SOUTH DAKOTA STATEWIDE FISHERIES SURVEY
Lewis and Clark, Yankton County
LCL-Lake-73-000
2018

Lake Information

Name: Lewis and Clark

County: Yankton

Surface Area: 48,774 Acres

Surveys and Investigations

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

Gear	Date	Effort
AFS gill net (1/2 inch)	Sep 17, 2018	21 net-nights
AFS gill net (1/2 inch)	Sep 18, 2018	15 net-nights
AFS std gill net	Sep 17, 2018	21 net-nights
AFS std gill net	Sep 18, 2018	15 net-nights
boat shocker (night)	May 22, 2018	3600 seconds
fall night EF-WAE	Oct 17, 2018	7210 seconds
large seine	Jul 23, 2018	13 hauls

Common Fish Species Present

Gizzard Shad

Bluegill

Walleye

Smallmouth Bass

Sauger

Freshwater Drum

Channel Catfish

Largemouth Bass

Black Crappie

White Bass

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)*	Channel Catfish	7	0.2	0.1	50		0		105	12
	Common Carp	1	0.0	0.0	100		100		111	
	Freshwater Drum	26	0.7	0.3	0		0		105	6
	Gizzard Shad	103	2.9	1.1	0				94	2
	Sauger	6	0.2	0.1	100		100		78	3
	Walleye	8	0.2	0.1	50		0		82	4
AFS std gill net	Channel Catfish	100	2.5	0.4	65	7	35	7	91	1
	Common Carp	2	0.1	0.1	100		100		97	7
	Flathead Catfish	3	0.1	0.1	0		0		85	7
	Freshwater Drum	118	3.2	0.7	73	6	60	6	95	1
	Gizzard Shad	85	1.0	0.3	6				103	2
	Paddlefish	2	0.1	0.1	50		0		80	
	River Carpsucker	2	0.1	0.1	100		100		92	4
	Sauger	23	0.6	0.2	96		70	15	77	1
	Shorthead Redhorse	6	0.2	0.1	100		100		99	3
	Shortnose Gar	1	0.0	0.0						
	Smallmouth Buffalo	1	0.0	0.0	100		100		87	
	Walleye	31	0.9	0.3	71	13	23	12	85	1
	White Bass	1	0.0	0.0	100		100		102	
	Yellow Perch	1	0.0	0.0	100		100		96	
boat shocker (night)	Smallmouth Bass	27	26.0	16.1	31	14	12		94	2
fall night EF-WAE*	Sauger	40	20.0	9.6						
	Walleye	68	34.0	21.0						
large seine*	Black Crappie	21	1.6	0.9						
	Bluegill	899	69.2	21.9						
	Channel Catfish	2	0.2	0.0						
	Emerald Shiner	4	0.3	0.1						
	Freshwater Drum	16	1.2	0.2						
	Gizzard Shad	1130	86.9	2.4						
	Grass Pickerel	1	0.1	0.0						
	Johnny Darter	3	0.2	0.0						

			Abundance		Stock Density Indices				Condition	
Gear	Species	Sample Size (n)	CPUE	CI-80	PSD	CI-80	PSD-P	CI-80	Wr	CI-80
large seine*	Largemouth Bass	28	2.2	0.4						
	Northern Pike	3	0.2	0.0						
	River Carpsucker	1	0.1	0.0						
	Sauger	2	0.2	0.2						
	Smallmouth Buffalo	1	0.1	0.0						
	Spotfin Shiner	2	0.2	0.0						
	Western Silvery Minnow	1	0.1	0.0						
	White Bass	21	1.6	0.3						
	Yellow Perch	16	1.2	0.3						

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	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Avg
AFS gill net (1/2 inch)	Channel Catfish									0.1	0.2	0.2
	Common Carp										0.0	0.0
	Freshwater Drum									0.1	0.7	0.4
	Gizzard Shad									0.1	2.9	1.5
	Sauger									0.1	0.2	0.2
	Walleye									0.0	0.2	0.1
AFS std gill net	Channel Catfish									4.2	2.5	3.4
	Common Carp									0.1	0.1	0.1
	Flathead Catfish									0.1	0.1	0.1
	Freshwater Drum									1.9	3.2	2.6
	Gizzard Shad									0.3	1.0	0.7
	Paddlefish										0.1	0.1
	River Carpsucker									0.6	0.1	0.4
	Sauger									0.2	0.6	0.4
	Shorthead Redhorse									0.1	0.2	0.2
	Shortnose Gar									0.0	0.0	0.0
	Smallmouth Bass									0.0		0.0
	Smallmouth Buffalo									0.3	0.0	0.2
	Walleye									0.6	0.9	0.8
	White Bass									0.1	0.0	0.1
	Yellow Perch									0.1	0.0	0.1
boat shocker (night)	Largemouth Bass								0.0	4.0		2.0
	Sauger								8.3			8.3
	Smallmouth Bass	37.2	73.0	54.6	25.0	94.0	53.0	30.0	7.1	25.0	26.0	42.5
	Walleye								15.0			15.0
electrofishing (flathead)	Flathead Catfish	6.3	6.5	16.3	8.8	11.7						9.9
fall night EF-WAE	Sauger	3.5		0.5	28.5	8.3	5.0	0.5		1.7	20.0	8.5
	Walleye	24.5	8.5	6.5	51.5	48.0	30.0	12.0	56.0	18.0	34.0	28.9
large seine	Bigmouth Buffalo			0.2			0.8	0.1	0.1			0.3
	Black Crappie	0.3		2.9	0.7		0.8	1.5	0.4	0.1	1.6	1.0
	Bluegill	3.3	0.3	1.6	3.3	0.3	0.1	0.3	1.6	3.3	69.2	8.3
	Bluntnose Minnow			0.6								0.6
	Central Stoneroller	0.3										0.3
	Channel Catfish	0.5	0.1	0.1	0.2	0.1		0.7	0.5	0.2	0.2	0.3

		CPUE										
Gear	Species	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Avg
large seine	Common Carp		0.1			0.1			0.1			0.1
	Common Shiner	0.5										0.5
	Creek Chub		0.1									0.1
	Emerald Shiner	171.3	75.8	23.6	9.2	355.1	0.3	5.8		0.2	0.3	71.3
	Fathead Minnow		1.6	0.3	0.2	0.1						0.6
	Flathead Catfish				0.1							0.1
	Freshwater Drum	2.3	0.3		0.1	3.1	0.6	2.0	5.0	2.6	1.2	1.9
	Gizzard Shad	3,753.0	20.3	4.4		346.8	16.8	5.3	2.5	169.1	86.9	489.5
	Golden Shiner						0.1					0.1
	Goldeye			5.5								5.5
	Grass Pickerel										0.1	0.1
	Green Sunfish								0.1			0.1
	Johnny Darter	4.5	7.9	0.7	0.6	0.7	6.2	2.3	3.4	0.3	0.2	2.7
	Largemouth Bass			0.5	2.0	0.6	3.8	2.9	1.5	0.9	2.2	1.8
	Northern Pike			0.8							0.2	0.5
	Northern Redbelly Dace		0.1									0.1
	Red Shiner	2.0		0.6	0.4							1.0
	River Carpsucker	0.5	0.5	0.2	1.7	0.4	0.3	0.2	1.4	3.8	0.1	0.9
	Rock Bass									0.1		0.1
	Sand Shiner						0.1					0.1
	Sauger	0.8		0.3			0.3				0.2	0.4
	Shorthead Redhorse	2.0	0.3	1.8	0.5							1.2
	Shortnose Gar	0.3	0.1									0.2
	Silver Chub			0.5								0.5
	Smallmouth Bass	2.0			0.5		0.1			0.1		0.7
	Smallmouth Buffalo			0.4		0.3	0.8		0.3	0.1	0.1	0.3
	Spotfin Shiner	3.8	5.0	0.6	0.1	0.3		0.2	0.8		0.2	1.4
	Spottail Shiner	1.3	1.1	0.1		0.1						0.7
	Walleye	3.0		0.9		0.2	0.3		0.1			0.9
	Western Silvery Minnow										0.1	0.1
	White Bass	119.3	0.8	10.4	0.3	5.4	46.8	30.8	3.1	0.5	1.6	21.9
	White Crappie			0.4			0.7	0.1		0.3		0.4
	Yellow Perch			3.0	0.8	14.5	0.3		7.0	0.4	1.2	3.9
std exp gill net	Bigmouth Buffalo	0.1	0.1									0.1
	Black Crappie				0.2							0.2
	Channel Catfish	3.3	3.6	0.5	4.1	6.8	3.2	6.3	4.0			4.0
	Common Carp	0.7	0.3	0.1	0.2	0.6	0.2	0.3	0.2			0.3

