SOUTH DAKOTA STATEWIDE FISHERIES SURVEY
Shadehill Reservoir, Perkins County
SFG-Lake-1017-000
2018

Lake Information

Name: Shadehill Reservoir

County: Perkins

Surface Area: 5,072 Acres

Surveys and Investigations

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

Gear	Date	Effort
AFS std gill net	Aug 07, 2018	6 net-nights
AFS std gill net	Aug 08, 2018	6 net-nights
frame net (std 3/4 in)	May 30, 2018	5 net-nights
frame net (std 3/4 in)	May 31, 2018	5 net-nights

Common Fish Species Present

Black Crappie

Channel Catfish

Gizzard Shad

Smallmouth Bass

Walleye

Yellow Perch

River Carpsucker

White Crappie

White Bass

Common Carp

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 std gill net	Bigmouth Buffalo	1	0.1	0.1	100		100			
	Black Crappie	5	0.4	0.3	100		100		95	3
	Channel Catfish	127	8.9	1.7	63	7	5	3	87	1
	Common Carp	22	1.8	0.7	100		27	15	89	1
	Freshwater Drum	16	1.3	0.3	88		25		98	3
	Gizzard Shad	2	0.0	0.0	0					
	Goldeye	17	0.0	0.0						
	Northern Pike	9	0.7	0.4	100		50		83	3
	River Carpsucker	18	1.5	0.3	100		94		95	2
	Shorthead Redhorse	19	1.6	0.8	74		68	17	97	3
	Smallmouth Bass	1	0.1	0.1	0		0		100	
	Walleye	91	7.0	1.0	27	7	1		79	1
	White Bass	40	3.3	1.0	100		64	12	89	1
	White Crappie	2	0.2	0.2	50		50		103	5
	Yellow Perch	22	1.8	0.7	73	15	9		99	3
frame net (std 3/4 in)	Black Crappie	27	2.7	2.5	100		96		87	2
	Bluegill	1	0.1	0.1	0		0		117	
	Channel Catfish	94	6.3	2.9	37	9	0		82	1
	Common Carp	3	0.3	0.3	100		0		90	4
	Freshwater Drum	1	0.0	0.0	0		0			
	River Carpsucker	81	8.1	3.7	100		98		96	1
	Shorthead Redhorse	2	0.2	0.3	100		50		75	5
	Walleye	5	0.5	0.3	100		80		79	2
	White Bass	3	0.3	0.2	100		100		85	6
	White Crappie	68	6.8	5.6	100		100		96	1
	Yellow Perch	1	0.1	0.1	100		100		74	

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 std frame net	Black Crappie									14.2		14.2
	Common Carp									0.1		0.1
	Freshwater Drum									0.2		0.2
	Northern Pike									0.2		0.2
	River Carpsucker									0.9		0.9
	Shorthead Redhorse									0.1		0.1
	Smallmouth Bass									0.2		0.2
	Spottail Shiner									0.0		0.0
	Walleye									0.0		0.0
	White Bass									0.9		0.9
	White Crappie									4.2		4.2
AFS std gill net	Bigmouth Buffalo										0.1	0.1
	Black Crappie									0.4	0.4	0.4
	Bluegill									0.1		0.1
	Channel Catfish									8.5	8.9	8.7
	Common Carp									2.2	1.8	2.0
	Freshwater Drum									2.2	1.3	1.8
	Gizzard Shad										0.0	0.0
	Goldeye									0.0	0.0	0.0
	Northern Pike									0.3	0.7	0.5
	River Carpsucker									1.8	1.5	1.7
	Shorthead Redhorse									0.7	1.6	1.2
	Smallmouth Bass									0.2	0.1	0.2
	Walleye									3.6	7.0	5.3
	White Bass									6.0	3.3	4.7
	White Crappie									0.8	0.2	0.5
	Yellow Perch									1.2	1.8	1.5
boat shocker (night)	Walleye							168.3				168.3
frame net (std 3/4 in)	Black Bullhead					3.0	0.2					1.6
	Black Crappie	2.0	6.1	6.9	44.6	75.3	1.7	2.9	34.7		2.7	19.7
	Bluegill	1.1	0.8	0.3	1.8		2.4	0.3	0.4		0.1	0.9
	Channel Catfish	0.7	1.6	3.6		0.0	3.5	0.2	0.5		6.3	2.1
	Common Carp	1.1	0.6	1.5	0.1	6.3	0.6	0.5	0.1		0.3	1.2
	Freshwater Drum		0.1	0.2		0.2	0.1	0.1			0.0	0.1

		CPUE										
Gear	Species	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Avg
frame net (std 3/4 in)	Gizzard Shad					0.9			0.1			0.5
	Green Sunfish				0.1							0.1
	Northern Pike			0.0		1.7		0.1				0.6
	River Carpsucker	0.6	0.9	0.6		0.4	4.1				8.1	2.5
	Shorthead Redhorse	0.1	0.1			0.1	0.7				0.2	0.2
	Smallmouth Bass	0.0	1.3	0.1	0.9	0.2	0.2	0.3	0.3			0.4
	Walleye	0.3	1.4	0.1		3.8	0.5		0.1		0.5	1.0
	White Bass	0.1	0.8			0.6	0.1		0.8		0.3	0.5
	White Crappie	0.1	0.1	13.9	4.1	49.6	1.7	22.6	45.3		6.8	16.0
	White Sucker				0.1	0.1	0.1					0.1
	Yellow Perch	0.4	0.5	0.1	0.4	0.2	0.3				0.1	0.3
std exp gill net	Black Bullhead								0.2			0.2
	Black Crappie		0.7	3.3	1.3	2.8	1.8	1.5	1.7			1.9
	Bluegill						0.2					0.2
	Channel Catfish	4.8	13.2	20.5	19.0	14.8	21.3	12.5	22.7			16.1
	Common Carp	1.0	0.3	2.0	1.3	0.4	2.2	1.7	8.2			2.1
	Freshwater Drum	0.8	1.5	3.0	1.0	0.4	0.8	2.3	3.0			1.6
	Gizzard Shad				2.3	3.6	0.0	2.3	1.0			1.8
	Goldeye	0.0	0.0		0.0		0.0	0.0				0.0
	Northern Pike	0.3	2.2	1.5	0.8	0.8	0.7	1.5	0.3			1.0
	River Carpsucker	0.5	1.3	1.2	0.7	1.4	0.8	0.3	0.8			0.9
	Shorthead Redhorse	1.5	1.3	2.5	0.3	1.8	6.5	5.8	2.3			2.8
	Smallmouth Bass						0.2					0.2
	Spottail Shiner			0.0								0.0
	Walleye	13.0	5.8	11.5	14.2	25.2	7.7	6.7	8.0			11.5
	White Bass	5.3	11.5	8.0	0.7	1.0	9.8	20.3	1.3			7.2
	White Crappie	2.2	0.8	3.7	3.3	0.6	0.2	0.7	1.5			1.6
	White Sucker	0.2	0.2	0.7		0.2		0.2				0.3
	Yellow Perch	2.2	3.3	3.0	2.0	4.4	5.7	4.2	3.3			3.5

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 std frame net	Black Crappie	PSD									100	
		PSD-P									82	
		Wr									95	
	Common Carp	PSD									0	
		PSD-P									0	
	River Carpsucker	PSD									100	
		PSD-P									91	
		Wr									108	
	Smallmouth Bass	PSD									50	
		PSD-P									0	
		Wr									91	
	Walleye	PSD									0	
		PSD-P									0	
	White Bass	PSD									100	
		PSD-P									100	
		Wr									91	
	White Crappie	PSD									100	
		PSD-P									100	
		Wr									98	
AFS std gill net	Black Crappie	PSD									100	100
		PSD-P									100	100
		Wr									94	95
	Channel Catfish	PSD									41	63
		PSD-P									5	5
		Wr									86	87
	Common Carp	PSD									73	100
		PSD-P									12	27
		Wr									93	89
	Gizzard Shad	PSD										0
	River Carpsucker	PSD									100	100
		PSD-P									95	94
		Wr									101	95
	Smallmouth Bass	PSD									100	0

			Year									
Gear	Species	Index	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
AFS std gill net	Smallmouth Bass	PSD-P									50	0
		Wr									71	100
	Walleye	PSD									33	27
		PSD-P									9	1
		Wr									81	79
	White Bass	PSD									90	100
		PSD-P									90	64
		Wr									92	89
	White Crappie	PSD									90	50
		PSD-P									90	50
		Wr									99	103
	Yellow Perch	PSD									86	73
		PSD-P									14	9
		Wr									92	99
boat shocker (night)	Walleye	PSD							80			
		PSD-P							20			
		Wr							90			
frame net (std 3/4 in)	Black Crappie	PSD	93	31	97	97	99	100	100	98		100
		PSD-P	57	16	41	12	2	100	100	97		96
		Wr	102	108	108	108	98	96	104	103		87
	Channel Catfish	PSD	40	31	53		0	37	50	100		37
		PSD-P	0	0	0		0	0	0	0		0
		Wr	93	83	89			91	77	91		82
	Common Carp	PSD	100	100	60	0	25	67	80	0		100
		PSD-P	13	60	47	0	4	50	60	0		0
		Wr	102	84		99	91	86	103	96		90
	Gizzard Shad	PSD					13			100		
		Wr					84			85		
	River Carpsucker	PSD	100	100	100		100	100				100
		PSD-P	100	86	50		75	98				98
		Wr	96	95			88					96
	Smallmouth Bass	PSD	0	20	100	14	0	100	33	33		
		PSD-P	0	0	0	0	0	0	33	33		
		Wr		102	98	93	77	93	99	92		
	Walleye	PSD	50	82	100		62	80		100		100
		PSD-P	50	9	0		9	0		0		80

			Year									
Gear	Species	Index	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
frame net (std 3/4 in)	Walleye	Wr	84	78	99		81	88		99		79
	White Bass	PSD	100	100			100	100		100		100
		PSD-P	100	100			20	100		63		100
		Wr	91	86			86	84		91		85
	White Crappie	PSD	100	100	100	100	100	100	100	100		100
		PSD-P	0	0	89	91	63	100	100	99		100
		Wr	96	99	102	103	96	96	104	102		96
	Yellow Perch	PSD	33	50	0	100	100	100				100
		PSD-P	0	0	0	33	0	0				100
		Wr	98	95	89	99	86	93				74
std exp gill net	Black Crappie	PSD		0	85	100	100	91	100	100		
		PSD-P		0	5	13	43	91	100	90		
		Wr		114	112	102	110	116	103	100		
	Channel Catfish	PSD	41	67	71	56	53	55	53	35		
		PSD-P	0	0	1	0	1	0	0	1		
		Wr	97	83	89	85	87	82	88	86		
	Common Carp	PSD	100	100	42	25	50	77	70	76		
		PSD-P	83	100	17	13	50	23	0	10		
		Wr	95	83	83	90	84	91	96	85		
	Gizzard Shad	PSD				0	94	0	86	83		
		Wr				90	89		122			
	River Carpsucker	PSD	100	88	86	100	100	100	100	100		
		PSD-P	67	63	43	50	43	100	100	100		
		Wr	89	92		98	87	94	103			
	Smallmouth Bass	PSD						100				
		PSD-P						100				
		Wr						96				
	Walleye	PSD	19	34	20	6	21	74	58	52		
		PSD-P	1	0	0	1	1	4	0	8		
		Wr	86	81	84	77	86	80	84	86		
	White Bass	PSD	100	74	92	100	100	58	98	100		
		PSD-P	69	68	50	25	60	44	30	63		
		Wr	92	90	91	86	104	93	95	94		
	White Crappie	PSD	77	80	86	100	100	0	100	100		
		PSD-P	46	60	36	20	100	0	100	100		
		Wr	101	106	103	99	101	92	102	99		
	Yellow Perch	PSD	38	30	67	58	77	65	36	90		

			Year									
Gear	Species	Index	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
std exp gill net	Yellow Perch	PSD-P	0	0	11	0	0	6	12	20		
		Wr	106	101	96	91	99	96	101	98		

Back-Calculated Lengths

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

Species: Walleye

Year Class	Age	N	Mean back-calculated length (SE) at age									
			1	2	3	4	5	6	7	8	9	10
2016	2	2	197 (20.3)	289 (52.6)								
2015	3	2	141 (5.9)	294 (.9)	331 (8.9)							
2014	4	1	113	235	334	367						
Weighted Mean		5	158	280	332	367						

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

Length at Capture

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

Species: Black Crappie

		Mean Length (expanded sample number) at capture by age									
Year	N	1	2	3	4	5	6	7	8	9	10+
2013	1304				227 (1271)	242 (33)					
2011	118		176 (2)	218 (68)	263 (6)	280 (22)	287 (20)				
2009	28		178 (2)	214 (6)	247 (8)	260 (2)	295 (10)				

Species: Walleye

		Mean Length (expanded sample number) at capture by age									
Year	N	1	2	3	4	5	6	7	8	9	10+
2018	22		310 (12)	366 (8)	384 (2)						
2017	35		333 (9)	366 (13)	430 (4)	423 (2)		471 (2)	528 (4)	630 (1)	
2016	96		294 (38)	384 (16)	394 (2)	411 (10)	468 (8)	480 (20)	505 (2)		
2015	104	215 (26)	305 (18)	353 (12)	398 (8)	396 (12)	443 (26)	441 (2)			
2014	92	275 (10)	330 (4)	367 (8)	407 (6)	430 (58)	545 (2)		483 (2)		748 (2)
2013	252	221 (4)	297 (8)	302 (22)	348 (207)	432 (7)				525 (4)	
2012	168		285 (17)	326 (149)		556 (2)					
2011	156	205 (6)	272 (106)	375 (34)	426 (6)	471 (4)					
2010	106	219 (40)	341 (34)	378 (18)	403 (12)					462 (2)	
2009	168	242 (26)	307 (52)	349 (56)	386 (18)	390 (6)	419 (6)	460 (2)			530 (2)

Species: White Crappie

		Mean Length (expanded sample number) at capture by age									
Year	N	1	2	3	4	5	6	7	8	9	10+
2015	430		168 (2)		283 (184)	293 (178)	300 (67)				
2013	892			254 (90)	252 (649)		305 (115)	296 (38)			
2011	278			249 (56)	278 (15)	290 (119)	296 (88)				

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).

