SOUTH DAKOTA STATEWIDE FISHERIES SURVEY
Lewis and Clark, Yankton County
LCL-Lake-73-000
2019

Lake Information

Name: Lewis and Clark

County: Yankton

Surface Area: 19,279 Acres

Surveys and Investigations

Survey methods used by gear type, date, and effort.

Gear	Date	Effort
AFS gill net (1/2 inch)	Sep 16, 2019	36 net-nights
AFS std gill net	Sep 16, 2019	36 net-nights
boat shocker (night)	May 22, 2019	3600 seconds
fall night EF-WAE	Oct 15, 2019	7200 seconds
large seine	Jul 23, 2019	3 hauls

Common Fish Species Present

Gizzard Shad

Walleye

Smallmouth Bass

Freshwater Drum

Black Crappie

Channel Catfish

Bluegill

Rock Bass

White Bass

Sauger

Terminology

Catch per unit effort (**CPUE**) refers to the relative abundance of a species. It is defined as the number of fish captured per unit of effort (i.e., number of fish captured per net-night or number of fish captured per hour electrofishing). In this report CPUE is typically given for only stock-length fish (see length categories table for stock lengths).

A statewide effort to help make netting efforts comparable to all waters sampled across the state, occurred in 2017, with a switch to American Fisheries Society gill nets. Past gill netting efforts were completed with different style/types of nets and are not comparable side by side.

- **AFS std gill net** – 80 ft experimental gill net containing eight panels (10 ft each) of varying monofilament meshes of 0.75, 1.00, 1.25, 1.50, 1.75, 2.00, 2.25 and 2.50 inches.
- **std experimental gill net for non-Missouri River waters** - 150 ft experimental gill net containing six panels (25 ft each) of varying monofilament meshes of 0.5, 0.75, 1.00, 1.25, 1.50 and 2.00 inches.
- s**td experimental gill net for Missouri River reservoirs** – 300 ft experimental gill net containing six panels (50 ft each) of varying multifilament meshes of 0.5, 0.75, 1.00, 1.25, 1.50 and 2.00 inches.

$$CPUE = \frac{number\ of\ fish}{effort}$$

Population size structure is quantified using the indices proportional size distribution of quality-length fish (**PSD**) and proportional size distribution of preferred-length fish (**PSD-P**). These indices indicate the proportion of stock-length fish that are equal to or greater than a given length. Minimum lengths for stock, quality and preferred length fish are given in the length categories table.

$$PSD = \left(\frac{number\ of\ fish \geq quality\ length}{number\ of\ fish \geq stock\ length}\right) \text{x } 100$$

$$PSD - P = \left(\frac{number\ of\ fish \geq preferred\ length}{number\ of\ fish \geq stock\ length}\right) \text{x } 100$$

Relative weight (**Wr**) is used to quantify fish plumpness. Relative weight is the ratio of what a fish weighs (W) compared to a length-specific standard weight (Ws) multiplied by 100. Relative weight values of 95-105 are commonly cited as optimum values, but values in the 80s are common during summer sampling in South Dakota.

$$Wr = \left(\frac{W}{Ws}\right) \text{x } 100$$

Confidence intervals (**CI**) are provided for many of the estimates calculated in this report. The confidence interval provides a range in which the true mean is expected to fall. For example, with an 80% CI we are 80% confident that the interval contains the true value.

Length categories include stock (**S**), quality (**Q**), preferred (**P**), memorable (**M**) and trophy (**T**). Length categories for most species have been defined based on a percentage of the world record length for that species. Some species mentioned in this report do not have defined length categories. Length categories for species used in this report are provided in the following table. Measurements are the minimum total length for each category and are reported in inches (in) and centimeters (cm).

	Stock		Quality		Preferred		Memorable		Trophy	
Species Name	(in)	(cm)	(in)	(cm)	(in)	(cm)	(in)	(cm)	(in)	(cm)
Black Bullhead	6	15	9	23	12	30	15	38	18	46
Black Crappie	5	13	8	20	10	25	12	30	15	38
Bluegill	3	8	6	15	8	20	10	25	12	30
Brown Trout	8	20	12	30	16	40	20	50	18	46
Channel Catfish	11	28	16	41	24	61	28	71	36	91
Freshwater Drum	8	20	12	30	15	38	20	51	25	63
Lake Trout	12	30	20	50	26	65	31	80	39	100
Largemouth Bass	8	20	12	30	15	38	20	51	25	63
Muskellunge	20	51	30	76	38	97	42	107	50	127
Northern Pike	14	35	21	53	28	71	34	86	44	112
Pumpkinseed	3	8	6	15	8	20	10	25	12	30
Rainbow Trout	10	25	16	40	20	50	26	65	31	80
Rudd	6	15	10	25	12	30	15	38	19	48
Sauger	8	20	12	30	15	38	20	51	25	63
Smallmouth Bass	7	18	11	28	14	35	17	43	20	51
Walleye	10	25	15	38	20	51	25	63	30	76
White Bass	6	15	9	23	12	30	15	38	18	46
White Crappie	5	13	8	20	10	25	12	30	15	38
Yellow Bullhead	4	10	7	18	9	23	11	28	14	36
Yellow Perch	5	13	8	20	10	25	12	30	15	38

Catch Summary of Stock Length Fish

Catch per unit effort (CPUE), proportional size distribution (PSD), proportional size distribution of preferred length fish (PSD-P), and relative weight (Wr) for species sampled in survey with 80% confidence interval (CI-80).

*** Methods/Species that ignore stock length**

			Abundance		Stock Density Indices				Condition	
Gear	Species	Sample Size (n)	CPUE	CI-80	PSD	CI-80	PSD-P	CI-80	Wr	CI-80
AFS gill net (1/2 inch)*	Freshwater Drum	16	0.4	0.2	0		0		110	9
	Gizzard Shad	23	0.6	0.6	0				86	4
	Walleye	6	0.2	0.1	0		0		81	8
	Yellow Perch	1	0.0	0.0	0		0		108	
AFS std gill net	Channel Catfish	46	1.1	0.3	60	12	33	11	96	2
	Common Carp	3	0.1	0.1	100		67		91	11
	Flathead Catfish	2	0.1	0.1	0		0		81	5
	Freshwater Drum	106	2.9	0.5	86	5	64	7	102	1
	Gizzard Shad	6	0.0	0.0	0					
	Northern Pike	1	0.0	0.0	0		0		79	
	River Carpsucker	4	0.1	0.1	100		75		90	3
	Sauger	13	0.4	0.2	85		77		77	2
	Shorthead Redhorse	3	0.1	0.1	100		100		93	10
	Smallmouth Buffalo	2	0.0	0.0	100		100		88	
	Walleye	15	0.4	0.4	73		20		87	3
	White Bass	1	0.0	0.0	100		100		82	
boat shocker (night)	Smallmouth Bass	20	11.0	20.7	36		9		92	3
fall night EF-WAE*	Walleye	77	38.5	17.5						
large seine*	Black Crappie	4	1.3	0.0						
	Bluegill	3	1.0	0.0						
	Freshwater Drum	4	1.3	0.0						
	Gizzard Shad	118	39.3	5.6						
	Rock Bass	3	1.0	0.0						
	Spotfin Shiner	1	0.3	0.0						
	White Bass	3	1.0	0.0						
	Yellow Perch	1	0.3	0.0						

10-Year Catch Per Unit Effort by Gear and Species

Catch per unit effort (CPUE) and average (Avg) of species across 10 years using different gear types.

		CPUE										
Gear	Species	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Avg
AFS gill net (1/2 inch)	Channel Catfish								0.1	0.2	0.0	0.10
	Common Carp								0.0	0.0	0.0	0.00
	Freshwater Drum								0.1	0.7	0.4	0.40
	Gizzard Shad								0.1	2.8	0.6	1.17
	Sauger								0.1	0.2	0.0	0.10
	Walleye								0.0	0.2	0.2	0.13
	Yellow Perch								0.0	0.0	0.0	0.00
AFS std gill net	Channel Catfish								4.2	2.5	1.1	2.60
	Common Carp								0.1	0.1	0.1	0.10
	Flathead Catfish								0.1	0.1	0.1	0.10
	Freshwater Drum								1.9	3.2	2.9	2.67
	Gizzard Shad								0.3	1.0	0.0	0.43
	Northern Pike								0.0	0.0	0.0	0.00
	Paddlefish								0.0	0.1	0.0	0.03
	River Carpsucker								0.6	0.1	0.1	0.27
	Sauger								0.2	0.6	0.4	0.40
	Shorthead Redhorse								0.1	0.2	0.1	0.13
	Shortnose Gar								0.0	0.0	0.0	0.00
	Smallmouth Bass								0.0	0.0	0.0	0.00
	Smallmouth Buffalo								0.3	0.0	0.0	0.10
	Walleye								0.6	0.9	0.4	0.63
	White Bass								0.1	0.0	0.0	0.03
	Yellow Perch								0.1	0.0	0.0	0.03
boat shocker (night)	Largemouth Bass	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.40
	Sauger	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.83
	Smallmouth Bass	73.0	54.6	25.0	94.0	53.0	30.0	7.1	25.0	26.0	11.0	39.87
	Walleye	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	1.50
electrofishing (flathead)	Flathead Catfish	6.5	16.3	8.8	11.7							10.83
fall night EF-WAE	Sauger	0.0	0.5	28.5	8.3	5.0	0.5	0.0	1.7	20.0	0.0	6.45
	Walleye	8.5	6.5	51.5	48.0	30.0	12.0	56.0	18.0	34.0	38.5	30.30
large seine	Bigmouth Buffalo	0.0	0.2	0.0	0.0	0.8	0.1	0.1	0.0	0.0	0.0	0.12
	Black Crappie	0.0	2.9	0.7	0.0	0.8	1.5	0.4	0.1	1.6	1.3	0.93
	Bluegill	0.3	1.6	3.3	0.3	0.1	0.3	1.6	3.3	69.2	1.0	8.10
	Bluntnose Minnow	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06

