

Fall 2017

Brooklyn Bird Club's

CLAPPER RAIL



Editor's note



Clapper rail at Plumb Beach. Photograph by Marc Brawer.

The role of editor is still new to me, and I've come to realize that it requires a healthy dose of artful persuasion. I'm convinced that a few members of the club now hurry across the Nethermead when they see me, fearing I'll pitch them on writing for the Clapper Rail. It is, however, genuine; call me a homer, but I believe our members have so much to share—in words and pictures—and thus our Fall issue overflows with new writers and photographers alongside our dedicated regulars. To pick on one debutant, Ed Crowne, whose spring discovery of a Swainson's warbler in Prospect Park made our lead story last issue, has found himself on the unenviable end of my pleadings, and so I thank Ed and other first-timers for joining our burgeoning roster.

Our writers covered it all this issue—from the Gowanus Canal to Great Gull Island, Owl's Head Park to south Florida, Plumb Beach to lower Manhattan, the migration of monarch butterflies and the flowering of ginkgo trees. Our lineup of photographers and artists, too, light up the page—and I can't help but call out Sam Dean Lynn, who sent us two magnificent illustrations, one made specifically for Ed's "Sparks!" column.

It's a testament to the contributions so far that we'd like to expand into publishing poetry. So please send us your nature-centric poems to newsletter@brooklynbirdclub.org. As always, I encourage you to send us your story ideas, photos, sketches, drawings, and illustrations. Our next issue is scheduled for January.

See you in the field.

— Ryan Goldberg

Cover: Lincoln's sparrow at Brooklyn Bridge Park.
Photograph by Heather Wolf.

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BioBlitzers Adelia Honeywood and Tom Stephenson count marine species with the Gowanus Dredgers. Photograph by Eymund Diegel.

BROOKLYN'S CURIOUS CANAL

THE ECOLOGICAL FUTURE OF THE GOWANUS



By Adelia Honeywood

In the 2006 film *The Host*, by Korean director Bong Joon-Ho, an unusual fish climbs out of the Han River in Seoul. The fish looks a bit like the three-eyed bullhead catfish claimed (and disputed) to have been caught in our own Gowanus Canal a few years ago—except that the Korean version is the size of a truck, with four legs, a prehensile tail, and giant snapping jaws full of foot-long teeth. The creature, mutated by industrial chemicals dumped into the Han by a callous U.S. military, proceeds to devour the inhabitants of Seoul and drag off the young daughter of a humble,

neighborhood concession-stand owner who eventually vanquishes the beast. The film was screened in New York City and prompted many jokes, maybe even serious speculation in some quarters, about our own Gowanus Canal.

Gowanus's real monsters—polycyclic aromatic hydrocarbons, polychlorinated biphenyls (or PCBs), cadmium, barium, mercury, lead and copper—mix lethally and quietly in a bed of toxic coal sludge (dubbed black mayonnaise by neighborhood residents), averaging a depth of 10 feet and even up to 20 feet in some places. The toxins bathe in the effluvia of 377 million gallons of sewage discharged each year by ten different combined sewer overflow (CSO) [outfalls](#). The chemical monsters are soon to be vanquished, or imprisoned, by parties held liable by the U.S. Environmental Protection Agency, which in 2010 designated the Gowanus a Superfund site with the status “Human Exposure Not Under Control.” Dredging is scheduled to begin at the end of this year. A dredging pilot, which will help finalize the method

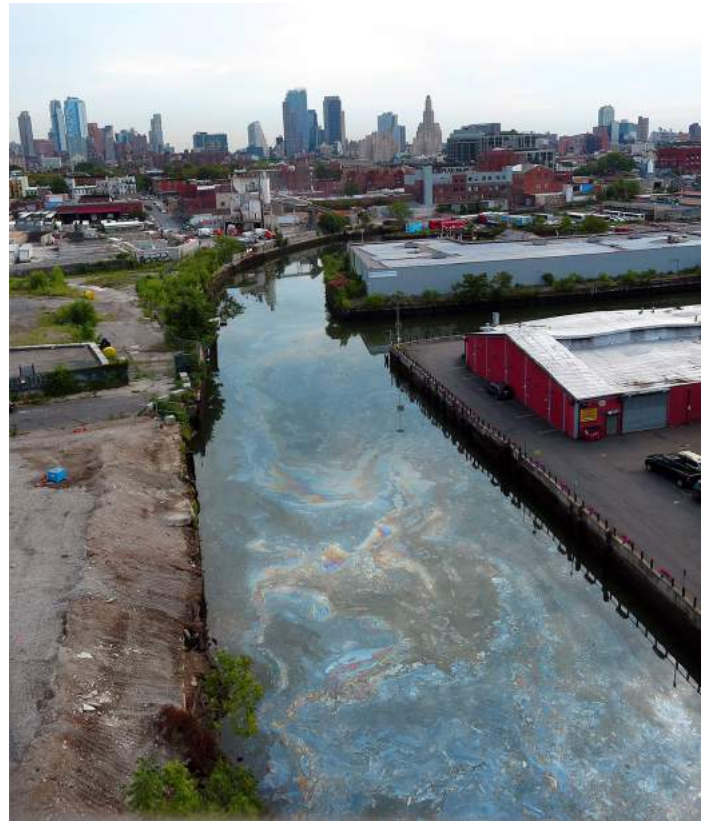
to be used on the full canal, began a few weeks ago in the turning basin at 4th Street and 3rd Avenue. The EPA has also ordered the city to deal with the sewage issue.

But natural life of the not-so-monstrous variety does stir in and around the Gowanus. The Gowanus Canal Conservancy (GCC), a small NGO with an extraordinarily committed staff, has an ecological vision for the area's future, called the Gowanus Lowlands Plan. Members of the Brooklyn Bird Club may be able to help shape the agenda for attracting birdlife to the area and even help turn the Gowanus into another of the city's birding destinations. Perhaps one day people will marvel enviously at happy bird couples raising families in a neighborhood where the median one-bedroom rental runs \$2,700 a month.

In August, Tom Stephenson and I, along with citizen botanists, insect specialists, and marine biologists, participated in a pilot BioBlitz hosted by the GCC. Since the upcoming dredging could temporarily wipe out a lot of the biodiversity that is already there, a BioBlitz was organized to document the flora and fauna currently present. It would also provide a baseline of comparison for ongoing, larger BioBlitzes scheduled to start next spring. Diana Gruberg, the GCC's horticulture manager, explained that the BioBlitz is meant to show what currently lives in and around the Canal and to help focus on the kinds of conditions required for future biodiversity.

In the 1600s Gowanus was a tidal estuary surrounded by acres of salt-wetlands, where, Joseph Alexiou reports in his book *Gowanus: Brooklyn's Curious Canal*, oysters grew to the size of dinner plates. Construction of the modern canal was completed in 1869 and soon surrounded by heavy chemical industries that, according to the NYC Department of Environmental Protection, included "coal yards, cement manufacturing, tanneries, paint and ink factories, machine shops, chemical plants, oil refineries, and three manufactured gas plants." All of these industries dumped toxins into the canal unremittingly for over a century. Running 1.8 miles from Boerum Hill through the neighborhoods of Carroll Gardens and Gowanus to Red Hook, the canal today is red hot for real-estate speculation, with residential developers snapping up small manufacturing and arts spaces. The creep of gentrification manifests in a posh Whole Foods Market on the canal's edge, and hipster hangouts such as the 10-lane Royal Palms Shuffleboard Club.

The ambitious vision of the Gowanus Lowlands



Above: Coal tar on the canal. Photograph by Public Lab.



Left & below: 1872 Sproule survey map showing Gowanus Creek, wetlands and topography, with the 2013 street grid & canal overlaid by Eymund Diegel.





Great egret found by BioBlitzers. Fresh waters from underground Denton's Spring flow out of the First Street Basin, making it particularly good for hunting birds. Photograph by Eymund Diegel.

Plan is a continuous corridor of interconnected parks that would provide public access, sustainable stormwater management, extreme weather resiliency and a restoration of the “productive tidal marshland” that the Canal once was. Along with supporting a vibrant, diverse, mixed-use neighborhood, ecology is a fundamental principle of the plan design, calling for restoring salt marshes, regenerating urban forest, creating “floating and in-water aquatic habitat,” and constructing green roofs and other bird habitat. Historic creeks, some of which currently run through building basements, would be uncovered, raised and floating walkways installed, and streets would lead into filtration gardens, walking paths and eco-education hubs. The ecological component of the Gowanus Lowlands Master Plan will be informed by data from the pilot BioBlitz.

At the pilot, we were given five checkpoints at urban industrial sites along the canal. We immediately spotted a black-crowned night heron from our meeting spot, looking across the canal to the Whole Foods on the right, a cement plant to the left, and beneath us an

infamous sewer outflow, OH-007, that spews “roughly 9 million gallons of stormwater and wastewater into the Canal” during a 1.2 inch rainstorm, according to Open Sewer Atlas.

In tour-bus parking lots and at Loews; by junk yards and murals; panning a landscape of scrap metal yards, cement plants, and graffiti; we looked for birds. We were allowed five minutes at each checkpoint to count species—kind of like speed dating biodiversity. Like speed dating, the number of matches was a little bit disappointing, yielding only 14 species. And like speed dating, the total included mostly riff-raff, in this case pigeons, house sparrows and starlings. But there were a few gems from whom we’d welcome a second date: the night heron, great egret, American kestrel and even a belted kingfisher flying low over the water. (See counts at the end of this article).

