Hudson River Audubon Society of Westchester, Inc. is a non-profit chapter of the National Audubon Society serving the communities of Ardsley, Dobbs Ferry, Hastings-on-Hudson, Irvington and Yonkers. Our mission is to foster protection and appreciation of birds, other wildlife and habitats, and to be an advocate for a cleaner, healthier environment.

DIRECTIONS TO LENOIR

Hudson River Audubon Society of Westchester, Inc. holds its meetings at Lenoir, a Westchester County Nature Preserve, on Dudley Street in Yonkers, New York (914) 968-5851.

By car: Take Saw Mill River Parkway to Exit 9, Executive Blvd. Take Executive Blvd. to its end at North Broadway and turn right. Go ¼ mile on North Broadway and turn left onto Dudley Street. Parking lot is on the left.

Members’ Night

Wednesday, June 24
7:00 pm, Lenoir Nature Preserve

6:00 pm: Michael will lead a leisurely walk around the Nature Preserve (meet behind the Nature Center).
7:00 pm: Refreshments in the Nature Center
7:30 pm: Final Program of the Season

Selected volunteers will be recognized for their special contributions to HRAS during the past year. It is because of our volunteers that our chapter remains strong, vital, and active.

Officers of HRAS will be elected.

HRAS members are encouraged to share favorite nature slides and digital photos, taken during the past year, with us. Please bring no more than 10 to 20 images, and prepare a five to ten minute presentation. For digital images, pictures must be on a CD, USB drive, or memory card: contact Michael Bochnik about format. You may expect to see photos from HRAS field trips, as well as members’ nature and birding trips.

Have a great summer!

We’ll see you at the first program next season on September 23rd.
Compact fluorescent light bulbs must be recycled, not thrown into the trash, because they contain small amounts of mercury. Home Depot is one store that will collect them for recycling. Rechargeable batteries such as those in cell phones and cordless tools must also be recycled. Radio Shack is one store that will take them back.

Dragons & Damsels at Lenoir

Winged wonders, aerial acrobats, dragonflies have been around since before the dinosaurs. Their flight is studied by the United States military and NASA. They come in a variety of colors from muted browns to brilliant blues and greens, bright reds and neon, they sparkle like dazzling jewels.

Join us on June 20, 2009 at 11:00 AM at Lenoir for an introductory program to learn about their lifestyle and the different species in our area, followed by a field session as we attempt to capture and observe these fleet flyers.

As part of the NY DEC and Saratoga Tree Nursery conservation program of forest stewardship on public and private lands, they’re offering sapling trees and shrubs at a low cost.

Hudson River Audubon purchased 90 native trees and shrubs to be planted at Lenoir Nature Preserve. Saul Scheinbeck, Yvonne Lynn, and curator Danniela Chiato were busy planting on the terraces. Additional planting days are scheduled. Check with Lenoir Preserve office (968-5851) if you are able to help with the planting.

From FGCNYS Environmental Newsletter

The Bio Diversity Research Institute, an ecological organization in Maine has found what they consider to be an alarming level of mercury in the blood and feathers of bald eagle chicks found in the Catskill Park in New York State. One quarter of adult eagles also had elevated levels of mercury. New York State has 145 pairs of bald eagles which produced 188 chicks two years ago, a 23% increase from the year before. In the 1970s New York had only one nesting pair. Researchers believe that over time, there is cause for concern about the mercury level in the birds not only for their survival but also because the birds may be an indicator of environmental health for all of us. Much of the drinking water for New York City comes from reservoirs in the very area causing concern about its safety.

The Catskills are located in the path of smokestack emissions from coal burning power plants located in the Midwest and this may be the source of the mercury. At the moment, the information about the mercury level in the birds will be used for future reference should there be reproductive problems in bald eagles.

Be a part of the effort.
**SCIENCE WATCH: Keeping One Eye Open**

SAUL SCHEINBACH

It’s migration time and millions of Neotropical passerines are heading north. Many of these tiny warblers, thrushes and sparrows fly thousands of miles, and they do it at night when the weather is calmer and fewer predators are out. Each night they may fly for 8–10 hours and when they land we see them greedily “refueling.” In fact, they move around so much it’s often hard to get a good look at them. So when do they sleep?