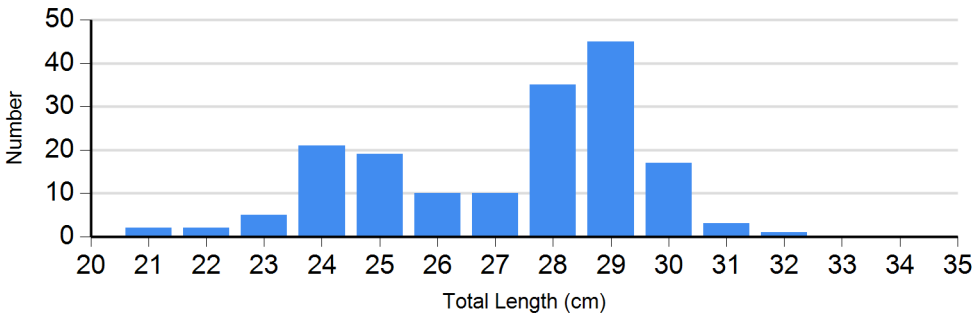
		Length Groups							
		S-Q		Q-P		P-M		M	
Species	Year	N	Wr (SE)	N	Wr (SE)	N	Wr (SE)	N	Wr (SE)
Black Crappie Frame Net	2014	0		0		32	97 (1.0)	2	82 (0.0)
	2015	0		0		58	104 (0.8)	0	
	2016	12	114 (1.3)	12	108 (2.2)	648	102 (0.3)	22	100 (0.7)
	2017	0		30	103 (1.4)	119	93 (0.8)	21	90 (1.1)
	2018	0		1	90	21	89 (1.3)	5	78 (5.2)
Channel Catfish Gill Net	2014	114	81 (0.6)	142	83 (0.7)	0		0	
	2015	70	87 (0.9)	80	89 (0.8)	0		0	
	2016	178	86 (0.3)	90	87 (0.7)	4		0	
	2017	60	87 (1.2)	37	87 (1.3)	5	82 (8.7)	0	
	2018	40	86 (1.3)	62	87 (1.0)	5	82 (0.9)	0	
Common Carp Gill Net	2014	6	93 (5.3)	14	91 (3.0)	6	87 (0.0)	0	
	2015	6	97 (0.0)	14	96 (2.0)	0		0	
	2016	24	94 (0.0)	64	86 (2.8)	10	70 (0.0)	0	
	2017	7		16	93 (2.0)	3		0	
	2018	0		16	89 (0.9)	6	89 (0.2)	0	
Walleye Gill Net	2014	24	82 (1.2)	64	80 (0.6)	2	89 (0.0)	2	66 (0.0)
	2015	34	84 (1.4)	46	83 (0.6)	0		0	
	2016	46	89 (0.7)	42	86 (0.7)	8	81 (2.0)	0	
	2017	29	81 (0.8)	10	80 (0.9)	3	84 (2.5)	1	88
	2018	61	80 (0.7)	22	78 (0.9)	1	81	0	
White Bass Gill Net	2018	0		14	92 (1.1)	23	87 (0.8)	2	85 (3.2)
White Bass Gill Net	2014	50	93 (0.7)	16	89 (1.3)	52	94 (0.6)	0	

		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	2015	4	101 (0.0)	166	95 (0.3)	68	95 (0.6)	6	89 (1.8)
	2016	0		6	99 (1.3)	10	91 (0.6)	0	
	2017	7	98 (2.2)	0		58	92 (0.6)	7	89 (2.2)
White Crappie Frame Net	2014	0		0		26	97 (0.9)	8	96 (1.9)
	2015	2	117 (0.0)	0		348	105 (0.3)	102	99 (0.8)
	2016	0		12	107 (5.7)	594	102 (0.3)	300	101 (0.4)
	2017	0		0		11	99 (1.1)	39	98 (1.1)
	2018	0		0		37	98 (1.1)	31	93 (1.3)
Yellow Perch Gill Net	2014	24	97 (1.5)	40	96 (1.1)	4	87 (2.8)	0	
	2015	32	100 (1.4)	12	106 (2.2)	6	99 (4.4)	0	
	2016	4	97 (0.7)	28	100 (1.5)	8	90 (2.2)	0	
	2017	2	96 (0.8)	10	93 (1.7)	2	87 (0.9)	0	
	2018	6	106 (3.0)	14	96 (2.4)	2	92 (5.0)	0	

Length Frequency Distribution

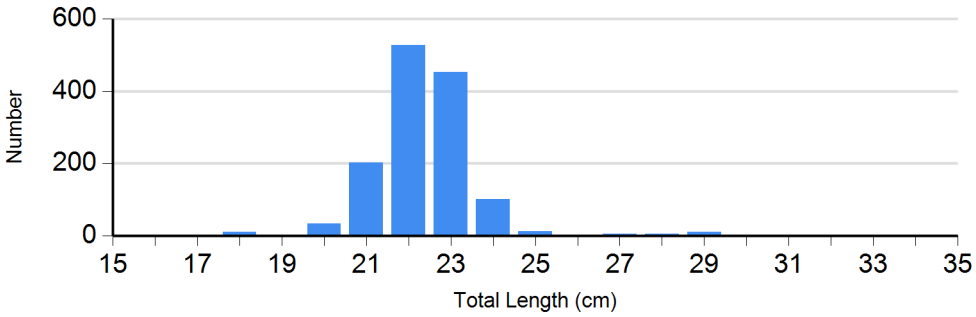
Length frequency histogram of species sampled by year.

Species: Black Crappie
Gear: AFS std frame net

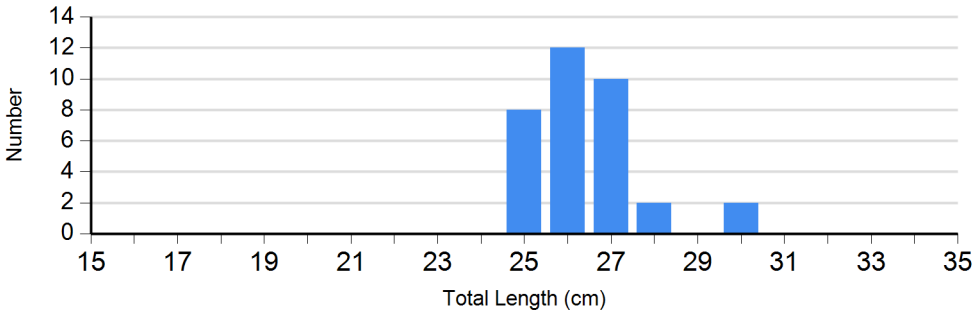


2017

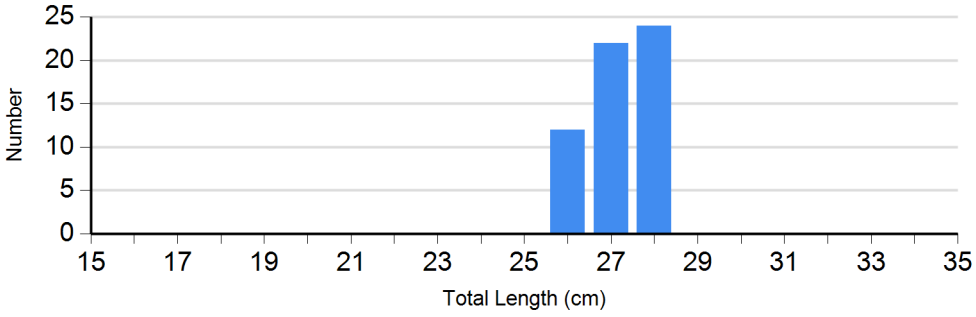
Species: Black Crappie
Gear: frame net (std 3/4 in)



