

Stink Lake Survey Summary

Stink Lake, located 6.0 miles north and 3.0 miles east of Henry, is managed as a walleye and yellow perch fishery. White sucker has been the only other fish species sampled since 2011.

- **Walleye.** Similar to surveys conducted in 2011 and 2015, walleye numbers were low (2.3/gill net) in 2019. Sampled walleyes ranged in length from 7.9 to 24.8 inches, half (8 of 16) were 20.0 inches or longer. Seven cohorts produced between 2010 and 2018 were represented in the gill net catch, each by five or fewer individuals.
- **Yellow perch.** Yellow perch were the most abundant species in the 2019 gill net catch. At 60.2/gill net, relative abundance was high. Sampled yellow perch ranged in length from 5.5 to 9.8 inches, most (94%) were from the 2018 (age-1) cohort, which had a mean length at capture of 6.4 inches.

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

SOUTH DAKOTA STATEWIDE FISHERIES SURVEY

Stink, Codington County

UBS-Lake-143-001

2019

Lake Information

Name: Stink
County: Codington
Surface Area: 595 Acres

Surveys and Investigations

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

Gear	Date	Effort
AFS std gill net	Aug 29, 2019	6 net-nights

Common Fish Species Present

Yellow Perch

Walleye

Northern Pike

Catch Summary of Stock Length Fish

Catch per unit effort (CPUE), proportional size distribution (PSD), proportional size distribution of preferred length fish (PSD-P), and relative weight (Wr) for species sampled in survey with 80% confidence interval (CI-80).

*** Methods/Species that ignore stock length**

Gear	Species	Sample Size (n)*	Abundance		Stock Density Indices			Condition		
			CPUE	CI-80	PSD	CI-80	PSD-P	CI-80	Wr	CI-80
AFS std gill net	Walleye	16	2.3	1.3	79		57	22	96	3
	Yellow Perch	361	60.2	10.1	6	2	1		102	1

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.

Gear	Species	CPUE										Avg
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
AFS std gill net	Walleye										2.3	2.3
	Yellow Perch										60.2	60.2
std exp gill net	Walleye		2.1				2.7					2.4
	White Sucker		0.0				0.7					0.4
	Yellow Perch		7.1				3.7					5.4

10-Year Size Structure and Condition Statistics by Gear and Species

Species proportional size distribution (PSD), proportional size distribution of preferred length fish (PSD-P), and relative weight (Wr) collected by different gear types across 10 years.

Gear	Species	Index	Year											
			2010	2011	2012	2013	2014	2015	2016	2017	2018	2019		
AFS std gill net	Walleye	PSD											79	
		PSD-P											57	
		Wr											96	
	Yellow Perch	PSD												6
		PSD-P												1
		Wr												102
std exp gill net	Walleye	PSD		0						0				
		PSD-P		0						0				
		Wr		102						81				
	Yellow Perch	PSD		20						73				
		PSD-P		6						9				
		Wr		99						102				

Length at Capture

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

Species: Walleye

Mean Length (expanded sample number) at capture by age											
Year	N	1	2	3	4	5	6	7	8	9	10+
2019	16	295 (5)	473 (2)		536 (2)	532 (1)	593 (1)		591 (3)	633 (2)	
2011	19	320 (19)									

Species: Yellow Perch

Mean Length (expanded sample number) at capture by age											
Year	N	1	2	3	4	5	6	7	8	9	10+
2019	361	163 (340)	228 (21)								
2011	64	182 (55)	246 (9)								

