# **Bird Observer**

### VOLUME 49, NUMBER 5

OCTOBER 2021



# HOT BIRDS



A **Magnificent Frigatebird** blazed a trail down the North Atlantic coast in mid-August. It was first photographed at Cape Sable, Nova Scotia, August 15. On the 19th it was seen from two locations in coastal New Hampshire, then turned up on the Isles of Shoals on August 20 and 21. The bird reached Massachusetts on August 22, putting on a show between UMass-Boston and Squantum. The lone report since then came from the vicinity of the Cape Cod Canal on September 1. Lauren Grimes took the photo on the right. A wave of **Roseate Spoonbills** wandering far outside of their usual range, reached Massachusetts this summer. Buzz DeVine found one in far northwestern Connecticut on August 7, an agonizing quarter-mile from the Massachusetts line. The following morning, Matt Kelly and Pauline Banducci encountered presumably the same bird near Bartholomew's Cobble, where it was seen intermittently through the 11th. This is Massachusett's first record of the species, so it is definitely the top bird of the season. Matt Kelly took the photo on the left.





Tom Johnson's surveys of pelagic seabirds from NOAA research vessels regularly yields noteworthy offshore bird sightings. Perhaps the most remarkable this summer was the **Masked Booby** (on right) that he photographed on August 9, the sixth state record for Massachusetts. He also crossed paths with a a Bridled Tern on July 31 and a Barolo Shearwater on August 1, in addition to several encounters with Black-Capped Petrels. Here is another traveling vagrant bird. After spending several days near Lighthouse Point in Connecticut during the last week of August, an **American White Pelican** took a tour of Massachusetts's south coast. The bird was spotted in Westport September 3, spent September 4-8 on Nantucket, then relocated to Orleans on the 8th, where it was seen again on the 14th. Janette Vohs took the photo on the left.



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Cover: Leach's Storm-Petrel by John Sill  ${\ensuremath{\mathbb C}}$  Massachusetts Audubon Society. Courtesy of the Museum of American Bird Art.



A bimonthly journal— to support and promote the observation, understanding, and conservation of the wild birds of New England.

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### A Guide to Birding Great Swamp Management Area, South Kingstown, Rhode Island

#### Patrick Felker

The Great Swamp Management Area in South Kingstown, Rhode Island, is a 3,349-acre preserve that is rich with diverse habitats, history, and birds. You



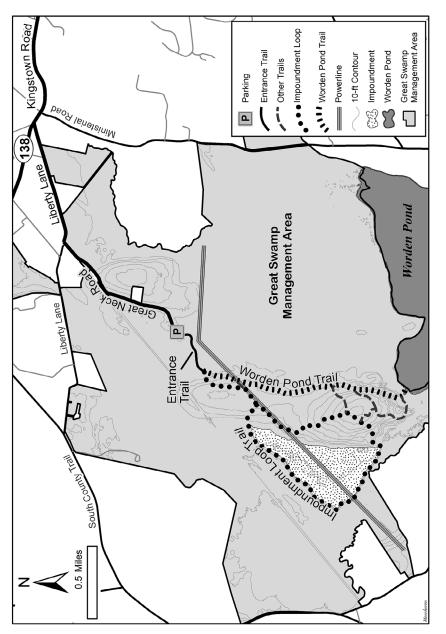
can access the walking trails from the dirt parking lot at the end of Great Neck Road (41.4690987646978, -71.5795471982134). To get to Great Swamp from Interstate 95, take exit 3A and merge onto RI-138 eastbound. After driving eastbound on RI-138 for 8.8 miles, make a sharp right turn onto Liberty Lane. TLC Coffee Roasters is located at this intersection.

To get to Liberty Lane from US-1, turn onto RI-138 westbound at the traffic light at (41.49477, -71.45652). After 5.2 miles, make a slight left turn onto Liberty Lane at TLC Coffee Roasters. To get to Great Swamp from RI-4, take exit 3B onto RI-102 northbound toward Exeter. Once on RI-102, turn left onto RI-2 southbound in 0.7 mile. Continue driving south on RI-2 for 6.8 miles, and turn left at the traffic light onto RI-138 eastbound. After 1.4 miles, take a sharp right turn onto Liberty Lane at TLC Coffee Roasters.

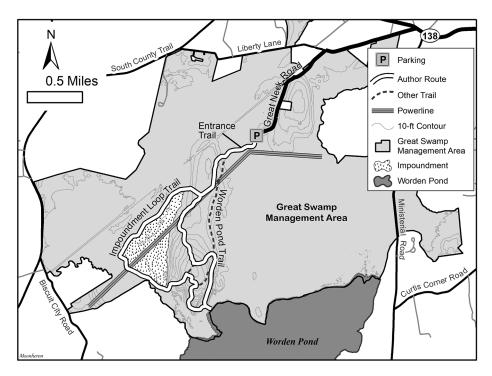
After turning onto Liberty Lane, continue straight for 0.8 mile. Soon Liberty Lane curves to the left, runs parallel to the railroad, and becomes Great Neck Road, which is an unpaved road usually littered with potholes. In 0.5 mile, there will be a hunter check station and the Department of Environmental Management offices on the right; continue straight. Soon after entering the forest, continue past the gun range on the left. About 100 feet after the gun range turnoff, there will be a misleading sign posted to a tree that says "Authorized Vehicles Only." This sign is not in reference to Great Neck Road but is in reference to a side "road" that is overgrown and unrecognizable. Keep driving on Great Neck Road for another 0.3 mile until you reach a large clearing, which is the parking lot for Great Swamp Management Area. The gate at the end of the parking lot is where the walk begins.

Great Swamp is free to the public, including hunters, so there are some important rules pertaining to hunting season. In Rhode Island, hunting season in management areas is permitted from the second Saturday in September to February 28, and the third Saturday in April to May 31. During hunting season, wearing fluorescent orange is required, and the Environmental Police strictly enforce these laws at Great Swamp. For most of the hunting seasons, at least 250 square inches of fluorescent orange is the amount required, which is either a hat <u>or</u> a vest. However, during the month of December, at least 500 square inches of fluorescent orange is required; you must wear a hat <u>and</u> a vest. All the hunting regulations for state management areas are at this link: <<u>http://www.dem.ri.gov/programs/bnatres/fishwild/pdf/huntabs.pdf</u>>. Another rule of Great Swamp is that all dogs must be on a leash unless they are being used for hunting.

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Map 2. Patrick's Favorite Birding Route.

An important note is that Great Swamp is open from sunrise to sunset. The entire list of parks and recreation regulations can be found at this link: <<u>https://rules.sos.ri.gov/</u>regulations/part/250-100-00-1>.

Historically, Great Swamp was the site of a pivotal tragedy for local indigenous peoples. When English settlers arrived in Rhode Island in the mid-1600s, the Narragansett Tribe occupied most of the land throughout the state, including Great Swamp. As more and more settlers arrived, pressure mounted on the Narragansett Tribe to trade land for products. These trades were often one-sided and mostly benefited the colonists. Slowly, the Narragansett Tribe's land shrank until it was just a chunk of southern and western Rhode Island, with Great Swamp at the heart of it. Great Swamp was a large village with more than 1,000 Narragansett men, women, and children.

On June 20, 1675, a war known as King Philip's War began between the Wampanoag Tribe and the Massachusetts Bay Colony. The Narragansett Tribe, valuing peace, tried to stay neutral but sheltered Wampanoag women and children. In the minds of the colonists, sheltering Wampanoags was an act of war. As a result, members of the militias of the Massachusetts Bay, Plymouth, and Connecticut colonies staged at Smith's Castle in Wickford, Rhode Island, in preparation for an attack on Great Swamp. On December 19, 1675, the combined colonial army crossed the frozen swamp and set fire to the village, killing more than 1,000 Narragansett men, women, and children. This attack became known as the Great Swamp Massacre and tragically



An American Kestrel perches on a dead tree at the second swamp opening along the Entrance Trail. All photographs by the author.

marked the end of the dominance of the Narragansett Tribe in southern Rhode Island. The exact site of the massacre is kept a secret and, therefore, is not close to or accessible by any trails. There is a monument dedicated to the Great Swamp Massacre at the end of Great Swamp Monument Road, off RI-2, about a mile south of the intersection of RI-2 and RI-138. There are no trails here that connect with the rest of the management area.

After the massacre, Great Swamp was unused because the swampy land was not conducive to farming. In the 1950s when creating wildlife habitat was becoming more prominent, Great Swamp was purchased using Wildlife and Sport Fish Restoration Funds to transform the land into a wildlife management area. These funds, along with revenues received through a tax on firearms, ammunition, and archery equipment, were used to convert a large tract of boggy wetland into a large impoundment, accessible by the main trail at the western end of the management area. This impoundment was created to attract waterfowl for hunting. Currently, the management area has a variety of uses, including a gun range, various kinds of hunting, and other types of outdoor recreation such as hiking and birding.

Bird biodiversity at Great Swamp is highest during the spring, summer, and fall. Therefore, this article will cover the birds you may expect to find at different parts of Great Swamp during those seasons. Great Swamp is home to a host of mosquitos, black flies, deer flies, and deer and dog ticks. To avoid the ticks, try to stay on the trail and thoroughly check yourself for ticks when you get home. Overall, to maximize bird counts and minimize bug bites, the best months to bird Great Swamp are May



View of the Atlantic white cedar swamp in summer from the powerline cut.

and September. If you end up birding Great Swamp during the peak summer months, try to time your trip for a cloudy or even slightly rainy day, since deer flies and black flies avoid such weather, though mosquitos will still be around. The best time of day to bird during the summer months is as early as possible. It is optimal to arrive at Great Swamp when it opens at sunrise to hear the greatest number of birds singing.

Because the impoundment is fresh water, there is no need to consider the tide when planning a trip to Great Swamp. There is a variety of walking trails at Great Swamp, but the trails do not have official names. For this article, I have given the trails descriptive names. (See Map 1. Great Swamp Management Area.) I call the trail that begins the walk the Entrance Trail. Only 0.3 mile long, it is short but beautiful, with a scenic vista of an Atlantic white cedar swamp. You can bird this trail fully in about 30 minutes. The Entrance Trail ends at a fork. The Worden Pond Trail continues straight and is about 2.86 miles to Worden Pond and back; it takes approximately two hours to bird. Veering right at the fork leads you onto the Impoundment Loop Trail. This loop is about 3.7 miles long, and you can bird it in three to four hours. Along the Impoundment Loop and Worden Pond trails are several cut-through trails that connect the two trails, so it can be fun to combine both trails while birding Great Swamp, which is what I do. My favorite route is about six miles long and can take close to five hours to complete. (See Map 2. Patrick's Favorite Birding Route.) I highly recommend this route if you are looking for a long, peaceful birding trip. Great Swamp is rich with nature and biodiversity on all of the trails.



Black-and-white Warbler along the Impoundment Loop Trail.

#### **Entrance Trail**

Before starting out on the Entrance Trail, take a walk around the parking lot and listen closely. The trees around the parking lot area are mostly red maple, white oak, and northern red oak. Hooded Warblers nest in the mountain laurels on the northeast side of the parking lot, and this is a good place to listen for their song. Northern Parulas also can be found in this area. Great Swamp has the largest concentration of breeding parulas in Rhode Island. For a long time, Great Swamp was the only place in the state where they bred, but they are expanding to other forests in southern Rhode Island. West of the parking area, you can hear the descending song of the Northern Waterthrush, as well as the melodic songs of Veeries.

When you start walking beyond the gate, you will see the many Red-winged Blackbirds and Common Grackles that inhabit this part of the swamp. In early to midspring, keep an eye and ear out for Rusty Blackbird in this flock as well. Other birds in this area are Common Yellowthroat, Ovenbird, American Redstart, Black-and-white Warbler, Red-eyed Vireo, and Yellow-throated Vireo. These birds also inhabit many other parts of Great Swamp.

Shortly, you will arrive at an opening with many dead trees on your left, where the blackbirds are almost a constant sight. Sometimes American Kestrels use the tops of these trees as hunting perches. Swamp Sparrows can be found here year-round. Walk through another small patch of forest for about 300 feet, and you will arrive at a larger opening on your left—an Atlantic white cedar swamp. Swamp Sparrows reside in the cedar swamp all year, and blackbirds, Tree Swallows, and Yellow Warblers nest there.



A Broad-winged Hawk soars over the first field of the Impoundment Loop Trail.

On your right, listen closely for Northern Waterthrushes singing. As you continue along the trail, you will see a small pond on the right where Northern Waterthrushes sometimes feed. Near the forest you may hear or see a vibrant Scarlet Tanager.

Once you enter the forest, the Entrance Trail ends in a fork. Hiking straight will lead you to Worden Pond, the largest freshwater body of water in Rhode Island, while veering to the right will lead to a powerline cut and the Impoundment Loop Trail. The Impoundment Loop Trail is usually more productive for birds, so that is the trail highlighted first.

#### Impoundment Loop Trail

When you head out on the Impoundment Loop Trail, listen for Pine Warblers singing in the assortment of conifers here, which include eastern white pine, pitch pine, Norway spruce, eastern hemlock, and red cedar. As you continue, you may start to smell a foul odor coming from the shed (slightly visible on your left) that contains the remains of dead animals. Mostly deer decay inside, but whale carcasses have been disposed of in Great Swamp, too. Soon, a field opens on your right that is home to Eastern Bluebirds and Field Sparrows; the woods on the other side of the field host breeding Northern Parulas. The field is also a good place to see Broad-winged Hawks soaring. Approximately 0.2 mile from the field, the trail will join a powerline cut that attracts many woodland edge birds and is also a migrant trap during spring and fall migrations. During the breeding season, Eastern Bluebird, Field Sparrow, Eastern Towhee, Gray Catbird, Eastern Kingbird, White-eyed Vireo, Blue-winged Warbler, Yellow Warbler, and Chestnut-sided Warbler live here. During fall migration, the small,



A Black Vulture soars overhead.

overgrown field to the right of the powerline where the trail veers right can hold the elusive Connecticut Warbler.

Where the trail meets the powerline cut, walk a little more than 0.1 mile until you reach another intersection. This part of the trail is a loop, so it does not matter if you continue straight or turn right. Going straight will take you along the powerline cut for a little bit longer and then to open uplands interspersed with trees. In approximately 0.3 mile, the powerline cut diverges from the main trail; follow the main trail slightly left for almost 0.4 mile to the upland area of Great Swamp. Many types of shrubs grow here, interspersed with American holly trees; Great Swamp has the largest concentration of American holly trees in Rhode Island, contributing to the diversity of wildlife here. This area is a good spot for many of the powerline cut birds that I have already mentioned, as well as Indigo Bunting and sometimes Prairie Warbler. One year, a Yellow-breasted Chat made this area its territory, singing frequently to attract a mate. It is unknown if the breeding attempt was successful because observers saw only one Yellow-breasted Chat at a time. This area is ideal for swallows, as evidenced by the breeding Tree Swallows. It is a good spot for viewing early Purple Martins in April. This overlook gives you a panoramic view of the Great Swamp impoundment and the many Osprey nests that dot the powerlines.

In about 0.1 mile, you will come to another fork in the trail. To follow the Impoundment Loop, turn right at this fork and walk straight until you see an opening on your right. Eastern Bluebirds nest in this field, and on the far end is a stand of gray birch trees. Past the field you will enter a forest and follow the trail down the hill for



Wilson's Snipe forages on the impoundment ..

about 0.4 mile. This wooded area can be a good spot for Winter Wren in winter and early spring and Blue-gray Gnatcatcher in the breeding season.

At the bottom of the hill, the trail emerges from the forest next to a large impoundment on the right. The Department of Environmental Management (DEM) controls the water levels in this impoundment using a large underwater pipe to drain water into the forested swamp nearby. DEM controls the water level seasonally to attract birds. In winter, the impoundment holds as much water as possible to attract ducks and geese for waterfowl hunting season. Starting in late March, it is drained to expose mudflats for migrating shorebirds such as Least Sandpiper, Greater and Lesser yellowlegs, and Pectoral Sandpipers to feed. Spotted Sandpipers and Killdeer inhabit the impoundment throughout the summer. If the water levels are low, the impoundment usually has Glossy Ibis, Great Egret, and Great Blue Heron. The impoundment is the most reliable place for Wilson's Snipe in the state, with many migrating through and some possibly breeding here. Snipe at Great Swamp had a particularly good year in 2018, with a count of 52 snipe one day in early April.

The impoundment also hosts ducks such as Green-winged Teal and sometimes Blue-winged Teal; on rare occasions, Northern Shovelers migrate through. It is worth watching for raptors at the impoundment, where Bald Eagle, Turkey and Black vulture, Osprey, Cooper's Hawk, American Kestrel, Broad-winged Hawk, and Red-tailed Hawk often soar overhead. Checking all the Osprey nests sometimes results in seeing



Eastern Bluebird perches on a nest box.

Great-horned Owls, since they have been known to use Osprey nests to hatch and raise chicks. King Rails have visited the impoundment in the past, but not since 2016. Warbling Vireo, American Redstart, Yellow Warbler, Common Yellowthroat, Swamp Sparrow, Northern Waterthrush, and Orchard Oriole are found on the forested side of the trail.

Other wildlife found in the impoundment include beavers and snapping turtles. It can take a long time to walk around the impoundment, but it is well worth it to go slowly and scan the water and shrubs for hidden birds. The trail parallels the impoundment for just under 1.5 miles. When the trail leaves the impoundment, it goes through a forest containing oak, beech, and yellow birch where you may find Northern Parulas, Black-and-white Warblers, and American Redstarts. In 0.15 mile, you will return to the trail intersection at the powerline cut, which marks the completion of the Impoundment Loop. Return to the Entrance Trail.

#### Worden Pond Trail

The other trail at the end of the Entrance Trail leads straight to Worden Pond. This trail begins at a section of woodland that is home to Downy and Hairy woodpecker, Eastern Wood-Pewee, and Great-crested Flycatcher. Pileated Woodpecker also can be found in this area, but not reliably. Follow the Worden Pond Trail for about 0.2 mile to the powerline cut, which you will cross to head straight to Worden Pond. However, if you want to get a view of the Atlantic white cedar swamp from the back, you can detour left along the powerline cut for about 0.7 mile. Be careful not to go much farther down this powerline trail because it gets close to the back of the gun range.

The Department of Environmental Management stocks Ring-necked Pheasants around this powerline cut. Because they are stocked and are not naturally occurring, they are not countable on any official lists. The only place in Rhode Island where Ring-necked Pheasants are countable is on Block Island.

Return to the Worden Pond Trail where you will notice a multitude of American holly trees surrounded by other shrub species. Here you may encounter American Redstart, White-eyed Vireo, and Northern Parula. In 0.7 mile you will come to a fork in the trail; continue straight and arrive at Worden Pond in 0.5 mile. (Veering right at this fork will take you to the Impoundment Loop in the open upland area.) As you walk to Worden Pond, keep an eye and ear out for the flat, buzzy trill of Worm-eating Warbler on your left; there has been a male singing in this area during the breeding season for the past few years. Pine Warblers also breed along this portion of the trail. Eastern Phoebes and Northern Waterthrushes breed closer to Worden Pond. At the pond you can spot Wood Ducks and Belted Kingfishers flying. Sometimes a massive flock of gulls—mostly Herring Gulls—feeds in the air above Worden Pond.

From Worden Pond you have several options. Taking the short trail west of the gray slab of concrete at the end of the Worden Pond Trail will lead to the Impoundment Loop Trail. The second option is to reurn the way you came to the parking lot. Or instead of backtracking all the way, you can take one of the various connecter trails to the Impoundment Loop Trail and head back from there.

#### Patrick's Favorite Birding Route

All the trails at Great Swamp have their own beauty and array of birds, which is why I like to combine the Impoundment Loop and the Worden Pond trails using the short connecter trails between them. This is my route: at the end of the Entrance Trail, follow the Impoundment Loop Trail for 0.5 mile to the loop intersection. Keep going straight at the fork by the powerline cut, then veer left to stay on the Impoundment Loop Trail in order to bird the upland part of this trail. In just over 0.7 mile, you will come to an intersection with a connector trail. Go straight for 0.2 mile to follow this connecter trail from the Impoundment Loop Trail to the Worden Pond Trail (turning right would keep you on the Impoundment Loop Trail). Turn right on the Worden Pond Trail, and continue for 0.5 mile until you reach the gray slab of concrete. Follow the connector trail in 0.3 mile. Walk 2.38 miles to finish the Impoundment Loop Trail, and can take close to five hours to complete.

Overall, there is no wrong way to bird Great Swamp; it is a wonderful place to bird no matter which trails you follow, and I recommend exploring Great Swamp to its fullest. For the birder who has an interest in both history and ecology, Great Swamp is an ideal place to bird.

**Patrick Felker** is a 20-year-old avid birder from North Kingstown, Rhode Island. He is currently in his junior year at the University of Rhode Island, studying Wildlife and Conservation Biology. Great Swamp is one of the first places Patrick went birding nine years ago, and it continues to be one of his favorite spots in Rhode Island.

# The Importance of Counting Shorebirds: Manomet's International Shorebird Survey (ISS)

Lisa Schibley



A mixed flock of shorebirds at Monomoy NWR. Photograph by Alan Kneidel.

In the early 1970s, Manomet biologist Brian Harrington was pondering important questions of shorebird migration and population biology. The shorebirds he was considering were those that nested in the high arctic tundra and then passed through North America, following the sun to winter in South and Central America. The puzzle was that the places where shorebirds spent the majority of their time, both north and south, were often remote and logistically complex for shorebird scientists to access. So how could scientists, with limited funding, best document population sizes and trends for these long-distant migrants? Brian hypothesized that a dedicated and enthusiastic group of shorebirders across the Western Hemisphere could, by counting shorebirds on their migration routes, supply necessary data to shorebird scientists and conservation partners. This network of volunteers evolved into Manomet's International Shorebird Survey (ISS), one of the longest-running citizen science projects in the world.

Brian began recruiting for the ISS in 1974 and by 1980 he had recruited over 100 shorebird enthusiasts at 240 sites who were sending in more than 2,000 surveys by hand each year, including more than 200 surveys per year from South America. In New England, about 25 contributors were sending in counts from 39 sites. Some of the New Englanders that Brian recruited in those first years, and who continued to submit counts for decades, will be familiar to birders in New England, e.g., Rick Heil, Seth Kellogg,



Justin Barrett, Lisa Schibley, and Nate Marchessault conduct an ISS survey on Plymouth Beach, Massachusetts. Photograph by Brad Winn.

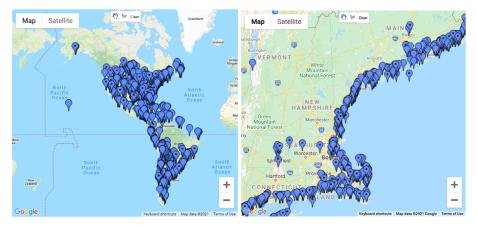
Rey Larsen, Blair Nikula, Wayne Petersen, and Soheil Zendeh. Brian also reached out to state and federal biologists in the area to encourage them to incorporate the ISS into work plans, successfully partnering with many organizations. Lindsay Tudor, who was the shorebird biologist for the Maine Department of Inland Fisheries and Wildlife for 30 years before recently retiring, is responsible for more than 10,000 ISS counts through her incredible army of volunteers along the Maine coast. And Nancy Pau, the wildlife biologist for the Parker River National Wildlife Refuge (NWR), has overseen a team of biological technicians who have been responsible for hundreds of ISS submissions over the years from one of the most important shorebird sites in New England.

Of course, when the ISS began, there was no internet or eBird to facilitate data collection. Figure 1 shows an example of one set of surveys conducted by Wayne Petersen at Third Cliff in Massachusetts. At the end of each season these sheets were mailed to Manomet, where the numbers were entered by hand into a database for tabulation and analysis. In 2006, Brian moved the data entry process from handwritten documents to eBird, and the Cornell Lab of Ornithology has been a valuable partner for the ISS ever since. By 2020, the ISS had 455 contributors sending in about 5,000 surveys from 4,802 sites in 21 countries across the hemisphere. Figure 2 shows the extent of ISS sites, both historical and current, in New England and across the Western Hemisphere, taken from the ISS Mapping Tool (https://www.manomet.org/iss-map/).

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Figure 1. One of the early ISS forms.



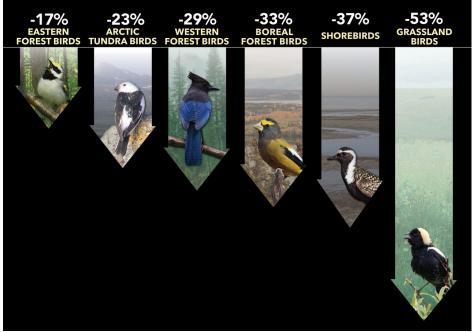
**Figure 2.** Extent of ISS sites, both historical and current, in New England and across the Western Hemisphere, taken from the ISS Mapping Tool (https://www.manomet.org/iss-map/).

From the beginning, the International Shorebird Survey produced important results to help understand populations and trends. After the first ten years of data collection, Marshall Howe of the US Fish and Wildlife Service published "Population trends of North American shorebirds based on the International Shorebird Survey" (Howe 1989), one of the first studies showing a statistically significant decline for some migrating shorebird species. Howe also suggested a number of ways that the ISS could be improved, particularly emphasizing the need for consistency in coverage across the years.

Significant results for shorebird population estimates and trends using ISS data were also published in 2006 (Morrison 2006), 2007 (Bart 2007), and 2012 (Andres 2012). The ISS is also a source of data for the North American Bird Conservation Initiative (https://nabci-us.org), which annually publishes a "State of the Birds" report (www.stateofthebirds.org) detailing declines in birds that use the coastal ecosystems—which includes most, although not all, shorebirds.

Most recently ISS data were used in the "3 Billion Birds" study that was published in 2019. This study showed that overall bird populations in the United States and Canada have declined by 29%, or almost three billion birds. The researchers analyzed the overall losses group-by-group, with some families showing steeper losses than others (Figure 3). The study's lead author, Ken Rosenberg, Applied Conservation Scientist at Cornell University and American Bird Conservancy, shared with Manomet how important the ISS was for the shorebird results:

Because most shorebirds breed too far north to be monitored by the Breeding Bird Survey and winter well south of traditional coverage by Christmas Bird Counts, we relied on migration counts from the International Shorebird Survey for the most complete and reliable estimates of continental population trends for 20 shorebird species. Based on a comprehensive statistical analysis of ISS data from 1974 to 2017, co-author Paul Smith



**Figure 3.** The 3 Billion Birds campaign used ISS data to show declines in shorebird populations.

of Environment and Climate Change Canada determined that 11 of these species have declined by 50% or more since 1974, contributing to an overall loss of 37% across all shorebird species.

The result of the study, the loss of three billion birds, captured the public's attention in a way few scientific studies have. Cornell and other contributors created a compelling set of stories, videos, and infographics that were picked up by the press to an astonishing extent. They recorded 1,800 print media articles with a circulation of four billion people describing the impacts of the loss of these birds on ecosystems and how humans are changing the environment. The 3 Billion Birds campaign also did an excellent job of presenting seven simple actions every person can take to help birds. And of course, we were grateful to see that #7 is to contribute to a citizen science project to record and share your bird observations, with the International Shorebird Survey listed as one of the examples.

Environment and Climate Change Canada's Paul Smith, one of the lead authors of the 3 Billion Birds study, has researched trends in shorebird populations using ISS data for more than 10 years. Last year, for the All About the ISS Webinar (https://www. youtube.com/watch?v=aQIdEhfmbL4), he shared one of his graphics summarizing ISS data for White-rumped Sandpiper (Figure 4). The map represents count data as circles, with the most negative trends as red and the least negative trends as blue, which you can see in color on Bird Observer's website: <www.birdobserver.org>. The map also represents the precision of the data by the size of the point, giving an overall

### **Regional Patterns**

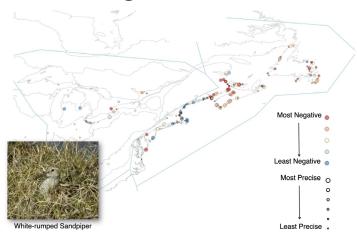


Figure 4. Population trends for White-rumped Sandpiper using ISS data.

snapshot for the northeast region including New England. The results seem to show that shorebird population trends in New England are not quite as negative as those in Maritime Canada.

In addition to understanding broad hemispheric population trends, one of the most important uses for ISS data to identify important stopover sites. For example, ISS data and surveys were integral to the creation of the Western Hemisphere Shorebird Reserve Network (WHSRN) and are frequently used to support the nomination of new sites. WHSRN is a science-based, partnership-driven, conservation initiative for protecting critical sites for shorebirds throughout the Americas. The first WHSRN site, designated in 1985, was Delaware Bay. The Network today includes 111 sites in 18 countries, covering 39 million acres of shorebird habitat (Figure 5). There are two WHSRN sites in New England: Great Marsh, which includes Parker River NWR, and Monomoy NWR at the elbow of Cape Cod. Both were established with the help of ISS data.

