

**BAYLES LAKE
HOMEOWNERS ASSOCIATION
ELECTRO-FISHING
SURVEY RESULTS
JUNE 4, 2020**



**MARINE BIOCHEMISTS
2024 EAGLE STREET, SUITE A
NORMAL, IL 61761**

Survey Background

On June 4, 2020, a survey of the fish population within Bayles Lake in Loda, IL, was conducted utilizing an electro-fishing boat. The lake is approximately 132 surface acres in size. The boat was equipped with three fiberglass rods with electrodes, which extended out in front of the boat creating an electric field powered by an onboard AC generator with a DC pulse converter. Fish swimming through this electric field were briefly stunned allowing them to be netted and placed in a holding tank. Shocking surveys were completed in 4 designated areas along the shoreline of the lake. The size and species of each fish sampled were recorded for data analysis, and recommendations for any changes to harvesting, stocking, and or structure enhancements are provided at the end of this report.

A total of 457 fish of 11 different species in the lake were sampled. Water clarity was poor with a Secchi depth reading of only 1 foot due to a planktonic bloom, but dissolved oxygen was present down to 13 feet. At 13 feet, the measurement was only 2 ppm, which is below the range comfortable for most fish species.

Survey Summary Information

Species sampled during the survey included largemouth bass, bluegill, green sunfish, channel catfish, white crappie, bullhead, yellow bass, wall-eye, gizzard shad, golden shiner and striped bass. Data accumulated during the survey was processed, analyzed and graphically represented in the following graphs and charts.

Descriptions of the listed fish are provided in the addendum section (pp. 13-23).

Electro-Fishing Survey Results—June 4, 2020

Size (")	#LMB	#CCF	#BG	#GSF	#WC	#YBH	#GSH	#YB	#WLY	#SB	#GS
4	-	-	3	1	-	-	-	-	-	-	-
4.5	-	-	7	1	-	-	3	-	-	-	-
5	-	-	17	-	-	-	12	2	-	1	-
5.5	-	-	18	1	-	-	10	1	-	-	-
6	-	-	17	1	-	-	3	15	-	-	1
6.5	-	-	28	-	1	-	4	31	-	-	-
7	-	-	11	-	1	-	72	26	-	-	-
7.5	-	-	4	-	5	-	60	8	-	-	-
8	-	-	-	-	3	1	30	-	-	-	-
8.5	-	-	-	-	-	-	10	-	-	-	-
9	-	1	-	-	-	-	15	-	-	-	-
9.5	-	-	-	-	-	-	4	-	-	-	-
10	-	1	-	-	-	-	11	-	-	-	-
10.5	-	-	-	-	-	-	2	-	-	-	-
11	-	-	-	-	-	-	4	-	-	-	-
11.5	-	1	-	-	-	-	2	-	-	-	-
12	-	2	-	-	-	-	-	-	-	-	-
12.5	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-
13.5	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-
14.5	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-
15.5	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-
16.5	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-
17.5	1	-	-	-	-	-	-	-	-	-	-
18	1	-	-	-	-	-	-	-	-	-	-
18.5	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-
19.5	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-
20.5	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-
21.5	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-
22.5	-	-	-	-	-	-	-	-	1	-	-
23	-	-	-	-	-	-	-	-	1	-	-
23.5	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	1	-	-
Totals	2	5	105	4	10	1	242	83	3	1	1

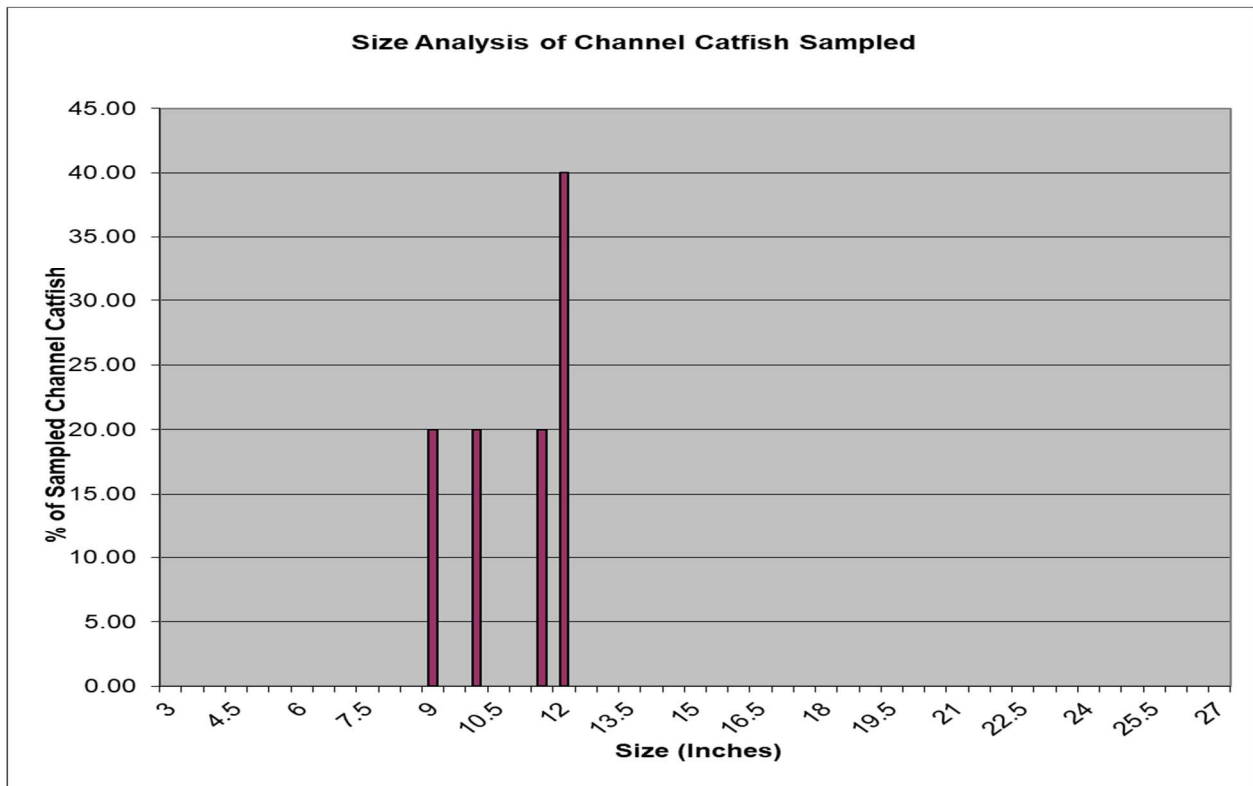
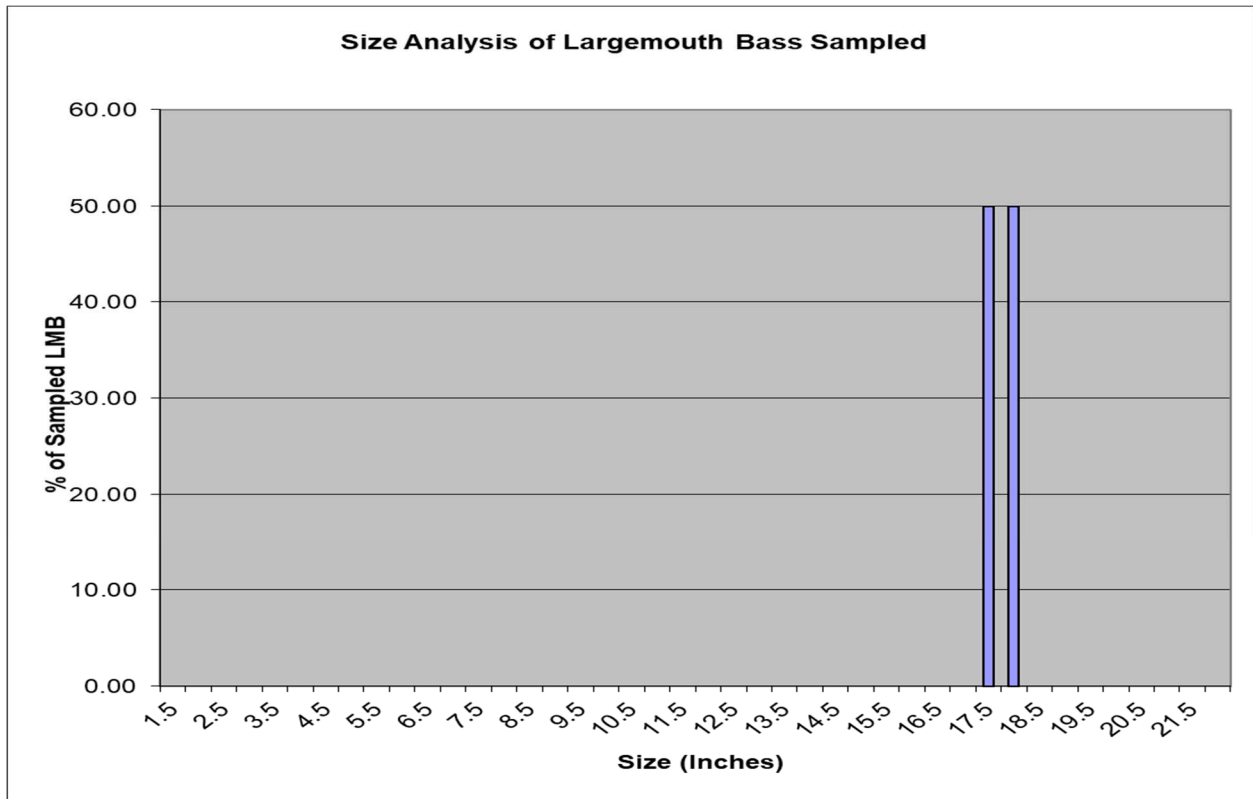
LMB = Largemouth Bass
 GSF = Green Sunfish
 GSH = Gizzard Shad
 SB = Striped Bass

