Anglers, Boaters, and Invasive Species
By NYSG and NYSDEC staff

Invasive species are known by many different names: invaders, exotics, invasives, and non-native species. However, all names have the same definition, a non-native plant or animal deliberately or accidentally introduced into a new habitat. Invasives are often a cause for concern as they can greatly affect an ecosystem, most often in a negative fashion.

One of the greatest impacts invasive species can have on an environment is loss of biodiversity. Invasive species represent the second leading cause of species extinction and loss of biodiversity in aquatic environments worldwide. When invasive species are introduced to an area, they frequently have no natural predators or parasites; at the same time native species have evolved without the invader and have a reduced ability to compete with or defend itself against the invasive. This allows invaders to grow at a faster rate and often grow to larger sizes than in their native range. In many cases, native species populations are reduced or even completely replaced by non-native species.

Another impact is economic. Invasive species can bring about large direct and indirect financial costs to introduced areas. For example, the zebra mussel, originally from the Caspian Sea region of Asia, clogs waterways, filters, and irrigation systems in the Great Lakes and surrounding regions. Since 1989, some facilities located on Lake Erie have reported big reductions in pumping capacity and occasional shutdowns caused by encrusted zebra mussels, costing affected businesses and municipalities billions in lost capacity and control/eradication efforts.

In most cases, eradication efforts are not only expensive but unsuccessful.

Given the near-impossibility of eradicating an invasive species once a population is established, the most effective control is to prevent their spread in the first place. Non-native species can be spread by a few different methods, including but not limited to: hitchhiking, through the aquarium trade, ballast water (large oceanic vessels take water in ballast to help with balance; organisms are taken in at one port and released at another), bait release, intentional introduction, and canals. A hitchhiker, an organism that “catches a ride” from one body of water to another on a third party, may be transported naturally (e.g., invasive snail larvae in mud attached to a migrating bird’s feet) or, more often, by humans (e.g. zebra mussels attached to a boat hull). This is where anglers and boaters play a role. Anglers’ gear, for instance boat trailers, boats, engines, waders, nets, etc., are some of the most common carriers of invasive hitchhikers, often without the angler’s knowledge. Hitchhikers can be either invasive plants or animals (or both).

To help stop the spread of invasive species, follow these simple steps (IDD):

1. **INSPECT** your fishing and boating equipment. Remove all mud, plants and other organisms.
2. **DRY** your fishing and boating equipment before using it in another water body. Basic rule of thumb is to allow at least 48 hours for non-porous gear.
3. **DISINFECT** your fishing and boating equipment if it does not have enough time to dry. There are a few disinfection techniques that
ASK KATIE  Q: What are some different ways I can fish for fluke?

A: Fluke or summer flounder can be fished a few different ways. One option is to tie a double overhand knot at the tag or bottom end of your line. Next tie a dropper loop about 10-12 inches from the double overhand knot. At the dropper loop, attach a snelled hook size 3/0 to 4/0. At the double overhand attach a bank sinker. The size of the sinker you use will depend on the conditions, e.g. tide, wind, etc. Ounce sizes can range from 2 to 8. A good rule of thumb is you want to lightly feel the bottom as you bounce the sinker. If you have a hard time feeling the bottom, go up a size; and if the sinker is hitting the bottom pretty easily, then lighten up the ounce size. A heavy current or tide will necessitate a heavier sinker to avoid drifting.

Another option is to use the same set up, a double overhand knot with a dropper loop, but this time attach a ball sinker equipped with a small teaser that has a hook at the double overhand, and at the dropper loop attach a teaser that has a hook. A teaser is a long shanked hook wrapped with a synthetic or natural material from the eyelet down the shank of the hook. Its purpose is to entice a fish to bite. Size selection is the same logic as the previous rig. The next consideration is color: yellow, chartreuse (fluorescent green), white and pink are some good choices.

You can also fish a bucktail tied directly to the lure, or tie a snap onto the end of the line, clipping the bucktail onto that. Clinch, improved clinch, uni or Palomar knots work well here. Select a size ¾ oz to 3 oz bucktail, again depending on conditions. Pink, orange/brown, white, yellow, and chartreuse are a few different color options.