As the ISS became established as an important protocol for monitoring shorebird populations, partners began to rely on it to supply data necessary for conducting management, conservation, and research at local scales. National Wildlife Refuges have included ISS data in their management priority-setting documents, such as the Monomoy NWR Comprehensive Conservation Plan published in March 2016. ISS data have been used by states developing conservation regulations and State Wildlife Action Plans. State and federal biologists also use the data to quantify and understand local issues. For example, Lindsay Tudor told us that "ISS data collected by Maine volunteers plays an integral role in identification and conservation of shorebird areas along Maine's coast" (Tudor 2000). And Kate O'Brien, wildlife biologist at the Rachel Carson NWR in Maine, mentioned that the ISS "has been very helpful to us when



**Figure 5.** Western Hemisphere Shorebird Reserve Network (WHSRN) sites.

documenting important shorebird roost and foraging areas allowing us to improve our conservation of these important areas and forming the basis for future studies" (Holberton 2019).

In addition to contributing to estimations for population sizes and trends of migratory shorebird species, identifying important stopover sites, understanding migration routes, contributing to local research, and supporting partners conducting management and conservation, Manomet's International Shorebird Survey has one more extremely important goal: to build a broad constituency supporting shorebird monitoring and conservation. From the beginning, Brian knew shorebirds often inspire a particular passion. Some of the volunteers he originally recruited have submitted hundreds or even thousands of counts. Figure 6 lists some of the most prolific ISS contributors in New England and the sites they have covered. We recently

contacted some of our most dedicated contributors for insight into their experience with the ISS and were grateful to hear back from so many.

Linda Pivacek wrote,

I was amazed and moved by the numbers of shorebirds that appeared in late summer near my Nahant, Massachusetts, home. Often, in early evening, I would watch them as they rested with bills in the sand on the empty beach; they were so exhausted. While researching these remarkable birds and their incredible journey during migration, I learned about Manomet's ISS and in 2004 began my official surveys and continue to do so today.

Ed Grew from Maine wrote, "I have such fond memories of the days searching for and counting shorebirds. They remain my favorite birds. The Taylor Bait Ponds in Orono, Maine, were often drained, and the exposed mudflats were a big draw for migrating shorebirds. I contributed to ISS until bait farming at Taylor was discontinued and the ponds not drained."

Sebastian Jones shared quite the story about a Buff-breasted Sandpiper running around a Jamaica Plain golf course "practically through the feet of a group of guys on a putting green" and then continued, "What gets me excited about the ISS is that it helps

ISS Site	Primary Contributor/s	State	Surveys
		Otate	Garveys
Milford Point	Thornton Masten	Connecticut	258
Stratton Island	Lucy Lee Lacasse	Maine	474
Taylor Bait Farm	Ed Grew	Maine	365
Scarborough MarshWinnock's Neck	Florence Cyr	Maine	242
Spurwink River	Florence Cyr	Maine	232
Weskeag Marsh	Don Reimer	Maine	208
Plymouth Beach	Brian Harrington	Massachusetts	722
Monomoy NWRNorth Monomoy Island	Blair Nikula	Massachusetts	703
Parker River NWR	Deborah Melvin, Douglas Spencer, Nancy Pau	Massachusetts	303
Allens Pond WSAllens Neck	John O. Hill, Jr	Massachusetts	303
Monomoy NWRSouth Beach,Chatham	Blair Nikula, Brian Harrington	Massachusetts	291
Crane Beach	David Rimmer, Rus Hopping, Franz Ingelfinger	Massachusetts	259
Longmeadow Flats	Seth Kellogg	Massachusetts	253
Belle Isle Marsh Reservation	Soheil Zendeh	Massachusetts	501
Third Cliff, Scituate	Wayne Petersen	Massachusetts	153
Sachuest NWR Salt Marsh	Rey Larsen	Rhode Island	946
Third Beach, Middletown	Rey Larsen	Rhode Island	796
Napatree Point	Rey Larsen	Rhode Island	720
Trustom Pond NWR	Sharon Marino, Don Tiller	Rhode Island	290
Sachuest Point NWR	Rey Larsen	Rhode Island	282

Figure 6. Some prolific ISS contributors in New England.



Max Chalfin-Jacobs near a mixed shorebird flock at Monomoy NWR. Photograph by Lily Morello.

us see the bigger picture and allows birders and citizen scientists to contribute to that effort, especially at a time when many of these birds are in severe decline."

And from Soheil Zendeh:

I was excited in 1976 when I first heard that Brian Harrington at Manomet was collecting shorebird data. I had been watching shorebirds along the Boston shore for a few years and had all my observations recorded on big sheets of graph paper. I arrived at Brian's office and showed off my data tables. I think he was quite amused. Of course, he then told me exactly how he needed all my information organized—by site and on individual sheets. Thus started my collaboration with ISS.

Wayne Petersen wrote:

Periodically, individuals come up with ideas, schemes, or protocols that literally move the conservation dial in ways that are beneficial to conservation planners and amateur field naturalists. The International Shorebird Survey (ISS) is just such a program. Brian Harrington, senior shorebird biologist at the Manomet Bird Observatory from1972 to 2007, is just such an individual. In 1975, Harrington and a collaborative of colleagues established what has become one of the most important shorebird monitoring programs in the world. Using data gathered by hundreds of volunteer observers from Canada to the Caribbean and southern South America, seasonal knowledge of shorebird distribution and abundance has made possible the recognition and establishment of many dozens of



Brian Harrington and Alan Kneidel conduct an ISS survey at Monomoy NWR. Photograph by Brad Winn.

protected shorebird stopover sites and wintering areas that are essential to the survival of many increasingly beleaguered populations of shorebirds throughout the western hemisphere.

Brian Harrington's and my friendship and our shared interest in shorebirds grew during mutual associations at the Manomet Bird Observatory. As Brian's career interests increasingly focused on shorebird migration, especially that of Semipalmated Sandpipers and Red Knots, we regularly swapped stories of counting shorebirds at various coastal localities. By the mid-1970s, it was inevitable that Brian would ask me to become an ISS volunteer observer. For several years, I systematically counted shorebirds on a regular basis at localities as removed as Newburyport Harbor, Third Cliff in Scituate, Plymouth Beach, and Monomoy Island on Cape Cod.

Over time, I recognized the connectivity between important shorebird sites in Canada, New England, the Mid-Atlantic States, and eventually Central and South America. As our understanding of international shorebird movements expanded, I increasingly appreciated the significance of the seasonal counting and monitoring efforts of other volunteers like me. With the gradual designation of important internationally recognized ISS shorebird sites, my own infatuation with shorebirds became galvanized into a lifelong obsession. It gives me great pride to realize that my early efforts to systematically count local shorebirds has contributed to the evolution of an internationally recognized conservation program that today addresses the needs of a group of birds in dire need of international conservation.



International Shorebird Survey Logo.

For anyone interested in becoming an ISS contributor, simply pick a site near you that hosts shorebirds, visit your site regularly, identify and count the shorebirds that are there, and submit your data through eBird. We ask potential contributors to use https:// www.manomet.org/iss-map/ to verify your site isn't currently covered. Select your state and recent years, then zoom to your area to see which sites are currently covered. As an added bonus, you can look for sites that have been covered historically but are not now. The ability to compare your data to historical data will give your data added value.

After finishing your eBird checklist, select "International Shorebird Survey" under "Observation Type," and then submit as normal. The most important components of the ISS protocols are repeated surveys within a migration season and repeatability. While the protocol documentation covers these items in more detail (https://www.manomet. org/wp-content/uploads/2018/03/ISS-Protocols\_April2019.pdf), the summary is: Visit your site at least three times per migration season, though we encourage visits every ten days if that is manageable for you. Visit your site, in the same way, each time, meaning that you should cover the same area in about the same amount of time at about the same tide or disturbance conditions each visit. For more information please visit https://www.manomet.org/project/international-shorebird-survey/ or reach out to Lisa Schibley, ISS Coordinator for North America, at lschibley@manomet.org.

Please allow all of us on the ISS team to express our gratitude to everyone who is contributing ISS counts in New England and across the hemisphere.

From Brad Winn, Vice President, Resilient Habitats at Manomet and Director of the ISS since 2008:

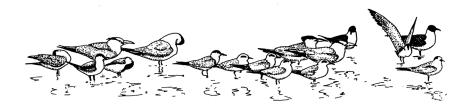
We are deeply grateful for the volunteers and professional biologists counting shorebirds for the ISS. They make a tremendous effort to get out to their sites on a repetitive basis and submit their data through eBird. We hope they know the importance of their work and the value of their surveys for conservation initiatives. Citizen science remains one of the greatest methods for widespread monitoring efforts we've got, so anyone interested in making a difference the next time they feel like heading out to walk in their favorite shorebird spot, please consider doing so on behalf of ISS. What you consider a hobby could contribute to the next big shorebird science discovery. And from Paul Smith:

Without dedicated survey participants, and without Manomet's longstanding leadership, there would be no national shorebird monitoring program in the United States. The ISS is the key monitoring data set for shorebirds in North America. As people faithfully head out to shorebird stopover sites to participate year after year, and in some cases decade after decade, it is important that they recognize just how significant their contribution is.

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Lisa Schibley joined the Shorebird Recovery Program at Manomet in 2008 and is currently the North American coordinator for the International Shorebird Survey. She develops and maintains the online ISS mapping tool, creates reports for Manomet scientists and partners, recruits and engages ISS volunteers through social media and newsletters, and finds creative ways to tell shorebird stories using ISS data. She holds an M.S. in Physics from the University of Arizona, and her background is in numerical analysis. Lisa is an avid birder. While living in Arizona, she coordinated the Tucson Christmas Bird Count and led field trips for the Tucson Audubon Society. She currently leads trips for the South Shore Bird Club.



# Bird-Friendly Maple Syrup

Jeff Ritterson and Steve Hagenbuch



The owners and operators of Bridge Road Sugarworks pose with a bird-friendly maple syrup sign. Photo credit: Bridge Road Sugarworks.

October. The cool, crisp air is a welcome respite from the summer's heat. We excitedly don our finest flannels and embrace this wonderful time of year in New England. Friends and families gather for the festivities of fall or one of many upcoming holidays. Amid the hustle and bustle, perhaps a lazy Saturday morning is in order, in a warm kitchen with a generous stack of pancakes. And of course, no pancake experience is complete without the requisite drizzle or, for a greater indulgence, pool, of pure maple syrup. Sweet maple flavor with notes of vanilla, caramel, and molasses, sticky on your lips and birdsong in your ears.

Wait, what!?! Birdsong? While birds may not be the first thing that springs to mind when considering the merits of maple syrup, the connection can be found in sugarbushes. Defined loosely as a group of maple trees used for syrup production, a sugarbush inherently provides some level of suitable forest bird habitat. After all, an intact forest is preferable over, say, a highly manicured lawn or parking lot. However, nuances in how a sugarbush is managed can have significant implications for the bird life that it supports and the conservation of forest bird species. A 2019 study reported that we have lost nearly three billion birds since 1970, a reduction of 29 percent (Rosenberg et al. 2019). A large portion of those losses were in populations of eastern forest birds, and New England is an especially important breeding area for many of those species (Goetz et al. 2014).



A sugarbush consisting of only canopy trees offers lower quality bird habitat. Photo credit: Audubon Vermont.

A well-established ecological principle is that habitats of higher complexity generally support greater biodiversity (McCoy and Bell 1991). By complexity, we mean the physical structure and arrangement of an environment. High complexity enhances biodiversity by providing a wide range of niches that allow superficially similar species to coexist. It also allows would-be prey to persist in the presence of predators by, for example, having places to escape (Kovalenko et al. 2012). Complexity's contribution to biodiversity has been demonstrated in many ecosystem types and natural communities, including the woodlands of New England (DeGraaf et al. 1998).

A complex forest habitat has layers of vegetation. The shrubs and saplings of the understory, or the area up to five feet in height, are the preferred nesting habitat for species such as the Black-throated Blue

Warbler (*Setophaga caerulescens*). Above that, the trees in the midstory, between five and 30 feet in height, are where a species like the Wood Thrush (*Hylocichla mustelina*) will place its nest. These layers exist under a tall canopy of trees greater than 30 feet in height, where species such as the Scarlet Tanager (*Piranga olivacea*) will nest and forage for insects.

Additional features of a complex forest include cavity trees for nesters such as the Great Crested Flycatcher (*Myiarchus crinitus*), and gaps in the canopy where an Eastern Wood-Pewee (*Contopus virens*), for example, may sally out to catch insects on the wing. Canopy gaps also allow sunlight to reach the forest floor and promote growth in the understory and midstory. Also worth mentioning are dead standing trees and logs on the ground—often referred to as snags and coarse woody material, respectively— that are decomposing, providing insects for birds to eat, and generally adding to the structural complexity of a forest.

Another ecological principle that contributes to high biodiversity, and indeed can in turn add to structural complexity, is the species composition of a habitat, with a higher diversity of foundation species generally supporting greater overall biodiversity (Cardinale et al. 2011). In this case, we are talking about trees. As an example, some forest birds are strongly associated with softwood trees, such as the Black-throated Green Warbler (*Setophaga virens*) and the Blue-headed Vireo (*Vireo solitarius*). Thus the presence of softwood trees like the eastern hemlock (*Tsuga canadensis*) can add to the biodiversity of forest birds. What is more, shade-tolerant hemlocks tend to



A sugarbush with a well-developed understory and midstory provides excellent bird habitat. Photo credit: Audubon Vermont.

retain their lower limbs, adding complexity to the layers of vegetation below the forest canopy.

Sugarbushes display a wide range of habitat complexity and tree species composition, from a meticulously tended monoculture of sugar maples to a more natural forest that happens to have a relatively high density of maple trees, and there is evidence that the basic ecological principles described above hold true. Hagenbuch (2009) found that both the number of individual birds and the number of bird species present decreased as maple trees became more prevalent in sugarbushes, suggesting that a monoculture of maples provides poorer habitat than a mix of trees. Conditions such as the number of maple trees and amount of vegetation in the understory can be adjusted with sustainable forestry and habitat management practices to make the resulting maple syrup more bird friendly.

As consumers, we can choose products that follow certain standards of production, and that includes the production of maple syrup. So, how do you know which maple syrup comes from bird-friendly sugarbushes? Look for the logo (Figure 1). Its stylized Scarlet Tanager tells you all you need to know, but for those who are curious, here are a few details on the production standards of bird-friendly maple syrup.

Part of what constitutes high-quality habitat for many forest birds is a large area of forest, so a sugarbush must first be part of a contiguous block of forest 100 acres or larger. The sugarbush itself can be smaller than 100 acres, but it must be part of a larger forest, which might also span property ownerships. Next, structural complexity



This label, with a stylized Scarlet Tanager, can be found on jugs of maple syrup that are recognized as bird friendly.

and tree species diversity are considered. For example, management targets include having vegetation covering 25 percent or more of the space in the understory and midstory of the sugarbush, as averaged across all acres. Also, maple should account for no more than 75 percent of the sugarbush (as measured in basal area) to avoid a monoculture or near monoculture. Where present, the maple producer is asked to develop a plan for managing non-native plant species, which are detrimental to bird habitat and forest health. Finally, targets include an average per acre of two snags larger than 10 inches in diameter, and four downed logs larger than 10 inches in diameter and greater than three feet long. The authors can provide more detail on program requirements and production standards on request.

Management targets must be included in a forest management plan, which is typically written by a licensed consulting forester, and which details approaches to either maintain or achieve the desired forest habitat conditions within the sugarbush. At that point, the syrup coming from that sugarbush is recognized as bird friendly, and the producer may place a sticker logo on their jugs to inform consumers of their standards. If not already met, the producer also agrees to make measurable progress on achieving habitat targets in a timely manner by following their forest management plan.

These habitat targets benefit more than just birds and other wildlife. Researchers at the University of Vermont found that increased tree species diversity in sugarbushes reduced the presence and impact of sugar maple insect pests and diseases (Parker et al. unpublished data). So, while getting rid of a few sugar maples may slightly reduce the volume of sap that a producer can gather in the short term, reduced impacts of pests and diseases will sustain the health of the sugarbush and its long-term sap production.

Furthermore, these same targets align with recommendations for both mitigating and adapting a forest to climate change. For example, snags, coarse woody debris, and vegetative growth in the understory and midstory increase the amount of carbon stored within a forest. That means less atmospheric carbon, which is a major contributor to climate change. Plus, having a diversity of tree species and tree ages makes a forest more resilient or responsive to a changing climate (Swanston et al. 2016). While we can be reasonably confident about the general effects of climate change on our forests, we can also expect those effects to unfold and cascade through the ecosystem in unexpected ways. Managing for a diversity of species, ages, and other conditions is akin to putting your eggs in more than one basket to prepare for a range of future conditions and reduce overall risk. As if we needed more reasons to tackle the climate crisis, there is evidence that climate change will result in a lower yield of syrup and a higher frequency of poor maple syrup seasons throughout much of the United States (Rapp et al. 2019). The good news is that as consumers we can support maple producers in creating bird-friendly sugarbushes, helping to turn a sticky situation into, well, a different sort of sticky situation, but one that is much more appetizing.

As an extension of the Vermont Foresters for the Birds program, which helps foresters and landowners to incorporate the principles of forest bird habitat into the management of forests, Audubon Vermont worked with the Vermont Department of Forests, Parks, and Recreation and the Vermont Maple Sugar Makers Association to develop the Bird-Friendly Maple Project. As described above, producers who make a commitment to achieving the production standards of the program are recognized as bird friendly. The program began in 2014, and now has over 60 producers enrolled. There are hopes that bird-friendly maple syrup may fetch a price premium one day, but at present, producers receive increased marketing exposure and support from Audubon Vermont. To learn more about the program, including where you can purchase bird-friendly maple syrup, you can visit vt.audubon.org/maple.

Massachusetts has its own version of the Foresters for the Birds program and, following the lead of Audubon Vermont, Mass Audubon is partnering with the Massachusetts Department of Conservation and Recreation, the Massachusetts Maple Producers Association, and the Massachusetts Woodlands Institute to bring the Bird-Friendly Maple Project to Massachusetts. By the time this article is published, local bird-friendly syrup may indeed be available in a second state. More about this effort can be found at massaudubon.org/maple.

So, the next time you sit down to enjoy the taste of maple syrup, do not be surprised to hear birdsong (or at least think of birds), and when you are in need of more syrup, look for the bird-friendly logo with its Scarlet Tanager. Purchasing bird-friendly maple syrup can help conserve our wonderful forest birds, support the livelihoods of those stewarding the forests, and contribute to the fight against climate change. That is right, you can have your pancakes and eat them too!

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*Steve Hagenbuch* is a senior conservation biologist and forester at Audubon Vermont, helping to promote healthy forest ecosystems that support birds and people.



Solitary Sandpiper by Michael Rossacci. See his Field Note on page 359.

BIRD OBSERVER Vol. 49, No.5, 2021

# **PHOTO ESSAY**

### Birds of the International Shorebird Survey



Semipalmated Sandpiper flock at Cape Porpoise, Maine. Photograph by Shiloh Schulte.



Greater Yellowlegs at Cape Porpoise, Maine. Photograph by Shiloh Schulte.



Whimbrel flock at Monomoy WNR. Photograph by Brad Winn.



Ruddy Turnstone at Napatree Point, Rhode Island. Photograph by Patrick Felker. 🤺

# **MUSINGS FROM THE BLIND BIRDER**

# Midsummer Thoughts

Martha Steele



Blackburnian Warbler. Photograph by Sandy Selesky.

Some random musings while savoring every birdsong as the season winds down:

Our friend Linda visited us in Vermont in early July. She is not a birder but takes notice of birds and has learned a few songs common in our Arlington, Massachusetts, neighborhood. We were walking down our road when Bob and I heard a Hermit Thrush singing at some distance into the forest. Despite its distance and the comingling with songs of other birds, including Ovenbird, White-throated Sparrow, Black-capped Chickadee, Blue-headed Vireo, and Blackburnian Warbler, the song was distinctive among the others and immediately grabbed our attention. At first, Linda could not pick out the thrush's song, her ears catching only the louder and closer songs of other birds. Several minutes passed, and finally, Linda said she heard the thrush. Once focused on the melodic song, she said she could easily pick it out. I was struck again by how birders are so attuned to bird songs, able to easily identify multiple birds at a time, or switch focus from a nonbird-related task when suddenly jolted by a song they recognize or love. It took Linda several minutes but once she found the song in the mix, she could easily hear the bird. Our ears are so trained to listen for birds that we hear them even when not thinking about them at all.

- Bob and I often talk about how some species seem to arrive all at once in spring as evidenced by one day hearing no song and the next day hearing a particular bird everywhere. A case in point is the Alder Flycatcher. This bird is common in Orleans County in Vermont's Northeast Kingdom. We have often found that they seem to arrive overnight and the next day we may hear a dozen or more individuals during a short drive when we did not hear a single bird the day before. Likewise, they seem to shut up at once, and by early July, it is rare to hear an Alder Flycatcher even though they have gone nowhere. Other birds may quiet but then pick up again. This summer, we noticed that Yellow-bellied Sapsuckers were drumming away in May and early June, then completely quieted. We thought that was it for the season for the sapsucker drumming but during the second week of July, we heard multiple birds drumming around our property for several days. These birds typically have one brood a season and thus, we were not sure what was behind the renewed drumming.
- I immensely enjoy working outside on our Vermont property in the early ٠ summer, with black flies mostly gone and birds still singing. I move about quietly, following ropes that I have set up around the yard to navigate to gardens, wood piles, and structures. This past May, we received five cords of split wood dumped from a delivery truck into our yard. We whittled away at the large pile over the course of two months by taking wheelbarrows full of wood back and forth to a woodshed where I stacked the wood for the coming winter. Given how carefully I have to move to make sure I don't get disoriented or lose track of where the guiding rope is, it takes me a long time to carry out my tasks. But it takes even longer because I so often stop to soak in what I am hearing: a drumming Pileated Woodpecker, the plaintive cry of a soaring Broad-winged Hawk overhead, Ovenbirds from multiple directions, Golden-crowned Kinglets competing with Blackburnian Warblers in the coniferous canopy, a House Wren singing his heart out all day long for days on end, and Winter Wrens calling from deep in the woods. I cannot get enough of these guys.
- Quiz: What family of birds can reduce its body temperature, sometimes dramatically, overnight to conserve energy? Answer below.
- Our friends Pat and John ("Coop") Cooper were recently enthralled by Massachusetts (now Ohio) birder Sean Williams, who lay on the snow outside their living room windows on a cold day last winter to observe and photograph Common and Hoary redpolls coming to the Cooper's feeder. Sean lied prone for hours, carefully observing the birds. The three struck up a friendship and escalated the Cooper's interest in birds. Now we are thrilled to get reports from them about birds they see in their yard, including nesting Cliff Swallows under their roof eaves and teetering Northern Harriers gliding across their meadow. The passion of a birder can awaken interest in birds for those who experience that passion.

- Do you ever notice how often you work hard to find a bird for your year list and then, once spotted, they suddenly show up all the time? This year for Bob, it was the Green Heron. We have a favorite birding location, River Road in Coventry, Vermont, that we bird frequently. The area includes extensive wetlands and small ponds perfect for Green Herons. Despite dozens of visits to River Road between April through late July, a Green Heron was never among our sightings. Then, on July 20, Bob spotted a Green Heron flying from a small stream across a field in the nearby community of Barton. Having finally gotten his year Green Heron, it was entirely predictable that on August 2, on only his second visit to River Road since spotting the Barton bird, a Green Heron sat in plain view by the side of the road, making a ruckus before flying away. I predict he will see Green Herons multiple times before they head south.
- Quiz Answer: Hummingbirds. A recent Public Broadcasting Service (PBS) program focused on fascinating behaviors and evolutionary adaptations of hummingbirds. As you may know, hummingbirds have the highest metabolic rate of any vertebrate, with heart rates of up to 1,265 beats a minute. In order to reduce the metabolic demand on their bodies overnight, they enter a state of torpor where their body temperatures and heart rates are greatly reduced, thereby saving energy and body mass, a remarkable evolutionary adaptation. These adaptations are perhaps most dramatic in hummingbirds of the high Andean mountains, where some birds lower their body temperature from over 100 degrees Fahrenheit to less than 40 degrees Fahrenheit every night and heart rates may drop from over 1,000 beats per minute to fewer than 100 beats per minute. The lower the body temperature and the longer they can sustain their torpor, the less body mass they lose overnight. Another adaptation for the high Andean birds, some of which are common at elevations above 14,000 feet, is the evolution of highly efficient hemoglobin, a protein in our red blood cells that carries oxygen to all of the tissues in our bodies. The birds have developed hemoglobin that has a very high affinity for oxygen, thus thriving in environments with considerably lower oxygen levels than at sea level.
- If you want to learn much more about bird behaviors, you will love John Kricher's book, The *Peterson Reference Guide to Bird Behavior*, published last year and reviewed by Mark Lynch in the April 2021 issue of *Bird Observer*. As wonderful it is to see and hear birds, your enjoyment of birding will be greatly enhanced by learning about their behaviors from Kricher's book or other sources. Good birding and good reading!

**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.

# FIELD NOTE

# Mill Pond, Belmont: A Southbound Stopover for Solitary Sandpipers

Michael Rossacci



Solitary Sandpipers at Mill Pond in Belmont, Massachusetts, during September 2020. Photographs by the author.

If rain is scarce during the dog days of late summer, then bird photographers and birdwatchers may have great viewing opportunities for inland shorebirds on exposed mudflats. Over a three–week stretch in September and October of 2020, I spotted and photographed Solitary Sandpipers at Mill Pond in Belmont, Massachusetts, which is part of the Beaver Brook Reservation. During this period, I came to appreciate that this pond was a precious stopover for these shorebirds, helping them continue along their southward journey.

During my first encounter, I almost missed seeing the sandpipers, both because they were dwarfed in size and number by a local raft of mallards and because they blended in well with the mud and vegetation at the water's edge. Once I got accustomed to the sandpipers' size and color pattern, I was able to spot them more easily during each visit. Most of the time I found at least one sandpiper, but on occasion a second bird, possibly an immature, would fly in and join in the foraging.

In late summer the shallow water level together with the exposed shoreline provided excellent foraging opportunities for these sandpipers and for other birds



Solitary Sandpiper. Exposed mud provides nutrients that are important for successful fall migration.

migrating through the area. Given their dedicated probing movements, it is highly likely that insects and other edibles were easily accessible and in abundance. The sandpipers tended to be not too far from the dabbling ducks, possibly taking a cue from where they were feeding.

It was easy to walk a short distance out into the exposed mud area to obtain a good position to set up for photography. I had a long telephoto lens on my camera and I used a plastic tarp to keep myself and my gear dry. Because the birds were focused on feeding, they did not pay much attention to me, although it was important to keep enough distance so as not to alter their behavior. At one point, a Solitary did march right up close to me within about twenty feet before returning to feeding. On one visit in early October, which happened to coincide with peak foliage, I was able to capture vibrant colors reflecting in the water near the sandpipers.

When mid-October rolled around, I visited the pond after a heavy rain and found the exposed mud was totally submerged and no sandpipers were in sight. With the water level back up, the birds would not have been able to feed and they had moved on to the next segment of their fall migration. Getting a prolonged period to observe and photograph Solitary Sandpipers was a rewarding experience for me and I look forward to the spring when they are back in the area again. You can see my shorebird collection on my website michaelrossacciphotography.com.

# A Birder's Quick Guide to HUNTING SEASONS

Hunting in Massachusetts ramps up in the fall, but that doesn't mean that birders and hunters can't share the outdoors. Learn where and when hunting may be taking place and review these safety tips to enjoy a more relaxed time outside!

### 2021 Seasons\*

	113		
	Youth Deer Hunt	Oct. 2	
	Archery (Zones 10–14)	Oct. 4 – Nov. 27	
Deer	Archery (Zones 1–9)	Oct. 18 – Nov. 27	
	Shotgun	Nov. 29 – Dec.11	
	Primitive Firearms	Dec. 13 – Dec. 31	
	Spring: Zones 1–13	April 26 – May 22, 2021	
Turkey	Fall: Zones 10–13	Oct. 4 – Nov. 27	
	Fall: Zones 1–9	Oct 18 – Nov.27	
	Coyote	Oct. 16 – Mar. 8, 2022	
	Black Bear	Sep.7-Sep. 25; Nov.1-Nov.20; Nov.2-Dec.11	
	Pheasant	Oct. 16 – Nov. 27	
	Waterfowl <sup>‡</sup>	Sept. 1, 2021 to Feb. 15, 2022	

\*Season dates change annually. Full regulations and seasons can be found at mass.gov/hunting. \*These dates are all-inclusive of waterfowl species. Species-specific regulations are found at mass.gov/hunting.

### Tips

- Do what the hunters do! Wear a bright orange vest or hat to stay visible. If your dog is venturing out with you, put bright orange on him or her too!
- If you see someone hunting or hear shots, call out to let them know you're there.
- Hunters and birders both want to reduce unnecessary noise. Once you've made your presence known, avoid making excessive noises.
- MassWildlife-owned lands—Wildlife Management Areas and Wildlife Conservation Easements—allow hunting.
- Most state parks and forests are open to hunting, and many towns allow hunting on municipal lands.
- Hunting is not permitted on Sundays throughout Massachusetts.