After birding, we took a tour of the canal on a canoe, something anyone can do for free through the Gowanus Dredgers Canoe Club. The canoes launch from the Gowanus Sponge Park, 1,800 square-feet of native plants set in a system of concrete cells to capture



Red snapper stranded at the Gowanus Sponge Park. Photograph by Eymund Diegel.



stormwater and allow for phyto-remediation of toxins from runoff. It was strangely peaceful, even a bit otherworldly to be on those waters on a Saturday when the hum and processes of industry are at rest. Colorful spirals of iridescent, oily looking substances drifted by to remind us where we were—a sight that might not have seemed so ominous in less environmentally conscious times. In 1954, a painter named Samuel Rothbort saw “great beauty in the Gowanus Canal, especially where the tar lays a film over the water and adds ‘gorgeous color.’”

But we were looking for marine life. I wore thick, elbow-length rubber gloves to reach into the water, although perhaps I needn’t have worried, considering that in April of 2015 an environmental activist named Christopher Swaim swam the length of the canal and is still alive swimming polluted waterways to this day. And it seemed like natural life was everywhere. We saw Atlantic ribbed mussels, tiny crabs, pipefish, and mummichogs. At one point I could’ve sworn I saw something larger dip into the water, and I’m betting turtle over mutant catfish.

In fact, Emma Garrison, a young marine biologist and educator for the GCC, has documented a couple dozen species or genera of marine invertebrates in the canal. (Ten species were found during the BioBlitz). Some of these species actually feed on the sewage waste and garbage we deposit into the canal, and

Gowanus Lowlands Plan rendering of the Salt Lot and 6th Street Basin. Image by Gowanus Canal Conservancy.

in general their presence is a promising sign. “We know that when we see diversity in marine systems,” Garrison said, “there’s more cycling of things in the water, which means the water gets cleaned in some capacity. Detrital materials get processed...and recycled. It becomes much more of an ecosystem.”

When the EPA was considering Superfund status for the Gowanus, the city, under Mayor Michael Bloomberg, vigorously resisted. This was perhaps to be expected considering that under Superfund, the federal government identifies parties responsible for the pollution and requires them to pay for the cleanup. The city and National Grid are the main Potentially Responsible Parties (PRPs) identified by the EPA, along with 26 others including such entities as CBS Corp, ConEd, Citigroup, Dun and Bradstreet, Exxon, Honeywell and Kraft Foods. The city originally favored a cleanup plan that would rely on the Army Corps of Engineers and would have required funding allocations from Congress. Given the tone of our current Congress, it was perhaps best that the EPA won out.

The cleanup is expected to cost \$506 million and consists of dredging and removing 588,000 cubic yards of contaminated sediment which will be treated

at an off-site facility. An EPA brochure explains that the remaining sediment will be covered with a multi-layer cap consisting of a “treatment” layer to remove contaminants that well up, an “isolation” layer of sand and gravel, and an “armor” layer of heavier gravel and stone to prevent erosion of the underlying layers from boat traffic and currents. This is topped off by clean sand as a “habitat” layer.

The canal has been divided into three sections for cleanup, with the first section cleanup scheduled to commence at the end of this year and the final section scheduled, on the EPA’s timeline, to be completed by 2022. This is assuming all goes according to plan. Earlier this year the EPA told the Gowanus Canal Community Advisory Group that they and the PRPs have “differences in opinion about schedules” that could delay completion until 2030.

The EPA has also mandated that the city construct two sewage retention tanks to hold combined sewage until it can be brought to a treatment plant. After much community opposition to the EPA’s originally proposed site at a much-loved local playground and pool, the city agreed to build an eight-million gallon tank on Nevins between Butler and Sackett. The city has until 2020 to acquire the property, now home to Eastern Effects, a multi-building film studio where “The Americans” was shot. The second tank, four-million gallons, will be built at Second Avenue and Fifth Street. The city’s draft Environmental Impact Statement for construction of the tanks is due any day now.

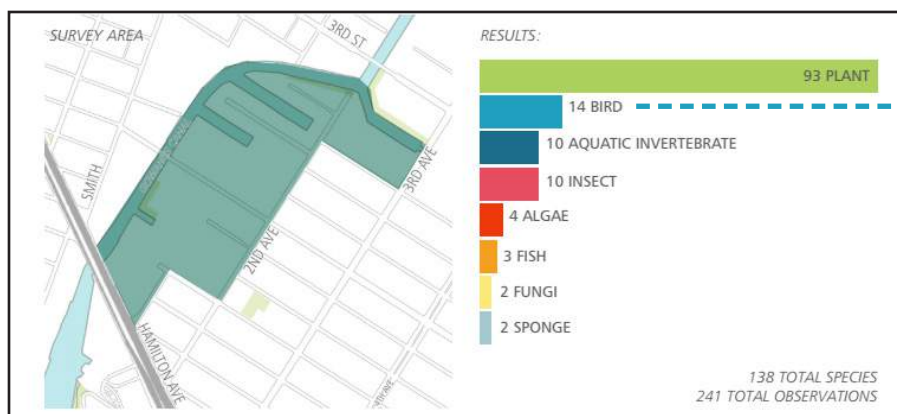
The tanks are in addition to improvements the city’s Department of Environmental Protection has already undertaken, including a \$190 million upgrade to a flushing tunnel and pumping station that significantly reduced sewage overflow and greatly improved oxygenation of the water, according to Emma Garrison of the GCC. The DEP’s long-term plans for wastewater management include construction of high-level storm

systems and the installation of 87 new catch basins. In addition to the already completed Sponge Park, the city has built, or is planning to build, green infrastructure, including bioswales and greenstreets (two different types of planted areas designed to manage stormwater runoff).

Diana Gruberg, GCC’s horticulture manager, hopes

“Edge design is a crucial aspect of the Gowanus Lowlands Plan’s vision of waterfront access and ecological restoration.”

the Brooklyn Bird Club will work with them on ideas to improve the habitat and create food and stopover places for migrating birds. The canal is currently walled by sheer, vertical bulkheads and Tom quickly pointed out the need to “soften the edges” so that birds can access the water. It turns out this is a bigger issue than we realized. In two separate instances this year, aging and unstable bulkheads collapsed into the canal. Property owners are responsible for maintaining the bulkheads and rebuilding them after the dredging. The EPA wants the new bulkheads to be metal and is offering to provide them. Considering the costs



BioBlitz bird list

American Kestrel	1
Barn Swallow	5
Belted Kingfisher	1
Black-Crowned Night Heron	2
Canada Goose	1
Crow sp	5
European Starling	4
Great Egret	1
House Sparrow	25
Laughing Gull	2
Mourning Dove	2
Northern Mockingbird	4
Ring-billed Gull	2
Rock Pigeon (Feral Pigeon)	16

involved, this is likely to be a welcome gift to business and property owners at the site.

Most aquatic life cannot adhere directly to a metal bulkhead, Garrison said. “It needs a graded edging, like a coastline or a wetland, and a variety of substrates—smooth, pebbly, and rocky, and both horizontal and vertical. Different species want to grow on each.”

Fortunately, edge design is a crucial aspect of the Gowanus Lowlands Plan's vision of waterfront access and ecological restoration. It's going to take a village to make the plan happen. Developers each have their own parcel of land, and advocates will have to weave together a cohesive vision among a variety of stakeholders. This fall, Gruberg said, they will speak to the community again while the Department of City Planning considers rezoning the area from manufacturing to residential. The GCC, Gruberg said, hopes to take advantage of investment going into the neighborhood. "We're thinking a 40-foot esplanade along the banks and an opportunity for connective open space—not a one-off by each developer, but one big park," she said.

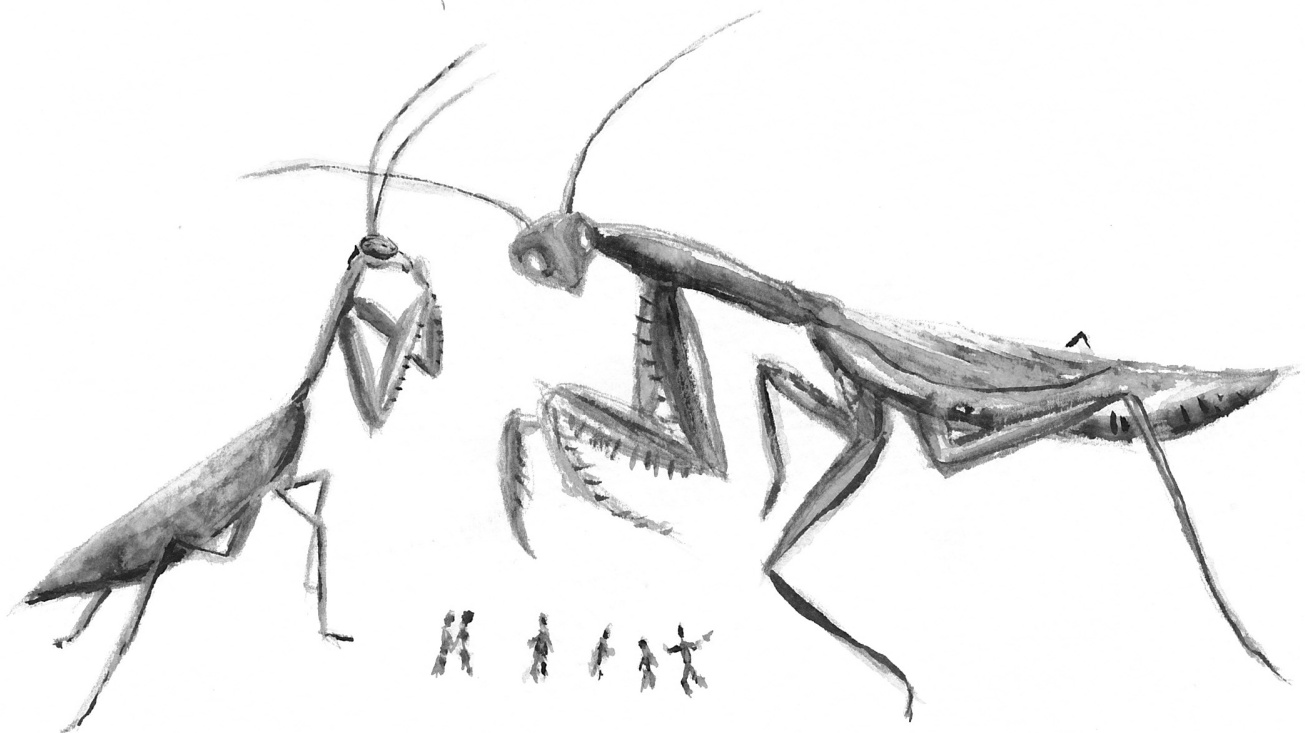
Private developers are going to have a lot of sway.

