

Bird Observer

VOLUME 43, NUMBER 6

DECEMBER 2015



HOT BIRDS



Just a few weeks after the BBC's August overnight pelagic, the *Helen H* (the boat that carries the BBC's pelagic trips) was on a fishing expedition over West Atlantis Canyon, about 90 miles south of Nantucket, when Captain Joe photographed what was later identified to be the first-ever Massachusetts record of **Masked Booby!** Photograph (left) by Joe Huckemeyer on September 10.

On October 1 Justin Lawson was looking for American Pipits for his Worcester County photographic big year but encountered a **Northern Wheatear** instead! The bird hung around near Gate 36 of Wachusett Reservoir for a few days and was admired and photographed by many happy chasers. Tom Murray took the photograph on the right.



This **Bell's Vireo** was caught and banded at the Manomet Bird Observatory on October 9. Another of its species was seen by Sean Williams on October 30 at Fort Hill in Eastham, and continued to be seen and heard around there through at least November 3. Lauren DiBiccari took the photo at left.

Justin Lawson's Worcester County photographic big year has led him to discover some fantastic birds this fall. He came across this **Purple Gallinule** at Little Chauncey Marsh in Northboro on October 21, less than three weeks after he found the Northern Wheatear! Another vagrant of this species was photographed at Burrage Pond WMA in Hanson and Halifax on November 8. He took the photo on the right.



A **MacGillivray's Warbler** which turned up on November 5 in a community garden in Lexington, just north of Arlington Reservoir, stuck around the area through at least November 10. This warmed up Lexington birders for the Common Ground-Dove that was found there a few days later. Erik Nielsen took the photo at left.

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Bird Observer

A bimonthly journal—to enhance understanding, observation, and enjoyment of birds
VOL. 43, NO. 6 DECEMBER 2015

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ADVERTISING: full page, \$100; half page, \$55; quarter page, \$35. Contact: Bird Observer Advertising, P.O. Box 236, Arlington MA 02476-0003.

MATERIAL FOR PUBLICATION: BIRD OBSERVER welcomes submissions of original articles, photographs, art work, field notes, and field studies. Scientific articles will be peer-reviewed. Please send submissions by email to the editor, Marsha C. Salett <msalett@gmail.com>, or to the feature editor, Paul Fitzgerald <pfitzgerald17@verizon.net>. Please DO NOT embed graphics in word processing documents. Include author's or artist's name, address, and telephone number and information from which a brief biography can be prepared.

POSTMASTER: Send address changes to BIRD OBSERVER, P.O. Box 236, Arlington MA 02476-0003. PERIODICALS CLASS POSTAGE PAID AT BOSTON MA.

BIRD OBSERVER (USPS 369-850) is published bimonthly, COPYRIGHT © 2015 by Bird Observer of Eastern Massachusetts, Inc., 115 Marlborough Road, Waltham MA 02452, a nonprofit, tax-exempt corporation under section 501 (c)(3) of the Internal Revenue Code. Gifts to Bird Observer will be greatly appreciated and are tax deductible. ISSN: 0893-463

Birding the Charles River Peninsula, Needham, Massachusetts

Peter W. Oehlkers

Charles River Peninsula is a Trustees of Reservations property in Needham. Surrounded on three sides by the Charles River, it features 20 acres of managed upland grassland ringed by wooded riparian habitat and shrubby marshes. Access to trails and parking is easy except after heavy snowfall.



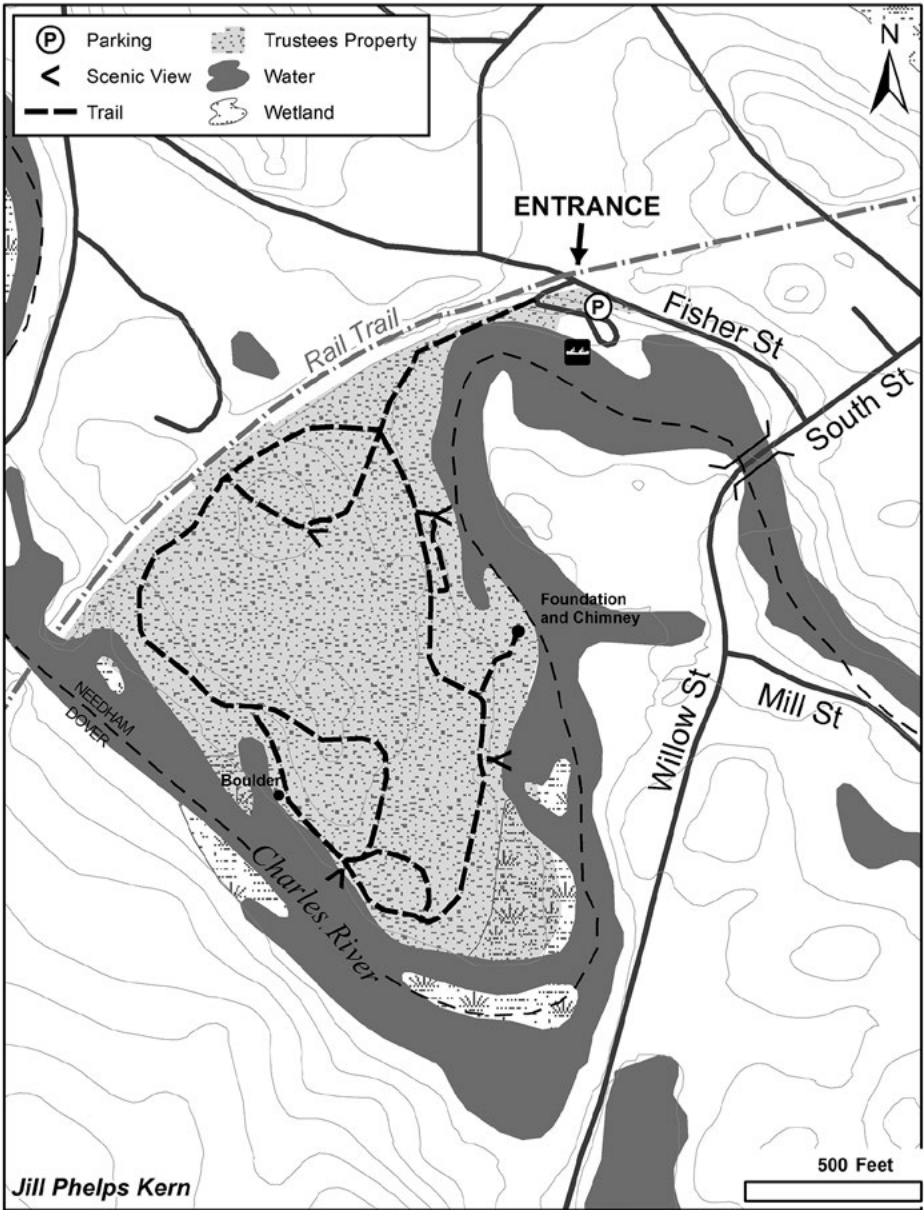
Charles River Peninsula isn't the kind of place that attracts many exciting rarities; those are more likely to be found in the parks downstream—Nahanton, Cutler, and Millennium. Its size, configuration, and habitats are ideal for novice birders looking for a dependable spot to find the region's more charismatic common birds, including Baltimore and Orchard orioles, Rose-breasted Grosbeaks, Bobolinks, Eastern Bluebirds, and Wood Ducks. There is, nevertheless, plenty to interest the veteran birder, including occasional appearances by Barrow's Golden-eyes, Rusty Blackbirds, and Mourning Warblers; the presence of breeding Yellow-throated Vireos and possible breeding White-eyed Vireos; and regularly occurring autumn flocks of staging Northern Rough-winged Swallows.

Charles River Peninsula is about seven minutes by car from Interstate 95 (Route 128). Take exit 17 to Route 135 and go west. At the first set of lights in Needham, take a left onto South Street and follow it, keeping a careful eye out for bicyclists, for about two and a half miles until you come to Fisher Street. Take a right on Fisher Street. Shortly, the driveway to the property, marked with a sign for Red Wing Bay, will be on the left.

Red Wing Bay Parking Lot

At Red Wing Bay there is a boat launch managed by the Massachusetts Department of Conservation and Recreation (DCR) with an unpaved circular driveway and space for about a dozen cars. For many years, there was a canoe rental boathouse at Red Wing Bay; it burned down in the 1980s. The existing boat launch is rarely used in the early morning but can get crowded later in the day, especially during weekends. After parking, it is worthwhile to spend a moment scanning the immediate area for White-crowned Sparrows, especially in the fall. You can find migrating kinglets in the surrounding shrubs and warblers in the upper branches of bordering willows. Common Grackles, Baltimore Orioles, and Warbling Vireos regularly breed here. During the winter, it is worth looking from the boat launch for passing Hooded and Common mergansers. You'll often find Mallards and Canada Geese and sometimes Great Blue Herons in Red Wing Bay.

Many of our common year-round resident species frequent the parking area and the paved driveway: Mourning Doves, Blue Jays, Black-capped Chickadees, Tufted





View of the Charles River from the boat launch. (All photographs by the author.)

Titmice, White-breasted Nuthatches, American Robins, Northern Cardinals, and American Goldfinches.

Red Wing Bay marks the end of a long, twisted leg of the Charles River stretching from South Natick to Needham. A kayak or canoe is a splendid way of birding the peninsula during the warmer months. A waterfall prevents passage downstream. Below the waterfall there is open water year-round, good for a variety of wintering ducks. During cold spells it is worth a drive along nearby Mill Street in Dover to scan the Charles River for mergansers, golden-eyes, and Ring-necked Ducks.

Path to the Peninsula

In the parking area, The Trustees have placed a kiosk with a large map of the Charles River Peninsula and some relevant information that you can use to plan your visit. Walk up the paved driveway from the parking lot and descend down a gravel path toward the peninsula. The river will be to your left and a rail trail on a ridge will be to your right. Gray Catbirds and Yellow Warblers breed in the vegetation between the path and the water; their nests are often visible. Crab apple trees along this path are popular with birds of all sorts. You'll sometimes hear White-eyed Vireos, Field Sparrows, and Blue-winged Warblers along this stretch.

The gateway to the peninsula is a wooden footbridge that crosses a small intermittent stream. You will be at the base of a hill, looking out on a large open field. You should see three paths: to the left, up the hill, and to the right. Take the path to the left and walk the trail clockwise.



Barrow's Golden-eye on the Charles River.

Charles River Peninsula's upland grassland has been maintained for agricultural purposes for over a century. It was owned by the Fisher family of Needham during the colonial era, and then was part of the Walker Gordon Dairy before being donated to The Trustees in the 1960s. The dairy's famous Rotolactor building is still standing, part of the adjacent Walker School property. For the last few years, The Trustees have consciously managed the property as a grassland habitat. They removed a large stand of mature trees in the process, in

hope of fostering grassland-dependent species such as Bobolinks, Savannah Sparrows, and Eastern Meadowlarks.

Numbered nesting boxes ring the property and contribute to robust Tree Swallow and Eastern Bluebird populations during the spring and summer. House Sparrow breeding attempts are aggressively managed. During spring and summer, scan the swallows in the air or perched on overhead wires for Barn as well as Tree swallows. In September, Northern Rough-winged Swallows perch in large numbers on the wires at the opposite side of the property.

Wooded River Overlook

Just beyond the first nesting box there is a path to the left through a wooded area. This is a good place to look for warblers during migration periods. Charles River Peninsula, generally, is not a place to expect great fallouts of warblers, but during the year you can see a good variety, including Blackpoll, Black-and-white, Northern Parula, Magnolia, American Redstart, Pine, Palm, Wilson's, and Nashville.

The path provides high, unobstructed views of the river. Look for ducks and herons, as well as Solitary and Spotted sandpipers. Golden-eyes, including Barrow's, make appearances during the winter when the water is open. When the river is frozen, you can sometimes see river otters and mink cavorting on the ice.

Back to the Meadow

Exit back onto the grassland path. During migration, you will flush large numbers of Savannah Sparrows as you walk. This section of the field has historically attracted the largest concentration of Bobolinks. Over the past few years, Bobolink pairs have been spotted in this area well into June, but no actual breeding has been observed. The Trustees hope that will change. Eastern Meadowlarks are rare but possible.

Short Woodland Loop

Near nesting box #5 you will see an opening into a wooded area. This is a short loop that passes close to the river and the remains of an old brick structure. The path

takes you behind the shrubs and briars that line much of the peninsula and provides good looks at birds that are otherwise hidden. Orchard Orioles, which arrive at the peninsula in mid to late April, will sometimes skulk here. There are usually at least two breeding pairs a year on the property and a great deal of competition for the females that arrive. Human walkers approaching Orchard Oriole nesting areas may receive the rare privilege of getting flutter-flighted, as the male circles eye-level, singing on the wing.



The Charles River Peninsula meadow in May.

Out on the Meadow Again

This section of the trail is close to prime Red-winged Blackbird nesting areas. During the summer, fledglings will hide in the long meadow grass, and parents will anxiously circle interlopers. During the past few years, there has been a particularly aggressive pair of Tree Swallows along this stretch that will dive-bomb you if you linger too long.

This is a major song corridor. Singing Rose-breasted Grosbeaks, plus Orchard and Baltimore orioles are dependable during May, particularly when the crab apples are blossoming. As you near the far end of the peninsula, the volume and variety of song increases. I've seen as many as a half-dozen male Baltimore Orioles competing here through song and chases. I've heard Rose-breasted Grosbeaks, Scarlet Tanagers, Baltimore Orioles, Bobolinks, Gray Catbirds, American Robins, Wood Thrushes,



Female Baltimore Oriole collecting nesting material.

Yellow Warblers, and Common Yellowthroats simultaneously singing here. This is also the best spot for relative rarities, including White-eyed Vireos, Rusty Blackbirds, and shrub-oriented warblers.

Woodland Trail

As you turn the corner, you have the choice of entering another woodland path or continuing on the meadow. Take the woodland path. This is a prime courtship and breeding area and because of the relative narrowness of the wooded part, nesting can be quite visible. One spring, I had daily views of a female Rose-breasted Grosbeak as she sat silent and still on her nest. The next year, I was able to watch as a pair of noisy Blue-gray Gnatcatchers built and defended their lichen-edged nest in the crook of a tree. Chickadees, titmice, and nuthatches will be close and abundant most of the year.

In April, Wood Ducks will congregate in large numbers on the river and in tree branches. Fox Sparrows may be singing in the understory. In spring and summer, Great Blue and Green herons may feed in the grassy shallows at water's edge. The woodland edge, as well as the other narrow wooded areas that border the Charles River and ring the property, attract Northern Flickers and Downy, Hairy, and Red-bellied woodpeckers.

Back Out to the Meadow

After exiting the woodland trail, keep left and follow the path along a dense row of low trees and shrubs where you will find many sparrows and finches, as well Common Yellowthroats and an occasional Willow Flycatcher. At the end of this stretch, near the rail trail, is a relatively grassy area where one can sometimes hear the *churr* of a Mourning Warbler in late May.

Turn the corner and head toward a row of mature oak trees that extends into the meadow. This is another favored nesting spot and the best place on the property to get close views of Eastern Bluebirds, who seem to be particularly fond of nesting box #16. For a few years, Yellow-throated Vireos nested in these trees. All summer long, one could hear the male vireo airing his raspy monotonous song. Alas, they seem to have moved across the river; you can hear him only from your canoe or kayak these days. Maybe they'll move back to the peninsula.



Juvenile Eastern Bluebirds on power line structure.

On Top of the Hill

A little way beyond the row of trees, you will have the option of continuing straight along the edge of the property or to the right, up a hill. Go up the hill. Until it was blown down in storm a few years ago, a large shagbark hickory stood on the top of the hill, a favored spot for songbirds—particularly woodpeckers—squirrels, and Red-tailed Hawks. Now the hill offers clear views of the entire property. During April, look for American Kestrels, which are regular visitors and potential breeders. Red-tails, Turkey Vultures, and an occasional Osprey also soar overhead. Descend down the hill and return to the parking lot. Or, return to the loop and try it again, switching directions and walking counter-clockwise for a slightly different perspective.

Additional Notes

Charles River Peninsula is known locally as the Tick Farm. It is important to stay on the paths, to take whatever precautions to avoid ticks that work for you, and to be vigilant about deer tick checks after your visit.

In order to improve the quality of the hay harvested from the meadow and the habitat for grassland wildlife, The Trustees have begun an aggressive program to control invasive plants. The milkweed and goldenrod that usually grew throughout the fields and hosted a large variety of interesting insects are gone, at least temporarily, but the hope is that the program will control the cypress spurge and black swallow-wort that had begun to take over large sections of the grassland.

Trustees Site: <<http://www.thetrustees.org/places-to-visit/greater-boston/charles-river-peninsula.html>> 

Peter W. Oehlkers is chair of the Communications Department at Salem State University and vice chair of Needham's Conservation Commission. He manages nesting boxes and monitors grassland birds for the Trustees of Reservations at Charles River Peninsula and other properties. Peter is the Production Editor of Bird Observer.

Thomas Nuttall: Pioneering Naturalist (1786-1859)

John R. Nelson

Note: *This article is an expanded version of “Thomas Nuttall: Pioneering Naturalist” published in the May/June 2015 issue of Harvard Magazine.*



Portrait of Nuttall, artist unknown—probably the only known portrait.

Thomas Nuttall’s first love was plants, not birds. In 1808, the day after he came to Philadelphia from his native England, Nuttall saw a common greenbrier, a species unknown to him, and brought it to Benjamin Smith Barton, professor of Natural History and Botany at the University of Pennsylvania. Barton, author of the first American botany textbook, was struck by the young man’s fervor for plants and became his mentor. Two years later, he sent Nuttall on the first of his many great collecting expeditions: west to the Great Lakes, up the Missouri River into Mandan territory in North Dakota, and then down the Mississippi.

Despite identification papers signed by President Madison, Nuttall soon realized that he wouldn’t be welcomed by British trappers who controlled the Great Lakes region, and he joined a John Jacob Astor fur trading party on Mackinac Island. In woods and prairies along the wide Missouri, he found plants

new to science and collected species discovered, but lost in transit, by the Lewis and Clark expedition. Mishaps punctuated his single-minded scientific quest. Suffering chills and fever from malaria, he had to be rescued by a Mandan after he’d wandered off and collapsed on the plains. Later, lost again, he fled from the Indians who’d been sent to save him but were wary of approaching him because of his reputation for brewing powerful herbal concoctions. He entrusted another group of Indians to deliver specimens by boat, only to be told that his couriers drank the alcohol used to preserve his treasures.

In late 1811, at journey’s end in New Orleans, Nuttall, apparently worried about the prospect of imminent war with England, boarded a ship for London, but he soon returned to Philadelphia. Though Barton had warned him to safeguard his specimens from piratical naturalists, Nuttall learned that Frederick Pursh, Barton’s previous assistant, had managed to access much of his collection, adding Nuttall’s species—and

naming some after himself—in an appendix to his 1814 book on North American plants (Hanley 1977). Undaunted, Nuttall headed off in 1816 on his second major collecting expedition, traveling by boat down the Ohio River and then trekking alone across Kentucky and Tennessee, returning north through the Carolinas. An apprentice printer back home in Yorkshire, Nuttall published his first major work at his own expense in 1818. Renowned botanist John Torrey declared that the book, *The Genera of North American Plants and a Catalogue of the Species, to the Year 1817*, “contributed more than any other work to advance the accurate knowledge of the plants in this country.” (Southwest Colorado Wildflowers 2015)

Nuttall had gained the respect of fellow botanists, but to the public at large, he had also become a prototype of the absent-minded professor, the naturalist as nerd. He first appeared in narratives of the Astor expeditions by Henry Breckenridge and John Bradley, who mocked his impassioned gathering of “weeds,” comical obliviousness to danger, inability to swim, and his use of his rifle to store seeds. In *Astoria*, Washington Irving labeled Nuttall a “zealous botanist” who went “groping and stumbling along among a wilderness of sweets, forgetful of everything but his immediate pursuit,.... The Canadian voyageurs... used to make merry at his expense, regarding him as some whimsical kind of madman.” (Kastner 1977) Historian Joseph Kastner calls him “a throwback to that bemused figure of the Middle Ages, the Blessed Fool, who, protected by his own innocence, wandered unharmed from one peril to the next.” (Kastner 1977) He may even have been the inspiration for Dr. Obed Bat, the obsessive blowhard naturalist satirized in James Fenimore Cooper’s 1827 novel *The Prairie*. Although there is no evidence that the two men ever met, Cooper did know Irving’s *Astoria*. But if Bat is a fictionalized Nuttall, or a composite of weed-bat-bug-bird-gathering naturalists, this and the other caricatures, however amusing, seem ungenerous and small-minded in their view of scientific exploration. Preoccupied Nuttall may have been, even pompous and pedantic, and he certainly got lost a lot, but there’s no doubting his endurance and relentless determination to discover and understand the natural wonders of the American West as a pioneer in the study of the continent’s flora and fauna.

