





FISH SURVEY REPORT

Indian Lake
Prepared For:
Phil Marble
10131 Indian Lake Blvd N
Indianapolis, IN 46236





Introduction

A survey of the fish community and other physical, biological, and chemical factors directly affecting the fish community was completed at Indian Lake on May, 22 2025. The major objectives of this survey and report are:

- 1. To provide a current status report on the fish community of the lake.
- 2. To compare the current characteristics of the fish community with established indices.
- 3. To provide recommendations for management strategies to enhance or sustain the sport fish community.

Water Chemistry

When managing an aquatic ecosystem the quality of water should always be considered first. If a lake or pond is perfectly constructed with abundant food and habitat, but has poor water quality, the fishery will ultimately suffer and never reach it's full potential. Although oxygen is typically not a year-round issue there are certain situations that can cause oxygen to drop to detrimental levels. If parameters such as pH or alkalinity are too low or too high it can put tremendous stress on the organisms living in it or even create a toxic environment all together. Other important parameters to consider are nitrogen and phosphorus levels. Nitrogen and phosphorus are two major nutrients that drive the plant growth in an aquatic ecosystem. If the ratio

Table 1. Selected lake and water quality parameters.

	Surface	Ideal Range
Acres	57	-
Temperature (F)	62.5	-
Dissolved Oxygen (ppm)	8.14	5.0+
рН	7.6	6-9
Alkalinity (ppm)	146	20+
Total Hardness (ppm)	190	20+
Total Phosphorus (ppm)	0.05	0.01-0.09
Total Nitrogen (ppm)	2.43	1.0-10.0

of nitrogen to phosphorus is below 17:1 there is potential for blue-green algae to become abundant. These species of algae can create a stressful environment for fish due to disruption of the food web.

The results of selected physio-chemical parameters from Indian Lake are presented in Table 1. Dissolved oxygen, pH, alkalinity, and hardness levels were all in acceptable ranges. The lake had sufficient oxygen (>5.0 ppm) down to 8 feet. The lake contains relatively uniform temperature and dissolved oxygen throughout the water column (Figure 1). The nitrogen to phosphorus ratio is 49:1 on the surface. This indicates there is a low potential for abundant blue-green algae growth during warmer months of the year. Overall, water quality parameters indicate Indian Lake appears to be capable of supporting a healthy fish population.

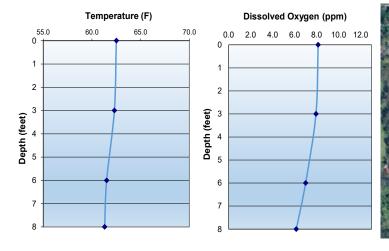


Figure 1. Temperature and Dissolved Oxygen profiles.



Indian Lake



Fish Collection

Fish sampling was done with the use of an electrofishing boat. Electrofishing is simply the use of electricity to capture fish for the evaluation of population status. Electrofishing equipment used in this survey consisted of a 16-foot aluminum boat equipped with a Midwest Lake Electrofishing Systems Infinity Box powered by a 6500-watt portable generator and two booms mounted with Wisconsin style rings. Electrofishing was done in transects around the shoreline and totaled 1 hour of shocking.

All fish collected were placed in water filled containers aboard the sampling boat for processing. Each fish collected was measured to the nearest half-inch. Five fish in each half-inch group were weighed to determine average and relative weights. Relative weight is a condition factor used to determine the overall plumpness of an individual fish. Relative weight values from 90-100 indicate good condition while anything under 90 is considered in poor condition. It can be assumed that fish with higher relative weights are finding enough food and are growing at a higher rate than fish with a lower relative weight.

A total of 203 fish weighing 273.25 pounds and representing thirteen species was collected from Indian Lake. The relative abundance of these species can be found in figure 2 and a full data table can be found at the end of this report. The data collected are adequate for management implications; however, there will be unanswered

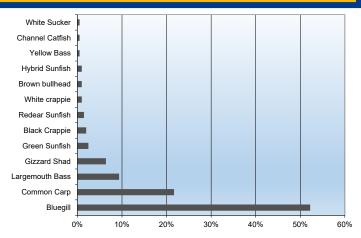


Figure 2. Relative abundance of species collected.



questions regarding aspects of the fish population and other related factors of the biological community in the lake.