CCF = Channel Catfish
 WC = White Crappie
 YB = Yellow Bass
 GS = Golden Shiner

BG = Bluegill
 YBH = Yellow Bullhead
 WLY = Walleye

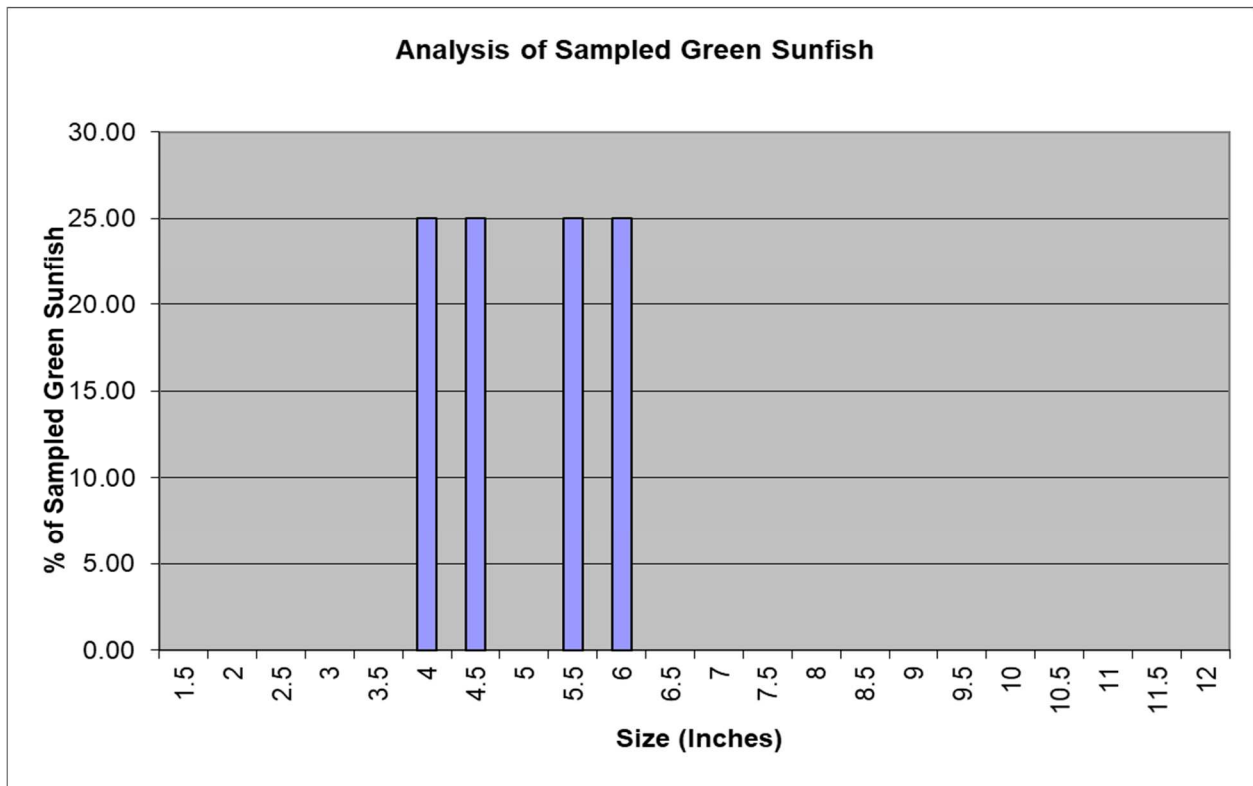
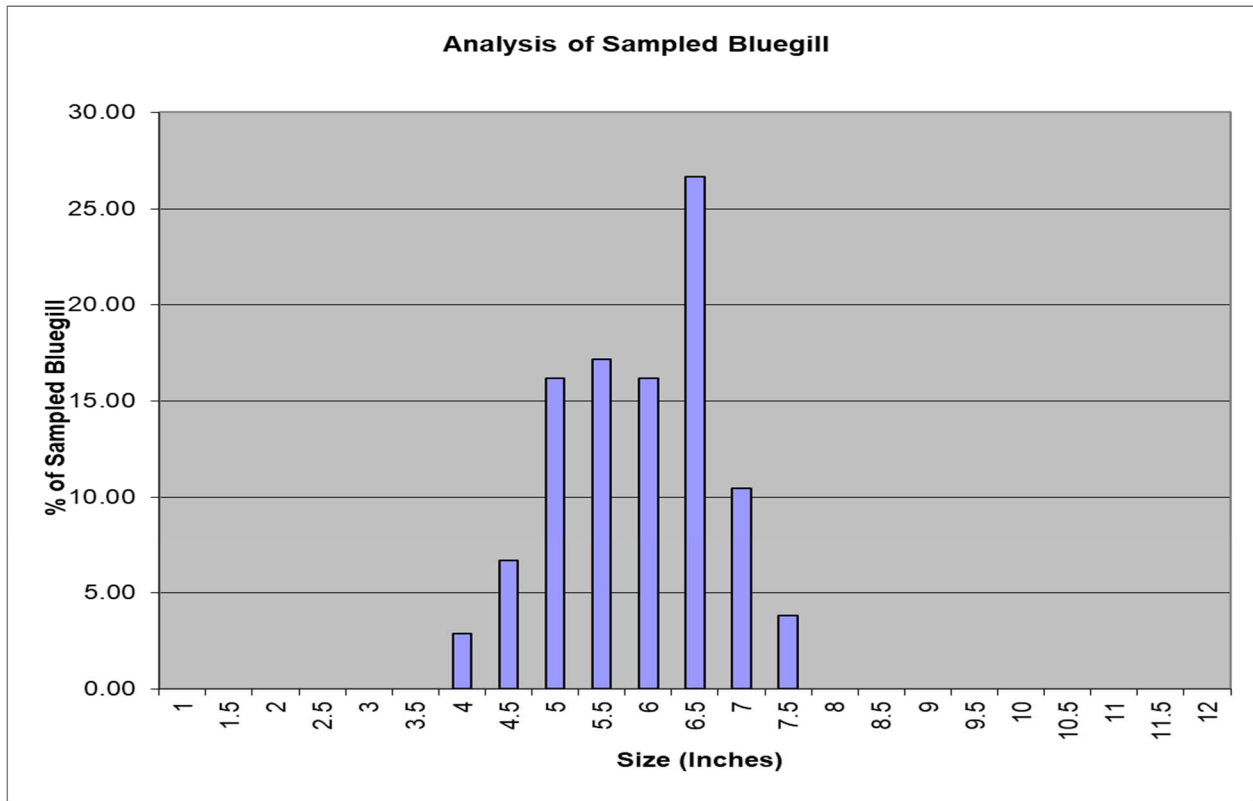
MARINE BIOCHEMISTS
2024 EAGLE STREET,
SUITE A
NORMAL, IL 61761
(309) 452-0461

