

The Sandpiper

Great South Bay Audubon Society

A Chapter of National Audubon Society

Creating Green Networks to Map Connectivity of Long Island's Natural Green Spaces A Sustainable Approach for Understanding and Protecting Natural Resources

by Maria Brown, MS, PWS, GISP, Conservation Chair

The total number of humans on Earth as of June, 2016 was recorded at 7.4 billion! How will we protect natural resources and ecosystem services for future generations as the world population continues to grow?

Decision makers and land managers are faced with the challenge of determining how, where, and what to develop to accommodate population growth both locally and globally. Accommodating this growth does not need

to place stress on our natural and life-sustaining resources if done with a well-thought-out and innovative plan to include constructing and analyzing a network of critical landscapes which make up our island's natural green infrastructure. Mapping connective natural green spaces provides a way for our communities to protect the places and resources that help people, wildlife, and the local economy. Long Island towns can grow smartly and responsibly while preserving our



Diagram of what greenspace networks would look like.

valuable landscapes. Collaboration between scientists, naturalists, economists, decision makers, and the public with the goal of identifying where and how to best preserve and link watersheds, wildlife, habitats, parks and other areas that enrich and sustain the Long Island communities begins with a better understanding of our sense of "place". This approach to planning, prioritizes the need to protect and manage our continuous environments over parcel-based development plans to ensure a sustainable future for Long Islander's and promote smart growth aligned to sound conservation efforts.

This idea has been demonstrated successfully in Valencia, Spain by Arancha

continued on bottom of page 6

GENERAL MEMBERSHIP MEETINGS and MONTHLY PROGRAMS

All GSBAS Activities are FREE and open to the public.

Join us and bring a friend.

General Membership Meetings are held on the third Thursday of each month, except May, (which is our Annual Dinner), July & August.

Pre-program refreshments begin at 7:00.

Program begins at 7:30 pm.

Held at Connetquot River State Park Preserve.

See page 3 for directions. Come early to chat

with our members and share your birding adventures with us!

Thursday, September 15

Who Doesn't Love Hummingbirds?

Long Island hummingbird expert, Paul Adams will discuss hummingbirds and the Baiting Hollow Hummingbird Sanctuary. Paul is a very personable and knowledgeable speaker, and we're sure you'll enjoy his presentation!

Thursday, October 20

Back by popular demand:

"The Fish Guy"

Chris Paparo spoke about the birds of the sea and shore at our General Membership meeting last April. This time he's back to share his program "Exploring Long Island's Underwater World." Follow Chris on an underwater journey of the waters surrounding Long Island. View beautiful underwater pictures and videos of local fish, crustaceans, mollusks, and other assorted invertebrates while learning interesting facts about each of the organisms.

Connetquot Breakfast and Birding

Saturday, September 10 • 8:00 am - 11:00 am

Connetquot River State Park Preserve, Sunrise Highway, Oakdale

Hosted by Friends of Connetquot

Join us for a continental breakfast, an introduction to bird identification, and a walk in beautiful Connetquot Preserve to find and identify birds.

RSVP required - call Connetquot River State Park Preserve at 581-1072 to register.

Registration fee \$4 plus \$8 parking fee per car - unless you have yearly NYS Park pass.



Mission Statement

The primary mission of the Great South Bay Audubon Society is to advocate for the conservation of habitats for native birds and other native wildlife on Long Island.

The Sandpiper

Editor: Vera Capogna
vlvcap@yahoo.com

Mailing Chair: Ken Thompson
Thank you to everyone who helps mail each issue.

Editorial Address:
Sandpiper
GSBAS, PO Box 267
Sayville, NY 11782

The Sandpiper
is published bi-monthly.

Website: GSBAS.org
email: info@GSBAS.org
Webmaster: Eric Larson

Submission Deadline for next issue is October 13
send submissions to
vlvcap@yahoo.com



The Larry Merryman Memorial Library

is located at our Brookside Headquarters, 59 Brook St. in Sayville. It can be accessed Wednesday and Sunday from 1 to 3pm

Enjoy Autumn's beauty with us: Join us on one of our Fall Nature Walks listed on Page 3.

The Board-Walk by Annette Brownell

My gosh! How I love trees! I am awestruck by the magnificent size and natural shapes of some of the old beauties that have survived not just hurricanes but also the thoughtlessness of man as we destroy so much in order to pave and build our way to progress. This is evident all around us as we see more and more apartment complexes put up - with some nice gardens for show and the environmental impact statements that state "there is no significant impact to the environment." Tell that to the wildlife being displaced.

