The Rivertown Naturalist


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.

ON THE ROAD AGAIN

A South American Journey: Peruvian Amazon, Machu Picchu, and the Galápagos

Wednesday, May 28th
7:00 PM, Lenoir Nature Center

Travel with Judi Veder and Saul Scheinbach on their three-week adventure to South America.

Judi will describe their journey, focusing on the people and their cultures. Saul will discuss the natural history of the Galápagos, its continuing role in Darwin’s theory, and highlight some of the species found nowhere else on earth.
Dragon Hunting

With the warmer weather it is time to start hunting dragons, dragonflies that is. Dragonflies and damselflies belong to the order Odonata (toothy ones). Dragonflies have been around for three hundred million years, even before the dinosaurs. Aerial acrobats, winged wonders are just a few ways to describe these amazing insects.

Dragonflies are fierce predators that eat a variety of insects from aerial plankton to dragonflies themselves. Odonates come in a variety of colors from subdued earth tones to brilliant reds, yellows and greens. Their flight has been studied by the United States military and NASA. Their two large compound eyes give them excellent vision.

At Lenoir Nature Preserve there are a variety of dragonflies from delicate damselflies to large darners flying over pond and meadows. Dragonflies in our area are active mainly from May through October. Species vary throughout the flight season.

Come to Lenoir Nature Preserve on June 14, 2008 at 10:00 am to learn about these flying jewels. We will learn about their unique life cycle, how to identify them and then we will observe them in the wild.

For information contact Walter Chadwick at 914-237-5791.
“As the mosquito is flying towards you, as it encounters a cloud of DEET, it stops being able to smell you, and therefore it doesn’t find you and doesn’t bite.”

DEET is used in concentrations up to 100%. Tests have shown a direct correlation between DEET concentration and the length of protection it provides against insect bites. DEET at 100% is effective for up to 12 hours. Lower concentrations (20%–30%) can provide protection for several hours and a concentration of 10% can protect for about an hour. But according to Leslie Vosshall, a professor of neurogenetics at The Rockefeller University, New York, NY, “no one has ever come up with a satisfactory explanation for how it does this, by what’s the mechanism by which DEET works.”

While mosquitoes may use their heat sensing ability to select a target, their attraction to human hosts depends largely on their ability to smell chemicals that we all emanate. Carbon dioxide in our breath, lactic acid in our sweat and 1-octenol-3-ol alcohol (octenol), a volatile substance found both in our sweat and breath, are strong mosquito attractants. To female mosquitoes these odors mean food, blood, which they must have for their developing eggs.

In the March 28, 2008 issue of the journal Science, Vosshall and her colleagues have examined DEET’s mode of action. They first checked out the behavior of fruit flies (Drosophila melanogaster), the laboratory rat of the fly world, in the presence of DEET. Presented with a choice of entering either of two tubes, both containing food, the flies entered both in equal numbers. If one tube also contained 10% DEET, the flies greatly preferred the DEET-free tube. However, if neither tube contained food, but one still contained DEET, they again entered both in equal numbers. This suggested to the researchers that the flies weren’t being repelled by DEET, but simply couldn’t smell the food when DEET was present.

The team then decided to look at the flies’ odor receptors. As Vosshall put it, we “can turn a frog’s egg into a fly’s nose.” They genetically engineered eggs from the African clawed frog (Xenopus laevis) to produce fly odor receptors. When the receptors are stimulated by a specific odor they set off a flow of positive ions, generating a tiny current that can be measured in the egg. Prior exposure to DEET greatly reduced the current, and it did so in a dose-dependent manner—the more DEET, the greater the reduction. These results show that DEET blocks the ability of the fly to detect food odors by blunting the sensitivity of its odor receptors.

When the experiment was repeated using three different receptors from the malaria-causing mosquito, Anopheles gambiae, which were tuned to human body odor, including the one for octenol, similar results were obtained. Thus, rather than repelling mosquitoes, DEET blunts their ability to detect the odors that attract them.