Graphic Electro-Fishing Survey Results—June 4, 2020



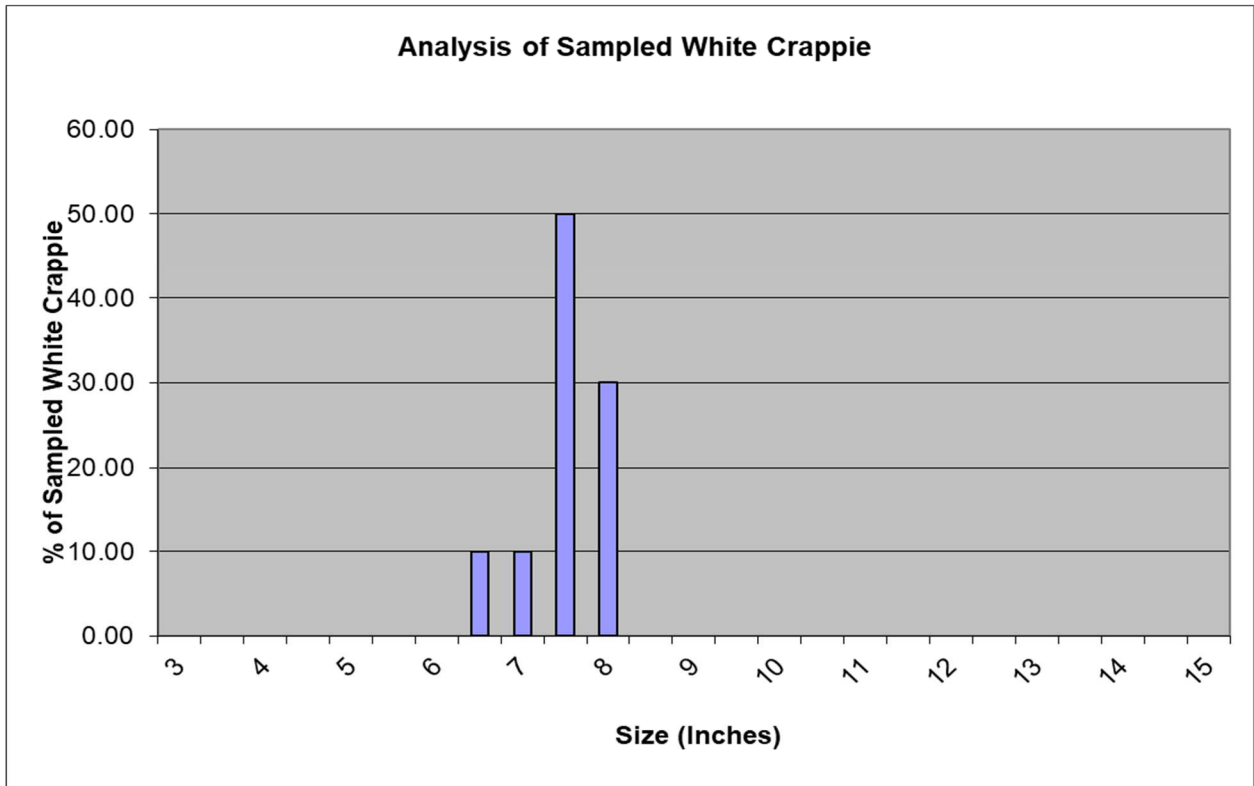
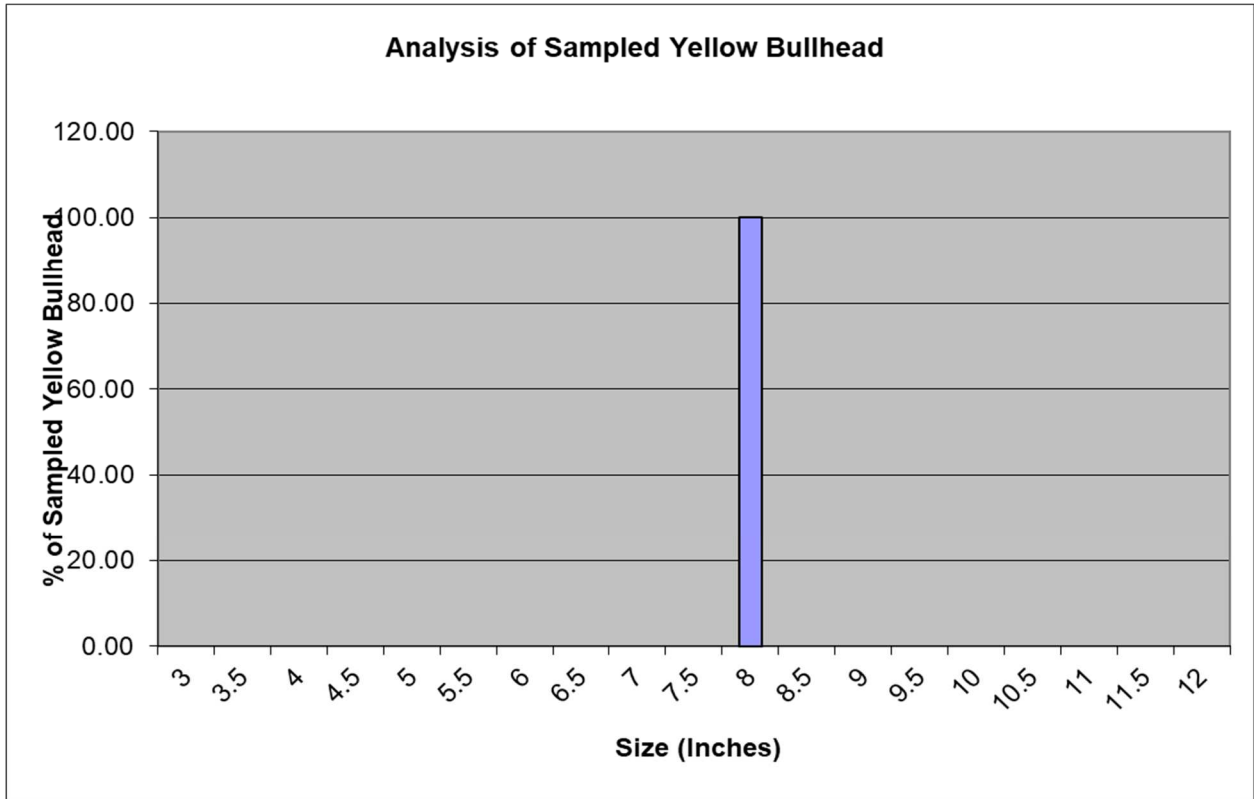
MARINE BIOCHEMISTS
2024 EAGLE STREET,
SUITE A
NORMAL, IL 61761
(309) 452-0461

