.81	3.03
*BC	9	1196	1	1304	6	4763	3	1431	2	1503	7	5599	28	15796	26.92	38.73
*LMB	-	-	1	75	-	-	-	-	-	-	-	-	1	75	0.96	0.18
*WC	2	104	11	1636	8	1403	6	2185	-	-	1	455	28	5783	26.92	14.19
FWD	1	51	2	514	7	4186	1	235	4	804	2	320	17	6110	16.35	14.99
Total	13	1401	19	4996	33	14511	12	4511	11	5434	16	9930	104	40783	100.00	100.00
Station %	12.50	3.43	18.26	12.25	31.74	35.58	11.53	11.06	10.58	13.33	15.39	24.35	100	100		
Rough Fish	2	101	6	1981	19	8345	1	235	7	3526	7	3706	42	17894		
% Rough Fish	15.38	7.21	31.58	39.65	57.58	57.51	8.33	5.21	63.64	64.89	43.75	37.32	40.38	43.88		
Game Fish	11	1300	13	3015	14	6166	11	4276	4	1908	9	6224	62	22689		
% Game Fish	84.62	92.79	68.42	60.35	42.42	42.49	91.67	94.79	36.36	35.11	56.25	62.68	59.62	56.12		

Note: Weights are given in grams.

Table VI. Lengths, Weights, and "K" Factors of Fish Caught in Lake Corpus Christi, October and November 1957.

	Standard Length			Weight in gms.			"K" Factor			Rank	Rank By
Species	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.	By No.	Weight
AG	470	650	553.20	907	2410	1366.40	0.79	0.92	0.86	9	6
SG	320	550	446.67	215	1361	788.00	0.66	0.99	0.79	8	5
LNG	430	810	565.00	316	3544	1240.50	0.40	0.67	0.48	10	8
GS	115	295	177.63	32	595	131.81	1.63	2.32	1.90	5	10
SMB	110	380	235.17	42	2381	590.66	2.76	4.34	3.34	4	2
Carp	230	315	258.42	311	964	561.00	1.42	3.24	2.81	7	7
CC	160	372	266.69	65	907	341.15	1.31	1.89	1.61	6	9
BC	153	510	308.10	49	2410	698.22	1.31	2.26	1.58	2	1
LMB	160	160	160.00	75	75	75.00	1.83	1.83	1.83	12	12
BGS	90	160	114.00	32	180	82.33	4.38	4.48	4.37	11	11
WC	110	260	172.57	36	567	177.92	2.01	3.60	2.89	1	4
FWD	130	365	202.11	51	1786	292.79	2.17	3.68	2.80	3	3

Table VII. Seining Collections on Lake Corpus Christi.

Species	Station and Date: 1 10-24-57	2 10-24	3 10-24	4 10-29	1 11-19	2 11-19	3 11-19	4 11-19	6 11-25	7 11-25	Total
TFS	1	1	71	17	26	-	-	-	2	-	118
GS	2	2	1	7	1	1	2	4	1	-	21
RGT	-	-	2	1	-	-	-	6	-	-	9
SMB	-	-	1	-	-	-	-	-	-	-	1
Op. em.	36	28	11	30	2	7	23	-	-	-	138
Not. lut.	2	-	13	14	-	8	7	-	-	-	44
Pim. vig.	-	-	-	-	-	-	-	1	-	-	1
Gamb.	1	1	2	2	-	-	-	1	2	-	9
Men. ber.	-	-	19	14	7	3	7	5	10	-	65
BGS	1	15	-	3	4	-	-	-	-	-	23
LES	-	1	-	-	-	-	-	-	-	-	1
WC	-	1	-	2	-	-	-	-	2	-	5
RGP	2	-	-	-	-	-	-	-	-	-	2
Totals	45	49	120	90	40	19	39	17	18	0	437

Casa Blanca Lake

Physical Description:

During the original survey (1956-57) the lake averaged about 11 feet below spillway level, and had an area of about 665 acres and a volume of about 5,600 acre feet. On February 18, 1958, the water was two feet below the spillway, and on June 12, 1958, it was at spillway level. At this level the lake has an area of about 1,679 acres and contains about 20,000 acre feet of water. During this segment the water went over the spillway for the first time since the dam was built. The increased water level inundated large areas of new land, most of it sparsely covered with thorny brush, which provides some new cover for fish. The land covered by the lake is mostly caliche, very poor in nutrients, and therefore the shallow water probably will not produce much food but it should provide good spawning grounds.