### MASS.GOV/MASSWILDLIFE



# ABOUT BOOKS

# The Joys of Birding with QR Codes

Mark Lynch

**Birdsong for the Curious Naturalist: Your Guide to Listening**. Donald Kroodsma. 2020. Boston, Massachusetts: Houghton Mifflin Harcourt.

**Birds of Colombia (Lynx and BirdLife International Field Guides)**. Steven L. Hilty. 2021. Barcelona, Spain: Lynx Edicions.

QR codes are those square, black and white, densely patterned, matrix barcodes you see on signs, in books, even on television. They were invented in 1994 by the Japanese automotive supply company Denso Wave (hats off to Masahiro Hara). I have read that the design was inspired by the black and white pieces on a Go board, but this may be an apocryphal tech tale. These codes are read by an app, typically downloaded on your phone. When scanned, the QR code will lead you to a website that contains further information, photographs, or maps. By 2011, QR codes were in wide use in the United States, so it was only a matter of time before publishers of bird books realized that QR codes could be invaluable in enhancing the birders' reading experience.

"Bird song fills our lives with beauty and wonder." (p. 1, *Birdsong for the Curious Naturalist*)

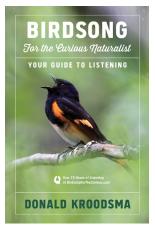
Ornithologist Donald Kroodsma was among the first to understand the full possibilities of using QR codes in a bird book. His wonderful memoir *Listening to a Continent Sing: Birdsong by Bicycle from the Atlantic to the Pacific* (2016)— reviewed by me in *Bird Observer* (2016)—was an account of his bike trip from coast to coast with his son, enjoying the birdsong all along the way. His text was augmented by a liberal use of QR codes throughout the memoir. As I wrote in my review of this book for *Bird Observer*:

In the margins of *Listening to a Continent Sing* are 381 labeled QR Codes. You download a free QR Code reader app on your cell phone and when you get to a code (in the book), hold the phone over it and it quickly takes you to what is essentially another whole book accessed through your phone's screen. This consists of state-of-the-art recordings of not just bird song, but atmospheric recordings, too, like people they met along the way, bees nectaring in fields, even geysers.

The overall effect of the use of the QR codes in *Listening to a Continent Sing* was to bring the reader along on the trip because you could hear what Kroodsma was writing about. You did not simply read this book, you experienced it.

In *Birdsong for the Curious Naturalist*, Kroodsma uses the many QR codes included to create a university-level course on all aspects of bird song, calls, and noise. Ultimately, he wants to inspire readers to become citizen scientists and to conduct their own field research on bird song.

There are 734 recordings accessed by the QR codes, amounting to an amazing 75 hours of bird song to experience. Kroodsma has never been stingy in his use of recordings. He wants readers and listeners to experience all of the subtleties and complexities of a bird's vocal display. Instead of a brief snippet of song you would typically find on commercial recordings of a call, in Birdsong for the Curious Naturalist you will be linked to many minutes of a species' vocalizations. For instance, one OR code links the reader to 21 minutes (!) of a Red-bellied Woodpecker's sounds. Therefore, this is not a book that you can just skim through. Kroodsma wants readers to stop and critically listen to and enjoy the bird songs. For Kroodsma, bird song is a deeply aesthetic experience, like listening to a symphony or opera-even if you are not sure what bird you are listening to.



It is liberating to be free of naming, and exploring a world without labels can be mind expanding. That idea runs counter, of course, to the primary goal of many birders, which is to pin a label on a bird as quickly as possible and with minimal clues (and then move on). (p. 3 *Birdsong for the Curious Naturalist*)

Kroodsma covers a lot of ornithological ground in this book. There are chapters and QR codes to help the reader understand the difference between a song and a call, and when that distinction is blurred. Other sections cover birds that have only calls and no songs, species that produce mechanical (nonvocal) sounds, why and how birds sing, the physiology and neurology of bird song, dialects in a species' repertoire, when birds sing, mimicry, and much more. Using QR codes, Kroodsma teaches the reader to listen carefully to what he is writing about. Ultimately, he wants the reader to put the book down, get out into the field, and critically listen to the birds around you.

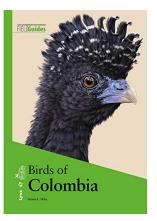
Also included in *Birdsong for the Curious Naturalist* are 48 "Explores" (29 are on the website). These are real field problems that challenge readers to hone their field skills and make their own discoveries about bird song. For example, one Explore focuses on robin vocalizations:

Discover something about robins that no one else seems to have explored. A robin sings "several" low, caroled phrases in a series before pausing and offering a high, screechy note (a *hisselly*, though some hear it as *eek*), but exactly how many carols does he sing? Or how many *eeks*? Do the numbers change through a singing session, or from early morning to midmorning to midday to afternoon to evening? Or from one week or month to the next? And how about the ratio of carols to *eeks*? What might you learn about the mind of a robin by simply counting his songs like this? No one yet knows. (p. 11)

It may be surprising to learn that there are many aspects of bird song that are not

yet well understood. Kroodsma hopes the readers can make some contributions to the science of bird song by making their own systematic observations. I am sure you all are familiar with the whistling sounds that Mourning Doves make with their wings. But did you realize that this behavior is still not completely understood? Kroodsma writes, "The official *Birds of North America* account declares 'Function [of wing whistling] unknown but may have some alarm-sounding value at takeoff.' But, I then ask, what about the function at landing?" (p. 21)

Some of the Explore sections get quite sophisticated. Kroodsma asks readers to record some bird songs and then, with the *Raven Lite* downloadable software, play



the songs at slower speeds and lower frequencies to learn how complex a bird song is compared to what we hear with mere human ears. Ultimately Kroodsma encourages readers to learn the song repertoires of an individual bird, because in many cases, each bird can have a unique repertoire. This reminds me of when we were conducting the Breeding Bird Atlas II. It was early in the morning, and I was deep inside a remote section of Quabbin Reservoir when out of the woods emerged Don Kroodsma. He proceeded to point out all of the individual Veery songs around us at that moment. He knew every bird by the slight variations in their repertoires and location of where they sang their dawn chorus. It was then I realized that Donald Kroodsma was enjoying the soundscape around us at another level entirely. Sure, I could identify a Veery song, but I could not identify a specific Veery.

*Birdsong for the Curious Naturalist* is an extraordinary book. By the liberal use of QR codes and by giving the readers real field problems to work on, this deceptively slim book changes us from being just birders into serious citizen scientists as well. This is not a book for birders who want to learn a song or call quickly so they can tick a species. *Birdsong for the Curious Naturalist* is for those who want to understand more about how a bird lives and expresses itself. This book makes us all connoisseurs of the complex and beautiful vocalizations of birds. "Once you are attuned to the different songs that a male can sing, *every singing bird* becomes interesting." (p. 97)

It was only a matter of time before authors and publishers realized the potential of using QR codes in field guides. The new *Birds of Colombia* shows what a modern printed field guide combined with online resources can accomplish.

Almost one-fifth of the earth's species of birds can be found in Colombia. This should have made the country a must-visit destination for every hardcore birder for decades. Political turmoil and drug cartel violence made Colombia a dangerous place to visit for some time. But in recent years, this dire situation has turned around, and birders are starting to take another look at what Colombia has to offer.

The author, Steven L. Hilty, is singularly qualified to pen a field guide to this country. He has worked for Victor Emanuel Nature Tours since 1983. He has led birding trips all over the world and is currently leading a number of tours of Colombia.

He has authored previous guides to the birds of several locations in South America, including Colombia. He even wrote the chapter on tanagers for Volume 16 of the Lynx Edicions *Handbook of the Birds of the World*. With his colleagues, he has even described two new species for Venezuela and one for Colombia.

This new field guide was the result of the cooperation of several important ornithological organizations:

No published work, however, has played a more significant part in the advancement of the planet's avifauna than the monumental 17-volume *Handbook of the Birds of the World*, by Lynx Edicions, and its companion online resource *HBW Alive*. Almost all the illustrations for the present book are taken from these incredible resources. During the preparation of this book *HBW Alive* was incorporated into the Cornell Lab of Ornithology's already magnificent online website *Birds of the World*. These combined resources have provided indispensable references for photographs, sound recordings, multimedia and taxonomy for this guide, as has the immense and ever-growing *eBird* database, also hosted by the Cornell Lab. Additionally, *Xeno Canto*, a Netherlands-based online repository of avian sounds, houses a large number of recordings from Colombia and adjacent countries, and these also have been of immense value to this work. (p. 8 *Birds of Colombia*)

The result of all this scientific cooperation is that almost all of the species pictured in *Birds of Colombia* have a QR code next to them. When you use your phone to read this code, you are transported to the *Birds of the World* section for that species, complete with numerous details about breeding, plumage, migration, maps, color photographs, and sound recordings. When I first got a copy of this guide, I spent an hour or so, comfortably in my reading chair, pointing my phone at the QR codes and listening to the songs of the birds of Colombia. My first thought was, "all field guides should have this access to these resources." My second thought was, "what is cell reception like in Colombia?"

The *Birds of Colombia* is a large, thick, hefty field guide. It is 608 pages long and contains 3,600 illustrations and 2,000 range maps. The species layout on a page is not crowded and is easy to read. The details in the guide for each species include the basics: size, habitat preference, abundance details, some behavioral notes, written descriptions of vocalizations, basic field identification details, and a note about similar species. The range maps are by necessity on the small side but are well drawn and color-coded for the seasonal appearance. Local species names are given. The illustrations are done by a number of artists who contributed to *The Handbook of the Birds of the World* and are clear and of a high quality.

Introductory sections give details of the history of studying birds in Colombia, climate, topographic regions, vegetation zones, habitat descriptions, habitats, and an interesting section on bird conservation in Colombia. My only minor complaint is that the print in these sections is small and dense, making it a bit of a chore to read for those of us well on in years.

The inside cover pages on both the back and front are two different large maps

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of Colombia, one a color topographic map and the other a map of the parks and conservation areas of the country. The page stock is perfect for a field guide, and the cover is sturdy but flexible. This is a field guide that will last several trips to Colombia. It is large, so you will either keep it at your campsite or hotel room or carry it in your backpack.

Even without the use of QR codes, the *Birds of Colombia* would have been a major contribution to field guide literature. But with the codes and the combined ornithological resources they access, the *Birds of Colombia* has set a new standard for what a birder can expect from a field guide.

### References

Kroodsma, Donald. 2016. Listening to a Continent Sing: Birdsong by Bicycle from the Atlantic to the Pacific. Princeton, New Jersey: Princeton University Press.
 Lynch, Mark. 2016. Road Trip! Bird Observer 44 (6): 418–20.

To listen to Mark Lynch talk with Donald Kroodsma about *Birdsong for the Curious Naturalist*, use this link: <a href="https://www.wicn.org/podcast/donald-kroodsma-birdsong-for-the-curious-naturalist/">https://www.wicn.org/podcast/donald-kroodsma-birdsong-for-the-curious-naturalist/</a>

# Volunteer Staff Openings at Bird Observer

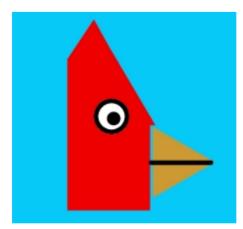
## BIRD SIGHTINGS COMPILER—BRISTOL COUNTY BIRD SIGHTINGS COMPILER—WORCESTER COUNTY

*Bird Observer* is looking for Bird Sightings Compilers for Bristol County and Worcester County. Our long-running Bird Sightings column relies on data from compilers around the state. The compilers for Bristol and Worcester counties would be responsible for sending in reports every two months of species seen in those respective counties for the previous two months. Species should be reported in a spreadsheet template and include sightings that are representative of high counts, early / late dates and anything rare or unusual. The compilers should be familiar with the birds (and birders!) of Bristol or Worcester counties, be comfortable with using a spreadsheet and be able to use eBird.org to query sightings. These are volunteer positions.

Interested candidates should contact Bird Sightings Editor, Neil Hayward at: neil.hayward@gmail.com.

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# **BIRD SIGHTINGS**

### May–June 2021

### Neil Hayward and Robert H. Stymeist

May 2021 was pleasant; the average temperature was 67 degrees, one degree above average for the month. The high was 92 degrees on May 26. There were only four days during the month that saw any precipitation. The total rainfall in Boston was 4.92 inches, 1.43 inches above normal. Most of the rain occurred over Memorial Day weekend. Beginning on Friday May 29, two inches of rain were recorded in Boston and the temperature on Saturday reached only 50 degrees, just one degree shy of setting a record low for that day's high temperature. Saturday's storm brought downpours and strong northeast winds along the coast. Cape Cod and the Islands were especially impacted, with gusts over 50 miles per hour that continued through to Monday. Birders along the coast were rewarded with great days of spring sea watching.

June 2021 was the hottest June on record for Boston. The temperature averaged 74.4 degrees, beating the previous record of 73.4 degrees set in June 1976. There were nine days in June when the temperature reached 90 degrees or higher. On June 30, the mercury hit 100 degrees, which is rare for June; the last June record was in 1952. The last time Boston experienced triple-digit weather at any point during the summer was July 22, 2011, when the temperature was 103 degrees. The temperature dipped below average for just six days during the month. There were eight days of precipitation totaling 2.57 inches in Boston, 1.32 inches below the average for June.

R. Stymeist

### WHISTLING-DUCKS THROUGH IBISES

A **Black-bellied Whistling-Duck** was photographed on Tuckernuck and Nantucket islands in June. This species, first recorded in Massachusetts in 2008, has been expanding its range northward. This is the first record for the state since the pandemic—the last being in September 2019, also on Nantucket. The Franklin Park **Cackling Goose**, first found on April 26, continued until May 1, when it qualified as only the second May record for the state—the first, also present on May 1, was at Plum Island in 1999.

A male Northern Shoveler in Pittsfield at the start of June was the first June eBird record for Berkshire County. A male **Eurasian Wigeon**, found on Penikese Island, is only the second June record for the state this century, after a bird in Dorchester on June 3, 2006. Notable for their absence were Green-winged Teals; this was the first year since 2009 that the species was not reported in Berkshire County in June. This duck is a rare breeder in the state and has nested successfully on October Mountain in recent years. Breeding was again confirmed for Ringnecked Ducks in Royalston—the third year in four that the species has bred at this location. A female **King Eider** at Mattapoisett on June 6 is the first June record for Plymouth County.

**Chuck-will's-widows** were reported from Barnstable, Dukes, and Nantucket counties, all areas in which this species is suspected of breeding.

Sandhill Crane nesting was confirmed at Worthington, Hardwick, Burrage Pond in Hanson, and the area around Ashfield and Plainfield—a record four families in four counties. This species was first confirmed nesting in the state at New Marlborough in 2007 and then again in 2016 in Worthington, after which reports and breeding records have increased steadily.

Single **Black-necked Stilts** were photographed in Sandwich on May 28 and on Nantucket in May and June. A pair of **Ruffs** was found at Plum Island on May 1. Although this shorebird is annual to the state, this is the first record of two birds together since 2015. Most records involving multiple birds have come from the Plum Island and Rowley area. A single female Ruff (Reeve) was found at Allens Pond, South Dartmouth, at the end of the period. An American Golden-Plover at Duxbury Beach in mid-June is the first June record for the state since 2010. The species is a rare spring migrant in April and May and a more common fall migrant from August to October. Short-billed Dowitchers in June are uncommon away from Barnstable and Essex counties; a flock at Bolton Flats Wildlife Management Area this year was just the second Worcester County record for June after a pair on June 10, 2005, also at Bolton Flats. Norfolk County also logged its second June record for Short-billed Dowitcher with a single bird in Quincy on June 15.

This was a good period for phalaropes. Wilson's Phalaropes were recorded from a record six counties, including the first Hampshire record—at East Meadows, Northampton—since May 2004. Red-necked Phalaropes were reported from an above-average five counties, with the first Plymouth County record for the period since 2006. Nantucket scored a new period high count of 75 Red Phalaropes on May 20.

Our knowledge of pelagic birds in our state waters is poor. Observations are limited to a handful of dedicated trips each year—predominantly in the fall—with a real paucity of data in the spring. This year we gained a better insight into the status and distribution of deepwater species from a research survey conducted by the National Oceanic and Atmospheric Administration (NOAA). The NOAA Ship *Gordon Gunter* was at sea from May 14 to May 25, embarking from and returning to Newport, Rhode Island, and passing through New Jersey, New York, Massachusetts, and Maine state waters. Bird counts were performed by onboard ornithologists Allison Black and Doug Gochfeld, who logged high counts and late dates for a number of species in Massachusetts.

The ship encountered one **South Polar Skua** in Essex County waters, and four south of Nantucket, the latter being a new high count for May. Most Massachusetts sightings of this Antarctic-nesting seabird have come between July and September, and this is only the fourth year this century in which May birds have been recorded—almost certainly a reflection of the lack of birder access to deep waters at this time of year. A Long-tailed Jaeger seen from the boat in Nantucket waters on May 19 is five days shy of the earliest state record on May 14, 2006. Birds were also seen from Race Point, Provincetown, at the end of the month. Long-tailed Jaegers are typically seen later in the summer, and this is only the fifth year this century in which they have been found in May. The research vessel logged 14 Leach's Storm-Petrels south of Nantucket on May 20, which is the highest count for May since 2005, when 627 were seen from Sandy Neck. And a count of 95 Northern Fulmars on May 25 in waters east of Cape Cod is the highest period count since May 20, 1995.

Alcids were surprisingly abundant this period. A count of 16 Common Murres past Race Point on May 2 is a new high count for May. Stellwagen Bank scored a new high count for Thick-billed Murres in May with two seen on May 3, as well as a new late date for the species with a single bird seen by the NOAA crew on May 24—eclipsing the previous late date of May 19 set in 2007 and 2013. A count of 40 Razorbills off Race Point on May 2 is a new eBird high count for May, and a bird east of Chatham on June 16 was the only June record south of Maine. A count of five **Atlantic Puffins** off Andrews Point, Rockport, on May 29 and from Race Point on May 31 beat the previous high count of two for the month. The NOAA crew also reported up to five puffins on separate half-hour checklists on May 19, with a potential total that day of up to 20 birds.

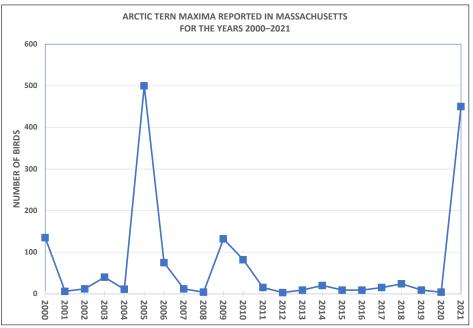


Figure 1. Annual high count of Arctic Terns in Massachusetts, 2000–2021. Data from eBird. org.

**Sabine's Gull** became a regular visitor to Race Point last year from July through November. This year, a first-year bird was photographed there on May 29–30. This is the fifth year this century in which this Arctic breeder has been recorded in May. It is typically more common as a fall migrant. Berkshire and Norfolk counties recorded their first May records of Lesser Blackbacked Gull.

This was a good period for rare and uncommon terns. A **Gull-billed Tern** was a one-day wonder at Eastham on June 12, and a **Sandwich Tern** was photographed at Race Point on June 20. Both species are less than annual to the state. Black Terns were reported from a period-high nine counties. Arctic Terns were reported in exceptional numbers from Race Point at the end of May; up to 450 birds were counted on May 30, which is the second-highest count this century, after 500 birds at Plum Island in 2005 (see Figure 1). To put this extraordinary number into context, the high counts for this species in 2019 and 2020 were only nine and four, respectively. Another tern highlight also happened on May 30, when a possible **White-winged Tern** was sighted from Race Point. Unfortunately, the bird disappeared among a large flock of gulls and terns and was not photographed. There are only two prior records of this species in Massachusetts: in Plymouth May 25–27, 1954, and at Provincetown on May 8, 2016.

Yellow-crowned Night-Herons were reported from a period-high seven counties, including a first period record for Suffolk County— an adult near the Fenway Victory Gardens in Boston on May 8. A count of seven birds—six adults and one immature—at Yarmouth on June 26 set a new high count for the period.

N. Hayward

<b>Black-bellied</b>	Whistling-Duck	
6/2	Tuckernuck I.	1 ph S. Kardell
6/24-6/26		1 phT. Pastuszak + v.o.
Brant 5/5	Revere	175 M. Viens + v.o.
5/8	Squantum	18 J. Forbes
5/16	Northampton	10 T.Gilliland
5/17	Bolton	2 min nfc V. Burdette
5/19 5/25	Marlborough Pittsfield	1 nfc T. Spahr 1 M. Kelly
6/11	PI	2 M. Bueby
Cackling Goo		-
5/1 Mute Swan	Boston (FPk)	1 ph P. Peterson $+$ v.o.
5/20	Arlington Res.	18 N. Hayward
5/25	Newton	27 J. Forbes
Wood Duck	Maarton	10 I Fankaa
5/25 6/24	Newton Boston (Fens)	18         J. Forbes           21         P. Hanc + v.o.
6/25	Petersham103 6	
Blue-winged 7	Teal	
5/2 5/2	DWMA	2 N. Tepper 2 L. Waters
5/2 6/11-6/30	Quincy PI	2 L. Waters 3 max T. Wetmore#+v.o.
6/12	S. Monomoy	4 B. Dolmon#
Northern Show	veler	
5/19	Rowe	2 lpr C.Hyytinen + v.o.
6/3-6/7 6/11-6/17	Pittsfield PI	$\begin{array}{rcl}1 \text{ m} & \text{J. Pierce} + \text{v.o.}\\2 & \text{S. Babbitt} + \text{v.o.}\end{array}$
6/12	S. Monomoy	2 B. Dolmon#
Gadwall		
6/1-6/30	PI	25 max v.o.
Eurasian Wig 6/5	Penikese I.	1 m ph M. Tucker#
American Wig		i in più ini. Tuenen
5/6	Royalston	1 ad m E. LeBlanc
5/7 Croon wingod	Yarmouth	2 1pr N. Villone
Green-winged 5/4-5/21	October Mtn	2 max J. Pierce + v.o.
5/5	Pittsfield (Pont.)	J. Pierce + v.o.
5/5	Cheshire	14 R. Wendell $+$ v.o.
6/30 Ring-necked I	PI	12 D. Prima, S. Babbitt
5/1	Petersham	6 M. Lynch#
5/1-5/8	Boston (CHRes.	
5/2-6/1	Gill	$3 \max$ J. Smith + v.o.
5/8-5/9 6/1	Arlington Res. Gill	2 T. Sackton + v.o. 2 1pr J. Smith
6/22	Royalston 8	
Greater Scaup	-	
5/5	Cheshire Dittefield (Operate	2 R. Wendell J. J. Pierce
5/5 6/1-6/10	Pittsfield (Onota Falmouth	1 E. Shavell#
Lesser Scaup	1 unito uni	
5/1	Pembroke	6 BBC (G. d'Entremont)
5/1 5/5	Hingham Pittsfield	2 BBC (G. d'Entremont) 3 J. Pierce
King Eider	Thusheid	J J. 1 IEICE
5/21-6/1	PI	2 f max ph S.Sullivan+v.o.
6/6	Mattapoisett	1 f ph C. Molander#
Common Eide 6/7	r BHI	850 S. Jones + v.o.
Harlequin Duc		050 B. Jones + v.o.
5/9	Gloucester	1 M. Kaiser
5/15	Rockport (AP)	3 S. Mirick#
6/27-6/30 Surf Scoter	Rockport	1 m D. Peterson
5/3, 6/9	MBO	34,1 M. Gray
5/5	Pittsfield (Pont.)	4 J. Pierce
White-winged		18,7 M. Grav
5/3, 5/27 5/5	Gill	18,7 M. Gray 15 L. + B. Bieda + v.o.
5/5	WWMA	2 T. Spahr

5/22	1 abbr.	1	C. Canan
5/22 Black Scoter	Ashby	1	C. Caron
5/4	BHI (Deer I.)	80	B. Burke
5/10 Long-tailed D	MBO uck	41	M. Gray
5/4	Woburn (HP)	2	A. Flynn + v.o.
5/5	Turners Falls		Fairbrother + v.o.
5/5-5/10 6/8	Revere Gloucester		M. Watson + v.o. O. Komar + v.o.
Bufflehead			
5/1, 5/10 5/3	Winthrop MBO	19,3 17	C. Kaynor
5/5	Holyoke	6	M. Gray L. + B. Bieda
Common Gol	deneye		
5/4-5/6 5/15	Gill PI	2 max 1	T.Gilliland + v.o. J. Kovner#
Hooded Merg		1	J. Kövitei#
5/1	Petersham	6 m	M. Lynch#
5/14 Common Mer	Quaboag IBA	4 f	M. Lynch#
5/1-5/3	Boston (CHRes		. Markley + v.o.
5/13	Rockport	2	D. Williams#
5/15 Red-breasted	Quabbin (G8) Merganser	2 f	M. Lynch#
5/5	Gill	11	J. Smith
5/5 5/5	Cheshire Weehusett Bee	2	R. Wendell V. Burdette
5/7	Wachusett Res. P'town	1 m 550	B. Nikula
5/10	MBO	215	M. Gray
Ruddy Duck 5/1	Pembroke	20 DI	C (C d'Entromant)
5/7, 6/30	Boston (CHRes		BC (G. d'Entremont) R. Doherty + v.o.
6/9	Waltham	2	J. Forbes
6/12 Northern Bob	S. Monomoy	2	B. Dolmon#
5/16	Groton	1	P. Guidetti
6/17	Jamaica Plain	1	C. Hartshorn
6/20 6/23-6/26	Saugus Boston (Fens)	1 1 S.	G. Wilson# Dickinson + v.o.
Wild Turkey	Boston (Pens)	1 5.	Dickinson + v.o.
6/25	Petersham	12 3yg	M. Lynch#
Ruffed Grous 5/19	Ware R. IBA	1	M. Lynch#
Pied-billed Gr	ebe		-
5/2 5/2-5/17	Norfolk PI	1	N. Crosby J. Barcus + v.o.
5/22	Fairhaven	-	G. d'Entremont#
6/4	Easthampton	1	C. Stern
6/13 Horned Grebe	Mystic R. (Somer	ville)1	M. McKenna#
5/1	PI	1	N. Landers
5/1	Pittsfield	1	G. Hurley
5/4-6/29 Red-necked G	Marblehead	1	N. Werth $+$ v.o.
5/5	Gill	3	M. Fairbrother
5/5 5/8	Orange	2 E 2	E LeBlanc + v.o.
5/8 5/30	PI P'town (RP)	$\frac{2}{1}$ alt	C. Lapite + v.o. P. Flood#
Yellow-billed	Cuckoo		
5/11 5/26	Boston (McW) Hadley	$\frac{1}{2}$	M. McMahon G. d'Entremont#
5/26	New Braintree	$\frac{2}{2}$	M. Lynch#
Black-billed C	Cuckoo		
5/2 5/26	Ludlow Hadley	$\frac{1}{2}$ (	J. Spool# G. d'Entremont#
Common Nig		2 (	
5/20	Pittsfield	23	J. Young
5/22 6/3	Easthampton Florence	23 30	J. Harrison C. Stern
Chuck-will's-	-widow		
5/6, 5/22	Chappaquiddic		F. Zeta, S. Fea
5/12-5/14 5/14	Bourne (Camp Edv Orleans	1	J. McCumber + v.o. J. Salett