		CPUE										
Gear	Species	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Avg
std exp gill net	Flathead Catfish			0.0			0.1	0.0	0.1			0.1
	Freshwater Drum	2.8	1.7	3.6	0.8	1.1	0.8	0.3	1.3			1.6
	Gizzard Shad	0.0	0.5		1.2	0.1	0.3	1.0	8.0			1.6
	Goldeye			0.0	0.0							0.0
	Northern Pike		0.1		0.3							0.2
	River Carpsucker	0.3	1.3	0.3	0.8	1.1	0.6	2.9	0.3			1.0
	Rock Bass			0.3								0.3
	Sauger	6.9	7.8	2.7	1.8	2.7	2.1	1.9	2.5			3.6
	Shorthead Redhorse	1.3	0.8	0.1	0.9	2.9	2.5	1.3	0.8			1.3
	Shortnose Gar				0.0	0.0	0.0	0.0	0.0			0.0
	Shovelnose Sturgeon		0.0	0.0								0.0
	Smallmouth Bass							0.1				0.1
	Smallmouth Buffalo	0.1			0.3	0.3		0.3	0.0			0.2
	Walleye	9.8	6.6	2.3	4.3	3.1	2.1	2.1	3.3			4.2
	White Bass	0.3	0.2		0.1	0.0	0.4	0.3	0.8			0.3
	White Crappie	0.3	0.3		0.1	0.2		0.0	0.0			0.2
	Yellow Perch				0.3	1.3	1.2	0.4	0.3			0.7

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	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
AFS gill net (1/2 inch)	Channel Catfish	PSD									0	50
		PSD-P									0	0
		Wr									98	105
	Gizzard Shad	PSD									0	0
		Wr									99	94
	Sauger	PSD									0	100
		PSD-P									0	100
		Wr									78	78
	Walleye	PSD									0	50
		PSD-P									0	0
		Wr									76	82
AFS std gill net	Channel Catfish	PSD									84	65
		PSD-P									29	35
		Wr									92	91
	Gizzard Shad	PSD									27	6
		Wr									98	103
	Sauger	PSD									100	96
		PSD-P									100	70
		Wr									80	77
	Smallmouth Bass	PSD									0	
		PSD-P									0	
		Wr									99	
	Walleye	PSD									57	71
		PSD-P									30	23
		Wr									84	85
	White Bass	PSD									100	100
		PSD-P									75	100
		Wr									102	102
boat shocker (night)	Largemouth Bass	PSD								0	50	
		PSD-P								0	25	
		Wr									97	
	Sauger	PSD								76		

			Year									
Gear	Species	Index	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
boat shocker (night)	Sauger	PSD-P								24		
	Smallmouth Bass	PSD	39	12	22	40	30	45	17	26	20	31
		PSD-P	19	3	4	16	3	11	0	8	0	12
		Wr	93	87	91	93	93	93	97	96	102	94
	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	58	51	83	67	43	61	78	77		
		PSD-P	20	12	0	12	4	13	7	8		
		Wr	93	90	102	80	87	86	88	92		
	Gizzard Shad	PSD	0	0		7	100	0	0	15		
		Wr		101		99	34	123	112	100		
	Sauger	PSD	61	82	100	95	69	80	70	77		
		PSD-P	36	26	59	76	50	56	39	57		
		Wr	80	78	76	77	76	82	78	86		
	Smallmouth Bass	PSD							0			
		PSD-P							0			
		Wr							88			
	Walleye	PSD	54	38	71	83	59	48	44	68		
		PSD-P	10	6	14	6	16	0	0	15		
		Wr	82	81	81	83	85	90	85	96		
	White Bass	PSD	75	100		100	0	100	67	22		
		PSD-P	75	100		100	0	0	67	11		
		Wr	94	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
2016	2	16	102 (2.7)	197 (3.6)								
2015	3	8	101 (4.1)	205 (4)	278 (12.6)							
2014	4	2	93 (5.1)	178 (7.6)	291 (7)	359 (14.3)						
2011	7	1	95	162	309	381	413	441	455			
Weighted Mean		27	101	197	283	366	413	441	455			

Year Class	Age	N	11	12	13	14	15	16	17	18	19	20
2016	2	16										
2015	3	8										
2014	4	2										
2011	7	1										
Weighted Mean		27										

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: Largemouth Bass

		Mean Length (expanded sample number) at capture by age									
Year	N	1	2	3	4	5	6	7	8	9	10+
2017	4		278 (1)	299 (2)		439 (1)					

Species: Sauger

		Mean Length (expanded sample number) at capture by age									
Year	N	1	2	3	4	5	6	7	8	9	10+
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)					
2009	83	277 (37)	380 (31)	440 (7)	468 (3)	442 (1)	481 (2)	472 (1)	490 (1)		

Species: Smallmouth Bass

		Mean Length (expanded sample number) at capture by age									
Year	N	1	2	3	4	5	6	7	8	9	10+
2018	27		200 (16)	282 (8)	362 (2)			460 (1)			
2017	28	127 (3)	225 (20)	293 (3)	317 (2)						

		Mean Length (expanded sample number) at capture by age									
Year	N	1	2	3	4	5	6	7	8	9	10+
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)				
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)			
2009	36		195 (13)	259 (16)	341 (5)	372 (1)	409 (1)	445 (1)			

Species: Walleye

		Mean Length (expanded sample number) at capture by age									
Year	N	1	2	3	4	5	6	7	8	9	10+
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)
2009	124	279 (44)	399 (53)	419 (6)	516 (6)	495 (4)	507 (2)	547 (3)		522 (1)	521 (5)

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).

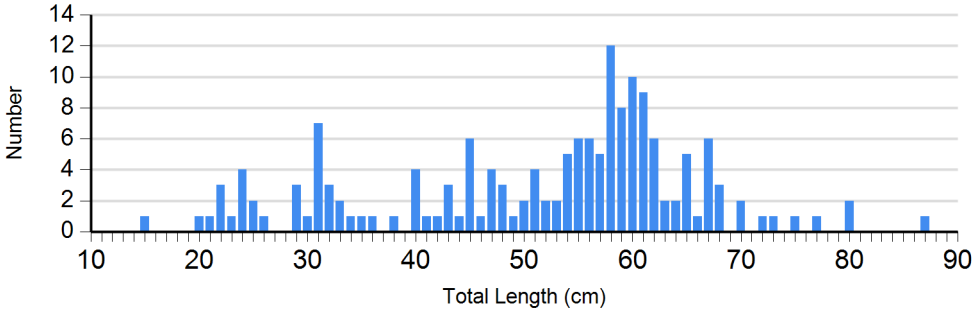
		Length Groups							
		S-Q		Q-P		P-M		M	
Species	Year	N	Wr (SE)	N	Wr (SE)	N	Wr (SE)	N	Wr (SE)
Channel Catfish Gill Net	2014	15	89 (2.4)	18	84 (2.1)	5	82 (3.7)	0	
	2015	17	87 (1.4)	54	88 (0.9)	3	89 (3.4)	2	84 (4.9)
	2016	11	94 (1.7)	33	91 (1.2)	4	90 (2.6)	0	
	2017	24	86 (1.1)	83	93 (0.7)	36	94 (0.9)	7	102 (4.0)
	2018	32	90 (1.4)	27	93 (2.5)	25	91 (1.7)	7	91 (2.9)
Largemouth Bass Electro Fishing	2016	0		0		0		0	
	2017	2	97 (12.3)	1	87	1	108	0	
Sauger Gill Net	2014	5	87 (1.0)	6	81 (0.7)	13	81 (1.6)	1	80
	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)
Smallmouth Bass Electro Fishing	2014	29	91 (2.5)	18	94 (1.7)	6	101 (4.4)	0	
	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
Walleye Gill Net	2014	13	91 (2.3)	12	88 (1.9)	0		0	
	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

		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	2018	0		0		1	102	0	
White Bass Gill Net	2014	0		5	96 (2.6)	0		0	
	2015	1	96	0		2	98 (1.0)	0	
	2016	7	95 (4.6)	1	99	0		1	93
	2017	0		1	106	3	100 (2.3)	0	

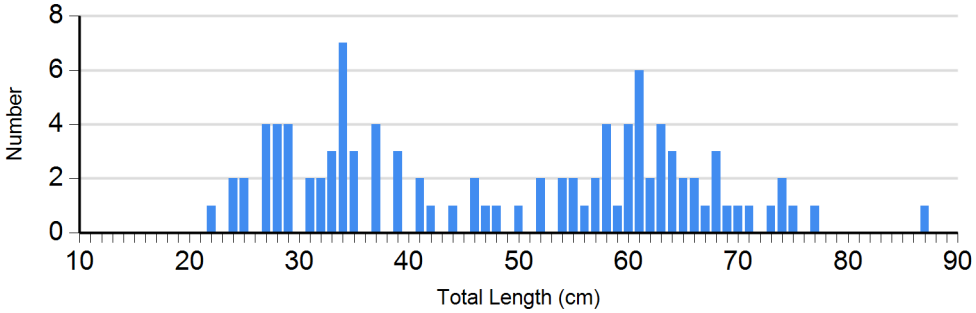
Length Frequency Distribution

Length frequency histogram of species sampled by year.