Fortunate to partner with people like you that are interested in protecting our natural world, we at Great South Bay Audubon Society are gearing up for another action packed year. September marks a time of new beginnings, more so it seems than January does. Summer is winding down, school activities are starting up again and the heat and humidity are breaking enough for us to begin thinking about moving again. Our Audubon year is moving back into full swing also with general meetings starting up again on September 15. These always prove to be educational, interesting and a good time of fellowship. We will be hosting a seed sale in October, and our Stop and Shop gift card program is an ongoing fundraiser. Security cameras have been installed at Brookside with the hopes of ending our vandalism issues and we are fine-tuning a number of events - in addition to the usual full list of mid week and weekend field trips.

We are really hoping to see new faces - some attached to familiar names and some attached to new names. Thank you, as always, for your support of the events and fundraisers that this Society hosts in order to keep Long Island a gift to our future generations.

How Far Is Down and How High Is Up? by Harry Anderson

Charles Dickens once commented that "a very little key will open a very heavy door," but frequently Nature is reluctant to let us into all of its places, with or without a key. One of those has been the Mariana Trench in the western Pacific.

The Mariana Trench is the deepest part of the ocean. It is 1,580 miles long and 7 miles or 36,000 feet deep. At this most extreme of depth, the pressure is 16,000 pounds per square inch. We know less about this abyss than we know about the surface of Mars. Despite of all these daunting facts (or because of them) the film maker, James Cameron hit the bottom of the abyss on March 26, 2012. His vertical torpedo named DeepSea Challenger reached 6.8 miles. The depth on arrival was 35,756 feet. He stayed near the bottom for 20 minutes, but ironically so much sand was stirred up little was learned except that it could be done. No small feat in itself to keep from being crushed like a beer can.

How far down can we dig until we reach China, as the saying goes. As it turns out, not very far. We have managed to "dig" down 7.6 miles toward the earth's core - that's just 0.2% of the distance. The temperature at that core exceeds 2000°. Whew!

On the cold side, another "door" only left ajar is the quest for Absolute Zero. Right now the figure is -459.67° F. Whew again! It will probably stay there for a long time since it is apparently not possible to reach a point where no more heat can be removed from a system, and that's how we try to reach it.

How high have we gone? Not counting space flights, the highest manned balloon flight was by Alan Eustace. On October, 24 2014, he reached 135,906 feet. The highest flight was by the Japanese, when an unmanned balloon reached 173,000 feet. Perhaps the sky is limited to us. As for outer space, we do not know where the edge is, if there is an edge at all. Where does the sky end and space begin? Like when does a man who needs a shave become one who's growing a beard?

Exploring inner space is yet another matter and it is tackled by that freaky science called Quantum Physics. A recent experiment by researchers at Australian National University into the quantum behavior of particles seems to suggest that their reality apparently does not exist until we try to measure them. Some things don't exist until we look for them? A good book to read about this bizarre stuff is *The Dancing Wu Li Masters*, by Gary Zukav.

In spite of some of Nature's "doors" being slammed in our faces, we will continue to search for that little key anyway. Up, down or sideways, we will persist. And as to horizontal persistence, it will take at least 300 years to identify all of the trees in the Amazon rain forest. Then we can start on the insects - if wisdom prevails and there is still any forest left to rain on.



Great South Bay Audubon Society Activities

General Membership Meetings and Programs

All General Membership Meetings are held at Connetquot River State Park Preserve in the beautiful and historic main building. The entrance is in the back of the building; please park near the garages. There is a handicap ramp at this entrance. Please do not park on the grass or in the circle in front of the building.

Join us at 7:00 p.m. for pre-program refreshments and casual conversation. Our bird experts will be on hand to field your questions, discuss equipment and share their favorite birding spots.

Directions to the Connetquot River State Park Preserve: Approaching from the East, the entrance is on the north side of the Sunrise Highway (Route 27), opposite the Sunrise-Montauk Highway merge. From the West, exit Sunrise Highway (Route 27) at Oakdale-Bohemia Road, cross over Sunrise Highway, merge on to westbound Route 27 and watch for the Park entrance on the right.

Louise Titus Memorial Tuesday Midweek Walks

Tuesday Sept 6, 9:30 am, Heckscher SP Meet in the Field 5 parking lot at the west end of the field.

Tuesday, Sept 13, 9:30 am, Shinnecock Dune Rd Sunrise Hwy. East to Exit 65 South to Montauk Highway. Go east and follow signs to Ocean Beaches. Cross Ponquogue Bridge and turn left at the traffic light. Go to end of road to parking lot at inlet.

