

Lake Poinsett Site Description

Location

Water designation number (WDN)	32-0001-00
Legal description	T112N-R52W-Sec.3-6; T113N-R52W-Sec.14-16,20-23,26-34
County (ies)	Hamlin/Brookings
Location from nearest town	7 miles west of Estelline

Survey Dates and Sampling Information

Survey dates	June 2, 2010 (EF-SMB) July 20-22, 2010 (FN, GN) September 1, 2010 (EF-WAE)
Spring electrofishing-SMB (min)	61
Gill net sets (n)	6
Frame net sets (n)	18
Fall electrofishing (min)	60

Morphometry (Figure 1)

Watershed area (acres)	292,197
Surface area (acres)	7,903
Maximum depth (ft)	22
Mean depth (ft)	17

Ownership and Public Access

Lake Poinsett is a meandered lake owned by the State of South Dakota and the fishery is managed by the SDGFP. The SDGFP maintains four public access sites on Lake Poinsett including one in a State Recreation Area (Figure 1). Ownership of the Lake Poinsett shoreline includes the State of South Dakota and private ownership. The shoreline of Lake Poinsett is highly developed and supports many cabins and homes.

Watershed and Land Use

The Lake Poinsett watershed is comprised of a mix of cropland (70%), pasture or grassland (25%), and wooded shelterbelts (5%).

Water Level Observations

The OHWM elevation for Lake Poinsett is 1651.5 fmsl and the outlet elevation is 1650.5 fmsl. Lake Poinsett experienced a "spring rise" of 3.6 ft during the spring of 2010. On May 19 and October 14, 2010 the elevations of Lake Poinsett were 1655.0 and 1654.5 fmsl, respectively.

Aquatic Nuisance Species Monitoring

Plant Survey

Lake Poinsett is a windswept basin and traditionally little emergent or submersed aquatic vegetation has been present. However, in recent years Lake Poinsett has become more vegetated. Sago pondweed has become common and often forms a dense ring around much of the shoreline. In 2010, sago pondweed was the only aquatic plant species encountered.

Macro-Invertebrate/Mussel Survey

No aquatic nuisance macro-invertebrate or mussel species were sampled in 2010.

Fish Community Survey

Common carp was the only aquatic nuisance fish species captured during the 2010 survey.

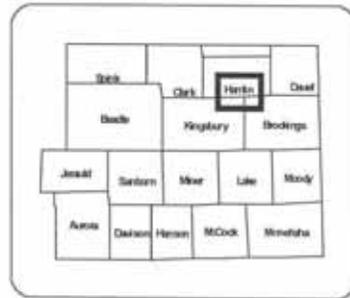
Fish Management Information

Primary species	smallmouth bass, walleye, yellow perch
Other species	bigmouth buffalo, black bullhead, black crappie, bluegill, channel catfish, common carp, emerald shiner, green sunfish, northern pike, orangespotted sunfish, shorthead redhorse, spottail shiner, white bass, white crappie, white sucker, yellow bullhead
Lake-specific regulations	NE Panfish Management Area: 10 daily; 50 possession Walleye: minimum length 15"
Management classification	warm-water semi permanent
Fish Consumption Advisories	none

Lake Poinsett - Hamlin County

Map creation: October, 2002 Sonar Survey: June, 2001
Shoreline: Landsat7, August, 2000

Lake Area: 7,903 acres Maximum Depth: 22 ft.
Mean Depth: 16.5 ft. Shoreline Development Index: 1.3



