

Alexander B. Grannis
Commissioner

M E M O R A N D U M

TO: Christopher Amato, Assistant Commissioner

FROM: Patricia Riexinger, Director, DFWMR

SUBJECT: MONTHLY REPORT - December 2007

DATE: January 24, 2008

Information and Extension

Historic Photographic Record Recovered: Fletcher Ward, nephew of former Chautauqua Hatchery assistant Maxie Ward, found a copy of the only documented record of paddlefish in Chautauqua Lake. The photo inscription incorrectly identified the fish as a sturgeon and careful examination of the photograph suggests that the scene was likely "canned" (no pun intended) well after the fish had been caught and mounted. Records indicate that the specimen was mounted and displayed at the Union School in Mayville through the early 1900s. Note the long snout or "paddle" on the right side of the fish. The following is an account of the capture of this paddlefish;



According to the Jamestown Journal (July 15, 1872, A Big Thing At the Fish Market);

"Bemus Point yesterday was somewhat astonished by the appearance upon the surface of old Chautauqua Lake a mammoth fish who was terrible agitating the otherwise calm and placid waters. It was the largest fish ever caught in the lake, measuring six feet in length, and on its nose was a bill, very wide and flat, nearly a foot long. The fish weighed one hundred and twenty pounds....."

Note: Through the State Wildlife Grants program New York is attempting to restore paddlefish to the Allegheny Watershed.

Bureau of Fisheries

Paul McKeown

(716) 372-0645

Protection

Interesting Biopesticide Reviewed - The Ecotoxicology and Standards Unit reviews many pesticide products over the course of a year, but this month, an exceptionally interesting product was reviewed that once registered, could have important implications for New York State. The products, named Tick-EX G and Tick-EX EC, use living spores of an entomopathogenic fungus, *Metarhizium anisopliae* Strain F-50 as the active ingredient. The spores are applied to lawns in either a granular or liquid formulation. When a target insect encounters the spores, they attach to the exoskeleton, germinate, and grow through the exoskeleton and into the insects body, where they cause death in three to five days. The dead insect itself becomes an infective agent as the fungus living in and on it can infect other insects as well. Control can last up to nine months. Different strains of *M. Anisopliae* have narrow ranges of host specificity, so don't count on it to control all the insects on your lawn. Honeybees and lady beetles, for example, are not affected by this fungus strain. Two of the targets named on the label, however, are most common species of ticks and grubs. This fungus might prove to be a highly selective biocontrol agent for the ticks that are vectors for lyme disease. This fungus is also selective for grubs, such as Japanese beetle larvae and June beetle larvae, that are very destructive to lawns. Highly toxic organophosphates such as diazinon are still used as lawn chemicals to control grubs. By targeting ticks and grubs, this product might help control an important human disease and help reduce the use of undesirable, highly toxic lawn chemicals. The product is not registered yet, as the Health Department must also complete their review as well, but the Bureau of Habitat did recommend that the product be registered.

Bureau of Habitat

Tim Sinnott

(518) 402-8970

Colonial Waterbird Protection - Wildlife staff have been involved with a detailed and involved review of the proposed second bridge from Buffalo to Fort Erie. Primarily, wildlife staff have been concerned with the status of the Niagara River as an Important Bird Area, and the high bird diversity and richness in the Niagara River Corridor. This corridor is important as a migratory pathway, as wintering waterfowl and gull habitat, and as a breeding area of the NYS threatened Common Tern, which Wildlife staff have been studying since 1985. The presence of the largest nesting population of Common Terns in the Great Lakes has caught the attention of DEC staff, and we are working hard to make sure the wisest choice is made for the wildlife resource using this unique area. Wildlife staff have also been involved in the NYPA HIP (Habitat Improvement Project) implementation of the restoration of an island between Motor and Strawberry Islands in the Niagara River. Though primarily a fisheries project, wildlife staff have had valuable input suggesting that a Common Tern nesting site be incorporated into the design of this newly built island. This would help mitigate for the loss of virtually all of their original natural nesting structure on the Niagara Frontier, habitat lost historically to human activities, and the usurping of any remaining natural nest area by the growth of Ring-billed gulls populations.

Bureau of Wildlife

Connie Adams

(716) 851-7010

Operation and Maintenance of WMAs -The dune crossover at Deer Creek Marsh Wildlife Management Area has been completed. This project was funded by 2006 Federal Aid in Wildlife Restoration Funds. The crossover was designed and built to allow dune users to access the beach area of Lake Ontario on the west and Deer Creek on the east side of the foot trail. The crossover is approximately half way down the dune from the Rainbow Shores parking area to the mouth of Deer Creek in an area that had been heavily eroded by users accessing the lake and creek from this trail.



