Pelican Lake Survey Summary

Pelican Lake, located near Watertown, is managed as a walleye and yellow perch fishery but other fish species (e.g., northern pike, white bass) are present and contribute to the fishery.

- Walleye. Walleye numbers were similar to those observed in 2021. At 2.7 per gill net, relative abundance was considered low to moderate. Sampled walleyes ranged in length from 7.5 to 28.7 inches of those that were at least 10.0 inches 84% were ≥15.0 inches and 69% were ≥20.0 inches. Nine cohorts produced between 2009 and 2022 contributed to the catch, none were particularly strong. Individuals from the 2022 (age-1), 2017 (age-6), 2015 (age-8), and 2014 (age-9) year classes, all of which coincided with fry stockings, were the most abundant accounting for 37 of 46 fish in the sample. Although sample sizes were low, the 2023 sample suggested good walleye growth with mean length at capture at age 2 and age 4 of 14.4 and 19.1 inches.
- Yellow Perch. Although yellow perch were the most abundant fish species in the 2023 gill net catch, relative abundance remained low (4.4 per gill net). Those sampled ranged in length from 5.1 to 10.6 inches, 9% were ≥8.0 inches and 8% were ≥10.0 inches. Two cohorts (2021 and 2022) contributed to the catch. Individuals from the 2022 (age-1) cohort, which had a mean length at capture of 6.4 inches, were the most abundant accounting for 89% sampled yellow perch.

For more detailed results see the computer-generated South Dakota Statewide Fisheries Survey for Pelican (Codington; below).

SOUTH DAKOTA STATEWIDE FISHERIES SURVEY

Pelican, Codington County UBS-Lake-173-000 2023

Lake Information

Name: Pelican Maximum Depth: 8 Feet

County: Codington Mean Depth: 5 Feet

OHWM Elevation: 1,710

Surface Area: 2,779 Acres Outlet Elevation: 1,710

Surveys and Investigations

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

Gear	Date	Effort
AFS std gill net	Jun 27, 2023	4 net-nights
AFS std gill net	Jun 28, 2023	4 net-nights
AFS std gill net	Jun 29, 2023	2 net-nights
AFS std gill net	Jun 30, 2023	2 net-nights

Common Fish Species Present

Northern Pike

Walleye

Yellow Perch

Bigmouth Buffalo

White Sucker

White Bass

Common Carp

Yellow Bullhead

Shorthead Redhorse

Channel Catfish

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.

$$CPUE = \frac{number\ offish}{effort}$$

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.

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

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

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.

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

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).

	St	ock	Qu	ality	Pref	erred	Mem	orable	Tro	ophy
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

			Abun	dance	St	tock Der	sity Indic	es	Cor	ndition
Gear	Species	Sample Size (n)	CPUE	CI-80	PSD	CI-80	PSD-P	CI-80	Wr	CI-80
AFS std gill net	Bigmouth Buffalo	38	3.2	1.1	100		13		93	3
	Black Bullhead	1	0.1	0.1	100		100		91	
	Channel Catfish	1	0.1	0.1	100		0		119	
	Common Carp	2	0.2	0.2	100		100		105	6
	Northern Pike	11	0.9	0.5	73		27		86	3
	Shorthead Redhorse	1	0.1	0.1	100		100		112	
	Walleye	46	2.7	8.0	84	10	69	13	95	2
	White Bass	4	0.3	0.3	100		100		109	2
	White Sucker	7	0.6	0.3	100		71		113	2
	Yellow Bullhead	1	0.1	0.1	100		100		86	
	Yellow Perch	53	4.4	1.3	9		8		116	2

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				18.8				2.2		3.2	8.07
	Black Bullhead				10.5				0.0		0.1	3.53
	Black Crappie				0.2				0.0		0.0	0.07
	Channel Catfish				0.0				0.0		0.1	0.03
	Common Carp				2.3				0.1		0.2	0.87
	Northern Pike				0.2				8.0		0.9	0.63
	Shorthead Redhorse				0.0				0.0		0.1	0.03
	Walleye				2.8				3.0		2.7	2.83
	White Bass				0.1				1.3		0.3	0.57
	White Sucker				0.1				1.8		0.6	0.83
	Yellow Bullhead				0.0				0.0		0.1	0.03
	Yellow Perch				0.3				4.7		4.4	3.13
frame net (std	Bigmouth Buffalo	20.4										20.40
3/4 in)	Black Bullhead	83.8										83.80
	Black Crappie	2.8										2.80
	Common Carp	0.3										0.30
	Northern Pike	3.7										3.70
	Walleye	1.1										1.10
	White Sucker	6.4										6.40
	Yellow Bullhead	1.1										1.10
	Yellow Perch	0.1										0.10
std exp gill net	Bigmouth Buffalo	20.7										20.70
	Black Bullhead	18.8										18.80
	Black Crappie	0.3										0.30
	Common Carp	5.3										5.30
	Green Sunfish	0.0										0.00
	Northern Pike	2.5										2.50
	Spottail Shiner*	0.2										0.20
	Walleye	1.3										1.30
	White Bass	0.0										0.00
	White Sucker	0.2										0.20
	Yellow Bullhead	0.0										0.00
	Yellow Perch	0.2										0.20