Gruberg declined to get specific about the developers which might be on board with the plan, but DNAInfo [reported](#) in May that the largest landowner along the canal, Property Markets Group, has been meeting with the GCC.

“We’ve already had a lot of discussions with the Gowanus Canal Conservancy to marry our visions of how the waterfront can be most accessible and well-planned,” PMG principal Richard Lam told DNAInfo. “We are proponents of having a cohesive, readily accessible waterfront for the community.” (DNAInfo also reported that Kushner Companies, owned by President Trump’s son-in-law, bought the entire block of Third Street across from Whole Foods.)

If the enthusiasm and dedication of GCC staff is any measure, the Gowanus Lowlands plan will become a reality. Want to [learn more](#) and get involved? The GCC's Annual Meeting and party is on Thursday, Oct. 26.

For more information, volunteer opportunities, and free canoe trips, visit the [Gowanus Canal Conservancy](#) and the [Gowanus Dredgers Canoe Club](#) websites.



Praying Mantis. Ink and paper drawing by Toni Simon.

FLYOVERS

By Sean Sime

eBird Checklist S38938799

Location: Coney Island Creek Park, Kings County, New York

Date & Effort: Friday, September 01, 2017 6:23 AM

Protocol: Stationary

Party Size: 1

Duration: 5 hours, 20 minutes



Ruby-throated hummingbird



Blue-gray gnatcatcher



Cape May warbler

Island Life: Great Gull Island

By Jennifer Kepler



Roseate tern. All photographs by the author.

The saying is true, if you find a career that you love, you'll never have to work a day in your life. That held true when my colleague, friend, and fellow birder Molly Adams and I traveled to [Great Gull Island](#) for work this summer. We traveled as volunteers to the 17-acre island on the eastern end of Long Island Sound—where thousands of common and roseate terns breed—but as the outreach education team for the New York Aquarium, we were guided by a professional purpose as well.

Our plan was to share what we learned with our coworkers, to learn from and take inspiration from the scientists on the island, to develop educational activities for our own work, and to relate it to the Motus radio antennas we keep at the aquarium (and are used on Great Gull Island) for tracking birds such as terns that are equipped with nanotags as they migrate.

We arrived at the end of June, after the busiest part of the season. A small fishing boat ferried six of us from eastern Connecticut to the island. With a small dock and rough waters, it proved something of a challenge getting onto land. The boat also carried our provisions for the week—groceries, fresh water, and mail for the few humans who reside on the island during breeding season.

The amazing Helen Hays, who manages the island, greeted us warmly, while Joe DiCostanzo, who has worked there since 1975, helped unload the passengers and their gear, and aided departing volunteers onto the boat. It all seemed so frenetic, especially as birds dive-bombed us as we walked up the dock. We heard yelling from behind us to watch where we stepped. Right away, we saw nests with eggs and mobile chicks scampering

under our feet. The ground was littered with delicate objects, which made me feel uneasy and clumsy—all the while I had the urge to look up so I could avoid the blows to the head from the territorial birds. It was chaos.

Great Gull Island is owned by the American Museum of Natural History. Volunteers are welcome to help monitor the tern colony there. Despite its name, only common and roseate terns nest on Great Gull Island—in fact, it has the highest concentration of nesting common terns (9,500 pairs) in the world, and the largest concentration of the endangered roseate terns (1,300 pairs) in the Western Hemisphere. Helen Hays first came to the island in 1969 and she has returned every year since then as the manager of this project. In conversation you can feel her passion for these birds. She and her team's work has led to quite a few discoveries as well as a southerly expansion of their work into the terns' range in South America.

Our assignment on the island centered around the common terns (another group handled the roseates), from banding chicks to marking nests and pairing adults. Before we did anything, we had to gear up. Our headgear included wide-brimmed hats with silk flowers standing tall, for the brim (mostly) blocks the flying fecal matter, and the flowers take the brunt of the beak stabbing from adult terns. A long-sleeved shirt acts as a smock to keep you (again, mostly) free of poop.

To band chicks, we had to tread lightly, looking for newly-hatched and not-yet-banded chicks. The nests sit on the ground and their eggs are well camouflaged, so we had to watch every single step.

Nothing compared to holding an hours-old chick in our hands and then using hardware far heavier than it to affix a small metallic band to its leg. It proved precarious on our first few tries, as their parents attacked us, but with practice it became easier. We



Common tern nest.



Banding common tern chicks.

recorded the band number, nest number and, with our best guess, which member of the clutch the chick was. If the chicks were all very young, we used flagging tape to mark the nest to capture the adults later for pairing. This was the favorite task of almost everyone. A tern chick makes even those with the hardest exterior melt a little bit.

Pairing the adults is how the island keeps track of the adult members of the colony. These are mated, nesting adults who are tending to a chick/eggs. Since both tend to the nest, you can catch the male and the female, gathering information on them year after year, or providing them with a band so you can do just that. One that Molly captured in her trap was 24 years old, and it was amazing to learn that information for an animal that weighs just over 120 grams. Adults were measured (weight, bill length), their band number and nest location recorded, and then released after 15 or 20 minutes.

Why the wait? It's just about the right amount of time for the other adult to return to the nest from fishing. As I learned, it's possible to trap the same adult twice, even three times, as you go into the next day's pairing. Birds are trapped using a chicken-wire trap with a guillotine-style door held up by a latch

attached to a platform. When stepped on, the platform moves the latch and the door falls behind the bird. Traps are placed over a nest where parents will return for feeding and sitting on their chicks. It's a simple design that works fairly well for its intended purpose; surprisingly, until you come for collection, the birds remain pretty calm inside of the traps as they continue caring for their chicks.

One thing I found fascinating about the common terns was the variation in their sounds, calls, and other noises. Because we heard them 24 hours a day, we noticed distinct variations in their vocalization. I also learned that they aren't kind; they are aggressive to one another, to chicks that are not their own, and to other bird species. We retrieved a dead spotted sandpiper chick from an adult common tern after it had carried it through the air. They were not tolerant of other species near their nests—which made binoculars unnecessary for birding around the island, as we found Carolina wrens inside our sleeping quarters and kitchen, catbirds in our dishwashing area, and song sparrows walking alongside us on the paths.

My greatest privilege was working alongside Joe DiCostanzo and Helen Hays. Helen is humble, kind, admirable, and always forgiving of minor errors in data collection, which I actually found helpful, because I always got it right afterward; she cheered you on as you learned organically. I doubt there is anything she doesn't like (except for nest predators such as night herons and great black-backed gulls). Joe meticulously collected and organized a mountain of data, and double-checked our notes in a lighthearted game of bag/nest BINGO whereby he matched the birds we captured to the correct nest. Joe has made over 600,000 data entries for the island and its nesting birds. His knowledge of the birds on and around the island is extensive, and when someone claimed there was a great shearwater off the island, he found it!

I'm already thinking about returning to the island, but in the meantime, I plan on using what we learned with kids in Brooklyn and beyond. I'll share with them how my week on Great Gull Island fulfilled my own childhood dream of becoming a scientist in the field—and how a species that is more than common in name offers opportunities to learn from wonderful experts and the birds themselves.

To read more about my trip, you can find my four-part series on my blog (part [1](#), [2](#), [3](#), [4](#)).

Monarchs and Milkweed

By Sheila Friedman

Seemingly overnight, the signs of autumn now surround us. Leaves are falling, the days are becoming cooler, daylight is shorter. To our delight, migratory birds have been stopping in our parks to fuel up on bugs and berries. A few monarch butterflies drifted by here and there, but with summer behind us, more and more are appearing in our yards and parks. In coastal areas like Jamaica Bay, Fort Tilden, and the barrier islands, one can see a kaleidoscope of the striking orange and black butterflies. Occasionally, they will pause to feed on nectar from remaining milkweed blooms and other flowers, and then travel on. Monarch migration has begun.

