

SOUTH DAKOTA STATEWIDE FISHERIES SURVEY
Lewis and Clark, Yankton County
LCL-Lake-73-000
2021

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 14, 2021	18 net-nights
AFS gill net (1/2 inch)	Sep 15, 2021	18 net-nights
AFS std gill net	Sep 14, 2021	18 net-nights
AFS std gill net	Sep 15, 2021	18 net-nights
boat shocker (night)	May 24, 2021	3600 seconds
fall night EF-WAE	Oct 18, 2021	7200 seconds
large seine	Jul 26, 2021	14 hauls

Common Fish Species Present

Walleye

Smallmouth Bass

Emerald Shiner

Gizzard Shad

Bluegill

Largemouth Bass

Sauger

Channel Catfish

Spotfin Shiner

Yellow Perch

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.
- **std 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.

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

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.

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

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

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.

$$Wr = \left(\frac{W}{W_s} \right) \times 100$$

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).

Species Name	Stock		Quality		Preferred		Memorable		Trophy	
	(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

Gear	Species	Sample Size (n)	Abundance		Stock Density Indices			Condition		
			CPUE	CI-80	PSD	CI-80	PSD-P	CI-80	Wr	CI-80
AFS std gill net	Bluegill	1	0.0	0.0	0		0		116	
	Channel Catfish	191	4.1	0.5	41	6	12	4	91	1
	Common Carp	4	0.1	0.1	100		100		131	4
	Flathead Catfish	4	0.1	0.1	50		0		89	6
	Freshwater Drum	99	2.4	0.5	77	7	64	7	102	1
	Gizzard Shad	35	0.9	0.2	3				112	2
	Goldeye	6	0.0	0.0						
	Northern Pike	2	0.1	0.1	100		0		87	8
	River Carpsucker	18	0.5	0.2	83		61	19	104	5
	Sauger	18	0.5	0.2	72	18	44	19	77	2
	Shorthead Redhorse	9	0.3	0.2	100		67		94	5
	Shortnose Gar	4	0.0	0.0						
	Smallmouth Buffalo	10	0.2	0.1	88		88		94	4
	Walleye	15	0.4	0.1	15		0		83	3
	White Bass	3	0.1	0.1	100		33		91	21
White Crappie	3	0.1	0.1	100		0		105	1	
Yellow Perch	1	0.0	0.0	100		0		81		
boat shocker (night)	Smallmouth Bass	21	20.0	14.7	70	17	35	17	98	2
large seine*	Bigmouth Buffalo	1	0.1	0.0						
	Black Crappie	3	0.2	0.0						
	Bluegill	194	13.9	3.2						
	Creek Chub	1	0.1	0.0						
	Emerald Shiner	277	19.8	1.5						
	Freshwater Drum	15	1.1	0.1						
	Gizzard Shad	214	15.3	1.7						
	Johnny Darter	7	0.5	0.0						
	Largemouth Bass	65	4.6	0.6						
	Redhorse	1	0.1	0.0						
	Shortnose Gar	2	0.1	0.0						
	Smallmouth Bass	5	0.4	0.0						
Smallmouth Buffalo	2	0.1	0.0							

Gear	Species	Sample Size (n)	Abundance		Stock Density Indices			Condition	
			CPUE	CI-80	PSD	CI-80	PSD-P	CI-80	Wr
large seine*	Spotfin Shiner	47	3.4	0.4					
	Walleye	2	0.1	0.0					
	White Bass	4	0.3	0.0					
	Yellow Perch	43	3.1	0.5					

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.

* Methods/Species that ignore stock length

Gear	Species	CPUE										Avg
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
AFS gill net (1/2 inch)*	Channel Catfish						0.1	0.2	0.0	0.1	0.0	0.08
	Common Carp						0.0	0.0	0.0	0.0	0.0	0.00
	Freshwater Drum						0.1	0.7	0.4	1.1	0.7	0.60
	Gizzard Shad						0.1	2.8	0.6	0.0	0.0	0.70
	Sauger						0.1	0.2	0.0	0.5	0.1	0.18
	Shorthead Redhorse						0.0	0.0	0.0	0.0	0.0	0.00
	Smallmouth Buffalo						0.0	0.0	0.0	0.0	0.1	0.02
	Walleye						0.0	0.2	0.2	0.0	0.1	0.10
	White Bass						0.0	0.0	0.0	0.0	0.0	0.00
	Yellow Perch						0.0	0.0	0.0	0.0	0.2	0.04
AFS std gill net	Bluegill						0.0	0.0	0.0	0.0	0.0	0.00
	Channel Catfish						4.2	2.5	1.1	3.9	4.1	3.16
	Common Carp						0.1	0.1	0.1	0.1	0.1	0.10
	Flathead Catfish						0.1	0.1	0.1	0.1	0.1	0.10
	Freshwater Drum						1.9	3.2	2.9	1.6	2.4	2.40
	Gizzard Shad						0.3	1.0	0.0	0.0	0.9	0.44
	Goldeye						0.0	0.0	0.0	0.0	0.0	0.00
	Northern Pike						0.0	0.0	0.0	0.0	0.1	0.02
	Paddlefish						0.0	0.1	0.0	0.0	0.0	0.02
	River Carpsucker						0.6	0.1	0.1	0.4	0.5	0.34
	Rock Bass						0.0	0.0	0.0	0.1	0.0	0.02
	Sauger						0.2	0.6	0.4	0.4	0.5	0.42
	Shorthead Redhorse						0.1	0.2	0.1	0.1	0.3	0.16
	Shortnose Gar						0.0	0.0	0.0	0.0	0.0	0.00
	Smallmouth Bass						0.0	0.0	0.0	0.0	0.0	0.00
	Smallmouth Buffalo						0.3	0.0	0.0	0.2	0.2	0.14
	Walleye						0.6	0.9	0.4	0.6	0.4	0.58
	White Bass						0.1	0.0	0.0	0.1	0.1	0.06
	White Crappie						0.0	0.0	0.0	0.0	0.1	0.02
	Yellow Perch						0.1	0.0	0.0	0.1	0.0	0.04
boat shocker (night)	Largemouth Bass	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.40
	Sauger*	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.83
	Smallmouth Bass	25.0	94.0	53.0	30.0	7.1	25.0	26.0	11.0	43.0	20.0	33.41
	Walleye*	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	1.50

Gear	Species	CPUE										Avg
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
electrofishing (flathead)	Flathead Catfish	8.8	11.7									10.25
fall night EF-WAE*	Sauger	28.5	8.3	5.0	0.5	0.0	1.7	20.0	0.0	17.0	4.5	8.55
	Walleye	51.5	48.0	30.0	12.0	56.0	18.0	34.0	38.5	51.5	79.0	41.85
large seine*	Bigmouth Buffalo	0.0	0.0	0.8	0.1	0.1	0.0	0.0	0.0	0.5	0.1	0.16
	Black Crappie	0.7	0.0	0.8	1.5	0.4	0.1	1.6	1.3	5.4	0.2	1.21
	Bluegill	3.3	0.3	0.1	0.3	1.6	3.3	69.2	1.0	36.8	13.9	12.97
	Bluntnose Minnow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
	Channel Catfish	0.2	0.1	0.0	0.7	0.5	0.2	0.2	0.0	0.3	0.0	0.22
	Common Carp	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.04
	Creek Chub	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.01
	Emerald Shiner	9.2	355.1	0.3	5.8	0.0	0.2	0.3	0.0	0.0	19.8	39.07
	Fathead Minnow	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03
	Flathead Catfish	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.02
	Freshwater Drum	0.1	3.1	0.6	2.0	5.0	2.6	1.2	1.3	18.9	1.1	3.60
	Gizzard Shad	0.0	346.8	16.8	5.3	2.5	169.1	86.9	39.3	4.7	15.3	68.67
	Golden Shiner	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
	Goldeye	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
	Grass Pickerel	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.01
	Green Sunfish	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.01
	Johnny Darter	0.6	0.7	6.2	2.3	3.4	0.3	0.2	0.0	0.0	0.5	1.42
	Largemouth Bass	2.0	0.6	3.8	2.9	1.5	0.9	2.2	0.0	1.2	4.6	1.97
	Northern Pike	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.02
	Northern Redbelly Dace	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
	Orangespotted Sunfish	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.01
	Rainbow Smelt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.01
	Red Shiner	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04
Redhorse	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.01	
River Carpsucker	1.7	0.4	0.3	0.2	1.4	3.8	0.1	0.0	2.2	0.0	1.01	
Rock Bass	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.0	0.0	0.0	0.11	
Sand Shiner	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	
Sauger	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.05	
Shorthead Redhorse	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.11	
Shortnose Gar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.03	
Silver Chub	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
Smallmouth Bass	0.5	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.4	0.11	
Smallmouth Buffalo	0.0	0.3	0.8	0.0	0.3	0.1	0.1	0.0	1.1	0.1	0.28	
Spotfin Shiner	0.1	0.3	0.0	0.2	0.8	0.0	0.2	0.3	14.2	3.4	1.94	