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.

							Ye	ar				
Gear	Species	Index	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
AFS std gill net	Walleye	PSD				33				100		84
		PSD-P				21				44		69
		Wr				82				91		95
	Yellow Perch	PSD				100				71		9
		PSD-P				0				39		8
		Wr				89				109		116
std exp gill net	Walleye	PSD	88									
		PSD-P	13									
		Wr	74									
	Yellow Perch	PSD	100									
		PSD-P	0									
		Wr	79									

Length at Capture

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

Species: Walleye

Year	Ν	1	2	3	4	5	6	7	8	9	10+
2023	46	222 (14)	366 (5)		484 (1)	516 (1)	548 (9)		550 (7)	586 (7)	719 (2)
2021	36		388 (2)	445 (5)	504 (11)		516 (9)	527 (7)			649 (2)
2017	39		232 (2)	302 (26)		493 (5)		565 (4)	585 (2)		
2014	9		251 (2)		423 (6)		568 (1)				
pecies: Y	ellow Pe	erch									

Mean Length (expanded sample number) at capture by age												
Year	N	1	2	3	4	5	6	7	8	9	10+	
2023	53	163 (47)	247 (6)									
2021	56	169 (15)	226 (20)	294 (20)	320 (1)							
2017	3			215 (2)	232 (1)							
2014	1			233 (1)								

Fish Condition

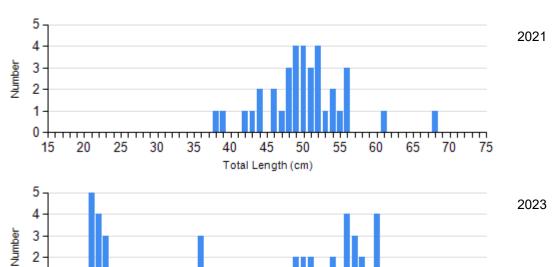
Mean relative weight (Wr) by sample size (N), length category stock to quality (S-Q), quality to preferred (Q-P), preferred to memorable (P-M), and memorable (M) for species collected across survey years with standard error (SE).

			Length Groups									
		S-Q			Q-P		P-M	М				
Species	Year	N	Wr (SE)	N	Wr (SE)	N	Wr (SE)	N	Wr (SE)			
Walleye Gill Net	2021	0		20	89 (1.5)	15	93 (1.8)	1	103			
	2023	5	99 (1.4)	5	100 (2.8)	19	95 (2.0)	3	84 (3.1)			
Yellow Perch Gill Net	2021	16	108 (2.5)	18	109 (1.7)	12	112 (2.3)	10	105 (3.1)			
	2023	48	116 (1.3)	1	110	4	110 (4.8)	0				

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Species: Walleye Gear: AFS std gill net



50

45

Total Length (cm)

Species: Yellow Perch Gear: AFS std gill net

15

20

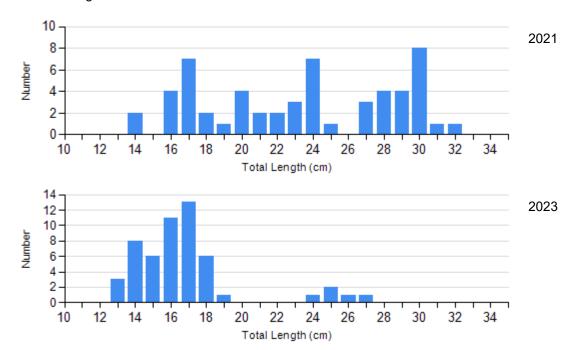
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75

