Redfield Dam Survey Summary

A sizeable portion of the shoreline at Redfield Dam, located on the southwest edge of Redfield, borders the Redfield City Park, which offers campground amenities and good public access to the lake including boat launch facilities and a fishing pier. Because the lake is shallow, fisheries management options are limited and less desirable fish species such as black bullheads and common carp tend to be the most abundant. However, species such as black crappie, channel catfish, and northern pike are commonly sampled and may provide angling opportunities beyond those for black bullhead.

- **Black crappie**. Black crappie numbers were considerably lower in 2023 than in 2019. In 2023, frame nets caught 26 individuals from 3.5 to 8.3 inches; only 4 of the 26 were ≥5.0 inches resulting in a mean frame net CPUE of 0.3.

- **Channel catfish**. Although not abundant, opportunities exist for anglers to catch channel catfish at Redfield Dam. In 2023, 28 individuals ranging in length from 7.1 to 21.7 inches were sampled.

- **Northern pike**. More northern pike were sampled in 2023 than in 2019. At 2.0/gill net, relative abundance was considered moderate to high for Redfield Dam. Twelve northern pike that ranged in length from 21.7 to 29.5 inches were netted.

- **Walleye.** Walleye (includes saugeye) fry or small fingerlings have been stocked on six occasions since 2014. Unfortunately, few have been sampled in surveys conducted from 2014 – 2023. In 2023, gill nets captured four individuals that ranged in length from 17.7 to 19.7 inches.

For more detailed results see the computer generated South Dakota Statewide Fisheries Survey for the Redfield (Spink; below).

SOUTH DAKOTA STATEWIDE FISHERIES SURVEY
Redfield, Spink County
TUR-Lake-1-000
2023

Lake Information

Name: Redfield

County: Spink

Surface Area: 242 Acres

Maximum Depth: 12 Feet

Surveys and Investigations

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

Gear	Date	Effort
AFS std gill net	Jun 06, 2023	3 net-nights
AFS std gill net	Jun 07, 2023	3 net-nights
frame net (std 3/4 in)	Jun 06, 2023	6 net-nights
frame net (std 3/4 in)	Jun 07, 2023	6 net-nights

Common Fish Species Present

Walleye

Northern Pike

Channel Catfish

Black Crappie

Black Bullhead

Common Carp

Yellow Bullhead

Bigmouth Buffalo

White Sucker

Freshwater Drum

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	33	1.2	0.6	57		0		89	4
	Black Bullhead	118	16.0	5.3	0		0		94	2
	Black Crappie	1	0.0	0.0	0		0			
	Channel Catfish	4	0.7	0.6	50		0		91	7
	Common Carp	23	3.7	2.3	100		64	16	87	3
	Freshwater Drum	3	0.5	0.5	100		67		99	4
	Northern Pike	12	2.0	0.9	100		25		101	3
	Walleye	4	0.7	0.5	100		0		93	3
	White Sucker	3	0.5	0.3	100		100		109	3
frame net (std 3/4 in)	Bigmouth Buffalo	11	0.4	0.4	100		0		79	4
	Black Bullhead	386	29.9	11.8	4	2	0		85	1
	Black Crappie	26	0.3	0.3	100		0		97	7
	Bluegill	5	0.4	0.3	40		0		107	5
	Channel Catfish	24	1.5	1.2	39	19	0		96	3
	Common Carp	5	0.3	0.2	75		25		83	6
	Northern Pike	3	0.3	0.3	100		33		86	8
	Orangespotted Sunfish*	30	2.5	1.6						
	White Sucker	1	0.1	0.1	100		100		102	
	Yellow Bullhead	16	1.3	0.9	94		13		83	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**

		CPUE										
Gear	Species	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Avg
AFS std gill net	Bigmouth Buffalo						0.0				1.2	0.60
	Black Bullhead						9.5				16.0	12.75
	Black Crappie						0.0				0.0	0.00
	Channel Catfish						1.2				0.7	0.95
	Common Carp						5.7				3.7	4.70
	Freshwater Drum						0.0				0.5	0.25
	Northern Pike						0.5				2.0	1.25
	Walleye						0.0				0.7	0.35
	White Sucker						0.0				0.5	0.25
	Yellow Bullhead						0.3				0.0	0.15
frame net (std 3/4 in)	Bigmouth Buffalo		0.0				0.0				0.4	0.13
	Black Bullhead		378.8				62.9				29.9	157.20
	Black Crappie		17.1				28.2				0.3	15.20
	Bluegill		0.1				0.6				0.4	0.37
	Channel Catfish		0.3				0.7				1.5	0.83
	Common Carp		0.3				1.4				0.3	0.67
	Northern Pike		1.3				0.0				0.3	0.53
	Orangespotted Sunfish*		0.5				0.0				2.5	1.00
	Pumpkinseed		0.0				3.0				0.0	1.00
	Walleye		0.1				0.0				0.0	0.03
	White Sucker		0.0				0.0				0.1	0.03
	Yellow Bullhead		4.0				2.3				1.3	2.53
std exp gill net	Black Bullhead		84.7									84.70
	Black Crappie		0.3									0.30
	Channel Catfish		0.0									0.00
	Common Carp		13.0									13.00
	Northern Pike		3.0									3.00
	Walleye		1.3									1.30
	Yellow Bullhead		0.3									0.30
	Yellow Perch		0.3									0.30

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	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
AFS std gill net	Channel Catfish	PSD						71				50
		PSD-P						0				0
		Wr						115				91
	Northern Pike	PSD						33				100
		PSD-P						0				25
		Wr						94				101
frame net (std 3/4 in)	Black Crappie	PSD		83				34				100
		PSD-P		1				0				0
		Wr		99				112				97
	Channel Catfish	PSD		100				38				39
		PSD-P		0				0				0
		Wr		87								96
std exp gill net	Channel Catfish	PSD		0								
		PSD-P		0								
		Wr										
	Northern Pike	PSD		100								
		PSD-P		11								
		Wr		89								

Fish Condition

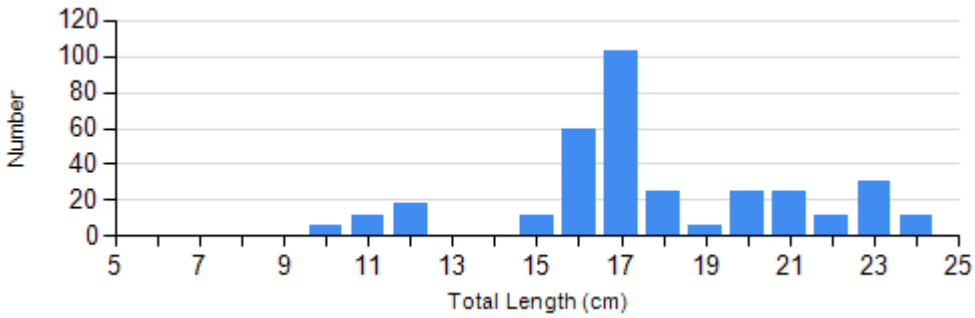
Mean relative weight (Wr) by sample size (N), length category stock to quality (S-Q), quality to preferred (Q-P), preferred to memorable (P-M), and memorable (M) for species collected across survey years with standard error (SE).

		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	2019	206	118 (1.6)	104	101 (1.4)	0		0	
	2023	0		4	97 (5.5)	0		0	
Channel Catfish Gill Net	2019	2	132 (4.5)	5	109 (1.8)	0		0	
	2023	2	81 (3.7)	2	100 (1.4)	0		0	
Northern Pike Gill Net	2019	2	90 (2.5)	1	100	0		0	
	2023	0		9	101 (2.6)	3	101 (5.9)	0	

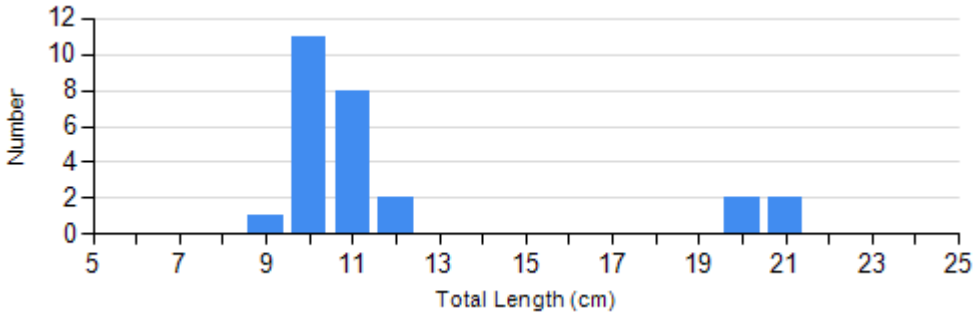
Length Frequency Distribution

Length frequency histogram of species sampled by year.

