



## I FISH NY Newsletter: Long Island and NYC

Fall 2012

### Long Time Coming: The Northern Snakehead

by James Macdonald, Ph.D.

The bedraggled teens stumble gratefully toward the welcoming light of the vacation cabin. Through the window, they spy a man reading a paper, nodding his head. Opening the cabin door, instead of the longed for salvation they find instead the terrifying visage of... a snakehead!

The classic scene from Snakehead Terror (© SyFy channel) still defines the classic view of the northern snakehead- voracious killing machines that will not only wipe out your local fishing hole but also your pets, children, and everything else in their path. But how does popular perception stack up with reality? As usual, the truth is more complex.

First discovered in the U.S. in Crofton, Maryland in 2002, the northern snakehead has since established populations in several states including New York and New Jersey. Native to parts of Korea, Russia, and China, many of the stereotypes and myths surrounding the snakehead are based in reality. They are large (specimens have been caught up to 18 pounds); they are predatory (mostly fish eaters, but snails, insects, shrimp and vegetation have also been found in stomachs); they breed rapidly, spawning several times a year; and they can in fact survive for some time out of water.

That last attribute is the source of much of the worry and confusion. Snakeheads are obligate air breathers, meaning they MUST breathe air. This makes them especially well adapted to live in shallow, low oxygen environments, survive droughts, and disperse through wet areas. If moist, adults can survive out of water for up to four days- fisheries staff observed one stay alive for 3 days in a refrigerator (by accident, of course)! However, despite their air breathing, their ability to cross dry land is highly limited. Longer movements are limited to wet or muddy areas.

Taken together, the snakehead's size, feeding habits, and dispersal abilities certainly imply a potential to impact native ecosystems (although your pets and children will be fine). Without further information, many authorities sensibly opted not to risk the potential damage and eliminated incipient snakehead populations. In areas where eradication efforts failed, however, a more nuanced picture is emerging.



Northern Snakehead caught during the 2009 snakehead eradication in Ridgebury Lake, Waywayanda, NY. Photo courtesy of Heidi O'Riordan NYS DEC Aquatic Biologist.

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### About I FISH NY

I FISH NY is a statewide outreach program provided by the New York State Department of Environmental Conservation that is designed to increase fishing participation in New York

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The rapid reproduction is turning out to be the most noticeable feature of many introductions. In many areas such as the Potomac basin and Willowbrook, NJ snakehead populations have taken off, and in some cases spread into neighboring systems. (For unknown reasons the population in our area (Queens), although reproducing, has not taken off so prolifically.) However, this prolific expansion has not, as yet, resulted in a concurrent drop in bass or other native fish populations. There are more snakeheads, but the same numbers of everything else.

For now, though, many states are making the best of it. Virginia recently held its first ever snakehead derby in 2012, and New Jersey anglers deliberately target snakeheads for their fight- they hit topwater lures like a rocket. Many anglers swear by the taste, but follow all health advisories for your area. Guided snakehead expeditions are available in many areas. In New York State, anglers are **REQUIRED** to kill any snakeheads caught (decapitation is preferred- fish simply left on the bank will probably find their way back to the water) and to notify the regional DEC office. In New York City, call 718- 482- 4922; in Long Island, call 631-444-0280. Note that IT IS ILLEGAL to return a snakehead to the water alive, or to transport it to another water body.

Time will tell if the snakehead will remain an abundant but relatively benign presence in some U.S. waters, or whether they will join the company of truly harmful introduced species such as asian carp or zebra mussels. Given its tolerance for a range of salinity and oxygen conditions, the snakehead remains a risk to spread to additional water bodies and river systems, and it is a hardy predator. It is certainly possible that the worst is yet to come, and severe ecological harm will eventually result from this species. No matter what their eventual impact is, or isn't, it appears that snakeheads are here to stay.

