

Crooked Lake 2015 Status and Trends Survey



Lake Information: 206 acres; 109 feet max depth **Located:** Columbia City, IN; Whitley and Noble

County

Access: Boat ramp on Northwest shore off of State

Road 109

GPS Coordinates: N 41.27014; W -85.48909 **Amenities:** Restroom; Nature Preserve and Hiking

Trail

Outboard Motor Restriction: 10 mph limit

Fishing Regulations: Statewide

Best Fishing: Sunfish, Largemouth Bass

DNR Contact Information:

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Report Approved By:

Steve Donabauer, Research Biologist, 4/4/2016 Jeremy Price, Regional Supervisor, 9/16/16

Methods

Fish

• Dates: 6/8 - 6/9/2015

• Electrofishing: 0.5 h pulsed DC with 2 dippers

Trap nets: 2 overnight liftsGill nets: 2 overnight lifts

Habitat

Dates: 6/8/15, 8/27/2015

Chemistry: Water clarity and oxygen profiles

• Vegetation: 8/27/2015

Depth Map: <u>Click for link to map</u>

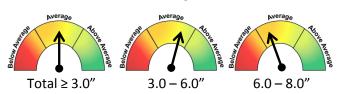
Fish Community

- Overall 374 fish were collected representing 17 species, average for Northern Indiana glacial lakes.
- Bluegill were the most abundant species with 171 individuals that measured up to 9.0 inches in length.
- Twenty-nine percent of the Bluegill were greater than 6.0 inches and up to age-7.
- Eighty-one Largemouth Bass were collected that measured up to 17.7 inches in length.
- Largemouth Bass ranged from age-2-6+, where the average length of an age-4 fish was 10.6 inches.
- Ten Cisco, an environmentally sensitive fish in Indiana, were detected and ranged from 12.6-14.8 inches.
- The abundance of Yellow Perch was similar to other Northern Indiana lakes inhabited by this species.

Summary

Sport Fish

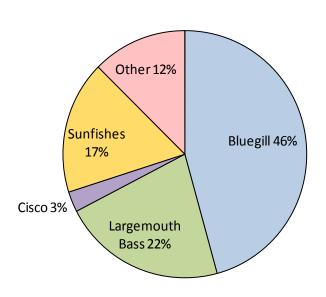
Bluegill



Largemouth Bass



Sport fish metrics for Crooked Lake compared to regional averages among all glacial lakes in northern Indiana.



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



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

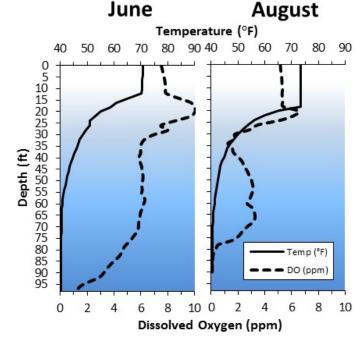


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		Percent Composition by	Length Range
Species	Num.	Num.	(in)
Bluegill	171	45.7	1.1-9.0
Largemouth Bass	81	21.7	1.3-17.7
Warmouth	27	7.2	4.2-7.0
Redear Sunfish	16	4.3	5.6-9.2
Lake Chubsucker	15	4.0	3.5-9.9
Cisco	10	2.7	12.6-14.8
Hybrid Sunfish	10	2.7	5.3-7.8
Yellow Perch	9	2.4	5.4-7.8
Yellow Bullhead	7	1.9	9.6-12.3
Rock Bass	5	1.3	4.3-7.7
Spotted Gar	5	1.3	17.5-32.0
Black Crappie	4	1.1	7.2-8.0
Bluntnose Minnow	4	1.1	1.7-2.3
Brown Bullhead	4	1.1	14.1-16.4
Green Sunfish	3	0.8	3.8-5.4
Redfin Pickerel	2	0.5	10.2-11.6
Bowfin	1	0.3	25.5
Total	374		

•	Trant coverage in the littoral zone was 50% with
	Coontail and Chara sp. occurring most frequently
	(53% and 35% respectively).



Highlights

- Crooked Lake was identified as a Conservation
 Opportunity Area in the State Wildlife Action Plan
 because it supports a population of Cisco that is listed
 as species-of-special-concern in Indiana.
- The DFW should work with conservation partners to limit the effects of nutrient loading in order to sustain cold-water habitat in Crooked Lake.

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Stocking

Species	Years	Average Number Stocked	
Rainbow Trout	1976,1979, 1980, 1983-94	1434	
Lake Trout	1976, 1977, 1979	12746	
Brown Trout	1976, 1977, 1979, 1981-83	1844	

Habitat

- Oxygen (3 ppm) was available for fish down to 90 feet in June and 68 feet in August (well above average for Northern Indiana lakes).
- Water clarity was 13.0 feet in June and 12.5 feet in August (above average).
- Aquatic plants were collected to 21 feet and comprised 15 species (both above average).
- Two non-native species, Eurasian watermilfoil and Curly-leaf pondweed, were collected.



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