Division of Fish, Wildlife and Marine Resources
Monthly Highlights
April, 2009

Issue Priorities:

Connect New Yorkers to Nature

I FISH NY at New York Restoration Project's Naturemania Celebration - On April 16th, staff participated in the New York Restoration Project (NYRP) Naturemania program at Swindler's Cove, Manhattan. During this week-long event, students of various ages spent their spring break learning about plants, animals and water through activities provided by NYRP at Swindler's Cove. The cove is adjacent to the Harlem River and has a small fishing pier. The pier was used as a platform to provide information on the fish of the Harlem River as well as fishing instruction to approximately 40 students (grades 3 and up) during several sessions throughout the day. Student chaperones were also included in the educational and fishing portion of our program. This was the first time fishing for many of the participants.

Bureau of Fisheries ***Melissa K. Cohen*** ***(718) 482-4022***

Saratoga Spa State Park Stocking - Geyser Creek was stocked with about 1,000 brown trout on April 15 by hundreds of excited children. Saratoga Spa State Park, along with DEC staff from the Warrensburg office, Van Hornsville Fish Hatchery, and Albany, provided this unique opportunity for children to get up close with a fish. The event has grown over the last few years and now includes other activities from educational tables to a tie-die shirt station. The Capital District Fly Fishers group was there to teach about fly fishing, and DEC's Hudson River Estuary unit also attended the event. Along with the outdoor activities, there were live music and hot dogs.

DEC hopes to expand on the educational opportunities for children in 2010. Informational tables on fish ID, aquatic habitat, and clean water, are in the works.

Bureau of Fisheries ***Robert Fiorentino*** ***(518) 623-1234***

New Car-Top Boat Launch - A new car-top boat launch had been planned for Lake Alice Wildlife Management Area (WMA) for more than two years. J. O'Connor and Forester D. Levy saw an opportunity to get this project completed while the timber harvest was taking place at Lake Alice WMA this winter. They realized the loggers were going to need to drive their feller/buncher right past the location proposed for the new boat launch and asked them to use it to clear the brush and down trees from the area. The loggers agreed and the area was cleared in 15 minutes. J. O'Connor and B. Ferns returned after the snow melted in April to remove the brush, stumps, and other debris. This new boat launch is located adjacent to the main parking area, is unobstructed, and much more user friendly. Previously, a car-top boat had to be lifted over the four-foot high gate at the end of the dike and dragged 100 yards before reaching the lake. Now, a boat can be lifted off a car in the parking lot and be placed directly in the lake.

Bureau of Fisheries ***John O'Connor*** ***(518) 897-1296***

The National Archery in the Schools Program of NY (NASP-NY) – The National Archery in the Schools Program (NASP) started in New York in January 2008. The program promotes student education, physical education, and participation in the life long sport of archery. The NASP continues to grow at an ever-increasing rate with 857,000 students participating in the program in the 2007-2008 school year. As of today, 4,700 schools in 46 states, Canada, and Australia have adopted the NASP.

Students who do not normally participate and enjoy sports-related or extra-curricular activities seem to excel in this program, something that invariably carries over into their attitude, work habits and other school activities. The NASP often inspires after school activities shared by families and friends. The program teaches discipline, respect, and self-control. In a survey conducted three years ago, 27% of NASP graduates reported purchasing personal archery equipment to continue their archery activities "after-school." About 37% of schools in the program have started after-school archery clubs.

The pilot program in New York now has 28 schools from 21 school districts, with another 9 schools trained and looking for funding. There are now 140 certified Basic Archery Instructors (BAI) and 15 certified Basic Archery Instructor Trainers. The First Annual New York State NASP (Virtual) State Tournament was recently completed; 166 students from eight schools participated, and the top male and female along with two other students plan on shooting at the National tournament in Kentucky in May.

Staff participated in the 2009 Rochester, Hamburg and Turning Stone sportsman and outdoor shows and also set up a booth and presentation at the New York Bowhunters annual meeting and banquet. An additional 25 schools will be signed up for the 2009-2010 school year.