		CPUE										
Gear	Species	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Avg
large seine	Central Stoneroller	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
	Channel Catfish	0.1	0.1	0.2	0.1	0.0	0.7	0.5	0.2	0.2	0.0	0.21
	Common Carp	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.03
	Common Shiner	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
	Creek Chub	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
	Emerald Shiner	75.8	23.6	9.2	355.1	0.3	5.8	0.0	0.2	0.3	0.0	47.03
	Fathead Minnow	1.6	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.22
	Flathead Catfish	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
	Freshwater Drum	0.3	0.0	0.1	3.1	0.6	2.0	5.0	2.6	1.2	1.3	1.63
	Gizzard Shad	20.3	4.4	0.0	346.8	16.8	5.3	2.5	169.1	86.9	39.3	69.15
	Golden Shiner	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.01
	Goldeye	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.55
	Grass Pickerel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.01
	Green Sunfish	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.01
	Johnny Darter	7.9	0.7	0.6	0.7	6.2	2.3	3.4	0.3	0.2	0.0	2.23
	Largemouth Bass	0.0	0.5	2.0	0.6	3.8	2.9	1.5	0.9	2.2	0.0	1.44
	Northern Pike	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.10
	Northern Redbelly Dace	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
	Red Shiner	0.0	0.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10
	River Carpsucker	0.5	0.2	1.7	0.4	0.3	0.2	1.4	3.8	0.1	0.0	0.86
	Rock Bass	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.0	0.11
	Sand Shiner	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.01
	Sauger	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.08
	Shorthead Redhorse	0.3	1.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26
	Shortnose Gar	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
	Silver Chub	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05
	Smallmouth Bass	0.0	0.0	0.5	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.07
	Smallmouth Buffalo	0.0	0.4	0.0	0.3	0.8	0.0	0.3	0.1	0.1	0.0	0.20
	Spotfin Shiner	5.0	0.6	0.1	0.3	0.0	0.2	0.8	0.0	0.2	0.3	0.75
	Spottail Shiner	1.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.13
	Walleye	0.0	0.9	0.0	0.2	0.3	0.0	0.1	0.0	0.0	0.0	0.15
	Western Silvery Minnow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.01
	White Bass	0.8	10.4	0.3	5.4	46.8	30.8	3.1	0.5	1.6	1.0	10.07
	White Crappie	0.0	0.4	0.0	0.0	0.7	0.1	0.0	0.3	0.0	0.0	0.15
	Yellow Perch	0.0	3.0	0.8	14.5	0.3	0.0	7.0	0.4	1.2	0.3	2.76
std exp gill net	Bigmouth Buffalo	0.1	0.0	0.0	0.0	0.0	0.0	0.0				0.01
	Black Crappie	0.0	0.0	0.2	0.0	0.0	0.0	0.0				0.03

		CPUE										
Gear	Species	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Avg
std exp gill net	Channel Catfish	3.6	0.5	4.1	6.8	3.2	6.3	4.0				4.07
	Common Carp	0.3	0.1	0.2	0.6	0.2	0.3	0.2				0.27
	Flathead Catfish	0.0	0.0	0.0	0.0	0.1	0.0	0.1				0.03
	Freshwater Drum	1.7	3.6	0.8	1.1	0.8	0.3	1.3				1.37
	Gizzard Shad	0.5	0.0	1.2	0.1	0.3	1.0	8.0				1.59
	Goldeye	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.00
	Northern Pike	0.1	0.0	0.3	0.0	0.0	0.0	0.0				0.06
	Paddlefish	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.00
	River Carpsucker	1.3	0.3	0.8	1.1	0.6	2.9	0.3				1.04
	Rock Bass	0.0	0.3	0.0	0.0	0.0	0.0	0.0				0.04
	Sauger	7.8	2.7	1.8	2.7	2.1	1.9	2.5				3.07
	Shorthead Redhorse	0.8	0.1	0.9	2.9	2.5	1.3	0.8				1.33
	Shortnose Gar	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.00
	Shovelnose Sturgeon	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.00
	Smallmouth Bass	0.0	0.0	0.0	0.0	0.0	0.1	0.0				0.01
	Smallmouth Buffalo	0.0	0.0	0.3	0.3	0.0	0.3	0.0				0.13
	Walleye	6.6	2.3	4.3	3.1	2.1	2.1	3.3				3.40
	White Bass	0.2	0.0	0.1	0.0	0.4	0.3	0.8				0.26
	White Crappie	0.3	0.0	0.1	0.2	0.0	0.0	0.0				0.09
	Yellow Perch	0.0	0.0	0.3	1.3	1.2	0.4	0.3				0.50

10-Year Size Structure and Condition Statistics by Gear and Species

Species proportional size distribution (PSD), proportional size distribution of preferred length fish (PSD-P), and relative weight (Wr) collected by different gear types across 10 years.

			Year									
Gear	Species	Index	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
AFS gill net (1/2 inch)	Channel Catfish	PSD								0	50	
		PSD-P								0	0	
		Wr								98	105	
	Gizzard Shad	PSD								0	0	0
		Wr								99	94	86
	Sauger	PSD								0	100	
		PSD-P								0	100	
		Wr								78	78	
	Walleye	PSD								0	50	0
		PSD-P								0	0	0
		Wr								76	82	81
AFS std gill net	Channel Catfish	PSD								84	65	60
		PSD-P								29	35	33
		Wr								92	91	96
	Gizzard Shad	PSD								27	6	0
		Wr								98	103	
	Sauger	PSD								100	96	85
		PSD-P								100	70	77
		Wr								80	77	77
	Smallmouth Bass	PSD								0		
		PSD-P								0		
		Wr								99		
	Walleye	PSD								57	71	73
		PSD-P								30	23	20
		Wr								84	85	87
	White Bass	PSD								100	100	100
		PSD-P								75	100	100
		Wr								102	102	82
boat shocker (night)	Sauger	PSD							76			
		PSD-P							24			
	Smallmouth Bass	PSD	12	22	40	30	45	17	26	20	31	36
		PSD-P	3	4	16	3	11	0	8	0	12	9

			Year									
Gear	Species	Index	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
boat shocker (night)	Smallmouth Bass	Wr	87	91	93	93	93	97	96	102	94	92
	Walleye	PSD							74			
		PSD-P							21			
fall night EF-WAE	Sauger	Wr								74		
	Walleye	Wr							82	75		
std exp gill net	Black Crappie	PSD			100							
		PSD-P			50							
		Wr			94							
	Channel Catfish	PSD	51	83	67	43	61	78	77			
		PSD-P	12	0	12	4	13	7	8			
		Wr	90	102	80	87	86	88	92			
	Gizzard Shad	PSD	0		7	100	0	0	15			
		Wr	101		99	34	123	112	100			
	Rock Bass	PSD		25								
		PSD-P		0								
		Wr		100								
	Sauger	PSD	82	100	95	69	80	70	77			
		PSD-P	26	59	76	50	56	39	57			
		Wr	78	76	77	76	82	78	86			
	Smallmouth Bass	PSD						0				
		PSD-P						0				
		Wr						88				
	Walleye	PSD	38	71	83	59	48	44	68			
		PSD-P	6	14	6	16	0	0	15			
		Wr	81	81	83	85	90	85	96			
	White Bass	PSD	100		100	0	100	67	22			
		PSD-P	100		100	0	0	67	11			
		Wr	93		96		96	97	95			

Back-Calculated Lengths

Mean species back-calculated total length (mm) at age, standard error (SE), and sample size (N).

Species: Smallmouth Bass

Year Class	Age	N	Mean back-calculated length (SE) at age									
			1	2	3	4	5	6	7	8	9	10
2018	1	4	113 (3.6)									
2017	2	4	109 (7.5)	162 (23.8)								
2016	3	5	96 (2.3)	169 (4)	234 (8.2)							
2015	4	3	102 (3.5)	208 (18.1)	276 (23.7)	308 (17.2)						
2014	5	1	103	220	344	377	397					
Weighted Mean		17	105	180	260	325	397					

Year Class	Age	N	11	12	13	14	15	16	17	18	19	20
2018	1	4										
2017	2	4										
2016	3	5										
2015	4	3										
2014	5	1										
Weighted Mean		17										

Length at Capture

Mean length at capture by age across years sampled, sample size (N).

Species: Channel Catfish

		Mean Length (expanded sample number) at capture by age									
Year	N	1	2	3	4	5	6	7	8	9	10+
2017	164	216 (8)	299 (22)	398 (13)	455 (12)	493 (8)	563 (21)	582 (33)	609 (21)	655 (13)	719 (15)
2012	70	203 (8)	282 (16)	373 (16)	456 (10)	473 (8)	550 (5)	557 (1)	623 (1)		608 (5)
2010	46	163 (1)	281 (4)	340 (17)	443 (5)	474 (10)	493 (3)			602 (1)	742 (5)

Species: Sauger

		Mean Length (expanded sample number) at capture by age									
Year	N	1	2	3	4	5	6	7	8	9	10+
2019	13	283 (2)		405 (7)	414 (2)	497 (2)					
2018	23	272 (1)	371 (9)	435 (3)	487 (5)	513 (1)	472 (3)				448 (1)
2017	6			477 (4)	530 (1)					462 (1)	
2016	24	347 (7)	408 (11)	415 (1)	493 (4)			478 (1)			
2015	23	293 (10)	363 (4)	406 (7)			447 (1)				447 (1)
2014	24	302 (5)	380 (15)			408 (2)		516 (1)	495 (1)		
2013	32	289 (11)	324 (4)	398 (3)	411 (3)	440 (6)	456 (4)	404 (1)			
2012	20	314 (1)	369 (1)	416 (3)	433 (13)	431 (2)					
2011	32		354 (7)	387 (16)	415 (5)	413 (1)	498 (1)	495 (2)			
2010	93	275 (19)	354 (51)	394 (17)	438 (3)	440 (3)					

Species: Smallmouth Bass

		Mean Length (expanded sample number) at capture by age									
Year	N	1	2	3	4	5	6	7	8	9	10+
2019	18	115 (5)	164 (4)	237 (5)	313 (3)	401 (1)					
2018	27		200 (16)	282 (8)	362 (2)			460 (1)			
2017	28	127 (3)	225 (20)	293 (3)	317 (2)						
2016	40	119 (2)	208 (17)	272 (15)	314 (3)	357 (2)	417 (1)				
2015	30		205 (8)	260 (19)	309 (3)						
2014	56	91 (1)	205 (18)	279 (21)	323 (12)	350 (3)	368 (1)				

