A Brief History of Herring
By James MacDonald

Did you know that some fish were once prized as fertilizer? You’re not herring things. Herring have a long and important history in the U.S., with mentions of herring dating to precolonial times. In many accounts, Native Americans taught the colonists not only to eat the herring but also to plant a few herring with the vegetables in order to ensure a bountiful harvest—the nutrients in the decomposing fish made for an excellent fertilizer. Some of the earliest examples of fisheries regulations governed the placement of herring weirs. Just like today, the oily fish and their roe were eaten smoked, salted, or pickled (colonists also used their backbones as candle wicks). In later years the Hudson River gill net fishery was very economically important. Anglers today have an exciting time fishing for the finicky herring - if a big run is on, you won’t be able to catch your breath!

“Herring” refers to a number of smallish, silvery fishes from several genera in the family Clupeidae, which are best known for forming vast, synchronized schools. These fishes are so adept at schooling that some ichthyologists believe that they have literally evolved to school. There are several species of herring common in New York waters, including the menhaden (*Brevoortia tyrannus*), American shad (*Alosa sapidissima*) and the Alewife (*Alosa pseudoharengus*). The portly alewife, apparently named for the stout lady innkeepers of 18th century England, was most prized as fertilizer (and food). The larger American shad is most prized by gourmands and anglers.

The ecological importance of herring cannot be overstated. Everything, from sportfish such as bluefish and striped bass, to seals, dolphins, whales, and even ospreys rely on herring. The majority of herring species are anadromous, meaning they spend the majority of their life in the ocean but return to freshwater to spawn; this has the added ecological benefit of transferring nutrients from marine to freshwater systems which are deficient. Despite those early days of abundance, overfishing and the construction of mill dams and other structures cut off the herring’s access to spawning grounds, and populations declined. Commercial landings (mostly for bait and fish oil) since the 1950s have plummeted (USFWS), leaving many herring species in a precarious position. Efforts to restore herring runs are taking place throughout the northeast; in our area, bypasses have been or will be established in several local rivers. So give these iconic fish a break; obey all fishing regulations and, where possible, use lures in lieu of bunker chunks. At the very least, leave some for the bass. Fish On!

Contributors
Steering Committee Members: Melissa Cohen, Ron Gelardi, Jim Gilmore, Chart Guthrie, Steve Heins, Tim Huss, Robert J. Kent, Greg Kozlowski, Ed Woltmann
Newsletter Staff: Darin Alberty, Melissa Cohen, James MacDonald, Ann TeNyenhuis
Contributing Writers: Darin Alberty, Erik Latremore, James MacDonald, Ann TeNyenhuis

I FISH NY is a New York State Department of Environmental Conservation education program. On Long Island and in New York City, the program has partnered with New York Sea Grant.
ASK KATIE

Q: What can I fish for during the winter-early spring on LI?

A: Beat the cabin fever and take a trip to your local tidal area to fish for white perch from November till April. White perch are often mistaken for a freshwater species, but in fact are anadromous (can survive in both fresh and salt water) and often found in brackish, tidal creeks. White perch are actually a member of the temperate bass family, and are a relative of the striped bass. They rarely grow much larger than a pound, but some record breakers have been caught exceeding 2 lbs. Long Island tidal waters of the Connetquot River and the Carman’s River have been white perch hotspots year after year.

Use light tackle when fishing for white perch. Try a 5-6 foot spinning rod (or spincaster for the kids) with 4-6 pound test monofilament line. A simple night crawler will do the trick for bait. Let your worm sink all the way down, and wait for the bite! Remember you will need a Marine Recreational Fishing License (MRFL) when fishing in the marine district. For more information on the true bass of New York, visit <http://www.dec.ny.gov/animals/7267.html>.

Changes in River Herring Management in Store for New York

In May 2009, an amendment was adopted by the Atlantic Marine Fisheries Council which will change future river herring management for all Atlantic coastal states. Amendment 2 was adopted to the Interstate Management Plan for Shad and River herring which requires all states that have populations of river herring (alewives and blueback herring), to close fisheries except those states with a sustainable fishery.

So what does this mean for New York herring fisheries? New York must either close their river herring fishery, or prove that they have a sustainable river herring fishery using available data. ‘Sustainable’ is defined as “those that can demonstrate their alewife or blueback herring stock(s) could support a commercial and / or recreational fishery that will not diminish the potential future stock reproduction or recruitment.”

