

PERFORMANCE REPORT

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FEDERAL AID PROJECT F-221-M-1

INLAND FISHERIES DIVISION MONITORING AND MANAGEMENT PROGRAM

2010 Survey Report

Stamford Reservoir

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SURVEY AND MANAGEMENT SUMMARY

Fish populations in Stamford Reservoir were surveyed in 2008-2011 using electrofishing, low-frequency electrofishing, gill nets, and trap nets. This report summarizes the results of the surveys and contains a management plan for the reservoir based on those findings.

- **Reservoir Description:** Stamford Reservoir is a 4,264-acre impoundment located on Paint Creek in the Brazos River Basin approximately 10 miles southeast of Haskell. Water level has been within 5 feet of full pool since July 2002 including flood events in 2005, 2007, and 2010. Primary habitat features consisted of dead brush, bulrush, and cattails. There were two public boat ramps and limited bank-fishing access.
- **Management History:** Florida largemouth bass were introduced in Stamford Reservoir in the late 1970s. Stockings of blue catfish, palmetto bass, and walleye also occurred during the 1970s. Palmetto bass and walleye stockings were largely unsuccessful so stocking programs for these species were discontinued by 1982. An additional blue catfish stocking occurred in 1991. Water level began to drop in 1993 and reached nearly 17 ft below conservation pool in 2000. When water level increased in 2001-2003, Florida largemouth bass and channel catfish were stocked.
- **Fish Community**
 - **Prey species:** Gizzard shad were abundant and the population size structure was suitable for sustaining sport fish populations. Relative abundance of bluegill was consistent with previous samples.
 - **Catfishes:** Relative abundance of blue catfish and channel catfish, as measured by gill net surveys, has remained consistent in the last 10 years. Blue catfish up to 28 inches total length were sampled and many were legal-harvest length. All sampled channel catfish were legal-harvest length. Excellent catfish angling opportunities continue to exist.
 - **White bass:** The white bass population was characterized by high abundance and excellent size structure. Mean length of white bass in the 2011 sample was nearly 14 in with individuals up to 17 in collected. White bass represent a traditionally underused fishery in Stamford Reservoir although the population continues to provide angling opportunities.
 - **Largemouth bass:** Size structure of largemouth bass indicated that the population has prospered with relatively stable water level. Low relative abundance can likely be attributed to sampling limitations associated with an increased amount of flooded vegetation during the survey period.
 - **White crappie:** The white crappie population was in excellent shape, both in terms of numbers of fish and size distribution. About 36% of sampled crappie were available to anglers for harvest.
- **Management Strategies:** A watershed map will be developed to better understand landscape-level factors that affect water collection and water quality in Stamford Reservoir. White bass angling opportunities will be publicized to inform anglers of the quality population that has established.

INTRODUCTION

This document is a summary of fisheries data collected from Stamford Reservoir in 2008-2011. The purpose of this document is to provide fisheries information and make management recommendations to protect and improve the sport fishery. While information on other species of fishes was collected, this report deals primarily with major sport fishes and important prey species. Historical data are presented for comparison.

Reservoir Description

Stamford Reservoir is a 4,264-acre impoundment constructed in 1953 on Paint Creek, a tributary of the Clear Fork of the Brazos River. It is located in Haskell County approximately 10 miles southeast of Haskell and is operated and controlled by the city of Stamford. The reservoir provides municipal and industrial water supply for the city of Stamford and is used for flood control and recreation. A steam electric generating plant was located on the reservoir but has not operated since 2002.

Habitat at time of sampling was primarily dead brush, emergent vegetation, and submerged vegetation. Water level at time of sampling was 0 to 4 feet below conservation level. Water level steadily dropped from 1993 to 2000 and reached a low of nearly 17 feet below conservation level before water level increased to near conservation level in 2002. Since 2002 water level has remained within 5 feet of conservation level including flood events in 2005, 2007, and 2010 (Figure 1).

Stamford Reservoir was eutrophic based on Carlson's Trophic State Index for Chlorophyll-a (TSI Chl-a) with a mean TSI chl-a of 53.04 (Texas Commission on Environmental Quality 2008). Boat access consisted of two public boat ramps. Bank-fishing access was restricted to the area around the boat ramps and a pay-for-fishing dock that operated sporadically from 2008 - present. Other descriptive characteristics for Stamford Reservoir are in Table 1.

Management History

Previous management strategies and actions: Management strategies and actions from the previous survey report (Dumont and Farooqi 2007) included:

1. Publicize the white bass fishery in Stamford Reservoir.

Action: An article highlighting white bass angling opportunities in Stamford Reservoir was published in several local newspapers in April, 2007.

Harvest regulation history: Sport fishes in Stamford Reservoir have always been managed with statewide regulations (Table 2).

Stocking history: Florida largemouth bass were introduced in 1977, and the most recent stocking was in 2002. Palmetto bass were stocked in the late 1970s and early 1980s. Walleye were stocked in the 1970s. Blue catfish were introduced in 1974 and a supplemental stocking occurred in 1991. Channel catfish were last stocked in 2003. A complete stocking history can be found in Table 3.

Vegetation/habitat management history: There has been no substantial vegetation or habitat management in Stamford Reservoir.

Water Transfer: Stamford Reservoir is primarily used for municipal water supply, recreation, and to a lesser extent, flood control. There is a pump station adjacent to the reservoir on California Creek that is capable of pumping water from the creek into the reservoir. The City of Stamford's water management plan allows pumping when the reservoir is 2 ft or greater below conservation elevation with no more than 10,000 ac/ft of water pumped annually. No water has been pumped since the station was constructed in 2000.

METHODS

Fishes were collected by electrofishing (1.0 hour at 12 5-minute stations), daytime bass-only electrofishing (1.3 hours at 16 5-minute stations), gill netting (5 net nights at 5 stations), trap nets (10 net nights at 10 stations), and low-frequency electrofishing (1.0 hour at 20 3-minute stations). Catch per unit effort (CPUE) for electrofishing and low-frequency electrofishing was recorded as the number of fish caught per hour (fish/h) of actual electrofishing and, for gill and trap nets, as the number of fish per net night (fish/nn). A shoreline habitat survey was conducted in 2010 by assessing substrate at 69 randomly selected shoreline locations and identifying habitat type at 118 randomly selected shoreline locations. Substrate was categorized using the Wentworth scale as soft (sand, silt, and clays), pebble (particle size < 2.5-in diameter), cobble (particle size 2.5-10-in diameter), or boulder (> 10-in diameter) (Wentworth 1922). An offshore habitat survey was conducted by identifying habitat type at 161 randomly selected locations in the reservoir. Each sampling point was categorized by each substrate or habitat type present (i.e. more than one substrate or habitat type could be assigned to each point). Confidence intervals were calculated for percent occurrence of each habitat type using the percentile method from 1,000 resamples, with replacement, of the empirical data. Genetic composition was measured from 35 largemouth bass. Confidence intervals for percent Florida alleles were calculated using the percentile method from 1,000 resamples, with replacement, of the empirical data. Ages of 33 blue catfish < 16 in were determined by counting annular growth rings on pectoral fin ray sections. All survey sites were randomly selected and all surveys were conducted according to Fishery Assessment Procedures (TPWD, Inland Fisheries Division, unpublished manual revised 2011).

