# **Bird Observer**

VOLUME 43, NUMBER 2

APRIL 2015



# **HOT BIRDS**



On January 6, Paul Peterson reported a **Black-backed Woodpecker** at Forest Hills Cemetery in Boston. It was seen regularly through the end of January. Eduardo del Solar took the photo on the left.



On March 1, Suzanne Sullivan was scanning King's Beach on the Swampscott/Lynn line and spotted a **Mew Gull** (Kamchatka) among the Ring-billed Gulls. She took the photo above. More Mew Gulls were reported subsequently at the same location.

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# Bird Observer

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## Birding and Botanizing the Hawley Bog

Robert Wood

Hawley Bog in the town of Hawley in western Franklin County is not what one might call a prime birding location. With a few exceptions, one can expect the usual array of birds found in the higher elevations of Berkshire County. What is almost unique about this location is the bog itself, a 63-acre northern sphagnum-heath bog in its natural state. It is owned and maintained by the Nature Conservancy along with the Five Colleges Consortium (University of Massachusetts, Smith, Amherst, Hampshire, and Mount Holyoke). It



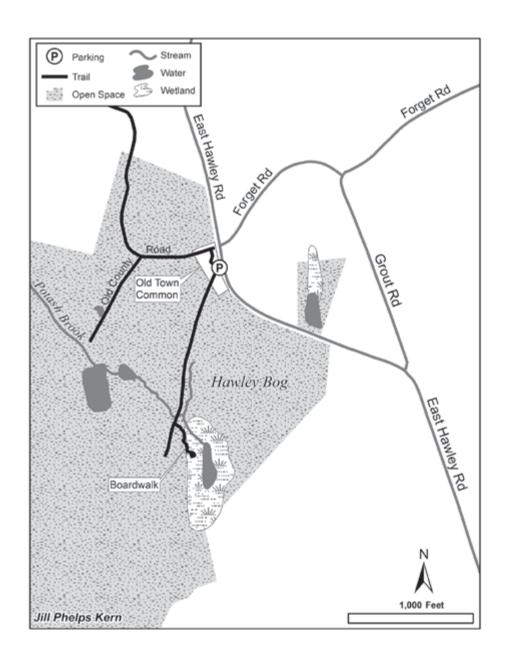
serves these institutions as an outdoor classroom. It is open to the public, although my understanding is that permission is required for organized, large group visits. For further details check the Nature Conservancy website (http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/massachusetts/placesweprotect/hawley-bog-preserve.xml).

Besides being a lovely place to explore, the bog offers great opportunities for botanizing as well as birding and butterflying. Here one may find a group of plant life that is unique to acid bogs—in this case the highest-elevation acid bog in the Commonwealth.

Although somewhat remote and not wheelchair accessible, the bog itself is easy to reach from the parking area. After walking a short distance through a mixed wood, one will come to a well-constructed boardwalk that extends about 300 yards into the middle of the bog. The boardwalk was overhauled in 2012, allowing visitors to easily, safely, and dryly visit the bog without disturbing the fragile plants that grow on the bog.

Over the course of several visits to the bog, mostly in spring and summer, I have recorded over 90 species of birds that include 13 breeding wood warblers. A list of 40 or more species for a single morning in June is not hard to achieve. Many of these species, such as Blue-headed Vireo and Yellow-bellied Sapsucker, are common summer residents. Some, like Black-billed Cuckoo and Wilson's Snipe, undoubtedly breed here but are more difficult to detect. May, June, and July are the optimal months to visit.

Known as "Cranberry Swamp" on topographic maps, Hawley Bog occupies a shallow glacial lake basin. Over hundreds of years, sphagnum moss grew from the shoreline and spread out toward the center of the lake. Because the lake was poorly drained and accumulation of sphagnum peat—partially decayed moss—exceeded decomposition, the water became acidic, which further inhibited decay to produce more and thicker layers of peat. Over many, many years, the sphagnum slowly accumulated both vertically and horizontally, extending its reach farther and farther toward the middle of the lake. It is now at the point where there is only a small pond of open water in the middle of the bog. The mat of sphagnum peat is reported to be over thirty feet



deep in places. The several vegetation zones that demonstrate bog succession are found here, from the central open water of the pond to the surrounding spruce-fir forest.

And if all this is not enough to encourage a visit, parking for the bog is on the former town common of Hawley, established in 1794. A few years ago, the Sons and Daughters of Hawley established the former town common as an archaeological site. The cellar holes of several former dwellings have each been researched, cleaned up, and labeled with placards that identify the former properties and give some of their history. The town of Hawley migrated to its present site in or around 1848, when a new meetinghouse was built farther to the west on East Hawley Road. A kiosk at the parking area should have a brochure that includes a crude map and brief descriptions of the various properties that once existed here. A self-guided tour of the Old Town Common is peaceful and enjoyable and will certainly add a few more birds to one's list.



"Bog Mat is Fragile" (All photographs by the author)

The parking area is at the intersection of East Hawley Road and Forget Road in Hawley. From Route 2 go to Route 8A in Charlemont. At the stop after the train tracks, go left and take the first right onto East Hawley Road. Continue for approximately four miles to the parking area marked by a small rock monument in a clearing. Alternatively, take Route 116 to Union Street in Plainfield. Turn left onto North Central Street, and then take an immediate right onto North Union Street. In about 7/10 of a mile, bear right onto North Street. North Street will become Plainfield Road and then East Hawley Road. The parking area is 4.7 miles from the turn onto North Road and about 1.4 miles from where it becomes East Hawley Road.

Although Hawley Bog is a lovely place to visit at any time of year, spring and summer offer the best opportunities for birding and botanizing. (Later in summer is probably a better time for butterflies and odonates, but that is not within the purview of this article.) An early morning in May or June will offer American Redstarts, Ovenbirds, Chestnut-sided Warblers, Black-and-white Warblers, and Red-eyed Vireos singing in the woods surrounding the parking lot. Across the road from the parking lot

is a summer cottage that was built on the former site of the Longley Tavern. Watch and listen there for Purple Finches, Goldfinches, and Chipping Sparrows.