What can you do? Attend a public meeting! NYS DEC will be holding public meetings in the Upper-Hudson region, Mid-Hudson region, and on Long Island this spring. For more details on the amendment and a public meeting schedule, check out the following website, <http://www.dec.ny.gov/animals/40998.html>. Visit <http://www.dec.ny.gov/outdoor/7894.html> (marine regulations) and <http://www.dec.ny.gov/outdoor/31421.html> (freshwater regulations) for the most current regulations.
FISHING HOTSPOTS
Long Island: Deep Pond Cooperative Fishing Area, Manorville

Type: Glacial Kettlehole Lake
20 ft. average with a 40 foot hole, 32 acre

Where: Suffolk County, located on the Schiff Scout Reservation at 1606 Wading River Manor Road, Wading River, NY 11949.

Getting There: Take the LIE to exit 69 north and follow Shultz/Wading River/Manorville Road north for 6 ¼ miles and look for the Boy Scout sign on the right.

Access: September 15-June 15, Monday - Thursday (sunrise to sunset), Friday (sunrise-3pm) closed on the weekends.

Boat Launch: Hand carry, beach launch
Fishing Pier: No
Shoreline: Yes, the entire shoreline
Wheelchair Accessible: No

Species: Chain pickerel, yellow perch, pumpkinseed sunfish, brown trout

Specific Rules for Deep Pond Cooperative Fishing Area: DEC Seasonal Access Permit is required, Anglers 16 years of age and older requires a NYS Freshwater Fishing License, Anglers must sign in and out at the Angler Sign in Station, All Boy Scout Rules apply.

Tips: Chain pickerel are found throughout the year, and are more commonly caught in the early spring in the shallows after they have spawned. Pickerel are catch and release only. Common lures would include spinners, crankbaits, worm harnesses, and small spinnerbaits. Cast these lures near the Phragmite stands, slow retrieve them and wait for the strike.

FISHING HOTSPOTS

Long Island: Deep Pond Cooperative Fishing Area, Manorville

Yellow perch and pumpkinseed sunfish are often caught using worms on a bobber rig. Every Fall, trout are stocked in Deep Pond by the NYSDEC. Common tactics include worms and flies for the more experienced anglers. Remember to match the hatch. Banded killifish are the common prey of many larger fish so feel free to bring a legal seine net to catch bait to target the larger fish. Ice fishing is permitted on the pond so check out <http://www.dec.ny.gov/outdoor/7733.html> for ice safety information.

**Gear:** A 6’ - 7’ light to medium action rod, spincasting reel with 6+ lb test monofilament line is recommended for pickerel and panfish. A nice 3 or 4 weight fly rod with corresponding weight line and tippet will do just fine for the trout and pumpkinseed sunfish in Deep Pond.

Additional Information: NYSDEC Regional stocking list: <http://www.dec.ny.gov/outdoor/7739.html> or call 631-444-0280 to have a copy mailed to you.

---

FISHING HOTSPOTS

NYC: Canarsie Pier, a part of Gateway National Recreational Area

**Type:** Saltwater, Jamaica Bay.

**Where:** Located at the south end of Rockaway Parkway, parking is located in the middle of the pier.

**Getting There:** Subway and Bus: BMT L subway to Rockaway Peninsula, then transfer to the B42 bus; it will drop you at the entrance to the pier. Car: Belt Parkway to Exit 13, Rockaway Peninsula.

**Access:** open from dawn until dusk

*Boat Launch:* Kayak launch  
*Fishing Pier:* Yes, the 600ft pier was originally a commercial dock.  
*Shoreline:* Yes; when entering the park there is a small beach located to the left of the pier.  
*Wheelchair Accessible:* Yes, all restrooms at Canarsie Pier are wheelchair accessible. Handicapped parking is available.
Several species of herring enter the waters of NYC during winter, particularly into bays and inlets, so you don’t have to spend the winter dreaming of spring. The easiest way to fish for herring is to use a Sabiki rig. This unusual-looking setup consists of a row of small hooks with shiny material attached. This material is known as skin flash as it imitates the shiny scales of small fish. A small sinker on the bottom of the line completes the rig, holding the flashing hooks near the bottom and making casting possible.

For best results, cast the rig and then slowly bounce the sinker along the bottom. This motion causes the hooks to shimmer enticingly, hopefully inducing the herring to feed. When they’re biting, it is not uncommon to catch more than one fish at a time. If you are lucky enough to be in the right place at the right time the action can be nonstop.