Bureau of Wildlife ***Mike Matthews*** ***(518) 402-8963***

Students Introduced to Amphibian Anatomy and Adaptation - On April 16, Biologist Eric Paul of the Aquatic Toxicant Research Unit (ATRU) gave a presentation titled "Biology and Ecology of Amphibians" to a group of 27 middle school and high school aged students. The presentation gave a general overview of adaptations of amphibians to the aquatic environment. Later in the presentation, Eric led the group's frog dissection exercise, pointing out these adaptations as the students examined the anatomy of their frogs. Frogs used were purchased by the students from a scientific supply company. The students and parents indicated that the presentation coupled with the demonstration was very informative and enjoyable.

Bureau of Habitat ***Eric Paul*** ***(315) 337-091***

Safeguard New York's Unique Natural Assets

Spring Egg Take - Egg takes for walleye, Washington and Skamania strain steelhead, and Finger Lakes strain rainbow trout were completed recently. The walleye egg take from Oneida Lake, coordinated by Oneida hatchery staff, was very successful with 325 million eggs collected from 5,336 female walleye in ten days. Salmon River Hatchery staff reported robust steelhead runs this spring, with 2.6-million Washington strain and 77,000 Skamania strain steelhead eggs collected. Wild rainbow trout from Cayuga Inlet produced 105,000 pure strain eggs and another 24,000 wild strain X domestic rainbow trout (via Randolph Hatchery) strain hybrid eggs were produced. Both the wild strain and hybrid rainbow trout are being reared at Bath Hatchery. The muskellunge egg take has recently commenced, and eggs will be incubated and reared at Chautauqua Hatchery. Bureau of Fisheries staff from various fish hatcheries and regional fisheries management units worked together to complete the egg takes.

This successful egg collection will ensure abundant fish for stocking during the coming year.

Bureau of Fisheries ***Phil Hulbert*** ***(518) 402-8894***

Long -Term Monitoring Crucial to Bird Conservation - The *U.S. State of the Birds*, released recently by Secretary of the Interior Ken Salazar, is the "first ever comprehensive report on bird populations in the United States." The report emphasizes birds as indicators of ecosystem health and while it details troubling trends in bird populations across the country, it also illustrates how in some cases birds can respond quickly and positively to conservation action. The *U.S. State of the Birds* depends on data collected by both professional biologists and citizen scientists during long-term bird monitoring efforts - the North American Breeding Bird Survey administered by the U.S. Geological Survey and the Canadian Wildlife Service, National Audubon Society's Christmas Bird Counts, and Waterfowl Breeding Population and Habitat Surveys from the U.S. Fish and Wildlife Service and Canadian Wildlife Service. The numerous DEC staff who have participated in these surveys through the years should be proud of their contributions.

The *U.S. State of the Birds* can be viewed online: http://www.stateofthebirds.org/. Those wishing to participate in bird monitoring should check the "What You Can Do" page: http://www.stateofthebirds.org/resources.

Bureau of Wildlife ***Laura Sommers*** ***(518) 402-8904***

Ruffed Grouse Fall - Winter Survival Study - For the past two years, Region 6 Bureau of Wildlife staff assisted SUNY College of Environmental Science and Forestry Masters student Megan Skrip in conducting a ruffed grouse fall – winter survival study. This study compares ruffed grouse survival in two study areas with different degrees of habitat fragmentation: one located on Fort Drum in Jefferson County and the other in the Partridge Run WMA in Albany County. Utilizing drift traps with long leads, 87 ruffed grouse were captured in September 2007, with 75 of these included in the study. In September 2008, the same method captured 126 grouse with 94 included in the study. Captured grouse were fitted with leg bands for the purposes of hunter harvest reporting. Radio telemetry was used to identify non-harvest mortality of the study birds, locate their remains, and determine the mortality source. During the first year, we observed a mortality rate a little over 50%. About 9% of the radio-collared grouse were killed by hunters, and about 43% were lost to non-hunting mortality (e.g., raptors, mammals). During the second year of the study, a little over 60% of the radio-collared birds died. Similar to the first year, hunting mortality was relatively low (about 5% of the total mortality). Over the coming weeks, analysis of survival data will continue including an investigation of the relationship between survival and various landscape variables (e.g., habitat patch size, habitat patch configuration, juxtaposition of habitat types). A final report will be available later this year.