Boardwalk at Hawley Bog

There are two trails that begin at the parking area. The trail to the right will start with a tour of the Old Town Common. If you haven't heard it in the parking lot, listen for Least Flycatcher here. The trail will eventually bring one to the abandoned Old County Road, which can be walked through deciduous woods for a mile or more. Use caution—it is possible to wander too far and become lost.

From the parking area, the trail to the left will lead to the bog. This trail goes down a short, gentle slope through hardwoods. Black-throated Blue, Black-throated Green, and Blackburnian warblers are often seen and heard along this section of the trail. Eastern Wood Pewees can also be heard. After going around a chain barrier you will come to a kiosk with a placard describing a few of the plants one can find on the bog. There is also a sign-in book where the Nature Conservancy would like you to document your visit. Because signing in helps the Nature Conservancy determine approximately how many people visit the bog, we usually sign the book.

Farther down the trail on the edge of the bog, one will come to the beginning of the boardwalk. Starting here, Canada Warblers will sing during May and June. Here, also, several Northern Waterthrushes invariably nest on both sides of the boardwalk. Canada Warbler and Northern Waterthrush are dependable here. The latter is often seen by scanning the top branches of trees, scattered along the perimeter of the bog to the left. The Canada Warblers are more challenging to see in the dense cover to the right, but they are almost as vocal as the waterthrushes. Magnolia Warblers are also expected after the start of the boardwalk. Cedar Waxwings are often seen anywhere along the boardwalk.

In May, there will be marsh marigolds in full bloom. The curious phantom crane fly is often seen here, slowly hovering in the low vegetation. As one continues on the boardwalk, Alder Flycatchers and Swamp Sparrows perch prominently in several places. During early June and again in late August, Olive-sided Flycatchers often visit the bog during their migration. Given the regular visits of these flycatchers and the breeding Eastern Phoebes, as well as possible visits of Yellow-bellied Flycatchers on

migration, it's possible to err by assuming that any flycatcher is an Alder. Along this stretch, if your hearing can pick up the sound, you may hear Ruffed Grouse drumming repeatedly from the forest edge.

Continuing on the boardwalk, look and listen for a Red-Shouldered Hawk. Off in the distance, we almost always hear a Yellow-throated Vireo singing from the top of a tree on the edge of the bog, but we are rarely able to locate it with our binoculars. You will more likely hear the Wood Ducks calling as they fly away. White-throated and Song sparrows are common. At any time of year listen for Evening Grosbeak. I have had fly-overs here several times. By late fall, most of the summer residents have left, but you may see Tree Sparrows and Pine Siskins from the boardwalk.



Northern Pitcher Plant

In the middle of the bog, you will come to the end of the boardwalk, which loops around on itself. Here is a panoramic view of the bog and surrounding woods. It is peaceful here, and you will often find yourself alone. Tree and Barn swallows often work the nearby pond. Check the pond for Mallards. Great Blue Herons do not nest here, but they will visit in summer. Listen for Common Ravens, since there is almost always one calling. Scan the trees on the far side of the bog for hawks. Please do not venture off the boardwalk onto the mat. The mat is fragile and you will be trampling tiny, rare bog plants, such as the round-leafed sundew. The mat surrounding the pond, which is relatively thin, is also treacherous for people to walk upon.

Here is where the northern pitcher plants grow. They are exquisite carnivorous plants whose leaves form a vessel that holds rainwater. Insects are lured into the pitcher and can't get out. They drown in the water, are digested, and thus become plant food. Later, in early to late summer, the tiny round-leafed sundew, another insect-eating plant, can be found by carefully inspecting the mat on both sides of the boardwalk. A magnifying glass may be helpful. Also visible here are a few species of wild, bogloving orchids. White-fringed orchid and rose pogonia are two of the orchids you may encounter, depending on when you visit. These are small orchids, not the large,

tropical kind that are sold in flower shops. Nevertheless, these orchids are beautiful. If you are interested in the orchids, bring a camera with telephoto capability.

As you retrace your steps back toward the edge of the bog, scan the spruce snags for finches, flycatchers, and woodpeckers. Black-backed is not here, but I have seen six species of woodpecker. Keep your ears open for a possible Boreal Chickadee—at least once I've heard a song that suggested this rare visitor but was not able to locate it. Brown Creepers and both nuthatches are residents. Also listen for Great Crested Flycatchers. Flowering plants along the boardwalk include wild cranberry, yellow loosestrife, and bog laurel.



View of open water at Hawley Bog.

Back at your vehicle, there are a few ways in which you can extend your time in this area. As mentioned above, you can take the other trail and explore cellar holes as well as an old logging road that allows relatively easy walking through the woods. In your car, if you drive west through the main section of Hawley, you can turn left onto Ashfield Road. This road quickly ascends to an area of potato fields. During the spring and summer, Vesper Sparrows can be found here. Continue on Ashfield Road and bear left onto Hawley Road. After passing Apple Valley Road on the left, you will come to Bear Swamp, a Trustees of Reservations property, on the right. Park along the pulloff and walk into this property, where there is relatively easy hiking on marked trails, with a spectacular variety of blooming native wildflowers in early to mid-May.

Robert Wood was born in Monmouth County, New Jersey, and grew up on the Jersey Shore. He discovered birding in 1982 when Phil Bedient took him to see a Gyrfalcon while he was living in Lancaster, Pennsylvania. He has lived in Berkshire County, Massachusetts, since 1987 and works as a Psychiatric Emergency Services Clinician for the Brien Center in Pittsfield. Robert Wood is a member of the Hoffmann and Allen bird clubs and lives in Windsor.

## Remembering Herman D'Entremont

#### Glenn d'Entremont



Herman D'Entremont on his 80th birthday (Photograph courtesy of the author).