East of the Mississippi River, monarchs (*Danaus plexippus*) will migrate to the mountains in central Mexico. Monarchs to the west will migrate to coastal California. The journey takes them approximately 85 days; they fly an average of 22 miles each day and only during the daytime. It will take at least four generations of the butterflies to travel from the northeast United

“In the end, we will conserve only what we love, we will love only what we understand, and we will understand only what we are taught.” – Baba Dioum

States to Mexico. The larger ones migrate faster than the smaller ones. The closer the eastern monarchs get to their goal—the forests of oyamel fir and pine trees in central Mexico—the farther they are from the plant that nourished and protected them throughout their life cycle: common milkweed.

Common milkweed (*Asclepias syriaca*) is named for the Greek god of medicine and healing. It is believed to have originated in Syria. In summer, large clusters of pink flowers appear on the milkweed plants. One can see them growing along roadsides, in meadows and in “weedy” lots. Their fragrance attracts both insects and humans. Their sphere-like clusters are called umbrels. Each umbrel contains anywhere between 10 to 200 individual flowers, and they are



Monarch butterfly on common milkweed.

Photograph by Robb Hannawacker (Creative Commons).

filled with an abundance of nectar that nourishes a multitude of insects.

The individual flowers are small and highly complex, with numerous internal structures. While there can be hundreds of tiny flowers on a particular shoot of milkweed, very few of the flowers will be pollinated and thus result in pod development. It is this complexity of the flowers that makes pollination a tricky business. The only way for the pollen to leave the inner chambers of the tiny flower is to be carried out by insects. Sometimes, on their way in or out, their legs get stuck and they die on the flower. Despite these hazards, milkweed attracts bugs far and wide as its nectar offers valuable nourishment.

After their flowers fade, milkweed plants produce elongated, pale, green, fuzzy pods that grow skyward. Incredibly, botanists have found that of the 60 to 150 flowers on one plant, only one pod will develop. In the fall, the pods dry and split open, releasing into the air silky threads with attached seeds (on average 226 of them.) Some will germinate, most will not.

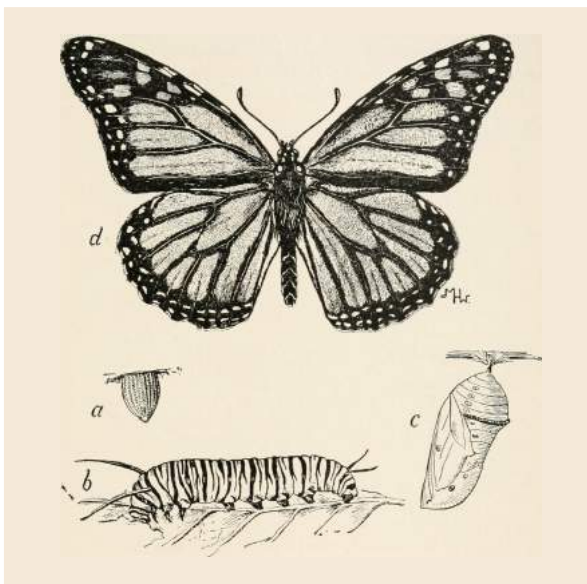
Given all this, the most prolific growth of milkweed happens not by seed dispersal but by underground rhizomes. As the rhizomes spread, shoots develop and new plants emerge. This is called a colony. Colonies have distinct characteristics such as leaf size and shape and color. Spreading by rhizome is the most successful way the plants reproduce.

This plant and monarchs have a perplexing partnership. As its name implies, common milkweed holds a milky white sap in its stems and leaves. The sap contains substances called cardiac glycosides. They are toxic and fatal in high doses to animals that eat it. The milkweed sap causes them to vomit, however, so they learn to steer clear. Monarchs do not, of course.

They are milkweed specialists.

They lay their eggs on milkweed leaves and when the larvae emerge, they feed on it exclusively. The adult butterfly drinks nectar from other flowers besides milkweed, but the larvae do not. When the larvae feed on the leaves, they consume the toxin-filled sap, then pass on the glycosides to adult butterflies. (To avoid eating too much of the sap, monarch larvae have been observed biting into the base of a leaf, and once the sap starts to ooze, crawling to the outside of the leaf.) When the adult butterfly emerges from its chrysalis later in its life-cycle, the tissues of its wings and exoskeletons contain greater levels of glycosides than was present in the milkweed. The presence of this poisonous toxin in its body makes it bitter tasting to natural predators. Birds and snakes avoid eating them; the former have come to associate the monarch's brilliant orange color with this bad taste. Paradoxically, the milkweed plant bestows protection on its predators, ensuring that there will be more predators to feed on it.

Milkweed and monarchs. Their fortunes are intricately linked and have been forever. Milkweed protects monarchs with its toxic sap, making them decidedly inedible to their predators. Monarchs pollinate the milkweed allowing the plant to bring forth more flowers to nourish not only their larvae



but many other insects as well. This balance has been severely disrupted though—by habitat destruction due to logging, pesticide use in industrial farming, climate change—and their populations have suffered precipitous declines.

According to the National Wildlife Federation's blog, this year monarch populations have declined

by as much as 27 percent from last year. In the last 20 years, the NWF puts that number at 90 percent. Logging in the forests of Mexico have stripped adult butterflies of their winter roost. In our country, the use

“One should pay attention to even the smallest crawling creature for those too may have a valuable lesson to teach us.” – Black Elk

of herbicides—like Dow Chemical's “Enlist Duo” or Monsanto's “Roundup”—in agricultural farmland destroys milkweed, and possibly even causes illness in humans. In 2015, California's EPA listed Roundup (glyphosate), which so often enters the food supply, as carcinogenic. Genetically-engineered crops like corn and soybeans have been developed as herbicide-resistant. Milkweed, the monarch larvae's sole food, is not resistant to glyphosate and has been nearly eradicated.

Monarchs, according to the federal U.S. Fish and Wildlife Service, are a “flagship” prairie species. Like bees, they require a pollinator-friendly habitat, rich in nectar sources and milkweed—a habitat that also supports prairie wildlife like grassland birds. In short, thriving pollinator habitats benefit humans and animals. In 2014, the government was petitioned to place the monarch on its list of endangered species. The answer could take years—and then it may be too late.

In the meantime, there are ways that ordinary citizens can help monarchs—by creating pollinator gardens, growing milkweed, counting and tagging butterflies, and telling their story to others. The U.S. Fish and Wildlife Service offers ideas on [its website](#). Other organizations like [Monarch Watch](#), the National Wildlife Federation, the [Xerces Society](#), and [Monarch Joint Venture](#) are educational and suggest ways to help monarchs rebound. The most important is to plant milkweed, and around the country, this is beginning to happen.

There is one caveat. Only native milkweed supports monarch larvae. Varieties of tropical milkweed are not only the wrong type to plant, but could cause parasitic infections. Tropical milkweed (*Asclepias curassavica*) is sold widely in nurseries. Their bright orange flowers grow well into fall months and could disrupt the monarch's migration schedule.

A September day at Plumb Beach

By Paul Chung



Photographs from top (moving clockwise): ruddy turnstone, semipalmated sandpiper, saltmarsh sparrow.



An interview with Rob Bate

By Ryan Goldberg



Rob Bate. Photograph by Tracy Meade.

Last month, after five years at the helm, Rob Bate decided to step down as the president of the Brooklyn Bird Club at the end of 2017. The BBC Council chose his successor: Dennis Hrehowsik, already a well-known figure in the club for his Saturday migration walks and organizing the monthly speakers series. Recently, I spoke to Rob about his time as president and his thoughts for the future of the BBC. This is a condensed transcript of our conversation.

RG: For those who don't know you well—since there are many new members to the club—how did you get into birding?

RB: I have something of a magical story—a lot changed for me when I got into birding. I had stopped working and had gone back to being an artist. As an artist, I would be holed up in my studio for hours or days on end. It was very easy to become isolated. Yet I didn't want to do something that would take me too far away from it, emotionally; I wanted to get some exercise and get some fresh air. And there were some birders in my family; my mom was a backyard birder, but I wasn't introduced to birding other than cardinals and robins, tufted titmice and chickadees. After college I got a Peterson guide and binoculars, and did some birding on my own, but it's hard to learn on your own,

and I quickly lost interest. I didn't even know about migration, you know?

RG: That makes two of us.

RB: (Laughs.) So if you go out birding in the middle of July, you can get really bored and frustrated. But if you go out on May 7, you could have a different experience if you're in the right place. So I signed up for a New York City Audubon walk with Joe Giunta. It was the fall of 2007 and I was living in Manhattan at the time. I met the group at 72nd and Central Park West on a Wednesday morning, we walked into Strawberry Fields and we didn't leave for an hour and a half or two hours. It was unbelievable. I saw my first winter wren, which I didn't know existed, and up in the trees an array of warblers. It was just a magical experience. I hit the ground running and I birded as much as I could. It became an obsession. (Laughs.) It became exactly what I didn't want it to be! It pulled me away from the studio and I haven't really painted since.

RG: How did you end up in Brooklyn then?

RB: Through my wife Tracy, who I met through birding. That spring, in 2008, I went for a woodcock walk at Jamaica Bay. I was waiting in the parking lot for it to start when I saw a car pull up and there was a couple that started to abandon a cat—in Jamaica Bay Wildlife Refuge! It was so many levels of stupidity, I just couldn't believe it. I started yelling at these people, and this other woman who had come for the walk got out of her car and thought I was berating this poor woman. (Laughs.) And she turned out to be my wife. Tracy lived in Brooklyn, we fell in love pretty quickly, and so I moved in with her. She had bought a house there [in Prospect-Lefferts Gardens] and so I ended up living a block and a half from Prospect Park. As you can see, my life changed dramatically because of birding.

