



## IDNR Fisheries Lake Status Summary Lake Jacksonville

**Location:** 3 miles south of Jacksonville. 30 miles west of Springfield just off I-72.

**Area:** 476 acres

**Lake history and characteristics:** The Division of Fisheries entered into a formal Cooperative Management Agreement with the City of Jacksonville in 1984 to manage the sport fishery. Due to the poor condition of the fishery, the lake was completely drained, rehabilitated, and restocked in 1986. This project produced one of the best Largemouth Bass fisheries in the State. Lake Jacksonville has a maximum depth of 31 feet, an average depth of 12.5 feet, 18.5 miles of shoreline, maintains abundant aquatic vegetation beds, and has a nice double ramp on the north shore. Below is a list of the fish species that are doing well in Lake Jacksonville.

**Largemouth Bass:** The Largemouth Bass population at Lake Jacksonville remains very good. The 2020 fall electrofishing survey resulted in a higher catch rate of Largemouth Bass (CPUE=55.5) compared to 2019 (CPUE=47.0). The 2018 catch rate (CPUE=100.0) is the second highest in the past five years, falling right behind the 2016 survey where 154.0 Largemouth Bass were collected per hour of electrofishing. In 2020, we collected Largemouth Bass ranging from 4.3-19.8" and weighing up to 5.57lbs. 25% of the catchable Largemouth Bass population exceeded 15" in length, and 18.5% exceeded 18" in 2020. These values were both higher in 2020 compared to 2019 where 10.5% of the population measured 15" or greater, and only 2.6% measured 18" or more. This increase in larger fish is an indication that the 2017 regulation change is improving the Largemouth Bass fishery. The 2019 sample consisted of fish measuring 0.8-18.5" and weighing up to 3.78lbs. Results from the 2018 survey represented bass measuring 3.5-21.7" and weighing up to 6.03lbs. In 2017, we collected bass ranging from 3.5-22" (0.03 - 8.14 lbs.). The 8.14lb bass is the heaviest fish collected in recent years.

Lake Jacksonville is currently under a consumption advisory for Largemouth Bass measuring over 15". No more than 1 meal/week is recommended for women beyond childbearing age and men more than 15 years old, while no more than 1 meal/month is recommended for pregnant or nursing women or women of childbearing age and children less than 15 years old. Check [www.ifishillinois.org](http://www.ifishillinois.org) for updated consumption advisories. Anglers can catch largemouth bass on points, deadfalls, stickups, and along aquatic vegetation beds in the spring and fall with plastic worms, jigs, spinners, crank baits, minnows, crayfish, and worms.

**Black and White Crappie:** The White Crappie is the dominant crappie species in Lake Jacksonville. This fishery appears to be improving. We collected White Crappie at a rate of 21 fish/hour of electrofishing in 2020. Fish measured 6.1-13.4" and weighed up to 1.34lbs. 42.8% of the catchable population exceeded 10" and 9.5% exceeded 12". The 2019 electrofishing survey yielded a CPUE of 14 fish/hour. 55.6% of the 2019 White Crappie exceeded 10" and 14.8% exceeded 12". Electrofishing catch rates have ranged from 14-30 White Crappie per hour from 2016-2020. 44 Black Crappie were collected via electrofishing (CPUE=22) in 2020. Two Black Crappie exceeded 10".

Supplemental spring trap netting surveys have been conducted to better evaluate the crappie fishery in Lake Jacksonville. White Crappie continue to outnumber Black Crappie. In 2019, 15 trap nets were fished for one night each, resulting in 15 net nights of effort. 443 White Crappie and 67 Black Crappie were collected. Catch rates for White Crappie and Black Crappie were 29.5 and 4.5 fish/net night, respectively. 98.0% of the catchable

White Crappie population exceeded 8", 56.9% exceeded 10" and 7.2% were 12" or greater. 83.6% of the Black Crappie population exceeded 8", 14.9% were 10" or greater, and 4.5% reached 12" or longer.

The crappie regulation changed in 2017, to a 25 fish/day harvest limit with no more than 10 fish measuring greater than or equal to 10". This regulation was put into place with a goal to reduce the density of fish measuring less than 10", which will allow for more food sources and faster growth rates of the remaining crappie and bass. Anglers can catch crappie on stickups and submerged structures in the spring and fall using spinners, jigs, and minnows. The largest White Crappie ever collected during an electrofishing survey measured over 15" and weighed 1.8 lbs.

**Channel Catfish:** The Channel Catfish population continues to remain excellent. The lake is large and turbid enough to potentially promote natural reproduction and it receives approximately 7,000 non-vulnerable Channel Catfish from the hatchery system biennially. In 2020, we collected 3 Channel Catfish/hr. electrofishing ranging from 12.8-19.2" in excellent body condition (Wr = 99).