It was around 1960 when a young man out hunting saw something beautiful at the other end of his sights. Wanting to learn more about the birds he was hunting, Herman almost stumbled upon a group of birdwatchers called the Brookline Bird Club. I think he found them in the *Boston Globe*, which announced a bird walk at Great Meadows National Wildlife Refuge in Concord led by a teenager named Peter Alden. Herman soon discovered there were more birds than ducks. They made sounds, too. He traded his gun for binoculars and a telescope.

During the 60s he was a quick learner and hobnobbed with the best birders of the times at what became his favorite birding spot—Plum Island and adjacent Newburyport. In a short time, he was leading trips and helping out beginners as the leaders before did with him. Herman became one of the elite, one of those whom beginners, intermediates, and even experts would ask for an opinion and receive an accurate answer.

Herman's hearing was excellent, still very good into his 80s, and he had a good command of bird song. He could identify most of the birds he heard. This came at a time when one had to learn song the old-fashioned way—by chasing down the sound and seeing its source. During the late '60s, '70s, and early '80s there were none better. He was in company of such notables as Nancy and Alden Clayton, Ruth Emery, Stella

Garrett, Ida Giriunas, Dick and Dora Hale, Warren Harrington, Larry Jodrey, Dennis and David Oliver, Evelyn Pyburn, Rod Sommers, Gerry Soucy, and Herman Weissberg, just to name a few.

He volunteered his time not only as a leader but also as a board member of the Brookline Bird Club for over 20 years and of *Bird Observer of Eastern Massachusetts* (now *Bird Observer*) for about 20 years. He authored the first "Where to Go Birding" in *Bird Observer*—"A Good Day at Cape Ann"—in 1973. (Reprinted on page 89). Herman also was program chairman of the now defunct Needham Bird Club for almost 30 years and assisted at the banding station at Manomet.

Herman gave of himself as well. He would take young and new birders to all corners of the state. Once he moved to Somerville, he befriended visiting birders by opening his home for them to stay and then going birding in their free time. Herman traveled extensively to all parts of the continent and the world. He birded in all 50 states, going to Hawaii in his 81st year.

His work with novice birders, young or old, was second to none. His quiet demeanor drew people toward him and he would always help locate birds for those having difficulty or not recognizing bird song. If he knew you had not seen a bird, he tried hard to get you on it. Always the patient birder, he would stay just five more minutes to locate what others had passed by.

Over the years the birding community has not had a better ambassador. A lot of us are probably in it because of Herman or someone like him.

Glenn d'Entremont is the nephew of Herman D'Entremont.



Editor's Note: Herman D'Entremont was one of the founding members of Bird Observer, which was originally called Bird Observer of Eastern Massachusetts. Herman wrote the first Bird Observer article about where to find birds, reprinted below, from Volume 1 Issue 1, Jan.—Feb. 1973.

#### A GOOD DAY AT CAPE ANN

Herman D'Entremont, Newton

For me the New Year began at 7 A.M. as I headed north on Rte. 128 toward Cape Ann. Yesterday my year list totaled 307, but today, 1972 was as empty as the Martin houses at Plum Island.

After entering the Gloucester city limits, a right turn on Rte. 133 brought me to the harbor. At the intersection of Rte. 127, also known as Western Avenue, I made another right. Hesperus Avenue, the road to Magnolia intersects at 1.4 miles, where a left and 0.8 miles more took me to the Hammond Museum, my first stop.

To get to the sea overlook, I walked down the driveway. The nearest land jutting into Gloucester Harbor is Mussel Point, to the north (left). From November through March this vantage often yields Harlequins, which can also be found to the south near a large island known as "Norman's Woe Rock."

Across the harbor mouth stands the lighthouse at the end of the breakwater at Eastern Point, which I shall visit later. The sun had not been up too long and was shining in my eyes when I looked seaward. My list now read: Red-breasted merganser, Common goldeneye, and Common loon. Yet this area can also provide Great cormorant, all three scoters, Common eider, Bufflehead, Greater scaup, Oldsquaw, and possibly King eider.

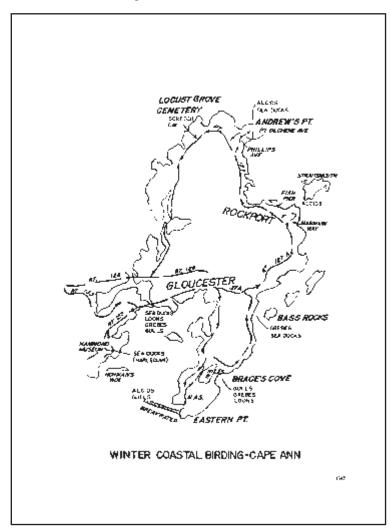
Returning to Gloucester, I saw a small flock of Snow buntings in Stage Fort Park. Near the famous Fisherman's Statue there were Great cormorant, Horned grebe, Common eider, and more Common goldeneye. This is also a good spot to search for wintering Barrow's goldeneye and white-winged gulls.

At the intersection of Rtes. 127 and 128, I turned right onto East Main Street, the scenic shore drive, toward Eastern Point. Approaching this landmark, one fines two stone pillars with a sign that states that this area is private. A guard is stationed here in summer, and if a birder is stopped he should say that he is going to the Massachusetts Audubon Society sanctuary at Eastern Point; your membership card may be necessary.

This road follows the shore to the right for 1.4 miles, through a second set of pillars to a parking lot at the Coast Guard station, where a sign painted on a rock tells this is for the M.A.S. Note the breakwater extending from the Coast Guard station southward into Gloucester harbor.

Though it was bitter cold and windy, I walked to the end of breakwater, and was rewarded with: Horned grebe, Common loon, Great cormorant, Common eider,

Razorbill, Thick-billed murre, Bufflehead, Red-breasted merganser, Dovekie, Purple sandpiper, and Black guillemot. A short-eared owl even flew overhead toward land. Alcids and an owl in the same place!