Past attempts to develop improved repellants have been hampered by a lack of understanding of the molecular mechanism by which DEET exerts its effect. Now we not only know the molecular target for DEET, we have an easy in vitro assay for testing new compounds that may be more effective and even cheaper. Just think what having a cheaper, better substance that keeps mosquitoes from biting would mean for the one million people who die each year from malaria.
A native of North America, the turkey is one of only two domesticated birds originating in the New World. The Muscovy Duck is the other.
**Hudson River Audubon Upcoming Field Trips**

**MOTHER’S DAY WARBLER WALK**  
Sunday, May 11, 2008  
MEET AT LENOIR NATURE PRESERVE AT 8 AM

Our traditional walk around Lenoir Nature Preserve is one of our most popular events of the year. The walk should yield colorful migrants such as Rose-breasted Grosbeak, Scarlet Tanager, Indigo Bunting and spring warblers. Afterwards join us for some coffee, bagels and other delights.

**BIRD-A-THON WEEKEND**  
Saturday—Sunday,  
May 17–18, 2008

You may join us for only part of the trip or the full weekend. We will search for as many species as possible as we visit these two popular spring destinations.

On Saturday May 17, we’ll visit Doodletown Road. Meet at the trail head (located on 9W one mile south of the Bear Mountain Bridge) at 8AM.

This popular trip located in Harriman State Park will yield Cerulean and Hooded Warblers. Many other species can be expected, including Ruby-throated Hummingbird, Indigo Bunting, Black Vulture, and Common Raven. We’ll then head over to Sullivan County and spend the evening and the morning at the Bashakill Marsh.

Make your own reservation at: Wurtsboro–Days Inn, 21 Perron Drive, Wurtsboro, NY, 845-888-2727 or 800-916-4614

Take Route 17 West to Exit 113 Wurtsboro. Make a right at the end of the exit ramp. Days Inn is ½ mile on the left.

We may hear Whip-poor-will at the marsh or right outside our motel. Bashakill host breeding species such as Bald Eagle, American Bittern, Sora, Pied-billed Grebe, Virginia Rail, Alder and Willow Flycatchers and many more. We should see well over 100 species for the weekend.

**BLUE MOUNTAIN RESERVATION**  
Saturday, June 7, 2008  
MEET AT MOUNTAIN RESERVATION AT 8 AM

This is the first time we are visiting this park as a field trip. A host of breeding birds will be searched for such as Scarlet Tanager, Eastern Wood Pewee, Louisiana Waterthrush and more.

Directions: Route 9 North or South to Peekskill, Welcher Avenue Exit. Follow East to Park entrance. We will meet in the far back parking lot.

Call Michael Bochnik at 914-237-9331 for more information, or visit our Web site at www.hras.org

**REMINDER:**

June 25th is Members’ Night where members are invited to share their favorite nature slides or digital images with us. If you took a trip this year or just photographed nature locally, select up to 20 images and share them with us.

**OTHER PLACES TO GO**

**BIRD WATCHING IN WESTCHESTER**

- Brinton Brook Sanctuary (Croton-on-Hudson)
- Bronx River Parkway Reservation (Yonkers)
- Butler Memorial Sanctuary (Bedford)
- Choate Sanctuary (New Castle)
- Cranberry Lake (Harrison)
- Cross River Reservoir, Maple Ave (Bedford)
- Croton Point Park (Croton-on-Hudson)
- East Irvington Nature Preserve (Irvington)
- Edith G. Read Sanctuary (Rye)
- George’s Island (Montrose)
- Glazier Arboretum (New Castle)
- Graff Sanctuary (Croton-on-Hudson)
Hudson River Audubon’s BIRD-A-THON will span an entire weekend — Saturday, May 17th and Sunday, May 18th. We will be birding both Doodletown and Bashakill Marsh to raise money for the chapter. You can help by making your pledge today or join our team, then sign up sponsors and help us find as many species of birds on our bird-a-thon weekend.

A bird-a-thon is like a walk-a-thon, bike-a-thon or any other “thon” in that we ask people to pledge X amount of money per lap, mile, or as in our case, bird species seen. The list for the team should be between 100 to 150 species.

The monies raised will go to support Hudson River Audubon and the New York State Audubon Office.

Pledges can be given for a flat rate such as $25.00 or you can pledge per species such as 25 cents/bird. If we see 120 species your pledge will come to $30.00. We will

send out reminders after the bird-a-thon on how much you pledged.