Species: Channel Catfish
Gear: AFS std gill net

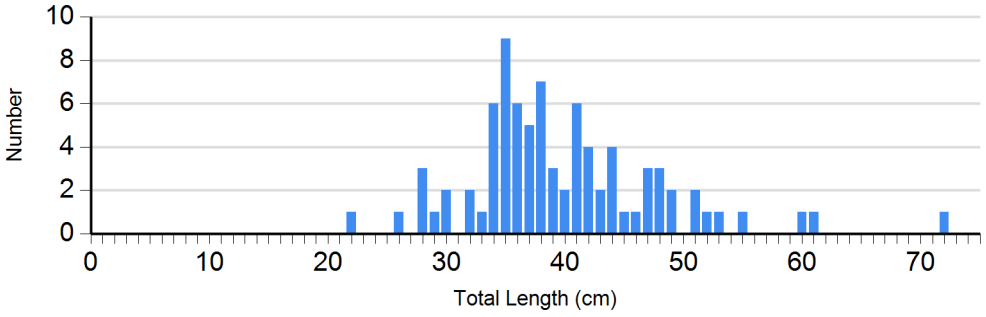


2017

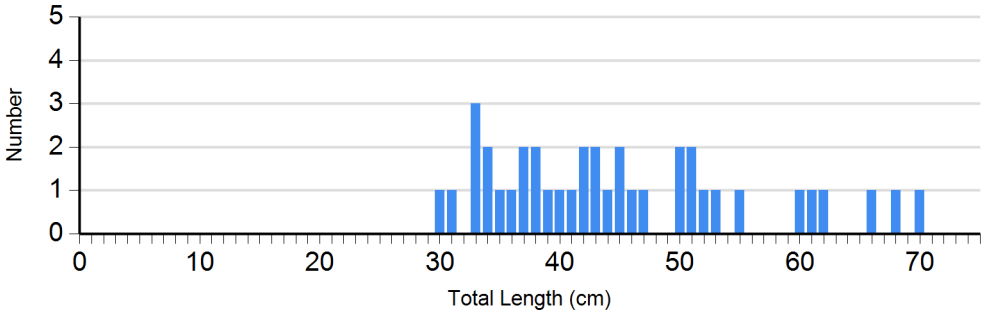


2018

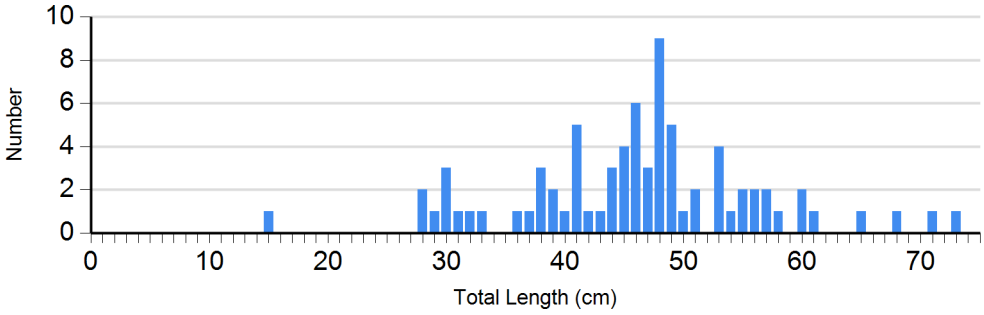
Species: Channel Catfish
Gear: std exp gill net