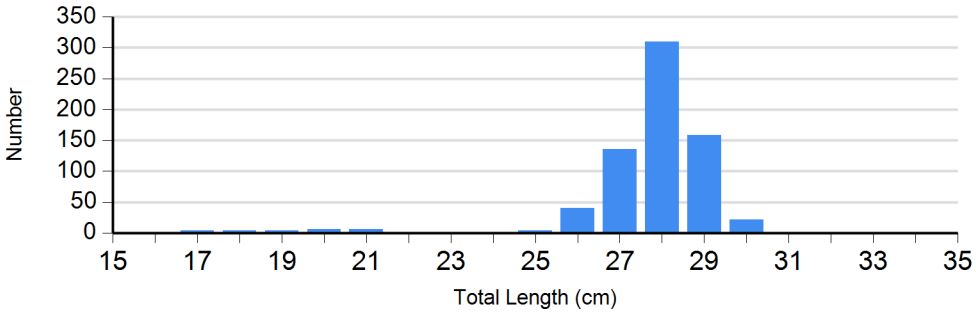
2013



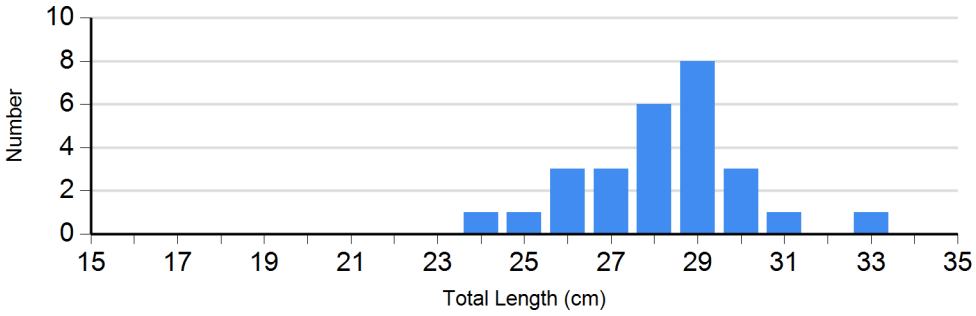
2014



2015

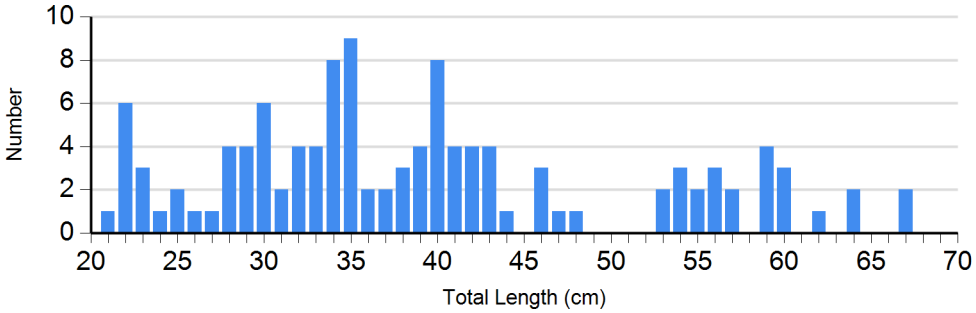


2016

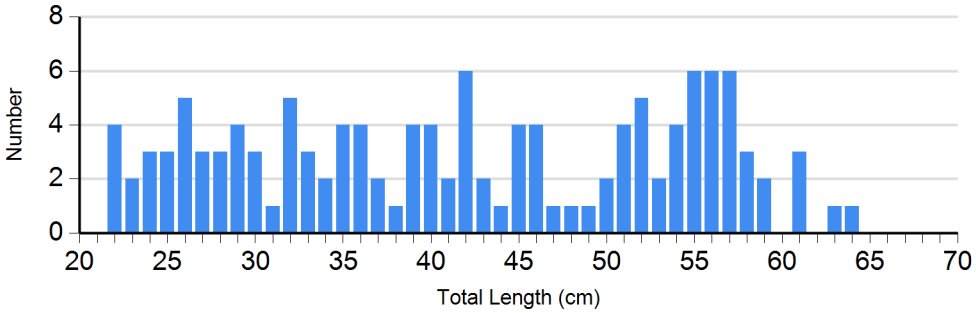


2018

Species: Channel Catfish
Gear: AFS std gill net

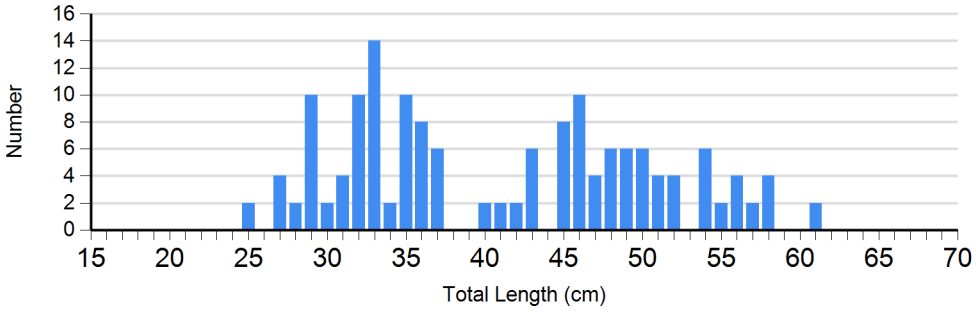


2017



2018

Species: Channel Catfish
Gear: std exp gill net



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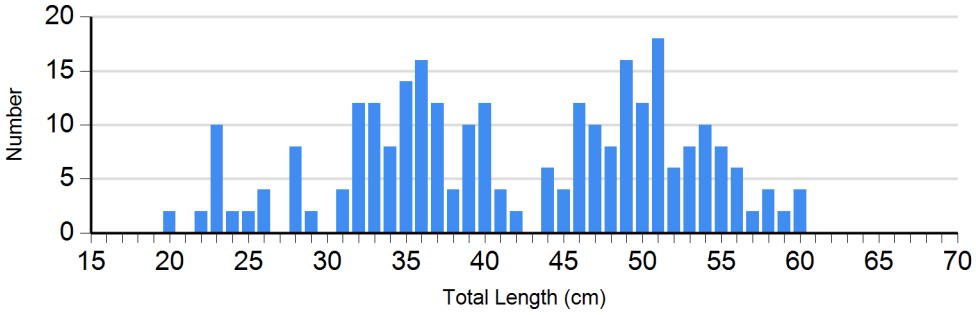
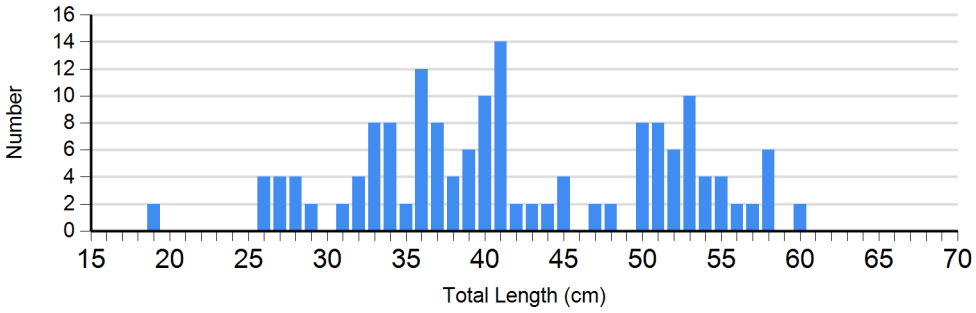
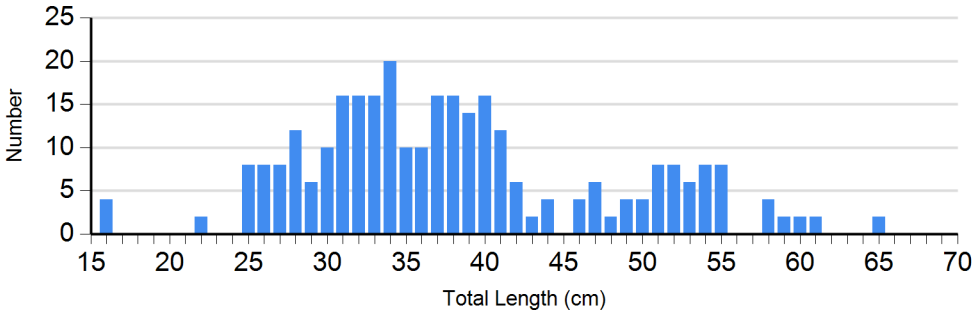


2014

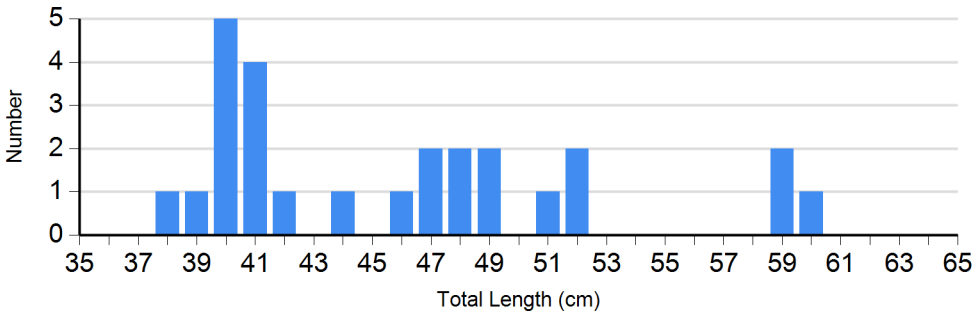


2015

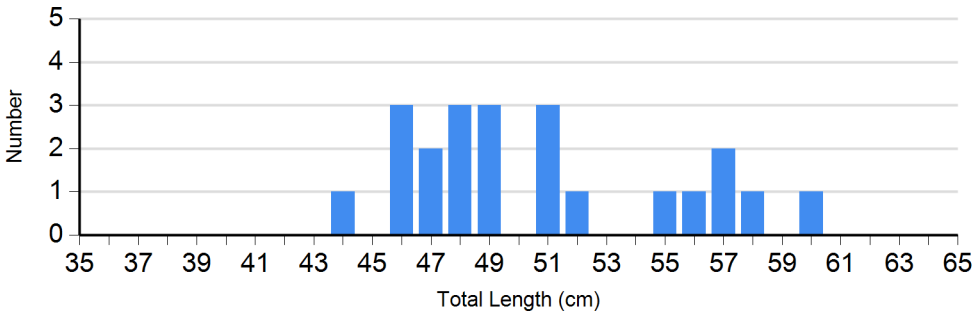


2016

Species: Common Carp
Gear: AFS std gill net



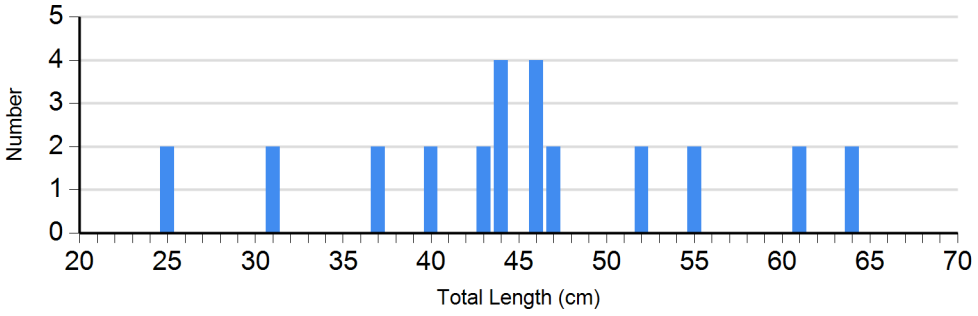
2017



2018

Species: Common Carp
Gear: std exp gill net

2014



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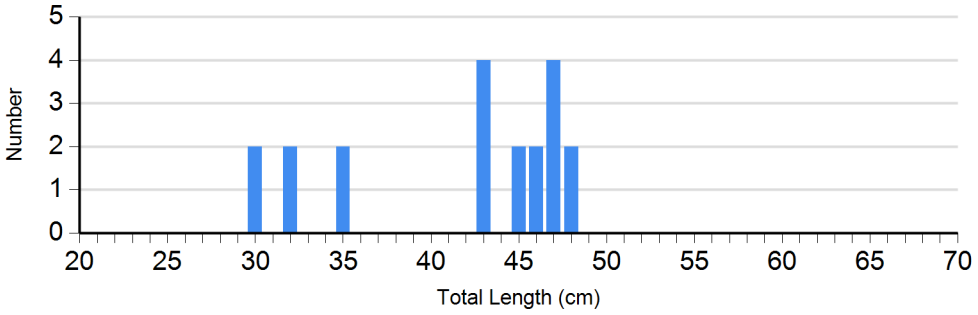
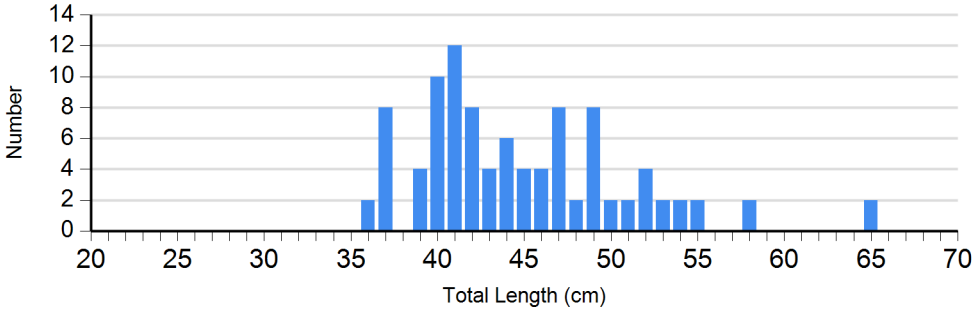
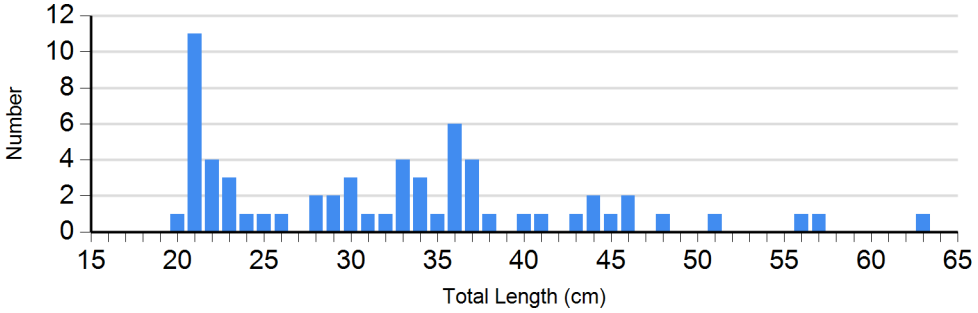


2016

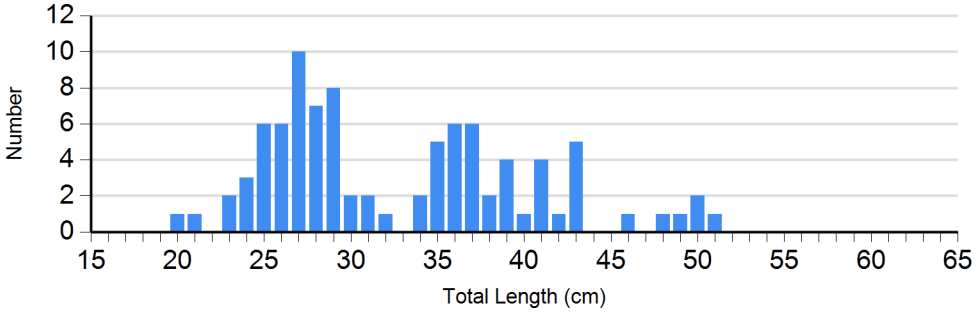


Species: Walleye
Gear: AFS std gill net

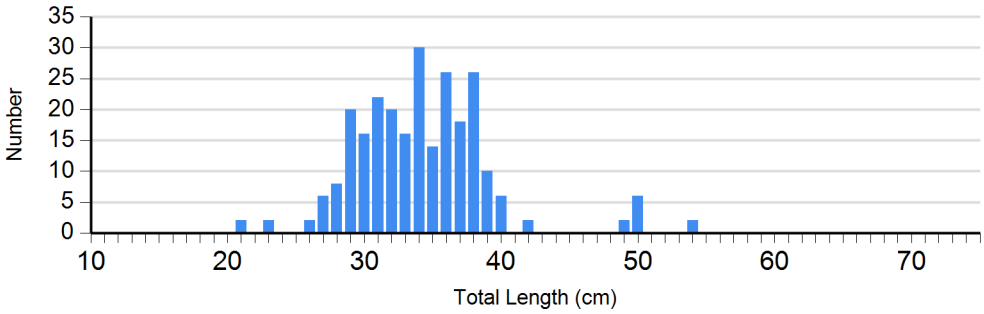
2017



2018



Species: Walleye
Gear: std exp gill net



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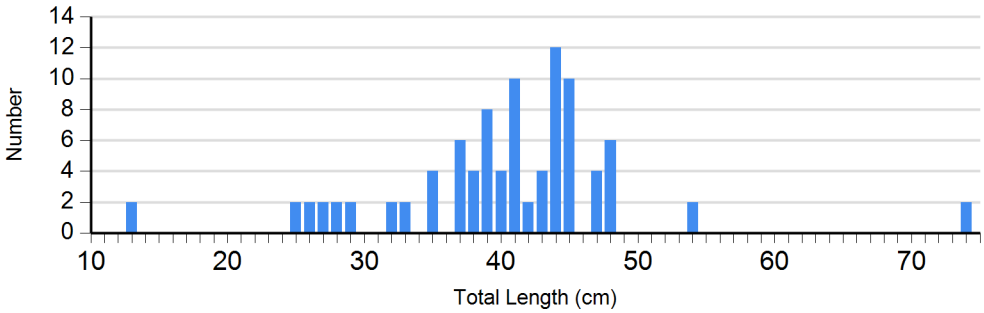

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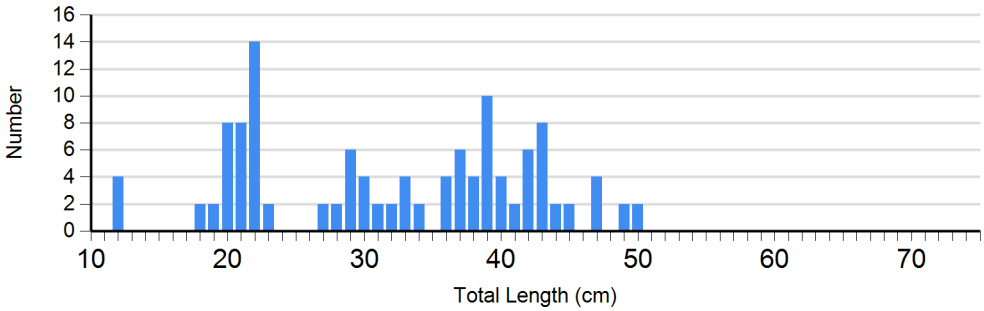