Bureau of Wildlife ***Jeff Eller*** ***(315)785-2261***

Spruce Grouse Habitat Research- The Spruce Grouse is endangered and declining in New York State. Recent studies by DEC and SUNY Potsdam have indicated that the species occupies mid-successional spruce-tamarack forests and that populations may be declining due to natural succession. Other boreal bird species are declining at alarming rates as well. Region 6 staff assisted in designing a study to test different habitat management techniques on the occurrence of spruce grouse and other boreal forest obligates. Nine one-hectare plots were established on private land in an occupied spruce grouse site at the core of the species' distribution in the Adirondacks. Four of six treatment areas were completed and plans to finish the other two are being finalized. This study will help DEC determine which management techniques are the most successful for spruce grouse and how these management techniques will affect other boreal forest bird obligates. Information such as this is necessary if we are to conserve persistent populations of the spruce grouse in New York State.

Bureau of Wildlife ***Angelena M. Ross*** ***(315) 785-2261***

Water Level in Hundred Acre Marsh at Three Rivers WMA - A draw-down of the water level in the Hundred Acre Marsh at Three Rivers WMA began this month. This impoundment had lost the majority of its emergent vegetation since its last draw-down in 2005. By exposing the marsh soil to the air, the seed bank will have a chance to sprout, eventually providing food and cover for numerous wetland-dependent wildlife species, including waterfowl and muskrats. The water level will be raised again at the end of the summer.

Bureau of Wildlife ***Bonnie Parton*** ***(315) 695-2272***

Additional Wetlands to be Protected - Nearly 5,000 acres of freshwater wetlands have been identified for mapping in Orange & Ulster Counties as part of the EPA Wallkill Watershed Wetland Mapping Grant. These identified wetlands are the results of digitizing over 20 years worth of field delineations and site inspections in Region 3. Regional Bureau of Habitat staff are working with Central Office's Habitat Inventory Unit to complete preliminary remote sensing datasets for future field confirmation. This will result in thousands of additional acres of wetland resources to be protected under Article 24 regulations.

Figure 1. Residential encroachment on a wetland

Bureau of Habitat ***James Pinheiro*** ***(845) 256-3033***

Proposed New York Regional Interconnect (NYRI) Powerline is Dead- An April 21, 2009 order from the Public Service Commission dismissed the application for construction of the 190-mile NYRI powerline. The proposed NYRI line would have run across 7 counties, crossed approximately 190 streams and 250 wetlands, and impacted endangered and threatened species. DEC staff made the case that the applicant had not provided enough information to show compliance with state regulations and that an alternative project or route must be selected. Over 24 DEC staff from central office and Regions 3, 4, 6, and 7 were involved with the NYRI case. An astounding number of staff (thirteen) provided expert testimony regarding the impacts of the project on natural resources, stormwater management, use of state-owned property, and the New York City watershed. This was a large complex case that came to a positive conclusion for New York's natural resources.