Bureau of Wildlife

Mike Putnam

(607) 753-3095

Recreational Use

Youth Pheasant Hunt Weekends A Big Success - New in 2007, junior hunters (licensees 12-15) had the opportunity to hunt ring-necked pheasants the weekend before the start of the regular pheasant hunting season. Youth pheasant hunt weekends were held September 29 - 30 in northern and eastern New York and October 13 - 14 in western New York. Pheasant release sites were stocked with adult pheasants prior to the youth hunt weekends. The release areas are listed on the DEC website at: <http://www.dec.ny.gov/outdoor/9349.html>. Pre-season stocking allows junior hunters to hunt pheasants in less crowded conditions under the supervision of an experienced hunter. DEC staff observed junior hunters hunting pheasants on pheasant release areas across the State. Some of the hunters were successful while others learned that harvesting game is not always easy and only a part of the overall hunting experience. A few of the junior hunters coupled pheasant hunting with the youth waterfowl hunt days making for a mixed bag of hunting opportunity. A number of great digital photos were taken celebrating the hunts. It's likely more junior hunters will take advantage of the youth pheasant hunt weekends in 2008 as word spreads of this new hunting opportunity.

Bureau of Wildlife

Mike Murphy

(607) 263-3763

Research and Monitoring

Angler diary program on wild trout streams: During the 2007 trout fishing season (March - early November), anglers voluntarily kept fishing diaries on four streams managed with a 9" minimum size limit and a year-round fishing season; Clear Creek, Hosmer Brook, Lime Lake Outlet and McKinstry Creek. A similar diary program was done in 2000.

Sixty diaries were sent out to angler diarists prior to the start of the season. Twenty seven diaries with information were returned (45%) at the end of the season. The 27 diarists recorded information from 197 trips, accounting for 368.5 hours of fishing effort. The average trip length was 2.07 hours. The most trips occurred on Clear Creek (81 trips, 41% of total), followed by Lime Lake Outlet (76 trips, 39% of total), McKinstry Creek (24 trips, 12%) and Hosmer Brook (16 trips, 8%). Fifty one percent of the total fishing hours were spent on Clear Creek. Diarists reported fishing with flies on 76% of their trips, while they used lures on 19% and bait on 5% of their trips.

In the 2007 diary program, the most effort occurred in June (50 trips), followed by May (47 trips), July (36 trips) and April (34 trips). For both brown trout and rainbow trout, the highest monthly catch rates were reported in September (1.31/hr and 3.21/hr, respectively) and lowest were reported in April (0.14/hr and 0.46/hr, respectively).

In all four streams combined, a total of 161 brown trout were caught by the angler diarists, of which 157 (98%) were released and four were creeled. Fifty-five percent of the released brown trout were 9" (legal size). The average size of the brown trout that were released ranged from 8.7" on Lime Lake Outlet to 10.0" on McKinstry Creek. The average size of those brown trout creeled was 10.7" on Clear Creek and 9.7" on Hosmer Brook. No brown trout were creeled on Lime Lake Outlet and McKinstry Creek. The average length of all brown trout caught was 9.2".

Overall on all four streams, 877 rainbow trout were caught by angler diarists, 875 (99%) of which were released. Twelve percent of those rainbow trout released were 9". The average size of rainbow trout released varied from 6.4" on McKinstry Creek to 6.9" on Hosmer Brook. Rainbow trout were only creeled in Clear Creek (two fish) (avg. length 10.6"). The average length of all rainbow trout caught was 6.7". The largest rainbow trout reported by diarists were 12" from Clear Creek and Lime Lake Outlet, while the largest reported brown trout was from Clear Creek at 19.75".

The catch rate for brown trout and rainbow trout combined varied from 1.23 trout/hr in McKinstry Creek to 4.01 trout/hr in Lime Lake Outlet. A catch rate of 1.0 trout/hr is considered good on high quality wild trout streams in New York State. Individually, the catch rate for brown trout ranged from 0.16 trout/hr in McKinstry Creek to 0.63 trout/hr in Lime Lake Outlet. For rainbow trout the catch rate varied from 1.07 trout/hr in McKinstry Creek to 3.38 trout/hr in Lime Lake Outlet.

Comparing angler diary results between 2000 and 2007, some changes in angler effort and catch can be seen. Similar numbers of trips occurred in both years on Clear Creek, Hosmer Brook and McKinstry Creek, while quite a few more occurred on Lime Lake Outlet in 2007 than in 2000. Catch rates for brown trout were lower on all four streams in 2007 than they were in 2000, while rainbow trout catch rates were higher in 2007 than in 2000 for all streams except Clear Creek.