Driving back toward the stone pillars, I stopped at Nile's Pond. Depending on the weather and the ice on the pond, one can find Glaucous and Iceland gulls mixed in with the Black-backs and Herrings. Before reaching the pillars, I turned right onto S-shaped Bemo Avenue to a beach called Brace's Cove. The rocks of both sides of the cove's entrance hold food for Purple sandpipers. On the beach were Killdeer, Dunlin, and Sanderling; on the water, gulls – Iceland, Bonaparte's, Ring-billed, Black-backed, and the ever-present Herrings. This place is also frequented by Horned and Red-necked grebes, loons, scoters, and other sea ducks.

One should continue northward toward Rockport along Atlantic Road; a small pine grove on the right often shelters Red and White-winged crossbills. Many sea ducks congregate in the frequent inlets along this rocky coast. At one such place, called Bass Rocks, opposite Windmere Road and the Moorland Motor Inn, an Eared grebe has been seen for eight consecutive years. He was not here today, but Horned grebes and Buffleheads were.

I continued along Atlantic Road until it joined Route 127A, Thatcher Road, which I followed to Rockport town limits. I then turned right along Marmion Way. An old Coast Guard tower stands on a rocky ledge at "Straitsmouth" where one can find wintering Alcids, Grebes, and both Common and King eiders.

Just a couple of hundred feet offshore is Straitsmouth Island, owned by M.A.S. There I hoped to see a Snowy owl or Sparrow Hawk. A flock of King eiders wintered there in 1970–71, and for two weeks in January, 1970, a Red phalarope was seen.

Driving on, I turned right onto Oldgarden Road, where there is a little park at the intersection of Marraden Avenue. There I looked for Red-necked and Horned grebes as well as Iceland gulls. Farther on I turned left at Norwood Avenue then right at Highland to Mount Pleasant Street, which is 127A to Rockport Center.

The Rockport Fishpier, at the foot of Broadway, is favored by Alcids and White-winged gulls, but I continued along Route 127 toward Pigeon Cover. After passing the Cape Ann Tool Co., I turned right onto U-shaped Philips Avenue and continued straight through the next intersection. Past the Waldo Emerson Inn is a stone slope where a Rock wren stayed for four weeks, December 1965 to January 1966. But in any year this location is a good overlook for Barrow's goldeneyes, Red-necked grebes, and other sea ducks.

Returning to the intersection, I made a right at Philips Avenue and continued to bear right to Point Dechene Avenue, which leads to Andrews Point. Another right brought me to a stone wall and a view of a rocky point where one or two Black guillemots usually winter. Here, too, all the Alcids have been found at one time or another. This site is excellent during northeasters, when Kittiwakes, Shearwaters, Gannets, Phalaropes, Jaegers, and Leach's petrels, among others, can be blown by. Yet it is a good idea to check all the overlooks around Andrew's Point in any weather.

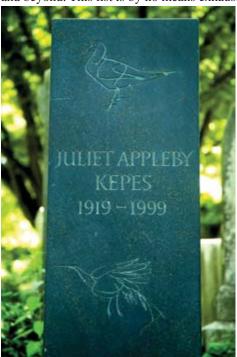
Now I continued along Route 127 toward Gloucester via Annisquam, arriving at the Locust Grove Cemetery. Turning right at the second entrance to the cemetery, across from a Texaco gas station, I parked near a small building. By climbing a knoll adjacent to the right side of the road, I could peer directly across the road into a hole about 30 feet high, in the crook of a large branch. There, as he has been for five years, was the resident Screech owl.

It was getting late. As I turned homeward along route 127, I began to think of the many fine restaurants in the Rockport-Gloucester area, a fitting way to celebrate a fine day of winter birding. For the hardy, yes, but a way to turn our "poorest" season into one of the best.

# A Commemoration of Birders at Mount Auburn Cemetery

#### Regina Harrison

From its founding in 1831, Mount Auburn Cemetery in Cambridge, Massachusetts, has been frequented by birds and by those who watch, admire, and study them. Many of those ornithologists and birders chose to remain at Mount Auburn in perpetuity, becoming a part of the landscape that supports so much avian life throughout the seasons. As you visit Mount Auburn this spring to enjoy its bounty of warblers and other migrants, keep an eye out for the names of the following individuals who contributed greatly to the study of birds and the avocation of birding in New England and beyond. This list is by no means exhaustive, but provides a sampling.



Juliet Appleby Kepes, 1919 - 1999 (detail) (All photographs courtesy of Mount Auburn Cemetery)

Path names of burial locations are provided here. If you like, you can obtain a specific location for an individual by visiting www.mountauburn.org, clicking on "Graves" in the upper right-hand corner, and entering the individual's name and a range of dates that include when that individual was interred. A pamphlet with a map is also available at the Mount Auburn Visitor Center for a small fee: it includes most of the individuals listed here. On the other hand, coming across one of these names by chance can provide a wonderful moment of unexpected communion with a past counterpart. For just as generations of birds continue to visit Mount Auburn, so too do generations of birders continue to arrive in spring, walking in one another's footsteps along the paths and roads of the cemetery with a continuity that feels timeless.

Glover Morrill Allen 1879–1942 (Maple Avenue)

Allen was a zoologist and ornithologist, and president of the Nuttall

Ornithological Club from 1919 to 1942. He was a professor of zoology at Harvard University and the author of many scientific publications, including *The Birds of Massachusetts* (with R. H. Howe, Jr., 1901), *Birds and Their Attributes* (1925), and *Bats: Biology, Behavior and Folklore* (1939). He also published numerous

distributional records and regional checklists of birds and was a prolific reviewer of ornithological works. William E. Davis Jr. profiled him in "Glover Morrill Allen: Accomplished Scientist, Teacher, and Fine Human Being" in *Bird Observer* December 2011.

