

Summer 2024 Vol. 43, No. 2

Summer Spotlight: Wetlands

A celebration of wetlands and the birds that call them home.



In the summer of 2024 Pied-billed Grebes nested at Pickering Ponds in Rochester, NH. These birds breed in low numbers across the state. Their name comes from the black band on the light colored bill of adult breeding birds—pied means having two or more colors. Photo by Kathryn Carson, 7-31-2024.



Look for Willow Flycatchers in wet, shrubby areas. They are one of the infamous Empidonax flycatchers, so listening for their song—fitz-bew—is key to identification. Photo by Kyle Wilmarth, 7-14-2024, Salem, NH.



Black-crowned Night Herons will eat just about anything—fish, eggs, turtles, you name it! And if you're wondering about the missing hyphen in "night heron," that's no mistake—the American Ornithological Society officially dropped it in 2024. Photo by Cameron Johnson, 6-30-2024, Dover Community Trail, Dover, NH.



A fledgling Barn Swallow rests on a cattail. Notice the bright yellow gape near its mouth—this feature helps young birds receive food from their parents but fades as they mature. Photo by Kyle Wilmarth, 6-28-2024, Salem, NH.

How far does a Least Bittern's neck go?





Least Bitterns are masters of staying hidden, but their distinctive chuckling "coo-coo" call gives them away. With a little luck (and patience!), you might even get incredible views like these. Photos by Kyle Wilmarth, 7-14-2024, Salem, NH.



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Becky Suomala (left) and Lindsay Herlihy (right) banding a Wood Thrush. Photo by Lindsay Herlihy.

IN RECOGNITION OF

Rebecca Suomala

This issue of *New Hampshire Bird Records* is in recognition of Becky Suomala and her amazing career of 37 years at NH Audubon. Becky is an outstanding birder, conservationist, and friend to many. Becky, thank you for all you've done for *New Hampshire Bird Records* as editor and for birds and birding in New Hampshire.

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From the Editor

SUMMER 2024

NESTING SEASON

Summer is finally here—a season of excitement, growth, and discovery. Though brief, it's a crucial time for birds as they raise their young. Look closely, and you'll see parents carrying food for hungry mouths, fledglings testing their wings, and perhaps a surprise or two.

This issue celebrates the wonder of nesting season. I loved hearing about Pam Hunt and Unity Dienes, Tom and Sue Santeusanio, and Kathryn Frieden's experiences watching nests. I hope you enjoy Melissa Moore's article on Project NestWatch, which may even inspire you to start your own nest observations this summer. If you're fascinated by bird coloration, don't miss Emma Stogsdill's article exploring the dazzling world of avian color.

I'm also excited to share stories that highlight the incredible diversity of birders in New Hampshire. This issue features voices from both new and seasoned birders, including two new contributors to *New Hampshire Bird Records*, Meera Mahadevan and Wesley Moore.

One of the biggest birding highlights of summer 2024, at least in terms of rare sightings, was the Bridled Tern that graces our cover. This extraordinary find also inspired our editorial team to take a closer look at tern research in the Granite State. We owe admiration and gratitude to the dedicated researchers on the Isles of Shoals who work tirelessly to study and protect these seabirds. A warm welcome to Ellen Estabrook, who offers a unique perspective through our new *A Day in the Life* feature.

Finally, this issue is dedicated to Rebecca Suomala, former editor of *New Hampshire Bird Records*. Becky's contributions to the birding community are immeasurable, as you'll read in the following article. Her passion, dedication, and leadership have left a lasting legacy. Thank you, Becky, for everything.

Wishing you all a wonderful summer filled with exciting sightings!

Grace McCulloch, Editor

Interview with a Birder: Becky Suomala

by Kathryn Frieden

Anyone involved with NH Audubon, a reader of New Hampshire Bird Records, or a longtime birder in New Hampshire needs no introduction to Becky Suomala. As she retires from her 37-year career at NH Audubon,



Becky birding in Alaska, June 2024. Photo by Mark Suomala.

her accomplishments are too numerous to list here and have already been celebrated by her friends, co-workers, and—yes, this is accurate—her admirers.

Personally, I'd like to say that after I became a "retiree" ten years ago, the best decision I made was to start volunteering for Becky. I have learned so much from her—from bird information to eBird data management to everything I know about Excel spreadsheets. And when she gave me the title of "Publication Assistant," I learned everything I know about publishing.

Many of you may not know that Becky is a juggler—not just literally, but also in her ability to manage the schedules and activities of a myriad of volunteers with consummate organizational and personal skill. The fact that she had so many volunteers is a testament to both her good nature and her excellent mentoring.

In addition to her successful NH Audubon career, it's probably common knowledge that Becky is also a skilled vegetable gardener—one who generously shares her harvest. But did you know she also has professional flower-arranging skills?

How old were you when you became a birder and what got you started?

My mother was a birder, so I grew up knowing the yard birds that came to the feeders. I can remember seeing an American Redstart when we were at our summer place in Maine and going home to ask her what it was. In fact, she encouraged my interest in all kinds of plants and animals. She would bring Monarch caterpillars into the house and take photos of them making a chrysalis and then coming out of the chrysalis. Of course, sometimes they escaped and

would be walking all around the dining room. My mother and I also used to collect moths at night in the woods with a sheet and a moth light. There was always something going on. My sophomore year in college was when my early interest and growing knowledge came together. That was when I met Mark Suomala, and we developed our involvement with birding together.

Do you have a favorite sighting that comes to mind?

My claim-to-fame is finding a Black-throated Gray Warbler on Star Island in the Isles of Shoals. I was doing my master's thesis research while running the banding station on Star Island in the fall of 1999. It is the only record of this species in New Hampshire. I managed to get the two people helping me to see it, because for a first state record to be approved you need three observers if there is no photo. Back then, photos were not always as helpful! Unfortunately, due to high seas stirred up by a hurricane, no one on the mainland was able to get to Star Island to see the bird (sorry, Steve). Another really exciting sighting was the Black Rail found by Matt Tarr in 2003 that a few organized groups of people got to see. I still remember hearing it call "Kickie-doo, kickie-doo!"

How many birds are on your state list and what do you hope for next?

I haven't put all my old sightings into eBird yet, so I don't know exactly how many there are—maybe I will do that soon. There isn't a usual New Hampshire bird that I need to see, but there are a few mega-rarities that stand out as big misses for me, such as the Ross's Gull in 2018 and the Magnificent Frigatebird in 2021, which I missed by only about 20 minutes. Those were both one-day wonders, but I also missed Brown Pelican, which has been seen in the state at least three times.

Do you have a New Hampshire "nemesis" bird?

I think the Brown Pelican qualifies as my nemesis bird for the state for now.

Editor's note: A nemesis bird is a species that a birder has repeatedly tried—and failed—to see, often despite numerous attempts.

If there was only one place in New Hampshire where you could go birding where would it be?

My two choices are Pondicherry National Wildlife Refuge in Jefferson and East Inlet Road in Pittsburg. If it were winter, then it would have to be the Seacoast.

What changes have you seen in birding over the years that you think are the most significant?

It has been interesting to see the invasion of southern species into New England. For example, back in the 1990s when I was starting at NH Audubon, a Red-bellied Woodpecker sighting required documentation. Now they are commoners. Technology has of course brought huge changes to birding itself. When I started there was no instant way to find out when a rarity was seen.

There have also been species in decline. I study one of them, the Common Nighthawk. When I started that study, I remember bringing my dad to the State House in Concord to listen to nighthawks in the evening. They are not there anymore, but even commoners such as Ovenbird and Wood Thrush are not heard as often as they once were.

One positive change has been the restoration of nesting terns on the Isles of Shoals. Now you can see Roseate Terns in Hampton Harbor! I also remember the excitement of seeing the first nesting pair of Peregrine Falcons in the state on Frankenstein Cliff in Crawford Notch, and also, that first Bald Eagle! It made a big impression on me, that this was the result of someone's really hard work. We see successes in some of the species we have worked on, but in the conservation realm the solutions are much more complicated now. These often need international cooperation and it is much harder to figure out what to do.

Any ideas for future birding now that you are retired? Do you have a United States target bird?

I don't have a target bird in the continental US, but there are certainly ones I'd like to see again, such as some of the birds that nest in the plains, like Sprague's Pipit and Baird's Sparrow. Perhaps, I'd have some target birds in Hawaii. I would like to do more owl surveys, especially in northern New Hampshire.

Do you have any advice for young or new birders?

- 1. Get a good pair of binoculars!
- 2. Go out in the field!
- 3. Assume it is something common, not a rarity, but if you think it is a rarity, take a picture!
- 4. Learn birdsong by listening in the field and then chasing the bird down. Once you learn the common bird songs, you'll know when something sounds different.

What are some of your thoughts about birding?

Birding can be a saving grace. For example, during COVID it was a way to be outdoors and be safe with other people. It is something I love and enjoy. When the road gets rocky, being outside, looking at birds, helps me get through tough times. Enjoying birds means a great deal to me. Birding has also taken me to some spectacular places I would never have gone to otherwise, and led me to some great people, especially the birding community of New Hampshire.

June 1 through July 31, 2024

by Jason K. Pietrzak

During the summer of 2024, a total of **246 bird species** were reported in New Hampshire—the fifth-highest species count for the season and slightly above the two-decade average. This continues a broader trend in recent years of increasing species diversity. Notably, many of the most interesting birds were associated with water.

Photo Quiz

by Greg Tillman



Leading up to the summer of 2024, New Hampshire experienced record high temperatures, and the summer continued that trend with July being the hottest July on record, 3.5°F above normal. Hurricane Beryl (a historic storm) made landfall far away in Texas, yet still produced

extreme rains that damaged towns and roads in northern New Hampshire, including those favored by birders searching for North Country specialties.

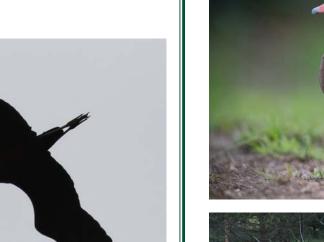
This season summary is split into two sections: the first highlights the rarest and most notable state-wide bird reports, listed chronologically. The second follows the more traditional, taxonomic ordering, and presents species highlights, breeding reports, and other information.

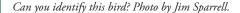
In writing, I primarily relied on the Cornell Lab of Ornithology's eBird for contemporary reports of birds. I also heavily referenced *The Birds of New Hampshire* by Keith and Fox for bird records prior to 2010. For species accounts, I used Cornell's Birds of the World website. Throughout the season David Sibley's app, *Sibley Birds V2*, was always at hand.

Rare and Notable Vagrants

Chronological Order

On June 10, Harry Smith reported an astonishing 21 Black-bellied Whistling-Ducks from his backyard farmyard in Epping. The ducks were associating with his chickens and swimming in his pond! A handful of birders were able to see the birds that day and the next, with the high count being 23 individuals. Black-bellied Whistling-Ducks have been





Fair warning on this challenge: I'm not sure we can confidently identify this to species, but let's see how close we can come. Photo taken in May in Strafford County, NH.

See the answer on page 39.





Black-bellied Whistling-Duck up close (by Cameron Johnson) and as a group (by Dan Prima). Photos taken in Epping, NH, 6-10-2024.

seen in New Hampshire before. In June of 2011, a group of golfers reported a flock of five at a golf course in Salem. More recently, in June of 2021, a flock of six was found in Exeter and hundreds of birders were able to see them over a week's time. Later that year, in August of 2021, a single bird was found in Rochester and a pair briefly returned to Exeter. This species' range is typically far south in Texas and Florida, but it has been expanding northward in recent years. The 2024 flock of 23 birds is a remarkably high count for this region.

A **Swallow-tailed Kite** reported by Marge Stevens on June 29 in Portsmouth, flying over I-95, was the second report for the year, but the first summer report of the species since July 2022. Prior to that, there have been a small handful of reports of this species all over the central and southern parts of the state since 2011. One individual spent several days in Webster in 2020. This is another species that has recently been expanding its range northward from a historic population in the southeastern US, though vagrants have been reported in New Hampshire as far back as 1875!



The Bridled Tern by Patrick Gritton, 7-9-2024, Seavey Island, NH.

The rarest and most exciting species of the summer of 2024 was the **Bridled Tern** reported from White and Seavey Islands in the Isles of Shoals on July 9. It was first spotted by Shoals Marine Lab (SML) staff members Patrick Gritton, Gemma Clucas, and Joe Brosseau, and then many others as it remained until August 4. This is the first state record for this warm, tropical tern. Only a small handful of records are known north of Cape Cod. See more about this bird in this month's feature on page 10.

Lastly, a **Western Kingbird** was found by Russell Ward in Gilmanton on July 21. This is always a noteworthy species in this state, but especially so in the summer, with the last summer report a decade ago in 2014. The only other summer report was in 2000. Western Kingbird is a species breeding in the western US but with uncommon vagrancy all across

the east. They are typically reported somewhere in New Hampshire every fall.

Highlights by Family

(Generally in Taxonomic Order)

Waterfowl and Loons

A **Snow Goose**, far behind schedule, was reported from Londonderry by Michael Medeiros on June 4, remaining into the next day. There are only two previous summer occurrences of this species in eBird: one in Errol in June 1989 and a flock of seven reported by the late Bob Crowley way back in June 1967.

A late lingering **Blue-winged Teal** was reported by Dominik Dubravec on June 15 from Pondicherry National Wildlife Refuge in Jefferson. A handful of late lingering **Green-winged Teal** on and near the coast were reported on June 1: Stuart Varney had two birds at Rochester Wastewater Treatment Plant (WTP) and Pam Hunt, Angie Krysiak, and David Bates had another male in Rye.

On both June 5 and 11, Mackenzie Goldthwait and Doug Kibbe reported as many as one male, one female, and nine fledgling **Ring-necked Ducks** in Wilmot. This is notably far south for a summer sighting, especially with evidence of breeding.



Lesser Scaup by Joy Burns, 7-10-2024, Sunrise Lake, Middleton, NH.

This was a notable summer for **Lesser Scaup** in the state, with Rebecca Lovejoy reporting a bird in Lyme on June 9 and Joy Burns reporting a different bird in Middleton (Strafford County) on July 10. There are only four previous summer records in the state since 1970. Another late duck, a **Common Goldeneye**, was reported on June 1 at Odiorne Point State Park in Rye by Dave Bates.

Low numbers of Pied-billed Grebes nest in the wetlands

SUMMER SEASON

found across the state. Successful breeding this summer at Pickering Ponds in Rochester was particularly well-documented by Alan Murray and breeding at the Airport Marsh in Whitefield was thoroughly tracked by Sue and Tom Santeusanio, among others.

Grace Drewry photographed a **Red-necked Grebe** on June 19 at Lake Umbagog. Summer records for this species are unusual anywhere, but especially inland. This represents only the tenth summer inland record ever reported to eBird.

Noteworthy in early July, a **Red-throated Loon** was photographed by Ken Faucher on July 2 between Rye Harbor and the Isles of Shoals.

Common Loons had a challenging summer due to the heat, according to Harry Vogel, Executive Director of the Loon Preservation Committee. He wrote in their Fall 2024 newsletter, "A record number of loons incubated inviable loon eggs, destined never to hatch this summer." However, 14 additional loon pairs established new nests on our lakes, so it wasn't all bad news.