Sampling statistics (CPUE for various length categories), structural indices (Proportional Size Distribution [PSD]), and condition indices (relative weight [W_t]) were calculated for target fishes according to Anderson and Neumann (1996). Size structure index terminology was modified according to Guy et al. (2007). Index of vulnerability (IOV) was calculated for gizzard shad (DiCenzo et al. 1996). Standard error (SE) was calculated for IOV and PSD estimates and relative standard error (RSE) was calculated for all CPUE statistics. Source for water level data was the United States Geological Survey website (http://waterdata.usgs.gov/tx/nwis/uv/?site_no=08084500&PARAMeter_cd=00062,72020,00054).

RESULTS AND DISCUSSION

Habitat: Shoreline habitat in Stamford Reservoir consisted primarily of dead brush (64% of sites) and bulrush (47% of sites). Substrate was predominantly soft (37% of sites). Percent occurrence of each habitat type and substrate is displayed in Figure 2. Offshore habitat consisted primarily of open water (73% of sites), bulrush (16% of sites), and dead brush (14% of sites). A complete listing of offshore habitat types and percent occurrence is shown in Figure 3.

Prey species: Electrofishing CPUE was 1,203.0/h for gizzard shad, and 63.0/h for bluegill. Gizzard shad IOV was 90 in 2010; similar to measurements in 2008 (85) and 2006 (98). Gizzard shad CPUE in 2010 increased from 2008 (241.5/h) and 2006 (827.5/h) surveys (Figure 4). Bluegill CPUE increased from 2008 (33.8/h) but decreased from 2006 (149.5/h). The bluegill population was dominated by individuals < 6 in and should provide excellent forage for sport fishes (Figure 5).

Blue catfish: Gill net CPUE was 3.0/nn in 2011 (Figure 6). This was similar to 2007 (1.8/nn) and 2002 (3.8/nn). Size structure in 2011 (PSD = 64) was similar to 2007 (PSD = 67) and shifted toward larger fish than in 2002 (PSD = 5). Approximately 73% of blue catfish sampled with gill nets in 2011 were legal-harvest size (≥ 12 in) and nearly half were 20 in or greater. Low-frequency electrofishing CPUE was 209.0/hr in 2011. Range of lengths was similar between low-frequency electrofishing and gill netting. However, increased sample size with low-frequency electrofishing sample revealed modal lengths at 7, 16, and 19 in that were not evident in gill net data (Figure 7). Approximately 75% of fish sampled with low-frequency electrofishing were legal-harvest length and nearly 13% were 20 in or greater. Blue catfish generally reached legal length at age 5 (Figure 8).

Channel catfish: Gill net CPUE was similar in 2011 (1.6/nn), 2007 (1.6/nn), and 2002 (0.6/nn) (Figure 9). All fish in the 2011 sample were 12 in or longer. Size structure of sampled fish was similar in 2011 (PSD = 50), 2007 (PSD = 50), and 2002 (PSD = 33).

White bass: Gill net catch rate of white bass was 14.4/nn in 2011 (Figure 10). This was increased from 2007 (8.4/nn) and similar to 2002 (16.0/nn). Nearly all white bass sampled in 2011 were available to anglers for harvest (≥ 10 in). Mean length of white bass in the 2011 sample was nearly 14 in. Both abundance and size structure suggest excellent white bass angling opportunities exist.

Largemouth bass: Total electrofishing CPUE was 38.0/h in 2010. This was similar to 2008 (27.8/h) but decreased from 2006 (115.5/h). Electrofishing CPUE of stock-length bass (≥ 8 in) was 16.0/h in 2010 and decreased from 2008 (24.0/h) and 2006 (44.0/h) measurements (Figure 11). Size structure of largemouth bass was shifted toward larger fish in 2010 (PSD-P = 50) compared to 2008 (PSD-P = 34) and 2006 (PSD-P = 33) (Figure 11). Daytime electrofishing was conducted two days after the standard survey to increase sample size. Daytime electrofishing CPUE was 48.0/h and stock-length CPUE was 38.3/h (Figure 12). Several fish > 18 in were sampled in 2010. Genetic analysis revealed 45% Florida largemouth bass alleles but no Florida genotypes. Florida alleles were similar in 2006 and 2010 (Table 4).

White crappie: Trap net catch rate of white crappie was 30.4/nn in 2008 and was decreased from 2006 (41.2/nn). However, CPUE of legal-length fish (≥ 10 in) was greater in 2008 (10.9/nn) than 2006 (5.9/nn). A strong year class in 2006 resulted in high CPUE of sub-legal fish in 2006 and likely attributed to greater CPUE of legal-length fish in 2008. Size structure of white crappie in 2008 indicated that reproduction and recruitment to legal length did not limit the population (Figure 13).

Fisheries management plan for Stamford Reservoir, Texas

Prepared – July 2011

ISSUE 1: Fish populations in Stamford Reservoir have been affected by dynamic water levels.

MANAGEMENT STRATEGY

1. Create watershed map for Stamford Reservoir and determine if watershed characteristics influence water collection and water quality in the reservoir.
2. Make watershed-level management recommendations to improve water collection in Stamford Reservoir.

ISSUE 2: The white bass population continues to thrive in Stamford Reservoir, but historical and anecdotal evidence suggests that fishing pressure is limited.

MANAGEMENT STRATEGY

1. Promote the white bass population in local newspaper articles and press releases.

ISSUE 3: Quantitative data pertaining to popularity, catch, and harvest of sport fishes do not exist for Stamford Reservoir.

MANAGEMENT STRATEGY

1. Conduct a 12-month roving creel survey beginning 1 September 2012 and ending 31 August 2013.

ISSUE 4: Many invasive species threaten aquatic habitats and organisms in Texas and can adversely affect the state ecologically, environmentally, and economically. For example, zebra mussels (*Dreissena polymorpha*) can multiply rapidly and attach themselves to any available hard structure, restricting water flow in pipes, fouling swimming beaches and plugging engine cooling systems. Giant Salvinia (*Salvinia molesta*) and other invasive vegetation species can form dense mats, interfering with recreational activities like fishing, boating, skiing and swimming. The financial costs of controlling and/or eradicating these types of invasive species are significant. Additionally, the potential for invasive species to spread to other river drainages and reservoirs via watercraft and other means is a serious threat to all public waters of the state.

MANAGEMENT STRATEGIES

1. Cooperate with the controlling authority to post appropriate signage at access points around the reservoir.
2. Contact and educate marina owners about invasive species, and provide them with posters, literature, etc... so that they can in turn educate their customers.
3. Educate the public about invasive species through the use of media and the internet.
4. Make a speaking point about invasive species when presenting to constituent and user groups.
5. Keep track of (i.e., map) existing and future inter-basin water transfers to facilitate potential invasive species responses.

SAMPLING SCHEDULE JUSTIFICATION:

Continued biennial electrofishing surveys will provide further trend data on the largemouth bass population and would be beneficial for the long-term management of largemouth bass in this reservoir. A four-year rotation on gill nets and trap nets should be adequate to monitor channel catfish, white bass, and white crappie populations. Low-frequency electrofishing will be used in 2014 to further assess the blue catfish population. A creel survey will be conducted in 2012/2013 to quantify angling metrics. The sampling schedule is in Table 5.