Fish Condition

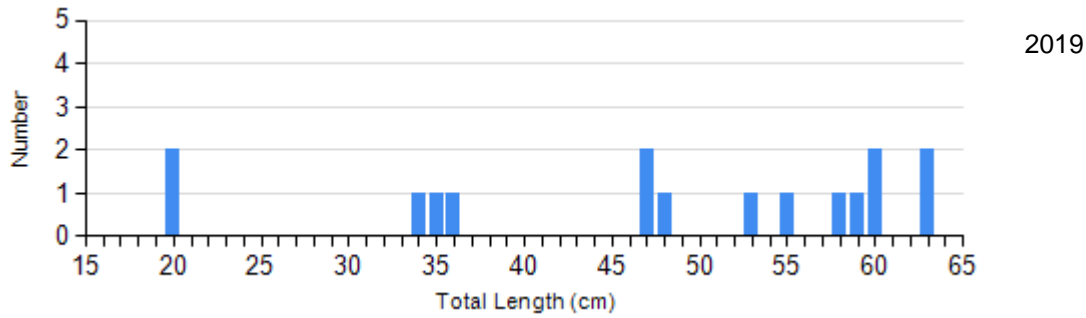
Mean relative weight (Wr) by sample size (N), length category stock to quality (S-Q), quality to preferred (Q-P), preferred to memorable (P-M), and memorable (M) for species collected across survey years with standard error (SE).

Species	Year	Length Groups							
		S-Q		Q-P		P-M		M	
		N	Wr (SE)	N	Wr (SE)	N	Wr (SE)	N	Wr (SE)
Walleye Gill Net	2015	8	81 (1.7)	0		0		0	
	2019	3	95 (7.4)	3	100 (3.4)	6	98 (3.6)	2	89 (10.9)
Yellow Perch Gill Net	2015	3	101 (4.2)	7	105 (3.8)	1	87	0	
	2019	339	103 (0.5)	20	92 (1.0)	2	94	0	

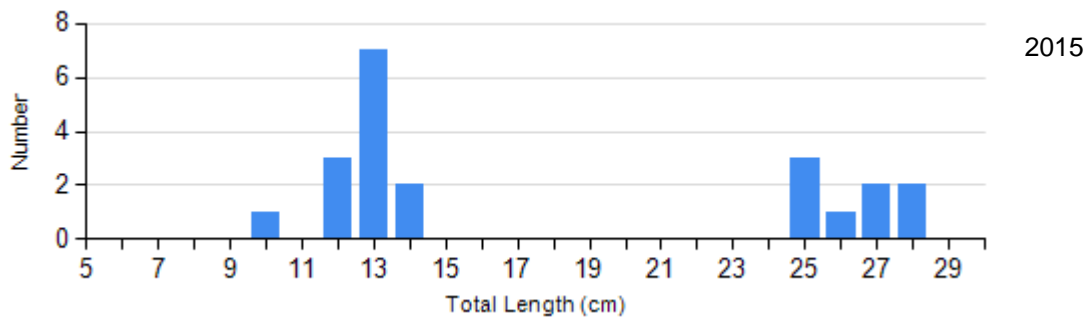
Length Frequency Distribution

Length frequency histogram of species sampled by year.