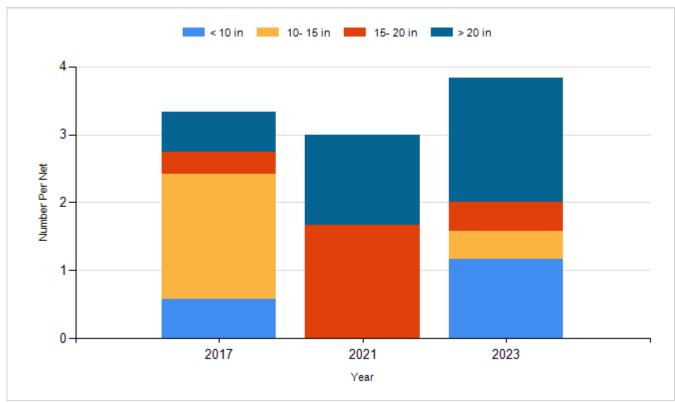
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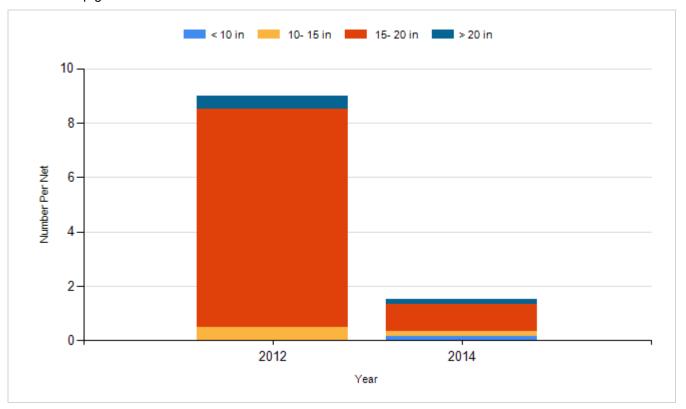
Historic Fish Sizes and Relative Abundance

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

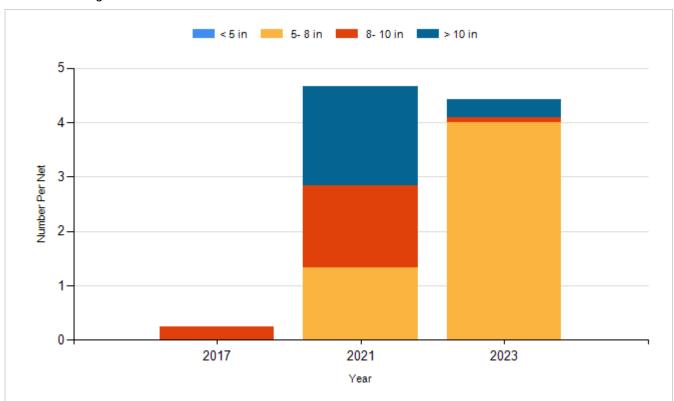
Species: Walleye Gear: AFS std gill net



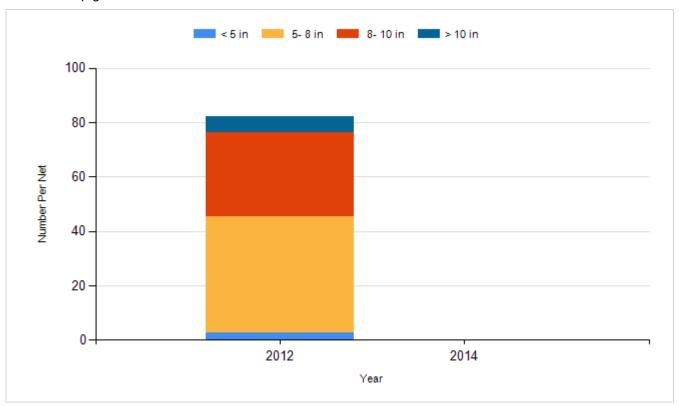
Species: Walleye Gear: std exp gill net



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
2012	Walleye	Fry	1,400,000
2014	Walleye	Fry	1,400,000
2015	Walleye	Fry	1,500,000
2015	Yellow Perch	Adult	3,750
2016	Yellow Perch	Small Fingerling	29,890
2017	Walleye	Fry	1,400,000
2019	Walleye	Fry	700,000
2021	Walleye	Fry	1,400,000
2022	Walleye	Fry	1,400,000
2023	Saugeye	Fry	3,300,000

SOUTH DAKOTA STATEWIDE FISHERIES SURVEY

Pelican, Codington County UBS-Lake-173-000 2023

Lake Information

Name: Pelican Maximum Depth: 8 Feet

County: Codington Mean Depth: 5 Feet

OHWM Elevation: 1,710

Surface Area: 2,779 Acres Outlet Elevation: 1,710

Surveys and Investigations

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

Gear	Date	Effort	
AFS std gill net	Jun 27, 2023	4 net-nights	
AFS std gill net	Jun 28, 2023	4 net-nights	
AFS std gill net	Jun 29, 2023	2 net-nights	
AFS std gill net	Jun 30, 2023	2 net-nights	

Common Fish Species Present

Northern Pike

Walleye

Yellow Perch

Bigmouth Buffalo

White Sucker

White Bass

Common Carp

Yellow Bullhead

Shorthead Redhorse

Channel Catfish

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.