Tuesday, Sept 20, 9:30 am, Oceanside MNSA & Jones Beach Southern State Pkwy. to Meadowbrook Pkwy. South to Merrick Rd (27A). Go west on Merrick Road a short distance and turn left on Mill Road. Bear left (on Main Street.) turn right on Atlantic Avenue to Waukena Ave. left to Park Avenue to Golf Drive (brown signs from Atlantic to Oceanside Marine EC)

Tuesday, Sept 27, 9:30 am, Jamaica Bay NWR Southern State Pkwy. to Belt Pkwy. to Exit 17, Cross Bay Blvd. South. Continue south for about 2 miles. Look for entrance of refuge on the right side.

Tuesday, Oct 4, 9:30 am, Massapequa Preserve Take Southern State Pkwy. to Exit 30 (Broadway south) to Pittsburgh Ave., go left 2 blocks to Parkside Blvd. Park on street, and walk into the park

Tuesday, Oct 11, 9:30 am, Robert Moses SP Meet in Field 5 at the NE corner.

Tuesday, Oct 18, 9:30 am, Avalon Rte. 25A to Village of Stonybrook at Carriage Museum, 25A turns right do not turn right, but proceed straight ahead on Main St. to Harbor Rd and park in legal spots by Grist Mill

Tuesday, Oct 25, 9:30 am, Jones Beach West End Meet in the parking lot at the Marina near the Coast Guard Station.

Tuesday, Nov 1, 9:30 am, Blydenburg CP Entrance on Veterans Highway just west of the Route 347 merge. Use Blydenburgh entrance not Greengate Park entrance. Meet in the parking lot at the boat ramp area.



GSBAS members at Robert Moses State Park

Weekend Nature Walks

Saturday, Sept 3, 8:00 am, Jamaica Bay Leaders John Gluth (631-827-0120), Steve D'Amato (631-264-8413)

Southern State Pkwy to Belt Pkwy to Exit 17, Cross Bay Blvd. South. Continue south for about 2 miles. Look for entrance of refuge on the right (west) side. There are signs for park entrance,

Saturday, September 10, 8:00 am, Connetquot River SPP Breakfast & Birding Leaders Ken Thompson Edith & Bob Wilson, Helga Merryman. Continental breakfast hosted by Friends of Connetquot. Reservations required - call Connetquot River Park Preserve at 581-1072 to register. Registration fee \$4. plus \$8 parking fee per car - unless you have yearly Empire pass.

Saturday, September 24, 8:00 am, Robert Moses Hawk Watch & Jones beach WE Leaders John Gluth (631-827-0120) Steve D'Amato (631-264-8413) Meet at Robert Moses State Park parking field #5 northeast corner

Saturday, October 22, 8:30 am, Caumsett SP Leaders John Gluth (631-827-0120) Ken Thompson (631-612-8028) Northern State to exit 42N (Route 35). 35 to 25A. 25A west to West Neck Road (right turn). West Neck/Lloyd Harbor Rd. into Lloyd Neck. Entrance to park on left. Meet in Parking lot.

Saturday, November 19, 8:00 am, Wertheim NWR Leaders: John Gluth (631-827-0120) Vera Capogna (516-639-5430) From the intersection of Montauk and William Floyd Highways in Shirley, proceed West on Montauk Highway 7/10 of a mile to traffic light (Smith Road) turn left, go over the railroad tracks and proceed to make a right into Wertheim Visitor Center. There are signs both on Montauk Highway and on Smith Road at the turnoff into Wertheim.

Young Naturalists Club

Meets first Sunday of the month at 1:15pm, Brookside County Park, 59 Brook St. Sayville

The Young Naturalists Club focuses on learning about nature and stewardship of a natural area. Outdoor activities include crafting nature boxes and pinecone feeders, nature scavenger hunts, hiking the trails, gardening, and maintaining bird-feeding stations. Indoor activities include examining birds' nests and feather displays and special presentations on subjects such as the Northern Bobwhite Quail, local marine creatures, and bird watching. For details on upcoming Young Naturalists Club activities, please email info@gsbas.org or call 631-581-1731, or visit our website: www.gsbas.org. Registration is not required but recommended. Program is free, but donations or joining GSBAS is encouraged.