RG: How did you become more involved in the club?

RB: It was by degrees. I started birding in Brooklyn. We didn't have the morning walks then. I got to know Peter [Dorosh], Rob Jett, Shane [Blodgett], some other regulars, and I was still birding all over the place, including on Joe Giunta's walks. And I got involved in the issues at Prospect Park. I talked to Peter and asked him if I could go along with Heather

Walters, the club's representative, to meetings of the Prospect Park community committee. There are a lot of stakeholders there, and not everybody is going to be happy all the time, but they really do shortchange habitat. I got involved in conservation issues, I became the representative, I went to city council meetings. I was invited to be on the board, and the very first board meeting was about picking Peter's successor, and apparently they had been talking amongst themselves and thought, 'Maybe we can talk Rob into it.' (Laughs.) Peter did *everything*—he wrote the Clapper Rail, planned trips, booked speakers, oversaw conservation issues—and I wasn't willing to do that, but everybody said they'd pitch in, and so I didn't mind being president. Dennis has agreed to a two-year term, and I'd like to see a spirit of rotation going forward. I don't want people to feel like there is some kind of litmus test they have to pass. Any ideas people want to take on under the umbrella of the bird club would be more than welcome.

RG: Conservation efforts have been a passion of yours. What are the important ones you see on the horizon?

RB: It's always nice to have the Brooklyn Bird Club ready to support efforts like saving Ridgewood Reservoir, which Steve [Nanz], Heidi [Steiner], and Rob Jett were instrumental in. I've banged my head against the wall trying to get the Prospect Park Alliance to control off-leash dogs and protect certain areas with fencing. I can't believe when I see them setting up yet another event in the Nethermead. It's heartbreaking. They do a good job of protecting a lot of habitat, but there are camps that have taken over the south side of the lake, and it's a challenge to turn the corner on those issues. As I step down as president, if nothing else I'll have more energy to devote to our conservation committee, which we set up earlier this year. Four people have already expressed interest in it.

RG: What would you like to see the club do more of, or differently, for beginner birders?

RB: We had that party in the winter at Steve and Heidi's house—remember that party?

RG: It was wonderful. That's where I learned about the Clapper Rail!

RB: It was. That's also when people signed up for the

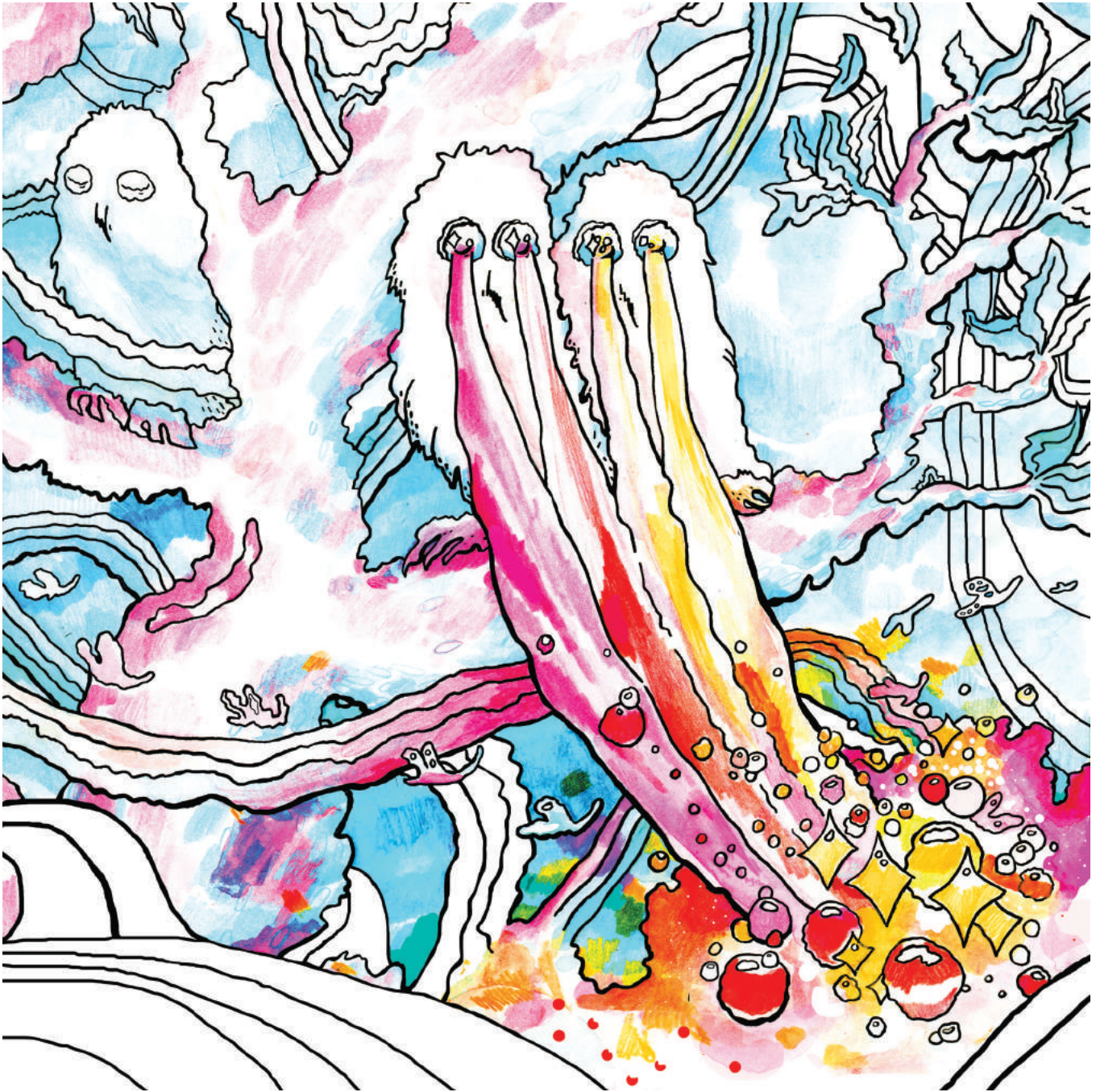
conservation committee. So if we had something like a social committee, somebody to arrange a party at the end of spring migration, for example—these types of events. We're looking for people to do that. Heidi and Janet [Zinn] threw that party and did a great job. We spend our time in isolation not looking at each other, so it's nice to sit down and find out people's last names and what they do.

RG: After making it your home, how would you say birding in Brooklyn fits into the landscape in New York?

RB: We have such rich diversity of habitat here. Manhattan is really stuck with Central Park. They have a hard wall around the entire island. We have marshland, we have shore, we have barrier islands, we have Norton Point in Coney Island which is a great viewing spot for anything that comes up into the canyon. And the concentration around Prospect Park means birds are just funneled into there. We're really blessed. Birding is a great way to see the wild world. Birds are every bit as wild as bears. And they make this fantastic journey twice a year; migration is an incredible feature of nature. And you'll never want for places to go either; I've gone to Myanmar and Antarctica, as well as Costa Rica and Panama. It provides you a reason to go some place. But if you don't want to do that, migration in Prospect Park is unparalleled.



9 Colors. Acrylic on panel by Rob Bate.



Dream-filled owls. Mixed media drawing by Sam Dean Lynn.

My patch: Owl's Head park

By Gus Keri

While birding at Brooklyn's Owl's Head Park on a lovely spring day almost three years ago, a homeless man approached me. We had noticed each other a few times before but never spoke. He had been sleeping in the park with his partner. Seeing that I had binoculars,

he assumed I was a birder and without introduction started telling me about an encounter he had had a few months earlier.

He had seen a bald eagle soaring in the sky and then, out of nowhere, it had dropped down and landed atop one of the tall trees. It stayed for a few minutes before flying off. The man marveled at the size of the wings when the bird sailed above him. I could tell this incident, which had happened around Christmas in 2014, had left him awestruck.

Coincidentally, during that same season, I visited

Owl's Head Park for the first time, birding or otherwise. I had been living in Bay Ridge, which is where the park's located, since 1990. I had often walked Shore Road Park and the Belt Parkway Promenade during those years. But I had never crossed 69th Street at Shore Road. Awkwardly, in the prior 12 years, I had driven by the park on an almost daily basis without registering its presence.

As a matter of fact, I had never even heard the name Owl's Head Park before that winter. And on hearing it, as curious as any birder, I wondered where the name came from. It turns out no one knows for sure. It goes back to before the 17th century.

Some believe owls used to reside in a barn in the area. Others believe the name was stolen from a nearby area to the south where the shore looked like an owl spreading its wings. But the explanation that made the most sense to me is that Native Americans who once lived in the area kept a pair of stone owls at the entrance gate to their camp. Today, there are stone owls on the tops of buildings lining Third Avenue, not far from the park.

I had visited a few parks since I began birding in the summer of 2013, but I had never gone out in my own neighborhood. I didn't realize that such small parks (Owl's Head is only 24 acres) could be worthwhile for birding; and besides, I felt embarrassed to walk out of my building with binoculars hanging around my neck.

So, that winter, I decided to expand my birding experience to include these parts of the city. I walked along the Belt Parkway Promenade to the American Veterans Memorial Pier and then up to Owl's Head. It was a brief trip and I saw nothing of note. I didn't go again for another three months; it was one of the worst winters I'd experienced

in New York.

