



New York State Department of  
**ENVIRONMENTAL CONSERVATION**

# BAITFISH OF NEW YORK STATE

How to identify and legally use them  
in our freshwaters and the Hudson River



[www.dec.ny.gov](http://www.dec.ny.gov)



# Contents

About this Booklet	4
Baitfish Regulations for Anglers	5
Baitfish Regulations for Commercial Dealers	9
Species Descriptions and Use Restrictions	13
Green List Baitfish	14
Baitfish Restricted to Specific Waters	22
What Can I Do to help?	29

## **About This Booklet**

This booklet explains how the careless use of baitfish can damage native freshwater fish populations, describes commercially available baitfish, provides specific information on baitfish regulations and use restrictions, and provides tips on how each of us can help protect the freshwater fisheries of New York State when using baitfish.

Due to their effectiveness on a variety of fish species and their ready availability in bait stores, baitfish are used by thousands of anglers throughout New York State. Unfortunately, while most anglers are aware of how effective baitfish can be, many are completely unaware of the damage that careless use of baitfish can have on our fish populations.

Baitfish compete with native fish species for food and may also consume their eggs and fry. The end result is that the abundance of native fish populations may decline dramatically. In New York, this has become a particular problem in many waters that once supported excellent brook trout fisheries, but are now dominated by introduced baitfish and small panfish. In the Adirondacks, the native round whitefish is now an endangered species, largely because of aggressive competition by introduced species. Since introduced baitfish and other species that are not native to a particular water body can seriously damage that water body's native fish community, the take home message is that fish introductions are best left to professionals that know how different fish populations interact with each other.

Baitfish can also harm native fish communities by spreading disease. Just as a human with a cold can spread his or her illness to other humans, so too can diseased fish. In fact, movement of diseased baitfish from water to water by unknowing anglers is thought to be the primary mechanism by which viral hemorrhagic septicemia (VHS), a serious fish disease recently identified in New York, has spread from the

Great Lakes to inland waters. Diseases can also potentially be introduced into New York State from bait wholesalers who do not test their fish before they are sold to bait dealers.

To address baitfish problems, DEC has established new regulations to reduce the likelihood of spreading diseases and introducing non-native fish species through the careless use of baitfish. The regulations affect both recreational anglers and commercial bait dealers and are included in this booklet. Also included are illustrations and descriptions of commercially available baitfish species and their use restrictions. For more information, go to DEC's website at: [www.dec.ny.gov](http://www.dec.ny.gov)

## **Baitfish Regulations for Anglers**

(Please consult the current NYS Freshwater Fishing Regulations for updates and changes.)

### **Green List Baitfish**

The following baitfish are the only species that can be purchased and used in any water body in New York where it is legal to use fish as bait. These baitfish are commonly used throughout New York and are not considered to be a threat to other native New York fish species, except for trout in waters where baitfish use is prohibited. Limiting the use of baitfish to the "Green List" will help prevent the accidental introduction of unwanted species.

Golden shiner	Northern redbelly dace
Emerald shiner	Blacknose dace
Common shiner	Longnose dace
Spottail shiner	White sucker
Banded killifish	Northern hogsucker
Fathead minnow	Creek chub
Bluntnose minnow	Fallfish
Logperch	

### **Baitfish Restricted to Specific Waters**

In addition to the “Green List,” the following baitfish may be purchased and used in specified water bodies only. They are not included on the “Green List” for a variety of reasons including potential negative impacts on native fish populations— e.g. alewife predation on walleye fry— or they are Marine and Coastal District species. See the “Baitfish Restricted to Specific Waters” section for which water bodies each of the following species may be used in:

Alewife

Rainbow smelt

Mummichog

Blueback herring

Atlantic menhaden

American eel

*Please Note: Native salamanders cannot be collected or used as bait.*

### **Use, Possession and Transportation of Purchased, Certified Baitfish**

Certified baitfish are those that have been tested and found to be free of specified diseases. Use of certified baitfish helps prevent the spread of fish diseases. Certified baitfish purchased from a bait dealer can be transported overland in a motorized vehicle and used on any body of water where it is legal to do so. For baitfish to be considered certified, a dated receipt containing the seller’s name, the species of fish and the number of each species sold must be obtained from the seller and retained by the purchaser while in possession of the baitfish. Baitfish without a receipt or with a receipt that is older than ten days shall be considered uncertified bait.