Goatsuckers through Cranes

Many birders reported with some concern a lack of hummingbirds. eBird reports, however, paint a reassuring picture: over the last three summers, roughly 2,500 eBird checklists have included Ruby-throated Hummingbirds each season. Although this suggests stability at the state level, birders can experience population booms and busts at the hyper-local level, such as your yard or hotspot. For information about the Common Nighthawk breeding season see Rebecca Suomala's article on page 29.

Persisting elusively, **Sandhill Cranes** continued their low-level presence in our state with pairs reported along the upper Connecticut River in Monroe on July 4 by Jim Sparrell and Katie Towler and somewhat farther south in Woodsville on July 20 by Melissa Fiorino. Another pair was reported at their usual location at Dead Pond in Pawtuckaway State Park on July 21 by Ian Davidson.

Shorebirds

A truly remarkable American Oystercatcher report came from Charlee Breen on July 9. She saw 14 American Oystercatchers flying through the harbor at Star Island in the Isles of Shoals. This sets a new high-count record for the state, doubling the previous high count of seven birds in September 2023. Your Season Editor's personal experience working with this species is that a large congregation of birds in the middle of nesting season suggests a widespread nest failure event. Could a combination of high tides and Hurricane Beryl have flooded nests, for example? Of course,

this is speculation.

New Hampshire's American
Oystercatchers are mostly reported from the Isles of Shoals, with very limited reports from the coast. That made the report on June 9 by Susan Wrisley and Leo McKillop of three American Oystercatchers in



A remarkable 14 American Oystercatchers were seen flying through the Gossport Harbor at Star Island. Photo by Charlee Breen, 7-9-2024.

Hampton Harbor seen from the Yankee Fisherman's Coop quite notable.

New Hampshire Fish and Game Department biologists monitored 20 breeding pairs of **Piping Plovers** between Hampton and Seabrook sites, fledging 19 chicks. That's a sharp drop, just under half, from the level of productivity of the 2023 season, which was notably high. **Least Terns**, on the other hand, had 29 nests and experienced high productivity, similar to 2023. Unfortunately, **Upland Sandpipers** at the Portsmouth International Airport at Pease were not monitored as closely as in previous years, so a comparison with previous years isn't as straightforward. The highest number reported for 2024 comes from NH Audubon's Pam Hunt who joined NH Fish and Game for a survey on June 18, reporting six breeding pairs.

Similar to last year, **Pectoral Sandpipers** arrived on their southward journey about a week ahead of the norm with two birds photographed at Rochester WTP by Alan Murray on July 22. Over the last few decades, the arrival of southbound **Stilt Sandpipers** has been highly variable, with first records



Piping Plover by Benjamin Griffith, 6-22-2024, Hampton Beach, NH.



Red-necked Phalarope by Lori Charron, 7-25-2024, Colebrook, NH.

equally likely to come in the middle of July, the end of July, or outside of the summer season altogether. Their arrival this year was on the early end with a bird reported from the Hampton Salt Marsh Conservation Area by Stuart Varney on July 16.

For the second year in a row, a **Red-necked Phalarope** was found inland. Lori and Paul Charron found one at the Panorama Golf Course near Colebrook on July 25. This is only the third summer record of this species since 1992.

Alcids through Herons

Shoals Marine Laboratory (SML) staff report on a number of species on the Isles of Shoals (islands in both New Hampshire and Maine). Nest monitoring of **Black Guillemot** found 48 nests in the summer of 2024 (41 nests in 2023). They also conducted some level of monitoring of a breeding colony on Appledore Island (Maine) that included **Snowy Egret, Great Egret, Glossy Ibis** and **Black-crowned Night Heron**.

The summer report from the Shoals Marine Laboratory (SML) indicated more challenging conditions for nesting terns on the Isles. You can read these numbers in James Freitas' article on page 11.

This was a very good summer for **Black Terns**, a small number of which are reported during their migration to and from more northern breeding grounds. Single birds were reported from mid- through late-July on the Isles of Shoals and coast, but a breeding-plumage individual was especially well-photographed on July 27 by John Welch, kayaking on Long Pond in Benton near Mt. Moosilauke.

Reports of single **Little Blue Herons** came fairly steadily over the season, especially in the month of July. Notable this year was a report of four birds, including two adults and two juveniles. That report from Stuart Varney came with clear photos taken at Parsons Creek Salt Marsh in Rye on

July 31. In the last few years, reports of multiple birds have tended to come later in the fall, though not every year. This is the first summer with a report of multiple birds since the summer of 1998, and only the eighth report of four or more individuals in any season. It is suspected that a pair is nesting on Appledore Island.

In recent decades **Black-crowned Night Herons** have been reliably found along the coast but otherwise reports are scattered unpredictably with single birds popping up nearly anywhere. The summer of 2024 was notable for having no records of this species farther inland than Rochester WTP or Exeter. Looking beyond New Hampshire, the map of summer reports reveals a striking void between the coast and the Canadian border, across most of our region.



Hybrid Glossy X White-faced Ibis by Steve Mirick, 6-10-2024, Hampton, NH.

And mere weeks after the American Ornithological Society took away the hyphen between Night and Heron, Jennifer Henshaw and Darryl Parker reported a recently renamed **Yellow-crowned Night Heron** on July 20 from Star Island. Of the two night herons, Yellow-crowned are typically far less numerous and much more restricted to the coast, but they are seldom reported from the Isles of Shoals. The only prior record of a Yellow-crowned Night Heron on New Hampshire's Isles of Shoals was just over 20 years ago back in May 2004 (Maine's Isles have reported low numbers, typically just one, nearly every year since 2017).

Flycatchers through Martins

Olive-sided Flycatchers pop up all over the state in migration, but breed in bogs and forest clearings in the mountains, so most summer reports tend to come from the North Country. Rob Woodward reported a bird singing and behaving as if on breeding territory at Merrymeeting Marsh in Alton, first on June 10 and then a week later on June 18. This is south of the typical breeding range in the state,

though not unprecedented. An extreme example was a pair that spent the summer in Rye in 1959.

An **Acadian Flycatcher** was reported and recorded by Steven Lamonde at the Robert P. Bass Memorial Town Forest in Sharon on June 4. A month later on July 5, Valerie Burdette and Emily Jew reported another on Lake Winnipesaukee, which is among a handful of the northernmost records for this species in the state.

Efforts to recover **Purple Martins** on the seacoast continued in 2024 with the most nests and fledglings in New Hampshire in recent decades. The five colonies at Seabrook, Hampton, Rye (Goss Farm), Rye (Awcomin Marsh), and Portsmouth Country Club had a total of 76 nests that produced approximately 355 fledglings. You can read more about the history of this species and conservation efforts in previous editions of *New Hampshire Bird Records*, including in the Summer 2023 issue, page 17.



Purple Martins at a nesting colony. In the East, these birds rely on nest boxes, which are maintained by dedicated volunteers. Photo by Debra Powers, 7-10-2024, Rye, NH.

Finches and Sparrows

Summer reports of **White-crowned Sparrows** are rare and often the result of a simple mix-up with the similarly-named White-throated Sparrow, which breeds ubiquitously in the higher country across much of the state. Occasionally, however, observers in the White Mountains report birds in habitat that bears a resemblance to these birds' breeding habitat in northern Quebec. On July 12, Desiree Narango recorded a singing White-crowned Sparrow near the Lakes of the Clouds Hut. This hut is at around 5,000 feet in elevation near the summit of Mt. Monroe. Subsequent visitors to the area again reported the species singing on July 18.

After the phenomenal summer of 2023, when large groups of birds showed up everywhere all season long, **Red Crossbill** reports were much reduced in the summer of 2024, but



Grasshopper Sparrow by Pam Hunt, 7-19-2024, Concord Airport, NH.

nearly as widespread. Many records of individual birds, as well as occasional groups, were reported across the state this year, although far fewer audio recordings were submitted to eBird. There were 50 recordings in 2023 and only four in 2024. The recorded birds included Type 1 (Appalachian), Type 2 (Ponderosa Pine), Type 4 (Douglas-fir), and Type 12 (Northeastern) Red Crossbills.

During surveys at Concord Airport, Pam Hunt and Becky Suomala reported 44 Grasshopper Sparrows, setting a new high count for the state in eBird. You can read more about Pam's **Grasshopper Sparrow** research in her article on page 10.

Warblers

Several years have passed since the last confirmed reports of **Cerulean Warblers** in the state. This is partly due to the similarity in songs that occur in this region between this species and the **Black-throated Blue Warbler**, which is nearly ubiquitous. No doubt the coloration of these species further compounds the confusion. This year, two Cerulean Warblers were well-documented in the Wantastiquet Mountain Natural Area in Chesterfield. Photos and audio recordings by many birders, starting with Robyn Prieto on May 13 continued into the summer with a last visual report on June 10.

Reports of **Prairie Warblers** north of the White Mountains are only a recent phenomenon. The first eBird record in Coos County came from the airport in Whitefield in 1997, and up until the summer of 2024, there have been only six accepted reports in that county including all seasons, mostly from the airport and the nearby Pondicherry Wildlife Refuge. On June 1, Scott Spangenberg reported a singing bird at Pondicherry. Later, on June 16, Eric Pilotte

reported another, both heard and seen, on Dartmouth's Second College Grant near Errol. Birders in this region should be on the lookout for this species in its preferred early successional habitat and try to document northern reports with a photo or recording.

The Wood Thrush Tracking Project

Part 1: Summer

by Pam Hunt

Although the Wood
Thrush is a familiar
bird in our eastern forests,
it has also become a symbol
of declining neotropical



Mike Akresh of Antioch University holding a tagged Wood Thrush. Photo by Phil Brown.

migrants—birds that breed in North America and winter in the tropics. While the severity of its decline varies across its wide range, overall, there are roughly half as many of these

accomplished songsters today as there were 50 years ago.

The decline is largely attributed to habitat loss and fragmentation on both the breeding grounds and in the forests of Mexico and Central America, where Wood Thrush spend the winter. To better understand how threats impact the species throughout its annual cycle, a biologist at the US Fish and Wildlife Service developed a project to use the Motus Wildlife Tracking System to look at Wood Thrush migration over the species' entire range. To do so, collaborators in over 20 states agreed to attach nanotags to thrushes in the breeding season, while partners in Latin America did the same in the winter of 2024-25.

NH Audubon coordinated the project in New Hampshire, where we were assisted by staff from The Harris Center for Conservation Education, Antioch University New England, and the Tin Mountain Conservation Center. Also critical to project success was bird bander Lindsay Herlihy, who worked at sites in central and southeastern New Hampshire. Between late May and early July, we caught and tagged 27 Wood Thrush in six clusters centered on existing Motus towers (Figure 1). This placement allowed us to monitor birds at local towers throughout the summer before they began migration and were detected by other towers en route south. However, in the southwestern part of the state, varied topography disrupted transmissions, limiting our ability to track birds locally.

With approximately 550 transmitters attached to thrushes from Minnesota to Maine in 2024, this project stands to gain an exceptional amount of data on the migratory routes of this declining species. Where do "our" birds go in winter? How long does it take for them to get there? Are there critical stopover sites along the way? By answering these questions across the species' full range, conservation biologists will be better equipped to identify limiting factors and develop strategies to support the Wood Thrush. Watch for an update on southbound migration in the Fall 2024 issue of *New Hampshire Bird Records*.

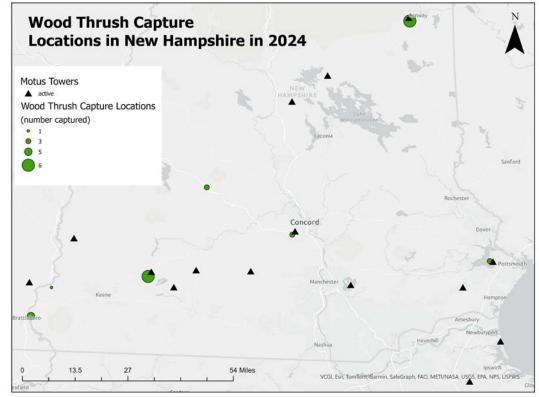


Figure 1. Locations of Wood Thrush banding and Motus towers in New Hampshire.

Grassland Bird Surveys in New Hampshire

by Pam Hunt

Lord New Hampshire's threatened grassland birds: the Grasshopper Sparrow and Eastern Meadowlark. In 2024, I surveyed airport sites and the old Manchester landfill, while a group of dedicated volunteers surveyed most of the other key grassland bird locations in the state, primarily in the Connecticut and Merrimack Valleys and just inland from the seacoast. In total, we surveyed about 30 sites at least once, supplemented by a few additional records from eBird.

The Concord Airport remains the primary site for Grasshopper Sparrows in the state, with a record 21 territories documented in 2024. For comparison, when surveys at this site were first implemented in the early 2000s there were only 10–12 pairs in most years. Lest you think 2024 is some sort of fluke, I found 18 territories in 2018, so the increase appears real. During my six visits between mid-May and late July, I observed double-digit numbers of sparrows each time, with an astonishing 44 individuals counted on July 22. Many were fledged young, but several adults were still carrying food, either for these fledglings or for younger chicks from second nests. Grasshopper Sparrows now occur throughout the airfield, although territories are most tightly packed at the southern end.

Statewide, the population is estimated at 45–55 pairs, nearly double that of 20 years ago. Much of that increase is from Concord, but some is from new sites we didn't know about when surveys began. The most reliable locations are airports (Concord, Pease, and Keene) and capped landfills, but now and then a male Grasshopper Sparrow will show up in an unexpected spot for a year or two before disappearing—likely dispersing from a core population but failing to find a mate.



A Grasshopper Sparrow carrying food for its young at the Concord Airport, NH. Photo by Pam Hunt, 7-19-2024.

Although Eastern Meadowlarks are more widespread, they occur in much lower densities, with most sites supporting only one or two pairs (Pease Airport has four to five). The statewide population is estimated at 30–40 pairs, with nearly half in the Connecticut Valley and the Seacoast close behind, largely due to Pease. As with the Grasshopper Sparrow, some sites will have meadowlarks in one year but not the next, which makes it hard to get accurate population estimates at three-year intervals. For example, meadowlarks successfully nested at the Concord Airport in 2024 after being absent from that site since 2019. The opposite was true for Elm Brook Park in Hopkinton, which hosted the species since at least 2017, but not the last two years.

Three other grassland species are even rarer and deserve mention. The Pease airfield remains the only site in the state where Upland Sandpipers nest, typically eight to ten pairs in recent years. This same airport is one of only two where Horned Larks still breed, and while the population there appears healthy the same cannot be said for that in Concord. Despite regular surveys, I only heard a single Horned Lark at the Concord Airport this year, and it was early in the season on May 17. Larks nest early (March–April), so it's possible that they had already left the area, but in past years it was not uncommon to find them well into June or July along the runways.

Meanwhile, the Concord Airport and adjacent pine barrens support the majority of New Hampshire's Vesper Sparrows, currently listed as a "Special Concern" species. I estimate four to six territories at this site, possibly representing a third of the state's population. Others are scattered across gravel pits and agricultural fields between Concord and Canterbury, while a small outlying cluster uses part of the Ossipee Pine Barrens. Historically, the species was occasionally found in the Upper Valley, but surveys of potential grassland sites along the Connecticut River in 2024 found none. With its population smaller than that of the meadowlark, the Vesper Sparrow may warrant consideration for future listing in New Hampshire.