All fish numbers used in the report are based on the samples collected and should not be interpreted to be absolute or estimated numbers of fish in the lake.



Largest Largemouth Bass caught during survey.

White Crappie caught during survey.



Predator-Prey Relationship

Even the most diverse systems can be broken down into predator-prey relationships. Often times the Largemouth Bass-Bluegill relationship is the most important. Bluegill are a great prey item for Largemouth Bass because they spawn multiple times a year and are continually creating food for Largemouth Bass. Managing for one species typically involves influencing both and as one of these populations change the other typically changes with it. In a balanced state both Largemouth Bass and Bluegill can experience proper growth rates.

Indian Lake—Bluegill

Bluegill ranged in size from less than 3.0 to 7.0 inches (Figure 3). Approximately 8.5% of Bluegill collected were 3.0 inches or less, indicating reproduction did occur in 2025. There was a small proportion of quality Bluegill collected. This led to a proportional stock density (PSD) of 12, which is below the desired range of 20-40 for Bluegill (proportion of quality fish within a population). The relative weight values of Bluegill collected at Indian Lake ranged from 92 to 147 (Figure 4). Bluegill are limited in top -end at this time.



Bluegill are facing a high level of competition within their population and from other species for resources. These include Common Carp, Gizzard Shad, Green Sunfish, Brown Bullhead, White Sucker, and Channel Catfish. Common Carp are one of the primary contributors to this competition as they make up over 80% of the biomass within the survey sample. This high level of competition has resulted in limited growth and a high abundance of 3.5-6.0 inch Bluegill. These size ranges are ideal forage for Largemouth Bass.

Redear Sunfish were also present within the dataset with a total of 3 individuals caught between 7.0 and 8.0 inches in length. Redear Sunfish are more capable of reaching quality size than Bluegill because they can consume snails and mussels that other species are not able to utilize.

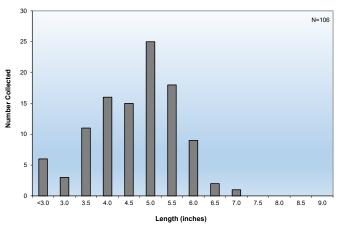


Figure 3. Length frequency distribution of Bluegill

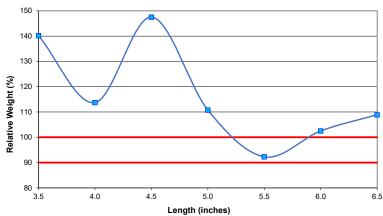


Figure 4. Bluegill relative weights



Predator-Prey Relationship

Largemouth Bass are an opportunistic predator that will eat just about any species of fish they can catch. To keep a Largemouth Bass growing properly there needs to be several different sizes of forage available. This allows the bass to continually find the optimal size of prey as it continues to grow. When the optimal size of prey is available the fish can conserve energy, resulting in a higher growth rate. If the prey is too small a Largemouth Bass could potentially spend more energy chasing a meal than it gains by eating it. This results in skinny and slow growing fish. Managing a forage base to create a variety of sizes is key to creating a healthy and balanced Largemouth Bass population.

Indian Lake—Largemouth Bass

A total of 19 Largemouth Bass ranging in size from 7.0 to 19.4 inches was collected (Figure 5). Approximately 5% of Largemouth Bass that were caught were 8.0 inches in length and smaller. This indicates reproduction and recruitment are suffering. The majority of Largemouth Bass sampled were greater than 13.0 inches in length. This led to a PSD of 72 for Largemouth Bass, which is above the desired range of 40-60. Relative weights ranged from 87 to 111 (Figure 6). The majority of relative weights fell above the 90 mark. This is an indicator that most Largemouth Bass are finding enough food.



Largemouth Bass

Largemouth Bass were found to be in relatively low abundance. This is due in large part to low recruitment within the Largemouth Bass fishery. This low recruitment is due to a high abundance of forage fish such as Bluegill, Gizzard Shad, and Green Sunfish. These species consume Bass fry and eggs and compete with young-of-year Largemouth Bass for food resources. These dynamics greatly reduce the spawning success of Largemouth Bass. Common Carp are especially impactful as they are known nest predators and extremely abundant within the fishery.

