

The Sandpiper

Great South Bay Audubon Society

A Chapter of National Audubon Society

Have You Thanked a Bat Today? Why We Should Conserve Bat Habitat on Long Island

by Maria Brown, MS, PWS, Conservation Chair

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, November 19 "An Introduction to Mushrooms and Other Fungi of Long Island"

A talk and color presentation by Joel Horman

Long Island has over 900 species of wild mushrooms: edible to toxic, beautiful to bizarre, tiny to humongous. Learn about their place in nature, their variety, beauty, edibility, fascinating life cycle, and their crucial role and importance in the ecology.

Joel has been studying fungi for 23 years after being introduced to mushrooming by his wife Peggy, president of the Long Island Mycological Club. Joel is Editor of their newsletter, and his articles have been reprinted in mycological newsletters both regionally and nationally. He has identified species previously unrecorded in NY State and the Northeast.

Thursday, December 17 Annual Member Participation and Holiday Celebration Night

Bring a treat to share, if you'd like, along with anything else you would like to share, such as photos, poetry, stories, books, etc. This is the last meeting of 2015 and it will give us an opportunity to take stock, look ahead, reflect on 2015 and enjoy some good company.



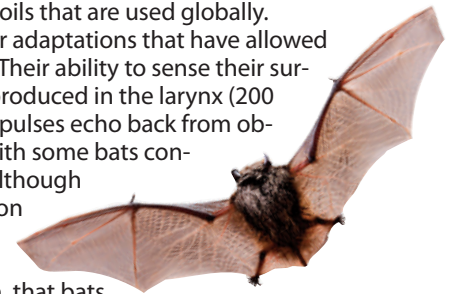
There are more than 1,300 species of bats around the world that are vital for the health of ecosystems and play an important role in world economies. Ecologically, bats are instrumental in pest control, as pollinators, and as seed dispersers, while their guano adds natural fertilizer to the environment (BCI, 2015). In the United States, scientists estimate that bats are worth more than \$3.7 billion each year in reduced crop damage and pesticide use as they feed on species such as the corn earworm moth, June beetles, and stink bugs (BCI, 2015). As pollinators, they help provide goods for our economy such as mangoes, bananas, guavas, peaches, and tequila made from agave. Flying foxes from Australia pollinate the dry eucalyptus forests which provide us with timber and oils that are used globally.

Bats are flying mammals with two major adaptations that have allowed them to flourish; echolocation and flight. Their ability to sense their surroundings by emitting ultrasonic pulses produced in the larynx (200 pulses per second), and then hearing the pulses echo back from objects, make them efficient insectivores, with some bats consuming thousands of insects per night. Although they are nocturnal and rely on echolocation to hunt, bats have eyes and can see very well at night; hence "as blind as a bat" is a poor idiom. Scientists have in fact proven, that bats will use both echolocation and their eyes to find flower shapes for pollinating. Bats come in all shapes, sizes and colors. The bumblebee bat, the smallest known in the world, weighs less than a penny (microbat), while some of the giant flying foxes have wing spans of up to six-feet (megabat).

On Long Island, we have sparse historical records and little baseline data for the species of bats our habitats support. The most recent data collected by local scientists suggests that out of the nine species of bats known to inhabit New York State, eight species of insect eating bats inhabit Long Island ecosystems. The bats of Long Island include: the little brown bat (*Myotis lucifugus*), tricolored bat (*Pipistrellus subflavus*), big brown bat (*Eptesicus fuscus*), eastern red bat (*Lasiurus borealis*) hoary bat (*Lasiurus cinereus*), eastern small-footed (*Myotis leibii*), silver haired (*Lasionycteris noctivagans*) and the northern long-eared bat (*Myotis septentrionalis*). It is still unclear how they are distributed by land cover types and elevation within the Long Island ecosystems. Bats are studied using three techniques: (a) mist netting; (b) radio telemetry; and (c) bioacoustics. Currently, mist netting and bioacoustics have been employed for the past few summers at both Brookhaven National Laboratory and at several locations managed by the National Park Service to better understand the distribution of populations on Long Island and to determine how Long Island bats have responded to White-Nose Syndrome (*Pseudogymnoascus destructans*). There are presently no radio telemetry studies for bats being conducted by these two research groups.

