## Axehead Lake Population Survey

Located in Park Ridge at the corner of Touhy Ave and River Rd. just east of the Tri-State Tollway (I294). This 17 -acre lake with a maximum depth of 29.9 feet is stocked every spring and fall with $1 / 2$ to $3 / 4$ pound rainbow trout. Other species found in this lake include Largemouth and Smallmouth Bass, Bluegill, Pumpkinseed Sunfish, bullhead, Yellow Bass, and crappie. Axehead Lake also has some of the best Yellow Perch in the District. Four bump-outs off the parking lots allow access to deeper water. 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.

## Axehead Lake Population Survey

Date of survey: August 28-31, 2022
Electro-fishing time: 45 minutes
Fyke nets fished: o hours
500 feet of gill nets fished: 24 hours

Total Population Sampled

| Species | Number | Percent |
| :--- | ---: | ---: |
| Bluegill | 35 | $56.45 \%$ |
| Largemouth Bass | 15 | $24.19 \%$ |
| Gizzard Shad | 5 | $8.06 \%$ |
| Rainbow Trout | 3 | $4.84 \%$ |
| Northern Pike | 2 | $3.23 \%$ |
| Yellow Perch | 1 | $1.61 \%$ |
| Warmouth | $\mathbf{1}$ | $1.61 \%$ |
| Total | $\mathbf{6 2}$ | $\mathbf{9 9 . 9 9 \%}$ |



## Bluegill

| $1 / 2-$ Inch <br> Group | Number <br> Collected | \% of <br> Population | Average Weight <br> lbs. | Age |
| ---: | ---: | ---: | ---: | ---: |
| 2.5 | 3 | $8.57 \%$ | 0.02 | $0+$ |
| - | - | - | - | - |
| 3.5 | 10 | $28.57 \%$ | 0.03 | $1+$ |
| 4.0 | 15 | $42.57 \%$ | 0.03 | $1+$ |
| - | - | - | - | - |
| 5.0 | 4 | $11.43 \%$ | 0.09 | $1+$ |
| 5.5 | 2 | $5.72 \%$ | 0.14 | $2+$ |
| 6.0 | 1 | $2.86 \%$ | 0.16 | $2+$ |
| Totals | $\mathbf{3 5}$ | $\mathbf{9 9 . 7 2 \%}$ |  |  |

## Largemouth Bass

| $1 / 2$-Inch <br> Group | Number <br> Collected | \% of <br> Population | Average Weight <br> lbs. | Age |
| ---: | ---: | ---: | ---: | ---: |
| 2.5 | 1 | $6.67 \%$ | 0.007 | $0+$ |
| 3.0 | 1 | $6.67 \%$ | 0.004 | $0+$ |
| - | - | - | - | - |
| 6.5 | 2 | $13.33 \%$ | 0.14 | $1-2+$ |
| 7.0 | 1 | $6.67 \%$ | 0.16 | $2+$ |
| 7.5 | 1 | $6.67 \%$ | 0.19 | $2+$ |
| 8.0 | 3 | $20.00 \%$ | 0.22 | $2+$ |
| 8.5 | 2 | $13.33 \%$ | 0.30 | $2+$ |
| - | - | - | - | - |
| 12.5 | 1 | $6.67 \%$ | 1.17 | $3+$ |
| - | - | - | - | - |
| 15.0 | 2 | $13.33 \%$ | 1.76 | $4+$ |
| 15.5 | 1 | $6.67 \%$ | 1.72 | $4+$ |
| Totals | 15 | $\mathbf{1 0 0 . 0 1 \%}$ |  |  |

## Rainbow Trout

| $1 / 2$-Inch <br> Group | Number <br> Collected | \% of <br> Population | Average Weight <br> lbs. | Age |
| ---: | ---: | ---: | ---: | ---: |
| 14.5 | 2 | $6.666 \%$ | 1.11 | o+ |
| - | - | - | - | - |
| 15.0 | 1 | $33.33 \%$ | 1.24 | $1+$ |
| Totals | $\mathbf{3}$ | $\mathbf{9 9 . 9 9 \%}$ |  |  |

## Other Species Collected

| Species | Number | Length | Weight | Age |
| :--- | :---: | :---: | :---: | ---: |
| Northern Pike | 2 | $26.5-30.0$ | $4.40-7.08$ | $3-4+$ |
| Yellow Perch | 1 | 6.5 | 0.10 | $2+$ |
| Warmouth | 1 | 5.5 | 0.14 | $2+$ |

## 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.

Bluegill are stocked at $1 / 2$ to $3 / 4$-inch.

## Axehead Lake Population Survey

Rainbow Trout are stocked in the $1 / 2$ to 1-pound range. Trout stockings are funded by your trout stamps and the FPCC. Spring trout season opens on the 1st Saturday in April, and the fall season opens on the 3rd Saturday in October.

| Species | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 9}$ | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 1}$ | $\mathbf{2 0 2 2}$ | $\mathbf{2 0 2 3}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Rainbow Trout | 4,784 | 4,884 | 4,030 | 4,884 | 4,051 | 3,079 |
| Bluegill | - | - | - | - | 19,825 | 32,264 |

## Fisheries Survey Overview

Axehead Lake is extremely difficult to sample. Due to its depth and conductivity levels electro-fishing tends to be somewhat ineffective. Many Largemouth Bass, Bluegill and Yellow Perch were seen but not collected during our electro-fishing run. These fishes were either too deep for us to reach or were not shocked because of the poor conductivity level. Gill netting can be difficult due to the clarity of the water. Fish are able to see the nets and avoid them especially when there is bright moonlight. Likewise, Fyke or trap nets are ineffective due to the steep drop off this waterbody.

While the number of bass and Bluegill collected was lower than we hoped for, many more were seen while we were electro-fishing indicating that the population is stable. Yellow Perch tends to be more of an open water species and are usually found in deeper water where electro-fishing does not work. In order to sample perch and other open water species require another sampling technique such as gill nets. Because of the clarity of this lake gill netting can be hit or miss. While only one Yellow Perch was sampled, this lake has a healthy population of decent size perch. Anglers usually do well ice fishing for perch in the winter.

Rainbow Trout are stocked in Axehead lake twice a year. While most of these trout are fished out within a month of stocking, we do get some carry over. Trout purchased by the Forest Preserves of Cook County are $1 / 2$ to $3 / 4$ of a pound while trout from the Illinois DNR usually range from $3 / 4$ to 1pound.

The two Northern Pike collected this year where a surprise since this species is not stocked in Axehead Lake. These fish most likely came from the Des Plaines River during a flooding event.