South Dakota Game, Fish, and Parks
SDSU Wildlife and Fisheries Sciences



0 0.5 1 Miles

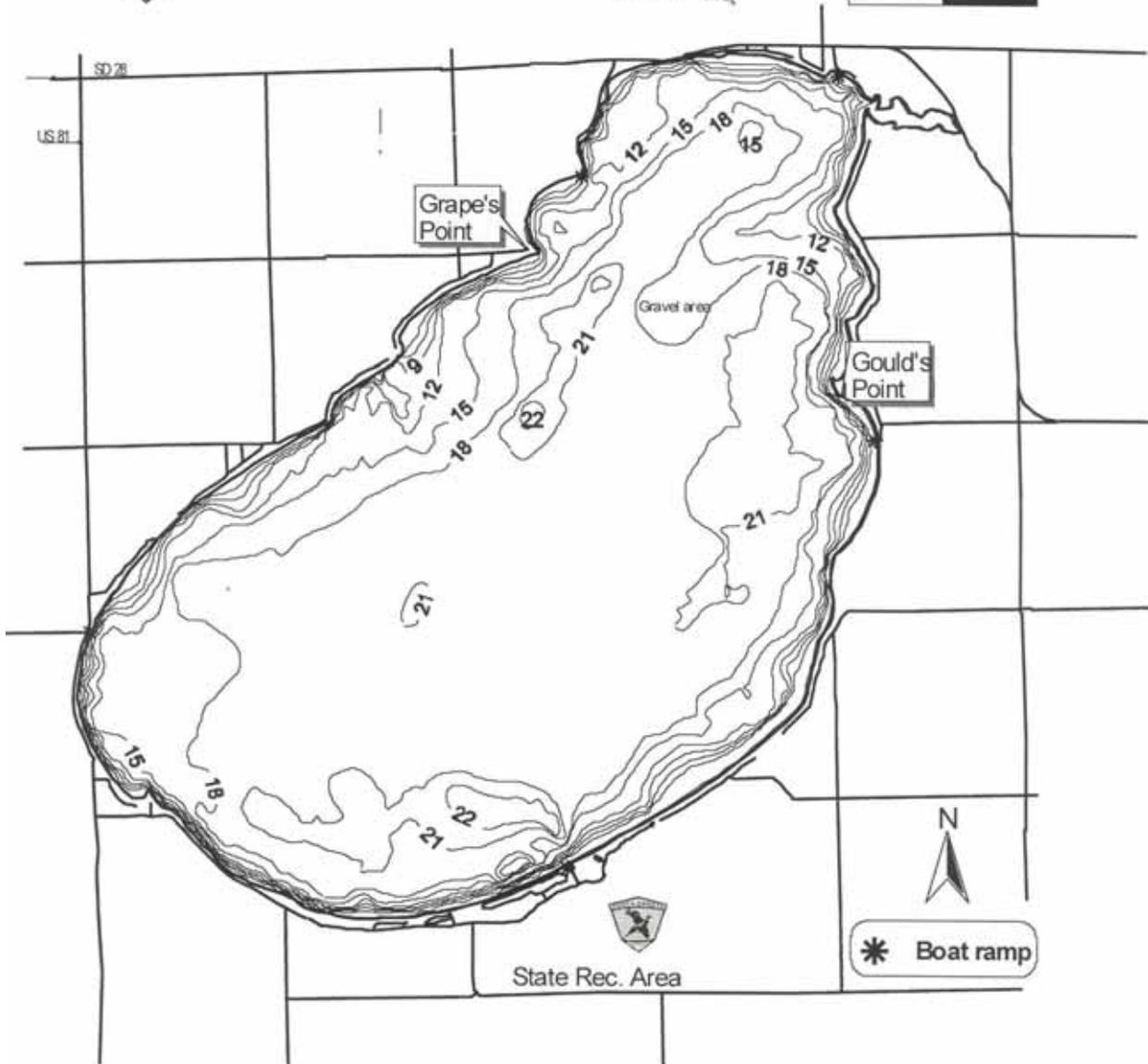


Figure 1. Map depicting depth contours of Lake Poinsett, Hamlin County, South Dakota.

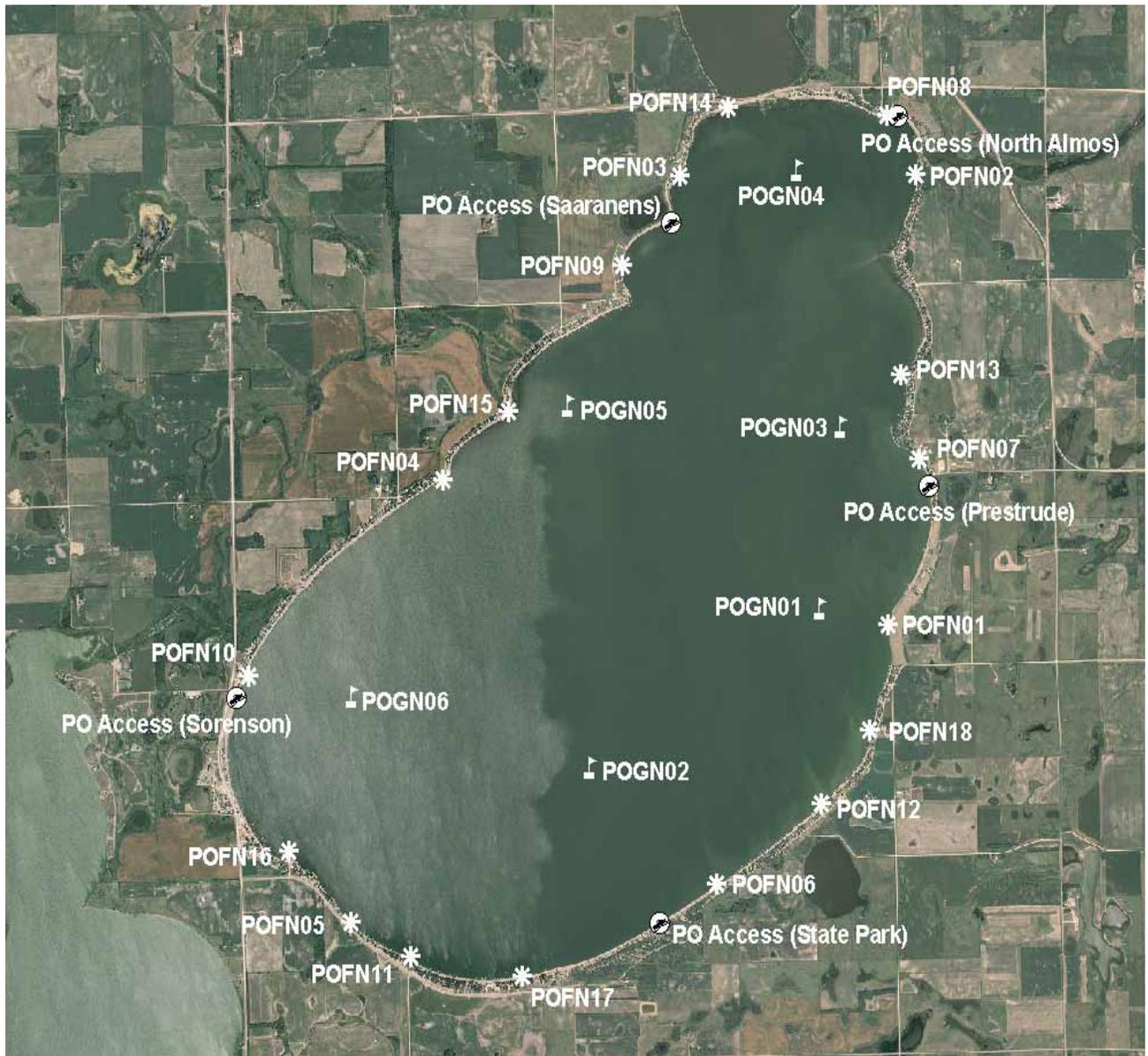


Figure 2. Map depicting access sites and standardized net locations for Lake Poinsett, Hamlin County, South Dakota. POFN= frame nets, POGN= gill nets

Management Objectives

- 1) Maintain a moderate density smallmouth bass population with a PSD of 40-70, and a PSD-P of 10-40.
- 2) Maintain a mean gill net CPUE of stock-length walleye ≥ 10 , a PSD of 30-60, and a PSD-P of 5-10.
- 3) Maintain a mean gill net CPUE of stock-length yellow perch ≥ 30 , a PSD of 30-60, and a PSD-P of 5-10.
- 4) Maintain a mean frame net CPUE of stock-length bullhead ≤ 100 .