### **Uncertified Baitfish**

Uncertified baitfish are those that have not been tested and found to be free of specified diseases. These fish may carry diseases that could be harmful if spread from one water body to another. Uncertified baitfish purchased from a bait

dealer can only be used on the same body of water from which it was caught and cannot be transported overland by car or other motorized vehicle. The seller is required to provide a receipt that names the water body in which the uncertified baitfish can be used, and includes a warning to the purchaser that the baitfish may not be transported by car or other motorized vehicle.

### **Collection, Use and Transportation of Personally Harvested Baitfish\***

In addition to angling, any person who has a fishing license, or is entitled to fish without a license, may collect minnows (except carp and goldfish), killifish, mudminnows, darters, sticklebacks, stonecats, smelt, alewives, suckers and blueback herring for personal use (sale prohibited) as baitfish as follows:

<b>Gear</b>	<b>Time</b>	<b>Waters</b>
<b>Seine or scap net:</b> maximum size - 36 square feet	Sunrise to Sunset	All non-trout waters
<b>Minnow trap:</b> maximum length - 20", maximum entrance diameter 1", must be marked with owner's name and address	Anytime	Waters open to baitfish use
<b>Seine:</b> maximum size - 36 square feet	Anytime	Lakes Erie & Ontario (excluding their inlets, outlets and bays), Niagara River, and the Hudson River below Troy Dam
<b>Cast net:</b> maximum 10 feet in diameter	Anytime	Hudson River below Troy Dam including tributaries to first barrier

**In addition, alewives are the only fish that may be taken as follows:**

<b>Gill nets:</b> maximum length - 25 feet, maximum size - 1" bar	Anytime	Canadice, Canandaigua, Cayuga, Hemlock, Keuka, Owasco, Otisco and Seneca lakes.
---	---------	---

**\*Possession of endangered or threatened fish species is prohibited.**

Baitfish, or other legally taken fish species intended to be used as bait, may only be used in the same water body from which they were caught for bait in hook-and-line fishing (see the current *New York Freshwater Fishing Official Regulations Guide* for a definition of “water body.”). Transportation of personally harvested baitfish overland by a motorized vehicle is prohibited except for smelt, suckers, alewives and blueback herring taken for human consumption.

Smelt, suckers, alewives and blueback herring may be taken for human consumption and transported off a water body, but they cannot be brought back to any water body for use as bait—dead or alive (see the current *New York Freshwater Fishing Official Regulations Guide* for allowable methods of harvest).

### ***Baitfish Collection Exceptions***

Possession or use of minnow traps and nets is prohibited on units of state land/waters where the use or possession of baitfish is prohibited (see Special Regulations by County in the current *New York Freshwater Fishing Official Regulations Guide*).

In the Hudson River downstream of the Troy Dam and in Lake Champlain, Upper and Lower Saranac Lakes, Lake Clear (Franklin Co.), and Chazy Lake, and their tributaries to the first barrier, smelt may be taken only by angling.

### ***Restricted Baitfish Species***

Carp, goldfish, lamprey larvae and round goby may not be collected or used for bait.

### ***Restrictions on Use and Possession of Marine Baitfish***

Baitfish collected in the Marine and Coastal District may be transported overland only for use in the Marine and Coastal District in the following counties: Queens, Kings, Richmond, New York, Bronx, Suffolk, Nassau, Rockland and

---

Westchester. The Marine and Coastal District includes waters of the Atlantic Ocean within 3 miles of the coastline and all other tidal waters, including the Hudson River upstream to the Tappan Zee Bridge.

### ***Use of Dead Fish as Bait***

Any dead fish, or parts thereof excluding eggs, that have been packaged for commercial sale and have been preserved by methods other than by freezing only (i.e. salted minnows) can be used in any water body where it is legal to use fish as bait, and do not require a receipt.

Each package of dead baitfish must be individually labeled, identifying the name of the packager/processor, the name of the species, the quantity of fish contained, and the means of preservation.

