

HUDSON RIVER ALMANAC for OCTOBER 4, 2012

A DAY IN THE LIFE OF THE HUDSON RIVER

Compiled by Steve Stanne, Hudson River Estuary Program Education Coordinator
New York State Department of Environmental Conservation

<<<< OVERVIEW >>>>

This special Hudson River Almanac offers a snapshot of the tenth annual "Day in the Life of the Hudson River," during which students sampled the Hudson from its non-tidal reaches above Troy to the Lower Bay of New York Harbor. Over 3,500 participants visited 70 sites on this windless, cloudy, sometimes rainy day, learning about their piece of the river and - by sharing data online - putting it in the context of the entire system. The entries in this journal came from students, classroom teachers, environmental educators, and "runners" who visited multiple sites to document activities and pick up samples for later testing.

<<<< HIGHLIGHT OF THE DAY >>>>

Headwaters of the Hudson River, Newcomb, Adirondack Mountains:

After my night with a family of three black bears, one lone loon warbles out on the dark Arbutus Pond. Quiet and still. Crickets softly purr. Mist barely drifts, the air is so still on the pond. Water temperature is 58°F. Where the Hudson first takes its name, between Henderson Lake, Calamity Brook, and the Opalescent River, the river is roaring from recent rains. Water temperature is 54°F. I'm looking around Tahawus and the old ironworks for the highest source water which ultimately comes from Mt. Marcy and Lake Tear of the Clouds, down Feldspar Brook and the Opalescent River to the Hudson, and catch a glimpse from the Opalescent River Club bridge. Then I ran downriver to collect and relay samples from Schuylerville, Albany, and Stuyvesant - 350 beautiful miles of Day in the Life running!

- Doug Reed, Hudson Basin River Watch



Black bears in the Adirondacks



The Hudson near Henderson Lake

<<<< NATURAL HISTORY NOTES >>>>



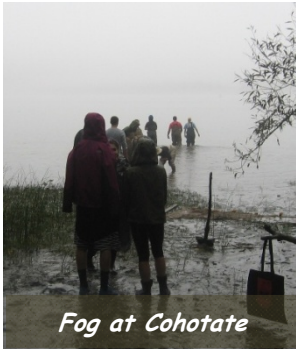
Studying fish at Green Island

Riverfront Park, Green Island, RM 153: Bins of fish! Reaching in to examine the shimmering spottails, scales fluttered in distraction. Rain failed to disturb the excitement of the morning, but our data sheets didn't survive the wet. Our students collected water temperature (66°F) and other data, observed the shore and water and examined the estuary for unusual life. With the tides being favorable, our nets filled to brimming with more than 200 spottail shiners, two young-of-the-year river herring, three smallmouth bass, and two bluegill sunfish. Smiles abounded!

- Kate Perry & Robert C. Parker School students

Riverfront Park, Coxsackie, RM 123: A 5th grader from the Albany Academy for Girls stepped off the bus and gazed in amazement at the river on this drizzly, overcast, and foggy day. She had stopped in her tracks and wasn't aware of the girls behind her bumping into her. She blurted out "When I imagined the Hudson River I did not expect something that big. I expected a creek!" That young girl is what the day is all about, getting kids to the river!

- Amanda Higgs, Hudson River Fisheries Unit, NYSDEC



Fog at Cohotate

Cohotate Preserve, Athens, RM 115: The fog was so thick that we could not differentiate between water and sky when the Coxsackie-Athens High School and Cairo-Durham Middle School students arrived at 8:45 am. Our spirits were not dampened by the drizzly rain as we gazed out into the gray abyss of the river. We caught the usual suspects: striped bass (5), white perch (2) pumpkinseed (5), bluegill (18), banded killifish (19), herring (52), spottail shiner (12), mummichog (3), and tessellated darter (8). The fog gradually cleared as the morning progressed and the students were able to describe the physical characteristics of the shoreline that had been hidden from view. A brilliant, fall landscape was revealed by the end of the day.
 - Elizabeth LoGiudice, Cornell Cooperative Extension Agroforestry Resource Center

Sojourner Truth Ulster Landing Park, Town of Ulster, RM 96.5: A foggy, still morning with geese honking, hidden by the fog - around 80 of them resting in the shallow water/sand bar during low tide. A single osprey flew by, southbound. Each seine pull was difficult due to the excessive mud close to the shore, which historically has been mainly sand. Prize catch of the day was a hogchoker moving in the mud! Students were excited by a flounder-like fish in this freshwater section of the estuary. Another fun day on the shore of the Hudson!