Graphic Electro-Fishing Survey Results—June 4, 2020

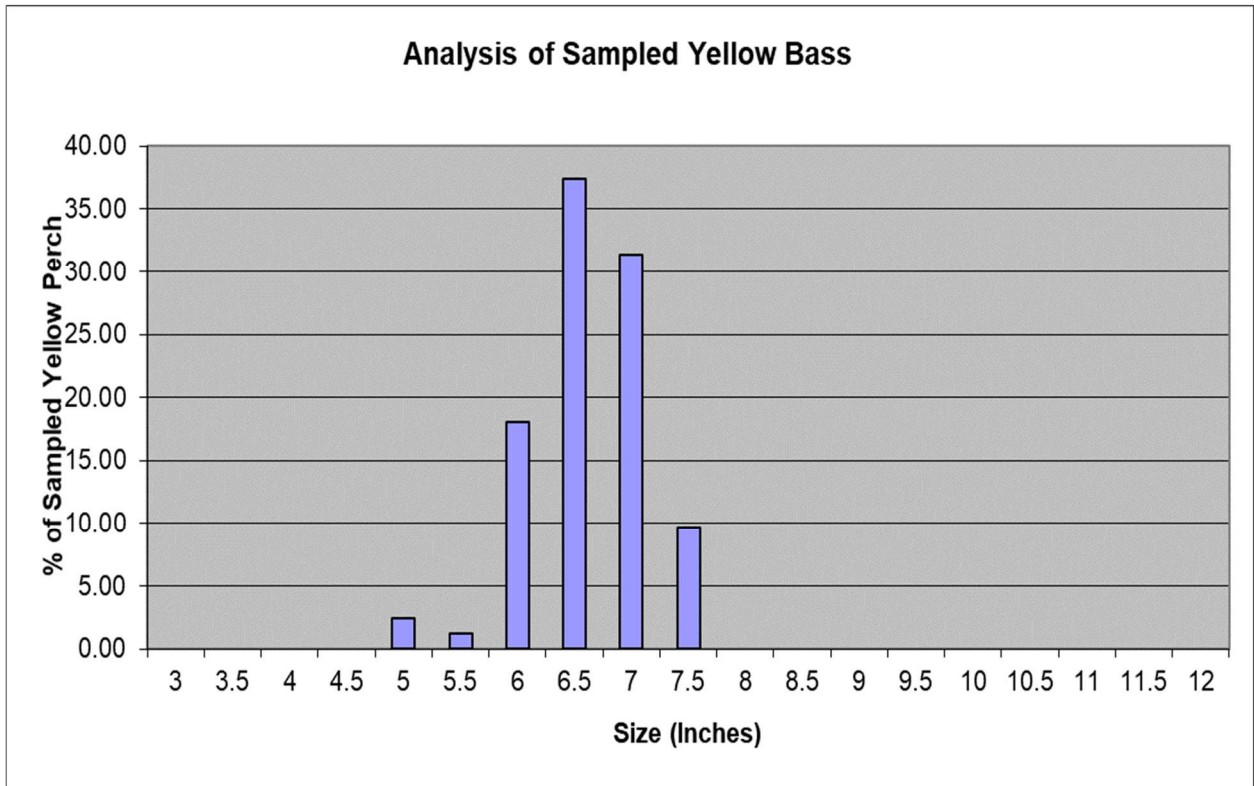
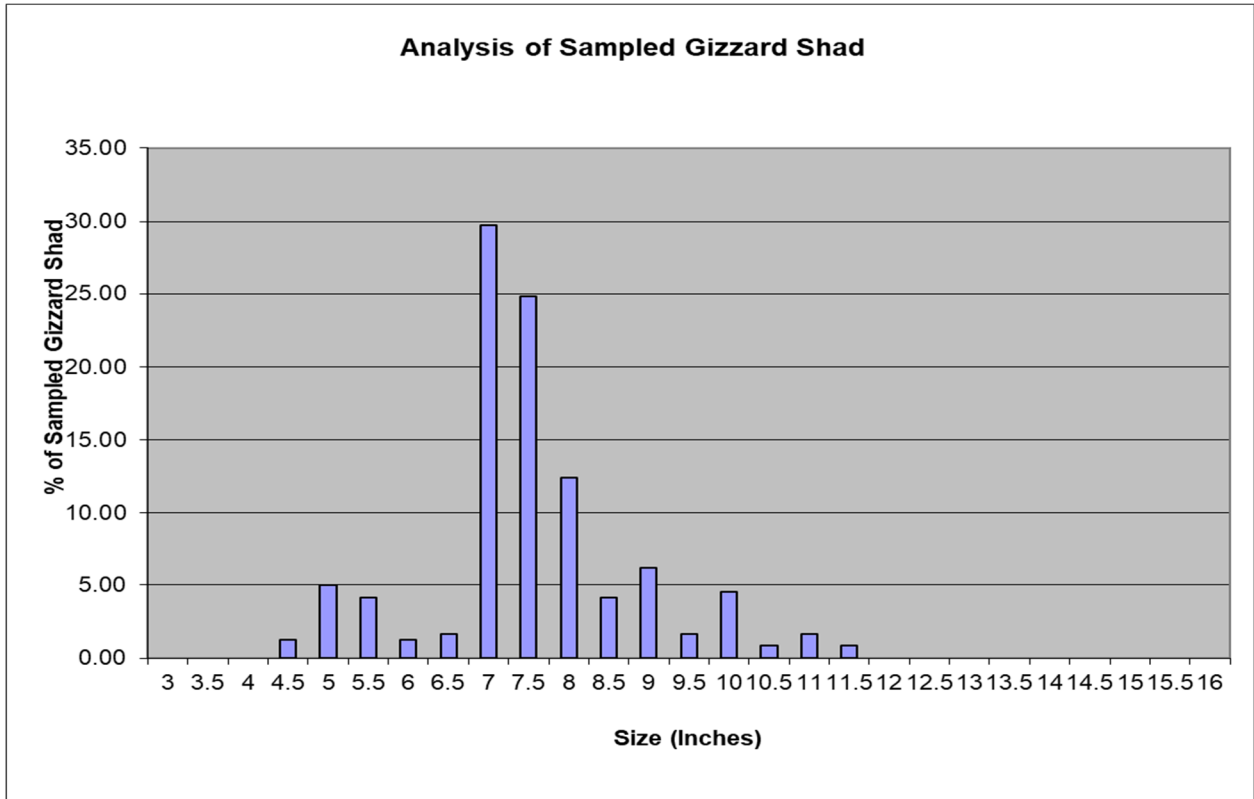


MARINE BIOCHEMISTS
2024 EAGLE STREET,
SUITE A
NORMAL, IL 61761
(309) 452-0461

Graphic Electro-Fishing Survey Results—June 4, 2020

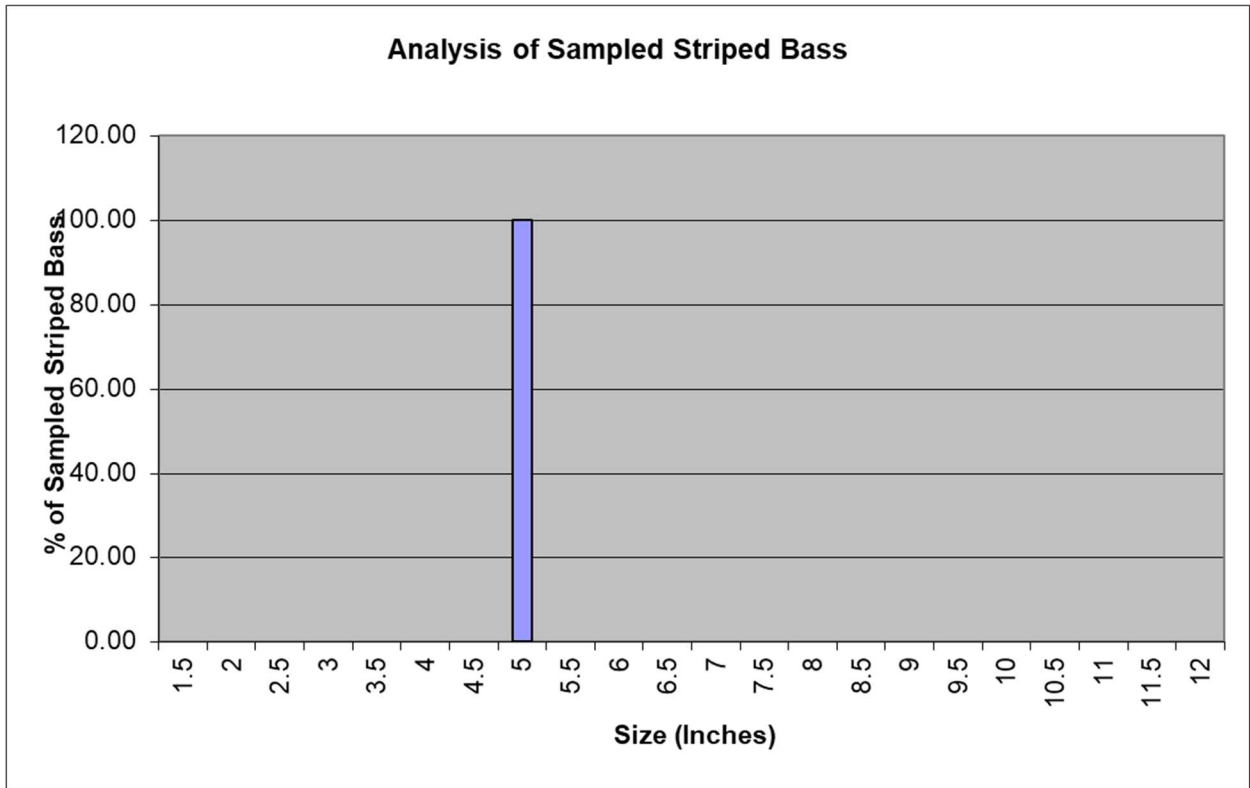
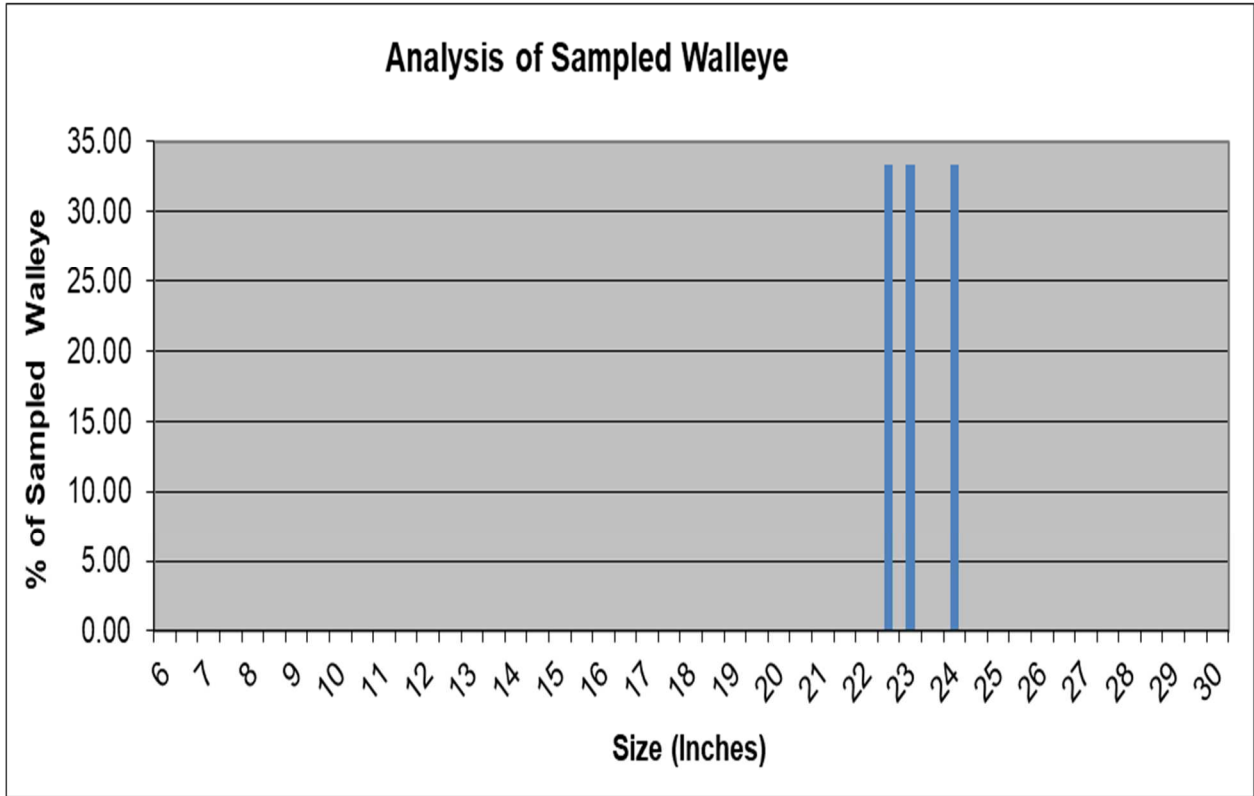