		CPUE											
Gear	Species	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Avg	
large seine*	Spottail Shiner	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	
	Stonecat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.01	
	Walleye	0.0	0.2	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.08
	Western Silvery Minnow	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.02	
	White Bass	0.3	5.4	46.8	30.8	3.1	0.5	1.6	1.0	3.4	0.3	9.32	
	White Crappie	0.0	0.0	0.7	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.11	
	Yellow Perch	0.8	14.5	0.3	0.0	7.0	0.4	1.2	0.3	2.3	3.1	2.99	
std exp gill net	Bigmouth Buffalo	0.0	0.0	0.0	0.0	0.0						0.00	
	Black Crappie	0.2	0.0	0.0	0.0	0.0						0.04	
	Channel Catfish	4.1	6.8	3.2	6.3	4.0						4.88	
	Common Carp	0.2	0.6	0.2	0.3	0.2						0.30	
	Flathead Catfish	0.0	0.0	0.1	0.0	0.1						0.04	
	Freshwater Drum	0.8	1.1	0.8	0.3	1.3						0.86	
	Gizzard Shad	1.2	0.1	0.3	1.0	8.0						2.12	
	Goldeye	0.0	0.0	0.0	0.0	0.0						0.00	
	Northern Pike	0.3	0.0	0.0	0.0	0.0						0.06	
	River Carpsucker	0.8	1.1	0.6	2.9	0.3						1.14	
	Rock Bass	0.0	0.0	0.0	0.0	0.0						0.00	
	Sauger	1.8	2.7	2.1	1.9	2.5						2.20	
	Shorthead Redhorse	0.9	2.9	2.5	1.3	0.8						1.68	
	Shortnose Gar	0.0	0.0	0.0	0.0	0.0						0.00	
	Shovelnose Sturgeon	0.0	0.0	0.0	0.0	0.0						0.00	
	Smallmouth Bass	0.0	0.0	0.0	0.1	0.0						0.02	
	Smallmouth Buffalo	0.3	0.3	0.0	0.3	0.0						0.18	
	Walleye	4.3	3.1	2.1	2.1	3.3						2.98	
	White Bass	0.1	0.0	0.4	0.3	0.8						0.32	
	White Crappie	0.1	0.2	0.0	0.0	0.0						0.06	
Yellow Perch	0.3	1.3	1.2	0.4	0.3						0.70		

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.

Gear	Species	Index	Year											
			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		
AFS std gill net	Bluegill	PSD												0
		PSD-P												0
		Wr												116
	Channel Catfish	PSD							84	65	60	40	41	
		PSD-P							29	35	33	11	12	
		Wr							92	91	96	93	91	
	Gizzard Shad	PSD							27	6	0		3	
		Wr							98	103			112	
	Sauger	PSD							100	96	85	93	72	
		PSD-P							100	70	77	93	44	
		Wr							80	77	77	83	77	
	Smallmouth Bass	PSD							0					
		PSD-P							0					
		Wr							99					
	Walleye	PSD							57	71	73	90	15	
		PSD-P							30	23	20	35	0	
		Wr							84	85	87	92	83	
	Yellow Perch	PSD							100	100		100	100	
		PSD-P							33	100		67	0	
		Wr							88	96		95	81	
	boat shocker (night)	Largemouth Bass	PSD						0	50				
PSD-P								0	25					
Wr									97					
Sauger		PSD						76						
		PSD-P						24						
Smallmouth Bass		PSD	40	30	45	17	26	20	31	36	40	70		
		PSD-P	16	3	11	0	8	0	12	9	14	35		
		Wr	93	93	93	97	96	102	94	92	96	98		
Walleye		PSD						74						
		PSD-P						21						
std exp gill net		Channel Catfish	PSD	67	43	61	78	77						
			PSD-P	12	4	13	7	8						

Gear	Species	Index	Year											
			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		
std exp gill net	Channel Catfish	Wr	80	87	86	88	92							
	Gizzard Shad	PSD	7	100	0	0	15							
		Wr	99	34	123	112	100							
	Sauger	PSD	95	69	80	70	77							
		PSD-P	76	50	56	39	57							
		Wr	77	76	82	78	86							
	Smallmouth Bass	PSD					0							
		PSD-P					0							
		Wr					88							
	Walleye	PSD	83	59	48	44	68							
		PSD-P	6	16	0	0	15							
		Wr	83	85	90	85	96							
	Yellow Perch	PSD	0	6	50	100	100							
		PSD-P	0	0	14	100	67							
		Wr	84	90	91	94	93							

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								
2020	1	1	103																	
2019	2	6	106 (11.1)	197 (12.7)																
2018	3	2	109 (3.2)	174 (13)	257 (16.9)															
2017	4	3	104 (5.1)	162 (9.1)	225 (12.3)	268 (.2)														
2016	5	5	99 (7.2)	168 (9)	231 (11.9)	290 (15.3)	332 (12.1)													
2015	6	2	101 (6.2)	197 (.6)	250 (3.5)	289 (.9)	330 (7.9)	365 (21.9)												
Weighted Mean		19	103	181	237	283	331	365												
Year Class	Age	N	11	12	13	14	15	16	17	18	19	20								
2020	1	1																		
2019	2	6																		
2018	3	2																		
2017	4	3																		
2016	5	5																		
2015	6	2																		
Weighted Mean		19																		

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)

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+
2020	13		394 (3)		441 (7)	449 (2)		455 (1)			
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)					

Species: Smallmouth Bass

Mean Length (expanded sample number) at capture by age											
Year	N	1	2	3	4	5	6	7	8	9	10+
2021	20	116 (1)	236 (7)	276 (2)	290 (3)	357 (5)	392 (2)				
2020	48	221 (4)	206 (14)	234 (12)	281 (8)	339 (6)	348 (2)	417 (2)			
2019	18	115 (5)	164 (4)	237 (5)	313 (3)	401 (1)					
2018	27		200 (16)	282 (8)	362 (2)			460 (1)			

Mean Length (expanded sample number) at capture by age

Year	N	1	2	3	4	5	6	7	8	9	10+
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)				
2013	108	131 (13)	205 (42)	270 (35)	290 (15)	360 (2)		465 (1)	500 (1)		
2012	23		193 (4)	260 (13)	344 (6)						

Species: Walleye

Mean Length (expanded sample number) at capture by age

Year	N	1	2	3	4	5	6	7	8	9	10+
2020	20	282 (1)	379 (1)	434 (1)	469 (8)	434 (1)	464 (1)	576 (2)	612 (1)		515 (4)
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)

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).