*Please Note: Any fish taken on a water body and used as bait, counts toward your daily limit.*

## **Baitfish Regulations for Commercial Dealers**

### ***Baitfish Collection, Possession and Sale***

Each establishment for wholesale or retail sale of baitfish or fish bait (aquatic insects) must be licensed by DEC. Licenses may be obtained from the appropriate DEC Regional office. All licenses expire December 31 of the year issued. The application for a bait dealer license can be found at: [www.dec.ny.gov/permits/25004.html](http://www.dec.ny.gov/permits/25004.html)

Allowable gears and license fees for dealing in baitfish or fish bait (aquatic insects) are:

<b>Gear or Operation</b>	<b>Residents</b>	<b>Non-residents</b>
<b>Seine:</b> up to 50 feet of length Fee includes license to sell	\$10.00 each (.25 for each additional foot)	\$30.00 each (.75 for each additional foot)
<b>Cast net:</b> maximum 10 feet in diameter For use only on Hudson River south of Troy Dam, including tributaries to first barriers. Fee includes license to sell.	\$10.00 each	\$30.00 each
<b>Minnow traps:</b> maximum 3 x 1.5 feet	\$3.00 each	\$9.00 each
<b>Minnow fykes:</b> maximum 2 foot hoop <b>For use only in private ponds with written permission of owner.</b>	\$3.00 each	\$9.00 each
To sell baitfish	\$2.00	\$6.00
To take and sell aquatic insects	\$2.00	\$6.00

- Licensed bait dealers can only use nets or traps to collect baitfish in specially designated waters. Specially designated waters shall be the private ponds specified in a person’s baitfish license, the Marine and Coastal District, and those waters listed in Section 35.2 of Title 6 of New York Codes, Rules and Regulations (NYCRR).
- A person who has not been a resident of the state for at least six months prior to the time of applying for a license will be required to pay nonresident fees.
- Persons taking and landing fish for commercial purposes in the Hudson River downstream from the Tappan Zee Bridge must possess a resident or nonresident marine commercial food fishing license, and a Hudson River commercial gear license.

- Smelt may only be taken by angling in Lake Champlain, Lake Clear (Franklin County), Chazy Lake, Upper Chateaugay Lake, and Upper and Lower Saranac lakes and their tributaries upstream to the first barrier, and in the Hudson River.
- Commercially harvested baitfish from inland waters can only be possessed and sold for use on the same water body from which they were caught, and cannot be transported overland by a motorized vehicle unless a permit to do so is issued by DEC. When sold at retail, the issuance of a receipt with the following information is required: the water body in which the baitfish may be used and a warning that the fish may not be transported overland by a car or other motorized vehicle.
- Baitfish are considered certified if they have been tested for and found free of the diseases listed in Section 188.2 of Title 6 NYCRR according to American Fisheries Society or World Organization of Animal Health protocols, and are accompanied by a standard DEC certification report. Effective January 1, 2009, baitfish must be free of VHS, spring viremia of carp, furunculosis, enteric red mouth, and infectious pancreatic necrosis. If baitfish do not meet these standards, they are considered uncertified.
- If both uncertified and certified baitfish are present at the same place of sale, all are considered uncertified, unless permitted by DEC.
- Commercially harvested or raised baitfish that have been certified may be sold, offered for sale, and transported overland if accompanied by the appropriate documentation (i.e., a standard health certificate and a receipt; see the next two bullet items for information to be included on these documents).

- When certified baitfish are sold for resale (i.e., from a wholesaler to a retailer), a fish health certificate and a receipt containing the name of the selling vendor, date sold, species of fish sold, and quantity of fish sold shall be retained by the purchaser for 30 days or until the fish are sold, whichever is greater.
- When certified baitfish are sold for retail, a receipt with the following information must be issued to the purchaser: name of the selling vendor, date, species and quantity of fish. The receipt will be valid for 10 days, including the date of sale. Such fish may be used only on waters where it is legal to use baitfish.