Nuttall showed his tenacity in 1818 when, after failing to procure funding for an expedition, he set off anyway on his third major journey, to the Southwest, a region then virtually unknown to naturalists. Traveling by flatboat, on horseback, and on foot, he covered over 5000 miles, heading down the Ohio and Mississippi, going up the Arkansas River beyond the army posts and into Comanche territory, and then making his way to New Orleans. He recounted his journey in his 1821 *A Journal of Travels into the Arkansas Territory*. Sensitive to criticism, Nuttall complained in the preface that his work had often met with “detraction and envy” instead of gratitude, and he insisted that he hadn’t written the *Journal* for “emolument” but rather had “sacrificed both time and fortune to it.” The book, he claimed, wasn’t intended for “those who vaguely peruse the narratives of travelers for pastime or transitory amusement” but for “the scientific part of the community.” “To converse, as it were, with nature,” he wrote, “to admire the wisdom and beauty of creation, has ever been, and I hope ever will be, to me a favorite pursuit.” (Nuttall 1821)



Photo of Nuttall Club, 1889, from the Library of Congress

The *Journal* captures Nuttall's excitement at finding almost countless new plant varieties, and the wonder of Arkansas's dawn chorus—"the songs of thousands of birds, re-echoing through the woods." But whatever his intent, the book reads like an epic adventure yarn, as Nuttall must overcome one obstacle after another, some natural, others human: floating ice, hidden sand bars, and treacherous eddies on the Mississippi; swampy, mosquito-infested forests in Arkansas; "pathless" and "inhospitable" deserts; drunken, unreliable boatmen; pirate gangs and "swindling robbers" on the river banks and islands; yellow fever; foul water; wormy meat; blow-flies and their maggots; freezing cold; and remorseless heat. Anticipating the time when "civilized society" would come to the "luxuriant wilds" of the West, Nuttall hardly romanticizes wilderness. Alone and away from the river in Arkansas, he found the landscape "almost destitute of every thing which is agreeable to human nature; nothing yet appears but one vast trackless wilderness of trees, a dead solemnity, where the human voice is never heard to echo, where not even ruins of the humblest kind recall its history to mind, or prove the past dominion of man." In August 1819, at his lowest, beleaguered by an excruciating headache and violent heat, he "imprudently" drank some tepid water and became desperately ill. Fever, diarrhea, and the "unremitting gloom" of sunless skies were compounded into "miseries of sickness, delirium, and despondence" until his mind "became so unaccountably affected with horror and distraction that, for a time, it was impossible to proceed to any convenient place of encampment." Soon after, a blind Osage chief and a squadron of "impertinent squaws" (compared by

Nuttall to *Macbeth's* witches) stole his canoe, tried to steal his horse, and then, in a wild thunderstorm, chased him through the darkness, into quicksand, and across a frigid river—"the most gloomy and disagreeable situation I ever experienced in my life." (Nuttall 1821)

The *Journal* includes Nuttall's impressions of Indian tribes, for he hoped to contribute to both natural history and the history of his adopted country, especially of "the unfortunate aborigines, who are so rapidly dwindling to oblivion." Along the Ohio he found Shawnees "ever flying from the hateful circles of civilized society," as well as white settlers "all searching for some better country" but "destitute of the means or inclination of obtaining an honest livelihood." In Arkansas Territory he was repelled by the sight of Osage chiefs begging tobacco and degraded by "intercourse with the civilized world" to acquire "merely artificial wants," yet he was impressed by the Quapaws, who, without civilized restraints, had not abandoned "the obligation to decorum and the essential ties of society." The Cherokees, granted land in the Territory, might become, Nuttall believed, a "powerful and independent nation" if they embraced the "habits and industry of the Anglo-Americans." Elsewhere he's philosophical about human nature and more skeptical about civilization's supposed benefits: "Yet so nicely balanced, in every situation, is the proportion of good and evil allotted to humanity, that one stage of society has but little advantage over another." Three appendices to the *Journal*, with linguistic notes on Southwestern tribes, would, Nuttall hoped, rectify the dismissal of Indian languages as "barbaric" and "create a new era in the history of primitive language." (Nuttall 1821)

Nuttall's books brought him to the attention of Harvard, which hired him in 1822 as a natural history lecturer and curator of its botanical garden. Without formal academic training, Nuttall was never made a professor, but over time, Harvard doubled his salary, allowed him to take botanizing leaves of absence, and awarded him an honorary masters of arts degree. In 1830 he was also elected the first president of the Boston Society for Natural History. Nuttall was a popular teacher, guiding students on rambles through nearby woodlands, though his reputation for oddity persisted. Donald Culross Peattie described him as "a shy, eccentric bachelor, shabbily dressed and parsimonious from necessity . . . During his curatorship of the botanical garden at Harvard it was his fancy to cut in his house all sorts of secret doors, which had for their purpose only his privacy; as a result, a man might enter Nuttall's study and find there nothing but innumerable cages of birds, with which this elvish little man continually experimented." (Peattie 1935)

Nuttall grew increasingly restive during his eleven years at Harvard. In that era, "Harvard was a veritable desert for a biologist" (Hanley 1977), and Nuttall later described his Cambridge years as vegetating with the vegetation. But his experiments with caged birds, whatever their purpose, were more than idle whimsy. At the close of his Harvard career, he brought forth *A Manual of the Ornithology of the United States and Canada* in two volumes, *The Land Birds* (1832) and *The Water Birds* (1834). Small, inexpensive, and filled with clear woodcut drawings, the manual became a popular guide that, as Christopher Leahy has remarked, "might qualify as the first field guide to North American birds." (Leahy 2004) Ralph Waldo Emerson praised the book,



MOTTLED OWL.

Illustration accompanying Screech Owl entry in original edition of Nuttall's *Manual*.

and Audubon carried an annotated copy. In fact, Audubon visited Nuttall in Cambridge with the hope that the author might show him his first Olive-sided Flycatcher. Nuttall did find him his bird, though it took some searching for a rifle to borrow before Nuttall could shoot it and Audubon could use it as the model for his painting of a “Cooper’s Flycatcher.”

Nuttall’s *Manual* brings us back to the time when American bird people delighted at finding Party-colored Warblers (Northern Parulas, also known as Finch-Creepers), Hair-Birds (Chipping Sparrows), High-holders (Northern Flickers), Hang-nests (or Firebirds or Golden Robins—Baltimore Orioles), Titlarks (American Pipits), Rain Crows (Yellow-billed Cuckoos), and Cat Owls (Great Horned). If Nuttall found wilderness more appalling than awe-inspiring, birds enraptured him. “They play around us like fairy spirits,” he rhapsodizes in the introduction, “elude approach in an

element which defies our pursuit, soar out of sight in the yielding sky, journey over our heads in marshaled ranks, dark like meteors in the sunshine of summer, or, seeking the solitary recesses of the forest and the waters, they glide before us like beings of fancy. They diversify the still landscape with the most lively motion and beautiful association. . . Their lives are spent in boundless action; and Nature, with an omniscient benevolence, has assisted and formed them for this wonderful display of perpetual life and vigor, in an element almost their own.” (Chamberlain 1891)

Unburdened by the modern scientist’s skittishness toward anthropomorphism, Nuttall, like other naturalists of his century, freely praises or disapproves of the habits of particular species. He commends birds generally for their conspicuous “conjugal fidelity and parental affection,” though he grants that fidelity usually “expires with the season.” Parasitical species, he concedes, are guilty of treachery—“the whole tribe of Cuckoos are in disgrace for the unnatural conduct of the European and some other foreign species”—yet he reminds us that avian parasitism is relatively rare. With other early Americans, Nuttall celebrated the skill, fearlessness, and ferocity of Eastern Kingbirds. Other favorites include the American Crow and Northern Mockingbird, which, despite character flaws—the crow’s thievishness, the mocker’s capriciousness—bring intelligence to mischief and can be easily domesticated and “reconciled to the usurping fancy of man.” He admires the crow’s skill in opening doors by alighting on the latches, and its ability to recognize its “master” even after a long absence. Of the mockingbird, he says: “Nothing escapes his discerning and intelligent eye or faithful

ear. He whistles perhaps for the dog, who, deceived, runs to meet his master; the cries of a chicken in distress bring out the clucking mother to the protection of her brood.” (Chamberlain 1891)

Nuttall isn't shy about making claims for bird intelligence: “We cannot deny to the feathered creation a share of that kind of rational intelligence exhibited by some of our sagacious quadrupeds, —an incipient knowledge of cause and effect far removed from the unimprovable and unchangeable destinies of instinct.” Though he grants that it is hard to distinguish between “innate propensity” and “the dawning of reason” in nest-building, he views the “consummate ingenuity of ornithal architecture,” along with adaptability in choosing nesting materials and sites, as proof of birds’ capacity for “education.” And migratory birds, he believes, exhibit knowledge of the qualities of air far beyond any human

conception. Nuttall especially finds signs of intelligence in birds’ adaptations to human proximity. Eagles, crows, and blackbirds, knowing “the powerful weapons and wiles of civilized man,” demonstrate “traits of shrewdness and caution which would seem to arise from reflection and prudence,” while other intelligent birds “soon learn to seek out the company of their friends or protectors of the human species,” the Brown Thrush (Brown Thrasher) even feeling “real and affectionate attachment” to people (Chamberlain 1891).

Nuttall likes to tell stories of remarkable birds, such as a canary, taught to play dead as part of a London stage show, that “suffered itself to be shot at, and falling down, as if dead, was put into a little wheelbarrow and conveyed away by one of its comrades.” He anticipates modern ornithological research in his fascination with a celebrated parrot that could answer questions and whistle a repertoire of tunes—even correcting minor errors in its singing—as it continued to “beat time with all the appearance of science.” (Chamberlain 1891) Scientists at Harvard now study Snowflake, a head-bopping, time-keeping Eleonora Cockatoo that can synchronize its body movements—*dance*—to human music, especially Backstreet Boys songs. The link between the ability to mimic sounds and the capacity for “beat induction” may offer clues about both the development of avian brain systems for learning song, and the evolution of human language.

Nuttall’s guide was precise and accurate enough for many readers to assume its author must have been a trained ornithologist, but it contained some errors and questionable species, and it eventually became dated because of changes in



Photo of stamp of Pacific Dogwood (named for Nuttall, *Cornus nuttallii*) from the U.S. stamp gallery.

ornithological classification and nomenclature, as well as discovery of new species. In 1891 Montague Chamberlain, a co-founder of the American Ornithological Union, edited and annotated a revised edition, *A Popular Handbook of the Ornithology of the United States and Canada, based on Nuttall's Manual*. Chamberlain prepared the book by “taking Nuttall’s biographies and inserting brief notes relating the results of recent determinations in distribution and habits” (Chamberlain 1891). He omitted species that occur only west of the Mississippi valley. Chamberlain notes that some of Nuttall’s birds were later reclassified, like the American Redstart, formerly considered a flycatcher, and he points out cases in which Nuttall, sometimes passing along the errors of Alexander Wilson or Audubon, gave species status to birds—Washington Eagle, Winter Hawk, and Hemlock’s Warbler—that were immature versions of the Bald Eagle, Red-shouldered Hawk, and Blackburnian Warbler. Chamberlain also explains the relegation of some species to the AOU’s “hypothetical” list, including Audubon’s Small-headed Flycatcher, which Nuttall claimed to have seen but which had never been found by later observers; the mysterious Carbonated Warbler, included by Nuttall on Audubon’s authority but never seen after Audubon allegedly killed two specimens in Kentucky; Cuvier’s Kinglet, included by Nuttall because of a single bird shot by Audubon in Pennsylvania; and Townsend’s Bunting, perhaps a Dickcissel with a rare color mutation, included by Nuttall because of a specimen shot by John Kirk Townsend in Pennsylvania.

Chamberlain generally lets Nuttall speak for himself in the revised work, though he can’t resist poking Nuttall for his lukewarm appreciation of Winter Wren song, and he can be opinionated in his own right, as when he badmouths falcons as nothing more than “handsome stalwart ruffians . . . They are neither the most intelligent nor most enterprising of birds, not the bravest.” At a time when some of Nuttall’s birds were near extinction, Chamberlain bemoans the coming loss of the Carolina Parakeet, “not quite exterminated yet” but slaughtered first by farmers and fruit-growers and later for the sake of “woman’s vanity and man’s greed. From the combined attack of such foes the remnant has but slight chance of escape.” His prediction echoes Nuttall’s outraged plea in the original *Manual*: “Public economy and utility, then, no less than humanity, plead for the protection of the feathered race; and the wanton destruction of birds, so useful, beautiful, and amusing, if not treated as such by law, ought to be considered a crime by every moral, feeling, and reflecting mind” (Chamberlain 1891).

After publication of the second volume, Nuttall and young ornithologist John Kirk Townsend joined an expedition led by Boston inventor Nathaniel Wyeth, which started in St. Louis in 1834 and crossed the Rockies to the Pacific Ocean. Exploring lands never studied by naturalists, Nuttall and Townsend marveled at the variety and abundance of wildlife in the grasslands and mountains, along the Snake River, and to the mouth of the Columbia. Nuttall discovered a new nightjar, the Common Poorwill, in the Wind River Range, and Townsend collected a number of new birds, including Mountain Plover, Vaux’s Swift, Sage Thrasher, Black-throated Gray Warbler, and Chestnut-collared Longspur. In his narrative of the journey, Townsend admired Nuttall’s persistence in finding and preserving specimens, though one night Townsend returned to camp to find Nuttall and their captain picking at the bones of a cooked



Troglodytes aedon parkmannii (above) and *Catharus guttatus nanus* (below). These specimens were collected by Nuttall and Townsend. Credit: Museum of Comparative Zoology, Harvard University. Photos ©President and Fellows of Harvard College.

owl that Townsend had killed and intended to preserve. Nuttall and Townsend sent nearly a hundred bird skins to the Academy of Science and their friend Audubon, who used them as models for *Birds of America*. “Cheap as Dirt too,” Audubon wrote John Bachman after he’d purchased the specimens. “Only one hundred and Eighty-Four Dollars for the whole of these, and hang me if you do not echo my saying so when you see them!! Such beauties! Such rarities! Such Novelties! Ah my Worthy Friend how we will laugh and talk over them!” (Hanley 1977) Several of these specimens now reside at the Harvard Museum of Comparative Zoology, including a Hermit Thrush subspecies (*Catharus guttatus nanus*) and a House Wren subspecies (*Troglodytes aedon parkmannii*).

From Fort Vancouver, Nuttall and Townsend traveled to the Sandwich Islands, now Hawaii, but their time in the islands was “recreational and not recorded” (Gibbons and Strom 1988). After their return to Oregon, Nuttall ventured on to the virgin scientific territory of California, where, in addition to new plants, he found Yellow-billed Magpies, Tricolored Blackbirds, and Black Phoebes. Townsend died at age 41 in 1851 from exposure to the arsenic he had used in his taxidermy, ultimately sacrificing his life for his science.



Drawing of Nuttall's Woodpecker by Donald Malick, published in *National Geographic*.

In 1836, Richard Henry Dana, a young Harvard graduate who'd shipped out as a sailor, was astonished to find his old professor barefoot and gathering stones and shells on a San Diego beach. "I knew him at once," Dana wrote, "though I should not have been more surprised to have seen the Old South steeple shoot up from the hide house." Nuttall, transporting boxes and barrels of plant specimens and shells, became the only passenger on Dana's ship *The Alert*, which was carrying animal hides from Monterey to Boston. The other crewmen, "puzzled to know what to make of him," nicknamed Nuttall "Old Curious" because of his "zeal for curiosities." Nuttall usually stayed below during a month of treacherous gales and icebergs around Cape Horn, but east of Tierra del Fuego, he "came out like a butterfly" on deck and was "hopping around as bright as a bird." At Staten Land, now Isla de Los Estados, Nuttall begged the captain to let him ashore to "examine a spot which probably no human

being had ever set foot upon" (Dana 1937), but the ship sailed on.

Nuttall was fifty when he returned from his two-year trip to the West. It proved to be his last collecting expedition. From 1836 to 1841, he worked in Philadelphia at the Academy of Natural Sciences, contributed to Asa Gray and John Torrey's *Flora of North America*, and gave popular lectures on natural history. In 1841 an uncle left him a fortune and estate in Lancashire, but stipulated that Nuttall live there at least nine months each year. "He accepted the bequest," says Peattie, "because he wished to give the money to a sister; but it meant, as he put it, exile in his native land" (Peattie 1935). Nuttall returned to America just once, on a six-month visit to Philadelphia in the winter of 1847–48. In England he wrote: "I prefer the wilds of America a thousand times" (Kastner 1977). As botany and ornithology became formalized professions, self-taught amateurs like Nuttall were giving way to often stay-at-home academic specialists, but he prided himself that he'd done his work "*not in the closet but in the field*" (Kastner 1977).

With William Bartram, Wilson, and Audubon, Thomas Nuttall belonged to the tribe of scientifically-minded, stop-at-nothing naturalist pioneers who—often on foot, often at risk, and often near broke—covered untold miles to find, study, order, and represent the birds, plants, and other wildlife of the New World. Nuttall's biographer, Jeannette Graustein, claims that his "field knowledge of the natural history of

temperate America was unequalled” (Kastner 1977). His legacy lives on through the names of three Western bird species he discovered—Nuttall’s Woodpecker (*Picoides nuttallii*), Yellow-billed Magpie (*Pica nuttalli*), and Common Poorwill (*Phalaenoptilus nuttallii*)—and the scientific names of a long list of land and marine plants, including Pacific dogwood (*Cornus nuttallii*), the catclaw briar (*Mimosa nuttallii*), and Nuttall’s violet (*Viola nuttallii*).

He was further commemorated through the naming of the Nuttall Ornithological Club, founded in Cambridge in 1873 as America’s first ornithological society and publisher of the nation’s first bird journal. Its distinguished members have included William Brewster, Theodore Roosevelt, Ludlow Griscom, Roger Tory Peterson, Ernst Mayr, and many other influential figures in the history of American ornithology and conservation. The club continues to publish scientific research, building on its namesake’s groundwork, and meets monthly for lectures at the Harvard Museum of Comparative Zoology. 🐦

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John Nelson, of Gloucester, contributes regularly to *Bird Observer* and has published essays about birds in *The Antioch Review*, *The Gettysburg Review*, *Harvard Magazine*, *The Harvard Review*, *The Missouri Review*, and *The New England Review* as well as *Birding*, *Birdwatching*, *Birdwatcher’s Digest*, and the *British journal Essex Birding*. His essay on birds and dance, “*Brolga the Dancing Crane Girl*,” was awarded the *Carter Prize* for the best non-fiction work published in *Shenandoah* during the 2011-2012 season. He is a director of the *Essex County Ornithological Club*, a trip leader for the annual *Cape Ann Winter Birding Weekend*, and chairs the *Brookline Bird Club’s Conservation and Education Committee*.

A New Peregrine Falcon Nest at Boston University Medical Campus

Jeffrey Boone Miller



June 22, 2015. Young falcons visited by a parent (Photograph by the author).

Here's what I usually see from my office window: a sliver of sky, a handful of locust trees, distant rooftops, and, dominating all, an almost featureless concrete wall that is twelve stories high. In this cityscape, birdlife is usually limited to pigeons, starlings, gulls, the occasional crow, or, on a good day, a Red-tailed Hawk.

One morning in March 2015, however, out of the corner of my eye, I noticed something zip by my window that was big, dark, and fast. My first thought—maybe just a hope—was falcon. It took a few days before I finally got a good look. Yes, it was a Peregrine Falcon (*Falco peregrinus*). This bird was perched on an inaccessible ledge that is almost the only feature of that concrete wall across the street from my office. About ten stories up but two stories below the roof, this southeast-facing ledge is part of the Dr. Solomon Fuller Mental Health Building, which is located on the corner of Albany and East Newton streets on the Boston University Medical Campus in Boston.

By the end of March, I felt sure that I was seeing two falcons, but I never saw them together until early April when they appeared on the ledge together. Through 8x binoculars, I could see that one was somewhat smaller than the other. Upon enlarging the digital images that I took with a 300-mm lens through my all-too-grimy window, I could see that one bird was unbanded. The other bird, however, had two bands on the left leg—upper black over lower green—and one grayish band on the right leg. This banding and color scheme is currently the standard for eastern Peregrines, with the right leg band made of metal with a unique nine-digit identifying number and the

two left bands carrying alphanumeric codes (Center for Conservation Biology 2015). Unfortunately, the codes were not distinct enough to read in my much enlarged photos of the bird in flight.

Because the falcon's ledge was so high above the street, the view from my fourth floor office was from below. Indeed, there was no location in our building where I could observe the site from above. However, over the next few weeks, I stole glimpses away from my work as life picked up pace for the falcons. Here are the highlights:

April 28, 2015: At about 8:00 am, the two falcons were back on the ledge where they engaged in a series of brief copulations. At this time, I could see that the male was banded and the female was unbanded.

Mid-May through mid-June: Several times, I saw one falcon land on the ledge, often with a prey item, eat and preen for several minutes, and then move out of my sight as the second falcon appeared and flew off. Perhaps handing off incubation duties? Prey items were typically pigeons or starlings, though one was an unidentifiable rodent.

June 17: Babies! The heads of two downy youngsters appeared above the ledge when one parent arrived with food. The babies continued to appear at times over the following days (see photo). I thought they appeared to be three to four weeks old, with one perhaps a few days older than the other.

July 3–7: On July 3, both youngsters were present and active on the ledge, indulging in much flapping of wings and even short hopping flights from one end of the ledge to the other. Meanwhile, one or both parent birds were often perched on and calling loudly from the roof of my building directly across the street. On July 6, one youngster remained on the ledge, but both were gone on July 7. It appeared that both had fledged successfully.

Shortly after the falcons fledged, I contacted Tom French, Assistant Director of the Natural Heritage & Endangered Species Program in Massachusetts, about this nest. He referred me to Anita DeStefano, a professor of Biostatistics at Boston University, who also had observed the nest and sent me several excellent photos, and to Dave and Ursula Goodine, who are volunteer Peregrine Falcon monitors for the Massachusetts Division of Fisheries and Wildlife. Unfortunately, there was bad news about one of the fledglings; Tom French reported that it had been hit by a car on July 6 and was not expected to survive. On the other hand, the second fledgling may have had better fortune, because as of October, a juvenile Peregrine is still making occasional flights past my window.

Ursula Goodine was able to read the bands and identify the male. The code on the male's bands—a black zero over a green Z—identified him as a bird hatched in Manchester New Hampshire and banded by Chris Martin of New Hampshire Audubon in 2008. Ursula gave him the name Zorro in 2010, and the Goodines have been following him since then. In 2010 and 2011, they observed him with young near Boston Children's Hospital, though the nest site was not found. In 2012, Zorro and his mate reared two chicks on Buick Street on the Charles River Campus of Boston

University, but he was not seen in 2013 or 2014. Thus, it amounted to an unexpected reunion when the Goodines found Zorro at the new nest in 2015. As for the unbanded female, it is unknown where she came from or even if she is the only female that has been with Zorro since 2010.