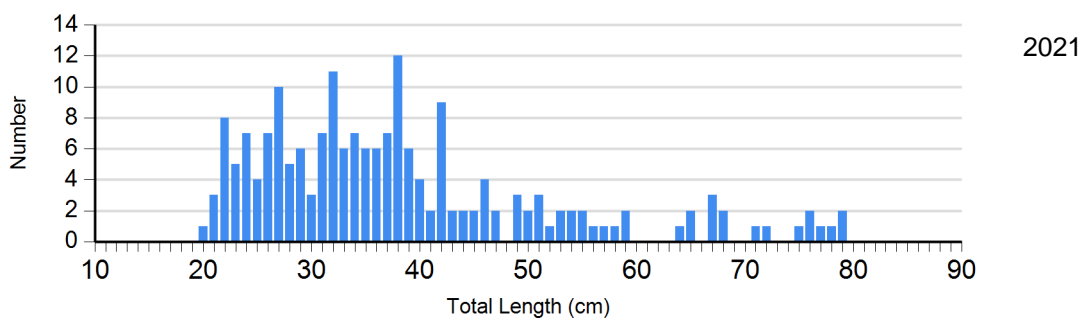
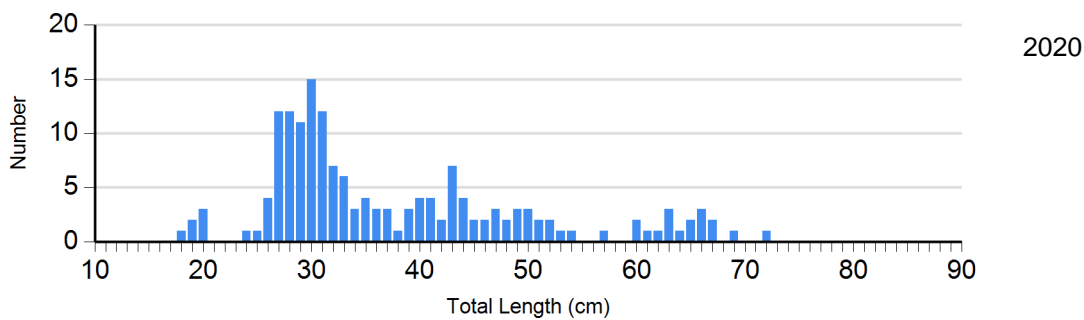
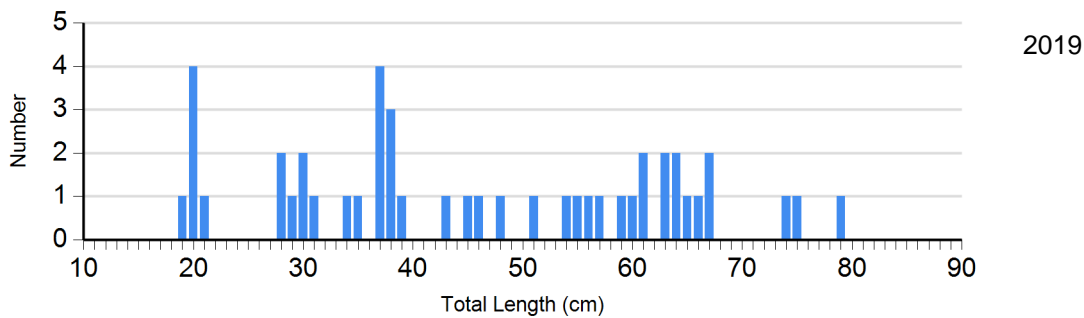
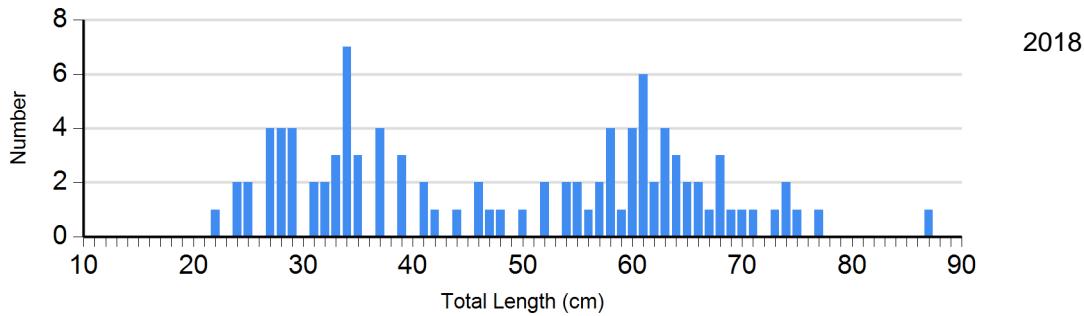
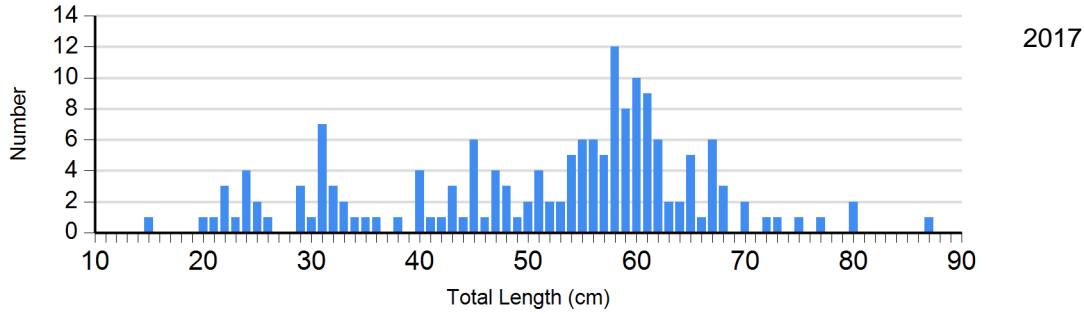
Species	Year	Length Groups							
		S-Q		Q-P		P-M		M	
		N	Wr (SE)	N	Wr (SE)	N	Wr (SE)	N	Wr (SE)
Channel Catfish Gill Net	2017	24	86 (1.1)	83	93 (0.7)	36	94 (0.9)	7	102 (4.0)
	2018	32	90 (1.4)	27	93 (2.5)	25	91 (1.7)	7	91 (2.9)
	2019	16	94 (1.5)	11	95 (2.0)	10	96 (3.4)	3	109 (2.2)
	2020	84	92 (0.9)	41	92 (1.4)	14	96 (2.4)	1	86
	2021	86	91 (0.8)	43	91 (1.3)	8	94 (4.2)	9	92 (4.4)
Largemouth Bass Electro Fishing	2017	2	97 (12.3)	1	87	1	108	0	
Sauger Gill Net	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	
	2020	1	83	0		13	83 (1.4)	0	
	2021	5	81 (2.1)	5	77 (1.6)	5	75 (5.0)	3	73 (2.9)
Smallmouth Bass Electro Fishing	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	
	2020	26	97 (1.3)	11	96 (1.2)	5	92 (2.1)	1	76
	2021	6	102 (1.9)	7	98 (2.5)	7	94 (2.9)	0	
Walleye Gill Net	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
	2020	2	88 (4.3)	11	95 (3.0)	7	87 (2.7)	0	
	2021	11	80 (1.0)	2	98 (6.5)	0		0	
Yellow Perch Gill Net	2017	0		2	83 (3.8)	0		1	98

Species	Year	Length Groups							
		S-Q		Q-P		P-M		M	
		N	Wr (SE)	N	Wr (SE)	N	Wr (SE)	N	Wr (SE)
Yellow Perch Gill Net	2018	0		0		1	96	0	
	2020	0		1	94	2	95 (2.2)	0	
	2021	0		1	81	0		0	

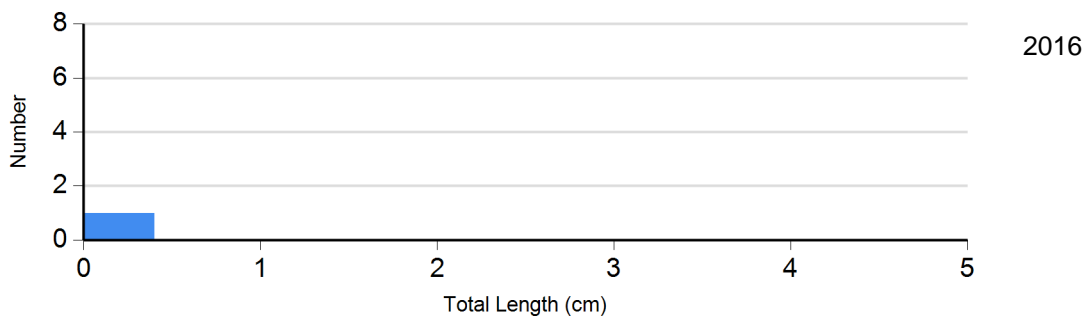
Length Frequency Distribution

Length frequency histogram of species sampled by year.

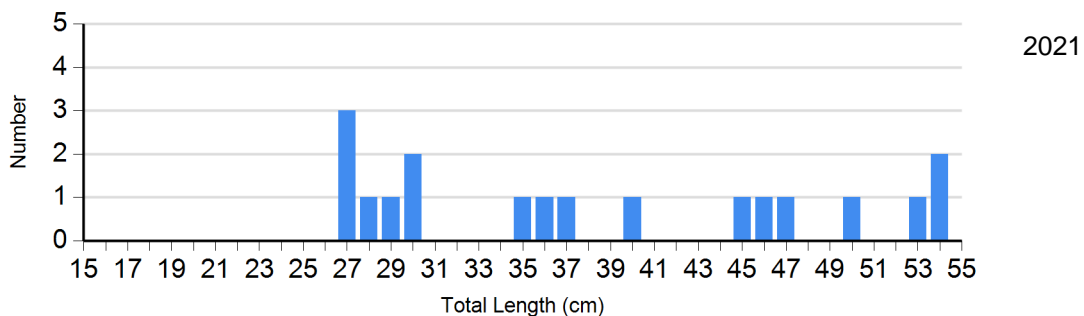
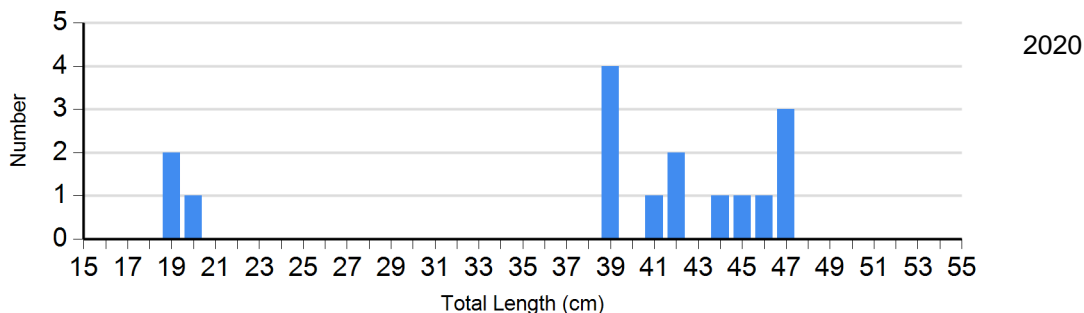
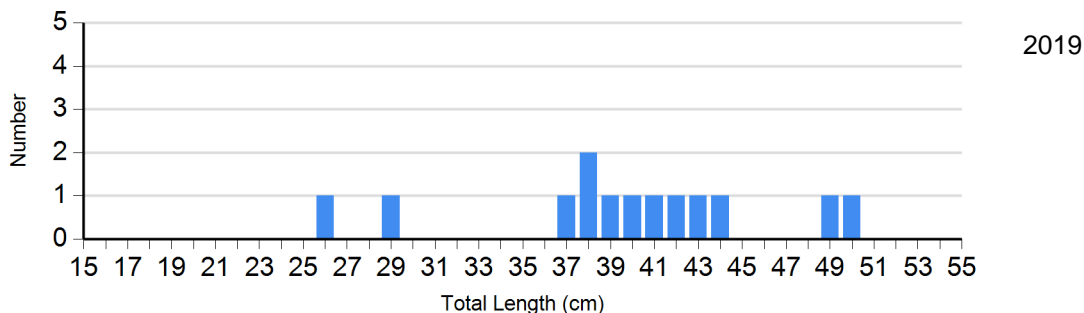
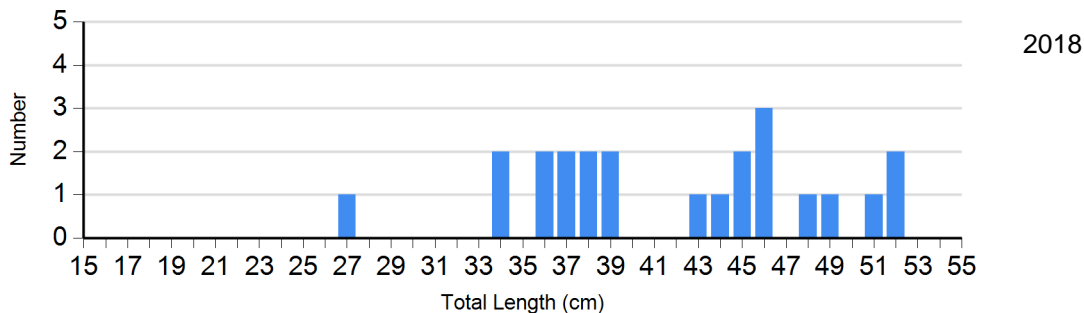
Species: Channel Catfish
Gear: AFS std gill net



