

Sea Lamprey
Petromyzon marinus

This invasive species is recognized by its snake-like body and circular mouth surrounded by hooks. It latches onto the side of a fish, chews a small hole, then feeds on the fish's insides. Sometimes seen attached to salmon or trout. 2 feet.



Lake Sturgeon
Acipenser fulvescens

Once common along the Chicago lakefront, it is now rare. Largest fish in Lake Michigan. Mouth is underneath head and behind 4 barbels (whiskers). 8 feet.



American Eel
Anguilla rostrata

Born in the Atlantic Ocean, this fish swims thousands of miles to reach Chicago's shoreline. Rarely seen, it hides in debris along the bottom. More common than most people realize. Recognized by its snake-like body and 'normal' mouth. 4 feet.



Alewife *Alosa pseudoharengus*

This invasive species was once so common that dead individuals covered local beaches. Still present, it is a favorite food of salmon. Belly is narrow, forming a keel with a saw-like edge. 10 inches.



Lake Chub *Couesius plumbeus*

In Illinois, it is only found along Lake Michigan's shoreline. This minnow is recognized by having a short barbel (whisker) in the back corner of its mouth. 8 inches.



Common Carp *Cyprinus carpio*

This invasive species is very common along Chicago's lakefront, often seen cruising through the shallows. Large scales and a long fin along its back. 4 feet.



Bighead Carp (Asian Carp)
Hypophthalmichthys nobilis

Although it is not established in Lake Michigan, it has had a huge impact on how people view Great Lakes' fishes. This invasive species can quickly take over aquatic habitats. Identified by small scales and its eye being below the level of its upper lip. 4 feet.



Sand Shiner *Notropis stramineus*

This small, nondescript minnow can be found by the thousands along Chicago's lakeshore. Eaten by larger fishes, it is an important part of the local food chain. Difficult to identify, black marks along the side form a row of "=" signs. 3 inches.



Longnose Dace *Rhinichthys cataractae*

Voted the official fish of the City of Chicago, it swims in the surf along the lakeshore. Many beach-goers have waded or swum past it without even knowing it was there. A small fish, it is identified by having a long snout that causes its mouth to be underneath its head. 3 inches.



Channel Catfish *Ictalurus punctatus*

A popular sport fish that lives on the bottom. Has 8 barbels (whiskers) around its mouth and scattered black spots on the side, although larger individuals are darker and the spots are obscured. 3 feet.



Rainbow Smelt *Osmerus mordax*

An invasive species that was once an abundant sport fish, but is now declining in numbers. Still found in local restaurants and grocery stores. A slender, silvery fish with an adipose fin and a relatively large mouth. 10 inches.



Bloater *Coregonus hoyi*

Usually found a hundred feet or more below the surface of Lake Michigan, it sometimes enters the shallower waters along Chicago's lakefront. They are numerous enough in some of the Great Lakes to support a commercial fishery. Identified by having an adipose fin and relatively small mouth. 1 foot.



Lake Trout *Salvelinus namaycush*

The largest native trout / salmon in Lake Michigan. Population was devastated in the middle of the 20th century, but is now slowly recovering. This popular sport fish has an adipose fin and gray-green sides with white spots and squiggle marks. 4 feet.



Rainbow Trout / Steelhead *Oncorhynchus mykiss*

An invasive species that is a popular game fish. Has an adipose fin and dark spots along the back and tail. Inside of mouth white. Rainbow Trout have a diffuse red stripe along the side. Steelheads are individuals that live in Lake Michigan and lack the red stripe, as in the picture above. 3 feet.



Chinook Salmon *Oncorhynchus tshawytscha*

Very common along the Chicago lakefront in the fall when they are attempting to spawn. This invasive species is a popular sport fish. Recognized by having an adipose fin and dark spots along the back and tail. Inside of mouth black or gray. 4 feet. Similar to the Coho Salmon *Oncorhynchus kisutch*, which has a black mouth but white gums (tissue around the teeth).



Brown Trout *Salmo trutta*

An invasive species that is a popular sport fish. Characterized by an adipose fin and straight edge along rear of tail. Usually brownish with red and black spots on side, but the less common lake-form is silvery with small black spots, as in the picture above. 3 feet.



Northern Pike *Esox lucius*

Not common in Chicago, but individuals will appear from time to time in shallow protected bays. Preys on other fishes. A popular sport fish with a large mouth full of needle-sharp teeth. Greenish side with white patches. 4 feet.



Burbot *Lota lota*

This cousin of the oceanic cod lives along the bottom of the depths of Lake Michigan. Some wander into the shallows of Chicago's lakefront, but it is rarely seen by people. Tastes delicious. Single barbel (whisker) on chin. 2 1/2 feet.