Peregrine hatching typically occurs about four and one-half weeks after eggs are laid and fledging occurs about six weeks after hatching (White et al. 2002). On this timetable, the two young falcons I observed would have hatched around May 25 from eggs laid around April 24. Perhaps due to the late arrival of spring weather after the brutal winter of 2014–15, this timing was delayed three to four weeks compared to the early April egg-laying common in Massachusetts (Massachusetts Division of Fisheries & Wildlife 2015).

This new nesting site had characteristics typical for middle-latitude Peregrines (White et al. 2002). In particular, the site had a partial southern exposure, was about a hundred feet above the ground, and was not at the highest part of the structure. In addition, Peregrines usually re-use a nest built by another species, and my colleagues told me that this site had been used by Red-tailed Hawks several years ago—before my arrival at the university—and sticks remaining from the hawk nest can be seen in the photo. However, 2015 appears to have been the first use of the site by Peregrines.

The reintroduction of Peregrine Falcons to the eastern United States is one of the great conservation success stories of our era. Nonetheless, Peregrines remain rare with only about 30–35 active nests known in Massachusetts as of 2015 (Boeri 2015, Massachusetts Division of Fisheries & Wildlife 2015). Remarkably, Boston University hosted two successful Peregrine nests in 2015. In addition to the one I've described, there was a nest with three chicks on a dormitory tower at the Charles River Campus (Boeri 2015, Laskowski 2015), which is about three miles from the Medical Campus. In 2014, I also saw a pair of copulating Peregrines in Cambridge at Harvard University's Memorial Hall, where a nesting platform has been built after the eggs failed to hatch in 2014 (Powell 2015). One is tempted to conclude that Boston falcons find our universities to be particularly hospitable. Nesting sites are often reused by Peregrines for many years, with the Custom House Tower in Boston a good example. So I can hope that a pair will be outside my window next year, but, if not, I at least have this year's memory to soften the view of that concrete wall. 🦅

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GREAT HORNED OWLS BY SANDY SELESKY

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Bear Creek Sanctuary: An Urban Grassland

Soheil Zende



Bobolink at Bear Creek Sanctuary (all photographs by the author).

The establishment and preservation of Bear Creek Sanctuary in Saugus, Massachusetts, brings together two large and complex stories in the world of environmental issues: the fate of North American grasslands and their denizens, and public policy regarding waste management. In this article I will summarize the issues surrounding grasslands and waste disposal and then describe some of the highlights of our years of birding at Bear Creek.

Grasslands

Grasslands stretch across the North American continent for thousands of miles. The farm country that starts in Ohio and dominates the landscape into Montana, Wyoming, and Colorado and stretches north into Alberta, Saskatchewan, and Ontario was originally tallgrass prairie in the east and shortgrass prairie in the west. The prairie was home to immense roaming herds of American bison and the Native American tribes that depended on them. Other denizens of these grasslands are mammals such as prairie dog, black-footed ferret, and a variety of burrowing rodents; birds such as grouse, Ferruginous and Swainson's hawks, Upland Sandpiper, Burrowing Owl, Prairie Falcon, longspurs, Horned Lark, Dickcissel, Savannah, Grasshopper, Vesper, and Baird's sparrows, Bobolink, and meadowlarks; the prairie rattlesnake; and a variety of grasses and shrubs adapted to the windswept undulating plains.

Unfortunately, many of the grassland areas that used to support these animals are now vast monocultures—turned into one-crop farmlands—and only remnant portions of North America’s original grasslands exist. The result is that many grassland species are in serious decline and some are endangered.

My interest in grassland and open-country habitats dates back to my childhood in Iran, and later in Morocco, where open country is all there is. Humans have cultivated these lands for thousands of years, so they can hardly be considered “grasslands.” But my experience of the outdoors was that wherever you were you could see forever.

New England landscapes are hardly like even these remnant grasslands! In densely wooded New England, grassland is vanishingly scarce, and even small patches in eastern Massachusetts attract birders searching for grassland species. Our hope is that the dearth of local grasslands will be addressed by “An Action Plan for the Conservation of State-listed Obligate Grassland Birds in Massachusetts,” jointly developed by the Massachusetts Natural Heritage and Endangered Species Program, the Massachusetts Division of Fisheries and Wildlife, the Massachusetts Natural Heritage and Endangered Species Program (NHESP), the Trustees of Reservations, the Massachusetts chapter of The Nature Conservancy, and Mass Audubon. Execution of the plan should help landowners and civic agencies preserve and enhance these bits of grassland habitat so that grassland species such as meadowlarks and Bobolinks will increase their numbers.

Over the years I have found myself attracted to nature study in the open-country habitats that we do have — mostly coastal salt marshes. I started birding Belle Isle Marsh in East Boston, Revere, and Winthrop in the 1970s, and Rumney Marsh in Revere and Saugus in the 1970s and 1980s.

Environmental Concerns and the History of RESCO and Wheelabrator

The northeast corner of the Rumney salt marsh had been used as a trash dump by the town of Saugus since at least the 1950s; the trash had built up to huge piles by the 1970s. As environmental concerns and activism spread, the owner of the private landfill, Martin DeMatteo, created RESCO (Refuse Energy Systems Company) in 1975. It was the nation’s first waste-to-energy plant, and the nation’s first profitable incinerator, modeled on a similar plant then in operation in Montreal. Wheelabrator Technologies Inc. (WTI) bought the site several years later; still later the international firm Waste Management acquired WTI, selling it in 2014 to Energy Capital Partners. Nevertheless, the plant maintains the Wheelabrator Saugus name. In 1992, Wheelabrator began to plan and implement a wildlife sanctuary, which it named Bear Creek after one of the tidal creeks that feed into the Saugus River system. Standing on top of the capped landfill and looking north, you can see Bear Creek winding into the marsh that defines the northeast boundary of the property.

Major concerns of the local neighborhoods and the environmental community are the waste plant’s effects on air and water quality. The plant burns household trash from ten North Shore communities at high temperature to generate electricity equivalent to the needs of approximately 47,000 homes. The emissions are



Snowy Owl at Bear Creek Sanctuary.

scrubbed and filtered; the output from the tall smokestack is said to be mostly steam. Some people in the neighborhood have disagreed, claiming increased cancer rates in surrounding areas. In response, Wheelabrator Saugus, which is regulated by the Massachusetts Department of Environmental Protection (DEP) and the Town of Saugus Health Department, continuously monitors its airborne and other output. The plant is subject to regular monitoring by DEP, and Wheelabrator also pays for the town's independent consultant to monitor its output.

The potential for water pollution by the plant's ash output is an issue that required ingenuity and the expenditure of large sums of money to tackle. Originally, of course, there was no ash. Household and industrial trash, garbage, and other waste were simply dumped here since, at the time, a salt marsh was considered to be —well, just a dump. Eventually, as the effects of tidal erosion on the landfill and subsequent spread of toxins or bacterial hazards were acknowledged by the landowner, a comprehensive plan was developed to contain the old dumped material as well as the new ash from the incinerator.

In part, these efforts at remediation were the result of Rumney Marsh and Belle Isle Marsh in East Boston, Revere, and Winthrop being designated Rumney Marshes Area of Critical Environmental Concern. This designation, championed by community groups such as Friends of Belle Isle Marsh, placed additional restrictions and controls on actions that might affect these environmentally sensitive areas.

RESCO and later Wheelabrator Saugus constructed a series of 10-foot-wide trenches reaching from the surface surrounding the landfill down to the level of Boston Blue Clay underlying the entire property. The trenches were then filled with a slurry of special clay known as bentonite. Trapped within the impermeable Boston Blue and the bentonite, the old trash and its potentially hazardous contents presumably have nowhere to go and also cannot be invaded by the twice-daily tides.

The top of the old landfill was covered with a thick and sturdy plastic sheet, which keeps rainwater from permeating the substrate. The plastic is covered with a couple of feet of topsoil, which was generated by Wheelabrator *in situ* using yard waste from the surrounding community. All in all, it is an elegant—and expensive—solution to an old sore spot in the local community, as well as an answer to the question, “What should we do with this dreck?”

Precipitation falling on the capped portions of the landfill flows through bioremediation swales where it is filtered by vegetation; it collects in a pond in the southwest corner of the sanctuary (a good place to search for freshwater waterfowl and shorebirds; the site of the Ruff in fall of 2014). Excess water from this pond flows out of a level spreader into the Pines River tidal creek.

Water in the form of rain and snow obviously lands on uncapped portions of the landfill. It soaks through the topsoil, is collected in elaborate underground runoff conduits, and is pumped to the plant to be used for cooling the smoke scrubbers and filters.

There are many questions regarding this relatively complex industrial-technological solution to trash disposal. The company claims that no major source of metals or other hazardous waste is allowed into the current waste stream that is burned at the plant. They say that material is burned at such a high temperature that few if any organic toxins can survive it. First, the ash is sorted and any metals are removed using magnets and other filtering devices; the recovered metals are recycled. The ash is then trucked to the landfill; it is kept wet at all times to reduce any chance of it blowing away. The ash is topped by short-term cover soil within seven days of being placed out in the landfill. If the section of the landfill is inactive for more than 30 days, it is capped by a deeper layer of intermediate cover. When formerly active areas reach approximately 40 acres in size, they are permanently capped with the plastic liner. The plastic and soil cap ensure that the ash can no longer affect the surrounding marsh.

Birding: fall and winter

Let’s now get back to the important stuff: birding.

In 1975, Bob Stymeist, the compiler (then and now) of the Greater Boston Christmas Bird Count, assigned Craig Jackson and me the task of covering the Saugus sector. The Saugus River winds through town and merges with several tidal creeks, including the Pines River, before emptying into Lynn Harbor at Point of Pines, Revere, forming the immense Rumney salt marsh right in the middle of a busy urban area. We took it upon ourselves to walk into this salt marsh from the various entrances that we could find.

When Craig Jackson and I walked into the landfill during the 1976 CBC, we immediately found a flock of Canada Geese, and among them a Snow Goose. The Canadas were skittish, and soon the whole flock disappeared over the hill into the next swale. In winter and during migration nowadays we still see Canada Geese on the property and these birds are, as before, quite wary. They are truly migratory Canadas. At Rumney Marsh, goose numbers build up through late fall and early winter. For example, on January 11, 2015, we estimated between 450 and 600 Canadas as they ascended the sky in skein after skein as a juvenile Bald Eagle cruised overhead.

Occasionally the Canadas are accompanied by more unusual species of goose. One of the more startling rare bird arrivals here was a flock of 17 White-fronted Geese, first reported by Paul Peterson in March 2009 and subsequently seen by many observers. Paul also found a Pink-footed Goose on the property in December 2011. Snow Goose is expected somewhat more regularly; the latest one was reported in March of 2015.

On that first Christmas Bird Count, Snow Goose was by no means the only noteworthy find. There was a Snowy Owl near the top of the landfill. And there were Horned Larks feeding in the sparse vegetation or cruising about overhead. Over the years, Bob Stymeist has come to expect us to find unexpected or highly prized winter birds at Bear Creek. In 2014, for example, the CBC crew reported five Eastern Meadowlarks, a flock of Horned Larks, a Rough-legged Hawk, a Snowy Owl, and an American Kestrel. A Snow Goose appeared in January 2015. Later that winter a Rough-legged Hawk (maybe two) was a somewhat regular visitor. Due to the extreme weather we had virtually no access to the site most of February. When the snows began to melt and we resumed our walks in March, we found two Snowy Owls and piles of their dried pellets.

During one year of birding at or near Bear Creek one could compile a list of at least 14 species of raptor (see Table 1).

On some field trips, particularly in late fall and winter, there is at least one raptor in view nearly the entire time we are in the field.

It makes sense that Rough-legged Hawk, a bird of the tundra, would winter in a grassland habitat such as Bear Creek. And we often find them here. Starting in late October we make sure that at least one participant in our walks has an eye on the sky. I have found the Roughleg to be extremely skittish. It does not allow close approach. Once it sees our group coming, it's often out of there and over to the other side of Rumney Marsh until we're gone. So you have to get a good glimpse of one when you can.

Another Arctic specialty, the Snowy Owl, is fairly regular and usually allows relatively close observation. A Snowy often has a favorite feeding perch, so we can usually figure what it has been eating by sorting through its enormous pellets. These pellets are huge — no kidding! One might contain a complete rat skeleton and fur, where another might have the bones of a Bufflehead. Both are Snowy Owl favorites.

Although American Kestrel has been on a serious decline throughout New England and the Northeast, there are a few places, e.g., New York City, that are stronghold

| | |
|----------------------------------|---|
| 1 species of vulture | Turkey Vulture (spring and fall migrant) |
| 7 species of accipitrine raptors | Osprey (breeder) |
| | Bald Eagle (winter) |
| | Northern Harrier (fall and winter) |
| | Cooper’s Hawk (fall and winter) |
| | Broad-winged Hawk (fall migrant) |
| | Red-tailed Hawk (breeder, year-round resident) |
| | Rough-legged Hawk (winter) |
| 3 species of owls | Great Horned Owl (on west side of Rumney Marsh) |
| | Snowy Owl (winter) |
| | Short-eared Owl (winter and spring) |
| 3 species of falcon | Peregrine Falcon (breeds locally, winter) |
| | Merlin (spring and fall migrant) |
| | American Kestrel (breeds locally, winter) |

Table 1. Raptors seen at Bear Creek.

breeding spots of this species. Around Bear Creek we seem to have two breeding pairs, though we don’t know where the nests are. During spring migration we might see a half dozen kestrels hunting over the grassland, and in the late fall and winter there is always the chance of finding one or more. Part of the explanation for this relative “abundance,” in my estimation, is that the property is not sprayed with the ubiquitous pesticides that are used all over the continent; as a result, grasshoppers and other large bugs, which constitute the majority of kestrel diet, are abundant. So are voles, another major source of kestrel food.

American Kestrels are said to follow migrating swarms of common green darner dragonflies and feed on them. Since late summer at Bear Creek is usually a time of abundance for bugs and dragonflies, it is also often a good time to find kestrels. On a late August 2015 walk through the grassland, we found common green darners hovering and darting everywhere. We saw four kestrels, although we didn’t see them feeding on dragonflies. Two days later, a couple of us were on the grassland again, specifically looking for dragonfly swarms—there were none! And no kestrels. We conjecture that the kestrels moved on to keep up with the darners.

Aside from raptors, there are other species that you can search for in a grassland habitat that might be difficult to find in other habitats.

The migration seasons often bring shorebirds into the sanctuary. In spring we count on finding at least one or two Wilson’s Snipes. Fall shorebird migrants can be fun and surprising, particularly if there is water in the runoff pond at the southwest corner of the property. We’ve seen Pectoral Sandpipers in addition to yellowlegs and Least and Semipalmated sandpipers. In October 2014, a Ruff spent nearly a week in that pond. Other fun shorebirds that have turned up during migration are American Golden

Plover—four in September 2014 and four in October 2015—and Upland Sandpiper, with sightings of singles from June through October.



Horned Lark and Lapland Longspur at Bear Creek Sanctuary.

Upland Sandpiper sightings at Bear Creek have tantalized us for a number of years. Quintessential grassland birds, Upland Sandpipers were once abundant in the center of the continent, but that population has crashed. In the Northeast, where grassland habitats are often restricted to airports, Logan International Airport in Boston, Hanscom Field in Lexington, Worcester Regional Airport, and Plymouth Municipal Airport are strongholds for a few pairs of breeding Uppies. We've conjectured that they will turn up to breed at Bear Creek because so many other grassland birds nest here.

In Massachusetts, Horned Larks are considered unusual except along the coast where they breed. Birders are most likely to find them in coastal dunes. But Horned Larks are possibly the most numerous land birds of the prairie. Late fall and winter generally bring a flock of several dozen of these birds to Bear Creek. They feed in areas with sparse grass; they also spend time on the gravel roads on the property, picking up gravel in order to break down and digest the food in their crops. When we find a flock of larks, we usually peruse them individually because we have found Snow Buntings and American Pipits in these flocks. Careful perusal has also turned up a Lapland Longspur or two. During the early winter of 2013, there were five longspurs among the larks.

Spring and summer

My friend Linda Pivacek has conducted Bear Creek breeding bird surveys since 2002. She told me that back in the early 2000s when she approached the company about gaining access to the grassland for bird surveys, she found the plant manager extremely welcoming and interested in birds and other wildlife. He introduced her to

the chief landscape contractor, Geoff Wilson, another person interested in and curious about the wildlife on the property. Linda says that after she and Geoff completed their first survey, the plant manager was waiting with coffee and donuts for them and wanted to know what they had found.

A year or two later, I joined Linda and her crew during the summer breeding season surveys, and I met Geoff Wilson. We made plans to start public walks on the property with Geoff as our chaperone, starting with Christmas Bird Counts and eventually expanding to the biweekly walks that we currently conduct almost year-round.

Around the middle of May we suspend our public bird walks to give the breeding birds a chance to raise their young with a minimum of disturbance. In grassland, the birds nest mostly on the ground. Savannah Sparrows sometimes nest *underground*—so to speak. The birds dig down through the thick matted grasses and make a nest cup well below what you might think is the surface. In one case we found a nest that was exposed because a mower had gone over it and removed all the overlying grass; the eggs inside were untouched.

Managing and maintaining the grassland is a full-time job for the small crew of Northeast Grassland Management under the direction of Geoff Wilson. Grasses in the upland are subject to a three-year rotation in mowing. Grasses and small shrubs are allowed to grow to a limited height until they are cut back. This maintains the character of the grassland but, even more important from an environmental safety standpoint, prevents the root systems from penetrating the plastic landfill cover that lies three to four feet below the surface.

Some of the breeding bird species at Bear Creek Sanctuary are the same as you would find at many other eastern Massachusetts mixed woodland and salt-marsh sites: Mallard and American Black Duck, Killdeer, Spotted Sandpiper, Eastern Kingbird, Song Sparrow, Red-winged Blackbird, American Goldfinch. I'm going to focus on several open-country and grassland specialties, although not all breed here.

Osprey: Osprey do not nest on the property itself, but all summer we examine three or four potential nesting spots. The nest platform on the southern periphery of the property was erected in the early 1990s by DCR property supervisor Geoff Wood in the Oak Island section of Rumney Marsh. Ospreys have been producing babies there for decades.

Two other nest platforms were installed to the northeast of the Wheelabrator property, and both have been occupied by nesting Ospreys at times. In 2015, Osprey young were still being fed by the parents at one of the platforms at the end of August. One year, a pair of Red-tailed Hawks used one of the platforms.

Ospreys also tried to use one of the power line poles along Route 107 as a nesting platform, but that nest has a hard time staying put due to high winds across the marsh. Finally, there are reports of Osprey attempting to nest on the tall smokestack next to the Wheelabrator plant; I have seen Red-tailed Hawks up there, but not Ospreys.

Upland Sandpiper: Is the Bear Creek grassland large enough to attract breeding Upland Sandpiper? The excitement was particularly intense when single Uplands were found during the June 2011 and 2014 summer breeding bird surveys, as well as a couple of other times in the past few years, but we have found no evidence of nesting yet.

American Kestrel: We see kestrels on nearly every visit to the sanctuary. During the breeding season adults are seen with young birds frequently. There seem to be two resident pairs in the vicinity. The exact locations of nests remain unknown.

About 10 years ago, some of us who were surveying breeding birds at Bear Creek wanted to install a kestrel box or two at the grassland but were persuaded by Mass Audubon not to do so. They were of the opinion that landfills were likely to be population sinks for kestrels, because of contaminants working their way into the prey base and methane exhaust pipes, which have burned or killed birds at other sites, especially kestrels who might be tempted to use them as hunting perches. [Note: at Bear Creek there are no flames.] With neither the budget nor the manpower to do the needed research that would determine if landfills are dangerous habitat for nesting kestrels, Mass Audubon's choice has been not to place nest boxes in landfills (personal communication Matt Kamm and Joan Walsh).

Kestrels still use the grassland to forage for insects and small mammals, so why not help them nest here too? Given the density of grasshoppers at the sanctuary, we might even be able to boost the number of pairs of American Kestrels nesting in the vicinity.

Matt Kamm provided this update:

I also see kestrels hunting at landfills with fair frequency. I don't think the "do no harm" policy of not encouraging nesting where we feel there might be risk to the health and safety of the birds is unreasonable, but I also think it would not be unreasonable to start collecting some toxicological and inclusive-fitness data from the landfill birds to test whether these precautions are warranted. Just because we see adults with young birds doesn't mean it's not a sink—the young birds could have some deficiencies that make them unable to survive migration, or the parents could be building up heavy metals that will shorten their lifespan and thus their lifetime fecundity. Then again, they could all be perfectly healthy and some simple baffles to keep them away from the methane exhaust pipes could turn landfills into great kestrel habitat.

Savannah Sparrow: Savannah Sparrow is a major member of the nesting avifauna of the grassland. Breeding numbers vary, from a high count of 34 singing males in 2005 to a low of 5 singing males in 2013. If you're wading through the grass in high-density Savannah Sparrow territory at the height of the nesting season, the amount of sibilant song and the constant to-and-fro of sparrows from bush to bush is captivating. Of course, we have to stay well away from those areas except for the few times a season that we run the breeding survey.



Savannah Sparrows, newly hatched, at Bear Creek Sanctuary.

Grasshopper Sparrow: This one is purely speculative. Call it wishful thinking. On the July 14, 2004 breeding bird survey two were seen. All I can say is that they *should* be breeding here, but they have not recently.

Eastern Meadowlark: Meadowlarks occur here regularly in the off-season and often in the winter. They used to nest here, but no longer do so. Political pressure—or an attempt to mollify that pressure—is what did them in. For much of a decade in the early 2000s, meadowlarks nested in small numbers. The maximum number of pairs was 16 in 2006. The major nesting area seemed to be approximately the central portion of the grassland.