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

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.

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

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

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.

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

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).

	St	ock	Qu	ality	Pref	erred	Mem	orable	Tro	ophy
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

			Abun	dance	St	tock Der	nsity Indic	es	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	38	3.2	1.1	100		13		93	3
	Black Bullhead	1	0.1	0.1	100		100		91	
	Channel Catfish	1	0.1	0.1	100		0		119	
	Common Carp	2	0.2	0.2	100		100		105	6
	Northern Pike	11	0.9	0.5	73		27		86	3
	Shorthead Redhorse	1	0.1	0.1	100		100		112	
	Walleye	46	2.7	8.0	84	10	69	13	95	2
	White Bass	4	0.3	0.3	100		100		109	2
	White Sucker	7	0.6	0.3	100		71		113	2
	Yellow Bullhead	1	0.1	0.1	100		100		86	
	Yellow Perch	53	4.4	1.3	9		8		116	2

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				18.8				2.2		3.2	8.07
	Black Bullhead				10.5				0.0		0.1	3.53
	Black Crappie				0.2				0.0		0.0	0.07
	Channel Catfish				0.0				0.0		0.1	0.03
	Common Carp				2.3				0.1		0.2	0.87
	Northern Pike				0.2				0.8		0.9	0.63
	Shorthead Redhorse				0.0				0.0		0.1	0.03
	Walleye				2.8				3.0		2.7	2.83
	White Bass				0.1				1.3		0.3	0.57
	White Sucker				0.1				1.8		0.6	0.83
	Yellow Bullhead				0.0				0.0		0.1	0.03
	Yellow Perch				0.3				4.7		4.4	3.13
frame net (std	Bigmouth Buffalo	20.4										20.40
3/4 in)	Black Bullhead	83.8										83.80
	Black Crappie	2.8										2.80
	Common Carp	0.3										0.30
	Northern Pike	3.7										3.70
	Walleye	1.1										1.10
	White Sucker	6.4										6.40
	Yellow Bullhead	1.1										1.10
	Yellow Perch	0.1										0.10
std exp gill net	Bigmouth Buffalo	20.7										20.70
	Black Bullhead	18.8										18.80
	Black Crappie	0.3										0.30
	Common Carp	5.3										5.30
	Green Sunfish	0.0										0.00
	Northern Pike	2.5										2.50
	Orangespotted Sunfish	0.0										0.00
	Spottail Shiner	0.0										0.00
	Walleye	1.3										1.30
	White Bass	0.0										0.00
	White Sucker	0.2										0.20
	Yellow Bullhead	0.0										0.00
	Yellow Perch	0.2										0.20

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.

							Ye	ar				
Gear	Species	Index	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
AFS std gill net	Bigmouth Buffalo	PSD				0				88		100
		PSD-P				0				8		13
		Wr				88				93		93
	Channel Catfish	PSD										100
		PSD-P										0
		Wr										119
	Common Carp	PSD				100				100		100
		PSD-P				59				100		100
		Wr				94				86		105
	Northern Pike	PSD				100				90		73
		PSD-P				50				20		27
		Wr				90				95		86
	Shorthead Redhorse	PSD										100
		PSD-P										100
		Wr										112
	Walleye	PSD				33				100		84
		PSD-P				21				44		69
		Wr				82				91		95
	White Bass	PSD				0				100		100
		PSD-P				0				100		100
		Wr				88				101		109
	White Sucker	PSD				100				95		100
		PSD-P				100				95		71
		Wr				119				111		113
	Yellow Bullhead	PSD										100
		PSD-P										100
		Wr										86
	Yellow Perch	PSD				100				71		9
		PSD-P				0				39		8
		Wr				89				109		116
frame net (std	Bigmouth Buffalo	PSD	4									
3/4 in)		PSD-P	2									
		Wr	94									

