## Maple Lake Population Survey

Located in Willow Springs approximately 1 mile west of Willow Springs Rd. (104 ${ }^{\text {th }}$ Ave.) at Wolf Rd. and $95^{\text {th }} \mathrm{St}$. Constructed in the 1920's this 60-acre lake drops down to 20.4 feet in the northwest corner. Species found in Maple Lake include Northern Pike, Largemouth Bass, Bluegill, sunfish, Yellow Bass, crappie, Channel Catfish and bullheads. A fishing pier is located on the east side of the lake, and 4 new bump-outs are located in the southwest corner. Boat rentals and bait are available at the concession stand on the southwest side of the lake; however, no private boats are allowed. Designated ice fishing lake.

## Fish Population Survey

Fish population surveys are periodically conducted on Forest Preserves lakes in order to assess the health of the lake and the fish population in it. Surveys last anywhere from a few hours to a few days depending on the size of the lake.

Fish are collected during surveys to assess the health of the population. Several methods are used to collect fish, these include experimental gill nets, Fyke or trap nets and the use of an electro-fishing boat. All fish collected are measured, weighed and a scale sample is collected when applicable. These scale samples are used to age the fish. All fish are then returned to the lake when possible.

Water samples are collected and analyzed for each survey. The information collected over the years will show trends in the lake's health. If any unusual readings are found, further tests may be done, or the Illinois DNR and EPA may be asked to investigate.

The information listed below was collected during the most recent survey. It is only a snapshot in time. Many factors such as temperature, wind, rain and even moonlight can affect the species and number of fish that are collected. The Forest Preserves' Fisheries Section looks at data from many years when assessing a lake's fish population and assumptions from just one year of data therefore should not be made.

The dates of the survey along with the type of equipment used and the length of time it was fished is listed below. The "Total Population" tables \& charts show all species collected and includes not only game fish but also forage fish. A healthy balanced population of forage fish and predatory (game) fish is needed in order to support a healthy overall fish population. Ideally, 30 to $40 \%$ of a lake's total fish population should be made up of forage fish in order to support a healthy predatory fish population. The species of forage fish varies from lake to lake, Gizzard Shad may be the main forage fish in one lake, while Bluegill/sunfish may be the main forage fish in another

Individual species tables are included only for the game fish that were collected. Game fish are those fish most sought after by anglers.

Date of survey: August 2-5, 2022
Electro-fishing time: $\mathbf{5 0}$ minutes
5 Fyke nets fished: 24 hours
o feet of gill net fished: o hours

Total Population Sampled

| Species | Number | Percent |
| :--- | ---: | ---: |
| Bluegill | 260 | $81.76 \%$ |
| Largemouth Bass | 17 | $5.35 \%$ |
| Warmouth | 11 | $3.46 \%$ |
| Yellow Perch | 6 | $1.89 \%$ |
| Black Crappie | 6 | $1.89 \%$ |
| Gizzard Shad | 6 | $1.89 \%$ |
| Channel Catfish | 4 | $1.26 \%$ |
| Green Sunfish | 2 | $0.63 \%$ |
| Warmouth x Green Sunfish Hybrid | 2 | $0.63 \%$ |
| Brown Bullhead | 1 | $0.31 \%$ |
| Yellow Bullhead | 1 | $0.31 \%$ |
| Bluegill x Warmouth Hybrid | 1 | $0.31 \%$ |
| Common Carp | $\mathbf{1}$ | $0.31 \%$ |
| Total | $\mathbf{3 1 8}$ | $\mathbf{1 0 0 . 0 0 \%}$ |



Bluegill

| $1 / 2$-Inch <br> Group | Number <br> Collected | \% of <br> Population | Average Weight <br> lbs. | Age |
| ---: | ---: | ---: | ---: | ---: |
| 3.0 | 1 | $0.38 \%$ | 0.03 | $1+$ |
| - | - | - | - | - |
| 4.5 | 29 | $11.15 \%$ | 0.07 | $1+$ |
| 5.0 | 177 | $68.08 \%$ | 0.10 | $2+$ |
| 5.5 | 42 | $16.15 \%$ | 0.13 | $3+$ |
| 6.0 | 10 | $3.85 \%$ | 0.13 | $3^{+}$ |
| 6.5 | 1 | $0.38 \%$ | 0.13 | $4+$ |
| Totals | $\mathbf{2 6 0}$ | $\mathbf{9 9 . 9 9 \%}$ |  |  |