- Dixon Onderdonk & Kingston High School students

Kingston Point Park, Kingston, RM 92: What started out as an ominous weather forecast for this day in the field turned out to be close to perfect in many ways. Yes it rained, on and off, harder in some places than others, but the winds were calm and the air temperature mild, making for a perfect day to be outdoors for field observations. The river along this stretch was shrouded in a bank of fog for the better part of the morning, lending its own brand of drama to the background as boats and ships of various shapes and sizes quietly appeared and disappeared in and out of the mist. The seine net brought in 28 spottail shiners, 2 golden shiners, a couple of sunnies, and striped bass, white perch, and yellow perch - one each. Lower than expected dissolved oxygen was observed and discussed by the J. Watson Bailey Middle School students.



Seining at Kingston Point

- Nancy Beard, Hudson River Estuary Program, NYSDEC

Freer Park, Port Ewen, RM 90: This was a new site this year and is a great spot for this event. Rondout Valley High School brought their entire 9th grade and one 10th grade Earth Science class to the river; over 150 kids swarmed the site, all engaged and jazzed to be on the river. Here, the seining brought in a variety of small fish, crabs, zebra mussels, and young eels.

- Nancy Beard, Hudson River Estuary Program, NYSDEC



Studying macroinvertebrates

Esopus Meadows Preserve, Esopus, RM 87: Spooning through trays of watery detritus, students from the Anna Devine Elementary School revealed in a myriad of macro-invertebrates from dragonfly nymphs to aquatic beetles of various sizes. They also caught seven kinds of fish in the seine - white perch (2), yellow perch (1), sunfish (24), banded(?) killifish (20), spottail shiner (10), bullhead (1), and a wild goldfish - plus 18 blue crabs!

- Nancy Beard, Hudson River Estuary Program, NYSDEC

Waryas Park, Poughkeepsie, RM 76: Three classes of second and third graders from Poughkeepsie Day School were excited to pull the net for a "sweep" through the water. The catch included 47 banded killifish, 3 tessellated darters, 18 spottail shiners, a striped bass, 2 pumpkinseeds, and a smallmouth bass. Interestingly most of the fish were 7 cm in length! Most exciting was coming up with a juvenile blue crab less than 2 cm across, and an American eel 18 cm long! The weather provided a steady drizzle with foggy weather conditions the whole time. Lots of river traffic: crew rowers; tug and oil barges, pleasure motor yachts and ocean going ships. The *Mystere* cruise ship was loading for an excursion, singing, and then heading out with a horn blast that the kids loved (woke them right up!). Definitely a busy day on the river!
 - Brian Reid, Sue Parise, Lynn Fordin

Kowawese, New Windsor, HRM 59: A gentle drizzle portended coming rains as we hustled to seine a rocky beach. We had two nets going at once with Orange County Community College students eager to see what was there. Of the 29 fish caught, spottail shiner dominated, along with tessellated darter, white perch, striped bass (68-71 mm), banded killifish, and a young-of-the-year American shad. Among the half-dozen blue crabs netted was a soft-shell, 6 inches carapace width. The river was 71°F; salinity was 1.2 parts per thousand [ppt].
 - Tom Lake, Jennifer Merriam, T.R. Jackson



[Blue crabs, as crustaceans, have an exoskeleton and must shed their shell from time to time to accommodate a growing body. After shedding, the crab's body expands; the picture shows the exoskeleton left behind by the soft-shelled crab in the upper part of the photo. The new shell takes one to two days to harden depending upon water temperature - the warmer the water, the quicker it will harden. While the shell is soft a crab unable to use its crushing claws and is extremely vulnerable to predators. Tom Lake.]