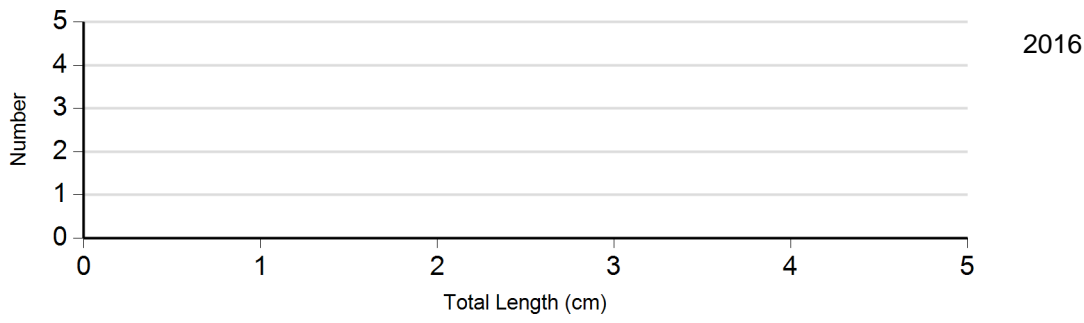
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Gear: std exp gill net



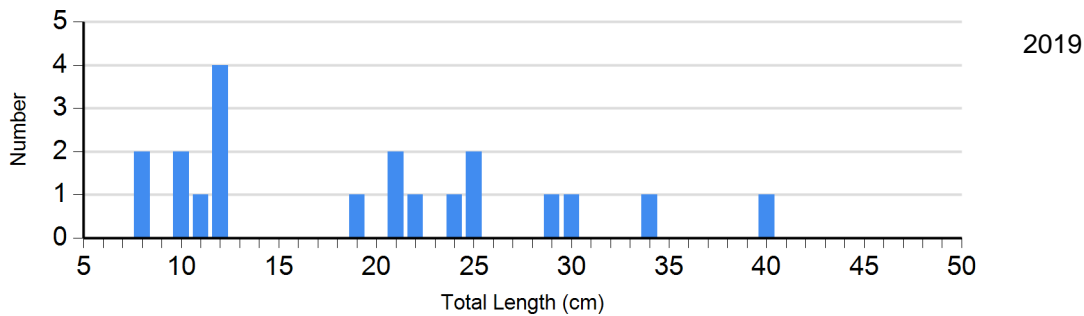
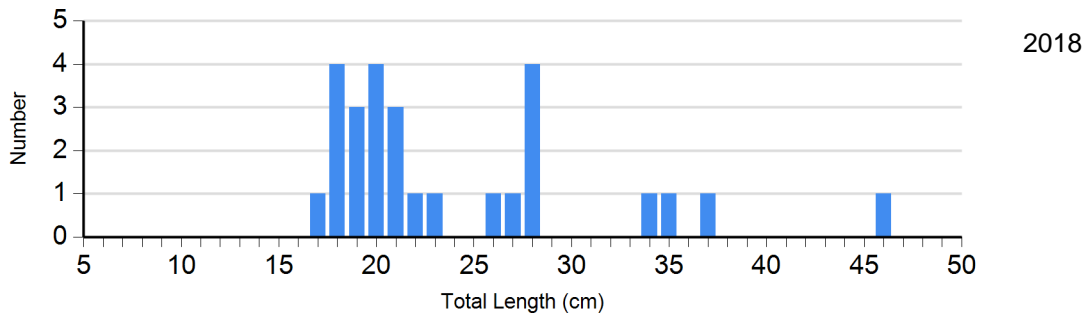
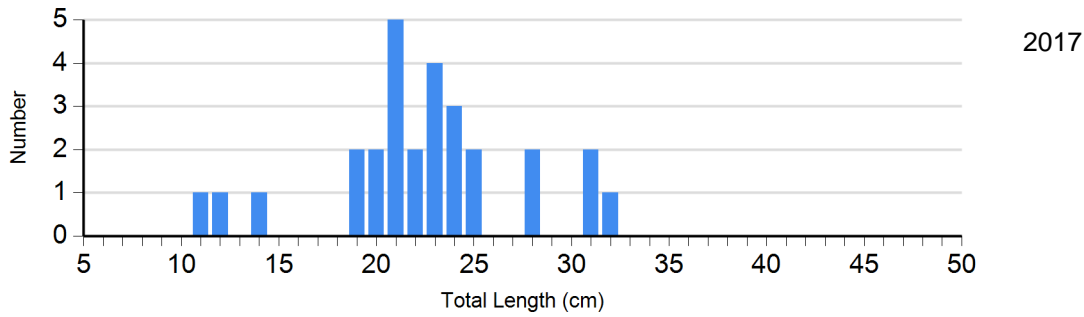
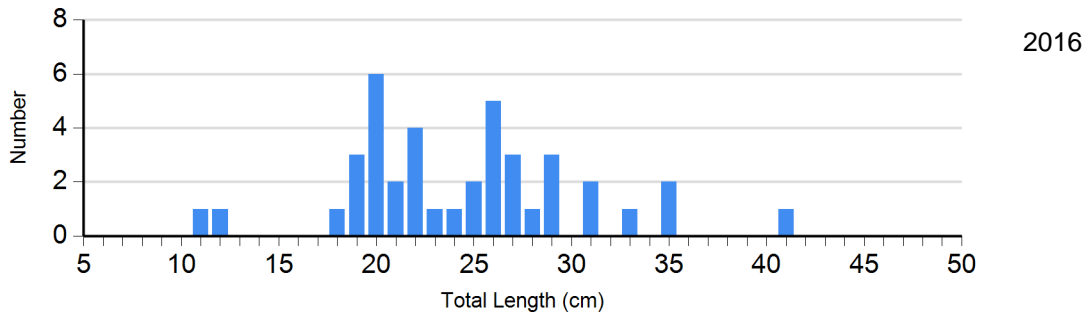
Species: Sauger
Gear: AFS std gill net

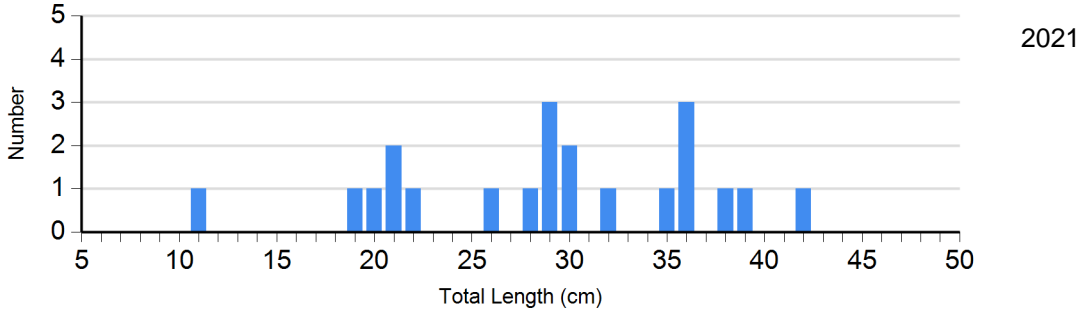
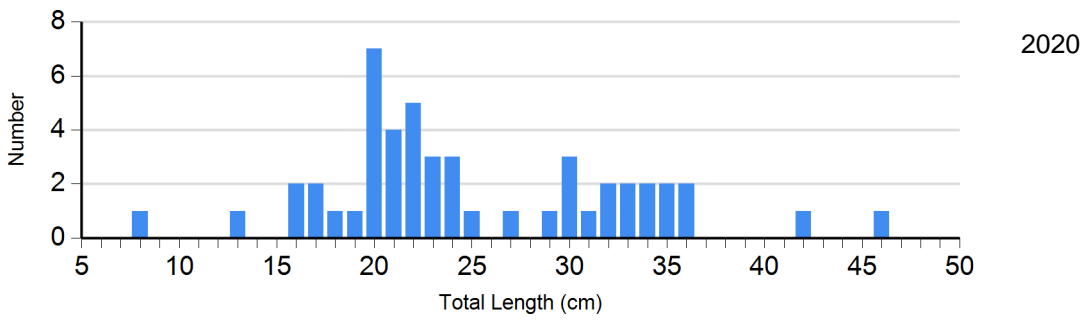