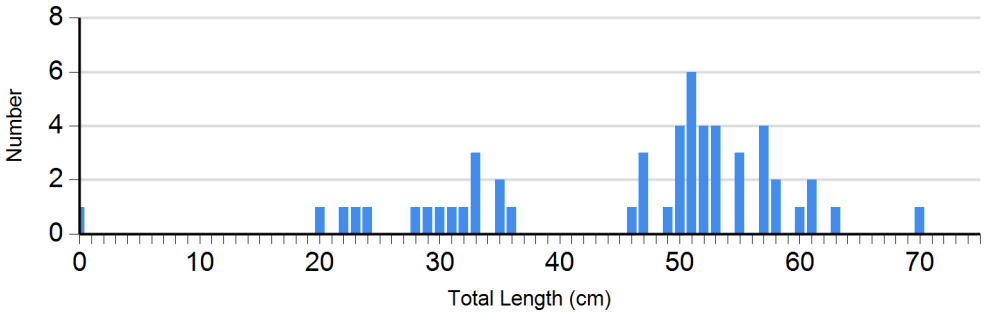
2013



2014

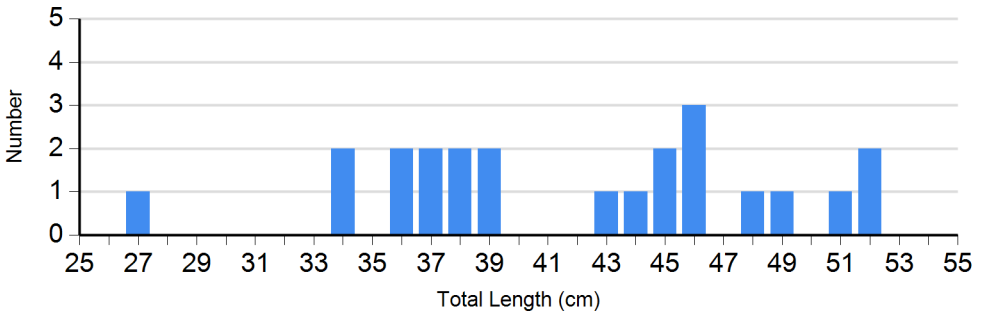


2015



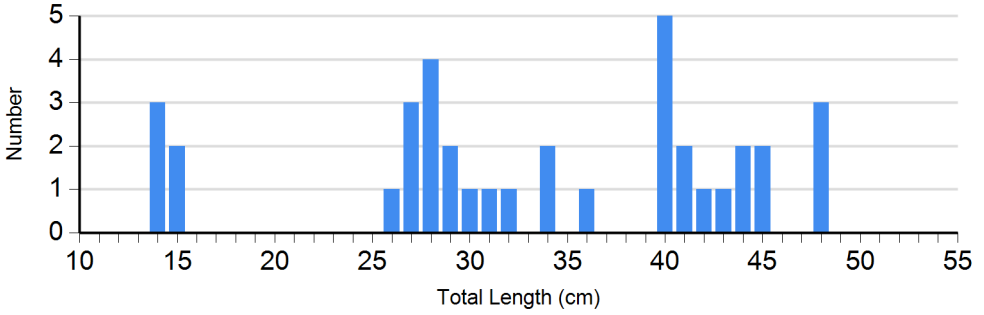
2016

Species: Sauger
Gear: AFS std gill net

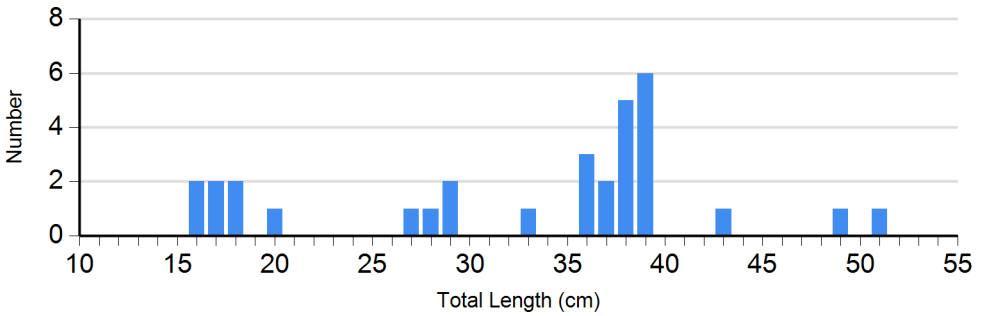


2018

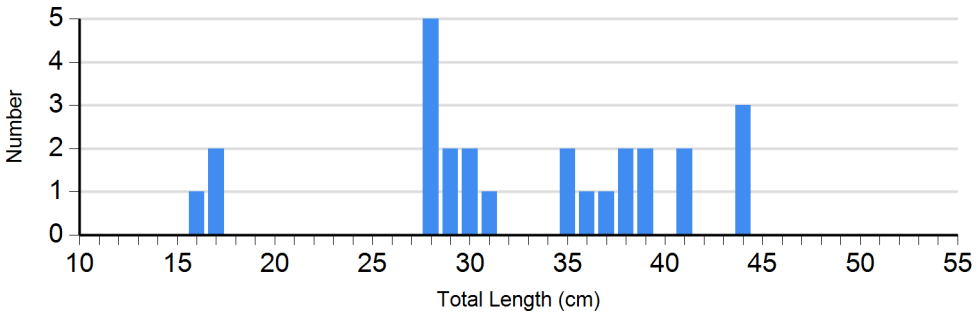
Species: Sauger
Gear: std exp gill net



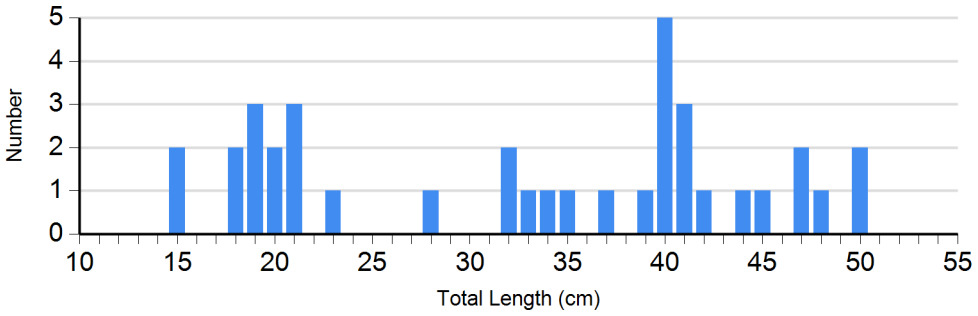
2013



2014

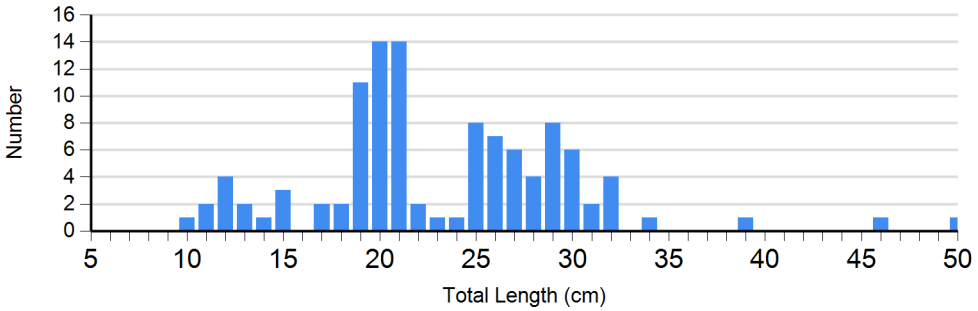


2015

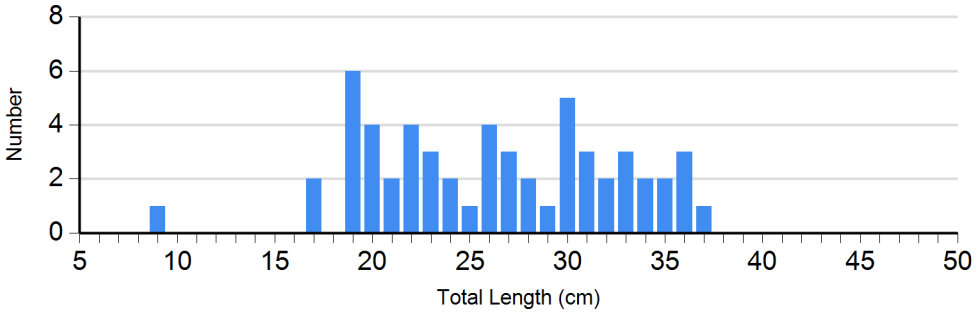


2016

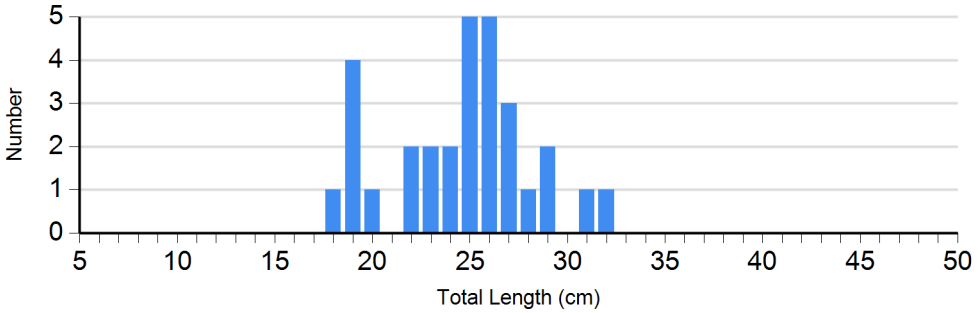
Species: Smallmouth Bass
Gear: boat shocker (night)



