Fishing has a Place in New York City’s Public School Curriculum
By Melissa Cohen

“Tuna is a fish? I didn’t know that!” a fifth-grade student recently said to me during one of our classroom lessons. Clearly we were in the right place. Outreach to public school students has been a significant part of the I FISH NY-NYC program since its inception in 2000. In addition to learning that tuna is more than lunchmeat, students learn about fish anatomy, adaptations, and diversity. And if that wasn’t enough, all students participate in a fishing trip to a local water body where I FISH NY provides the rods, bait, and instruction at no cost to the school.

The I FISH NY-NYC classroom program involves two sequential in-class visits, each dealing with a different aspect of fish biology, and targets grades 3-8. The program is currently in the process of expanding to include high school students as well. Our GoFish! card game, featuring 52 species of fish found in New York State, introduces students to fish classification and diversity in a fun, low-pressure environment. Topics such as fisheries management and invasive species are the focus of more in-depth high school lessons.

While the students enjoy our classroom visits, they look forward to the fishing trips the most. Fishing instruction includes a waterside safety lesson and information on stewardship practices such as catch and release fishing and proper handling of fish to minimize harmful impacts. Teachers have confirmed the value of this program. JoEllen Schuleman, a 4th grade teacher from P.S. 134 in Manhattan, states that, “The I FISH NY program is one of the most memorable events in my student’s fourth grade year. Students from three years ago still return and ask me if I remember when we went fishing and learned about fish anatomy.” Maria Banzil from P.S. 171 in Queens also reflects on the program: “I think I FISH NY…allows children, especially our neighborhood children, not only the opportunity to learn about their environment, but also to experience what most of them are not exposed to. It’s a great learning experience.”

The I FISH NY program on Long Island also offers a classroom program similar to that of I FISH NY-NYC. For more information log onto www.ifi shnewyork.org or contact I FISH NY-LI staff at (631) 444-0283.

Photo courtesy of DEC staff
Students from P.S. 171 look for fish at Gantry Plaza during their class field trip.

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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.
Tins are one of the oldest and most basic saltwater lure types on the market. Nothing more than shiny pieces of metal attached to hooks, tins can imitate a variety of baitfish, attracting the attention of fish ranging from snappers (young bluefish) to mammoth striped bass. Depending on how they are retrieved after casting and the weight of the lure, tins can be placed at any water depth: the faster the retrieve, the higher up in the water column the lure will travel. Adding a short jerk of the pole during a retrieve causes a rise and fall of the lure, imitating the movement of an injured baitfish. The versatility and simple design (not to mention low price) of tins make them highly popular among anglers. The prime time to use a tin is when the wind is blowing hard at your face and you need a heavy lure that can be cast and worked in rough seas.

ASK KATIE  Q: I am looking to purchase a freshwater rod and reel to target bass and other panfish this season. Do you have any suggestions?

A: A simple combination of a rod and reel is needed to target bass and other panfish. Whether it is a separate rod and reel or a combination which comes with both the rod and reel in one package, there are many to choose from at your local bait and tackle shop. Whichever you choose, there are a few things to keep in mind. When selecting a rod, you want to match it to the size of the fish you are targeting. Line rating and action of the pole are important. In your case, a 6 to 6 ½ foot pole, rated with 8-14 lb. test line and that has a light to medium action will work nicely. It will be strong enough to catch beefy bass as well as sensitive enough for those smaller panfish.

When choosing a reel, spinning, spincasting or baitcasting are appropriate. As a quick reference; a spincasting reel is recommended for beginner anglers, a spinning reel for those who are advanced beginners or higher, and a baitcasting reel is suggested for anglers intermediate and above. Good luck and remember to practice good stewardship when fishing!

ARTIFICIAL LURE SPOTLIGHT

Tins

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FISHING HOTSPOTS
NYC: Lighthouse Park, Northern end of Roosevelt Island

**Type:** Saltwater-East River estuary

**Where:** Roosevelt Island (RI) is located in the East River between Manhattan and Queens, roughly aligned with 47th to 87th Streets in Manhattan

**Getting There:**
*Car:* Via RI Bridge located at 36th Avenue and Vernon Boulevard in Queens. Visitor parking is available at the Motorgate Garage.

*Subway:* F subway links RI with Manhattan and Queens; RI stop is between 63rd Street and Lexington station in Manhattan and 21st Street/Queensbridge station in Queens.

*Tram:* Tram runs every four minutes between RI and 2nd Avenue and 59th Street Manhattan. Fare is $2; metrocards are accepted.