The answer, presented in two studies by Thomas Fuchs, University of Pittsburgh, Johnstown, PA, and colleagues, is that migratory birds compensate for loss of nocturnal sleep with brief episodes of daytime sleep.

The first study, published in the July 31, 2006 issue of *Animal Behavior*, showed that Swainson’s thrushes (*Catharus ustulatus*), which fly up to 5,000 km (3,000 mi) from Central and South America to their breeding grounds in Alaska and Canada, take daytime “micro-naps” lasting several seconds during the migration season. The second, published online in *Biology Letters*, November, 2008, reveals a remarkable finding: during micro-naps only half the brain sleeps so one eye can remain open.

In the first study the team observed the behavior of 12 captive thrushes that were kept in an artificial light/dark cycle that mimicked the normal day/night changes they experience throughout the year. Infrared camcorders monitored the birds’ activity during “migratory” (spring and autumn), and “non-migratory” (summer and winter) periods.

The scientists found that when the birds were in a migratory state, they reversed their activity cycle, resting during the day and becoming active at night. As a result daytime “drowsiness” (eyes partially closed) increased, but total sleep time dropped by 67% as compared to birds in the non-migratory state. To partially compensate for this sleep loss migratory birds took daytime micro-naps with one or both eyes closed. These episodes occurred during periods of drowsiness and lasted about eight seconds each. The team suspected that unilateral eye closure (UEC) during the micro-naps allowed one brain hemisphere to sleep while the other stayed awake to avoid predation, and they tested this in the next study.

Seven captive Swainson’s thrushes were implanted with electrodes in each brain hemisphere to monitor brain activity and eye movements. Video recordings were used to match brain activity with the type of daytime sleep occurring in the “migratory” season.

Micro-nap episodes with UEC lasted an average of 11 seconds and showed differences in brain activity between the two hemispheres. During UEC the brain hemisphere opposite the closed eye showed the slow-wave “delta” pattern typically observed for both hemispheres during nocturnal deep sleep in the “non-migratory” season. Delta brain waves are also seen in mammals during deep sleep. In both birds and mammals, as in other vertebrates, much of the visual information from each eye crosses over in the brain and is recorded in the opposite hemisphere. However, unlike mammals, the separation of brain hemispheres in birds is almost complete so closing one eye blocks most of the visual information to the opposite hemisphere, allowing half the brain to go into deep sleep.

Clearly the thrushes have evolved the ability to cope with nighttime sleep loss during migration by alternately resting one half of the brain during the day while keeping one eye open for danger.

UEC has also been observed in ducks, whales and dolphins, indicating it may be more widespread across the animal kingdom. Perhaps humans exhibit some form of UEC too. I recommend testing college students during exam time and security guards at night.

“The relatively brief but frequent daytime sleep states (‘micro-naps’) may represent an adaptive balance that enables migratory birds to compensate for extended periods of nocturnal sleep loss during the subsequent day without rendering them entirely vulnerable to environmental challenges like predation.” — T. Fuchs
New York, NY, June 1, 2009 - Project Puffin’s “Puffin Cam” is now beaming live-streaming video and sounds from Seal Island National Wildlife Refuge, eighteen miles off the coast of Rockland, Maine. The National Audubon Society started Project Puffin 36 years ago after these charming birds were nearly wiped out in Maine. Atlantic Puffins and other Maine seabirds suffered from intense hunting for their eggs, meat and feathers for nearly 300 years following colonial days. Led by Dr. Stephen Kress, the Audubon project restored colonies of the colorful seabirds to Eastern Egg Rock and Seal Island National Wildlife Refuge by translocating nearly 2,000 puffin chicks from Newfoundland, where the birds are abundant.

For more than a decade, Kress and his team of “Puffineers” carried chicks by plane, truck, and boat. Each special suitcase held containers for 20 tiny, black and white puffin chicks. Upon their arrival, the chicks were placed in individual burrows, and Dr. Kress and his team became Puffin Parents, feeding each chick small fish daily. Kress’s hope was that once the puffins were released to the sea, they might return to this island when they matured, to establish a breeding colony.

Puffin chicks leave a colony when they fledge and head off to the ocean without their parents. They remain in the open ocean until they are 2–3 years old. Then they return to the area where they began, and may actually nest near the burrow where they hatched. Would these translocated puffins find their way back to Maine?