For all of these rigs, the fishing line needs to be monofilament. Be sure to strip each hook in each rig with one silverside or spearing through both eyes and a strip of squid. You can fish without the squid; however the squid is tougher than the silverside and often prevents it from falling off too easily. Once you drop your bait down to the bottom, lightly bounce your bait by gently lifting the rod. Good luck fishing, but please remember that summer flounder have a split season this year, May 15 - June 15 and again from July 3 - August 17; limit is 2 fish at 21 inches.

Contributors

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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.
ARTIFICIAL LURE SPOTLIGHT

Poppers come in different shapes, colors and sizes but the principle is always the same: the lure is designed to splash along the surface of the water, like an injured baitfish, attracting the attention of any predatory fish in the area. Poppers are great to use for bluefish and striped bass in saltwater, and largemouth bass and chain pickerel in freshwater. If you’re going to be traveling farther North in New York, try popping for northern pike. After splashdown, start to retrieve the lure at a steady rate while simultaneously jerking the rod tip up and down- it is this action that causes the lure to splash across the surface making a popping sound (hence the name, popper). Keep repeating this action until you get a strike.

By casting the lure as far as possible it gives the popper’s action the greatest possible distance in which to operate. On calmer days, let the lure sit for a few seconds before retrieval as the landing will sometimes be enough to induce a strike. At times, a large fish will strike at the lure with its tail or the side of its body (flank), or strike and miss, causing the lure to fly out the water. When this happens, stop retrieving for a second or two and be patient while leaving the popper to settle on the surface. A fish will often turn and engulf the popper thinking it has stunned a prey fish.

Main Article Cont: one can employ: hot water, bleach, or select cleaning agents. For hot water, soak equipment at 140°F for 1 minute or at 110°F for 20 minutes. Be careful as scalding water can destroy some fabrics such as Gore-Tex®. Bleach can also be used in a watered-down format. Spray equipment with a 2% bleach solution (3 ounces of household bleach mixed with 1 gallon of water). Again, be careful as bleach can be corrosive to aluminum. Lastly, use a cleaning agent such as Formula 409® or Fantastic®. These products can be used in their full strength or diluted to 2 parts water, 1 part disinfectant. Equipment must be soaked for a minimum of 10 minutes.

In addition, anglers and boaters can take a few other precautions, all of which can be applied to both fresh and salt waters:

• Refrain from using felt-soled waders or wading boots; rubber or studded soles are less likely to transport invaders and are easier to disinfect
• Do not release unwanted plants or animals into the wild unless they came from that body of water
• Do not release unused bait
• Learn to identify common exotic species; for information and photos log onto http://www.dec.ny.gov/animals/50272.html

Thanks for doing your part to keep invasive species out of NY waters!

1Environmental Protection Agency. 4 December 2008 <http://www.epa.gov/bioiweb1/aquatic/exotic.html>.
2Environmental Protection Agency. 4 December 2008 <http://www.epa.gov/owow/invasive_species/>.
3Minnesota Sea Grant. 4 December 2008 <http://www.seagrant.umn.edu/ais/zebramussels_threaten>.
FISHING HOTSPOTS
NYC: Van Cortlandt Park Lake, Bronx, NY

Type: Freshwater lake; 2-13 ft deep.

Where: Located towards the Southern end of Van Cortlandt Park in the Bronx, the lake is most easily accessed right next to the Van Cortlandt Park Golf Course (105 Van Cortlandt Park South, Bronx, NY, 10463). Take the Van Cortlandt Park South exit off the Major Deegan Expressway; parking is available for a small fee at the golf course. Call 781-430-1890 or visit http://www.nycgovparks.org/parks/VanCortlandtPark for more information.

Public Transportation: Get to Van Cortlandt Park on either the #1 subway (take it to the last stop, 242nd St.) or take the #4 to the end of the line at Woodlawn station. Bx9, BxM3, Bx16, and Bx34 busses all make stops right by the Park.

Access: Access to the lake is free (excluding the parking fee) and all fishing is from the shoreline. Especially convenient access can be had near the golf course parking lot by the golf cart access road, but please, watch out for golf carts and be respectful to the golfers.