*The Red Bus:* Bus costs $0.25, and loops from Tramway Plaza north and the subway station to the new octagon development and back. Ask the bus driver to drop you off at the north end of RI and they will give you directions to the Park.

**Access:**
*Boat Launch:* No

*Handicap Access Fishing Pier:* Yes

*Shoreline:* Yes; 150ft sea wall with rocky shore line

**Species:** Striped bass, bluefish, weakfish, fluke/summer flounder, black sea bass, blackfish, sea robin, oyster toadfish, porgy/scup.

**Specific Rules for Lighthouse Park:** All species are subject to marine recreational fishing regulations; please note that daily limit is a 24 hour period, not each time fished in one day.

**Other:**
- For marine recreational rules and regulations log onto: [http://www.dec.ny.gov/outdoor/7894.html](http://www.dec.ny.gov/outdoor/7894.html)

- RI Visitor Center: (212) 688-4836; [http://www.rihs.us](http://www.rihs.us)

- RI Operating Crop (RIOC): coordinates events on RI; 591 Main Street; (212) 832-4540, open 9am to 5pm M-F

**Tips and Techniques:** Temperatures in the early spring are a good guide for when to fish. When the water temperatures start to reach the 50’s striped bass will start to feed. Striped bass are often the first fish caught in early spring, both East River winter residents as well as fish returning to the Hudson River to spawn. Lighthouse Park on RI is in a perfect location; it’s right on the migration route to and from the spawning grounds making it a prime spot for some early spring action. Look for shallow areas to the west side of the Lighthouse at high tide as stripers often congregate here as the water warms. As the spring passes into summer fish diversity will increase to include species such as bluefish, fluke/summer flounder, and oyster toadfish—to name a few.

Seawall shoreline access at Lighthouse Park

Photo courtesy of Darin Alberry
FISHING HOTSPOTS
NYC: Lighthouse Park, Northern end of Roosevelt Island

Tips and Techniques Cont: Pay attention to the tide; a good rule of thumb is to fish two hours before high tide and two hours following, into the outgoing or ebbing tide. Slack tide, between the last of the incoming tide and before the outgoing tide, can also produce fish. However, if fishing slows, slack tide can serve as a snack, lunch or dinner break. Combine a high tide with the low light of dawn or dusk and you can dramatically increase your chances of encountering fish. For tide information, log onto: http://www.noreast.com/tides/indexb.cfm. Remember this is a tidal strait; while nobody likes to lose rigs, the strong currents and underwater snags make it a distinct possibility. The currents and underwater structure are what attracts fish to this particular area, but they can make fishing challenging. Be sure to move around the park to find the clearest spots.

- Gear: A 7ft to 9ft surf outfit lined with 20lb to 30lb test monofilament or braided line.
- Natural Baits: In general, clams are always a good choice, generally effective for all species mentioned. Use a full clam for striped bass and bluefish, and try using smaller clam pieces for the other species. In the spring, try bloodworms, a favorite of striped bass. As the season progresses try using menhaden (bunker) chunks (purchase a whole fish from your local bait and tackle store then cut into 1-1½ inch chunks) and mackerel strips as they can often produce larger fish towards the end of summer and into the fall.
- Natural Bait Rigs: A simple sinker and dropper loop set up is advised when using bait. Tie a dropper loop approximately 1 to 2ft from the end of the line; then tie a double overhand knot. Attach a sinker on the double overhand knot and a hook with a 20 inch leader onto the dropper loop. For knot tying instructions, check out: http://www.rbff.org/uploads/Resources_section/Tip_Sheets/Knots.pdf. Depending on the strength of the tide, select a sinker between 1-4oz. Remember, the bigger the bait, the bigger the hook; try hooks in the 2 to 6/0 size range.
- Artificial Baits: As a rule in the Hudson and lower sound, larger lures work better in the early part of the season as bunker enter into the river and smaller lures work better later into the season, but be flexible and try different sizes as conditions require. In the spring, try using a medium to large (4-6 inches) paddle tail swim bait, such as a Storm Shad. If the tide is running hard, select a larger lure to compensate. Cast the lure up tide and retrieve it at a brisk pace, keeping the line taught in order to feel a strike. Another option is to try a surface lure such as a popper. When you start to retrieve the lure, twitch the pole; this causes a splash on the water’s surface, and thereby draws attention from the predatory fish in the area. Vary your retrieve speed and rod twitches until you find a method that induces a bite.