Results and Discussion

Lake Poinsett is one of South Dakota's largest natural lakes with a surface area of nearly 8,000 acres. Lake Poinsett receives water from Lake Albert and Dry Lake. Historically, Lake Poinsett has been a popular destination for recreational activities including fishing, boating, swimming, water-skiing, and camping. Public access to Lake Poinsett is exceptional with access locations on the north, east, south (State Recreation Area), and west shores of the lake. Currently, Lake Poinsett is primarily managed as a smallmouth bass, walleye and yellow perch fishery.

Primary Species

Smallmouth bass: The first spring night electrofishing survey for smallmouth bass on Lake Poinsett was conducted in 2010. The spring night electrofishing mean CPUE was 19.6 (Table 1). The lack of spring electrofishing data from previous years precludes comparison of trend data for the population.

Smallmouth bass captured during spring 2010 ranged in total length from 20 to 51 cm (7.9 to 20.1 in.) had a PSD of 45 and PSD-P of 30 (Table 1). The PSD was within the management objective range (40-70) and PSD-P was above the management objective range (10-40; Table 2).

Scales were taken from a sub-sample of smallmouth bass in 2010. Six year-classes (2000-2001, 2003, 2005, 2007-2008) were present in the sample indicating consistent recruitment (Table 4). All year-classes were of a low magnitude.

Smallmouth bass in Lake Poinsett appear to have fast growth with a mean back-calculated length at age-3 of 284 mm (11.2 in) which is substantially larger than the statewide mean of 242 mm (9.5 in; Table 4; Willis et al. 2001). Condition was good with mean W_r values ranging from 107 to 135 for all length categories sampled. The mean W_r for all stock-length smallmouth bass was 116 (Table 1).

Walleye: The gill net mean CPUE of stock-length walleye in 2010 was 10.0 and is at the minimum objective (≥ 10 stock-length fish/net night) for walleye in Lake Poinsett. The 2010 gill net CPUE was above the average of 7.3 from 2003-2010 (Table 2). Relative abundance is considered to be moderate.

Walleye captured in gill nets during 2010 ranged in total length from 19 to 53 cm (7.5 to 20.9 in.), had a PSD of 32, and a PSD-P of 2 (Table 1; Figure 3). The PSD was within the management objective range (30-60) and PSD-P was below the management objective range (5-10) indicating a population dominated by quality-length and smaller walleye. In 2010, approximately 16% of walleye captured in gill nets were above the 381 mm (15 inch) minimum-length restriction enforced on Lake Poinsett (Figure 3).

During the mid to late 1990's, the walleye population in Lake Poinsett was considered to be largely self-sustaining, exhibiting relatively consistent recruitment and high relative abundance (Ermer et al. 2005). However, limited recruitment from 2000-2002 resulted in decreased relative abundance. Relative abundance of walleye remained at moderate-low levels from 2002-2008 (Tables 2-3). Recent recruitment of three year-classes resulted in an increase in gill net CPUE and decrease of PSD and PSD-P. The 2007-2009 year classes comprised 94% of all walleyes captured in the 2010 gill net survey (Table 5). Natural reproduction appears to have improved since 2002 with 36% off all walleye sampled in the 2010 gill nets coinciding with non-stocked years (Table 5).

Fall night electrofishing in 2010 for young of the year walleye resulted in CPUE of 0.0 indicating the absence of a 2010 year-class (Table 1). Fall night electrofishing since 2003 has indicated moderate to strong year classes (> 75 age-0 walleye/hour) in five of the seven years sampled (Table 2).

Walleye growth rates remained similar in Lake Poinsett from 2005-2010 (Table 6). The weighted mean length at capture for gill net captured age-2 and age-3 walleye in 2010 was 369 and 436 mm (14.5 and 17.2 inches), respectively (Table 5). Given current growth rates, walleyes reach the 381-mm (15-inch) minimum length beginning at age-3. Mean W_r values ranged from 93 to 102 for all length categories with a mean W_r for all lengths being 94 (Table 1). No length related trends in W_r were observed in 2009.

Yellow Perch: The mean gill net CPUE of stock-length yellow perch in 2010 was 137.2 and above the minimum objective (≥ 25 fish/net night; Table 1). Since 2003, the gill net CPUE of stock-length yellow perch has fluctuated between 0.8 (2005) and 137.2 (2010; Table 2). Yellow perch relative abundance had declined from moderate to low levels between 2003-2009, likely due to declining water levels limiting recruitment. However, a substantial increase in mean gill net CPUE from 13.2 in 2009 may indicate improved recruitment potentially related to an increase in the water level (Table 2). Relative abundance in 2010 is considered to be high.

Sampled yellow perch ranged in total length from 12 to 33 cm (4.7 to 13.0 inches), had a PSD of 9, and a PSD-P of 3 (Table 1; Figure 4). The PSD and PSD-P were below the management objective ranges (30-60 and 5-10) due to the recruitment of a large year-class to stock-length.

Otoliths were collected from a sub-sample of gill net captured yellow perch in 2010. Four year classes (2006-2009) were present in the gill net sample indicating consistent recruitment in recent years. Approximately 92% of all yellow perch sampled by the gill nets were in the 2009 year class (Table 8).

Growth was good with weighted mean total length at capture of age-1 male and female perch being 161 and 169 mm (6.3 and 6.7 in), respectively (Table 9). Gill net sampled yellow perch had mean W_r values that ranged from 106 to 112 for all length categories sampled and had a mean W_r for all lengths of 106 (Table 1). No length-related trends in mean W_r values were apparent during the 2010 survey.

Other Species

Black bullhead: The 2010 mean frame net CPUE for black bullheads was 0.2 (Table 1). Black bullhead relative abundance appears to be low and has declined from the high of 170.7 in 2003 (Table 2). Condition of stock-length black bullheads in the 2010 frame net catch was good with a mean W_r value of 88 (Table 1).

