

Lake Information: 180 Acres; Bluegrass FWA

Located: Daylight, IN; Warrick County

GPS Coordinates; N38.08493; W-87.46100

Ownership: State of Indiana

(812)789-2724, www.in.gov/dnr/fishwild/3099.htm

Fees: None

Amenities: Two boat ramps and 1.4 miles of maintained shoreline access.

Outboard Motor Restriction: Idle only

Special Regulations: 18-inch minimum size limit and two fish daily bag limit for Largemouth Bass

Best Fishing: Largemouth Bass and Crappie

Stockings: 920 Muskellunge stocked annually since 2006

DNR Contact Information:

Fish Management District 6

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Winslow, IN 47598

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Report Approved By: Daniel Carnahan, South Region Fisheries Supervisor

Date Approved: May 24, 2018

Methods

Fish sampling was conducted on February 27 to March 10, 2017. Fish collection effort consisted of 12 overnight Michigan trap net lifts. White Crappie and Black Crappie were measured to the nearest 0.1 in TL and weighed to the nearest 0.01 lb. Scales were taken from a subsample for age and growth estimation. Fisheries Analysis and Modeling Simulations (FAMS) program was used to calculate proportional stock density (PSD), relative weight (W_r), and growth indices to assess the population.

Summary

- A total of 188 White Crappie was sampled that ranged in length from 6.1 to 12.3 in and the catch rate was 15.7/lift.
- A total of 115 Black Crappie was sampled that ranged in length from 6.3 to 10.8 in and the catch rate was 9.6/lift.
- White Crappie size structure improved slightly as 54% were 9.0 in or longer, compared to 51% during 2015 (Table 1). The PSD (80) also improved from 58 during 2015. The PSD-10 was 29 and PSD-12 was 2.
- White Crappie growth was above average up until age 5 and then leveled off around the average after age 5 (Figure 1). Mean length at age 5 was 9.3 in

(Figure 3). The average length of a harvested crappie during the 2016 creel survey was 9.5 in (Munter 2017).

- White Crappie total annual mortality was 42.5%. The White Crappie population can sustain higher exploitation of fish 9 inches (age 4) and larger.
- Forage is not a limiting factor for White Crappie growth as the relative weight (W_r) was 84.
- Black Crappie size structure also improved as the PSD was 72 compared to 50 during 2015. The PSD-10 was 3.
- Black Crappie growth was above average up until age 4 and then leveled off around the average after age 4 (Figure 2). Mean length at age 4 was 8.3 in and total annual mortality was 74% (Figure 4).
- The Black Crappie W_r was 80.
- The crappie populations in Loon Pit are in excellent condition and no recommendations are required at this time.

Literature Cited

Munter, R.A. 2017. Loon Pit Supplemental Crappie and Muskellunge Survey. Indiana Department of Natural Resources. Indianapolis. 14 pp.



Table 1. White and Black Crappie size distribution by number and percent, Loon Pit, 2017.

Species	Size Class (in)	Number	Percent
White Crappie	5.0-7.9	40	17.5
	8.0-8.9	46	20.1
	9.0-9.9	50	21.8
	10.0-11.9	48	21.0
	12+	4	1.7
Black Crappie	5.0-7.9	38	39.2
	8.0-8.9	44	45.4
	9.0-9.9	29	29.9
	10.0-11.9	4	4.1
	12+	0	0