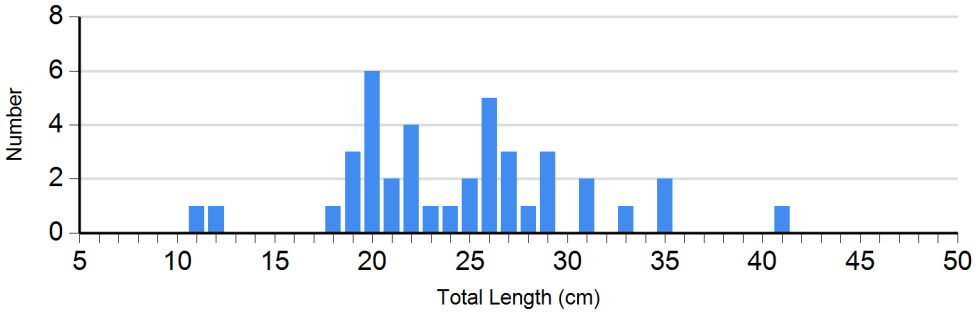
2013



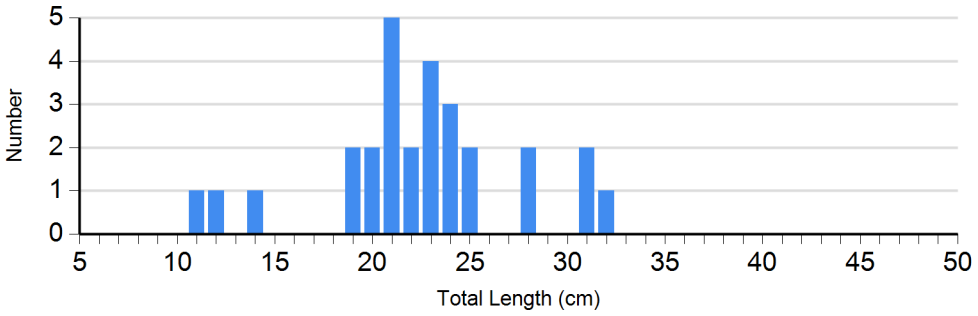
2014



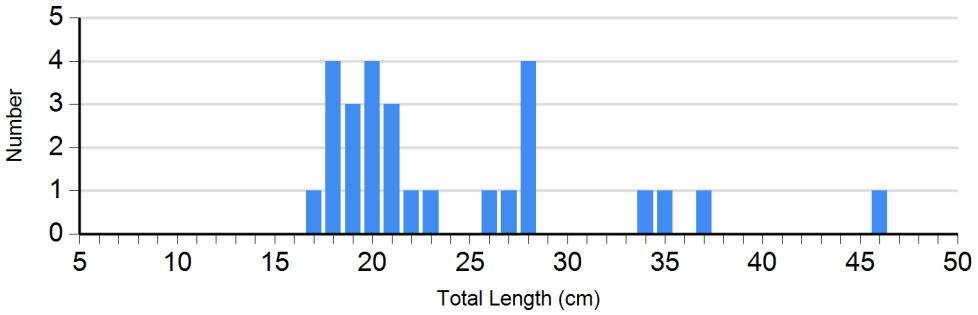
2015



2016

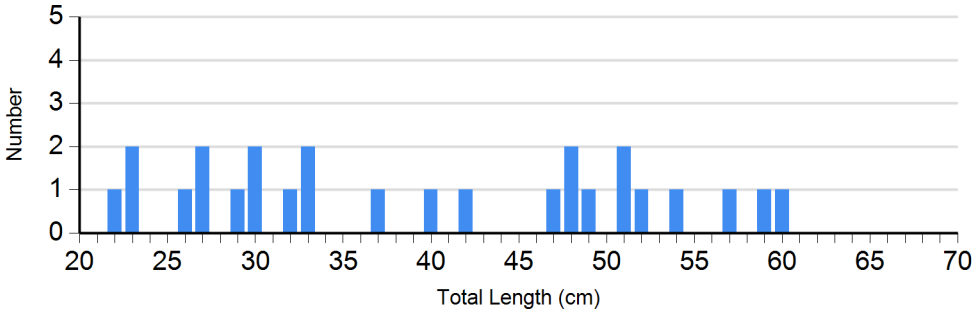


2017

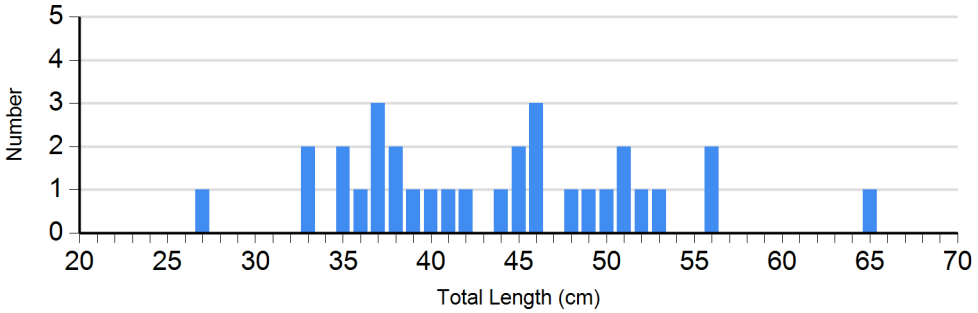


2018

Species: Walleye
Gear: AFS std gill net

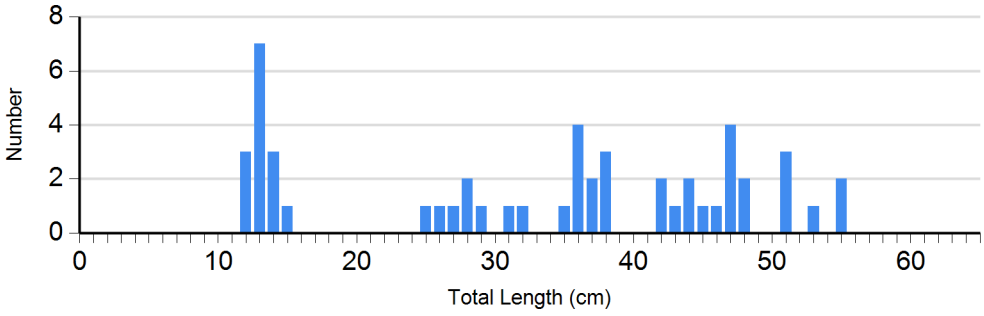


2017

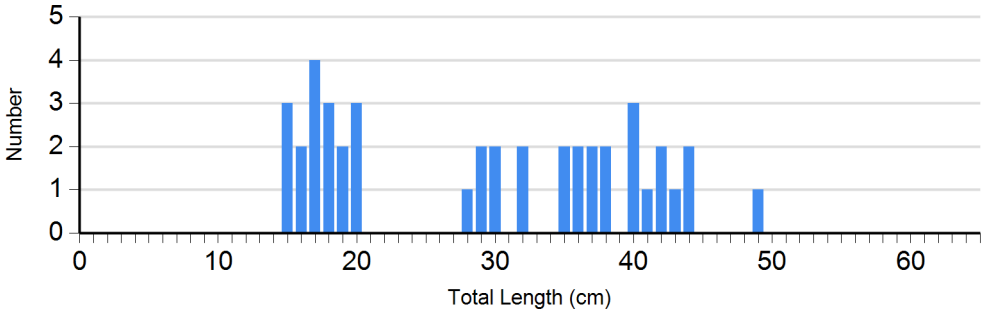


2018

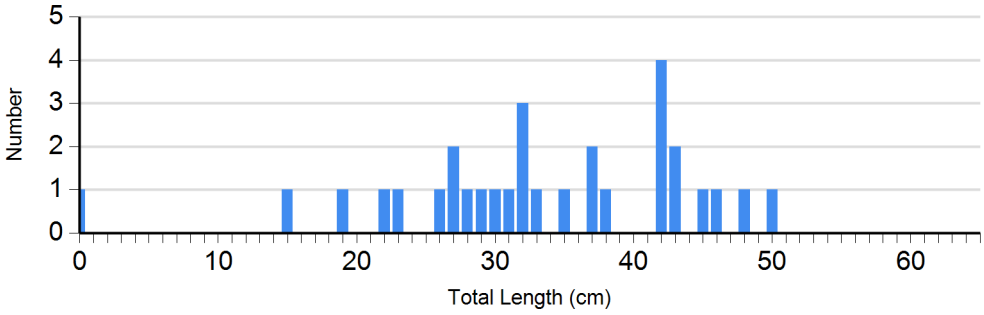
Species: Walleye
Gear: std exp gill net



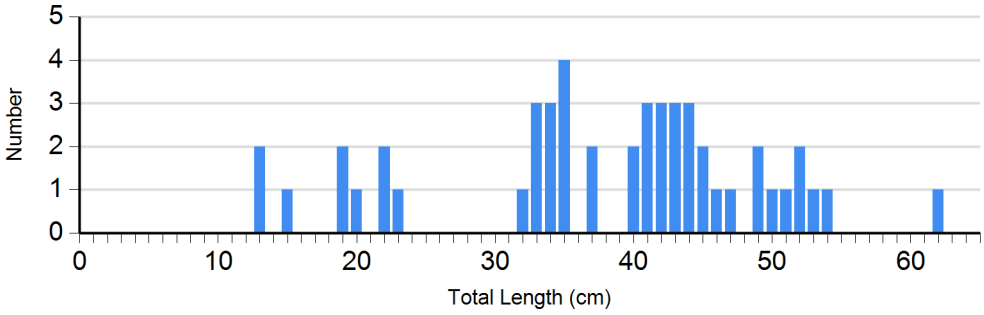