BOOKS for BIRDERS

Moonbird by Phillip Hoose,
The Narrow Edge
by Deborah Cramer

reviewed by

Andrea M. DiGregorio

Who would have imaged that a relatively unheralded shorebird, the weight of a coffee cup, would inspire not one, but two recent books? For fans of the rufa red knot, this phenomenon will come as no surprise. *Moonbird, a Year on the Wind with the Great Survivor B95*, and *The Narrow Edge, A Tiny Bird, An Ancient Crab, & an Epic Journey*, are two award-winning books that explore, from different perspectives, the plight of the red knot -- the extraordinary avian migrator whose population has plummeted nearly 80 percent over the past two decades.

Moonbird, a delightful book geared towards teenagers (and also a wonderful read for adults) approaches the saga of red knots through a fascinating account of a red knot tagged "B95," and nicknamed "Moonbird," because of his remarkable accomplishment of having logged over 325,000 migratory flight miles: the equivalent of traveling to the moon and halfway back. Through a literary device of tracing B95's travels, *Moonbird* discusses the Atlantic Flyway migratory path of red knots from their "wintering" ground in Tierra del Fuego, Argentina, to their breeding grounds in the Canadian Arctic. As the reader roots for the continued, extraordinary success of B95 (who is estimated to be perhaps twenty years old, a truly remarkable age for a red knot), and marvels at Moonbird's ability to survive (while the number of his fellow knots precipitously declines), the author discusses the numerous challenges faced by B95 and his brethren shorebird travelers. Among the problems encountered, and thought to be contributing to the rapid decline of the knots, are habitat degradation, encroachment by humans, and depletion of horseshoe crabs, which provide energy-rich eggs that the knots use for much-needed fuel during their 9,500-mile journey from the bottom to the top of the western hemisphere. The plight of the

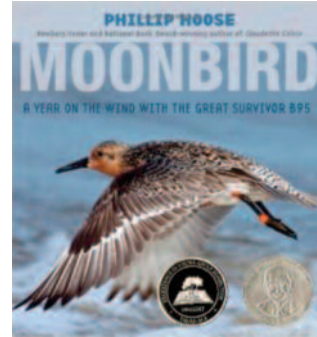
horseshoe crab, and the resultant devastating consequence on the survivability of the knot, is relatively close to home for GSBAS members. Delaware Bay is a major stopover and refueling locale for migrating knots, as well as other shorebirds, some of whom have traveled six days nonstop. Horseshoe-crab eggs provide easy-to-digest and potent fuel to the flight-weary birds. However, because of the rampant slaughtering of horseshoe crabs for fishing bait, and the harvesting of horseshoe-crab blood for medical purposes (their blood is used to detect toxic contaminants in medicine and medical equipment), the amount of horseshoe-crab eggs has plunged, with a seeming correlation in the decline of knots.

Although *Moonbird* discusses the perils faced by the knots, it nonetheless manages to inspire, by discussing numerous individuals, as well as organizations, who advocate for the preservation of that shorebird. In sum, *Moonbird*, which contains illustrative maps and plentiful photographs, is the well-researched and well-presented tale of a heroic and veritable Olympic champion of a bird, B95. The book enriches and hopefully moves the reader to become a defender of the imperiled red knot.

Like *Moonbird*, *The Narrow Edge* also explores the plight of the red knot. However, while *Moonbird* focuses on the grand champion of red knot travelers -- B95 -- *The Narrow Edge* discusses knots more broadly. Indeed, *The Narrow Edge* uses dialogue about red knots as a springboard for exploring the plight of other shorebirds and animals (such as ruddy turnstones, semi-palmated sandpipers, and polar bears), and commenting upon the degradation of the environment in general.

The author's research efforts, which

provide the framework for her book, involve her traveling to locations along the knots' flyway, and areas relevant thereto, and examining environmental, historical, economic, social, geological, and political aspects of those places. Those discourses are detailed and thought-provoking, and treat the reader



to the author's adventures at shorebird stopovers in South American (such as Tierra del Fuego and Rio Gallegos), to her helicopter reconnaissance of a possible red knot stopover in Texas, to her shotgun-toting adventures in red knot Arctic breeding grounds, and to her visit

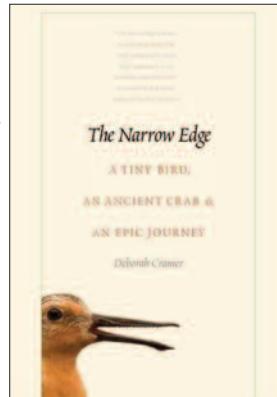
to a horseshoe-crab blood extraction facility in South Carolina.