		Mean Length (expanded sample number) at capture by age									
Year	N	1	2	3	4	5	6	7	8	9	10+
2013	108	131 (13)	205 (42)	270 (35)	290 (15)	360 (2)		465 (1)	500 (1)		
2012	23		193 (4)	260 (13)	344 (6)						
2011	147	106 (5)	180 (60)	251 (64)	298 (14)	404 (1)	387 (3)				
2010	112	134 (4)	174 (53)	235 (39)	287 (12)	342 (3)		420 (1)			

Species: Walleye

		Mean Length (expanded sample number) at capture by age									
Year	N	1	2	3	4	5	6	7	8	9	10+
2019	15	269 (1)	354 (1)	398 (8)	437 (2)			592 (2)	672 (1)		
2018	31	270 (1)	377 (12)	438 (7)	501 (2)	541 (2)		657 (1)	465 (1)	518 (4)	499 (1)
2017	26	284 (12)	401 (3)	475 (1)	493 (1)	530 (5)		603 (1)	531 (2)		524 (1)
2016	40	350 (12)	415 (10)	495 (4)	445 (7)	537 (1)		584 (2)	471 (3)	523 (1)	
2015	27	287 (12)	369 (5)	418 (4)	467 (2)	434 (1)	460 (1)	470 (2)			
2014	25	301 (6)	377 (12)	417 (3)		422 (1)	495 (1)	443 (1)	433 (1)		
2013	37	293 (9)	381 (9)	466 (1)	439 (3)	461 (8)	523 (5)	475 (1)			530 (1)
2012	53	300 (6)	369 (4)	416 (13)	453 (18)	457 (7)	444 (1)	477 (1)	541 (1)		552 (2)
2011	28		341 (7)	405 (9)	460 (9)	497 (1)	513 (1)		628 (1)		
2010	83	260 (16)	353 (39)	417 (17)	454 (2)	538 (2)	463 (2)	516 (1)	540 (2)	516 (1)	529 (1)

Fish Condition

Mean relative weight (Wr) by sample size (N), length category stock to quality (S-Q), quality to preferred (Q-P), preferred to memorable (P-M), and memorable (M) for species collected across survey years with standard error (SE).

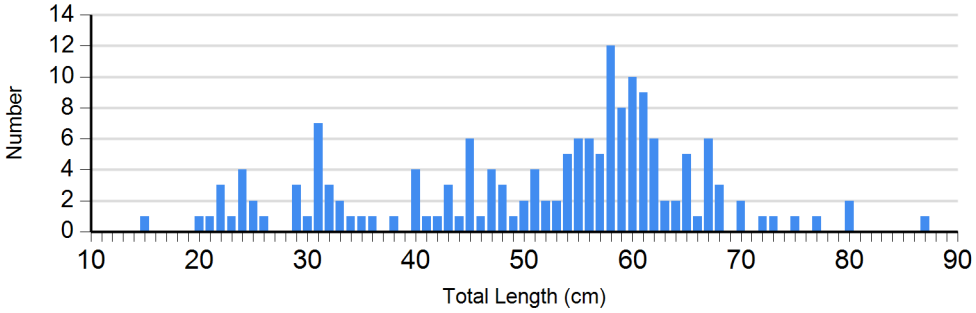
		Length Groups							
		S-Q		Q-P		P-M		M	
Species	Year	N	Wr (SE)	N	Wr (SE)	N	Wr (SE)	N	Wr (SE)
Channel Catfish Gill Net	2015	17	87 (1.4)	54	88 (0.9)	3	89 (3.4)	2	84 (4.9)
	2016	11	94 (1.7)	33	91 (1.2)	4	90 (2.6)	0	
	2017	24	86 (1.1)	83	93 (0.7)	36	94 (0.9)	7	102 (4.0)
	2018	32	90 (1.4)	27	93 (2.5)	25	91 (1.7)	7	91 (2.9)
	2019	16	94 (1.5)	11	95 (2.0)	10	96 (3.4)	3	109 (2.2)
Sauger Gill Net	2015	7	77 (2.0)	7	81 (1.2)	9	76 (2.3)	0	
	2016	7	92 (5.4)	6	93 (2.4)	17	81 (2.6)	0	
	2017	0		0		5	81 (5.0)	1	78
	2018	1	79	6	79 (2.0)	13	76 (1.0)	3	76 (2.3)
	2019	2	81 (9.3)	1	81	10	76 (1.6)	0	
Smallmouth Bass Electro Fishing	2015	25	99 (1.5)	5	88 (2.6)	0		0	
	2016	28	98 (1.6)	7	88 (3.1)	3	97 (3.4)	0	
	2017	20	102 (1.9)	5	100 (3.0)	0		0	
	2018	18	95 (1.5)	5	94 (2.8)	2	88 (2.1)	1	101
	2019	7	87 (2.7)	3	99 (4.0)	1	101	0	
Walleye Gill Net	2015	14	86 (2.1)	11	83 (1.3)	0		0	
	2016	13	97 (2.2)	21	96 (1.7)	6	94 (2.4)	0	
	2017	10	84 (1.5)	6	82 (1.9)	7	86 (1.0)	0	
	2018	9	83 (1.8)	15	86 (1.4)	6	85 (2.6)	1	84
	2019	4	90 (4.9)	8	89 (2.2)	2	82 (9.3)	1	70
White Bass Gill Net	2015	1	96	0		2	98 (1.0)	0	
	2016	7	95 (4.6)	1	99	0		1	93

		Length Groups							
		S-Q		Q-P		P-M		M	
Species	Year	N	Wr (SE)	N	Wr (SE)	N	Wr (SE)	N	Wr (SE)
White Bass Gill Net	2017	0		1	106	3	100 (2.3)	0	
	2018	0		0		1	102	0	
	2019	0		0		0		1	82

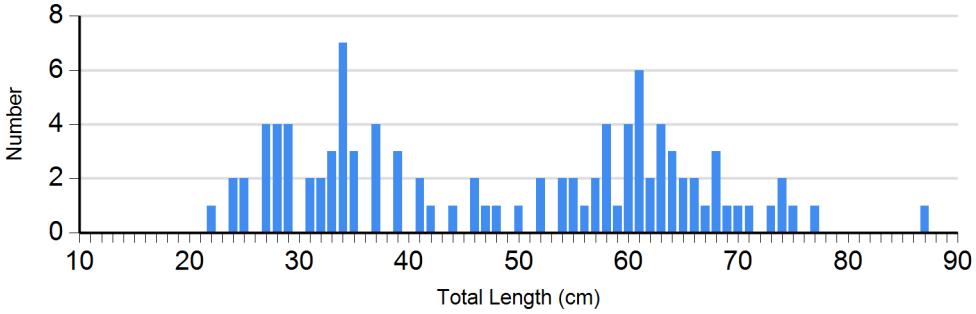
Length Frequency Distribution

Length frequency histogram of species sampled by year.

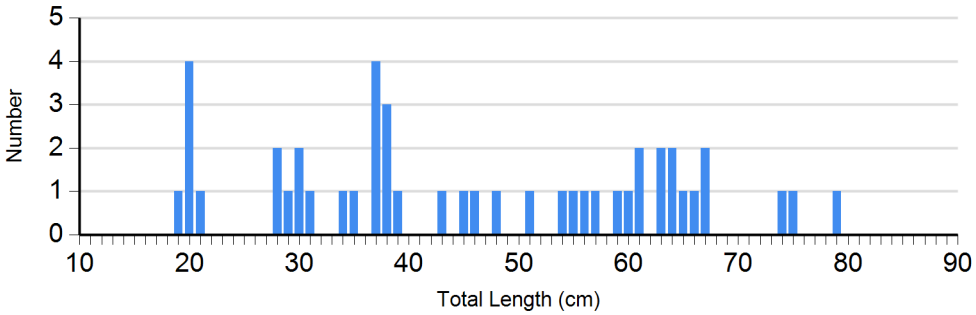
Species: Channel Catfish
Gear: AFS std gill net



2017

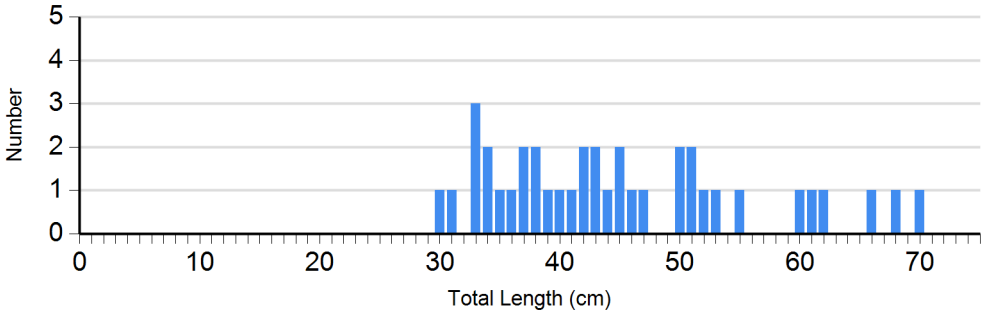


2018

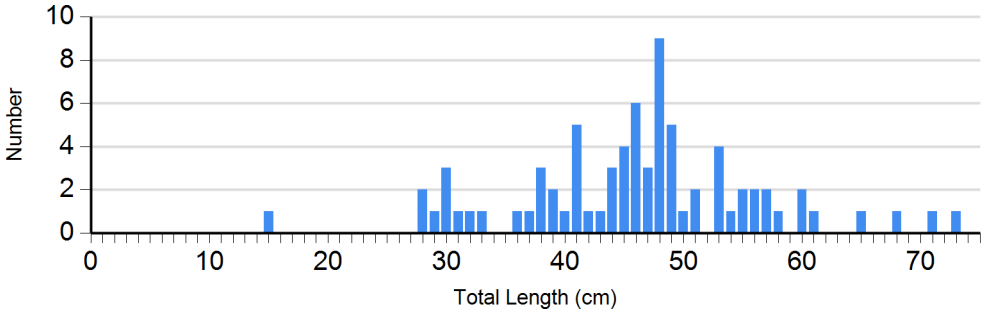


2019

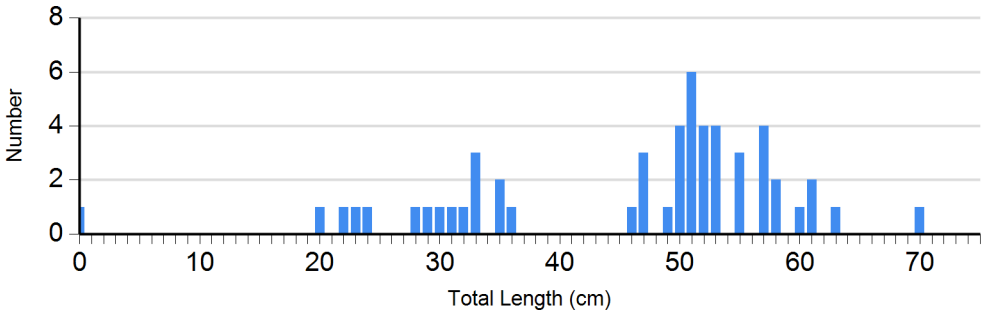
Species: Channel Catfish
Gear: std exp gill net