This low abundance is a desired state if a trophy Large-mouth Bass fishery is part of the goal. Low competition for the abundant forage fish resulted in good relative weights across each size classes. Stocking additional Largemouth Bass would increase the catch rate of Largemouth Bass and improve the growth rate of Bluegill.

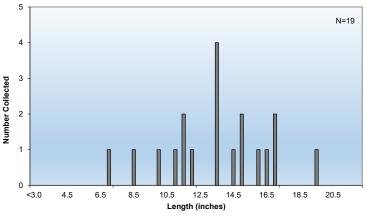


Figure 5. Length frequency distribution of Largemouth Bass

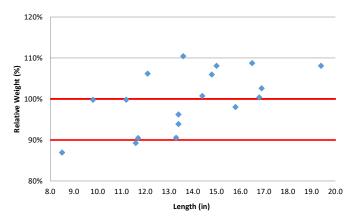


Figure 6. Largemouth Bass relative weights



Bluegill Comparison

Bluegill have seen a shift towards a higher abundance of small and intermediate-sized Bluegill (Figure 7). The increased abundance within these size classes is due in large part to the reduced abundance of the Largemouth Bass. Reducing predation pressure on Bluegill will increase the abundance of individuals in

these intermediate size classes. This competition has resulted in fewer individuals reaching quality size. This has resulted in PSD shifting from 57(2021) to 12(2025). Relative weight values were similar across both surveys (Figure 8). Increasing the amount of predatory fish present in Indian Lake would increase the abundance of Bluegill that can reach quality size.

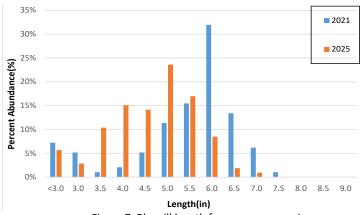


Figure 7. Bluegill length frequency comparison

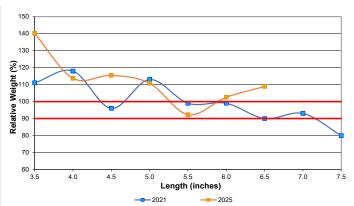


Figure 8. Bluegill relative weight comparison

Largemouth Bass Comparison

Largemouth Bass reproduction and recruitment have been low in recent years. Common Carp, Gizzard Shad, Green Sunfish, and Bluegill greatly impact Largemouth Bass recruitment. This is apparent from the low abundance of <8.0 inch individuals in 2025 compared to 2021 (Figure 9). Largemouth Bass catch rate has dropped from 51/hr. (2021) to 19/hr. (2025). Generally, for a

Quality/Trophy Largemouth Bass fishery the desired electrofishing catch rate is between 40-50/hr. Supplemental stocking efforts will attempt to get Largemouth Bass catch rate within that range. Largemouth Bass relative weights were similar across both surveys (Figure 10). Increasing Largemouth Bass abundance will improve the angler catch rate of Largemouth Bass and can help to improve balance within the fishery.

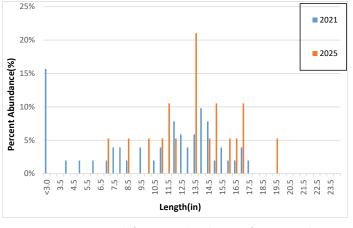


Figure 9. Length frequency distribution of Largemouth Bass

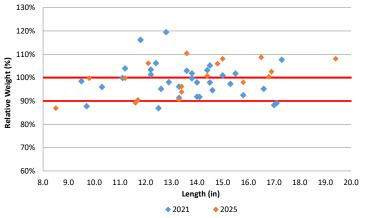


Figure 10. Largemouth Bass relative weights



Predator-Prey Relationship (Gizzard Shad)

Gizzard Shad were also found in Indian Lake. This is another commonly known forage species that can make up a large percentage of a predators diet when available at smaller sizes, but can often come with more negatives than positives. The first issue caused by Gizzard Shad is the reduction in recruitment. Gizzard Shad are a filter feeding species that consume large amounts of phytoplankton and zooplankton. Unfortunately, this is exactly what all larval fish eat as soon as they are hatched. When Gizzard Shad are in large abundances they can compete with these larval fish for food and greatly impact recruitment of species such as Largemouth Bass.