Channel catfish: No channel catfish were caught in 2010 gill net survey (Table 1). Seven channel catfish were captured in frame nets in 2010 resulting in a mean CPUE of 0.4 (Table 1). Channel catfish in Lake Poinsett have generally been considered to be present at a low density with the 2003-2010 mean gill net CPUE of stock-length fish being 1.2 (Table 2). Channel catfish abundance remains low; however, potential exists for anglers to catch trophy channel catfish in Lake Poinsett. Channel catfish collected in frame nets from Lake Poinsett ranged in total length from 33 to 61 cm (13.0 to 24.0 in.).

Northern Pike: Northern pike typically are not sampled effectively during mid-summer fish community assessments. The 2010 gill net mean CPUE for stock-length northern pike was 1.0 (Table 1). Abundance of northern pike in Lake Poinsett has generally been considered low, based on the 2003-2010 mean gill net CPUE of stock-length fish of 0.5 (Table 2).

White bass: The gill net mean CPUE of stock-length white bass in Lake Poinsett during 2010 was 3.5 (Table 1). White bass have generally been considered to be present at a moderate-high density with 2003-2010 gill net mean CPUE for stock-length fish being 11.2 (Table 2). However, relative abundance has declined since 2008 likely due to poor recruitment in recent years and poor representation of the strong 2005 cohort in the sampling gear.

White bass collected from Lake Poinsett in 2010 ranged in total length from 7 to 45 cm (2.8 to 17.7 inches; Figure 5). The PSD was 95 and PSD-P was 90 for white bass captured in gill nets (Table 1).

Otoliths were collected from a sub-sample of white bass caught in gill nets during 2010. Seven year-classes (1999, 2000, 2005, and 2007-2010) were present. The 1999 and 2000 year classes comprise approximately 50% of all stock-length white bass caught by gill nets in 2010 indicating poor recruitment or sampling variability in recent years (Table 10).

Growth of white bass in Lake Poinsett is good with a weighted mean length at capture for age-1 fish of 235 mm (9.3 in; Table 11). Condition of stock-length white bass was excellent with a mean Wr of 105.

White bass are commonly harvested on Lake Poinsett by commercial fisherman. Commercial harvest is limited by an annual quota of 30,000 lbs. During the winter of 2009-2010 no commercial harvest took place on Lake Poinsett.

Other: Bigmouth buffalo, black crappie, common carp, orangespotted sunfish, shorthead redhorse, spottail shiner, and white sucker were other fish species captured during the 2010 survey. Abundance of most of these species is believed to be low in Lake Poinsett and their impact on the fishery is likely minimal (Table 1; Table 2).

Bigmouth buffalo and common carp are commonly harvested through a permit by commercial fisherman during the ice-covered season. In the winter of 2009-2010 no commercial harvest of bigmouth buffalo or common carp occurred on Lake Poinsett. Bigmouth buffalo and common carp are not effectively sampled using standard lake survey methods; therefore abundance is difficult to assess. Both species are commonly sampled, but in low numbers during standard fish community surveys (Table 1; Table 2).

Management Recommendations

- 1) Conduct fish community assessment surveys utilizing gill nets and frame nets on an annual basis (next survey scheduled in summer 2011) to monitor fish abundance, fish population size structures, fish growth, and stocking success.
- 2) Conduct fall night electrofishing on an annual basis to monitor age-0 walleye relative abundance.
- 3) Stock walleye (≈ 500 fry/acre; 50% OTC marked) to establish additional year-classes if gill netting and/or fall night electrofishing CPUE of age-0 walleye results warrant (i.e., low gill net CPUE of < 250 mm (10 inch) walleye and/or fall night electrofishing CPUE of age-0 walleye < 75 fish/hour).
- 4) Maintain the 381-mm (15 in) minimum length limit on walleye to benefit the population and comply with tool box options (Lucchesi and Blackwell 2009).
- 5) Conduct spring night electrofishing on a biennial basis (even years) to monitor smallmouth bass population parameters.
- 6) Monitor commercial harvest of bigmouth buffalo, common carp, and white bass.
- 7) Partner with willing landowners on shoreline restoration projects designed to restore native plant fauna along highly-developed shorelines providing improvements to water quality and littoral habitats within the lake.

Table 1. Mean catch rate (CPUE; gill/frame nets= catch/net night, electrofishing= catch/hour) of stock-length fish, proportional size distribution of quality- (PSD) and preferred-length (PSD-P) fish, and mean relative weight (Wr) of stock-length fish for various fish species captured in frame nets, gill nets and electrofishing in Lake Poinsett, 2010. Confidence intervals include 80 percent (\pm CI-80) or 90 percent (\pm CI-90). BIB= bigmouth buffalo; BLB= black bullhead; BLC= black crappie; CCF= channel catfish; COC= common carp; NOP= northern pike; OSF= orangespotted sunfish; SHR= shorthead redhorse; SMB= smallmouth bass; SPS= spottail shiner; WAE= walleye; WHB= white bass; WHS= white sucker; YEP= yellow perch

Species	Abundance		Stock Density Indices				Condition	
	CPUE	CI-80	PSD	CI-90	PSD-P	CI-90	Wr	CI-90
<i>Frame nets</i>								
BIB	0.4	0.2	100	0	29	36	95	6
BLB	0.2	0.1	67	67	67	67	88	<1
BLC	0.1	0.1	0	---	0	---	114	---
CCF	0.4	0.2	71	36	14	28	104	10
COC	0.6	0.4	100	0	82	22	88	8
NOP	0.5	0.2	89	21	44	33	88	4
SMB	1.7	1.1	16	0	6	0	117	1
WAE	0.3	0.3	17	34	0	---	93	2
WHB	0.1	<0.1	100	---	100	---	106	---
WHS	0.7	0.4	100	0	100	0	98	3
YEP	22.4	15.2	7	2	3	1	99	<1
<i>Gill nets</i>								
COC	0.3	0.3	100	0	100	0	114	18
NOP	1.0	0.4	83	34	0	---	99	6
OSF ¹	0.5	0.7	---	---	---	---	---	---
SHR	0.2	0.2	100	---	100	---	103	---
SMB	0.2	0.2	100	---	100	---	122	---
SPS ¹	4.7	3.1	---	---	---	---	---	---
WAE	10.0	3.9	32	10	2	3	94	1
WHB	3.5	2.0	95	8	90	11	105	1
WHS	2.7	1.5	94	11	44	22	104	4
YEP	137.2	14.3	9	2	3	1	106	<1
<i>Electrofishing</i>								
SMB ²	19.6	6.6	45	20	30	18	116	4
WAE ³	0.0	---	---	---	---	---	---	---

¹ All fish sizes.