Bridled Tern: A First in New Hampshire

by James Freitas

The Bridled Tern isn't a bird that comes to mind when birding in New Hampshire. With a population of about 700,000 individuals, your best chance to see one would likely be in the southeastern United States during the warmer months. New Hampshire's waters lack the tropical or subtropical conditions this species prefers.



Bridled Tern by Cameron Johnson, 7-13-2024, Isles of Shoals, NH.

The Bridled Tern is a medium-sized tern with a black cap, white forehead and dark gray back. It has a long, deeply forked tail and a wingspan of approximately 80 cm. Its dark plumage resembles that of the slightly larger Sooty Tern. Bridled Terns are island breeders, nesting on remote, tropical locations. These elusive birds are typically spotted after hurricanes, when storms push them closer to shore. True to their pelagic nature, they are most often observed from boats, occasionally perched on floating debris as they traverse the open ocean.

That's why it caused such excitement when one was repeatedly sighted at the Isles of Shoals in July 2024. The first report came on July 9. The tern was seen and photographed at the tern colony on White and Seavey Islands multiple times that week. As White and Seavey Islands aren't publicly accessible, birders hoping to catch a glimpse of the Bridled Tern had to take to the water.

Interestingly, a Bridled Tern was also spotted on Metinic Island, Maine, on July 4, 2024. Its dark plumage made it stand out, with the observing researcher describing it as "a very dark tern." Nesting Common Terns were seen chasing the Bridled Tern, but whether this individual was the same one later seen in New Hampshire remains uncertain. This sighting marked only the fourth record of the species in Maine. Farther south in New England, Bridled Tern records are more frequent. Massachusetts has documented around a dozen occurrences, beginning with the first in Hyannisport in 1995, followed by sightings in Nantucket County and, most recently, Provincetown in 2016.

In the Granite State, one of the first people to see the Bridled Tern was Patrick Gritton, a visiting student to the Shoals Marine Lab Tern Conservation Program headed by Liz Craig. Doing field observations of Common and Roseate Tern chicks, Gritton saw an unusual tern. As with the researcher who saw one in Maine, the Bridled Tern's darkness made it stand out. Gritton brought it

to the others' attention: Liz Craig, Gemma Clucas, Aliya Caldwell, and Joe Brosseau. Common? Sooty? Together, they confirmed it: a Bridled Tern. It wasn't until later that they learned it was the first record for New Hampshire.

Terns of New Hampshire: A Closer Look

by James Freitas, with expertise provided by Diane De Luca who worked on the initial Tern Restoration Project at the Isles of Shoals

Terns You Are Likely to See

While the Bridled Tern's appearance was remarkable, New Hampshire is home to several other tern species that birders are far more likely to encounter.

The **Common Tern** is a state-threatened species in New Hampshire, nesting primarily on islands and in salt marshes. In 2024, just over 3,000 Common Tern nests were recorded on White and Seavey Islands on the Isles of Shoals. Nesting success was high, thanks to abundant food, mild weather, and low predation.



Common Tern by Benjamin Griffith, 6-22-2024, Hampton Harbor inlet, NH.

The **Roseate Tern**, federally endangered, is similar in size to the Common Tern, sometimes slightly larger at 14–17 inches. In 2024, the Shoals Marine Laboratory recorded 133 Roseate Tern nests—the second-highest count for the area.

Arctic Tern once nested in small numbers at the Isles of Shoals, with only a few pairs recorded annually since 2002, according to New Hampshire Fish and Game. The Isles of Shoals is at the southern fringe of the Arctic Tern's breeding range. Unfortunately, their future as breeders on the Isles is uncertain; no nests were found in 2024 for the second consecutive year.

The **Least Tern**, classified as endangered in New Hampshire, is a smaller species, measuring about 9 inches in length compared to the Common Tern's 13–16 inches. Uniquely, Least Terns nest in colonies on the mainland beaches, arriving in New Hampshire in April and May to breed.



Roseate Tern by Benjamin Griffith, 5-22-2024, Hampton Harbor inlet, NH.



Least Tern by James Freitas.

The Importance of Conservation

In the 1930s, the Isles of Shoals was home to one of the Gulf of Maine's largest tern colonies, with approximately 2,000 pairs of Common Terns, 50–60 pairs of Roseate Terns, and 25–30 pairs of Arctic Terns. By 1955, however, human abandonment of the islands and a significant increase in gull

numbers allowed Herring and Great Black-backed Gulls to establish themselves, preying on young terns and displacing the colony. Thanks to the Tern Restoration Project, the tern colony has made an impressive comeback, reclaiming its place as one of the most significant in the Gulf of Maine.

In 1997, NH Audubon, in partnership with the New Hampshire Fish and Game Nongame Program and with support of the Office of State Planning Coastal Program, the NH State Parks Division, USDA Animal Damage Control, Shoals Marine Laboratory, Isles of Shoals Steamship Company, Gulf of Maine Seabird Working Group, and the US Fish and Wildlife Service, worked cooperatively to successfully complete the first year of the Project by using nonlethal means of gull control along with decoys and tern colony sounds to attract breeding terns back to the Isles of Shoals. A small colony of six pairs of Common Terns raised and fledged six young at this site in the first year. This was the first documented breeding by terns at the Isles of Shoals since the early 1950s.

Since the tenacity of the first six pairs of Common Terns on Seavey Island back in 1997, this colony has continued to grow. Tern biologists from Shoals Marine Laboratory in partnership with NH Fish and Game, remain on the island during the breeding season to protect, monitor, and research the workings of the colony. In 2024, the White and Seavey Island tern colony numbered well over 3,000 pairs of Common Terns and 133 pairs of Roseate Terns.

With the successful recovery of New Hampshire's seabirds and the unexpected appearance of a Bridled Tern, 2024 proved to be a remarkable year for the Granite State. Conservation efforts work to secure the future of the terns that have long called this place home, while chance delivered a rare visitor to our shores.

You can read more about tern research on the Isles of Shoals in the following article by Ellen Estabrook on page 13.

References

Craig, L., J. Borsseau, and H. Caliendo. 2024. Gulf of Maine Seabird Working Group Report—August 2024, Isles of Shoals. http://gomswg.org/index.html

Langlois, M. 2024. Metinic—so much to do, so little time! https://mainecoastalislands.wordpress.com/2024/07/06/so-much-to-do-so-little-time/

NH Fish and Game. 2015. New Hampshire Wildlife Action Plan, Appendix A: Birds. Available: https://www.wildlife.nh.gov/sites/g/files/ehbemt746/files/inline-images/appendixa-birds.pdf.

A Day in the Life of a Tern Researcher

by Ellen Estabrook, photos provided courtesy of Aliya Caldwell.

Editor's note: We are excited to welcome Ellen as a new author for New Hampshire Bird Records and to introduce a new feature: "A Day in the Life." This series will follow the work of avian biologists in New Hampshire, offering a glimpse into the world of wildlife research in the state.

Who: Aliya Caldwell, University of New Hampshire Graduate Student

What: Common Tern movement dynamics and prey selection

Where: Gulf of Maine When: 2020-Present

Why: Understanding how tern movement and diet correlate with local fish conditions can help us understand more about how terns and fish populations might respond in a changing environment.

Graduate student Aliya Caldwell has spent much of her academic career studying terns and their foraging habits on New Hampshire's Isles of Shoals. White and Seavey Island are home to the largest tern colony in the Gulf of Maine—an area of particular interest to scientists because it is one of the fastest warming bodies of water on the planet. Aliya's fieldwork investigates the intersection of climate change, tern movement, foraging environments, and prey (primarily fish) selection.

"The work has implications for tern conservation, as better understanding their movements in the region can help us assess how changes in their environment might impact their ability to find prey and provision their young," Aliya explains. The threatened status of Common Terns in Maine and New Hampshire underscores these important conservation concerns.

Aliya's work is part of the Tern Conservation Program directed by Dr. Elizabeth Craig and supported by the Shoals Marine Lab, NH Fish and Game, and US Fish and Wildlife Services, as well as additional grants. Her PhD research is conducted in Dr. Nathan Furey's Fish and Movement Ecology Lab. Currently, she is wrapping up over five years of research and developing her dissertation. We were able to catch up with Aliya recently as she shared about her studies and took us along for a day of field work:

6:30 am – Wake up and have breakfast. We stay in the lighthouse keeper's cottage on White Island; we live at our field site, which means we have lots of flexibility!

8:00 am – Head out into the colony to collect diet and productivity data. This entails sitting in an observation blind in the colony for one to three hour "diet watches," during which we



Aliya Caldwell provides a unique glimpse into tern research in New Hampshire.



One of the Common Terns Aliya studies feeds its chick. Aliya studies this diet and how it may change in light of climate change. Her research tracks just how far terns go to find food to feed their young.



Aliya, Dr. Elizabeth Craig, and Guy Beckley Stearns weigh and measure a Common Tern chick. Can you spot the chick?



Aliya moves among the tern colony. Wide brimmed hats can provide some protection from the dive-bombing terns while Aliya monitors nests. Photo by Gemma Clucas.



Aliya prepares water samples for eDNA analysis.

monitor a number of nests to identify the species and sizes of prey items delivered to chicks by their parents. We also track productivity by recording the number of eggs laid, chicks hatched, and fledglings in designated study areas. Any newly hatched chicks are banded, weighed, and measured. We will check on these chicks until they fledge, continuing to collect data on their growth throughout that time.

12:00 pm – Lunch break.

1:00 pm – Head back into the field to deploy GPS tags. We use walk-in traps to capture adult birds and then deploy GPS tags on them using a "leg-loop-harness," which positions the tag on their back just ahead of their tail, with straps going around their legs to secure it. The movement aspects of the project are exciting because GPS satellite trackers have only recently become small enough for use on seabirds like terns. This technology provides novel insights into their life history and foraging behavior.

4:00 pm – Back to the house to enter data and clean up from the field day, followed by dinner.

Aliya's research extends beyond tern colonies and into fish surveys as well. "For days on the boat assessing forage fish, our team would depart from the Jackson Marine Lab in Great Bay and the Coastal Marine Lab in New Castle at 8:00 a.m. on UNH research vessels," says Aliya. "We would typically start by collecting environmental DNA samples to identify fish species in the sampling area, followed by six or seven hours fishing with a modified purse seine."

Environmental DNA, or eDNA, is a data-collecting

method pairing trace analysis with genetic sequencing. While eDNA's application in terrestrial environments is a bit more nuanced, aquatic surveys are fairly straightforward and involve collecting "lots of water to extract DNA, which we later isolate and sequence to identify the fish species present in our sampling area," Aliya explains. This technique allows for DNA data collection without the need for direct observation and the accompanying conventional catch methods, which is particularly useful for species that are more difficult to catch and/or are threatened.

By combining new tracking technologies with a diet dataset dating back to 1999, Aliya's research reveals significant variability in tern foraging movements—ranging from the Piscataqua River and its tributaries to the Merrimack and Parker River estuaries, offshore near the Isles of Shoals, and even as far south as Cape Cod and Stellwagen Bank.

Preliminary results show that "in years when the availability of suitable prey is lower, terns increase the amount of time they spend foraging and the distances across which they forage, which might have meaningful energetic implications," Aliya explains. The assessment of the utility of terns as predictors of fish abundance also has implications for fisheries management and how tern and fish populations might respond in a changing environment.

"Foraging behavior changes across years, and we are still working to understand what drives these shifts," Aliya continues. "We suspect it has a lot to do with breeding status and the distribution of the fish they depend on."

While Aliya prepares to wrap up her PhD next fall, she will be continuing post-doc research in Dr. Furey's lab while continuing collaboration with Dr. Liz Craig and the Tern Restoration Program. Her work in both fish and seabird research plays a key role in investigating how climate change will impact the Gulf of Maine from an ecological standpoint and improve both risk prediction and resource management. With the advancement in technologies like GPS tracking and eDNA, Aliya and her team are able to collect detailed data on the foraging environment with information about the prey environment to better understand the implications of the movement findings.

To learn more about this project, you can check out an exciting new exhibit at the Seacoast Science Center in Rye. "The Science of Seabirds," featuring Aliya, Liz Craig, and their partners, is an interactive experience highlighting their research as well as climate change impacts. The Furey Fish Movement and Ecology Lab also has a website about the project (https://fishmovementecolab.wixsite.com/fureyfmelab/research), as does the Shoals Marine Laboratory, and Aliya also has a project website in the works—you can connect with Aliya on Twitter at @CaldwellAliya to learn more.





Left: Red-eyed Vireos are often heard but rarely seen. Banding stations provide the opportunity to study these birds up close. Right: Lindsay carefully holds a Blackand-white Warbler, one of the many species banded at the Black Mountain Banding Station. All birds are safely handled and banded under the appropriate permits. Photos by Lindsay Herlihy.

For the past 35 years, MAPS has generated continent-wide data through the contribution of over 1,200 banding operations to shed light on the drivers of avian population decline, determine trends in population dynamics between habitat types and across the range of individual species, and identify possible means of reversing population declines both locally and range-wide. In order to make a meaningful contribution to MAPS, I will run

BMBS for a minimum of five consecutive summers. These efforts will yield data on the capture rates of different species, the response of the bird community to habitat alterations, and the timing of nest establishment and fledging of young. BMBS is located on a large property maintained by the Society for the Protection of New Hampshire Forests (Forest Society) for wildlife habitat protection and sustainable forestry; banding data from BMBS can also offer insight on the effects of Forest Society management.

Sitting in a camp chair next to my portable banding table,

The New Black Mountain Banding Station

by Lindsay Herlihy, Lead Bander

The woods around me are full of deep shadows and ragged wisps of fog in the dimness of pre-dawn. I turn on my headlamp as I duck between trees, then begin the task of stringing up and unfurling the first of five mist nets. The sun might not be up yet, but the forest is awake and bursting with birdsong—Wood Thrush, Red-eyed Vireo, Ovenbird, Black-throated Blue Warbler, and a multitude of other species' songs emanate from the trees. I listen and hope that at least some of the songsters will visit the nets soon—after all, the new Black Mountain Banding Station is designed to study this particular community of breeding birds.

I established Black Mountain Banding Station (BMBS) in May of 2024 to contribute to ongoing research into the health and variability of native New Hampshire bird populations while involving the general public as a means to engage citizens in hands-on science, spark wonder in nature, and inspire support for avian conservation. To do so, BMBS operates as a part of a broader program called Monitoring Avian Productivity and Survivorship, or MAPS for short. MAPS is a cooperative network of bird banding stations coordinated by the Institute for Bird Populations. True to its name, the goal of MAPS is to gather and maintain long-term data about breeding bird populations.



The Black Mountain Banding Station setup, featuring a variety of band sizes. Each bird species requires a specific band size for proper fit. Photo by Carrie Deegan, Society for the Protection of New Hampshire Forests.

I check my watch. It is almost 8:30 am—my nets have been open for over three hours, I have almost 10 minutes until the next net check, and I am expecting visitors. Right on cue, I see a small cluster of people round the corner of the old logging road. A group of summer interns from the Harris Center for Conservation Education, led by ecologist Brett Amy Thelen, has arrived. Bird banding efforts like MAPS stations offer unique educational opportunities in addition to invaluable data. Students can see scientific inquiry in action, and interested people of all ages can enjoy the magic of seeing birds up close. Such unforgettable experiences are critical to building a public awareness and knowledge of avian conservation. To that end, adult programs run by the Forest Society and independent study students from nearby Kearsarge Regional High School will also visit BMBS before the end of the year. In the future, I hope to welcome more school trips, help Kearsarge teachers relate BMBS research to their science curriculum, and facilitate more adult field trips. After introductions are made around the banding table, the shrill

beeping of a timer cuts into our conversation.

