

## IDNR – Fisheries2018 Lake Status Summary

## Drake Lake - JEPC SFWA











**Location**: At the Jim Edgar Panther Creek State and Fish and Wildlife Area. 8 miles north of Ashland. 40 miles northwest of Springfield.

Lake history and characteristics: In the early 1990's the Department of Natural Resources purchased 15,575 acres of ground from Commonwealth Edison. Ten old farm ponds on the site were rehabilitated and restocked and three new larger lakes were constructed. Drake Lake is 35 acres with a maximum depth of 42'. The lake was initially stocked in the fall of 2001 with 21,500 bluegill, 8,600 redear sunfish and 4,300 channel catfish and 4,300 largemouth bass followed in July of 2002. The lake filled in late 2003. The lake was initially very clear and is steep-sided making electrofishing surveys sometimes difficult, but has since become more fertile.

Largemouth bass: The largemouth bass population continues to show signs of stunting. Body condition of largemouth bass is well below average (Wr = 84 in 2015) and the population is composed of mainly 10-14" fish. The largemouth bass population characteristics are great for a high quality pan fish population (bluegill and redear sunfish). High densities of small, hungry bass keep sunfish from overpopulating and allow the sunfish that avoid largemouth bass predation to grow faster and attain larger sizes. Also, black crappie have shown up in our surveys for several years. Black crappie were not stocked by IDNR. They were most likely introduced by anglers. Hopefully, the density of the largemouth bass population is high enough to prevent an over population of black crappie that would interfere with the balance of the fish community as a whole.

**Bluegill**: The bluegill population indices for Drake Lake do not meet the criteria for Lake Management Plan Objectives for a "balanced population", but they do fall within desired ranges for a trophy panfish management objective. We collected 51 bluegill/hr of electrofishing during the 2017 spring survey. Bluegill ranged in size from 3.5-8.5" and weighed up to 0.5 lbs. Bluegill body condition has shown to be less than desired the last few years. While large, hungry bluegill will provide anglers excellent fishing opportunities, I'm considering increasing the creel limit to allow anglers to harvest a few more bluegill, while reducing competition among individuals within the population and increase the potential to grow fatter bluegill.

**Redear sunfish**: We collected 38 redear sunfish/hr of electrofishing in the 2017 spring survey. That number is lower than desired, but the survey may have been conducted too late in the spring for optimal redear collection. Redear sunfish ranged in size from 5-10" and weighed up to 0.7 lbs. Body condition of redear sunfish was average in 2017 (Wr = 93). The redear sunfish population should provide anglers with excellent fishing opportunities.

**Channel catfish**: Only five channel catfish were collected in the 2017 survey. Channel catfish in Drake Lake are in excellent body condition (Wr = 107 in 2017). The IDNR will continue stocking non-vulnerable sized fish on alternate years to sustain the channel catfish population.

Fishing Regulations: see the Fishing Regulation Booklet or IFISHILLINOIS.org for updates

2 pole and line fishing only

Largemouth bass - 15" minimum length limit with a creel limit of 3 per day.

Bluegill or redear sunfish – 10 fish per day creel limit.

Channel catfish - 6 fish per day creel limit.

	2007	2008	2009	<u>2010</u>	<u>2011</u>	2012	2013	2014*	2015	2016	2017	Management
Largemouth Bass	spring*	spring*	spring*	summer	spring	spring	summer	fall	spring	spring	spring	Objectives
% >12"	85	46	29	11.9	11.1	8.8	17.5	36.1	38.6	36.6	54.9	40-60
% >15"	15	8	4	0	2.8	0	0	0	0	2	0	15-25
% >18"	0	0	2	0	0	0	0	0	0	0	0	3-5
condition	90	-	88	83	89	83	82	89	87	89	84	90-110
fish/hour EF	113	122	129	65	55	148	46	74	82	114	53	>75
Bluegill												
% >6"	67	45	59	81.8	59	57.1	34.5	0	65.3	67.9	80.4	30-50
% >7"	59	12	46	59.7	52.4	46.4	24.1	0	28	47.6	64.7	10-20
% >8"	24	0	23	20.8	40	21.4	10.3	0	8	8.9	31.4	3-5
condition	93	-	101	101	105	102	104	85	93	92	93	90-100
fish/hour EF	60	62	175	79	106	31	40	79	82	171	51	80-120
Redear sunfish												
% >7"	92	72	39	90.6	88.6	91.8	66	61.5	77.5	91.4	78.9	40-60
% >8"	69	69	27	58.3	84.2	85.9	51.1	53.8	40	77.1	71.1	25-35
% >10"	0	0	0	0	0	5.9	6.4	23.1	0	2.9	2.6	10-20
condition	97	-	101	102	110	108	96	85	96	100	93	90-100
fish/hour EF	49	98	182	96	114	89	47	13	40	35	38	80-120
Channel Catfish												
% >16"	83	90	38	100	50	100	83.3	-	50	33.3	100	50-60
% >18"	83	78	38	100	50	75	66.7	-	50	33.3	100	20-40
% >20"	50	67	13	0	0	75	16.7	-	50	33.3	40	10-20
condition	100	-	102	104	124	95	107	-	98	116	107	90-100
fish/hour EF	8	10	11	4	2	4	6	0	4	3	5	10-20
*night survey												

2014\* - replaced 3-phase AC electrofishing with pulsed-DC electrofishing

## **Fisheries Management Activities Completed:**

-conducted a spring fish population survey on Drake Lake using standard protocols (2-30 min pulsed-DC electrofishing surveys). 6/1

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