Water Analysis:

Water samples taken in June showed a higher oxygen content than before and a lower turbidity. Otherwise there apparently was no change. The difference in turbidity is probably due to decreased wave action on the bottom because of deeper water. At Station No. 1, water from 30 feet down smelled of hydrogen sulfide and contained no oxygen. This, along with a temperature difference of 7° F., indicates that the water was thermally stratified, a condition not found in this lake before. Table VIII shows the results of water analyses.

Fish Population:

The river carpsucker is still the most common fish species both by weight and number. It made up 53.90% of the number, and 76.36% of the weight, of fish netted. This is a large increase in percentage by number and a noticeable increase in percentage by weight. Fewer fish per net were caught during the resurvey, probably due to the increased size of the lake letting the fish spread out more. Station No. 2 provided the largest percentage of fish caught during the resurvey, whereas nets set at Station No. 1 caught more fish during the original survey. Tables IX and X show netting results, while Tables XI and XII show length, weight, and "K" factor.

The only seining collections made during the resurvey were in June. Seining Station No. 1 was moved up the same sandy beach with the rise of the water; Station No. 2 moved several hundred yards south and west to find an area free of brush. The sample is too small to be completely reliable, but it seems to indicate that threadfin shad have increased in numbers while silversides and bluegills have decreased. One of the four Rio Grande tetras caught had a hook mark indicating it had been used as bait. The other three were probably released bait also. Thirteen small largemouth bass were seined, indicating a spawn in the spring. Table XIII shows the seining results.

Table VIII. Lake Casa Blanca Water Analysis Results, June 12, 1958.

Station	Depth	Temp. °F.	O_2 ppm.	CO_2 ppm.	PHTH. Alk.	M. O. Alk.	Jackson Turb.	pH.	Secchi. Disk	Air Temp. °F
1	0	81	9.8	-	0	160	*	8.0	54"	83
	10		11.2	-	0	172	*	8.2		
	20		4.3	-	0	154	*	7.9		
	30**	74	0.0	-	0	156	*	7.4		
2	0	83	10.2	0	4	160	*	8.0	32"	84
	10		10.8	0	4	169	*	8.0		

\- No test, faulty chemicals.

* Less than 25.

** Smelled of H_2S.

Table IX. Numbers and Weights of Fish Taken in Experimental Gill Nets From Casa Blanca Lake, February 18 and 19, 1958.

Species	Station 1		2		3		4		Total		Percent	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
GS	-	-	2	122	-	-	2	288	4	410	4.60	0.63
RCS	1	765	50	45501	5	3685	13	11650	69	61601	79.31	94.99
*FHC	-	-	1	1134	-	-	-	-	1	1134	1.15	1.75
*WC	4	697	5	374	-	-	4	637	13	1708	14.94	2.63
Totals	5	1462	58	47131	5	3685	19	12575	87	64853	100.00	100.00
Station %	5.74	2.25	66.67	72.67	5.74	5.68	21.83	19.39	100.00	100.00		
Rough Fish	1	765	52	45623	5	3685	15	11938	73	62011		
% Rough Fish	20.00	52.33	89.66	96.80	100.00	100.00	78.95	94.93				
*Game Fish	4	697	6	1508	-	-	4	637	14	2842		
% Game Fish	80.00	47.67	10.34	3.20	-	-	21.05	5.07				

Note: Weights are given in grams.

Table X. Number and Weights of Fish Taken in Experimental Gill Nets From Casa Blanca Lake, June 12 and 13, 1958.

