



Starve Hollow Lake 2020 Black Crappie Survey

Lake Information: 145 Acres; Starve Hollow SRA

Located: Vallonia, IN; Jackson County

GPS Coordinates: N38.81073; W-86.08252

Ownership: Jackson Washington State Forest (812) 358-3464, StarveSRA@dnr.IN.gov

Fees: Entrance \$7/car, \$9/car out-of-state. Boats must display the DNR Lake Permit

Amenities: Campground, beach, 3 boat ramps.

Outboard Motor Restriction: Electric trolling motor only.

Special Regulations: Statewide size and bag limits apply.

Best Fishing: Panfish, Largemouth Bass, Channel Catfish

Stockings: Channel Catfish biennially

DNR Contact Information:

Fish Management District 5

5596 E. State Road 46

Bloomington, IN 47401

(812)287-8300; D5Fish@dnr.IN.gov

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Report Approved By: Dan Carnahan, Fisheries Supervisor

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Methods

The fish collection effort used 2 Michigan style trap nets and 4 Indiana standard trap nets from March 16-20, 2020 for 8 and 16 lifts respectively. All nets were lifted on March 17, 18, and 20. One standard net was moved after catching 0 crappie after the first two net lifts. A subsample was aged using whole otoliths.

Summary

- Surface water temperature was 48.6-49.0 °F throughout the sample period.
- A total of 118 Black Crappie was sampled that weighed 61 lbs and ranged in length from 2.5 to 14.6 in (Table 1).
- Catch per unit effort was 10.0 fish/lift in the Michigan style nets and 2.4 fish/lift in the Indiana standard nets.
- Proportional Size Distribution (PSD-8) was 78, PSD-10 was 52, and PSD-12 was 9. Their growth was below average for year 1, average for year 2, and excellent thereafter (Figure 1). The mean length at age for age 2 was 7.5 in, 10.0 in for age 3, 11.4 in for age 4, 12.6 in for age 5, and 13.3 in for age 6. Fish 9 in and longer made up 70% of the sample by number.

- Relative weight (W_r) was reported by mean stock indices. W_r for PSD-5 to 8 was 95, PSD-8 to 10 was 93, PSD-10 to 12 was 91, and PSD-12 to 15 was 90. Fish with a W_r close to 100 are in balance with the food supply, whereas fish with values below 85 are underweight and may be too abundant for the food supply (Flickinger 1999).

Table 1. Size distribution by number and percent.

Species	Size		
	Class (in)	Number	Percent
Black Crappie	< 5.0	9	7.6
	5.0-7.9	24	20.3
	8.0-9.9	28	23.7
	10.0-11.9	47	39.8
	12.0-14.9	10	8.5

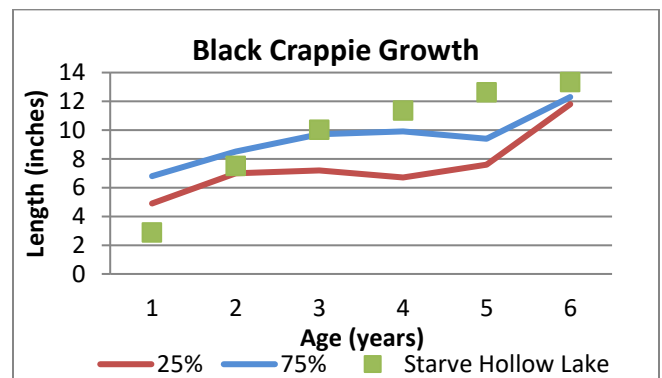


Figure 1. Starve Hollow Black Crappie growth compared to the 25th and 75th growth percentiles.



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www.Fishing.IN.gov



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Recommendation

The population is exhibiting fast growth and good W_r . As such, Starve Hollow is a good candidate for further research into implementing a Black Crappie minimum length limit.

Literature Cited

Flickinger, S.A., F.J. Bulow, and D.W. Willis. 1999. Small impoundments. Pages 561-588 in C.C. Kohler and W.A. Hubert editors. Inland Fisheries management 2nd edition. American Fisheries Society, Bethesda, MD.



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