2013



2014

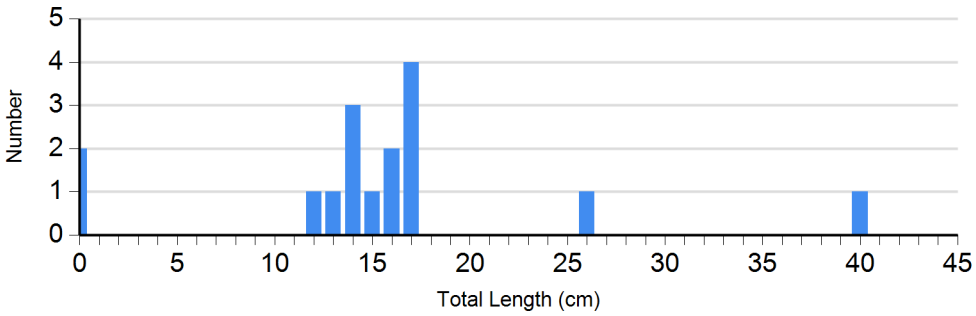


2015



2016

Species: White Bass
Gear: std exp gill net

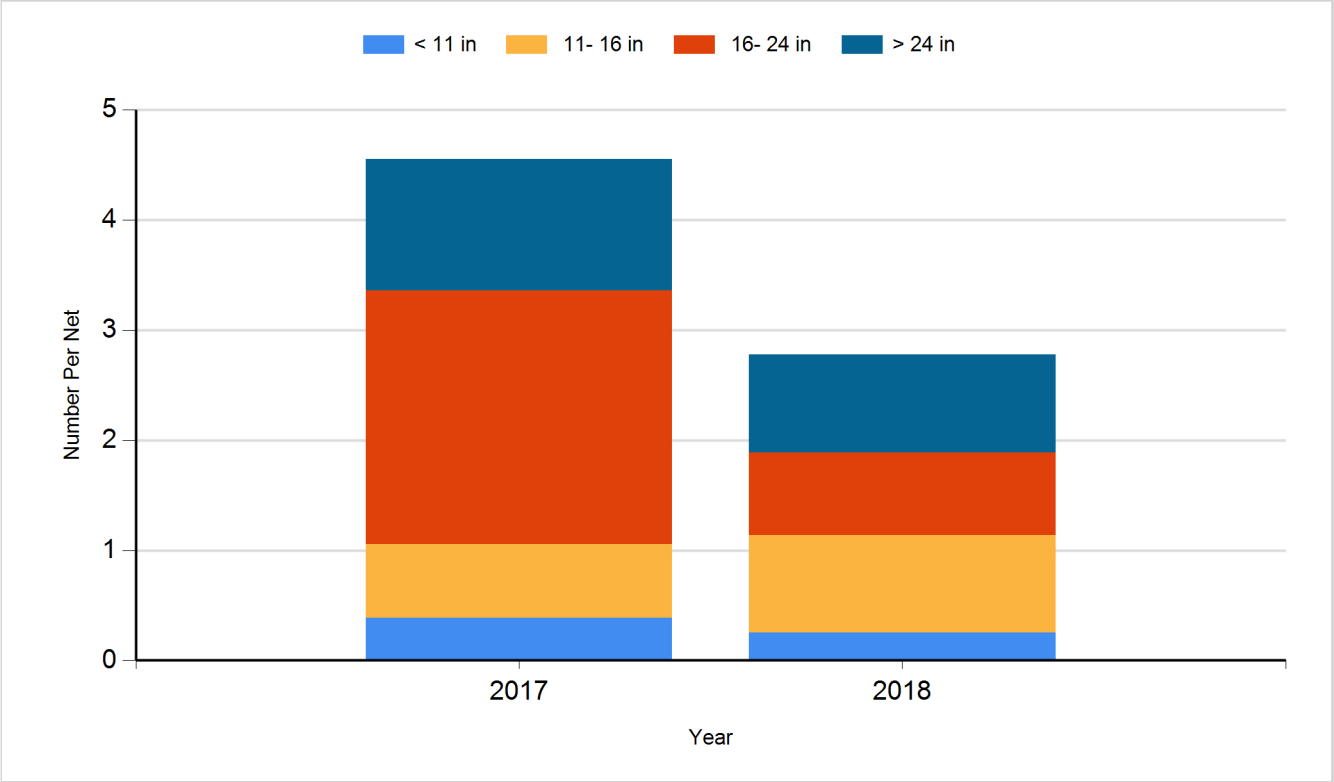


2016

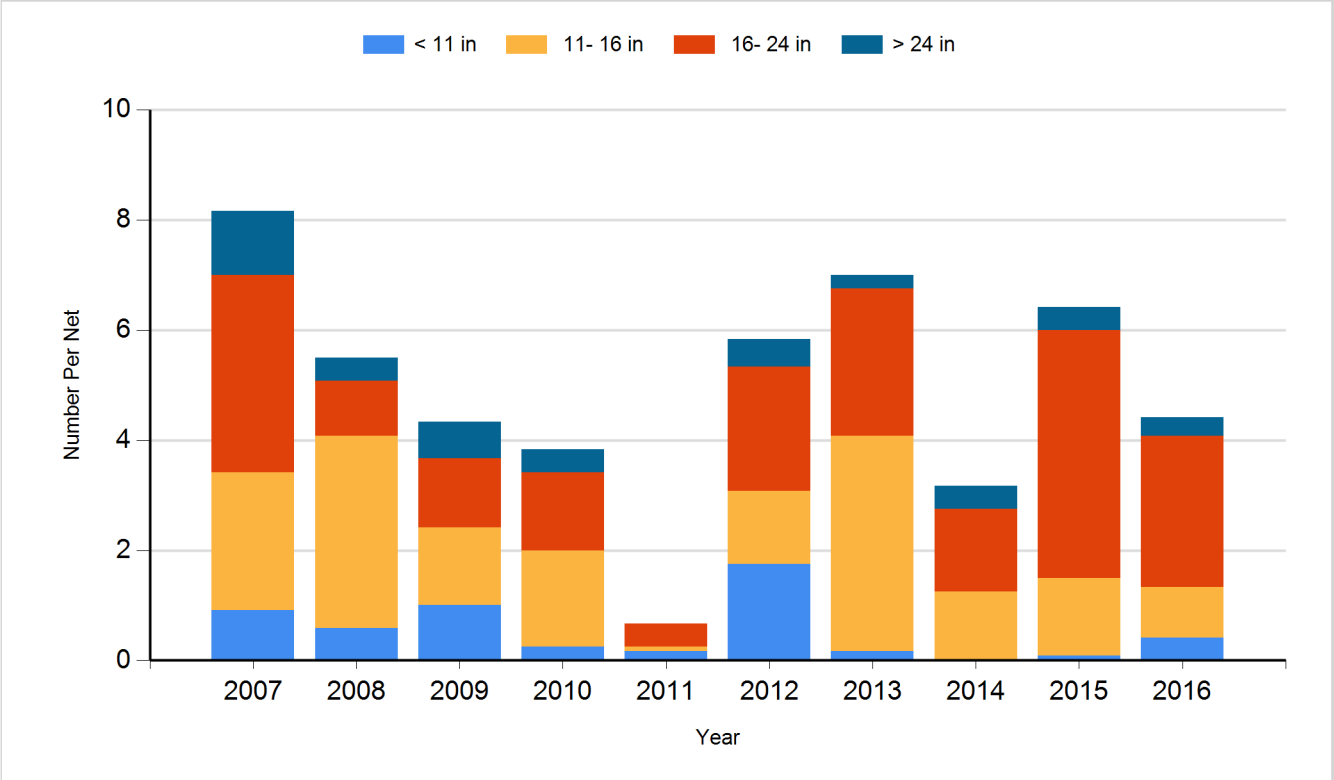
Historic Fish Sizes and Relative Abundance

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

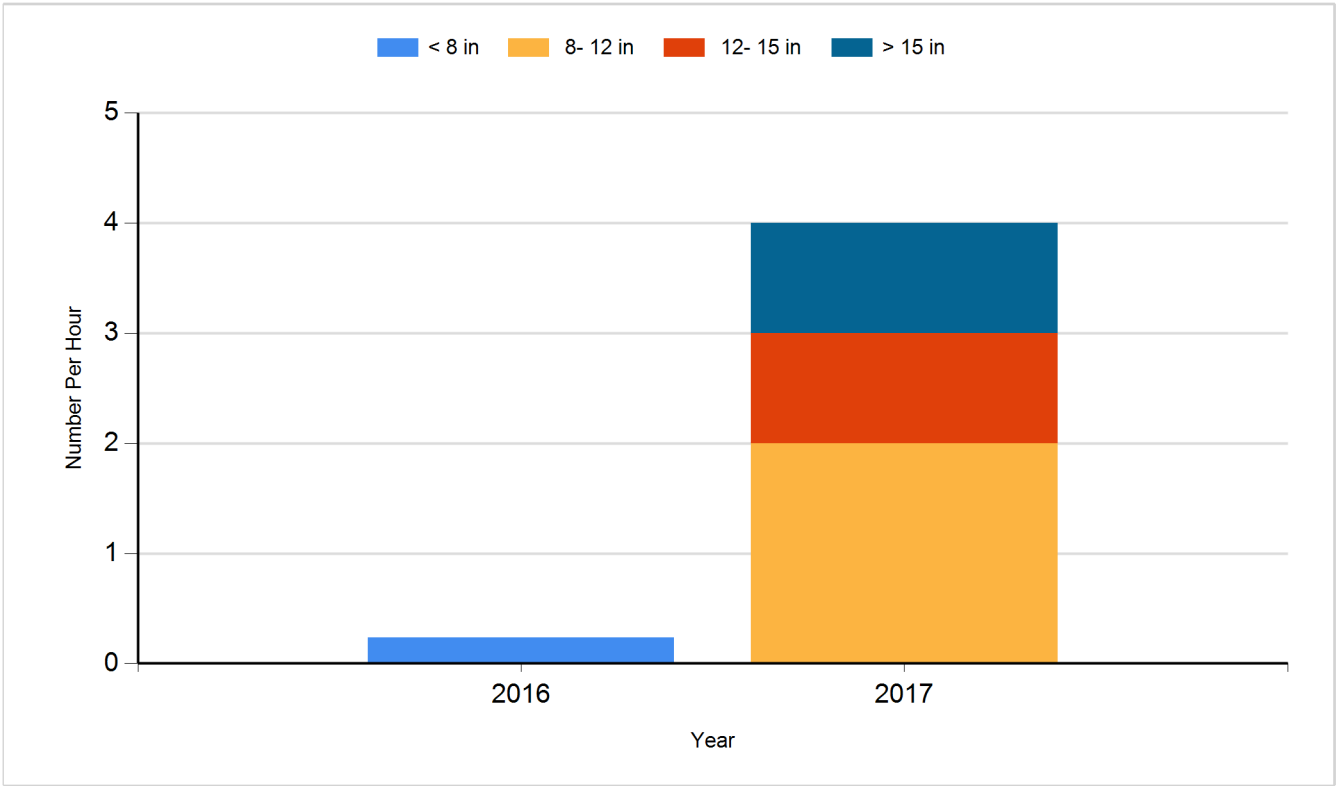
Species: Channel Catfish
Gear: AFS std gill net



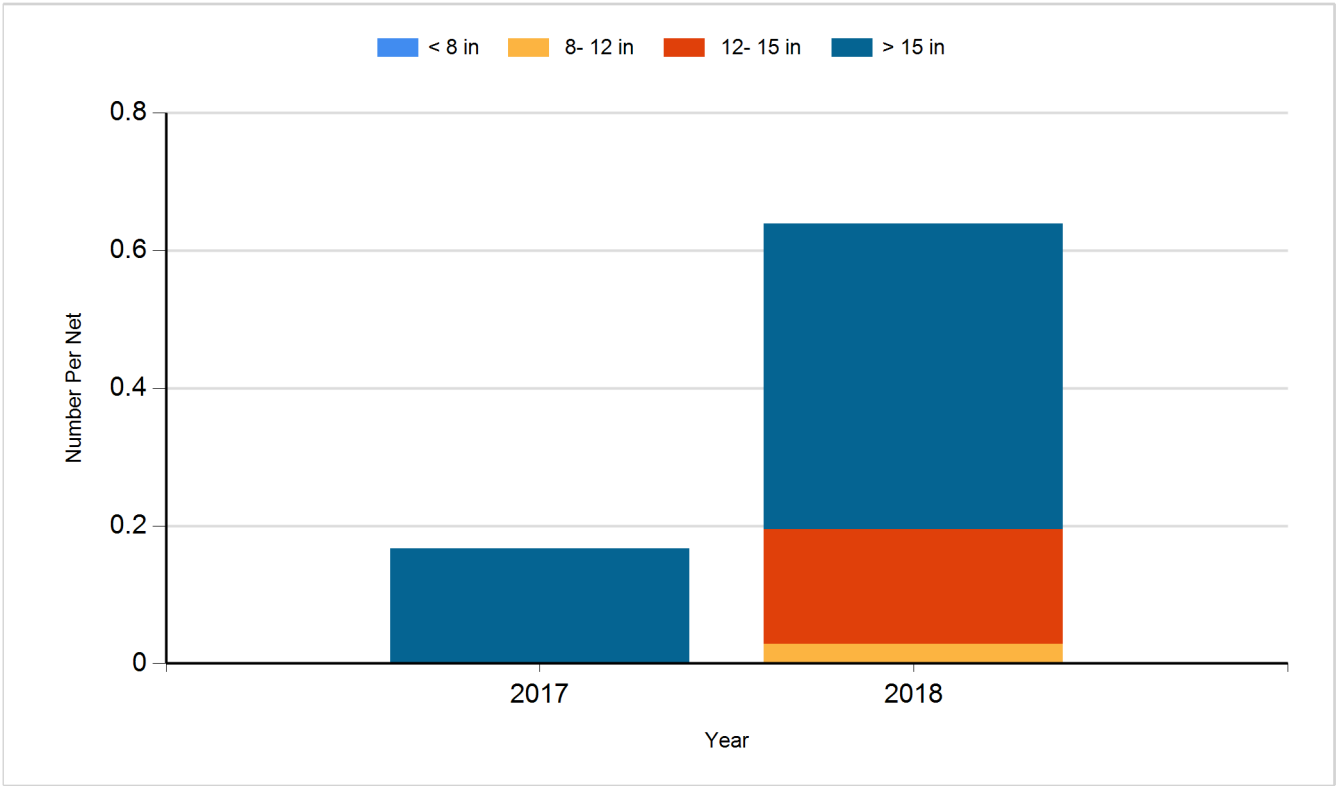
Species: Channel Catfish
Gear: std exp gill net