### ***Use of Dead Fish as Bait***

*(Please refer back to the Baitfish Regulations For Anglers )*

### ***Federal Regulations***

The United States Department of Agriculture – Animal and Plant Health Inspection Service (APHIS) issued a federal order on October 24, 2006 (amended on November 14, 2006, May 4, 2007, and April 2, 2008) to establish interstate movement and import requirements for VHS-susceptible fish species that originate from the Great Lakes region. The order prohibits interstate movement of certain species of live fish from the Great Lakes states and prohibits importation of these species from Ontario and Quebec, Canada, unless certain conditions are met. New York State baitfish species that are affected by this order are the emerald shiner, bluntnose minnow, and spottail shiner. The order allows these species to be exported from New York State for disease testing purposes or if they are certified VHS-free and have the appropriate documentation.

See [www.aphis.usda.gov](http://www.aphis.usda.gov) for further information and updates on the federal order, as well as its implications with regard to the harvest, use and transport of baitfish and other fish species.

---

## **Species Descriptions and Use Restrictions**

As of October 1, 2008, 21 species of fish may be sold as baitfish in New York. Fifteen of these species (i.e., the “Green List”) may be used on all waters where it is legal to use baitfish. Please review the Special Regulations by County in the current *New York Freshwater Fishing Official Regulations Guide* for waters where the possession and use of baitfish is prohibited. Use of six additional species is restricted to specific bodies of water. These waters are listed along with the species descriptions that follow.

## Green List Baitfish

### Minnows (*Cyprinidae*)



#### **Golden shiner (*Notemigonus crysoleucas*)**

The golden shiner is a relatively deep-bodied, but thin, minnow that can grow 5 – 10 inches in length. Young fish are silver, but adults exhibit their characteristic golden color. Golden shiners typically live in lakes, ponds or slow-flowing rivers with abundant aquatic vegetation, where they feed on plankton and small insects. It is a common minnow with a wide distribution in New York. It is an important forage species for many predatory fish, and also is a popular commercial baitfish.



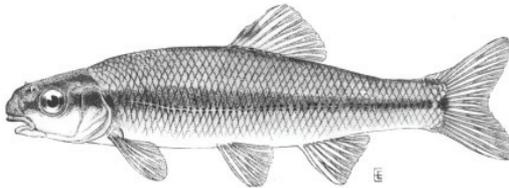
#### **Emerald shiner (*Notropis atherinoides*)**

The emerald shiner is a slender silvery minnow and averages 2 – 4 inches in length. A distinctive emerald band often is visible along the midline of the body. The emerald shiner typically inhabits large rivers and lakes where they swim in schools and feed on zooplankton and insects. They are distributed throughout the Great Lakes, St. Lawrence and Hudson-Mohawk drainages of New York. It is an important forage species in these drainages and is one of the most popular baitfish.



### **Fathead minnow (*Pimephales promelas*)**

The fathead minnow typically grows to 2 – 3 inches. It is drab olive green on the back with an incomplete lateral line and a white belly. The fathead minnow derives its name from the soft fatty pad that develops behind the head of breeding males. Males also become much darker in coloration and develop tubercles on their heads during spawning season, which runs from May through August. Fathead minnows may occupy a wide range of habitats, but they prefer slow water streams and ponds and are able to withstand low oxygen levels. They have an omnivorous diet that includes insects, crustaceans, algae and detritus. It is widely distributed in New York and is an important forage species. It is a commercially valuable species that is commonly raised and sold as a baitfish.



### **Bluntnose minnow (*Pimephales notatus*)**

The bluntnose minnow averages 3 – 4 inches in length. It varies from brown to green on the back with a complete lateral line and white on the belly. It has a small, horizontal mouth that is overhung by the snout. This is a common, widespread minnow that prefers clear lakes, ponds and rivers. It feeds on plankton and benthic organisms. The bluntnose minnow is considered an important forage species and a popular baitfish.



**Spottail shiner (*Notropis hudsonius*)**

The spottail shiner averages 3 – 4 inches in length. It is a silvery minnow that grades from dark on the back to light on the belly. Its name is derived from a large black caudal spot. The spottail typically inhabits clear rivers and lakes with sand or rocky bottoms and sparse vegetation. It feeds on a variety of creatures, including zooplankton, crustaceans, insects and mollusks. It has a widespread distribution in New York and is an important forage species.