Graphic Electro-Fishing Survey Results—June 4, 2020

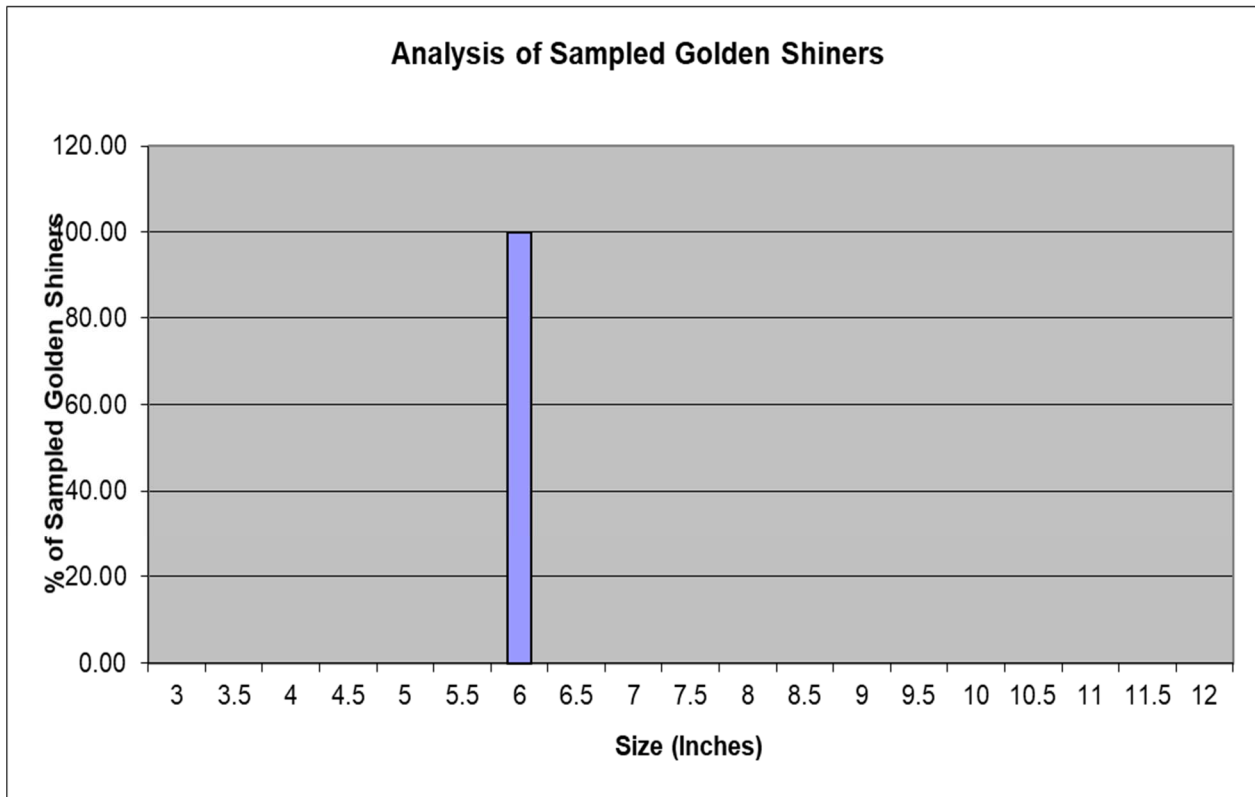


MARINE BIOCHEMISTS
2024 EAGLE STREET,
SUITE A
NORMAL, IL 61761
(309) 452-0461

Graphic Electro-Fishing Survey Results—June 4, 2020



Graphic Electro-Fishing Survey Results—June 4, 2020



Survey Discussion

Four sampling runs were made as follows: northern shoreline, flat to the channel, rock wall bridge area, and the south part of the lake beyond the bridge.

For the northern shoreline, catch rates were As follows:

Bluegill: 182.35/hour; Gizzard Shad: 394.12/hour; Channel Catfish: 5.88/hour; White Crappie: 29.41/hour; Walleye: 5.88/hour; Green Sunfish: 11.76/hour; Golden Shiner: 5.88/hour; and Yellow Bass: 123.53/hour.

For the flat to the channel area, catch rates were as follows:

Largemouth Bass: 5.26/hour; Bluegill: 152.63/hour; Gizzard Shad: 263.16/hour; Channel Catfish: 5.26/hour; White Crappie: 15.79/hour; Walleye: 5.26/hour; and Yellow Bass: 263.16/hour.

For the rock wall/bridge area, catch rates were as follows:

Largemouth Bass: 5.29/hour; Bluegill: 174.60/hour; Gizzard Shad: 375.66/hour; Channel Catfish: 10.58/hour; Walleye: 5.29/hour; Green Sunfish: 10.58/hour; Yellow Bullhead: 5.29/hour; Striped Bass: 5.29/hour; and Yellow Bass: 5.29/hour.

For the south lake area, catch rates were as follows:

Bluegill: 144.06/hour; Gizzard Shad: 732.29/hour; Channel Catfish: 12.00/hour; Green Sunfish: 12.00/hour; White Crappie: 24.01/hour; Yellow Bullhead: 12.00/hour; and Yellow Bass: 36.01/hour.

Overall catch rates for the lake were as follows:

Largemouth Bass: 3.16/hour; Bluegill: 165.79/hour; Gizzard Shad: 382.10/hour; Channel Catfish: 7.89/hour; Green Sunfish: 6.32/hour; White Crappie: 15.79/hour; Walleye: 4.74/hour; Yellow Bullhead: 1.58/hour; Golden Shiner: 1.58/hour; Striped Bass: 1.58/hour; and Yellow Bass: 131.05/hour.

Overall Observations:

Water clarity was poor due to a planktonic algal bloom. Oxygen levels were limited, but measured down to 13 feet. Very little structure was noted anywhere along the shoreline.