Chuck-will's-	widow (continue	-d)
5/14-6/21		2 max au v.o.
5/19-6/23	Nantucket	1 au L. Buck $+$ v.o.
6/11	Eastham	3 W. Freedberg#
Eastern Whip-	poor-will	5 Willieddollga
thr	PI	17 max T. Martin + v.o.
5/1-6/2	Quabbin Pk	21 max L. Therrien
5/12	Camp Edwards	18 J. McCumber
5/12-6/23	Montague	12 max P.Gagarin+v.o.
6/9	MSSF	8 BBC (G. d'Entremont)
Chimney Swif	t	
5/13-6/30	South Hadley	415 max C. Allen + v.o.
5/15-6/30	Amherst	150 max J. Menezes
	Hummingbird	
5/5-5/31	Easton	3 K. Ryan
5/11	MBO	5 b T. Lloyd-Evans#
Clapper Rail		
5/3, 5/8 5/27-6/2	Rowley	1,1 ph au R.Heil.A.Steenstrup
	PI	1 T. Wetmore#
6/12	Ellisville	1 Anon.
6/23	Duxbury B.	1 A. Single
King/Clapper		
5/6	Harwich Port	1 B. Nikula
King Rail	DI	1 who we T We two well
6/10-6/30	PI	1 ph au T. Wetmore#
Virginia Rail	CMNWD	6
5/1-5/31 5/1-6/19	GMNWR	6 max v.o.
5/14	Lenox Ouchoog IDA	6 max K.Barnes,Sa.Auer+v.o. 9 M. Lynch#
6/6	Quaboag IBA BFWMA	5 S. Wilson
Sora	DF W MA	5 S. WIISOII
5/3	BFWMA	3 N. Dowling
5/5-5/22	GMNWR	1,1A. Bragg#, M. Moore
5/6-5/13	Ipswich	2 S. Hedman + v.o.
5/9-6/20	Sheffield	1 G. Ward
6/12	S. Monomoy	1 B. Dolmon#
		D. Domiona
Common Crai		
Common Gal		6 max phM.Ridge+v.o.
thr	Richmond PI	6 max phM.Ridge+v.o.
	Richmond PI	1 v.o.
thr 5/8-5/14	Richmond	1 v.o.
thr 5/8-5/14 5/13	Richmond PI Washington	1 v.o. 1 ph M. Watson
thr 5/8-5/14 5/13 5/14	Richmond PI Washington Chatham	1 v.o. 1 ph M. Watson 1 J. Salett
thr 5/8-5/14 5/13 5/14 5/23	Richmond PI Washington Chatham BFWMA S. Monomoy	1         v.o.           1 ph         M. Watson           1         J. Salett           1         N. Paulson
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16	Richmond PI Washington Chatham BFWMA S. Monomoy	1         v.o.           1 ph         M. Watson           1         J. Salett           1         N. Paulson           1         B. Dolmon#           1         v.o.
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11	Richmond PI Washington Chatham BFWMA S. Monomoy t	1         v.o.           1 ph         M. Watson           1         J. Salett           1         N. Paulson           1         B. Dolmon#           1         v.o.           1         T. Gilliland
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/19-6/11 6/12	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy	1         v.o.           1 ph         M. Watson           1         J. Salett           1         N. Paulson           1         B. Dolmon#           1         v.o.
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy	1v.o.1 phM. Watson1J. Salett1N. Paulson1B. Dolmon#1v.o.1T. Gilliland2B. Dolmon#
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr	Richmond PI Washington Chatham BFWMA S. Monomoy PI Longmeadow S. Monomoy Worthington4 1	1         v.o.           1 ph         M. Watson           1         J. Salett           1         N. Paulson           1         B. Dolmon#           1         v.o.           1         T. Gilliland           2         B. Dolmon#           pr+2yg         T. Gessing + v.o.
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Cooc 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy Worthington4 1 Ashfield/Plainfi	1         v.o.           1 ph         M. Watson           1         J. Salett           1         N. Paulson           1         B. Dolmon#           1         v.o.           1         T. Gilliland           2         B. Dolmon#           pr+2yg         T. Gessing + v.o.           eld         4 1pr+2yg         L. Bobay + v.o.
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy Worthington4 1 Ashfield/Plainfi Reading	1 v.o. 1 ph M. Watson 1 J. Salett 1 N. Paulson 1 B. Dolmon# 1 T. Gilliland 2 B. Dolmon# pr+2yg T. Gessing + v.o. eld 4 1pr+2yg L. Bobay + v.o. 6 M. Nelson
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/7-5/18	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree	1 v.o. 1 ph M. Watson 1 J. Salett 1 N. Paulson 1 B. Dolmon# 1 v.o. 1 T. Gilliland 2 B. Dolmon# pr+2yg T. Gessing + v.o. eld 4 1pr+2yg L. Bobay + v.o. 6 M. Nelson 2 D. Schell + v.o.
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/7-5/18 5/9-5/23	Richmond PI Washington Chatham BFWMA S. Monomoy PI Longmeadow S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree BFWMA	1         v.o.           1 ph         M. Watson           1         J. Salett           1         N. Paulson           1         B. Dolmon#           1         v.o.           1         T. Gilliland           2         B. Dolmon#           pr+2yg         T. Gessing + v.o.           eld         4 1pr+2yg         L. Bobay + v.o.           6         M. Nelson           2         D. Schell + v.o.           2         J. Johnson# + v.o.
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Cood 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/7-5/18 5/9-5/23 5/15	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree BFWMA New Marlborou	1       v.o.         1 ph       M. Watson         1       J. Salett         1       N. Paulson         1       B. Dolmon#         1       T. Gilliland         2       B. Dolmon#         pr+2yg       T. Gessing + v.o.         eld       4 1pr+2yg       L. Bobay + v.o.         6       M. Nelson       2         2       D. Schell + v.o.       2         1       J. Johnson# + v.o.       2         1       M. Peltz       Y. Schell + v.o.
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/7-5/18 5/9-5/23 5/15 5/16	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree BFWMA New Marlborou Upton	1       v.o.         1 ph       M. Watson         1       J. Salett         1       N. Paulson         1       B. Dolmon#         1       T. Gilliland         2       B. Dolmon#         pr+2yg       T. Gessing + v.o.         eld       4 Ipr+2yg L. Bobay + v.o.         6       M. Nelson         2       J. Johnson# + v.o.         rgh       M. Peltz         4       J. Glagowski
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/7-5/18 5/9-5/23 5/16 6/2	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree BFWMA New Marlborou Upton Burrage Pd WM	1       v.o.         1 ph       M. Watson         1       J. Salett         1       N. Paulson         1       B. Dolmon#         1       r. Gilliland         2       B. Dolmon#         pr+2yg T. Gessing + v.o.         eld 4 1pr+2yg L. Bobay + v.o.         6       M. Nelson         2       D. Schell + v.o.         2       J. Johnson# + v.o.         rgh 1       M. Peltz         4       J. Glagowski         43 1pr+1yg       L. Grimes
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/1-5/18 5/9-5/23 5/15 5/16 6/2 6/21-6/27	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree BFWMA New Marlborou Upton Burrage Pd WM Hardwick 4 1	1       v.o.         1 ph       M. Watson         1       J. Salett         1       N. Paulson         1       B. Dolmon#         1       T. Gilliland         2       B. Dolmon#         pr+2yg       T. Gessing + v.o.         eld       4 Ipr+2yg L. Bobay + v.o.         6       M. Nelson         2       J. Johnson# + v.o.         rgh       M. Peltz         4       J. Glagowski
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crand thr 5/1-6/12 5/3 5/1-5/18 5/9-5/23 5/15 5/16 6/2 6/21-6/27 <b>Black-necked</b>	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree BFWMA New Marlborou Upton Burrage Pd WM Hardwick 4 1 Stilt	1v.o.1 phM. Watson1J. Salett1N. Paulson1B. Dolmon#1T. Gilliland2B. Dolmon#pr+2ygT. Gessing + v.o.eld 4 1pr+2ygL. Bobay + v.o.6M. Nelson2D. Schell + v.o.2J. Johnson# + v.o.rgh 1M. Peltz4J. Glagowski1A3 1pr+1ygL. Grimespr+2ygW. Howes
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/7-5/18 5/9-5/23 5/16 6/2 6/21-6/27 <b>Black-necked</b> 5/17-27,6/15	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree BFWMA New Marlborou Upton Burrage Pd WM Hardwick 4 1 Stilt Nantucket	1       v.o.         1 ph       M. Watson         1       J. Salett         1       N. Paulson         1       B. Dolmon#         1       T. Gilliland         2       B. Dolmon#         pr+2yg       T. Gessing + v.o.         eld       4 1pr+2yg L. Bobay + v.o.         6       M. Nelson         2       D. Schell + v.o.         6       M. Peltz         4       J. Glagowski         1A3 1pr+1yg       L. Grimes         pr+2yg       W. Howes         1,1 ph J.Olney+v.o.,S.Kardell
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crand thr 5/1-6/12 5/3 5/7-5/18 5/9-5/23 5/15 5/16 6/2 6/21-6/27 <b>Black-necked</b> 5/17-27,6/15 5/28	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy S.	1v.o.1 phM. Watson1J. Salett1N. Paulson1B. Dolmon#1T. Gilliland2B. Dolmon#pr+2ygT. Gessing + v.o.eld 4 1pr+2ygL. Bobay + v.o.6M. Nelson2D. Schell + v.o.2J. Johnson# + v.o.rgh 1M. Peltz4J. Glagowski1A3 1pr+1ygL. Grimespr+2ygW. Howes
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/1-6/12 5/7-5/18 5/9-5/23 5/15 5/16 6/2 6/21-6/27 <b>Black-necked</b> 5/17-27,6/15 5/28 American Oys	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree BFWMA New Marlborou Upton Burrage Pd WM Hardwick 4 1 Stilt Nantucket Sandwich tereatcher	1       v.o.         1 ph       M. Watson         1       J. Salett         1       N. Paulson         1       B. Dolmon#         1       v.o.         1       T. Gilliland         2       B. Dolmon#         pr+2yg       T. Gessing + v.o.         eld       4 lpr+2yg L. Bobay + v.o.         6       M. Nelson         2       J. Johnson# + v.o.         1       M. Peltz         4       J. Glagowski         1A3 lpr+1yg       L. Grimes         pr+2yg       W. Howes         1,1 ph J.Olney+vo.,S.Kardell         1 ph       K. Fiske#
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/7-5/18 5/9-5/23 5/15 5/16 6/2 6/21-6/27 <b>Black-necked</b> 5/17-27,6/15 5/28 American Oys 5/11	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy S.	1v.o.1 phM. Watson1J. Salett1N. Paulson1B. Dolmon#1T. Gilliland2B. Dolmon#pr+2ygT. Gessing + v.o.eld 4 1pr+2yg L. Bobay + v.o.6M. Nelson2D. Schell + v.o.cM. Nelson2J. Johnson# + v.o.ngh 1M. Peltz4J. Glagowski1A3 1pr+1ygL. Grimespr+2ygW. Howes1, 1 ph J.Olney+v.o.,S.Kardell1 phK. Fiske#5D. Fitzpatrick
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/7-5/18 5/9-5/23 5/16 6/2 6/21-6/27 <b>Black-necked</b> 5/17-27,6/15 5/28 American Oys 5/11 5/14-5/19	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree BFWMA New Marlborou Upton Burrage Pd WM Hardwick 4 1 Stilt Nantucket Sandwich tercatcher Gloucester PI	1       v.o.         1 ph       M. Watson         1       J. Salett         1       N. Paulson         1       B. Dolmon#         1       r. Gilliland         2       B. Dolmon#         pr+2yg T. Gessing + v.o.         eld 4 lpr+2yg L. Bobay + v.o.         6       M. Nelson         2       D. Schell + v.o.         2       J. Johnson# + v.o.         1       J. Glagowski         1A3 lpr+1yg       L. Grimes         pr+2yg       W. Howes         1,1 ph J.Olney+v.o.,S.Kardell       lph         K. Fiske#       5       D. Fitzpatrick         4       max       v.o.
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/1-6/12 5/7-5/18 5/9-5/23 5/15 5/16 6/2 6/21-6/27 <b>Black-necked</b> 5/17-27,6/15 5/28 American Oys 5/11 5/14-5/19 6/12	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree BFWMA New Marlborou Upton Burrage Pd WM Hardwick 4 1 Stilt Nantucket Sandwich tercatcher Gloucester PI Squantum	1       v.o.         1 ph       M. Watson         1       J. Salett         1       N. Paulson         1       B. Dolmon#         1       T. Gilliland         2       B. Dolmon#         pr+2yg T. Gessing + v.o.         eld 4 1pr+2yg L. Bobay + v.o.         6       M. Nelson         2       J. Johnson# + v.o.         2       J. Johnson# + v.o.         1       J. Glagowsti         4       J. Glagowsti         4       J. Glagowsti         10       L. Grimes         pr+2yg W. Howes       1,1 ph J.Olney+v.o.,S.Kardell         1       ph         5       D. Fitzpatrick         4       max         5       D. Fitzpatrick
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/1-6/12 5/3 5/15 5/16 6/2 6/21-6/27 <b>Black-necked</b> 5/17-27,6/15 5/28 American Oys 5/11 5/14-5/19 6/12 6/26	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree BFWMA New Marlborou Upton Burrage Pd WM Hardwick 4 1 Stilt Nantucket Sandwich tercatcher Gloucester PI Squantum Monomoy NWM	1       v.o.         1 ph       M. Watson         1       J. Salett         1       N. Paulson         1       B. Dolmon#         1       T. Gilliland         2       B. Dolmon#         pr+2yg T. Gessing + v.o.         eld 4 1pr+2yg L. Bobay + v.o.         6       M. Nelson         2       J. Johnson# + v.o.         2       J. Johnson# + v.o.         1       J. Glagowsti         4       J. Glagowsti         4       J. Glagowsti         10       L. Grimes         pr+2yg W. Howes       1,1 ph J.Olney+v.o.,S.Kardell         1       ph         5       D. Fitzpatrick         4       max         5       D. Fitzpatrick
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/1-6/12 5/3 5/1-6/12 5/3 5/16 6/2 6/21-6/27 <b>Black-necked</b> 5/17-27,6/15 5/28 American Oys 5/11 5/14-5/19 6/12 6/26 Black-bellied	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy S. Monomoy S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree BFWMA New Marlborou Upton Burrage Pd WM Hardwick 4 1 Stilt Nantucket Sandwich tercatcher Gloucester PI Squantum Monomoy NWI Plover	1v.o.1 phM. Watson1J. Salett1N. Paulson1B. Dolmon#1T. Gilliland2B. Dolmon#pr+2ygT. Gessing + v.o.eld 4 1pr+2yg L. Bobay + v.o.6M. Nelson2D. Schell + v.o.cM. Nelson2J. Johnson# + v.o.ngh 1M. Peltz4J. GlagowskifA3 1pr+1ygL. Grimespr+2ygW. Howes1, 1 ph J.Olney+v.o.,S.Kardell1 phK. Fiske#5D. Fitzpatrick4 maxv.o.6G. d'EntremontR 21R. Sormani
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/1-6/12 5/7-5/18 5/9-5/23 5/15 5/16 6/2 6/21-6/27 Black-necked 5/17-27,6/15 5/28 American Oys 5/11 5/14-5/19 6/12 Black-bellied 1 5/19	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree BFWMA New Marlborou Upton Burrage Pd WM Hardwick 4 1 Stilt Nantucket Sandwich tercatcher Gloucester PI Squantum Monomoy NWI Plover Rowley (RMW	1       v.o.         1 ph       M. Watson         1       J. Salett         1       N. Paulson         1       B. Dolmon#         1       T. Gilliland         2       B. Dolmon#         pr+2yg T. Gessing + v.o.         eld 4 lpr+2yg L. Bobay + v.o.         6       M. Nelson         2       D. Schell + v.o.         2       J. Johnson# + v.o.         1       M. Peltz         4       J. Glagowski         (A3 lpr+1yg L. Grimes         pr+2yg W. Howes         1,1 ph J.Olney+v.o.,S.Kardell         1 ph       K. Fiske#         5       D. Fitzpatrick         4 max       v.o.         6       G. d'Entremont         R 21       R. Sormani         S)48       R. Heil
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/1-6/12 5/7-5/18 5/9-5/23 5/15 5/16 6/2 6/2-6/27 Black-necked 5/17-27,6/15 5/28 American Oys 5/11 5/14-5/19 6/12 6/26 Black-bellied 1 5/19 5/31	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree BFWMA New Marlborou Upton Burrage Pd WM Hardwick 4 1 Stilt Nantucket Sandwich tercatcher Gloucester PI Squantum Monomoy NWI Plover Rowley (RMW PI	1v.o.1 phM. Watson1J. Salett1N. Paulson1B. Dolmon#1T. Gilliland2B. Dolmon#pr+2ygT. Gessing + v.o.eld 4 1pr+2yg L. Bobay + v.o.6M. Nelson2D. Schell + v.o.cM. Nelson2J. Johnson# + v.o.ngh 1M. Peltz4J. GlagowskifA3 1pr+1ygL. Grimespr+2ygW. Howes1, 1 ph J.Olney+v.o.,S.Kardell1 phK. Fiske#5D. Fitzpatrick4 maxv.o.6G. d'EntremontR 21R. Sormani
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/1-6/12 5/3 5/15 5/16 6/2 6/21-6/27 <b>Black-necked</b> 5/17-27,6/15 5/28 American Oys 5/11 5/14-5/19 6/26 Black-bellied 1 5/19 5/31 American Gol	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree BFWMA New Marlborou Upton Burrage Pd WM Hardwick 4 1 Stilt Nantucket Sandwich tercatcher Gloucester PI Squantum Monomoy NWI Plover Rowley (RMW PI	1       v.o.         1       ph       M. Watson         1       J. Salett         1       N. Paulson         1       B. Dolmon#         1       T. Gilliland         2       B. Dolmon#         pr+2yg T. Gessing + v.o.         eld 4 1pr+2yg L. Bobay + v.o.         6       M. Nelson         2       J. Johnson# + v.o.         2       J. Johnson# + v.o.         1       M. Peltz         4       J. Glagowski         1A3 1pr+1yg       L. Grimes         pr+2yg       W. Howes         1, 1 ph J.Olney+v.o.,S.Kardell         1 ph       K. Fiske#         5       D. Fitzpatrick         4 max       v.o.         6       G. d'Entremont         R 21       R. Sormani         S)48       R. Heil         70       S. Sullivan#
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/1-6/12 5/7-5/18 5/9-5/23 5/15 5/16 6/2 6/2-6/27 Black-necked 5/17-27,6/15 5/28 American Oys 5/11 5/14-5/19 6/12 6/26 Black-bellied 1 5/19 5/31	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy S. Monomoy S. Monomoy S. Monomoy S. Monomoy S. Monomoy S. Monomoy S. Monomoy S. Monomoy S. Monomoy New Braintree BFWMA New Marlborou Upton Burrage Pd WM Hardwick 4 1 Stilt Nantucket Sandwich tercatcher Gloucester PI Squantum Monomoy NWI Plover Rowley (RMW PI den-Plover	1       v.o.         1       ph       M. Watson         1       J. Salett       N. Paulson         1       B. Dolmon#         1       T. Gilliland         2       B. Dolmon#         pr+2yg       T. Gessing + v.o.         eld       4 1pr+2yg       Bobay + v.o.         eld       4 1pr+2yg       Bobay + v.o.         eld       4 1pr+2yg       L Goldsowski         2       J. Johnson# + v.o.       2         1       J. Glagowski       M. Peltz         4       J. Glagowski       MA3 1pr+1yg       L. Grimes         pr+2yg       W. Howes       1,1 ph       J.Olney+v.o.,S.Kardell         1,1 ph       J.Olney+v.o.,S.Kardell       1       ph         K. Fiske#       5       D. Fitzpatrick       4         5       D. Fitzpatrick       4       Max       v.o.         6       G. d'Entremont       R       21       R. Sormani         S)48       R. Heil       70       S. Sullivan#       1,1 S. McDonald, J. Smith
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/7-5/18 5/9-5/23 5/15 5/16 6/2 6/2-6/27 <b>Black-necked</b> 5/17-27,6/15 5/28 American Oys 5/11 5/14-5/19 6/12 6/26 Black-bellied 1 5/15, 5/20 6/14-6/16 Semipalmated	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree BFWMA New Marlborou Upton Burrage Pd WM Hardwick 4 1 Stilt Nantucket Sandwich tercatcher Gloucester PI Squantum Monomoy NWI Plover PI Sever Plover PI Duxbury B.	1       v.o.         1       ph       M. Watson         1       J. Salett         1       N. Paulson         1       B. Dolmon#         1       T. Gilliland         2       B. Dolmon#         pr+2yg       T. Gessing + v.o.         eld       4 Ipr+2yg L. Bobay + v.o.         6       M. Nelson         2       J. Johnson# + v.o.         gh       M. Peltz         4       J. Glagowski         1A3 1pr+1yg       L. Grimes         pr+2yg       W. Howes         1,1 ph       Johnson# v.o.         1,1 ph       Johnson# v.o.         6       G. d'Entremont         70       S. Sullivan#         1,1 S. McDonald, J. Smith         1       A. Single
thr 5/8-5/14 5/13 5/14 5/23 6/12 American Coo 5/1-5/16 5/19-6/11 6/12 Sandhill Crane thr 5/1-6/12 5/3 5/7-5/18 5/9-5/23 5/16 6/2 6/21-6/27 Black-necked 5/17-27,6/15 5/28 American Oys 5/11 5/14-5/19 6/12 6/26 Black-bellied 1 5/19 5/31 American Goll 5/15, 5/20 6/14-6/16	Richmond PI Washington Chatham BFWMA S. Monomoy t PI Longmeadow S. Monomoy S. Monomoy Worthington4 1 Ashfield/Plainfi Reading New Braintree BFWMA New Marlborou Upton Burrage Pd WM Hardwick 4 1 Stilt Nantucket Sandwich tercatcher Gloucester PI Squantum Monomoy NWI Plover PI Sever Plover PI Duxbury B.	1       v.o.         1       ph       M. Watson         1       J. Salett       N. Paulson         1       B. Dolmon#         1       T. Gilliland         2       B. Dolmon#         pr+2yg       T. Gessing + v.o.         eld       4 1pr+2yg       Bobay + v.o.         eld       4 1pr+2yg       Bobay + v.o.         eld       4 1pr+2yg       L Goldsowski         2       J. Johnson# + v.o.       2         1       J. Glagowski       M. Peltz         4       J. Glagowski       MA3 1pr+1yg       L. Grimes         pr+2yg       W. Howes       1,1 ph       J.Olney+v.o.,S.Kardell         1,1 ph       J.Olney+v.o.,S.Kardell       1       ph         K. Fiske#       5       D. Fitzpatrick       4         5       D. Fitzpatrick       4       Max       v.o.         6       G. d'Entremont       R       21       R. Sormani         S)48       R. Heil       70       S. Sullivan#       1,1 S. McDonald, J. Smith

5/19-6/6	Longmeadow		axT.Gilliland+v.o.
5/22	Gill	9	J. Smith
5/23 6/7-6/9	PI Pittsfield	21	N. Hayward J. Pierce + v.o.
Piping Plover	1 Ittsheiu	1	J. T Terce + v.0.
5/1-6/30	Quincy	10	B. Sullivan + v.o.
5/31	PI	14	S. Sullivan#
Upland Sandp	iper		
5/1	Plymouth Airpo		BBC (G. d'Entremont)
5/1-6/25	Westover AFB	5 m	axB.+J.Lafley+v.o.
Whimbrel	***		
5/27	Wareham	1	B. Gluhosky
6/30 Ruddy Turnsto	Nantucket	1	K. Blackshaw#
5/31	PI	35	S. Sullivan#
Red Knot		55	5. Builtvain
5/19-5/20	PI	1	B. Hodson + v.o.
6/10-6/18	PI	1	T. Graham#+v.o.
Ruff			
5/1	PI		+f ph S.Williams + v.o.
6/29	S. Dart. (APd)	l m	ph J. Eckerson
Stilt Sandpipe			
6/8, 6/28-30	PI	1,1	C. Cook, S. Babbitt + v.o.
Sanderling 5/22-5/27	Longmandow	2 m	axT.Gilliland + v.o.
5/31	Longmeadow PI	70	S. Sullivan#
Purple Sandpi		70	5. Sumvann
5/13	PI	3	D. Lynch#
5/15	Rockport	7	J. Hoye#
5/17	Boston H.	1	P. Taylor + v.o.
5/24	Cohasset	5	V. Zollo
Least Sandpip		2	D 411 4 1
5/5-6/2	BFWMA		ax B. Abbot + v.o.
5/19 5/20	Rowley (RMW Arlington Res.	S)330 8	R. Heil N. Hayward
Pectoral Sand		0	IN. Haywalu
5/2	PI	1	P. Urich#
5/5	Sheffield	i	K. Schopp
5/13	BFWMA	2	P. Morlock
Semipalmated			
5/15-6/4	BFWMA		ax M.Moore + v.o.
5/19-5/27	Longmeadow		axT.Gilliland+v.o.
6/6 Short billed D	PI	260	T. Wetmore#
Short-billed D 5/18	Pittsfield (Onot	a) 1	J. Gaudette
5/19	PI	186	G. d'Entremont#
5/19	Rowley (RMW		R. Heil
5/19-5/22	Longmeadow		axT.Gilliland+v.o.
5/22	Gill	21	T. Gilliland
6/2	BFWMA	7	B. Abbot $+$ v.o.
6/15	Quincy	1	E. Ross
American Wo 5/19		S) 7	R. Heil
Wilson's Snip	Rowley (RMW	3) /	K. Hell
5/1	Deerfield	6	P. Gagarin
Spotted Sandr		Ū	1. Gugunn
5/3-6/1	Boston (CHRes	s.) 4 m	ax D. Bates + v.o.
5/5	Wachusett Res.		M. Lynch#
5/24	Arlington Res.	5	N. Hayward
6/23	Quabbin (G8) 3	3 2ad+1	yg M. Lynch#
Solitary Sand		0	N. Dawling
5/3 5/4	BFWMA Acton	8 2	N. Dowling
5/7	Deerfield	29	S. Wilson R. Ranney-Blake
Lesser Yellow		,	r. runney-Diake
5/17	Ρ̈́Ι	8	N. Hayward
5/19	Rowley (RMW		R. Heil
5/20	Chatham	7	B. Nikula
Willot	Chathan	'	
Willet		100	
thr	PI		axT.Wetmore+v.o.
thr 5/19	PI Rowley (RMW		axT.Wetmore+v.o. R. Heil
thr	PI Rowley (RMW		