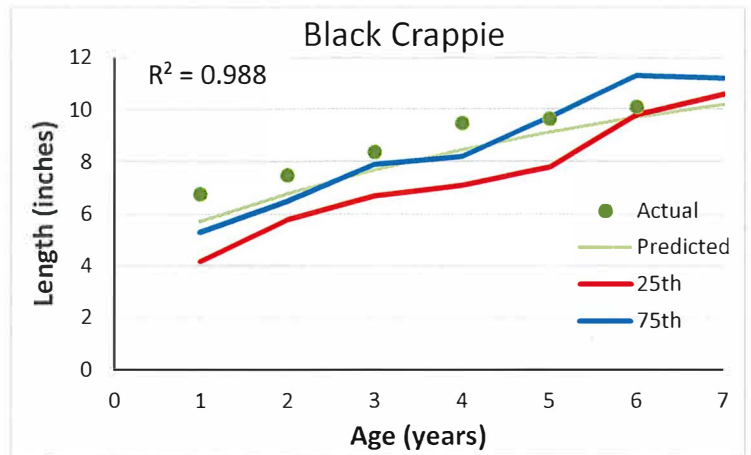


Figure 2. Black Crappie actual mean length at age compared to the Von Bertalanffy growth function with R^2 value and the district's 25th and 75th percentiles.

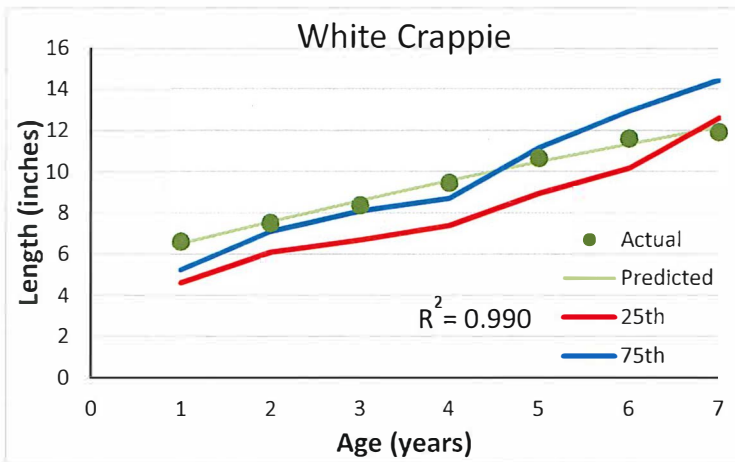


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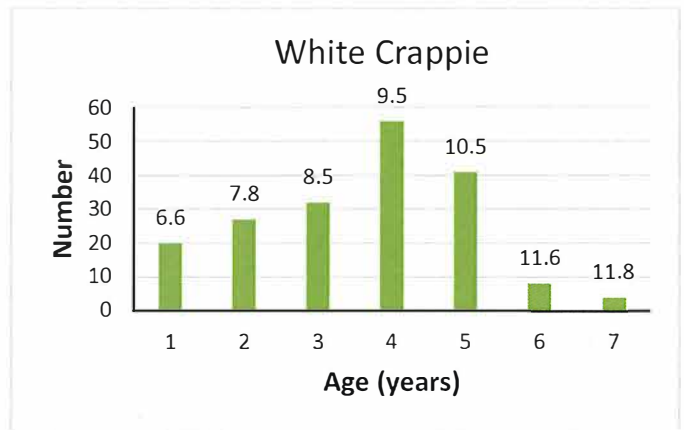


Figure 3. White Crappie age frequency with mean length, Loon Pit, 2017.

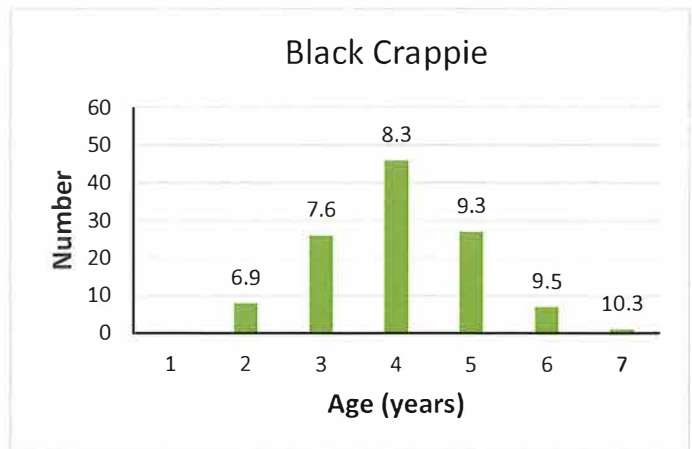


Figure 4. Black Crappie age frequency with mean length, Loon Pit, 2017.