Research and Monitoring

Natural Heritage Conducts Rapid Biodiversity Assessment of TNC Lands Acquired from Finch-Pruyn – The Adirondack Chapter of The Nature Conservancy (ANC) recently purchased 162,430 acres of timberlands from Finch-Pruyn. ANC is now in the process of determining which portions of the purchased lands will be transferred to NYS for inclusion in the Forest Preserve; which portions will be maintained in active forest management under conservation easements; and which portions will go to local jurisdictions or private landholders (Trade lands). ANC made a preliminary assignment of Finch-Pruyn management units (MU's) to each of these categories in July, with the most biologically significant lands designated for transfer to NYS.

In August, to assist ANC in its final assignment of MU's to categories, New York Natural Heritage agreed to conduct a rapid assessment of the MU's preliminarily designated as Easement and Trade lands, and to highlight any sites containing important biological or conservation priorities to ANC by November. Our approach was to complete a remote assessment of all Finch-Pruyn parcels using available GIS layers, with a view toward special features and landscape context; and to conduct field surveys in a number of the northern MU's.

For the remote GIS assessment we scored each MU for the prevalence of rare species and significant natural communities, the presence of predicted habitat for rare species and natural communities, moist 'cove' landscape patterns, calcareous substrates, special indicator trees, and biodiversity feature rankings by other researchers and expert sources. Our final rank synthesized these metrics and helped to inform our field work.

We spent 22 people-days in the field in the fall visiting 30 MU's. About 21 of the sites visited showed potential as suitable habitat for rare species. For example, a forested stream near Long Pond could provide excellent habitat for several invertebrate species such as ocellated emerald (*Somatochlora minor*). We also investigated a black spruce-tamarack bog with a small bog pond in the Chain Lakes area. This site has high potential for bog dragonflies and damselflies and also has the potential to be a significant natural community. The summit of Boreas Mountain exhibited excellent habitat for Bicknell's thrush (*Catharus bicknelli*, Special Concern) and a resurvey during breeding season has good potential to turn up one or more breeding pairs.

Other sites showed potentially suitable habitat for rare plants. For example, a northern white cedar swamp near the upper Hudson River had a number of large trees, no evidence of cutting, and a good diversity of microtopography and microsites. There is good potential for twayblade orchids (*Listera* spp.) and other rare plant species at this site. Withered orchid stems were found in a small perched peatland in the mountain spruce fir forest near Snyder Brook and another site visit is needed during the proper season to identify these plants.

The project report to ANC includes key findings and several recommendations for including biodiversity in a protection strategy for these lands, such as conducting more surveys, and protecting calcareous coves, rock outcrops, cliffs, steep slopes, and swamps and wetlands.

Research and Monitoring

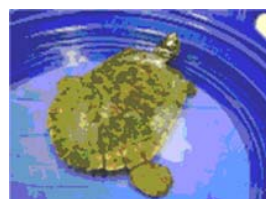
Peregrine Falcon Population on the Rise Again Season - The 2007 peregrine falcon season was record setting in many categories. A high of sixty-three territorial pairs were present, one more than last year, with 54 of these breeding (second highest ever by one), and a record 48 successful pairs. An incredible high of 127 young were produced, an increase of 32% over last year's 96 and an increase of 11% over the previous high of 114 in 2005. Thirty-five of these pairs were upstate (a record) and 28 were downstate. On a regional basis, both areas set records for young, with 62 upstate (up 17% over 2006) and 65 downstate (up 51% over 2006). The downstate area also had record numbers of breeding and successful pairs. The statewide number of young per breeding pair was 2.3, while the number of young per successful pair was 2.1, the third highest in both categories and the highest since 1993. The outcome was not determined at four sites statewide where pairs were present, all upstate, so these figures may be a bit conservative. The reasons for the increase in productivity this year are unclear, but as we often suspect, good weather during the incubation and early nestling period may have played a role.

Bureau of Wildlife

Barb Loucks

(518) 402-8919

Map Turtle Tagged and Released- Biologist Ken Roblee and Seasonal Fish and Wildlife Technician Tom Sommerville have collected and released a Common Map Turtle to Lake Erie. The turtle was found frozen on Bennett Beach on December 4. After thawing, the turtle recovered and was fitted with a radio transmitter prior to its release. We expect that this radio-tagged turtle will provide valuable information on the home range size and habitat use of this species. Presently almost nothing is known of how this species inhabits Lakes Erie and Ontario.



Bureau of Wildlife

Ken Roblee

(716) 851-7010

Third Season of Wild Turkey Trapping and Banding Study Under Way - The banding program started up again in December, when DEC staff and cooperators from NWTf launched a statewide effort to capture wild turkeys and fit them with metal leg bands bearing a toll-free phone number for reporting. The objective of the study is to examine hunter harvest rates, turkey survival rates, and harvest reporting rates across the State. Banding will be done on public and private lands throughout the State north of New York City from January through March.