Cornwall Landing, Cornwall-on-Hudson, HRM 57: Nearly 100 fourth-graders from Willow Avenue School lined the beach in anticipation as our 85-foot-long seine came ashore vibrating with fish. Two "shoe-string" eels wiggled their way out of the net and back into the river. Most of the other fish were nonmigratory: spottail shiners, white perch, tessellated darters, and banded killifish. While we counted and measured some YOY striped bass (58-65 mm), we also recognized a half-dozen less common fish: smallmouth bass (115-117 mm) and largemouth bass (109-145). The river was 71°F and the salinity was 1.2 ppt.
 - Chris O'Sullivan, Tom Lake



Tracking an orange in the current at Piermont

Piermont Pier, Piermont, RM 25W: Moisture saturated the early morning air, covering the pier in a ghostly film. Two large herons stood motionless where the Sparkill Creek widens into the Hudson, and at the pier's end a kingfisher perched on a tall piling, surveying the area. The silence was soon broken by three buses of high schoolers arriving to sample, measure, and assess the river and its inhabitants. With a salinity of 7 ppt the students pulled in close to 200 Atlantic silversides, 15 small striped bass, a dozen white perch, a naked goby, a few small blue crabs and loads of small moon jellies. One large, feisty, and battleworn blue crab impressed the group, swinging angrily at them with its one remaining claw and a single swimmeret. About noon, as rain threatened, a large ring of bunker (Atlantic menhaden) appeared at the surface, flashing silvery sides as they circled frantically off the north side of the pier for close to 30 minutes before disappearing.

Throughout the day monarch butterflies moved quietly by us like fall leaves floating on the gentle breeze; we counted over 15, each traveling solo on the journey to a warmer climate.
 - Margie Turrin with Clarkstown South High, Pearl River High, & Tappan Zee High School students

Pier 45, Hudson River Park, Manhattan, RM 3: Observations by two P.S. 3 students:

"It's a cloudy day out, but it's not raining. Fog hangs over the city, and I can't see the tops of some buildings. There's a light breeze. The water is kind of gray-green. A boat is coming. It's blue and white. There's also a water taxi coming. The water is bubbly." - Kit

"It's raining now. It's so misty you can barely see the NJ skyline. The Statue of Liberty is almost out of view." - Baird

We saw a flock of geese (I think) flying in the typical V-formation, except barely a foot above water! There was heavy fog except for the narrow band right above the water, which provided a clear view path. We also encountered a single monarch butterfly on the pier.

- Shino Tanikawa and the students of P.S. 3



Male fiddler crab

Sherman Creek/Swindler Cove, Harlem River, Manhattan: Most Day in the Life trips happen during school hours, but each year two sites at opposite ends of the estuary close out the day in the late afternoon: the Alternative Learning Center at Stuyvesant at river mile 127, and Obed Fulcar's hearty group of middle schoolers from the Friends of Sherman Creek. Within minutes of arriving at the site, we caught a male fiddler crab with one huge claw. A few pulls of the seine net brought up several Atlantic silversides and a small winter flounder. As we placed the fish into buckets and bags, one of the kids whispered mainly to himself, "I've never touched a fish before..." Perfect way to close out another Day in the Life of the Estuary.

- Chris Bowser, Steve Stanne, Cynthia Fowx, Beth Roessler, Obed Fulcar, Friends of Sherman Creek

Brooklyn Bridge Park, East River, Brooklyn: Lots of commercial boats traveled by during our sampling at the mouth of the East River just under the Manhattan Bridge. Salinity read 25.5 ppt in this saltwater strait connecting Long Island Sound and the water rushing in from the Atlantic Ocean. The salty water yielded three small fish to our nets - an Atlantic silverside, a young-of-the-year bluefish, and a young-of-the-year mullet - plus a small periwinkle snail.