## Largemouth Bass

| 1/2-Inch <br> Group | Number <br> Collected | \% of <br> Population | Average Weight <br> lbs. | Age |
| ---: | ---: | ---: | ---: | ---: |
| 3.5 | 10 | $58.82 \%$ | 0.02 | $0+$ |
| 4.0 | 3 | $17.65 \%$ | 0.03 | $0+$ |
| - | - | - | - | - |
| 10.0 | 1 | $5.88 \%$ | 0.51 | $2+$ |
| - | - | - | - | - |
| 11.0 | 1 | $5.88 \%$ | 0.59 | $2+$ |
| - | - | - | - | - |
| 14.0 | 1 | $5.88 \%$ | 1.59 | $0^{+}$ |
| - | - | - | - | - |
| Totals | 1 | $5.88 \%$ | 2.08 | $4+$ |

Warmouth

| $1 / 2$-Inch <br> Group | Number <br> Collected | \% of <br> Population | Average Weight <br> lbs. | Age |
| ---: | ---: | ---: | ---: | ---: |
| 2.5 | 2 | $18.18 \%$ | 0.01 | o+ |
| 3.0 | 5 | $45.45 \%$ | 0.02 | $0-1+$ |
| - | - | - | - | - |
| 4.5 | 1 | $9.09 \%$ | 0.04 | $1+$ |
| 5.0 | 1 | $9.09 \%$ | 0.07 | $2+$ |
| 5.5 | 1 | $9.09 \%$ | 0.16 | $3+$ |
| - | - | - | - | - |
| Totals | 1 | $9.09 \%$ | 0.34 | $4+$ |

## Yellow Perch

| 1/2-Inch <br> Group | Number <br> Collected | \% of <br> Population | Average Weight <br> lbs. | Age |
| ---: | ---: | ---: | ---: | ---: |
| 5.0 | 1 | $16.67 \%$ | 0.04 | - |
| - | - | - | - | - |
| 6.0 | 2 | $33.33 \%$ | 0.07 | $1-2+$ |
| 6.5 | 3 | $50.00 \%$ | 0.09 | $2+$ |
| Totals | $\mathbf{6}$ | $\mathbf{1 0 0 . 0 0 \%}$ |  |  |

## Black Crappie

| $1 / 2$-Inch <br> Group | Number <br> Collected | \% of <br> Population | Average Weight <br> lbs. | Age |
| ---: | ---: | ---: | ---: | ---: |
| 5.0 | 1 | $16.67 \%$ | 0.09 | $2+$ |
| - | - | - | - | - |
| 6.5 | 1 | $16.67 \%$ | 0.15 | $2+$ |
| 7.0 | 1 | $16.67 \%$ | 0.12 | $1+$ |
| - | - | - | - | - |
| 8.0 | 1 | $16.67 \%$ | 0.30 | - |
| - | - | - | - | $2+$ |
| 9.0 | 1 | $16.67 \%$ | 0.32 | - |
| Totals | - | - | - | $2+$ |
| 10.5 | 1 | $16.67 \%$ | 0.56 | - |

## Channel Catfish

| $1 / 2$-Inch <br> Group | Number <br> Collected | \% of <br> Population | Average Weight <br> lbs. | Age |
| ---: | ---: | ---: | ---: | ---: |
| 13.0 | 1 | $25.00 \%$ | 0.68 | NA |
| - | - | - | - | - |
| 16.0 | 1 | $25.00 \%$ | 1.20 | NA |
|  | - | - | - | - |
| 17.0 | 1 | $25.00 \%$ | 1.67 | NA |
|  | - | - | - | - |
| Totals | 18.0 | 4 | $100.00 \%$ |  |

Other Species collected

| Species | Number | Length | Weight | Age |
| :--- | ---: | :---: | :---: | ---: |
| Green Sunfish | 2 | $2.5-3.0$ | $0.009-0.02$ | o+ |
| Warmouth x Green <br> Sunfish Hybrid | 2 | 3.5 | 0.03 | $1+$ |
| Brown Bullhead | 1 | 9.0 | 0.34 | NA |
| Yellow Bullhead | 1 | 10.0 | 0.42 | NA |
| Bluegill x Warmouth | 1 | 5.0 | 0.07 | $1+$ |
| Common Carp | 1 | 24.0 | 5.93 | $5^{+}$ |

## Stocking

The Forest Preserves of Cook County works closely with the Illinois Department of Natural Resources to stock fishes within the Forest Preserves lakes. The decision to stock fish and the number of fish stocked is based on many factors including but not limited to type of species, size of fish stocked, size of the lake and type of stocking. The Forest Preserves of Cook County must follow State of Illinois regulation regarding the introduction and stocking of fish. All requests to stock a new species into a District lake must go through the State's Management Recommendation Committee.