**Creek chub (*Semotilus atromaculatus*)**

The creek chub typically reaches 4 - 6 inches in length, but can sometimes grow to 10 inches or more. It is brownish green on the back, silver on the sides and white on the belly. It has a large dark spot at the base of the dorsal fin and barbels located in the grooves above the upper corners of the mouth. The creek chub is common and widespread in New York, inhabiting small to moderate-sized clear streams and small lakes. It feeds on a large variety of foods including plants, insects and other fish.



### **Common shiner (*Luxilus cornutus*)**

The common shiner is one of the largest shiners in New York and can grow 7 – 8 inches in length. As its name implies, it is one of the most common and widespread species in New York and typically inhabits small to medium-sized streams. The common shiner has silvery sides and an olive green back. During the breeding season, which typically occurs in May and June, males will develop a red tinge on their fins and tubercles on their heads. The common shiner is omnivorous and feeds on insects and aquatic vegetation. It is regularly used as a baitfish by anglers.



### **Blacknose dace (*Rhinichthys atratulus*)**

The blacknose dace typically reaches 2 -3 inches in length. It has a dark olive or brown back and a white belly. It also has a thick, dark lateral stripe that extends from the snout to the base of the caudal fin. The blacknose dace is widespread throughout New York State and common in small, clear, fast-flowing streams with gravel substrates. Its preferred foods include small aquatic invertebrates and plants. It is not generally considered an important baitfish species, but it may be used to a limited extent.



**Longnose dace (*Rhinichthys cataractae*)**

The longnose dace is similar in appearance to the blacknose dace, except that it can grow slightly longer (4 – 5 inches), has an elongated snout, and has a more diffuse lateral stripe. It is widespread throughout New York State and typically inhabits fast-flowing small streams, where it prefers to dwell in riffles. Longnose dace prefer a diet of small aquatic insects. It is not generally considered an important baitfish species, but may be used to a limited extent.



**Fallfish (*Semotilus corporalis*)**

The fallfish is the largest native minnow in New York, with a typical length ranging from 8 – 12 inches, but larger fish have been observed. It is silvery brown, grading from dark on the back to light on the belly. Like the creek chub, it has barbels located in the grooves above the upper corners of the mouth. It is found in clear, medium to large gravel bottom streams, and nearshore areas of some lakes. Its diet consists of small fish, crustaceans and aquatic insects.



### **Northern redbelly dace (*Phoxinus eos*)**

The northern redbelly dace is a small minnow that averages 2 inches in length. It has minute scales and a small mouth. It has a dark olive brown back and 2 black lateral stripes. Males develop a lateral red band during spawning. The northern redbelly dace inhabits swampy or boggy ponds, lakes and creeks in the Adirondack region. There are also some isolated populations scattered throughout the state. Its preferred foods are zooplankton, small aquatic insects, and larval fish.

## **Suckers**

### ***Catostomidae***



### **White sucker (*Catostomus commersonii*)**

The white sucker is a cylindrical fish that may grow 18 – 20 inches in length. It is silvery brown on its back and has a white belly. The white sucker is widespread throughout New York. It feeds on insects, crustaceans, snails and clams. It is a commonly used baitfish for northern pike and other large game fish.

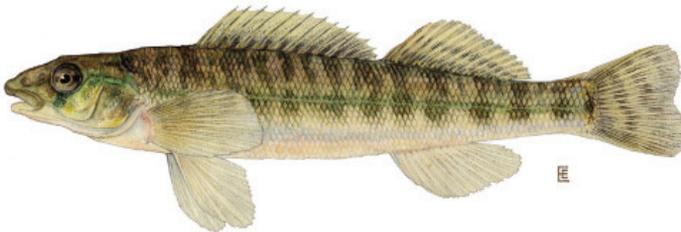


### **Northern hogsucker (*Hypentelium nigricans*)**

The northern hogsucker can reach lengths of 10 – 14 inches. It is a slender fish with a broad head that is concave between the eyes. It is olive brown on the back with 4 – 5 dark saddles. The northern hogsucker typically inhabits riffle areas of clear shallow streams, where it feeds on insects and crustaceans. It is widely distributed from the mid-Hudson drainage to western New York State. It is occasionally used as bait for northern pike and other large game fish.