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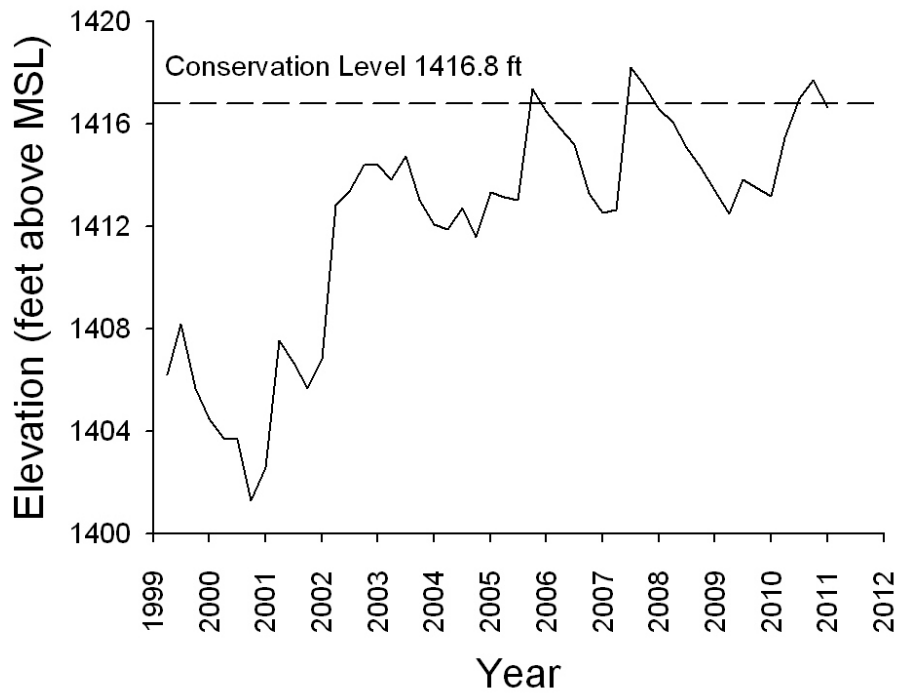


Figure 1. Quarterly water level elevations in feet above mean sea level (MSL) recorded for Stamford Reservoir, Texas, 1999-2011.

Table 1. Characteristics of Stamford Reservoir, Texas.

Characteristic	Description
Year constructed	1953
Controlling authority	City of Stamford
County	Haskell
Reservoir type	Tributary, Brazos River Basin
Shoreline Development Index	6.23
Watershed area	236,459 acres
Reservoir-to-Watershed percentage	1.80%

Table 2. Harvest regulations for Stamford Reservoir, Texas.

Species	Bag Limit	Minimum – Maximum Length (in)
Catfish: channel and blue catfish, their hybrids and subspecies	25 (in any combination)	12 – No Limit
Catfish, flathead	5	18 – No Limit
Bass, white	25	10 – No limit
Bass, largemouth	5	14 – No Limit
Crappie: white and black crappie, their hybrids and subspecies	25 (in any combination)	10 – No Limit

Table 3. Stocking history in Stamford Reservoir, Texas from 1971 - 2003. Size categories are: FRY < 1 in and FGL = 1-3 in.

Species	Year	Number	Size
Blue catfish	1974	25,300	FGL
	1977	41,250	FGL
	1991	52,000	FGL
	Total	118,550	
Channel catfish	1971	2,250	FGL
	1973	13,000	FGL
	1974	1,500	FGL
	2003	149,712	FGL
	Total	166,462	
Florida largemouth bass	1977	60,720	FGL
	1978	116,200	FGL
	1985	83,435	FGL
	1986	71,500	FGL
	1996	260,933	FGL
	1998	262,295	FGL
	2001	100,735	FGL
	2002	263,514	FGL
	Total	1,219,332	
Palmetto bass (striped X white bass hybrid)	1977	23,500	FGL
	1979	46,900	FGL
	1982	46,016	FGL
	Total	116,416	
Walleye	1976	1,000,000	FRY
	1977	1,227,000	FRY
	1978	1,150,000	FRY
	Total	3,377,000	

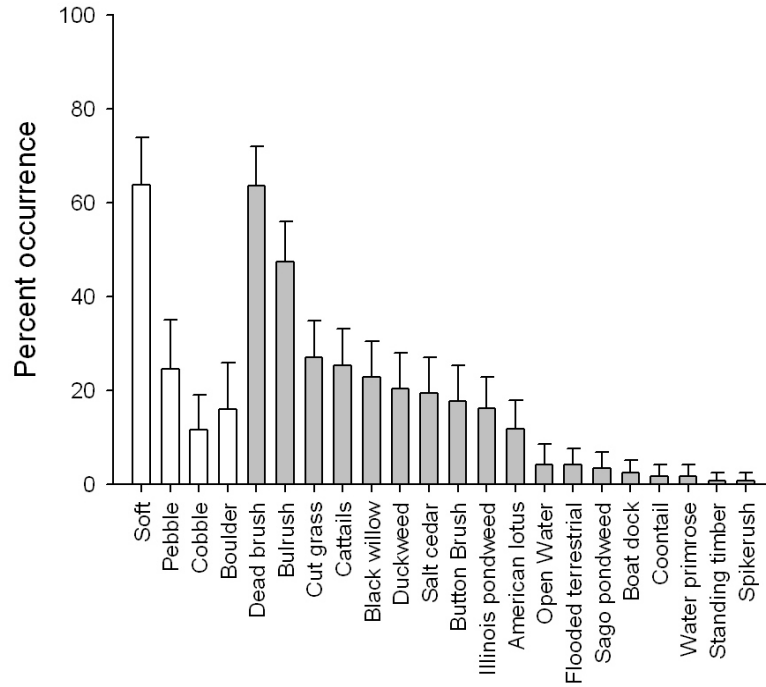


Figure 2. Percent occurrence of substrate (empty bars) at 69 randomly selected shoreline locations and habitat type (filled bars) at 118 randomly selected shoreline locations in Stamford Reservoir, Texas, 2010. Error bars represent 95% confidence intervals calculated from 1,000 resamples of the empirical data.

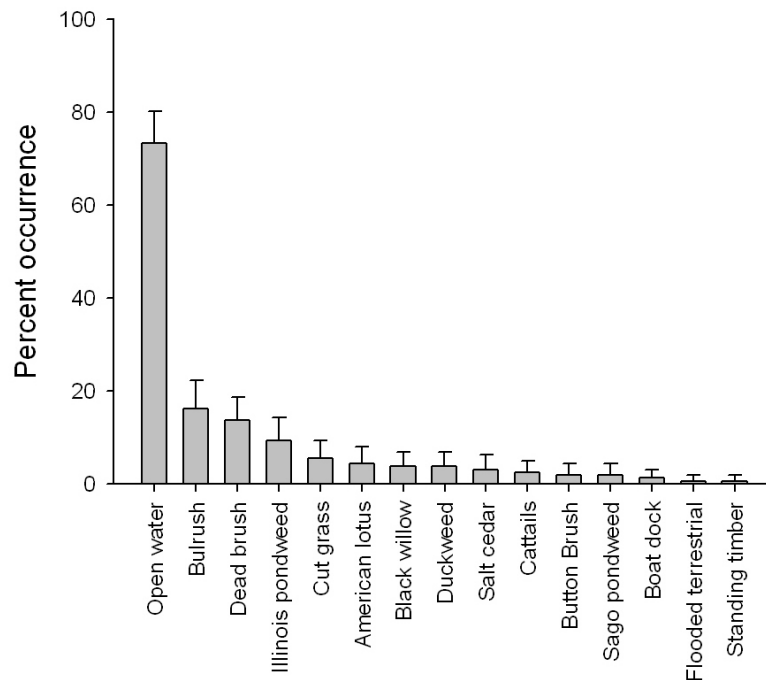
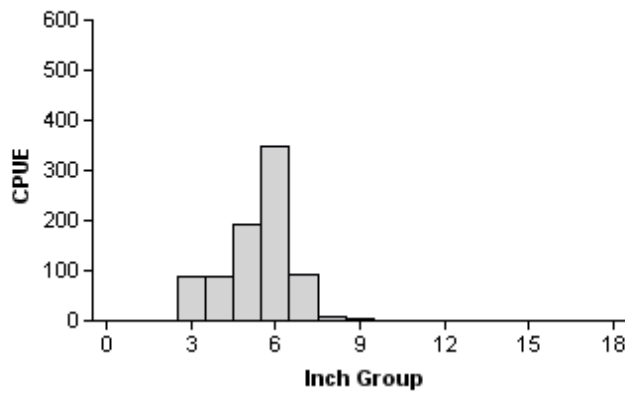


Figure 3. Percent occurrence of habitat type at 161 randomly selected offshore locations in Stamford Reservoir, Texas, 2010. Error bars represent 95% confidence intervals calculated from 1,000 resamples of the empirical data.