Then, magic happened in the spring. In late April, on my fourth visit to the park, I saw one of the most beautiful birds I'd ever seen in my young birding life: a blue-winged warbler. It wasn't a life bird but I'd never seen it so close and so clearly. And I was lucky to have with me the camera I'd bought a couple of weeks earlier. I got the photo to eternalize this special moment, memorializing the spark that ignited my love affair with the park. I have been a regular visitor ever since.

Owl's Head is a small quarter-circular park located in the northwest corner of Bay Ridge, bordered by 68th Street to the south, Colonial Road to the east, and Shore Road Drive (which runs parallel with the Belt Parkway at exit 1) to the north and west. It's a friendly neighborhood park that has a playground, basketball court, and skate park in the northeast corner and dog park in the southwest corner. But most of the park consists of a forest-like hill that covers the whole northwest side and an open flat terrain in the center. Both are wonderful for birding.

The slope that spans from the southwest corner to the northeast corner has trees of various types and sizes. It feels like a small forest, and walking through it you end up feeling as if you're on a hike in some mountainous area. Beware of the hiking path, though! It's steep in certain spots and sometimes you have to cut through overgrown plants and fallen trees. But don't worry, the paved paths around the hill are similarly good for birding. In the forest hill, you can find all kind of passerines—warblers, vireos, wrens, tanagers, grosbeaks, orioles, woodpeckers, and thrushes.

On the top of the hill to the west, there is a small semi-circular promenade featuring the tallest trees inside the park. This area



Top: Metal owl sculpture.
Bottom: the open, flat terrain and the forested hill.
Photographs by the author.

is also good for similar birds, and from here you can see the aforementioned pier and the Owl's Head Wastewater Treatment plant (or Owl's Head Water Pollution Control plant) at the Belt Parkway. You can spot gulls, terns, and waterfowl from here. Last winter, on occasion, this was the only place from which you could see the rare black-headed gull that wintered in the area.

The flat terrain (or mild slope) that covers the central span of the park is a wonderful place for sparrows, finches, swallows, flickers, buntings, meadowlarks, and blue grosbeaks. The trees along its south side often house nuthatches, flycatchers, bluebirds, crows, ravens, and raptors.

As Owl's Head became my local patch, I kept hoping for a sight of that legendary bald eagle. Every time the homeless man saw me, he'd retell the story, to the point where I became bored with it. He'd spread his arms, emulating the bird in flight, and I could see in his eyes his dream of flying like one. Isn't that everyone's dream, too?

Sometimes I think God must like this man, or perhaps pity him, to have allowed the bald eagle to show up for him and nobody else. I'm not religious, but sometimes I can't help but think that the poor really

are blessed. Or could it be the pure of heart?

On eBird, no one has reported seeing a bald eagle in the park, not even in flight. As a matter of fact, since 2006, 181 species have been reported on eBird. I have been lucky to see 122 of them. None were an eagle or even an owl, as the name of the park suggests.

I haven't seen the homeless man or his partner in over a year. Just before they disappeared, the man told me that he was back working. I feel cautiously happy for them, and I like to think that they are doing well now. His singular bird still hasn't appeared, but I keep looking for it in the tops of these trees. Maybe one day I'll be as blessed, or as pitied, as he was on that unforgettable day.

Getting there:

Owl's Head Park is easily accessible by public transportation, cars, and now NYC ferry. By subway: the R to 68th Street and walk three blocks west. By bus: B9, B64, X27, X37 to Bay Ridge Ave. at Colonial Road or Shore Road and walk one block north. By car: exit 1 on the Belt Parkway. By ferry: Bay Ridge stop at American Veterans Memorial Pier and walk one block north on Shore Road.



Piping plover. Watercolor and pencil on paper by Jennifer Kepler.



Fall migration brought seemingly higher-than-normal numbers of Cape May warblers to city parks. Photograph by Mike Yuan.



Juvenile pectoral sandpiper, on the club's September trip to Jamaica Bay. Photograph by Mike Yuan.

Naturalist's column: the ginkgo tree

By Nancy Tim

It's mid- to late October and while you're out birding and enjoying the colorful fall foliage, you come up on this beautiful tree covered with buttery yellow leaves. You stop to admire it and, oh, what's that horrible putrid smell? Well it's the ginkgo tree and its ripe fruit is to blame for that malodorous scent.

The ginkgo (*Ginkgo biloba*) is also known as the maidenhair tree since its leaves somewhat resemble the fronds of the maidenhair fern. It's a living prehistoric

link between conifers, tree ferns, and cycads. It once ranged worldwide—during the Paleozoic Era—and flourished in America, Australia, Europe, and Asia, but by the Ice Age, had begun to decline and only remained in the eastern forests of China. It is the only living species of the ginkgo family. It has been found in fossils dating back millions of years.

It is thought that the ginkgo is a misspelling of the Japanese “gin kyo,” which means silver apricot, an apt description of its seeds once the fleshy pulp around it has been removed.

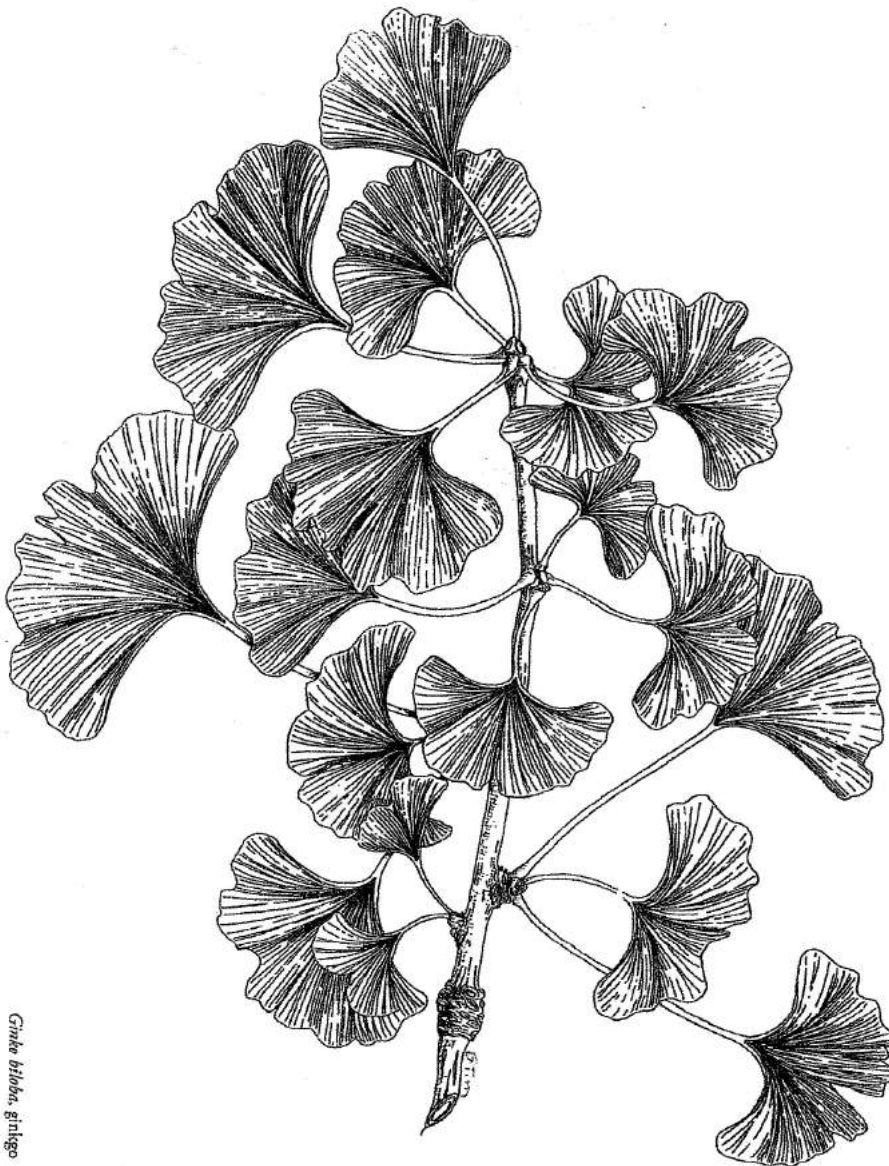
There are male and female ginkgo trees. Often those bearing male flowers tend to be more upright in shape, while those bearing female flowers tend to have wider shapes and crowns. The male tree is therefore more suited for street plantings—and because only the female trees produce the messy fruits.

The ginkgo flowers appear at the tips of the short leaf branching and, as the tree must be several years old before flowering, the flowers aren't usually visible as they're too high up to be seen.

The fruits are globe-shaped with a fleshy layer covering a hard, grayish, white shell that contains the edible kernel of the seed. When mature in autumn the fruits fall to the ground and the ripe, fleshy layer accounts for the putrid odor.

Many Chinese use the seed kernel in soups, stews, and other dishes, but the outer coating must be removed first with disposable gloves—as you are wont to see in parks this time of year—since the chemicals on it cause an allergic reaction similar to poison ivy. Also, nobody wants to take home that unpleasant odor.

There are some beautiful ginkgo specimens in Prospect Park of both sexes. Which is which? Oh, you'll find out as soon as you get near the tree, but be sure to enjoy this living fossil's autumn gold color and marvel at the fact that it has survived millions of years!



Ginkgo biloba, ginkgo

Sparks!