			Year									
Gear	Species	Index	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
frame net (std	Common Carp	PSD	100									
3/4 in)		PSD-P	100									
		Wr	99									
	Northern Pike	PSD	76									
		PSD-P	47									
		Wr	68									
	Walleye	PSD	83									
		PSD-P	39									
		Wr	75									
	White Sucker	PSD	100									
		PSD-P	100									
		Wr	79									
	Yellow Bullhead	PSD	100									
		PSD-P	72									
		Wr	90									
	Yellow Perch	PSD	50									
		PSD-P	0									
		Wr	105									
std exp gill net	Bigmouth Buffalo	PSD	1									
		PSD-P	1									
		Wr	93									
	Common Carp	PSD	100									
		PSD-P	3									
		Wr	96									
	Northern Pike	PSD	100									
		PSD-P	53									
		Wr	80									
	Walleye	PSD	88									
		PSD-P	13									
		Wr	74									
	White Sucker	PSD	100									
		PSD-P	100									
		Wr	79									
	Yellow Perch	PSD	100									
		PSD-P	0									
		Wr	79									

Length at Capture

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

Species: Walleye

				Mean Len	igth (expa	nded sam	ple numb	er) at capt	ture by ag	е	
Year	N	1	2	3	4	5	6	7	8	9	10+
2023	46	222 (14)	366 (5)		484 (1)	516 (1)	548 (9)		550 (7)	586 (7)	719 (2)
2021	36		388 (2)	445 (5)	504 (11)		516 (9)	527 (7)			649 (2)
2017	39		232 (2)	302 (26)		493 (5)		565 (4)	585 (2)		
2014	9		251 (2)		423 (6)		568 (1)				
pecies: Y	ellow Pe	erch									
				Mean Len	igth (expa	nded sam	ple numb	er) at capt	ture by ag	е	
Year	N	1	2	3	4	5	6	7	8	9	10+
2023	53	163 (47)	247 (6)								
2021	56	169 (15)	226 (20)	294 (20)	320 (1)						
2017	3			215 (2)	232 (1)						
2014	1			233							

(1)

Fish Condition

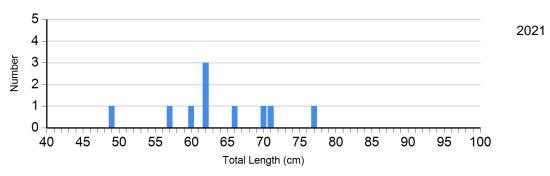
Mean relative weight (Wr) by sample size (N), length category stock to quality (S-Q), quality to preferred (Q-P), preferred to memorable (P-M), and memorable (M) for species collected across survey years with standard error (SE).

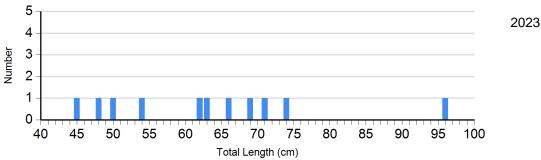
		Length Groups										
			S-Q		Q-P		P-M		М			
Species	Year	N	Wr (SE)	N	Wr (SE)	N	Wr (SE)	N	Wr (SE)			
Channel Catfish Gill Net	2023	0		1	119	0		0				
Common Carp	2021	0		0		0		1	86			
Gill Net	2023	0		0		0		2	105 (4.6)			
Northern Pike Gill Net	2021	1	102	7	94 (2.9)	2	96 (7.1)	0				
	2023	3	95 (1.4)	5	81 (2.8)	2	89 (4.9)	1	81			
Walleye Gill Net	2021	0		20	89 (1.5)	15	93 (1.8)	1	103			
	2023	5	99 (1.4)	5	100 (2.8)	19	95 (2.0)	3	84 (3.1)			
White Bass Gill Net	2021	0		0		2	92 (1.8)	13	102 (1.2)			
	2023	0		0		2	109 (2.9)	2	110 (3.5)			
White Sucker Gill Net	2021	1	97	0		7	115 (3.3)	14	110 (2.1)			
	2023	0		2	111 (0.6)	1	118	4	112 (2.2)			
Yellow Perch Gill Net	2021	16	108 (2.5)	18	109 (1.7)	12	112 (2.3)	10	105 (3.1)			
	2023	48	116 (1.3)	1	110	4	110 (4.8)	0				

Length Frequency Distribution

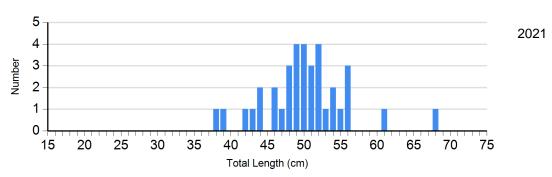
Length frequency histogram of species sampled by year.