In some lakes Gizzard Shad can reproduce very quickly and grow extremely fast. These may sound like great attributes for a forage fish, but often times Gizzard Shad grow too large for Largemouth Bass to consume. While the juvenile size classes of Gizzard Shad are beneficial as forage, they provide no benefit at adult size classes and can have negative impacts on water quality. Without a large enough predator to consume them these fish will never transfer their biomass up the food chain into a more desirable fish. Due to these issues the Gizzard Shad population should be closely monitored and the following management options should be considered.

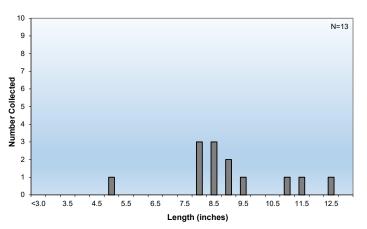


Figure 11. Length frequency distribution of Gizzard Shad



Gizzard Shad

Management Options

There are only a few options when trying to manage Gizzard Shad populations. One method is chemical eradication. This can be very costly on large lakes and results in dead fish throughout the lake. The other method commonly used to manage Gizzard Shad in impoundments is the supplemental stocking of large predators such as Hybrid Striped Bass or Muskellunge. By introducing a large apex predator some of the adult sized Gizzard Shad can then be consumed. This does not always improve the recruitment issue previously discussed, but it does provide an additional angling opportunity to the lake. If the Gizzard Shad population is large enough these stockings can be done with little to no impact on the existing Largemouth Bass fishery.

Indian Lake Gizzard Shad

Gizzard Shad within Indian Lake primarily occupied size ranges that were 8.0 inches in length and larger (Figure 7). Gizzard Shad of these sizes are too large for the majority of Largemouth Bass to consume. Gizzard Shad are likely contributing to the low abundance and recruitment of Largemouth Bass. Supplementally stocking Largemouth Bass will help to mitigate the low recruitment in recent years.

www.aquaticcontrol.com



Harvest

Harvesting fish is often one of the most important and under utilized management practices in a pond or lake. Harvesting, or culling, fish is simply the act of intentionally removing fish from a specific population to decrease competition among the remaining individuals. The culture of catch and release bass fishing started in the 1970's and still has a strong hold on fisherman today. There is a misconception that taking a fish out of a system will be detrimental to the population and if released someone could catch that fish again after it has "grown up." The reality is in some situations there is too much competition and the next time that fish is caught it could be the exact same size a year later. By removing that fish, and others, it leaves more food available for the remaining individuals to continue to grow each and every year.

Ponds and lakes can both become overrun with predators or prey. Each scenario presents a different set of problems. In a predator (Largemouth Bass) dominant system prey populations are decimated and the lack of food results in slow or stunted growth. In a prey (Bluegill) dominated system spawning and recruitment success of other species can be negatively impacted due to egg predation or direct competition with young-of-year fish, along with slow growth within the population.

Fixing these issues requires targeted annual harvest. In an unbalanced system generally only one species requires a

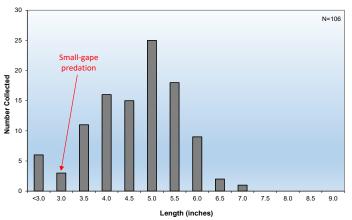


Figure 12. Bluegill length frequency distribution



Example of Stunted Largemouth Bass

heavy amount of the harvest, while in a balanced system fish should be removed from most populations to maintain a continuous level of growth.

Indian Lake continues to be largely dominated by Common Carp and other undesirable species. Common Carp should be removed when caught. Large-scale Common Carp removals can take place, but it is unknown what all impacts will occur. A significant reduction in Common Carp could result in increased weed growth.