Species: Sauger
Gear: std exp gill net

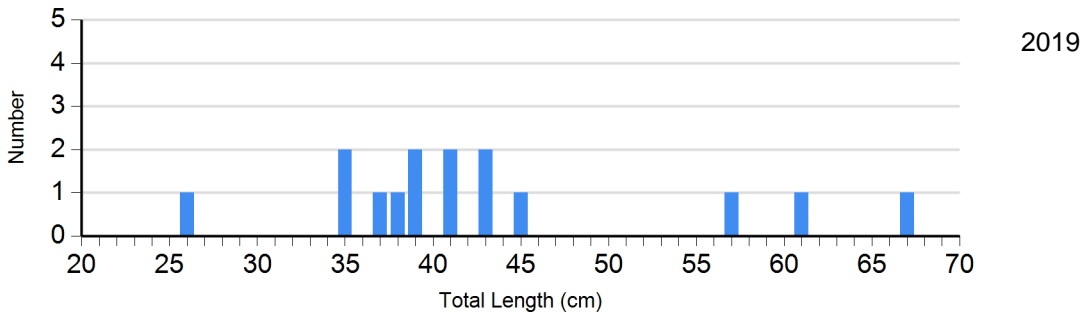
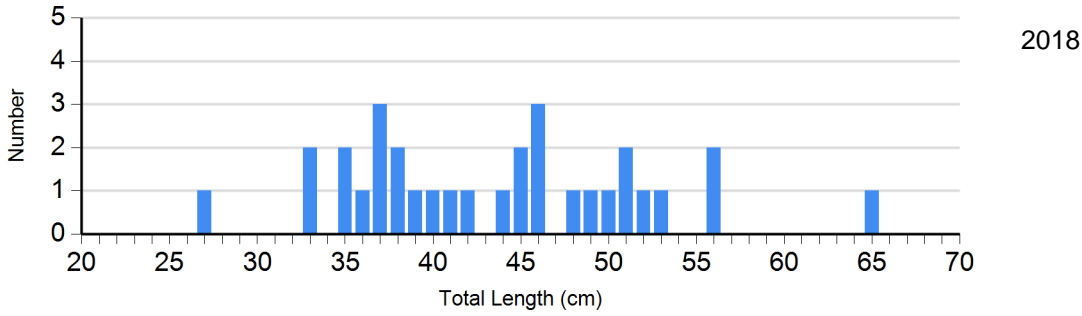
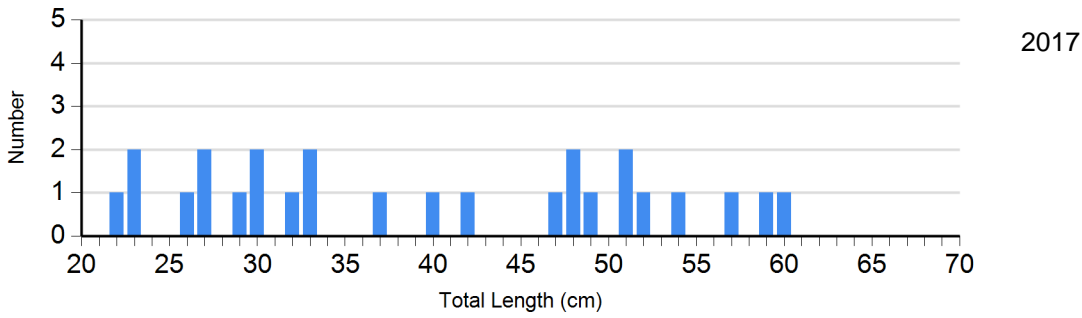


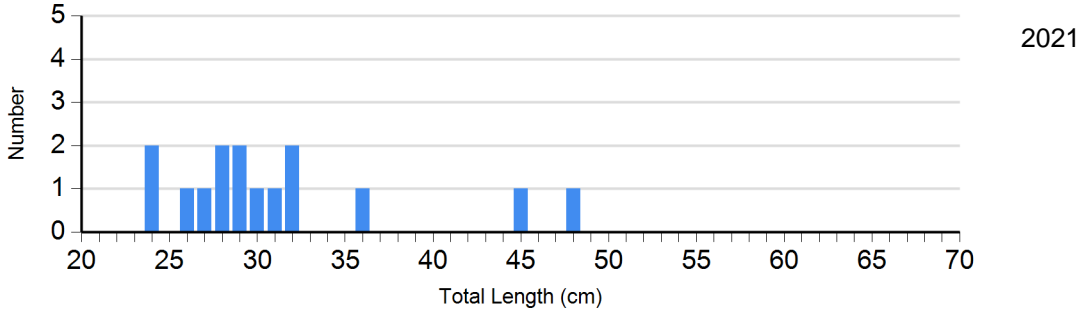
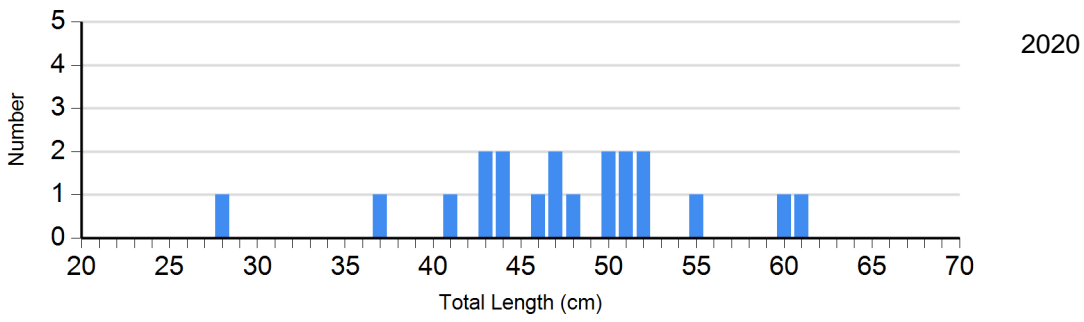
Species: Smallmouth Bass
Gear: boat shocker (night)