Catch rates for largemouth bass were significantly down from IL DNR 2013 survey (82/hour in 2013). Catch rates for bluegill were also down from 2013, but less significantly (over 200 in 2013). Walleye catch rate was down from 2013 survey (14/hour in 2013), which is near the 2013 recommended goal. Channel catfish catch rate was less than half of what it was in 2013 (16/hour in 2013). White crappie catch rate was much lower than 2013 (26/hour in 2013). Shad and yellow bass were numerous, similar to comments made in 2013. The bullhead, striped bass, and golden shiner numbers were not sufficient to make any conclusions on impact. White Catfish were not seen.

Lake Recommendations

Recommendations for the lake are multi-fold. First, it is recommended to install structures throughout the lake to encourage better predator to prey relations, and for spawning. Structures should be of durable, non-biodegradable materials set in 3 to 8 feet of water as well as in shallow areas to promote spawning. Spawning structure should consist of shallow gravel basins where such substrate is limited.

Stocking of largemouth bass is highly recommended as this species only showed 2 specimens during the survey. More game fish will assist in keeping the significant populations of non-gamefish, such as shad and yellow bass, down. Additional electro-fishing surveys can be done to remove larger shad and yellow bass aiding in their population control. Both species are of limited forage value for gamefish when they grow beyond the 6-inch range.

Stocking a walleye is recommended since only 3 adult specimens were sampled with little indication of spawning. Walleye are desirable, and can help in keeping the shad and yellow bass in check.

Stocking of channel catfish can be done since the catch rate was well below the recommended levels from the 2013 survey. No flathead catfish were noted during the survey, but as mentioned in the 2013 recommendations, they can assist in keeping white catfish and bullhead numbers down. The bluegill and crappie populations were down, and sizes were mostly in the smaller size classes. Stocking of panfish should not be done until largemouth bass populations rebound. Electro-fishing can assist in removal of smaller panfish, but the emphasis on any electro-fishing removal efforts should be focused on shad and yellow bass along with any bullhead or rough fish that may feed upon fish eggs.

It is also recommended to allow beneficial aquatic vegetation to grow along shoreline areas in order to create more structure. Native aquatic plants provide habitat for fish. Optimum plant cover is normally 15 to 25% of the total surface area. It is recommended that native plants be allowed to grow to a certain extent in the lake with only selective control measures to limit invasive species such as Eurasian Watermilfoil or non-selective control measures to address excessive native plant and/or algae growth.

Dissolved oxygen should be monitored on a regular basis. Monitoring should also be conducted for planktonic algal and other aquatic plant growth. Excessive planktonic algae and/or aquatic plant growth can cause dissolved oxygen crashes negatively impacting fisheries. Aerating a lake of this size is possible, but would require advanced budgeting and planning.

Lake Recommendations

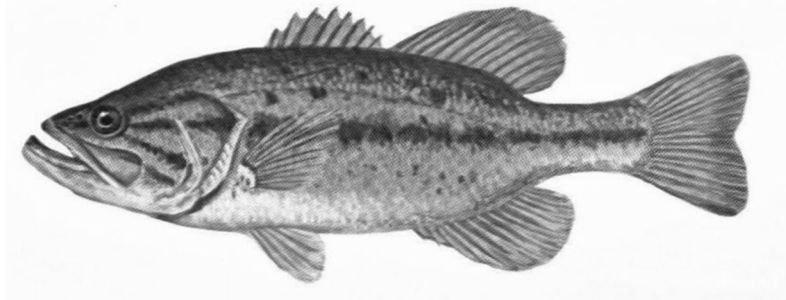
Marine Biochemists can provide aquatic plant management services to selectively control invasive species while limiting excessive growth of native plants or unwanted algae. Marine Biochemists can also provide assistance in selecting and planting native vegetation if requested. Should additional structure be desired, Marine Biochemists can provide and install custom structures to maximize cover while promoting increased fishing opportunities.

Finally, it is recommended that periodic electro-fishing surveys be conducted to verify the population structure, and remove undesirable fish. Turbid water does limit the effectiveness of these surveys. Additional surveys should be conducted every three years once the fisheries has recovered to provide the necessary data to adjust harvesting and stocking efforts. Surveys should also be conducted should any drastic change be noticed in fishing or in the overall condition of the lake. Please contact Marine Biochemists if you have any questions or need further assistance.



Addendum

Large-mouth Bass *Micropterus salmoides*



Description

Color generally dark green above; sides and below greenish-silver. A dark lateral band is present. Head is large and mouth is extremely wide with corners extending beyond the eyes.

Characteristics and Habits

Species is a common game fish inhabiting many natural and man-made lakes. Commonly found with bluegill in weedy areas, it is very tolerant of warm waters. It feeds by engulfing its prey in large gulps as it cruises weed beds or shallows in search of food. Anglers have found that large-mouth bass will bite on a variety of baits including frogs, worms, minnows or other live bait; or a variety of spinners, spoons, or other types of lures. During warm weather, early morning and evening hours provide for the best fishing times.

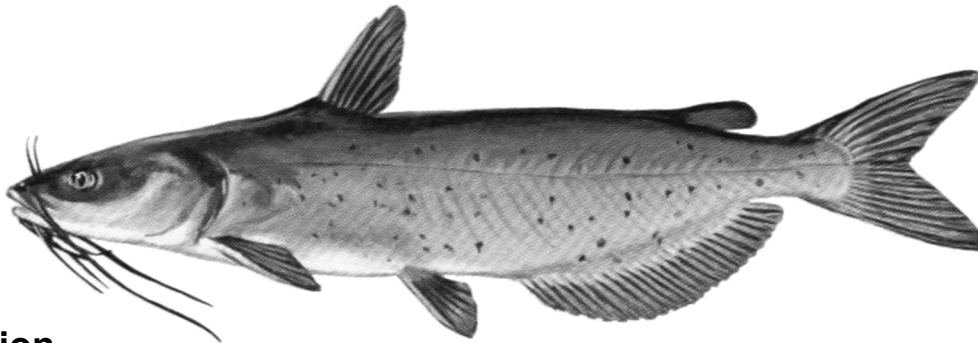
Large-mouth bass prefer to reproduce in rocky or gravel areas with males building nests in early to mid spring in waters typically 1.5 to 3 feet in depth. Large-mouth bass typically reach sexual maturity at 2 years of age and a length of 9 to 10 inches. Maximum weight is approximately 11 pounds with a length of about 22 inches, with common sizes in the 14 to 16 inch range.

Carrying Capacity

Carrying capacities for large-mouth bass range from 50 to 100 pounds per acre.

Channel Catfish

Ictalurus punctatus



Description

Color generally bluish with scattered dark spots on the back and sides. It has a forked tail and whiskers near the mouth.

Characteristics and Habits

Species is a common in rivers and stocked lakes. It feeds on both plant and animal material mostly near the bottom. It finds its food primarily by touch, smell and taste. Anglers have found that channel catfish will bite on a variety of baits with strong smells, but always on or near the bottom (deep pools during the daytime and muddy shoals at night).

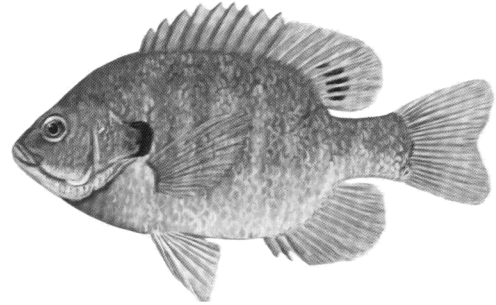
Channel catfish are very particular in spawning sites, and will generally not spawn in small man-made lakes. If catfish present in man-made lakes do spawn, survival of offspring is negligible in clearer waters. Channel catfish typically reach sexual maturity at 4 to 5 years of age and a length of 15 to 16 inches. Maximum weight can be more than 30 pounds with a length of over 30 inches. Common sizes caught are in the 13 to 17 inch/1 to 2 pound range.

Carrying Capacity

Carrying capacities for channel catfish range from 150 to 300 pounds per acre. Reproduction of channel catfish within small ponds and lakes is unlikely.

Bluegill

Lepomis macrochirus



Description

Color generally light to dark olive with 3 or 4 dark greenish vertical side bars. Luster of yellow, yellowish brown or purple to lavender present. Shape is relatively short and compressed with small oblique mouth and short head. Flap behind eyes (opercular flap) is very broad and black in color.

Characteristics and Habits

Species is a food fish (called a panfish due to its flat and wide body shape) inhabiting many natural and man-made lakes with weedy areas. It feeds on insects within and along weed beds. Anglers have found that bluegill will bite on a variety of baits including worms and insects; or a variety of worm or insect-type lures. During warm weather, larger bluegills are typically taken in deeper waters.