The Narrow Edge, like *Moonbird*, reports on the numerous threats to the knot population, but does so in greater detail. For example, in examining the reasons for the decline of horseshoe crabs and their nutritious eggs upon which migrating knots depend so heavily, the author explores the harvesting of those crabs for medicinal purposes and provides an account of precisely how blood -- up to 40% of an

individual animal's supply -- is extracted from the crab. The author also presents a balanced examination of the pros (use for detecting contaminants in medicine and medical equipment) and cons (depletion of the crabs, and unknown non-lethal consequences of the blood extraction) of using the crabs' blood for scientific purposes.

Although *The Narrow Edge* presents a stark assessment of the decline of the environment and many creatures, it too, like *Moonbird*, provides a glimmer of hope for the future. The author notes that the horseshoe crab population has previously rebounded from massive depletion and that conservation efforts are currently underway to protect that ancient species. The author also points to successes in other conservation efforts -- such as the rescue of the gray seal and pelican population -- and holds out hope that conservation plans might save the threatened red knot too. In sum, *The Narrow Edge* is an interesting book that examines the plight of red knots and the environment.

These books can be found in the The Larry Merryman Memorial Library at Brookside.



CHAPTER NEWS

Join the 2016 Ed Davis Memorial Beach Cleanup

Organized by Beach Cleanup Coordinator, Jody Banaszak, this year's clean up is scheduled for Saturday, September 17. Volunteers meet at the Sailors Haven Ferry Terminal in Sayville. We will depart on the 10:30 am ferry from Sayville and return on the 2:30 pm ferry. There is a snack bar to purchase lunch, drinks or snacks, or you can pack your own. Contact Jody to register:

crabnose88@yahoo.com

or call the GSBAS phone: 631-563-7716

Get Ready for the December Meeting

Our general membership meeting in December has always been a holiday celebration where members share nature related photos, videos, stories, etc. We want to take this early bird opportunity to get you thinking about anything you might want to share. If you can let Vera Capogna know ASAP so we make sure we have enough time for everyone. This year's meeting is December 15.



My Journey by Tim Meyer

When I saw the article in *Newsday* about Breakfast and Birding, I was intrigued. I remember my parents feeding and watching birds in my youth. In fact there were some very funny stories of my father's quest to thwart the squirrels from "stealing" all the bird seed. Fifty pounds of sunflower seed in those days must have been a handsome sum. So when I told my wife Karen that I was going to a breakfast and birding, she asked "Where? A breakfast and birding at eight o'clock on a Saturday? OK dear", she said, "Have fun!" Off I went silent into the morning.

When I walked into Connetquot State Park for the Breakfast and Birding, I was reminded of my youth at boy scouts. We gathered around a table with a guide in front telling us of what to expect out on the trail. After the bagels and coffee (if you are accustomed to Starbucks, bring your own) we ventured outside. We were split into three groups and off we went.

I had no idea there were that many different species of birds on Long Island: Yellow Warblers, Baltimore Orioles, Red-tailed Hawks. WOW! What a morning!

"Cash for Causes" our Ongoing Fundraiser

A simple way to help out the chapter is by purchasing Stop and Shop gift cards from us at face value. Available in increments of \$50, they will be for sale at our general membership meetings, or you can mail a check to Annette Brownell, 1411 Saxon Ave., Bay Shore, NY 11706. Please include a self-addressed stamped envelope. Call Annette with any questions: 631-665-4405. Thank you for your support!



Seed Sale

Birdseed for our fall seed sale fundraiser will be supplied by Wild Birds Unlimited in Oakdale. Orders must be received by Oct. 23. Pick up is on November 5 at Wild Birds Unlimited. As an added bonus, anyone picking up their seed that day will be eligible to purchase items tax-free. (excluding seed items). See insert in this newsletter for more info.

Volunteers Needed for Hospitality Committee

We are looking for one or two people to help out our Hospitality Committee. Hospitality sets up and organizes the beverages and snacks that are served at our meetings and events. Please contact Vera if you think you might be interested: vlvcap@yahoo.com or 631-563-4969.

May Dinner Committee

Thoughts in regard to the May dinner are already in motion. John Cardone, an author and terrific photographer will be our speaker. You can check out some of his work on Waterviewsbook.com. We are hoping to revamp some of our organization in regard to the dinner and are looking for volunteers that would be willing to solicit donations by writing letters to businesses and retailers. This is your dinner and suggestions are as welcome as extra hands are. We would like to hold our first brainstorming meeting in January. Please contact Annette at nettiesbaskets2@optonline.net or call 631-665-4405

MEMBER'S CORNER



And that was just the birding part. I also met Bill, a ninety-something year old man with a great big smile. And Ken, who led the group and pointed out the birds we novices most likely would have missed. Doing his best to speak of the birds in broader terms than their color, most of us had a hard time focusing on more than just the physical beauty of them. Not to be dissuaded, Ken found a frog under a plant (don't asked me how) for us to admire-- cool stuff. Ken also spoke about some of the plant life in the park. With a good portion of the day left ahead of us, we departed.