Species	Stations 1		2		3		4		Total		Percent	
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
GS	-	-	-	-	7	366	2	105	9	471	13.23	2.00
RCS	-	-	7	5897	-	-	-	-	7	5897	10.29	25.04
Carp	-	-	4	4337	-	-	-	-	4	4337	5.89	18.42
*CC	-	-	1	454	1	200	1	680	3	1334	4.41	5.66
BBH	-	-	1	331	-	-	-	-	1	331	1.47	1.41
*BGS	3	124	4	441	-	-	-	-	7	565	10.29	2.40
*WC	6	768	3	796	9	923	4	777	22	3254	32.36	13.82
FWD	1	294	6	3926	-	-	4	1881	11	6101	16.17	25.91
RGP	-	-	4	1256	-	-	-	-	4	1256	5.89	5.34
Total	10	1176	30	17438	17	1489	11	3443	68	23540	100.00	100.00
Station %	14.70	4.99	44.12	74.06	25.00	6.32	16.18	14.63	100.00	100.00		
Rough Fish	1	294	22	15747	7	366	6	1986	36	18393		
% Rough Fish	10.00	25.00	73.33	90.30	41.18	24.58	54.55	57.68	78.12			
*Game Fish	9	882	8	1691	10	1123	5	1457	32	5153		
% Game Fish	90.00	75.00	26.67	9.70	58.82	75.42	45.45	43.32	47.06	21.88		

Note: Weights are in grams.

Table XI. Length, Weights, and "K" Factors of Fish Caught in Lake Casa Blanca, February 1958.

Species	Standard Length			Weight in gms.			"K" Factor			Rank By No.	Rank By Weight
	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.		
GS	145	190	165.00	60	150	102.50	1.78	2.57	2.14	3	4
RCS	270	385	317.68	482	1559	892.27	1.98	3.29	2.70	1	1
FHC	365	365	365.00	1134	1134	1134.00	2.33	2.33	2.33	4	3
WC	130	245	167.00	56	345	131.38	2.35	2.81	2.58	2	2

Table XII. Lengths, Weights, and "K" Factors of Fish Caught in Lake Casa Blanca, June 1958.

Species	Standard Length			Weight in gms.			"K" Factor			Rank By No.	Rank By Weight
	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.		
GS	119	145	135.37	35	66	52.33	1.95	2.19	2.07	3	8
RCS	280	371	322.00	510	1247	842.43	2.18	2.56	2.41	4	2
Carp	305	493	362.50	595	2268	1084.25	1.89	2.25	2.06	5	3
CC	228	320	279.33	200	680	444.67	1.69	2.08	1.88	6	5
BBH	236	236	236.00	331	331	331.00	2.52	2.52	2.52	7	9
BGS	106	145	129.00	21	141	80.72	1.76	4.62	3.43	4	7
WC	100	280	173.86	33	539	147.91	1.87	2.78	2.36	1	4
FWD	182	413	274.00	152	1531	508.42	1.92	2.53	2.19	2	1
RGP	180	205	190.00	243	363	314.00	4.17	4.88	4.50	5	6

Table XIII. Seining Collection Results on Lake Casa Blanca, June 12, 1958.

Species	Station 1	2	Total	Percent
TFS	-	374	374	66.66
GS	-	7	7	1.25
RGT	4	-	4	0.71
Not. cry.	22	-	22	3.92
Op. em.	-	1	1	0.18
Not. lut.	1	-	1	0.18
Gamb.	2	-	2	0.36
Men. ber.	56	11	67	11.94
LMB	5	8	13	2.32
BGS	-	4	4	0.71
WC	-	66	66	11.77
Total	90	471	561	100.00
Percent	16.04	83.96		

Falcon Lake

Physical Description:

The only noticeable change in the physical description of the Falcon Lake is that the water levels were more stable during this segment than during the original survey. The lake stayed nearly full all year, varying approximately eight feet from 284.12 to 291.82 feet above sea level. The minimum variation on any year during the original survey was about 32 feet. Table XIV shows the water levels during the segment.