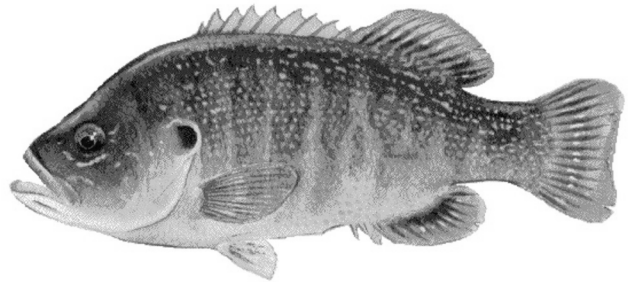
Bluegill prefer to reproduce in rocky or gravel areas, but any type of bottom may be used with males building and defending nests in late spring to late summer in waters typically 1 to 2 feet in depth. Bluegill typically reach sexual maturity at 1 year of age and a length of about 3 inches. Maximum weight is approximately 0.5 pounds with a length of about 12 inches, with common sizes in the 4 to 7 inch range.

Carrying Capacity

Carrying capacities for bluegills range from 75 to 400 pounds per acre.

Green Sunfish

Lepomis cyanellus



Description

Species has 41 to 53 lateral line scales. Body shape is similar to bass. Dorsal fin has 10 (rarely nine or 11) spines and 10 to 12 rays. Anal fin has 3 spines and 8 to 11 rays. Palatine teeth present in roof of mouth. Short pectoral fin when bent forward does not reach nostril. Large mouth with upper jaw extending to near middle of eye. Black Ear flap is elongate and mostly inflexible near its margin. Body color is dark green on back and sides with rows of small, metallic turquoise spots toward head and irregularly spaced spots toward tail. Large dark spot occurs near rear of soft dorsal and anal fins. Yellow to orange edges of anal, pelvic, soft dorsal, and caudal fins become noticeably brighter during spawning season.

Characteristics and Habits

Species is very versatile able to tolerate wide range of conditions. Does well with when competition is minimal. Species nests in closely packed groups in shallow areas preferring gravel or rocky bottoms. Spawns in late spring when water temperatures reach above 70 degrees F (may continue through summer). Nests aggressively defended by males until fry are free swimming (usually 6 to 7 days). Green sunfish are very prolific, and can over-populate small water bodies very quickly.

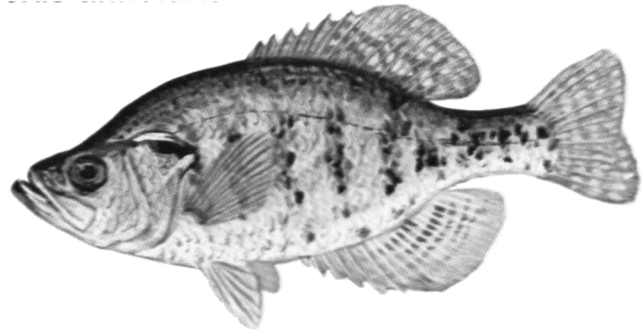
Adult fish feed upon small fish and insects. Species can be caught on waxworms, nightcrawlers, and mealworms. Adults grow to 4 to 8-inches rarely exceeding one pound. Maximum known size was 12-inches at about 2 pounds weight.

Carrying Capacity

Carrying capacities for green sunfish vary tremendously. Their tolerance to adverse conditions and their tremendous reproduction potential can quickly cause over-population. The resulting stunting tend to limit their intentional introduction. Their larger mouth size also allows larger adults to compete with game fish for food.

White Crappie

Poxomis annularis



Description

Color darker olive on back, silvery-olive on sides with 5 to 7 dark green or brown vertical bars, whitish belly, plain paired fins, and mottled median fins. Shape is compressed with long head, concave near eye. Large, oblique mouth extending past mid-eye. Dorsal fins connected without any notch. Anal fin about same size as dorsal fin. Only member of sunfish to have 6 spines both in dorsal and anal fins. Dorsal fin has shorter base than Black Crappie.

Characteristics and Habits

Species is considered an excellent game fish (pan fish grouping) inhabiting many natural and man-made lakes with weedy areas or similar structure. It primarily feeds on insects and worms within and along weed beds and brush piles, but will feed upon small minnows if given the opportunity. Anglers have found that crappie will bite on small minnows either by trolling or jigging near weed beds or other structures. Dry flies have also been successful in early morning or evening hours on quiet waters.

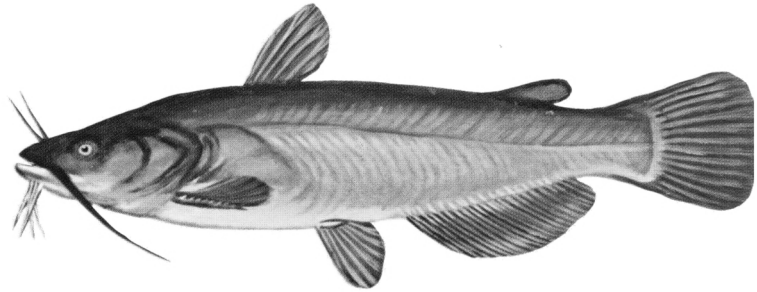
Crappie prefer to reproduce in waters typically 3 to 8 feet in depth. White crappie typically reach a length of 6 to 12 inches with a weight of 3 ounces to 1.5 pounds. Maximum weight can be up to 2 pounds with a maximum length of 15 to 18 inches.

Carrying Capacity

Carrying capacities for white crappie range tremendously. Populations fluctuate regularly to a great extent. Carrying capacity is less when other panfish species are present or cover is scarce.

Yellow Bullhead

Ictalurus natalis



Description

Species has whiskered chin with light-color barbels, pectoral and dorsal fins with very sharp spines. Pectoral fin has sharp teeth. Color is dark brown along spine becoming brownish-yellow along sides. Bottom is yellowish.

Characteristics and Habits

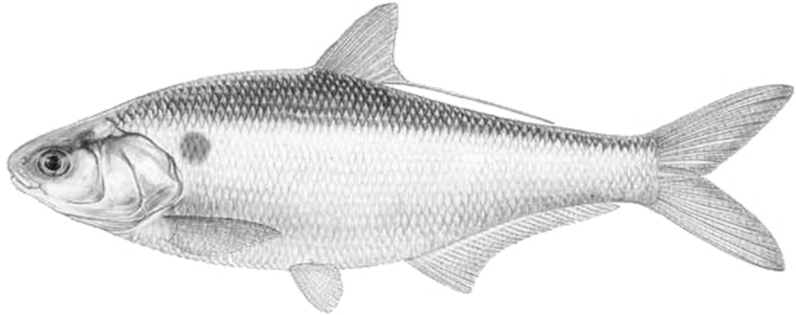
Species is found in a variety of bottom conditions. Species is a nest-builder with spawning occurring in spring. Females protect eggs and young. Species is a bottom dweller reaching an average size of 10-inches. Bullheads can be caught using a bottom bait (typically a mass of nightcrawlers) with night time in a shallow bay working best. Bullheads will most likely swallow hook requiring a long nose pliers for removal. Bullheads are considered a food fish for some being prepared by skinning the fish. Many see the bullhead as a nuisance when other game species are desired.

Carrying Capacity

Carrying capacities for bullheads can be extremely large as this species can survive low dissolved oxygen and warm water environments. Bullheads have a high reproductive rate increasing the potential for overcrowding, and large populations can discolor the water by disturbing bottom sediments. Typically, bullheads are the only species able to survive in shallow lakes and ponds prone to winter or summer fish die-offs. If other game fish are desired, bullheads should be removed from the water body if caught.

Gizzard Shad

Dorosoma cepedianum



Description

Body is lance-like and deep, moderately compressed. Back is gray or dark blue in color. Silvery sides with white belly. Upper sides have 6 or 8 dusky horizontal stripes. Small inferior mouth, upper jaw projecting beyond lower, small head with adipose eyelid. Dorsal fin has last ray being long and filamentous. Anal fin has between 29 to 35 rays.

Characteristics and Habits

Species is common throughout the eastern United States extending to the Dakotas south to New Mexico, excluding New England, south Florida, Lake Superior and parts of the Appalachian range. It is considered a forage fish for larger game fish, and has no commercial value. Species will often gather in large schools sometimes leaping out of the water in groups. Species can grow up to 20-inches in length and over 2.5 pound, but average size is closer to the 9 to 14-inch range. Adults feed on microscopic plants, organic debris and animals by filtering the water over close-set gill rakes. Young will feed on microscopic plants and animals as well as insect larvae. With its ability to utilize a relatively non-competitive food source and provide a food base for larger game fish, the gizzard shad can be a vital part of a water body's food web if numbers are kept in check.