### **Additional Information:**

Information about the New York City population:

[http://www.dec.ny.gov/docs/fish\\_marine\\_pdf/meadowwillrep.pdf](http://www.dec.ny.gov/docs/fish_marine_pdf/meadowwillrep.pdf)

Northern Snakehead facts:

<http://fishwild.vt.edu/snakeheads/Facts.html>

## **ASK KATIE**

### **Q: What do you do when a fish swallows the hook?**

When you accidentally hook a fish in the gut or gills, cut the line as close to the hook as possible and release the fish immediately. Do not pull the hook out, as it could tear or damage the fish's organs. In a short time, the hook will either rust or fall out on its own. If you pull the hook out of the fish, chances are they won't survive the injury. Studies have shown that deep hook injuries in a fish's gills or throat can lead to mortality, but ripping out the hook can only worsen the wound and increase mortality.

Here are a few simple techniques that will increase the fish's chance of survival:

- Use barbless hooks or circle hooks.
- Tamp down the barb on your hooks for quicker removal.
- After you hook a fish, land them as quickly as possible. This will avoid exhausting the fish.
- By properly setting your drag you will reduce the time it takes to land the fish.
- Handle your catch as little as possible, if you can, unhook the fish in the water.
- Handle your catch with wet hands, and don't use a shirt or rag. This will protect the fish's slime layer.
- Carry pliers or forceps with you to help remove hooks quickly.
- Avoid using landing nets, which can also remove a fish's slime layer. If you must use one, use a rubber or knotless mesh net.





### **Eating, Preparing, & Storing Seafood Safely**

The market for seafood is becoming increasingly popular in New York and on Long Island. As a seafood consumer you should be aware of the following seafood safety tips.

1) If purchasing seafood at a restaurant, make sure the restaurant is reputable and sanitary. Fresh raw seafood, if on display, should be in a cold case, with no noticeable discoloration or odor.

2) When purchasing seafood at a market to prepare on your own, there are a few important steps you should take in order to ensure seafood is handled safely:

- If buying a whole fresh fish, the gills should be red or pink with no noticeable slime.
- Look for clear eyes; clouding of the eyes or a blurring of the iris indicate a less fresh fish.
- High quality fresh fish should not have an overpowering "fishy" smell.
- Seafood should be kept cold at all times, as close to 32°F as possible.
- Store fresh seafood in the coldest part of your refrigerator in leak proof containers.
- If freezing fish, wrap tightly in plastic wrap and place in foil or freezer paper.
- Wrapping your fish properly then freezing it in a block of ice will keep it from drying out.
- Make sure you prepare your seafood with clean non-contaminated utensils.
- Thaw seafood properly by allowing it to defrost in a refrigerator or under cool running water. Do not thaw seafood in warm standing water where bacteria can easily grow.
- When cooking your seafood make sure it has an internal temperature of at least 145-160°F.

### **ARTIFICIAL LURE SPOTLIGHT**



Darter plugs are commonly used when targeting striped bass during spring and fall runs. These lures mimic local forage fish such as menhaden, shad, herring and squid. When fished properly this plug has a slow, subsurface erratic zigzagging motion that drives striped bass and bluefish to strike. You can experiment with retrieve style until you find what works for you in your specific condition. It should be noted that the action of this plug is more pronounced in stronger currents found in rips, inlets and undertows. Night, dawn and dusk are the best times to use these lures. Striped bass are known to pick up on the side to side motion of this lure in low light conditions. Popular colors for the darter include black, purple, yellow, or white. The darter ranges from 1-3oz and is generally constructed of wood or plastic. The plastic variation is more durable around rocky structure. When trying a new plug for the first time, patience and persistence often pays off. Good luck and tight lines!

# Fish 411: Fluke and that Weird Eye

by Bob McCormack

Have you ever wondered how or why flatfishes have both eyes on one side of their head? How did that second eye get there?