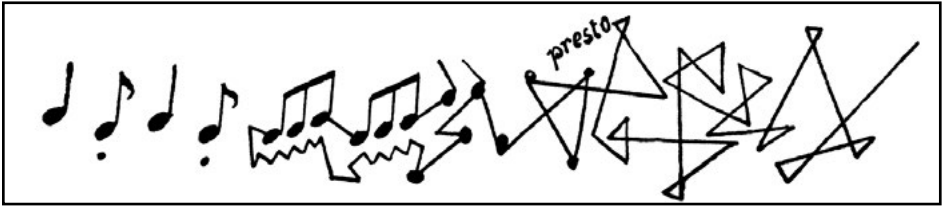
Nesting ceased in 2012, coincident with the development of a golf practice green in the central part of the grassland. The golf green is mowed very closely, which eliminates the possibility of anything nesting there. The impetus for siting the golf green in this grassland—which is designated a wildlife sanctuary, after all, by the *property owner*—is the widespread opposition, indeed repugnance, in the Town of Saugus to the existence of the incinerator and the landfill here. In its attempts to improve community relations, the property owner, Wheelabrator Saugus, offered up this central parcel of the grassland for use by the Saugus High School golf team as a practice green. This saves the Town approximately \$50,000 a year.

The nesting bird survey team is convinced that the location of the golf green, smack in the middle of the grassland, breaks up the continuity of the grassland and has caused the meadowlarks to abandon the site. We have proposed a potential solution to Wheelabrator, one we hope they will eventually adopt. Clearly maintaining good relations with the town is a high priority for everyone. It is difficult to revoke the golf green arrangement now, but we think it is possible to relocate it to the edge of the grassland where it won't break up the habitat. Then maybe the meadowlarks will recolonize the site.

We seek meadowlarks each time we visit; sadly, we rarely find any during the breeding season.

Bobolink: Among the most distinctive of grassland birds, Bobolinks nest on the Bear Creek upland. The males in their topsy-turvy breeding garb arrive in late May or early June and begin setting up numerous small colonies in the different swales. F. Schuyler Mathews, in *Field Book of Wild Birds and their Music*, 1904, wrote: “Bobolink ... is no ordinary fellow. He is a soloist of comic opera in the fields.” Mathews then described the song:

The Bobolink is indeed a great singer, but the latter part of his song is a species of musical fireworks. He begins bravely enough with a number of well-sustained tones, but presently he accelerates his time, loses track of his motive and goes to pieces in a burst of musical scintillations. It is a mad, reckless song-fantasia, an outbreak of pent-up, irrepressible glee.



F. Schuyler Mathews illustration of Bobolink song

Later, the females arrive, courtship is consummated, and eggs are laid, but the males keep displaying and carrying on well into July. The number of Bobolink pairs at the sanctuary varies, from a high of 23 pairs in 2006 to a low of 8 in 2009. But the main thing is that they are here and they are breeding, providing an entertaining addition to the local scene.

Summary

Having regularly surveyed Bear Creek Sanctuary year-round for over seven years, I can state a few conclusions:

Bear Creek is not a passerine migrant trap. And yet there are fall days when you can walk the periphery, which is wooded or thick with shrubbery, and find plenty of passerine migrants.

The fun starts when you climb the edge of the landfill and suddenly survey the open landscape at the top. The vista is superb and gets better when the hawks and owls show up in winter.

The marsh surrounding Bear Creek hosts raptors, herons, shorebirds, geese, ducks, and other water birds such as cormorants and loons. There is always something happening in the marsh or the tidal creeks. You need a scope for best viewing.

Careful perusal is needed to find the open country birds. Horned Larks, American Pipits and longspurs survive by being cryptic and inconspicuous.

Late fall and winter is the best time at the Sanctuary.

Access to and enjoyment of the Bear Creek Sanctuary would not be possible without the involvement of Wheelabrator Saugus. Our experience with Wheelabrator illustrates the desirability of approaching and working with private land owners to enhance wildlife habitats and to gain access to such lands for the public, even on a limited basis such as we have at Bear Creek. You never know when starting small, with a request to access the property for a CBC, for example, will result in a working relationship with the owner that benefits your community and the environment. It's worth a try. 🐦

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Soheil Zende, born in Tehran, grew up in Tehran and Tangier, Morocco, arrived in Cambridge in 1961 as a college freshman and later started an auto repair shop first in Cambridge, then in Watertown. He began birding in 1973, never got a good look at the Newburyport Ross's Gull, got sick of driving to the North Shore for birds, and began checking out local Boston spots in 1975. Since 2009 he has been guiding bird tours at Bear Creek Sanctuary in Saugus. Soheil lives in Lexington with his wife Christine.

The author thanks the following for helping to prepare and edit this article: Craig Jackson, Linda Pivacek, Pat Randall, and Geoff Wilson.



HORNED LARK BY SOHEIL ZENDEH

PHOTO ESSAY

Birds of Bear Creek Sanctuary

Soheil Zende



Pectoral Sandpiper (left) and juvenile Ruff (right)



Snow Goose (foreground) with Canada Goose (background)



Snowy Owl female



American Kestrel male.

FIELD NOTES

Leucistic Female Boat-tailed Grackle

William E. Davis, Jr.



Fig. 1. Leucistic Boat-tailed Grackle. (All photographs by the author.)

On March 3, 2015, at about 3:00 pm, at the Wakodahatchee Wetlands near Delray Beach, Florida, I observed a female Boat-tailed Grackle (*Quiscalis major*), which had plumage abnormalities. Instead of the normal cinnamon brown above and buffy brown below, this bird had a largely white head, white undertail coverts, and scattered white feathers on its breast and upper back (Figures 1, 2). The distribution of white feathers on the head and breast were asymmetrical (Figure 1). I did not see the back and upper tail well as the bird was flitting about in dense foliage. A local birder told me that he had seen the bird in the same area for several years so the bird was an adult.

Although many would call this bird a ‘partial albino,’ the correct term is ‘leucino’ because albinism is defined as the total absence of *all* pigmentation, resulting in all

white feathers; pink eyes (there is no melanin to obscure blood circulation); and light colored bills, legs, and feet (Buckley 1982). Leucism is the complete loss of a particular pigment or pigments in feathers but not in soft parts. It may be complete or partial, in an extreme case affecting only a single feather, and it can be symmetrical or asymmetrical. Because the shades of browns and black coloration of this bird are probably produced by one or more melanins, the proper designation for this bird is non-melanic asymmetrical partial leucino.

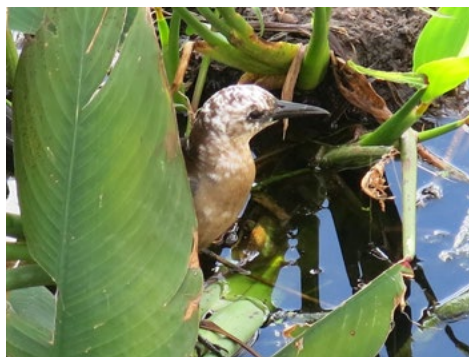


Fig. 2. Leucistic Female Boat-tailed Grackle

Leucism is not uncommon in grackles. There is, for example, an “Aberrant plumages” section in the *Birds of North America* species account (Post et al. 1996). Also, Selander (1958) discusses plumage abnormalities in the Boat-tailed Grackle, including leucism, and states that white spotting (usually single white feathers) was found in four females out of 486 (0.82%) sampled. I searched for albino grackles on Google and found dozens of pictures of leucistic grackles and perhaps a few albinos. Virtually every image showed a different distribution of white, suggesting a very broad spectrum of complex genetic abnormalities leading to leucism in this species. Leucism is widespread in birds, affecting most avian families. For example, I have previously reported on leucism in the American Goldfinch (1990), Northern Mockingbird (1995), and Australian Magpie (1996); and Buckley (1982) reports on leucinos in diverse families including sandpipers, lapwings, grebes, and passerines. 🐦

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Ted Davis thanks John Kricher and P.A. Buckley for reading an earlier draft of the manuscript.

MUSINGS FROM THE BLIND BIRDER

Brewing Habitat for Birds

Martha Steele



Magnolia Warblers have been found wintering in shade-grown coffee plantations. (All photographs by Sandy Selesky.)

On a recent and glorious late September day, I sat on our deck at our Vermont home, enjoying the solitude and the warmth of the morning sun on my face. I heard the ubiquitous Blue Jay and Black-capped Chickadee, but this is not a particularly exciting time for a blind birder. Most bird vocalizations in late summer and early autumn, if any, are of the challenging, chipping variety. Still, I revel in the vicarious pleasure of listening to Bob's reports of what he saw during his regular morning walks around the property. Migration back south is in full swing during September, and we never know what will be in a mixed flock feeding near our house.

As I sat there, eyes closed and listening to the jays, chickadees, and an occasional chip of a Yellow-rumped Warbler, I was jolted from my seat with the nearby and beautiful full song of a White-throated Sparrow. I wanted to hear it again and again, but alas, it did not perform an encore before we departed on our own southward migration to Boston.

The sparrow may have been a migrant in the midst of its journey, or it may have been a resident that would stay the winter, sustained in part by winter feeders. Regardless, its announcement of its presence moved me deeply, as birds often do.

Readers may now know that I often talk to birds, wishing them well here in their northern breeding grounds, during their amazing migrations, and in their southern wintering grounds. In this case, the sparrow seemed to be talking to me, signaling its farewell until next spring.

I casually reached for my coffee cup on the table in front of me and thought of its connection to the gift of song that I had just received from the sparrow. I thought of migrants from all over North America heading to their Latin American wintering grounds, where the coffee I was drinking was grown.

I love coffee and, to be honest, cannot do without it in the morning. My coffee habit is actually a problem when it comes to birding. Getting up early, grabbing a cup or two of coffee, and then heading out to bird where there are often no facilities is not always the ideal situation. Still, I persist in my habit, and I know that I am not alone. And in this case, my habit is helping to sustain and conserve needed habitat for the southbound migrants.

The coffee that Bob and I drink is one of a number of brands (in our case, Birds & Beans, a Boston-based company using New England roasters) that are certified as Smithsonian Migratory Bird Center (SMBC) Bird Friendly® shade-grown and organic coffee. When my birds return to their southern wintering grounds in Latin America, I know that at least some of them will find refuge in a bird-friendly coffee plantation characterized by a rich, complex, and diverse habitat in which the coffee plants grow. It gives me at least some measure of satisfaction that in a small way, I am helping to provide nourishing and supporting habitats for our birds in their winter homes.

Scott Weidensaul wrote an excellent and educational article for *Bird Observer* (Weidensaul 2009) in which he described how the SMBC Bird Friendly® program is the gold standard for shade-grown coffee and why the plantations that meet SMBC Bird Friendly® certification are so important to our wintering migratory birds. While Weidensaul and others have since noted that many coffees are marketed as eco- or bird-friendly, the SMBC Bird Friendly® certification stands out with its rigorous, science-based standards that growers must meet (e.g., canopy height, tree diversity, foliage cover, multiple vegetation strata). The result is that beans mature far more slowly under the shade trees that birds need than coffees grown in habitat-destroying sun plantations. The extended growing process imparts a deeper, richer flavor to the coffee.

According to Robert Rice, who oversees the SMBC Bird Friendly® coffee program, recent years have seen substantial growth in Bird Friendly® coffees. For example, the number of hectares supporting SMBC certified coffee grew from 4847 hectares in 2009 to 7343 hectares in 2015. Similarly, during the same time period, the volume of Bird Friendly® certified coffees increased from 6.1 million pounds to 12.3 million pounds. Sales of SMBC Bird Friendly® coffees from Central and South America more than doubled from 2010 to 2014. In Nicaragua alone, more than 300 family farmers now grow Bird Friendly® beans, up from a single farm in 2011. And more is on the way, with Birds & Beans working with farmers and landowners in other regions of Nicaragua to convert thousands of hectares to Bird Friendly® coffee. In addition to the availability of SMBC Bird Friendly® coffee from online distributors, the

coffee is showing up in more and more retail outlets (including major grocery retailers) throughout the country, driving up demand even more.

In 2009, few bird or conservation organizations talked about or may even have known about SMBC Bird Friendly® coffees. Today, SMBC Bird Friendly® coffees are endorsed by the Cornell Laboratory of Ornithology, the American Birding Association, and the American Bird Conservancy, as well as many local conservation organizations across the country. Japan's Wild Bird Society and the Royal Society for the Protection of Birds in the United Kingdom also support protecting habitat by selling Bird Friendly® coffee at their shops.



Cape May Warblers have also been found wintering in shade-grown coffee plantations..

The growth of SMBC Bird Friendly® coffee sales across all available brands is very encouraging, but at the same time, there is plenty of room for exponential growth. Says Weidensaul: “The awareness of Bird Friendly® coffee and its importance for migratory birds has grown tremendously, and the impact on bird conservation in Latin America is profound. When I visit areas like the highlands of northern Nicaragua, where hundreds of small family-owned shade coffee farms are protecting quality bird habitat while producing millions of pounds of certified organic Bird Friendly® coffee (as well as generating a premium price that is encouraging farmers to restore grain fields and pastures to forest) the benefits are incredibly clear. We have made a lot of progress but we can do more to protect immeasurably greater areas of bird habitat” (Weidensaul, personal communication). The higher the demand for certified coffee, the more habitat is protected under the certification program.

Bob and I gravitated to SMBC Bird Friendly® coffee after two eloquent and convincing talks in late 2008 and early 2009 by Weidensaul and Kenn Kaufman, both speaking to the unequivocal benefits of SMBC Bird Friendly® coffees for birds and on behalf of the nascent Birds & Beans company. Many birders attended at least one of the talks. Although generally supportive of the coffee, a number of listeners

expressed concern about the cost of ordering the coffee online (these coffees were not yet available in local retail stores), which meant shipping and handling costs would be added to the base cost of the coffee. To address these concerns, Bob and I decided to ask others to join us when we ordered online and thus share in the shipping and handling cost, which was reduced to cents per bag. This meant that the price of the coffee was comparable to premium coffees found in supermarkets or coffee specialty stores. Our Arlington-based coffee group was born, and we have not stopped since.

But no matter the worthiness of supporting SMBC Bird Friendly® coffee, no one would buy the coffee if it was not also good. The amazing loyalty of members of our coffee group to this coffee attests to the extraordinary flavor of SMBC Bird Friendly® coffee.

Since starting the Arlington coffee group in the spring of 2009, we have ordered over two tons of roasted Bird Friendly® coffee, or over 5000 pounds of green coffee beans. Although we cannot quantify how much bird-friendly habitat our group is helping to conserve, we know our business is helping bird conservation efforts.

If we drink coffee, we may as well buy coffee that helps the birds that we are so passionate about, never mind the family farmers working the plantations. Buying SMBC Bird Friendly® coffee is a very small step for each one of us, but a very big step for our migratory birds.

So, yes, I take pride in being part of the growing number of conservation-minded coffee drinkers in supporting the SMBC Bird Friendly® coffee of our choice. Visit the SMBC website for more information about their program and for listings of where you can purchase Bird Friendly® coffees online or near you (<http://nationalzoo.si.edu/scbi/migratorybirds/coffee/>).

In a world that often seems so overwhelmed with negativity, we can take solace in our own positive actions related to what matters the most to each of us. When you sip your morning mug of coffee, you too could take satisfaction in knowing that you are helping your birds, you too could help expand areas of quality habitat in coffee growing regions, and you too, as I do, can talk to your birds, telling them what you are doing for them and wishing them well. You would be joining a growing number of birders and conservationists doing the same, a collective series of small steps making a singular profound impact for migratory bird conservation. 🐦

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Martha Steele, a former editor of Bird Observer, has been progressively losing vision due to retinitis pigmentosa and is legally blind. Thanks to a cochlear implant, she is now learning to identify birds from their songs and calls. Martha lives with her husband, Bob Stymeist, in Arlington. Martha can be reached at marthajs@verizon.net

GLEANINGS

Laying Your Eggs in All the Right Places

David M. Larson



Female Brown-headed Cowbird. (Photograph by the author.)

The popular concept of brood parasites is of lazy cheats who dump eggs in other birds' nests and scamper off on their merry way, leaving the poor suckers to take care of their eggs and young. Of course, the real story is much more complex. In the Old World, several groups of birds practice brood parasitism; some are obligate—they only breed this way—and others are facultative so brood parasitism is not strictly necessary. Obligate brood parasites can be generalists or can be restricted to a single host species. In Africa, for example, Variable Indigobirds only parasitize Jameson's Firefinches, in which case the two species co-evolve as the host defenses change and the parasite catches up. In the New World, facultative brood parasites include cuckoos and several cavity-nesting ducks, while obligate brood parasitism is limited to cowbirds. And, of course, our North American exemplar is the Brown-headed Cowbird (*Molothrus ater*). This species is a generalist brood parasite, meaning that the female will lay an egg in the nests of a variety of host species. In fact, approximately 220 species of hosts have been documented, though only about 140 have fledged cowbirds (Lowther 1993).

Clearly, it is to the evolutionary advantage of cowbirds to select nests with a high probability of fledging young cowbirds. This selection could be based on habitats, nest locations, and host species. An open question has been if cowbirds are capable of learning which species to parasitize and even which nests to use. Louder et al. (2015) addressed this question as part of a long-term nest box project involving Prothonotary Warblers (*Protonotaria citrea*) in southern Illinois. Each year for 21 years, the researchers placed and monitored approximately 1000 standardized nest boxes for Prothonotary Warblers in suitable habitat. Prothonotary Warblers are good hosts for cowbirds since they apparently lack any defenses against these brood parasites (Hoover 2003). Although cowbird parasitism in these nest boxes was substantial—at least 60% of nests—the warblers often double-brooded and were capable of raising both cowbird and warbler nestlings in each nesting attempt.

The researchers predicted that fledging success for cowbirds in particular sites would increase the probability of cowbird parasitism during the following year—the cowbirds would remember and reinvest in successful locations. There was, in fact, a positive relationship between cowbird fledging in one year and the rate of parasitism in the following year. In nests with no cowbird fledging in year one, the rate of parasitism in year two was 49%. The rate was 72% for nests with cowbird fledging in year one, implying that the female cowbirds remembered and re-laid in nest boxes that successfully produced cowbirds.

In order to test if experimentally removing cowbird eggs would decrease the probability of parasitism in subsequent nesting attempts, a subset of nest boxes that had successfully fledged cowbirds had cowbird eggs removed from subsequent nests. The probability of parasitism dropped from 0.89 to 0.73 after eggs had been removed. Since the warblers are often double-brooded, the investigators could test the effects of egg removal from a first nesting on parasitism in the second brood. In this case, the probability of parasitism in the second brood dropped from 0.38 to 0.14 when the cowbird eggs were removed from the first brood.

So, the take-home message from this study is that female cowbirds, in their efforts to perpetuate their species, make choices about where to deposit their eggs based in part on knowledge of previous successes at sites and in particular nest boxes. This information is durable enough to inform laying decisions from year to year. While personal observation of success seems the most parsimonious explanation, social communication of nesting success with conspecifics is also a possible learning mechanism.

Lest you think that brood parasitism is merely a matter of sneaking your eggs into another's nest, you might be interested in an article that appeared in 2014 in *Nature Scientific Reports* where Chakra and colleagues reported on mafia-like behavior (Zahavi 1979) in Brown-headed Cowbirds and Great Spotted Cuckoos (*Clamator glandarius*). The authors started with the observation that when host species remove cowbird or cuckoo eggs from their nests, they face retaliatory attacks on the host's young from the parasitic adults. Chakra and colleagues modeled this behavior using

game theory and found a cyclic relationship, where retaliation by the parasite leads to cooperation from the host, leading to larger parasite populations. However, eventually inspection and retaliation becomes more rare and host populations begin more aggressive removal of the eggs of parasites. This cyclic interspecific behavior depends on the plasticity of host defenses against parasitism.

Thus, brood parasitism is not the simple dump and run proposition of folklore. 🐦

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BOHEMIAN WAXWING BY SANDY SELESKY

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ABOUT BOOKS

“He Was So Merry, He Sang”

Mark Lynch

The Curious Mister Catesby. Edited for the Catesby Commemorative Trust by E. Charles Nelson and David J. Elliott. 2015. Athens, Georgia: University of Georgia Press.

In American birding circles Mark Catesby (1683–1749) lacks the name recognition or cachet of John James Audubon or Alexander Wilson. There are no shearwaters or petrels named after him. Even to those familiar with Catesby’s published work, the man remains a shadowy figure. There are no portraits of him, the details of his life are spare, and the few written descriptions of the man seem contradictory and add to the mystery of who he was.

“He was so merry, he sang,” wrote William Byrd, Catesby’s host in Virginia. Others describe Catesby as sullen, grave and sedate, modest, honest, affable, or simply tall. Without much else to go on, the reader cannot help but picture Mark Catesby as some kind of nature-loving Abraham Lincoln. We are left deducing the qualities of the man from the details of his artwork and anecdotes from his written work.

For instance, he decided to check out the stories about the manchineel tree for himself:

but the virulent and dangerous Properties of these Trees, causes a general Fear, or at least Caution, in felling them; this I was not sufficiently satisfied of, ‘till assisting in the cutting down a Tree of this Kind on Andros Island, I paid for my Incredulity, some of the milky poisonous Juice spurting in my Eyes, I was two Days totally deprived of Sight, and my Eyes, and Face, much swelled, and I felt a violent pricking Pain, the first twenty-four Hours, which from that Time abated gradually with the Swelling, and went off without any Application, or Remedy, none in that uninhabited Island being to be had.” (p. 214)

Catesby certainly appears to be curious, at times even fearless, and possessing a true scientist’s need to get at the truth behind the stories. But is this just my reading into this quote or what he was really like? Cynthia P. Neal, the producer and director of a documentary titled “*The Curious Mister Catesby*,” says this about the man: “Aside from all else that I admire about Mark Catesby, the one characteristic that stands above all the rest is his phenomenal powers of observation and recall.” (p. 25)

These qualities can be inferred by looking at his artwork or reading his text.

An outline of his life is as follows. Mark Catesby was born on March 24, 1683, and baptized in Castle Hedingham, England. Catesby lived at a time in a Britain that experienced amazing advances in scientific knowledge while also exploring some of

the farthest reaches of the globe. London itself was in the midst of a building renaissance. The great fire of 1666 had leveled large areas of the city, and during Catesby's life, London was being reimaged by architects like Christopher Wren.