White-Nose Syndrome (WNS) is a white fungus that appears on the muzzle or other body parts of hibernating bats and has caused extensive mortality in eastern North America. It was first documented in Schoharie County in the winter of 2006-2007 and has spread rapidly across the eastern United States and Canada and as far west as eastern Oklahoma. It has killed nearly 6 million bats in the northeast and has been found in seven bat species in 25 states and five Canadian provinces (USFWS, 2014). The first bat identified on Long Island with WNS was found in the Town of Brookhaven. WNS causes bats to awaken more often during hibernation and use up the stored fat reserves that are needed to get them through the winter. The infected bats are often seen flying in midwinter resulting in the freezing or starving to death of individuals by spring. Mortality rates can reach 100% in some caves and half of America's bats are at risk to the disease. WNS is commonly found in Europe where native bats are immune to the disease. It is suspected that WNS

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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

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

Please consider joining us on one our Nature Walks listed on Page 3. Our experienced leaders are always willing to share their expertise. Everything we do centers on what's out there to be enjoyed and, if need be, protected.
Hope to see you soon!

The Board-Walk by Annette Brownell

Our year is already in full swing with one exciting program after another. The monthly speaker lineup covers a wide range of birding, landscaping and environmental topics from owls (October with Steve D'Amato) to bats to fungi, compost and watersheds. The Fall Audubon Conference in early November is focused on forest conservation (one of my personal favorite topics!) for watershed protection. I'm so glad that serious attention is finally being placed on forests and trees – after all the tree phobia of recent years due to storm damage. Our trees and forests are so vital to the preservation of the very things we love in nature – and for ourselves!

Speaking of love of nature, this February, in honor of Valentine's Day (for us romantics out there), we are going to host an art show "For the Love of Nature" at Brookside County Park. Members are invited to display their works of art from all medium: painting, drawing, photography, stained glass, carving, sculpture, etc. This is not a fundraiser and no fee will be charged to display or to view. It will just be a terrific opportunity to showcase all the diverse talent of Great South Bay Audubon Society members. The exact date and details will be made available as soon as we pull it together so watch our website. Perhaps someone reading this will think, "I have ideas or experience that I can share on this one." That would be wonderful.

Just a thought of gratitude as we walk through this autumn season toward the cold days of winter: On cool morning I got up literally with the chickens and stumbled outside in the dark to do the morning chores before work. Rather than hasting toward with usual duties, I took a moment and allowed my eyes to focus heavenward. To my delight and almost surprise was a beautiful predawn sky with crisp stars, a planet to the east sparkling like a diamond and the crescent moon. I thought once again "How lucky am I!" Never neglect a moment to see the beauty that abounds around us.

Striving to Reach Potential, by Harry Anderson

If you are ever on "Jeopardy," it is highly unlikely that you will go down not knowing "what the word "entelechy" means. You might never encounter the word at all, anywhere. But, you can experience its effect daily.

The word is Aristotle's doing. It is meant to describe the vital force that directs an organism toward self-fulfillment. It's philosophical, not scientific. Maybe. In brief, when a dandelion seed floats around the neighborhood, lands and takes root, on your lawn, it strives to become what it is intended to become, namely a dandelion, conditions being conducive. At least until 2,4-Dichlorophenoxyacetic acid spray takes care of it and maybe you in the bargain.

Not many natural occurrences thwart this force - weeds on a daily basis work their way up to the light through asphalt, and tiny tree roots will seek out and find the slimmest opening in sewer pipes. Healthy weeds shoot up in arid, blistering heat; indeed they seem to thrive on what to us is intolerable. We, however, have a talent of frustrating the process - sometimes necessary, sometimes expedient, but sometimes senseless.

I recently saw a thriving 70 year old oak tree being cut down. I had watched its growth for 30 years. It was sad to witness its destruction, painful to experience. Obviously, the neighbors owned the tree and were free to do with it as they wished, but I have a feeling it was not necessary and probably expedient and senseless. It was an inconvenience. What's left is a pile of sawdust and a lingering image of a massive tree that had not yet reached its fulfillment. What Stanley Kunitz alluded to in his poem, "The War Against the Trees": "One witness-moment, caught in the rear-view mirrors of passing cars."

Startling Statistics on Bird Mortality*

According to recent studies, wind turbines kill 600,00 birds annually, communication towers kill 6.8 million birds a year, and power lines, another 175 million.