² Spring electrofishing-SMB.

³ Fall electrofishing-WAE; catch rate (CPUE) represents age-0 walleye/hour

Table 2. Historic mean catch rate (CPUE; gill/frame nets= catch/net night, electrofishing= catch/hour) of stock-length fish for various fish species captured using gill nets, frame nets, and electrofishing in Lake Poinsett, 2003-2010. BIB= bigmouth buffalo; BLB= black bullhead; BLC= black crappie; BLG= bluegill; CCF= channel catfish; COC= common carp; NOP= northern pike; OSF= orangespotted sunfish; SHR= shorthead redhorse; SMB= smallmouth bass; SPS= spottail shiner; WAE= walleye; WHB= white bass; WHS= white sucker; YEB= yellow bullhead; YEP= yellow perch

Species	CPUE								
	2003	2004	2005	2006 ⁴	2007 ⁴	2008	2009	2010	Average
<i>Frame nets</i>									
BIB	0.4	1.5	0.1	---	---	0.0	1.8	0.4	0.7
BLB	170.7	0.7	0.2	---	---	0.6	0.3	0.2	28.8
BLC	0.0	0.1	0.0	---	---	0.0	0.0	0.1	0.0
BLG	0.0	0.1	0.0	---	---	0.0	0.0	0.0	0.0
CCF	0.0	0.0	1.6	---	---	0.7	0.1	0.4	0.5
COC	0.1	0.1	0.0	---	---	0.2	1.1	0.6	0.4
NOP	1.3	0.2	1.0	---	---	1.3	0.6	0.5	0.8
OSF ¹	0.0	0.0	0.1	---	---	0.0	0.0	0.0	0.0
SHR	0.0	0.2	0.0	---	---	0.1	0.1	0.0	0.1
SMB	1.2	1.1	0.0	---	---	4.3	0.3	1.7	1.4
WAE	0.9	0.1	0.1	---	---	1.4	4.1	0.3	1.2
WHB	0.7	2.5	0.0	---	---	0.7	0.6	0.1	0.8
WHS	1.1	1.9	0.5	---	---	1.4	2.4	0.7	1.3
YEB	0.1	0.0	0.0	---	---	0.0	0.0	0.0	0.0
YEP	0.0	0.3	4.3	---	---	2.3	0.4	22.4	5.0
<i>Gill nets</i>									
BIB	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.1
BLB	14.8	0.0	0.2	0.0	0.0	0.0	0.2	0.0	1.9
CCF	3.2	1.0	1.2	2.7	1.0	0.3	0.5	0.0	1.2
COC	0.0	0.0	0.2	0.8	1.0	0.0	0.0	0.3	0.3
NOP	0.7	0.3	0.0	0.7	0.8	0.5	0.0	1.0	0.5
OSF ¹	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1
SHR	0.0	0.0	0.2	0.3	0.3	0.0	0.2	0.2	0.2
SMB	0.7	0.8	0.8	0.7	1.8	0.2	0.2	0.2	0.7
SPS ¹	0.2	0.0	0.0	0.0	0.0	0.2	2.0	4.7	0.9
WAE	3.8	3.0	8.3	5.0	6.3	5.7	16.0	10.0	7.3
WHB	17.3	25.5	15.0	11.7	10.0	3.2	3.5	3.5	11.2
WHS	1.8	1.2	2.0	1.5	1.2	0.5	0.2	2.7	1.4
YEP	8.5	11.5	0.8	5.7	6.2	16.0	13.2	137.2	24.9
<i>Electrofishing</i>									
SMB ²	---	---	---	---	---	---	---	19.6	19.6
WAE ³	706.1	31.1	97.5	117.0	79.8	19.5	257.2	0.0	163.5

¹ All fish sizes

² Spring electrofishing-SMB

³ Fall electrofishing-WAE; catch rate (CPUE) represents age-0 walleye/hour

⁴ Monofilament gill net mesh size (0.75", 1.00", 1.25", 1.50", 2.00" and 2.50")

Table 3. Mean catch rate (CPUE; gill/frame nets= catch/net night, electrofishing= catch/hour) of stock-length fish, proportional size distribution of quality- (PSD) and preferred-length (PSD-P) fish, and relative weight (Wr) for selected species captured using gill nets, frame nets, and electrofishing in Lake Poinsett, 2002-2009. BLB= black bullhead; SMB= smallmouth bass; WAE= walleye; WHB= white bass; YEP= yellow perch