In 2019, 36 Channel Catfish were collected during trap netting efforts. 71.5% of the fish collected exceeded 16". A 2017 supplemental spring trap netting survey turned out to be an excellent Channel Catfish survey which yielded 313 Channel Catfish ranging from 13-30" (0.6-11.3lbs). Eighty-five percent (n=266) of the Channel Catfish sampled during the 2017 trap netting survey exceeded 16".

**Hybrid Striped Bass:** Collecting a good sample of Hybrid Striped Bass via boat electrofishing can be difficult and focused gill net surveys have not been conducted for many years due to time and manpower constraints. Hybrid Striped Bass have not been collected in electrofishing surveys since 2016. The 2017 spring trap netting survey yielded four Hybrid Striped Bass. These fish ranged from 22-27" (6.7-13.7lbs). The average body condition of these fish was excellent. Angler accounts suggest that the population is doing well and is providing good fishing opportunities. Hybrid Striped Bass are stocked annually into Lake Jacksonville, as hatchery production allows.

	2006	2007	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Management Objectives
<b>Largemouth Bass</b>													
% >12"	74.3	64	70.6	70.3	57.5	51.2	43.9	43	33	54.7	38.2	43.0	40-60
% >15"	51.6	38	42	52	31.3	26.5	25.4	25	19	21.1	10.5	25.0	10-20
% >18"	19.1	8	15.4	18.9	16.8	12.4	13.7	15	9	14.7	2.6	18.5	5-10
% >20"	4.8	4	6.8	4.1	6.7	3.5	4.9	8	2	4.2	0.0	0.0	1-5
condition	105	97	94	98	95	95	93	93	91	96	98	90	90-110
fish/hr EF	130	224	122	113	53.2	71.8	61.5	154	55.8	100.0	47.0	55.5	>60
<b>White Crappie</b>													
% >8"	91.8	78.3	93.8	91.2	92.9	70	78.1	91	100	92.1	92.6	88.0	30-50
% >10"	22.4	34.8	37.5	12.2	35.7	25	11	22	37	18.4	55.6	42.8	20-40
% >12"	2.4	0	6.2	0	10.7	6.7	1.4	3	2	2.6	14.8	9.5	5-10
condition	88	89	86	90	89	91	89	86	89	84	91	92.7	90-100
fish/hr EF	29.2	23	24	128	7	22	32.8	30	24.8	19.0	14.0	21.0	70-100
<b>Channel Catfish</b>													
% >16"	90.6	100	75.9	69.6	66.7	63.6	72.2	62	40	50.0	100.0	33.3	40-60
% >18"	78.1	66.7	44.8	52.2	44.4	36.4	38.9	54	35	50.0	100.0	16.6	10-20
% >20"	53.1	66.7	27.6	30.4	33.3	27.3	22.2	23	25	0.0	33.3	0.0	5-10
% >22"	21.9	33.3	13.8	17.4	22.2	18.2	11.1	8	15	0.0	33.3	0.0	1-5
condition	148	101	97	110		96	96	91	97	95	102	99	90-100
fish/hr EF	15.5	3	7.2	11.7		2.8	4.4	3	5	1.0	1.5	3.0	5-15

**Other fish species:** Other species present in this lake include Black Bullhead, Bluegill, Common Carp, Gizzard Shad, Green Sunfish, Hybrid Sunfish, Redear Sunfish, White Sucker, Yellow Bass, and Yellow Bullhead.

**Fishing Regulations:** see the Illinois Fishing Information Booklet or [www.IFISHILLINOIS.org](http://www.IFISHILLINOIS.org) for updates.

- Two pole and line fishing only and each pole must not have more than 2 hooks or lures attached while fishing.
- Carp, buffalo, suckers and carpsuckers may be taken by means of pitchfork and gigs (no bow and arrow devices)
- Largemouth Bass – 3 Fish Daily Harvest Limit, 14-18” Protected Slot Limit
- Black, White, and Hybrid Crappie – 25 Fish Daily Harvest Limit with no more than 10 fish greater than or equal to 10”
- Hybrid Striped Bass – 3 Fish Daily Harvest Limit, 17” Minimum Length Limit
- Channel Catfish – 6 Fish Daily Harvest Limit

**Aquatic vegetation and/or chemical treatment:**

- None conducted by IDNR Fisheries.

**Fisheries Management Activities Completed:**

- Stocked 5,405 4.5” Largemouth Bass in Lake from Rearing Pond on 10/26/2020.
- Conducted an electrofishing survey consisting of (4) 30 minute pulsed-DC runs utilizing a standard sampling protocol on October 7-8, 2020. Water Temperature was 61.8-63.3F. A total of 1,631 fish were collected, representing 12 species.
- Hatchery stocked 7,160 7” Channel Catfish on 7/22/2020.
- Hatchery stocked 2,730 1.4” Hybrid Striped Bass on 6/19/2020.
- Hatchery stocked 21,800 1” Largemouth Bass in Rearing Pond 6/17/2020.
- Trap Netting that was planned for April 2020 was canceled due to COVID.