Banded Killifish *Fundulus diaphanus*

An endangered species that lives in the sheltered bays along Chicago's shoreline. It is more common in Lake Michigan than most people realize, but is usually overlooked because of its small size. Recognized by a mouth angled towards the top of the head and several faint vertical bars along its side. 3 inches.



Ninespine Stickleback *Pungitius pungitius*

This small hydrodynamic fish cruises the open waters of Lake Michigan. Identified by having 9 spines along its back. 2 inches.

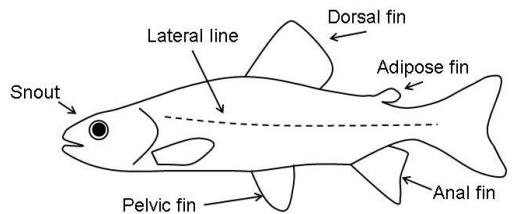


From the dark depths of Lake Michigan to the mouth of the Chicago River, over 70 species of fishes make their home. Some are so common that anyone fishing Chicago's lakefront would recognize them. Others are so rare that few people have encountered them alive in Chicago. And many others are overlooked despite their importance to Lake Michigan's ecology.

This field guide covers 30 representative fish species that live along Chicago's lakefront. There is an image (or two) of each species as well as interesting facts and key features to help identify them. The indicated lengths are near maximum for each species within the Great Lakes. Most individuals are smaller than the length that is given.

Please enjoy using this field guide to learn more about our Lake Michigan neighbors living beneath the waves along Chicago's lakefront.

Basic fish anatomy diagram:



This field guide was made possible by the generous support of Patricia and Richard Schnadig and Marlene Phillips.

All images by Philip Willink, except Alewife, Rainbow Trout, Chinook Salmon, and Brown Trout by Frank Veraldi.

2010



Mottled Sculpin *Cottus bairdii*

This fish used to live on the bottom within the cracks and crevices of rocks and rubble along Chicago's lakefront, but its numbers have been devastated by the invasive Round Goby. It has no scales, a relatively wide head when viewed from above, and 2 pelvic fins. 5 inches.



Freshwater Drum *Aplodinotus grunniens*

A very sturdy, solidly-built fish that lives along the bottom feeding on mussels and insects that it crushes with its powerful jaws. Identified by its high back, long fin along the length of the back, and a tail that is not forked. 2 feet.



Rock Bass
Ambloplites rupestris

A popular sport fish among some, it is most easily recognized by square black blotches on the side and red eyes. Not a picky eater, it is usually easy to catch with a baited hook. 11 inches.



Pumpkinseed *Lepomis gibbosus*

A beautiful sunfish with a black 'earflap' rimmed with white and a red spot. During the summer, they are often seen along the Chicago lakefront in shallow water. A male clears a 1-2 foot circular area of vegetation and debris, then a female lays eggs in the center of the circle. The male guards this nest from other marauding fishes, crayfishes, etc. 8 inches.



Bluegill *Lepomis macrochirus*

A sunfish with a completely black 'earflap' and several thin vertical bars along the sides. Usually easy to catch with a baited hook. During the summer, they are often seen along the Chicago lakefront in shallow water. A male clears a 1-2 foot circular area of vegetation and debris, then a female lays eggs in the center of the circle. The male guards this nest from other marauding fishes, crayfishes, etc. 1 foot.



Smallmouth Bass *Micropterus dolomieu*

A very popular sport fish whose numbers seem to be increasing along the Chicago lakefront. Some think they are doing well because they are eating lots of the invasive Round Goby. Its mouth does not extend past the eye and it usually has several vertical bars along its sides. 2 feet.



Largemouth Bass *Micropterus salmoides*

A very popular sport fish. Individuals seem to be getting larger along the Chicago lakefront, and some think this is because they are eating lots of the invasive Round Goby. Usually has a black stripe extending from the eye to the tail, but this can be obscured in darker older adults. Mouth extends past the eye in adults, but not necessarily so in juveniles. 2 feet.



Yellow Perch *Perca flavescens*

One of the most sought after fish along the Chicago lakefront. Tastes delicious. Population numbers have declined over the years, although there has been a slight increase recently, giving us hope for the future of this favorite fish. Identified by its yellowish color, several dark bars along its sides, and two fins on the back. 1 foot.



Walleye *Sander vitreus*

Usually associated with local rivers, it seems to be becoming more common in Lake Michigan. And larger individuals keep appearing. A popular sport fish recognized by its streamlined shape, two fins on its back, and a white blotch on the bottom tail tip. 2 ½ feet.



Round Goby *Neogobius melanostomus*

Invasive species that has recently become abundant in Chicago. It has wreaked havoc among some fishes living along the bottom, and is most notorious as a 'bait stealer'. Recognized by its two pelvic fins fusing together to form a single disk. 10 inches.



Chicago Lakefront Fishes

By Philip Willink
The Field Museum, Chicago, IL