#### Oakes Ingalls Ames 1893–1970 (Begonia Path)

Ames was the president of Mount Auburn Cemetery from 1934–1963 and again from 1967–1968. He was also a director of the Massachusetts Audubon Society. With lifelong interests in horticulture and conservation, he recognized and developed Mount Auburn's resources as an arboretum and a bird sanctuary, and oversaw the cemetery's restoration following the hurricane of 1938 with those resources in mind.

#### Francis Parkman Atkinson 1851–1874 (Palm Avenue)

Atkinson was one of the nine original members of the Nuttall Ornithological Club.

#### Outram Bangs 1863–1932 (Woodbine Path)

Bangs was elected a member of the Nuttall Ornithological Club in 1880. As a young man, he was known to his fellows as a boxer and a keen quail shooter, and admired for his dazzling waistcoats. As a curator of mammals and curator of birds at Harvard's Museum of Comparative Zoology (MCZ), he built collections of worldwide fame, including a contribution of 24,000 of his own specimens. William E. Davis Jr. wrote about him in "Outram Bangs and the Creation of a World-Class Bird Collection at Harvard's Museum of Comparative Zoology" in *Bird Observer* December 1997.

#### **Thomas Barbour** 1884–1946 (Excelsior Path)

Professor of zoology at Harvard and director of the MCZ, Barbour was one of the foremost American naturalists of his time, specializing in herpetology but also a great generalist. He was a member of the Nuttall Ornithological Club and author of several books, including *The Birds of Cuba* (1923) and *Cuban Ornithology* (1943). William E. Davis Jr. wrote about him in "Thomas Barbour: The Last of the Gentleman Naturalists" in *Bird Observer* October 2001.

#### Charles Foster Batchelder 1856–1954 (Excelsior Path)

Batchelder was elected a member of the Nuttall Ornithological Club in 1877, and was a founder of the New England Zoological Club in 1899. He was an associate in mammalogy and ornithology at the MCZ and author of *An Account of the Nuttall Ornithological Club 1873 to 1919* (1937). William E. Davis Jr. featured him in "He Spanned Two Eras: Charles Foster Batchelder, Last of the 'Shotgun' Ornithologists" in *Bird Observer* February 1999.

#### Thomas Mayo Brewer 1814–1880 (Yarrow Path)

Brewer was an early ornithologist and a friend of Thomas Nuttall and John James Audubon, who named Brewer's Blackbird after him; his friend John Cassin similarly honored him in the naming of Brewer's Sparrow. He was the editor of a revised edition of Wilson's *American Ornithology* (1840), and author of *North American* 

Oölogy (1857) and A History of North American Birds (with Spencer Fullerton Baird and Robert Ridgway, 1874). He was a trustee of Mount Auburn, 1870–1880, and was elected a member of the Nuttall Ornithological Club in 1876.

#### William Brewster 1851–1919 (Larch Avenue)

Brewster was the founder of the Nuttall Ornithological Club in 1873 and the American Ornithologists' Union (AOU) in 1884. The first president of the Massachusetts Audubon Society (1896), he also amassed one of the best collections of North American birds, which is now at the MCZ. He authored almost 300 papers and the book *Birds of* Cambridge Region (1906). Selections from his journals were published as October Farm (1936) and Concord River (1937). He was an early conservationist who understood the importance of preserving habitat. His studies of the Cambridge landscape were discussed by Michael W. Strohbach, Paige S. Warren, and Andrew Hrycyna in "Saturday, April 28th, 1866: Saw The First Chimney Swallow Today.' 150 Years of Bird Observation In Western Cambridge" in Bird Observer August 2014, and his writings were showcased in a series of articles compiled by Robert H. Stymeist titled "Gleanings from the Journal of William Brewster" in Bird Observer October 2003 through October 2004.



William Brewster, July 5, 1851 - July 11, 1919. "For, lo the winter is past, the flowers appear on the earth; the time of the singing of birds is come."

#### **Zebedee Cook Jr.** 1786–1858 (Rose Path)

Cook was a horticulturist and a founding member of the Massachusetts Horticultural Society in 1829, as well as a founder and trustee of Mount Auburn Cemetery from 1832–1833. During the early years of the cemetery, he called for the protection and preservation of birds at Mount Auburn.

#### Ruthven Deane 1851–1934 (Beryl Path)

Deane was an original member of the Nuttall Ornithological Club and a fellow of the AOU. He was a businessman by profession, but President Theodore Roosevelt referred to him approvingly as a "heart ornithologist" (Osgood 1935). After moving to Chicago, he became the first president of the Illinois Audubon Society in 1897.

**Ludlow Griscom** 1890–1959 (Palm Avenue)

Griscom became a curator at MCZ in 1927; prior to that, he was an ornithologist at American Museum of Natural History from 1917-1927. An expert on Mexican and Central American avifaunas, he was known for his brilliant field identification skills, encyclopedic memory, and enthusiasm for the sport of birding, to which he attracted a host of followers and protégés. He authored several works, including Birds of the New York City Region (1923), Modern Bird Study (1945), The Birds of Nantucket (with E. Folger, 1948), Birds of Concord (1949), Birds of Massachusetts (with D. Snyder, 1955), and Birds of Martha's Vineyard (with G. Emerson, 1959). His birding experiences during World War I were recently recounted in "Birding from the Front: A Wartime Letter from Ludlow Griscom," edited by David Swain, in Bird Observer



Ludlow Griscom, 1890-1959

October 2014; William E. Davis Jr. provided further biographical information in "Ludlow Griscom: The Birdwatchers' Guru" in *Bird Observer* February 1993.

#### Harriet Lawrence Hemenway 1858–1960 (Thistle Path)

With her cousin Minna Hall, Hemenway cofounded the Massachusetts Audubon Society in 1896, spurred by outrage over the devastation of colonies of Snowy Egrets and other birds for the sake of using their plumage in women's hats.