Illustration by Duane Raver

## The Eye Migration

In certainly one of nature's most bizarre evolutionary adaptations, the eye migration of flatfish like the fluke ranks right up there. Remember your surprise the first time you reeled in a flounder, or saw one in biology class? You might have thought to yourself, "it's a mutant!". Well, you are partly right, a mutation of natural selection. This mutation is believed to be an adaptation for better survival, as adaptations normally are. By having both eyes on one side of their head, flatfishes have the ability to "lie in wait," partially buried in a sandy ocean floor that may have little or no hiding places, and dart out at passing prey. This ability to bury and color themselves also protects them from predators. They can change their coloration and spotting, camouflaging in nearly any type of sea bottom. Pretty amazing, huh?

But flatfish don't start their lives out this way. When flatfish first hatch, the larvae look just like any other fish, with their body aligned vertically, and one eye on each side of their head. Within a few days after hatching, the fluke's right eye starts to migrate (move) up and over the top of their head. The larvae begin to swim inshore from their offshore spawning grounds, and enter coastal and estuarine areas from October to May. By the time the fish reaches its' inshore nursery area and settles to the bottom, both eyes are on the left side of its body and it lays down on its right side (open the website links at end of this article to learn and view videos of this phenomenon!).

This unique adaptation takes between 3 weeks to 3 months. This time period is dependent primarily on water temperature. In warmer temps this metamorphosis is completed in a short time (3-6 weeks), while in cold temps it requires a longer period of time (up to 3 months) for the eye to migrate to the other side. The juvenile fluke (summer flounder) lays on its right side with eyes on the left; while the winter flounder does the opposite, and lies down on its left side.

## Eye Migration Video Links

<http://www.youtube.com/watch?v=L6zXpCM1w1Y&NR=1&feature=endscreen> (3 min)

<http://www.youtube.com/watch?v=qePwW44HhNg&feature=related> (1 min)

[http://www.youtube.com/watch?v=\\_JFFHxkTY8&NR=1&feature=endscreen](http://www.youtube.com/watch?v=_JFFHxkTY8&NR=1&feature=endscreen) (5 min)

# FISHING HOTSPOTS

## Long Island: Deep Pond, Wading River

**Region:** Suffolk County

**Type:** Freshwater

**Where:**

Suffolk County, Deep Pond is owned by the Theodore Roosevelt Council of the Boy Scouts of America (TRCBSA) in Wading River. It is located on the Schiff Scout Reservation at 1606 Wading River Manor Road, Manorville, NY 11949.

**Getting There:**

Take the Long Island Expressway to exit 69 north and follow Shultz/Wading River/ Manorville Road 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

Golden shiner

Banded killifish

**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.

**Other:**

For general rules about fishing: visit

<http://www.dec.ny.gov/outdoor/fishing.html>

**Suffolk County Regulations:**

<http://www.dec.ny.gov/outdoor/31495.html>

**Contour map:**

[http://www.dec.ny.gov/docs/fish\\_marine\\_pdf/deepdmap.pdf](http://www.dec.ny.gov/docs/fish_marine_pdf/deepdmap.pdf)

**Seasonal Access Permit:**

[http://www.dec.ny.gov/docs/regions\\_pdf/newaccessprmt.pdf](http://www.dec.ny.gov/docs/regions_pdf/newaccessprmt.pdf)

**Tips:** Chain pickerel are found throughout the year, and are more commonly caught in the early spring in the shallows after they have spawned. Deep Pond has a special all year catch and release pickerel season. 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. Yellow perch and pumpkinseed sunfish are often caught using worms on a bobber rig. Trout are stocked in the Fall each year by the NYSDEC and 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

The NYSDEC conducted a survey on Deep Pond May 14th-16th 2012, to evaluate the catch and release only regulation for chain pickerel, to collect fish for contaminant analysis, and to collect fish for disease testing. The average size of pickerel caught was 25 inches with none caught below 14 inches. The DEC also caught 928 yellow perch, 813 golden shiner, and 734 pumpkinseed. It seems as if the catch and release only regulation has done wonders for larger pickerel in the pond. Although no pickerel below 14 inches were caught in the spring survey, at least half a dozen were caught in a follow up survey completed this fall. Hopefully the continuing regulation of catch and release only for chain pickerel will allow the population to balance out and recover.