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

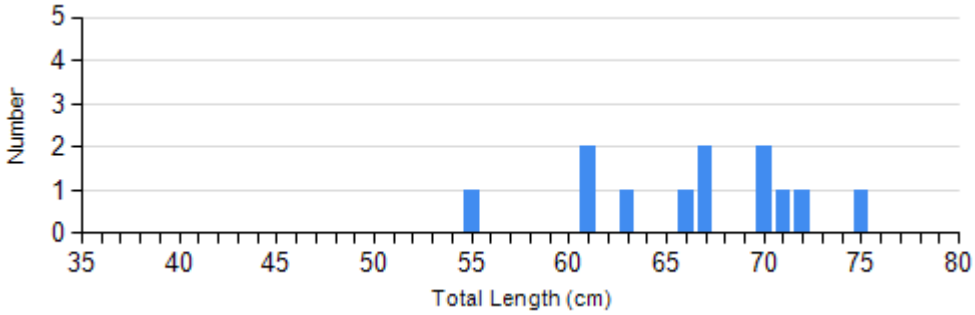


2019



2023

Species: Northern Pike
Gear: AFS std gill net

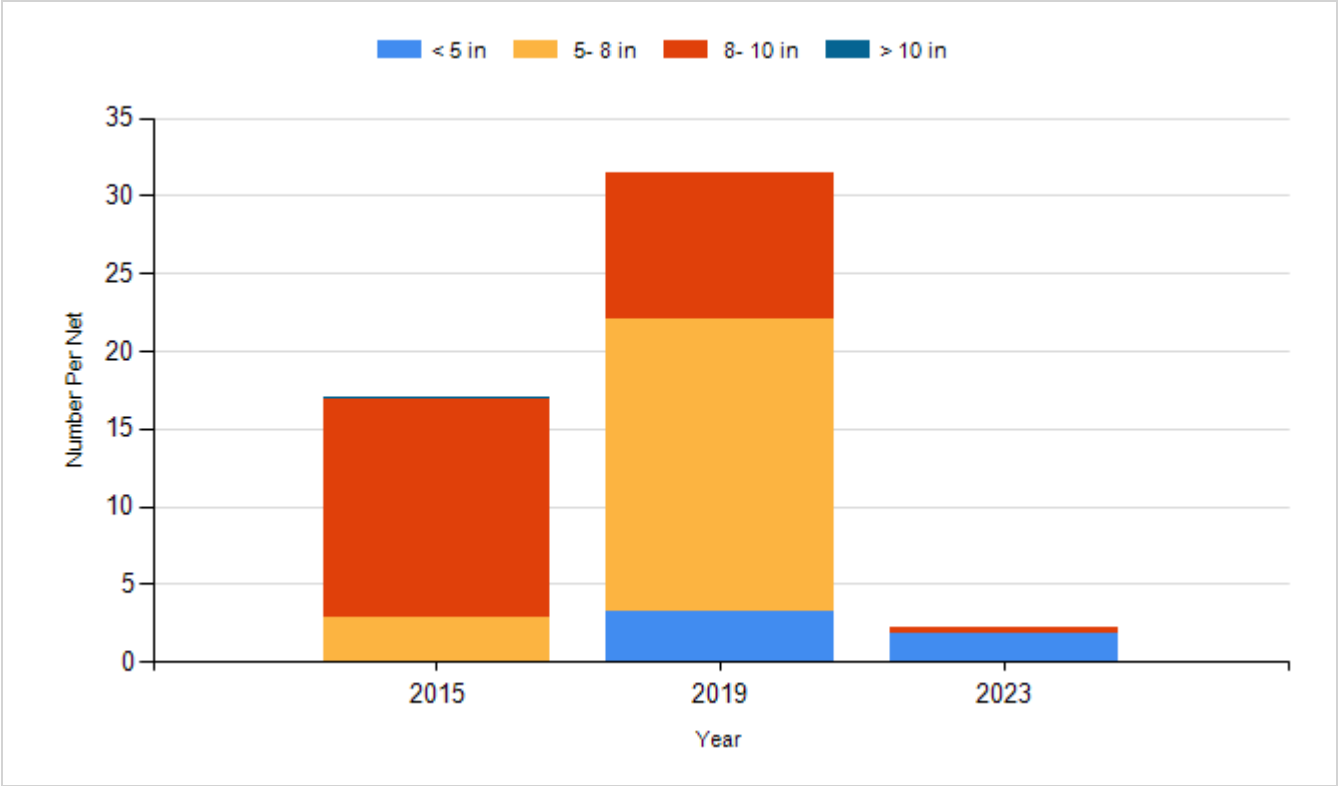


2023

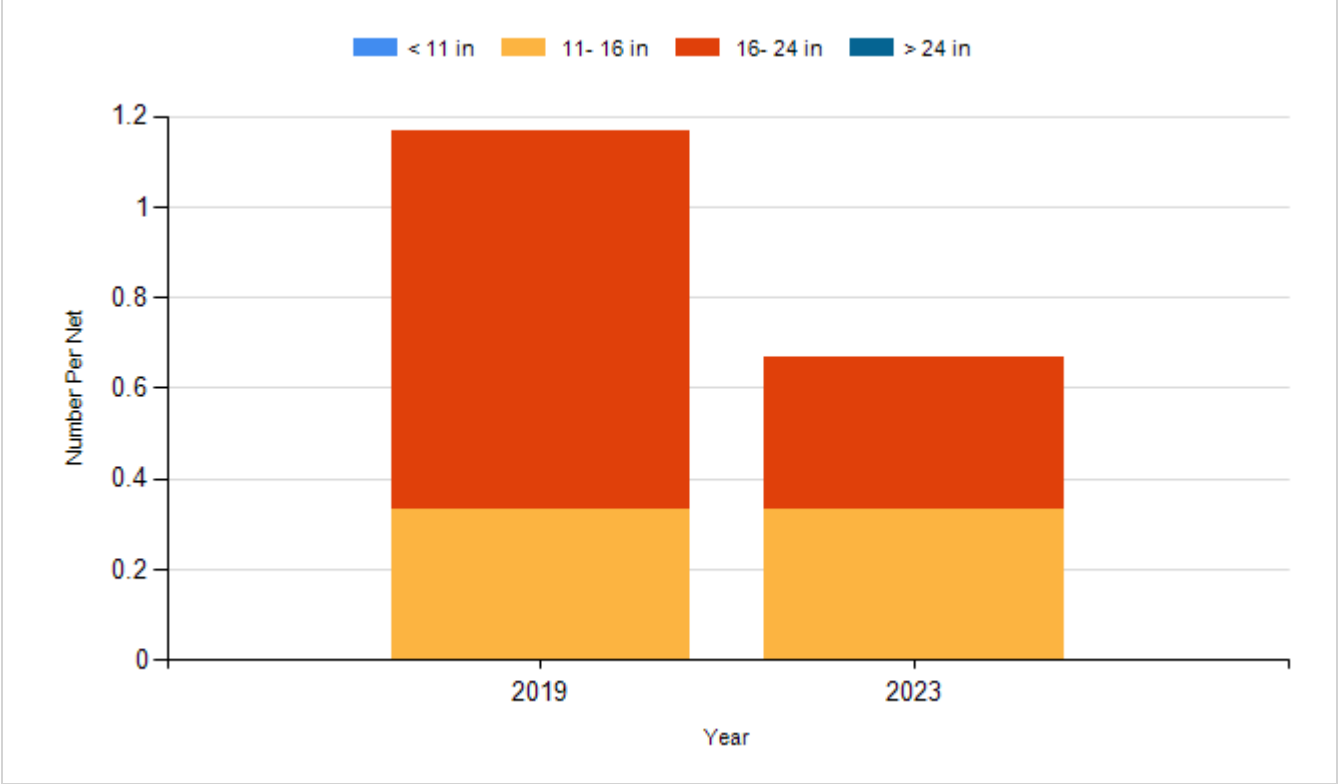
Historic Fish Sizes and Relative Abundance

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

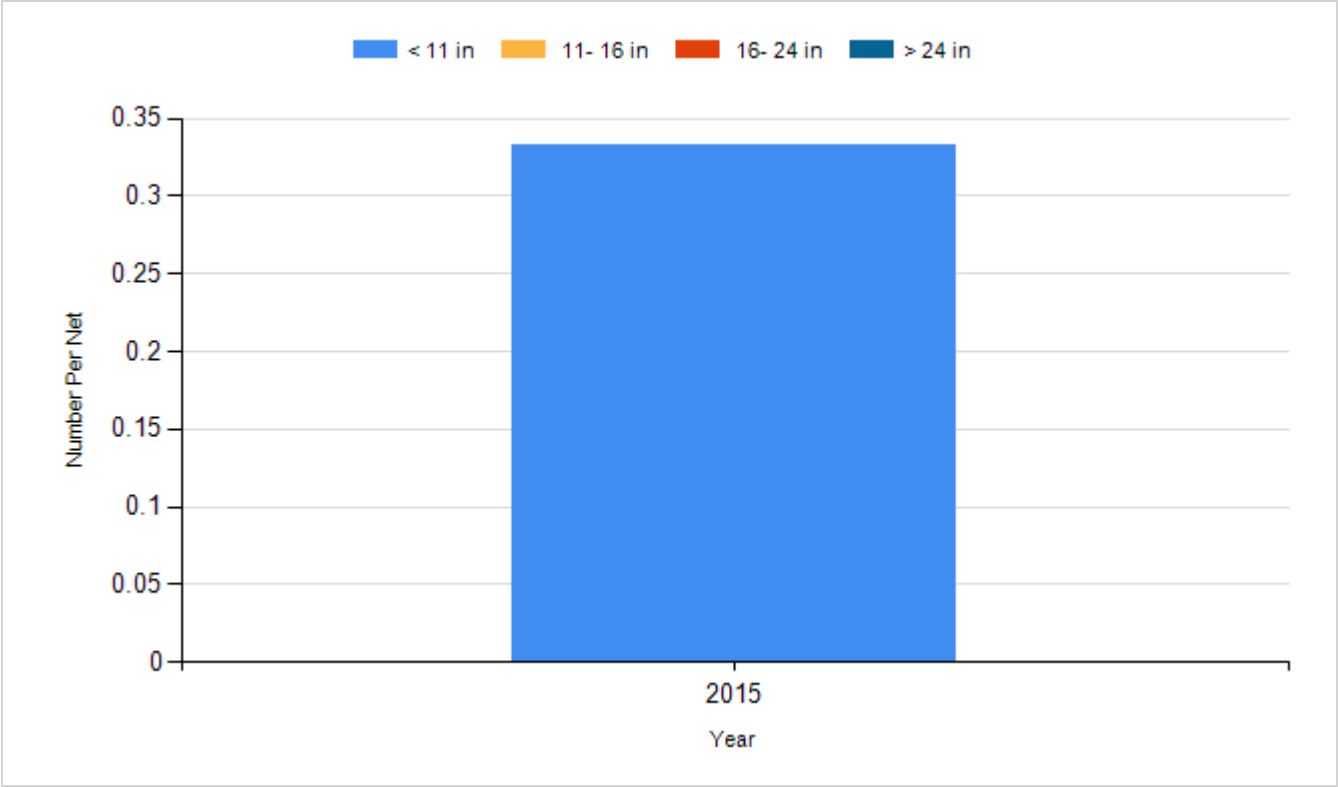
Species: Black Crappie
Gear: frame net (std 3/4 in)