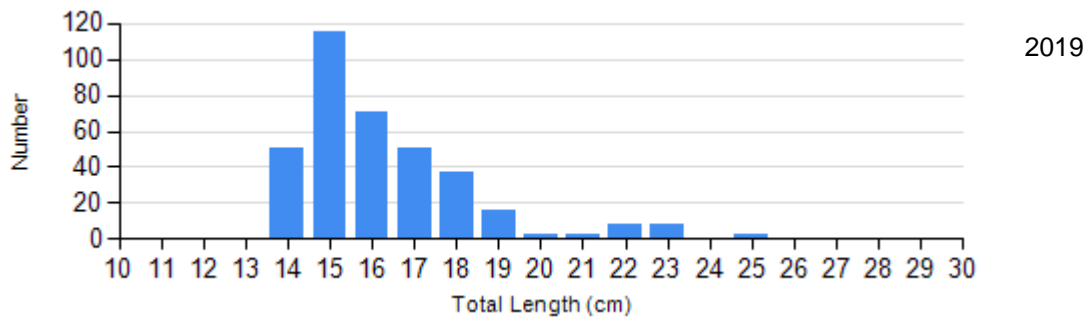
Species: Walleye
Gear: AFS std gill net



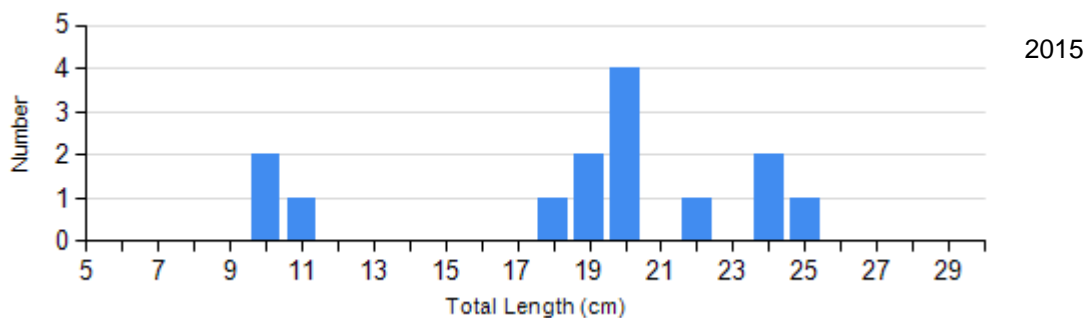
Species: Walleye
Gear: std exp gill net



Species: Yellow Perch
Gear: AFS std gill net



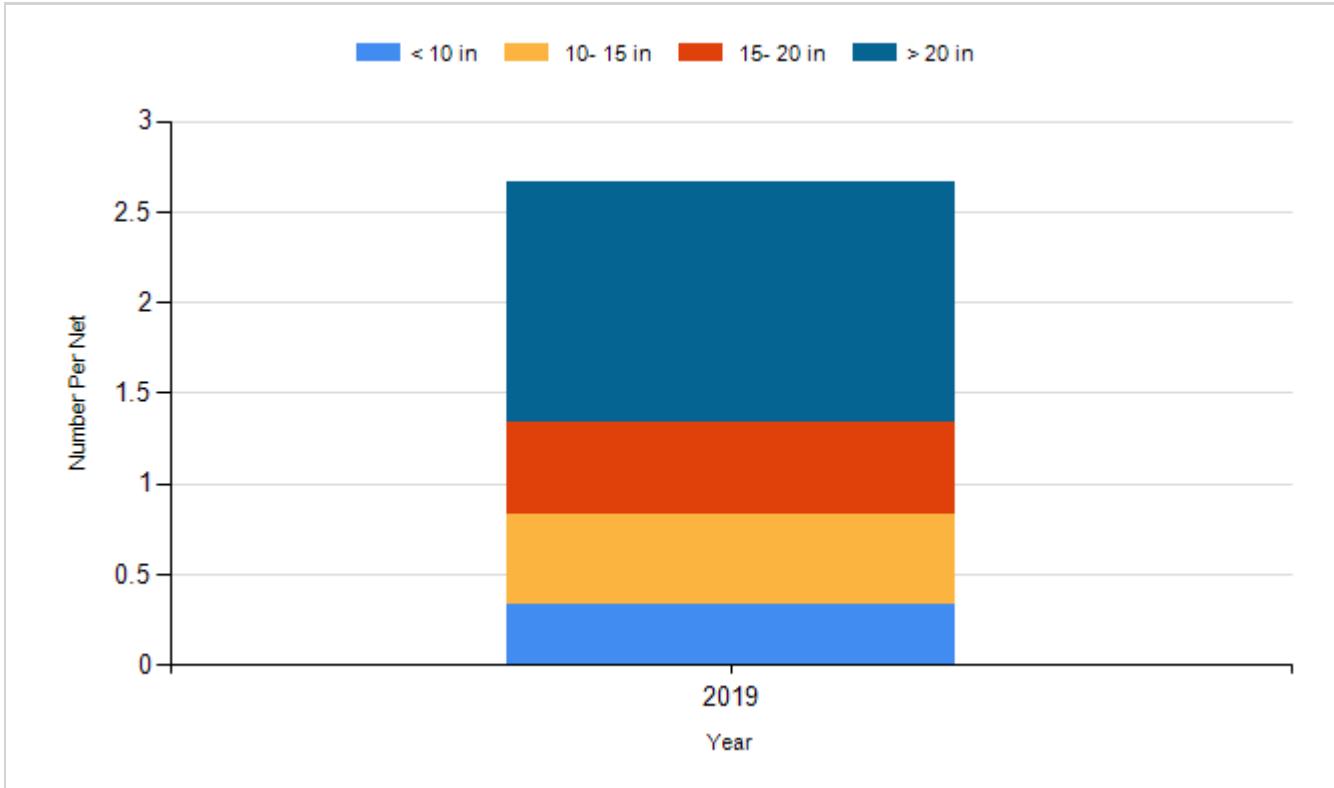
Species: Yellow Perch
Gear: std exp gill net