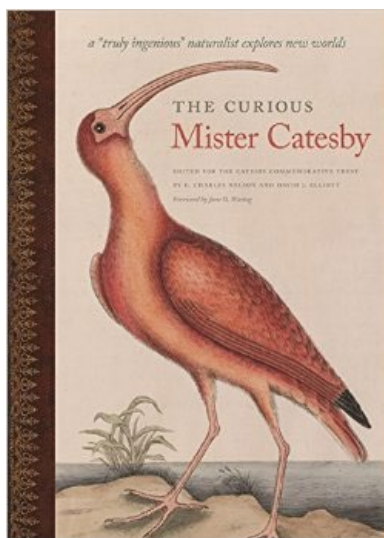
Catesby traveled to Virginia for the first time in 1712. Little is known of what transpired in Virginia. He sent plants back to England, to Samuel Dale and Henry Compton, the Bishop of London. It was a common practice of the day to get sponsors to finance your trips in exchange for your sending eagerly sought specimens from the New World. Catesby sent many plant specimens to England, some that became popular in gardens and parks. These included the catalpa, the red maple and the magnolia. In 1714, he made trips to Jamaica and Bermuda. In 1716 he returned to England.

In 1722, he set sail for North America again, but this time under the "auspices of the Royal Society of London," which was headed by Sir Isaac Newton at the time. He proposed a trip to Mexico in 1724, but this venture was not approved by his sponsors, a shame because one wonders what specimens he would have discovered there. He spent most of 1725 in the Bahamas and also visited Hispaniola and Puerto Rico. Catesby returned to England in 1726.

To record his observations of the plants, animals, and birds of the New World Catesby began to write what was to become his magnum opus, *The Natural History of Carolina, Florida and the Bahama islands*. Catesby apparently was not one to delegate responsibility, so he taught himself how to engrave. The plates for his book were produced in his own house by his own hand. Ultimately, he personally engraved each of the 220 plates and colored the prints, somewhere in the ballpark of 30,000 prints for the first edition. This figure seems nothing short of incredible, if not impossible.

The book was issued in parts, from 1 through 10. Part 1 was presented at the court to Queen Caroline in 1729. Part 10 was released in 1743. About 100 copies of this landmark book survive with another 100 copies considered lost.

Catesby's book illustrates and describes the plants, birds, reptiles, amphibians, fish, crustaceans, gorgonians, and even a few insects that caught his interest during his travels. Now extinct, the Ivory-billed Woodpecker, the Passenger Pigeon, and the Carolina Parakeet were all described and illustrated by Catesby. The bullfrog (*Rana catesbeiana*), which he illustrated, was named later in his honor. Although most attention is paid to his mainland North American work, fully one-third of his illustrations show specimens from the Bahamas, and these are considered some of his best plates. He also illustrated seven species from Jamaica and twelve species from other localities. He drew preliminary drawings for the plates, and colored some on the



spot. He worked on these after he returned from his expeditions, and, when finished, they became the basis for his plates.



The Ricebird (Bobolink) plate from Catesby's *Natural History*

In 1747, he published and presented a short paper that remains a landmark in the history of ornithology. In 1725, while lying on the deck of a ship anchored off Andros Island in the Bahamas, he noted the flight calls of Bobolinks overhead for three nights. This got him to start thinking about “the apparent periodic seasonal absence of birds after the end of summer.” (p. 219) Up until then, people believed all sorts of odd notions about where certain species went in the winter months. For instance, it was commonly believed that swallows hibernated under the mud in ponds. Catesby's paper titled “Of Birds of Passage” inspired a more scientific study of bird migration and the discovery that certain species of birds flew to other climates in winter.

Four years later he married Elizabeth Rowland, but died just two years after that. “His burial place at St. Luke's Church, Old Street, London, is no longer known.” (p. ix) Mark Catesby was clearly an extraordinary person who traveled widely in the New World. He drew and wrote about the natural wonders he found there, but the personal details of what he was like will always be frustratingly out of reach.

The Curious Mister Catesby is a collection of twenty-two papers presented to the Catesby Commemorative Trust and written by leading experts in their fields. It is a stunning volume. “The objective of this book is to review the life and work of Mark Catesby in a way that will be valuable both to the interested and informed general reader and to the scholarly community.” (p. xi) Because so little is known about the person, the authors approach the subject of Catesby from various, sometimes



The Pied-billed Grebe plate from Catesby's *Natural History*

peripheral, perspectives. Several of the papers concentrate on naturalists that came before Catesby and either definitely or possibly influenced the way he looked at the natural world. These include naturalists like John Banister and Maria Sibylla Merian.

I have a confession. I almost forgot about Catesby entirely when I read the essay on William Dampier (1651–1715) by Diana Preston and Michael Preston (pp. 57–70). Dampier was a pirate/naturalist who began his life sailing the Spanish Main and keeping notes on the world he saw. Later he left buccaneering and became a full-time natural historian and hydrographer and also became the first naturalist to visit five continents. There is a great portrait of the dashing Dampier included in the essay and he looks every bit the rogue naturalist. A fine role model if there ever was one.

Other papers found in *The Curious Mister Catesby* focus on such varied topics as how he made drawings in the field, his many contributions to botany, his work in the Caribbean, a behind the scenes look at the aforementioned documentary of his life, and of course the legacy of Catesby—later naturalists who were inspired by Catesby. The book is profusely illustrated with color plates, including many examples of Catesby's work. Though the focus of a number of essays is on his botanical discoveries, much attention is paid to his bird work, and an entire chapter is about his seminal paper, "Of Birds of Passage."

Though Catesby's bird plates may lack the overt drama of Audubon's large format plates, Catesby's birds are quite lively and beautifully composed. He often included a plant with the bird. This book will likely encourage a re-evaluation of Catesby's artistic endeavors, particularly his illustrations from the Bahamas.

The Curious Mister Catesby is a sumptuous scholarly volume that will introduce the reader to a deeper understanding of who Mark Catesby was and what he accomplished. It is a must-have book for anyone interested in the history of North American natural history. 🐦

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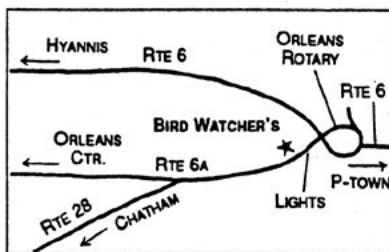
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BIRD SIGHTINGS

July/August 2015

Seth Kellogg, Marjorie W. Rines, and Robert H. Stymeist

July temperatures were average, but precipitation was below average. The first 90° reading occurred unusually late on July 19, and the high of 92° was reached on July 20 and again on July 29. The low was 59° on July 16, and the high that day was just 68°, 14° below average. Rainfall totaled 2.09 inches in Boston, 1.34 inches below normal, the most falling on July 9–10 with 1.27 inches.

August was mild with temperatures reaching into the nineties on six days. Boston recorded an official heat wave August 15–17 (three days or more with temperatures reaching 90° or more). Precipitation was just 2.19 inches, 1.16 inches below average, and the most rain in any one day was only 0.83 inch on August 11. *R. Stymeist*

WATERFOWL THROUGH ALCIDS

Pelagic birding was the highlight of the summer, as shearwaters were seen in exceptional numbers from whalewatch boats visiting the southeast part of Stellwagen bank. But in addition to the regularly occurring shearwaters there was an unbelievable selection of rarities and mega-rarities.

According to trip leader Jeremiah Trimble, the two-day Brookline Bird Club (BBC) pelagic trip to Hydrographer Canyon in August was, “one of, if not the, best trip we have ever run.” **Black-capped Petrels** were seen on both days, adding to only a dozen or so previous Massachusetts sightings. **Audubon’s Shearwaters** were seen in triple digit numbers. A two-day total of 37 **White-faced Storm-Petrels** and 23 **Band-rumped Storm-Petrels** shattered records of previous sightings for this two-day trip. A total of five **Tropicbirds** were seen including one **Red-billed** and an astonishing four **White-tailed Tropicbirds**. This was the third August trip in a row that the extraordinarily rare Red-billed Tropicbird was seen. Quoting Trimble again, “There have only been around 10 previous records of White-tailed Tropicbird in Massachusetts, and now we had seen four on this trip alone. ‘Wow’ does not begin to cover it.” Capping the list of rarities were a **South Polar Skua**, a **Long-tailed Jaeger**, and a **Bridled Tern**.

Pelagic rarities were not limited to the Brookline Bird Club pelagic. On July 12 an observer on a seabird survey for NOAA spotted an albatross resting on the water that he believed to be a **Yellow-nosed Albatross**. He was uncomfortable identifying it with certainty. On August 10 a birder from Quebec on a whalewatch boat out of Provincetown saw a bird he initially thought to be a Northern Gannet until he raised his binoculars, and as he put it, “Well, a Gannet it was not.” He identified and beautifully photographed a Yellow-nosed Albatross, almost surely the same individual seen a month before.

Fea’s Petrel was seen for the first time in Massachusetts waters on June 24, 2014, so it was hardly on anyone’s radar only a year later to see one on Stellwagen Bank. Diagnostic photos confirmed this exceptional sighting.

There were a scattering of reports of an adult **Brown Booby** from outer Cape Cod, surely the same bird that was seen off Provincetown on June 20. There was also, however, a report of an immature that landed on the bowsprit of a fishing boat on Nantucket Sound and hitched a ride into Hyannis Harbor. The sighting of a **Brown Pelican** on August 31 at South Beach in Chatham was tame by comparison.

Swallow-tailed Kite is now annual during spring migration but very rare in midsummer, so a Nantucket sighting on the first three days of July was exciting. On August 5 a Lancaster birder was astonished to see a **Crested Caracara** in his back yard. He was able to submit spectacular photos to the Massachusetts Rare Bird Alert (RBA) Facebook page, good enough to show that the bird was missing an eye. For about a week in mid-April there was a caracara in Montgomery, New York, which was also missing an eye, almost certainly the same bird. A caracara seen flying over Chatham on April 5 remains enigmatic. Obviously its eye could not be seen in flight, but perhaps it was on its way to New York.

American Avocets were seen on Plum Island and at Nauset Marsh in Orleans, and loitered long enough for many birders to enjoy them. As the dates did not overlap, it is possible it was the same individual. On July 28 a crew from the U.S. Fish and Wildlife Service spotted a **Long-billed Curlew** near the lighthouse on South Monomoy, and even more astonishing the crew returned on the 31st and saw three! It has been nearly 20 years since this species has been recorded in Massachusetts. On August 26 a **Curlew Sandpiper** was photographed on Duxbury Beach. A female **Ruff** was sighted on July 2 on Plum Island, probably one of the best places in the state to look for this rarity.

The BBC Pelagic **Bridled Tern** was not the only sighting for the period. On July 11 an observer at the western end of Nantucket spotted one flying in and roosting briefly. Astonishingly, the same observer was on Tuckernuck Island, less than a mile away, on August 19, and spotted a Bridled Tern again. Given the rarity of this species it would seem likely it was the same individual, although clear photographs of both birds showed that the August bird was missing a leg and the July bird was not. If it lost its leg shortly after the initial sighting, it may have impaired its ability to move on. **Sandwich Terns** were reported from Eastham and Chatham. Although rare, this species now appears to be annual in the state.

M. Rines

| | | | | | | | |
|-------------------|------------------|------------|------------------|------------------------|-----------------------|----|---------------|
| Brant | | | | Common Eider | | | |
| 7/11 | Newbypt H. | 1 | S. Mroz | 7/11 | Gloucester H. | 47 | J. Berry# |
| Wood Duck | | | | 8/15 | Westport | 74 | M. Lynch# |
| 8/16 | S. Quabbin | 18 | M. Lynch# | 8/22 | P.I. | 35 | T. Wetmore |
| 8/17 | Hancock | 21 | M. Lynch# | Surf Scoter | | | |
| 8/20 | GMNWR | 79 | BBC (W. Martens) | 7/6 | Chatham (S.B.) | 3 | B. Nikula |
| 8/24 | Belchertown | 62 | S. Surner | White-winged Scoter | | | |
| Gadwall | | | | 7/6 | Chatham (S.B.) | 5 | B. Nikula |
| 7/8 | Fairhaven | 2 | L. Waters | Black Scoter | | | |
| 8/3 | P.I. | 2 f, 6 yg | T. Wetmore | 7/6 | Chatham (S.B.) | 3 | B. Nikula |
| 8/13-31 | Turners Falls | 1 | J. Smith | 7/8 | Westport | 27 | L. Waters |
| Blue-winged Teal | | | | Long-tailed Duck | | | |
| thr | P.I. | 2-8 | v.o. | 7/6 | Chatham (S.B.) | 3 | B. Nikula |
| 8/13 | GMNWR | 2 | A. Bragg# | Common Goldeneye | | | |
| 8/22 | E. Boston (B.I.) | 2 | P. Peterson | 8/31 | Wachusett Res. | 1 | M. Lynch# |
| 8/26 | S. Monomoy | 12 | B. Prescott# | Hooded Merganser | | | |
| 8/27 | Pittsfield | 2 | J. Pierce | 7/16 | GMNWR | 3 | M. Stone# |
| 8/30 | Holden | 2 | M. Lynch# | 7/18 | Lincoln | 3 | J. Forbes |
| Northern Shoveler | | | | 8/29 | Shirley | 12 | J. Forbes |
| 7/7 | P.I. | 3 | P. + F. Vale | Common Merganser | | | |
| Northern Pintail | | | | 7/10 | Williamstown | 60 | C. Jones |
| 8/25 | P.I. | 1 | R. Heil | 8/22 | Deerfield | 70 | S. Kellogg |
| 8/26 | S. Monomoy | 6 | B. Prescott# | Red-breasted Merganser | | | |
| Green-winged Teal | | | | 7/10 | P.I. | 1 | D. Chickering |
| 8/4 | P.I. | 8 ad, 3 yg | R. Heil | Ruddy Duck | | | |
| 8/21 | Hadley | 5 | L. Therrien | 8/25 | Pittsfield | 3 | J. Pierce |
| 8/22 | Lexington | 4 | J. Forbes | Northern Bobwhite | | | |
| 8/23 | Washington | 10 | J. Pierce | 7/1 | P'town | 1 | B. Nikula |
| Ring-necked Duck | | | | 8/2 | S. Dart. (A.Pd) | 1 | L. Abbey# |
| thr | Cambr. (F.Pd) | 1 m | R. Jilek | Ruffed Grouse | | | |
| 7/21 | Sutton | 1 | R. Holden | 7/3 | Quabbin (G10)pr +9 yg | | SSBC (GdE) |
| Greater Scaup | | | | 8/12 | Ware R. IBA | 1 | M. Lynch# |
| 8/1 | Agawam | 1 | S. Motyl | 8/22 | Brewster | 2 | S. Finnegan |

| | | | | | | | |
|---------------------------------|------------------|------------|-------------------|--------------------------------|------------------|----------|------------------|
| Common Loon | | | | 8/22, 23 | S. of Nantucket | 17, 6 | BBC Pelagic |
| 7/4 | Haverhill | 2 | M. Akey# | White-tailed Tropicbird | | | |
| 7/12 | Westminster | 4 | T. Pirro | 8/22, 23 | S. of Nantucket | 1, 3 | BBC Pelagic |
| 7/19 | N. Truro | 13 | B. Nikula | Red-billed Tropicbird | | | |
| 8/22 | P.I. | 4 | T. Wetmore | 8/22 | S. of Nantucket | 1 | BBC Pelagic |
| 8/30 | Wachusett Res. | 13 | M. Lynch# | Brown Booby | | | |
| Pied-billed Grebe | | | | 7/3 | P'town | 1 ad | J. Young# |
| 7/5 | GMNWR | 1 | USFWS (S. Arena) | 8/25 | Nant. Sound | 1 imm ph | Huckemeyer# |
| 8/thr | P.I. | 1 | T. Wetmore | 8/28 | Orleans | 1 ad | C. Goodrich |
| 8/8 | W. Gloucester | 1 | C. Haines | 8/29 | N. Truro | 1 ad ph | P. Wolter# |
| Horned Grebe | | | | Northern Gannet | | | |
| 7/19 | Winthrop | 1 | A. Trautmann | 7/27 | Ipswich (C.B.) | 20 | M. Brengle |
| Red-necked Grebe | | | | 8/11 | Rockport (A.P.) | 356 | R. Heil |
| 8/19 | Stellwagen | 51 | T. Green# | 8/15 | Stellwagen | 20 | P. Peterson |
| Yellow-nosed Albatross | | | | 8/27 | P'town | 70 | B. Nikula |
| 8/10 | Stellwagen | 1 ph | F. Grenon# | Double-crested Cormorant | | | |
| Albatross species | | | | 7/14 | Winthrop | 136 | R. Stymeist |
| 7/12 | Stellwagen | 1 | NOAA (P. Crosson) | 8/13 | Chatham | 900 | R. Schain |
| Black-capped Petrel | | | | Brown Pelican | | | |
| 7/11 | Atlantis Canyon | 1 ph | A. Wilson# | 8/31 | Chatham (S.B.) | 1 ad ph | M. Malin |
| 8/22, 23 | S. of Nantucket | 1, 1 ph | BBC Pelagic | American Bittern | | | |
| Fea's Petrel | | | | 7/3 | Konkapot | 2 | M. Lynch# |
| 7/18 | NE of Truro | 1 ph | S. Surner# | 8/20 | GMNWR | 1 | A. Bragg# |
| Cory's Shearwater | | | | 8/24 | Hadley | 1 | M. Locher |
| 7/1 | P.I. | 16 | R. Heil | 8/27 | Wayland | 1 | B. Harris |
| 7/16, 8/31 | P'town | 3325, 1600 | B. Nikula | Least Bittern | | | |
| 7/18 | Stellwagen | 5000 | B. Nikula# | 7/5 | GMNWR | 7 | USFWS (S. Arena) |
| 8/2, 15 | E. of Chatham | 2500, 300 | B. Nikula# | 7/8 | Westport | 1 | L. Waters |
| 8/11 | Rockport (A.P.) | 1780 | R. Heil | 8/22 | P.I. | 1 | M. Goetschkes# |
| 8/24 | Cohasset | 10 | V. Zollo | Great Egret | | | |
| Great Shearwater | | | | 7/31 | Turners Falls | 6 | E. Huston |
| thr | P'town | 800 max | B. Nikula | 8/12 | P.I. | 110 | T. Wetmore |
| 7/18 | Stellwagen | 3000 | B. Nikula# | 8/15 | Westport | 52 | M. Lynch# |
| 7/25, 8/15 | E. of Chatham | 150, 2500 | B. Nikula# | 8/19 | E. Boston (B.I.) | 33 | R. Stymeist |
| 8/11 | Rockport (A.P.) | 52 | R. Heil | 8/21 | Northampton | 9 | L. Therrien |
| 8/12 | Eastham | 350 | M. Faherty | 8/31 | Cambr. (F.Pd) | 23 | P. Roberts# |
| Sooty Shearwater | | | | Snowy Egret | | | |
| thr | P'town | 200 max | B. Nikula | 7/27 | Hadley | 1 | L. Therrien |
| 7/12 | Stellwagen | 800 | B. Nikula# | 8/13 | Chatham | 115 | R. Schain |
| 7/25, 8/15 | E. of Chatham | 15, 30 | B. Nikula# | 8/19 | E. Boston (B.I.) | 49 | R. Stymeist |
| 8/11 | Rockport (A.P.) | 3 | R. Heil | 8/20 | P.I. | 98 | D. Chickering |
| Manx Shearwater | | | | 8/22 | Sterling | 1 | G. Gove |
| 7/16, 8/31 | P'town | 7, 85 | B. Nikula | Little Blue Heron | | | |
| 7/18 | Nantucket Shoals | 11 | BBC Pelagic | 8/11 | Pittsfield | 1 | J. Pierce |
| 7/25, 8/15 | E. of Chatham | 2, 15 | B. Nikula# | 8/12 | Newbury | 2 | MAS (D. Larson) |
| 7/26 | Revere B. | 20 | S. Hedman | 8/29 | Gloucester | 9 | G. d'Entremont# |
| 8/11 | Rockport (A.P.) | 59 | R. Heil | Green Heron | | | |
| 8/24 | Cohasset | 10 | V. Zollo | 7/19 | Burrage Pd WMA | 3 | G. d'Entremont# |
| Audubon's Shearwater | | | | 7/23 | Eastham | 4 | M. Lynch# |
| 7/11 | Atlantis Canyon | 2 | A. Wilson# | 7/24 | Nauset | 6 | M. Lynch# |
| 7/18 | Hydrographer | 3 | BBC Pelagic | 7/30 | GMNWR | 3 | K. Dia# |
| 8/22, 23 | S. of Nantucket | 144, 58 | BBC Pelagic | 8/16 | Sterling | 7 | B. Kamp |
| Wilson's Storm-Petrel | | | | Black-crowned Night-Heron | | | |
| 7/1 | N. Truro | 400 | B. Nikula | 7/15 | Winthrop | 7 | P. Peterson |
| 7/18 | S. of Nantucket | 886 | BBC Pelagic | 8/27 | Hadley | 1 | P. Yeskie |
| 7/20 | Stellwagen | 1000 | B. Nikula# | 8/28 | Springfield | 1 | M. Moore |
| 8/2 | E. of Chatham | 2500 | B. Nikula# | 8/30 | P.I. | 55 | T. Wetmore |
| 8/11 | Rockport (A.P.) | 400 | R. Heil | 8/31 | Eastham | 19 | B. Prescott |
| 8/12 | Eastham | 350 | M. Faherty | Yellow-crowned Night-Heron | | | |
| 8/12 | Boston (Deer I.) | 325 | M. Iliff | thr | P.I. | 15 max | v.o. |
| 8/16 | off P'town | 500 | B. Nikula# | 7/15 | Winthrop | 1 imm | P. Peterson |
| 8/22, 23 | S. of Nant. | 1168, 614 | BBC Pelagic | 8/5 | Gloucester | 1 imm | N. Dubrow |
| White-faced Storm-Petrel | | | | 8/9-28 | S. Dartmouth | 1-2 | A. + D. Morgan |
| 8/22, 23 | S. of Nantucket | 16, 21 | BBC Pelagic | 8/10 | Ipswich | 3 | N. Dubrow |
| Leach's Storm-Petrel | | | | 8/10 | Duxbury | 1 | E. Corbett |
| 7/13 | Jeffries L. | 2 | MAS (D. Larson) | 8/15 | Wellfleet | 2 | G. d'Entremont |
| 7/18 | S. of Nantucket | 196 | BBC Pelagic | 8/31 | Eastham | 12 | B. Prescott |
| 8/5 | Stellwagen | 1 | J. Baldwin | Glossy Ibis | | | |
| 8/12 | Eastham | 6 | M. Faherty | 7/6 | P.I. | 27 | D. Williams |
| 8/22, 23 | S. of Nantucket | 107, 54 | BBC Pelagic | 8/2 | Newbury | 70 | MAS (D. Larson) |
| Band-rumped Storm-Petrel | | | | Black Vulture | | | |
| 7/18 | Hydrographer | 2 | BBC Pelagic | 6/23 | Swansea | 1 | S. Davis |