"Time to check the nets!" I tell my visitors. Unfortunately, the mist nets yielded no birds on this round. Without birds to band, there is ample time to answer the interns' questions about how MAPS stations operate. Banding occurs at BMBS every seven to ten days during late May through early August. Twelve-meter-long mist nets hung between steel poles are used to capture birds that are flying through the area. These nets are opened at sunrise and checked every 20 minutes, ensuring that all captured birds are removed from the net promptly and safely. Each day of banding lasts a little over six hours.

At the next net check, our luck has improved—we have two Ovenbirds, the most frequently captured species at BMBS. One Ovenbird, a young male, already has a band. By reading the 9-digit number printed on the tiny aluminum band that adorns his foot, I can tell that this bird was banded at BMBS last week. I walk the visitors through the process of banding the other Ovenbird. Specialized pliers are used to apply the band. Then a series of measurements are taken, observations of the bird's body condition are conducted, and the plumage is examined to determine the bird's age.

"Remember how the first bird had rusty edges on some wing feathers?" I spread the Ovenbird's wing to show off the feathers in question. "This bird doesn't have those rusty edges, and its feathers are a much higher quality—less



Lindsay measures an Ovenbird's wing length. Photo by Carrie Deegan, Society for the Protection of New Hampshire Forests.

transparent, not as ragged. That means that this bird is at least three years old."

The process ends with the removal of two tail feathers this is done gently, with no harm done to the bird. The feathers will be sent to the Bird Genoscape Project. While MAPS focuses predominantly on breeding bird populations and their associated demographics, the Bird Genoscape Project (BGP) seeks to compile genetic information to connect populations of bird species across their annual cycle. This ambitious project relies on feather samples collected from bird banders across the continent, and has powerful applications to areas of inquiry including, but not limited to: bird migration, threats encountered in the annual cycle, microevolution across broader landscapes, the responses of bird populations to climate change, and the development of bird-safe alternative energy. Collaborating with both MAPS and BGP increases the usefulness and impact of BMBS data without creating extra effort or impact on the birds being studied.

"Would you like to release this bird?" I ask one of the visiting undergraduates. She nods excitedly, so I explain the safest way to hold wild songbirds, then pass the Ovenbird over to her.

"Oh... wow," she whispers. There is undisguised wonder in her expression as she gently cups her hands around the bird. Moments later, she opens her hands and watches the Ovenbird dart back into the forest. As we all savor the magic of our close encounter with the Ovenbirds, I hope that this experience will stick with my visitors and help them become champions for avian conservation in the future.

Field Notes Summer 2024

Unusual Kingbird Nest



Eastern Kingbirds typically nest in the outer branches of deciduous trees but are also known to nest in odd places that are sometimes quite exposed. Eric Masterson took this photo of an unusual kingbird nest in a power line while on his Breeding Bird Survey route (Marlow to Charlestown) on 6-16-2024.

A Yellow Scarlet Tanager

by Rob Woodward

ne of the most striking birds we see in New Hampshire is the brilliant Scarlet Tanager, but this one was different. On June 21, 2024, I visited the Society for the Protection of New Hampshire Forests' Morse Preserve in Alton to search for Vesper Sparrow for Pam Hunt's grassland birds project. I heard a nearby Scarlet Tanager singing, so I searched for it to get a closer look. Good thing it was singing otherwise I might have misidentified it. The bird was a solid brilliant yellow except for the wings and tail. I've seen mottled Scarlet Tanagers in the fall when they are molting into winter plumage, but this was completely different. I managed to get a few photographs before it disappeared.

There are several different types of mutations that affect the color of birds, such as albinism, leucism, and melanism.



The yellow Scarlet Tanager by Rob Woodward in Alton on 6-21-2024.

Sometimes an odd color is caused by diet such as is often seen in Cedar Waxwings. These birds have orange-tipped tails instead of yellow due to the consumption of berries from introduced honeysuckle plants. In the case of this particular tanager, this color aberration is known as xanthochromism. Since the yellow is so brilliant, this bird doesn't have a diet deficiency, instead it has a rare mutation that causes it to produce yellow feathers instead of red. While the brilliant scarlet of the Scarlet Tanager is one of my favorite birding sights, I must say this yellow bird was quite striking in his own right.

Carolina Wrens Learn a New Trick

by Greg Tillman

In early June, a pair of Carolina Wrens began building a nest in the walkway that runs between our house and garage, and they were of course every bit as cute as you'd expect. We were a little surprised at first, because the walkway is fully screened-in except for some small gaps at the base of the screen walls. That a wren found its way in was not surprising; we've sometimes had sparrows or juncos trapped in there before, but Carolina Wrens usually have both sexes help with nest building and with rearing chicks. So how long did it take for one of the wrens to learn, not just the way in, but also the way out? Did the female teach the male? Did the female forge ahead with nest building and wait for the male to catch on?

This was almost certainly the same pair of wrens that was feeding fledglings in the yard in late May, meaning that the pair chose to build a new nest for their second brood, even though their first nest was successful. This nest was certainly safe and secure, and the nestlings fledged noisily on June 25. From nest-building to fledgling took less than a month! The young were not quite flying when they left the nest, but they were nimble climbers, small and cute as can be. After the first three or four gradually found the appropriate corners to exit from, parents calling nearby all the while, I finally opened the screen door to let the last straggler depart into the wild.

Blue Jays Robbing a Red-bellied Woodpecker Seed Cache

by Robert A. Quinn

Many feeder birds are known to take sunflower seeds and cache them nearby. In July 2024, I observed a pair of Red-bellied Woodpeckers doing this in my yard.

Both the male and female woodpeckers hid seeds. One site was interesting because it was along a dead branch of a large Red Oak tree where Yellow-bellied Sapsuckers drum in early summer. I have seen several different sapsuckers drumming

in this precise spot and perhaps that activity created a cavity suitable for storing the seeds. A second nearby cache was in the broken, but still intact crook of a Red Maple branch, a branch that succumbed to the heavy snowstorm of early April 2024. The final fascinating observation was that on the second day of the Red-bellied Woodpeckers caching their seeds in the "sapsucker" site, two Blue Jays followed them and immediately ate the recently stored seeds! Luckily for the woodpeckers the jays moved along the next day, and they went back to building their larder.

The Yellow-billed Cuckoo and the Frog

by Robert A. Quinn

During a bird walk that I was leading at Knight's Meadow Road in Webster on July 24, 2024, we were lucky enough to hear and see both species of cuckoos. Most notable was a Yellow-billed Cuckoo that flew over our heads carrying a frog! It was cooperative enough to perch on a bare branch for leisurely scope views. We could see its rufous wing feathers and the yellow at the base of the bill. After several minutes, it dropped out of sight, as if heading for a nest with the tasty morsel. We could not identify the frog.

I found an old reference that states "Yellow-billed Cuckoos sometimes eat tree frogs and other small frogs, and in the Southern States, an occasional small lizard" (Bent 1940).

References

Bent, A. C. Life Histories of North American Cuckoos, Goatsuckers, Hummingbirds, and Their Allies. Dover Publications Inc., New York, NY.

Magnolia Warbler Nest at Deer Mountain Campground

Story by Pam Hunt and Unity Dienes. Photos by Pam Hunt.

The Deer Mountain Campground in Pittsburg is one of our favorite places to camp. Not only is it small and rarely crowded, but it is embedded in the beautiful northern spruce-fir forest (where else can you have a Spruce Grouse land in a tree above your picnic table? But that's another story...). In late July 2024 we were up there for three nights, with the campground serving as our base of operations to explore this northernmost point in New Hampshire.

Our site had a nice view to the west toward the namesake Deer Mountain, and while sitting enjoying this view on the afternoon of July 30 we noticed a Magnolia Warbler repeatedly enter a small fir tree just to the right of

the "Cornpopper" cabin. This seemed a little odd at the time, but we chalked it up to a favorite spot on the bird's foraging route. The next day, Unity was near the tree and surprised to see one of the warblers land right next to her while carrying food. Now suspecting a nest, we looked more closely and eventually found it tucked between two close branches and containing four chicks.

As a testament to how well it was hidden, we still had a little trouble finding it the next day. We went back to our site and for the rest of the afternoon watched the male warbler come and go, bringing caterpillars and leaving with fecal sacs. We didn't see the female during this period and feared



Magnolia Warbler nest with four chicks, 7-31-2024.



Magnolia Warbler chick on the ground, 8-1-2024.

something had happened to her. In the afternoon of August 1, after morning birding and some lunch, we were again in our chairs when we heard insistent begging from near the nest tree. One of the chicks must have fledged! We found it



Female Magnolia Warbler with a tasty caterpillar.

on the ground a few feet away, and this time both parents were regularly nearby with food.

Thinking the chick had fledged prematurely, we attempted to return it to the nest, which at that point only contained two chicks. The fledged chick would have none of this, however, and immediately returned to the ground after hopping among the branches. Shortly afterward, the other two chicks departed, as evidenced by both their begging (they were silent in the nest) and visual confirmation. One chick appeared a little smaller than others and remained in the nest tree.

The parents were now kept busy with their dispersing young, the first of which had now moved 15 or more feet from the nest.

At one point, the male became very agitated near our site, uttering alarm calls, fluttering about, diving into the ground vegetation, and doing a broken wing display. We suspected that one of the numerous Red Squirrels was posing a threat to the young until Unity discovered a large garter snake in the grass. She intervened on behalf of the frantic father and interposed herself (at risk of great personal harm!) between the snake and the last known location of the nearest chick. Whether through her efforts, those of the male warbler, or its own serpentine inclinations, the snake wandered away from the danger zone, still attended by the male for several minutes even though we could no longer see it. The following morning one of the chicks was still being fed nearby, based on constant begging and regular food deliveries by the female. There was no sign of the other two from the previous afternoon, but we knew one had wandered relatively far away the day before. It's also certainly possible that the other young had succumbed to predators (there really were a lot of red squirrels around). Wishing the family luck, we



Give me some food!

departed later that morning to return to Concord.

According to *The Birds of the World* species account for Magnolia Warbler, there are no confirmed cases of second broods, so our observations are likely of a pair that re-nested after a failed first attempt. The nesting cycle of Magnolia Warblers takes four to six days for nest building, five to six days to complete a clutch of four eggs, 13 days of incubation, and another eight to ten days before the young fledge. The account also states that young are able to fly before leaving the nest, which was clearly not the case here, leading us to suspect that something (perhaps a potential predator) spooked the first chick into leaving the nest (we never did find any sign of the fourth). Given a presumed early fledge in this case, this nest attempt was probably initiated on or shortly after July 1.

A Bobolink Bonanza

by Greg Tillman

I awoke at dawn on June 30, having volunteered to tally breeding field birds like Bobolinks and meadowlarks at several local hotspots for a project run by Dr. Pam Hunt of NH Audubon. My first stop was behind the Rockingham County complex, where there are 60 or 70 acres of lush grassland that remain un-mowed during the summer nesting season.

I had visited the complex two weeks earlier and counted about 30 Bobolinks and no meadowlarks, so was expecting a similar count that morning, but for whatever reason, the birds were incredibly active. I counted, conservatively, 80 Bobolinks in about an hour. In one sweep of my binoculars across a swale, I tallied 50 birds perched on grasses and flowers.

Perched Bobolinks, flying Bobolinks, Bobolinks

appearing and disappearing into the grass, singing like a melodious R2D2. It was a glorious morning in a small but amazing grassland habitat. Considering the birds undoubtedly still in their nests, I was surrounded by probably hundreds of Bobolinks.

Sadly, my next stop showed me the importance of those un-mowed fields. Nearly all the privately owned fields I visited next, along the roads in Fremont, had been either mowed or grazed over. The count of Bobolinks was down by half from my previous visit, and some of the birds I did see were pretty clearly displaced, crowded into the remaining un-mowed habitat.

Bobolinks remain a species of concern in New Hampshire, and while many environmental problems seem large and intractable, here is one opportunity where individual action can directly help. If you own land, consider leaving nesting grassland habitat available into late July, and if you have friends or neighbors with field or farmland, consider talking to them as well.

Also in the nesting season, June or early July, find a field to visit one morning and let the songs of the Bobolinks fizz and burble all about you.

A Summer with the Grebes

by Sue Santeusanio

y husband (Tom) and I love driving to Airport Marsh in Whitefield for birding, spending a morning there every week or every other week. Despite its small size, we've recorded 104 species over the past three years.

This past June, we noticed a pair of Pied-billed Grebes swimming in and out of the tall marsh grass, vocally defending their space from any bird that came too close. Intrigued, we began monitoring the area and spoke with



One of the parents brings back a fish for the young grebes in Airport Marsh, Whitefield, NH. Photo provided by Tom and Sue Santeusanio.

David Govatski, a well-known local conservationist, about our observations. In early July, heavy rain appeared to have overwhelmed the nest, but the parents continued to show strong nesting behavior, so we kept watching. I read everything I could about Pied-billed Grebes' mating and nesting habits and learned that if the eggs had been nonviable, the parents would have abandoned the site and either renested elsewhere or given up breeding for the year.

At the end of July, we were thrilled to see the parents frequently bringing food into the nest area. (Who am I kidding—Tom and I were jumping up and down with joy that our Pied-billed Grebes had nested successfully!) A few days later, we spotted all seven baby grebes venturing out with Mom and Dad, learning the ways of the pond.

Over the following months, we visited Airport Marsh once or twice a week, hoping to see the young grebes thrive. We watched as they mastered diving for food, struggled to swallow oversized insects and fish, and learned to recognize their parents' warning calls to leave open water when danger was near. Our weekly check-ins continued until early October when, to our delight, the entire family had vanished. We like to believe that Mom, Dad, and all seven young successfully migrated to warmer waters—and will return next year. This was the first bird nest we've ever discovered and monitored, and what a wonderful way to spend a summer!

Loony for Loons

by Wesley Moore

About the Author: Wes Moore is a 16-year-old attending Newton South High School. He spends his summers on Crystal Lake in Gilmanton, NH. His interest in birding was sparked at a very young age on a family trip to Sanibel Island, Florida and took off in 2020 when he spent more time outside, especially in Gilmanton. He is involved with local birding groups, participates in his school's climate activism program, and plays baseball and hockey.

One August Sunday afternoon, I saw my neighbor and her son in a canoe, waving their paddles in the air and screaming into the sky. A Common Loon and its chicks were in the water; a Bald Eagle circled above. My neighbor was making a frantic attempt to scare the eagle away—she couldn't bear the thought of the loon chicks meeting their untimely end.

Reflecting on other experiences on my small lake in New Hampshire, I realize my neighbor isn't alone in her love for—dare I say obsession with—loons. On my lake, the Common Loon is a frequent topic of social media posts



Common Loon and chick by Debra Powers.

and conversation. In years when a storm or some other event prevented the loons from having chicks, people were devastated. They would not be able to watch the babies grow up over the summer. When hatchlings were successful, the journey from chick to adult was documented and carefully archived in photographs on social media. People took great joy in canoeing or kayaking alongside the chicks and watching them blossom into adults.