Black and white Crappie are the primary sport fish that would benefit from some level of harvest. The low abundance of Bluegill <3.5 inches in length is often a strong indication of a high level of small-gape predation (Figure 12). This can be due to multiple species, but Black and White Crappie are large contributors. Harvesting <12.0 inch Crappie will reduce competition for food and improve the quality of the Crappie fishery.

www.aquaticcontrol.com



Structure and Habitat

Structure and habitat are an extremely important factor to consider no matter what body of water is being managed. Just like anything else, the amount of structure in a lake should be kept in moderation. Too much or too little can lead to predictable scenarios. When very little or no structure is available Largemouth Bass spend too much time roaming around looking for food instead of saving energy and waiting near a piece of structure for food to swim by. The other end of the spectrum allows so many places for Bluegill or other prey species to hide that Largemouth Bass can't efficiently catch their prey. In both scenarios Largemouth Bass tend to have low relative weights even with proper harvest rates in place. In most cases roughly 20% of the shoreline containing structure is sufficient. This number can vary depending on the complexity of the cover.

Adding structure to a pond can be beneficial in a variety of ways. It can be a great way to increase the survival of small juvenile fish. This provides a forage base with a wide range of sizes available for your predators. Another benefit of adding structure to a pond is that they attract fish. Strategically placing structure can give you places that you can reliably catch fish.

Fish structure can take many different forms. Aquatic vegetation, brush piles, Christmas trees, and a variety of manmade structures can all be utilized by fish. All of these different structure types have different benefits that make them good management options. Aquatic vegetation



Pickerelweed



Largemouth Bass utilizing a Mossback Root Wad Kit grows on its own but can be hard to manage at times. Brush piles and Christmas trees are often free, but will break down over time and need to be replaced. Manufactured structure can be costly initially, but will last a lifetime. Variety is important when assessing structure in a body of water. Adding structures of varied complexity and in varied depth can help to provide habitat to a variety of fish at different stages of life.

Indian Lake had an abundance of shallow water habitat in the form of docks, laydowns, overhangs, and water willows. Maintaining this near-shore structure will help to keep protective structure for young and developing forage fish. Sinking brush piles or artificial structure in accessible areas for anglers can help to improve fishing access but is not necessary ecologically.

Indian Lake has a very low average depth with only one deep section near the dam. If submersed vegetation were to take hold, it would likely become dominant throughout the entire basin.



Summary/Recommendations

Indian Lake contains a diverse fish assemblage with quality Largemouth Bass, Redear Sunfish and Channel Catfish. Other sportfish present within the dataset were both Black and White Crappie. The fishery continues to be dominated by undesirable fish species, especially Common Carp. Common Carp made up approximately 22% of the total catch rate and 80% of the total catch weight. Removing Common Carp would reduce competition with sport fish, but it would take a massive amount of removal to make a large impact. Large-scale removal would be possible, but could result in a very high abundance of vegetative growth.

Indian Lake had an abundance of Water Willow present in shallow water. This vegetation is important cover for young and developing fish. Allowing Water Willow to continue to grow in low-nuisance areas will be help to maintain the quality of habitat within the fishery. Overhangs, lay-downs and docks also provide habitat for sport fish to associate with. Additional structure is not needed at this time, but could be put in areas accessible to anglers to create fish attractors.

Harvest is not a high priority within the fishery. Harvesting <12.0 inch Black and White Crappie can help to increase the amount of Crappie that reach quality size. Bluegill are overabundant and can be harvested, but few Bluegill were sampled within a desired harvest range. Largemouth Bass and Redear Sunfish should be released when caught. Common Carp, Yellow Bass, Bullhead, and Green Sunfish should be removed when caught.

Supplemental Largemouth Bass stocking should take place starting in the Fall of 2025. Largemouth Bass are showing clear signs of low recruitment and were on the cusp of needing supplemental stocking in 2021. The catch rate has dropped significantly between the two surveys and very little replacement has occurred. Largemouth Bass stockings should take place each Fall for the next three years. This will help to create artificial year classes of Largemouth Bass. Largemouth Bass stocking can then be re-evaluated in 2028 when a follow-up survey is conducted. Parasites were noted in the tails of multiple fish during the survey. Redear Sunfish stocking is recommended to better establish this species in Indian Lake and help to reduce parasitism.