Anywhere from 1.3 to 4 billion birds are killed by cats annually. Cars, trucks and other road traffic kill 80 to 380 million birds a year.

Window strikes are estimated to reach at least a billion a year in the US alone.

Seventy-two million birds perish from pesticide use.

Part of the work we do at GSBAS works toward reducing these statistics and protects birds from additional dangers such as habitat loss, pollution and climate change. Come make a difference by volunteering with us for just a few hours a month.--Vera Capogna

*Statistics from Sierra Club, National Audubon and American Bird Conservancy.

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, Oct 27, 9:30 am, Heckscher SP Meet in the Field 5 parking lot at the west end of the field.

Tuesday, Nov 3, 9:30 am, Blydenburgh County Park

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.

Tuesday, Nov 10, 9:30 am, Sunken Meadow SP Meet in the main parking lot in front of the main pavilion near the traffic circle.

Weekend Nature Walks

Saturday, October 24, Caumsett SP, 8:30 am

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.

Sunday, November 15, Wertheim NWR, 8:00 am

Leaders: Alice Heller (631-827-6561), John Gluth (631-827-0120)

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 make first right into Wertheim. There are signs both on Montauk Highway and on Smith Road at the turnoff into Wertheim.

Sunday, November 22, Morton NWR, 9:00 am

Leaders: Bob Grover (516-318-8536), Ken Thompson (631-612-8028) Sunrise Highway east past Shinnecock Canal. Look for North Sea Road Noyack sign and bear left on CR52. Stay on CR52 and then turn left at light onto CR38. After 1.4 miles on CR38, turn right onto Noyack Road. After 5 miles turn left onto refuge.

Saturday, December 12, 9:00 am, Montauk

Leaders: Bob Grover (516-318-8536), Ken Thompson (631-612-8028) Meet at Lighthouse parking lot. Late-comers can still join in the vicinity of the restaurant overlook. Directions Route 27 to 27A to end.

Saturday, January 9, 9:00, am Montauk

Leaders: Bob Grover (516-318-8536), Ken Thompson (631-612-8028) Meet at Lighthouse parking lot. Late-comers can still join in the vicinity of the restaurant overlook. Directions Route 27 to 27A to end.

Saturday, January 16, 8:00 am, Connetquot River SPP Breakfast & Birding Leaders: Bob & Edith Wilson, Ken Thompson Helga Merryman. Continental breakfast hosted by Friends of Connetquot. Reservations required - call Connetquot River State Park Preserve at 631-581-1072 to register. Registration fee \$4. plus \$8 parking fee per car - unless you have yearly Empire pass.



Great South Bay Audubon members at Wertheim National Wildlife Refuge last year. This is a special trip due to the fact that we are able to explore areas of the refuge that the general public does not have access to. On this trip last year we counted 48 species of birds, including two bald eagles.

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.

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Poets Among Us

On a gray, cold Saturday afternoon, Oct. 3rd, six of us gathered in the front library room of the Great South Bay Audubon Office at Brookside County Park to learn how to solve the mystery of writing poetry.

It turned out it wasn't a mystery at all. All of us found the poet within us with the help of Gladys Henderson, well-known poet and teacher. In two hours we plumbed the depths of our poetic beings and ended up with a least a few lines of poetry. Everyone brought a photograph or work of art that meant something to them, and with Gladys' guidance, we were able to write fairly good ekphrastic poems (poems responding to works of art). More importantly, we learned that we all have the stirrings of poetry within us; even on a stormy day, there is the human need to find beauty and meaning in words.

Perhaps in the spring, we may offer another workshop. Any suggestions would be greatly appreciated. Haiku, anyone? --Karen Schulte

New Bird Feeder at Brookside

After our last rash of vandalism at Brookside, we had to replace the bird feeder pole that Bob Wilson had originally made and donated to GSBAS as well as replace most of the feeders. As the spirit of our members and community is always helpful and generous, we were able to replace the pole and feeders with minimal cost to the Society.

Rite Fence on Moffitt Blvd. in Bay Shore,

a fencing company that has been family owned for generations, donated a beautiful sturdy 10' black pole to us. Rick Barns of A&N Reliable Welding designed and welded the feeder and then graciously dug the hole and did the physical labor of installing the pole. The pole is encased in 170 lbs. of cement, some of which was donated by Johnna Vullo, and will certainly not be coming down too soon. Wild Birds Unlimited of Oakdale once again donated feeders to replace the vandalized ones.