Species	2003	2004	2005	2006 ¹	2007 ¹	2008	2009	2010	Average	Objective
<i>Frame nets</i>										
BLB										
CPUE	171	1	< 1	---	---	1	<1	<1	29	≤ 100
PSD	99	100	100	---	---	100	33	67	83	---
PSD-P	1	100	100	---	---	100	33	67	67	---
Wr	94	102	101	---	---	90	102	88	96	---
<i>Gill nets</i>										
WAE										
CPUE	4	3	8	5	6	6	16	10	7	≥ 10
PSD	48	72	72	63	42	59	17	32	51	30-60
PSD-P	0	6	10	23	18	12	2	2	9	5-10
Wr	88	99	97	85	89	88	90	94	91	---
WHB										
CPUE	17	26	15	12	10	3	4	4	11	---
PSD	100	100	100	91	100	100	100	95	98	---
PSD-P	100	100	100	91	100	100	100	90	98	---
Wr	104	109	109	106	105	102	110	105	106	---
YEP										
CPUE	9	12	1	6	6	16	13	137	25	≥ 30
PSD	100	77	60	100	32	17	27	9	53	30-60
PSD-P	92	75	60	38	22	16	15	3	40	5-10
Wr	119	119	105	105	107	105	106	106	109	---
<i>Electrofishing</i>										
SMB ²										
CPUE	---	---	---	---	---	---	---	20	20	---
PSD	---	---	---	---	---	---	---	45	45	40-70
PSD-P	---	---	---	---	---	---	---	30	30	10-40
Wr	---	---	---	---	---	---	---	116	116	---

¹ Monofilament gill net mesh size (0.75", 1.00", 1.25", 1.50", 2.00" and 2.50")

² Spring electrofishing-SMB

Table 4. Mean back-calculated length (mm) at age and standard error (SE) for smallmouth bass captured during spring night electrofishing in Lake Poinsett, 2010.

Year	Age	N	Age											
			1	2	3	4	5	6	7	8	9	10		
2008	2	11	104	232										
2007	3	3	119	230	338									
2005	5	2	109	199	279	339	380							
2003	7	1	118	204	310	372	402	430	438					
2001	9	1	82	212	314	401	459	480	500	508	517			
2000	10	1	80	114	179	265	333	387	428	448	465	479		
Mean	---	19	102	199	284	344	393	432	455	478	491	479		
SE	---		7	18	28	29	26	27	23	30	26	0		
<i>Mean Comparison</i> ¹														
			98	180	241	291	---	---	---	---	---	---		
			92	169	237	304	335	---	---	---	---	---		
			96	179	249	316	339	---	---	---	---	---		
			91	171	242	300	333	---	---	---	---	---		

¹ Willis et al. 2001.

Table 5. Year class distribution based on the expanded age/length summary for walleye sampled in gill nets and associated stocking history (Number stocked x 10,000) from Lake Poinsett, 2006-2010.

Survey Year	Year Class												
	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
2010	---	51	21	8	3		2						
2009	---		47	44	2	3	1	1	1				
2008	---	---		21	14	4	3	4			1		
2007 ^{1,2}	---	---	---		9	19	1	6		1			
2006 ^{1,2}	---	---	---	---		39	1	12		2		1	
# stocked													
fry		400			805	1,170		1,052					
sm. fingerling													
lg. fingerling													

¹ Older walleye were sampled, but are not reported in this table.

² Monofilament gill net mesh size (.75", 1", 1.25", 1.5", 2" and 2.5").

Table 6. Weighted mean total length at capture (mm) for walleye age-1 through age-10 sampled in experimental gill nets (expanded sample size) from Lake Poinsett, 2005-2010. Note: sampling was conducted at approximately the same time during each year allowing comparisons among years to monitor growth trends.

Year	Age									
	1	2	3	4	5	6	7	8	9	10
2010	250(51)	369(21)	436(8)	480(3)	---	517(2)	---	---	---	---
2009	265 (47)	358 (44)	468 (2)	478 (3)	496 (1)	514 (1)	580(1)	---	---	---
2008	233 (21)	372 (14)	450 (4)	506 (3)	520 (4)	---	---	568 (1)	---	---
2007 ¹	265 (9)	362 (19)	433 (1)	506 (6)	---	554 (1)	---	---	---	---
2006 ¹	223 (39)	378 (1)	461 (12)	---	563 (2)	---	532 (1)	---	559 (1)	---
2005 ¹	269 (3)	385 (37)	480 (1)	---	511 (2)	519 (3)	491 (1)	---	---	---

¹ Older walleye were sampled, but are not reported in this table.

Table 7. Stocking history including size and number for fishes stocked into Lake Poinsett, 1998-2010. WAE= walleye

Year	Species	Size	Number
2003	WAE	fry	10,520,000
2005	WAE	fry	11,700,000
2006	WAE	fry	8,050,000
2009	WAE	fry	4,000,000

Table 8. Year class distribution based on the age/length summary for yellow perch sampled in gill nets from Lake Poinsett, 2009-2010.

Survey Year	Year Class					
	2010	2009	2008	2007	2006	2005
2010		761	47	14	2	
2009	---		59	19	1	1

Table 9. Weighted mean total length (mm) at capture by gender for yellow perch captured in experimental gill nets (expanded sample size) from Lake Poinsett, 2009-2010.

Year	Age			
	1	2	3	4
2010				
Male	161(126)	227(9)	258(4)	---
Female	169(484)	242(40)	299(8)	328(2)
Combined	167(761)	239(47)	281(14)	328(2)
2009				
Male	144 (14)	220 (1)	---	---
Female	147 (44)	247 (18)	313 (1)	325 (1)
Combined	147 (59)	246 (19)	313 (1)	325 (1)

Table 10. Year class distribution based on the expanded age/length summary for white bass sampled in gill nets from Lake Poinsett, 2009-2010

Survey Year	Year Class											
	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999
2010	7	2	1	1		3					1	13
2009	---								10	11		

Table 11. Weighted mean total length (mm) at capture for white bass age-0 through age-11 sampled in gill nets (expanded sample size) from Lake Poinsett, 2009-2010.