Predation from birds such as Double-Crested Cormorants and White Pelicans continues to be a concern from anglers. It is difficult to measure what species are most impacted because fish populations will have natural shifts from year to year. In a shallow lake such as this, these birds probably feed most on species that are most abundant such as Bluegill, Gizzard Shad, and Crappie. All of these species appear to be abundant and reproduce at a high rate, which makes them very resilient to this predation. Largemouth Bass have likely been predated upon to a lesser degree, but Largemouth Bass abundance and recruitment are significantly lower, so their population would be impacted to a much greater degree. There is no way to say for certain if these birds have made an impact on the Largemouth Bass fishery, especially since Largemouth Bass recruitment has been low for several years.



Summary/Recommendations

The following recommendations, **listed in order of importance**, will help protect and enhance the fishery in Indian Lake:

- 1. Stock 600 4-6" Largemouth Bass each Fall for the next three years.
- 2. Largemouth Bass Bag limit: Catch and Release.
- 3. Redear Sunfish Bag limit: Catch and Release.
- 4. Encourage harvest of <12.0 inch Black and White Crappie.
- 5. Remove Common Carp when caught.
- 6. Remove Bullhead Catfish when caught.
- 7. Consider stocking 8,500 3-4" Redear Sunfish over a 3 year span.
- 8. Conduct a Fisheries analysis survey in 2028.



Other Species Present

Channel Catfish (Ictalurus punctatus)

Channel Catfish are members of the Ictaluridae family. Channel Catfish can be problematic to a fishery if overabundant, but in small or moderate abundances, rarely cause problems. They are often desirable sportfish and can be good table fare. Channel Catfish are typically not represented very well in electrofishing surveys, and can often be more abundant than the data shows. Channel Catfish often do not have a high level of natural reproduction in small ponds and some lakes, and therefore need to be stocked if desired in many cases.



Channel Catfish



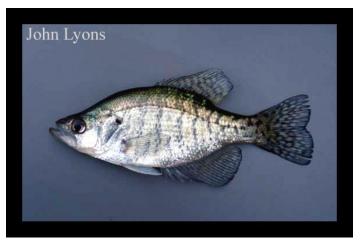
Hybrid Sunfish

Hybrid Sunfish (Lepomis spp. X Lepomis ssp.)

Hybrid sunfish are members of the Centrarchidae (Sunfish) family. Hybrid sunfish are often a cross between Green Sunfish and Bluegill when stocked from a hatchery. Though this is the most common cross, many different species of sunfish can hybridize if both are present. Hybrid sunfish can be desirable because they can grow to very large sizes quickly, but over time they can cause problems because through generations of reproducing some of the offspring revert back to fish resembling Green Sunfish. Any hybrid sunfish caught should be removed.

White Crappie (Pomoxis annularis)

White Crappie are members of the Centrarchidae(Sunfish) family. White Crappie are difficult to manage in a pond setting and are often advised against in systems that are less than 10 acres. This is due to White Crappie's tendency to become overabundant and stunted in smaller systems. In situations where Crappie are to be stocked into a smaller body of water, Black Crappie would be the preferred species because they tend to have a lower rate of reproduction. White Crappie eat a variety of organisms while developing into adulthood, and then as adults tend to only eat small fish. White Crappie tend to sit deeper in the water column and often do not show up well in electrofishing surveys.



White Crappie



Other Species Present

Black Crappie (*Pomoxis nigromaculatus*)

Black Crappie are members of the Centrarchidae(Sunfish) family. Black Crappie can be difficult to manage in a pond ecosystem and in many cases are advised against in systems less than 10 acres. This is due to the tendency of Black Crappie becoming overabundant and stunted in smaller systems. In situations where Crappie are stocked, Black Crappie are usually the more advisable species due to lower reproduction in comparison to White Crappie. Black Crappie eat a variety of organisms while developing into adulthood, and then as adults tend to only eat small fish. Black Crappie tend to sit deeper in the water column and often do not show up well in electrofishing surveys.



Black Crappie

Yellow Bass (Morone misissippiensis)

Yellow Bass are a member of the Moronidae (Temperate Bass) family. Yellow Bass area common species found in midwestern rivers, streams and reservoirs. Yellow Bass feed on a variety of prey including, crustaceans, fish eggs, zooplankton, and small fish. Yellow Bass are not generally considered to be a desirable fish species in most circumstances because they can become abundant and can compete for resources with other species. Unlike their close relative, the White Bass, Yellow Bass are not often pursued by fisherman.