We are really grateful for the support that our members and community businesses give us. Please support them in return --Annette Brownell

Brookside Butterfly Garden News

*"Autumn is the hush before winter." ~
French Proverb*

On October 12, 2015, beneath leaves shrouded in Autumnal colors and skies of blue, garden club members spent several hours tending to the Brookside Butterfly Garden. Fences needed mending, bushes needed trimming and the remaining flowers needed thinning.

At this time of year, long, narrow tufts of purple butterfly bush and plumes of fluffy yellow goldenrod dominate the garden. These plants are a source of nectar for migrating butterflies and bees, encouraging them to stay in the area and pollinate other plants. Clusters of deep pink starry flowers of the Autumn Joy sedum plant dot the garden border along with willowy, purple New England

Asters. These early autumn blooming plants provide food late in the season to keep honey bees nurtured through the winter months.

Seed heads of Black-eyed Susan, phlox, bergamot and cone flowers were left on their stalks to allow sustainability of the garden and food for wintering birds.

American Goldfinches,

just shy of molting into their drab winter plumage, can easily be spotted feeding on the spike-like seeds of the purple cone flowers. Sturdy stems of the bergamot plant are the perfect perch for Black-capped Chickadees as the remaining seeds are individually extracted from each seed head. The tiny black seeds of the Black Eyed Susan, often scattered on the ground, will attract larger songbirds like cardinals, nuthatches and sparrows along with other seed-eating ground feeders. The old stems of Joe Pye Weed, left in place, provide winter cover for beneficial insects. Wrens, titmice, and juncos not only enjoy the seeds from these plants, but use the fluff of spent flowers to line their nests for warmth. Goldenrod provides seeds for Pine Siskens and serves as harborage for overwintering insects such as spiders and beetles.

While garden club members tended to their tasks, their chatter mimicked the endless chirping and tweeting of the birds at the nearby feeder. As our day ended, we were delighted to glimpse a hawk passing swiftly overhead.

With the waning daylight, the Butterfly Garden in it's Autumn apparel, looked muted and welcoming for all who may visit, whether bird, butterfly, bumble bee or nature lover! --Janet Gremli

GSBAS Guided Nature Hike at West Oak Recreation Corp.

Thursday, August 13, 2015 began with temperatures in the low 80's and bright sunshine. It was a perfect day for a summer hike. At the West Oak Recreation Corporation (WORC), a group of about 25 adults, teens and children gathered at the north end of The Crooked Mile. It was here that we began our private Nature hike for the summer community of WORC. The hike was led by Janet Gremli and Peter Schramel as part of a community outreach program for GSBAS. The tour began with a brief history of the site provided by Ed Brunswick, a longtime community member. The property, located on Montauk Highway in the hamlet of Oakdale, was once part of the estate of Frederick Bourne, president of the Singer Sewing Machine Company. In 1945, the land became a private summer colony. Of the 253 acre parcel, 150 acres are protected from development.

Our hike traversed the winding trail, densely populated with poison ivy, cat brier, bittersweet and Virginia creeper. Low bush blueberry, bayberry and Eastern Bac-



Dedicated Brookside volunteer Marie Mandell clearing stones and leveling the ground near the garden. The new vandal-proof bird feeder is in the background.

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charis, full of sweet scented flowers, filled the voids beneath the canopy of black cherry, white oak, Eastern red cedar, red swamp maple, pitch pine and white birch.

As hikers meandered along Indian Creek, they were serenaded by catbirds, cedar wax wings and hairy woodpeckers along the trail. Up above, the high-pitched peeping of an osprey allowed for easy location of the beautiful raptor. This fish-eating bird of prey, with a wingspan of close to six feet, was found nesting in the top of a dead pitch pine. The pre-historic looking nest was enormous and appeared to occupy the full crown of the pitch pine. Teaching the hikers to be keen on observing clues in nature, large gills from fish were pointed out along the trail before locating the osprey nest. Noting the heavy, white droppings from the birds, it could be determined that the osprey were feeding on the fish while perched in the trees near to the nest.

Along our path, the leathery, white, curled eggshells in the shallow hollow of sand along the shore, were an indication that Eastern Painted Turtles had recently vacated their nest. How lucky were we to observe a baby turtle poke it's head from the 2 inch diameter hole it called home! After several attempts to climb from beneath the earth, the turtle returned to the cool comforts below.