- Giannina Zlatar & Brooklyn Waldorf School 5th graders; Kara Gilmour, Brooklyn Bridge Park Conservancy

Aboard Schooner *Pioneer*, Upper New York Bay off Brooklyn: The Andries Hudde Junior High School sailed out of South Street Seaport and onto the Bay Ridge Flats, where the water was 69°F. At the fish station students closed their eyes and I placed a small red beard sponge or bryozoans in each hand. The immediate recoil when they opened their eyes was followed by incredulity that these were actual animals, not clumps of debris. The catch also included two porgies, several female blue crabs, a dozen button-sized mud crabs, a palm-sized windowpane flounder, and...drumroll please...an exquisite three-inch lined seahorse, a first for Day in the Life! It was astounding to see this little fish curl its tail around a piece of sponge as we coasted along the Brooklyn waterfront.

- Chris Bowser, Robert Nyman, Maggie Flanagan, Captain Richard Dorfman



Lined seahorse

Gerritsen Creek Salt Marsh, Jamaica Bay, Brooklyn: Sixty second graders joined the Park Rangers to explore the salt marsh at Gerritsen Creek. Salinity hovered at 23 ppt, and turbidity averaged 60 cm of visibility, offering cover for the small life we pulled in with our nets: over 100 Atlantic silversides, 15 striped killifish, a dozen comb jellies, some ghost shrimp and a couple of green crabs.

- Sydra Mallery and the Brooklyn School of Inquiry



Tina with striped killifish

Canarsie Pier, Jamaica Bay, Brooklyn: Jamaica Bay lay under a haze of morning fog as I joined Student Conservation Association members Diane Collins and Tina Walsh in greeting 100 students for the 10th Annual Day in the Life of the Hudson River. As Tina and I waded out with the seine net, it was hard to tell where the water ended and the sky began. But the still bay yielded a surprisingly bountiful catch: several dozen Atlantic silversides, a tiny hogchoker, a striped killifish, a blue crab, a few glass shrimp, and plenty of hermit crabs and comb jellies. The students from Robert Van Wyck Middle School 217 and the International High School at Prospect Heights eagerly recorded our findings - and at the end of the day, one student even told us that he had decided to become a marine biologist!

- Ann Pedtke, Student Conservation Association

<<<< ABOUT A DAY IN THE LIFE OF THE HUDSON RIVER >>>>

"A Day in the Life of the Hudson River" is organized by DEC's Hudson River Estuary Program, with assistance from the Lamont-Doherty Earth Observatory of Columbia University. The event is held in conjunction with National Estuaries Day, which celebrates these remarkably productive and valuable ecosystems. Many environmental education centers along the river join in the effort, partnering with classroom teachers to help students better understand their local piece of the Hudson and then share their experiences and data to gain wider perspective on the entire ecosystem. For more information about "A Day in the Life," visit <http://www.ldeo.columbia.edu/edu/k12/snapshotday>.

<<<< HUDSON RIVER MILES >>>>

The Hudson is measured north from Hudson River Mile 0 at the Battery at the southern tip of Manhattan. The George Washington Bridge is at HRM 12, the Tappan Zee 28, Bear Mountain 47, Beacon-Newburgh 62, Mid-Hudson 75, Kingston-Rhinecliff 95, Rip Van Winkle 114, and the Federal Dam at Troy, the head of tidewater, at 153.

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The regular Hudson River Almanac is compiled and edited by Tom Lake and emailed weekly by DEC's Hudson River Estuary Program. To sign up to receive the Almanac (or to unsubscribe), send an email message to hrep@gw.dec.state.ny.us and write Almanac in the subject line. There is no charge to subscribe. Share your observations throughout the year by e-mailing them to trlake7@aol.com. See something really special? Give us a call at (845)297-8935.

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<<<< USEFUL LINKS >>>>

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Information about the Hudson River Estuary Program is available on DEC's website at <http://www.dec.ny.gov/lands/4920.html>