#### **Juliet Appleby Kepes** 1919–1999 (Oxalis Path)

Kepes was an artist and a writer and illustrator of children's books including the Caldecott Medal recipient *Five Little Monkeys* (1953). She collaborated with her husband Gyorgy Kepes on a series of experimental enamel panels of bird and tree designs for the Morse School in Cambridge, Massachusetts (1955), and she also designed a series of bronze birds in flight set against a wall of a playground at Clarendon Avenue Park, Cambridge (1980). Her elegant monument bears several engraved images of her fine bird illustrations.

#### Elizabeth "Betty" Petersen 1943–2013 (Andromeda Path)

Petersen was a volunteer and staff member at the Manomet Center for Conservation Services working on bird surveys, bird banding, marketing, and the Birders' Exchange Program, which delivers used binoculars, spotting scopes, and birding equipment to Latin American communities that would not otherwise be able to afford them. She joined the American Birding Association (ABA) staff in 2000 when the Birders' Exchange Program transferred to the ABA. She was president of the Nuttall Ornithological Club from 2011–2013.

Henry Augustus Purdie 1840–1911 (Mimosa Path)

Purdie was an original member of the Nuttall Ornithological Club and a fellow of the AOU.

**Henry Munson Spelman** 1861–1946 (Olive Path)



Horace Winslow Wright, 1848-1920. "The Lord is the strength of my life."

Spelman was elected a member of the Nuttall Ornithological Club in 1879 at the age of 18, one of the youngest members ever admitted and also one of the most active. He was a lawyer by profession and was the son of Israel Munson Spelman, who was president of Mount Auburn Cemetery from 1874–1905.

#### Wendell Taber 1897–1960 (Excelsior Path)

Taber was a member of AOU and the Wilson, Cooper, and Nuttall ornithological clubs. He edited some of the final volumes of Bent's *Life Histories of North American Birds* for the Smithsonian Institution. An investment counselor by trade, he was "one of the most active and enthusiastic amateur ornithologists in New England" (Unknown 1972). He was the brother of Elizabeth Taber Taintor.

#### Elizabeth Taber Taintor 1895–1955 (Excelsior Path)

A local authority on birds, Taintor was active in the Massachusetts Audubon Society's work to interest children in the appreciation of birds. She was the sister of Wendell Taber.

#### Charles Wendell Townsend 1859–1934 (Rose Path)

A physician by profession, Townsend was a prolific amateur ornithologist. Author of *Birds of Essex County, Massachusetts* (1904), *Supplement* (1920), and many reports in Bent's *Life Histories of North American Birds*, he was a member of the Nuttall Ornithological Club and a fellow of the AOU. He was also a member of the Cooper Ornithological Club, the Wilson Ornithological Club, the *Deutsche Ornithologische Gesellschaft*, and a charter member of the Essex County Ornithological Club. In addition, he was a member of the Boston Society of Natural History and, at the time of his death, a director of the Massachusetts Audubon Society.

#### Horace Winslow Wright 1848–1920 (Lily Path)

Wright was the author of *Birds of the Boston Public Garden: a Study in Migration* (1909) and a member of the Nuttall Ornithological Club. \*

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# Birds of the World: A New Exhibit at the Harvard Museum of Natural History

Maude Baldwin



Greater Sage-Grouse (*Centrocercus urophasianus*; center, male; right, female). Males perform elaborate mating displays. (Credit: Museum of Comparative Zoology, Harvard University; Copyright © President and Fellows of Harvard College)

#### For the birds—and for the birders

The Harvard Museum of Natural History's new exhibit, *Birds of the World*, is designed for you. Vying for attention with the impressive hanging whales in the gallery above the Great Hall of Mammals and showcasing the global diversity of modern birdlife, the new exhibit occupies the same space as the former North American bird display. Although the location is the same, both the birds and the balcony have undergone a dramatic renovation. In addition to being redesigned, with all cabinets repainted and relit to appeal to the general museum-going public, the exhibit is also organized to serve as a resource for birders and biologists curious about the evolutionary relationships that connect groups they know and love.

#### Global diversity in your own backyard

Birds are extremely diverse—over 10,000 species are alive today. In *Birds of the World*, nearly 750 specimens are on display; taxidermied mounts as well as 13 articulated skeletons were selected from the Ornithology Collection and from other public exhibits. These birds were chosen to represent as many different families as possible. Due to the Museum of Comparative Zoology's extensive collection of mounts, members of 178 living bird families —roughly 80%—are now included. Many

of the old Thayer Hall North American specimens are back in the cases, although some groups, such as ducks, had to be winnowed to a few key genera. Instead of being grouped by their biogeographic area—the common organization in most natural history museums—the birds are now organized according to their evolutionary history.

The modern study of bird relationships relies on research combining many different types of data, from comparative anatomy to paleontological studies on fossils to current cutting-edge work using genomic data. In December 2014, a new phylogeny, or tree of life of birds, was published, based on genome sequencing of 48 key lineages (Jarvis et al. 2014). This is an immense increase in information; 10 years ago, the only bird with a sequenced genome was the domestic chicken. Recent work has greatly improved our understanding of bird relationships, and these new results are reflected in the exhibit's organization. A large panel with a phylogeny tree shows the current relationships of the major groups. Smaller trees will soon be added to the individual cases so that interested visitors will have access to the underlying organization at a more detailed level. The average museumgoer may not care that penguins are the closest living relatives, or sister group, to albatrosses and tube-nosed seabirds; or that toucans are nested within the colorful smaller-billed barbets; or that sunbirds and hummingbirds, although superficially similar, are extremely distant cousins—but these stories are there if your curiosity is piqued.

The exhibit is not only about the birds, but also about evolution. Convergent evolution can be seen everywhere you look. When habitats or other selective forces are similar, animals often evolve to look, act, or sound like other species despite being only distantly related. The small size, iridescent plumage, long bill, and modified tongue of nectar-feeding sunbirds and hummingbirds exemplify convergent evolution, along with many other instances on display. Fulmars look like gulls, but they aren't close kin. The quail-like body shape is apparent in a number of different groups; "quail" themselves have independent origins in the Old and New Worlds. Buttonquail are not true quail at all, but in fact are more closely related to gulls and shorebirds. Common names are particularly misleading. Vultures in the Americas are *not* most closely related to vultures in the Old World, but rather, with condors form a separate family, renowned for their sense of smell. If you have ever pondered the similarities in terrestrial habits and plumage shared by Ovenbirds and waterthrushes (Lovette et al. 2010), or wondered if auks and penguins are close relatives or merely look alike due to the demands of polar life, you can find answers in the new display cases.