Our goal this year is to raise $3,000.00. We need over 100 pledges of $25 to do it! You can be one of them!

You can make any pledge that you like. To help you choose, we have the following categories:

- Pewee: 1¢ / bird or $1
- Chickadee: 5¢ / bird or $5
- Goldfinch: 10¢ / bird or $10
- Bluebird: 25¢ / bird or $25
- Peregrine Falcon: 50¢ / bird or $50
- Golden Eagle: $1.00/bird or $100

Please make checks payable to Hudson River Audubon Society.

Thank you for your generous support!

Please help your Chapter maintain financial viability!

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**NATIONAL AUDUBON BIRD-A-THON PLEDGE CARD**

☐ I am happy to pledge $ _________ per species in support of your birdathon.

☐ I prefer to pledge the enclosed gift of $ _________.

☐ I will give you an additional $ _________ if the _______________ team spots a _______________ (bird species).

Name

Address

City

State

Zip Code

Telephone

Send to:  Hudson River Audubon Society

  P.O. BOX 616

  Yonkers, New York 10703

Make Donations Payable to HUDSON RIVER AUDUBON SOCIETY.

Remember, if you’re not participating, please pledge to the Bird-a-thon to make our efforts worth it.
Great Whales in Baja

YVONNE LYNN

When I started planning this trip, I thought I was going to California. It turns out that Baja, California Sur, is in Mexico.

I had a wonderful trip. The Gray Whales calf in Magdalena Bay on the Pacific side of the Peninsula where the water is shallow. We weren’t ten minutes out in the boat when we saw our first mother and calf. They come very close to the boat—no fear—and are not aggressive. Next came three whales swimming together, and then two more. One whale was “spy hopping,” raising its whole head up out of the water looking at us. The Gray Whale’s skin is blotched with white and barnacles are attached. Each one has different markings.

While we ate lunch that day on the boat there was a lot of activity around us with a couple of whales doing head stands where their tails were held erect up out of the water. As the activity got more vigorous, we finally realized we were witnessing a mating. Rather exciting.

We passed a group of sea lions or seals resting with the fins and tails sticking up out of the water in a circle. Dolphins ran with boat. Coming out of the harbor that morning we had passed through a mangrove filled with great blue herons, great egrets, snowy and tri-colored. My camera at that point was in the bottom of my backpack, and of course when we came back into harbor, the birds were all out fishing and nowhere to be seen.

The next day we went into the Sea of Cortez to see the Blue Whales, which are the largest whales. They are gorgeous and sleek. Again we sighted whales within a half and hour and had a number of them going by us. I got some good pictures. The Blue Whales calf in the Sea of Cortez because it is very deep, and they like deeper water than the Gray Whales. The harbor in Loreto, the town where I stayed, is full of brown pelicans and cormorants. The pelicans were flying high and then diving for sardines.

It was a great trip, and if anyone is interested in going, I would be happy to give you more information.

COMMON BIRDS IN DECLINE

Many of our common and beloved birds are experiencing precipitous population declines. Analyzing forty years of bird population data collected by citizen scientists for Audubon’s Christmas Bird Count, combined, for the first time with Breeding Bird Survey data from the U.S. Geological Survey, Audubon has identified our nation’s most vulnerable common birds.

Percent decline since 1967:
  - Grasshopper Sparrow – 98%
  - Eastern Meadowlark – 87%
  - Ruffed Grouse – 83%
  - Field sparrow – 80%

Here are some specific ways you can help:

- Protect local habitat
- Promote sound agricultural policy
- Support sustainable forests
- Protect wetlands
- Fight global warming
- Combat invasive species

If you want to read what Audubon New York is doing and what you can do to help these birds, go to http://ny.audubon.org
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, Rivertown Naturalist, and an open invitation to all our guest lectures, field trips and events.

Sign me up as a New Member for 1 Year for $20!

Name
Address
City
State Zip Code
Telephone

CHAPTER NO R20 7XCH

Send check and this application to: National Audubon Society Membership Data Center P.O. BOX 52529 Boulder, CO 80322

Please make check payable to: National Audubon Society

www.hras.org