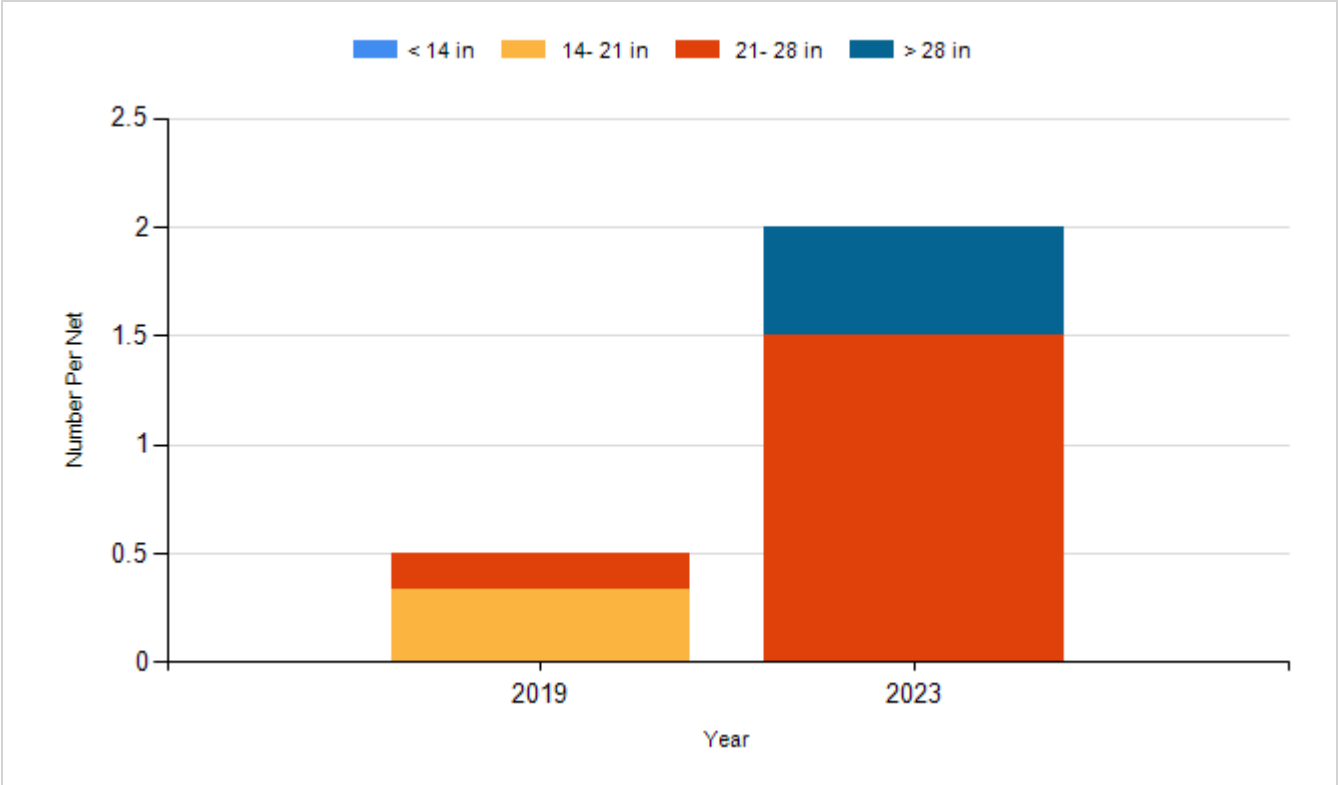
Species: Channel Catfish
Gear: AFS std gill net



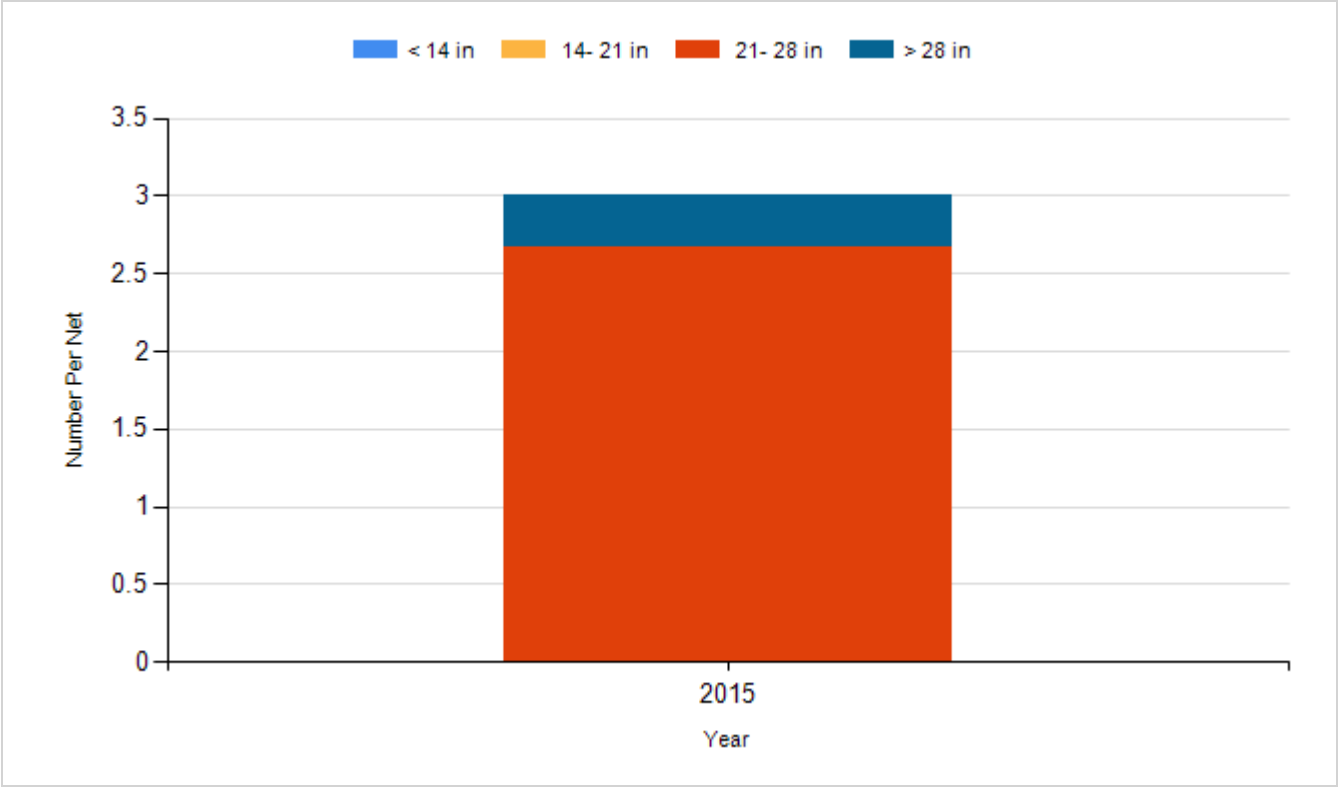
Species: Channel Catfish
Gear: std exp gill net



Species: Northern Pike
Gear: AFS std gill net



Species: Northern Pike
Gear: std exp gill net



Fish Stocking

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

Year	Species	Size	Number
2014	Walleye	Fry	100,000
2016	Yellow Perch	Juvenile	4,800
2017	Walleye	Fry	100,000
2021	Walleye	Fry	100,000
2022	Saugeye	Fry	100,000
2022	Saugeye	Juvenile	18,000
2023	Saugeye	Fry	100,000

SOUTH DAKOTA STATEWIDE FISHERIES SURVEY
Redfield, Spink County
TUR-Lake-1-000
2023

Lake Information

Name: Redfield

County: Spink

Surface Area: 242 Acres

Maximum Depth: 12 Feet

Surveys and Investigations

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

Gear	Date	Effort
AFS std gill net	Jun 06, 2023	3 net-nights
AFS std gill net	Jun 07, 2023	3 net-nights
frame net (std 3/4 in)	Jun 06, 2023	6 net-nights
frame net (std 3/4 in)	Jun 07, 2023	6 net-nights

Common Fish Species Present

Walleye

Northern Pike

Channel Catfish

Black Crappie

Black Bullhead

Common Carp

Yellow Bullhead

Bigmouth Buffalo

White Sucker

Freshwater Drum

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	33	1.2	0.6	57		0		89	4
	Black Bullhead	118	16.0	5.3	0		0		94	2
	Black Crappie	1	0.0	0.0	0		0			
	Channel Catfish	4	0.7	0.6	50		0		91	7
	Common Carp	23	3.7	2.3	100		64	16	87	3
	Freshwater Drum	3	0.5	0.5	100		67		99	4
	Northern Pike	12	2.0	0.9	100		25		101	3
	Walleye	4	0.7	0.5	100		0		93	3
	White Sucker	3	0.5	0.3	100		100		109	3
frame net (std 3/4 in)	Bigmouth Buffalo	11	0.4	0.4	100		0		79	4
	Black Bullhead	386	29.9	11.8	4	2	0		85	1
	Black Crappie	26	0.3	0.3	100		0		97	7
	Bluegill	5	0.4	0.3	40		0		107	5
	Channel Catfish	24	1.5	1.2	39	19	0		96	3
	Common Carp	5	0.3	0.2	75		25		83	6
	Northern Pike	3	0.3	0.3	100		33		86	8
	Orangespotted Sunfish	30	0.0	0.0						
	White Sucker	1	0.1	0.1	100		100		102	
	Yellow Bullhead	16	1.3	0.9	94		13		83	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**

		CPUE										
Gear	Species	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Avg
AFS std gill net	Bigmouth Buffalo						0.0				1.2	0.60
	Black Bullhead						9.5				16.0	12.75
	Black Crappie						0.0				0.0	0.00
	Channel Catfish						1.2				0.7	0.95
	Common Carp						5.7				3.7	4.70
	Freshwater Drum						0.0				0.5	0.25
	Northern Pike						0.5				2.0	1.25
	Sunfish Hybrid						0.2				0.0	0.10
	Walleye						0.0				0.7	0.35
	White Sucker						0.0				0.5	0.25
	Yellow Bullhead						0.3				0.0	0.15
frame net (std 3/4 in)	Bigmouth Buffalo		0.0				0.0				0.4	0.13
	Black Bullhead		378.8				62.9				29.9	157.20
	Black Crappie		17.1				28.2				0.3	15.20
	Bluegill		0.1				0.6				0.4	0.37
	Channel Catfish		0.3				0.7				1.5	0.83
	Common Carp		0.3				1.4				0.3	0.67
	Northern Pike		1.3				0.0				0.3	0.53
	Orangespotted Sunfish		0.0				0.0				0.0	0.00
	Pumpkinseed		0.0				3.0				0.0	1.00
	Walleye		0.1				0.0				0.0	0.03
	Western Painted Turtle		0.0				0.0				0.0	0.00
	White Sucker		0.0				0.0				0.1	0.03
	Yellow Bullhead		4.0				2.3				1.3	2.53
std exp gill net	Black Bullhead		84.7									84.70
	Black Crappie		0.3									0.30
	Channel Catfish		0.0									0.00
	Common Carp		13.0									13.00
	Northern Pike		3.0									3.00
	Walleye		1.3									1.30
	Yellow Bullhead		0.3									0.30
	Yellow Perch		0.3									0.30

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	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
AFS std gill net	Bigmouth Buffalo	PSD						0				57
		PSD-P						0				0
		Wr										89
	Black Bullhead	PSD						2				0
		PSD-P						0				0
		Wr						102				94
	Black Crappie	PSD										0
		PSD-P										0
	Channel Catfish	PSD						71				50
		PSD-P						0				0
		Wr						115				91
	Common Carp	PSD						85				100
		PSD-P						9				64
		Wr						92				87
	Northern Pike	PSD						33				100
		PSD-P						0				25
		Wr						94				101
	Walleye	PSD										100
		PSD-P										0
		Wr										93
	White Sucker	PSD										100
		PSD-P										100
		Wr										109
	Yellow Bullhead	PSD						100				
		PSD-P						50				
		Wr						105				
frame net (std 3/4 in)	Bigmouth Buffalo	PSD						0				100
		PSD-P						0				0
		Wr										79
	Black Bullhead	PSD		0				0				4
		PSD-P		0				0				0
		Wr		85				95				85
	Black Crappie	PSD		83				34				100