| | | | | | | | | |
|----------------------------|------------------|-----------|---------------------|------------|---------------------------|---------|--|--------------------|
| Black Vulture (continued) | | | | 8/31 | Chatham (S.B.) | 606 | | M. Malin |
| 7/6 | Hadley | 2 | L. Therrien | | American Golden-Plover | | | |
| 7/10 | E. Brookfield | 1 | J. Bourget | 7/29, 8/25 | P.I. | 1, 1 | | Bourget, Vale |
| 8/22 | Sandisfield | 3 | M. Lynch# | 8/26 | Squantum | 1 | | A. Trautmann |
| Turkey Vulture | | | | | Semipalmated Plover | | | |
| 8/15 | Fitchburg | 24 | M. Larson# | 7/29 | P.I. | 220 | | M. Lynch# |
| 8/15 | Lancaster | 12 | M. Larson# | 8/1 | Westport | 60 | | P. Champlin |
| 8/18 | Mt. Wachusett | 18 | G. Gove# | 8/4 | Newbypt. H. | 1500 | | R. Heil |
| 8/22 | Sandisfield | 17 | M. Lynch# | 8/22 | Longmeadow | 4 | | S. Surner |
| Osprey | | | | 8/31 | Chatham (S.B.) | 755 | | M. Malin |
| 7/11 | P.I. | 8 | P. + F. Vale | | Piping Plover | | | |
| 8/15 | Westport | 73 | M. Lynch# | 7/10 | Westport | 25 | | P. Champlin |
| 8/15 | Acoaxet | 23 | M. Lynch# | 7/14 | Revere B. | 18 | | R. Stymeist |
| Swallow-tailed Kite | | | | 7/14 | Ipswich (C.B.) | 33 | | M. Brengle |
| 7/1-3 | Nantucket | 1 ph | R. Stevenson + v.o. | 7/24 | W. Tisbury | 14 | | S. Whiting |
| Bald Eagle | | | | 7/25 | Plymouth B. | 17 | | SSBC (GdE) |
| 8/10 | Milton | 2 | G. Denton | 8/10 | Chatham (S.B.) | 27 | | M. Malin |
| 8/22 | Deerfield | 6 | S. Kellogg | | Killdeer | | | |
| 8/26 | Mt. Wachusett | 3 | Hawkcount (SO) | 8/16 | S. Quabbin | 21 | | M. Lynch# |
| Northern Harrier | | | | 8/17 | Waltham | 21 | | C. Cook |
| 8/16 | P.I. | 6 | J. Berry | 8/25 | Lynn | 22 | | R. Heil |
| 8/26 | S. Monomoy | 3 | B. Prescott# | 8/26 | Newbury | 20 | | MAS (B. Gette) |
| 8/28 | Nantucket | 4 | L. Dunn# | | American Oystercatcher | | | |
| Sharp-shinned Hawk | | | | 7/3 | Edgartown | 6 | | P. Gilmore |
| 8/2 | Athol | 2 | M. Lynch# | 7/15 | Winthrop | 13 | | P. Peterson |
| 8/22 | Chatham | 2 | SSBC (GdE) | 8/25 | Eastham | 11 | | K. Schopp |
| 8/27 | Mt. Wachusett | 4 | Hawkcount (SO) | 8/28 | Nantucket | 25 | | L. Dunn# |
| 8/30 | Mt. Wataatic | 3 | Hawkcount (BR) | 8/31 | Chatham (S.B.) | 23 | | M. Malin |
| Cooper's Hawk | | | | | American Avocet | | | |
| 8/22 | Woburn (HP) | 3 | M. Rines | 7/25-8/8 | P.I. | 1 | | T. Walker + v.o. |
| Northern Goshawk | | | | 8/19-27 | Orleans | 1 | | A. Northrup + v.o. |
| 7/12 | Russell | 1 | S. Svec | | Spotted Sandpiper | | | |
| 7/12 | Greylock | 1 | T. Gagnon | 7/11 | Sandisfield | 13 | | M. Lynch# |
| 8/26 | Ware R. IBA | 1 ad | M. Lynch# | 7/23 | Newbury | 8 | | J. Hoye# |
| Red-shouldered Hawk | | | | 8/2 | Winchester | 6 | | R. LaFontaine |
| 7/19 | Ware R. IBA | 2 | M. Lynch# | 8/17 | Waltham | 5 | | C. Cook |
| Broad-winged Hawk | | | | 8/25 | Lynn | 8 | | R. Heil |
| 7/3 | Quabbin (G10) | 3 | SSBC (GdE) | | Solitary Sandpiper | | | |
| 8/3 | Sandisfield | 6 | M. Lynch# | 8/3 | Sandisfield | 5 | | M. Lynch# |
| 8/6 | Waltham | 4 | J. Forbes | 8/22 | Lexington | 5 | | J. Forbes |
| 8/27 | Wayland | 4 | B. Harris | 8/22 | W. Townsend | 3 | | R. Templeton |
| 8/29 | Mt. Wataatic | 20 | Hawkcount (BR) | 8/29 | Cambridge | 3 | | K. Hartel |
| Crested Caracara | | | | 8/29 | Rockport | 4 | | B. Harris |
| 8/5 | Lancaster | 1 ph | S. Kirkorian | | Greater Yellowlegs | | | |
| Clapper Rail | | | | 7/24 | Nauset | 70 | | M. Lynch# |
| 7/1 | Wellfleet | 5 ad 6 yg | S. Broker | 7/28 | P.I. | 100 | | T. Wetmore |
| 8/8 | Fairhaven | 1 | L. Waters# | 8/2 | Squantum | 20 | | P. Peterson |
| Virginia Rail | | | | 8/30 | Sterling | 6 | | M. Lynch# |
| 7/3 | Konkapot | 3 | M. Lynch# | | Willet | | | |
| 7/5 | GMNWR | 13 ad | USFWS(S.Arena) | 7/3 | P.I. | 93 | | R. Heil |
| 7/21 | Sudbury | 3 | G. Freedman | 7/8 | S. Dart. (A.Pd) | 54 | | MAS (Buchsbaum) |
| Sora | | | | 7/30 | Westport | 56 | | P. Champlin |
| 7/3 | Konkapot | 1 | M. Lynch# | 7/31 | Chatham (S.B.) | 60 | | N. Bonomo |
| 7/5 | GMNWR | 1 | USFWS (S. Arena) | | Lesser Yellowlegs | | | |
| 7/24 | Belchertown | 1 | L. Therrien | 7/15 | E. Boston (B.I.) | 14 | | P. Peterson |
| 8/9 | Squantum | 1 | G. d'Entremont | 8/4 | Newbypt | 325 | | R. Heil |
| 8/9 | E. Boston (B.I.) | 1 | P. Peterson | 8/7 | Pittsfield | 8 | | G. Hurley |
| 8/9 | N. Truro | 1 | T. Green | 8/15 | E. Boston (B.I.) | 17 | | P. Peterson |
| Common Gallinule | | | | 8/29 | Ipswich | 15 | | J. Berry |
| 7/1 | Belchertown | 1 | L. Therrien | | Upland Sandpiper | | | |
| 7/4 | Stockbridge | 2 | M. Lynch | 7/8 | Otis AFB | 2 | | J. McCumber |
| 7/5 | GMNWR | 1 | USFWS (S. Arena) | 8/22 | Westport | 1 | | H. Zimmerlin |
| 8/25 | P.I. | 1 | R. Heil | 8/30 | Hadley | 1 | | L. Therrien |
| Sandhill Crane | | | | | Whimbrel | | | |
| 7/thr | Worthington | 1-5 | v.o. | 7/8 | Essex | 14 | | D. Brown |
| 7/1-8/15 | Burrage WMA | 2 | v.o. | 7/30 | Westport | 23 | | P. Champlin |
| 8/15 | Essex | 1 | D. Brown | 7/31 | Eastham (F.E.) | 17 | | T. Green |
| 8/24 | E. Bridgewater | 2 ad | E. Giles | 8/2 | WBWS | 32 | | F. Hareau |
| Black-bellied Plover | | | | 8/10 | W. Chatham | 24 | | M. Vogler |
| thr | P.I. | 221 max | v.o. | 8/29 | P.I. | 5 | | P. + F. Vale |
| 7/23 | Chatham | 30 | M. Lynch# | | Long-billed Curlew | | | |
| 8/15 | Acoaxet | 12 | M. Lynch# | 7/28, 31 | S. Monomoy | 1, 3 ph | | R. Finer# |

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|-------------------------------|------------------|----------|-----------------|--|-----------------------|---------|------------------|
| Hudsonian Godwit | | | | Buff-breasted Sandpiper | | | |
| 8/13 | Chatham | 3 | R. Schain | 8/29 | P.I. | 2 | P. + F. Vale |
| 8/27 | P.I. | 3 | D. Adrien | 8/30 | Sandwich | 1 | J. LeClaire |
| Marbled Godwit | | | | Ruff | | | |
| 8/19-25 | Plymouth | 1 | S. van der Veen | 7/2-03 | P.I. | 1 f | v.o. |
| 8/21-30 | Westport | 1 | H. Zimmerlin | Short-billed Dowitcher | | | |
| 8/27 | P.I. | 1 | D. Adrien | 7/6-8/16 | P.I. | 391 max | v.o. |
| Ruddy Turnstone | | | | 7/13 | E. Boston (B.I.) | 8 | P. Peterson |
| 8/2 | Westport | 8 | P. Champlin | 7/13 | Duxbury B. | 50 | R. Bowes |
| 8/7 | Scituate | 7 | P. Peterson | 7/31 | Chatham (S.B.) | 4750 | N. Bonomo |
| 8/15 | Westport | 12 | M. Lynch# | 8/30 | Northampton | 1 | L. Therrien |
| 8/22 | Winthrop B. | 4 | S. Riley | Long-billed Dowitcher | | | |
| Red Knot | | | | 8/thr | P.I. | 1-2 | v.o. |
| 8/19 | Chatham | 800 | P. Trull | Wilson's Snipe | | | |
| 8/21 | Plymouth B. | 4 | L. Waters | 7/4 | P.I. | 1 | S. Heron |
| 8/21 | Revere (POP) | 2 | L. Ferraresso | 8/22 | ONWR | 1 | BBC (MacFarlane) |
| 8/28 | P.I. | 5 | S. Sullivan | American Woodcock | | | |
| Sanderling | | | | 7/16 | Wayland | 2 | B. Harris |
| 7/19 | P.I. | 35 | T. Wetmore | 7/17 | ONWR | 3 | M. Lynch# |
| 7/25 | Plymouth B. | 40 | SSBC (GdE) | 8/17 | P.I. | 7 | D. Adrien |
| 7/31 | Chatham (S.B.) | 1450 | N. Bonomo | Wilson's Phalarope | | | |
| 8/8 | Westport | 800 | P. + J. Roberts | 7/3 | P.I. | 2 | S. Grinley |
| Semipalmated Sandpiper | | | | 8/2 | Chilmark | 1 | L. McDowell# |
| 7/14 | Winthrop | 45 | R. Stymeist | Red-necked Phalarope | | | |
| 7/24-8/31 | P.I. | 1500 max | v.o. | 7/18 | Nantucket Shoals | 9 | BBC Pelagic |
| 7/31 | Chatham (S.B.) | 2050 | N. Bonomo | 8/13, 29 | E. of Chatham | 130, 55 | B. Nikula# |
| 8/8 | Longmeadow | 4 | S. Kellogg | 8/15 | Stellwagen | 10 | P. Peterson |
| 8/21 | Plymouth B. | 1150 | L. Waters | 8/16 | off P'town | 50 | B. Nikula# |
| Western Sandpiper | | | | 8/21 | P.I. | 1 | T. Wetmore |
| 8/15 | E. Boston (B.I.) | 1 | P. Peterson | 8/22, 23 | S. of Nantucket | 153, 84 | BBC Pelagic |
| 8/20 | Plymouth | 1 | J. Hoye# | Red Phalarope | | | |
| 8/29 | Rockport | 1 | B. Harris | 7/1-8 | P.I. | 1 | T. Wetmore# |
| 8/30 | Squantum | 1 | P. Peterson | 8/23 | S. of Nantucket | 5 | BBC Pelagic |
| 8/30 | P.I. | 14 | E. Nielsen | Black-legged Kittiwake | | | |
| Least Sandpiper | | | | 7/16 | P'town | 50 | B. Nikula |
| 7/6 | P.I. | 225 | R. Heil | 7/21 | Vineyard Haven | 1 | T. Green |
| 7/14 | Winthrop | 28 | R. Stymeist | 7/23 | Stellwagen | 18 | M. Lynch# |
| 8/19 | Longmeadow | 75 | L. Richardson | 8/2 | E. of Chatham | 1 | B. Nikula# |
| 8/26 | Lexington | 45 | J. Forbes | Sabine's Gull | | | |
| White-rumped Sandpiper | | | | 8/4, 31 | P'town 1 sub ad, 2 ad | | B. Nikula |
| thr | P.I. | 60 max | v.o. | 8/30 | Stellwagen | 1 ad | T. Factor# |
| 8/21 | Plymouth B. | 7 | L. Waters | Bonaparte's Gull | | | |
| 8/22 | Winthrop B. | 6 | S. Riley | 7/4 | P.I. | 66 | S. Miller |
| 8/28 | Chatham | 12 | M. Faherty# | 7/14 | Ipswich (C.B.) | 71 | M. Brengle |
| 8/29 | Eastham | 65 | J. Trimble# | 7/21 | N Adams | 1 | C. Jones |
| Baird's Sandpiper | | | | 8/19 | Revere B. | 235 | R. Stymeist |
| thr | P.I. | 1-2 | v.o. | Black-headed Gull | | | |
| 8/8 | Nantucket | 1 | D. Blatt | 7/27 | Wellfleet | 1 | J. Gamble |
| 8/24 | Longmeadow | 1 | S. Kellogg | Little Gull | | | |
| 8/26 | Nahant | 1 | J. Hoye# | 7/4 | P'town (R.P.) | 1 | P. Flood |
| 8/26 | S. Monomoy | 1 | B. Prescott# | 7/6-13 | P.I. | 1 1S | R. Heil |
| 8/27 | Paxton | 1 | M. Lynch# | 7/23 | Ipswich (C.B.) | 1 | N. Dubrow |
| 8/28 | Quabbin (G43) | 1 | B. Kamp | 7/24 | Nauset | 1 ad | M. Lynch# |
| Pectoral Sandpiper | | | | 8/8 | P'town | 1 imm | B. Nikula |
| thr | P.I. | 1-2 | v.o. | Laughing Gull | | | |
| 8/1-5 | Pittsfield | 1 | J. Pierce | 7/26 | E. of Chatham | 400 | B. Nikula# |
| 8/2 | Westport | 3 | P. Champlin | 8/15 | Westport | 83 | M. Lynch# |
| 8/20 | Rowley | 5 | G. Gove# | 8/21 | Plymouth B. | 1360 | L. Waters |
| 8/30 | Lexington | 1 | J. Forbes | 8/27 | Squantum | 70 | P. Peterson |
| 8/31 | Holden | 1 | B. Kamp | Lesser Black-backed Gull | | | |
| Dunlin | | | | 7/19 | N. Truro | 90 | B. Nikula |
| 7/1 | P.I. | 1 | M. Goetschkes# | 7/31 | Chatham (S.B.) | 74 | N. Bonomo |
| 7/9 | Plymouth B. | 1 | J. Sender | 8/2, 13 | E. of Chatham | 8, 12 | B. Nikula# |
| Curlew Sandpiper | | | | 8/24 | Pittsfield | 1 | J. Pierce |
| 8/26 | Duxbury B. | 1 ph | R. Bowes | 8/26 | S. Monomoy | 15 | B. Prescott# |
| Stilt Sandpiper | | | | Herring x Great Black-backed Gull | | | |
| 7/9-8/31 | P.I. | 20 max | v.o. | 7/6 | Chatham (S.B.) | 1 | B. Nikula |
| 8/2 | Chilmark | 5 | L. McDowell# | Bridled Tern | | | |
| 8/15 | Truro | 1 | G. d'Entremont# | 7/11 | Nantucket | 1 ph | L. Dunn |
| 8/17 | E. Boston (B.I.) | 1 | R. Stymeist | 8/19 | Tuckernuck | 1 ph | L. Dunn |
| 8/25 | Squantum | 3 | P. Peterson | 8/22 | S. of Nantucket | 1 | BBC Pelagic |

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|---------------------|-----------------|------|------------------|---------------------------|----------------------|-------|--------------------|
| Least Tern | | | | 7/5 | Newbypt. H. | 1 | S. Grinley# |
| 7/13 | Winthrop B. | 120 | S. Riley | 7/8 | P.I. | 1 | D. Adrien |
| 7/25 | Plymouth B. | 60 | SSBC (GdE) | 7/26 | Falmouth | 1 | G. Hirth |
| 7/31 | Chatham (S.B.) | 250 | N. Bonomo | 8/24 | Eastham | 1 | K. Schopp |
| 8/11 | P.I. | 100 | D. Adrien | | | | |
| Caspian Tern | | | | | Sandwich Tern | | |
| 7/2 | P.I. | 1 | S. Harvell | 7/10 | Eastham | 1 ph | K. Schopp |
| 7/8 | Ipswich (C.B.) | 1 | D. Brown | 8/16-19 | Chatham | 1 ph | D. Hollie |
| 8/23, 27 | Squantum | 1, 4 | Rawdon, Peterson | Black Skimmer | | | |
| Black Tern | | | | 7/6 | Duxbury B. | 2 | R. Bowes |
| 8/23 | Quabbin Pk | 1 | L. Therrien | 7/16 | S. Dart. (A.Pd) | 2 | L. Miller-Donnelly |
| 8/23 | Westport | 50 | P. Champlin | 7/18 | Plymouth B. | 2 | J. Hoye# |
| 8/25 | Richmond | 1 | T. Collins | 7/31 | P'town | 6 | F. Hareau |
| 8/26 | S. Monomoy | 25 | B. Prescott# | 8/15 | Edgartown | 9 | R. Bierregaard# |
| 8/27 | Eastham (F.E.) | 35 | B. Nikula | 8/23 | Winthrop B. | 1 | M. Filosa |
| 8/28 | Nantucket | 200 | L. Dunn# | South Polar Skua | | | |
| 8/31 | Falmouth | 35 | G. Hirth | 8/22 | S. of Nantucket | 1 | BBC Pelagic |
| Roseate Tern | | | | Pomarine Jaeger | | | |
| 7/31 | Chatham (S.B.) | 120 | N. Bonomo | 7/18 | Stellwagen | 4 | B. Nikula# |
| 8/11 | Rockport (A.P.) | 16 | R. Heil | 7/28 | Westport | 1 | P. Champlin |
| 8/28 | Nantucket | 800 | L. Dunn# | 8/2, 13 | E. of Chatham | 10, 3 | B. Nikula# |
| 8/29 | Eastham | 380 | J. Trimble# | 8/22, 23 | S. of Nantucket | 2, 15 | BBC Pelagic |
| Common Tern | | | | 8/27 | P'town | 2 | B. Nikula |
| 7/23 | Eastham | 200 | M. Lynch# | Parasitic Jaeger | | | |
| 7/31 | Chatham (S.B.) | 6000 | N. Bonomo | 7/1, 8/27 | P'town | 2, 15 | B. Nikula |
| 8/15 | Westport | 605 | M. Lynch# | 7/11 | Stellwagen | 3 | J. Berry# |
| 8/21 | Plymouth B. | 800 | L. Waters | 7/25, 8/28 | E. of Chatham | 1, 6 | B. Nikula# |
| 8/21 | Medford | 12 | J. Layman | 8/21 | P.I. | 1 | T. Wetmore |
| 8/27 | P'town | 2500 | B. Nikula | 8/23 | Squantum | 1 | V. Zollo |
| Arctic Tern | | | | Long-tailed Jaeger | | | |
| 7/8 | Westport | 1 | L. Waters | 7/13 | P'town | 1 | M. Keleher# |
| 7/25 | E. of Chatham | 1 | B. Nikula# | 8/8, 11 | P'town | 1, 1 | B. Nikula |
| 8/25 | P.I. | 3 | R. Heil | 8/22 | S. of Nantucket | 1 | BBC Pelagic |
| Forster's Tern | | | | Common Murre | | | |
| 8/20 | Dennis | 135 | P. Flood | 7/1 | P.I. | 1 | R. Heil |
| 8/25 | P.I. | 4 | R. Heil | 7/17 | Stellwagen | 1 | C. Otto |
| 8/26 | S. Monomoy | 25 | B. Prescott# | Black Guillemot | | | |
| 8/27 | Eastham | 11 | K. Schopp | 7/2 | P'town | 1 | J. Nance |
| Royal Tern | | | | 8/28 | W. Gloucester | 1 imm | C. Haines |
| 7/4 | P'town (R.P.) | 4 | P. Flood | Atlantic Puffin | | | |
| | | | | 8/16 | Brewster | 1 imm | M. J. Foti |

CUCKOOS THROUGH FINCHES

Tom Gagnon has manned a nighthawk watch in Northampton for 42 years. Starting on August 15 this year Tom recorded over 3200 birds. Last year he recorded his all-time high of 7791 birds. **Chuck-wills-widows** were noted in Falmouth and in Plymouth, and Eastern Whip-poor-wills were reported from four locations including two still calling on August 29 at Oxbow National Wildlife Refuge. Tom Gagnon logged 21 migrating Ruby-throated Hummingbirds during his nighthawk watch in Northampton from August 15 through the end of the month. A **Selasphorus hummingbird** was noted in Pepperell on August 18. The observer noticed the rufous sides and orangey coloring on the base of the tail when it was spread, but the bird disappeared before photos could be taken.