Loons account for around 95% of bird posts on our community Facebook page. The other wonderful birds that also inhabit our lake, like Eastern Bluebirds and Eastern Kingbirds, rarely get a mention. I am often alone in being able to distinguish a Belted Kingfisher from a "baby eagle." Clearly, there is something that gives people a greater

connection to loons than other birds.

Loons are stunning. They have attention-grabbing features and are often around people when they fish or look for freshwater mussels near docks and boats. Who doesn't remember listening to loon calls from bed in the summertime or being amazed at how long they spend underwater? It wouldn't be hard to convince people that loons have gills.

Even so, there's more to why people are so obsessed. Loons return to the same body of water year after year. People appreciate seeing the same birds repeatedly. Maybe humans feel connected to loons because we exhibit the same behavior and often enjoy the same places and traditions throughout our lives.

Humans love cute baby animals. Loons care for their chicks much like humans care for their babies. People identify with parents who protect and nurture their offspring. Small lakes tend to have just one pair of loons, larger lakes have pairs that occupy certain areas. People have "their loons." The birds can become a symbol of the happiness and joy experienced during summers on the lake.

Love for loons is well-deserved, but other birds that call New Hampshire home throughout the year have unique attributes too. There's always something to appreciate when observing birds.

Editor's Note: In 2019, NH Audubon and the Loon Preservation Committee investigated the potential link between loon nest failures and the proximity of eagle nests. While they found that eagles may have contributed to 3% of observed loon nest failures, this pressure alone does not explain the declines in local loon populations. Their findings are published in The Wilson Journal of Ornithology, 131(2):329–338.

Backyard Bluebird Adventures

by Kathryn Frieden

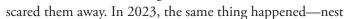
In mid-July, I was nearly attacked in my yard by an Eastern Bluebird. I have seen that famous photo of the "grumpy



Female Eastern Bluebird feeding chick, photo by Roger Frieden on 8-17-2024.

bluebird," but I did not realize how grumpy they really can be. How did this happen?

Five years ago, we installed a rather fanciful birdhouse on the fence near the edge of our yard in Nottingham. For the first few years there was no bird activity, but then in the spring of 2022, Eastern Bluebirds used it to build a nest. We were at first excited, but then disappointed because no eggs hatched, and the bluebirds abandoned the nest. Following advice from Becky Suomala, we opened one of the five eggs and found a tiny embryo in it. This ruled out unfertilized eggs as a cause for the failure to hatch. Perhaps the parents were too inexperienced and did not incubate well, or something had





Bluebird nest after the summer breeding is over. Photo by Roger Frieden, 8-25-2024.



Bluebird chick waiting impatiently for food. Photo taken by Linda Farrington, 7-4-2024 in Kathryn's yard in Nottingham, NH.

building, egg laying, and then...no hatching.

Finally, in the summer of 2024, an Eastern Bluebird pair was successful! We watched the parents bring food to the nest, listened to the tiny but persistent screeches of the begging nestlings, and caught glimpses of their heads poking out the hole of the house as they neared fledging.

In early July, as I was walking down the steps near the birdhouse, I became aware of a loud persistent "chit chit chit." Then, I noticed the fledgling bluebird on the step right in front of me. I started to back up just as the adult bluebird I had been hearing flew straight at me! It looked as if it was aiming straight at my forehead but instead flew just over the top of my head. I kept backing away, but I guess I wasn't going fast enough because it flew at me a second time for good measure. From a safe distance, I watched as the fledgling successfully flew off into the nearby bushes. This was a big day for celebration—my first observation of a bird in the process of fledging and my first (and hopefully last) experience of surviving a bird "attack."

Eastern Bluebirds live in woodlands adjacent to open areas. They are cavity nesters and are often just as likely to choose a nest site in a nesting box as a tree cavity. When nesting in trees, they most commonly use abandoned woodpecker holes. In New England, they lay an average of three clutches per season, usually ranging from April to September. The female does all the nest building, lays one egg a day for a total of three to seven eggs, and then incubates for approximately two weeks. The male will often bring her

food during the day as she sits on the nest. After the nestlings hatch, both parents feed them. They glean insects from foliage and the ground, bringing mostly caterpillars, spiders, grasshoppers, and crickets to the nest. Fledging occurs around two and a half weeks. The young tend to stay around nearby bushes until all have fledged and then start roaming farther from the nest.

The chances that the same bluebirds will return to their successful nesting sight the next year is in the range of 30 to 40 percent. Of course, we always think it is "our" bluebirds that are returning.

Our bluebirds must have enjoyed their success because this summer they reused the same nest and by mid-August, we were enjoying the sight of a new set of nestlings being fed by their parents.

This time, we missed the moment of fledging, but once the nest was empty, we could hear the persistent "tu-a-wees" of the nearby young bluebirds calling for food and to each other.

References

Gowaty, P., and J. Plissner. 2020. Eastern Bluebird (Sialia sialis), version 1.0. Birds of the World (A. Poole, ed.). Cornell Lab of Ornithology, Ithaca, NY. Erickson, L., and M. Read. 2015. *Into the Nest*. Storey Publishing, North Adams, MA.

Black Bears and Nest Boxes

by Iain MacLeod

We frequently hear stories of Black Bears destroying bird feeders and entire feeding stations. In the last few years, I have had several of my Eastern Bluebird/Tree Swallow nest boxes destroyed by Black Bears too, and I've heard of others encountering the same problem. I first encountered this at our former home in Ashland. Three boxes were destroyed and the contents devoured at the same time. Not only did the bear obliterate the wooden box, but the metal poles they were mounted on were bent over and mangled too.

When we moved to our new property in Sandwich, I placed several boxes in the meadow behind the house. Most of the boxes were occupied and then one was destroyed one night, and a brood of bluebirds was lost. I noticed that there was a well-worn bear path through the meadow from the woods to my neighbor's fenced-in chicken yard. The box that was hit was nearest to that path.

Bears are smart and opportunistic and I'm sure that once a bear gets a tasty calorie-rich snack of eggs or chicks (in an easy to reach, easy to open container), it will then add this to their diet whenever they find more nest boxes. Moms will teach their cubs that this is a potential food source. In areas where there is a high population of Black Bears (like Sandwich!), we may be fighting a losing battle . . . unless we outsmart them.

After losing the first box two years ago, I did some research and tried some olfactory deterrence. Bears have an extraordinary sense of smell, so finding some scent that bears don't like seemed like a good option. I tried rags soaked in ammonia, but they dried out too quickly and would have needed refreshing daily (not a fun task). I read that Black Bears don't like the smell of pine oil (go figure!) . . . so, I tried rags soaked in Pine-Sol, but that needed replenishing too often as well. Then, I decided to try those little green pine tree air fresheners. The scent seemed to last a long time, and they were cheap and easy to deploy. I hung one near the bottom of the pole and one higher just below the box. That seemed to work, at least for a while, but then last year, I had three boxes smashed and two of them had the air fresheners on them. Oh well!

So . . . Plan B was called for. I decided to reduce the number of boxes in that meadow to just two, and to focus on making them more difficult to reach, putting my eggs in fewer baskets so to speak. Both are now mounted nine feet off the ground. I doubled up the metal fence posts by mounting two back-to-back with a piece of 10 ft wood strapping sandwiched in between. Those standard green metal fence posts that you can buy at any hardware store are easier to fold over when bent from one direction, so by facing them inward with the strapping in between, it makes them much harder to bend. I pounded them deeper in the ground than I would normally, making sure that the bottom of the sandwiched section was into the ground too. I hoped that having the boxes at nine feet would make them less detectable to a passing bear's nose.

So far it has worked. Both boxes were occupied, and one successfully fledged a brood of Tree Swallows and the other a brood of Eastern Bluebirds. Bear sightings were as frequent as ever this year, so they were certainly around. I have four additional nest boxes on shorter (standard) fence posts right around the house and three of them successfully fledged chicks and remained untouched by bears. The fourth was empty but was bent over by a bear one night. Certain locations may be more prone to attacks.

So, if you find a box that was raided by a bear, don't just replace the box and hope it doesn't happen again. It likely will, and you will be attracting birds to your boxes just to become bear snacks. Perhaps the box is close to a path that bears use. If so, relocate the box, but if it becomes a recurrent problem, try a taller, stronger pole. A little bit of extra effort in bear country may save you the distress of losing a brood of bluebirds overnight.

Unusual Parents

by James Freitas



Hooded Mergansers with a Wood Duck duckling. Photo by Pam Geiger, 6-1-2024, Pawtuckaway State Park, NH.

The above photograph, taken by Pam Gieger at Pawtuckaway State Park on June 21, 2024, is a Hooded Merganser hen accompanied by ducklings, not all hers. One stands out: a Wood Duck. Gieger did not realize the duckling was not a Hooded Merganser until after the fact, when she reviewed her photos. Birds can always bring surprises, look as closely as you can. The same phenomenon can be seen in the photograph below, from Kate McKay. Two Wood Duck chicks follow a Hooded Merganser mother. But why?

Most duck broods have twelve ducklings or fewer. There are also gigantic broods. Sometimes one mother will raise ducklings from two hens of the same species, other times there will be more than one species of duckling. One viral picture features a Common Merganser followed by a lineup of 76 ducklings. Obviously, they are not all hers.

A large brood from more than one hen is called a creche, the result of brood amalgamation or parasitism. There are two types of brood amalgamation: post-hatch and pre-hatch. Pre-hatch is often brood parasitism. One bird lays her eggs in the nest of another. Whichever bird's nest was parasitized raises all the chicks. Another term for this is "egg dumping," a prevalent form of brood parasitism in ducks. Often but not always intraspecific, it is more common among cavity-nesters—like Wood Ducks and Hooded Mergansers. A creche is not always the result of egg dumping but it can be.

In the cases of these photos, we see the result of interspecific egg dumping. When a Wood Duck lays her eggs in the nest of a Hooded Merganser, there is a decent chance the merganser was nesting in a "Wood Duck" box. Despite the name, "Wood Duck" boxes are used by other species too and are often epicenters of brood parasitism. Wood Ducks famously offload their eggs and are frequent perpetrators of egg dumping. However, they are not the only brood parasites.

There are two kinds of brood parasitism, facultative and obligate. Facultative brood parasites can still make their own nests, and do not *have to* be parasitic. Obligate brood parasites cannot make a nest, so have no choice but to offload their eggs to be raised by another bird, hence "obligate." Obligate brood parasites only account for roughly 1% of bird species.

The most famous brood parasite is the Brown-headed Cowbird. Obligate brood parasites, these birds avoid the burdens of child-rearing by laying eggs in the nest of another species. They do this to hundreds of species, so have a wide impact.

It is quite easy to love birds. They are objectively beautiful and provide innumerable points of inquiry for interested aviphiles. That said, the bird world is complex and not always in charming ways. Species will lay eggs in nests not their own to avoid raising their own chicks. Others have learned to be wary of this and will reject eggs they recognize are not their own. That discarded egg would have been a beautiful bird to watch. The bird world is not one purely of beauty and joy, though there is still beauty and joy to witness in it. Sometimes less-beautiful aspects of the avian world make themselves apparent. This complexity adds to its richness. Just like ours, the world of birds is not so black and white.



Hooded Mergansers with two Wood Duck ducklings. Photo by Kate McKay, 6-20-2024.

Reaching 400 Species in New Hampshire....but only for a few days!

by Stephen R. Mirick

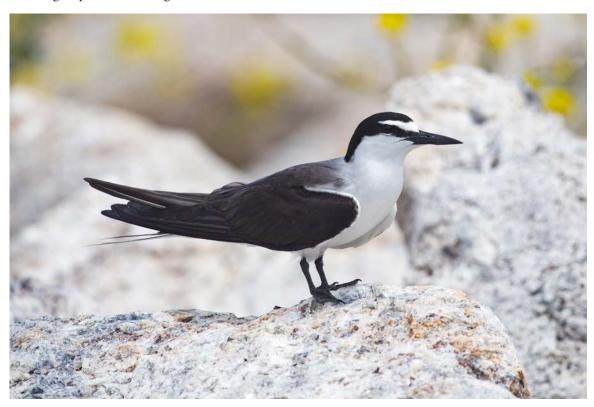
We're floating on a small boat five miles off the shoreline of New Hampshire near Seavey Island at the Isles of Shoals, when 17-year-old Ethan Ring suddenly shouts out, "There it is! There's the Bridled Tern!" I quickly look up and catch sight of the beautiful tropical bird and snap off a few photos before exhaling and realizing I had finally made it to the major milestone of having seen 400 species of birds in New Hampshire! I could now relax!

Birders are a curious group. We all enjoy watching birds and seeing new birds for the first time, and most of us enjoy keeping a list of the birds we see, but some of us take this to an extreme. Most treasured of the lists we keep is the "Life List" which includes all of the species that we've been able to see around the world during our lifetime, but more serious birders break it down further and keep track of many other lists. These can include their "United States List," "State Lists," "County Lists," "Yard Lists," "Big Year Lists," "Big Day Lists," etc.

When I first started birding 43 years ago, lists were kept by hand with checkmarks on blue cards issued by the American Birding Association, a group which, among other

things, developed "official" rules for listing and catered to bird listers across the United States. Members would "snail mail" their lists each year, and a summary of many of these lists were published annually in a special "Big Day & List Report." Hard core birders anxiously awaited that publication each year. Back then, the news of rare birds was spread by telephone chain alerts where individuals were responsible for calling the next person in line and spreading the word of the rare bird and so forth. These chains often broke down, however, with people who were away from the phone and didn't have answering machines. Technology has advanced at an incredible rate over the last 30 years and many of these new technologies have been adopted in the "sport" of birding. Cell phones, emails, GPS units, and digital cameras have all allowed for nearly instantaneous messaging and confirmation of rare birds. During the 1990s, the advent of personal computers became important and programs such as Avisys and spreadsheets like Excel became valuable resources for maintaining bird lists, thus eliminating the need for the archaic pen and paper lists.

Finally, eBird was launched by Cornell University in 2002 and this has been the default online database around the world for the last 15 years or more. It's been an incredible resource for birders to enter sightings and to keep track of different lists as well as to learn about and locate birds. In 2008, eBird was adopted by *New Hampshire Bird Records* and historic records for the state have been gradually added to the database since then. For better or worse, eBird has also "gamified" the process of keeping lists so that we all can compete with each other in a "friendly" manner while birding. This has led to an incredible growth of new birders out there learning about birds, appreciating the outdoors, and entering their data; however, it has also created nightmares for bird reviewers trying to maintain integrity for accurate identifications in the database.



Bridled Tern by Cameron Johnson, 7-13-2024, Isles of Shoals, NH.

I believe I am the first person to reach 400 for my "New Hampshire Life List," but reaching this milestone is not so much a testament to my birding skills and abilities, but rather a testament to my longevity for birding in New Hampshire, my flexible work schedule to chase after rare birds over the years, my ability to adjust to modern technology in finding out about rare birds, and most of all to having a wonderful spouse who shares my excitement and enthusiasm for finding birds. The quintessential birder in New Hampshire was the late Dennis Abbott. He fell in love with the chase, and his enthusiasm continued right up until he passed away in 2019. He thrilled in the study of bird identification and would travel long distances at the "drop of a hat" to find new birds for his many lists. In the final years, he championed the "New England List" where he chased birds across all six New England States and tallied the total for all states combined. To the best of my knowledge, Denny made it up to 391 species for New Hampshire and an incredible 2,251 for his New England "total ticks" list!