## **Darters**

### ***Percidae***



### **Logperch (*Percina caprodes*)**

The logperch can grow 4 – 5 inches in length. It is a slender fish that is brownish yellow with a tinge of green on the back and sides. It has narrow, dark, vertical bars across the side and underneath the eyes. It also has a long snout that extends beyond the upper lip. It typically inhabits the slow

---

water of rivers and lakes, where it feeds on insects. The logperch has a scattered distribution in most major drainages of New York State. It is occasionally used as a baitfish.

## Topminnows

### *Fundulidae*



### **Banded killifish (*Fundulus diaphanus*)**

The banded killifish is the only top minnow that can spend its entire life cycle in freshwater. It is a small, slender fish that typically grows 2 – 3 inches in length. It is brown on the back and grades to white on the belly. A series of dark vertical bars extend along the body of the fish. Its head is flattened and the mouth points upward, which is an adaptation for surface feeding. The banded killifish is common on Long Island and in the Hudson River, St. Lawrence River, and Lake Ontario drainages in New York. It is a common baitfish in the southeastern region of the state.

## **Baitfish Restricted to Specific Waters**

### **Herring** *Clupeidae*



#### **Alewife (*Alosa pseudoharengus*)**

The alewife is an anadromous species, leaving the marine environment to spawn in freshwater in the spring. Sea-run alewives may grow to 12 inches in length. There are some landlocked populations, most notably in the Great Lakes and some Finger Lakes. Fish from these populations tend to be smaller, reaching an average of 6 inches in length. The alewife has a vertically compressed body, relatively large eyes, and a serrated belly, which accounts for its other common name – sawbelly. They are greenish gray on the back and silver on the sides. They are an open water species that primarily feed on plankton throughout their lives.

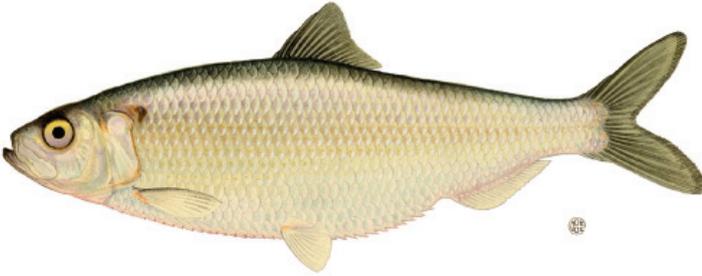
Alewives are considered a critical forage species for Pacific salmon in Lake Ontario and lake trout in some Finger Lakes. They are also a popular baitfish for a variety of large game fish. However, non-native landlocked alewife populations may also negatively affect aquatic ecosystems in a number of ways. Alewives may become so abundant that they can severely affect a lake's plankton community and ultimately disrupt the ecology of the system. They also may directly affect sportfish and other native fish populations by eating their eggs and fry and by

competing with these species for available food resources. Alewives contain high levels of thiaminase, an enzyme that limits thiamin, which is critical in the development of fish embryos. When alewives constitute the primary prey of lake trout and some other predatory species, the resulting thiamin deficiency diminishes the predator's ability to reproduce successfully.

Alewives are prone to annual, sometimes massive, die-offs; typically in mid-winter, early spring and summer. When large scale die-offs occur, this can affect the populations of predatory fish that rely on alewives as a primary food source. In addition, the large numbers of dead and dying fish on shorelines that may result from these events often cause fish and public health concerns.

**To limit the spread of alewives in NY they may only be used as baitfish in the following waters and their tributaries up to the first barrier impassable by fish:**

Canandaigua Lake; Cannonsville Reservoir; Cayuga Lake; Cayuta Lake; Conesus Lake; Hemlock Lake; Canadice Lake; Waneta Lake; Hudson River downstream from the Federal Dam at Troy to the Battery at the southern tip of Manhattan; Keuka Lake; Otsego Lake; Otisco Lake; Owasco Lake; Lake Ontario; Lake Erie; Lamoka Lake; Pepacton Reservoir; Seneca Lake; St. Lawrence River; Niagara River; Mohawk River, and all waters in Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster and Westchester counties.