Our walk ended where the trail transitioned from decidu-

ous woods to salt marsh. Sea lavender, phragmites, Russian olive, spike grass, purple thistle, Queen Anne's lace and salt spray rose formed dense thickets between the Great South Bay and the trail. Snowy Egrets and Great Blue Herons could be observed feeding in the tidal wetlands.

A jewel of Nature, The Crooked Mile proved to delight all of those who hiked it's humble trail.--Janet Gremler

Young Naturalist Clubs Study Butterflies

Sunday, October 4, was the perfect example of why I love going to Brookside. After a few chilly, gray rainy days, going into the calm, lush surroundings of Brookside and feeling the sun on your face was just the best! So wonderful to see birds feeding at the feeders, chickadees and titmice, and then to have a lovely family arrive, eager to take part in our Young Naturalists Club activity. This particular day we discussed the Monarch



YNC member Elizabeth Ford with her colorful butterfly craft.

butterfly and its migration this time of year, its different cycles and generations. Following our discussion we made a butterfly clothespin craft and then headed outside for our hike. On the trail the chil-

dren took turns being the leader as Lois Goelz pointed out several fallen trees and snags and talked about how these provide good resources and homes for many creatures.

On the tail end of our exploring, Lois spotted a Great Blue Heron on the pond. Only a fleeting moment to observe, but what a beauty to behold and an exciting end to our fun YNC Sunday!

--Juliane Wohler

Great South Bay Audubon Members: LI Birding Champs

Pteam Ptarmigeddon, consisting of John Gluth, Tim Dunn (Great South Bay members), Pete Morris and Taylor Sturm joined forces to compete in the second annual Seatuck Birding Challenge.

Waking well before the crack of dawn on Sept. 26, the team began their strategic route through Brooklyn, Queens, Nassau and Suffolk, birding a total of 14 locations and spotting 106 species. According to John, the species highlights were: Philadelphia Vireo, Ring-necked Pheasant, Long-billed Dowitcher and Ruby-throated Hummingbirds.

"We certainly got our exercise, jumping in and out of Tim's Prius all day" said John. The exhausted team arrived at Scully mansion at Seatuck just a couple of minutes before the 5:00 deadline.

John also just happens to be one of Great South Bay Audubon's skillful nature walk leaders. Come join us on one of our walks and see the champ in action. You will surely be impressed. --Vera Capogna

Get the Dirt on Dirt PART II*

by Annette Brownell

Once again this past summer, I had my yearly struggle with the sandy soil in my vegetable garden. Very different from the soil I grew up with on the north shore where farming and gardening work out much better, I find that I am continually replenishing my soil with compost and chicken manure. It doesn't take long, however, for the nutrients to filter out through the sandy soil. Next year I am going to make raised beds where I can better control the soil quality. As we continue to look at this hard working, life sustaining element, a few concepts are worth bringing to mind.

Healthy soil = healthy water. Soil normally filters and cleans water. But what if the soil is contaminated? Rainwater that drains through contaminated soil before arriving in lakes and streams could contaminate water. The soil in forests, wetlands and along rivers prevents many pollutants such as toxins, viruses, manufacturing oils and bacteria from entering the drinkable water supply. This is another very good reason for the protection of our natural habitats.



Soil supports buildings. We build on soil, as well as in it and with it. Soil provides the support for the physical foundations of buildings, roads and railways. Have you ever watched the construction of a building or roadway? Even more amazing is the reconstruction of a road where the traffic has to continue to flow around the work. Civil engineers have no easy task. Just as special knowledge is needed for agriculture and forestry, so it is with building sites. Soils vary in texture, properties and behavior. Houses and roads are damaged where soils shrink and swell. Soil strength must be measured to determine how easily it changes shape and how it will bear weight.

This one I love – Soil supports mental health. Aside from the fact that soils are the foundation of our national forests, hiking trails and parks, spending time outdoors is linked to positive effects on physical health. A strain of bacterium found in soil, *Mycobacterium vaccae*, triggers the release of serotonin, which elevates mood and decreases anxiety.

We know more about the movement of celestial bodies than about the soil underfoot." - Leonardo da Vinci (1452-1519)

*Part I of *Get The Dirt on Dirt* appears in the July/August 2015 issue of *The Sandpiper*.