Studies on the evolutionary history of birds have produced a number of surprises over the recent years. Flamingos and grebes are each other's closest relatives, a finding that is backed up solidly by molecular work (Van Tuinen et al. 2001), skeletal similarities, and the discovery of intermediary fossil forms (Mayr 2004, Mayr 2005). This took many people by surprise, reflected in the new name for the group: the Mirandornithes, or wonderful birds (Sangster 2005). Parrots turn out to be more closely allied with songbirds than previously suspected, and falcons are more closely related to parrots than to other extremely similar-looking accipiters—the raptorial appearance and predatory lifestyle may have arisen independently (Hackett et al. 2008).





Macaroni Penguin (*Eudyptes chrysolophus*), Atlantic Puffin (*Fratercula arctica*). Penguins and puffins are distant relatives despite their similar outward appearance. (Credit: Museum of Comparative Zoology, Harvard University; Copyright © President and Fellows of Harvard College)

New studies of tanagers, the second largest family of birds after tyrant flycatchers, reveal other surprises. For instance, many species formerly belonging to this group, e.g., Scarlet Tanagers, are actually more closely related to cardinals. Conversely, many tropical species called cardinals, such as the Red-crested Cardinal and the Yellow Cardinal, both with striking pointed crests, are now grouped in the tanager family (Burns et al. 2014). Other unlikely members of the tanagers include the finch-like saltators, the tiny conebills, and the hooked-billed group of flowerpiercers. Bananaquits are also tanagers, as are their close relatives, the Darwin's finches, famous for their radiation throughout the Galapagos Islands. All this you can now see for yourself.

#### A bird walk through deep time

The colorful tanagers occupy the last case in the *Birds of the World* exhibit. To follow birds through time, save it for last and walk clockwise, starting with the large, flightless bird case to the left of the stairwell as you arrive on the balcony. These birds, called the ratites, are the most 'basal' group of birds, a term scientists use to indicate that this group split off from the rest of birds earliest in their evolutionary history. They are not technically *older* than other birds—a common misconception. All living birds today have been evolving for the same amount of time, but ratites—the group known as Palaeognathae—were the first to have branched off, or diverged, from the rest.

The ratites include many flightless birds: kiwis, rheas, ostrich, emus, and the impressive casqued cassowary, as well as the extinct moas and elephant birds. Many of these giants are too big to fit into the museum's cases. A chick and an egg represent the ostrich, and a cast of an elephant bird's enormous egg gives visitors a sense of its former stature. Surprisingly, recent research shows that Palaeognathae also includes the smaller South American tinamous, which can fly, raising questions about how many times flight was lost (Harshman et al. 2008, Haddrath and Baker 2012, Mitchell et al. 2014).

Yet more surprising to some visitors—to children in their "T. rex" phase and to some adults as well—might be the fact that birds are indeed dinosaurs and that crocodiles are their sister group. A juvenile saltwater crocodile winds its way beneath the rhea's feet, raising the question of origins and unexpected relatives. Skeletons of theropods, the agile, raptorial, meat-eating dinosaurs from which birds evolved, can be found together with a cast of the famous *Archaeopteryx* in the galleries on the museum's third floor.

After the ratites come the Galloanseres, the combined group of waterfowl—ducks and relatives—and landfowl or gamebirds, which include turkeys, pheasants, grouse, quail, and of course, chickens, as well as lesser known groups like the moundbuilders and curassows.

The remainder of birds—indeed, the majority of birds—are called Neoaves. Many of the major groups within Neoaves diverged from one another in a short window of time, making relationships difficult to determine. With the new bird genome project, scientists were finally able to unravel some of these events: pigeons, including the small ground-doves and the enormous crowned-pigeons, comprise an early-branching group and are related to the sandgrouse and to Madagascan mesites. Other relatives include the unlikely pair of flamingos and grebes. Cuckoos, bustards and turacos also belong to this early radiation, as do the Strisores, the group containing hummingbirds, swifts, and nightjars (Mayr 2010). The enigmatic foregut-fermenting hoatzin, a family of its own, has been traditionally difficult to place; it likely split off from other birds at roughly the same time in the distant past as these other early Neoaves.

Other major divisions in the bird tree of life include a group of waterbirds and their relatives, and another group called landbirds. Within landbirds, the largest radiation is that of the passerines, which includes over 5,000 species and is divided into the suboscines, or non-vocal-learning perching-birds, and the oscines, or songbirds, which likely arose in the Australasian region before spreading across the globe (Barker et al. 2004)

Songbirds are divided into a series of groups including crows and relatives, many of which are only found in Australia and Asia, such as birds-of-paradise, minivets, woodswallows, and the "true" orioles. North American orioles are in the icterid family, again misleadingly sharing a common name. Together, these are distinct from another songbird group, called the Passerida, which include the bulk of songbirds. Sister to the little-known rail-babbler (*Eupetes*), a specimen of which is on display, the Passerida include many of the songbirds familiar to North Americans: swallows, thrushes, wrens,



Red-billed Streamertail (*Trochilus polytmus*). Over 330 species of hummingbirds exist today—all in the Western Hemisphere, with most of the diversity in Central and South America. The earliest hummingbird fossils, however, are from Europe, indicating a wider range in the past. (Credit: Museum of Comparative Zoology, Harvard University; Copyright © President and Fellows of Harvard College)

tanagers, as well as the distinct groups of both warblers and sparrows from the New and Old Worlds.