			Year									
Gear	Species	Index	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
frame net (std 3/4 in)	Black Crappie	PSD-P		1				0				0
		Wr		99				112				97
	Channel Catfish	PSD		100				38				39
		PSD-P		0				0				0
		Wr		87								96
	Common Carp	PSD		100				93				75
		PSD-P		25				7				25
		Wr		89				88				83
	Northern Pike	PSD		93								100
		PSD-P		40								33
		Wr		84								86
	Walleye	PSD		100								
		PSD-P		100								
		Wr		88								
	White Sucker	PSD										100
		PSD-P										100
		Wr										102
	Yellow Bullhead	PSD		54				84				94
		PSD-P		25				12				13
		Wr		89				175				83
std exp gill net	Black Bullhead	PSD		0								
		PSD-P		0								
		Wr		86								
	Black Crappie	PSD		0								
		PSD-P		0								
		Wr		115								
	Channel Catfish	PSD		0								
		PSD-P		0								
	Common Carp	PSD		38								
		PSD-P		10								
		Wr		95								
	Northern Pike	PSD		100								
		PSD-P		11								
		Wr		89								
	Walleye	PSD		75								
		PSD-P		50								
		Wr		92								

			Year									
Gear	Species	Index	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
std exp gill net	Yellow Bullhead	PSD		0								
		PSD-P		0								
		Wr		138								

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+
2015	205		169 (23)	216 (14)	217 (153)	254 (6)	224 (9)				

Species: Walleye

		Mean Length (expanded sample number) at capture by age									
Year	N	1	2	3	4	5	6	7	8	9	10+
2023	4				474 (4)						
2015	4		333 (1)		463 (2)	554 (1)					

Fish Condition

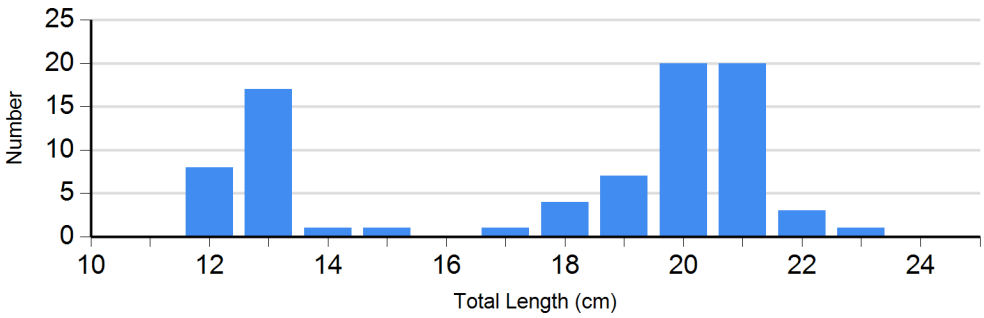
Mean relative weight (Wr) by sample size (N), length category stock to quality (S-Q), quality to preferred (Q-P), preferred to memorable (P-M), and memorable (M) for species collected across survey years with standard error (SE).

		Length Groups							
		S-Q		Q-P		P-M		M	
Species	Year	N	Wr (SE)	N	Wr (SE)	N	Wr (SE)	N	Wr (SE)
Black Bullhead Gill Net	2019	56	102 (1.6)	1	113	0		0	
	2023	96	94 (1.2)	0		0		0	
Black Crappie Frame Net	2019	206	118 (1.6)	104	101 (1.4)	0		0	
	2023	0		4	97 (5.5)	0		0	
Channel Catfish Gill Net	2019	2	132 (4.5)	5	109 (1.8)	0		0	
	2023	2	81 (3.7)	2	100 (1.4)	0		0	
Common Carp Gill Net	2019	5	100 (5.3)	26	91 (1.5)	3	80 (1.9)	0	
	2023	0		8	89 (3.0)	13	87 (2.8)	1	78
Northern Pike Gill Net	2019	2	90 (2.5)	1	100	0		0	
	2023	0		9	101 (2.6)	3	101 (5.9)	0	
Walleye Gill Net	2023	0		4	93 (1.9)	0		0	
White Sucker Gill Net	2023	0		0		1	107	2	111

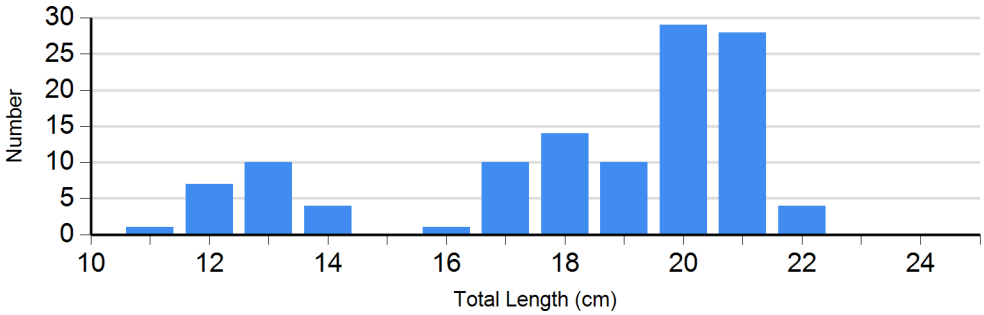
Length Frequency Distribution

Length frequency histogram of species sampled by year.