Gizzard Shad

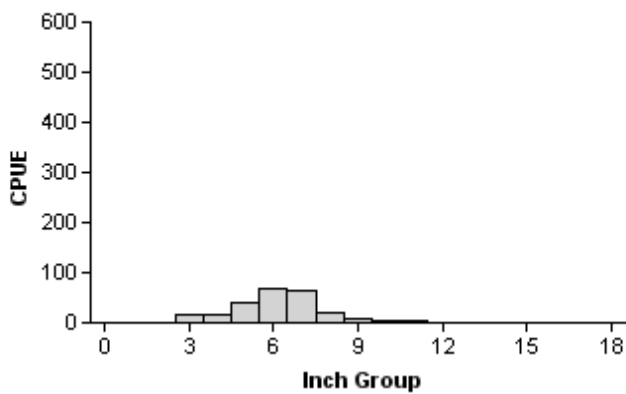
2006

Effort = 2.0
 Total CPUE = 827.5 (12; 1,655)
 = 98 (1)
 IOV =



2008

Effort = 1.3
 Total CPUE = 241.5 (17; 322)
 IOV = 85 (3)



2010

Effort = 1.0
 Total CPUE = 1,203.0 (25; 1,203)
 IOV = 90 (4)

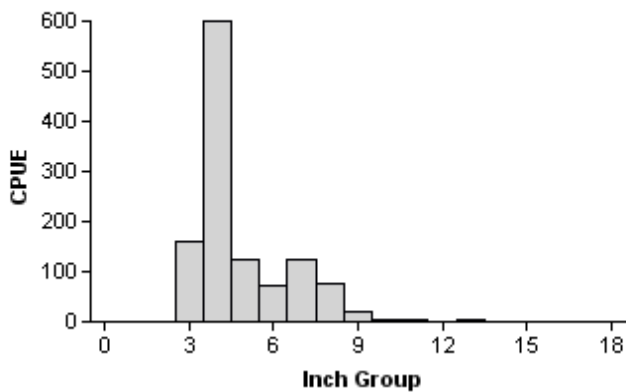
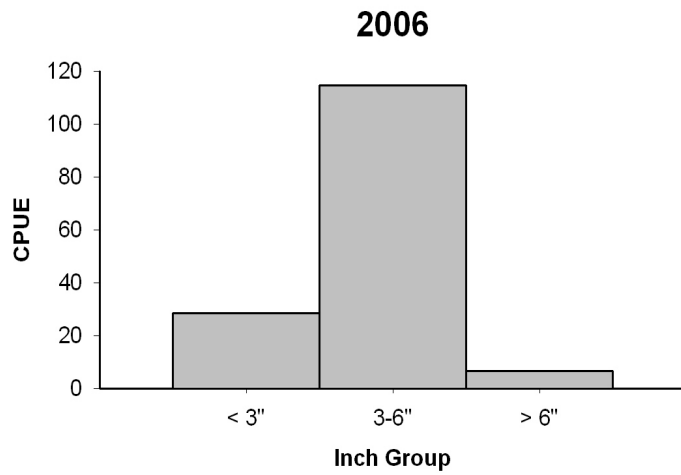
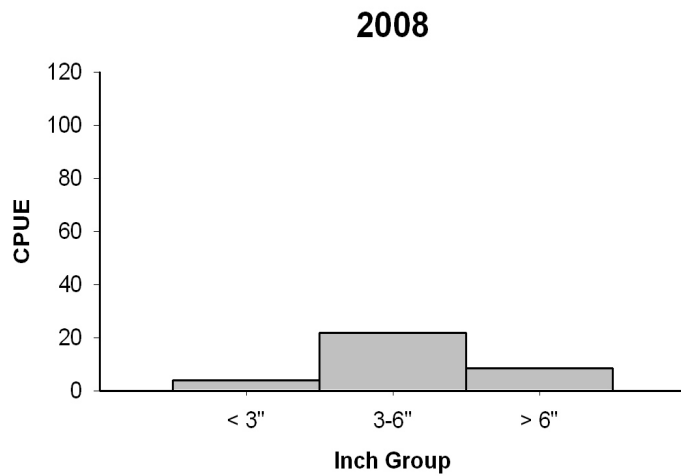


Figure 4. Number of gizzard shad caught per hour (CPUE) and population indices (RSE and N for CPUE and SE for size structure are in parentheses) for fall electrofishing surveys, Stamford Reservoir, Texas, 2006, 2008, and 2010.

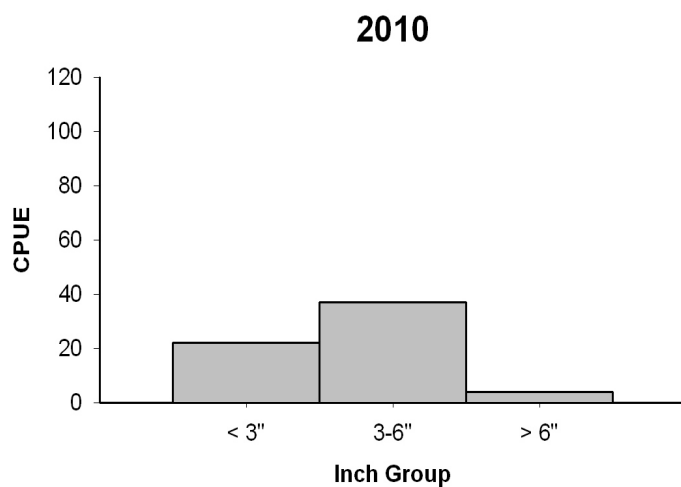
Bluegill



Effort = 2.0
 Total CPUE = 149.5 (16; 299)
 Stock CPUE = 121.0 (17; 242)
 PSD = 5 (2)



Effort = 1.3
 Total CPUE = 33.8 (31; 45)
 Stock CPUE = 30.0 (33; 40)
 PSD = 28 (12)

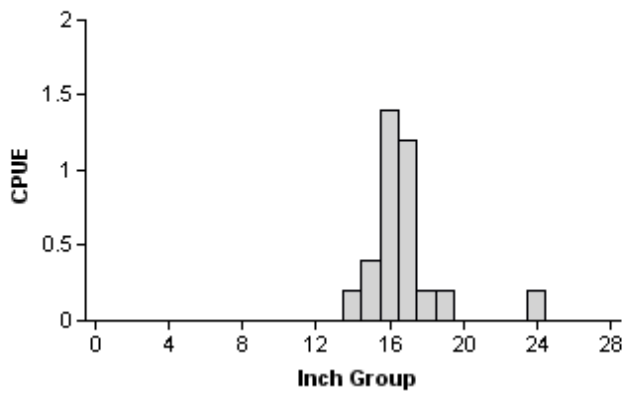


Effort = 1.0
 Total CPUE = 63.0 (32; 63)
 Stock CPUE = 41.0 (26; 41)
 PSD = 10 (4)

Figure 5. Number of bluegill caught per hour (CPUE) and population indices (RSE and N for CPUE and SE for size structure are in parentheses) for fall electrofishing surveys, Stamford Reservoir, Texas, 2006, 2008, and 2010.