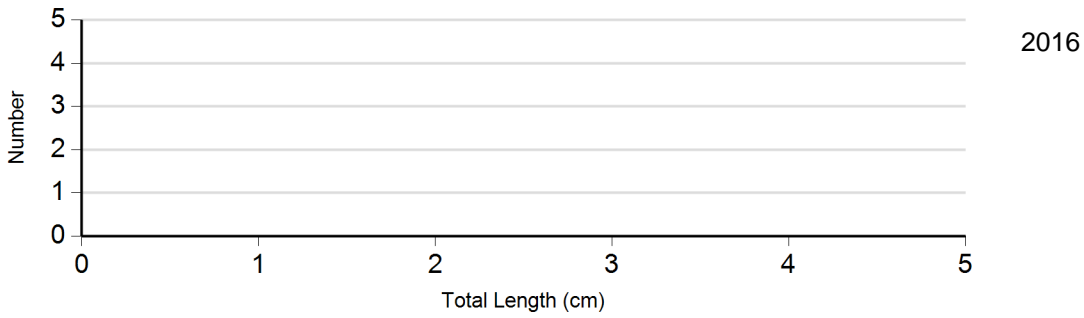


Species: Walleye
Gear: AFS std gill net





Species: Walleye
 Gear: std exp gill net

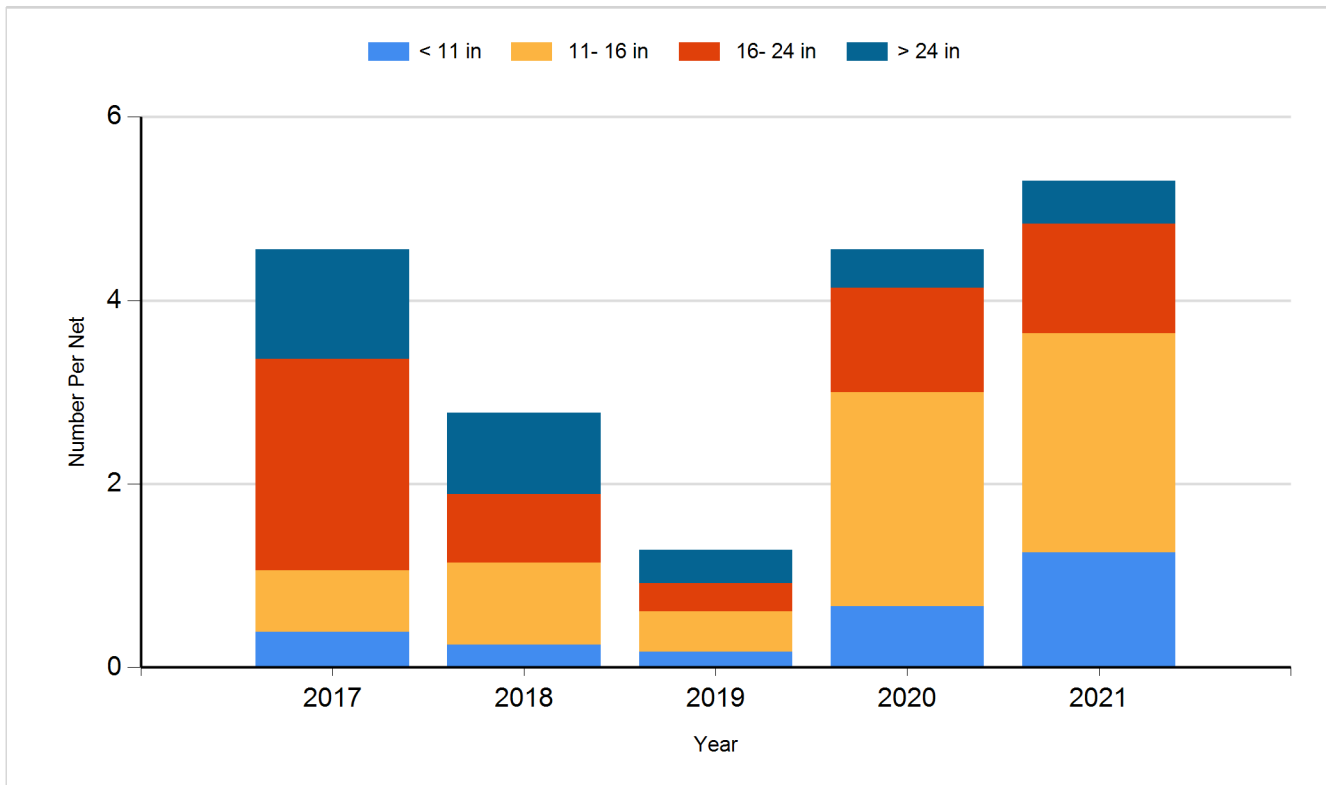


Historic Fish Sizes and Relative Abundance

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

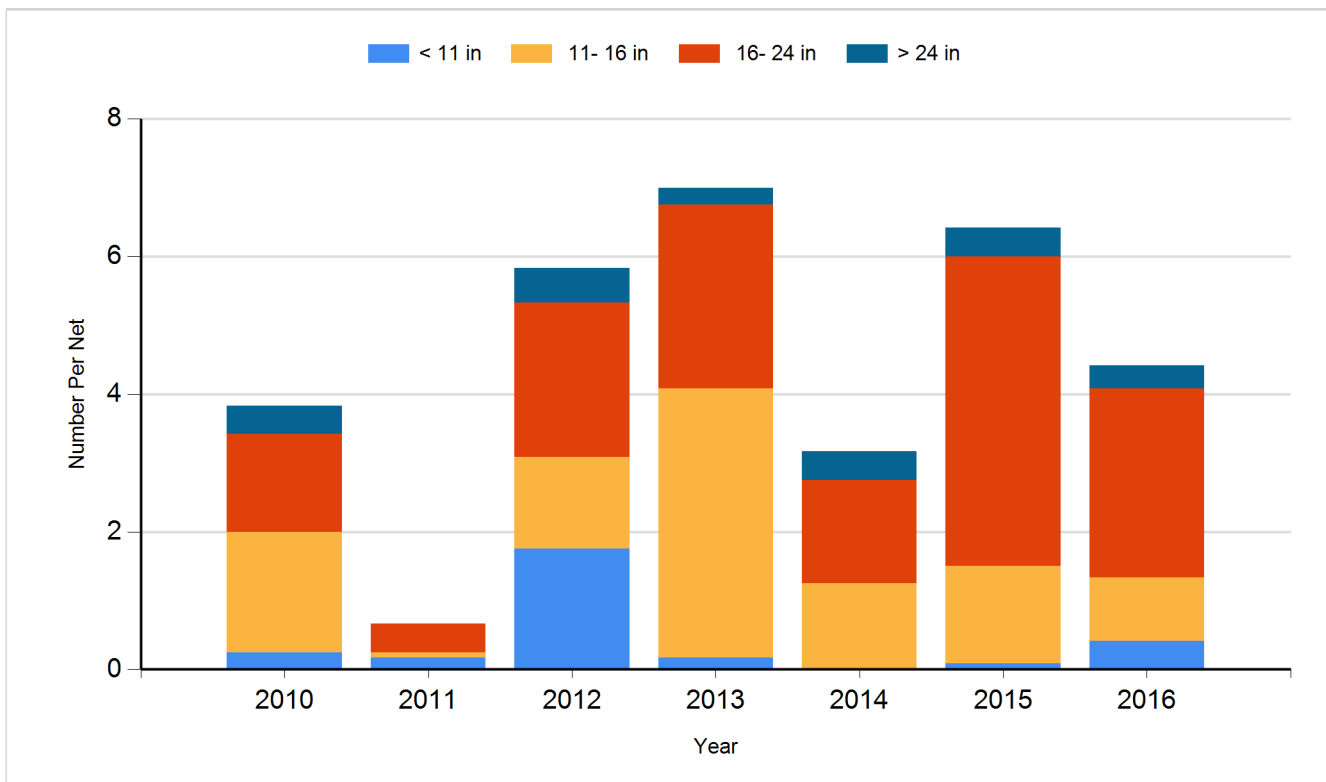