Yellow Bass

Common Carp (*Cyprinus carpio*)

Common Carp is in the Cyprinidae (Minnow) Family. Common Carp are a non-native, invasive species that can cause several problems. They consume a lot of food resources and tend to uproot aquatic vegetation, reducing water quality. Common Carp are also known to have detrimental effects on reproduction of many fish species by damaging spawning grounds. Common Carp should be removed when caught in order to reduce their impact on the fishery.



Common Carp



Other Species Present

Brown Bullhead (Ameiurus nebulosus)

Brown Bullhead is in the Ictaluridae (Catfish) Family. Brown Bullhead will eat a variety of food items such as macroinvertebrates, small fish, detritus, etc. Brown Bullhead are not generally considered a desirable fish species. They can become very abundant and compete with more desirable species. They do not grow very large and are not often used as table fare.



Brown Bullhead

Green Sunfish

Green Sunfish Lepomis Cyanellus

Green Sunfish are a member of the Centrarchidae (Sunfish) family. Green Sunfish can be aggressive and competitive with Bluegill and other species for food and resources therefore they are generally considered an undesirable species. Green Sunfish look superficially like Bluegill. They can easily be distinguished by their larger mouths and more rounded pectoral fins.

White Sucker (Catostomus commersonii)

White Sucker are a member of the family Catostomidae (Sucker family). White Sucker usually have light coloration during most of the year, with darker coloration during the Spring spawn. White Sucker scales start small near the head and progressively get larger as they approach the tail. White Sucker have subterminal mouths and consume a variety of food items including, invertebrates, eggs, detritus, and small fish. In lake systems suckers are often not considered to be desirable, though they likely have very little negative impact.



White Sucker



Fish Collection Tables

SIZE	NUMBER	PERCENTAGE	AVERAGE	TOTAL	WS	RELATIVI
GROUP			WEIGHT	WEIGHT		
(IN)			(lbs.)	(lbs.)		WEIGHT
<u>LUEGILL</u>						
<3.0	6	5.66%	0.01	0.06	_	_
3.0	3	2.83%	0.02	0.06	0.02	_
3.5	11	10.38%	0.04	0.42	0.03	140
4.0	16	15.09%	0.05	0.77	0.04	114
4.5	15	14.15%	0.09	1.38	0.06	147
5.0	25	23.58%	0.10	2.45	0.09	111
5.5	18	16.98%	0.11	2.02	0.12	92
6.0	9	8.49%	0.17	1.49	0.16	103
6.5	2	1.89%	0.23	0.46	0.21	109
7.0	1	0.94%	-	-	-	-
TOTAL	106	0.0470		9.11		
_ARGEMOUTH BASS						
7.0	1	5.26%	0.22	0.22	0.16	-
8.5	1	5.26%	0.26	0.26	0.30	87
10.0	1	5.26%	0.47	0.47	0.50	94
11.0	1	5.26%	0.72	0.72	0.68	106
11.5	2	10.53%	0.74	1.47	0.78	94
12.0	1	5.26%	0.98	0.98	0.90	109
13.5	4	21.05%	1.26	5.04	1.31	96
14.5	1	5.26%	1.62	1.62	1.64	99
15.0	2	10.53%	1.92	3.84	1.83	105
16.0	1	5.26%	2.12	2.12	2.25	94
16.5	1	5.26%	2.70	2.70	2.48	109
17.0	2	10.53%	2.70	5.39	2.73	99
19.5	1	5.26%	4.50	4.50	4.23	106
TOTAL	19			29.33		
Brown Bullhead						
8.5	1	50.00%	0.31	0.31		
13.0	1	50.00%	1.20	1.20		
TOTAL	2			1.51	_	
White Crappie						
12.5	1	50.00%	-	-		
13.5	1	50.00%	1.25	1.25		
TOTAL	2			1.25	_	



