

Duck Lake 2017 Management Report



Lake Information: 59 Acres; Dugger Unit, Greene-Sullivan

State Forest.

Located: Dugger, IN; Sullivan County

GPS Coordinates: N39.05982, W-87.65702

Ownership: IDNR Division of Forestry; 812-648-2810

GreeneSF@dnr.IN.gov

Fees: Boats must display the DNR Lake Permit.

Amenities: Boat ramp, shoreline fishing along west bank.

Outboard Motor Restriction: Trolling motors only.

Special Regulations: Statewide size and bag limits apply.

Best Fishing: Panfish, Largemouth Bass, Muskie

DNR Contact Information:

Stockings: Muskie 5/acre annually

Fish Management District 5

5596 E. State Road 46

Bloomington, IN 47401

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Report Approved By: Dan Carnahan, Fisheries Supervisor

Date Approved: September 20, 2018

Methods

Fish collection and water chemistry parameters were measured on May 22, 2017. Fish collection consisted of 0.5 h of pulsed DC night electrofishing with two dippers. Two standard experimental gills net and two standard trap nets were fished overnight. The tier II aquatic vegetation survey was conducted on August 8, 2017. Duck Lake has been part of the Muskie stocking program since 2008.

Summary

- At the time of sampling surface water temperature was 75.9 °F and the Secchi disk reading was 10 ft 6 in. Eleven species, comprising 513 fish, were sampled that weighed 104 lbs (Figure 1).
- A total of 163 Redear Sunfish was sampled that ranged in length from 3.8 to 7.3 in. Four percent of the Redear caught were 7 in and greater (Table 1).
 Redear growth was poor (Figure 2). Their catch rates were 78.0/electrofishing h, 5.0/gill net lift, and 57.0/trap net lift.
- A total of 127 Largemouth Bass was sampled that ranged in length from 4.3 to 15.7 in. Only one bass greater than 14.0 in was sampled. The electrofishing catch rate was 250.0/h. Largemouth Bass growth was average at ages 1 to 2 and poor thereafter (Figure 3).
- A total of 118 Bluegill was sampled that ranged in length from 1.9 to 7.3 in. Seven inch and larger

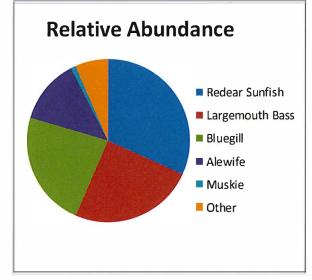


Figure 1. Relative abundance of fish caught by number.

Bluegill accounted for 5% of the sample and growth was average (Figure 4). Their catch rates were 208.0/electrofishing h, 2.0/gill net lift, and 6.0/trap net lift.

- Sixty-six Alewife were sampled. Alewife are a member of the herring family that invaded the Great Lakes from the north Atlantic in the mid 1900's. They were first detected in Bass Lake of the Dugger Unit in 2002.
- Five age-1 Muskie were sampled that ranged in length from 11.2 to 13.3 in.
- Other species sampled were Warmouth, Longear Sunfish, Common Carp, Yellow Bullhead, Black Crappie, and Gizzard Shad.



Your purchase of fishing equipment and motor boat fuel supports boating access and Sport Fish Restoration.

Indiana Fishing Regulation Guide: http://www.in.gov/dnr/fishwild/2347.htm



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Six species of aquatic macrophytes were sampled.
The aquatic invasive, Eurasian watermilfoil, was the most dominant species, occurring in 68% of the samples.

Table 1. Bluegill, Largemouth Bass, and Redear Sunfish catch and size distribution.

	Size		
Species	Class (in)	Number	Percent
	<4.0	1	36.2
Redear	4.0-6.9	155	95.1
Sunfish	7.0-8.9	7	4.3
	9.0+	0	
	<8.0	46	36.2
	8.0-11.9	76	59.8
Largemouth	12.0-13.9	4	3.1
Bass	14.0-14.9	0	
	15.0-17.9	1	0.8
	18.0+	0	
	< 3.0	2	1.7
Bluegill	3.0-5.9	69	58.5
	6.0-6.9	41	34.7
	7.0-7.9	6	5.1
	8.0+	0	

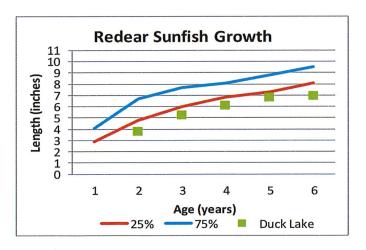


Figure 2.Duck Lake Redear Sunfish growth compared to the 25th and 75th growth percentiles.

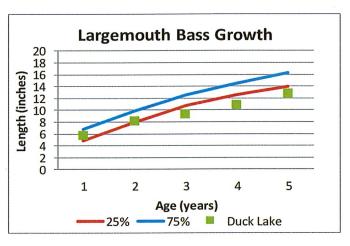


Figure 3. Duck Lake Largemouth Bass growth compared to the 25th and 75th growth percentiles.

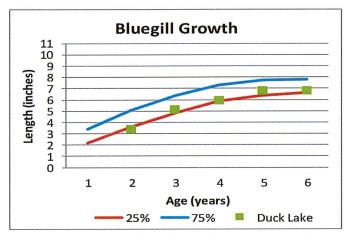


Figure 4. Duck Lake Bluegill growth compared to the 25th and 75th growth percentiles.