Species: Channel Catfish

Gear: AFS std gill net

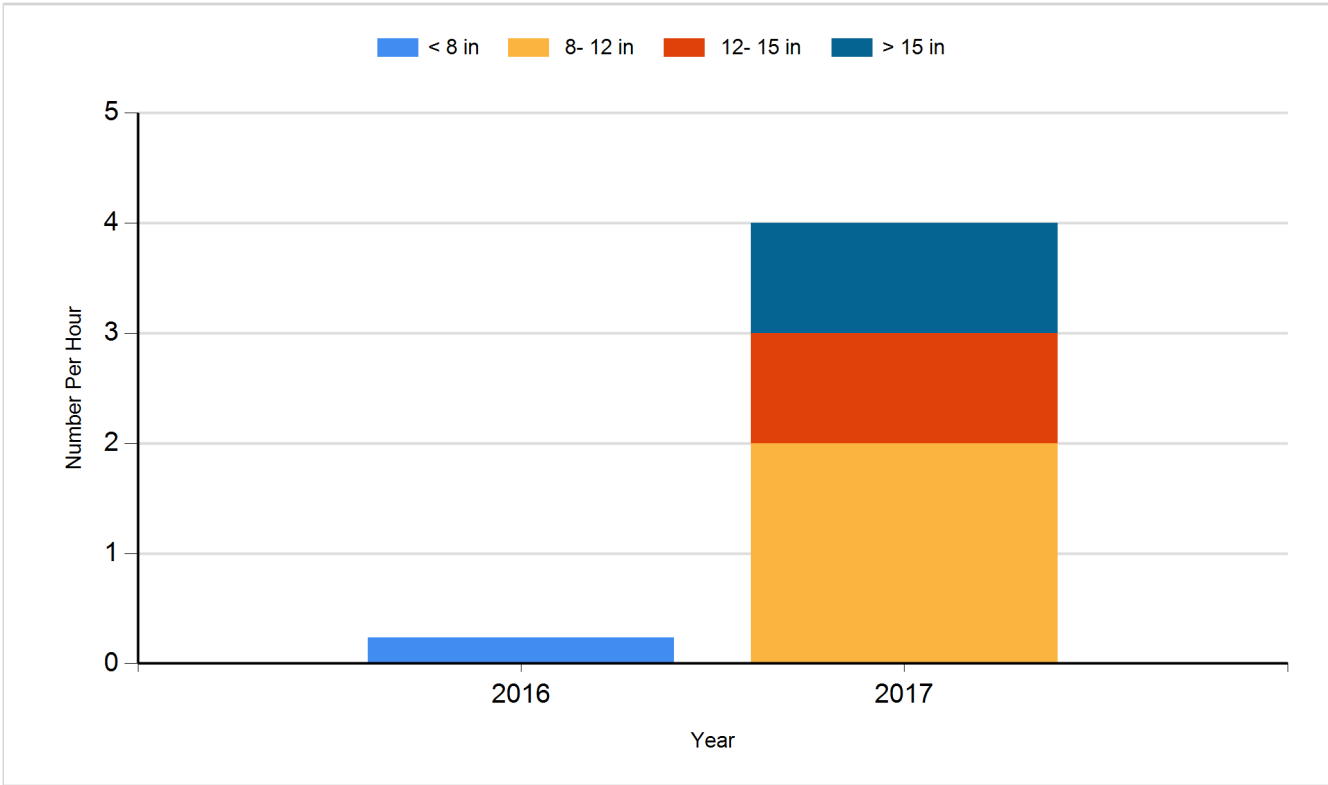


Species: Channel Catfish

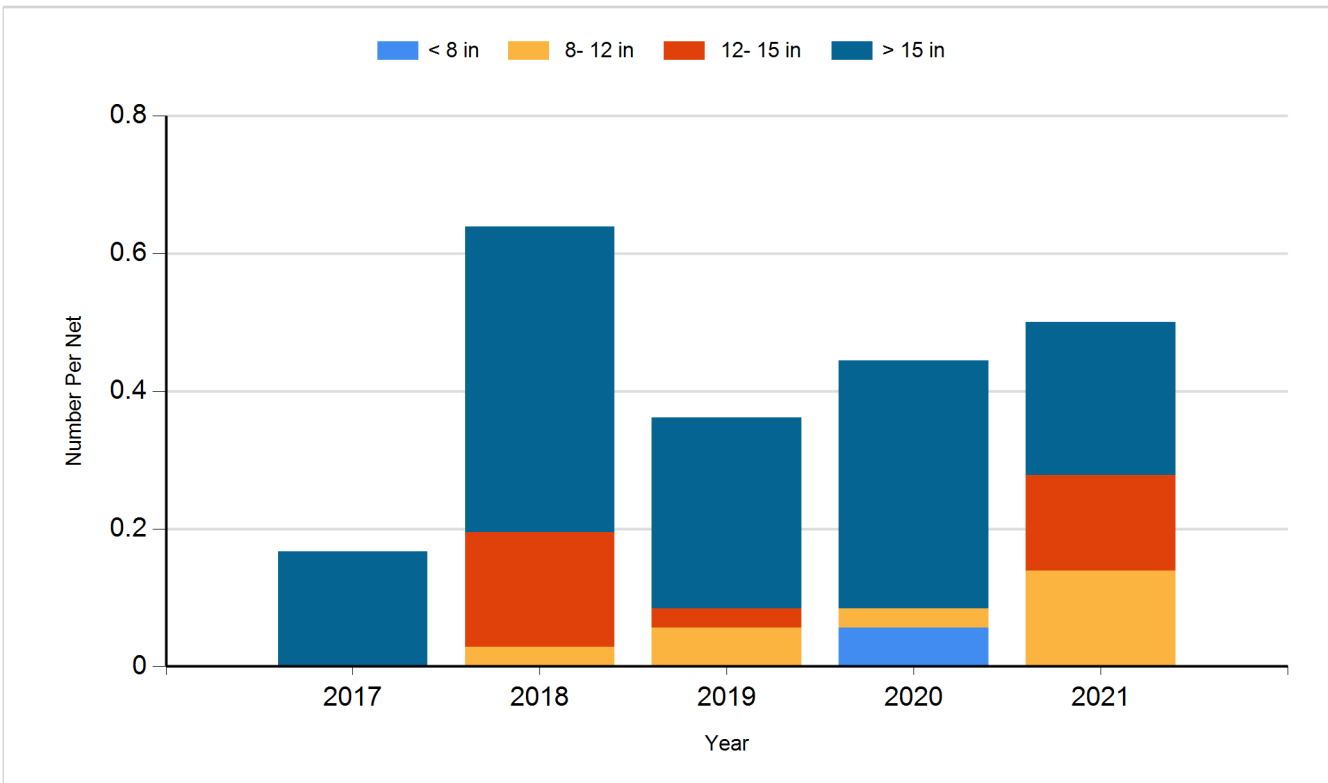
Gear: std exp gill net



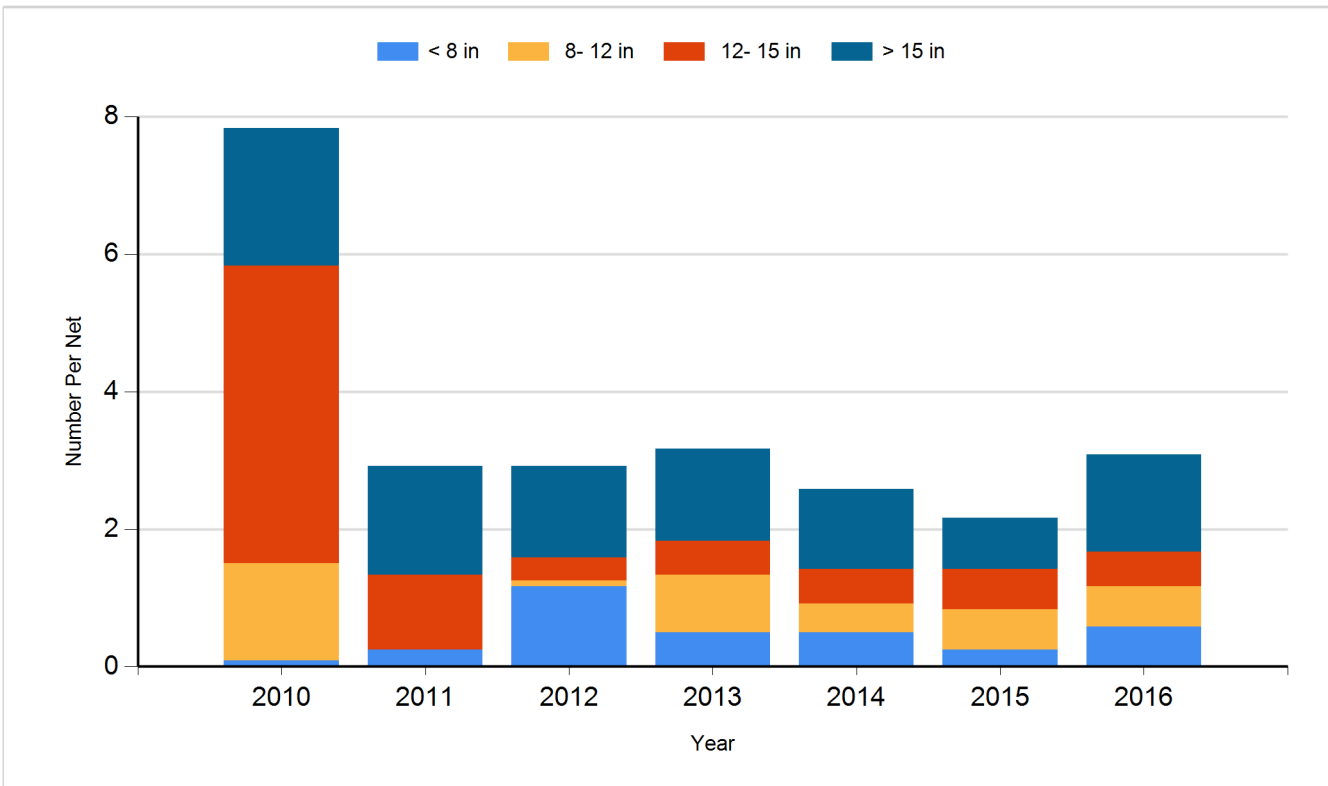
Species: Largemouth Bass
Gear: boat shocker (night)