The Sabiki rig may also be used for other small fish in the warm months to target any small fish; sabikis are particularly effective at catching snappers (small blue fish) during late summer.
Fish 411: Herring
Fish Identification and Information

There are several species of herring native to the waters of New York. Herring are a silvery iridescent color with shades of blue and purple, pearly white, green, and yellow. Large distinct black spots can be found on their sides. Many species of herring look alike, making it difficult to tell them apart. All species exhibit some form of counter shading, so they tend to be darker on top with silvery sides and bellies. Many herring species dive deep during the day for protection from predators, rising to shallower waters at night—the Guinness Book of World Records grants the record for largest single group of animals to... the Atlantic Herring!

If you look closely at each herring’s body you will notice slight differences between species: body shape, shape of the jaw, location of spots, and the size of the eye. The following chart shows a few of the herring species most commonly encountered by anglers in New York’s waters, but other local species such as the alewife, although rarely targeted, are important ecologically. For further information, check out

Use the chart on the following page to “Name that Herring!”
## FISH 411: Fish Species Characteristics

<table>
<thead>
<tr>
<th>Fish Species</th>
<th>Characteristics</th>
<th>Historic/Commercial Importance</th>
<th>Location/Time of Year</th>
<th>Fish Picture</th>
</tr>
</thead>
</table>
| American Shad *Alosa sapidissima* | • Largest of NY herring (14”-29”)  
• Long upper jaw  
• Silvery iridescent with 4-6 black spots on sides | • Important commercial fish food along the Atlantic coast, valued for its meat and roe  
• Fun fact: scientific name means “most delicious” | • Range Quebec to Florida  
• Spawn May-early June  
• Best fishing in April & May                     | ![Image by Hugh Crisp](image_url) |
| Atlantic Menhaden *Brevoortia tyrannus* | • Silvery in color, distinct black spot behind gill cover with small spots on side  
• Caudal fin deeply forked  
• Size max 15” | • Processed for oil, protein, fishmeal, and used as bait (bunker) | • Range Nova Scotia, Canada to central Florida  
• Spawns in saltwater unlike other herring, during March  
• Best fishing in early spring to fall | ![Image by Duane Raver](image_url) |
| Atlantic Herring *Clupea harengus* | • Silvery with blueish or greenish black  
• No dark spots  
• Maximum size 18” | • One of the world’s most valuable fish.  
• Used as bait  
• Manufactured into oils, fertilizer, fishmeal, and pearl-essence.  
• Fun fact: Certified as “most numerous fish” by Guinness Book of world Records. | • Range Greenland to North Carolina, also Eastern Atlantic and NE Pacific  
• Spawning time varies by population; spends daytime in deeper waters, comes closer to surface at night. | ![Image by Duane Raver](image_url) |
| Blueback Herring *Alosa aestivalis* | • 10-14” long  
• Slender body  
• Small eye  
• Short upper jaw; lower jaw juts out slightly when mouth is closed  
• Silvery iridescent with one large black spot on side | • Commercial fish food valued for its meat  
• Like all herring, extremely important prey species for game fish and marine mammals | • Range Nova Scotia to Florida  
• Spawns May till early June (travels farther inland than other herring) | ![Image by Hugh Crisp](image_url) |
| Alewife *Alosa pseudoharengus* | • 10-14” long  
• Deep body  
• Large eye  
• Short upper jaw  
• Silvery iridescent with one black spot on sides | • Commercial food fish valued for its meat  
• Occasionally a source of serious conflict between native and settler groups. | • Range Newfoundland to North Carolina  
• Spawns April-May | ![Image by Duane Raver](image_url) |
CALENDAR OF EVENTS

I FISH NY provides all bait and tackle. Just call and reserve your spot today!

Long Island:

April 10th, 2010
Family Freshwater Fishing Festival
Belmont Lake State Park
10am-4pm

NYSDEC stocks Belmont Lake with over 1,000 trout for the event. Children’s activities include: inflatable slide, environmental exhibits, and “Spring Fling” casting contest. No pre-registration required.

To get more information, log on to http://www.ifishnewyork.org.
To ask questions or register, call 631.444.0283 (LI) or 718.482.4022 (NYC).

NYC:

Check the I FISH NY website for 2010 events.

NYSDEC
50 Circle Road
SUNY-Stony Brook
Stony Brook, NY 11790