Boat Launch: No
Wheelchair Access Fishing Pier: No

Shoreline: Can be reached by wheelchair, but pathways have not been specifically modified for wheelchair access.

Species: Largemouth bass, black crappie, yellow perch, brown bullhead.

Specific Rules for Van Cortlandt Park:
Van Cortlandt Park is open to all anglers, although as in all New York City Parks only catch and release fishing with barbless hooks is allowed.

Other:
• For complete angling regulations in NYC Parks visit http://www.nycgovparks.org/facilities/fishing.
• For general freshwater fishing regulations in New York State, please visit http://www.dec.ny.gov/outdoor/7917.html

Tips and Techniques: Are you ready for the aperchalypse? Good, because you’re in yellow perch country! Entice perch with a bobber and a natural worm, such as a nightcrawler, but use enough line below the bobber to keep the worm about a foot off the bottom. A small spinner will also be effective; retrieve it quickly to keep it above weedy patches, or retrieve it more slowly to move it towards the bottom. Try both and see which is most successful. The perch are present throughout the lake, but to improve your odds start at the slightly deeper Southern half.

Feeling crappie? No worries, these attractive sunfish are abundant as well. Use a shallow worm in the vegetation behind the golf clubhouse. Soft plastic worms, size 1/32 to 1/8 oz, or tube jigs, size 1/16 to ¼ oz, bounced through the vegetation are also a good bet.

Try for the more elusive largemouth bass in the lilies at the North end of the lake using a weedless floating frog.

Students in NYC fish from the shores of VanCortlandt Park Lake.

Photo courtesy of NYSDEC staff
FISHING HOTSPOTS
Long Island: Sandspit Park, Marina and Pier, Town of Brookhaven, Patchogue

**Type:** Saltwater, Patchogue River and the Great South Bay.

**Where:** Suffolk County, south shore Long Island, at junction of Brightwood Street and Beach Avenue, (631) 758-2740.

**Getting There:** The Park is off Main Street/Montauk Highway in Patchogue. Take South Ocean Ave south, almost to end; take a right onto Maiden Lane, left onto Brightwood Street. Park entrance is on left.

**Access:** Park is open sunrise to 9pm; attendant on duty 24/7. Over 100 parking spaces. Parking is next to pier for easy access

**Boat Launch:** No

**Wheelchair Access Fishing Pier:** Yes; 75 feet with railings

**Shoreline:** No

**Species:** Bluefish, weakfish, striped bass, blue crabs.

**Specific Rules for Sandspit Park, Marina and Pier:** Entrance to the Park is free for Town of Brookhaven residents with a Town sticker or proof of residency (i.e. driver’s license, car registration); $20 fee for non-residents per day. Town residents that want to fish after hours can pay an extra $25 to obtain a night fishing permit. For more information, log onto: http://www.brookhaven.org/DesktopModules/Bring2mind/DMX/Download.aspx?TabId=134&DMXModule=1576&Command=Core.Download&EntryId=948&PortalId=0.

**Other:** Remember fishing for blue crabs has regulations too: hard shell crabs must be 4 ½", soft shell crabs 3 ½” or peeler/shedder crabs 3". A peeler or shedder crab is one that is just about to molt. You can tell if the shell looks fragile and is dull in color. Sometimes the shell is partially cracked as well. You are allowed 50 crabs per person in one day and can fish all year.

- For general information about the Town of Brookhaven: www.brookhaven.gov

**Tips and Techniques:** Located at the mouth of the Patchogue River and the Great South Bay, this Park is great for adults and kids looking do some summer snapper and blue crab fishing. The Park has restrooms (real ones, not Porto-potties),

![Overview of pier at Sandspit Park](Photo courtesy of SG staff)
LONG ISLAND: SANDSPIT PARK, MARINA AND PIER

TIPS AND TECHNIQUES CONT: a medium sized grassy area with a playground and picnic tables, and a sturdy pier with railings.