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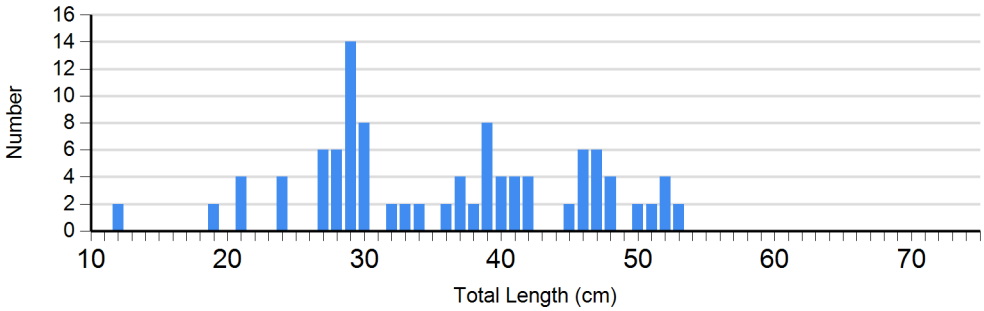
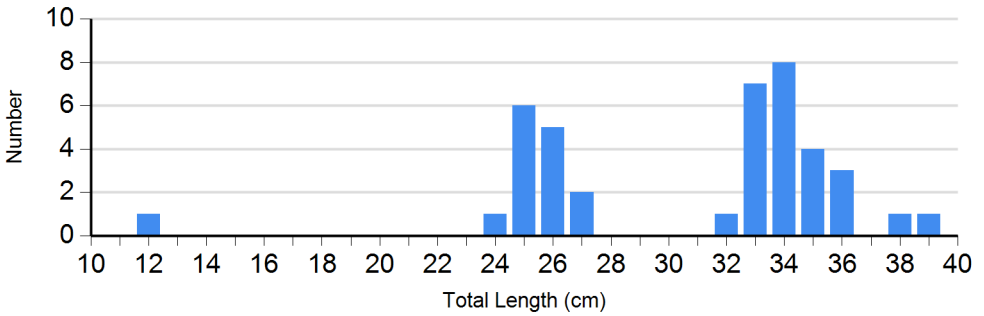


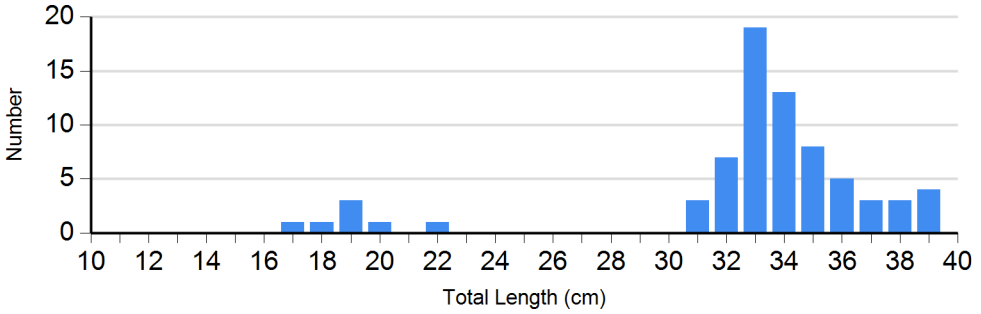
2016

Species: White Bass
Gear: AFS std gill net



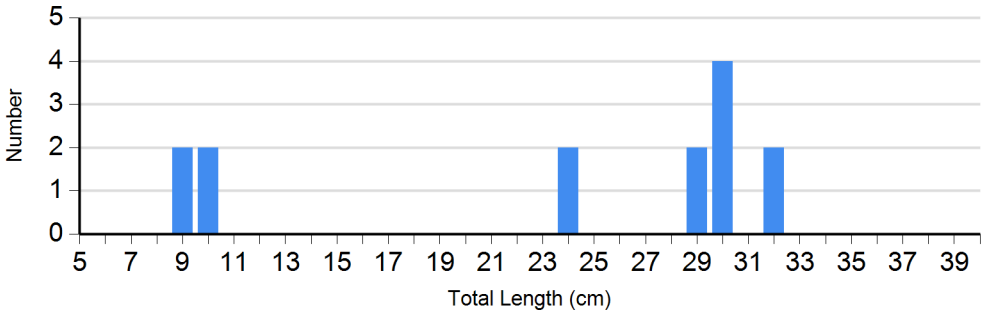
2018

Species: White Bass
Gear: AFS std gill net



2017

Species: White Bass
Gear: std exp gill net



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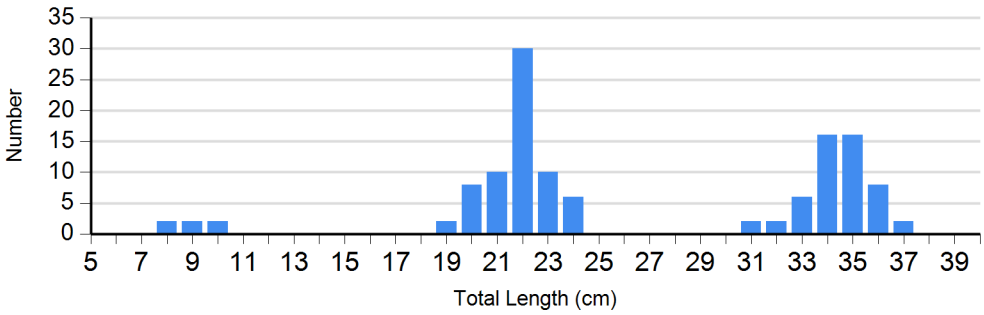

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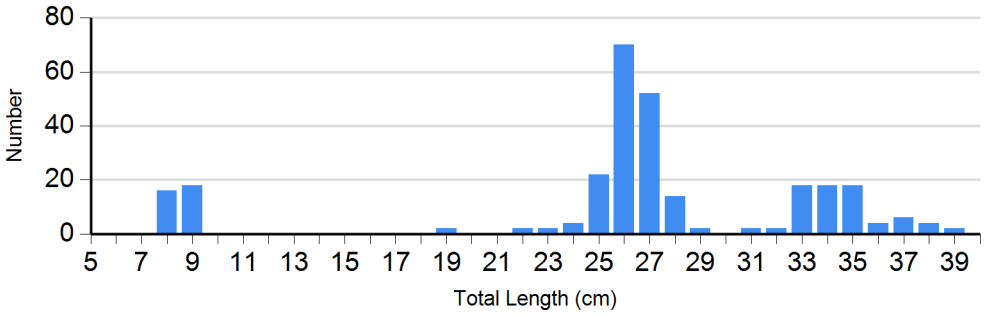

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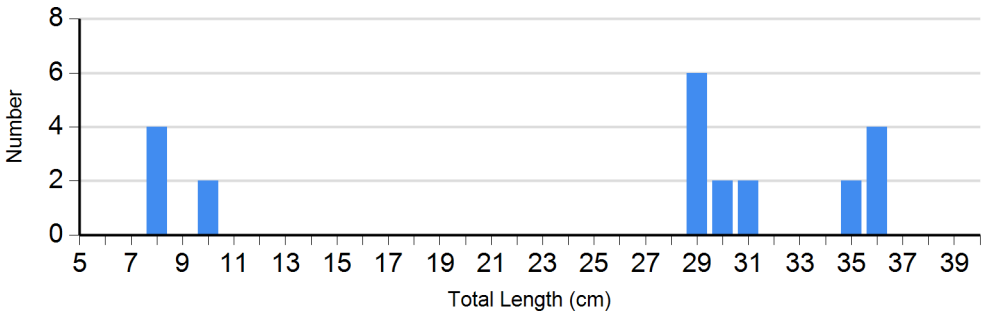
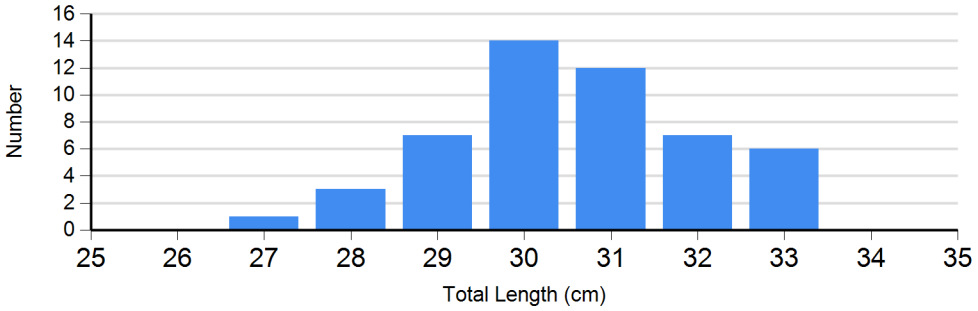


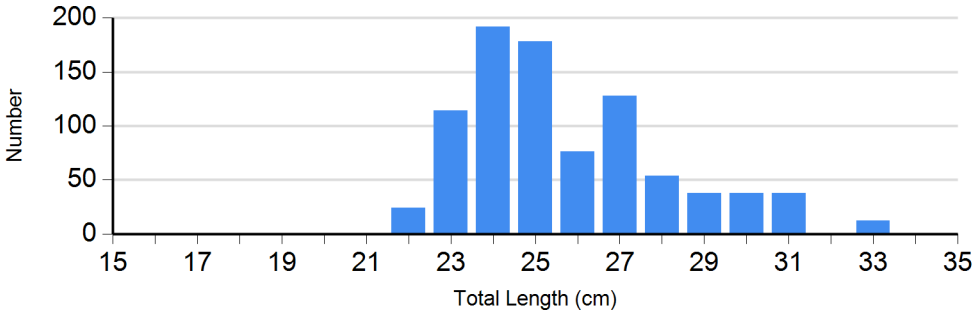
2016

Species: White Crappie
Gear: AFS std frame net



2017

Species: White Crappie
Gear: frame net (std 3/4 in)



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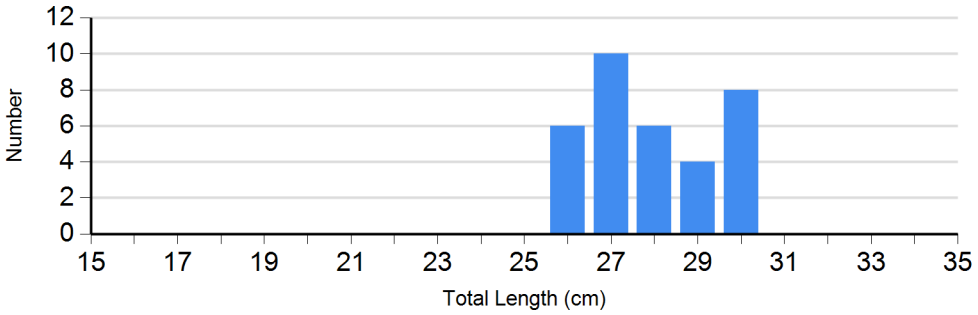

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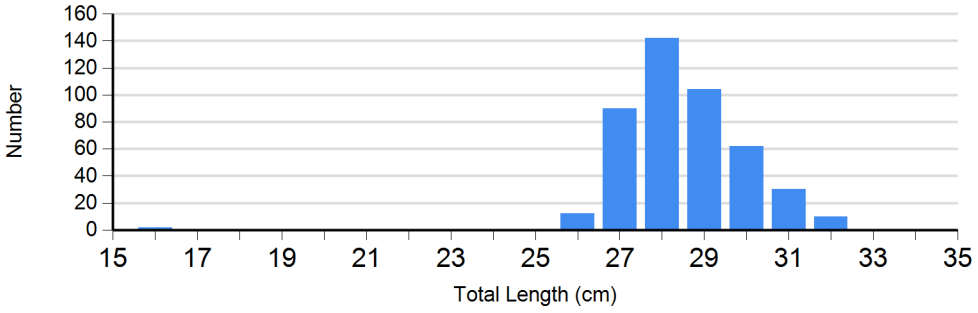

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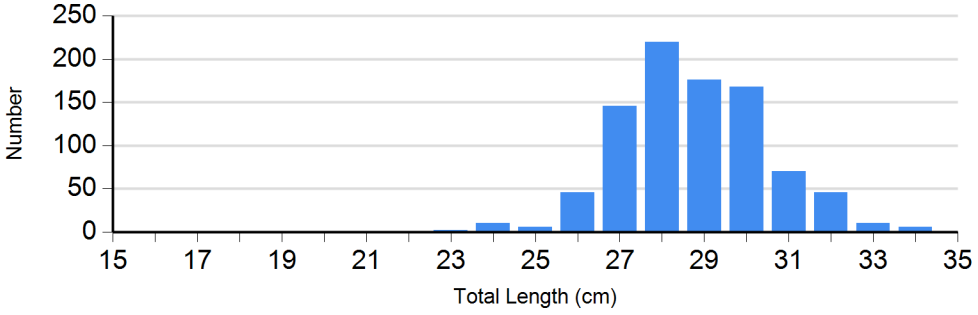
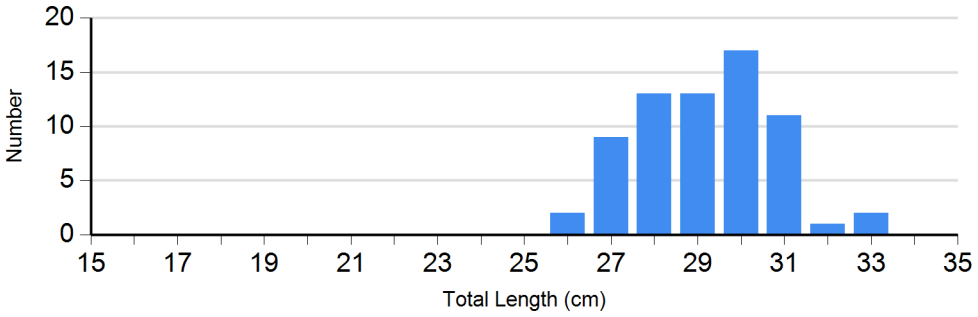
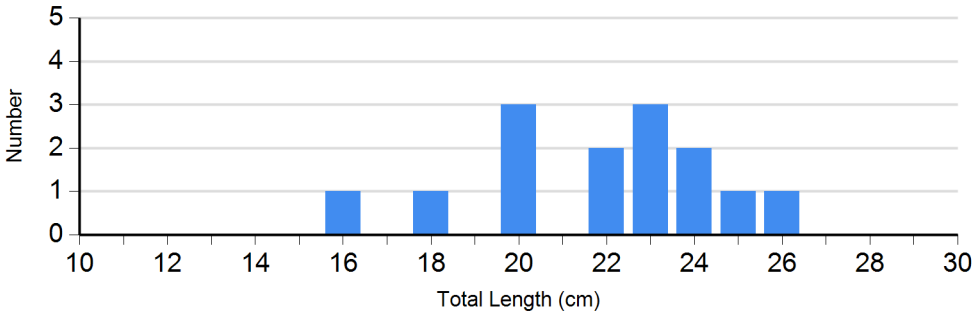