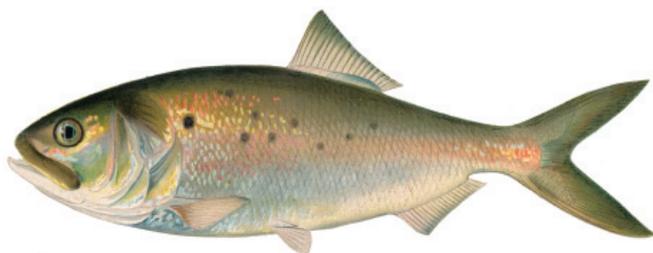


### **Blueback herring (*Alosa aestivalis*)**

The blueback herring very closely resembles the alewife in size, shape and general appearance, except that their eyes are relatively small. They tend to have dark blue backs, quickly grading to silver on the sides. Their habits are also similar to those of alewives in that they are an open water species that primarily feed on plankton, and they are anadromous, inhabiting marine waters and spawning in freshwater. Indeed, alewives and blueback herring are so similar that they are often collectively referred to as river herring. In New York, bluebacks are common in the marine waters around Long Island and in the lower Hudson and Mohawk rivers. It is a seasonally important baitfish for striped bass in the Hudson River.

### **Waters where blueback herring may be used as baitfish:**

Hudson River downstream from the Federal Dam at Troy to the Battery at the southern tip of Manhattan, and the Mohawk River.



### **Atlantic menhaden (*Brevoortia tyrannus*)**

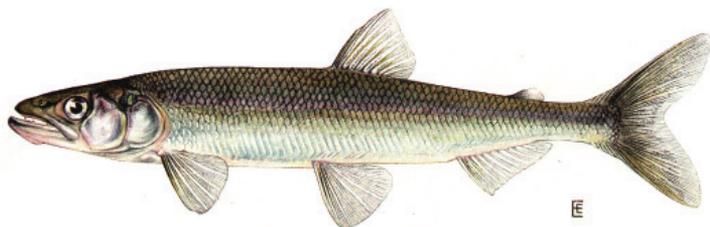
The Atlantic menhaden, also commonly called bunker, is a silvery, vertically compressed member of the herring family that can grow to 15 inches in length. They are a marine species and spawn in the ocean; unlike the anadromous alewife and blueback herring. Menhaden are common in the coastal waters of the Atlantic Ocean and they often move into estuarine habitats where they filter-feed on plankton. They are considered one of the most important forage species for a large variety of predatory marine fish including striped bass, sharks, bluefish and tuna. The commercial menhaden fishery is extremely productive; more pounds of menhaden are harvested each year in the United States than any other fish. They are primarily harvested for production of fish oil, fertilizer and fishmeal, and for use as bait for other species.

**Waters where Atlantic menhaden may be used as baitfish:** Hudson River downstream from the Federal Dam at Troy to the Battery at the southern tip of Manhattan, and the Mohawk River.

## Smelts

### Osmeridae

#### Rainbow smelt (*Osmerus mordax*)



The rainbow smelt is a slender, elongate fish that typically grows 6 – 8 inches in length. It is silvery, with a large mouth, many teeth, an adipose fin, and a complete lateral line. Marine populations are anadromous and, therefore, spawn in freshwater streams. In New York State, many have become landlocked in freshwater lakes and run up tributaries to spawn. When not spawning, they prefer the open, cool, deep water of lakes. In New York, they are distributed in the Great Lakes, Hudson River, most Finger Lakes, and a number of Adirondack lakes. Juvenile smelt feed on zooplankton, while adults consume small crustaceans and fish. They are a popular food fish, are important as a forage species for many game fish, and are a locally significant baitfish. However, in certain situations, rainbow smelt may negatively impact native fish populations by out-competing them for available food and by consuming their larval and juvenile life stages.

#### **Waters where rainbow smelt may be used as baitfish:**

Canandaigua Lake; Cayuga Lake; Cayuta Lake; Hemlock Lake; Canadice Lake; Honeoye Lake; Conesus Lake; Fulton Chain; First, Second, Third and Fourth Lakes (Herkimer County); Keuka Lake; Owasco Lake; Lake Champlain; Lamoka Lake; Lake Ontario; Lake Erie; Seneca Lake; Star Lake (St. Lawrence County); Waneta Lake; St. Lawrence River and the Niagara River.