For snappers, aka baby bluefish, try fishing a silverside/spearing on a size 5 or 4 snapper hook equipped with a 1-1 ½ inch bobber. Snapper hooks have a long shank—this design is used to help keep your bait on the hook for a longer period of time. Hook the silverside through both eyes and then again through its body. Once the silverside loses its tail, it is no longer effective, and time to change the bait. Adjust the bobber so your bait hangs in the middle of the water column. If you plan to keep any snapper, remember to grab a bucket and place them snout down—they are called ‘snappers’ for a reason!

Crabbing is also a great activity for the family with dusk to evening being the best time. Crabs can be caught throughout the day but they tend to swim up towards street/pier lights at night, making them easier targets. There are a few ways to fish for crabs: 1) crab traps, and 2) chicken, string, and nets.

Crab traps: The most common crab trap is a square box that is designed to open on 2 sides. When the string is pulled tight, four sides close; and vice versa when the line is slack the 2 doors open. To get started fishing, place a dead fish inside the center compartment of the trap. (Bunker/menhaden from your local bait and tackle store work well.) In most cases, there is a small brick already attached to the trap, however if absent attach one to the bottom of the trap with cable ties- the brick will ensure that the trap settles properly. Using the attached string (most crab traps come with a thin string already attached), lower the trap down to the bottom of the seafloor. Tie the string to a dock piling or cleat. Periodically check the trap by quickly pulling on the string, lifting the trap out of the water and onto the dock.

Chicken, string, nets: This method often catches more crab but requires a bit more skill. Tie a thin string, such as kite string, around a raw chicken drumstick and drop it to bottoms of seafloor. Tie off to a cleat or piling. When you see the string become straight or taught, slowly and smoothly pull in the line hand over hand. You can often feel the crab “jumping off” your drumstick if you pull to fast and unevenly. Here comes the net—when you can see your chicken piece (along with a crab munching away), quickly dip the net below the chicken/crab, scooping it up. A long handled net works best here. Now, this type of crab fishing is easiest with two people—one on the string, the other on the net. However, both jobs can be done by one person with a little practice.

While crabbing and snapper fishing can be fun summer activity, please be sure to clean up after yourself, such as cutting lines off of dock pilings, throwing bait bags in the trash cans, etc. Good luck, watch your fingers, and enjoy!
The mission of the New York State Department of Environmental Conservation’s (NYSDEC) Bureau of Fisheries is: To conserve and enhance New York State’s abundant and diverse populations of freshwater fishes while providing the public with quality recreational angling opportunities. In order to do this, fisheries biologists must understand the status of the fish communities in New York’s lakes, ponds and streams and know what kind of fishing opportunities the public wants.

Biologists learn about fish communities and the wants and needs of the angling public by conducting surveys. To learn about fish communities, biologists catch and measure fish using techniques such as angling, nets and electrofishing. To learn about the angling community, biologists survey anglers asking about their catch and what they are fishing for. When collecting fish or interviewing anglers, biologists cannot measure ALL of the fish or interview ALL of the anglers in a community. Thus, an inference is made about the community based upon a representative sample.

In fisheries surveys, biologists make several observations and take different measurements of the fish, including: species, number, length and weight. They may also take a scale sample to determine the age the fish or collect a sample of fish tissue for contaminant or disease analysis. Biologists will also measure environmental and habitat parameters such as temperature, dissolved oxygen, depth, flow, plant cover and type to learn more about the habitat type and quality. The data collected allows biologists to make conclusions about the fish populations.

Once a conclusion is reached about a fish population then management actions can be taken if necessary. Actions can include changes in the fishing regulations, fish stocking, or habitat improvement. For the most part, fisheries management involves the management of human behavior such as revising fishing regulations or improving angler access in order to achieve a specific goal for a fish population and the angling community.
CALENDAR OF EVENTS

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

Long Island:

Sunday June 28th
Free Fishing Day Festival
Lake Ronkonkoma County Park
10am-4pm

Loaner rods and free bait are provided. Children’s activities include seine hauls, casting contest, and more. No pre-registration required.

NYC:

Saturday July 18th
City of Water Day
Governor’s Island, New York Harbor
10am-4pm

For more information log onto: http://www.cityofwaterday.org/

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).

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