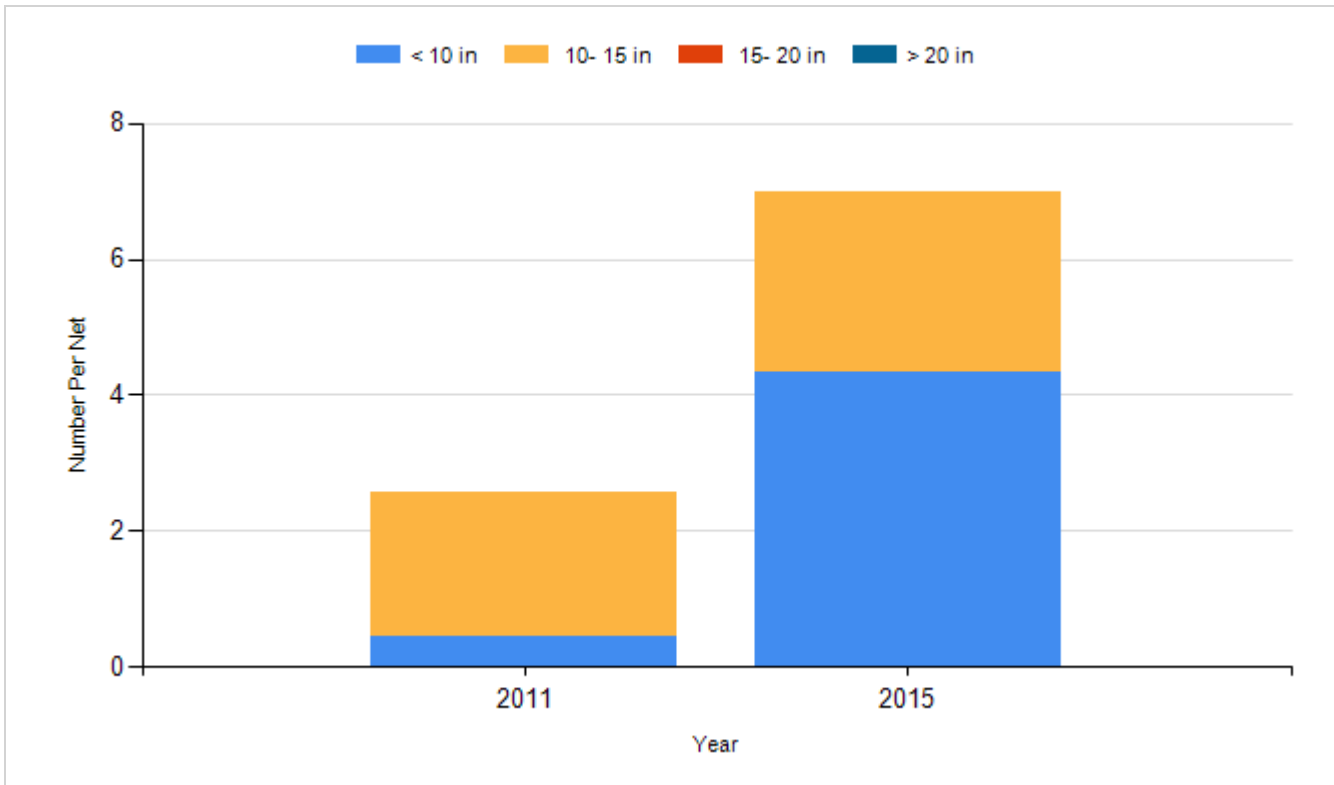
Historic Fish Sizes and Relative Abundance