2014

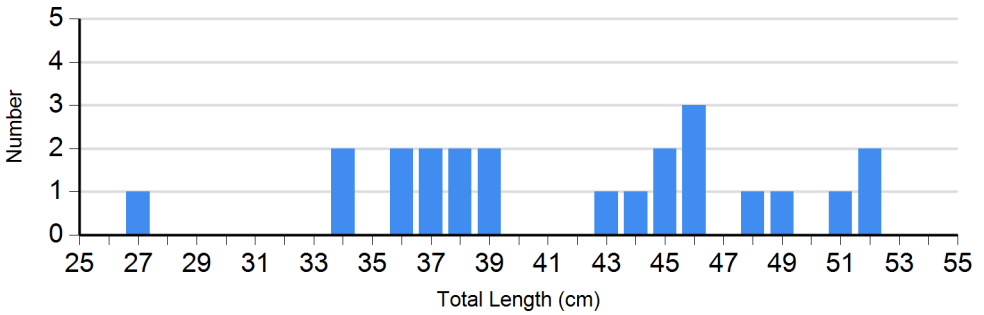


2015

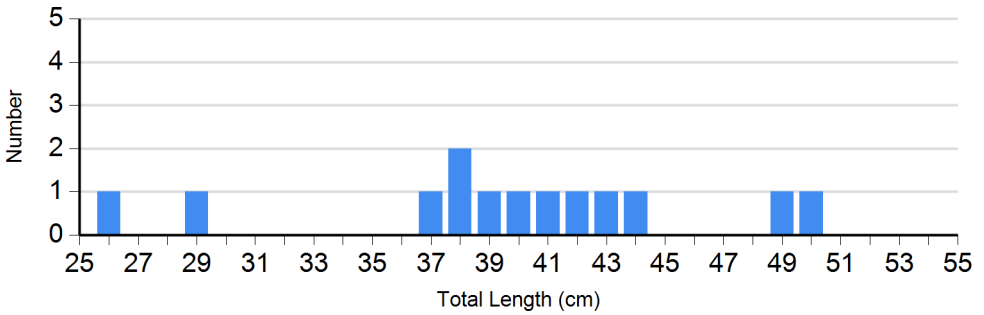


2016

Species: Sauger
Gear: AFS std gill net

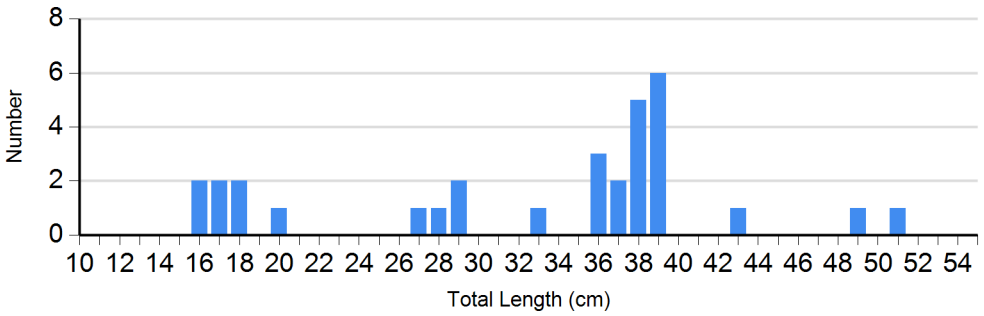


2018

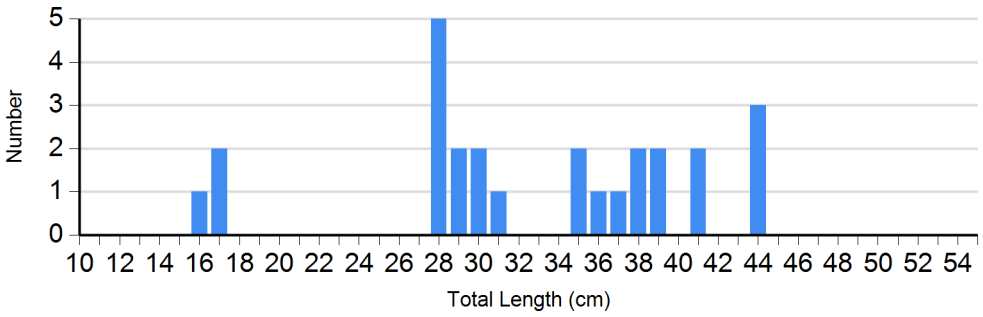


2019

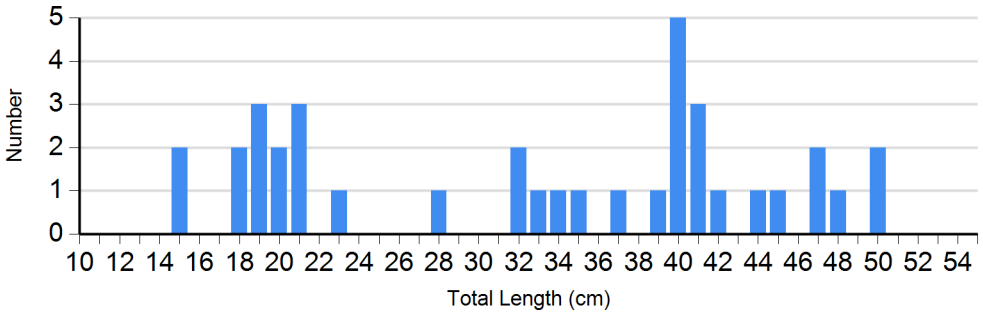
Species: Sauger
Gear: std exp gill net



2014

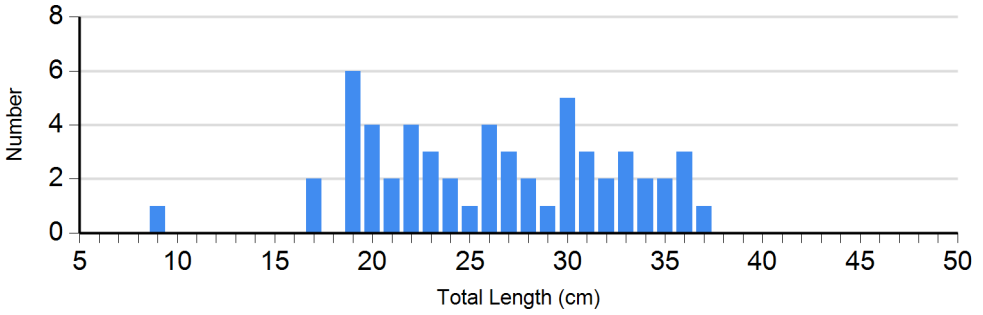


2015

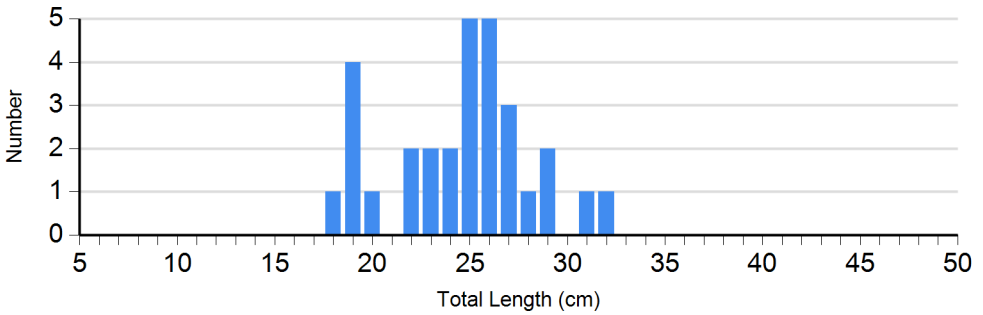


2016

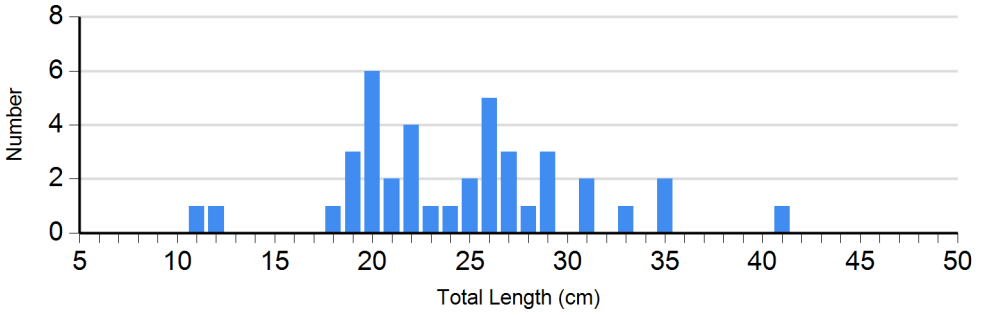
Species: Smallmouth Bass
Gear: boat shocker (night)