Redear Sunfish				
7.0 8.0	1 2	33.33% 66.67%	0.22 0.35	0.22 0.69
TOTAL	3			0.91
Green Sunfish				
<3.0	1	20.00%	0.01	0.01
3.0	1	20.00%	0.03	0.03
3.5 5.5	1 2	20.00% 40.00%	0.06 0.13	0.06 0.25
TOTAL	5	40.0070	0.13	0.25
Common Carp				
15.0	1	2.27%	1.65	1.65
15.5	1	2.27%	2.26	2.26
16.0	2	4.55%	2.30	4.60
16.5 18.0	1 1	2.27% 2.27%	2.26 2.84	2.26 2.84
18.5	1	2.27%	2.93	2.93
19.0	1	2.27%	3.69	3.69
19.5	3	6.82%	3.48	10.43
20.5	8	18.18%	4.37	34.98
21.0	1	2.27%	4.69	4.69
21.5	4	9.09%	4.67	18.66
22.0	2	4.55%	5.13	10.25
22.5 23.0	4	9.09%	5.14	20.56
23.0	4 4	9.09% 9.09%	5.49 6.14	21.96 24.55
24.5	1	2.27%	6.86	6.86
26.0	2	4.55%	8.93	17.85
26.5	1	2.27%	9.25	9.25
27.0	1	2.27%	8.45	8.45
29.5	1	2.27%	11.56	11.56
TOTAL	44			220.28
Gizzard Shad				
5.0	1	7.69%	0.05	0.05
8.0	3	23.08%	0.17	0.50
8.5	3	23.08%	0.20	0.60
9.0	2	15.38%	0.25	0.49
9.5	1	7.69%	0.28	0.28
11.0 11.5	1 1	7.69% 7.69%	0.44 0.56	0.44 0.56
12.5	1	7.69% 7.69%	0.83	0.83
TOTAL	13		2.00	3.75



Black Crappie				
6.5	2	50.00%	0.15	0.29
7.0	2	50.00%	0.17	0.34
TOTAL	4			0.63
Hybrid Sunfish				
4.0	1	50.00%	0.05	0.05
5.0	1	50.00%	0.08	0.08
TOTAL	2			0.13
Yellow Bass				
7.5	1	100.00%	0.20	0.20
TOTAL	1			0.20
Channel Catfish				
Chainlei Cathsh				
23.5	1	100.00%	5.64	5.64
TOTAL	<u>'</u> 1	100.0070	3.04	5.64
101712	•			0.01
White Sucker				
15.0	1	100.00%	1.17	1.17
TOTAL	1			1.17

Species	Scientific Name	N	%N	Size Range (in.)	Total weight (lbs.)	%Wt.	N/hr.
Bluegill	Lepomis macrochirus	106	52.22%	<3.0-7.0	9.11	3.32%	106
Common Carp	Cyprinus carpio	44	21.67%	15.0-29.5	220.28	80.32%	44
Largemouth Bass	Micropterus salmoides	19	9.36%	7.0-19.4	29.33	10.69%	19
Gizzard Shad	Dorosoma cepedianum	13	6.40%	5.0-12.5	3.75	1.37%	13
Green Sunfish	Lepomis cyanellus	5	2.46%	3.0-5.5	0.35	0.13%	5
Black Crappie	Pomoxis nigromaculatus	4	1.97%	6.5-7.0	0.63	0.23%	4
Redear Sunfish	Lepomis microlophus	3	1.48%	7.0-8.0	0.91	0.33%	3
White crappie	Pomoxis annularis	2	0.99%	12.5-13.5	1.25	0.46%	2
Brown bullhead	Ameiurus nebulosus	2	0.99%	8.5-13.0	1.51	0.55%	2
Hybrid Sunfish	Lepomis ssp. X Lepomis ssp.	2	0.99%	4.0-5.0	0.13	0.05%	2
Yellow Bass	Morone misissippiensis	1	0.49%	7.5	0.20	0.07%	1
Channel Catfish	Ictalurus punctatus	1	0.49%	23.5	5.64	2.06%	1
White Sucker	Catostomus commersonii	1	0.49%	15.0	1.17	0.43%	1
Total		203			274.25		

N = number of individuals

%N = percent number of a species as compared to the total number of fish collected

%Wt = percent weight of a species as compared to the total weight of all fish collected

N/hr. = catch rate of species (number of fish of a species collected per hour of electrofishing effort)