	1 ( D		
5/10	Reston (CHRes	) 8 m	ax N.Hayward,D.Scott
5/15	PI	51	P. Vale
5/19	Rowley (RMWS		R. Heil
Wilson's Phala		/	
5/16	Rumney (Revere		B. Burke
5/19-5/20	Northampton	3	T. Gessing $+$ v.o.
5/22	S. Dart. (APd)	3	G. d'Entremont#
5/24 6/1-6/2	WBWS BFWMA	1	S. Connors# I fL. Kramer + v.o.
Red-necked Pl		1 au	IL. KIAIIICI + V.U.
5/17-5/18	Northampton	1	A. Hulsey + v.o.
5/29	Gloucester (BR)	2	J. Thompson#
6/6	Duxbury B.	1	A. Ŝingle
Red Phalarope			
5/20	S. of Nantucket	75	A. Black, D. Gochfeld
5/29 5/30-5/31	Rockport (AP)	4 1	J. Thompson#
South Polar S	P'town (RP)	1	J. Bourget#
5/24	Essex Co. waters	s 1	D. Gochfeld
5/26	S. of Nantucket	4	D. Gochfeld
Pomarine Jaeg	er		
5/30	P'town (RP)	1	P. Flood#
Parasitic Jaege			D II 'I
5/29	Rockport (AP)	$\frac{1}{20}$	R. Heil B. Nikula#
5/29, 5/30 6/19	P'town (RP) 3 Westport (GN)	3,20 1	J. Eckerson
Long-tailed Ja		1	J. LEREISON
5/19	S. of Nantucket	1 ad	A. Black, D. Gochfeld
5/29, 5/30	P'town (RP) 2,2		
Common Mur	re		<u>^</u>
5/2, 6/2		16,1	P. Flood
5/3	Stellwagen Bank		L. Waters#
5/30 Thick-billed M	Rockport (AP)	2	S. Sullivan#
5/3, 5/24		211	Waters#, A.Black, D.Gochfeld
5/14	Gloucester	1	J. Young
5/15	Rockport	1	B. Black $+$ v.o.
Razorbill			
5/2	P'town (RP)	40	P. Flood
5/29	Rockport (AP)	6	R. Heil
6/16 Black Guillem	E. of Chatham	1 au	K.Powers, P. Trull
5/15-6/18	PI	1 J.	Bourget#, S. Laks + v.o.
5/15	Rockport		
5/23		1	J. 1107C#
	P'town (RP)	1 2 al	J. Hoye# t P. Flood#
6/21	Manchester		
Atlantic Puffi	Manchester n	2 al 2	t P. Flood# T. Swain#
Atlantic Puffi 5/3	Manchester n Stellwagen Bank	2 al 2 x 1 pł	t P. Flood# T. Swain# L. Waters#
Atlantic Puffi 5/3 5/19	Manchester n Stellwagen Bank S. of Nantucket	2 al 2 4 1 pł 20 m	t P. Flood# T. Swain# h L. Waters# ax A. Black, D. Gochfeld
Atlantic Puffi 5/3 5/19 5/29	Manchester n Stellwagen Bank S. of Nantucket Rockport (AP)	2 al 2 ( 1 pl 20 m 5	t P. Flood# T. Swain# h L. Waters# ax A. Black, D. Gochfeld R. Heil
Atlantic Puffi 5/3 5/19 5/29 5/30, 5/31	Manchester n Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP)	2 al 2 ( 1 pl 20 m 5	t P. Flood# T. Swain# h L. Waters# ax A. Black, D. Gochfeld
Atlantic Puffi 5/3 5/19 5/29	Manchester n Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP)	2 al 2 ( 1 pl 20 m 5	t P. Flood# T. Swain# h L. Waters# ax A. Black, D. Gochfeld R. Heil
Atlantic Puffi 5/3 5/19 5/29 5/30, 5/31 Black-legged I 5/30 Sabine's Gull	Manchester n Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP) Kittiwake	2 al 2 1 pl 20 m 5 2,5 ph	t P. Flood# T. Swain# n L. Waters# ax A. Black, D. Gochfeld R. Heil B.Nikula#,J.Young,P.Felker
Atlantic Puffi 5/3 5/19 5/29 5/30, 5/31 Black-legged I 5/30 Sabine's Gull 5-29-5/30	Manchester n Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP) Vittiwake P'town (RP) P'town (RP)	2 al 2 1 pl 20 m 5 2,5 ph	t P. Flood# T. Swain# n L. Waters# ax A. Black, D. Gochfeld R. Heil B.Nikula#,J.Young,P.Felker P. Flood#
Atlantic Puffi 5/3 5/19 5/29 5/30, 5/31 Black-legged I 5/30 Sabine's Gull 5-29-5/30 Bonaparte's G	Manchester n Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP) Vittiwake P'town (RP) P'town (RP) ull	2 al <sup>2</sup> 2 l ph 20 m 5 2,5 ph 1 1S 1 1S p	t P. Flood# T. Swain# n L. Waters# ax A. Black, D. Gochfeld R. Heil B.Nikula#,J.Young,P.Felker P. Flood# ph P. Flood#
Atlantic Puffi 5/3 5/19 5/29 5/30, 5/31 Black-legged I 5/30 <b>Sabine's Gull</b> 5-29-5/30 Bonaparte's G 5/4	Manchester n Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP) Vittiwake P'town (RP) ull Gardner	2 al <sup>2</sup> 2 l ph 20 m 5 2,5 ph 1 1S p 17	t P. Flood# T. Swain# a L. Waters# ax A. Black, D. Gochfeld R. Heil B.Nikula#,J.Young,P.Felker P. Flood# ph P. Flood# T. Pirro
Atlantic Puffi 5/3 5/19 5/29 5/30, 5/31 Black-legged 1 5/30 Sabine's Gull 5-29-5/30 Bonaparte's G 5/4 5/5	Manchester n Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP) Vittiwake P'town (RP) ull Gardner Pittsfield (Onota	2 al <sup>2</sup> 2 1 pl 20 m 5 2,5 ph 1 1S 1 1S p 17 )160	t P. Flood# T. Swain# a L. Waters# ax A. Black, D. Gochfeld R. Heil B.Nikula#,J.Young,P.Felker P. Flood# bh P. Flood# T. Pirro J. Pierce
Atlantic Puffi 5/3 5/19 5/29 5/30, 5/31 Black-legged I 5/30 Sabine's Gull 5-29-5/30 Bonaparte's G 5/4 5/5 5/5	Manchester n Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP) Vittiwake P'town (RP) P'town (RP) ull Gardner Pittsfield (Onota Turners Falls	2 al <sup>2</sup> 2 1 pl 20 m 5 2,5 ph 1 1S 1 1S p 17 160 12	t P. Flood# T. Swain# a. L. Waters# ax A. Black, D. Gochfeld R. Heil B.Nikula#,J.Young,P.Felker P. Flood# oh P. Flood# T. Pirro J. Pierce M. Fairbrother
Atlantic Puffi 5/3 5/19 5/29 5/30, 5/31 Black-legged 1 5/30 Sabine's Gull 5-29-5/30 Bonaparte's G 5/4 5/5	Manchester Manchester Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP) Vittiwake P'town (RP) ull Gardner Pittsfield (Onota Turners Falls P'town (RP)	2 al <sup>2</sup> 2 1 pl 20 m 5 2,5 ph 1 1S 1 1S p 17 160 12 500	t P. Flood# T. Swain# A. Black, D. Gochfeld R. Heil B.Nikula#J.Young,P.Felker P. Flood# Dh P. Flood# T. Pirro J. Pierce M. Fairbrother B. Nikula#
Atlantic Puffi 5/3 5/19 5/29 5/30, 5/31 Black-legged 1 5/30 Sabine's Gull 5-29-5/30 Bonaparte's G 5/4 5/5 5/5 5/30 Little Gull 5/17	Manchester Manchester Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP) Vittiwake P'town (RP) ull Gardner Pittsfield (Onota Turners Falls P'town (RP) P'town (RP)6 5	2 al <sup>2</sup> 2 1 ph 20 m 5 2,5 ph 1 1S p 17 160 12 500 1S+1 2	t P. Flood# T. Swain# n L. Waters# ax A. Black, D. Gochfeld R. Heil B.Nikula#,J.Young,P.Felker P. Flood# oh P. Flood# T. Pirro J. Pierce M. Fairbrother B. Nikula# 2S ph B. Nikula
Atlantic Puffi 5/3 5/19 5/29 5/30, 5/31 Black-legged I 5/30 Sabine's Gull 5-29-5/30 Bonaparte's G 5/4 5/5 5/5 5/30 Little Gull 5/17 5/31	Manchester n Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP) Cittiwake P'town (RP) ull Gardner Pittsfield (Onota Turners Falls P'town (RP) P'town (RP) P'town (RP) 6 5 PI	2 al <sup>2</sup> 2 1 ph 20 m 5 2,5 ph 1 1S p 17 160 12 500 1S+1 2	t P. Flood# T. Swain# A. Black, D. Gochfeld R. Heil B.Nikula#J.Young,P.Felker P. Flood# Dh P. Flood# T. Pirro J. Pierce M. Fairbrother B. Nikula#
Atlantic Puffi 5/3 5/19 5/29 5/30, 5/31 Black-legged I 5/30 Sabine's Gull 5-29-5/30 Bonaparte's G 5/4 5/5 5/5 5/30 Little Gull 5/17 5/31 Laughing Gull	Manchester Manchester Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP) Vittiwake P'town (RP) Ull Gardner Pittsfield (Onota Turners Falls P'town (RP) P'town (RP)6 5 PI	2 al <sup>2</sup> 2 (1 pt 20 m 5 (2,5 pt) 1 1S 1 1S p 17 160 12 500 1S+1 2 1 ad	t P. Flood# T. Swain# A. Black, D. Gochfeld R. Heil B.Nikula#,J.Young,P.Felker P. Flood# Oh P. Flood# T. Pirro J. Pierce M. Fairbrother B. Nikula#
Atlantic Puffi 5/3 5/19 5/29 5/30, 5/31 Black-legged 1 5/30 <b>Sabine's Gull</b> 5-29-5/30 Bonaparte's G 5/4 5/5 5/5 5/5 5/30 <b>Little Gull</b> 5/17 5/31 Laughing Gull 5/21	Manchester Manchester Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP) Vittiwake P'town (RP) P'town (RP) Ull Gardner Pittsfield (Onota Turners Falls P'town (RP) P'town (RP)6 5 PI P'town (RP)	2 al <sup>2</sup> 2 1 pl 20 m 5 2,5 ph 1 1S p 1 7 160 12 500 1S+1 2 1 ad 500	t P. Flood# T. Swain# A. Black, D. Gochfeld R. Heil B.Nikula#,J.Young,P.Felker P. Flood# oh P. Flood# T. Pirro J. Pierce M. Fairbrother B. Nikula# S. ph B. Nikula ph A.Sanford + v.o. B. Nikula
Atlantic Puffi 5/3 5/19 5/29 5/30, 5/31 Black-legged I 5/30 Sabine's Gull 5-29-5/30 Bonaparte's G 5/4 5/5 5/5 5/30 Little Gull 5/17 5/31 Laughing Gull	Manchester Manchester Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP) Vittiwake P'town (RP) Ull Gardner Pittsfield (Onota Turners Falls P'town (RP) P'town (RP)6 5 PI	2 al <sup>2</sup> 2 (1 pt 20 m 5 (2,5 pt) 1 1S 1 1S p 17 160 12 500 1S+1 2 1 ad	t P. Flood# T. Swain# A. Black, D. Gochfeld R. Heil B.Nikula#,J.Young,P.Felker P. Flood# Oh P. Flood# T. Pirro J. Pierce M. Fairbrother B. Nikula#
Atlantic Puffi 5/3 5/19 5/29 5/30, 5/31 Black-legged 1 5/30 Sabine's Gull 5-29-5/30 Bonaparte's G 5/4 5/5 5/5 5/30 Little Gull 5/17 5/31 Laughing Gull 5/29	Manchester Manchester Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP) Vittiwake P'town (RP) P'town (RP) Ull Gardner Pittsfield (Onota Turners Falls P'town (RP) P'town (RP)6 5 PI P'town (RP)	2 al <sup>2</sup> 2 1 pl 20 m 5 2,5 ph 1 1S p 1 7 160 12 500 1S+1 2 1 ad 500	t P. Flood# T. Swain# A. Black, D. Gochfeld R. Heil B.Nikula#,J.Young,P.Felker P. Flood# oh P. Flood# T. Pirro J. Pierce M. Fairbrother B. Nikula# S. ph B. Nikula ph A.Sanford + v.o. B. Nikula
Atlantic Puffi 5/3 5/19 5/29 5/30, 5/31 Black-legged I 5/30 <b>Sabine's Gull</b> 5-29-5/30 Bonaparte's G 5/4 5/5 5/5 5/5 5/30 <b>Little Gull</b> 5/17 5/31 Laughing Gull 5/21 5/29 Iceland Gull 5/31 Lesser Black-t	Manchester Manchester Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP) Vittiwake P'town (RP) P'town (RP) P'town (RP) P'town (RP) P'town (RP) P'town (RP) Rockport (AP) PI packed Gull	2 al ph 20 m 5 2,5 ph 1 1S 1 1S p 17 100 12 500 1S+1 2 1 ad 500 2 1	t P. Flood# T. Swain# A. L. Waters# ax A. Black, D. Gochfeld R. Heil B.Nikula#,J.Young,P.Felker P. Flood# Oh P. Flood# T. Pirro J. Pierce M. Fairbrother B. Nikula# P. Sph B. Nikula ph A. Sanford + v.o. B. Nikula R. Heil
Atlantic Puffi 5/3 5/19 5/29 5/30, 5/31 Black-legged I 5/30 Sabine's Gull 5-29-5/30 Bonaparte's G 5/4 5/5 5/5 5/30 Little Gull 5/17 5/31 Laughing Gull 5/29 Iceland Gull 5/31 Lesser Black-to 5/5	Manchester Manchester Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP) Cittiwake P'town (RP) ull Gardner Pittsfield (Onota Turners Falls P'town (RP) P'town (RP) 65 PI P'town (RP) Rockport (AP) PI Sacked Gull Pittsfield (Pont.)	2 al <sup>2</sup> 2 al <sup>2</sup> 1 B <sup>2</sup> 1 B <sup>2</sup> 1 B <sup>3</sup> 1 B <sup>3</sup>	t P. Flood# T. Swain# A. Black, D. Gochfeld R. Heil B.Nikula#,J.Young,P.Felker P. Flood# bh P. Flood# T. Pirro J. Pierce M. Fairbrother B. Nikula# P. Sph B. Nikula ph A.Sanford+v.o. B. Nikula R. Heil S. Sullivan + v.o. G. Hurley + v.o.
Atlantic Puffi 5/3 5/19 5/29 5/30, 5/31 Black-legged I 5/30 <b>Sabine's Gull</b> 5-29-5/30 Bonaparte's G 5/4 5/5 5/5 5/5 5/30 <b>Little Gull</b> 5/17 5/31 Laughing Gull 5/21 5/29 Iceland Gull 5/31 Lesser Black-t	Manchester Manchester Stellwagen Bank S. of Nantucket Rockport (AP) P'town (RP) Vittiwake P'town (RP) P'town (RP) P'town (RP) P'town (RP) P'town (RP) P'town (RP) Rockport (AP) PI packed Gull	2 al ph 20 m 5 2,5 ph 1 1S 1 1S p 17 100 12 500 1S+1 2 1 ad 500 2 1	t P. Flood# T. Swain# A. L. Waters# ax A. Black, D. Gochfeld R. Heil B.Nikula#,J.Young,P.Felker P. Flood# Oh P. Flood# T. Pirro J. Pierce M. Fairbrother B. Nikula# P. Sph B. Nikula ph A. Sanford + v.o. B. Nikula R. Heil

5/31	PI	1	S. Sullivan#
6/1	Cohasset	1	M. Iliff
Glaucous Gull 5/1	Revere	1	A. Higgins
Least Tern			00
5/8	Ipswich (CB)	8	I. Pepper + v.o.
5/19	Rowley (RMW		R. Heil
5/31	PI	65	S. Sullivan#
Gull-billed Te		1.	dah N Tanan
6/12 Caspian Tern	Eastham	12	ad ph N. Tepper
5/1-5/8	Carver	21	nax Anon.
5/2	Turners Falls		nax M.Fairbrother + v.o.
5/3, 5/15	P'town (RP)		C. Strand, P. Flood#
5/5	Sheffield	1	G. Ward
5/6	Quabbin Pk	1	L. Therrien
5/9	Duxbury B.	2	L. Schibley
5/15	Plymouth B.	1	S. van der Veen
5/23	PI	1	M. Goetschkes#
6/21	Manchester	1	D. Swain#
Black Tern	~~~		
5/5	Gill		L + B. Bieda + v.o.
5/5	BFWMA	1	B. Abbot + v.o.
5/5	Southwick	1	D. Holmes
5/6	Pittsfield	1	J. Pierce, R. Wendell
5/6 5/29	Quabbin Pk P'town (RP)	2	L. Therrien B. Nikula#
5/29-5/31	PI	2	S. Sullivan + v.o.
White-winged		2	5. Sunivan + v.o.
5/30	P'town (RP)	1	S. Arena
Roseate Tern	r town (id )		5.7 Henu
5/29	PI	4	S. Sullivan
5/29	Rockport (AP)	1	R. Heil
Common Tern	/		
5/2	Quincy	2	L. Waters + v.o.
5/5	Pittsfield (Onot		J. Pierce
5/15-5/31	Mystic River		nax v.o.
5/21	` ` /	2300	B. Nikula
5/29	PI	150	S. Sullivan
Arctic Tern	Dealers of (AD)	0	D 11.3
5/29 5/29	Rockport (AP) PI	8	R. Heil
5/29,5/30	P'town (RP) 47		S. Sullivan N. Tepper, S. Arena#
Forster's Tern	1 town (K1) 4	,450	N. Tepper, S. Arena#
6/13	Dennis	1	P. Flood
Royal Tern	Dennis	•	1.11004
6/8	PI	1	T. Wetmore
Sandwich Ter			
6/20	P'town (RP)	11	oh D. Burton#
Black Skimme			
5/15	Edgartown	27	R. Culbert
6/29-6/30	PI	1	S. Babbitt + v.o.
Red-throated L		a) 1	J. Pierce
5/5 5/8	Pittsfield (Onot Revere	a) 1 3	A. Higgins
Pacific Loon	Revere	5	A. Higgins
5/2, 5/30-31			
	P'town	111	h P Flood#
Common Loor	P'town	1,1 p	P. Flood#
Common Loon 5/15	1		
		5 S) 7	h P. Flood# M. Lynch# R. Heil
5/15 5/19 6/4	Quabbin (G8)	S) 7 2	M. Lynch#
5/15 5/19 6/4 6/13	Quabbin (G8) Rowley (RMW Hardwick Lincoln	S) 5 2 2	M. Lynch# R. Heil M. Lynch# J. Forbes
5/15 5/19 6/4 6/13 6/19-6/30	Quabbin (G8) Rowley (RMW Hardwick Lincoln Concord (Walden	S) 5 2 2	M. Lynch# R. Heil M. Lynch#
5/15 5/19 6/4 6/13 6/19-6/30 Wilson's Storm	Quabbin (G8) Rowley (RMW Hardwick Lincoln Concord (Walden n-Petrel	5 S) 7 2 Pd.)1	M. Lynch# R. Heil M. Lynch# J. Forbes B. Olson
5/15 5/19 6/4 6/13 6/19-6/30 Wilson's Storn 5/30	Quabbin (G8) Rowley (RMW Hardwick Lincoln Concord (Walden -Petrel P'town (RP)	5 S) 7 2 Pd.)1	M. Lynch# R. Heil M. Lynch# J. Forbes B. Olson P. Flood#
5/15 5/19 6/4 6/13 6/19-6/30 Wilson's Storn 5/30 6/30	Quabbin (G8) Rowley (RMW Hardwick Lincoln Concord (Walden 1-Petrel P'town (RP) PI	S) 5 2 2	M. Lynch# R. Heil M. Lynch# J. Forbes B. Olson
5/15 5/19 6/4 6/13 6/19-6/30 Wilson's Storm 5/30 6/30 Leach's Storm	Quabbin (G8) Rowley (RMW Hardwick Lincoln Concord (Walden I-Petrel P'town (RP) PI -Petrel	S) 7 2 2 Pd.)1 3 2	M. Lynch# R. Heil M. Lynch# J. Forbes B. Olson P. Flood# S. Babbitt#
5/15 5/19 6/4 6/13 6/19-6/30 Wilson's Storm 5/30 Leach's Storm 5/20	Quabbin (G8) Rowley (RMW Hardwick Lincoln Concord (Walden I-Petrel P'town (RP) PI -Petrel S. of Nantucket	S) 7 2 2 Pd.)1 3 2 2 14	M. Lynch# R. Heil M. Lynch# J. Forbes B. Olson P. Flood# S. Babbitt# A. Black, D. Gochfeld
5/15 5/19 6/4 6/13 6/19-6/30 Wilson's Storm 5/30 6/30 Leach's Storm 5/20 5/29	Quabbin (G8) Rowley (RMW Hardwick Lincoln Concord (Walden n-Petrel P'town (RP) PI -Petrel S. of Nantucket Rockport (AP)	S) 7 2 2 Pd.)1 3 2	M. Lynch# R. Heil M. Lynch# J. Forbes B. Olson P. Flood# S. Babbitt#
5/15 5/19 6/4 6/13 6/19-6/30 Wilson's Storm 5/30 Leach's Storm 5/20 5/29 Northern Fulm	Quabbin (G8) Rowley (RMW Hardwick Lincoln Concord (Walden h-Petrel P'town (RP) PI -Petrel S. of Nantucket Rockport (AP) ar	S) 7 2 2 Pd.)1 3 2 : 14 2	M. Lynch# R. Heil M. Lynch# J. Forbes B. Olson P. Flood# S. Babbitt# A. Black, D. Gochfeld R. Heil
5/15 5/19 6/4 6/13 6/19-6/30 Wilson's Storm 5/30 6/30 Leach's Storm 5/20 5/29	Quabbin (G8) Rowley (RMW Hardwick Lincoln Concord (Walden n-Petrel P'town (RP) PI -Petrel S. of Nantucket Rockport (AP)	S) 7 2 2 Pd.)1 3 2 : 14 2	M. Lynch# R. Heil M. Lynch# J. Forbes B. Olson P. Flood# S. Babbitt# A. Black, D. Gochfeld

Cory's Shearv	vater		6/10	Everett	1 v.o.
6/19	Westport (GN) 1	J. Eckerson	6/11	ONWR	1 E. Mueller
	P'town (RP) 1,1		Little Blue He		I E. Mueller
Sooty Shearw		J. DOCKI, R. E.	5/3	GMNWR	1 M. Hibberd
5/29	Rockport (AP) 4	R. Heil	5/3	PI	1 S. Grinley#
5/29	P'town (RP) 1	10. 11011	5/3	Quincy	1 T. Kutasz
6/16	E. of Chatham 550		5/3	WWMA	1 R. Sirull $\#$ + v.o.
Manx Shearw		1. IIuli	5/6	Weymouth	1 J. Garretson
5/29	Rockport (AP) 1	R. Heil	5/14-5/21	Newbury	1 5. Ganetson 1 v.o.
5/30	P'town (RP) 14		5/21-5/23	BFWMA	1 ad L. Ormand-Clemens + v.o.
Northern Gan		1.1100d#	6/7	Cohasset	1 ad L. Offiand-Cleffields (v.o.
5/3	Stellwagen Bank580	) L. Waters#	6/18	Gloucester	4 S. Hedman
5/29	Rockport (AP) 306		Tricolored He		4 S. Hedman
5/30	P'town (RP) 490		5/2-5/18	W. Harwich	1 E. Lamb, v.o.
Great Cormor		D. INKula#	5/7-5/16	Hingham	1 S. Avery $\#$ + v.o.
5/15		imm G. d'Entremont#	5/12	Eastham	1 $P. Kyle$
6/7	Boston H. 3		Cattle Egret	Lastiani	1 1. Kyle
6/29	P'town 1		5/1	Falmouth	1 ph D. Berard
Double-creste		D. Leooni	5/1-5/6	Eastham	1 ph D. Belald
5/5	Wachusett Res. 11	M. Lynch#	5/12	Mashpee	2 ph M. Keleher
5/7-6/26	Orange 22		5/17	PI	1 D. McComiskey# + v.o.
5/18	Nahant 50		Green Heron	11	I D. McColliskey# + v.o.
6/29	P'town 1500		5/15	Quabbin Res.	2 M. Lynch#
American Bit		D. Leoolii	5/16	MtA	2 N. Hayward
5/2-6/23		maxT. Gessing + v.o.	5/21	Petersham	2 M. Lynch#
5/12-6/24		max J. Pierce $+$ v.o.	6/27	Warren	3 M. Lynch#
5/14	Quaboag IBA 2			d Night-Heron	5 IVI. Lynch#
5/15-6/26		max M. Galdos-Shapiro	5/7	Amherst	1 F. Bowrys, L. Therrien
Least Bittern	Kielillolla (	max w. Galuos-shapito	5/8	WWMA	1 N. Dowling $+$ v.o.
5/8	DWWS 1	M. Iliff	5/18	MNWS	1 N. Downing + v.o. 1 N. Hayward
5/9	Mashpee 1		6/20-6/24	Springfield	1 T. Jampa
5/13-5/16	Amherst 1			ed Night-Heron	i i. Jampa
5/15-6/24		max Z.Adams + v.o.	5/5	Hingham	1 K. Rawdon
5/18	Dedham 1		5/8	Boston (Fens)	1 L. $Bix + v.o.$
5/18-6/16		max v.o.	5/12	Woburn (HP)	1 ad v.o.
5/23-5/28	BFWMA 1		5/18	Medford	1 ad F. Charpentier
6/1-6/30	PI 5 2ad+3		5/21	Watertown	1 ad J. Forbes#
6/11-6/28		maxT.Gilliland+v.o.	5/26	Mattapoisett	1 W. Copps#
6/15-6/28	Deerfield 1		6/22-6/26	Nbpt	5  max  D.  Bates  +  v.o.
Great Blue He		5. Shiftin + v.o.	6/26	Yarmouth	7 N. Villone
6/5	Ware R. IBA22 3ad-	+16yg M. Lynch#	Glossy Ibis	Tarmouti	
6/16	Quaboag IBA 12 6		5/2	Northampton	1 T. Gilliland
Great Egret	Quabbag IDA 120	ivi. Lynch#	5/2	Sheffield	1 K. Schopp $+$ v.o.
thr	PI 28	max v.o.	5/7	Southbridge	3 S. Williams
5/8	Wore. 1		5/10	Newbury	18 N. Hayward
5/19	Rowley (RMWS)22		5/24	Wilmington	7 S. Sullivan
6/12	Everett 1		6/1	GMNWR	10 C. Van Dyke
Snowy Egret		5.101005	White-faced		10 C. Van Dyke
5/14	Agawam 1	J. Zepko	5/3	Ipswich	1 N. Werth
6/1-6/30		max v.o.	5/14-5/20	Newbury	1 ph T. Sackton + v.o.
0/1 0/50	)	······ v.o.	5/11 5/20		- P <sup>A</sup> 1. Suckton + 4.0.

### VULTURES THROUGH DICKCISSEL

The hawk movement this spring was special, with six reports of **Swallow-tailed Kites**, all but one documented by excellent photographs. Several birds were present for multiple days, affording many birders a chance to add this species to their state or life lists. During this period there were seven reports of **Mississippi Kites** compared with just two last year—a reflection of how the range of this species has been expanding in recent years. One individual was photographed at the Arnold Arboretum in Jamaica Plain, a first record for Boston and Suffolk County.

The hawkwatch at Lot 1 at Parker River National Wildlife Refuge, Plum Island, wrapped up the spring migration count on May 13. Nearly 40 percent of hawks were reported on just one day—May 2. It was a banner day for hawkwatchers, who tallied 699 raptors, an all-time spring high for Plum Island. A total of **461** Sharp-shinned Hawks were counted, a record one-day total that exceeded all spring hawk counts since 2006, when the annual spring site was established. Other high counts that day included 169 American Kestrels and 23 Merlins. A late-season Roughlegged Hawk was present on Plum Island May 11–13. There have been only three prior May records for Massachusetts during the last 10 years. The single Snowy Owl present throughout April was last seen on Plum Island on May 11. A Long-eared Owl was found there on May 21.

The first fallout of migrants during this period occurred early on May 2, when the temperature reached into the low 70s. Ruby-crowned Kinglets and Palm and Yellow-rumped warblers were everywhere. An early Lincoln's Sparrow was noted in Boston. During the next 10 days, the temperatures hovered in the mid-50s to low 60s and migrants dribbled into our area. A warm front arrived just in time for the annual Mass Audubon Bird-a-thon when the floodgates opened on Friday May 14. Doug Chickering spent the day on Plum Island and thought it was one of the top five spring days he had experienced on the island. Doug posted to Massbird, "The sheer volume of birds was staggering and overwhelming. Parulas were everywhere." John Nelson agreed. He counted 32 Northern Parulas within just 100 yards of Parking Lot 1 and ended up with 84 by the time he got to Hellcat. Major fallouts were also noted at Nahant Thicket, Marblehead Neck Wildlife Sanctuary, Halibut Point in Rockport, and Franklin Park in Boston. Trevor Lloyd-Evans at Manomet had a big day of banding on May 14 and reported of the season, "The spring total of new bandings was the highest in raw numbers since 1992. A bit like the medium-old days; but not the old-old days of the 1960s and 70s."

Spring migration, unlike fall migration, does not generally send vagrants to our area. Nonetheless, several unusual birds were discovered. A **Golden-crowned Sparrow** was found and photographed at Edgartown, Martha's Vineyard, on May 1, perhaps a wintering bird that was finally located. The **Cave Swallow** that was found on April 18—and the first state record of the Caribbean race—was still present on May 1. A **Western Kingbird**, just the fifth June record for the state, was photographed at Plymouth Airport. The most recent June sighting of this species was last year in Gardner. A **Western Meadowlark** was heard singing in Northampton on May 9. The species has an interesting history in Massachusetts. According to Veit and Petersen (1993), between 1957 and 1974 there were 23 reports of Western Meadowlarks in the state, with most of those coming from the Connecticut River Valley. Since 1974, occurrences have been rare, and since 2000, only three have been reported, the most recent of which was on Cuttyhunk Island on October 24, 2020.

Thirty-four warbler species were reported during the period, including three **Goldenwinged Warblers**, with one cooperative individual enjoyed by many birders at Mount Auburn Cemetery on May 19. **Prothonotary Warblers** were found in Sandwich and Plymouth; **Yellow-throated Warblers** were reported from five locations. Worm-eating Warblers were noted in many areas, with as many as seven at Skinner State Park in Hadley. **Kentucky Warblers** were found in eight localities compared with just two last year. Interestingly, a possible hybrid between a Mourning Warbler and a Common Yellowthroat was photographed and videotaped in Leicester.

Winter finches were reported well into the end of May, with Red Crossbills continuing in good numbers into early June.  $\checkmark$ 

R. Stymeist

### Reference

Veit, R. R., and W. R. Petersen. 1993. Birds of Massachusetts. Lincoln, Massachusetts: Massachusetts Audubon Society.