2016

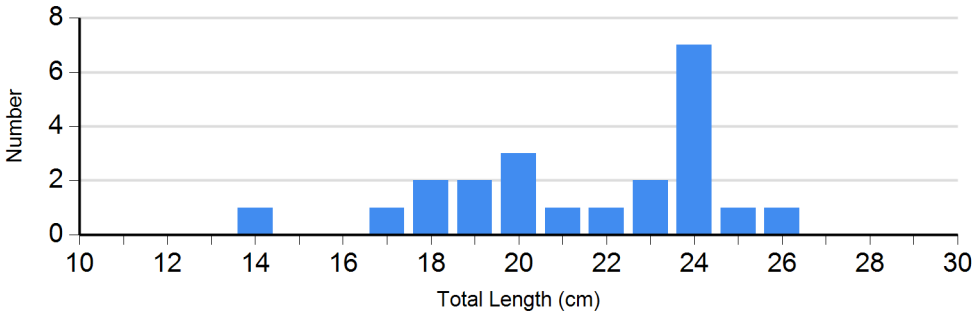


2018

Species: Yellow Perch
Gear: AFS std gill net

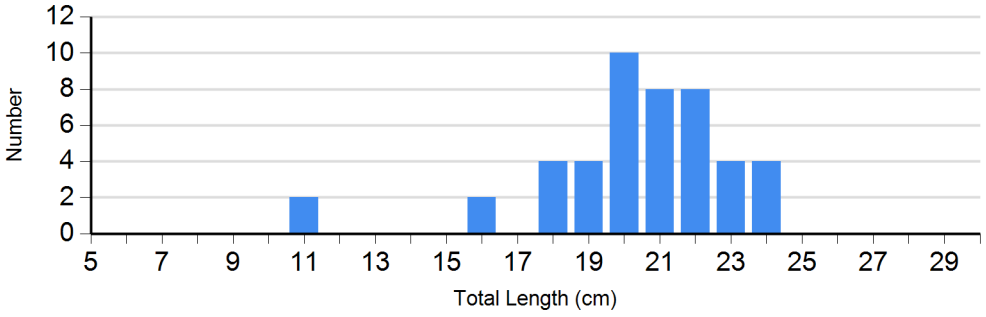


2017

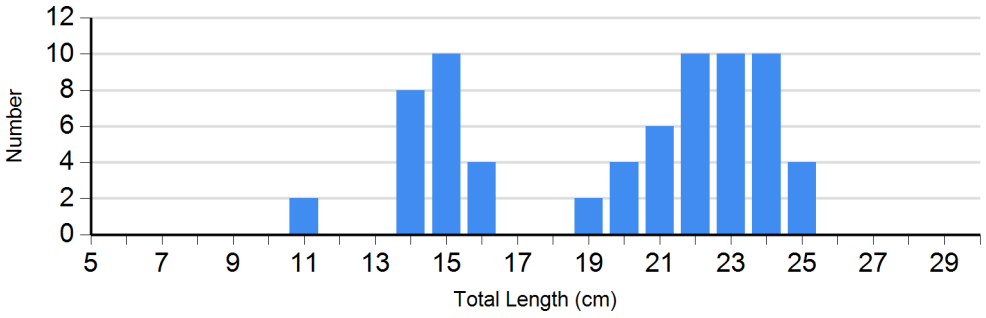


2018

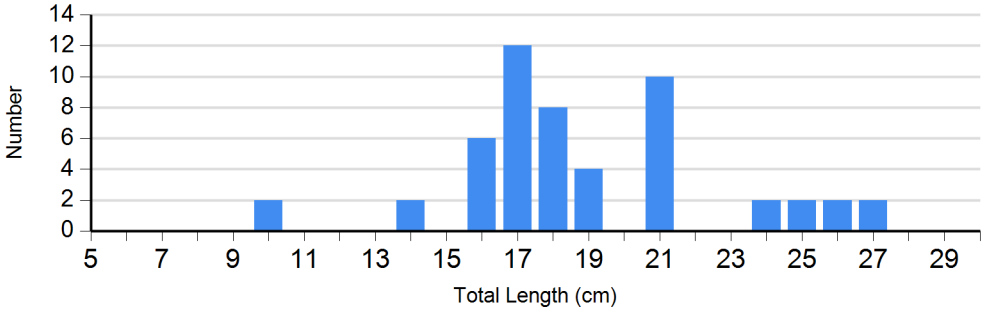
Species: Yellow Perch
Gear: std exp gill net



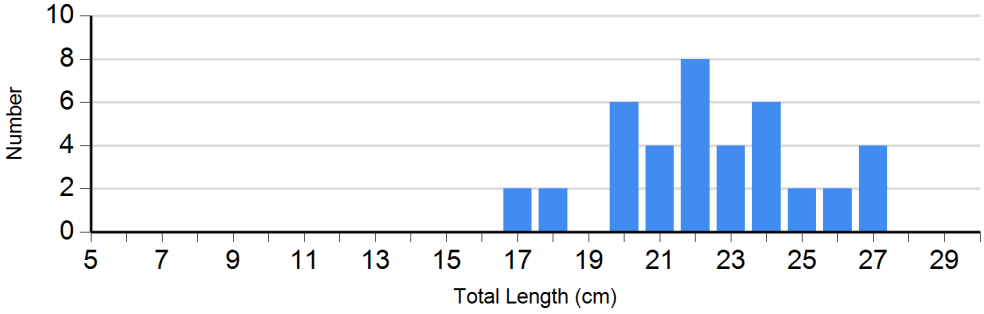
2013



2014


Number
14
12
10
8
6
4
2
0
5
7
9
11
13
15
17
19
21
23
25
27
29
Total Length (cm)

2015

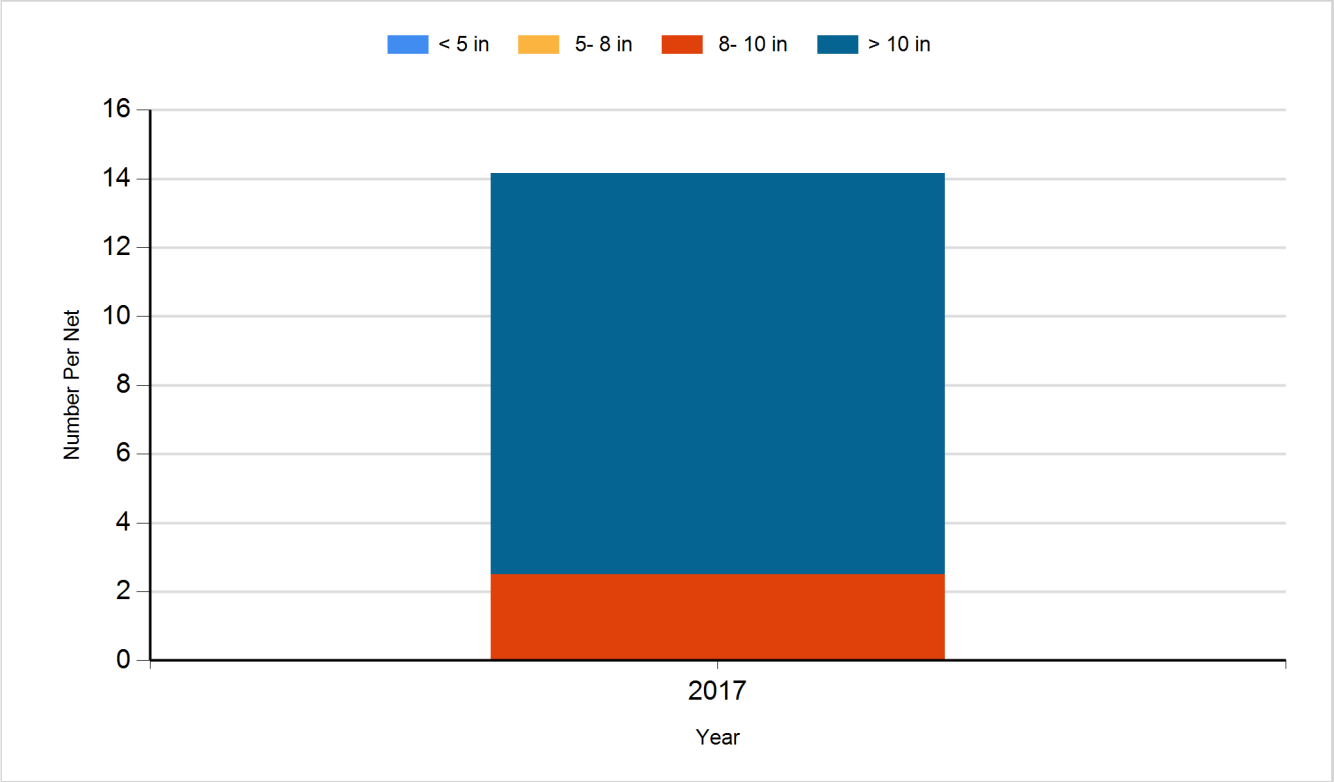

Number
10
8
6
4
2
0
5
7
9
11
13
15
17
19
21
23
25
27
29
Total Length (cm)

2016

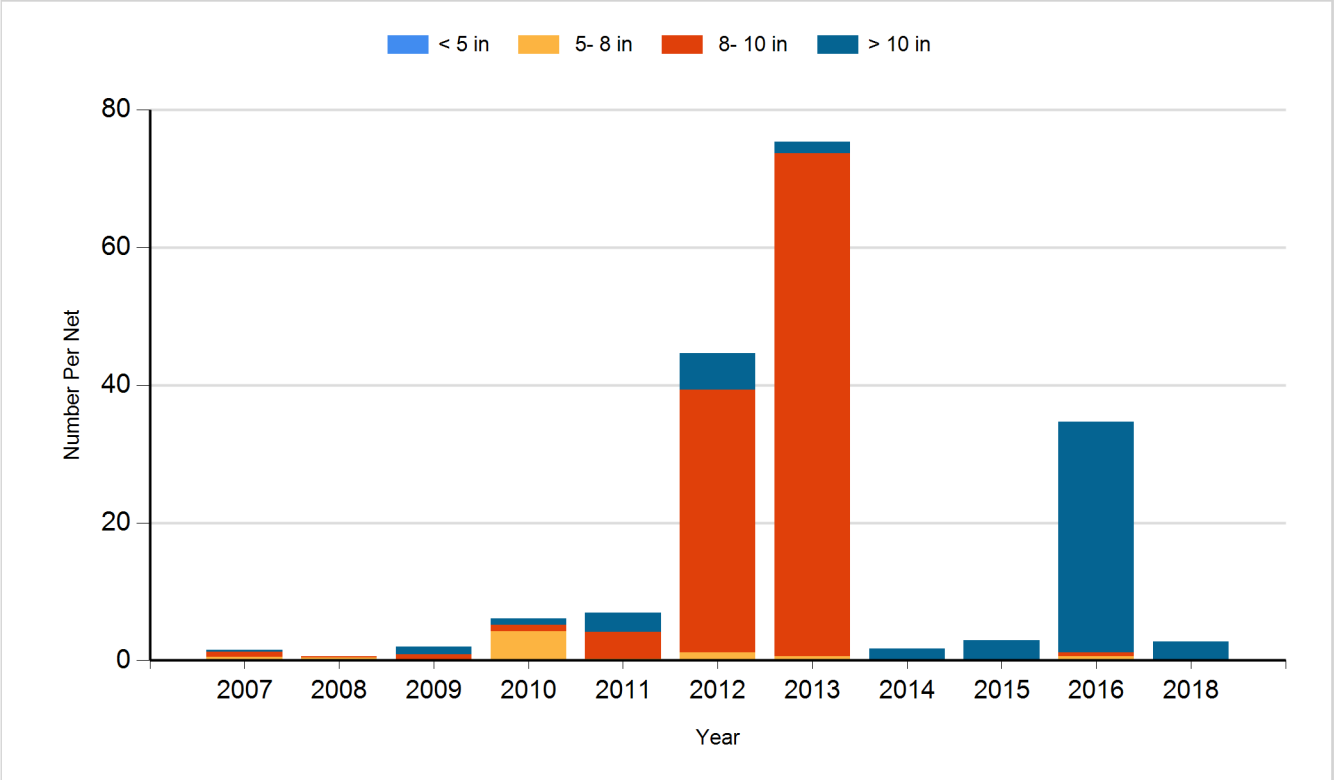
Historic Fish Sizes and Relative Abundance

