

I FISH NY programs are offered free to 3rd graders and up in any borough of New York City. Here, 5th graders at PS 78 in Long Island City form an interconnected food web with help from NYSG's Nim Lee, as she builds on an earlier lesson in fish biology. Photos this page by Paul C. Focazio



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My students and I learned a great deal from the fishing program and especially Nim's knowledge of the local fishing community,

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. . . says PS 78 science teacher Victoria Mulligan (far right) as she helps her 5th graders diagram a marine ecosystem. “Nim motivated the children and sparked their interest in fishing, especially for those who had never fished before.” Adds Nim, “There are a lot of great teachers in the NY public school system. And Victoria is just one of the teachers who pursues opportunities like I FISH NY to augment her science curriculum.”

It's an overcast, brisk Monday morning in early April in Long Island City. Inside the doors of PS 78, though, **Victoria Mulligan's** science classes are filled with the engaging minds and waving arms of eager 5th graders. Today is the second in a series of three sessions the students will have with educators from I FISH NY, an educational outreach partnership between New York Sea Grant and the New York State Department of Environmental Conservation (NYSDEC). Targeting New York City and Long Island residents, I FISH NY is designed to broaden knowledge of the local fresh and saltwater resources via school visits, fishing clinics and festivals.

But don't try and pass on those specifics to the kids at PS 78. After being taught Fish Anatomy 101 a month ago, these 5th graders are more intent on identifying the laminated fish or animal pictures strung around their necks. They're playing an interactive marine food web game. And most of them

are right on the mark. “I'm a phytoplankton,” one child says, hesitating as she tries to sound out the syllables.

Nim Lee, a NYSG Recreational Fisheries Specialist in New York City, is overseeing the exercise. She's accompanied by **Sarah Bruner**, a NYSDEC Urban Aquatic Educator. Afterwards Lee compares notes with **Malynda Nichol**, her I FISH NY counterpart in Long Island's Nassau and Suffolk Counties, who offers similar classes in her region.

After Lee asked the students “who” or “what” they are – a striped bass, bluefish, a school of silversides, or even an angler – Lee sits them in a circle to begin making connections between the various plants and animals using long pieces of colored yarn.

Kids are then grouped together by trophic level – top predators like the angler; predators like the striped bass and bluefish; prey like the silversides; and producers like algae and phytoplankton.

“Food source” cards are passed along through the pyramid as each level “consumes” the one before it. Some of these cards are marked with an “X,” later explained to the kids as pollutants. So, while predators prey on those lower on the food chain, they are also consuming pollution. At this most basic level, Victoria Mulligan's students learn about the interconnections of the food web. They'll apply what they know on a class fishing trip in June with Nim and other I FISH NY-ers at Gantry Plaza, which is across the street from the school and overlooks New York's East River.



Watch



Nearly 2,400 people, including members of the Smith family from North Babylon (pictured), took part in the annual Belmont Lake State Park Spring Fishing Festival. NYSDEC and I FISH NY, in conjunction with NYS's Office of Parks, Recreation and Historic Preservation, hold such festivals each spring, summer, and fall. Rods, bait and tackle are provided. No fishing license is required. Similar events will be held at Lake Ronkonkoma County Park in June and Hempstead Lake State Park in October. Photo by Larry Cowdon



"People love animals," says Lee. "I know this from having worked at the American Museum of Natural History and, well, just from observing." Citing New York's urban dwellers as "unknowing environmentalists," she continues, "New Yorkers utilize fewer resources because of the way the city is organized – smaller apartments, public transportation, and high population density. The flipside of that is that there is not much space for natural areas. So, I think the I FISH NY program gives traditional classroom students and other user groups in New York access to something they might not even know they're missing."

Those in the I FISH NY program realize that interest in fishing starts at a young age. "Since I was young, my father and I shared a special bond through fishing," says Nichol. "It left such a tremendous impression upon me as a child."



NYSG's Malynda Nichol helps a student from PS 48 in the Bronx reel in a fish he caught at Crotona Park last spring. I FISH NY's Nim Lee plans to fish with PS 48 classes for six days in mid-May. Photo courtesy of Student Conservation Association/Americorps

Now it's great to be able to provide a similar opportunity for others to enjoy the sport of fishing."

Nichol and Lee are not alone in their beliefs. A new Cornell University study in *Children, Youth and Education* suggests that if you want your children to grow up to actively care about the environment, give them plenty of time to play in the "wild" by going hiking, camping and fishing before they're 11 years old. "When children become truly engaged with the natural world at a young age," says principal investigator **Nancy Wells**, "the experience is likely to stay with them in a powerful way – shaping their subsequent environmental path."

Helene Dillard, Director of Cornell Cooperative Extension and member of NYSG's Board of Governors, concurs. "My parents enjoyed fishing, and I loved it too," she says. Despite the demands of her job, in good weather, Dillard, her husband and 14-year old son Jamar can be found fishing in streams in the Finger Lakes region and the Adirondacks.

And, much like the I FISH NY educators, she's passing down her passion to the next generation of potential anglers and sport fishermen. "I'm really pleased Jamar has developed a passion for fishing," she says.

"We have been taking him fishing since he was a toddler – he's now nearly six feet tall. He will fish in any kind of weather – I'm a little more weather-selective."

— Paul C. Focazio

I FISH NY began in January 2002, when the NYSDEC was awarded a grant from the U.S. Fish and Wildlife Service. Three years later, the DEC partnered with Sea Grant to further expand the program. Malynda Nichol and Nim Lee were hired as NYSG Recreational Fisheries Specialists to provide outreach via classroom visits, fishing trips and clinics.

"This partnership utilizes Sea Grant's outreach expertise to help the DEC inform people about local fishing opportunities and the value of the local aquatic resources," says Chart Guthrie, DEC Region 1 Bureau of Fisheries Manager. "Fishing is one way to connect residents with the past, as well as the outdoors in general," adds Steve Heins from DEC's Bureau of Marine Resources. "Urban dwellers especially don't get to make that connection without leaving the city. With I FISH NY, they can discover what's here is often just a short walk away."

Expanding on the symbiotic relationship between Sea Grant and the DEC, NYSG's Director Jack Mattice says, "As access and water quality improve in urban estuaries, fishing becomes a more desirable recreational outlet for relieving daily stresses. I FISH NY recognizes this and provides a valuable forum for teaching urban youth the joys and skills of fishing."

James Gilmore, a DEC Regional Natural Resources Supervisor based in Long Island City, applauds I FISH NY's recent efforts. "We've increased the number of schools and other institutions we visit, reaching a greater number of urban residents, especially children," he says. Melissa Cohen, a DEC Biologist also in Long Island City, says, "Our lesson plans have not only increased in number, but also, existing lessons have improved by being more effective at getting our message across and, thus, our mission accomplished."

For more on I FISH NY go to www.ifishnewyork.org or check out the "Web Extras" for this issue of *Coastlines* at www.nyseagrant.org.