Black Vulture	Shaffald	8 may I Diaraa + v.a
5/2	Sheffield Nbpt	8 max J. Pierce + v.o. 1 L. Hannigan
5/3	Carver	1   L. Hamingan  2   L. G. + v.o.
5/3	Rochester	2 R. Baum#
5/4	Wrentham	1 V. Zollo
5/9-5/16	Hardwick	3 max L. Therrien
5/11	Medway	<ol> <li>M. Pierre-Loius</li> </ol>
5/14	Woburn (HP)	2 J. Meskill
5/16	Gloucester	1 S. Hedman
5/16	Quincy	<ol> <li>M. Kasprzyk</li> </ol>
5/18-6/12	Bourne	1 M. Harris, v.o.
6/8	Wrentham	1 W. Sweet
Osprey	DI	
5/10	PI Wanna 4.1	4 N. Hayward
6/27 Swellow teile		or+2yg M. Lynch#
Swallow-taile 5/1-5/3	Rochester	1 ph B. Vasa + v.o.
5/6, 5/19	Nantucket	1 H. Young, J. Olney
5/15	Carver	1 ph L.G.
6/1-6/8	Dennis	K. Fiske, v.o.
6/2-6/7	Falmouth area	1 ph K. Fiske, v.o.
6/17-6/18	Foxborough	1 vid Anon.
Northern Harr		1 114 1 1101.
5/22	Pepperell	1 S. Wilson + v.o.
Sharp-shinned		
5/1-5/13	PI	516 Hawkcount (R. Secatore#)
5/2	N. Truro	68 D. Burton
Cooper's Haw	k	
5/1-5/13	PI	24 Hawkcount (R. Secatore#)
Northern Gosł		
5/1	October Mounta	
5/12	Williamsburg	1 A. Hulsey $\#$ + v.o.
5/15	New Salem	1 ad M. Lynch#
Bald Eagle	Cl	1 W/ Courset
5/17 5/23	Sharon	1 W. Sweet 1 N. Havward
5/30	PI Outboag IBA	
Mississippi K	Quaboag IBA	2 yg M. Lynch#
5/26	South Hadley	1 ph T. Gilliland
5/26	Truro	1 ph N. Tepper#
6/5	Falmouth	1 ph M. Kasprzyk#
6/5	Plymouth Airpor	
6/7	Fairhaven	1 ph C. Longworth#
6/7	Raynham	1 A. Kniedel
6/19	Boston (AA)	1 ph R. George
Red-shouldere		
5/2	Easton	4 K. Ryan
5/21	Petersham	3 M. Lynch#
6/20		d+1imm M. Lynch#
Broad-winged		<b>2 3 4 5</b>
5/2-5/26	Boston (FPk)	2 S. Jones + v.o.
5/3-5/19	Pelham	10 max J. Rose
5/19 6/13	Ware R. IBA Falmouth	5 M. Lynch# 3 G. d'Entremont#
6/19	Mount Greylock	
Rough-legged		5 IIIIII BBC(0.d Endemond)
5/11-5/13	PI	1 S. Sullivan + v.o.
Snowy Owl	11	i B. Bullivan V.O.
5/1-5/11	PI	1 v.o.
Barred Owl		
5/2-6/23	Boston (FPk)	2 L. Markley + v.o.
5/8	W. Barnstable	4 P. Črosson
5/16	Boston (AW)	2 R. Schain
Long-eared Or	wl	
5/21	PI	1 M. Kaufman
Short-eared O		
5/2	Rockport (HPt)	1 S. Sullivan#
Northern Saw-		1
5/15	Sharon	1 W. Sweet
6/9 Daltad Kinafa	MSSF	1 BBC (G. d'Entremont)
Belted Kingfis		3 M. Lvnch#
6/25	Petersham	3 M. Lynch#

Rad-haadad	Woodpecker		
5/12	Nantucket	1	ad ph D. Sutherland
5/13-5/14			ad D. Williams + v.o.
5/15	P'town		ad C. Walz#
5/21	Falmouth		ad ph J. Saitz
6/30	Uxbridge		ad ph D. Gauthier
Yellow-bellie			
5/15	Quabbin (G8)	6	M. Lynch#
5/21	Petersham	13	M. Lynch#
6/20	October Mountain	11	BBC (G. d'Entremont)
Northern Flic	ker		
5/5	Wachusett Res.	16	M. Lynch#
5/7	Hardwick	11	M. Lynch#
Pileated Woo			
5/12	Ware R. IBA	. 3	M. Lynch#
6/20	October Mounta		BBC (G. d'Entremont)
6/23	Quabbin (G8)	2	M. Lynch#
American Ke	PI	222	
5/1-5/13 5/2	Pi P'town	332 14	Hawkcount (R. Secatore#) S. Williams#
Merlin	1 town	14	5. williams#
5/1-5/13	PI	80	Hawkcount (R. Secatore#)
5/2	P'town	7	S. Williams#
Monk Parake		'	5. Williams/
5/2-6/27	Winthrop	2	J. Francis + v.o.
Great Crested		-	0.1141010 - 1.0.
5/15	MtA	3	N. Hayward
5/19	Rowley (RMWS		R. Heil
5/23	Ware R. IBA	15	M. Lynch#
6/12	PI	6	J. Offermann
Tropical Kin	gbird		
5/15	<sup>°</sup> P'town	1	ph au P. Trimble#
Western Kin			
6/22-6/23	Plymouth Airpo	rt 1	ph V.Burdette + v.o.
Eastern King	bird		
5/15	P'town	38	S. Williams#
5/20	Warren	17	M. Lynch#
Olive-sided F		1	W/ II
5/5	Hardwick	1	W. Howes
5/9 5/13	Pepperell Amherst	1	S. Miller# M. McKitrick#
5/13	Scituate	1	L. Norton
5/15	Longmeadow	1	T. Gilliland
5/15	Washington	1	M. Watson
5/26-6/1	Boston (McW)	1	P. Peterson $+$ v.o.
5/27-6/1	Boston (FPk)	1	J. Hanson + v.o.
5/28-5/30	Sharon	1	V. Zollo
6/6, 6/17	PI	1,1	T. Wetmore#, A. Sanford#
Eastern Wood	l-Pewee		· · · · · · · · · · · · · · · · · · ·
5/19	Ware R. IBA	8	M. Lynch#
6/5	Hadley (Skinner SP)	) 10	BBC (M. Burns)
6/10	Petersham	18	M. Lynch#
Yellow-bellie			
5/26	Boston (McW)	1	S. Jones $+$ v.o.
5/27, 6/3	Boston (FPk)	1,1	J. Hanson, J. Young
6/1	Jamaica Plain	1	J. Hanson
6/2	W. Roxbury	1	C. Hartshorn
6/17	Woburn (HP)	1	L. Kilpatrick
Acadian Flyc			
5/15-6/26 5/19-6/28	Belchertown Granville		max au M. McKitrick + v.o. max D. Holmes
5/22	Mashpee		au P. Johnson-Staub#
5/25, 6/4	MNWS		au A.Sanford, R. Doherty
5/26	Monterey		au P. Banducci
6/1	MBO	3	
6/6	Falmouth		au D. Burton#
6/16	Brookfield	1	J. Ritterson
6/16-6/23	Quincy	2	au E. Dalton + v.o.
Alder Flycate			
5/10-5/16	PI	1,1	A. Steenstrup, G. Dupont#
5/20	Medford	2	M. Rines
5/26	New Braintree	19	M. Lynch#
6/1	MBO	2	b T. Lloyd-Evans#

Alder Elvesteh			
	er (continued)	2	
6/6-6/30	GMNWR		x C. Cook + v.o.
6/20	October Mountai	in 4 E	BBC (G. d'Entremont)
Willow Flycate		1	E. Laham
5/12	Natick	1	E. Lebow
6/1	MBO Owebeen IDA	4 b	T. Lloyd-Evans#
6/16	Quaboag IBA	3	M. Lynch#
6/20	Lenox	4 E	BBC (G. d'Entremont)
Least Flycatch		2	
5/5-6/1	MNWS	3 ma	
5/15	New Salem	14	M. Lynch#
6/10	Petersham	24	M. Lynch#
White-eyed Vi		1	E D I
5/1	Longmeadow	1	F. Bowrys + v.o.
5/1	Medford	1	R. LaFointaine + v.o.
5/2	Rockport (HPt)	1	S. Sullivan#
5/6	Monomoy NWR		P. Trimble
5/9, 5/19	PI		Deese#, T. O'Malley#
5/13	MNWS	1	J. Smith
5/15	Quabbin (G33)		Griesemer + v.o.
5/16	E. Boston (BI)	1	B. Burke
5/16-5/17	Boston (FPk)	1	D. Forsyth $+$ v.o.
5/19	MBO	2 b	T. Lloyd-Evans#
5/19	Southampton	1	A. Hulsey $+$ v.o.
5/22	S. Dart. (APd)	1	G. d'Entremont#
5/27	Northampton	1	L. Therrien
6/13	Middleton	1	J. Hannafee
Yellow-throate			
5/9	MtA	1	A. Lear
5/13	Boston (McW)		McMahon + v.o.
5/14	Hadley (Skinner SP)		G. d'Entremont#
5/21	Petersham	13	M. Lynch#
5/31	PI	1	S. Sullivan#
6/16	Quaboag IBA	16	M. Lynch#
Blue-headed V			
5/1	Petersham	20	M. Lynch#
5/1-5/19	Boston (CHRes.)	) 6 max	N. Hayward + v.o.
5/19	Rowley (RMWS		R. Heil
6/20	Erving	13	M. Lynch#
6/20	October Mountai	in9 E	BBC (G. d'Entremont)
Philadelphia V	ireo		
5/8	Longmeadow	1	D. Holmes
5/9	GMNWR	1	C. VanDyke
5/19	Nahant	1	M. Padulo
5/20-22, 5/28	PI	1,1	J. Dillon + v.o.
5/22-5/26	MNWS	1	J. Smith
Warbling Vired	)		v. 0111111
5/3			
	Boston (FPk)	6	G. d'Entremont
5/25	Boston (FPk) W. Brookfield	6 29	
			G. d'Entremont
5/25	W. Brookfield Spencer	29	G. d'Entremont M. Lynch#
5/25 6/2	W. Brookfield Spencer o	29	G. d'Entremont M. Lynch#
5/25 6/2 Red-eyed Vire	W. Brookfield Spencer o	29 21 198	G. d'Entremont M. Lynch# M. Lynch#
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5/25 6/2 Red-eyed Vire 5/21 6/5 6/19 6/20 Blue Jay 5/14 Fish Crow 5/14 5/30 Common Rave	W. Brookfield Spencer Petersham Hadley (Skinner SP) Mount Greylock October Mountai P'town MtA Quaboag IBA	29 21 198 21 82 E in31 E 230 mi 3 4	G. d'Entremont M. Lynch# M. Lynch# BBC (M. Burns) BBC (G. d'Entremont) BBC (G. d'Entremont) gr B. Nikula N. Hayward M. Lynch#
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5/21 6/25	** 11		
5/31-6/27 6/1	Hadley Shelburne Falls	100 max 30 n	A.Piccolo# + v.o. T. Raymo
6/1-6/30	PI	12 max	
Tree Swallow		12 1114	
5/5	Wachusett Res.		M. Lynch#
5/10		140	M. Lynch#
	gh-winged Swallo		Denter Millerer diese
5/1-6/5 5/5	Boston (CHRes.) Wachusett Res.	5	Denton, N.Hayward+v.o. M. Lynch#
6/24	Hardwick	4	M. Lynch#
Purple Martin			
5/1-5/31	PI	30 max	
5/5	Wachusett Res.	1	M. Lynch#
5/23 5/29	WBWS GMNWR	20 1	G. d'Entremont J. Forbes
6/11-6/30	Hadley (Fort R.)	1 3 may n	F Rubenstein + v o
6/21	Mashpee	127	M. Keleher
Barn Swallow			
thr	Hadley (Fort R.)		
5/5	Wachusett Res.	107	M. Lynch#
5/30 Cliff Swallow	Quaboag IBA	115	M. Lynch#
thr	Rowe	90 max	n C. Hyytinen + v.o.
5/1	Dedham	1	M. Iliff
5/2	Norfolk	1	J. Bock + v.o.
5/5	Wachusett Res.	2	M. Lynch#
5/14-6/26	Cheshire		n G. Hurley + v.o.
5/31 6/20-6/23	Ipswich (CB) Great Barrington	9	I. Pepper n G. Ward + v.o.
	v (Caribbean)	50 max i	$0. \text{ ward } \pm \text{ v.o.}$
5/1	W. Newbury	1 ph	A. Sanford# + v.o.
Red-breasted	Nuthatch		
thr	Montague		J. Smith $+$ v.o.
5/15	Boston (FPk)	4	S. Jones $+$ v.o.
5/21 6/20	Petersham October Mounta	26 in 4 вр	M. Lynch# 3C (G. d'Entremont)
Brown Creepe		III 7 DI	SC (G. a Entremont)
5/1	Petersham	9	M. Lynch#
5/1 5/1	Wompatuck SP	6 BE	M. Lynch# BC (G. d'Entremont)
5/1 5/1 6/19	Petersham Wompatuck SP Mount Greylock	6 BE	
5/1 5/1 6/19 House Wren	Wompatuck SP Mount Greylock	6 ве 4 ве	BC (G. d'Entremont) BC (G. d'Entremont)
5/1 5/1 6/19 House Wren 5/7	Wompatuck SP Mount Greylock Hardwick	6 BE 4 BE 30	BC (G. d'Entremont) BC (G. d'Entremont) M. Lynch#
5/1 5/1 6/19 House Wren 5/7 5/9	Wompatuck SP Mount Greylock	6 ве 4 ве	BC (G. d'Entremont) BC (G. d'Entremont)
5/1 5/1 6/19 House Wren 5/7	Wompatuck SP Mount Greylock Hardwick	6 BE 4 BE 30	BC (G. d'Entremont) BC (G. d'Entremont) M. Lynch#
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/1	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP	6 BE 4 BE 30 29 3 3 BE	<ul> <li>BC (G. d'Entremont)</li> <li>BC (G. d'Entremont)</li> <li>M. Lynch#</li> <li>M. Lynch#</li> <li>M. Lynch#</li> <li>BC (G. d'Entremont)</li> </ul>
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/1 5/9	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle	6 BE 4 BE 30 29 3 3 BE 2 BE	C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# C (G. d'Entremont) J. Forbes
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/1 5/9 5/12	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA	6 BE 4 BE 30 29 3 3 BE 2 3 BE	<ul> <li>BC (G. d'Entremont)</li> <li>BC (G. d'Entremont)</li> <li>M. Lynch#</li> <li>M. Lynch#</li> <li>M. Lynch#</li> <li>BC (G. d'Entremont)</li> <li>J. Forbes</li> <li>M. Lynch#</li> </ul>
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/1 5/9 5/12 5/12 5/15	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8)	6 BE 4 BE 30 29 3 3 BE 2 3 2	C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# C (G. d'Entremont) J. Forbes M. Lynch# M. Lynch#
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/1 5/9 5/12	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA	6 BE 4 BE 30 29 3 3 BE 2 3 2 3 BE 3 BE	C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# SC (G. d'Entremont) J. Forbes M. Lynch# M. Lynch# BC (G. d'Entremont)
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/1 5/9 5/12 5/15 6/19	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock	6 BE 4 BE 30 29 3 3 BE 2 3 2 3 BE 3 BE	C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# C (G. d'Entremont) J. Forbes M. Lynch# M. Lynch#
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/1 5/9 5/12 5/15 6/19 6/20 Marsh Wren 5/1-6/20	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta Lenox	6 BF 4 BF 30 29 3 BF 2 3 3 BF 3 BF in 4 BF 6 max	C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# C (G. d'Entremont) J. Forbes M. Lynch# M. Lynch# C (G. d'Entremont) C (G. d'Entremont) Z. Adams + v.o.
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/12 5/15 6/19 6/20 Marsh Wren 5/1-6/20 5/5-6/30	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta Lenox Richmond	6 BF 4 BF 30 29 3 BF 2 3 BF 3 BF 16 max	C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# C (G. d'Entremont) J. Forbes M. Lynch# C (G. d'Entremont) C (G. d'Entremont) Z. Adams + v.o. G. Ward + v.o.
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/12 5/12 5/12 5/12 5/15 6/19 6/20 Marsh Wren 5/1-6/20 5/5-6/30 5/14	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta Lenox Richmond Quaboag IBA	6 BF 4 BF 30 29 3 BF 2 3 BF in 4 BF 6 max 3	C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# C (G. d'Entremont) J. Forbes M. Lynch# M. Lynch# C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont)
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/12 5/12 5/12 5/12 5/12 5/12 5/12	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta Lenox Richmond Quaboag IBA Hatfield	6 BF 4 BF 30 29 3 BF 2 3 BF 16 max 3 max	C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# A. Lynch# C (G. d'Entremont) J. Forbes M. Lynch# M. Lynch# C (G. d'Entremont) Z. Adams + v.o. G. Ward + v.o. M. Lynch# A. Hulsey + v.o.
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/12 5/12 5/12 5/12 5/15 6/19 6/20 Marsh Wren 5/1-6/20 5/5-6/30 5/14	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta Lenox Richmond Quaboag IBA	6 BF 4 BF 30 29 3 BF 2 3 BF in 4 BF 6 max 16 max 3 max 30 max	C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# AL Lynch# C (G. d'Entremont) J. Forbes M. Lynch# M. Lynch# C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) Z. Adams + v.o. G. Ward + v.o. M. Lynch# A. Hulsey + v.o. v.o.
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/12 5/12 5/12 5/12 5/12 5/12 5/12	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta Lenox Richmond Quaboag IBA Hatfield PI Deerfield GMNWR	6 BF 4 BF 30 29 3 BF 2 3 BF 2 3 BF 2 3 BF 6 max 16 max 3 max 30 max 3 max	C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# C (G. d'Entremont) J. Forbes M. Lynch# C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) Z. Adams + v.o. G. Ward + v.o. M. Lynch# A. Hulsey + v.o. P. Gagarin + v.o.
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/12 5/12 5/12 5/12 5/12 5/12 5/12	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta: Lenox Richmond Quaboag IBA Hatfield PI Deerfield GMNWR	6 BF 4 BF 30 29 3 BF 2 3 BF 16 max 3 max 3 max 23	C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# AL Lynch# C (G. d'Entremont) J. Forbes M. Lynch# AC (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) Z. Adams + v.o. G. Ward + v.o. M. Lynch# A. Hulsey + v.o. V. O. P. Gagarin + v.o. A. Bragg#
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/1 5/9 5/12 5/15 6/19 6/20 Marsh Wren 5/1-6/20 5/5-6/30 5/14 5/21-thr 6/1-6/30 6/30 Carolina Wren 5/9	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta Lenox Richmond Quaboag IBA Hatfield PI Deerfield GMNWR	6 BF 4 BF 30 29 3 BF 2 3 BF 2 3 BF 6 max 16 max 3 max 3 max 3 max 3 max 3 max 3 3 max 3 4 max	C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# SC (G. d'Entremont) J. Forbes M. Lynch# M. Lynch# M. Lynch# C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) Z. Adams + v.o. G. Ward + v.o. M. Lynchh# A. Hulsey + v.o. v.o. P. Gagarin + v.o. A. Bragg# M. Lynch#
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/12 5/15 6/19 6/20 Marsh Wren 5/1-6/20 5/5-6/30 5/14 5/21-thr 6/3-6/30 6/3-6/30 Carolina Wrer 5/9 6/6	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta Lenox Richmond Quaboag IBA Hatfield PI Deerfield GMNWR Blackstone Berkley	6 BF 4 BF 30 29 3 BF 2 3 BF 16 max 3 max 3 max 23	C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# AL Lynch# C (G. d'Entremont) J. Forbes M. Lynch# AC (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) Z. Adams + v.o. G. Ward + v.o. M. Lynch# A. Hulsey + v.o. V.O. P. Gagarin + v.o. A. Bragg#
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/1 5/9 5/12 5/15 6/19 6/20 Marsh Wren 5/1-6/20 5/5-6/30 5/14 5/21-thr 6/1-6/30 6/30 Carolina Wren 5/9	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta Lenox Richmond Quaboag IBA Hatfield PI Deerfield GMNWR Blackstone Berkley	6 BF 4 BF 30 29 3 BF 2 3 BF 2 3 BF 6 max 16 max 3 max 3 max 3 max 3 max 3 max 3 3 max 3 4 max	C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# M. Lynch# C (G. d'Entremont) J. Forbes M. Lynch# C (G. d'Entremont) C (G. d'Entremont) Z. Adams + v.o. G. Ward + v.o. M. Lynch# A. Hulsey + v.o. P. Gagarin + v.o. A. Bragg# M. Lynch# G. d'Entremont
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/12 5/12 5/12 5/12 5/12 5/12 5/12	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta Lenox Richmond Quaboag IBA Hatfield PI Deerfield GMNWR Blackstone Berkley ed Kinglet	6 BF 4 BF 30 29 3 BF 2 3 BF 2 3 BF 6 max 3 max 3 max 3 max 3 max 3 max 3 4 9 1	C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# C (G. d'Entremont) J. Forbes M. Lynch# C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) Z. Adams + v.o. G. Ward + v.o. M. Lynch# A. Hulsey + v.o. P. Gagarin + v.o. A. Bragg# M. Lynch# G. d'Entremont M. Lynch# J. Pierce + v.o.
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/12 5/12 5/12 5/12 5/12 5/12 5/12	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta: Lenox Richmond Quaboag IBA Hatfield PI Deerfield GMNWR Blackstone Berkley ed Kinglet New Salem Mount Greylock Edgartown	6 BF 4 BF 30 29 3 BF 2 3 BF 2 3 BF 6 max 3 max 3 max 3 max 3 max 3 max 3 4 9 1	C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# A. Lynch# C (G. d'Entremont) J. Forbes M. Lynch# M. Lynch# C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) Z. Adams + v.o. G. Ward + v.o. M. Lynch# A. Hulsey + v.o. V.O. P. Gagarin + v.o. A. Bragg# M. Lynch# G. d'Entremont M. Lynch#
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/12 5/12 5/12 5/12 5/12 5/12 5/12	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta: Lenox Richmond Quaboag IBA Hatfield PI Deerfield GMNWR Blackstone Berkley ed Kinglet	6 BF 4 BF 30 29 3 BF 2 3 BF 6 max 16 max 3 max 30 max 3 max 34 9 1 7 max 1	C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# C (G. d'Entremont) J. Forbes M. Lynch# C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) Z. Adams + v.o. G. Ward + v.o. M. Lynch# A. Hulsey + v.o. V.o. P. Gagarin + v.o. A. Bragg# M. Lynch# G. d'Entremont M. Lynch# J. Pierce + v.o. S. Fea#
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/12 5/12 5/12 5/12 5/15 6/19 6/20 Marsh Wren 5/1-6/20 5/5-6/30 6/3-6/30 6/3-6/30 6/3-6/30 6/6 Golden-crown 5/15 6/13 Ruby-crowned 5/1	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta Lenox Richmond Quaboag IBA Hatfield PI Deerfield GMNWR Blackstone Berkley ed Kinglet New Salem Mount Greylock Edgartown I Kinglet	6 BF 4 BF 30 29 3 BF 2 3 BF 2 3 BF 2 3 BF 6 max 3 max 1 max 2 max 1 max 1 max 2 max 1 max 1 max 2 max 1 max 1 max 2 max 1 max 1 max 2 max 1 max	C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# C (G. d'Entremont) J. Forbes M. Lynch# M. Lynch# C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) Z. Adams + v.o. G. Ward + v.o. M. Lynch# A. Hulsey + v.o. v.o. P. Gagarin + v.o. A. Bragg# M. Lynch# G. d'Entremont M. Lynch# J. Pierce + v.o. S. Fea# M. Lynch#
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/12 5/12 5/12 5/12 5/12 5/12 5/12	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta: Lenox Richmond Quaboag IBA Hatfield PI Deerfield GMNWR Blackstone Berkley ed Kinglet New Salem Mount Greylock Edgartown t Kinglet Petersham Boston (FPk)	6 BF 4 BF 30 29 3 BF 2 3 BF 2 3 BF 3 C 3 C 4 DF 4	C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# C (G. d'Entremont) J. Forbes M. Lynch# C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) Z. Adams + v.o. G. Ward + v.o. M. Lynch# A. Hulsey + v.o. A. Bragg# M. Lynch# G. d'Entremont M. Lynch# G. J. Pierce + v.o. S. Fea# M. Lynch# S. Jones
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/12 5/12 5/12 5/12 5/15 6/19 6/20 Marsh Wren 5/1-6/20 5/5-6/30 6/3-6/30 6/3-6/30 6/3-6/30 6/6 Golden-crown 5/15 6/13 Ruby-crowned 5/1	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta Lenox Richmond Quaboag IBA Hatfield PI Deerfield GMNWR Blackstone Berkley ed Kinglet New Salem Mount Greylock Edgartown I Kinglet	6 BF 4 BF 30 29 3 BF 2 3 BF 2 3 BF 2 3 BF 6 max 3 max 1 max 2 max 1 max 1 max 2 max 1 max 1 max 2 max 1 max 1 max 2 max 1 max 1 max 2 max 1 max	C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# C (G. d'Entremont) J. Forbes M. Lynch# M. Lynch# C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) Z. Adams + v.o. G. Ward + v.o. M. Lynch# A. Hulsey + v.o. v.o. P. Gagarin + v.o. A. Bragg# M. Lynch# G. d'Entremont M. Lynch# J. Pierce + v.o. S. Fea# M. Lynch#
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/1 5/1 5/12 5/15 6/19 6/20 Marsh Wren 5/1-6/20 5/5-6/30 6/3-6/20 6/3-6/30 6/3-6/30 6/3-6/30 6/3-6/30 Carolina Wren 5/9 6/6 Golden-crown 5/15 6/3-6/24 6/13 Ruby-crowned 5/1 5/3 Veery 5/11	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta Lenox Richmond Quaboag IBA Hatfield PI Deerfield GMNWR Blackstone Berkley ed Kinglet New Salem Mount Greylock Edgartown Kinglet Petersham Boston (FPk)	6 BF 4 BF 30 29 3 BF 2 3 BF 2 3 BF 3 BF 6 max 3 max 3 max 3 max 3 max 3 max 3 max 3 max 3 max 1 7 max 20 17 14 4	C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# C (G. d'Entremont) J. Forbes M. Lynch# C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) Z. Adams + v.o. G. Ward + v.o. M. Lynch# A. Hulsey + v.o. v.o. P. Gagarin + v.o. A. Bragg# M. Lynch# G. d'Entremont M. Lynch# J. Pierce + v.o. S. Fea# M. Lynch# S. Jones C. Strand
5/1 5/1 6/19 House Wren 5/7 5/9 Winter Wren 5/1 5/12 5/12 5/12 5/12 5/12 5/12 5/12	Wompatuck SP Mount Greylock Hardwick Blackstone Petersham Wompatuck SP Carlisle Ware R. IBA Quabbin (G8) Mount Greylock October Mounta: Lenox Richmond Quaboag IBA Hatfield PI Deerfield GMNWR Blackstone Berkley ed Kinglet New Salem Mount Greylock Edgartown Kinglet Petersham Boston (FPk) E. Boston	6 BF 4 BF 30 29 3 BF 2 3 BF 3 BF 6 max 3 max 1 m	C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) M. Lynch# M. Lynch# C (G. d'Entremont) J. Forbes M. Lynch# C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) C (G. d'Entremont) Z. Adams + v.o. G. Ward + v.o. M. Lynch# A. Hulsey + v.o. V.O. P. Gagarin + v.o. A. Bragg# M. Lynch# G. d'Entremont M. Lynch# J. Pierce + v.o. S. Fea# M. Lynch# S. Jones C. Strand