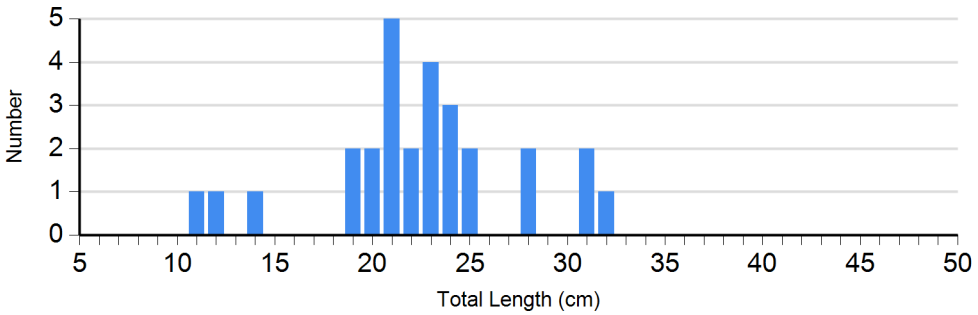
2014



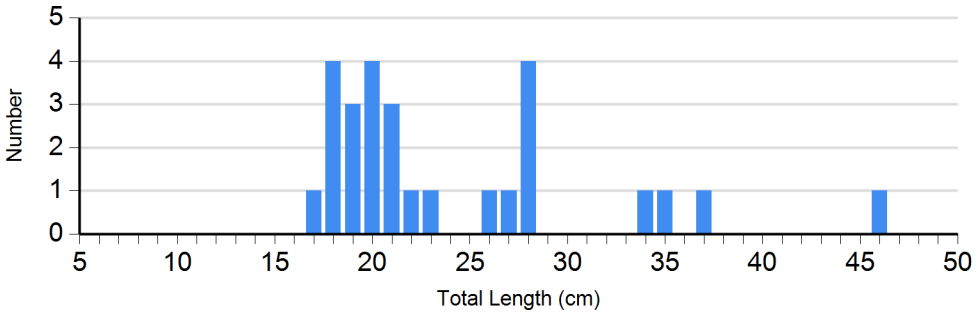
2015



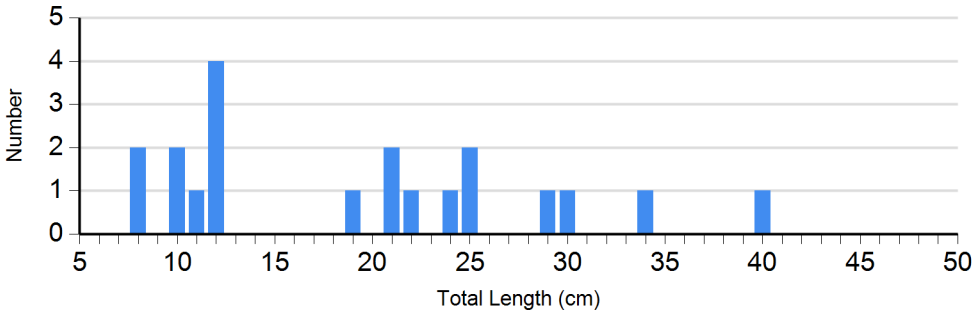
2016



2017

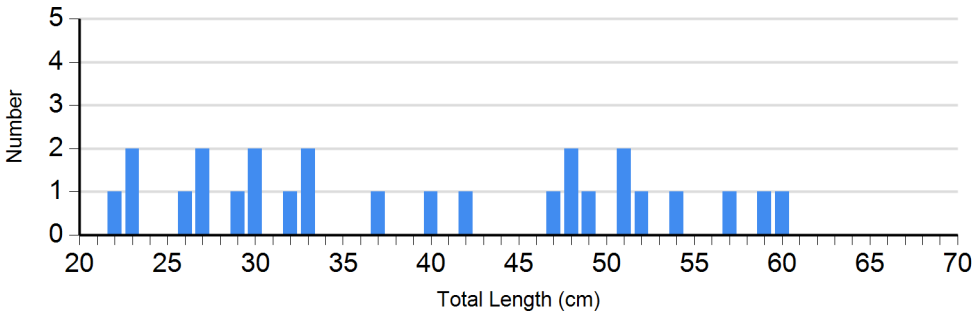


2018

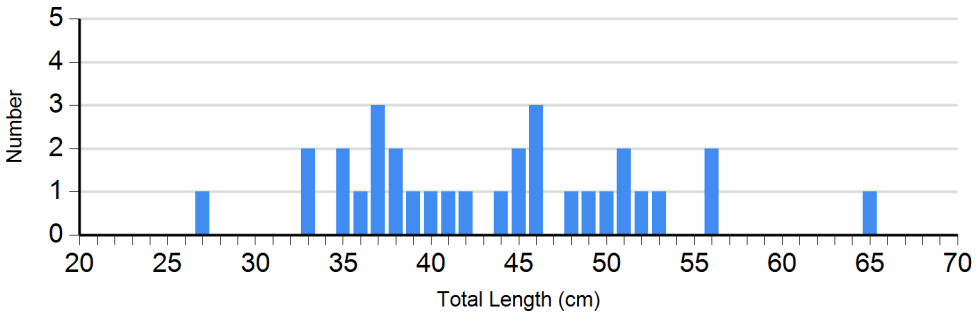


2019

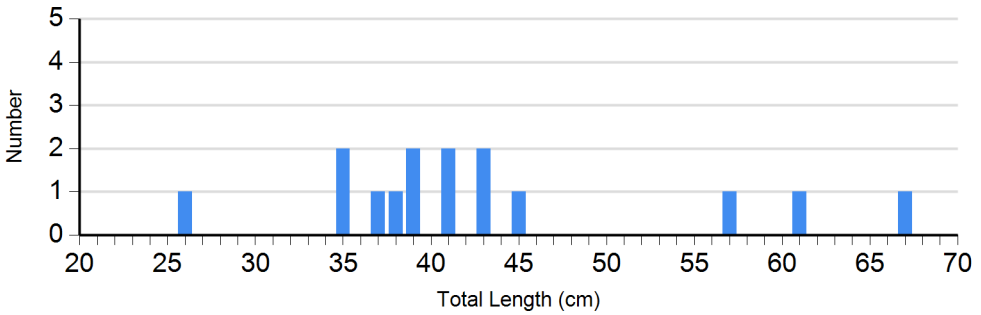
Species: Walleye
Gear: AFS std gill net



2017

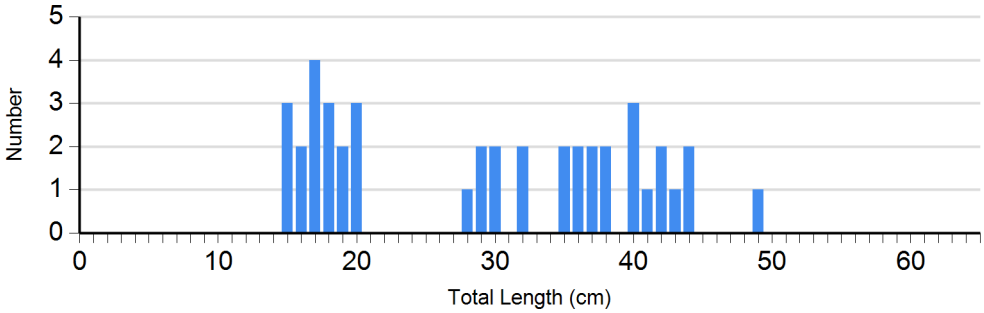


2018

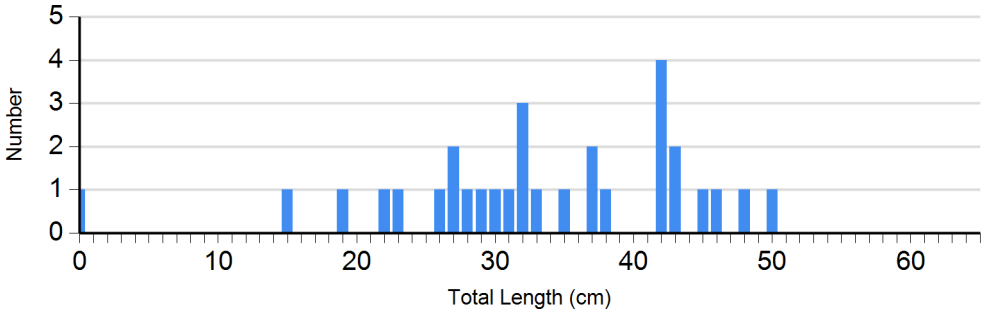


2019

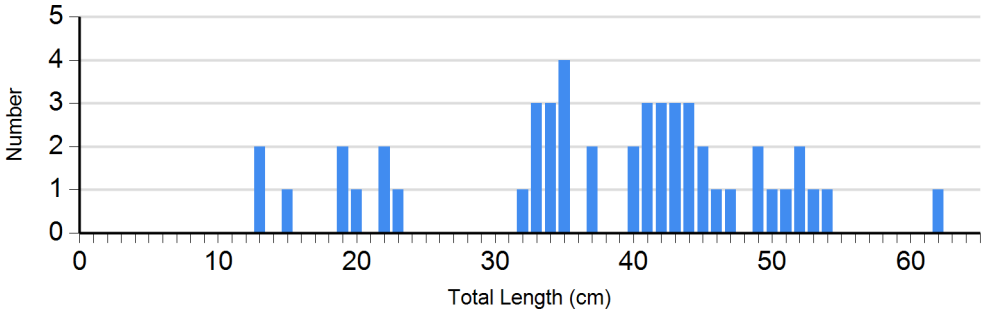