Now that I've gotten to 400, I can sit back on my laurels and relax....oh no....I just got a text from Ben Griffith. Looks as if the American Ornithological Society has just decided at its recent summer 2024 meeting to lump Hoary and Common Redpoll into one species! I just lost a species and am now back down to 399!!!

My last 20 species for New Hampshire were:

*Indicates a first state record for New Hampshire.

*Bridled Tern: 7-14-2024 Virginia's Warbler:12-5-2023 *Tropical Kingbird:11-13-2022 Chuck-will's-widow: 5-16-2022 Northern Lapwing: 3-7-2022 *Roseate Spoonbill: 7-31-2021

Black-bellied Whistling Duck: 6-2-2021

Long-eared Owl: 3-7-2021 *Sage Thrasher:12-21-2020

Chestnut-collared Longspur: 10-24-2020

Swallow-tailed Kite: 8-9-2020 Green-tailed Towhee: 12-5-2019 LeConte's Sparrow: 9-25-2019 *Trumpeter Swan: 4-14-2019 *South Polar Skua: 9-4-2018

*Neotropical Cormorant: 8-9-2018

Wood Stork: 8-9-2018

MacGillvray's Warbler: 9-4-2017 *Common Shelduck: 8-14-2017 Brown Pelican: 6-24-2017

Starting Young: An 11-yearold Boy's Birding Journey

by Meera Mahadevan

Sahil Asnaani is so proficient at birding, he can not only identify what birds he sees within seconds and describe their physical and behavior patterns in scientific detail, but he also posts to eBird regularly and has photos to document his findings. All this may seem like normal fare for an experienced adult birder.

Sahil is only 11 years old!

He is too young to have his own phone and he borrows his parents' iPad to check and post his findings on eBird. He has a subscription to *New Hampshire Bird Records* and has meticulously saved every issue. He reads it cover to cover when the issue arrives. He happily points to an issue when his name was even published.

During a recent visit to his home in Newfields, NH, Sahil (pronounced Saw-Hill) had a row of stuffed animals lined up on a coffee table and was holding a stuffed panda bear as



Sahil stands surrounded by his many copies of New Hampshire Bird Records. Photo by Meera Mahadevan.

he sat down for an interview. He is quick to point out that his brother, Shaylan, age eight, and sister Sahana, age five, all love birds too.

"My grandfather bought me this book," said Sahil, as he opened, *Birds, Bees, and Butterflies*, addressed to him inside. "It not only started my interest in birds but in all of nature. There are also bees and butterflies in here. I just got more and more interested in birds. My brother became interested in other animals like snakes but we all love all types of nature."

Sahil was just two years old when he got the National Geographic book as a gift. His mother says Sahil immediately took to the book and would often ask for the names of the birds. Soon, bird guides became Sahil's bedtime stories. Also, as soon as he learned to read on his own, his interest in birds skyrocketed and it has not slowed down since. When the family visits a bookstore, Sahil heads straight to the ornithology section. He has amassed quite a collection of bird books that line his bookshelf at home.

"When he saw birds at our feeder, at age three, he wouldn't just say look there's a bird," said Apara Dave, an Infectious Disease Physician in Exeter. "He would say, 'look, there's a White-breasted Nuthatch or a Tufted Titmouse!!"

Sahil and his family estimate his life list of birds so far hovers around 290, including 276 species he has documented on eBird! At 11, Sahil stands out in the birding community where an average birder might be six times older than he is.

It's hard not to be excited along with Sahil as he describes the day he spotted his most prized finding, a rare, adult, male Hooded Warbler in his front yard near his driveway in April 2024. He frantically ran inside the house telling his babysitter that his iPad had run out of storage space. His sitter let him borrow her phone to take a picture. He was quick to say that the warbler was a lifer for him.

"I heard a chirping sound and I thought it was a phoebe so I was looking high in the tree," he said. "Then I ran off to play soccer and then I came back and I kept hearing it. I looked on the forest floor and I found it! My brother helped me. It shocked me when I saw a yellow mask and black hood and throat, yellow belly and olive back and tail foraging on the ground. It was 10 feet off the ground for a minute or two. My photos were bad but I saw essential features." You can view Sahil's photos on his eBird checklist: https://ebird.org/checklist/S169101718. Though the photos aren't perfect, they still capture essential details that many birders would be thrilled to get of such a rarity.

His mother says that after Sahil posted his warbler finding on eBird, fellow birders flocked to his driveway looking for the bird, assuming Sahil was an adult.

"I was coming home from work and I was puzzled to see a stranger in my driveway," she said, "They asked to speak to Sahil and I said he's at school and asked if I can help them. They were shocked to learn Sahil was only 10."

At school, in addition to having done a report on nuthatches, Sahil said he sneaks in some birding in between soccer and classes. "At recess, I usually play soccer, but I also go on nature trails," he said. "I found my first Swamp Sparrow at school."

Sahil is an early riser. In fact, his mother said that on school mornings, he will often fill the feeders even before he eats. "I'll come downstairs and usually say, 'Sahil, have you had breakfast?' and he'll say, 'No,'" she recalled jokingly. "Then I'll ask, 'Have you started packing your backpack?' He'll say, 'No, but I've filled the feeders."

Sahil's favorite area to bird in the region is the Parker River National Wildlife Refuge at Plum Island in Massachusetts where he says he once counted 13 Black-bellied Plovers. His family also makes it a point to set aside a day or two for birding every time they travel. He has also visited the famous Cornell Lab of Ornithology in Ithaca, NY.

"I saw my first Black-bellied Plover at Plum Island," he said as he showed a picture on his iPad. "We went to Canada on a whalewatching trip and saw lots of birds. We also went to Paris and Barcelona and we did see some new birds."

Sahil's eBird profile says that he has made eBird entries from five of the six countries and nine out of the 15 US states he has visited so far. Sahil ranks among the top ten eBirders in Rockingham County. Sahil's parents are extremely supportive of his passion. They recently landscaped their backyard to specifically attract birds and butterflies, including adding ponds and bird baths. Each of the three children helped create their sections of the yard. "This year, bluebirds successfully nested in our bird house and a Chipping Sparrow nested in a new tree we got," he said.

Over the winter, his parents also have a dedicated Christmas tree upstairs for the kids where they get to display their growing collection of beautiful bird ornaments made by a local artist. Each child gets to pick a new bird ornament to hang each year.

Sahil isn't sure yet what he wants to be when he grows up. For now, he is busy with school, soccer, birding, and recording his findings on eBird. Given his age, he is limited to an hour and a half a day on his iPad which includes the time he spends entering sightings on eBird. "I'm allowed to play games if we are on long car rides," he said. He is looking forward to more birding as he gets older and seeing birds he has not seen before, including on an upcoming family trip to Alaska.

"I'm always looking for new birds," he said. "It's so amazing and exciting to look for and then find a new bird and take the time to really see it so I can believe it. Seeing birds, especially a new bird, makes me really happy."

The Whip-poor-wills of Belknap County

by Rob Woodward

How many Eastern Whip-poor-wills are there in Belknap County? Supposedly not many. The distribution map on eBird shows a few scattered sightings of single birds except for one site with two. Conventional wisdom says you need river valleys and pine barrens, scarce in Belknap. *The Birds of New Hampshire* by Keith and Fox says whip-poor-wills are concentrated in central Carroll County, namely the Ossipee Pine Barrens, and in a band from northwest Merrimack County to north-central Hillsborough County. NH Fish and Game's Wildlife Action Plan has a distribution map that includes the southern-most edge of Belknap County. The best way to answer this question of how many Eastern Whippoor-wills are in Belknap County is to go out and look. In May through July 2024, I began my search.

I first investigated New Hampton by traversing the length of Straits Road. I found one bird in an area where one had been reported a few years earlier. I had a hunch that sand and gravel pits would be productive places to search since the adjacent dry sandy soils make for ideal nesting sites for

this ground-nesting species. I used the satellite images on eBird to locate these features. On May 23, I checked the gravel pit on Sam Clark Road in Barnstead. There was one singing whip-poorwill and a second bird nearby. A good start, but I needed to go back for another look.

I returned for that second look on July 14. The date was not picked at random. Ideal conditions to see a whip-poor-will require a full moon on a clear, calm night, but this month, the full moon would not rise until too late in the night. I had to settle for a half-moon

whose meridian passage (when it reaches the highest point in the sky) would occur between 7:00 and 10:00 pm. This time, there were three whip-poor-wills singing at the gravel pit and three more nearby. A cluster! Six whip-poor-wills in one area, the first of its kind in Belknap County since the advent of eBird. Down John Tasker Road, across Rte. 126 from Sam Clark Road, I found two more about 1.5 miles away. The next night, I found another bird on Welch Road not far from the gravel pit site that I believe is not one of the previously counted birds. I later heard by email from a Barnstead resident who reported a whip-poor-will calling in her backyard, bringing the total to 10 in Barnstead alone—all from sites not previously reported on eBird.

I know of a large gravel pit in Belmont along Rt. 140. A few years ago, I unsuccessfully searched there for Bank Swallow colonies. On July 21, I checked this area and found three more whip-poor-wills. It seems that sand and gravel pits are the next best thing to pine barrens for whip-poor-will searches, at least for finding clusters.

There are still more places to be searched over the next few years. I have no doubt there are other birds scattered about the county, but I can safely say with great satisfaction that whip-poor-wills are indeed present in Belknap County and in higher numbers than previously known.



Eastern Whip-poor-wills are masters of camouflage, blending seamlessly into their surroundings. Though rarely seen, their distinctive "whip-poor-will" song fills the night. Photo by Pam Hunt.

Common Nighthawk 2024 Nesting Season

by Rebecca Suomala



The Steeplegate Mall fenced off in August 2024, preparing for demolition. Photo by Rebecca Suomala.

Project Nighthawk staff and volunteers typically track nesting nighthawks in Concord, Ossipee, and throughout the state. In the summer of 2024, we changed focus and concentrated our monitoring at one location, the Steeplegate Mall in Concord, NH. The Mall has a large stone roof which typically has one or two nests on it. With only about 15 breeding territories in the state, that makes the Mall a significant site for New Hampshire, so when plans to demolish most of the buildings were announced, it became important that we track nighthawk activity from the start of the nesting season.

Project Nighthawk staff and volunteers conducted standard evening surveys at least twice a week from late May through mid-August. There were three active males at the Mall and likely two nests. I met with the consultant for the developers to share observations, his from the rooftop and ours from the ground. Thanks to this information, NH Fish and Game was able to negotiate with the developers to delay removal of the stone roof until the nighthawks were finished nesting. Eventually, we documented two fledged young feeding above the Mall lights. Even more interesting was that when the Mall lights were turned off in preparation for demolition in mid-August, we discovered the nighthawks had moved next door and were feeding above the lights at the Shaw's parking lot. This is the first time we have been able to document feeding locations used after dark.

There were only a few watches at other sites in the Concord area, so information is not complete, but there was activity at three other territories. For the third year in a row there was no activity in Keene, so those nighthawks are

gone. The only information we have for other areas of the state comes from a few, brief eBird reports that don't provide enough information to determine nesting status.

If you would like to receive Project Nighthawk's annual summary, including more on the 2024 season, contact me: rsuomala@nhaudubon.org.

Report Your Nighthawk Sightings to eBird

With my retirement, NH Audubon and NH Fish & Game will be reviewing the future monitoring strategy for Common Nighthawks in New Hampshire. eBird reports will be the primary source of information on nighthawks in years when there is no active monitoring so please help by reporting your sightings, especially in June and July! Please add information about what the nighthawks were doing: peenting, circling, flying by, etc. That's very helpful in the nesting season to determine whether there might be an active territory. An early June report of a nighthawk repeatedly circling and peenting over a site is very different from a nighthawk that simply flies by. The first means possible nesting, the second could be a migrant. Your added notes will help track potential nighthawk territories.

I am grateful to all the volunteers and supporters of Project Nighthawk who have made this work possible. Project Nighthawk is funded entirely by private donations.

Mississippi Kite Nesting Summary: 2024

by Stephen R. Mirick

Mississippi Kites continue to struggle and 2024 was another difficult year for them in New Hampshire with no confirmed young reported for the first time



Mississippi Kite by Steve Mirick, 6-2-2024, Stratham, NH.

since 2017. Only three territorial pairs were confirmed this year and two of these pairs built a nest and started incubating. Sadly, both of these nests failed early in the season. The kites were first made famous by nesting in 2008 and this is (at least) the seventeenth consecutive year that kites (between one and four pairs) have nested in New Hampshire in this isolated, rare, nesting colony.

A summary of the three kite territories observed follows.

Durham (No. 1)

Kites in Durham have somewhat regularly appeared over the last several years but they've failed to produce any young in the last four years. This year, a pair was back quickly and observed copulating on May 22; however, Fish Crows seemed to be harassing them. No further observations were made until a nest was discovered by Debra Powers on June 16 with a female high in a white pine in a side yard of a residential neighborhood. Incubation was thought to start a few days later on the late date of June 19. Incubation looked fine into the fourth of July weekend; however, nest failure was reported on July 6 by Debra when Fish Crows were seen removing sticks from the nest and no kites were seen in the area. It's not clear what caused the failure, but the Fish Crows may have been the culprits.

Durham (No. 2)

This is the only bright spot for the year. It appears to be a new territory, different from the other pair in Durham. Starting in May, reports were received of one or two birds and even copulation was reported. Random sightings continued into August; however, no nest was found and there were no signs of fledged young.

Stratham

Only one pair of kites was found in Stratham this year. The pair rebuilt the same nest that successfully fledged a single chick last year. The nest was high up in a maple tree crotch in the front yard of a single family home in an established residential neighborhood. While the beginning stages of nest building and courtship were not observed, the nest appeared to be getting bigger, and then on a June 18 visit, a bird was seen incubating!

Things continued to look fine with brief weekly visits showing a female on the nest, but things turned bad on July 13 when I visited and found no bird on the nest or in the vicinity and no sign of a chick in the nest. Subsequent visits showed a female at the nest site acting strangely; either partly incubating/brooding or leaving the nest and not returning. Again, there was no sign of a chick in the nest and no male to be seen. It's unclear what happened here, but on

July 25 I finally concluded that there was a nest failure.

Other birds seen during the summer include a one-yearold kite that was seen wandering the neighborhoods of Stratham which may not be related to the nesting pair, and a couple of late season reports in August of a single bird in Newmarket. No reports were received from Greenland where there was a nest a few years ago.

Table 1. A summary of confirmed fledged kites (and pairs of kites present) from recent years in New Hampshire.

2017 - 0 (3 pairs) 2018 - 3 (3 pairs) 2019 - 2 (3 pairs) 2020 - 3 (3 pairs) 2021 - 1 (4 pairs) 2022 - 1 (4 or 5 pairs) 2023 - 1 (4 pairs) 2024 - 0 (3 pairs)

Lakes Region Motus Tower Overview

by Iain MacLeod

Editor's note: As you will see in Pam Hunt's article on Wood Thrush research (page 9), Motus technology is rapidly becoming a key tool in avian research. This innovative tracking system allows biologists to study birds throughout their entire lifecycle, providing invaluable insights into their movements. Enjoy this article, which showcases just how far—and from where—many birds travel through New Hampshire during spring and fall migrations. Note that the Motus data is visible to the public and anyone can look at the detections of birds or animals with Motus transmitters at: www.motus.org.