Bureau of Habitat ***JR Jacobson*** ***(518) 402-8853***

New Dragonfly Confirmed for New York State- Jeff Corser, Zoologist with the New York Natural Heritage Program, documented three adult broad-tailed

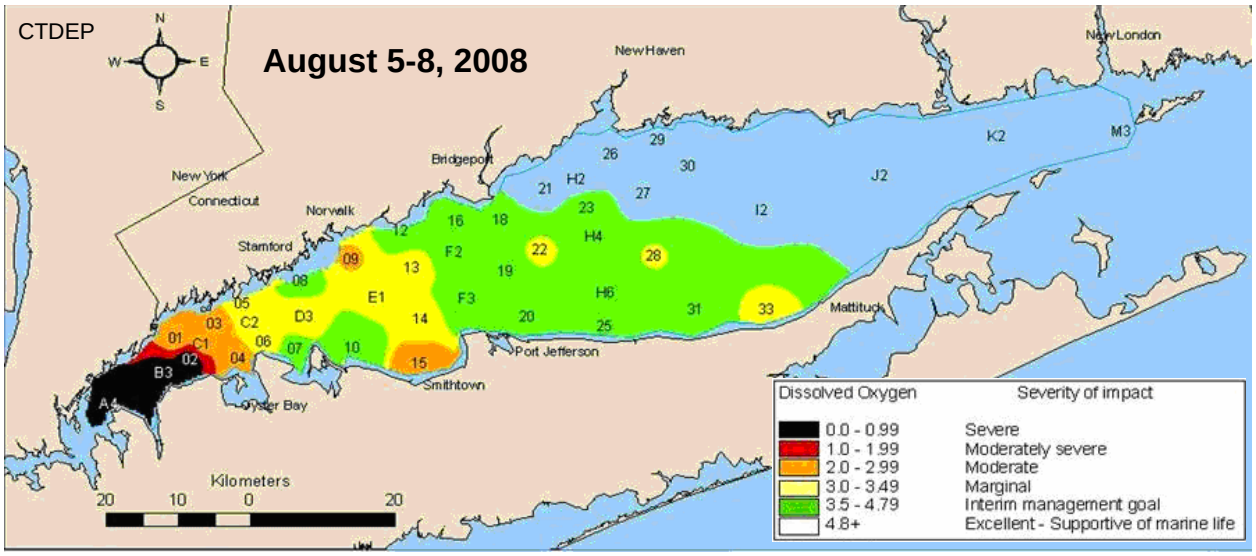
shadowdragons from the Delaware River in June of 2008. This record will be included in the New York Dragonfly and Damselfly Survey (NYDDS). This is the first time this species has been confirmed with the presence of adults in New York State. The adults were observed in large numbers after having freshly emerged from their larval form, thus confirming that they are breeding here. In 2007, Jeff and NYDDS volunteer Kevin Hemeon documented larval skins from two other locations in the state, but larvae or adults were needed to confirm the identification to species level. This exciting find will inspire NYDDS efforts for our last field season in 2009.

Bureau of Habitat ***Erin White*** ***(518) 402-8955***

NYSDEC Slated to Receive Annual Federal Funding -The Long Island Sound Study (LISS), an EPA National Estuary Program, held its quarterly Management Committee meeting on April 16th in Stamford, CT. During this meeting, budget decisions for Federal fiscal year 2009 were made. DEC will receive funding for coordination as well as support of on-going projects, such as the USGS North Shore Tidal Wetland Monitoring (funds are being supplied for only one year of the operational costs). At the meeting, it was decided that the Connecticut Department of Environmental Protection (CTDEP) should continue plankton sampling as part of their regular LISS water quality monitoring, as this is an important component of the ecosystem and has also come up in discussions regarding climate change.

The USGS North Shore Tidal Wetland Monitoring program is part of a larger, on-going effort between NYSDEC, USGS, and the School of Marine and Atmospheric Sciences at Stony Brook University to determine the causes of tidal wetland loss on the north shore of Long Island. Most of the analyzed wetland complexes across the north shore have experienced a loss of more than 20% vegetated acreage since the 1974 aerial infra-red photography was taken, as compared to 2006 photography. This study will compare data from wetlands experiencing varying degrees of loss and no change in areal extent. Once the cause of wetland loss is better understood, management decisions can more effectively be made.

CTDEP has been conducting its annual LISS-funded water quality monitoring since the early 1990s. The monitoring is targeted to catch the annual bottom-water hypoxic event (low dissolved oxygen) in the western Long Island Sound, which generally occurs between July and September. Phytoplankton and zooplankton collection began in 2005 as part of the EPA National Coastal Assessment.