At home Karen listened intently about my adventure. Neither of us would have imagined some years later me sitting here writing of my new found love.

That Birding and Breakfast got me inspired to attend a Thursday night GSBAS meeting. Always looking for something other than watching TV, I took up the invitation to go to a meeting. Not knowing what to expect, I entered the building, a little hard to find; "someone could have said it was in the back" I remember muttering under my breath. Surprise. more

coffee. (remember Starbucks) and sweets. This time was a different layout-- more of a classroom setting. With a computer in the middle, the speaker presented a power point program on frogs. Cool Beans. Blue and green frogs and tree frogs and water frogs-- it was frogging heaven. Ok. so I know it sounds like TV-right? WRONG. There was a raffle, coffee, (Starbucks) sweets plus the passion of the presenters expressing something they know and love, whether its about frogs or birds, bats, horseshoe crabs, you name it. Oh- and best of all: people, nice people. Bill was there and so was Ken, both who came over to greet me. They remembered ME from the Breakfast and Birding.

That was about two years ago give or take. I have accumulated so many more stories since then: Library openings, annual dinner at Captain Bill's (not to be missed), duck walks with lunch at Jack's Finkenburg's (good soup), art shows. I even recently became a member of the Board of Directors of GSBAS. I think back on that eventful day when my wife asked "Where are you going?" On a journey. that's where.

CONSERVATION ISSUES

BY BOB GROVER

Disappearing Butterflies

If you spend any significant amount of time outside observing nature, you have probably noticed a scarcity of butterflies this spring and summer. Butterflies are, by far, the most studied group of insects throughout the world, so there is a vast database that can be mined to document their trends over relatively long periods of time. Although those trends have been downward, as we will discuss, this year the decline seems drastic. Local birder Ken Feustel, who also studies and photographs butterflies, belongs to a butterfly blog. He told me recently that observers throughout the United States are reporting a severe lack of butterflies.

By now, everyone is aware of the much publicized plight of the iconic Monarch Butterfly, whose population has plummeted 97% in the past 25 years, due to habitat destruction, pesticides, and genetically modified crops encountered along the Monarch's migratory route as well as in its highly specialized and localized wintering grounds in Mexico. Consider that Trudy Battaly documented 18,000 Monarch Butterflies passing the Fire Island Hawk Watch on October 3, 1985, in one hour! Last fall, 20 was a good day.

But the Monarch is somewhat atypical of the butterflies, having both highly specific food requirements (host plants) and a long distance migratory life style, which combine for a perilous cycle of life. Most butterflies, in contrast to the Monarchs, do not undertake long distance journeys, although many of them do have highly specific larval host plant species.

For the most part, our butterflies fall into one of two types, generalists and specialists. The majority are special-



Left, Eastern Tiger Swallowtail, an example of a "generalist" and the Monarch, right, a "specialist", the later being at greatest risk.

ists, and, as we will discuss, these are the ones in the most serious decline. The generalists tend to utilize a variety of trees and shrubs during their caterpillar stages, and the adults tend range over rather large territories. Probably the best local example is the beautiful and very conspicuous Eastern Tiger Swallowtail, of which I am seeing several in my gardens nearly every day this summer. The specialists, on the other hand, tend to favor very local patches of specific habitat, such as grasslands, meadows or wetland edges. Those habitats are especially prone to fragmentation, and when they are broken up, the resulting fragmented populations, preferring to avoid leaving their preferred habitat, no longer interact with the remaining nearby fragments, and they are individually too small to sustain a viable community. These are the specialists that are being lost at alarming rates. This has been best documented in Europe, where the database spans a greater historical range. For example, in a well-studied area of Germany, 117 species of butterflies were documented in 1840. 46 of these are extinct today. In the English county of Suffolk (ironically) the extinction rate over a similar time span is a frightening 42%.

Unfortunately, although the databases are much less robust, it appears that similar extinction rates are likely being experienced by dragonflies, bumblebees and moths, all three of which serve much more critical ecological roles than butterflies.

So why this year? Why does it appear that 2016 will be remembered for a drastic drop in our already depleted butterfly populations? Will this be permanent, or will they rebound in the next several years? The answers to these questions remain to be answered.