Fish Population:

The general trend toward a higher proportion of rough fish noted in the original survey (1954-57) seems to be continuing. Over 79% of the fish by weight and number were rough fish, compared to about 62% for the year ending June 30, 1957, and fewer for the preceding years. This increase seems to be due to a rise in the numbers of freshwater drum and gizzard shad, coupled with a decline of blue catfish. Opposing this trend is the rise of white bass, which have risen from an insignificant 0.32% in the last year of the original survey to over 15% during the resurvey. The white bass are doing extremely well, providing good fishing most of the time. Only seven white bass were caught during the entire original survey, but 51 were caught during the resurvey. Eight of the white bass and one black bass caught at Station No. 9 were caught plug casting. Tables XV and XVI show the numbers and weights of fish caught. Table XVII shows the lengths, weights, and "K" factors. Table XVIII shows the netting success of each lake.

Table XIV. Falcon Reservoir Water Levels

July 1957 through June 1958

296.4' - Spillway elevation - top of Conservation Pool - 78,000 surface acres - 2,400,000 acre-feet.
314.2' - Maximum elevation - top of Flood Storage - 113,000 surface acres - 4,085,000 acre-feet.

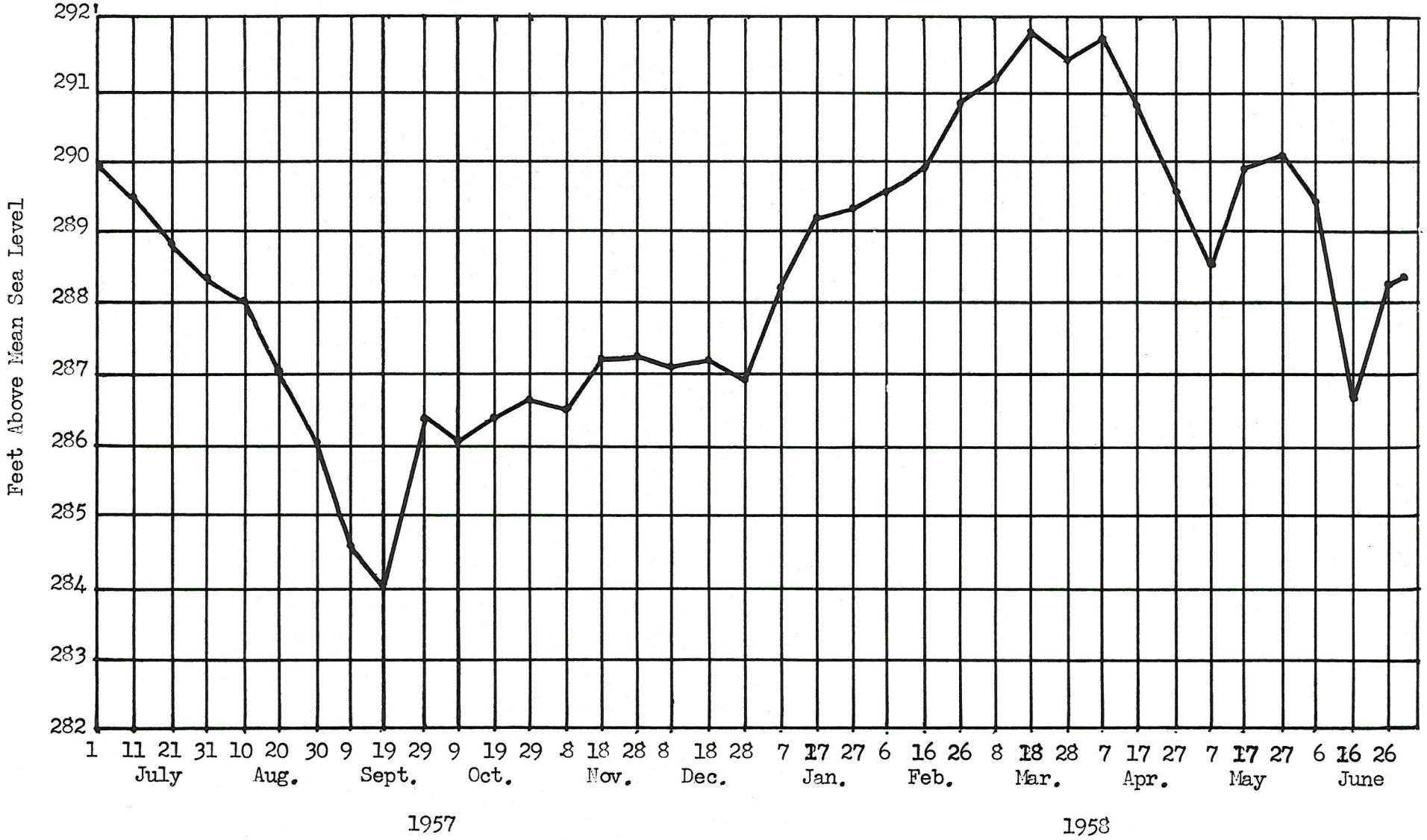


Table XV. Numbers of Fish Caught in Falcon Lake, March 1958.

Species	Stations 1	2	3	4	5	6	7	8	9	10	Total	Percent
LNG	-	1	-	1	-	-	-	-	-	4	6	1.77
GS	-	2	14	11	1	19	-	1	20	11	79	23.37
SMB	13	11	17	17	4	7	4	-	3	7	83	24.56
RCS	-	-	3	2	-	3	-	-	-	2	10	2.96
Carp	2	3	4	2	1	1	-	-	-	1	14	4.14
*BC	-	-	-	-	-	4	-	3	-	2	9	2.66