Bureau of Marine Resources ***Sarah Deonarine*** ***631-444-0467***

Concern for Lobsters - The Atlantic States Marine Fisheries Commission American Lobster assessment successfully completed peer review in March and was accepted by the Board at the May meeting. The new assessment showed current abundance of the Southern New England stock (which includes the NY Marine District) is the lowest observed since the 1980s, and exploitation rates have declined since 2000. Recruitment has remained low since 1998. Given current low levels of spawning stock biomass and poor recruitment, further management restrictions are warranted. The Board tasked the technical committee with providing recommendations for management and revising the reference points.

Bureau of Marine Resources ***Kim McKown*** ***631-444-0454***

Horseshoe Crab Area Closures - Two new areas will be closed to the commercial harvest of horseshoe crabs. At the request of the National Park Service, Fire Island National Seashore will be closed on May 4, 2009. At the request of the Town of Brookhaven, Cedar Beach Park in Mt. Sinai will be closed on June 17, 2009.

Bureau of Marine Resources ***Kim McKown*** ***631-4444-0454***

Promote a Toxic Free Future

Aquatic Toxicant Research Unit Continues Study on Mercury Contamination in Fish – ATRU staff have completed the first year of sample collection for a project titled: Mercury and Selenium in Fish in Important Recreational Waters of New York State. This project is funded by New York Energy Research and Development Authority

(NYSERDA) and builds upon the recently completed monitoring of mercury contamination in fish which was also funded by NYSERDA.

The goals of this new project are to: 1) Provide data on the mercury concentrations in fish from lakes located in state parks; 2) Provide data on the mercury concentrations in fish in rivers located downstream from lakes with fish with high levels of mercury; 3) Determine whether there have been any significant changes in mercury concentrations in New York State fish in recent years; 4) Provide data on the selenium concentrations and how this relates to mercury; and 5) Provide analytical data to the NYS Department of Health to evaluate existing advisories and determine whether any additional lakes should have fish consumption advisories.

Fish have been collected and prepared for analysis from 23 state park lakes. This year's sampling will focus on fish from rivers and the 12 mercury trend lakes. Funding from NYSERDA will allow for the purchase of nearly $100,000 of laboratory equipment for the Analytical Services Unit (ASU) at Hale Creek, updating the analytical capabilities of the ASU as well as supporting the sampling efforts of the ATRU.

Bureau of Habitat ***Eric Paul*** ***(315) 337-0910***

Foster Green and Healthy Communities

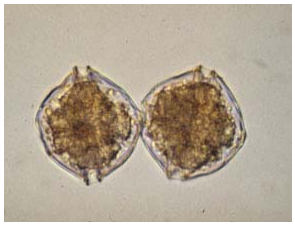
Initiate 2009 Monitoring for Alexandrium –

Since mid-April, the Bureau of Marine Resources' Shellfisheries Section has been conducting monitoring for potentially hazardous marine biotoxins in shellfish at 10 locations around Long Island. Mesh bags of blue mussels were deployed at six monitoring sites at municipal marinas on the north and south shores in eastern, central and western Suffolk County. Four offshore stations have been established in the Huntington/Northport complex of bays and harbors where we have previously detected biotoxins and implemented closures in 2006 and 2008.

On May 26, biotoxin was detected in mussels at three DEC monitoring sites in the Northport/Huntington complex. One of the locations is in a certified (open) area in which shellfish are harvested commercially and recreationally for human consumption. Effective at sunrise on May 27, BMR designated approximately 2200 acres of shellfishing areas in Northport Bay, Centerport Harbor and Duck Island Harbor as temporarily uncertified for the harvest of shellfish. The temporary closure will remain in effect until three consecutive samples, collected over a period of two weeks, are determined to be negative for the presence of biotoxin or the biotoxin level is sufficiently below the action level of 80 micrograms/100 grams of shellfish tissue, that it does not present a threat to shellfish consumers.