*Kathleen Marean NYS DEC Region One Fish and Wildlife Technician with a Chain Pickerel caught at Deep Pond during the May 2012 electrofishing survey. Photo courtesy of Heidi O'Riordan NYS DEC Aquatic Biologist.*



# FISHING HOTSPOTS

## NYC: Prospect Park Lake, Brooklyn

**Type:** Freshwater

**Where:** Prospect Park, Brooklyn

**Public Transportation:** Take F, G trains to Ft. Hamilton Parkway Station. Walk east on Greenwood Avenue to access main lake. Alternately, take B or Q trains to Prospect Park station and walk west into the park for the lull water and Audubon center. Continue on the Q to Parkside station for the south east corner of the main lake.

**Access:**

*Boat Launch:* No

*Fishing Pier:* No

*Shoreline:* Yes; most of the shoreline is accessible by foot; some portions are handicapped accessible.

*Parking:* Street

*Hours:* The park is open from dawn until dusk

**Species:**

Largemouth bass

Black crappie

Yellow perch

Chain pickerel

Bluegill sunfish

Pumpkinseed sunfish

Carp

Golden shiner

**Other:** Like All NYC Parks properties, fishing at Prospect Park Lake is Catch & Release only. A fishing license is required for anglers 16 years of age or older.

**Tips:** Located in the heart of Brooklyn, this urban oasis can meet most needs for a local fishing get-a-way. Many species can be caught here especially quality sized black crappie and largemouth bass.

One big difference that sets Prospect Park apart from other freshwater water bodies in the city is all the different techniques that can be employed to catch fish, especially largemouth. Frog fishing, top water, worming, swim baits, spinner baits, jerk baits, jigs, and crank baits are among a few techniques that will produce here. The variety of shoreline structures offer options to test your skills. Bring both reaction baits as well as your favorite finesse game to cover all the bases. Make sure that some things in your box are weedless, and throw in some smaller rigs to tempt the largest crappie in NYC.

The main lake in general holds the larger fish and the lull water to the Audubon Center holds better numbers of fish. A quiet approach is best with fish being, at times, very close to the shore and under over hanging trees and other structure.

**Additional Information:**

**New York DEC Prospect Park Fishing Info:**

<http://www.dec.ny.gov/outdoor/57276.html>

**Prospect Park Contour map:**

[http://www.dec.ny.gov/docs/fish\\_marine\\_pdf/prospectlmap.pdf](http://www.dec.ny.gov/docs/fish_marine_pdf/prospectlmap.pdf)

**Prospect Park Alliance:**

<http://www.prospectpark.org/>



*Jerimiah Lo with an impressive largemouth bass from Prospect Park Lake in Brooklyn, NY. Photo courtesy of Melissa Cohen, NYS DEC Region 2 Fisheries Manager*

# CALENDAR OF EVENTS

I FISH NY provides all bait and tackle.

## **Long Island:**

**Saturday, October 13, 2012**

Fall Family Fishing Festival  
Hempstead Lake State Park  
MacDonald Pond

10am-4pm

Event Includes: Free loaner rods & bait (over 1,000 trout stocked for the event), "Casting for Pumpkins" contest, Fish Cleaning, Fishing Demonstrations, Environmental Displays, Magic Show, Pony Rides, Face Painting, Pumpkin Decorating.

Cost: \$6 per person (children 12 and under, free). There is no rain date for this event

## **NYC:**

**Thursday, October 11, 2012**

Baisley Pond Fishing Day  
Baisley Pond Park  
10am-1pm

Event Info: Seniors are especially encouraged to participate, but all are welcome. All instruction and equipment provided.

For more info call 718-482-4920.



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).