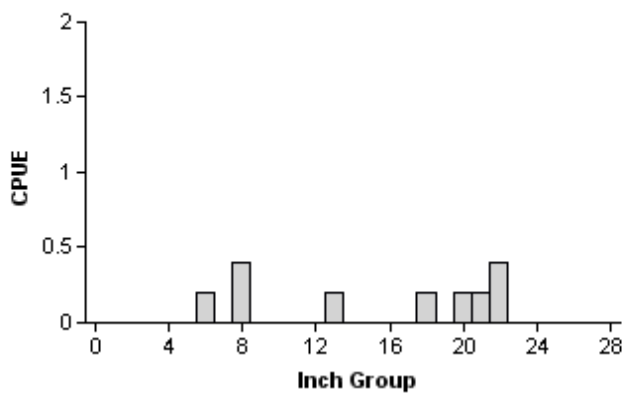
Blue catfish

2002



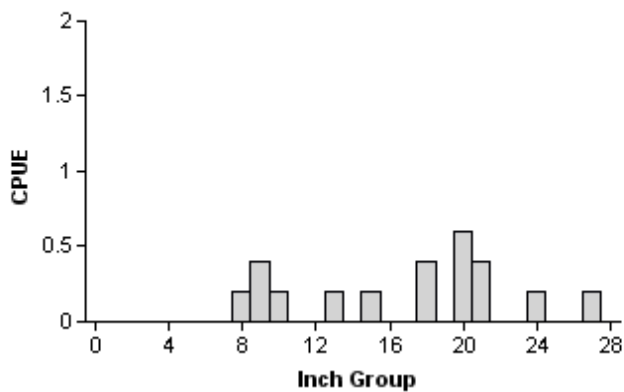
Effort = 5.0
 Total CPUE = 3.8 (36; 19)
 CPUE-12 = 3.8 (36; 19)
 CPUE-20 = 0.2 (100; 1)
 PSD = 5 (4)

2007



Effort = 5.0
 Total CPUE = 1.8 (32; 9)
 CPUE-12 = 1.2 (49; 6)
 CPUE-20 = 0.8 (61; 4)
 PSD = 67 (18)

2011



Effort = 5.0
 Total CPUE = 3.0 (38; 15)
 CPUE-12 = 2.2 (46; 11)
 CPUE-20 = 1.4 (43; 7)
 PSD = 64 (10)

Figure 6. Number of blue catfish caught per net night (CPUE) and population indices (RSE and N for CPUE and SE for size structure are in parentheses) for spring gill net surveys Stamford Reservoir, Texas, 2002, 2007, and 2011.

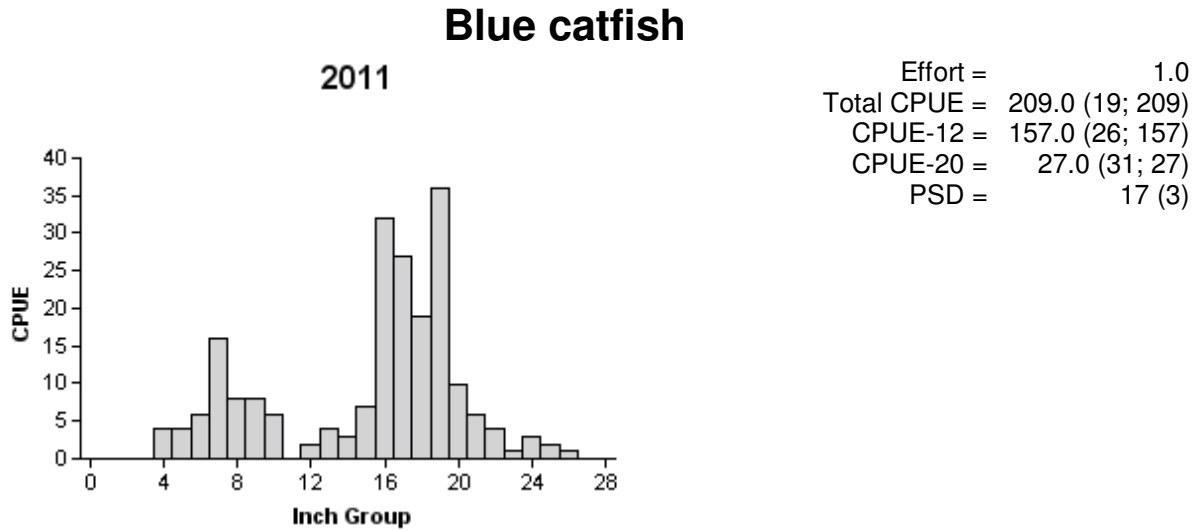


Figure 7. Number of blue catfish caught per hour of spring low-frequency electrofishing, Stamford Reservoir, Texas, 2011.

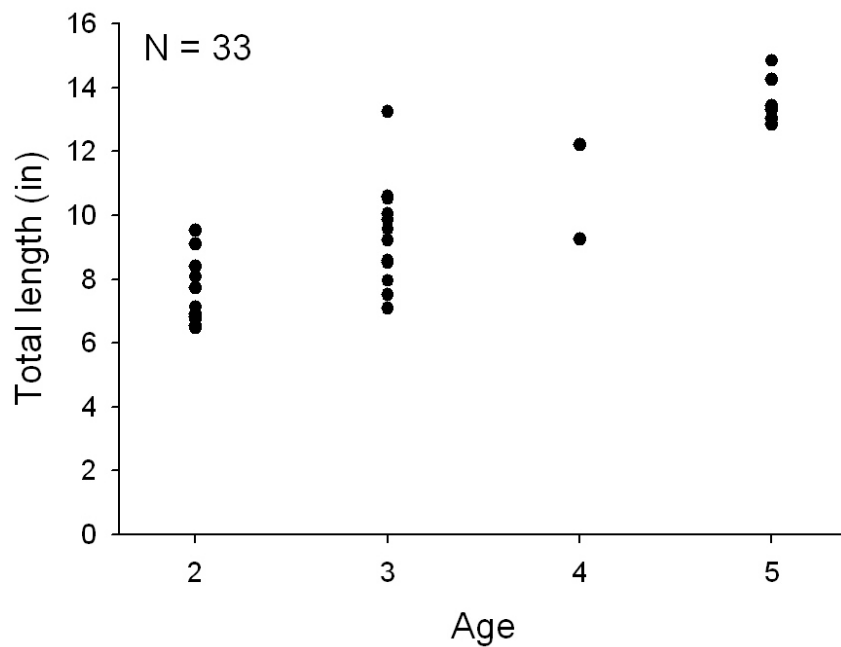
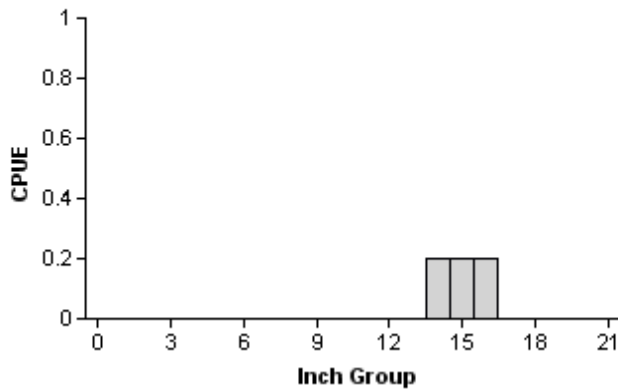


Figure 8. Length at age for blue catfish from Stamford Reservoir, 2011.