CONSERVATION ISSUES

BY BOB GROVER

Creepy Crawlies

Does it seem strange that most people are afraid of “bugs”, such as insects and spiders, as well as snakes and various small mammals including mice? Yet most people are not revolted by the sight of fish or rabbits. As with much of human behavior, there is an evolutionary foundation for this phenomenon. Early humans learned to exploit various fish species and selected small mammals as valuable food resources. Conversely, creatures such as spiders and snakes were recognized as potentially dangerous, and the desire to avoid these became engrained in our behavioral responses.

The magnitude of this response, however, seems to be out of proportion with the actual danger, indicating that spiders and snakes likely posed a greater threat during earlier periods of human development. In addition, the response to these creatures varies greatly among individual people, with some individuals reporting an affinity for snakes but an aversion to spiders, or vice versa, and others have no fear of either.

Let’s focus briefly on spiders. Worldwide, there are more than 30,000 species of spiders, and they are a very diverse group. They vary in size from less than half a millimeter to the size of a human hand. A couple of years ago I found a beautiful iridescent sub-millimeter spider in my garden. I attempted to photograph it for later identification, but it was so tiny it didn’t show up in any of my pictures! Many spiders form webs to capture prey, as we all know. Who among us has never unwittingly walked through a



spider web in the yard or woods in the early morning? Even for spider admirers, that is not pleasant. But there are many other spiders that simply chase down their prey, pounce from above, or form other types of elaborate traps. All spiders, however, are predatory. At least two of my textbooks state that all spiders are venomous, but I recall reading an article recently on one of the internet news outlets, about a spider that lacks a poison gland. I wish I had saved that for further investigation but neglected to.

Although most, if not all, spiders are venomous, very few of them are capable of both penetrating human skin and producing venom that elicits a human physiological response. In other words, most of them are harmless to us, and it is not necessary to dispatch every spider you may encounter, as many people instinctively do.

In our previous column, we discussed coevolution. Spiders represent another interesting example of coevolution with their arthropod cousins, the moths. The powdery scales often present on the wings of moths evolved so that they could evade capture in sticky spider webs. I first learned this as a young boy when late one summer evening I found a large, impressive, orb web spider, *Argiope*, outside of my garage. There was an outside light nearby attracting moths. I decided to capture some moths and toss them into the orb web to watch the spider’s response. To my surprise and disappointment, the moths would not stick to the web and simply resumed their collisions with the light fixture.

Collisions with the light fixture? Good topic for a future column.

Have You Thanked a Bat Today? *continued from front cover*

arrived in caves in Schoharie County by spelunkers (cave explorers) who may have unknowingly brought it over on the soles of their boots. WNS is transferred by touch, and since bats huddle in caves together for warmth, they are continuously touching each other, allowing for the easy transfer from one bat to another. In May of 2011, the White-Nose Syndrome National Plan was developed by a team of federal, state, tribal, and non-governmental partners to address the spread and impact of WNS. Most recently, the US Forest Service researchers have gained a better understanding of the disease and are working on strategies to prevent its further spread.

On Long Island, where we do not have bedrock, and therefore, no caves, the detection of WNS has not been prevalent in the bats captured the past few years during mist netting activities. The little brown bat, once thought to be prevalent on Long Island, is rarely observed and may have truly been a migratory species, leaving Long Island to hibernate in caves upstate New York in the winter. Since 2011, the only place in New York state where the northern long-eared bat has been observed is in Suffolk County, New York, and may be residential and not migratory! In October, 2013, the US Fish and Wildlife Service proposed that the northern long-eared bat be listed as endangered. Under the Endangered Species Act’s definition, it meets the status of threatened and was effectively listed as threatened on May 4, 2015.

The bats in our backyards protect us by eating insects that we consider pests, especially mosquitoes which carry diseases that are transmitted to humans. With the presence of West Nile Virus and one confirmed case of Dengue Fever believed to be contracted locally in Babylon (CBS News, 2013), our microbats act as vector controls which is “music to my ears” when compared to the alternative, persistent larvicide and adulticide mosquito spraying Long Islander’s have endured since the fall of 1999. When ecosystems are left in-tact, predator-prey relationships help to balance out the number of pests and hence play a role in preventing the

spread of zoonotic diseases. At Brookside County Park the bats, dragonfly, dragonfly larvae in the muds, and fish do a wonderful job of limiting the number of mosquitoes encountered during the warmer months!