Most stocking fall under one of three categories, introduction, supplemental and put-and-take. Introduction stockings are the introduction of a new species within an existing lake or the stocking of a new body of water. Supplemental stockings are the stocking of species already in a lake and are used to supplement a species that may not successively reproduce on its own or has been overfished. Fish stocked in a put-and-take stocking are catchable size fish.

## Size of Fish Stocked

Most of the fish stocked in the lakes of the Forest Preserves of Cook County are young-of-the-year and are provided by the IDNR Hatcheries. Fish from the hatcheries are stocked upon availability and are funded by your fishing licenses.

Channel Catfish are stocked at around 6-inches in most lakes.
The IDNR suspended the production, rearing and stocking of Northern Pike in 2017, Northern stocking resumed in 2020 and were stocked in the 7 to 9 -inch range. Muskellunge range from 10 to 14-inches and are stocked in the Main Pool of Busse Reservoir intermittently.

| Species | $\mathbf{2 0 1 9}$ | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 1}$ | $\mathbf{2 0 2 2}$ | $\mathbf{2 0 2 3}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Channel Catfish | 971 | 1,375 | 550 | 1,375 | 1,375 |
| Northern Pike | - | 245 | 241 | 243 | 240 |

## Fisheries Survey Overview

This year's survey at Maple Lake was not very productive. Very warm water temperatures and excessive aquatic vegetation made electro-fishing very difficult and unproductive. Many of the game fish were in deeper, cooler water or the thick vegetation making them difficult to collect. The heavy vegetation also made it difficult to run our Fyke or trap nets. The majority of the vegetation that hindered this year's survey is Eurasian Watermilfoil, a non-native invasive species that is spreading throughout the state.

Bluegill made up almost $82 \%$ of the fish collected and ranged from 3.0-inches up to 6.5 -inches. Many thousands more were seen but not collected. This large population of Bluegill provides young anglers with a great opportunity to catch fish for hours on end if they choose to.

Largemouth Bass are usually more abundant than the 17 that were collected this year. Hundreds of young-of-year (YOY) and larger bass were seen in the weed beds but were not collected. Only two of the bass collected this year were over the legal size limit of 14-inches compared to three times that many in 2018, Those fish ranged from 14 to 19 -inches. The bass population of Maple Lake is much healthier than indicated in the numbers of fish collected as indicated by the number of YOY and larger bass observed during the survey.

An often overlooked sunfish, the Warmouth is a species that does well in lakes and pond with heavy weed cover. This aggressive species can get quite large for a sunfish and is easily caught on a hook and line. The Warmouth has a stout body that is dark greenish brown. They have dark red eyes with reddish brown streaks radiating from them. It is often mistaken for a Rock Bass by those who are unfamiliar with it.

Both Channel Catfish and Northern Pike are stocked annually. Catfish are seldom collected while electro-fishing and only four were caught in the trap nets. The largest one was just over 18-inches and came in at 2.24 -lbs. However, we have caught larger catfish that approached $15-\mathrm{lbs}$ in the past so bigger ones are out there.

Because of their speed, Northern Pike are very hard to sample since the can out run the shocking boat. The easiest way to sample Northern is with gill nets but that usually results in a large mortality rate and is not worth the effort. In past surveys we have collected Northern up near 10-lbs, so like catfish, some bigger ones are out there.

There are boat rentals at Maple Lake, but private watercraft are not allowed. Renting a boat allows you to fish the out edges of the weed beds. Artificial fish habitat was placed off the point near the $95^{\text {th }}$ Street Overlook by volunteers. These fish habitats hold smaller fish with larger predatory species around them looking for a meal. You can fish these structures either from a boat or cast to from the point. If you row your boat a little farther to the east and off the north shore, you will come across an old stump field that is a great place to find larger bass. While these stumps are submerged, if the water is clear and calm, you can see them rising from the bottom.