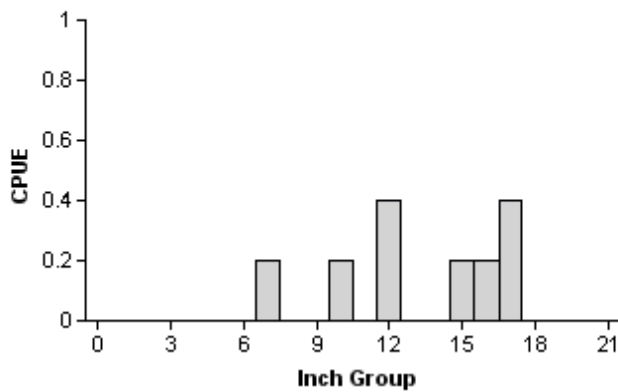
Channel catfish

2002



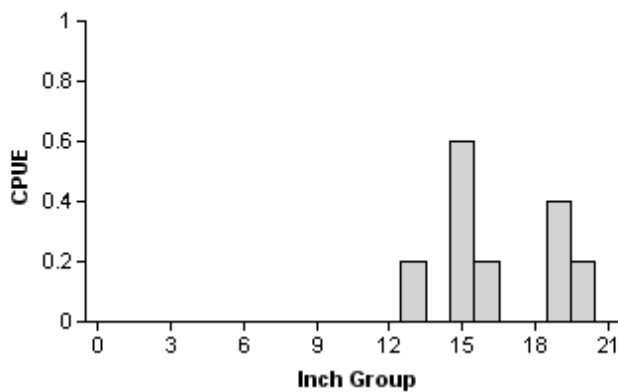
Effort = 5.0
 Total CPUE = 0.6 (41; 3)
 CPUE-12 = 0.6 (41; 3)
 PSD = 33 (30)

2007



Effort = 5.0
 Total CPUE = 1.6 (38; 8)
 CPUE-12 = 1.2 (49; 6)
 PSD = 50 (35)

2011

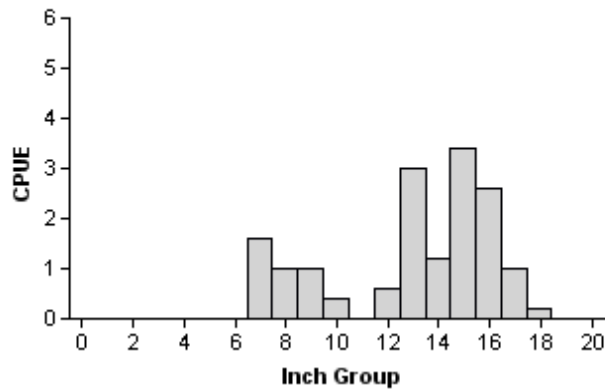


Effort = 5.0
 Total CPUE = 1.6 (25; 8)
 CPUE-12 = 1.6 (25; 8)
 PSD = 50 (20)

Figure 9. Number of channel catfish caught per net night (CPUE) and population indices (RSE and N for CPUE and SE for size structure are in parentheses) for spring gill net surveys, Stamford Reservoir, Texas, 2002, 2007, and 2011.

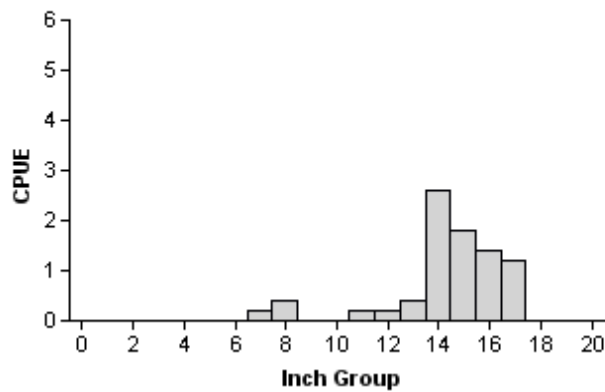
White bass

2002



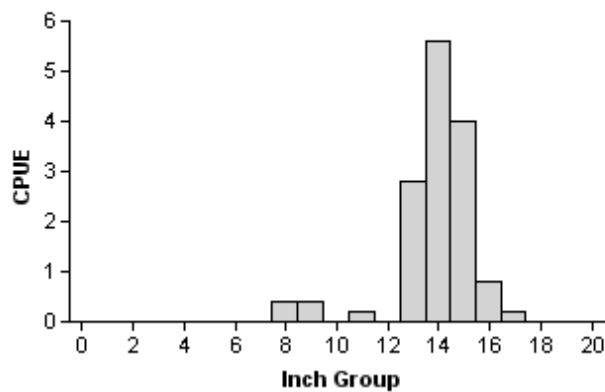
Effort = 5.0
 Total CPUE = 16.0 (27; 80)
 CPUE-10 = 12.4 (34; 62)
 PSD-P = 75 (7)

2007



Effort = 5.0
 Total CPUE = 8.4 (36; 42)
 CPUE-10 = 7.8 (36; 39)
 PSD-P = 90 (5)

2011

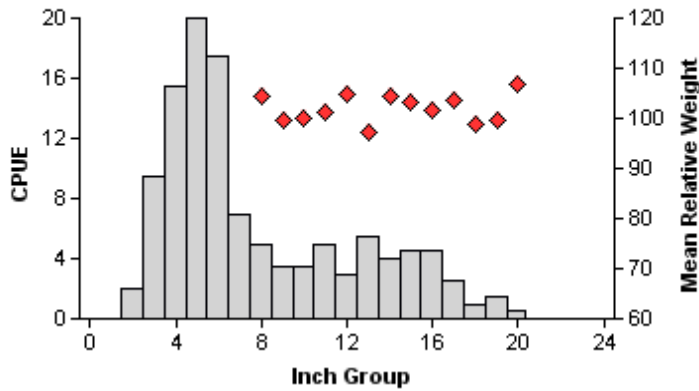


Effort = 5.0
 Total CPUE = 14.4 (33; 72)
 CPUE-10 = 13.6 (39; 68)
 PSD-P = 93 (5)

Figure 10. Number of white bass caught per net night (CPUE) and population indices (RSE and N for CPUE and SE for size structure are in parentheses) for spring gill net surveys, Stamford Reservoir, Texas, 2002, 2007, and 2011.