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

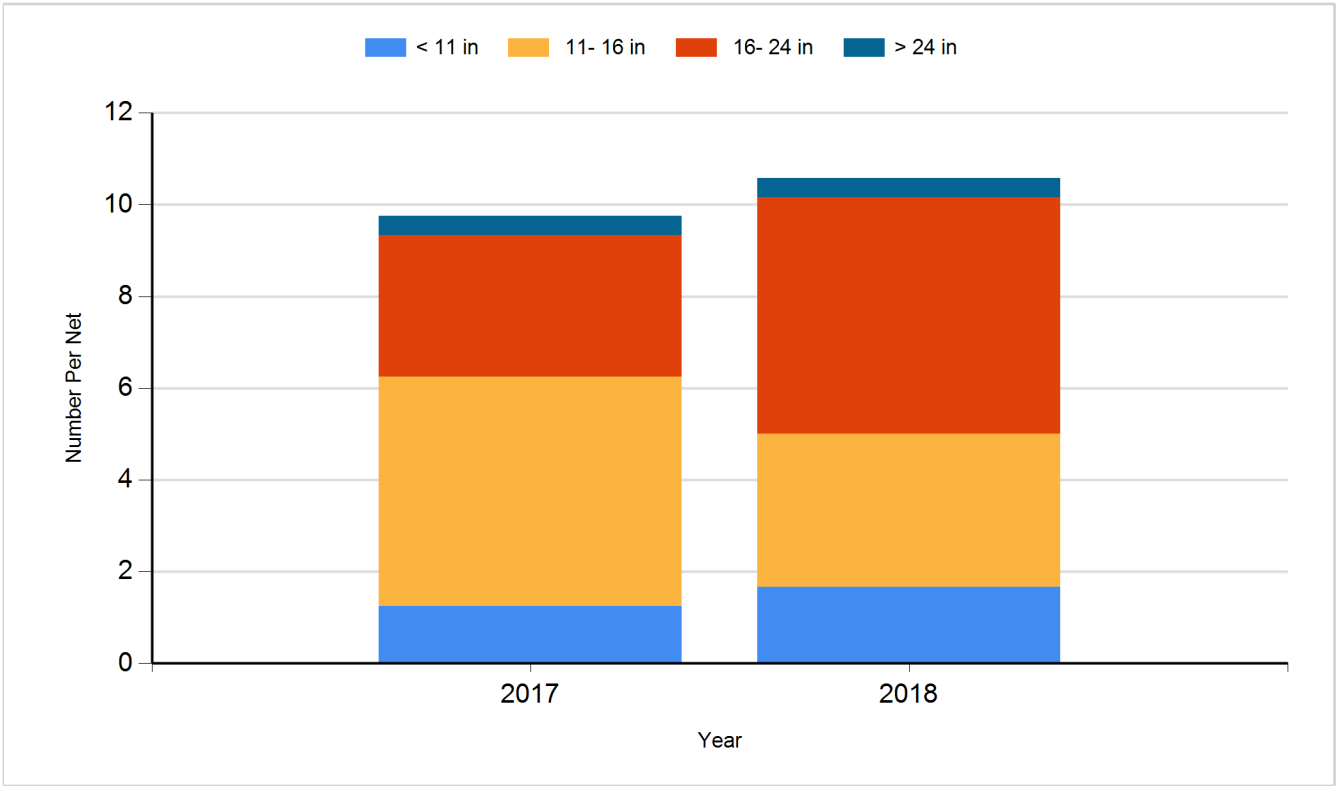
Species: Black Crappie
Gear: AFS std frame net



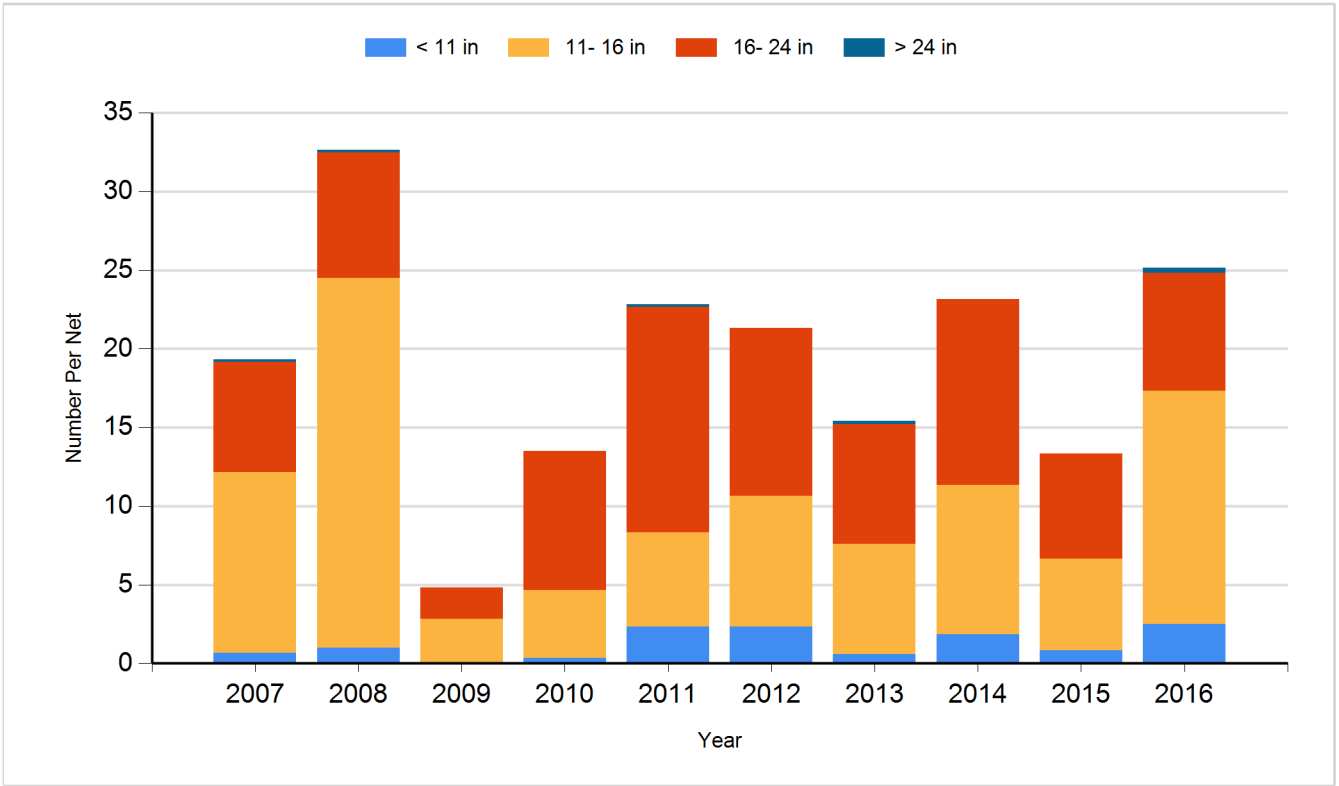
Species: Black Crappie
Gear: frame net (std 3/4 in)



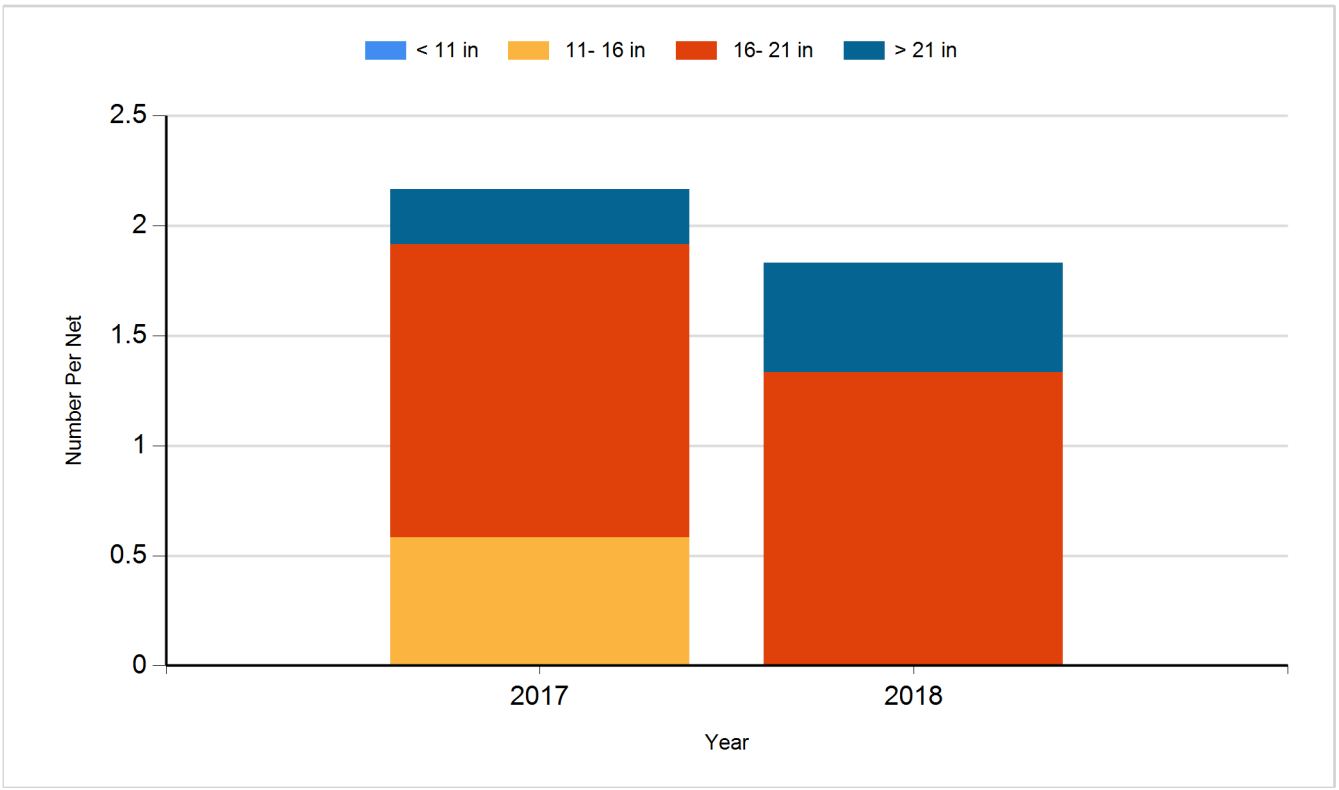
Species: Channel Catfish
Gear: AFS std gill net



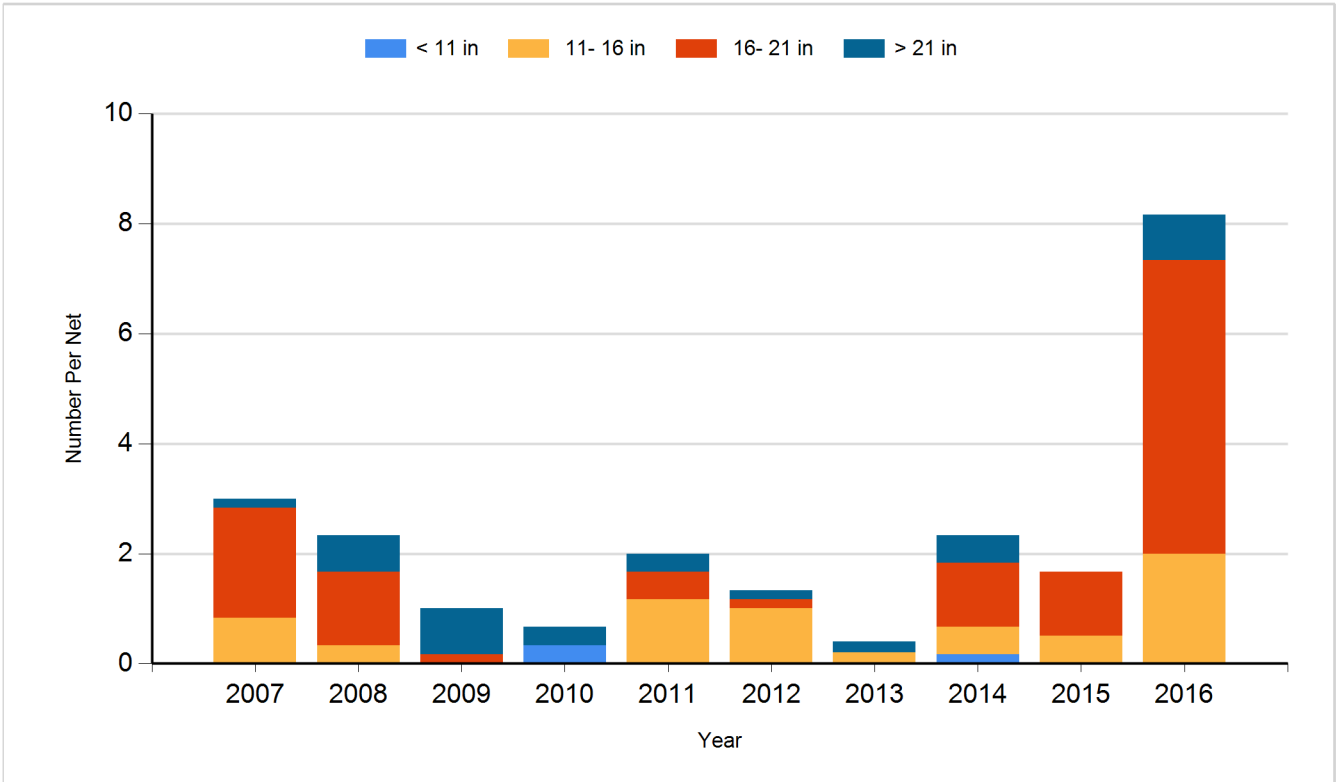
Species: Channel Catfish
Gear: std exp gill net