Species: Black Bullhead
Gear: AFS std gill net

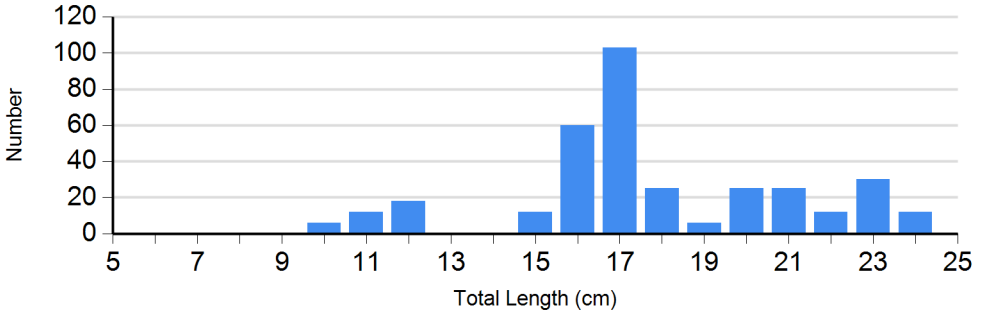


2019

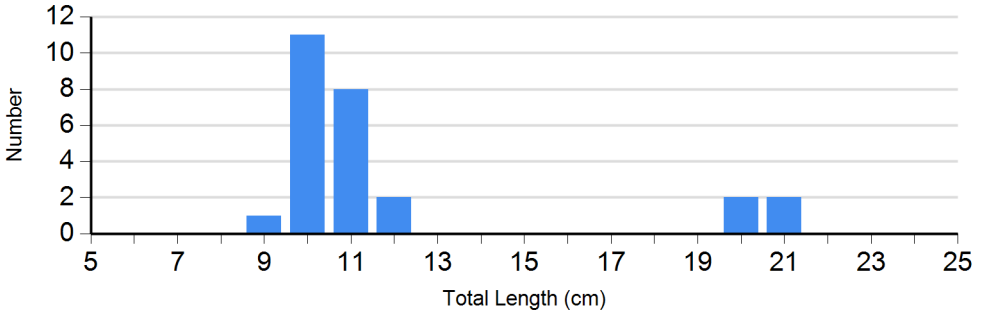


2023

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

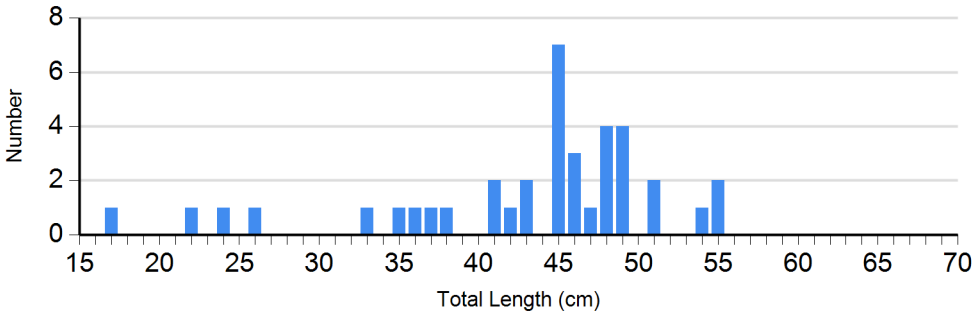


2019

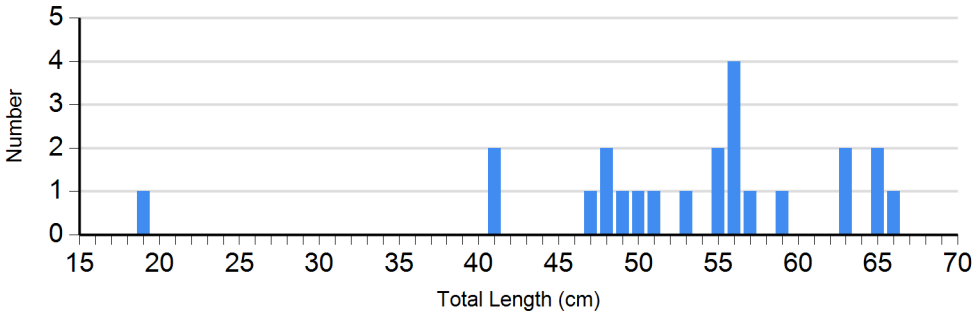


2023

Species: Common Carp
Gear: AFS std gill net

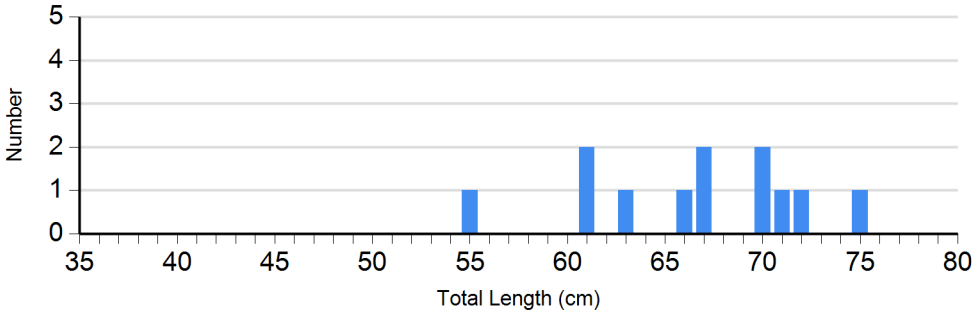


2019



2023

Species: Northern Pike
Gear: AFS std gill net

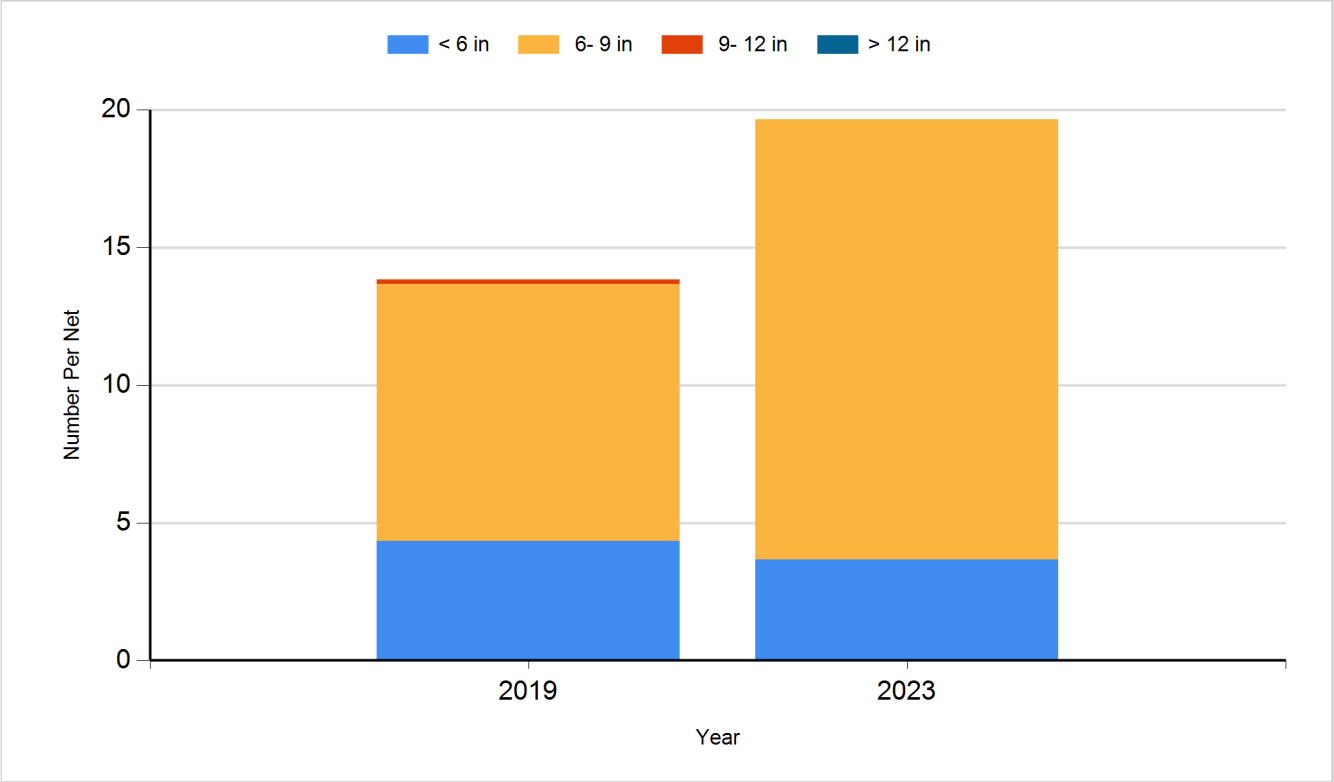


2023

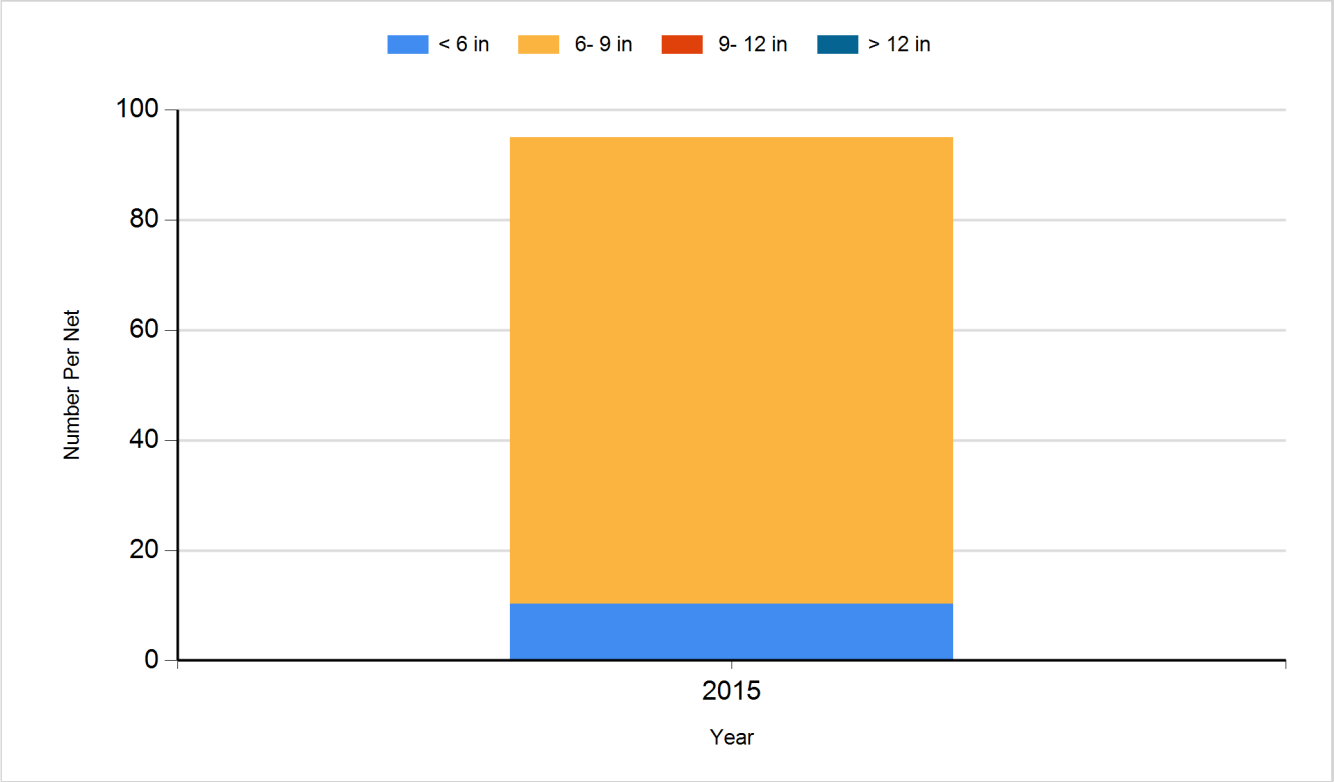
Historic Fish Sizes and Relative Abundance

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

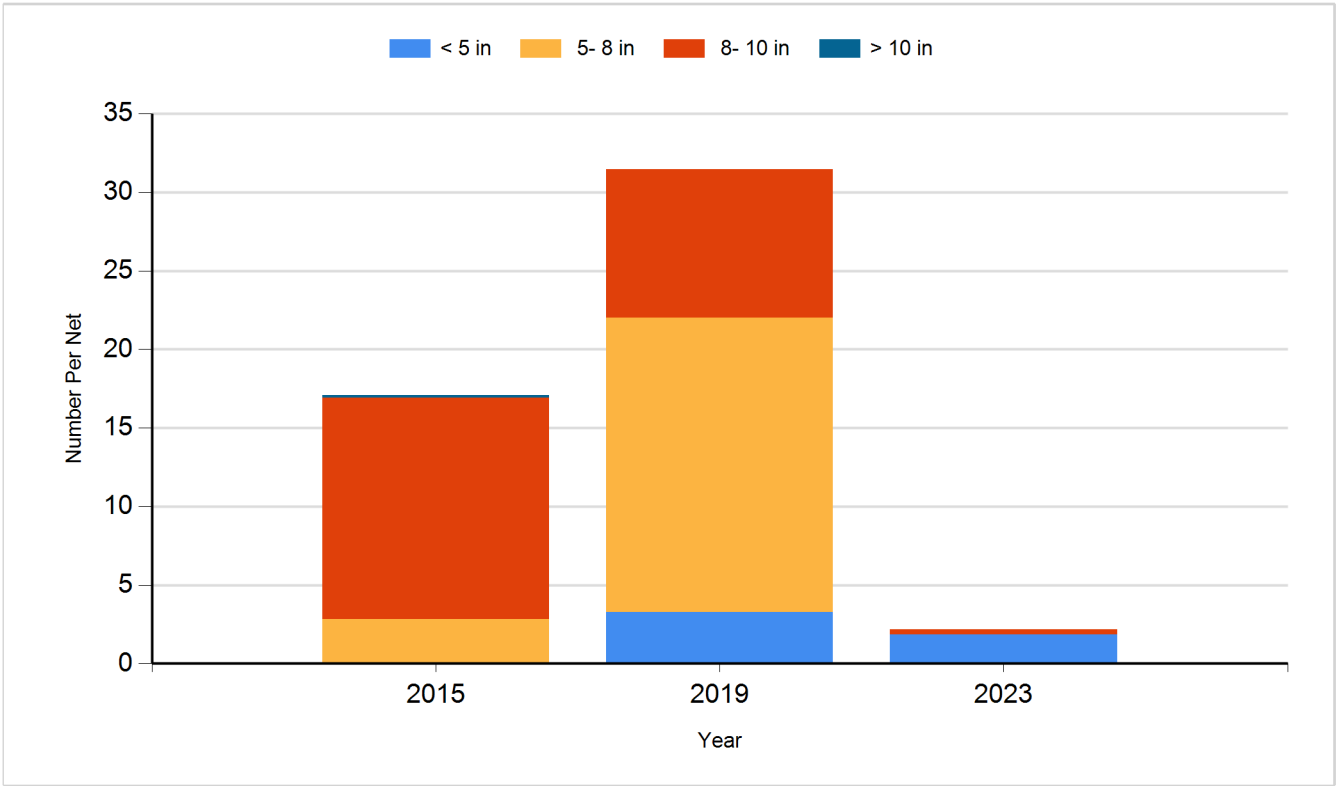
Species: Black Bullhead
Gear: AFS std gill net