*FHC	-	-	-	-	-	-	-	-	2	-	2	0.59
*WB	1	2	4	-	1	3	6	4	22	8	51	15.09
*LMB	1	-	2	-	-	2	-	-	1	1	7	2.07
*WMB	-	1	-	-	-	-	-	-	-	-	1	0.30
FWD	-	3	2	1	6	1	7	22	8	26	76	22.49
Total	17	23	46	34	13	40	17	30	56	62	338	100.00
Station %	5.02	6.81	13.61	10.06	3.84	11.84	5.03	8.87	16.57	18.34	100.00	100.00
Rough Fish	15	20	40	34	12	31	11	23	31	51	268	
% Rough Fish	88.23	86.96	86.96	100.00	92.31	77.50	64.71	76.67	55.36	82.26	79.29	
*Game Fish	2	3	6	0	1	9	6	7	25	11	70	
% Game Fish	11.77	13.04	13.04	0	7.69	22.50	35.29	23.33	44.64	17.74	20.71	

Table XVI. Weights of Fish Caught in Falcon Lake, March 1958.

Species	Stations 1	2	3	4	5	6	7	8	9	10	Total	Percent
LNG	-	5117	-	320	-	-	-	-	-	1659	7096	5.95
GS	-	109	2274	990	150	2365	-	156	1392	1031	8467	7.10
SMB	7900	8553	9276	16670	1888	3045	2357	-	2197	3784	55670	46.71
RCS	-	-	1693	820	-	1261	-	-	-	807	4581	3.84
Carp	604	615	1030	420	169	202	-	-	-	185	3225	2.71
*BC	-	-	-	-	-	296	-	1408	-	485	2189	1.83
*FHC	-	-	-	-	-	-	-	-	1135	-	1135	0.96
*WB	454	880	1552	-	443	1381	2048	1271	7712	3226	18967	15.91
*LMB	274	-	619	-	-	433	-	-	788	293	2407	2.02
*WMB	-	180	-	-	-	-	-	-	-	-	180	0.15
FWD	-	577	238	152	1082	161	2262	3557	2672	4574	15275	12.82
Total	9232	16031	16682	19372	3732	9144	6667	6392	15896	16044	119192	100.00
Station %	7.74	13.45	14.00	16.25	3.13	7.67	5.60	5.36	13.33	13.47	100.00	
Rough Fish	8504	14971	14511	19372	3289	7034	4619	3713	6261	12040	94314	
% Rough Fish	92.11	93.39	86.99	100	88.13	76.92	69.28	58.09	39.39	75.04	79.13	
*Game Fish	728	1060	2171	0	443	2110	2048	2679	9635	4004	24878	
% Game Fish	7.89	6.61	13.01	0	11.87	23.08	30.72	41.91	60.61	24.96	20.87	20.87

Note: Weights are given in grams.