Green Networks *continued from front cover*

Munoz- Criado, whom I had the pleasure of speaking with at the ESRI Conference in San Diego, California this past June. As a landscape architect, she uses geodesign and technologies where leveraging nature – plants, wetlands, rivers, water features, urban forests and gardens, and soil types for city planning is a priority. If it can be implemented in urban planning, then why not suburban planning so that all greenscapes can form a network and act as the framework for sustainable planning.

The question arises, where do we begin? Start with a map or an aerial image of your home town and branch outward until each town has been connected. This is best achieved using technology from a geographic information system where map overlays, analytics, boundaries and intersection of areas that can be designated as priority greenspaces and/or potential build-re-use areas are located. By establishing a green network, three critical aspects of sustainable development are addressed: (a) Environment – sustain natural systems and boosts biodiversity, mitigates flooding, counteracts carbon emissions, and helps regulate climate; (b) Economy –

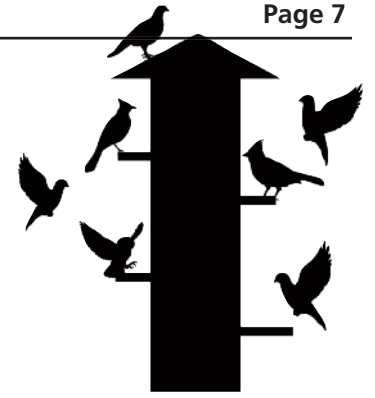
facilitates higher property values, lower healthcare and energy costs, more jobs, and smarter investments; and (c) Community – people connect with nature, have access to clean air and water, and live healthier, happier lives.

Environmental Systems Research Institute (ESRI) has launched a suite of green network planning tools that can be used by local governments, nonprofits, and the public to import local data and create localized green "infrastructure" maps and conservation strategies. The framework for the six steps to green infrastructure can be found at <http://www.esri.com/about-esri/greeninfrastructure>. You can learn more about this effort by going to the website, scrolling to the bottom of the page and typing in your zip code. You will notice that only the Carmans River Watershed has been included for Suffolk County and that the remainder of Long Island has not been evaluated. Be the first to fill in the gaps by working on a green network project in your home town as we will begin mapping the green networks for the Town of Islip in collaboration with Stony Brook University's Geospatial Center and the Accelerated College Education students at Sayville High School in an effort to best protect our terrestrial and marine resources for future generations.

BIRD FEEDER SURVEY

Compiled by Helga Merryman

FALL 2016-SPRING 2017



At the Outdoor Festival held in June at Heckscher State Park, GSBAS had an informational display with brochures and interactive activities. A few pair of good binoculars and a telescope were provided by our volunteers for the people who stopped at our table. Visitors, including quite young children were amazed at what they could view through the scope and binoculars. Many of us start with an assortment of "good enough" optics handed down through the years, such as opera glasses from the Paris Opera, WWI military issue field glasses, or a second hand pair bought decades ago by an uncle to view the horse races. The toy binoculars we buy for our children, usually just frustrate them and cause them to lose enthusiasm when trying to locate anything. Viewing nature through decent optics is like opening up a new world. Maybe this is the time to consider buying a good pair of binoculars for yourself or for the family to share. The July/August issue of *Bird Watchers Digest** has a very comprehensive article containing most of the information needed to purchase a relatively inexpensive pair of good binoculars. Even though \$200-\$300 may seem a costly lump sum, if you break it down over a lifetime of use, it comes to just pennies a day. Since the earth has successfully completed another journey around the sun, and we've reached the bookmark of the FALL 16—SPRING 17, Feeder Survey, this may be the ideal time to purchase those new binoculars.

The GSBAS Feeder Survey has been run for many years. The reward of the survey is to bring awareness of nature to our doorstep and share our observations with others. Everyone is welcome to join the survey. I look forward to a new season with our past participants and welcome all newcomers.

**Bird Watcher's Digest* can be found in our chapter library, The Larry Merryman Memorial Library.

How Does the Survey Work?

- 1) The counting period is 5 months from November to March. You may choose to participate for only one month, several months or the full period of five months.
- 2) During the first 15 days of each month, keep your feeders filled. Whenever you view your feeders, count the number of each individual bird species you observe. Report the largest number of each individual species seen at any one time, e.g., if you see 10 Cardinals on the 1st, 5 on the 2nd, 3 on the 3rd - report the largest number observed, i.e., 10. These birds can actually be at your feeder or attracted to your yard by the feeding activity.
- 3) Make five (5) copies of the form printed below, use(1) form per month to record the largest number of individuals of any species that you see at one time.
- 4) No later than the 19th of each survey month, mail your completed form to Helga Merryman, 38 South Carll Ave, Babylon, NY, 11702. You can also email your sightings and photos to me at eider55owl@optonline.net, please put FEEDER SURVEY in the subject line. I will compile the information and the results will be published in the following issue of *The Sandpiper*.