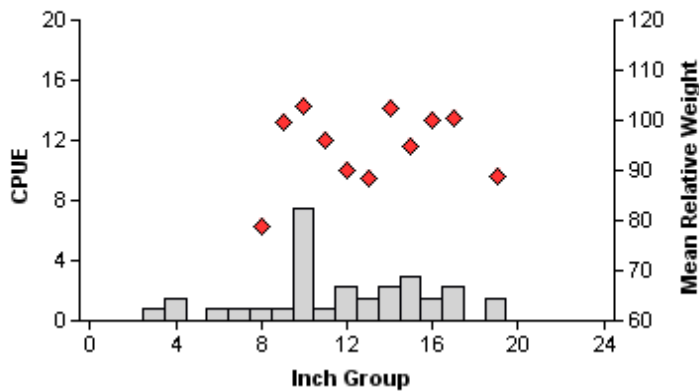
Largemouth Bass

2006



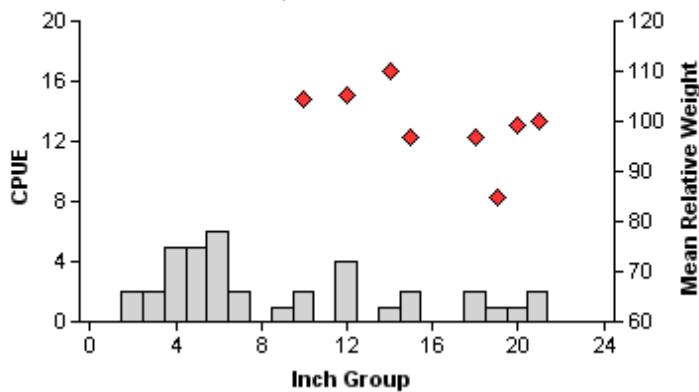
Effort = 2.0
 Total CPUE = 115.5 (15; 231)
 Stock CPUE = 44.0 (16; 88)
 CPUE-14 = 18.5 (21; 37)
 PSD = 61 (8)
 PSD-P = 33 (7)

2008



Effort = 1.3
 Total CPUE = 27.8 (22; 37)
 Stock CPUE = 24.0 (23; 32)
 CPUE-14 = 10.5 (34; 14)
 PSD = 59 (7)
 PSD-P = 34 (9)

2010



Effort = 1.0
 Total CPUE = 38.0 (21; 38)
 Stock CPUE = 16.0 (41; 16)
 CPUE-14 = 9.0 (52; 9)
 PSD = 81 (3)
 PSD-P = 50 (19)

Figure 11. Number of largemouth bass caught per hour (CPUE, bars), mean relative weight (diamonds), and population indices (RSE and N for CPUE and SE for size structure are in parentheses) for fall electrofishing surveys, Stamford Reservoir, Texas, 2006, 2008, and 2010.

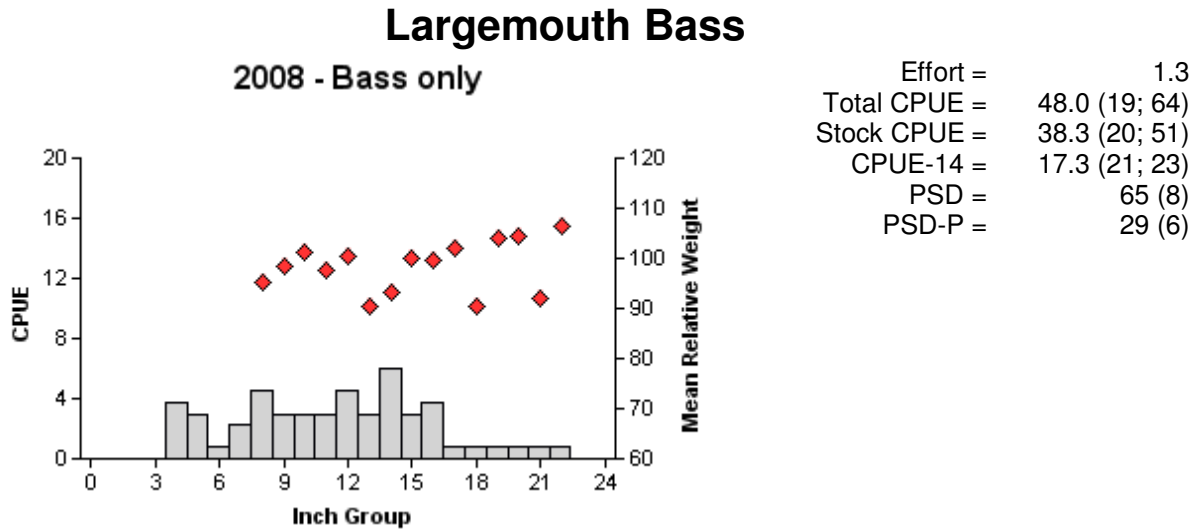


Figure 12. Number of largemouth bass caught per hour (CPUE, bars), mean relative weight (diamonds), and population indices (RSE and N for CPUE and SE for size structure are in parentheses) for fall, daytime, bass-only electrofishing survey, Stamford Reservoir, Texas, 2008.

Table 4. Genetic composition of largemouth bass in Stamford Reservoir, Texas, 2002, 2006, and 2010. Genetic composition from 2002 and 2006 were analyzed using electrophoresis techniques and can not be directly compared to 2010 genetic analyses.

	Florida alleles		Florida genotype		Northern genotype	
	% observed	95% CI	% observed	95% CI	% observed	95% CI
2002	34%		14%		40%	
2006	39%	29% - 49%	0%		20%	7% - 37%
2010	45%	37% - 53%	0%		9%	0% - 20%