Additional Information: Here are a few other fishing spots on the Island: Southpoint Park (southern tip of RI), Observation Pier (along Promenade Walk close to the visitor center), Capopianco Field (located across from the baseball field south of Roosevelt Bridge). In addition, maps of the Island are available at the visitor center and the RIOC building.
FISHING HOTSPOTS
Long Island: Willow Pond, Caleb Smith State Park, Smithtown

Type: Freshwater pond, 3 feet deep, 4.3 acres.


Getting There: on Route 25 between Old Willets Path and Meadow Road; north side of road.

Access: pond open for fishing April 1st; Wednesday-Sunday 8a-4p; hours may change in summer.

Boat Launch: No
Handicap Access Fishing Pier: Yes; 10ft dock
Shoreline: Yes; can only fish the eastern end of the Pond; about 200 ft. Vehicle use fee is 6$, free with Empire Passport (http://nysparks.state.ny.us/passport/).

Species: Largemouth bass, brook and brown trout, pumpkinseed sunfish, bluegill sunfish.

Specific Rules for Willow Pond: Must be ages 15 and under to fish at the Pond, parents can assist; catch and release only.

Other:
• For general rules about freshwater fishing: http://www.dec.ny.gov/outdoor/7917.html
• The Park is offering two children’s fishing events in 2009: Jr. Angler Fly Fishing Clinic and Jr. Angler “Catch and Release” Fishing Tournament; for more information: http://nysparks.state.ny.us/events/list.asp?txtPKRefNo=LI-5&txtHSRefNo=NA&txtRegion=&dtStart=&dtEnd=&feature=0&sortBy=0.

Tips and Techniques: Springtime means the start of trout fishing and Willow Pond is no different. Most anglers fish the small peninsula that juts out into the Pond; however, the southeast edge of the pond in-between the trees also holds fish. As the water temperatures begin to heat up, warm water species such as largemouth bass, pumpkinseed sunfish, and bluegill sunfish can be caught. The peninsula itself, though, is the hotspot.

• Gear: A 5 ½ to 6 ft spincasting, spinning or baitcasting combo lined with 6 to 8lb test monofilament line.

• Natural Baits: Worms, namely dillys, wax, and meal are good for targeting trout, while pumpkinseed and bluegill sunfish will also bite. Dough, such as Pillsbury Crescent Rolls or pizza dough, is also a favorite among anglers for trout. When fishing with dough, take a small piece of dough and roll it into a ball. Gently wrap the “doughball” around the shank or long part of the hook. Be sure to close up the seam; this prevents the dough from flying off when casted.

In the summer, nightcrawler worms are a good choice when targeting bass and sunfish.
FISHING HOTSPOTS
Long Island: Willow Pond, Caleb Smith State Park, Smithtown

Tips and Techniques Cont:

• **Natural Bait Rigs:** A simple hook and bobber set up is one option for this site. Tie a size 6 or 8 hook onto the end of your line using an improved clinch or Palomar knot. For knot tying instructions, check out: [http://www.rbff.org/uploads/Resources_section/Tip_Sheets/Knots.pdf](http://www.rbff.org/uploads/Resources_section/Tip_Sheets/Knots.pdf). Attach a 1” to 1 ½” bobber about 1ft from your hook. Depending on where you are fishing in the Pond, adjust the bobber so the bait is close to the bottom. All worms and doughballs can be used in this set up.

Another option is to remove the bobber and attach a non-lead split shot sinker about 1ft from your bait. This option is good for bass fishing with a nightcrawler but it involves a bit more action from the angler: 1) cast bait out; 2) let bait sink to the bottom; 3) gently lift the rod tip a few times, raising the worm slightly off the bottom; 4) reel up slack, wait few seconds, letting bait sink back to the bottom; 5) continue steps 3-5 until at shore’s edge, or a fish strikes. Repeat.

• **Artificial Baits:** Because aquatic vegetation in and on the water is generally low in the spring, diving lures such as spoons and spinners are a good option. White, yellow, and pink spinners are always a favorite. Cast the lure out and vary your retrieve until you find a speed that the fish like. As the temperature begins to heat up, the plants begin to grow, often completely taking over the Pond; when this occurs, try using top water lures, such as poppers, for bass. Weedless frogs or mice are also a good choice. Simply cast on top of vegetation such as lily pads, twitching the rod tip to move the lure from plant to plant. Curly tail or small fish soft plastics on 1/8 to ¼ lead jig heads also can be worked, bouncing through the vegetation. Be sure to move the rod tip lightly as hard twitches can cause your line to get snagged in the weeds.