The Motus Wildlife Tracking System (Motus) is an international collaborative research network that uses cooperative automated radio telemetry to track small flying organisms (birds, bats, and insects). Lightweight transmitters are affixed to the animals and then tracked by a network of strategically-placed receiver stations. Typically, the stations are located on high terrain where there is a good "viewshed" to maximize detections.

As of this writing, there are over 2,000 receiving stations in 34 countries and more than 49,000 animals tagged. Here in New Hampshire, we currently have 17 receiver stations.

In May 2021, through the Squam Lakes Natural Science Center, I coordinated the installation of the Lakes Region's first Motus station on a hilltop in New Hampton, NH. In September 2024, NH Audubon installed a second tower atop Red Hill in Moultonborough. Together, these two towers now provide full coverage of the Squam Watershed, allowing us to detect birds with transmitters passing through.

Notable Detections at "Hager"

(in chronological order)

The New Hampton tower, known as "Hager" has had some fascinating detections so far, presented in chronological order according to when it was detected at Hager.

2021

In October, Hager detected two **White-throated Sparrows** originally tagged in New Brunswick, a **Rusty Blackbird** tagged in Maine that was later recorded at several towers as far south as South Carolina, and a **Hermit Thrush** tagged in New Brunswick that also traveled to South Carolina.

2022



Black-and-white Warbler by Debra Powers.

A Black-and-white Warbler from Jamaica!

This exciting bird was tagged in Jamaica on February 28, 2022. It remained in its wintering grounds until May 2, when it began its migration north. It was first detected at a tower in Virginia on May 14, then passed two towers in Pennsylvania the following day. On May 16, it passed by Hager, covering 260 miles in a single day! It was detected at our tower for only eight minutes before continuing north. Later that same day, it was recorded near Norway, Maine.

May 30, **Semipalmated Sandpiper** tagged on the Delaware Bay in New Jersey on May 14 was detected at

Hager. Ours was the only tower it was detected at after leaving New Jersey.

On June 30, an American Kestrel tagged at Drumlin Farm in Massachusetts on June 29 passed Hager before reaching Fields Point, just south of Bangor, Maine, on July 1. It was not recorded again until October 5, when it was detected in New Jersey. Over the next two days, it was picked up at 13 different towers in New Jersey and Delaware.

On July 29 and 31, two **Bank Swallows** were detected at Hager—one tagged on Prince Edward Island and the other in New Brunswick. Neither was detected again after passing Hager.



Blackpoll Warbler by Kyle Wilmarth.

A Blackpoll Warbler from Colombia!

This warbler was tagged in Central Colombia on April 12, 2022. After it left Colombia on April 16, it was not detected until it pinged a tower in Quebec on September 1 on its southbound journey (back to Colombia we assume). It passed Hager on September 12, 2022.

A **Swainson's Thrush** was tagged near Gaspe, Quebec, on September 6. On September 26, it passed Hager before being detected at towers in New York, Pennsylvania, West Virginia, Maryland, and finally Florida on October 13.

2023

Spring Migration

An **American Robin** tagged in New Brunswick on October 22, 2022, spent the winter in Pennsylvania. It was detected again in New York in April, passed by Hager on April 12, and returned to New Brunswick the next day. This bird may have spent its next winter in Delaware as well.

More birds from Jamaica!

Another **Black-and-white Warbler** was tagged in Jamaica on March 20, 2023. It somehow managed to avoid detection by the hundreds of towers along the eastern seaboard until May 8, when it was recorded in Putney, Vermont. The next day, it passed by Hager and has not been detected since. A **Northern Waterthrush**, tagged in Jamaica at the exact same location on March 29, 2023, was similarly undetected until it passed Hager on May 11. Later that day, it pinged two more towers in northern New Hampshire. Another **Black-and-white Warbler**, also tagged in Jamaica, passed Hager on June 9 and was detected two days later on Prince Edward Island.

Other 2023 Sightings

Two **American Kestrels**, both tagged in Massachusetts in June. Both dispersed north into New Hampshire or Vermont before heading south in the fall. One was detected in South Carolina in mid-August and the other in southern New Jersey in October.

On October 3, an **American Woodcock** tagged in Rhode Island in March was detected at Hager. It passed several towers before wintering in Maryland and then returning to coastal Rhode Island for the next breeding season. It was last detected there in April 2024.

2024

In late March, a **Northern Saw-whet Owl** tagged near Williamstown, MA, in October 2023 passed Hager. On April 2, it was detected at Mt. Blue State Park (SP) in Maine.

On May 14, a **Swainson's Thrush** tagged in Tennessee on April 30 passed by Hager. The next day, it was detected near Bethel, Maine.

On May 20, a **Bicknell's Thrush** tagged at Hobe Sound National Wildlife Refuge in Florida on May 3 passed by Hager. It was in central Maine on May 21.

Shorebirds in May

Two **Short-billed Dowitchers** tagged at Delaware Bay in mid-May were both detected at various towers (including Hager) for a week or so as they headed north to their arctic breeding grounds. Both were redetected in July (as they headed south again) in New Jersey and Delaware.

A **Dunlin** tagged in southern Rhode Island on May 21 passed Hager on May 27. The next day it was along the St. Lawrence River in New Brunswick.

A **Semipalmated Sandpiper** was tagged on Delaware Bay on May 30. It passed Hager on June 3 and continued north. After just six weeks, it was on its way south again and was last heard from on July 14 near Exeter, NH.

Fall Migration

A **Wood Thrush** tagged at Tin Mountain Conservation Center in Albany, NH, in June passed Hager (and the newly installed tower on Red Hill) on September 13. By September 19, it had reached southern West Virginia.

An Eastern Whip-poor-will, tagged in Maine in June, was last detected at the tagging site on August 12 and was detected at Hager (and Red Hill) on September 19. On September 19, Red Hill Tower had a second whip-poor-will (also tagged in Maine). As of this writing, it has not been detected again.

A **Bicknell's Thrush** tagged near the Mt. Washington Auto Road in July 2024 passed Red Hill on September 21. Just three days later, it was detected at two towers in Maryland.

Looking Ahead

With the addition of the Red Hill tower, Motus tracking in the Lakes Region is stronger than ever. These detections provide valuable insights into bird migration, connecting our local landscape to the broader global movement of birds. With more Motus stations being installed across the state, we expect to gather even more remarkable records in the years ahead.

The Hager station was funded by the Lovett-Woodsum Foundation and made possible by Liz and Dennis Hager. The Red Hill Tower was funded by the Squam Environmental Preservation Fund and made possible by the Lakes Region Conservation Trust.

Project NestWatch

by Melissa Moore

Editor's Note: Project NestWatch is a participatory science project where volunteers monitor the nests in their backyards and share their data with the Cornell Lab of Ornithology. Everyone is welcome to participate. In this piece, Melissa shares more information to inspire you to observe the birds in your backyard and contribute to this important effort.

Project NestWatch offers many tools to help you be field-prepped and ready to collect accurate data when exploring. Before proceeding with Project NestWatch, a multiple-choice certification quiz is required for all citizen scientists. It's a 10-question test, and reading the website's FAQ prior to taking it should be enough to prepare you. During the test, take your time and read carefully. Scoring a 100% is required to earn your certificate. On my first

attempt, going too quickly and misreading one question led to subsequent failure. The testing program used by NestWatch highlights errors and reveals the correct answer. On my second attempt, I passed and earned my certificate.

The certificate is issued by the Cornell Lab of Ornithology and includes the NestWatch Code of Conduct: 11 points modeling excellent birding ethics. Project NestWatch's



American Robin nest by Grace McCulloch.



American Robin eggs are a striking bright blue. Backyard bird nests can hold a surprising variety of colors. Keep an eye out for nature's palette! Photo by Grace McCulloch.

priority is for birders to learn about the birds they'll likely encounter in their area. The Common Bird Nesting Tool features photos, bird call recordings, habitat maps, and graphics to help with your nest-watching activities. Focus on just a few species you're likely to encounter in your area and learn as much as you can about them. Next, watch and listen.

Most nest-building activity in New Hampshire happens from May to August, when the insect population is high. Spend some time in the field, on the lookout for birds carrying grass, twigs, or plant down. Birds carrying these materials are a sign that nest building is underway. Listen for and identify bird calls. The Merlin app's Sound ID function will help you identify birds you hear, though don't rely purely on Sound ID. If you are hearing alarm calls, you might be too close to a nest, so back away.

Once a nest is discovered, map it immediately in your NestWatch account. With the nest mapped, you will be able to find it easily next time you are out. If you prefer to explore with a pencil and clipboard, paper forms are available for download. It is important to be mindful of the paths you leave while walking to nests. Don't take the same path more than once. A dead-end path leading straight to a nest encourages predators to follow, endangering the eggs, nestlings, or fledglings. Bring your binoculars and try to observe from a distance if possible.

When you register a nest, you will be prompted to answer questions about the habitat, location, cavity orientation, and elevation. A text box is provided for additional notes. It is recommended you visit the nest and record observations every three to four days. Each time you visit, your observations are recorded under the nesting attempt, and you enter information about the number of eggs or the number of fledglings. Keep visits short. One minute of observation at the nest is recommended and is all you need.

Your efforts will help researchers monitor trends in breeding birds. With so many people submitting data from sites around the world, conclusions can be drawn about how bird populations are responding to climate change, habitat loss, or the effects of non-native plants and animals. The NestWatch Digest Annual Report for 2023 offers many positive outcomes. Observers in 43 countries submitted records from 36,035 nest visits. The report states, "Six scientific papers were published based on the NestWatch data in 2023."

Kestrel Rescue

by Melissa Moore

I had just returned from volunteering at NH Audubon and was getting ready to head off to the next task, when my son Jeff tracked me down and said, "You'll want to call your friends at NH Audubon. There's a kestrel nestling walking along the ground, away from the nest and all alone." Together with my husband, Larry, we walked to the spot in the hayfield slowly and carefully and found the small bird. It made no effort to fly, and it appeared to be a very young bird. Based on the appearance of primary feathers and tail feathers, we concluded the young bird was likely 17–18 days old. A nestling for sure, too young to be a fledgling. We concluded that the young American Kestrel probably fell out of the nest.

On our farm, we have been lucky enough to be included in Steve Wheeler's kestrel box monitoring program. Years ago, Steve placed a box in a tree that stands along a stonewall at the junction of three large hayfields. More recently, he installed a new improved box at the same location. This new box can be lowered and raised with ease. Much to Steve's dismay, the kestrels at our farm two years ago chose the old box that's higher and not as easy to monitor. Here they incubated a clutch of three eggs. For some reason, after this successful hatch, the next spring they snubbed the kestrel

boxes and moved back across the field to the main barn.

The old hay barn is a three-story structure with an altitude of about 30 feet at the peak. The barn, ell, and farmhouse are all attached. Altogether, the footprint of these buildings is a great example of connected farm building architecture; a design unique to New England and one that was adopted centuries ago back in colonial times. We love our old barn, but it has its drawbacks. Due to the many peaks, scaffolding, and numerous hay mows it's not an efficient place to unload hay bales. The commitment



A young 17- or 18-day kestrel wandering in a hayfield. Photo taken on July 9, 2024 by Melissa Moore, Loudon, NH.

to maintain a sound roof, intact windowpanes, guttering, shingles, and siding falls to my husband and sons who faithfully tend to the barn's needs. There's one place at the back of the barn where robust winds have dislodged shingles and sent them adrift leaving a few openings into the hayloft's interior. Naturally these openings are at the highest peak and this is where the kestrels decided to make their nest this spring. Since we had observed the kestrels' many trips in and out of the openings, the hay crew intentionally avoided



High in the telehandler, Jeff Moore lifted the kestrel back into the nest. Photo by Melissa Moore.

stacking new hay bales in this area. When we found the nestling on the ground, it was well away from the barn. It's a mystery how the young bird was able to travel so far from the nest.

I immediately called NH Audubon's Becky Suomala to ask for advice. It seemed she had a sixth sense that there was a bird emergency because her first words were, "Melissa, is everything all right?" I replied, "I need help with a baby kestrel." I sent her a photo and video of the bird walking across the grass. Becky made two recommendations: call Steve Wheeler and maybe Maria Colby. Steve was in the field when I called, monitoring kestrel boxes in the Upper Valley. He knew what had to be done. "Sounds like it's a young bird," he said. "If you leave it out, you know what will happen tonight." He was confident predators would seize the young bird as prey. Steve advised us to catch the bird and call Maria Colby, owner of Wings of Dawn Wildlife Rehab Center. Maria advised us to catch the young bird and return it to the nest. This action plan was possible thanks to a neighbor who stores his telehandler (combination forklift and crane) at our farm. Both my husband and son are quite familiar with using this "zoom boom" due to a recent new barn building project.

My husband managed the controls while my son climbed into the telehandler's box with the baby kestrel and some supplies. Jeff and the nestling were lifted to the peak of the barn for the big return operation. Since we knew from previous observations where to find the nest, Larry and Jeff were able to get close to the opening and place the young kestrel back inside to be with his mate. Jeff was quite sure there was one other bird in the cavity. He reached in with his camera to get a photo, but the second bird appeared to retreat into the far reaches of the nest. Jeff had brought some thin boards up in the box with him, and he made the opening smaller by 50% to reduce the chances of a nestling falling out again. The kestrel rescue appeared to be a success. The next day, it was business as usual with the adults flying in and out of the nest. Now two weeks later, we hear the constant crying and "klee, klee, klee" sound of fledglings chasing after their parents and begging for food.

Mobbing is another bird behavior we witness frequently at the farm. The Barn Swallows have several cup-like nests scattered throughout the main barn and outbuildings. At least once a day, a half dozen swallows mob the kestrels while in flight. I sometimes think it's a wonder the hay crew ever gets any bales unloaded into the big old barn. Thankfully, we have enough choices for where to stack hay so that the crew can get their job done and still respect kestrel and swallow bird nests. There's a lot happening in the big old barn, and it has quite a story to tell.

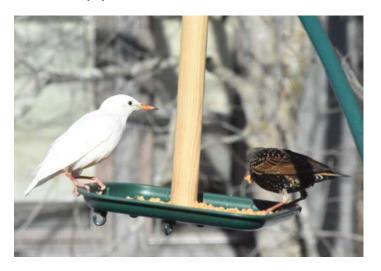
The Color of Feathers: A Bird's Eye View

by Emma Stogsdill

Birds' feathers are as dazzling as they are diverse. The oil-slick shine of a raven's back. The orange pop of an oriole against a forested backdrop. A flash of red on the shoulders of the Red-winged Blackbird. But behind the beauty lies an intricate and fascinating process that defines each bird's plumage. Birds' colors are thanks to a combination of pigments and structural features that work in harmony to create the unique appearance of every species. Many visible plumage colors result from an interaction between one or more pigments and structural characteristics. It is a world of color that goes beyond what the human eye can see, and it begins with two primary mechanisms: pigmentation and structure.



Yellow Warbler by Kyle Wilmarth.



European Starlings are usually glossy black, but the leucistic starling on the left is mostly white due to a genetic condition that reduces pigmentation. Photo by Lisa Payne in Milford, NH.