Last year's effort was highly successful, as staff banded a total of 383 gobblers (males) and 403 hens (females), increasing the two-year total to 679 gobblers and 753 hens. One-hundred twenty of the banded gobblers were reported shot by hunters during the spring 2007 hunting season, of those, 41 birds had been banded in winter 2006 and 79 had been banded in winter 2007. Another nine were harvested by hunters during the fall 2007 season. Most birds were killed within five miles of where they were banded, but some birds used in the study have moved at least 20 miles from where they were banded. Regions 7 and 9 are reporting early capture success already.

DEC will also continue collecting data on winter turkey flocks across the State to assess feasibility of a long-term population monitoring program. DEC hopes to identify several locations in every county of New York where turkeys can be counted each winter to monitor population changes. Last winter, observers documented over 500 flocks throughout the State, including several recently established flocks on Long Island.

Bureau of Wildlife

Mike Schiavone

(518) 402-8886

Resource Management Plans

A LaMP-based Biodiversity Conservation Strategy for Lake Ontario Begins - The last of four workshops addressing the biodiversity of Lake Ontario was held December 5-6 in Niagara on the Lake, Ontario. This project builds on the existing Lakewide Management Plan (LaMP) for Lake Ontario to develop bi-national strategies for conserving and restoring the biodiversity of the Lake's ecosystem. While existing conservation blueprints and lists of habitat priorities provide important information about where to work, they do not address how to protect and manage ecological systems, natural communities, or species. Participants at this workshop finalized strategies and implementation steps needed to conserve resources at specific priority areas in the States and Canada. Approximately 60 participants from Canada and the United States attended the workshop, representing all levels of government, NGO's, tribal nations, and academia. NYSDEC was well represented by both Central Office and regional staff.

Bureau of Habitat

Tracey Tomajer

(518) 402-8877

Restoration

Restoration of the endangered round whitefish: egg collection efforts - Following a successful round whitefish egg take on Lower Cascade Lake in the third week of November, Region 5 Fisheries staff set a trapnet near the outlet of Little Green Pond (on the grounds of the Adirondack Fish Cultural Station) on November 26. Little Green Pond was reclaimed with rotenone in 2003 and stocked with round whitefish fingerlings in 2004, 2005 and 2006. Sampling efforts in 2006 in Little Green captured all three year classes, but caught no ripe fish until December. After the first net night this year, 16 round whitefish were caught but as in 2006, none were ripe. The oldest of the fish caught were 2+. No 3+ whitefish were encountered, although there had been a strong year class of 2+ in 2006. Since no ripe fish were netted, a decision was made to pull the net and reset a week later. Unfortunately, winter commenced early this year and Little Green Pond froze over on December 1. Staff will return to Little Green Pond in early spring and try the SLIN short term gillnetting method developed by Cornell University to determine the overall population status of round whitefish.

Bureau of Fisheries

Rich Preall

(518) 897-1333

Route 219 Habitat Mitigation: Biologists Galati and Cornett met with NYSDOT consultants on Mansfield Creek, a trout protected water, to discuss habitat restoration/enhancement options for mitigation relating to the next section of the Rt. 219 expansion project. Estimates on the amount of stream mitigation required for the next section range from 15,000 to 17,000 feet. Expected work is anticipated for summer 09.



Bureau of Fisheries

Joseph Galati

(716) 372-0645

Chautauqua Creek Fish Passage: Final designs for a fish passage project on Chautauqua Creek were presented to the project partners in a meeting in Westfield, New York, in early December by the U.S. Army Corp of Engineers. The design includes a two-foot drop on an eight-foot wide section of the lower dam and the creation of a rock ramp on the upper dam to help create easier passage for steelhead and other fish species. Projects partners, which included staff from the Lake Erie Fisheries Unit and Region 9 Fisheries of NYSDEC, U.S. Fish and Wildlife Service, New York Rivers United, and the town of Westfield, further suggested an increased drop to four-feet in the lower dam height to increase passage of non-game species. This suggestion was implemented into the final design, with the provision of yearly monitoring for sea lamprey passage and the inclusion of temporary stop gates into the design at the lower dam to prevent upstream migration of sea lampreys if passage became an issue in the future. Chautauqua Creek is currently not considered a major producer of sea lampreys into Lake Erie, but access to favorable

Restoration

spawning and rearing areas in the upper watershed could change this situation.

Funding for the project was also discussed with total project costs estimated at \$400,000. The majority of the costs involve the purchase and transportation of the rock over one mile to the remote dams. Federal funding for the project is expected in 2008 through the Great Lakes Fisheries Ecosystem Restoration Act (GLEFR) program, with the State providing the majority of the 35% match. If funding for the project is obtained in 2008, the project is expected to be completed by summer 2009. In anticipation of the fish passage project, monitoring of juvenile steelhead production and overall fish species composition is already under way at sites both below and above the dams to assess changes in reproduction and the fish community.

Bureau of Fisheries

James Markham

(716) 366-0228