Additional Information: Caleb Smith State Park also offers a fly fishing opportunity for anglers in the south section of the Park on the Nissequogue River and Vail Ponds. Brook and rainbow trout are present, however a few large brown trout linger. The Park offers 8 river sites and 5 pond sites to choose from, open Wednesday to Sunday. Each site involves wading, no felt soles, or platform fishing. Anglers can choose from the following 4 hour sessions: 7a-11p and 11:30a-3:30p. A third session in the evening from 4p-8p is pending. The cost to fish is $20/person/session. A 2 fish limit is imposed/session. Reservations are required and can be made by calling 631-265-1054, Wednesday through Sunday, 8a-4p. Any anglers age 16 and over are required to present a valid NYS freshwater fishing license. Note that the vehicle use fee of $6 is suspended when fly fishing.

The New York State Department of Environmental Conservation (DEC) stocks 17 Nassau and Suffolk County waters with brown and rainbow trout a few times in the spring and the fall each year, providing an excellent opportunity to kick off the fishing season. For more information on the waters stocked and the number of fish, call the DEC Bureau of Fisheries at (631) 444-0280 or log onto: [http://www.seagrant.sunysb.edu/ifishny/pdfs/TROUTStockingListMap.pdf](http://www.seagrant.sunysb.edu/ifishny/pdfs/TROUTStockingListMap.pdf).
Flatfish are a diverse order of fishes, including flounders, soles, and tonguefishes, which are adapted to living on the sea floor. To do this, these fish shift one eye to either the right or left side of their head during their larval stage, giving them the ability to swim on their side and look permanently upwards. Flatfish can also alter their pigmentation to camouflage themselves with the ocean's substrate, and feed on small crustaceans, invertebrates such as sandworms, or fish. All three types of flatfishes are present in our region, but only certain flounders and soles are likely to be encountered by anglers. The uncommon soles are easily distinguished from flounders by their rounded heads which lack prominent snouts. The most common sole, the hogchoker, is a small, brown, year-round resident of estuaries and bays.

Of the flatfishes, flounders are the most prevalent; our waters are home to at least 12 species. Fortunately, the different species are easily distinguishable by body markings and orientation. To identify a flounder, the first place to start is with the flounder's “handedness” which refers to the direction the fish is facing to orient the fish's mouth below its eyes. Most flounders are left handed, frequently referred to as left “eyed.”

Use the chart below to “Name That Flounder!”

<table>
<thead>
<tr>
<th>Fish Name</th>
<th>Right/Left Handed</th>
<th>Characteristics</th>
<th>Location/Time of Year</th>
<th>Fish Picture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Flounder (fluke)</td>
<td>Left</td>
<td>Brownish body with 5 large, prominent dark spots toward the rear half of the fish; teeth present</td>
<td>Migrate inshore in late spring and summer; muddy, sandy, to rocky bottom</td>
<td><img src="image" alt="Fish Picture" /></td>
</tr>
<tr>
<td>Winter Flounder</td>
<td>Right</td>
<td>Reddish to olive green in color; small mouth; no teeth; color variable</td>
<td>Migrate to inshore bays and estuaries in winter, early spring</td>
<td><img src="image" alt="Fish Picture" /></td>
</tr>
<tr>
<td>Windowpane Flounder (sundial)</td>
<td>Left</td>
<td>Body and fins covered in many small dark spots; first dorsal rays form a forked crest</td>
<td>Sandy bottom habitat; abundant inshore late spring to summer.</td>
<td><img src="image" alt="Fish Picture" /></td>
</tr>
<tr>
<td>Four Spot Flounder</td>
<td>Left</td>
<td>Four oblong spots encircled in a pinkish hue; eyes very close together; rare</td>
<td>Inshore in summer; deeper water</td>
<td><img src="image" alt="Fish Picture" /></td>
</tr>
</tbody>
</table>

Images provided by: Nim Lee and NYSDEC
CALENDAR OF EVENTS

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

Long Island:

Sat. April 18th
Family Freshwater Festival
Belmont Lake State Park
10am-4pm

NYSDEC also stocks Belmont Lake with over 1,000 trout for the event. Children’s activities include: inflatable slide, environmental exhibits, and “Spring Fling” casting contest.

NYC:

Sat. May 16th
Roosevelt Island Health and Fitness Day
Capobianco Park, Roosevelt Island, NYC
11am-5pm

There will be outdoor exhibits and activities for all ages as well as information about city health resources- and, it goes without saying, fishing! Please call ahead to confirm availability of fishing.

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).