Pigmentation: Nature's Palette

Birds' feathers gain their hue via three categories of pigments, each responsible for different shades. These pigments come from both the food they eat and the way their bodies process natural elements.

Carotenoids, for instance, are pigments derived from plants. Found in everyday foods like carrots, pumpkins, and sweet potatoes, carotenoids are the reason birds may sport brilliant yellows, oranges, and reds. Yellow Warblers, for example, owe their striking golden feathers to the carotenoids in their diet. Plants rich in carotenoids include Cloudberry, Blueberry, Mulberry, and Elderberry. Some birds eat the plants directly, while sometimes carotenoids come from other sources. A Yellow Warbler's carotenoids come from the insects in their diet which in turn feed on plant sources rich in carotenoids. When carotenoids are consumed during a bird's molting period the pigment is deposited in their feathers.

Then there is melanin, the same pigment that contributes to the color of human skin. Melanin in birds gives rise to a spectrum of colors, ranging from deep blacks to rich browns and soft yellows. And besides color, melanin provides

strength. Feathers that contain high concentrations of melanin are more durable and better able to withstand the wear and tear of flight. This is why birds, even those with mostly white feathers, may have black tips on their wings or tails. The areas of the wing most subject to friction are reinforced by melanin, helping to keep them strong for the long journey ahead.

The third pigment class, porphyrins, is a more elusive contributor. These pigments, a result of modified amino acids, produce colors ranging from soft pinks to deep reds and browns. Porphyrins have an added trick: they fluoresce vivid red when exposed to ultraviolet light. This characteristic is a defining feature of certain species, such as owls and pigeons, lending a mysterious glow to their feathers when seen under the right conditions. The browns in owls and grouse result from an interaction between melanin and porphyrin.

In the absence of pigment, however, feathers that reflect the full spectrum of visible light appear white. Species like the Snowy Owl and gulls boast bright white bodies, but individuals of typically colorful species can be the same white in cases of albinism or leucism, when due to genetics, a bird may lack pigment entirely or in patches.



Ruby-throated Hummingbird by Grace McCulloch. Note that females and juveniles don't have a "ruby" throat, like the adult males!

Structural Coloration: The Magic of Light

While pigments create the foundational colors, the structure adds another layer of complexity. Some bird species have developed intricate feather structures that interact with light in stunning ways, producing colors that seem to shimmer and change depending on how the light hits them.

Take, for instance, the Ruby-throated Hummingbird. Its iridescent feathers are not the result of pigments but of the physical structure of the feathers themselves. Air pockets, or vacuoles, created by an organized lattice of structural proteins in the feathers act like a prism, bending and refracting light into brilliant blues, greens, purples, and violets. The effect is not a simple reflection of light, but rather the bending of light waves, causing the colors to shift depending on the angle of the light. The result is an almost magical, everchanging display of color that seems to glow from within.

Then there are birds like the Eastern Bluebird and the Blue Jay, whose feathers appear blue not because of pigments, but because of the way light interacts with tiny air pockets in the feathers. These microscopic structures reflect blue wavelengths and absorb other color wavelengths. This type of coloration is known as structural coloration. Interestingly, when a feather from a Blue Jay is backlit or ground into powder, the blue fades, and the brownish color of the underlying melanin shows through. Blue, in this case, is not an inherent color of the feather, but the result of a fascinating interplay between light and structure.

A Hidden Spectrum: Ultraviolet Vision

Birds live in a world that is far richer in color than the one we see. While humans can perceive only a fraction of the light spectrum, many bird species can see part of the ultraviolet (UV) range, which is invisible to us. This gives them the ability to see patterns and hues that remain hidden from human eyes. Feathers that appear dull to us reflect brightly in the UV spectrum, revealing intricate patterns and vibrant details.

Some birds use UV coloration as a means of communication. Feathers that look simple and monochromatic to us may be breathtakingly colorful to a bird, and subtle patterns that escape our notice may play a key role in their behavior and interactions.

The Colorful Language of Birds

The colors of birds tell stories—of diet, survival, and attraction—and often speak of things we cannot see. Pigments, light, and structure work together in ways that create not only beauty but resilience, function, and communication.

What to Watch for in Summer

Summer in the bird world is only two months long—June and July. It is the breeding season for most birds in New Hampshire, but the tail end of the northward migration is still going on in early June. By the end of July, southbound shorebirds start to appear. This begins the heart of the migration for adult shorebirds; the young will follow later in the fall. Watch for songbirds carrying food to feed their young. Here are some summer birding highlights.

June



American Oystercatcher by Leo McKillop, 7-21-2024, Star Island, Isles of Shoals. NH

- Common Eider chicks appear in numbers in late May and early June at the coast. There is still no documented breeding on the New Hampshire mainland, only on the Isles of Shoals.
- Common and Roseate Terns nest at the Isles of Shoals and feed on the coast, especially at Hampton Harbor and the Piscataqua River off New Castle.
- American Oystercatchers recently began nesting at the Isles of Shoals and can be seen on Star Island. The best way to look for them is to take a boat tour around the islands and/or land on Star Island. They can also be seen occasionally on the coast, especially in the cove south of Odiorne Point State Park in Rye.
- The first Wilson's Storm-Petrels arrive in northern waters after breeding in the southern hemisphere.
 Numbers build during the summer and peak in July.
 They can sometimes be seen from the coast, but are more reliable offshore, such as on a whalewatch.
- Bicknell's Thrush are on their breeding territories in the high elevations of the White Mountains and northern Coos County. They are easier to hear rather than see, especially their "veer" call.

The boreal bird song chorus is in full voice in early
June. Birds can be difficult to see in the dense sprucefir of northern forests in Coos County, but this is the
time to look for them, especially in the early morning
during peak singing.

July

- Watch and listen for both Yellow-billed and Blackbilled Cuckoos wherever there are caterpillar outbreaks, especially the Spongy Moth (formerly called Gypsy Moth). Cuckoos are some of the few species in New Hampshire that eat hairy caterpillars.
- Hummingbird numbers increase at feeders as youngsters fledge and feed on their own.
- Great Shearwaters, and sometimes Manx, Sooty, and Cory's Shearwaters join the Wilson's Storm-Petrels in offshore ocean waters. A whalewatch or fishing boat is the easiest way to see them.
- Tennessee Warblers nest in northern New Hampshire and Canada but sometimes show up well to the south in early July.
- Southbound shorebird migration starts in early July
 with the first species to arrive being Least Sandpipers,
 Short-billed Dowitchers, and Lesser Yellowlegs. They
 are most common on the coast, but Least Sandpipers
 and Solitary Sandpipers are common inland.
- Watch for an influx of Bonaparte's Gulls at the coast in late July, with adults arriving first. Check coves anywhere along the coast, especially the cove north of the Seacoast Science Center at Odiorne Point State Park in Rye and the Piscataqua River off Fort Constitution in New Castle.
- The first Great Egrets appear inland in late July. This
 is post-breeding dispersal and birds can show up
 anywhere.
- Most swallows finish nesting early and begin to stage in



Cory's Shearwater by Benjamin Griffith, 7-26-2024, Jeffreys Ledge, NH.

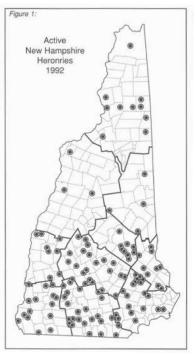
- large flocks at ponds and lakes and along the coast.
- Chimney Swifts start to gather in large flocks, often in cities and towns, roosting in large chimneys.

Great Blue Heron Rookery Data Now in eBird

by Rebecca Suomala

In 1983, NH Audubon initiated field surveys to document Great Blue Heron rookeries in New Hampshire. Volunteer Elizabeth "Betty" Swift was the Project Coordinator until 1992. Chris Martin analyzed data from the surveys in a 10-year summary which showed 167 heronries (Figure 1) and stable reproductive success during that period.

Field data sheets from those surveys were well organized in file folders for each rookery, but these records were tucked away in a file cabinet in Concord. The advent of eBird created an opportunity to make this historic data available to all.



Location of active Great Blue Heron rookeries in 1992 from "Great Blue Herons in New Hampshire: A 10-year Summary" by Chris Martin in NH Audubon March-April 1993, Vol. 29 #2.

Thanks to the efforts of volunteers Chris DiBona and Susan Burkhardt, the data from those heron rookery reports are now in eBird.

As they entered the data, they found some interesting comments. Here are a couple:

One observer was scouting an area for a rookery in 1984 and found a marijuana farm which he reported to the police. "They thanked me and told me to stay away if I valued my skin." The police "pulled up several thousand dollars' worth of the plants. Naturally I don't advertise this."

One form had "MURDER!" written on it but it was referring to herons, not people. There were five or six dead juveniles up in the nests in the colony. At first, it was thought to be a raccoon but later determined to likely be a fisher.

A big thank you to Chris and Susan for their efforts to make this data publicly accessible. Of note, Betty Swift received the Goodhue-Elkins Award in 1997 in recognition of all her work on the project. If you visit a heron rookery, please consider documenting what you find in eBird.

Answer to the Photo Quiz

by Greg Tillman

Sometimes in birding we don't always get the view we want. A silhouette against the sky might be the best look we get before our bird vanishes over the horizon, or into the woods, or behind a river bend. One benefit of understanding shape is that it can help us rapidly narrow down our candidates when all we have is that brief, bad look.

On our mystery bird silhouette, the amazingly long, curved bill stands out immediately. We also see long legs and feet trailing behind the tail, so with some confidence we can focus on long-legged birds like waders. Let's start with rails, perhaps some of the larger shorebirds, and certainly we need to look at herons and their relatives.

Rails are marsh birds, but they are much more compact than the bird we see here, and although some have moderately long bills, none of our rails have the distinctively long bill of our mystery bird. In fact, only two sets of birds in New Hampshire have that sort of dramatically long and down-curved bill: ibises (which are medium-sized marsh waders) and curlews (large shorebirds that are represented in New Hampshire primarily by the Whimbrel).

In the field, a Whimbrel is clearly smaller than an ibis, and shorter as well (when it's standing). Our flying silhouette gives the impression of a large bird, but in photos, and also when birds are flying, size can be hard to determine. Let's be a little cautious. Does wing shape help in separating an ibis from Whimbrel? The wings of this bird are long, and show dramatic curves in the leading edge, from the neck to the

wrist, but after spending some time looking at pictures of different birds flying and birds taking off, I think the curved edge is mostly an artifact of the position of the wings.

Rather than puzzle out wing shape, I think the long trailing legs and feet are the best clue, along with the long neck. The shorter legs of a Whimbrel barely extend beyond the tail when it flies, but this bird clearly shows legs so long they stand out against the sky. Additionally, Whimbrels don't fly with a long, extended neck like our bird has.

With long legs, long neck, and long curved bill, we are looking at an ibis, but what kind of ibis? New Hampshire has recorded White-faced Ibis and White Ibis, both occurring less than annually, along with the

much more common Glossy Ibis. White Ibis is slightly larger and heavier than the other two species, but honestly, identifying a White Ibis in New Hampshire solely by shape would be fraught with doubt. Also, the other two species, Glossy and White-faced, are virtually identical in size and shape. I think, with the picture we have, we've really taken the identification about as far as we can.

Conclusion: From a silhouette perspective, the best we can do is **identify it as an ibis—but which species?** (I did warn you!) For full transparency, Jim Sparrell took this stunning photo of a Glossy Ibis at Pickering Ponds in Rochester, NH.

Final Thoughts

One final thought about what this quiz tells us: From a practical standpoint, if you're birding in New Hampshire (and not taking a photo quiz), it is fairly safe to assume that any silhouetted or distant ibis is a Glossy Ibis. We make similar identifications all the time—just as we don't typically question that a hummingbird zipping by is anything other than a Ruby-throated Hummingbird.

However, we should always check whenever possible! While shape can sometimes be enough to identify a bird, the best practice is to confirm your ID with clear field marks whenever you can. In the case of a probable Glossy Ibis preening in front of you—not hidden half a mile into a marsh—always check to see if the bill is grayish rather than brownish and if the face and knees are more reddish than usual. If you don't check, you'll never be the one to find that White-faced Ibis that is, just barely, possible!



Photo by Jim Sparrell.

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Abbreviations Used

AMC Appalachian Mountain Club

BBC Brookline Bird Club
BBS Breeding Bird Survey
CA Conservation Area
CC Country Club

CFT NH Audubon Chapter Field Trip

FT Field Trip

IBA Important Bird Area

L. Lake

LPC Loon Preservation Committee

NA Natural Area

NHA New Hampshire Audubon
NHBR New Hampshire Bird Records
NHRBC NH Rare Birds Committee
NWR National Wildlife Refuge

NWR National Wildl PO Post Office

R. River Rd. Road

RO Raptor Observatory

Rt. Route
SF State Forest
SP State Park

SPNHF Society for the Protection of NH Forests,

Concord

T&M Thompson & Meserves (Purchase)

TNC The Nature Conservancy
WMA Wildlife Management Area
WMNF White Mountain National Forest

WS NHA Wildlife Sanctuary

- approximately

WTP Wastewater Treatment Plant

New Hampshire Bird Records is published quarterly by NH Audubon's Conservation Department. Thank you to the many observers who submit their sightings to NH eBird (www.ebird.org/nh), the source of data for this publication. All records are subject to review by the NH Rare Birds Committee and publication here does not imply future acceptance by the RBC.

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Summer 2024 Birds of Prey



An Eastern Screech-Owl peeks out from a nesting box in Exeter, NH. These small owls depend on cavities for nesting but cannot excavate their own relying instead on woodpecker holes, natural tree hollows, and nest boxes. Photo by Len Medlock, 7-10-2024.



A group of American Kestrel chicks awaits their next meal. In a single summer, a kestrel pair may raise one or two broods, with a typical clutch size of four to five eggs. Photo by Debra Powers, 6-26-2024, Strafford County, NH.



A Merlin soars over Rye Harbor State Park, NH. These small but powerful falcons are known for their speed and agility in flight. Photo by Benjamin Griffith, 7-23-2024.

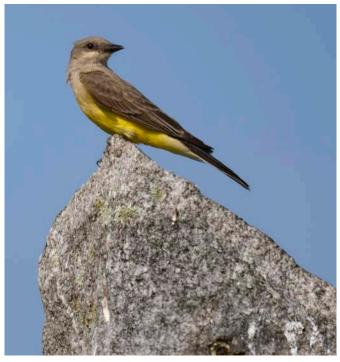


Ospreys often return to the same large nest year after year, adding new materials each season. This nest in Strafford County, NH, had three chicks in 2024. Clutch size typically ranges from one to four eggs. Photo by Debra Powers, 7-4-2024.

Summer 2024 Rarities



A remarkable high count of 23 Black-bellied Whistling-Ducks were reported in Epping NH. Photo by Cameron Johnson, 6-10-2024.



A one-day wonder, this Western Kingbird was reported and photographed by Russell Ward in Gilmanton, NH, 7-21-2024. There are only two other summer reports in eBird for this species.





The summer of 2024 was an excellent season for Black Tern sightings, with several reports of birds moving to and from their northern breeding grounds along with reports on the coast through July. This breeding-plumage tern was photographed inland at Long Pond in Benton, near Mt. Moosilauke by John Welch, 7-27-2024.

◆ A rare report of a Yellow-crowned Night Heron on the Isles of Shoals. Photo by April Leighton, 7-20-2024, Star Island, NH.