Survey Data: period from _____ to _____ Date _____

Name _____

Address _____

Phone Number _____ Email Address _____

- | | | |
|--------------------------------|-------------------------------|----------------------------|
| Red-tailed Hawk _____ | Black-capped Chickadee _____ | Dark-eyed Junco _____ |
| Sharp-shinned Hawk _____ | Tufted Titmouse _____ | Northern Cardinal _____ |
| Cooper's Hawk _____ | Red-breasted Nuthatch _____ | Red-winged Blackbird _____ |
| Rock Pigeon _____ | White-breasted Nuthatch _____ | Common Grackle _____ |
| Mourning Dove _____ | Carolina Wren _____ | Brown-headed Cowbird _____ |
| Monk Parakeet _____ | American Robin _____ | House Finch _____ |
| Red-bellied Woodpecker _____ | Northern Mockingbird _____ | American Goldfinch _____ |
| Yellow-bellied Sapsucker _____ | Brown Thrasher _____ | House Sparrow _____ |
| Downy Woodpecker _____ | European Starling _____ | OTHER SPECIES |
| Hairy Woodpecker _____ | Towhee _____ | _____ |
| Northern Flicker _____ | Fox Sparrow _____ | _____ |
| Blue Jay _____ | Song Sparrow _____ | _____ |
| American Crow _____ | White-throated Sparrow _____ | _____ |

Great South Bay Audubon Society

Officers

President: (Position Pending)
Vice-president: (Position Pending)
Treasurer: Annette Brownell (631) 665-4405
Corresponding Secretary:
Tim Meyer (631) 346-0198
Recording Secretary: Nicholas Laviola (631) 678-7866

Board of Directors

Jody Banaszak (631) 278-4059
Vera Capogna (631) 563-4969
Steve D'Amato (631) 264-8413
Jack Isaacs (631) 567-7631
Nicholas Laviola (631) 678-7866
Peggy Marsh (631) 667-3556
Tim Meyer (631) 346-0198
Juliane Wohler (631) 581-1731

Committee Chairs

Brookside: Vera Capogna (631) 563-4969
Hospitality: open
Conservation: Maria Brown
Membership: Juliane Wohler (631) 581-1731
Publicity: Helga Merryman (631) 669-6473
Education: Juliane Wohler, Janet Gremli,
Jack Finkenberg
Audubon Activist: Open
Newsletter: Vera Capogna (631) 563-4969
Nature Walks: Ken Thompson (631) 612-8028
Programs: Jody Banaszak (631) 278-4059
Librarian: Vera Capogna (631) 563-4969
Annual Dinner:
Annette Brownell (631) 665-4405
Mailing: Ken Thompson (631) 612-8028
Email Responder: Vera Capogna (631) 563-4969
Answering the GSBAS Direct Phone:
Steve D'Amato
GSBAS Direct Phone Number (631) 563-7716
GSBAS Email address: info@gsbas.org

For wildlife in need of rescue please call The STAR
Foundation (631) 736-8207



Great South Bay Audubon Society
PO Box 267, Sayville, NY 11782
A Chapter of National Audubon



Great South Bay Audubon Society Membership

Become a member of Great South Bay Audubon Society.
Your contribution will support GSBAS conservation efforts, educational programs and our stewardship at Brookside County Park.

Please make checks payable to:
"Great South Bay Audubon Society" and mail to:
GSBAS, P.O. Box 267, Sayville, NY 11782

- New Membership \$20 New Membership Senior (62+) \$15
 Renewal \$20 Renewal Senior (62+) \$15

Name _____

Address _____

City _____ State _____ Zip _____

Phone _____ Email _____



Great South Bay Audubon Gear

Shirts, Mugs, Bags and More
For Sale at
www.zazzle.com/sandpiper267



Welcome New Members!

GSBAS would like to welcome our new members.
We're sincerely glad to have you and look forward
to seeing you at our events and programs.

NON PROFIT ORG.
U.S. POSTAGE PAID
SAYVILLE, NY 11782
PERMIT NO. 108

Or Current Resident
Dated Material: Please Do Not Delay