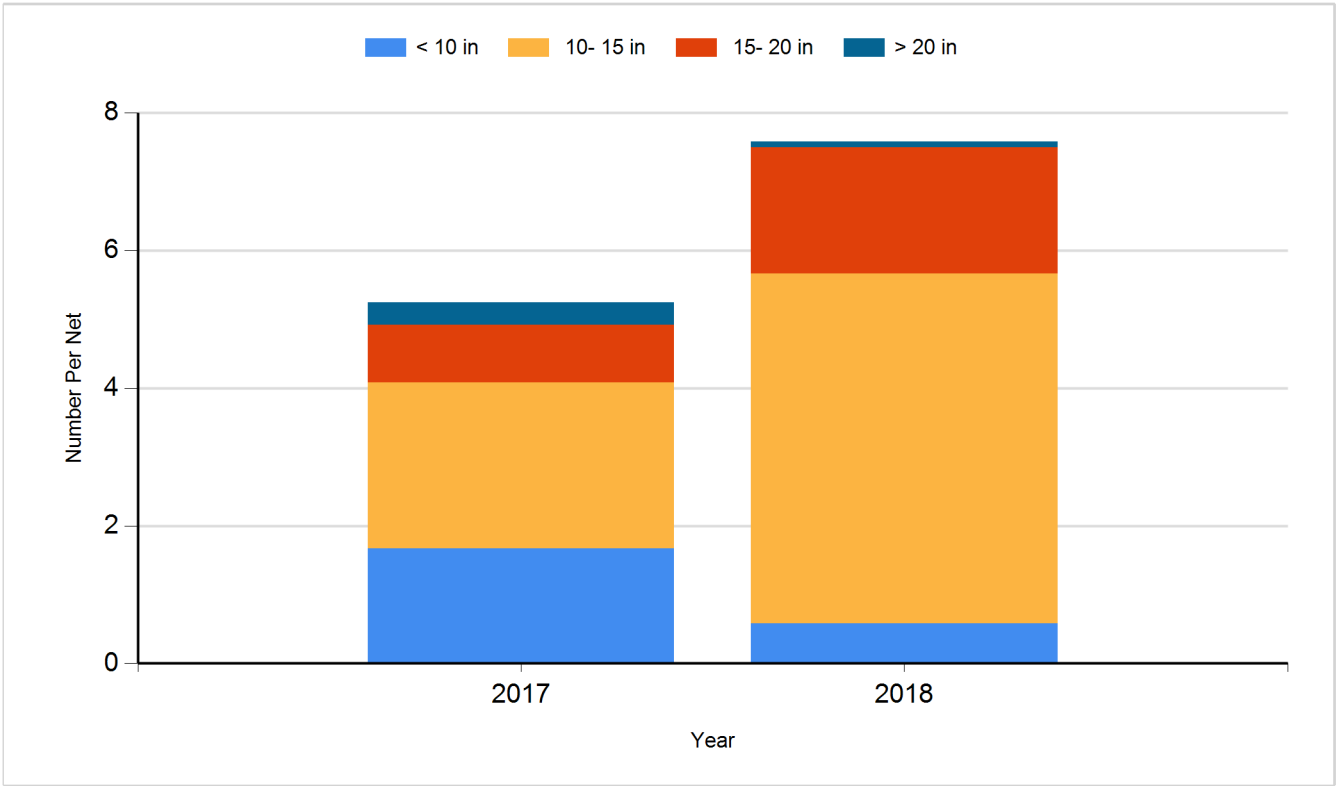
Species: Common Carp
Gear: AFS std gill net



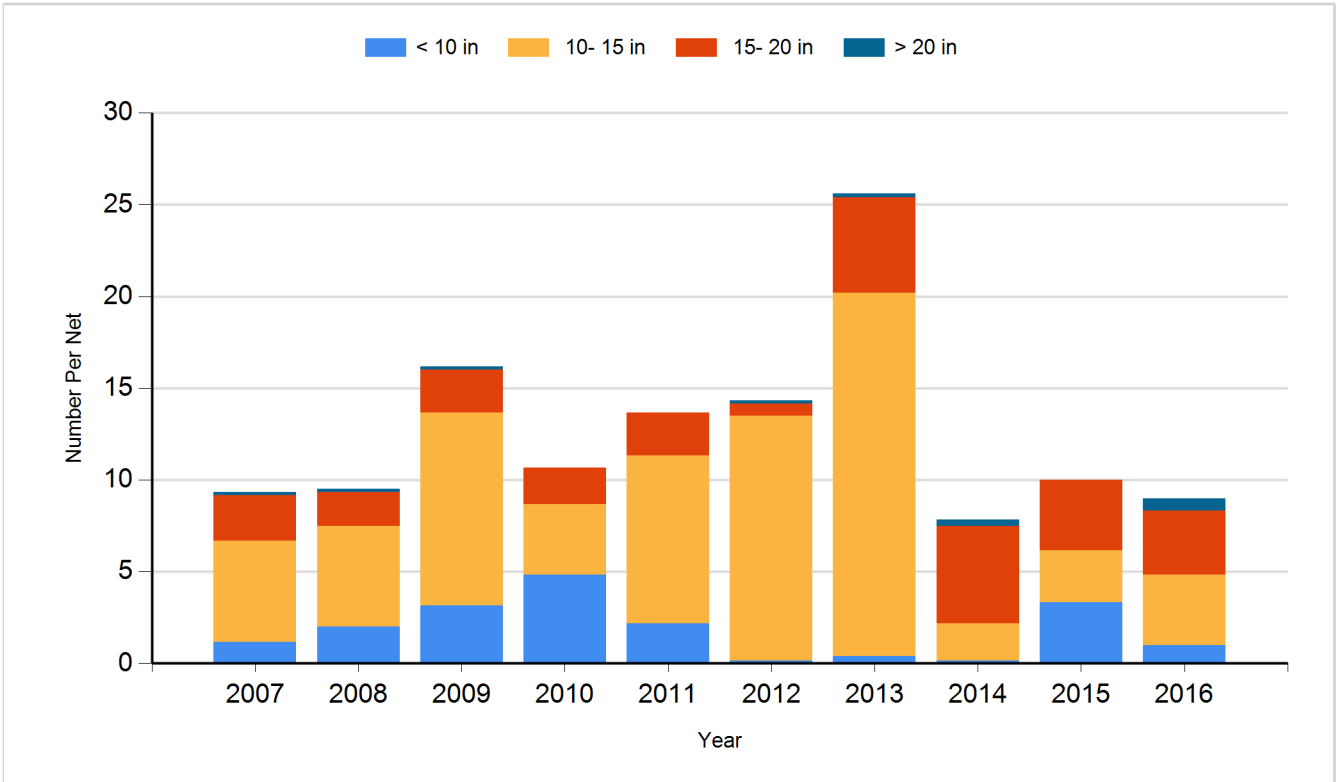
Species: Common Carp
Gear: std exp gill net