A **Red-headed Woodpecker** lingered in Ipswich from May, and a second was present for a month in Lexington. A one-day report from Williamstown could have concerned the same individual reported there in May. A pair of Monk Parakeets was reported from Belle Isle Marsh in East Boston.

A report of an Olive-sided Flycatcher at Turners Falls on August 8 was early for a migrant, but reports of two in Belchertown and two in Monterey at the end of August were in the typical migration window. A Yellow-bellied Flycatcher, another early fall migrant, was reported from Wachusett Reservoir on August 20. Other early migrants included a Philadelphia Vireo first reported on August 16, a Swainson's Thrush on August 13, four Tennessee Warblers in August, and a **Connecticut Warbler** from Nahant on August 29.

It was a good year for breeding birds especially Purple Martins. Mary Keleher reported from Mashpee that a total of 245 eggs were laid, and 196 martins hatched. On August 22 the last bird successfully fledged for a total of 176, the best year to date. The colony in Rehoboth had 94 pairs, 34 more than last year, and the two colonies on Plum Island successfully fledged 45 birds. Red-eyed Vireo, considered by many to be the most abundant bird in eastern deciduous forests, is doing well with over 140 reported from Sandisfield and 71 noted from Gate 10 at the Quabbin Reservoir. Some other impressive totals of resident birds came from the Ware River Important Bird Area: 32 Red-breasted Nuthatches, 38 Hermit Thrushes, 51 Ovenbirds, and 12 Scarlet Tanagers.

An early July survey of the salt marsh at Allen's Pond in South Dartmouth found a total of 51 Saltmarsh and 24 Seaside sparrows. It is important to note that southern New England has about 60% of the world's breeding population of Saltmarsh Sparrows (State of the Birds, 2013: <http://www.massaudubon.org/content/download/9511/156450/file/state-of-the-birds-2013-document.pdf>). Other noteworthy sparrow reports include a **Clay-colored** in Hadley, three reports of **Lark Sparrow**, and two reports of **Dickcissel**. Single Pine Siskins were noted from five locations scattered throughout the state, and there was one report of Red Crossbill. Evening Grosbeaks were found in Easton and Colrain.

R. Stymeist

| | | | | | | | |
|---------------------------|----------------|----------|------------------|------------------------------|------------------|-----------|------------------|
| Yellow-billed Cuckoo | | | | Selasphorus species | | | |
| 7/12 | Wendell | 1 | M. Lynch# | 8/18 | Pepperell | 1 | M. Resch |
| 7/22 | Ipswich | 2 | J. Berry | American Kestrel | | | |
| 8/8 | Belchertown | 1 | L. Therrien | 7/2 | Somerville | pr, 1 juv | P. Bain |
| 8/30 | P.I. | 1 | D. Weaver | 7/4 | Medford | pr, 3 juv | J. Layman |
| Black-billed Cuckoo | | | | 7/7 | Revere | 2 fl | S. Riley |
| 7/5 | MSSF | 1 | G. d'Entremont | 8/20-28 | Mt. Wachusett | 8 | Hawkcount (SO) |
| 7/10 | Southwick | 1 | S. Kellogg | 8/24 | Leicester | 4 | M. Lynch# |
| 7/12 | Greylock | 1 | T. Gagnon | 8/30 | Saugus | 4 | S. Zende# |
| 7/12 | Wendell | 2 | M. Lynch | Merlin | | | |
| 8/26 | Ware R. IBA | 1 | M. Lynch# | 7/2 | Swansea | 1 | S. Davis |
| Barred Owl | | | | 7/25-31 | Williamstown | 1-3 | C. Jones |
| thr | Medford | 2 | M. Rines | 7/26 | Nantucket | pr w 2 yg | T. Sackton# |
| Northern Saw-whet Owl | | | | 8/17 | Falmouth | 2 | K. Fiske |
| 8/15 | Wayland | 1 | J. Hoye# | 8/28 | P.I. | 2 | S. Sullivan# |
| Common Nighthawk | | | | Peregrine Falcon | | | |
| 8/15-31 | Northampton | 3228 | T. Gagnon | 7/2 | Haverhill | 3 | S. + J. Mirick |
| 8/16 | S. Hadley | 100 | S. Desrosier | 7/21 | Boston (Deer I.) | 2 | R. Stymeist# |
| 8/21, 31 | Southwick | 155, 225 | S. Kellogg | 8/15 | P.I. | 2 | P. + F. Vale |
| 8/22 | Amherst | 140 | H. Lappen | 8/27 | Mt.A. | 2 | S. Sullivan# |
| 8/24 | Leicester | 122 | M. Lynch# | 8/28 | Nantucket | 3 | L. Dunn# |
| 8/25 | Longmeadow | 100 | S. Kellogg | Monk Parakeet | | | |
| 8/25-27 | Mt.A. | 205 | R. Stymeist# | 7/15 | Revere | 1 | P. Peterson |
| 8/27 | Wayland | 77 | B. Harris | 7/18 | E. Boston (B.I.) | 2 | D. + T. Sullivan |
| Chuck-will's-widow | | | | Red-headed Woodpecker | | | |
| 7/3 | Falmouth | 1 | T. Green# | thr | Ipswich | 1 | J. Berry |
| 7/14 | Plymouth | 1 | J. Barrett | 7/1-8/3 | Lexington | 1 | J. Williams |
| Eastern Whip-poor-will | | | | 8/27 | Williamstown | 1 | C. Jones |
| 7/6 | P.I. | 4 | D. Williams | Yellow-bellied Sapsucker | | | |
| 7/20 | MSSF | 3 | G. d'Entremont# | 7/3 | Quabbin (G10) | 14 | SSBC (GdE) |
| 8/21 | Quabbin Pk | 3 | L. Therrien | 7/12 | Wendell | 12 | M. Lynch# |
| 8/29 | ONWR | 2 | BBC (MacFarlane) | Hairy Woodpecker | | | |
| Chimney Swift | | | | 7/3 | Quabbin (G10) | 6 | SSBC (GdE) |
| 7/27 | Newton | 50 | J. Forbes | 7/19 | Ware R. IBA | 5 | M. Lynch# |
| 8/20 | GMNWR | 40 | BBC (W. Martens) | Pileated Woodpecker | | | |
| 8/23 | Lowell | 100 | J. Forbes# | 7/3 | Quabbin (G10) | 2 | SSBC (GdE) |
| 8/31 | Cambridge | 40 | P. Roberts# | 7/4 | Ware R. IBA | 4 | M. Lynch# |
| Ruby-throated Hummingbird | | | | 7/24 | Hamilton | 3 | J. Berry |
| 8/2 | Westport | 9 | P. Champlin | 8/2 | Athol | 3 | M. Lynch# |
| 8/6 | GMNWR | 7 | A. Bragg# | Olive-sided Flycatcher | | | |
| 8/15-31 | Northampton | 21 migr | T. Gagnon | 8/8 | Turners Falls | 1 | J. Smith |
| 8/22 | Lexington (DM) | 5 | J. Forbes | 8/28 | Belchertown | 2 | L. Therrien |
| 8/26 | Ware R. IBA | 6 | M. Lynch# | 8/29 | Monterey | 2 | M. Lynch# |

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|---------------------------|-----------------|------|-----------------|-------------------------------|----------------|--------|-------------------|
| Eastern Wood-Pewee | | | | Purple Martin | | | |
| 7/3 | Quabbin (G10) | 11 | SSBC (GdE) | 7/4 | Rehoboth | 94 pr | R. Marr |
| 8/14 | Waltham | 6 | J. Forbes | 7/18 | Norfolk | 8 | J. Fecteau |
| 8/14 | Ipswich | 11 | J. Berry | 8/16 | P.I. | 45 fl | S. McGrath |
| 8/16 | S. Quabbin | 18 | M. Lynch# | 8/19 | Lexington | 2 | J. Forbes |
| 8/29 | Medford | 3 | M. Rines# | 8/21 | Hadley | 1 | L. Therrien |
| Yellow-bellied Flycatcher | | | | 8/22 | Mashpee | 176 fl | M. Keleher |
| 8/20 | Wachusett Res. | 1 | M. Lynch# | Tree Swallow | | | |
| Alder Flycatcher | | | | 8/16 | Wakefield | 750 | P. + F. Vale |
| 7/4 | Brewster | 2 | S. Finnegan | 8/26 | S. Monomoy | 5000 | B. Prescott# |
| 7/11 | Sandisfield | 3 | M. Lynch# | 8/30 | P.I. | 20,000 | J. Berry# |
| 7/21 | Wayland | 3 | B. Harris | Northern Rough-winged Swallow | | | |
| Willow Flycatcher | | | | 7/3 | Belchertown | 2 | SSBC (GdE) |
| 7/17 | Bolton Flats | 7 | M. Lynch# | 7/5 | Huntington | 4 | M. Lynch# |
| 7/23 | GMNWR | 7 | M. Stone# | 7/18 | Wakefield | 5 | P. + F. Vale |
| 8/4 | P.I. | 8 | R. Heil | 8/29 | Agawam | 5 | S. Kellogg |
| Least Flycatcher | | | | Bank Swallow | | | |
| 7/3 | Sheffield | 17 | M. Lynch# | 7/5 | Huntington | 15 | M. Lynch# |
| 8/13 | GMNWR | 1 | A. Bragg# | 7/6 | Duxbury B. | 100 | R. Bowes |
| 8/14 | Waltham | 1 | J. Forbes | 7/6 | P.I. | 12 | R. Heil |
| 8/30 | P.I. | 1 | B. Harris | 8/8 | Longmeadow | 50 | S. Kellogg |
| 8/31 | Lexington (DM) | 1 | M. Rines | 8/22 | Deerfield | 50 | S. Kellogg |
| Eastern Phoebe | | | | Cliff Swallow | | | |
| 8/25 | DFWS | 8 | P. Sowizral | 7/3 | Konkapot | 8 | M. Lynch# |
| 8/26 | Ware R. IBA | 41 | M. Lynch# | 7/22 | Williamstown | 7 | C. Jones |
| 8/27 | P.I. | 17 | P. + F. Vale | 7/23 | Newbypt | 3 n | D. Larson |
| Great Crested Flycatcher | | | | 8/2 | P.I. | 4 | BBC (I. Girinuas) |
| 7/17 | ONWR | 7 | M. Lynch# | 8/3 | Sandisfield | 2 | M. Lynch# |
| 7/29 | N. Andover | 4 | J. Berry# | Barn Swallow | | | |
| 8/2 | Wompatuck SP | 4 | G. d'Entremont | 7/5 | Huntington | 50 | M. Lynch# |
| 8/27 | Woburn (HP) | 1 | M. Rines | 7/13 | P.I. | 32 | S. Miller |
| Eastern Kingbird | | | | 7/18 | New Braintree | 47 | M. Lynch# |
| 7/19 | Burrage Pd WMA | 10 | R. Stymeist | 7/30 | GMNWR | 220 | K. Dia# |
| 7/29 | P.I. | 23 | D. Chickering | Red-breasted Nuthatch | | | |
| 8/26 | Ware R. IBA | 13 | M. Lynch# | 7/5 | W. Gloucester | 5 | J. + M. Nelson |
| 8/30 | P.I. | 1 | J. Berry# | 7/25 | Colrain | 39 | M. Lynch# |
| White-eyed Vireo | | | | 8/12 | Ware R. IBA | 32 | M. Lynch# |
| 7/5 | Belchertown | 1 | L. Therrien | 8/22 | WBWS | 2 | SSBC (GdE) |
| 7/18 | Falmouth | 2 | J. Burr | 8/29 | Tyringham | 3 | M. Lynch# |
| Yellow-throated Vireo | | | | Brown Creeper | | | |
| 7/3 | Sheffield | 4 | M. Lynch# | 7/3 | Quabbin (G10) | 3 | SSBC (GdE) |
| 7/5 | Rowley | 2 | J. Berry | 7/12 | Wendell | 5 | M. Lynch# |
| 8/7 | Wayland | 1 | J. Forbes | 8/13 | GMNWR | 2 | A. Bragg# |
| 8/16 | S. Quabbin | 3 | M. Lynch# | House Wren | | | |
| Blue-headed Vireo | | | | 7/29 | N. Andover | 7 | J. Berry# |
| 7/25 | Colrain | 9 | M. Lynch# | 8/28 | Lexington (DM) | 16 | M. Rines |
| 8/8 | Ashburnham | 8 | M. Lynch# | 8/29 | Tyringham | 6 | M. Lynch# |
| Warbling Vireo | | | | Winter Wren | | | |
| 7/5 | Rowley | 6 | J. Berry | 7/11 | Lincoln | 1 | J. Forbes# |
| 7/12 | Wakefield | 10 | P. + F. Vale | 7/25 | Colrain | 9 | M. Lynch# |
| 8/27 | Woburn (HP) | 7 | M. Rines | 7/28 | Sharon | 1 | V. Zollo |
| Philadelphia Vireo | | | | 8/2 | Wompatuck SP | 1 | G. d'Entremont |
| 8/16 | P.I. | 1 ph | S. Sullivan | Marsh Wren | | | |
| 8/30 | Cambr. (Daneyh) | 1 | K. Hartel | 7/2 | GMNWR | 38 | A. Bragg# |
| 8/30 | Saugus | 1 | S. Zende# | 7/3 | Konkapot | 10 | M. Lynch# |
| Red-eyed Vireo | | | | 7/5 | Rowley | 9 | J. Berry |
| 7/3 | Quabbin (G10) | 71 | SSBC (GdE) | 7/11 | P.I. | 10 | D. + T. Swain |
| 7/4 | Otis | 25 | J. Forbes | 7/19 | Burrage Pd WMA | 4 | R. Stymeist |
| 7/11 | Sandisfield | 148 | M. Lynch# | Blue-gray Gnatcatcher | | | |
| 7/22 | Quabbin (G40) | 10 | R. Stymeist# | 7/17 | Bolton Flats | 6 | M. Lynch# |
| Fish Crow | | | | 7/23 | GMNWR | 7 | M. Stone# |
| 7/20 | Westport | 3 | M. Lynch# | 7/23 | Ipswich | 3 | J. Berry# |
| 7/25 | Plymouth | 3 | G. d'Entremont# | 8/16 | S. Quabbin | 7 | M. Lynch# |
| 8/8 | Gloucester | 3 | J. Forbes# | 8/29 | Medford | 3 | M. Rines# |
| 8/8 | Stoughton | 10 | G. d'Entremont | Eastern Bluebird | | | |
| Common Raven | | | | 7/29 | N. Andover | 12 | J. Berry# |
| 7/3 | Sheffield | 13 | M. Lynch# | 8/2 | DFWS | 14 | P. Sowizral |
| 8/12 | P'town | 2 | J. Young | 8/29 | Tyringham | 21 | M. Lynch# |
| 8/20 | Newton | 2 | J. Forbes | Veery | | | |
| 8/27 | Mt. Wachusett | 10 | S. Olson | 7/3 | Sheffield | 24 | M. Lynch# |
| Horned Lark | | | | 7/3 | Quabbin (G10) | 21 | SSBC (GdE) |
| 7/25 | Plymouth B. | 2 | SSBC (GdE) | 7/4 | Otis | 4 | J. Forbes |

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|------------------------------|-------|--|----------------|-----------------------------|-----|-----------------|--|
| Veery(continued) | | | | Mourning Warbler | | | |
| 7/12 Wendell | 59 | | M. Lynch# | 7/4 Greylock | 1 | G. d'Entremont | |
| Swainson's Thrush | | | | 8/17 Pittsfield SF | 1 | M. Lynch# | |
| 7/25 Colrain | 1 | | M. Lynch | 8/17 Northampton | 1 | T. Gagnon | |
| 8/13 Sudbury | 1 | | T. Spahr | 8/18 Wayland | 1 | B. Harris | |
| Hermit Thrush | | | | 8/23 Burlington | 1 | M. Rines | |
| 7/3 Quabbin (G10) | 8 | | SSBC (GdE) | 8/27 MNWS | 1 | L. Pivacek | |
| 7/19 Ware R. IBA | 38 | | M. Lynch# | 8/30 Squantum | 1 | P. Peterson | |
| 7/22 Ipswich | 6 | | J. Berry | Common Yellowthroat | | | |
| 8/30 P.I. | 1 | | B. Harris | 7/3 Quabbin (G10) | 34 | SSBC (GdE) | |
| Wood Thrush | | | | 7/3 Newbury | 22 | J. Berry# | |
| 7/3 Quabbin (G10) | 13 | | SSBC (GdE) | 7/5 Huntington | 61 | M. Lynch# | |
| 8/14 Ipswich | 3 | | J. Berry | 8/28 Lexington (DM) | 25 | M. Rines | |
| 8/22 Woburn | 1 | | M. Rines | 8/29 Tyringham | 31 | M. Lynch# | |
| Gray Catbird | | | | Hooded Warbler | | | |
| 7/3 Sheffield | 91 | | M. Lynch# | 8/14-30 Nahant | 1 m | J. Malone | |
| 7/10 Ipswich | 14 | | J. Berry | American Redstart | | | |
| Gray Catbird (continued) | | | | 7/3 Sheffield | 11 | M. Lynch# | |
| 7/23 Ipswich | 11 | | J. Berry# | 7/3 P.I. | 5 | R. Heil | |
| 8/4 P.I. | 67 | | R. Heil | 8/5 Waltham | 2 | J. Forbes | |
| Brown Thrasher | | | | 8/27 Westport | 24 | P. Champlin | |
| 7/4 Westfield | 3 | | M. Moore | 8/29 Medford | 6 | M. Rines# | |
| 7/14 Ipswich (C.B.) | 3 | | M. Brengle | Cape May Warbler | | | |
| 8/4 P.I. | 11 | | R. Heil | 8/28 P.I. | 1 | S. Sullivan | |
| American Pipit | | | | 8/29 Ashby | 2 | J. Forbes | |
| 8/30 Saugus | 3 | | S. Zende# | 8/31 Wayland | 1 | B. Harris | |
| Cedar Waxwing | | | | Cerulean Warbler | | | |
| 7/29 N. Andover | 21 | | J. Berry# | 7/5 Mt Holyoke | 1 | L. Therrien | |
| 8/22 Sandisfield | 53 | | M. Lynch# | 8/15 P.I. | 1 | S. Miller# | |
| Ovenbird | | | | Northern Parula | | | |
| 7/3 Quabbin (G10) | 47 | | SSBC (GdE) | 8/16 S. Quabbin | 1 | M. Lynch# | |
| 7/4 Ware R. IBA | 51 | | M. Lynch# | 8/16 Bedford | 1 | K. Hartel | |
| 8/16 P.I. | 2 | | J. Keeley# | 8/22 HRWMA | 1 | T. Pirro | |
| Worm-eating Warbler | | | | 8/28 Lexington (DM) | 2 | M. Rines | |
| 7/5 Mt Holyoke | 2 | | L. Therrien | 8/29 Ashby | 2 | J. Forbes | |
| 7/10 Wompatuck SP 1 ad, 2 fl | | | X. Wei | Magnolia Warbler | | | |
| 8/18 MNWS | 1 | | A. Robinson | 7/3 Quabbin (G10) | 1 | SSBC (GdE) | |
| 8/30 Woburn | 1 | | M. Rines | 7/4 Otis | 2 | J. Forbes | |
| Louisiana Waterthrush | | | | 8/29 Ashby | 2 | J. Forbes | |
| 7/25 Colrain | 2 | | M. Lynch# | 8/29 P.I. | 3 | G. d'Entremont# | |
| 7/30 Belmont | 1 | | J. Forbes | Bay-breasted Warbler | | | |
| 8/3 Sandisfield | 6 | | M. Lynch# | 8/31 Pittsfield | 1 | J. Pierce | |
| 8/13 Southwick | 1 | | S. Kellogg | Blackburnian Warbler | | | |
| 8/17 Williamstown | 1 | | M. Lynch# | 7/3 Quabbin (G10) | 8 | SSBC (GdE) | |
| Northern Waterthrush | | | | 7/4 Otis | 5 | J. Forbes | |
| 7/23 Ipswich | 2 | | J. Berry# | 7/4 Ware R. IBA | 2 | M. Lynch# | |
| 8/2 Westport | 14 | | P. Champlin | 7/11 Sandisfield | 7 | M. Lynch# | |
| 8/17 Nahant | 2 | | R. Stymeist | 8/29 Ashby | 1 | J. Forbes | |
| 8/31 Lexington (DM) | 2 | | M. Rines | Yellow Warbler | | | |
| Blue-winged Warbler | | | | 7/5 Huntington | 23 | M. Lynch# | |
| 7/29 Lexington (DM) | 1 | | J. Forbes | 7/19 Burrage Pd WMA | 10 | R. Stymeist | |
| 8/16 Weymouth | 1 | | G. d'Entremont | 7/20 Westport | 10 | M. Lynch# | |
| 8/23 Burlington | 3 | | M. Rines | 8/4 P.I. | 43 | R. Heil | |
| 8/23 Waltham | 1 | | J. Forbes | Chestnut-sided Warbler | | | |
| Black-and-white Warbler | | | | 7/3 Quabbin (G10) | 18 | SSBC (GdE) | |
| 7/12 Wendell | 16 | | M. Lynch# | 7/3 Newbury | 3 | J. Berry# | |
| 8/2 Wompatuck SP | 9 | | G. d'Entremont | 7/4 Otis | 4 | J. Forbes | |
| 8/23 Waltham | 7 | | J. Forbes | 7/11 Sandisfield | 32 | M. Lynch# | |
| 8/29 Medford | 3 | | M. Rines# | 7/22 Quabbin (G40) | 3 | R. Stymeist# | |
| 8/30 Arlington | 3 | | K. Hartel | Blackpoll Warbler | | | |
| Tennessee Warbler | | | | 7/4 Greylock | 1 | G. d'Entremont | |
| 8/13 Sudbury | 1 | | T. Spahr | 8/29 Ashby | 1 | J. Forbes | |
| 8/27 Westport | 1 | | P. Champlin | 8/30 Ipswich | 1 | N. Dubrow | |
| 8/31 Lexington (DM) | 1 | | J. Forbes | Black-throated Blue Warbler | | | |
| 8/31 Chatham | 1 | | R. Schain | 7/3 Quabbin (G10) | 28 | SSBC (GdE) | |
| Nashville Warbler | | | | 7/4 Otis | 6 | J. Forbes | |
| 7/11 Sandisfield | 2 | | M. Lynch# | 7/12 Wendell | 39 | M. Lynch# | |
| 8/28 Lexington (DM) | 2 | | M. Rines | 7/18 New Braintree | 1 | M. Lynch# | |
| 8/30 P.I. | 1 | | B. Harris | 8/29 Ashby | 5 | J. Forbes | |
| Connecticut Warbler | | | | Pine Warbler | | | |
| 8/29 Nahant | 1 imm | | L. Pivacek | 7/3 Quabbin (G10) | 16 | SSBC (GdE) | |