Year	Age											
	0	1	2	3	4	5	6	7	8	9	10	11
2010	84(7)	235(2)	326(1)	386(1)	---	389(3)	---	---	---	---	434 (1)	426(13)
2009	---	---	---	---	---	---	---	---	399(10)	416(11)	---	---

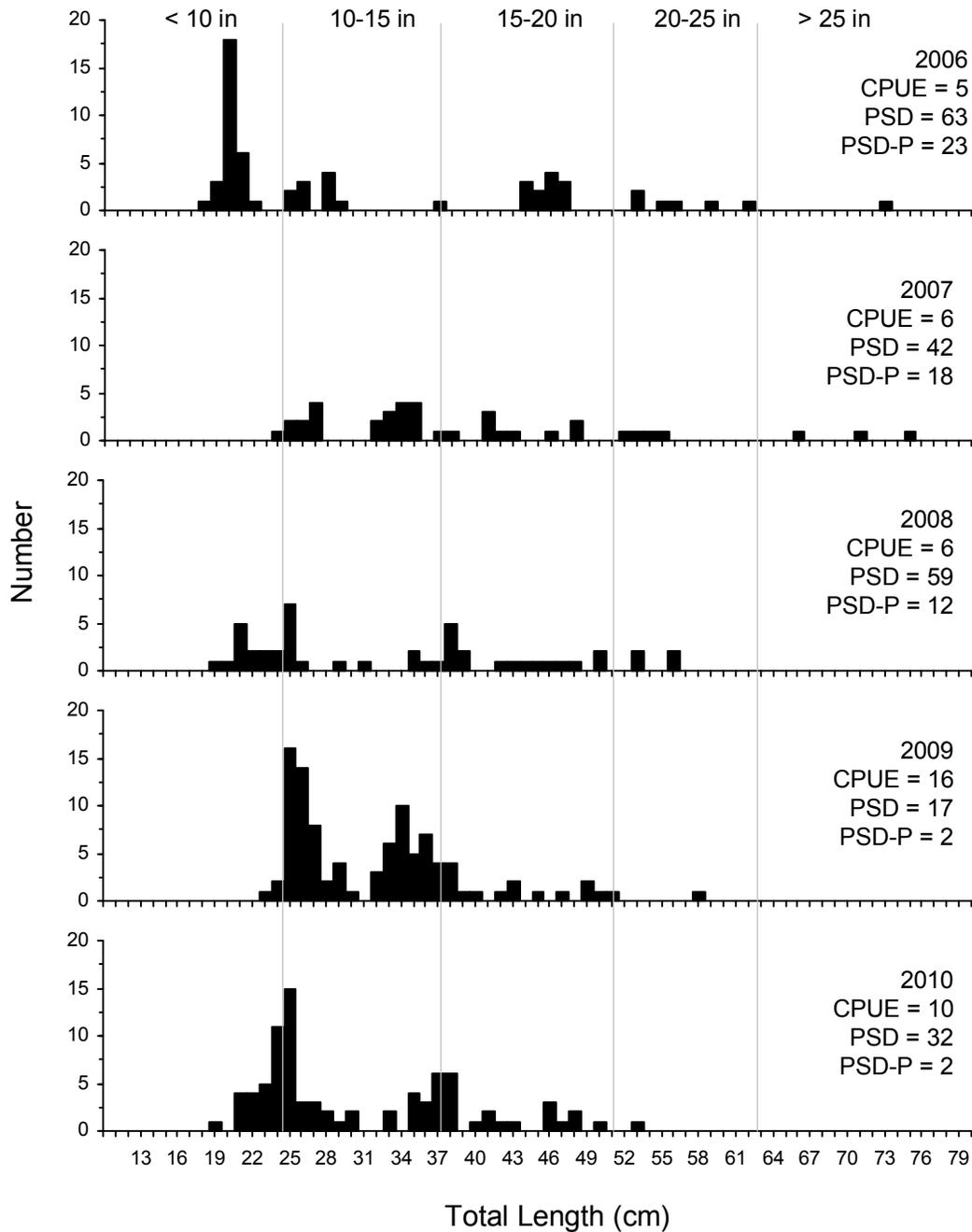


Figure 3. Length-frequency histogram, catch rate of stock-length fish (CPUE), proportional size distribution of quality- (PSD) and preferred-length (PSD-P) fish for walleye captured using experimental gill nets in Lake Poinsett, 2006-2010.