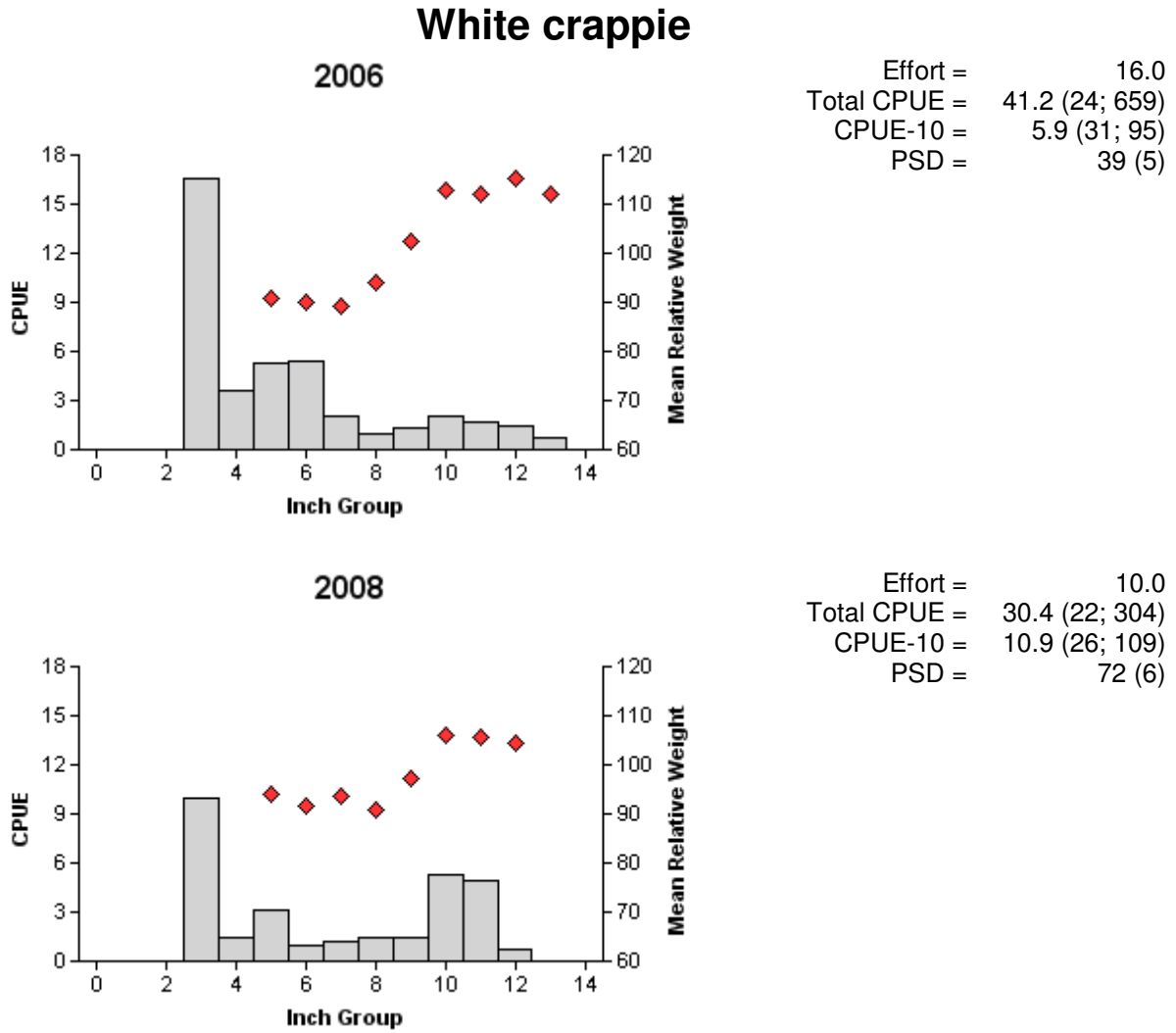


Figure 13. Number of white crappie caught per net night (CPUE, bars), mean relative weight (diamonds), and population indices (RSE and N for CPUE and SE for size structure are in parentheses) for fall trap net surveys, Stamford Reservoir, Texas, 2006 and 2008.

Table 5. Proposed sampling schedule for Stamford Reservoir, Texas. Low-frequency electrofishing is conducted in summer, electrofishing and trap net surveys are conducted in fall, and gill net surveys are conducted in spring. The creel survey will be conducted for 12 months. Standard surveys are denoted by S and additional surveys are denoted with A.

Survey year	Electrofisher	Trap net	Gill net	Low-frequency electrofisher	Creel	Vegetation survey	Access survey	Report
Summer 2011 – Spring 2012								
Summer 2012 – Spring 2013	A				A			
Summer 2013 – Spring 2014					A			
Summer 2014 – Spring 2015	S	S	S	A		S	S	S

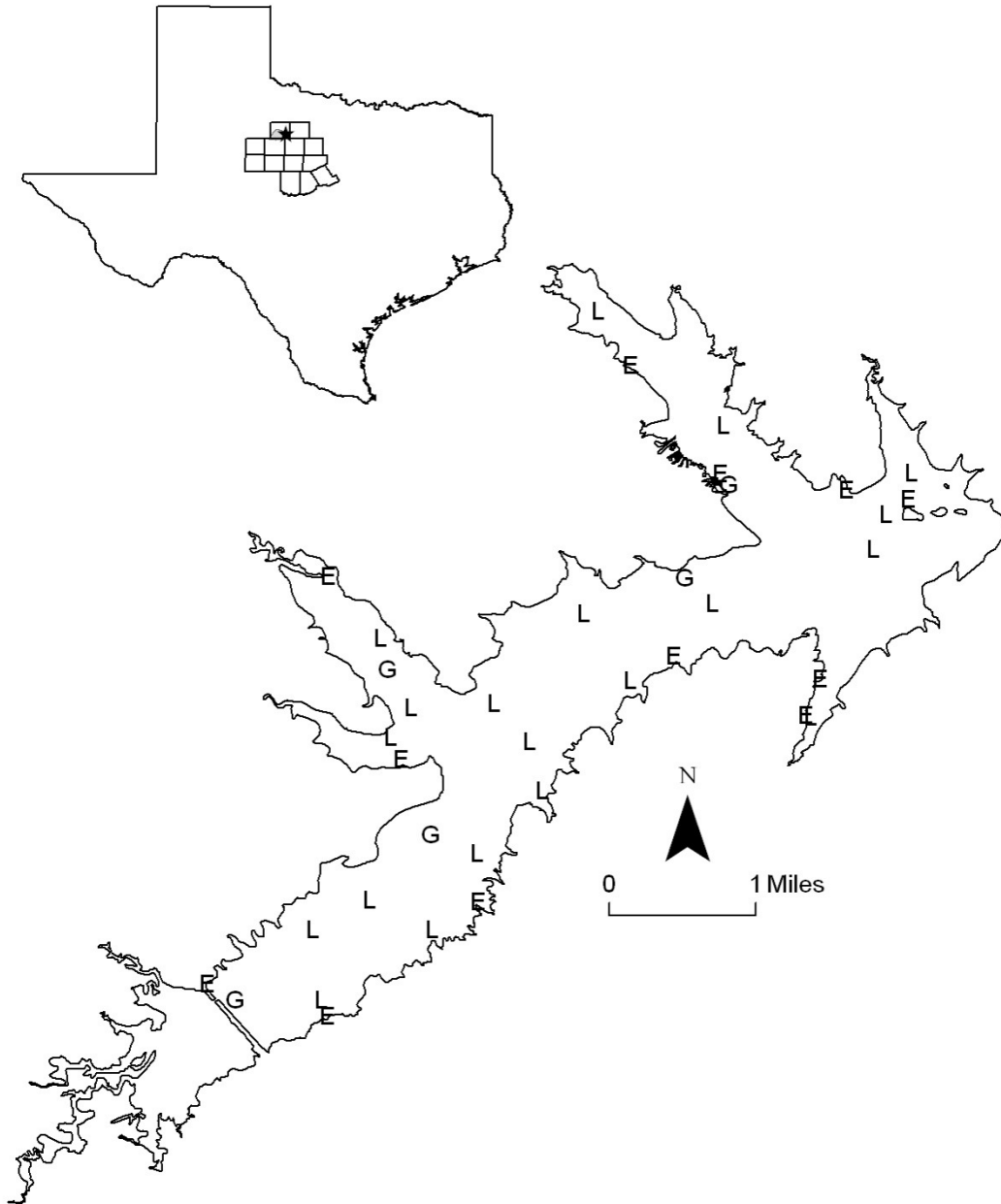
APPENDIX A

Number (N) and catch rate (CPUE) of all target species collected from all gear types from Stamford Reservoir, Texas, 2010-2011.

Species	Electrofisher		Gill nets		Low frequency electrofisher	
	N	CPUE	N	CPUE	N	CPUE
Gizzard shad	1,203	1,203.0				
Blue catfish			15	3.0	209	209.0
Channel catfish			8	1.6		
White bass			72	14.4		
Green sunfish	2	2.0				
Bluegill	63	63.0				
Longear sunfish	10	10.0				
Redear sunfish	1	1.0				
Largemouth bass	38	38.0				

APPENDIX B

Location of standard sampling sites, Stamford Reservoir, Texas, 2010-2011. Locations of electrofishing sites (E), gill netting sites (G), and low-frequency electrofishing sites (L) are indicated on the map. Water level was within one foot of conservation level at time of sampling.



APPENDIX C

Type, location, size, capacity, American Disability Act (ADA) accessibility, and needed improvements of boat ramps (BR), fishing piers (FP), and jetties (J) at Stamford Reservoir, Texas, 2010. Latitude and Longitude are reported as decimal degrees.

Facility Type	Location	Latitude	Longitude	Fee	# of BR Lanes	BR Parking Capacity	ADA Accessible (FP or J)	Needed Improvements
BR	Stamford Marina	33.04636	-99.60925	N	4	20	NA	
BR	Anchor Marina	33.06830	-99.59980	N	2	10	NA	
FP	Anchor Marina Crappie House	33.06853	-99.59930	Y	NA	NA	Y	