By Ed Crowne



Not so long ago I was leading a birding walk in Prospect Park. Someone inquired when I first became interested in birds. I answered, a little truthfully and a little flippantly, “When I opened my eyes.” But here is a better version:

My wife and I bought our second home first, in 1980. (Five years later we acquired our first—and only—first home in Brooklyn.) Our first second home was located in a very small town in the western Catskills, less than half a mile from the Delaware River, which separates New York from Pennsylvania. There were lakes, rivers, bogs, mixed hardwood forests and dairy farms nearby.

Our house was over a hundred years old. One morning in June 1980, I was renovating a room on the second floor when my eyes fastened on a small blue and yellow bird moving about in a maple sapling whose leaves gently brushed against the window. I still remember how beautiful this animated and acrobatic creature seemed to me. I was wholly captivated and engaged. After craning in for a better look and noting some details, I went to consult our nascent collection of natural history books. I found among them the *Audubon Field Guide: Eastern Land Birds*, by Richard Pough, with illustrations by Don Eckelberry. Leafing through Eckelberry's plates, I found the bird: a parula warbler, *Compothlypis americana*. Many already-present strands swiftly coalesced in this moment: intellectual interests in natural history; the opportunity to pursue those interests; active and frequent engagement with the natural world.

Here too was my invitation to pay much closer attention. I had already had more than average amateur experience sorting through identifications of butterflies and other insects and various reptiles and amphibians. And I had had some close encounters with a few memorable caged birds. Oddly, although I was raised less than hour's drive from Cape May, I can recall no effort made by education, family or friends to introduce me or anyone I knew to birding. So I had to make up for lost time.

Art appreciation and music appreciation courses contributed their fair share to my immediate response. And I had just begun giving closer scrutiny to plants, trees. Birding, I soon realized, meant looking at leaves, lots of leaves, far more leaves than birds—though not with the same attention to detail. So birds appeared as a natural extension and continuation. But there was also an exclamatory element, a pulse, that after several years of life in Manhattan reconnected me to

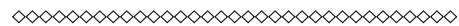
the wildlife I had known in earlier, formative years.

Yet I soon recognized that something was missing. Pough: "For serious field work a binocular is almost indispensable." Not every bird, I realized, would be so confiding as this first warbler. Soon, with the benefit of binoculars, I was able to bring more life, bird life especially, into focus. There were many dots to be connected. Just the kind of natural-order detective work and play I knew I would enjoy.

Of course, I soon began to note with deepening interest the sounds of birds. This added dimension would only increase in value as the years went by. It would be five years of solitary birding until we moved to Brooklyn and I bridged the gap to other birders. New and exciting avian avenues opened up to me thanks to their multitude. I leaned on and learned from them.

After twenty years we exchanged our first second home for our second, second home. This one was further south in the same environment where I spent my time before college, nearer to the south New Jersey coast and a whole new cast of avian characters. So, thanks to an initial tropical migratory bird connection, for as long as I am able: to be continued.

Previous page: *Parula*. Mixed media drawing by Sam Dean Lynn.



Green heron in Prospect Park. Photograph by Ann Feldman.



The Pond Cypress forest.
All photographs by the author.

Sunshine State birding: Corkscrew Swamp Sanctuary

By Adam Nashban

Last March, my wife Amanda and I were halfway through the 2.25-mile boardwalk that makes up most of Corkscrew Swamp Sanctuary when we heard, “*Who cooks for you...who cooks for you all,*” the haunting, almost electronic bellow of the swamp’s resident star: the barred owl. We had finally heard the call of our prize jewel of the trip. But where were they? And how could we see them?

Corkscrew Swamp is an Audubon-run preserve in northern Collier County, about 45 minutes from Southwest Florida International Airport in Fort Myers. My mom Lynn lives in nearby Naples, and I had told her that during our visit we wanted to take her birding. Her father had lived in the house she now occupies and he had passed his passion of birdwatching to his grandson. But on this trip she got a sense of how I had adopted it with a similar fervor.

We needn’t set our alarms: a raucous mockingbird outside our window woke us up at five. It was cool but sunny, in the low 60s, and would turn into a perfect

day for birding by going into the upper 70s. It was a 30-minute drive to the sanctuary, and as beautiful as rural Florida is, the sprawl takes its toll on the outsider. (Does every community need to be gated and the size of a small town?) It was a marked contrast to the pristine wilderness that is Corkscrew Swamp.

We arrived at eight and as it was early, the main reception desk wasn’t open yet. We paid our entrance fees (\$14 each, good for two days) in the gift shop. To reach the boardwalk you have to walk through the main building, which tells the natural history of south Florida, highlighting the heron and egret population crashes during the fancy hat craze of the early 1900s. Feeders that often attract painted and indigo buntings were quiet that morning.

The main way to traverse the boardwalk is clockwise, so at the first junction, we went to the left. Florida as it once was revealed itself—towering pines, cypress groves, wet prairies, marshes. We ran into a great-crested flycatcher that was briefly joined by a trio of warblers: yellow-throated, pine, and palm. I felt my excitement wearing off on my birding companions when they kept asking, which warbler is that? Next we came upon the bunting house, which also has feeders; we saw a local red-tailed squirrel, but no buntings. Strike two.

Along the southern side of the boardwalk there are two observation decks—one over the wet prairie,



Lettuce Lakes in the dry season.

the other over the central marsh. Between the two lies the Bald Cypress Forest, which is where you find the Lettuce Lakes. Before moving into that denser habitat, we saw Louisiana and Northern waterthrushes, a juvenile yellow-bellied sapsucker, multiple black and turkey vultures, a swallow-tailed kite and, with time to analyze it, a perched red-shouldered hawk. The Lettuce Lakes, because of the dry season and scarcity of water elsewhere, offered an incredible number of birds in a small area: great and little blue and yellow-crowned night herons, snowy and great egrets, anhingas, white ibises and the crowd-pleasing roseate spoonbills. I reflected that few other places outside Florida offer such a bounty of wading birds. The one missing was a limpkin.

And then we heard the barred owls. We searched and searched, but couldn't find them, and reluctantly left the Lettuce Lakes. We found white-eyed and blue-headed vireos, a black-and-white warbler and northern parula, singing Carolina wrens and heard a pileated woodpecker. It was a glorious day and the sights and sounds were unforgettable.

How could you ask for more—and yet, not being able to see the owls gnawed at us. Sitting on the beach the next day, I was reminded that I married the right non-birding woman when Amanda insisted that we go back to find them. This time we knew a few tricks. We arrived two hours before the sanctuary closed, which didn't feel like shortchanging ourselves since our receipt was good for two days. It was as if the folks who run Corkscrew—clearly birders themselves—planned for this very situation. We were back on the boardwalk in no time.

Lo and behold there were painted and indigo buntings at the feeders. Since we knew where the owls were we went right at the fork instead of left. Halfway to the Lettuce Lakes there is an area where you come

out of the pine forest and into the wet prairie. Scanning the prairie we saw a pileated woodpecker fly from one side to the other. Simply majestic.

Reaching the Lettuce Lakes, we saw a limpkin not far from the boardwalk. We watched it for minutes and were captivated as it flew from one side of the marsh to the other. A noisy red-shouldered hawk came flying overhead, and then again we heard the barred owls calling to each other. The calling was close, so we continued down the boardwalk, in the process missing a sign that told visitors where the owls were usually seen. We spoke to a ranger who couldn't tell us more, leaving us to admire the nearby waders with a measure of disappointment.

Then, a quiet older woman who witnessed this interaction gestured to us to follow her just 15 feet past the ranger. She pointed about 20 feet above the boardwalk, in a group of trees filled with Spanish moss, to a pair of owlets. They looked almost like their adult companions, but much fuzzier—Spanish moss-like fuzz—still sporting their young down. We spent the next 30 minutes in awe of these magnificent little creatures, and even though we didn't see the adults, we thought about how this was only one more reason to return to Corkscrew.

Postscript: The sanctuary suffered significant damage from Hurricane Irma last month and is temporarily closed. To read about or support its rebuilding efforts, please visit [its website](#).



Barred owlette.

Tribute in Light

By Jennifer Kepler

We pay our respects to those who fell along with the towers on September 11th in so many ways, as we never forget. In the days leading up to the anniversary, one reminder is “Tribute in Light”—two beams of light that pierce the night sky where the Twin Towers once stood. It can be seen from miles away, and as a result, comes with a price for migratory birds.

NYC Audubon has done an amazing job working with Michael Ahern Production Services, Inc. and the National September 11 Memorial and Museum in ensuring a safe flight for birds by monitoring the beams. The science behind why birds are attracted to, then disoriented by and trapped in light is still largely unknown; so until we have more answers, it’s important to guarantee birds safe passage through the night.

During this year’s monitoring, the heaviest numbers of birds came at night between 9:30 PM and 12:30 AM. When birds number over 1,000, or show signs of being trapped in the beams, or fall dead from the sky, the lights are turned off. Lights are kept off for 20 minutes so that birds can disperse and continue their

flight, utilizing radar to confirm their dispersal. On the following night, the beams were turned off on three occasions: at 9:49 PM (low-flying birds), 10:55 PM (count over 1,000), and 12:30 AM (low-flying birds). Over the course of the night, NYC Audubon staff and volunteers counted 4,383 birds until the beams were shut off at 6.