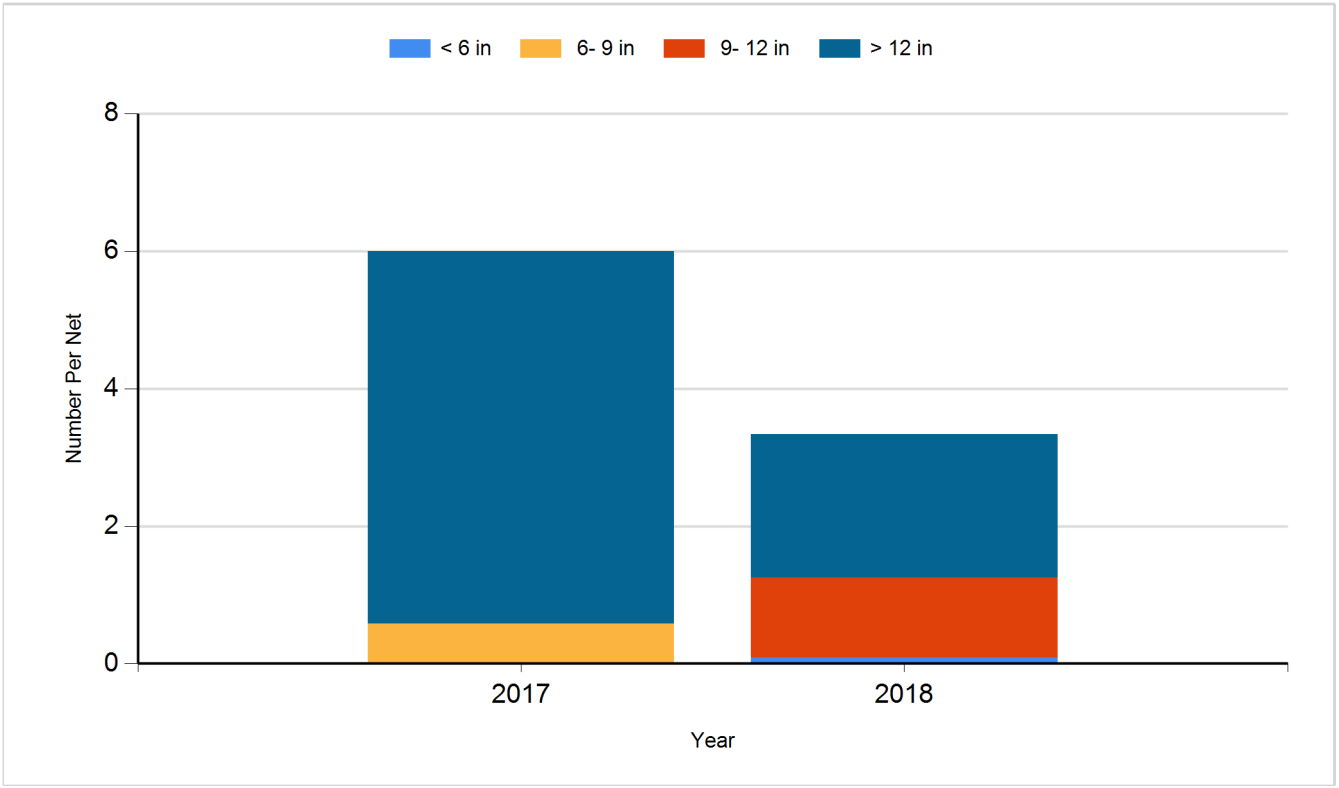
Species: Walleye
Gear: AFS std gill net



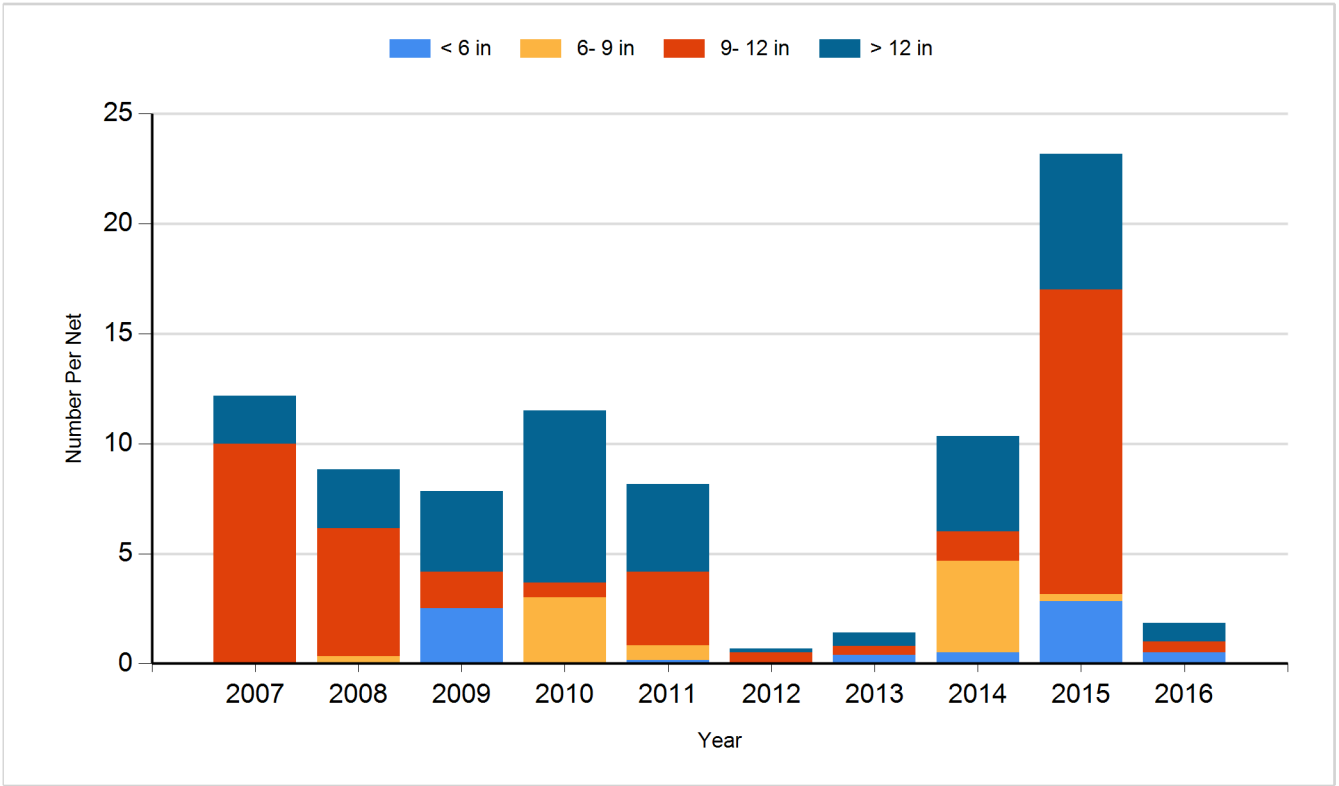
Species: Walleye
Gear: std exp gill net



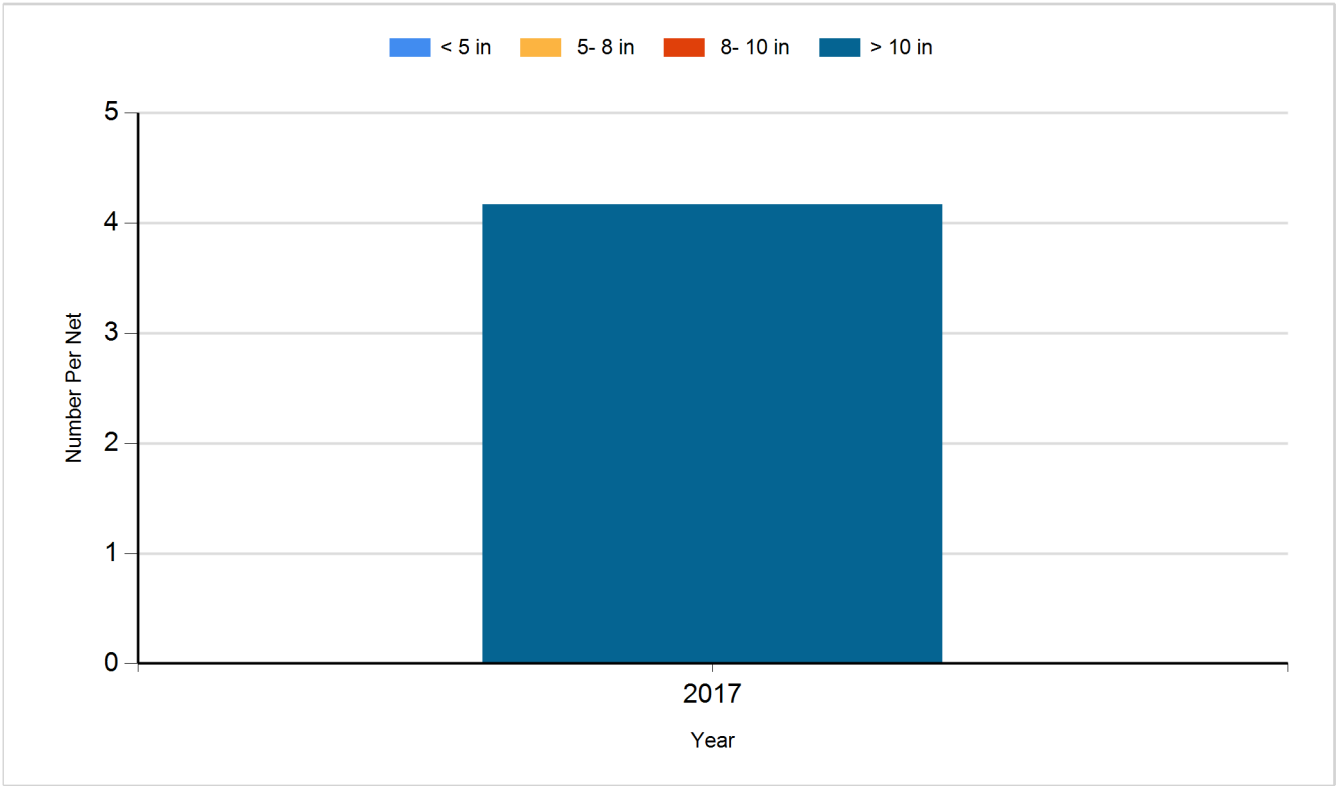
Species: White Bass
Gear: AFS std gill net



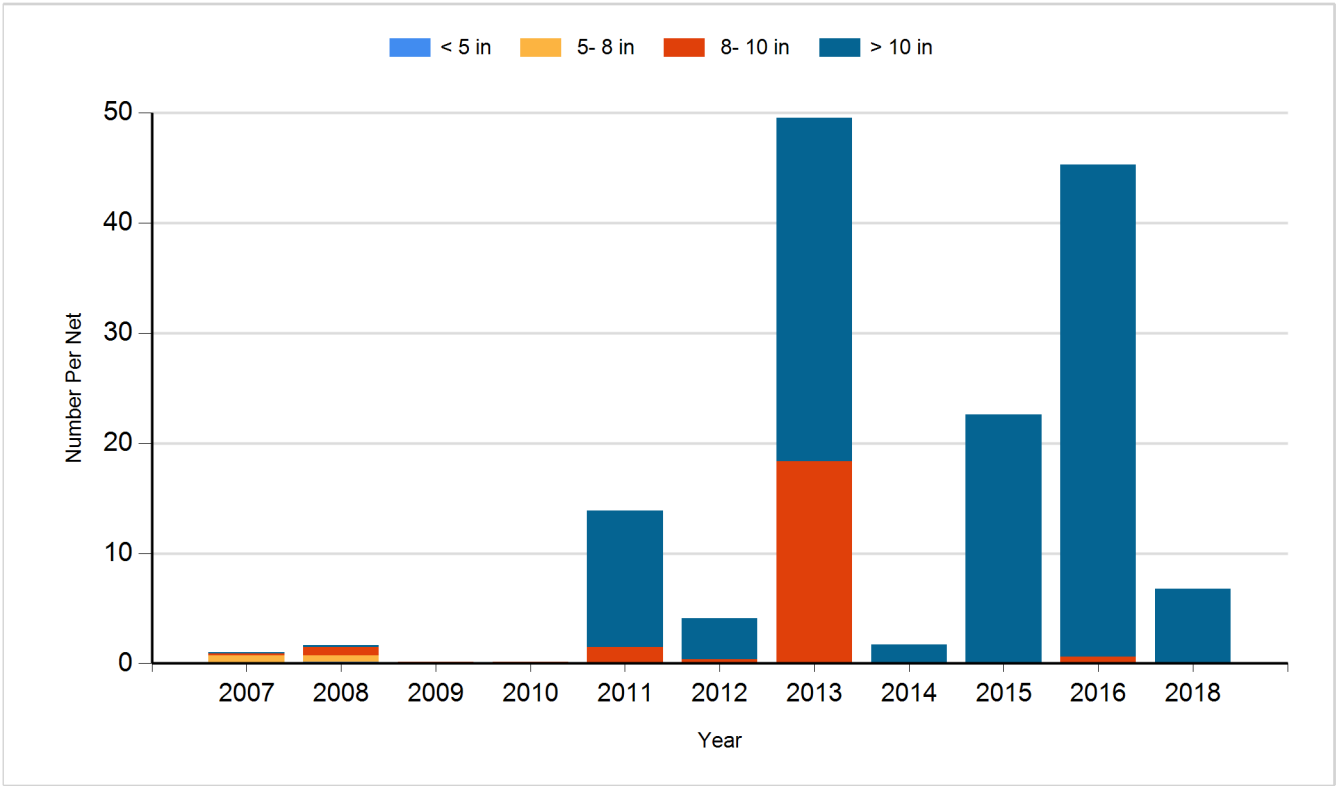
Species: White Bass
Gear: std exp gill net



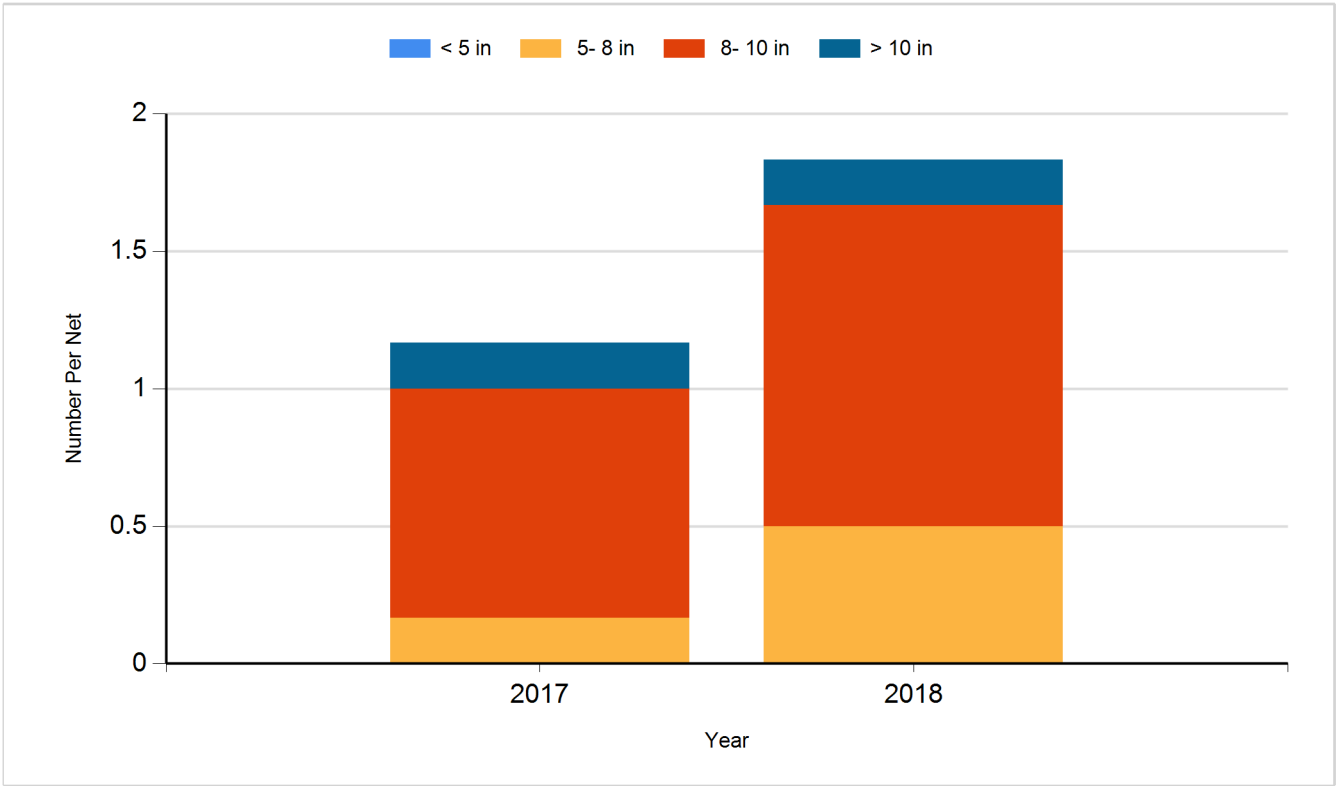
Species: White Crappie
Gear: AFS std frame net



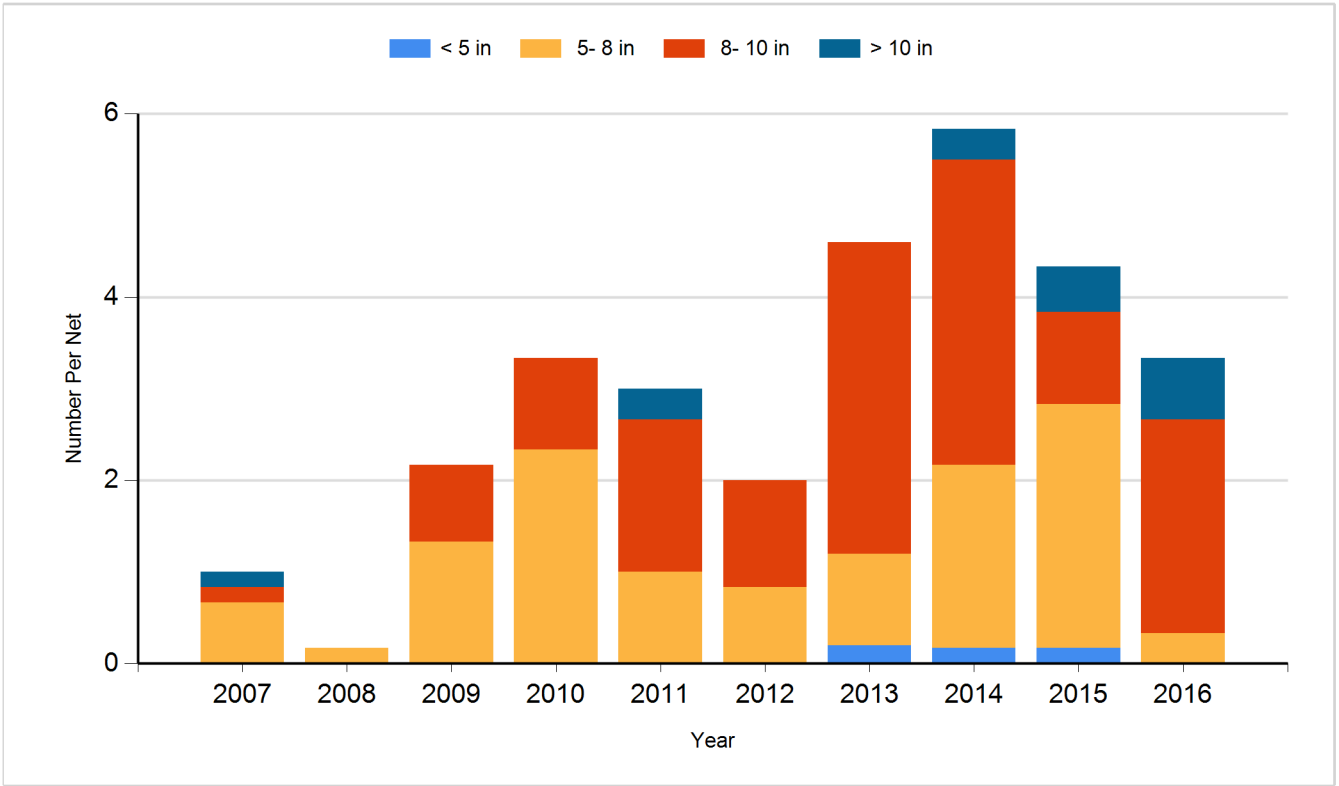
Species: White Crappie
Gear: frame net (std 3/4 in)



Species: Yellow Perch
Gear: AFS std 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
2007	Walleye	Fingerling	192,953
2008	Walleye	Fingerling	409,235
2009	Gizzard Shad	Adult	85
2009	Walleye	Fingerling	420,652
2009	Walleye	Fry	420,652
2010	Gizzard Shad	Adult	90
2010	Walleye	Fingerling	385,829
2011	Gizzard Shad	Adult	225
2011	Walleye	Fingerling	278,922
2012	Rainbow Trout (Shasta)	Fingerling	28,832
2012	Smallmouth Bass	Fingerling	30,173
2012	Walleye	Fry	6,000,000
2013	Gizzard Shad	Adult	100
2013	Walleye	Fingerling	112,275
2014	Gizzard Shad	Adult	373
2014	Walleye	Fry	5,000,000
2015	Walleye	Fry	4,700,000
2016	Walleye	Fry	5,000,000
2017	Walleye	Fry	5,000,000
2018	Gizzard Shad	Adult	113
2018	Walleye	Fry	6,900,000