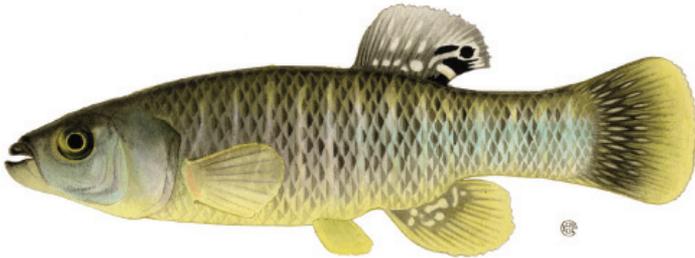
---

# Topminnows

## *Fundulidae*

### **Mummichog (*Fundulus heteroclitus*)**

The mummichog is a topminnow similar in appearance to the banded killifish but shorter and stockier with a more rounded snout. It typically grows 1 – 2 inches in length.



The mummichog is a brackish water species that inhabits estuarine areas of Long Island and the Hudson River. It is a commonly used baitfish on Long Island.

### **Waters where mummichogs may be used as baitfish:**

Hudson River downstream from the Federal Dam at Troy to the Battery at the southern tip of Manhattan, and all waters in Nassau and Suffolk counties.

## Freshwater eels

### *Anguilla rostrata*



#### **American eel (*Anguilla rostrata*)**

The American eel, the only freshwater eel in the Western Hemisphere, is a long cylindrical fish that can grow to 3.5 feet in length. It is distinguished from lampreys, the only other similarly elongate fish, by the presence of jaws and paired fins. Adult eels are olive brown on the back and lighter on the belly. The American eel has a very complex life cycle. Most of its juvenile and adult life is spent in freshwater streams and rivers. Upon reaching sexual maturity, it migrates to the marine waters of the Sargasso Sea in the middle North Atlantic Ocean to spawn. Adult eels are presumed to die after spawning. Ocean currents bring the eggs and young eels back to the Atlantic coast of North America and ultimately to freshwater rivers and streams. It is an opportunistic carnivore and feeds on a variety of aquatic organisms, including fish and large invertebrates. In New York, it is found in all major drainage basins; but populations are declining in some areas, particularly in the St. Lawrence River and Lake Ontario watersheds. Juvenile eels are sometimes used as bait for marine species such as striped bass.

### Waters where American eels may be used as baitfish:

Delaware River, 6-inch minimum size limit, and the Hudson River, between 6 and 14 inches, downstream from the Federal Dam at Troy to the Battery at the southern tip of Manhattan.

---

## What can I do to help?

You can help to protect the fisheries of New York State and prevent the spread of unwanted aquatic organisms and fish diseases into our waters by following these guidelines:

- Purchase bait only from a dealer selling certified, disease-free bait.
- Carefully review and follow the regulations for baitfish use in New York State.
- Dispose of water from your bait bucket and unused bait in an appropriate location *on land*.
- Do not transport fish, including baitfish, from one water body to another.
- Do not release unused baitfish into any water body. Stocking fish, which includes dumping unused baitfish in the water you were fishing, is illegal without a permit from DEC.
- Do not dispose of fish carcasses or by-products in any water body.
- Do not use baitfish in waters where their use is prohibited.
- Remove mud, plants or other organisms from all gear, boats, motors and trailers before departing access sites.
- Drain all water from your boat, including bilge areas, livewells and baitwells, before leaving a boat access site.
- Dry or disinfect all boating and fishing equipment before use in another water body. Pay particular attention to boat

livewells and bilge areas that are difficult to dry. A two percent bleach solution or full-strength household disinfectants/cleaners listing alkyl dimethyl benzyl ammonium chloride on their labels are effective disinfectants.

## ***Keep Fishing Great! Use Certified Bait!***

Though this material was made possible, in part, by a cooperative agreement with the United States Department of Agriculture's Animal and Plant Health Inspection Service (APHIS), it may not necessarily express APHIS's views.