Species: Walleye
Gear: std exp gill net



2014

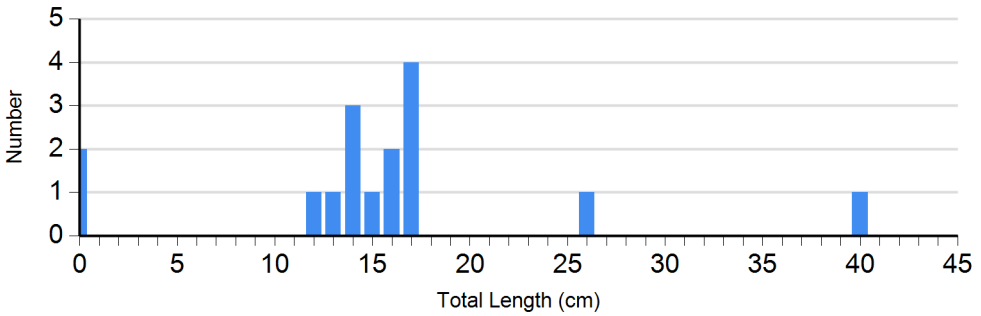


2015



2016

Species: White Bass
Gear: std exp gill net

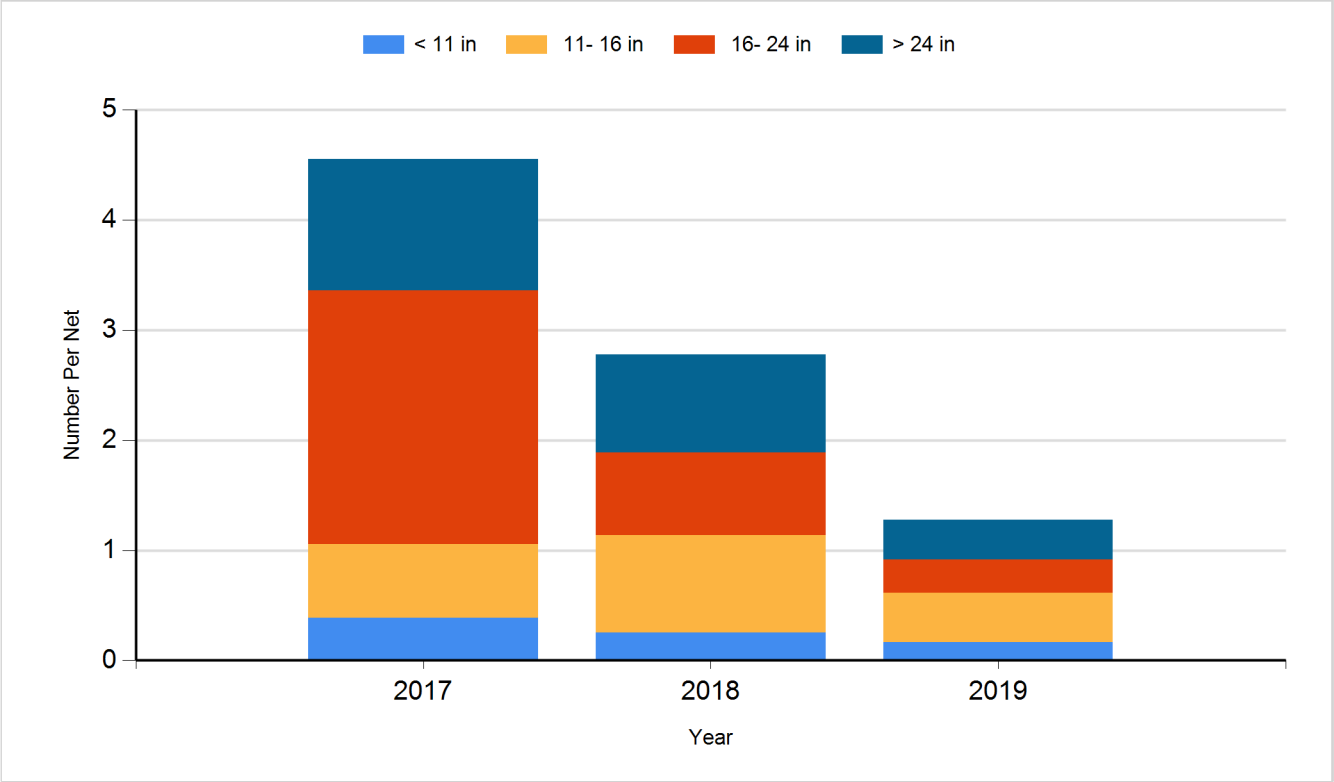


2016

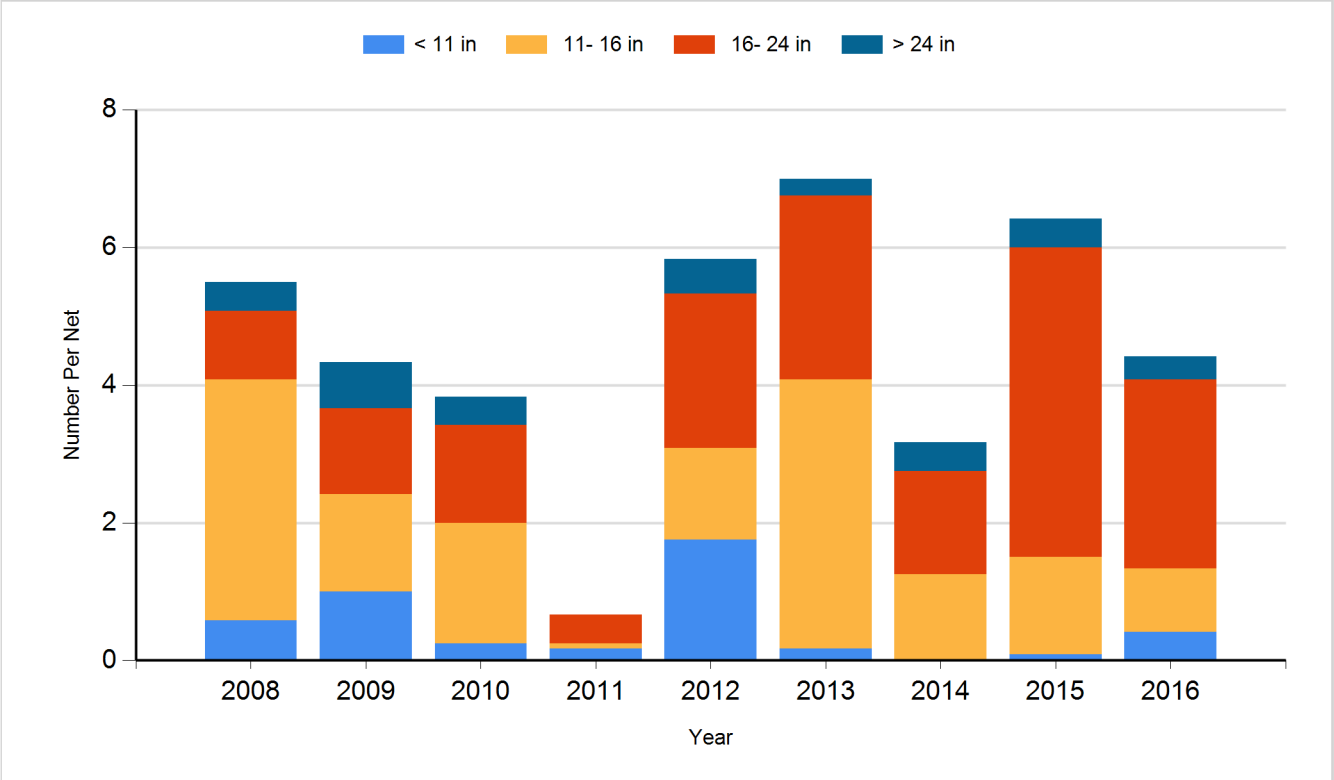
Historic Fish Sizes and Relative Abundance

Size distribution per net by color for species sampled by year.

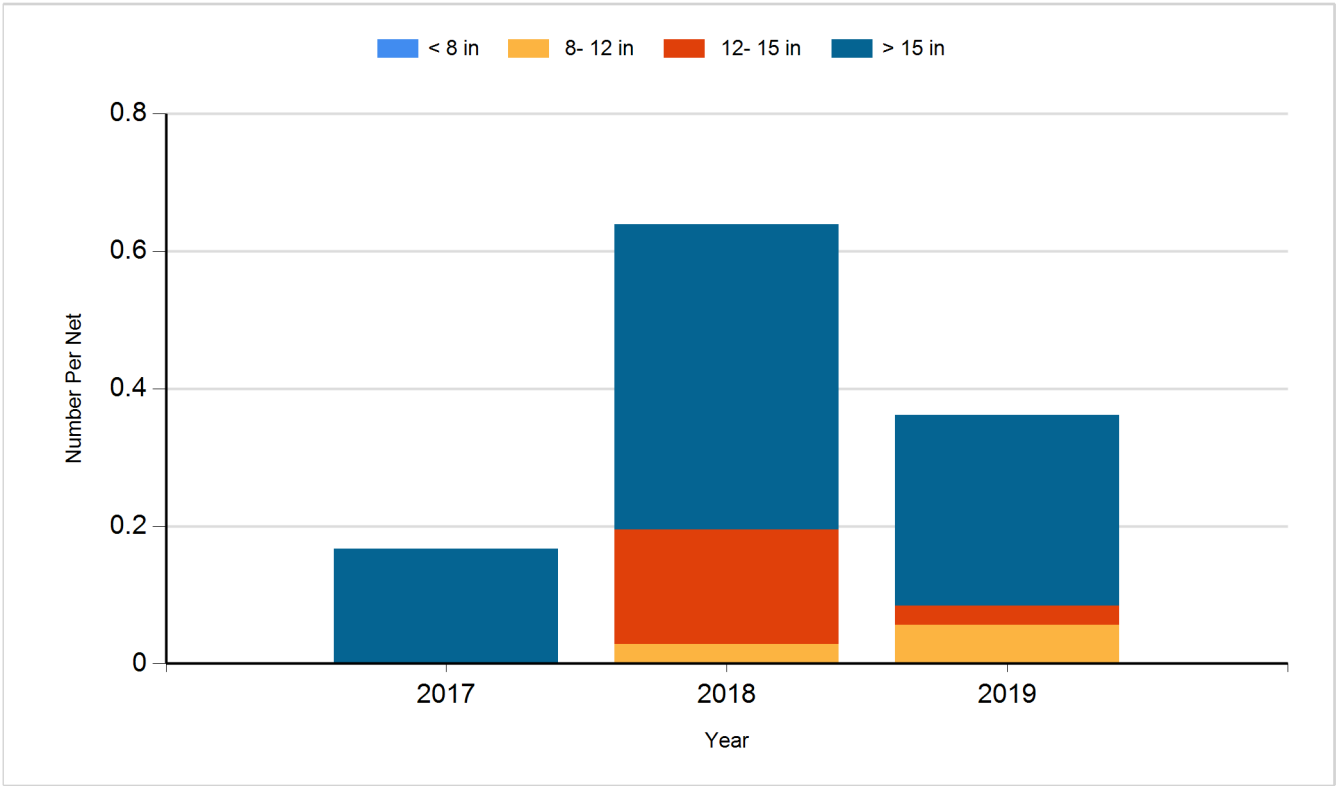
Species: Channel Catfish
Gear: AFS std gill net