Table XVII. Lengths, Weights, and "K" Factors of Fish Caught in Falcon Lake, March 1958.

Species	Standard Length			Weight in gms.			"K" Factor			Rank	Rank By
	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.	By No.	Weight
LNG	460	950	572.50	320	5117	1182.00	0.32	0.60	0.37	9	5
GS	125	273	168.29	42	411	107.15	1.51	2.85	1.97	2	4
SMB	180	465	264.48	190	3459	670.95	2.60	4.85	3.18	1	1
RCS	150	305	257.60	100	680	458.00	2.15	2.96	2.56	6	6
Carp	130	275	200.07	71	482	231.00	2.32	3.23	2.75	5	7
BC	157	43	231.89	40	121	243.00	1.07	1.68	1.30	7	9
FHC	286	320	303.00	426	709	568.00	1.82	2.10	1.96	10	10
WB	200	275	236.16	241	470	372.00	2.33	3.44	2.80	4	2
LMB	209	280	242.22	193	482	318.00	2.05	2.28	2.19	8	8
WMB	155	155	155.00	180	180	180.00	4.83	4.83	4.83	11	11
FWD	125	336	195.62	47	1134	201.00	1.29	2.99	2.32	3	3

Check List of Fish Species Caught Plus Common Names and Abbreviations Used in This Report.

Lepisosteus spatula	alligator gar	AG
Lepisosteus productus	spotted gar	SG
Lepisosteus osseus	longnose gar	LNG
Dorosoma petenense	threadfin shad	TFS
Dorosoma cepedianum	gizzard shad	GS
Astyanax fasciatus	Rio Grande tetra	RGT
Ictiobus bubulus	smallmouth buffalo	SMB
Carpiodes carpio	river carpsucker	RCS
Cyprinus carpio	German carp	Carp
Notemigonus crysolucas	golden shiner	Not. cry.
Opsopoeodus emiliae	pugnose minnow	Op. em.
Notropis lutrensis	red shiner	Not. lut.
Pimephales vigilax	parrot minnow	Pim. vig.
Ictalurus punctatus	channel catfish	CC
Ictalurus furcatus	blue catfish	BC
Ictalurus melas	black bullhead	BBH
Pylodictus olivaris	flathead catfish	FHC
Gambusia affinis	mosquitofish	Gamb.
Menidia beryllina	tidewater silverside	Men. ber.
Roccus chrysops	white bass	WB
Micropterus salmoides	largemouth bass	LMB
Chaenobryttus gulosus	warmouth bass	WMB
Lepomis macrochirus	bluegill sunfish	BGS
Lepomis megalotis	longear sunfish	LES
Pomoxis annularis	white crappie	WC
Aplodinotus grunniens	freshwater drum	FWD
Cichlasoma cyanoguttatum	Rio Grande perch	RGP

Table XVIII. Success of Gill Netting on All Lakes in Terms of Numbers and Pounds of Fish Caught.

Lake and Date	Number of Nets Set	Number of Feet of Nets Set	Number of Fish Caught	Average Number of Fish Per Net	Average Number of Fish Per Foot of Net	Pounds of Fish Caught	Average Pounds of Fish Per Net	Average Pounds of Fish Per Foot of Net
Lake Corpus Christi, Oct. and Nov. 1957	15	1875	287	19.13	0.153	261.44	17.43	0.139
Lake Casa Blanca February 1958	4	500	87	21.75	0.174	142.97	35.74	0.286
Lake Casa Blanca June 1958	4	500	68	17.00	0.136	51.90	12.98	0.104
Falcon Lake March 1958	10	1250	329	32.90	0.263	256.61	25.66	0.205