Students from Sayville High School have used three different bioacoustical monitoring systems to verify the species of bats that forage at Brookside County Park since 2012. Currently, seven of the eight species known to occur on Long Island have been recorded using a Bioacoustic Technology (BAT) microphone, SM3 microphone, and the Echo Meter Touch microphone with the Kaleidoscope software for analysis from Wildlife Acoustics, Inc. Since bioacoustics are 80% reliable, the recordings analyzed on the three microphones can only be confirmed through active mist netting activities. The suspected bat species to forage at Brookside County Park include: big brown, eastern red, hoary, silver-haired, eastern small-footed, tricolored, and the northern long-eared bat. The potential for utilization of the site by the northern long-eared bat warrants further investigation based on the bioacoustical results.

Since bats provide so many ecosystem services and values for humans, you may be wondering what you can do to help bats? Build a bat house and put it in your yard! There are bat house plans that can easily be downloaded from the Bat Conservation International Website <http://www.batcon.org/>. Wildlife Acoustics Inc. and the Organization for Bat Conservation are sponsoring a bat house building event on Halloween to see if we can break a world record by having citizens of the USA build 5000 bat houses in one day! For more information on how you can participate visit <http://batconservation.org/discover/bat-week/>. Lastly, don’t forget to thank a bat today or during Bat Week which is celebrated this year between October 25-31!

References:BCI,(2015). Why bats?. Retrieved from: <http://www.batcon.org/why-bats/bats-are/bats-are-important>. CBS News (2013). New York State’s first known Dengue Fever infection found on Long Island. Retrieved from: <http://newyork.cbslocal.com/2013/11/20/new-york-states-first-known-dengue-virus-infection-found-on-long-island/>.U.S. Fish and Wildlife Service. (2014). White-nose syndrome fact sheet August 2014. Retrieved from https://www.whitenosesyndrome.org/sites/default/files/august2014_fact_sheet.png

BIRD FEEDER SURVEY

FALL 2015-SPRING 2016

Compiled by Helga Merryman



I thought this might be a good place to review bird feeding practices. It can be pricey to feed the birds and you want to use your dollars to the best advantage. Following are some hints for using the most popular types of feed.

First, determine the type of birds you wish to attract, then find out what type of feed they like and how to offer the feed to them.

Black Oil Sunflower is the best bang for your buck because it is popular with many species including but not limited to cardinals, jays, finches, chickadees and woodpeckers. There are a large variety of hopper or tube type feeders appropriate for this type of seed. This can also be purchased already hulled as a no-mess feed to be used in areas such as patios where you don't want shells to pile up. Thistle or Niger attracts gold finches, Pine Siskins and others, and should be offered in specific feeders with tiny holes or in net thistle socks. Millet attracts finches, sparrows Cardinals and juncos and can be offered in hopper type feeders, or on the ground. Safflower attracts Cardinals, finches, Mourning Doves and others. Squirrels don't seem to be attracted to Safflower so it can be offered in hopper or platform type feeders. Cracked corn attracts doves, jays, blackbirds and game birds (if you are lucky enough to have them). And can be offered on platform feeders or on the ground. Peanut chips go a long way and are pricey but almost every species eats them, make sure to offer them in sturdy squirrel proof feeders. Suet can be plain or mixed with a variety of seeds or flavorings to attract woodpeckers, nuthatches Carolina Wrens, and chickadees to name a few. It is usually offered in cage type feeders which can either be hung or nailed to trees. In the summertime sugar water can be offered to hummingbirds and orioles in specialized nectar feeders.

Unfortunately the invasives (Starlings, House Sparrows, and Rock Pigeons) eat almost anything which is probably why they are so successful.

Don't over feed, let the feeders empty before refilling, wash out feeders once a month and dip in a 10% bleach solution, rinse and dry.

Feeders should be sturdy, easy to fill and keep clean and be squirrel proof, the squirrels get enough feed that is dropped on the ground. It pays to buy good quality seed from a reputable dealer. If you notice twigs and debris mixed with the seeds or if there are insect holes in the seeds, or if the birds always leave the same type of seed uneaten (a sign that the seed mix has undesirable fillers added such as Red and White Milo), you are not getting your moneys worth.

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.

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

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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.

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