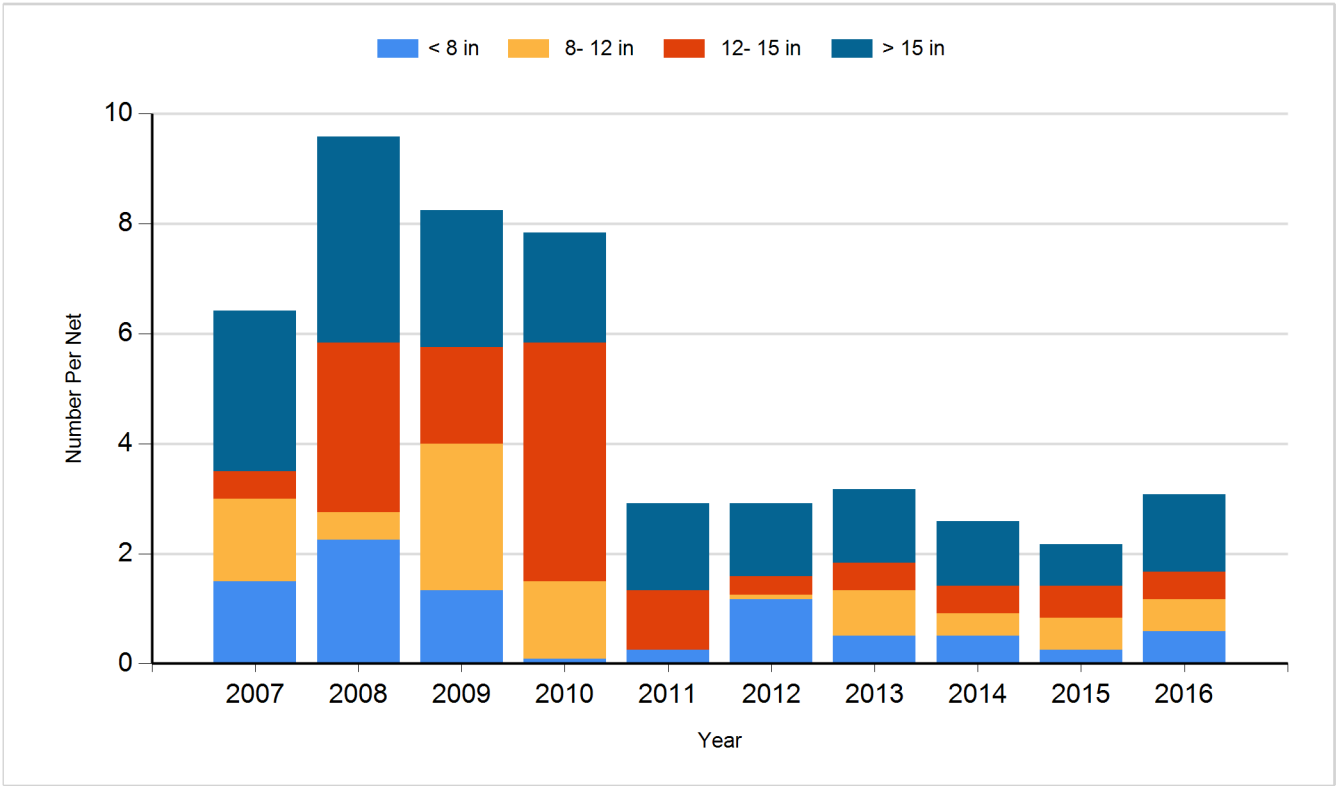
Species: Largemouth Bass
Gear: boat shocker (night)