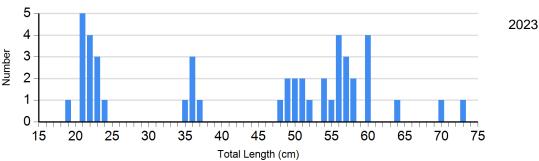
Species: Northern Pike Gear: AFS std gill net



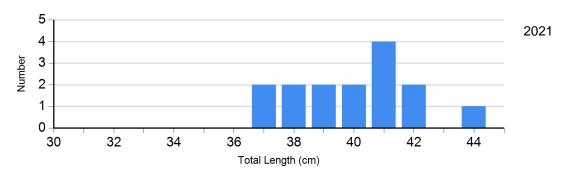


Species: Walleye Gear: AFS std gill net

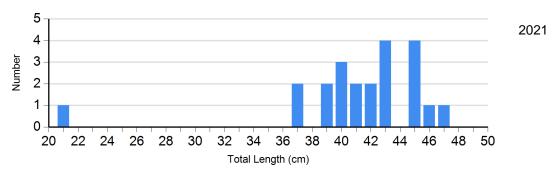




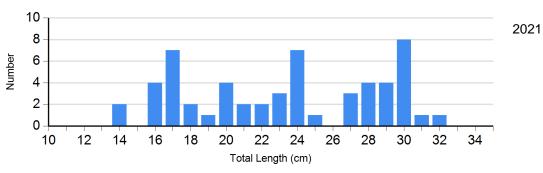
Species: White Bass Gear: AFS std gill net

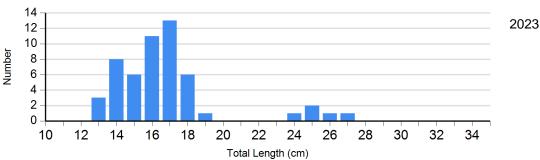


Species: White Sucker Gear: AFS std gill net



Species: Yellow Perch Gear: AFS std gill net

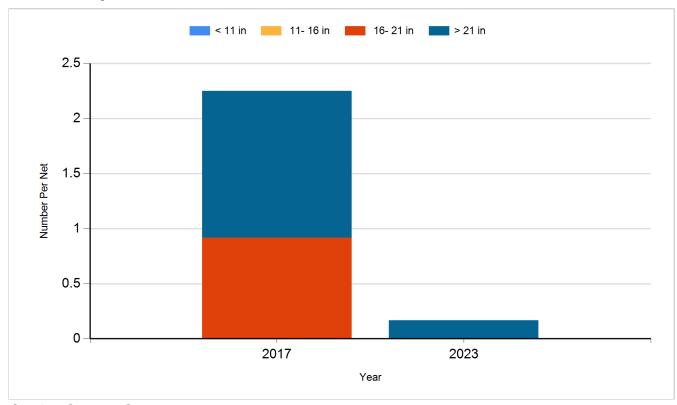




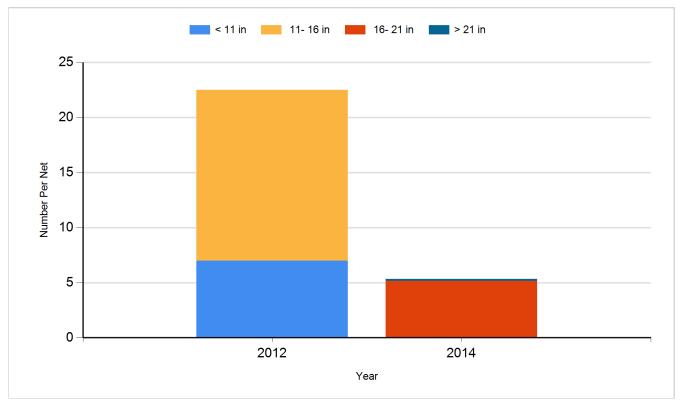
Historic Fish Sizes and Relative Abundance