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

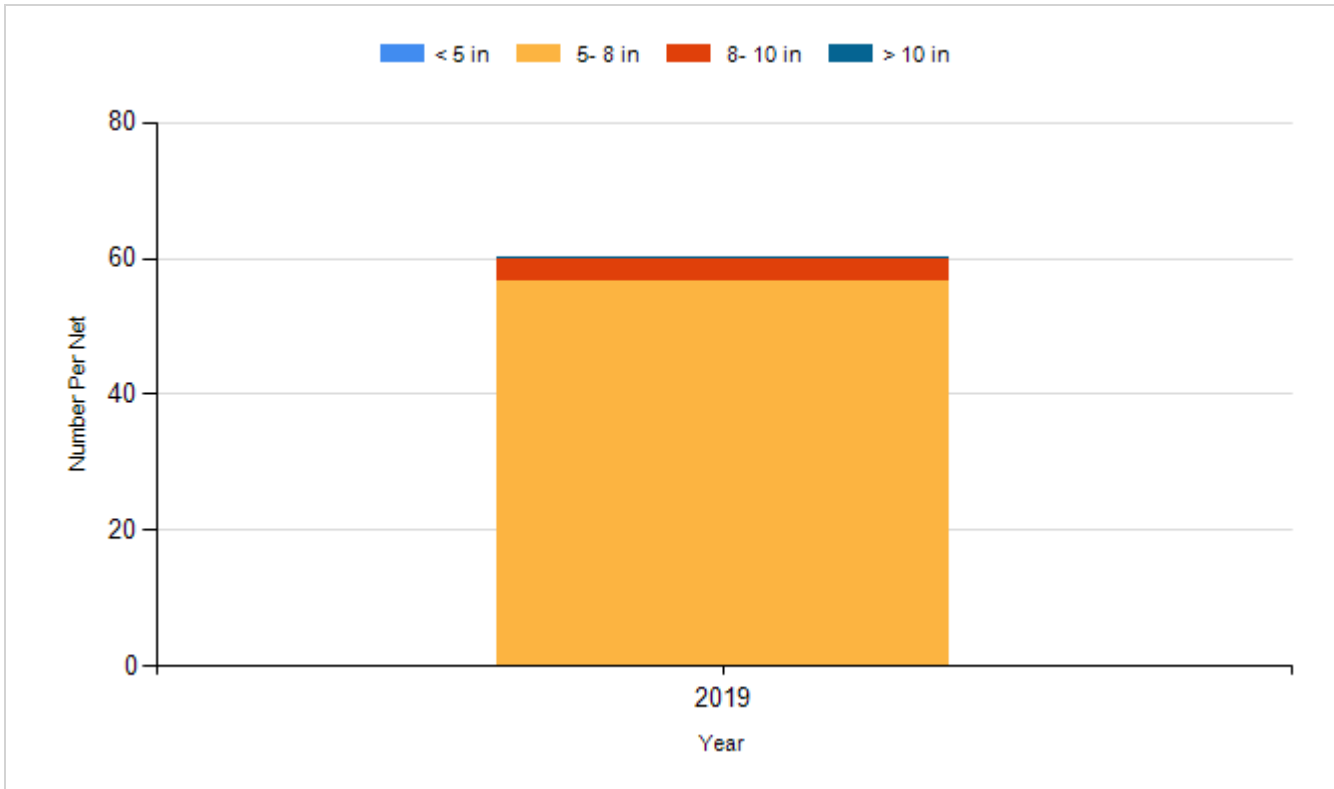
Species: Walleye
Gear: AFS std gill net



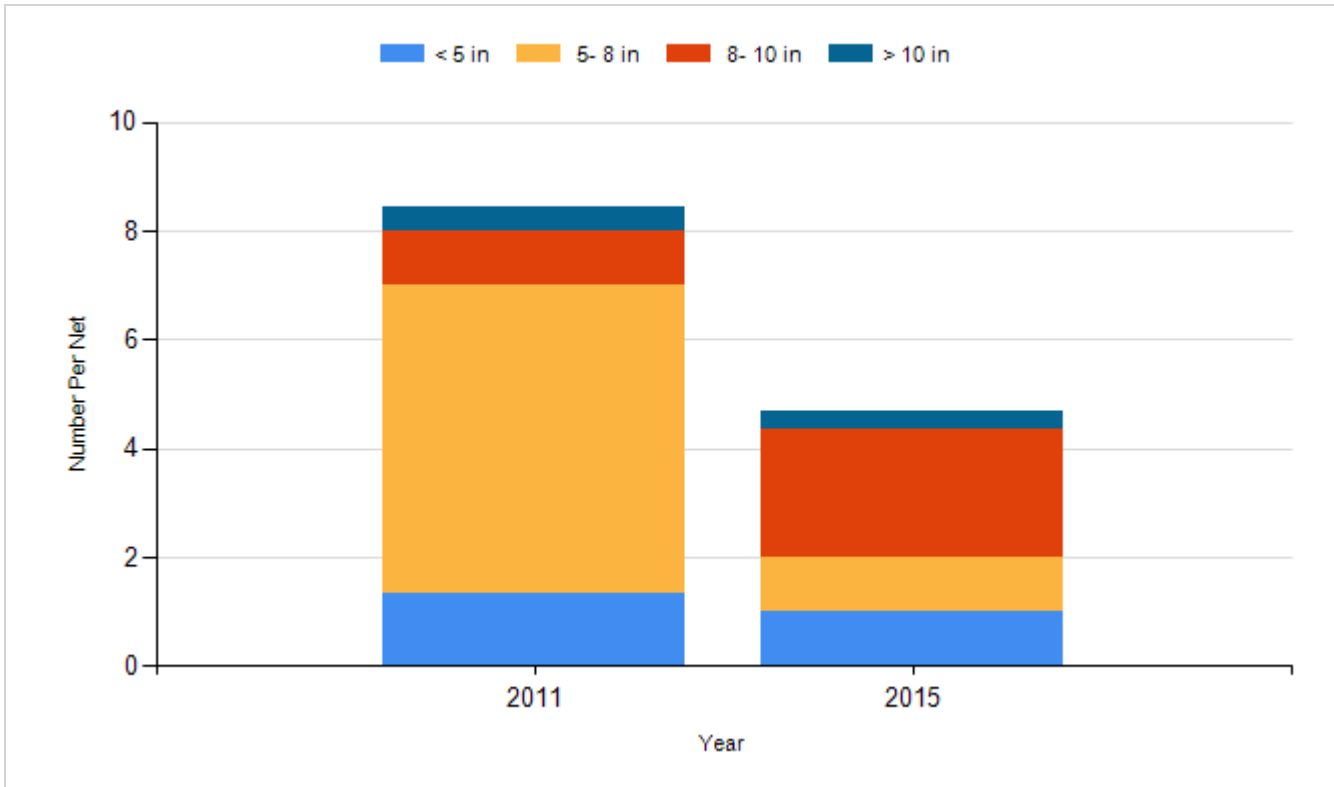
Species: Walleye
Gear: std exp gill net



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
2010	Walleye	Fry	250,000
2012	Walleye	Fry	180,000
2014	Walleye	Fry	200,000
2017	Walleye	Fry	185,000
2019	Saugeye	Small Fingerling	28,000