Varme (a antine	(h		
Veery (continu 6/4	Hardwick	67	M. Lynch#
6/19	Mount Greylock		BBC (G. d'Entremont)
Gray-cheeked			
5/22 5/26	MtA Amherst	1 1	J. Barcus
5/31, 6/1	Marlborough	1,1 n	L. Therrien fc T. Spahr
6/1	Dedham	3 n	
6/1	Cambridge	2 n	
6/2 Cray abaalaad	Boston (McW)	1	D. Bates
5/11	Bicknell's Thrush Boston (AA)		M. Sheridan + v.o.
5/17	Boston (FPk)	i	R. Mayer
Swainson's Th			
5/6-5/31 5/13-5/31	MtA PI	4 n 6 n	
5/17-6/19	Mount Greylock		ax K. Hanson# + v.o.
5/19	Ware R. IBA	8	M. Lynch#
5/24-5/27	Boston (FPk)	7	J. Young + v.o.
6/1	MBO	10 b	T. Lloyd-Evans#
Hermit Thrush 5/19	Ware R. IBA	29	M. Lynch#
6/19	Mount Greylock		BBC (G. d'Entremont)
6/20	October Mounta		BBC (G. d'Entremont)
Wood Thrush	** 1 * 1	10	
5/7 5/21	Hardwick Petersham	18 14	M. Lynch# M. Lynch#
6/5	Hadley	6	G. d'Entremont
Gray Catbird	munoj	Ũ	o. u Entremont
5/3-6/14		398 b	
5/14 5/20	PI Warren	44 142	G. d'Entremont#
5/23	Lexington (DM)		M. Lynch# BBC (C.Cook)
Brown Thrash		50	BBC (0.0000)
5/7	Hardwick	1	M. Lynch#
5/9	Blackstone	1	M. Lynch#
		3	
5/17 Cedar Waxwir	PI	3	N. Hayward
Cedar Waxwir 5/5	Wachusett Res.	3 13	N. Hayward M. Lynch#
Cedar Waxwir 5/5 American Pipi	ng Wachusett Res. It	13	M. Lynch#
Cedar Waxwir 5/5 American Pipi 5/2	wachusett Res. t P'town	13 72	M. Lynch#
Cedar Waxwir 5/5 American Pipi	wachusett Res. t P'town Middleton	13 72	M. Lynch#
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/9	Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester	13 72	M. Lynch#
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/9 5/9 5/9	Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS	13 72 3 2 p	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/9 5/9 5/9 5/19 5/20-5/29	Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton	13 72 3 2 p	M. Lynch#
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/9 5/9 5/9 5/20-5/29 Evening Grosl	Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton	13 72 3 2 p	M. Lynch# S. Williams# J. Keeley J. Smith S. Hedman# R. Heil ax J. Jorgensen# + v.o.
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/19 5/20-5/29 Evening Grost 5/1 5/2	ng Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak	$ \begin{array}{c} 13 \\ 72 \\ 3 \\ 2 \\ 9 \\ 4 \\ 1 \\ 1 \end{array} $	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/19 5/20-5/29 Evening Grost 5/1 5/2 5/2	y Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport	$ \begin{array}{c} 13 \\ 72 \\ 3 \\ 2 \\ p \\ 1 \\ 1 \\ 1 \end{array} $	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan#
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/9 5/9 5/9 5/9 5/9 5/2 5/2 5/2 5/2 5/3	y Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport South Hadley	$ \begin{array}{c} 13 \\ 72 \\ 3 \\ 2 \\ p \\ 1 \\ 1 \\ 2 \end{array} $	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan# S. Derosier
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/9 5/19 5/20-5/29 Evening Grost 5/1 5/2 5/2 5/2 5/2 5/3 5/5-5/7	y Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport South Hadley Ashland	$ \begin{array}{c} 13 \\ 72 \\ 3 \\ 2 \\ p \\ 1 \\ 1 \\ 2 \\ 1 \end{array} $	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan# S. Derosier N. Jacob
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/9 5/20-5/29 Evening Grost 5/1 5/2 5/2 5/2 5/3 5/5-5/7 5/5-5/7 5/8	y Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport South Hadley	$ \begin{array}{c} 13 \\ 72 \\ 3 \\ 2 \\ p \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{array} $	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan# S. Derosier N. Jacob M. Doe D. Tobias + v.o.
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/19 5/20-5/29 Evening Grost 5/1 5/2 5/2 5/2 5/3 5/5-5/7 5/8 5/8, 5/15	y Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport South Hadley Ashland Chatham MtA Ipswich	13 72 3 2 p 2 4 m 1 1 2 1 1 8,3 N	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan# S. Derosier N. Jacob M. Doe D. Tobias + v.o. J. Smith, W. Tatro#
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/9 5/19 5/20-5/29 Evening Grost 5/1 5/2 5/2 5/2 5/3 5/5-5/7 5/5-5/7 5/8 5/8, 5/15 5/11, 5/16	y Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport South Hadley Ashland Chatham MtA Ipswich P'town	13 72 3 2 p 2 4 m 1 1 2 1 1 2 1 1 8,3 N 1,3	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan# S. Derosier N. Jacob M. Doe D. Tobias + v.o. S. Smith, W. Tatro# B. Nikula, K. Griffis#
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Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/19 5/20-5/29 Evening Grosl 5/1 5/2 5/2 5/2 5/3 5/5-5/7 5/8, 5/15 5/8, 5/15 5/12 5/12	y Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport South Hadley Ashland Chatham MtA Ipswich P'town	13 72 3 2 p 2 4 m 1 1 2 1 1 2 1 1 8,3 N 1,3	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan# S. Derosier N. Jacob M. Doe D. Tobias + v.o. N. Smith, W. Tatro# B. Nikula, K. Griffis# D. McComiskey V. Zollo + v.o.
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/19 5/20-5/29 Evening Grosl 5/1 5/2 5/2 5/2 5/3 5/5-5/7 5/8 5/11, 5/16 5/12 5/12 5/12 5/26 Purple Finch	Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport South Hadley Ashland Chatham MtA Ipswich P'town Gloucester Sharon Chatham	13 72 3 2 p 4 m 1 1 2 1 1 8,3 N 1,3 1 1	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan# S. Derosier N. Jacob M. Doe D. Tobias + v.o. J. Smith, W. Tatro# B. Nikula, K. Griffis# D. McComiskey V. Zollo + v.o. S. Finnegan#
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/19 5/20-5/29 Evening Grost 5/1 5/2 5/2 5/3 5/5-5/7 5/8 5/8, 5/15 5/11, 5/16 5/12 5/26 Purple Finch 5/2	y Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport South Hadley Ashland Chatham MtA Ipswich P'town Gloucester Sharon Chatham P'town	13 72 3 2 p ) 2 4 m 1 1 1 2 1 1 1 8,3 N 1,3 1 1 1 8,2	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan# S. Derosier N. Jacob M. Doe D. Tobias + v.o. J. Smith, W. Tatro# B. Nikula, K. Griffis# D. McComiskey V. Zollo + v.o. S. Finnegan# S. Williams#
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/19 5/20-5/29 Evening Grost 5/1 5/2 5/2 5/2 5/3 5/5-5/7 5/8 5/8, 5/15 5/11, 5/16 5/12 5/26 Purple Finch 5/2 5/3	y Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport South Hadley Ashland Chatham MtA Ipswich P'town Gloucester Sharon Chatham P'town W. Roxbury	13 72 3 2 p ) 2 4 m 1 1 1 2 1 1 1 8,3 N 1,3 1 1 1 8,2 9	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan# S. Derosier N. Jacob M. Doe D. Tobias + v.o. V. Smith, W. Tatro# B. Nikula, K. Griffis# D. McComiskey V. Zollo + v.o. S. Finnegan# S. Williams# D. Forsyth + v.o.
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/19 5/20-5/29 Evening Grost 5/1 5/2 5/2 5/2 5/3 5/5-5/7 5/5-5/7 5/8 5/8, 5/15 5/12 5/12 5/12 5/12 5/12 5/26 Purple Finch 5/2 5/3 6/1-6/30	Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport South Hadley Ashland Chatham MtA Ipswich P'town Gloucester Sharon Chatham P'town W. Roxbury PI	13 72 3 2 p ) 2 4 m 1 1 2 1 1 1 8,3 N 1 1 1 8,3 N 1 1 1 8,3 N 1 1 1 8,3 N 1 1 1 8,3 N 1 1 1 1 8,3 N 1 9 6 m 1 9 6 m 1 9	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan# S. Derosier N. Jacob M. Doe D. Tobias + v.o. V. Smith, W. Tatro# B. Nikula, K. Griffis# D. McComiskey V. Zollo + v.o. S. Finnegan# S. Williams# D. Forsyth + v.o. nax v.o.
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/19 5/20-5/29 Evening Grost 5/1 5/2 5/2 5/3 5/5-5/7 5/8 5/8, 5/15 5/12 5/12 5/26 Purple Finch 5/2 5/3 6/1-6/30 6/19 6/20	y Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport South Hadley Ashland Chatham MtA Ipswich P'town Gloucester Sharon Chatham P'town W. Roxbury	13 72 3 2 2 4 m 1 1 2 1 1 2 1 1 2 1 1 8,3 N 1,3 1 1 1 8,2 9 6 n 4	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan# S. Derosier N. Jacob M. Doe D. Tobias + v.o. V. Smith, W. Tatro# B. Nikula, K. Griffis# D. McComiskey V. Zollo + v.o. S. Finnegan# S. Williams# D. Forsyth + v.o.
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/19 5/20-5/29 Evening Grost 5/1 5/2 5/3 5/5-5/7 5/5-5/7 5/8 5/8, 5/15 5/11, 5/16 5/12 5/2 5/2 5/2 5/2 5/3 6/1-6/30 6/19 6/20 Red Crossbill	Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport South Hadley Ashland Chatham MtA Ipswich P'town Gloucester Sharon Chatham P'town W. Roxbury PI Mount Greylock October Mounta	13 72 3 2 p 2 4 m 1 1 1 2 1 1 1 8,3 N 1,3 1 1 1 8,3 N 1,3 1 1 1 8,3 N 1,3 5	M. Lynch# S. Williams# J. Keeley J. Smith S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan# S. Derosier N. Jacob M. Doe D. Tobias + v.o. J. Smith, W. Tatro# B. Nikula, K. Griffis# D. McComiskey V. Zollo + v.o. S. Finnegan# S. Williams# D. Forsyth + v.o. hax v.o. BBC (G. d'Entremont) BBC (G. d'Entremont)
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/9 5/19 5/20-5/29 Evening Grost 5/1 5/2 5/2 5/2 5/3 5/5-5/7 5/8 5/15 5/11, 5/16 5/12 5/26 Purple Finch 5/2 5/3 6/1-6/30 6/19 6/20 Red Crossbill thr	Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport South Hadley Ashland Chatham MtA Ipswich P'town Gloucester Sharon Chatham P'town W. Roxbury PI Mount Greylock October Mounta Recorded from 1	13 72 3 2 p 2 4 m 1 1 2 1 1 1 8,3 N 1 1 1 8,3 N 1 1 1 8,3 N 1 1 1 8,3 N 1 1 1 5 00+1	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan# S. Derosier N. Jacob M. Doe D. Tobias + v.o. S. Smith, W. Tatro# B. Nikula, K. Griffis# D. McComiskey V. Zollo + v.o. S. Finnegan# S. Williams# D. Forsyth + v.o. nax v.o. BBC (G. d'Entremont) BBC (G. d'Entremont)
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/19 5/20-5/29 Evening Grost 5/1 5/2 5/2 5/2 5/3 5/5-5/7 5/8 5/15 5/11, 5/16 5/12 5/2 5/3 6/1-6/30 6/19 6/20 Red Crossbill thr 5/1-5/19	Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport South Hadley Ashland Chatham MtA Ipswich P'town Gloucester Sharon Chatham P'town W. Roxbury PI Mount Greylock October Mounta Recorded from 1 Ipswich	13 72 3 2 p 2 4 m 1 1 2 1 1 1 8,3 N 1 1 1 8,3 N 1 1 1 8,3 N 1 1 1 8,3 N 1 1 1 0 6 n 4 0 0 n 4 0 0 1 2 9 0 n 4 1 1 1 2 9 0 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 1 2 1 1 1 1 1 2 1 1 1 1 1 2 1	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan# S. Derosier N. Jacob M. Doe D. Tobias + v.o. J. Smith, W. Tatro# B. Nikula, K. Griffis# D. McComiskey V. Zollo + v.o. S. Finnegan# S. Williams# D. Forsyth + v.o. BBC (G. d'Entremont) BBC (G. d'Entremont) BBC (G. d'Entremont) ocations nax1. Pepper + v.o.
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/19 5/20-5/29 Evening Grost 5/1 5/2 5/2 5/2 5/3 5/5-5/7 5/5-5/7 5/8 5/8, 5/15 5/11, 5/16 5/12 5/26 Purple Finch 5/2 5/3 6/1-6/30 6/19 6/20 Red Crossbill thr 5/1-5/19 5/1-5/19 5/1-5/19	Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport South Hadley Ashland Chatham MtA Ipswich P'town Gloucester Sharon Chatham P'town W. Roxbury PI Mount Greylock October Mounta Recorded from I Ipswich Montague Nantucket	13 72 3 2 p 4 m 1 1 2 4 m 1 1 2 1 1 1 2 1 1 1 2 9 6 n 4 5 n 65 n 20	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan# S. Derosier N. Jacob M. Doe D. Tobias + v.o. V. Smith, W. Tatro# B. Nikula, K. Griffis# D. McComiskey V. Zollo + v.o. S. Finnegan# S. Williams# D. Forsyth + v.o. nax v.o. BBC (G. d'Entremont) BBC (G. d'Entremont) ocations nax I. Pepper + v.o. nax J. Smith + v.o. S. Fea
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/19 5/20-5/29 Evening Grosl 5/1 5/2 5/2 5/2 5/3 5/5-5/7 5/8 5/15 5/11, 5/16 5/12 5/26 Purple Finch 5/2 5/3 6/1-6/30 6/19 6/20 Red Crossbill thr 5/1-5/19 5/1-6/4 5/2 5/3	Wachusett Res. P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport South Hadley Ashland Chatham MtA Ipswich P'town Gloucester Sharon Chatham P'town W. Roxbury PI Mount Greylock October Mounta Recorded from 1 Ipswich Montague Nantucket P'town	13 72 3 2 pp 2 4 mm 1 1 2 1 1 1 8,3 N 1 1 1 8,3 N 1 1 1 8,3 N 1 1 1 8,3 N 1 1 1 1 8,3 N 1 1 1 1 2 9 6 n 4 5 0 0 2 9 2 0 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan# S. Derosier N. Jacob M. Doe D. Tobias + v.o. J. Smith, W. Tatro# B. Nikula, K. Griffis# D. McComiskey V. Zollo + v.o. S. Finnegan# S. Williams# D. Forsyth + v.o. nax v.o. BBC (G. d'Entremont) BBC (G. d'Entremont) BBC (G. d'Entremont) ax J. Smith + v.o. ax J. Smith + v.o. S. Fea B. Nikula
Cedar Waxwir 5/5 American Pipi 5/2 5/6 5/9 5/19 5/20-5/29 Evening Grost 5/1 5/2 5/2 5/2 5/3 5/5-5/7 5/5-5/7 5/8 5/8, 5/15 5/11, 5/16 5/12 5/26 Purple Finch 5/2 5/3 6/1-6/30 6/19 6/20 Red Crossbill thr 5/1-5/19 5/1-5/19 5/1-5/19	Wachusett Res. t P'town Middleton E. Boston (BI) Gloucester Rowley (RMWS Northampton beak Petersham Concord Rockport South Hadley Ashland Chatham MtA Ipswich P'town Gloucester Sharon Chatham P'town W. Roxbury PI Mount Greylock October Mounta Recorded from I Ipswich Montague Nantucket	13 72 3 2 p 4 m 1 1 2 4 m 1 1 2 1 1 1 2 1 1 1 2 9 6 n 4 5 n 65 n 20	M. Lynch# S. Williams# J. Keeley J. Smith h S. Hedman# R. Heil ax J. Jorgensen# + v.o. M. Lynch# W. Hutcheson S. Sullivan# S. Derosier N. Jacob M. Doe D. Tobias + v.o. V. Smith, W. Tatro# B. Nikula, K. Griffis# D. McComiskey V. Zollo + v.o. S. Finnegan# S. Williams# D. Forsyth + v.o. nax v.o. BBC (G. d'Entremont) BBC (G. d'Entremont) ocations nax I. Pepper + v.o. nax J. Smith + v.o. S. Fea

6/1		25	R G
	W. Barnstable	25	P. Crosson
6/8 White wingod	Brewster	20	T. Coughlan
White-winged 5/11, 5/15	PI	13	N.Paulson, D.McComiskey#
Pine Siskin	11	1,5	N.I auison, D.WeConniskey#
5/2	P'town	22	S. Williams#
5/3-5/20	Easton	-3	K. Ryan
5/11	PI	12	S. Sullivan
6/15	Williamstown	4	So. Auer
Lapland Long	spur		
5/1	Chatham	4	R. Johnson
5/12-5/16	Northampton	1	S. Surner + v.o.
Grasshopper S			
5/6-6/10	Westover AFB		max N.Dowling+v.o.
5/12	Marlborough		nfc T. Spahr
5/12-thr	Southwick		max A.Kapinos+v.o.
5/18	Weymouth	2	C. Gearin
5/28-6/27	Leverett		max J. Jorgensen# + v.o.
6/9	Lancaster	19	C. Cook
6/11 Clay colored	Falmouth	22	J. Salett
Clay-colored	Medford	1	G. Giribet
6/25-6/28	Windsor	1	J. Pierce $+$ v.o.
Field Sparrow		1	J. 1 10100 + 0.0.
5/2	Lancaster	15	B. Burke
5/31	Falmouth	5	G. d'Entremont
6/4	Hardwick	3	M. Lynch#
Fox Sparrow	1 lui u mien	2	
5/7	Ipswich	1	I. Pepper
American Tre			
5/6	Dalton	1	G. Hurley
Dark-eyed Ju	ico		2
thr	Huntington	5	maxD.McLain,K.Jones
5/4-6/30			max So. Auer + v.o.
6/19	Mount Greylock		BBC (G. d'Entremont)
6/25	Westford	1	P. Guidetti
White-crowne			D WITH #
5/7	PI	4	D. Williams#
5/13	Jamaica Plain	2 2	J. Young + v.o.
5/16	Burlington		J. Forbes
5/19 6/2	Rowley (RMWS South Hadley	1	R. Heil
Golden-crow		1	C. Szewczyk
5/1-5/2	Edgartown	1	ph S.Kardell,R.Bierregaard
White-throate		1	pri birtaiden,it.bieiregaard
5/3	MtA	23	337 771 1
5/3-5/18	MBO		W. Klockner
			W. Klockner b T. Llovd-Evans#
6/3-6/19		202	b T. Lloyd-Evans#
	Mount Greylock Edgartown	202	
6/3-6/19	Mount Greylock	202 4	b T. Lloyd-Evans# max J. Pierce + v.o.
6/3-6/19 6/13	Mount Greylock Edgartown Boston (RKG)	202 4 1	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea#
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot)	202 4 1 1 4	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o.
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord	202 4 1 1 4 1	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport	202 4 1 1 4 1 2	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara G. Brown + v.o. W. Martens max E. LeBlanc# + v.o.
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5 5/26-6/29	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport Southwick	202 4 1 1 4 1 2	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5 5/26-6/29 Seaside Sparr	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport Southwick	202 4 1 1 4 1 2 3	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens max E. LeBlanc# + v.o. max L+A.Richardson+v.o.
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5 5/26-6/29 Seaside Sparr 6/12	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport Southwick ow Eastham	202 4 1 1 4 1 2 3 1	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens max E. LeBlanc# + v.o. max L+A.Richardson+v.o. N. Tepper
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5 5/26-6/29 Seaside Sparr 6/12 6/15-6/30	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport Southwick ow Eastham PI	202 4 1 1 4 1 2 3 1	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens max E. LeBlanc# + v.o. max L+A.Richardson+v.o.
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5 5/26-6/29 Seaside Sparr 6/12 6/15-6/30 Nelson's Spar	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport Southwick ow Eastham PI row	202 4 1 1 4 1 2 3 1 3	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens max E. LeBlanc# + v.o. max L+A.Richardson+v.o. N. Tepper maxT.Wetmore+v.o.
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5 5/26-6/29 Seaside Sparr 6/12 6/15-6/30 Nelson's Spar 6/1, 6/7	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport Southwick ow Eastham PI row PI	202 4 1 1 4 1 2 3 1	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens max E. LeBlanc# + v.o. max L+A.Richardson+v.o. N. Tepper
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5 5/26-6/29 Seaside Sparr 6/12 6/15-6/30 Nelson's Spar 6/1, 6/7 Saltmarsh Spa	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport Southwick ow Eastham PI row PI Irrow	202 4 1 1 4 1 2 3 1 3 1,1	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens max E. LeBlanc# + v.o. max L+A.Richardson+v.o. N. Tepper maxT. Wetmore+v.o. A. Steenstrup, T. Wetmore
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5 5/26-6/29 Seaside Sparr 6/12 6/15-6/30 Nelson's Spar 6/1, 6/7 Saltmarsh Spa 5/19	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport Southwick ow Eastham PI row PI Irrow Rowley (RMWS	2022 4 1 1 4 1 2 3 1 3 1,1 5) 4	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens max E. LeBlanc# + v.o. max L+A.Richardson+v.o. N. Tepper max T. Wetmore+ v.o. A. Steenstrup, T. Wetmore R. Heil
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5 5/26-6/29 Seaside Sparr 6/12 6/15-6/30 Nelson's Spar 6/1, 6/7 Saltmarsh Spa 5/19 6/1-6/30	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport Southwick ow Eastham PI row PI urrow Rowley (RMWS PI	2022 4 1 1 4 1 2 3 1,1 3 1,1 5) 4 25	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens max E. LeBlanc# + v.o. max L+A.Richardson+v.o. N. Tepper maxT.Wetmore+v.o. A. Steenstrup, T. Wetmore R. Heil max T.Wetmore+v.o.
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5 5/26-6/29 Seaside Sparr 6/12 6/15-6/30 Nelson's Spar 6/1, 6/7 Saltmarsh Spa 5/19 6/1-6/30 6/20	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport Southwick ow Eastham PI row PI urrow Rowley (RMWS PI Saugus	2022 4 1 1 4 1 2 3 1 3 1,1 5) 4	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens max E. LeBlanc# + v.o. max L+A.Richardson+v.o. N. Tepper max T. Wetmore+ v.o. A. Steenstrup, T. Wetmore R. Heil
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5 5/26-6/29 Seaside Sparr 6/12 6/15-6/30 Nelson's Spar 6/1, 6/7 Saltmarsh Spa 5/19 6/1-6/30	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport Southwick ow Eastham PI row PI urrow Rowley (RMWS PI Saugus	2022 4 1 1 4 1 2 3 1,1 3 1,1 5) 4 25	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens max E. LeBlanc# + v.o. max L+A.Richardson+v.o. N. Tepper maxT.Wetmore+v.o. A. Steenstrup, T. Wetmore R. Heil max T.Wetmore+v.o.
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5 5/26-6/29 Seaside Sparr 6/12 6/15-6/30 Nelson's Spar 6/1, 6/7 Saltmarsh Spa 5/19 6/1-6/30 6/20 Savannah Spa	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport Southwick ow Eastham PI row PI urrow Rowley (RMWS PI Saugus rrow	2022 4 1 1 4 1 2 3 1,1 5) 4 25 23	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens max E. LeBlanc# + v.o. max L+A.Richardson+v.o. N. Tepper maxT.Wetmore+v.o. A. Steenstrup, T. Wetmore R. Heil maxT.Wetmore+v.o. G. Wilson#
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5 5/26-6/29 Seaside Sparr 6/12 6/15-6/30 Nelson's Spar 6/1, 6/7 Saltmarsh Spa 5/19 6/1-6/30 6/20 Savannah Spa 5/4	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport Southwick ow Eastham PI Tow PI Rowley (RMWS PI Saugus rrow W. Newbury New Braintree	2022 4 1 1 4 1 2 3 1,1 1 5) 4 25 23 7	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens max E. LeBlanc# + v.o. max L+A.Richardson+v.o. N. Tepper max T. Wetmore+ v.o. A. Steenstrup, T. Wetmore max T. Wetmore+ v.o. G. Wilson# M. Watson
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5 5/26-6/29 Seaside Sparr 6/12 6/15-6/30 Nelson's Spar 6/1, 6/7 Saltmarsh Spa 5/19 6/1-6/30 6/20 Savannah Spa 5/4 5/26 Lincoln's Spa 5/2	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport Southwick ow Eastham PI row PI Kowley (RMWS PI Saugus rrow W. Newbury New Braintree rrow Boston (McW)	2022 4 1 1 4 1 2 3 1,1 1 3 1,1 2,3 1,1 2,3 7 4 1 2,3 7 4 1 2,3 1,1 1,1 1,1 1,1 1,1 1,1 1,1 1	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens max E. LeBlanc# + v.o. max L+A.Richardson+v.o. N. Tepper max T. Wetmore+v.o. A. Steenstrup, T. Wetmore max T. Wetmore+v.o. G. Wilson# M. Watson M. Lynch# D. Forsyth + v.o.
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5 5/26-6/29 Seaside Sparr 6/12 6/15-6/30 Nelson's Spar 6/1, 6/7 Saltmarsh Spa 5/19 6/1-6/30 6/20 Savannah Spa 5/4 5/26 Lincoln's Spa 5/2 5/2, 5/28	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport Southwick ow Eastham PI row PI row PI Saugus rrow Rowley (RMWS PI Saugus rrow W. Newbury New Braintree rrow Boston (McW) MtA	2022 4 1 1 4 1 2 3 1,1 1 3 1,1 1 5) 4 25 23 7 4 1,1 1 1 1 1 1 1 1 1 1 1 1 1 1	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens max E. LeBlanc# + v.o. max L+A.Richardson+v.o. N. Tepper max T. Wetmore+ v.o. A. Steenstrup, T. Wetmore max T. Wetmore+ v.o. G. Wilson# M. Watson M. Lynch# D. Forsyth + v.o. v.o., J. Barcus#
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5 5/26-6/29 Seaside Sparr 6/12 6/15-6/30 Nelson's Spar 6/1, 6/7 Saltmarsh Spa 5/19 6/1-6/30 6/20 Savannah Spa 5/2 5/26 Lincoln's Spa 5/2 5/6, 5/28 5/8-5/22	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport Southwick ow Eastham PI row PI Rowley (RMWS PI Saugus rrow W. Newbury New Braintree rrow Boston (McW) MtA Longmeadow	$\begin{array}{c} 202\\ 4\\ 1\\ 1\\ 1\\ 2\\ 3\\ 1\\ 1\\ 3\\ 1,1\\ 1,1$	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens max E. LeBlanc# + v.o. max L+A.Richardson+v.o. N. Tepper maxT.Wetmore+v.o. A. Steenstrup, T. Wetmore maxT.Wetmore+v.o. G. Wilson# M. Lynch# D. Forsyth + v.o. v.o., J. Barcus# maxM. Moore + v.o.
6/3-6/19 6/13 6/22 Vesper Sparro 5/4-thr 5/9 5/14-6/5 5/26-6/29 Seaside Sparr 6/12 6/15-6/30 Nelson's Spar 6/1, 6/7 Saltmarsh Spa 5/19 6/1-6/30 6/20 Savannah Spa 5/4 5/26 Lincoln's Spa 5/2 5/2, 5/28	Mount Greylock Edgartown Boston (RKG) W Hadley (Honeypot) Concord Orange Airport Southwick ow Eastham PI row PI row PI Saugus rrow Rowley (RMWS PI Saugus rrow W. Newbury New Braintree rrow Boston (McW) MtA	$\begin{array}{c} 202\\ 4\\ 1\\ 1\\ 1\\ 2\\ 3\\ 1\\ 1\\ 3\\ 1,1\\ 1,1$	b T. Lloyd-Evans# max J. Pierce + v.o. S. Fea# A. Laquidara max G. Brown + v.o. W. Martens max E. LeBlanc# + v.o. max L+A.Richardson+v.o. N. Tepper max T. Wetmore+ v.o. A. Steenstrup, T. Wetmore max T. Wetmore+ v.o. G. Wilson# M. Watson M. Lynch# D. Forsyth + v.o. v.o., J. Barcus#

S			
Swamp Sparro 5/14	MBO	11 t	T. Lloyd-Evans#
6/16	Quaboag IBA	27	M. Lynch#
6/19	Lenox	8	BBC (G. d'Entremont)
Eastern Towhe		( )	
5/12	Ware R. IBA PI	62 23	M. Lynch#
5/17 6/4	Hardwick	46	N. Hayward M. Lynch#
6/9	MSSF	26	BBC (G. d'Entremont)
Yellow-breaste			- (
5/16	MNWS	1	J. Smith
Bobolink	D:4-C-14		
thr thr	Pittsfield Hadley (Fort R.)	45 n	nax K. Hanson + v.o. nax M. McKitrick + v.o.
thr	Sheffield		max J. Pierce $+$ v.o.
5/2-6/30	Williamstown		max So. Auer $+$ v.o.
5/20	Warren	37	M. Lynch#
5/26	New Braintree	56	M. Lynch#
Eastern Meado 5/11-6/30		12	
5/30	Southwick Plymouth Airpor		max M. Moore + v.o. BBC (G. d'Entremont)
6/5-6/11	Amesbury		nax v.o.
6/8	Worc.	2	M. Lynch#
Western Mea			
5/9	Northampton	1	T. Gagnon
Orchard Oriol 5/6	e W. Brookfield	3	M. Lunch#
5/19	PI	9	M. Lynch# G. d'Entremont#
5/19	Rowley (RMWS		R. Heil
Baltimore Orio		, -	
5/9	Blackstone	44	M. Lynch#
5/15	P'town	40	S. Williams#
5/19 Rusty Blackbi	Rowley (RMWS	)28	R. Heil
5/2-5/10	Amherst	25 r	max C. Elowe + v.o.
5/13-5/15	Newton (CSPk)	1	C. Dalton
Ovenbird			
5/1	Wompatuck SP	30	BBC (G. d'Entremont)
5/3-5/26	MBO Dester (MaW)	56 t	
5/11 5/12	Boston (McW) Ware R. IBA	10 180	J. Hanson M. Lynch#
5/14	PI	14	S. Sullivan
6/6	Fall River	24	G. d'Entremont
6/19	Mount Greylock	46	BBC (G. d'Entremont)
6/20	October Mountai	in32	BBC (G. d'Entremont)
Worm-eating V		7.	mov 6. Criterene Leve
5/2-6/30 5/6-5/31	Hadley (Skinner SP) Sherborn		nax S. Griesemer + v.o. nax K. Winkler + v.o.
5/8	Falmouth	3	M. Kasprzyk
5/9-6/18	Amherst		max C. Elowe $+$ v.o.
5/9-6/23	Mount Tom	4 r	nax D. Allard + v.o.
5/15	Ipswich	1	C. Disney#
5/21	Boston (CHRes.)	) 1	R. Doherty
Louisiana Wat 5/6	Leominster	5	J. Skinner
6/1	MBO		ad f T. Lloyd-Evans#
6/26	Ashby	4	J. Forbes#
6/26	Groton	2	E. Ross
Northern Wate		-	
5/19	Ware R. IBA	5 5	M. Lynch#
5/21 5/22	Petersham Freetown SF	8	M. Lynch# G. d'Entremont#
Golden-winge		0	G. a Enablishi
5/8-6/26	Montague	1 p	h au A.+G.Fiske-White+v.o.
5/12, 5/16	W. Warren		id m+f B. Zajda
5/19 Plue winged V	MtA Varblar	1 p	bh D. Hursh $+$ v.o.
Blue-winged V 5/7	Hardwick	6	M. Lynch#
5/11	PI	1	N. Paulson
5/20	Warren	4	M. Lynch#
	arbler (hybrid)		·
5/2-6/10	Medfield		n ph E. Nielsen + v.o.
5/12	Great Barrington	1 p	oh C. Blake + v.o.