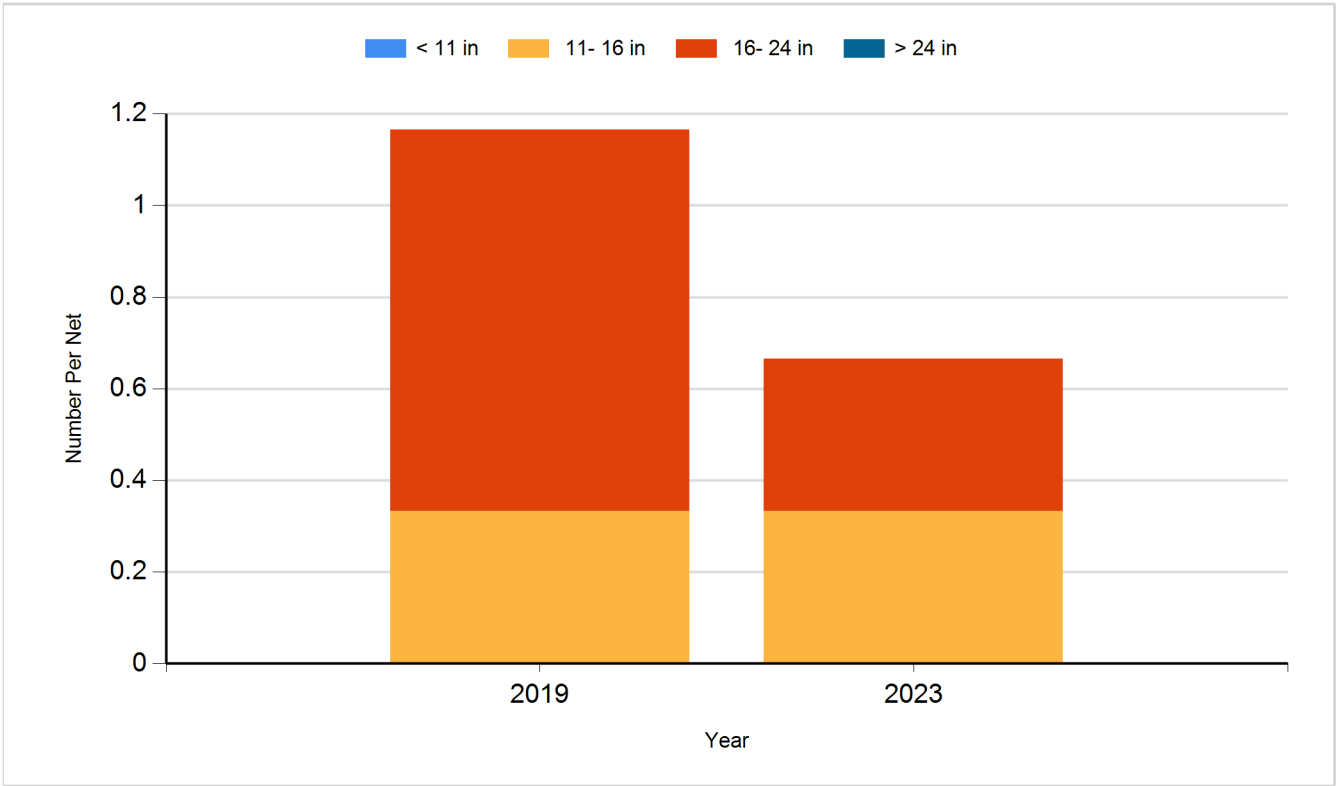
Species: Black Bullhead
Gear: std exp gill net



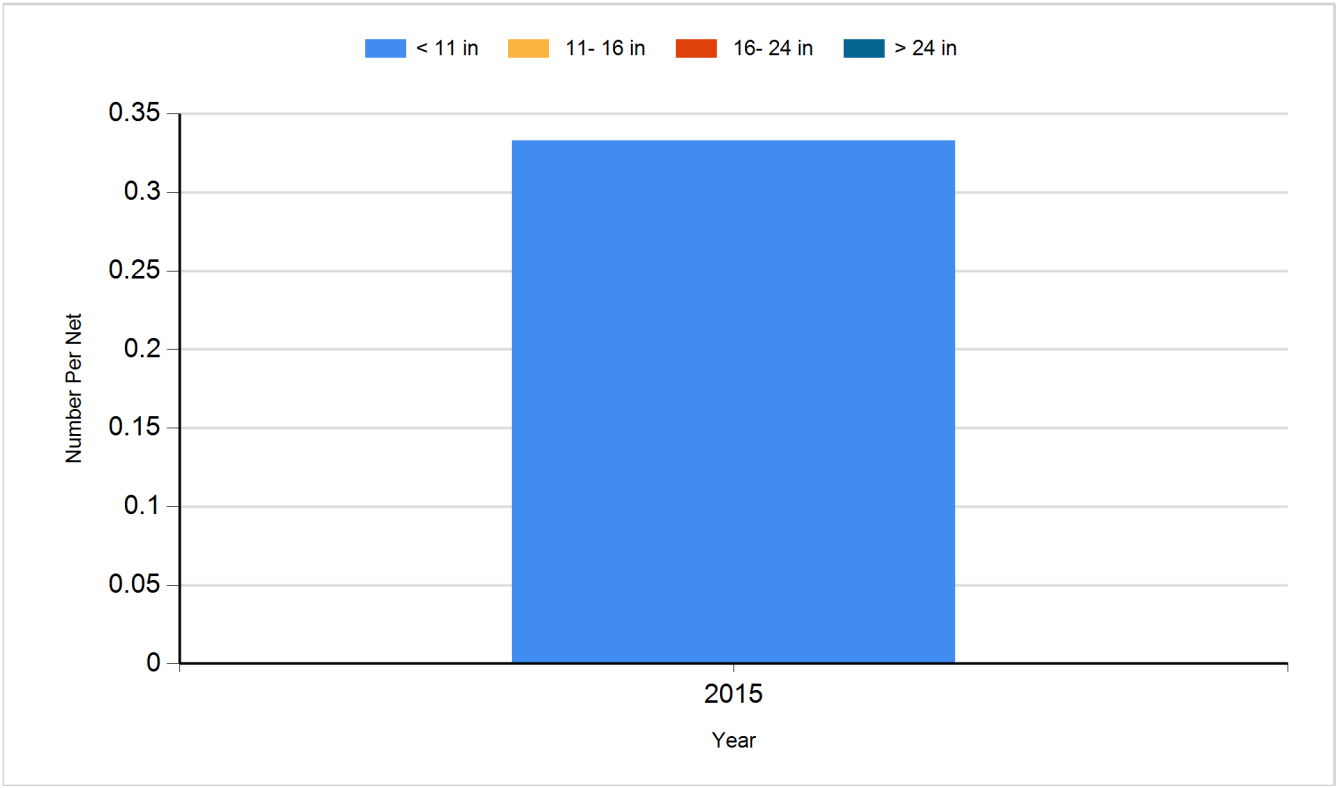
Species: Black Crappie
Gear: frame net (std 3/4 in)



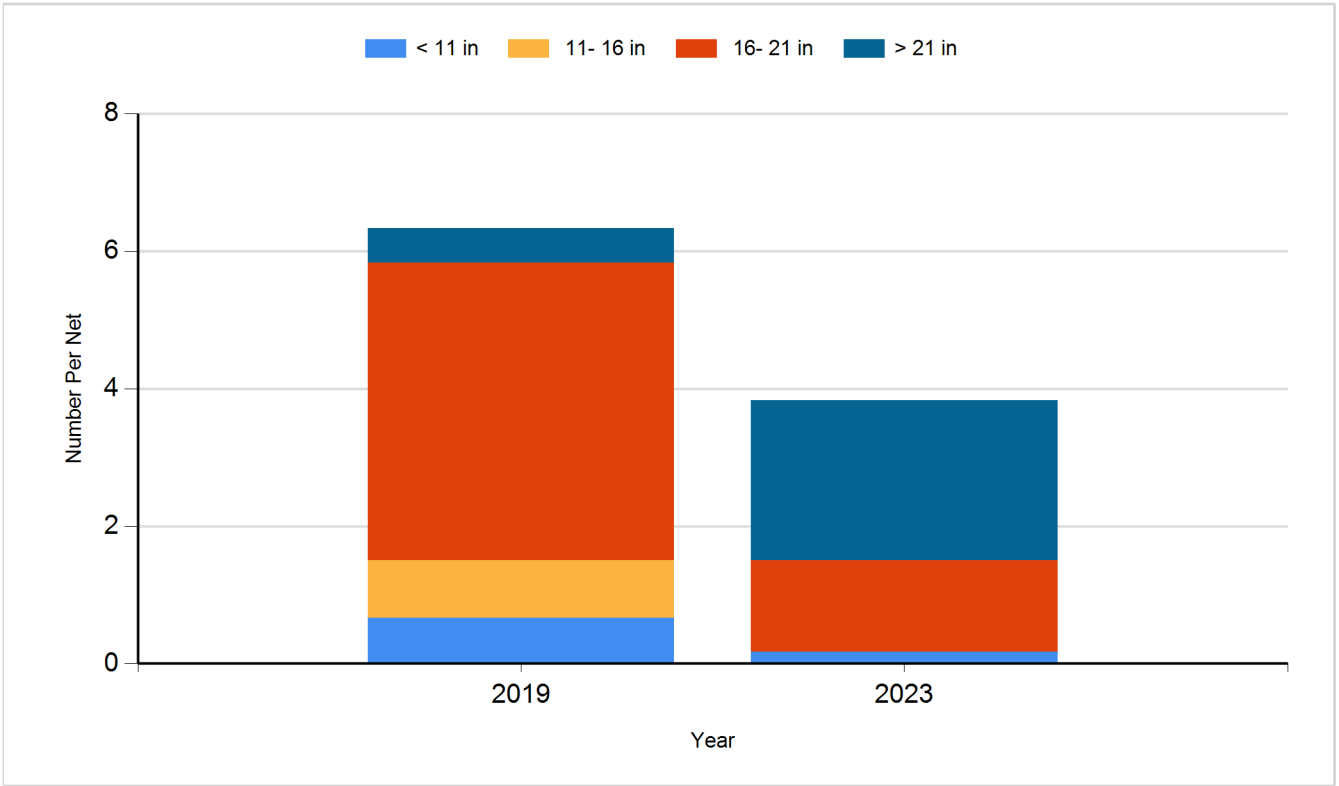
Species: Channel Catfish
Gear: AFS std gill net