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

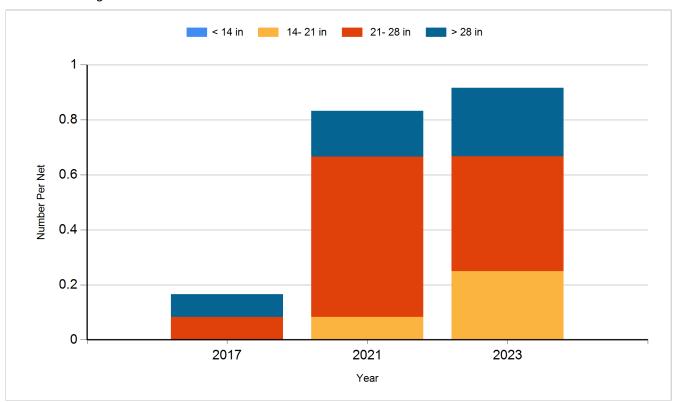
Species: Common Carp Gear: AFS std gill net



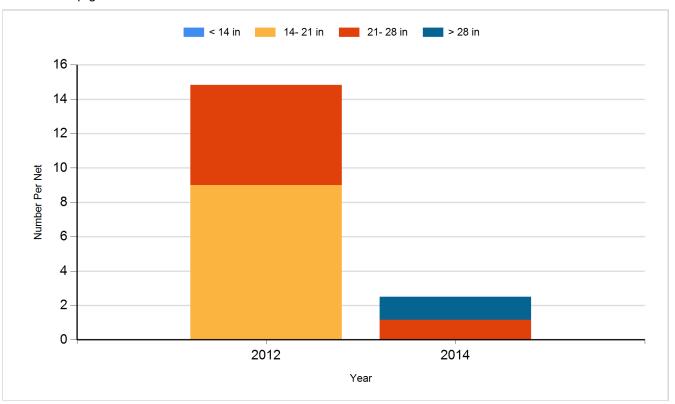
Species: Common Carp Gear: std exp gill net



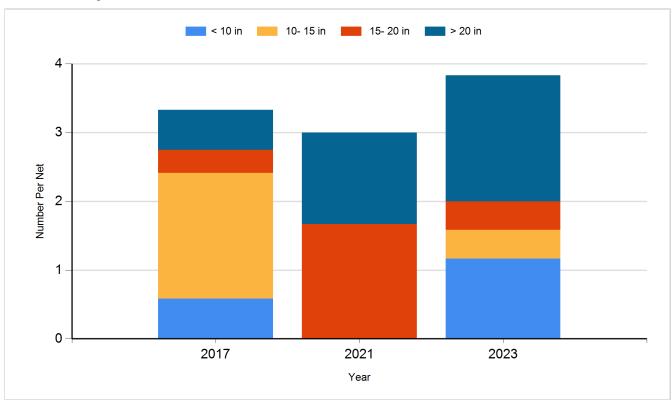
Species: Northern Pike Gear: AFS std gill net



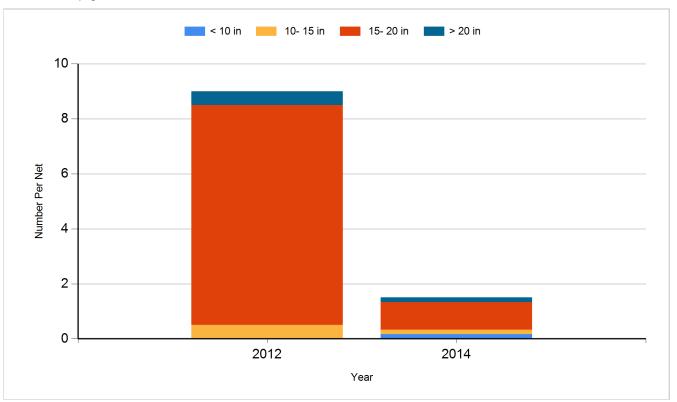
Species: Northern Pike Gear: std exp gill net