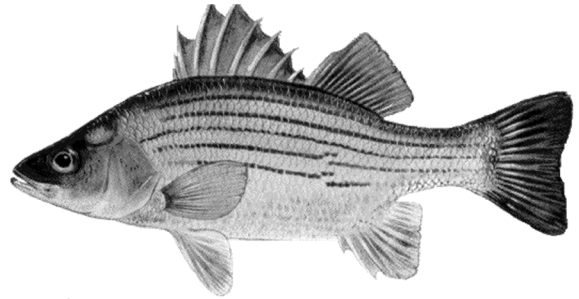
Spawning occurs in late spring with eggs being laid in shallow protected areas. Eggs are adhesive and will attach to objects on the bottom. Spawning occurs within schools without regard of mating individuals.

Carrying Capacity

Carrying capacities can be high, and shad populations can reach what would be considered nuisance levels even to bass fisherman. Smaller fingerlings are important for forage with larger individuals having little value.

Yellow Bass

Morone mississippiensis



Description

Silvery-yellow to yellow-olive in color with laterally compressed body with spiny ray. Pelvic fins and belly are yellowish-white. Dark horizontal side stripes (six to seven) become offset and broken just above the front of the anal fin. Two slightly connected lobes make up the dorsal fin, with 12 soft rays in the second one and nine spines in the first one. The lower jaw protrudes slightly in front of the upper jaw, and the mouth is scarcely oblique.

Characteristics and Habits

Yellow Bass are also called barfish, and is native to the Midwestern and southern parts of the United States. Smallest of the temperate bass family, the Yellow Bass is sometimes confused with the Striped Bass, but its yellow belly along with a broken pattern in its lower stripes help distinguish it. It inhabits lakes, ponds and large rivers eating mostly insects, fish and crustaceans. It will also feed upon its own larvae. It prefers clear to slightly turbid waters, and feeds near the surface or in mid-water during early morning and evening hours when light is at low intensity.

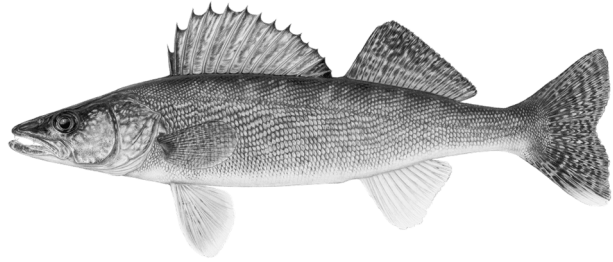
Yellow Bass spawn in two to three feet of water in May when water temperatures approach 60 degrees Fahrenheit. They can move up into tributary streams, but will also spawn over gravel areas and rock bars in lakes and ponds. The eggs sink slowly and are not protected by the parents. Yellow Bass typically grow to 10 or 11 inches with an average life span of 4 to 5 years. Rarely will they exceed 3/4 of a pound with record fish ranging in the 18" and 1-1/2 pound range.

Carrying Capacity

Carrying capacities for Yellow Bass can vary greatly and is dependent on habitat, predation and harvesting.

Walleye

Sander vitreus



Description

Eyes are large and cloudy in appearance due to a special light gathering layer. Color generally gold and olive, with flanks having a golden hue. The upper part of sides have five darker saddles breaking up pattern. Belly is white. Mouth is large with numerous sharp teeth. First dorsal fins is spiny as are the anal fins. Caudal fins have white colorization.

Characteristics and Habits

Walleyes are aggressive predators and highly prized as a game fish due to their action on a line and their reputation of being the best tasting fresh water fish. Walleyes will feed upon small trout, bass, perch, sunfish and pike usually in the early morning or early evening. They will also eat crayfish, earthworms, minnows and leeches. In turbid waters, their excellent eyesight allows them to feed throughout the day. Walleyes prefer cooler waters and will retreat to deeper areas or shelter during daylight hours. Walleyes are preyed upon by muskellunge and northern pike, and compete with smallmouth bass, lake whitefish and yellow perch for food. Anglers find fishing during cloudy or “choppy” conditions help in targeting walleye as they have a visual advantage in darker or more turbid waters.

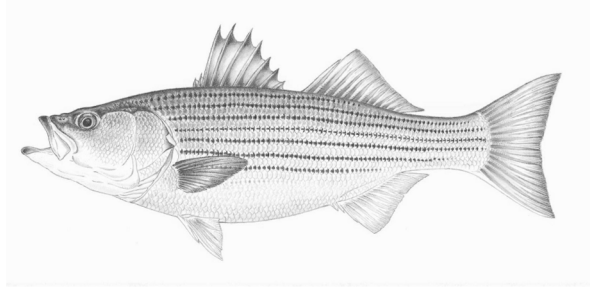
Walleyes prefer spawning over rocky shoals in April and May with females maturing at three to six years and males at two to four years in age. A female can lay hundreds of thousands of eggs with no care being given to the eggs or fry, which hatch after 12 to 30 days. Walleye can usually grow up to 30 inches in length and reach a weight of 15 pounds, but due to fishing pressure, typical sizes are in the 18 to 25-inch range. Record sizes are up to 42 inches in length and 25 pounds in weight. Walleye have been found to live up to 29 years, but due to fishing pressure, typically live only to 5 to 6 years.

Carrying Capacity

Carrying capacities for walleye can range dramatically depending on habitat, fishing pressure, food availability/competition, and predation of fry.

Striped Bass

Morone saxatilis



Description

Streamlined silvery body with longitudinal dark olive-green to dark blue stripes, which run from the gills to the tail base. Median fins are dusky with the belly being white. Large mouth with slightly protruding lower jaw. Small teeth in bands on jaws. 8-10 strong spines on first dorsal fin with a deep notch separating it from the second dorsal fin.

Characteristics and Habits

Striped Bass are native to coastal waters, but now extend throughout the United States thanks to dam construction and stocking efforts. They now inhabit inland lakes, ponds and large rivers eating mostly insects, fish and crustaceans. They are a good eating fish with great sporting qualities, and can inhabit both fresh and salt water.

Striped bass females can spawn more than once a season, but may not spawn every year. Few fresh water lakes have been known to have successful spawning populations of Striped Bass, and most have been stocked. Hybrids of the species are common with White Bass, and have been stocked in many freshwater lakes throughout the United States.

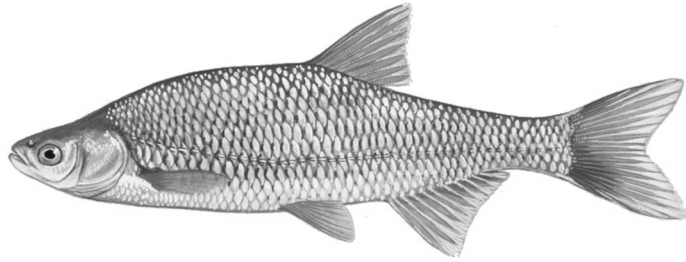
Striped Bass can grow up to 70 or 80 pounds with a length exceeding 40 inches or more.

Carrying Capacity

Carrying capacities for Striped Bass can vary greatly and is dependent on habitat, food source and harvesting.

Golden Shiner

Notemigonus crysoleucas



Description

Back is deep and compressed, olive to golden in color. Light olive sides with silvery or golden reflection. Pronounced keel on belly between anal and pelvic fins. Uprturned mouth, blunt snout, and downward curved lateral line. Dorsal fin has 7 to 9 rays branched.

Characteristics and Habits

Species is common throughout the eastern half of the United States. Member of the minnow family, golden shiners are often used as bait. They prefer non-flowing waters such as lakes and ponds, and will gather in schools in shallow waters sometimes venturing into deeper waters. Species is often found near aquatic vegetation. Species can grow up to 12-inches in length and up to 1/4 pound, but average size is closer to 7.5 inches. Species feeds on vegetation and algae as well as crustaceans, snails, and insects. When a golden shiner is bitten by a predator, a chemical agent is released in the water that drives other golden shiners from area.

Spawning occurs in spring with eggs being laid amongst vegetation or in the active nests of pumpkinseed or large mouth bass. When laid in active nests, eggs are protected by dilution with other eggs, and by the owners of the nests. Golden shiner adults do not care for their eggs at all.

Carrying Capacity

Carrying capacities vary greatly, and are dependent upon habitat, predation and competition for food.