5/14-5/20	Sherborn	1 ph N. Jacob
5/24-6/11	Amherst Varbler (hybrid)	1 vidL. Therrien $+$ v.o.
5/3-6/7	Belchertown	1 ph L. Therrien
5/6	Melrose (Ell Pd)	1 ph D.Lounsbury + v.o.
5/6-5/13	WWMA	1 ph T. Spahr + v.o.
Black-and-wh 5/3-5/24		100 b T. Lloyd-Evans#
5/8	Douglas	36 P. Vanderhoof
5/14	PI	46 S. Sullivan
5/14	MBO	30 b T. Lloyd-Evans#
5/19 6/20	Rowley (RMWS)	
	October Mountai	n 7 BBC (G. d'Entremont)
Prothonotary 5/2-5/6	Sandwich	1 ph P. Crosson, v.o.
5/5-5/8	Plymouth	1 ph S. Clifford + v.o.
Tennessee Wa		2
5/3-5/22 5/14	MtA Hadley (Skinner SP)	3 max v.o. 2 G. d'Entremont#
5/14	PI	2 S. Sullivan
Orange-crowr		
5/1-5/7	Boston (McW)	2 P. Peterson $+$ v.o.
5/2-5/4	Hadley (Fort R.)	1 T. Gilliland + v.o.
5/4 5/5-5/6	Brighton Woburn (HP)	1 R. Doherty 1 J. McCoy + v.o.
5/6	Quabbin Pk	1 S. Griesemer#
5/7	Boxborough	1 S. Dresser#
5/8	Paxton	1 R. Jenkins
5/9	MtA	1 J. Offermann $+$ v.o.
5/11 5/16	Great Barrington Montague	1 C. Blake, G. Ward 1 V. Woodring
5/19	PI	1 N. Werth
Nashville War	bler	
5/7	Wore.	10 B. Robo
5/9 5/14	MtA PI	4 G. d'Entremont 6 S. Sullivan
5/14 5/18	MNWS	6 S. Sullivan 3 N. Hayward
6/20	Sheffield	1 G. Ward
Mourning Wa		
5/16-6/19	Mount Greylock	
5/24 5/25	Milton W. Brookfield	1 R. Schain 1 m M. Lynch#
5/26	Hadley	1 m M. Lynch# 2 G. d'Entremont#
5/26	Boston (FPk)	1 S. Jones
5/27	Winchendon	1 M. Lynch#
5/27, 6/1-6/2		1,1 C. Cook#, D. Bates + v.o.
5/31 6/1-6/3	Brookline PI	1 M. Garvey 2 max S. Babbitt + v.o.
6/5	Medford	1 M. Rines#
6/12	PI	1 L. Hannigan
		Yellowthroat (hybrid)
5/16	Leicester	1 ph vid C. Winstanley
Kentucky Wa 5/9, 5/16	MNWS	1 J. Smith
5/11	Amesbury	l ph au G. Vigna
5/11	Mashpee	1 P. Crosson
5/11	MBWMA	1 M. Schackwitz#
5/11-5/12	Ipswich WBWS	1 J. Berry 1 b J. Junda#
5/13 5/16	Gloucester (EP)	1 ph au D. Peterson#
6/1	WWMA	1 m ph au T. Spahr
Common Yell	owthroat	1 1
5/3-5/27	MBO 1	115 b T. Lloyd-Evans#
5/19 5/19	Rowley (RMWS) PI	
5/23	Lexington (DM)	37 G. d'Entremont# 30 BBC (C.Cook)
6/4	Hardwick	70 M. Lynch#
Hooded Warb	ler	5
5/1-6/26	Indiv. reported fro	
5/10-6/26 5/12, 5/15	Westfield PI	$3 \max$ M. Moore + v.o. 1,1 T. Wetmore# + v.o.
5/13-6/21	New Marlboroug	
5/22	Freetown SF	2 G. d'Entremont#

American Redstart 5/14 ΡI 24 S. Sullivan 5/14-6/7 131 b T. Lloyd-Evans# MBO 5/19 Rowley (RMWS)39 Hadley (Skinner SP) 21 R. Heil 6/5 BBC (M. Burns) 6/19 Mount Greylock 13 BBC (G. d'Entremont) Cape May Warbler 5/7-5/21 MtA 4 max V.O. 5/12-5/21 ΡI 4 max v.o. Rockport (HPt) 5/145 J. Keeley 5/14 4 Boston (McW) D. Bates + v.o. 5/15-5/16 Nahant 2 max V.O. Cerulean Warbler 5/7 Hardwick 1 m M. Lynch# 5/13 Boston (FPk) S. Jones + v.o. B. Nikula 5/13 P'town ΡI 5/14 1 M. Badger# 5/14, 6/5 3,5 G. d'Entremont#, BBC (M. Burns) Hadley (Skinner SP) Northern Parula 5/14 PI 65 S. Sullivan 5/14 49 Rockport (HPt) J. Keelev 5/14 Medford 33 M. Rines# 5/14Boston (FPk) 30 S. Jones 5/15 S. Williams# P'town 28 5/18 MBO 8 b T. Lloyd-Evans# Rowley (RMWS)47 5/19 R. Heil Magnolia Warbler 5/3-5/27 MBO 96 b T. Lloyd-Evans# 5/14 ΡI 46 S. Sullivan 20 S. Williams# 5/15 P'town 5/19Rowley (RMWS)26 R. Heil Bay-breasted Warbler 5/10-5/26 4 max MtA v o PI 5/13-5/31 10 max v.o. 5/15 P'town S. Williams# 11 5/18Boston (FPk) 4 S. Jones + v.o. 5/21 4 M. Lynch# Petersham Blackburnian Warbler 5/2-5/31 PI 4 max v.o. 5/3-5/26 MtA 6 max v.o. 5/14 Boston (FPk) 6 S. Jones + v.o. 6/18 J. Young Royalston 6/19Mount Greylock 15 BBC (G. d'Entremont) Yellow Warbler 5/2-5/31 PI 75 max v o S. Williams 5/7 Southbridge 45 5/20 Warren 45 M. Lynch# 5/22 G. d'Entremont# S. Dart. (APd) 44 Chestnut-sided Warbler 5/21Petersham 44 M. Lynch# 6/19Mount Greylock 16 BBC (G. d'Entremont) 6/20 M. Lynch# Erving 16 6/20 October Mountain 8 BBC (G. d'Entremont) Blackpoll Warbler 5/6-5/31 MtA 12 max v.o. 5/24-6/24 Mount Grevlock 9 max M. Morales + v.o. 5/25 W. Brookfield 4 M. Lynch# Black-throated Blue Warbler 29 5/14 ΡI S. Sullivan 5/18 MBO 10 b T. Lloyd-Evans# 6/5 21 Leominster R. Lockwood 6/18 49 Wendell M. Lynch# 6/19 Mount Greylock 18 BBC (G. d'Entremont) Palm Warbler 5/1 IRWS 25 W. Tatro 23 5/1Waltham C. Hartshorn 5/18Moran WMA 1 T. Raymo 5/18W. Gleavy Quincy 1 Palm Warbler (Western) 5/1 Beaver Brook N Res 1 L M 5/5-5/8 S. Jones Boston (FPk) 5/10-5/12 Worcester 1 N. Dowling, E. Kittredge Pine Warbler 5/1Petersham 33 M. Lynch#

5/1Wompatuck SP 16 BBC (G. d'Entremont) 6/9 MSSF 14 BBC (G. d'Entremont) Yellow-rumped Warbler P'town 524,45 5/2, 5/15 S Williams# 5/3 Boston (FPk) G. d'Entremont 50 5/4 Boston (CHRes.) 45 min N. Hayward 5/5 28 Wachusett Res. M. Lynch# J. Keeley 5/14 51 Rockport (HPt) 6/19 October Mountain 8 BBC (G. d'Entremont) Yellow-throated Warbler 5/8 W. Warren 1 ad m albilora B. Zajda 5/9 Mashpee P. Johnson-Staub# 1 ph 1 ph N. Calabro + v.o. 5/10-5/11 MtA Vineyard Haven B. Shriber# 5/27-5/28 1 ph Pocasset 6/6 1 âu C. van Rees Prairie Warbler 5/2-5/6 5/2-5/19 Boston (CHRes.)  $2 \max A. Gurka + v.o.$ 4 max PI V.O. 5/3-5/14 Boston (FPk) 2 max S. Jones + v.o. 5/4-6/30 Montague 18 max J. Smith + v.o. 5/19 Ware R. IBA 8 M. Lynch# 6/9 MSSF 10 BBC (G. d'Entremont) Black-throated Green Warbler 5/1-5/25 MtA 14 maxR. Hodson+v.o. 5/2-5/31 MNWS 35 max J. Smith + v.o. 31 maxS. Sullivan+v.o. 5/2-5/31 ΡI 6/19 Mount Greylock 8 BBC (G. d'Entremont) 6/20 October Mountain 4 BBC (G. d'Entremont) Canada Warbler 5/11-5/31 5/12-5/30 MNWS 3 max V.O. PI 3 max v.o. 5/14-5/22 2 max MtA V.O. M. Perrin 5/16Jamaica Plain 2 ĩ 6/18 Wendell M. Lynch# 6/19 Mount Greylock 3 BBC (G. d'Entremont) Wilson's Warbler 5/145 PI S Sullivan 5/15 2 N. Hayward MtA Summer Tanager 5/3-5/15 Nantucket T. Pastuszak + v.o. 5/6 A. Curtis# Harwich 1 imm m ph 5/6-5/9 S. Kardell Tuckernuck I. 1 ph 5/8-5/11 MtA 1 ph V.O. 1 phT. Wetmore + v.o. 5/14 ΡI 5/16 P'town M. Doe 1 m ph 5/21Mashpee M. Keleher 1 ph Scarlet Tanager 5/14-5/20 5/21 MNWS 3 max v o Petersham 34 M. Lvnch# 6/5 Hadley (Skinner SP) 6 BBC (M. Burns) 6/19 Mount Greylock 4 BBC (G. d'Entremont) 6/20 20 M. Lynch# Erving Rose-breasted Grosbeak 5 5/7W. Newbury N. Hayward 5/14 PI 18 S. Sullivan 5/20Warren 30 M. Lynch# 6/5 Hadley 8 BBC (G. d'Entremont) Blue Grosbeak 5/8 MtA 1 J. Reade + v.o. 5/14-6/30 5/15 2 max Southwick M. Moore + v.o. Camp Edwards J. McCumber 5/15-6/23 3 max Falmouth V.O. 5/22-6/30 Hadley (Honeypot) 2 max J. Smith + v.o. Indigo Bunting 5/26 New Braintree 22 M. Lynch# BBC (M. Burns) 6/5 Hadley (Skinner SP) 4 6/19 ġ Mount Greylock BBC (G. d'Entremont) **Painted Bunting** Norwood 5/201 ad m phB. Sullivan + v.o. Dickcissel 5/31-6/30 3 max J.Lawson + v.o. Southwick 5/16 Leicester C. Winstanley

### ABBREVIATIONS FOR BIRD SIGHTINGS

Taxonomic order is based on AOS checklist, Seventh edition, 61st Supplement, as published in *Auk* 137: ukaa030 (2020) (see < http://checklist.americanornithology.org/>).

Locations		Pd
AA	Arnold Arboretum, Boston	PG
ABC	Allen Bird Club	PI
AFB	Air Force Base	Pk
AP	Andrews Point, Rockport	PLY C
APd	Allens Pond, S. Dartmouth	Pont.
AthBC	Athol Bird Club	POP
B.	Beach	PR
Barre FD	Barre Falls Dam	P'town
BBC	Brookline Bird Club	R.
BFWMA	Bolton Flats WMA, Bolton & Lancaster	Res. RKG
BHI	Boston Harbor Islands	RKG
BI	Belle Isle E Boston	RP
BMB	Belle Isle, E. Boston Broad Meadow Brook, Worcester	CD
	Diodu Meduow Diook, Wolcester	SB SF
BNC	Boston Nature Center, Mattapan	SF
BR	Bass Rocks, Gloucester	SN
BRI Co. seas	Bristol County, offshore	SP
Cambr.	Cambridge	SRV
CB CCBC	Crane Beach, Ipswich Cape Cod Bird Club	SSBC
ČČBC	Cape Cod Bird Club	TASL
CGB	Coast Guard Beach, Eastham	WBWS
		WDW
Co.	County	WE
Corp. B.	Corporation Beach, Dennis	WMA
CP	Crooked Pond, Boxford	WMW
CPd	Chandler Pond, Boston	Wompa
CPd C. Res.	Chandler Pond, Boston Cambridge Reservoir, Waltham	Worc.
CSpk	Cold Spring Park, Newton	WS
Cumb Farme	Cumberland Farms Middleboro	WS WSF
Cumb. Farms DFWS	Cumberland Farms, Middleboro Drumlin Farm Wildlife Sanctuary	WOL
Drws	Drummi Farm whume Sanctuary	WWM
DM	Dunback Meadow	Other A
DWMA	Delaney WMA, Stow, Bolton, Harvard	*
DWMA DWWS	Delaney WMA, Stow, Bolton, Harvard Daniel Webster Wildlife Sanctuary	1
EP	Eastern Point, Gloucester	ad
FE	Eastern Point, Gloucester First Encounter Beach, Eastham	alt
FH	Fort Hill, Eastham	au
FHC	Forest Hills Compton: Poston	
	Forest Hills Cemetery, Boston Fresh Pond, Cambridge	b
FP	Fresh Pond, Cambridge	basic
FPk	Franklin Park, Boston	br
G#	Gate #, Quabbin Res. Great Meadows National Wildlife Refuge	cy d
GMNWR	Great Meadows National Wildlife Refuge	ď
GN	Gooseberry Neck, Westport	dk
H.	Harbor	f
HCB		ĥ
	Herring Cove Beach, Provincetown	
HP	Horn Pond, Woburn	h
HPt	Halibut Point, Rockport High Ridge WMA, Gardner	imm
HRWMA	High Ridge WMA, Gardner	inj
I.	Island	juv
IBA	Important Bird Area	lt
IRWS	Ipswich River Wildlife Sanctuary	m
JPd	Jamaica Pond, Boston	MARC
L	Ledge	max
MAS	Mass Audubon	migr
MBO	Bird Observatory, Manomet Martin Burns WMA, Newbury McLaughlin Woods	mın
MBWMA	Martin Burns WMA, Newbury	n
McW	McLaughlin Woods	nfc
MI	Morris Island	ph
MNWS	Marblehead Neck Wildlife Sanctuary	
MP	Marblehead Neck Wildlife Sanctuary Millennium Park, W. Roxbury	pr
	Malas Standish State Espect Diment	r S
MSSF	wrytes Standish State Forest, Plymouth	
MtA	Mount Auburn Cemetery, Cambr.	subad
MV	Myles Standish State Forest, Plymouth Mount Auburn Cemetery, Cambr. Martha's Vineyard	v.o. W
NAC	Nine Acre Corner, Concord	W
Nbpt	Nine Acre conten, concord Newburyport	
Nbpt ONWR	Oxbow National Wildlife Refuge	yg #

#### **n**.1 Pond Public Garden, Boston Plum Island Park o. seas Plymouth County, offshore Pontoosuc Lake, Lanesboro Point of Pines, Revere Pinnacle Rock, Malden Provincetown River Reservoir Rose Kennedy Greenway, Boston Race Point, Provincetown South Beach, Chatham State Forest Sandy Neck, Barnstable State Park Sudbury River Valley South Shore Bird Club Take A Second Look, Boston Harbor Census Wellfleet Bay Wildlife Sanctuary S World's End, Hingham World S End, Hingham Wildlife Management Area Wachusett Meadow Wildlife Sanctuary Hingham, Cohasset, Scituate, Norwell Worcester atuck SP Wildlife Sanctuary Willowdale State Forest, Ipswich Westborough WMA, Westborough Abbreviations first state record (pending MARC review) subject to MARC review adult alternative plumage audio recorded banded basic plumage breeding cycle (3cy = 3rd cycle) dead dark (morph) femalé fledgling heard immature injured iuvenile light (morph) male Massachusetts Avian Records Committee maximum migrating minimum nesting nocturnal flight call photographed pair rescued summer (1S = first summer)subadult various observers winter (2W = second winter) young additional observers

#### HOW TO CONTRIBUTE BIRD SIGHTINGS TO BIRD OBSERVER

Sightings for any given month should be reported to *Bird Observer* by the eighth of the following month. Reports should include: name and phone number of observer, name of species, date of sighting, location, number of birds, other observer(s), and information on age, sex, and morph (where relevant). Reports can be emailed to sightings@birdobserver.org or submitted online at <<u>http://www.birdobserver.org/</u>Contact-Us/Submit-Sightings>, or sent by mail to Bird Sightings, Robert H. Stymeist, 36 Lewis Avenue, Arlington MA 02474-3206.

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 Sean Williams, 18 Parkman Street, Westborough MA 01581, or by email to seanbirder@gmail.com.

# **BYGONE BIRDS**

# Historical Highlights for January-February

Neil Hayward

### **5 YEARS AGO**



January–February 2016

A **Pink-footed Goose** that was wintering in Connecticut made occasional visits to Agawam this period. A **Western Grebe** was discovered on Winthrop Beach on February 7. An injured **Purple Gallinule**, discovered at Hathaway Pond in Barnstable on January 11, was treated for anemia by a wildlife rehabilitator. A Barn Owl was found dead in Danvers. A **Hammond's Flycatcher** discovered in Fairhaven on New Year's Day was the third record for the state. Another third for the state was a **Smith's Longspur** found on January 17 at Bear Creek Wildlife Sanctuary in Saugus. **Ash-throated Flycatchers** continued in Cambridge and Manomet, and a **Mountain Bluebird** was present throughout the period at the Crane Wildlife Management Area in Falmouth.

Best sighting: a first-winter **Yellow-billed Loon** discovered at Race Point in Provincetown on February 27. This was the first state record.

### **10 YEARS AGO**



January–February 2011

A **Ross's Goose** continued on Nantucket through February 17. A **Mew Gull** of the Asian *kamtschatschensis* or *heinei* subspecies was found at Lynn Beach at the end of February. The three Monk Parakeets continuing on Bremen Street, East Boston, were being fed suet and parrot food by local residents. This was a poor winter for Snowy Owls with no sightings during this period. A **Varied Thrush** was visiting a feeder in Centerville in February.

Best sighting: two **Harris's Sparrows**, one on Duxbury Beach, from January 9–February 27, another in Falmouth, February 1–26.

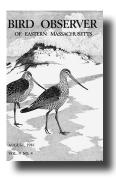


### January–February 2001

A **Pacific Loon** was discovered along the Rowley Shore section of Gloucester on January 18, while the **Eared Grebe** continued in nearby Gloucester Harbor. A likely **Western Grebe** was a one-day wonder at Salisbury on January 14. Two adult **Greater White-fronted Geese** spent most of February in Fairhaven. A **Purple Gallinule** was rescued on Martha's Vineyard on January 1, and a **Sandhill Crane** was present in Fairhaven for the month of February. An impressive 520 Purple Sandpipers were counted in North Scituate on January 26. An adult European **Mew Gull** was present at Flax Pond, Lynn, in mid-February.

Best sighting: an invasion of White-winged Crossbills, including up to 140 birds in Savoy. Many were singing, and the first breeding record for the state was documented in Windsor.

### January–February 1981



Iceland Gulls were very much in evidence at Nantucket and Eastern Point, Gloucester, with 111 and 140, respectively. Nantucket also hosted a **Mew Gull** on January 3. A **Gyrfalcon** was reported from outer Cape Cod in January. Up to 22 Long-eared Owls were roosting at Dunback Meadow. A **Western Kingbird** was found in Chatham on January 2, and a **Sedge Wren** continued on Nantucket from December through early January. Six **Boreal Chickadees** were present during the period, and a **Hoary Redpoll** was discovered in a flock of redpolls at Plum Island on the last day of February.

Best sighting: Fifteen records of Goshawk, including three immatures in one tree in Framingham.

40 YEARS AGO

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RED CROSSBILL BY SANDY SELESKY

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# **ABOUT THE COVER**

## Leach's Storm-Petrel

The Leach's Storm-Petrel (*Hydrobates leucorhous*), also known as Mother Cary's Chicken, is a cosmopolitan species that breeds in colonies on islands in the oceans of the Northern Hemisphere. The Leach's Storm-Petrel is a brown to black, medium-sized storm-petrel with a long, forked tail and long wings that bend backward at the carpal joint. A large, curved, pale brown wing bar crosses each wing from the carpal joint to the edge of the rump. The wings and tail are darker than the body. The rump is usually white and is shaped like an arrowhead with the point to the rear; it is sometimes split by a median stripe of brown. In colonies of the Pacific Ocean south of the Mexican border, many birds have dark rumps. The nostrils are in a tube that sits on top the black, hooked bill. The legs and feet are also black. The sexes are similar in appearance. Their flight is bouncy, often erratic, low over the water, and often with deep wing strokes.

The taxonomy of the Leach's Storm-Petrel has been controversial, with up to five subspecies recognized in the past. Currently two subspecies are recognized: *H. l. leucorhous*, ranging in the Atlantic Ocean from Europe to Newfoundland and south to Massachusetts, and across the North Pacific Ocean from the Farallon Islands in California north to Alaska and along the Aleutian Islands to Japan; and *H.l. chapmani*, breeding on the Coronado Islands and San Benito Islands off Baja California. More than 8,000,000 pairs breed in burrows and rock crevasses on islands in the Atlantic and Pacific, and several million more nonbreeding birds stay at sea. The breeding islands are generally far enough offshore to be free of mammalian predators.

Colonies vary greatly in size from, for example, one colony on an island off of Newfoundland, which has more than 300,000 pairs, compared to seven pairs in the single, small colony in Massachusetts on Penikese Island in Buzzards Bay, and several more pairs on Noman's Land off the coast of Martha's Vineyard. Leach's Storm-Petrel is an uncommon to sometimes common migrant, usually seen more than 50 miles from shore. The eastern North American birds arrive in April and May; they migrate south in late September to early November. Sightings of Leach's Storm-Petrels inshore are storm sensitive; 10,000 birds were seen in Cape Cod Bay during a late snowstorm in May 1977. They are often blown into Cape Cod Bay during autumn nor'easters, and even inland during hurricanes.

Leach's Storm-Petrels are monogamous, but the rare two-egg nests may indicate occasional bigamy or egg dumping. Little is known about the courtship of these largely nocturnal birds. They breed for the first time between ages five and six, and pair formation is thought to occur at the burrow site a year or two before actual nesting. Burrow-site fidelity apparently brings pairs back together in succeeding breeding seasons. Both males and females utter calls that are used in territorial defense and courtship. A chatter call consists of two protracted staccato notes separated by a much longer note and is given in flight at the breeding colony, on the ground, or in the burrow. A purr call is sometimes given in duet between mates and consists of a series of closely spaced notes separated occasionally by a longer note. It is used in courtship and

pair maintenance. Harsh screech calls are given when birds are disturbed at their nests. Most calls are given at night.

Leach's Storm-Petrels nest once per breeding season and raise a single young bird. Pairs sometimes return to their burrows a month or more before breeding. The male is thought to do most of the burrow excavation and nest building during the night. Nests are usually a scrape lined with grass, twigs, mosses, lichen, conifer needles, leaves, and feathers or just about anything that is available. Burrows are generally shallow and less than two feet in length; they may be straight or include a bend. Between late May and July, the female lays a single milky white egg that sometimes has purplish spotting around the large end. Both parents develop brood patches, and both incubate the egg for approximately six weeks until hatching. At hatching, the chick is covered with blue gray down but does not open its eyes for about a week. One adult broods the chick for about a week but rarely thereafter. The parents feed the chick a high-lipid diet, and the chick may eventually weight 1.5 times the adult weight. The chick fledges in about nine weeks and may appear at the burrow entrance for several days before flying away from the colony, after having trimmed down to adult weight.

Leach's Storm-Petrels forage in open ocean wherever floating zooplankton or swimming nekton are concentrated, usually at upwellings. They forage by pecking while hovering, capturing individual organisms. They sometimes forage while swimming and may forage at night. They drink seawater and have salt glands over the eyes that remove the salt, which they secrete through their tube noses. Their diet includes cephalopods such as squid, crustaceans such as amphipods, small fish, and jellyfish. Breeding adults usually feed within one or two days of travel from their nest. Lipid-rich foods are concentrated in the stomach and regurgitated to feed to the chick.

Leach's Storm-Petrels occasionally are taken by sharks in tropical waters, and suffer from kleptoparasitism from other storm-petrels, including conspecifics, and also from jaegers. Although they usually nest on islands far from shore, introduced mammals such as dogs, cats, or pigs can cause colony abandonment. Although active at night, they may fall prey to eagles, hawks, crows and ravens. Gulls and owls are also sometimes a problem. Despite these difficulties, Leach's Storm-Petrels can live into their thirties and produce substantial numbers of young, which, together with their wide breeding distribution and large population size, suggests that this lovely pelagic species is secure.

William E. Davis, Jr.



# AT A GLANCE

## August 2021



WAYNE R. PETERSEN

This issue's At a Glance image appears to be a sparrow. You know the look: it is streaky and has a conical bill, and—in the color image online—it is generally brownish in color. Also, it is perched in a grassy or weedy habitat. Are we ready to explore sparrow possibilities? No, not yet. Why isn't the mystery bird a female Bobolink instead of a sparrow? A Bobolink is certainly a grassland possibility.

The reason the mystery species cannot possibly be a Bobolink is that its bill is way too small, its legs are far too slim, and the overall structure of the bird is way too delicate to belong to a blackbird. Otherwise, the mystery species bears a superficial resemblance to an immature, an adult female, or a male Bobolink in nonbreeding plumage. A Bobolink also exhibits coarser streaking on both its back and its sides, usually appears more yellowish on the underparts, exhibits less pattern on the nape, and has a more pointy-tipped tail.

Having established that the mystery species is indeed a sparrow and not a Bobolink, we can concentrate on its features: the broad, unmarked supercilium (eyebrow stripe) above the eye; the thin, pale median crown stripe just visible above the base of the bill; the grayish lores between the eye and the base of the bill; the thin dark stripes on the sides of the breast and on the sides and flanks; and the prominent white edges to the tertials. In the color photograph, note also the buffy tone to the supercilium and the gray auriculars (cheek area).

This combination of features at once eliminates any of the sparrow species having unstreaked underparts. The overall delicate aspect and fine-streaked appearance also remove the chunkier and more heavily streaked Fox Sparrow and Song Sparrow as considerations. The broad, unmarked eyebrow stripe, absence of an eye ring, and absence of an obvious necklace of streaks take the Savannah and Vesper sparrows off the table. What is left are five species of grassland or marshland sparrow: Grasshopper in the genus *Ammodramus*, Henslow's in the genus *Centronyx*, and LeConte's, Nelson's, and Saltmarsh—all in the genus *Ammospiza*. These species are small, often somewhat colorful, typically difficult to observe, and possess rather insignificant songs.

The Grasshopper Sparrow is not a candidate for identification because even the youngest Grasshopper is unlikely to show the extent of side streaking of the pictured sparrow, and normally exhibits an eye ring—a feature not visible in the pictured sparrow. Grasshopper Sparrows also have a noticeably heavier bill than the decidedly small bill shown by the mystery sparrow. A Henslow's Sparrow also has a heavier bill, may also show an eye ring, displays two prominent dark spots at the rear of the ear coverts, and has an overall darker-headed—olive green—appearance. This leaves only the LeConte's Sparrow and the two sharp-tailed sparrows as possibilities.

Both the Nelson's Sparrow and the Saltmarsh Sparrow have solid crowns that are unmarked by a pale median stripe like the crown of the mystery sparrow. In addition, both of these species typically have a rather colorful orange triangle surrounding their gray cheek—a feature visible even in a black-and-white image. Accordingly, the combination of a pale median crown stripe, a small bill, and the absence of an orangish triangle-shaped border around the cheek and face of the mystery bird identifies it as a LeConte's Sparrow (*Ammospiza leconteii*).

LeConte's Sparrows are rare fall migrants in Massachusetts that occasionally linger into early winter, often but not exclusively near the coast. The species seems to prefer moist weedy or grassy fields, as well as the edges of salt marshes during migration, especially if there is dense vegetation at the periphery for hiding. The author photographed this LeConte's Sparrow in the Cumberland Farms fields in Middleborough, Plymouth County, Massachusetts, on October 21, 2009.

Wayne R. Petersen

# **ABOUT THE COVER ARTIST**

## John Sill

John Sill is a freelance wildlife artist living in the mountains of North Carolina. He was the illustrator for the Bird Identification Calendar for Mass Audubon for many years. His work has appeared in Birds In Art at the Leigh-Yawkey Woodson Art Museum, Wausau, Wisconsin, and in Art of the Animal Kingdom at the Bennington Center for the Arts in Vermont. He continues to illustrate the "About" and "About Habitats" series of natural history books for children written by his wife Cathryn.

# 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**



Two **White Ibises** visited eastern Massachusetts this summer. On July 30, an adult was caught on video at Dudley Pond in Wayland. Two weeks later, on August 16, came another report from Wayland at Heard's Pond. When birders relocated it the following day, it was a younger individual than the bird seen in July. August 18th, Joel Eckerson photographed one flying over Dighton, 40 miles to the south; photo comparisons revealed that the Dighton bird was the same individual seen at Heard's Pond. This White Ibis had also been photographed in Nova Scotia on August 2. Lauren Grimes took the photo on the left.

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