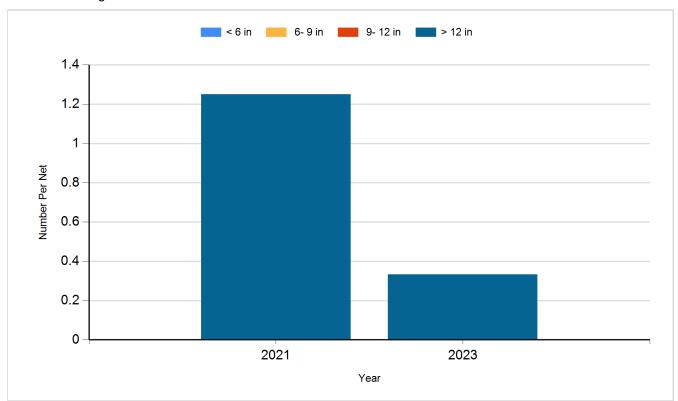
Species: Walleye Gear: AFS std gill net



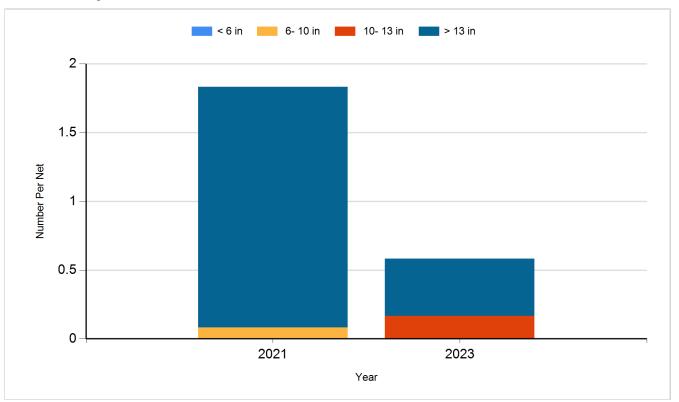
Species: Walleye Gear: std exp gill net



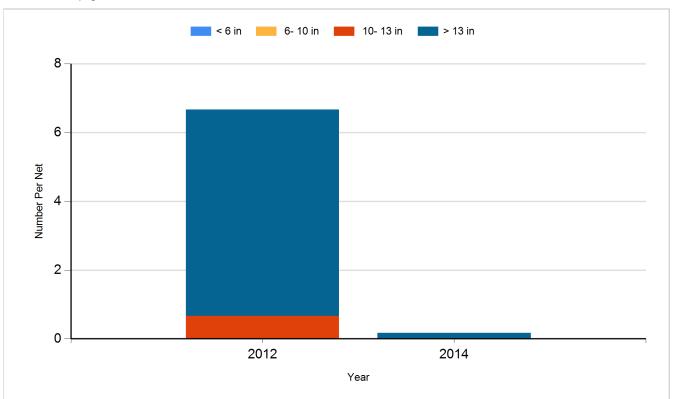
Species: White Bass Gear: AFS std gill net



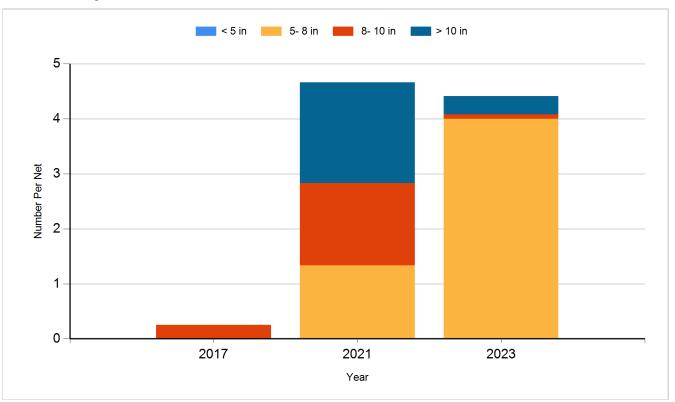
Species: White Sucker Gear: AFS std gill net



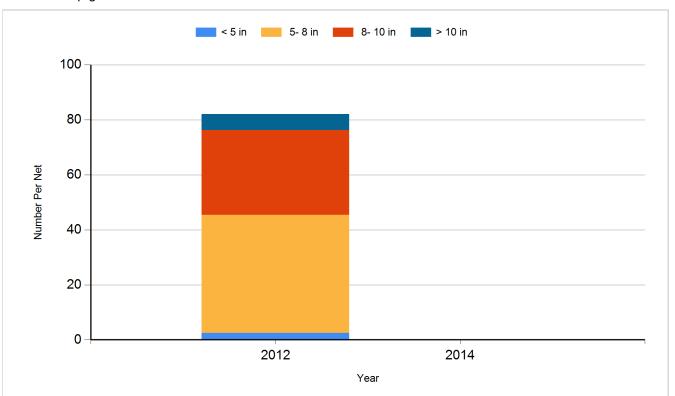
Species: White Sucker Gear: std exp gill net



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
2012	Walleye	Fry	1,400,000
2014	Walleye	Fry	1,400,000
2015	Walleye	Fry	1,500,000
2015	Yellow Perch	Adult	3,750
2016	Yellow Perch	Small Fingerling	29,890
2017	Walleye	Fry	1,400,000
2019	Walleye	Fry	700,000
2021	Walleye	Fry	1,400,000
2022	Walleye	Fry	1,400,000
2023	Saugeye	Fry	3,300,000