Testing of shellfish at all other DEC monitoring locations continues. Collection and testing of samples has been expanded to include shellfish harvested commercially in other areas not covered by the regular monitoring program.

Below is a picture of Alexandrium cells.



William Hastback ***Bureau of Marine Resources*** ***631-444-0479***

Organizational Priorities:

Partnerships and the Public

Hatchery Biosecurity Workshop - Staff from DEC's Central office and Rome Fish Disease Control Center helped organize and participated in a biosecurity workshop hosted at a private hatchery, Hickling's Fish Farm, in Edmeston, NY. The principal objective of the workshop was to help private aquaculturists improve their understanding of the risks posed by various fish pathogens and ways to lessen the likelihood of pathogens entering their facilities. The workshop attendees included private hatchery operators, representatives from the New York Farm Bureau, the Department of Agriculture and Markets, several county and SUNY hatchery personnel, Cornell University staff, a representative from MicroTechnologies, Inc. (a fish health testing laboratory in the northeast US), and DEC staff. In addition to technical presentations, attendees received a manual focused on improving hatchery/aquaculture biosecurity and observed a biosecurity audit conducted by staff from MicroTechnologies Inc.

Bureau of Fisheries ***Phil Hulbert*** ***(518) 402-8894***

Peconic Estuary Program Enlists Help of Residents to Re-open Shellfish Areas - The Peconic Estuary Program (PEP) hosted two public watershed meetings in April to engage the public and private property owners in PEPs efforts to re-open some of the most productive shellfish areas in NYS. These public watershed meetings complement a larger multi-million dollar effort led by the PEP in partnership with USEPA, NYS, Suffolk County, and the East End Towns to implement highly concentrated subwatershed-based stormwater management to restore impaired waterbodies and re-open closed shellfish growing areas (SGAs).

At these extremely well-attended public meetings, one for Southold's Hashamomuck Pond watershed and the other for Southampton's Reeves Bay watershed, residents learned about the harms associated with polluted stormwater runoff and road drainage improvements planned in their neighborhood. Residents then discussed ways in which they together can reduce their stormwater footprint and restore their subwatershed. Kayak

paddles and several other upcoming outreach events have been planned to get people out into their watershed and showcase watershed-friendly living. PEP envisions working with residents in the future to pursue low impact development and green infrastructure practices.

Bureau of Marine Resources ***Laura Stephenson*** ***631-444-0871***

Workforce, Science and Technology

Pesticide Screening Model Updates Make the Job Easier and More Reliable - Since 1992, the Ecotoxicology and Standards Unit (ESU) has performed ecological risk assessments for every new pesticide active ingredient (NAI) or major change of label (MCL) submitted to DEC for registration. This month, two major changes were made to the risk assessment models to make them more reliable and easier to use. The first was to modernize computer files for unit work. The other major change was the ability to generate pesticide residue values. Herbivorous birds and mammals can be exposed to pesticides through their diet, either from feeding directly on treated vegetation or from pesticide drift from treated fields to non-target areas. In order to assess the risks to such birds and animals, a method was needed to estimate the concentration of pesticides on vegetation that herbivores feed upon. This month, a module was added to the ESU pesticide screening models to automatically compute pesticide residues using the work of Hoerger and Kenaga who developed a methodology for estimating pesticide residues on seven types of vegetation (short grass, long grass, leafy crops, fruits, grains, etc.) from the pounds of pesticide applied per acre. The modeler enters an application rate in pounds per acre, then selects whether the program should calculate “typical” residue values or “upper limit” residue values. Alternatively, the modeler can select to bypass the calculation module and enter residue values from the literature, submitted data, or other sources. These improvements will increase the reliability of pesticide risk assessments performed by ESU, and make the task easier for the modeler.

Bureau of Habitat ***Tim Sinnott*** ***(518) 402-897***0