After several years waiting, wooden puffin decoys, mirrors (to convince the puffins they had company), lured a few back. In 1981, four pairs settled in and produced the first puffin eggs on Eastern Egg Rock in nearly a century. Today, about 100 pairs nest at Eastern Egg Rock and more than 375 pairs nest at Seal Island along with Razorbills and nearly 2,000 pairs of Common and Arctic Terns. The techniques used by Project Puffin have since been used around the world, helping more than 40 other seabird species.

People are encouraged to see puffins via boat from Muscongus Bay. Audubon’s new Project Puffin Visitors Center in downtown Rockland, ME, allows people to learn more about these captivating “clowns of the sea,” and steps you can take to help protect them and our shared oceans.

“While humans have hurt puffin numbers in the past,” Dr. Kress said, “We also have the ability to restore and protect colonies. We need to reduce pollution of our coasts and do a much better job managing our fisheries. This benefits seabirds and people.”

To watch the Puffin Cam and hear live sounds from Seal Island, visit: www.projectpuffin.org. The best hours for viewing are mornings and early afternoon. Puffins typically spend mid afternoon at sea, but return in the evening before going under the boulders to sleep. If your image is blurry or you can’t see a puffin, please check back later. You can also see “best of the puffin cam from previous seasons” by clicking on http://www.projectpuffin.org/puffin-cam-best.html

The Puffin Cam is sponsored by Barbara’s Bakery of Petaluma CA, makers of Puffins Cereal.
Birdathon Fundraiser Results

Four teams were out the weekend of May 16 & 17, bird watching their hearts out to raise money for the chapter in our annual Bird-a-thon. The Eagles team started out in darkness at the Bashakill marsh, hampered by dense fog and some rain. The Eagles then headed to the Walkill area then a stop at an Eagle nest, then traveled down to Jamaica Bay Wildlife Refuge and managed to find 67 species. The Raven-Loon-atics team started at dawn at Doodletown Road before heading to numerous spots in six different counties including Jones Beach, Forrest Park and Croton Point and found 122 species. Two teams of one were in California and Florida and added some exotic species such as Sandhill Crane and Anna's Hummingbird.

Over a thousand dollars were raised with donations still trickling in. We want to thank all of our donors for supporting the bird-a-thon and our chapter. It’s not too late to donate! Send your check made out to Hudson River Audubon to P.O. Box 616, Yonkers, NY 10703 and note that it’s for our bird-a-thon.

Our thanks to Katherine

The Hudson River Audubon Society expresses our thanks to Kathryn Kirkpatrick for her hard work and dedication at the Lenoir Nature Preserve — from filling the bird feeders to all the little things that needed to be done to make visiting this county park such a wonderful experience. We wish her well and good luck in her new endeavors.

Volunteers needed

Volunteers are needed for watering and weeding the butterfly garden during the summer. Contact Mary Harrington at TCTallon@aol.com.

Remember

This is our last newsletter and meeting till September! Have a great summer and make sure you visit the Beverly Smith Butterfly Garden at Lenoir. Let us know what butterflies you see and look for Ruby-throated Hummingbirds — nearly guaranteed to be seen during August!

Keep an eye on our web site at www.hras.org for possible field trips in August and early notice of our programs and trips for the next season. You can also keep in touch by becoming a fan of our Facebook Page where you can see updates, join discussions, and see and even upload your own photos depicting the butterfly garden or birds you see.

Have a great summer.

Michael Bochnik
President
Join The Hudson River Audubon Society of Westchester!

Every membership supports Audubon’s vital efforts to protect birds, other wildlife and natural habitats. Membership includes a subscription to *Audubon* magazine and affiliation with National Audubon. As a member, you will also receive our chapter newsletter, *The Rivertown Naturalist*, and an open invitation to all our guest lectures, field trips and events.

**SIGN ME UP AS A NEW MEMBER.**

**ONE YEAR FOR $20.**

Name ____________________________________________

Address ____________________________________________

City ____________________________________________

State __________ Zip Code __________

Telephone ____________________________________________

**CHAPTER NO C9ZR200Z**

Send check and this application to:
National Audubon Society
P.O. Box 422250
Palm Coast, FL 32142-2250

Please make check payable to National Audubon Society.