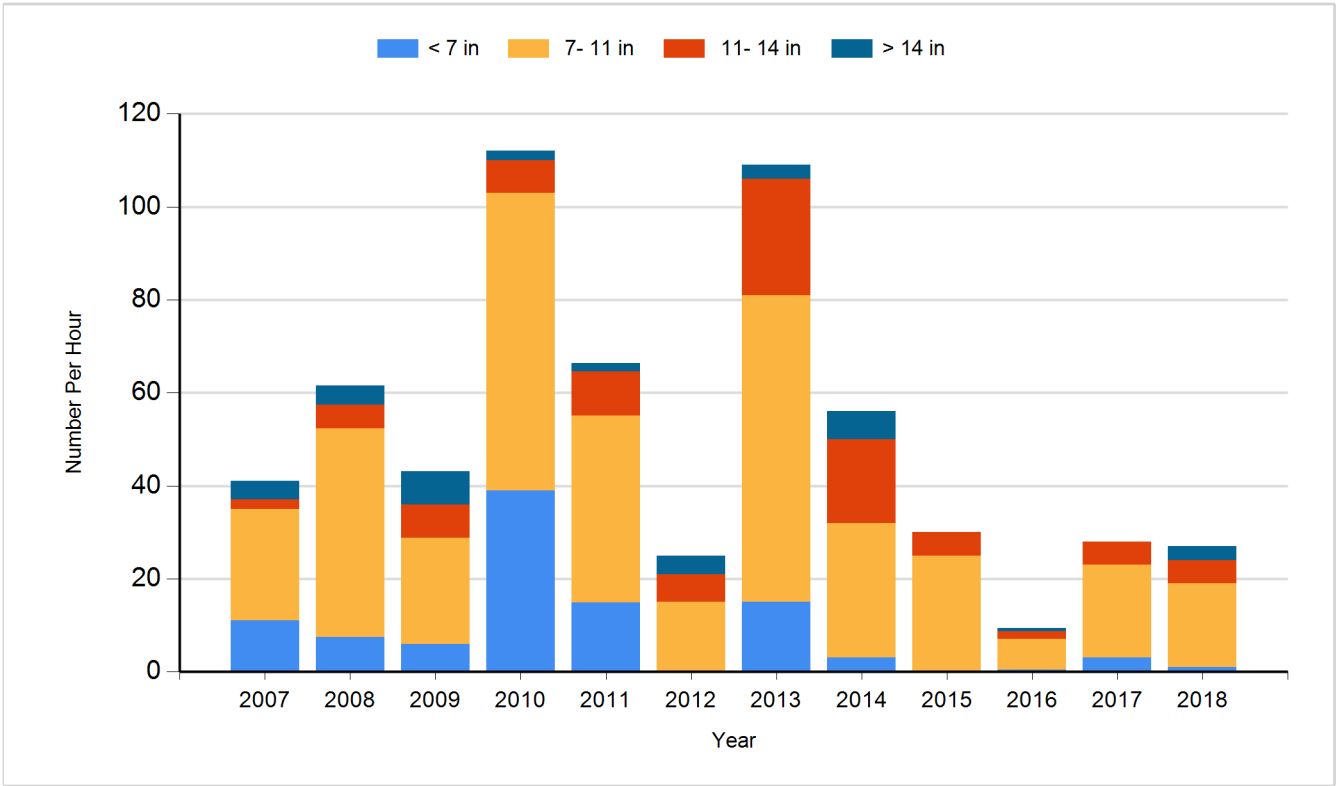
Species: Sauger
Gear: AFS std gill net



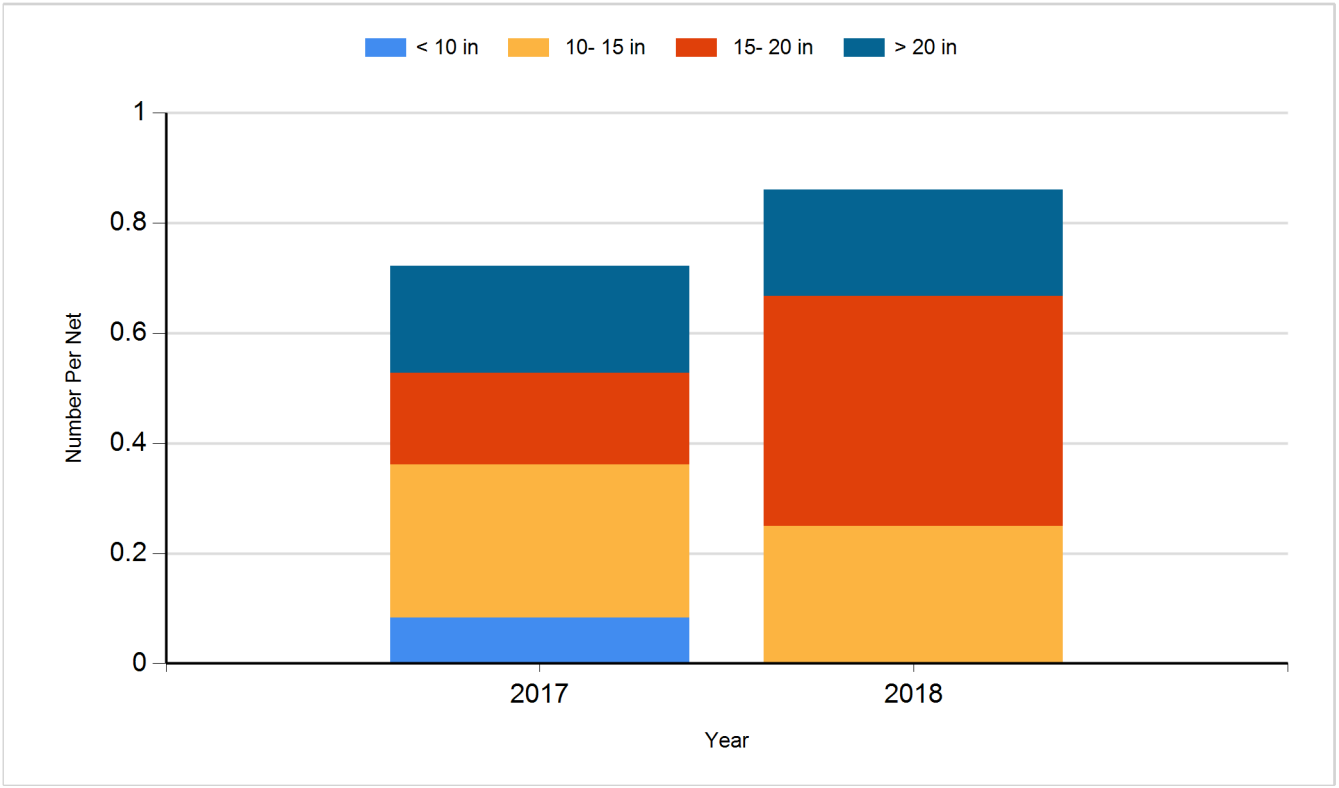
Species: Sauger
Gear: std exp gill net



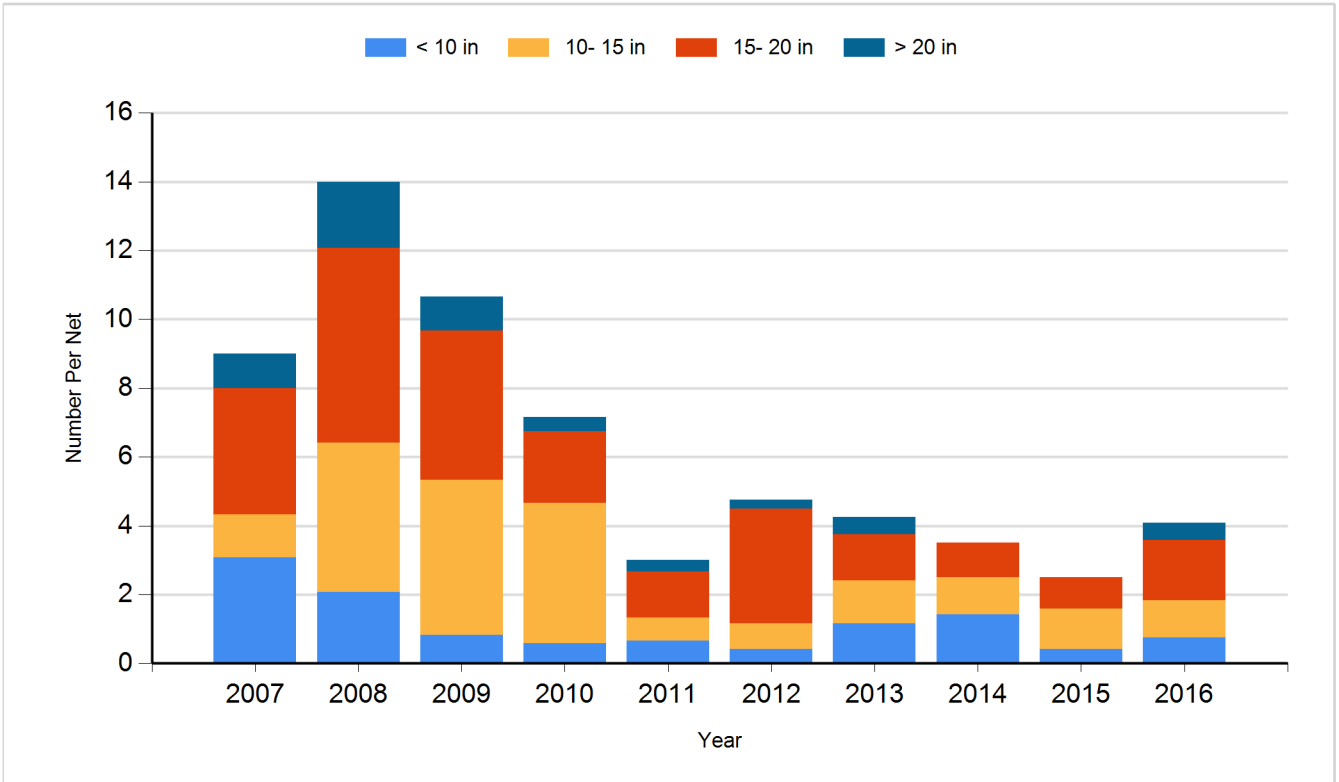
Species: Smallmouth Bass
Gear: boat shocker (night)



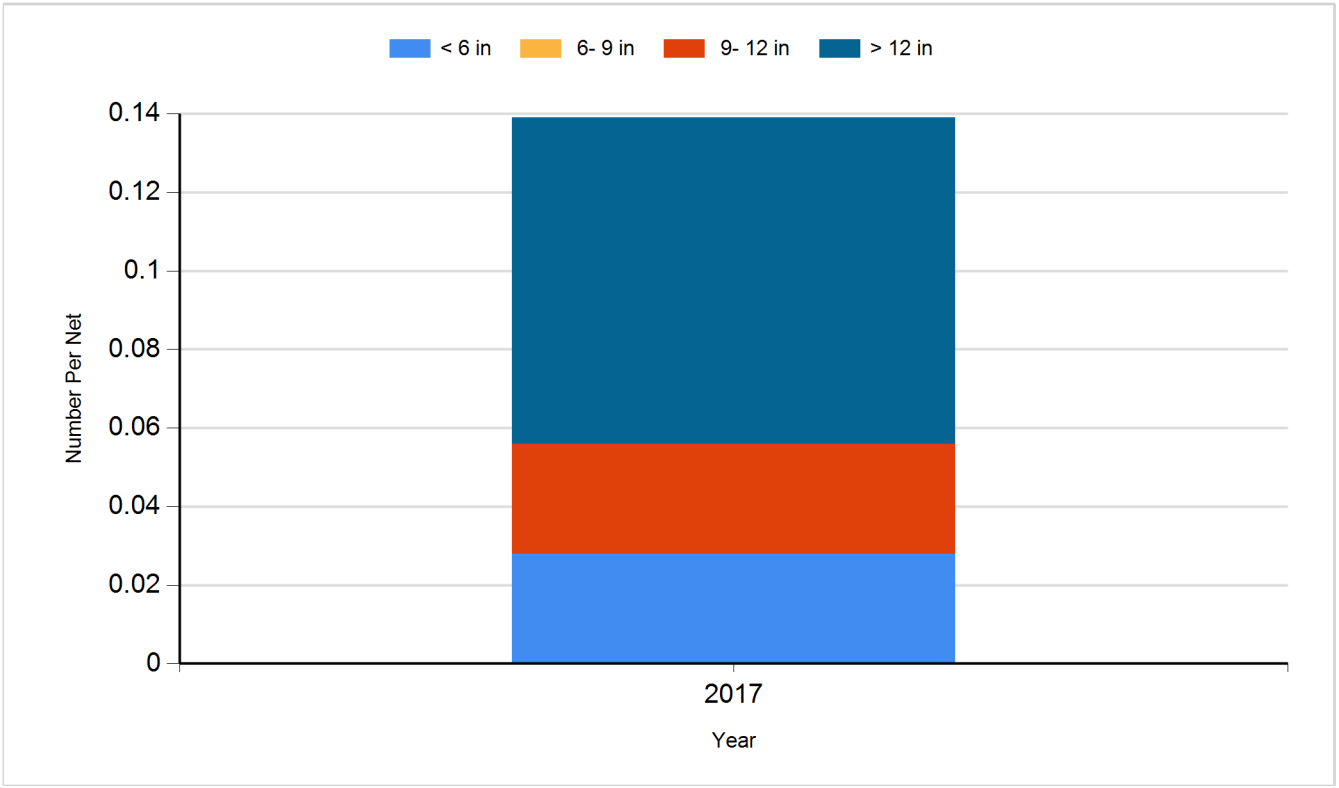
Species: Walleye
Gear: AFS std gill net



Species: Walleye
Gear: std exp gill net



Species: White Bass
Gear: AFS std gill net



Species: White Bass
Gear: std exp gill net