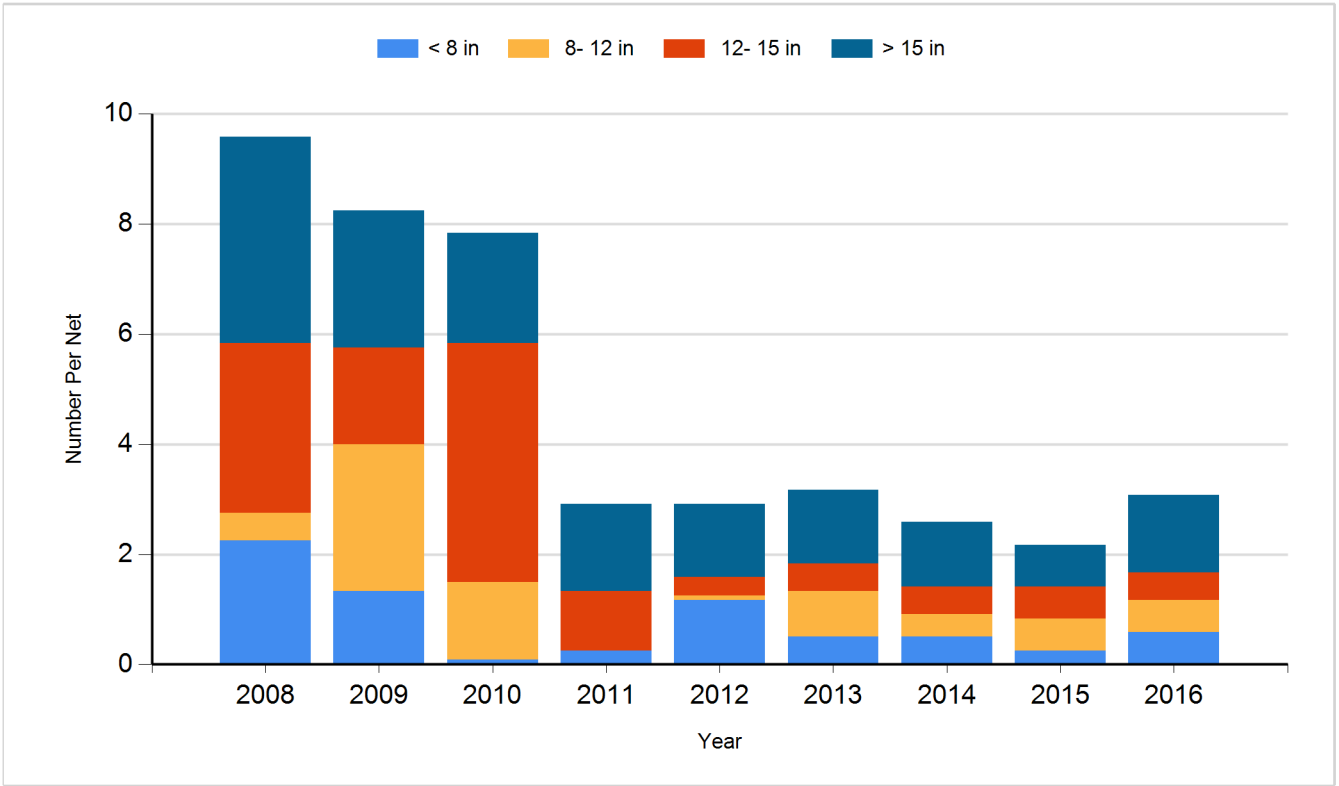
Species: Channel Catfish
Gear: std exp gill net