Volunteers help monitor and count the birds as well as non-avian fliers like insects and bats. I signed up to volunteer and the only requirements were an orientation and a commitment to wake up very early or very late (depending on your shift) and huff it to the Battery Parking Garage at the bottom of Greenwich Street. I participated in the 2-4 AM shift.

We saw few birds—a cuckoo and yellow warbler—plus bats and a mass of insects, so we never had to shut off the lights. But it wasn’t your typical birdwatching. We lay down to make it easier to look up—a yoga mat or sleeping bag was a standard accessory. It also gave us the privilege of being close to the beams; from there, they are impressive.

To volunteer next year, contact NYC Audubon. I want to thank NYC Audubon for providing this opportunity, the data for this article, and safe passage for migrating birds.



Birds in flight through “Tribute in Light.” Photograph by Jennifer Kepler.

Reading nature: Bernd Heinrich and Noah Strycker

By Janet Schumacher

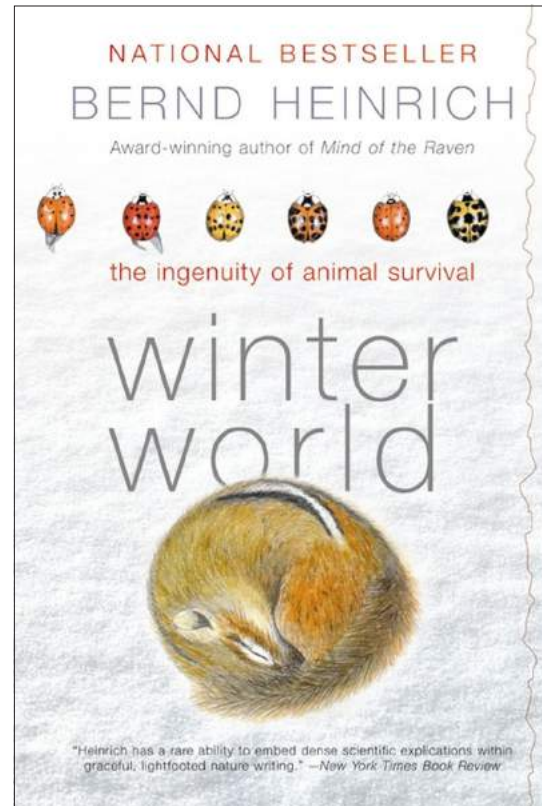
I travel far to see new birds, but I find observing the behavior of local birds equally fascinating. The other day I almost stepped on a ruby-throated hummingbird, motionless in the dirt path in the Brooklyn Botanic Garden's native garden. I saw that it was alive and I picked it up to warm it in my hands. It remained very still. A passerby offered it a jewelweed flower; we were next to a large patch where two other hummingbirds were claiming territorial rights. The hummingbird had no interest in the flower. After a while, I cautiously set it on a fern branch next to the jewelweed. It zoomed off, astonishingly revving up from immobile to high speed! The young bird was seemingly uninjured. As there are no buildings nearby, I am assuming that it was either exhausted or stunned from sparring with the other hummingbirds.

When I'm not birding, I enjoy reading about bird and animal behavior. Bernd Heinrich is a master nature writer. He has written at least 20 books, chronicling behavior, physiology, and ecology. Two of my favorites are *Mind of the Raven* and *Ravens in Winter*. To attract ravens, he hauled road-killed deer up in the woods near his Vermont cabin. Early on freezing mornings, he climbed high in pines overlooking the kill, waiting the arrival of ravens. Equally interesting to me was his *Geese of Beaver Bog*—and Canada geese are one of my least favorite species. Heinrich is such a keen observer that he was able to recognize individual geese by their facial patterns.

Heinrich is also an accomplished illustrator, and a number of his books feature his fine line drawings. His work is the result of countless hours of observation without the distraction of internet or TV in his Maine cabin. He facilitates his opportunities to the extent of welcoming a pair of flickers drilling a nest hole in his cabin wall. At night he removed a portion of the inner cabin wall, inserted a platform board for the nest, and put glass in the inner wall so he could watch the family.

Despite his obvious interest in birds, his research focus has been on bees, primarily thermoregulation and their adaptation to the environment. He is currently professor emeritus of biology at the University of

Vermont. *Winter World* describes how even the tiny golden-crowned kinglets are able to survive below freezing temperatures. Heinrich has applied this research to his own body, recording his experiences as a marathoner and later as a competitive ultra-marathoner, on occasion running days across inhospitable terrain.



Some years ago Heinrich was the featured speaker at a meeting of the Linnaean Society in Manhattan. Anticipating his talk, I grew dismayed as I watched his allotted hour eaten up by a contentious board election of the society. Rather than vote and move on, there was an endless discussion over whether the vote should be a show of hands or a paper ballot. Heinrich patiently waited. On reflection, I realized that he probably was more interested than annoyed by this display of quarrelsome New Yorker behavior and not as disappointed as I was.

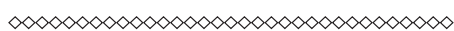
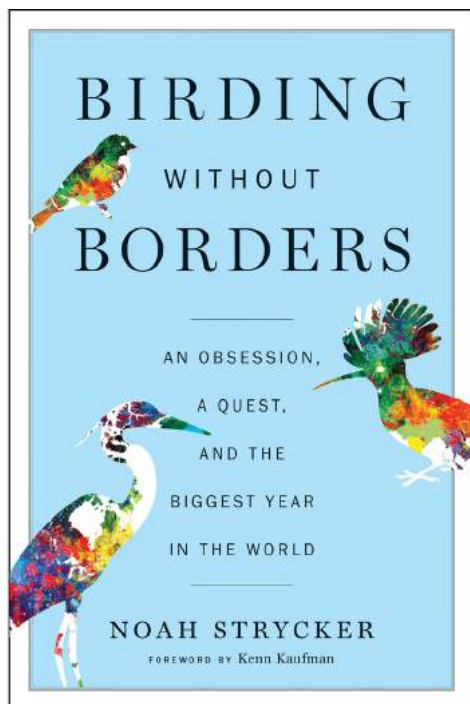
On a brighter note, Noah Strycker was an engaging and dynamic speaker at a recent Linnaean meeting. In 2015, Strycker set a world record by seeing 6,042 species of birds—more than half of the world's species. Equally important to his record-setting feat was his determination to engage with local birders in the seven continents and 41 countries he visited. Each bird he counted had to be seen with a local birder. He didn't rely on major birding tour companies to smooth his way, but instead meticulously planned the

route himself. This approach led to many interesting encounters and experiences, which he was only able to touch upon in his talk.

To stay nimble, Strycker traveled with a carry-on backpack, more than half of which was filled with a scope and camera. He had loaded his phone and laptop with pages from the many area field guides. He started his big year in Antarctica, where he was working as a naturalist on a cruise ship, hoping that his first sighting would be a penguin, to highlight global changes. But he wasn't too disappointed that a Cape petrel, one of the loveliest birds Antarctica has to offer, took that spot. A chinstrap penguin was number four.

Houghton Mifflin funded his quest, so after a long day of birding, he had to keep his notes up to date. He said that after a brief summer stint in northern Europe, when it never gets dark, he was happy to return to the tropics and early sunsets. In response to a question from the audience, Strycker said that despite the grueling pace, he never experienced burnout. The morning after his big year ended, as usual he woke up at five and went out birding.

Strycker's *Birding Without Borders* is supposed to be published this month. I anticipate that it will be a lively read, not only for the many rare birds he saw, but also for the stories of the dedicated and generous birders who helped him succeed.



On Oct. 5 at Floyd Bennett Field, Heydi Lopes spotted a clay-colored sparrow and then, not to be outdone, a mega-rare yellow-headed blackbird that attracted birders from around the city to southeast Brooklyn for several days.

Upcoming Brooklyn Bird Club programs

Tuesday, November 14, 2017 at 7 PM

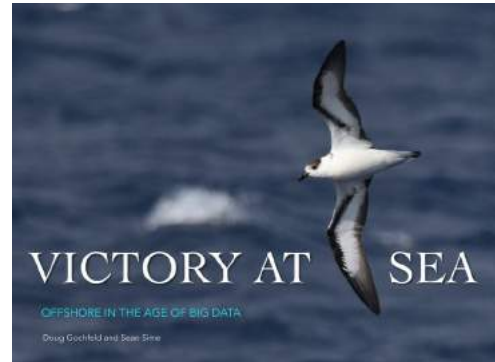
Steve Nanz and Janet Zinn present: “Wild and wonderful Cuba!”



Birders have been quick to take advantage of easier access to Cuba by U.S. residents, drawn to its 27 endemic species, warm Caribbean weather, and fascinating culture. Last March, four Brooklyn Bird Club members traveled there together in search of birds, music, and of course, mojitos. Join Steve Nanz and Heidi Steiner, Janet Zinn and Alan Baratz, as they recount their trip in photos and answer your questions about traveling to this warm, friendly country.

Tuesday, January 16, 2018 at 7 PM

Doug Gochfeld and Sean Sime present: “Victory at sea: Offshore in the age of big data”



Join pelagic junkies Doug Gochfeld and Sean Sime as they discuss how Brooklyn became the “go deep or go home” pelagic mecca, and how analyzing seabird data Atlantic-wide has paid immediate dividends in N.Y. waters.

*Programs are held inside the Information Commons at the Brooklyn Public Central Library at Grand Army Plaza.

Below: Young least tern at Plumb Beach. Photograph by Adam Nashban.





American kestrel at Coney Island Creek Park. Photograph by Sean Sime.