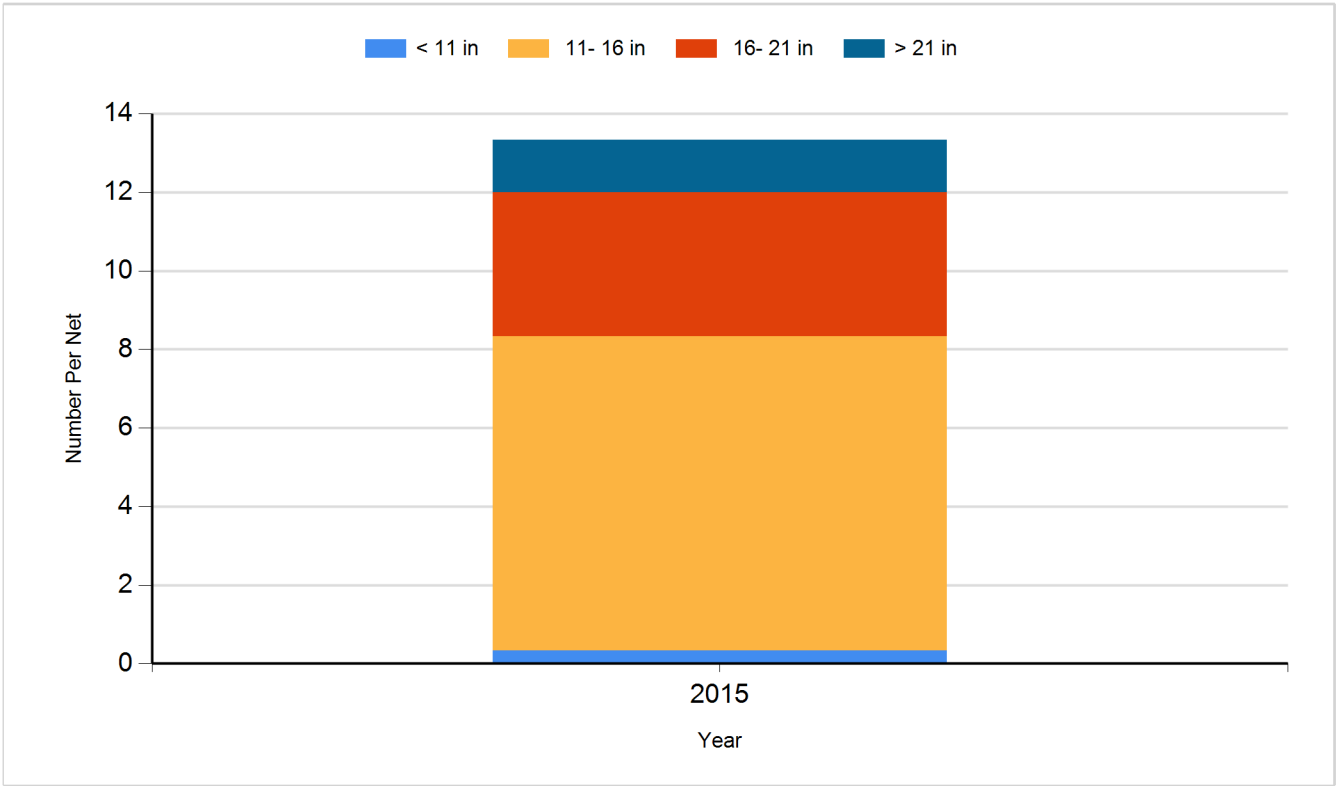
Species: Channel Catfish
Gear: std exp gill net



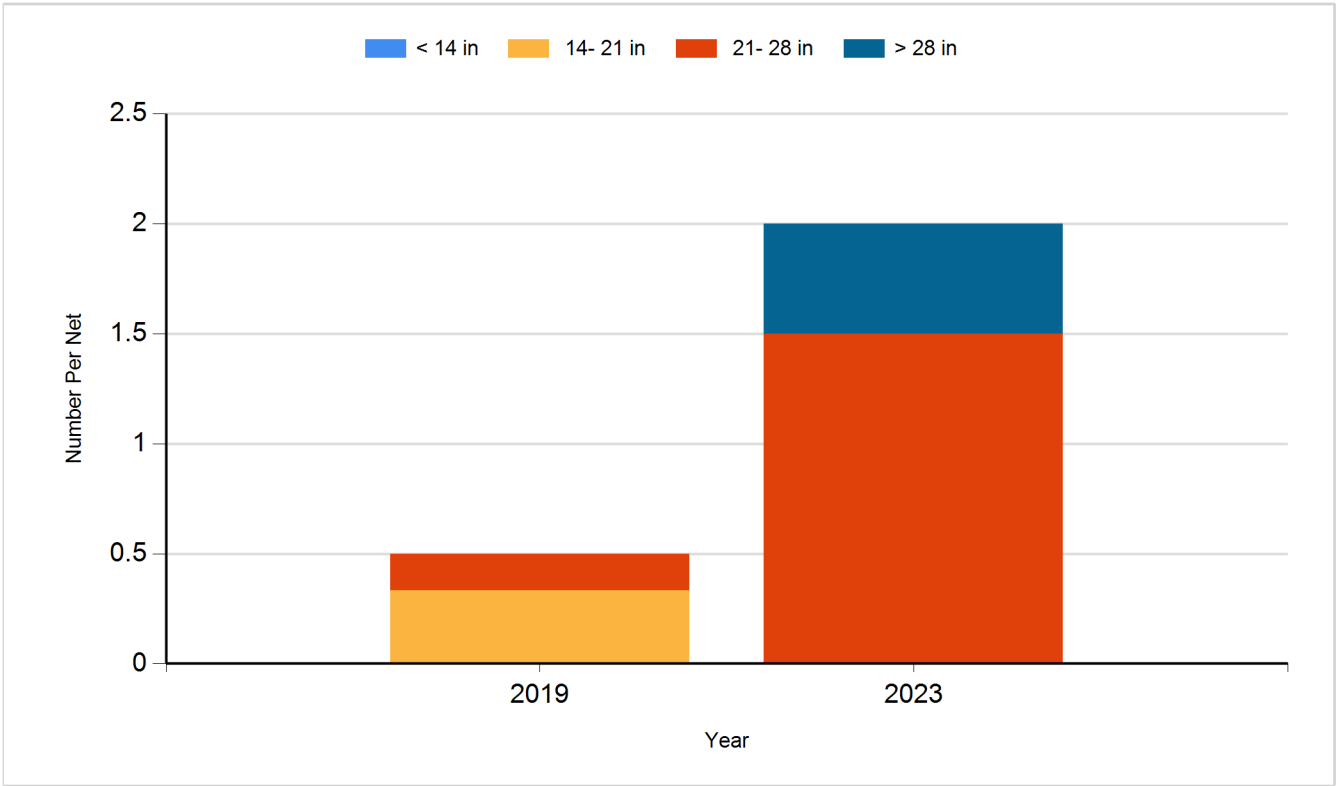
Species: Common Carp
Gear: AFS std gill net



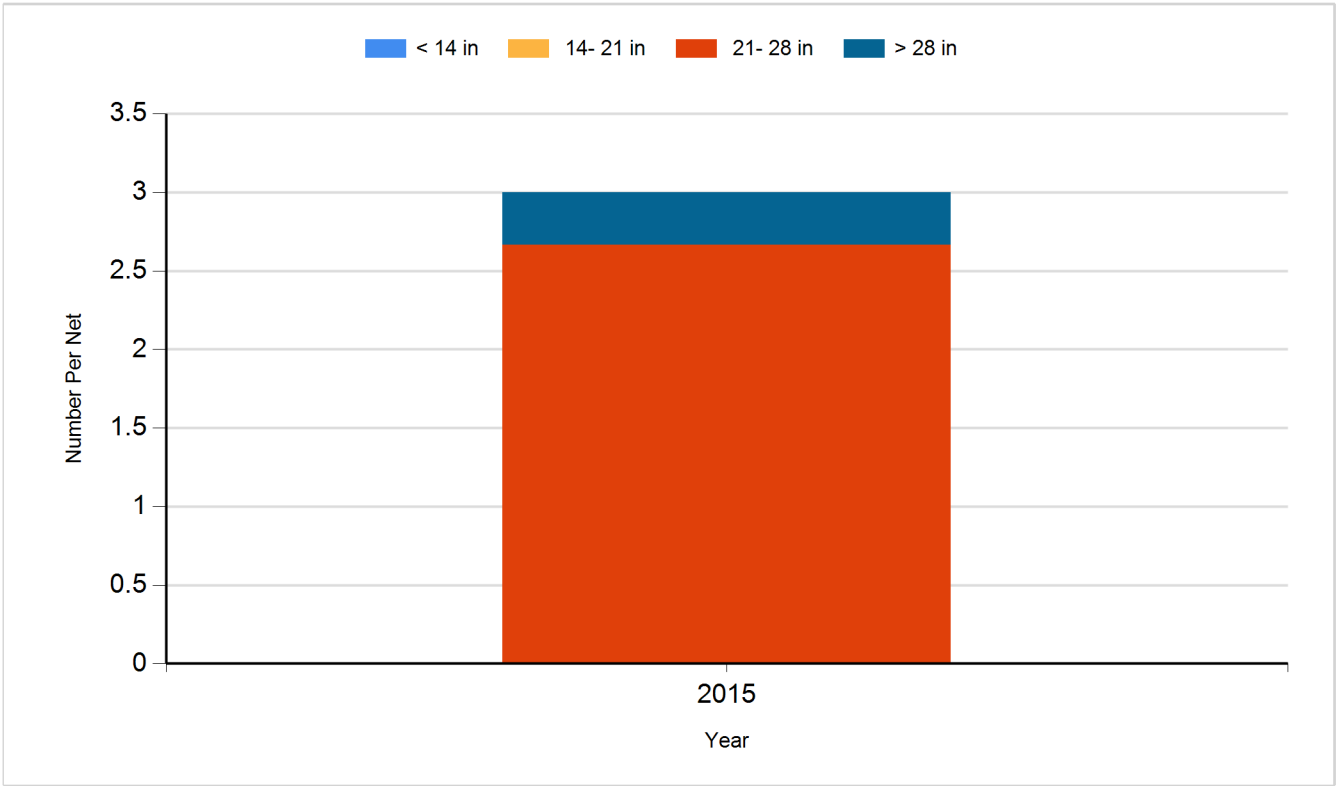
Species: Common Carp
Gear: std exp gill net



