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

In This Issue

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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Cover Photo: A Bridled Tern—the first ever recorded in New Hampshire! Learn more about this rare visitor and ongoing tern research in this issue's articles by James Freitas (page 10-12) and Ellen Estabrook (page 13). Photo by Cameron Johnson, 7-13-2024, Isles of Shoals, NH.

Grassland Bird Surveys in New Hampshire

by Pam Hunt

Every three years, I update population estimates for two of 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.

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.