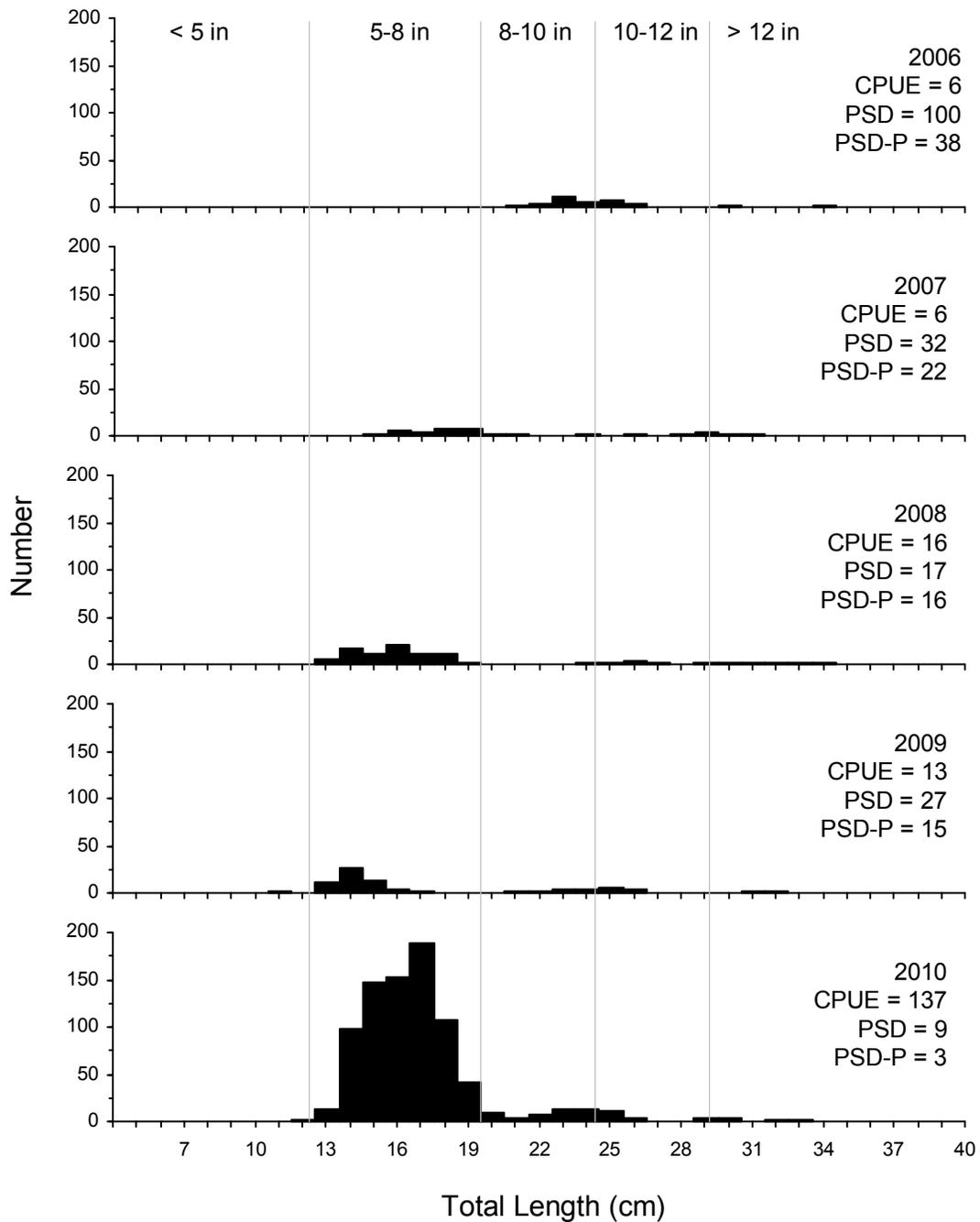


Figure 4. Length-frequency histogram, catch rate of stock-length fish (CPUE), proportional size distribution of quality- (PSD) and preferred-length (PSD-P) fish for yellow perch captured using experimental gill nets in Lake Pointsett, 2006-2010.

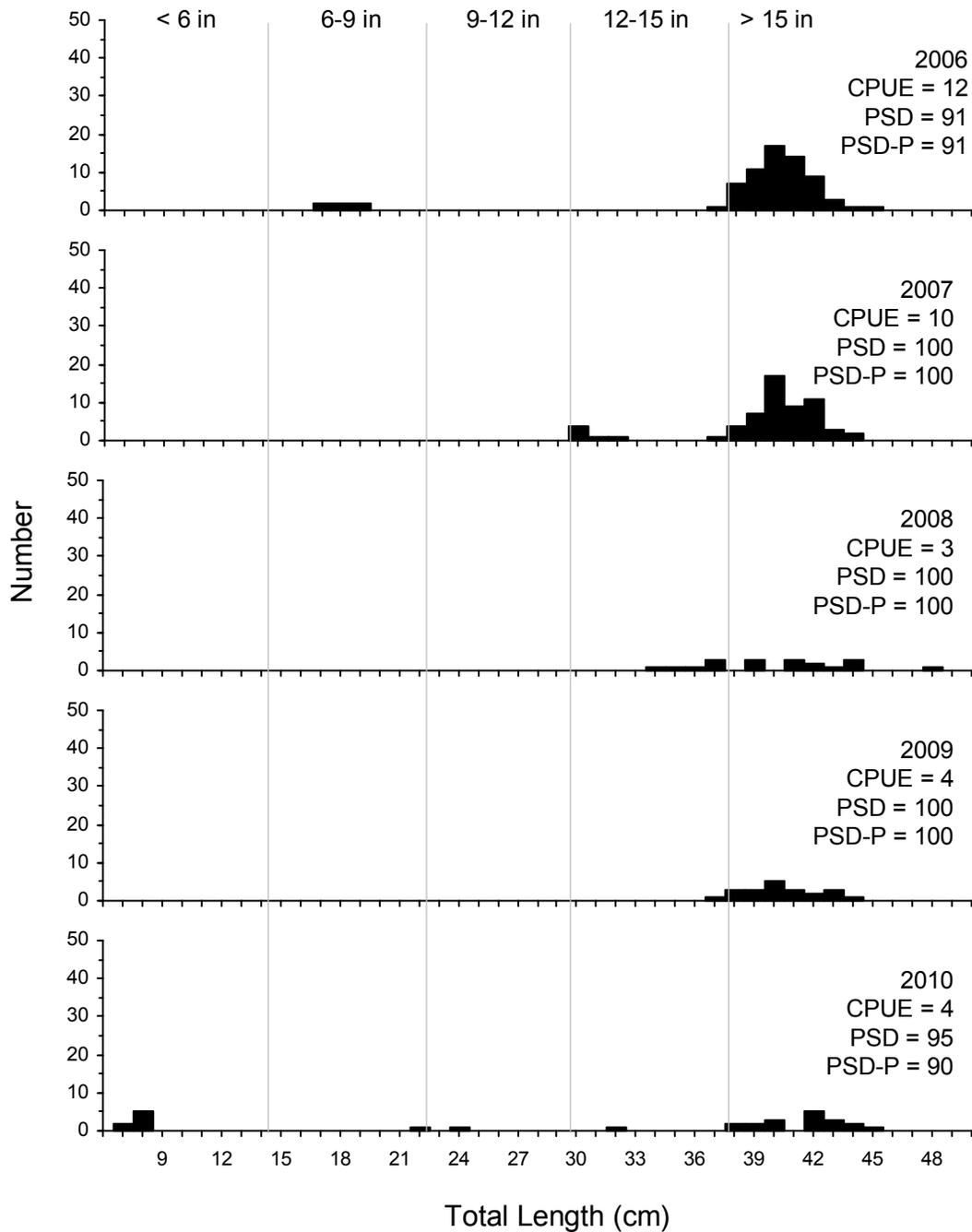


Figure 5. Length-frequency histogram, catch rate of stock-length fish (CPUE), proportional size distribution of quality- (PSD) and preferred-length (PSD-P) fish for white bass captured using experimental gill nets in Lake Pointsett, 2006-2010.