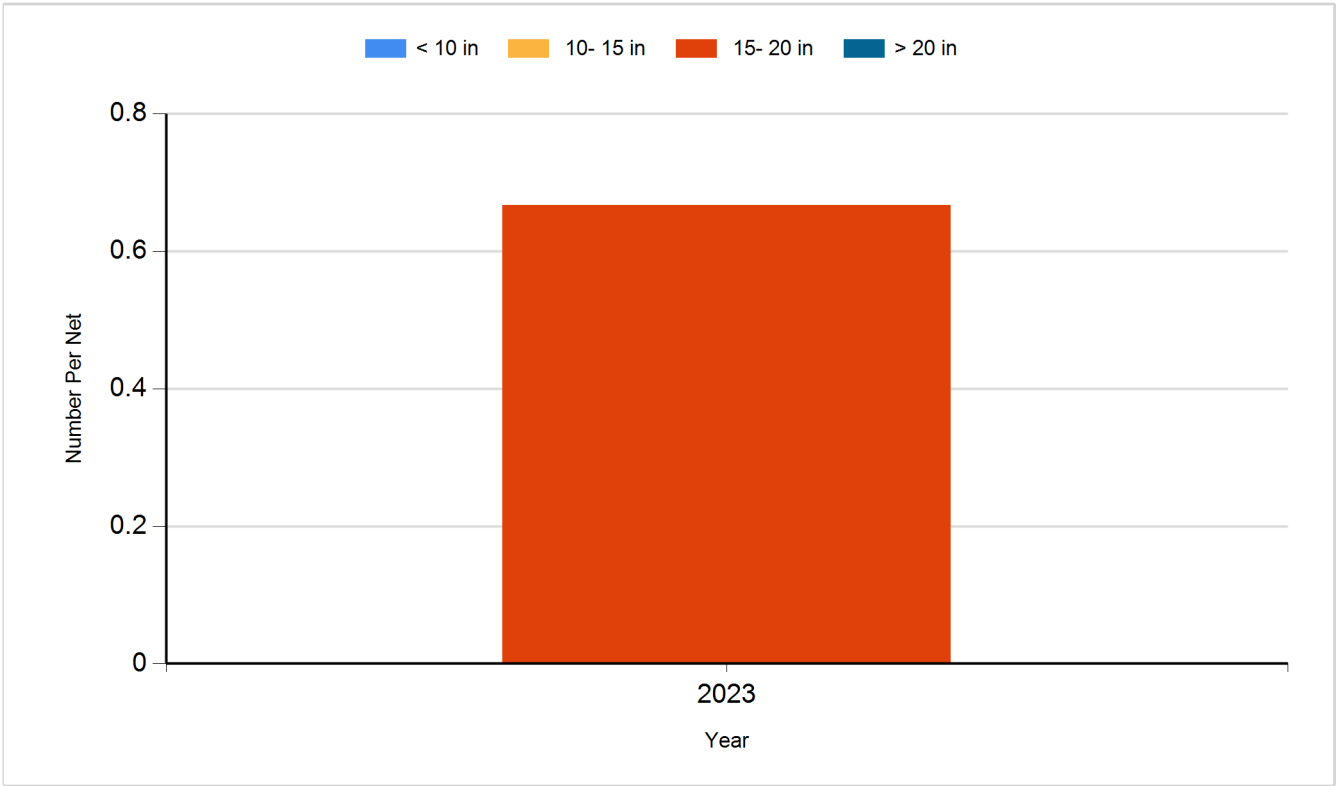
Species: Northern Pike
Gear: AFS std gill net



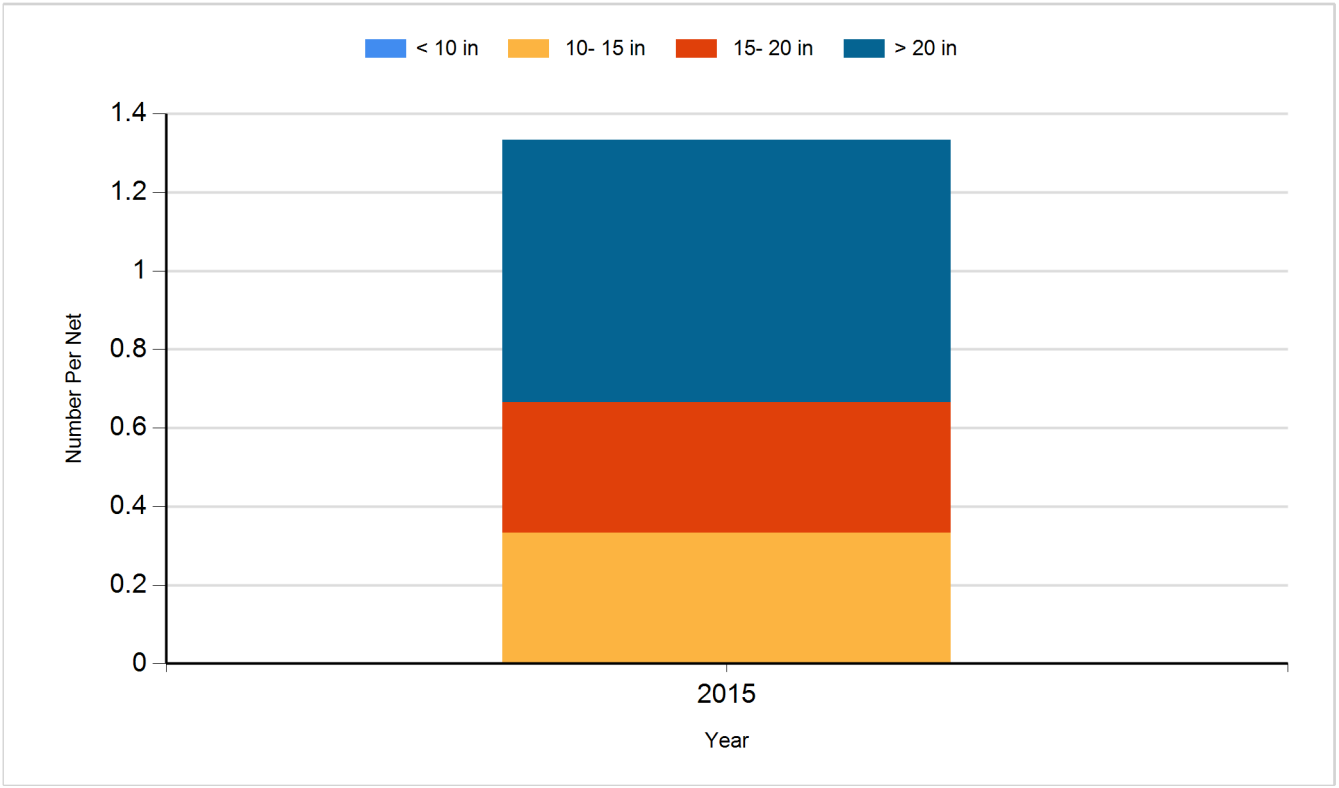
Species: Northern Pike
Gear: std exp gill net



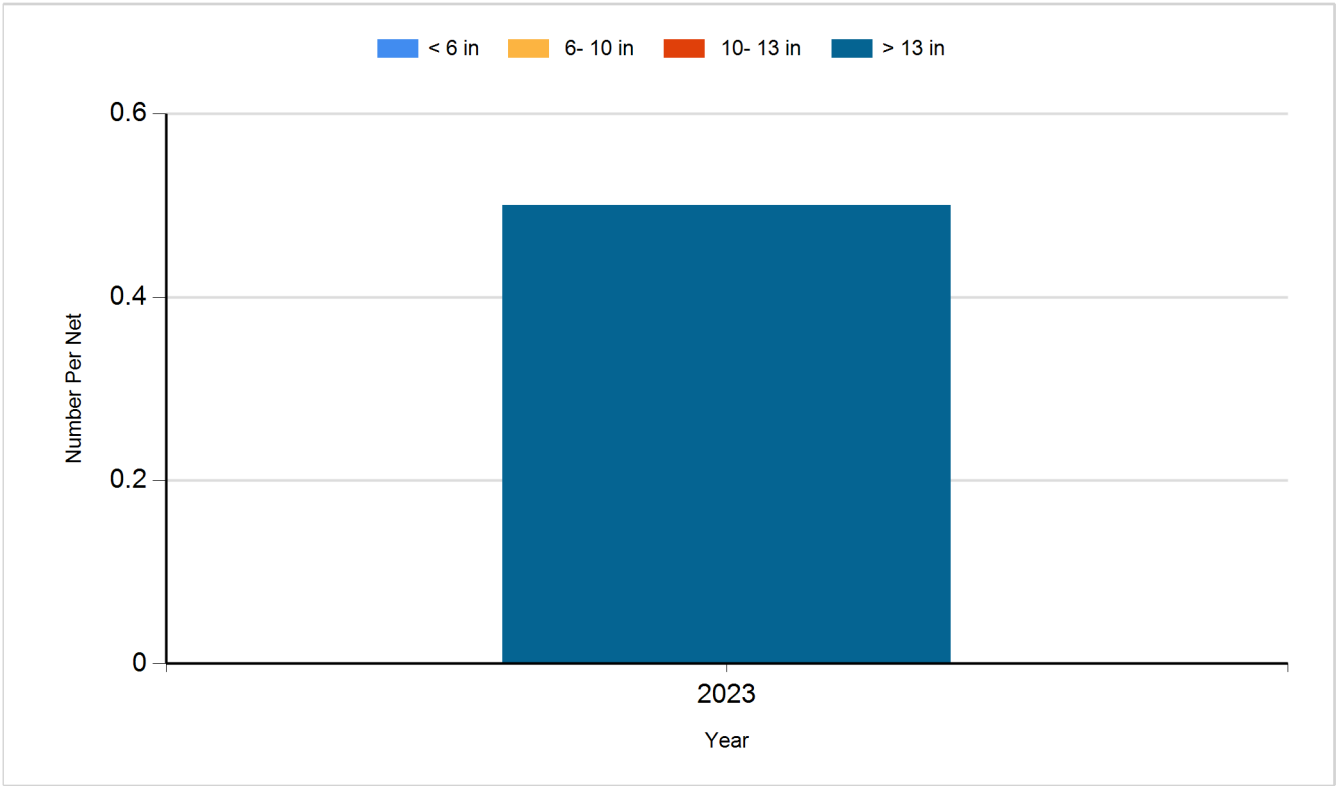
Species: Walleye
Gear: AFS std gill net



Species: Walleye
Gear: std exp gill net



Species: White Sucker
Gear: AFS std gill net



Fish Stocking

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

Year	Species	Size	Number
2012	Walleye	Fry	104,710
2014	Walleye	Fry	100,000
2016	Yellow Perch	Juvenile	4,800
2017	Walleye	Fry	100,000
2021	Walleye	Fry	100,000
2022	Saugeye	Fry	100,000
2022	Saugeye	Juvenile	18,000
2023	Saugeye	Fry	100,000