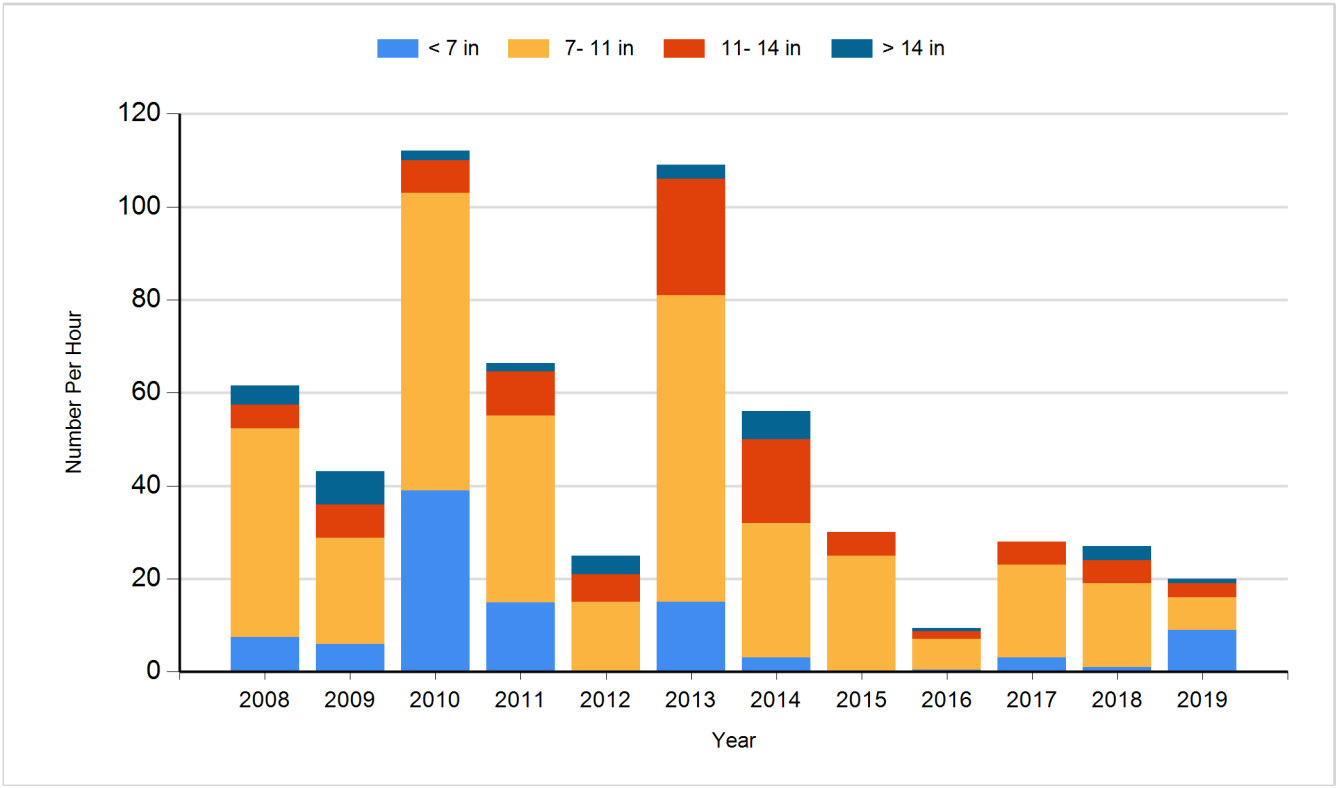
Species: Sauger
Gear: AFS std gill net



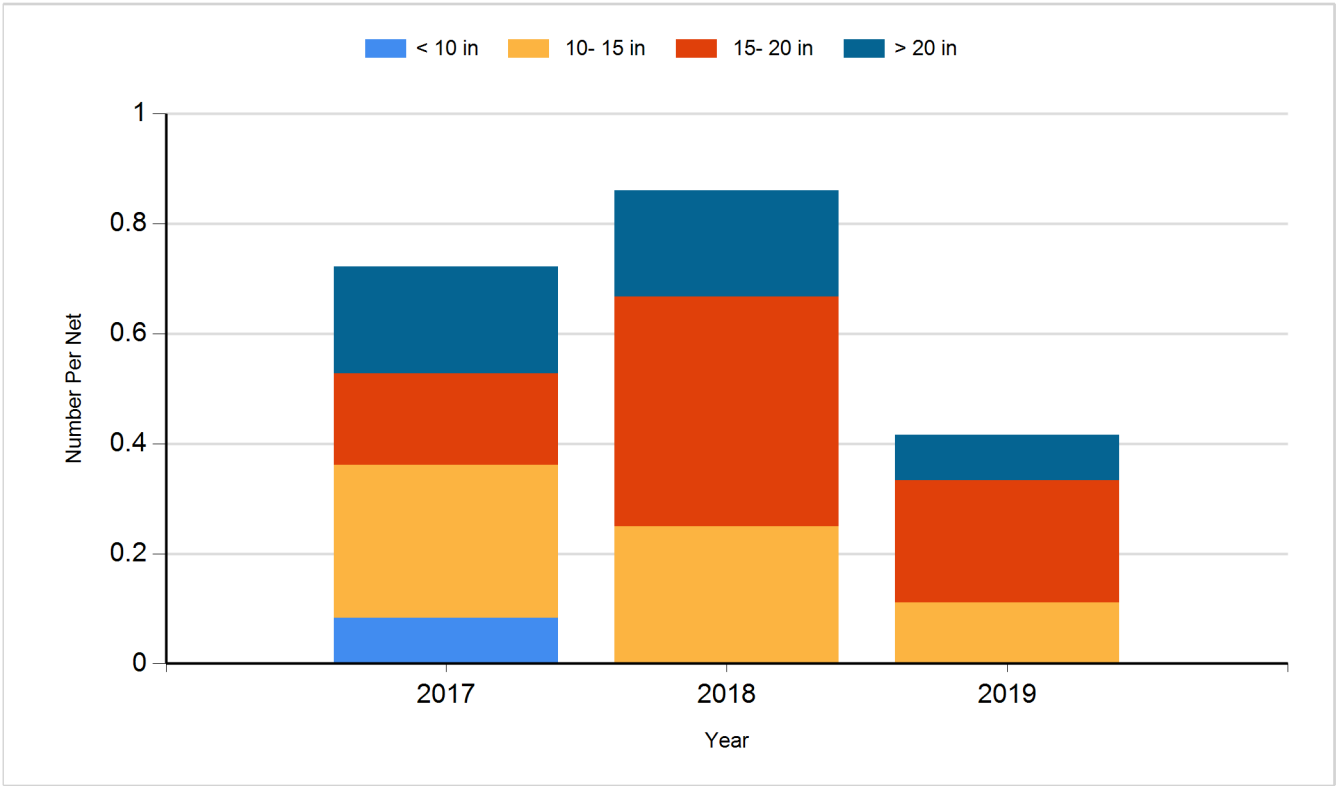
Species: Sauger
Gear: std exp gill net



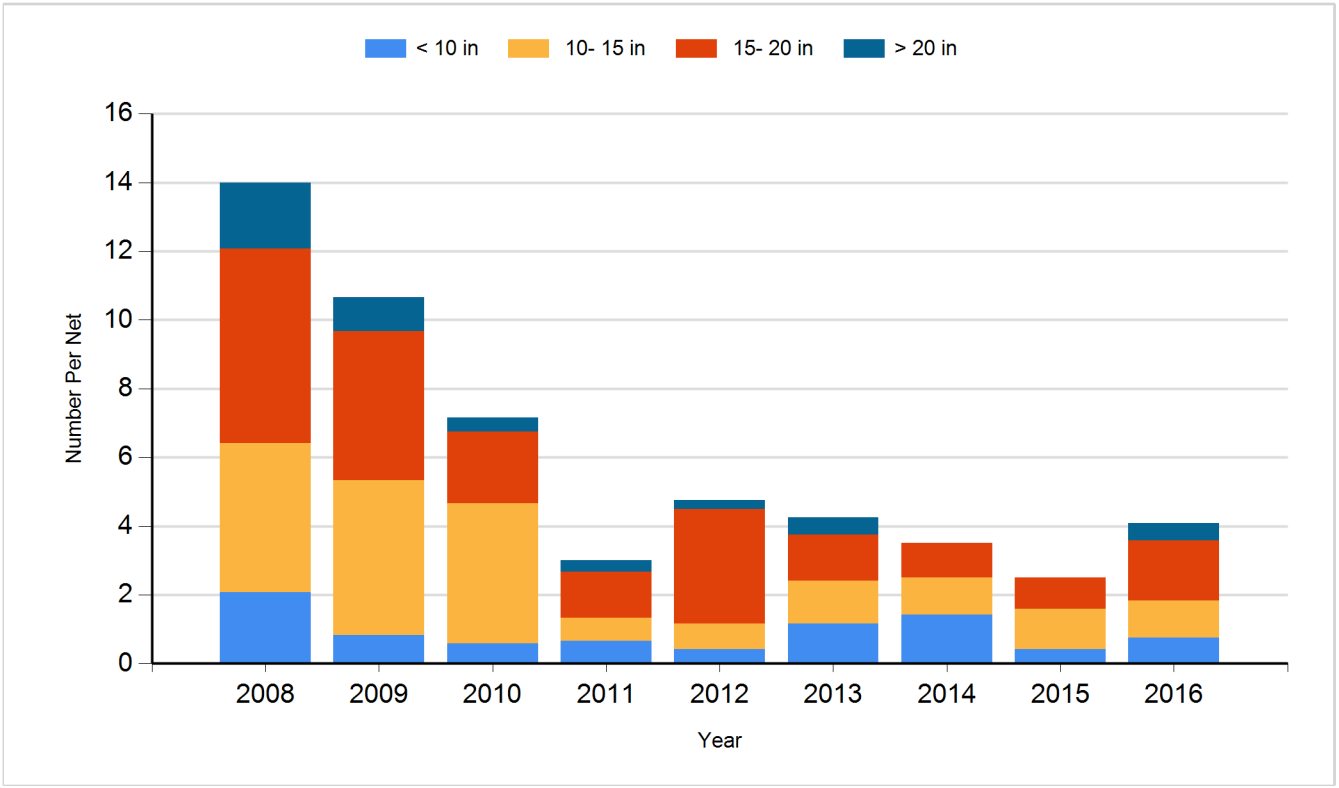
Species: Smallmouth Bass
Gear: boat shocker (night)



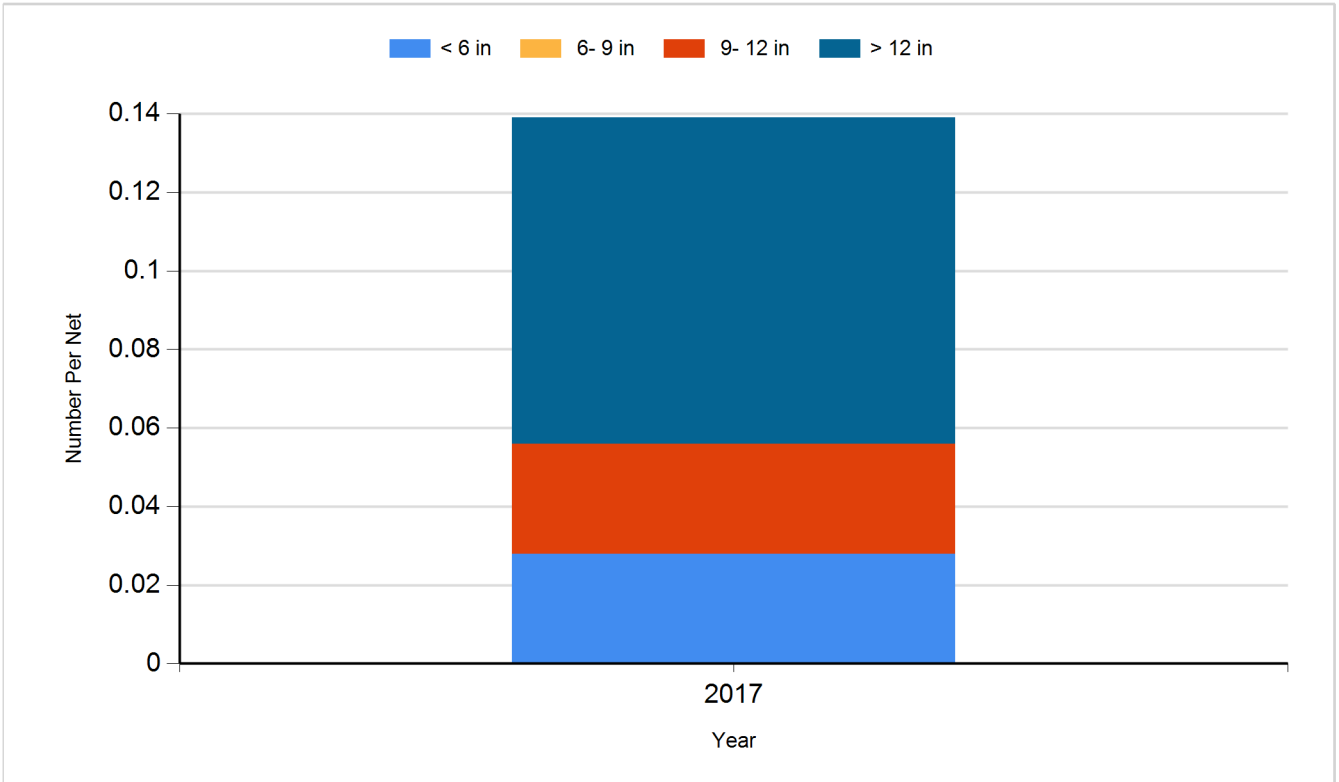
Species: Walleye
Gear: AFS std gill net



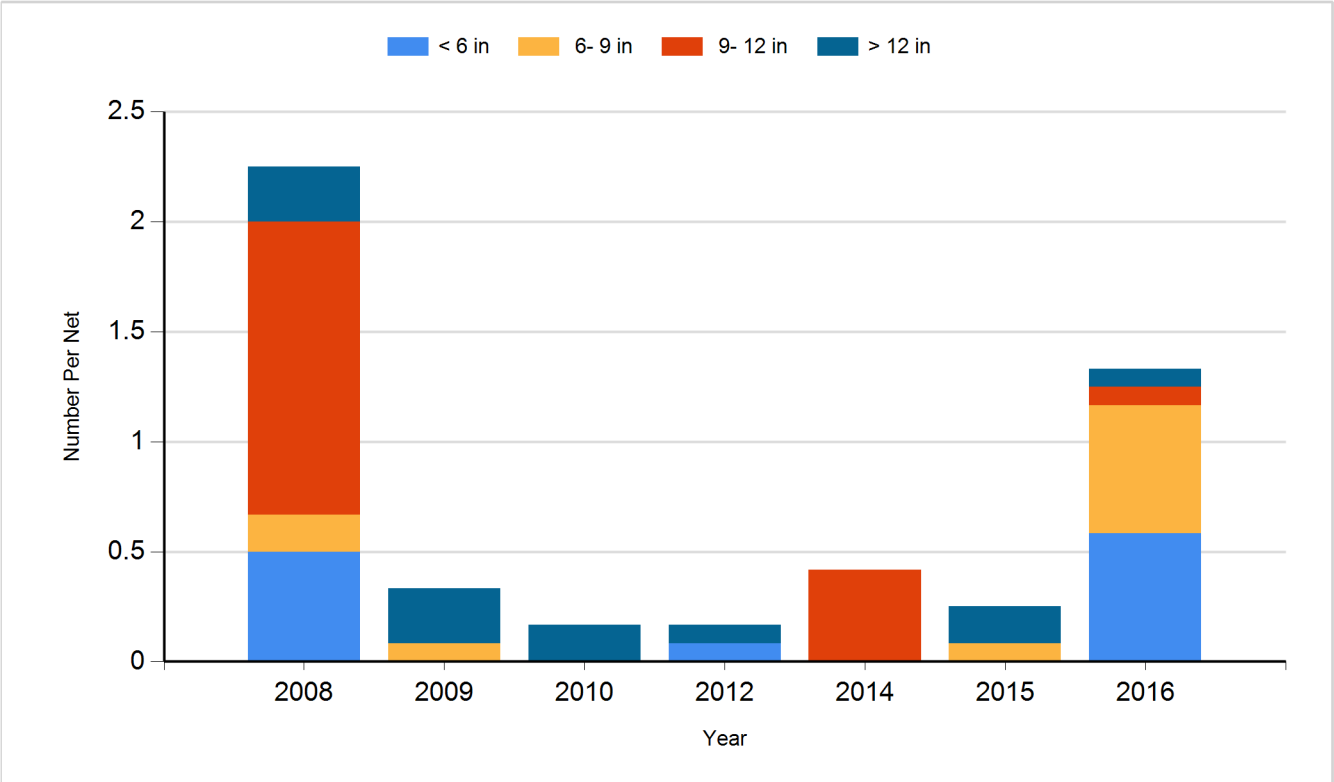
Species: Walleye
Gear: std exp gill net



Species: White Bass
Gear: AFS std gill net



Species: White Bass
Gear: std exp gill net



Fish Stocking

Number of fish stocked by year, species, and size.

Year	Species	Size	Number
2019	Walleye	Fingerling	1,819,269