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|------------------------------|-------|-----------------|--|------------------------|--------|--|------------------|
| Pine Warbler (continued) | | | | White-throated Sparrow | | | |
| 7/12 Wendell | 26 | M. Lynch# | | thr Nantucket | 1 | | T. Pastuszak |
| 7/22 Ipswich | 6 | J. Berry | | 7/25 Colrain | 7 | | M. Lynch# |
| 7/22 Quabbin (G40) | 7 | R. Stymeist# | | 8/14 Wendell | 2 | | M. Lynch# |
| Yellow-rumped Warbler | | | | 8/30 Boston (Fens) | 1 | | R. Schain |
| 7/3 Quabbin (G10) | 5 | SSBC (GdE) | | Dark-eyed Junco | | | |
| 7/12 Wendell | 13 | M. Lynch# | | 7/4 Otis | 2 | | J. Forbes# |
| 8/29 Ashby | 1 | J. Forbes | | 7/15 P.I. | 1 | | T. Wetmore |
| Prairie Warbler | | | | 7/25 Colrain | 7 | | M. Lynch# |
| 7/3 Newbury | 2 | J. Berry# | | 8/17 Pittsfield SF | 9 | | M. Lynch# |
| 7/5 MSSF | 2 | G. d'Entremont | | 8/25 Mt. Wachusett | 1 | | S. Olson |
| 7/12 Wendell | 4 | M. Lynch# | | Summer Tanager | | | |
| 8/16 Weymouth | 2 | G. d'Entremont | | 8/16 Belchertown | 1 m ad | | L. Therrien |
| 8/28 P.I. | 2 | S. Sullivan | | Scarlet Tanager | | | |
| 8/31 Chatham | 18 | R. Schain | | 7/3 Newbury | 7 | | J. Berry# |
| Black-throated Green Warbler | | | | 7/3 Quabbin (G10) | 15 | | SSBC (GdE) |
| 7/3 Quabbin (G10) | 11 | SSBC (GdE) | | 7/4 Ware R. IBA | 12 | | M. Lynch# |
| 7/4 Otis | 5 | J. Forbes | | 8/2 Wompatuck SP | 5 | | G. d'Entremont |
| 7/5 Rowley | 2 | J. Berry | | Rose-breasted Grosbeak | | | |
| 7/11 Sandisfield | 22 | M. Lynch# | | 7/6 Marlboro | 5 | | G. Gove |
| 8/23 Burlington | 3 | M. Rines | | 7/29 N. Andover | 4 | | J. Berry# |
| Canada Warbler | | | | 8/17 Belmont | 9 | | C. Cook |
| 8/12 Ware R. IBA | 2 | M. Lynch# | | 8/22 Lexington (DM) | 10 | | J. Forbes |
| 8/29 Medford | 1 | M. Rines# | | Indigo Bunting | | | |
| 8/29 P.I. | 1 | D. Chickering | | 7/3 Newbury | 6 | | J. Berry# |
| Wilson's Warbler | | | | 7/5 Huntington | 14 | | M. Lynch# |
| 8/26 Nahant | 1 | M. Hipp | | 7/18 New Braintree | 8 | | M. Lynch# |
| 8/27 Woburn (HP) | 1 | M. Rines | | 7/19 Cumb. Farms | 5 | | R. Stymeist |
| 8/31 Pittsfield | 1 | J. Pierce | | 7/25 Colrain | 9 | | M. Lynch# |
| Eastern Towhee | | | | Dickcissel | | | |
| 7/3 Quabbin (G10) | 33 | SSBC (GdE) | | 8/15 WBWS | 1 | | K. Maley |
| 7/29 N. Andover | 17 | J. Berry# | | 8/22 GMNWR | 1 | | J. Forbes |
| 8/2 Wompatuck SP | 33 | G. d'Entremont | | Bobolink | | | |
| 8/4 P.I. | 25 | R. Heil | | 7/3 P.I. | 65 | | R. Heil |
| 8/14 Wendell | 58 | M. Lynch# | | 8/15-31 Northampton | 2323 | | T. Gagnon |
| 8/23 Burlington | 9 | M. Rines | | 8/20 Wayland | 173 | | B. Harris |
| Clay-colored Sparrow | | | | 8/29 ONWR | 50 | | BBC (MacFarlane) |
| 8/12 Hadley | 1 | M. Locher | | 8/30 Holden | 31 | | M. Lynch# |
| Field Sparrow | | | | Eastern Meadowlark | | | |
| 7/1 P.I. | 2 | T. Wetmore | | 7/5 Weymouth | 6 | | G. d'Entremont |
| 7/3 Newbury | 2 | J. Berry# | | 7/12 Hanscom | 1 | | R. Stymeist |
| 7/17 Lancaster | 5 | M. Lynch# | | 7/25 Essex | 1 | | J. Nelson |
| Vesper Sparrow | | | | 8/12 Newbury | 1 | | MAS (D. Larson) |
| 7/10 Hadley | 4 | L. Therrien | | 8/24 Leicester | 1 | | M. Lynch# |
| 7/17 Lancaster | 3 | M. Lynch# | | Orchard Oriole | | | |
| Lark Sparrow | | | | 7/7 P.I. | 3 | | T. Wetmore |
| 8/27 P.I. | 1 imm | S. Miller | | 7/10 Hadley | 6 | | L. Therrien |
| 8/28 Weston | 1 | J. Forbes | | 8/4 W. Roxbury (MP) | 2 | | M. Iliff |
| 8/28 Dennis | 1 | R. Debenham | | 8/12 Westboro | 1 | | T. Spahr |
| Savannah Sparrow | | | | Baltimore Oriole | | | |
| 7/5 Weymouth | 14 | G. d'Entremont | | 7/5 Rowley | 16 | | J. Berry |
| 7/19 P.I. | 4 | T. Wetmore | | 8/16 S. Quabbin | 14 | | M. Lynch# |
| 8/29 Tyringham | 13 | M. Lynch# | | 8/27 Westport | 20 | | P. Champlin |
| Grasshopper Sparrow | | | | 8/30 Wakefield | 4 | | P. + F. Vale |
| 7/17 Lancaster | 5 | M. Lynch# | | Purple Finch | | | |
| 8/23 Hadley | 1 | S. Chapke | | 7/3 Sheffield | 4 | | M. Lynch# |
| Nelson's Sparrow | | | | 7/4 Ware R. IBA | 4 | | M. Lynch# |
| 7/22 Newbury | 5 | J. Drucker | | 8/29 Tyringham | 6 | | M. Lynch# |
| Saltmarsh Sparrow | | | | Red Crossbill | | | |
| 7/3 P.I. | 23 | R. Heil | | 7/4 Quabbin | 1 | | L. Therrien |
| 7/8 Fairhaven | 11 | L. Waters | | Pine Siskin | | | |
| 7/8 S. Dart. (A.Pd) | 51 | MAS (Buchsbaum) | | 7/25 Colrain | 1 | | M. Lynch |
| 7/15 E. Boston (B.L.) | 7 | P. Peterson | | 7/29 Yarmouth Port | 1 | | P. Bono |
| 7/24 Barnstable | 12 | M. Lynch# | | 8/3-14 Westwood | 1 | | E. Nielsen |
| Seaside Sparrow | | | | 8/24 Newbypt | 1 | | S. Grinley |
| 7/8 S. Dart. (A.Pd) | 24 | MAS (Buchsbaum) | | 8/31 Chatham | 1 | | R. Schain |
| Swamp Sparrow | | | | Evening Grosbeak | | | |
| 7/3 Konkapot | 22 | M. Lynch# | | 7/25 Colrain | 2 | | M. Lynch |
| 7/9 GMNWR | 10 | A. Bragg# | | 8/29 Easton | 1 | | E. Dalton |
| 7/10 Ipswich | 9 | J. Berry | | | | | |
| 7/12 Wakefield | 7 | P. + F. Vale | | | | | |

ABBREVIATIONS FOR BIRD SIGHTINGS

Taxonomic order is based on AOU checklist, Seventh edition, up to the 53rd Supplement, as published in *Auk* 129 (3): 573-88 (2012) (see <<http://checklist.aou.org/>>).

| | | | |
|------------------|---------------------------------------|----------------------------|--|
| Locations | | Newbypt | Newburyport |
| Location-# | MAS Breeding Bird Atlas Block | ONWR | Oxbow National Wildlife Refuge |
| A.A. | Arnold Arboretum, Boston | PG | Public Garden, Boston |
| ABC | Allen Bird Club | P.I. | Plum Island |
| A.P. | Andrews Point, Rockport | Pd | Pond |
| A.Pd | Allens Pond, S. Dartmouth | POP | Point of Pines, Revere |
| B. | Beach | PR | Pinnacle Rock, Malden |
| Barre F.D. | Barre Falls Dam | P'town | Provincetown |
| B.I. | Belle Isle, E. Boston | Pont. | Pontoosuc Lake, Lanesboro |
| B.R. | Bass Rocks, Gloucester | R.P. | Race Point, Provincetown |
| BBC | Brookline Bird Club | Res. | Reservoir |
| BMB | Broad Meadow Brook, Worcester | RKG | Rose Kennedy Greenway, Boston |
| BNC | Boston Nature Center, Mattapan | S.B. | South Beach, Chatham |
| C.B. | Crane Beach, Ipswich | S.N. | Sandy Neck, Barnstable |
| CGB | Coast Guard Beach, Eastham | SRV | Sudbury River Valley |
| C.P. | Crooked Pond, Boxford | SSBC | South Shore Bird Club |
| Cambr. | Cambridge | TASL | Take A Second Look, Boston Harbor Census |
| CCBC | Cape Cod Bird Club | WBWS | Wellfleet Bay WS |
| Corp. B. | Corporation Beach, Dennis | WE | World's End, Hingham |
| Cumb. Farms | Cumberland Farms, Middleboro | WMWS | Wachusett Meadow WS |
| DFWS | Drumlin Farm Wildlife Sanctuary | Wompatuck SP | Hingham, Cohasset, Scituate, Norwell |
| DWMA | Delaney WMA, Stow, Bolton, Harvard | Worc. | Worcester |
| DWWS | Daniel Webster WS | | |
| E.P. | Eastern Point, Gloucester | Other Abbreviations | |
| F.E. | First Encounter Beach, Eastham | ad | adult |
| F.H. | Fort Hill, Eastham | b | banded |
| F.P. | Fresh Pond, Cambridge | br | breeding |
| F.Pk | Franklin Park, Boston | dk | dark (morph) |
| G40 | Gate 40, Quabbin Res. | f | female |
| GMNWR | Great Meadows NWR | fide | on the authority of |
| H. | Harbor | fl | fledgling |
| H.P. | Halibut Point, Rockport | imm | immature |
| HP | Horn Pond, Woburn | juv | juvenile |
| HRWMA | High Ridge WMA, Gardner | lt | light (morph) |
| I. | Island | m | male |
| IRWS | Ipswich River WS | max | maximum |
| L. | Ledge | migr | migrating |
| MAS | Mass Audubon | n | nesting |
| MP | Millennium Park, W. Roxbury | ph | photographed |
| M.V. | Martha's Vineyard | pl | plumage |
| MBWMA | Martin Burns WMA, Newbury | pr | pair |
| MI | Morris Island | S | summer (1S = 1st summer) |
| MNWS | Marblehead Neck WS | v.o. | various observers |
| MSSF | Myles Standish State Forest, Plymouth | W | winter (2W = second winter) |
| Mt.A. | Mount Auburn Cemetery, Cambr. | yg | young |
| NAC | Nine Acre Corner, Concord | # | additional observers |

HOW TO CONTRIBUTE BIRD SIGHTINGS TO *BIRD OBSERVER*

Sightings for any given month must be reported in writing by the eighth of the following month, and may be submitted by postal mail or email. Send written reports to Bird Sightings, Robert H. Stymeist, 36 Lewis Avenue, Arlington MA 02474-3206. Include name and phone number of observer, common name of species, date of sighting, location, number of birds, other observer(s), and information on age, sex, and morph (where relevant). For instructions on email submission, visit: <<http://www.birdobserver.org/Contact-Us/Submit-Sightings>>.

Species on the Review List of the Massachusetts Avian Records Committee, as well as species unusual as to place, time, or known nesting status in Massachusetts, should be reported promptly to the Massachusetts Avian Records Committee, c/o Matt Garvey, 137 Beaconsfield Rd. #5, Brookline MA 02445, or by email to <mattgarvey@gmail.com>.

ABOUT THE COVER

Northern Hawk Owl

The Northern Hawk Owl (*Surnia ulula*) is well named, for in shape and behavior this diurnal owl resembles hawks of the genus *Accipiter*. A hawk owl will often perch conspicuously in a treetop and in flight will often glide low or flap its somewhat pointed wings with quick, stiff wingbeats. It has a long tail for an owl. Its back and wings are patterned brown and white, it is barred with rufous below, and its grayish face is edged in black. It is similar in size to the Long-eared Owl. The Northern Hawk Owl's size, long tail, and perching and flying behavior separate it from other owl species. Much of what we know about the behavior of the Northern Hawk Owl comes from studies of Eurasian birds, as it is one of North America's least studied bird species.

The Northern Hawk Owl is a denizen of the circumpolar boreal forest where three subspecies are recognized; only *S. u. caparoch* breeds in North America. Its breeding range extends from Alaska in a broad swath across Canada to Newfoundland and south to the Great Lakes. Hawk owls are year-round residents of this area but are nomadic and may periodically wander hundreds of miles in search of high concentrations of prey. They are occasionally irruptive, moving south into the northern United States when harsh winter conditions and scarcity of prey prevail, especially following successful breeding seasons. In Massachusetts, Northern Hawk Owls are vagrants with only about a half dozen records since 1900. One bird, present in Concord from November 1958 to January 1959, was the last life bird of the legendary birder, Ludlow Griscom.

The Northern Hawk Owl is a usually monogamous, single-brooded species. Both males and females have advertising calls. One of the male's call is described as a trilling whistle: *ulululululululul* given either from a perch or during a circular display flight involving gliding on stiff wings. The female may duet with the male, sometimes bowing or actually touching heads with her mate. Alarm calls have been described as *rike, rike, rike* or *kip-kip-kip*, or as a screech including various trills.

Northern Hawk Owls may begin nesting as early as February in existing tree cavities. They may line the nest with feathers and fur. The clutch size is variable but averages about six white eggs. Only the female has a brood patch and she alone broods the eggs for about four weeks until hatching. The male brings her food while she is incubating. Both parents will attack an intruder, including humans. At hatching, the altricial young have closed eyes and are naked and helpless. Only the female broods the chicks for three to five weeks until fledging. During this period the male brings food to the female and she feeds the chicks. The young are not fully independent until they are about three months old; they remain in the nest area for several months.

The habitat of Northern Hawk Owls is open coniferous forests or mixed coniferous and deciduous forests that are near open areas such as marshes, bogs, or, in winter, agricultural fields. Hawk owls often hunt in open habitat from exposed perches in

nearby trees. They probably detect prey more by sight than hearing, because they lack the asymmetrical ear holes of owls that rely heavily on hearing to track prey. Hawk owls descend on unlucky voles or squirrels in gliding dives that are interspersed with flapping if the distance is great. They may hover or occasionally employ searching flights in fields at heights of up to twelve feet above the ground. They have been recorded using farm equipment as “beaters,” following and taking prey disturbed by the vehicles. Their diet in summer is mostly small mammals including voles, squirrels, hares, and lemmings. In winter they may take mostly birds, including grouse, ptarmigan, and songbirds. They typically swallow small mammals whole, or else swallow the head first and then eat the body, sometimes after eviscerating it.

Great Horned Owls and Gyrfalcons prey upon Northern Hawk Owls, and mammals of the weasel family are serious nest predators. Humans often shoot hawk owls because they are mainly diurnal, absurdly tame, and habitually sit on exposed perches. They have even been labeled “practice owls” by some. Because of the remoteness of their breeding habitat and their nomadic behavior, breeding bird data is inconclusive in assessing population numbers and changes. Apparently, populations fluctuate in response to periodic crashes in preferred prey, but because of their dispersive nature it is difficult to quantify changes. The Northern Hawk Owl is currently considered “Not at Risk” in Canada and is “Globally Secure,” which bodes well for the survival of this elegant owl species. 🦉

William E. Davis, Jr.



Northern Hawk Owl study ©Catherine Hamilton, All rights reserved.

AT A GLANCE

October 2015



WAYNE PETERSEN

The thin, sharply pointed and slightly downcurved bill, combined with the slender legs and overall slim shape of this month's puzzler all point to a warbler. The single obvious wing bar and heavily streaked underparts offer useful information about its specific identity. For many warblers, the presence or absence of wing bars, along with the presence or absence of streaks on the underparts, can place an unfamiliar warbler into one or another smaller group. Once this easy first cut is made, additional subtle features can eventually lead to identification of the species. As with other recent At a Glance images, viewing the picture in color on the *Bird Observer* website at www.birdobserver.org/start further simplifies the identification process.

Careful scrutiny of the picture fails to reveal any noticeable streaks on the back, but there are blurry, i.e., not crisp and sharp, streaks on the underparts. The bird also has a strong pale wing bar on the median coverts, a bare trace of a wing bar on the greater secondary coverts, a modestly defined stripe over the eye, and a relatively short tail showing at least one white underside spot. A peek at the color version online reveals a diffuse, light-colored patch on the side of the neck below an otherwise dusky-olive cheek, a dull yellow rump, and whitish undertail coverts. This combination of features makes it is easy to eliminate a number of possibilities.

Having prominent and extensive ventral streaks is a feature shared by the Ovenbird, the waterthrushes, and the Black-and-white, Cape May, Cerulean, Magnolia, Blackburnian, Blackpoll, Palm, Yellow-rumped, and Black-throated Green warblers. We can, however, eliminate as candidates the Ovenbird, the waterthrushes, and the Black-and-white, Cerulean, Blackburnian, and Black-throated Green warblers because all of these birds have either conspicuous and prominent eye stripes, *two* obvious wing bars, or some clearly distinctive facial marking. The most realistic possibilities thus become Cape May, Magnolia, Blackpoll, or Yellow-rumped warbler. The Blackpoll and Yellow-rumped warblers can be eliminated because among other features they have conspicuous streaks on their backs, and the Palm Warbler would never show the distinctive single wing bar of the mystery warbler. The ventral streaking on a Magnolia Warbler would be darker and more obvious and the white tail spots would produce a cross-banded effect not exhibited by the mystery bird. An immature Magnolia Warbler would show fewer and less prominent ventral streaks in addition to being bright yellow when viewed in the color photograph. This leaves only the Cape May Warbler (*Setophaga tigrina*) as a possibility, which indeed is what the mystery species is—an adult female Cape May Warbler in nonbreeding plumage.

Cape May Warblers are generally uncommon to very uncommon spring and fall migrants throughout Massachusetts. In some autumns, however, they can be quite numerous at outer coastal migrant traps or on offshore islands, particularly following outbreaks of spruce budworms in the boreal forests of eastern and central Canada where most of the population breeds. The author photographed this Cape May Warbler in Cuba on November 10, 2008. 🐦

Wayne R. Petersen

About the Cover Artist: Catherine Hamilton

Catherine Hamilton is an internationally recognized artist and natural history illustrator. A former instructor at the Rhode Island School of Design, she has exhibited her paintings and drawings over the last 25 years at galleries and small museums across the United States, and has work in private and corporate collections in the United States and Europe.

Catherine was featured in the 2012 HBO documentary “Birders: the Central Park Effect.” She has developed a body of work that crosses the boundaries between artistic and scientific investigation. In addition to gallery exhibition, her work recently has been published in the scientific journal *Nature* and in *The Warbler Guide* (Princeton University Press 2013). 🐦

AT A GLANCE



DAVID CLAPP

Can you identify the bird in this photograph?
Identification will be discussed in next issue's AT A GLANCE.

MORE HOT BIRDS



A **Townsend's Solitaire** found by Ted Bradford on November 12 remained at Halibut Point through at least November 15. Tom Murray took the photo on the left. Another one was described from Burrage Pond WMA in Hanson and Halifax on November 15 but not photographed (as of this printing).

A **Common Ground-Dove** northward irruption in early November produced records in Oregon, Ontario, and Chicago, before the second state record for Massachusetts was found on November 13 in the Waltham Street Fields of Lexington by Guillermo Rodriguez Lazaro. Tom Murray took the photo on the right.



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VOL. 43, NO. 6, DECEMBER 2015

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