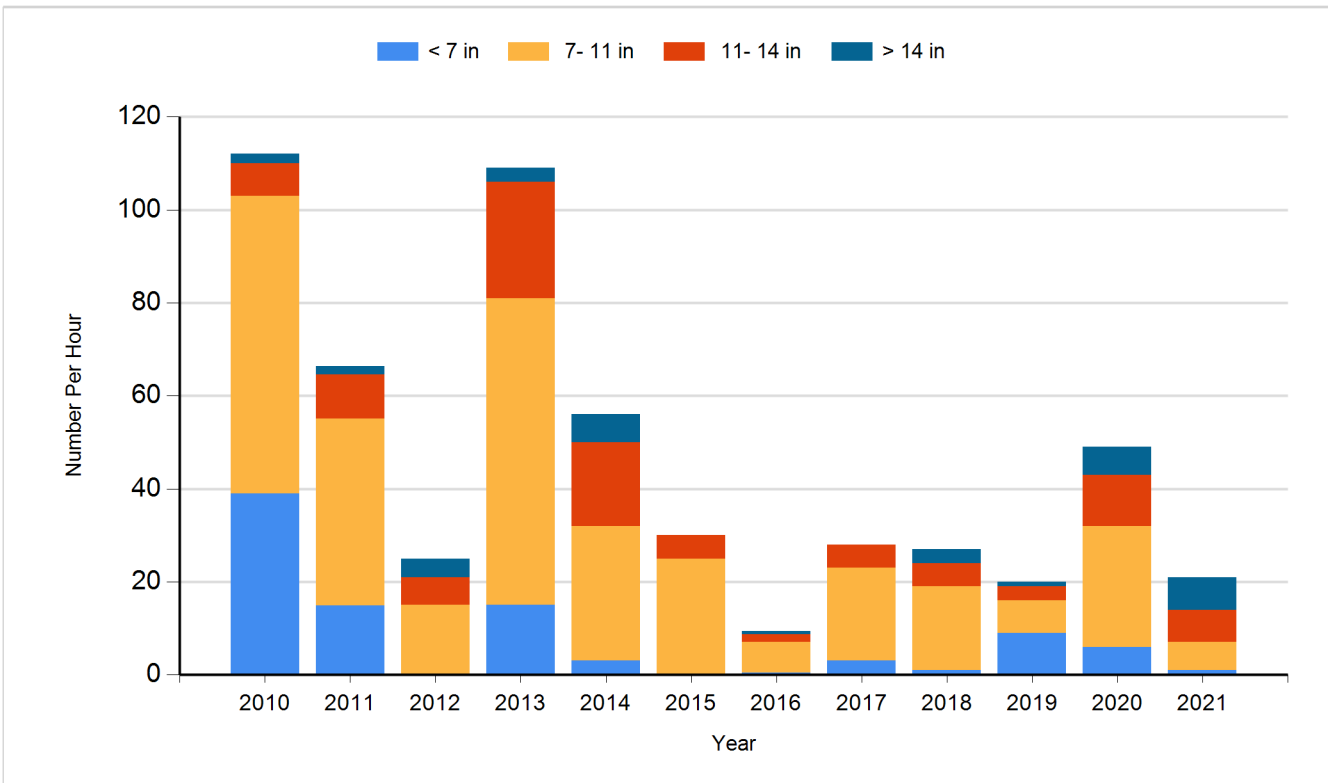
Species: Sauger
Gear: AFS std gill net



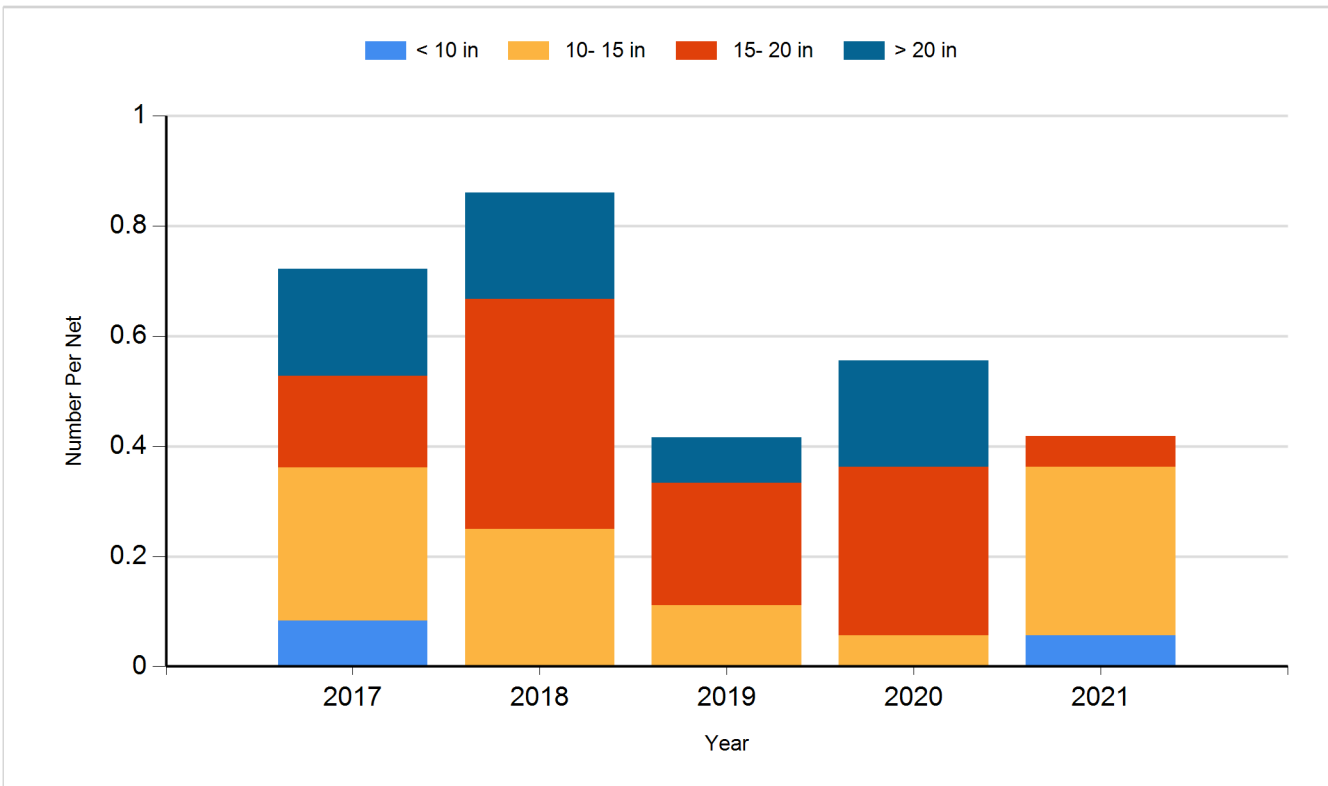
Species: Sauger
Gear: std exp gill net



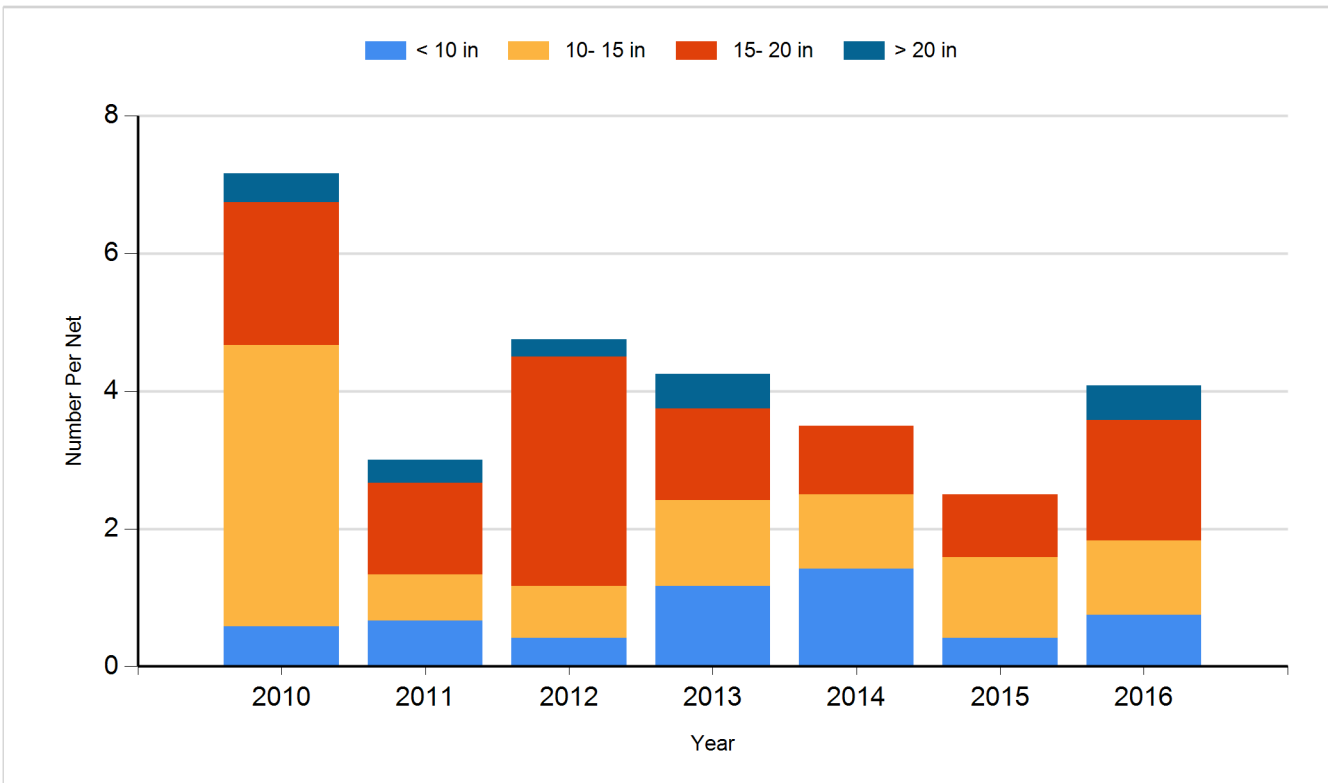
Species: Smallmouth Bass
Gear: boat shocker (night)



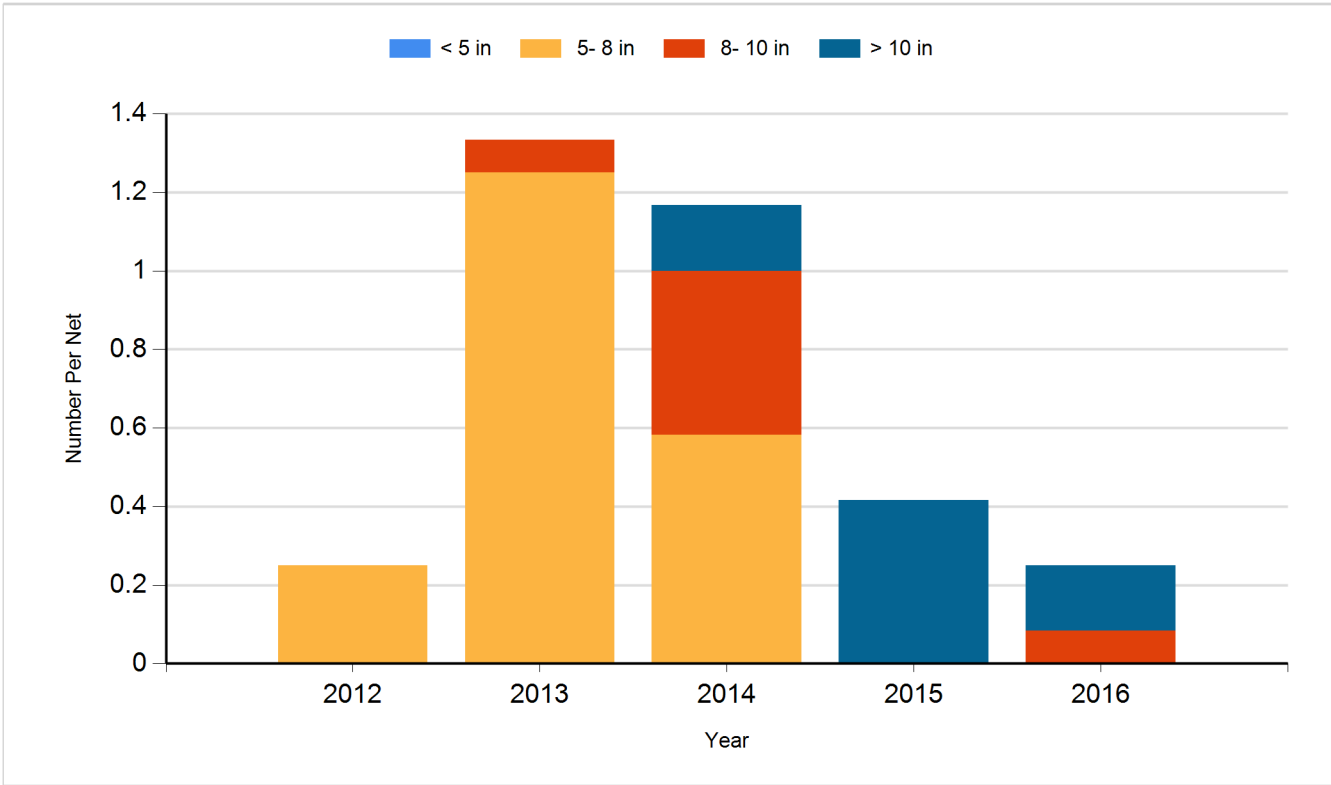
Species: Walleye
Gear: AFS std gill net



Species: Walleye
Gear: std exp gill net



Species: Yellow Perch
Gear: std exp gill net



Fish Stocking

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

Year	Species	Size	Number
2015	Walleye	Fry	12,800,000
2019	Walleye	Fingerling	1,819,269