Phylogenies are hard to describe in words; come to the museum to have them brought to life. In all of the display cases, recent research on each of the groups is surveyed so that closest relatives are placed close together. The exhibit is organized to be pleasing to the casual observer and informative to the bird sleuth. Other panels depict specializations of the bird body plan and maps of the radiation of passerines across the globe. New developments are in the works for the exhibit to become more multi-sensory in the future, maybe including bird songs and incorporating new interactive technology. As research continues and our knowledge about phylogenetic relationships changes, the exhibit will evolve as well.

#### Birds of the World exhibit information

The exhibit, made possible by a generous anonymous donation in memory of Melvin R. Seiden, Harvard AB 1952, LLB 1955, opened to the public on September 18, 2014. It is on permanent display at the Harvard Museum of Natural History, 26 Oxford Street, Cambridge, Massachusetts. Visiting hours are 9:00 am to 5:00 pm; Sunday mornings from 9:00 am to noon and Wednesday afternoons from 3:00–5:00 pm are free for Massachusetts residents.

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Maude Baldwin recently finished her PhD in Professor Scott Edwards' lab in the Department of Organismic and Evolutionary Biology. She has been researching how hummingbirds, which lack the mammalian sweet receptor, instead use their savory receptor to taste nectar sugars. In 2014 she helped with the redesign of the exhibit, synthesizing new studies on bird phylogenetics to reorganize the bird balcony with Jennifer Berglund, Janis Sacco, and the exhibits staff at the Harvard Museum of Natural History, along with Jeremiah Trimble and Kate Eldridge in the Museum of Comparative Zoology's Ornithology Department.

# **PHOTO ESSAY**

# Birds of the World

The Harvard Museum of Natural History





Brown Kiwi (*Apteryx australis*) left; Hoatzin (*Opisthocomus hoazin*) right. Kiwis are part of the earliest-diverging group of birds, the Paleognaths. The Hoatzin is an herbivorous tropical species that uses foregut fermentation as part of its digestive system. It is in a family of its own. (Credit: Museum of Comparative Zoology, Harvard University; Copyright © President and Fellows of Harvard College)



American Flamingo (*Phoenicopterus ruber*). Flamingos and grebes have been recently shown to be sister taxa, despite their morphological differences. (Credit: Museum of Comparative Zoology, Harvard University; Copyright © President and Fellows of Harvard College)





Tawny Frogmouth (*Podargus strigoides*) left; Costa's Hummingbird (*Calypte costae*) right. Hummingbirds evolved from an insectivorous ancestor. They form a group called the Strisores along with swifts (their closest relatives), frogmouths, nightjars, oilbirds, and potoos. (Credit: Museum of Comparative Zoology, Harvard University; Copyright © President and Fellows of Harvard College)



Three Hummingbirds: White-tipped Sicklebill (*Eutoxeres aquila*) left; Sword-billed Hummingbird (*Ensifera ensifera*) center; Sapphire-vented Puffleg (*Eriocnemis luciani*) right. Hummingbirds feed on different flowers and many have strikingly different bill shapes. While all living species are nectarivorous, hummingbirds also eat large numbers of insects. (Credit: Museum of Comparative Zoology, Harvard University; Copyright © President and Fellows of Harvard College)

## **FIELD NOTES**

## A Hawk In Pigeon's Clothing

David Sibley

*Editor's Note:* This article is reprinted from Sibley Guides online, where it was posted on November 23, 2014, and last edited on November 24, 2014.

I saw a Cooper's Hawk catch a Rock Pigeon a few days ago. By itself that experience is noteworthy – a Rock Pigeon is a big bird for a Cooper's Hawk to handle – but more remarkable was the way the attack unfolded.



Juvenile Cooper's Hawk (Photograph by Sandy Selesky)

I was just finishing a birding walk at a local farm. Ahead of me was a small field, recently plowed, where twenty or so Rock Pigeons were foraging on the ground. Another bird was about ten feet up and flying across the field toward the flock. I didn't give it much thought. It was just another pigeon making the sort of relaxed, floating approach that pigeons do – or so I thought. Except that when this "pigeon" got within about five feet of the pigeons on the ground it suddenly transformed into a Cooper's Hawk!

The pigeons all burst into flight, but much too late. The hawk was already among them and knocked one out of the air in a cloud of feathers.

I was stunned. It's always shocking to witness a life-and-death drama like that, but a few seconds earlier I was simply seeing a pigeon flying in to join the flock when suddenly everything changed. And I wondered: How could I (and, more amazingly, a whole flock of pigeons) misidentify a Cooper's Hawk like that? The hawk was in plain view, flying over an open field. Admittedly I did not give it much attention in that first glance, but there was nothing that drew my attention. It "registered" as a pigeon, which made sense for a bird coasting across the field. The pigeons must have seen it the same way, because normally they would not just sit on the ground and allow a Cooper's Hawk to fly into their midst.

I considered the possibility that this was just a very lucky Cooper's Hawk taking advantage of an opportunity with a flock of pigeons that either didn't see it or didn't think it was a threat. But I can't imagine a whole flock of pigeons not seeing this bird approaching, nor letting it get that close under any circumstances.

I think the most plausible explanation is that the pigeons saw the bird but didn't recognize it as a hawk (the same thing that happened to me), and that this was due to some deliberate mimicry by the Cooper's Hawk, a brilliant bit of acting.

Predators rely on surprise, so if there is any way they can camouflage or "disguise" themselves and sneak up on their prey, it makes sense that they would take advantage of that. The resemblance of Zone-tailed Hawk to Turkey Vulture is often cited as an example of this aggressive mimicry. Potential prey species don't react to the common and benign presence of Turkey Vultures overhead, and a Zone-tailed Hawk can hide among the vultures and drop onto unsuspecting prey.

Zone-tailed Hawks are born looking like Turkey Vultures, and they take advantage of it. I believe this Cooper's Hawk was doing something more deliberate and active, transforming its wingbeats and flight actions to mimic another bird.

I've seen raptors mimic the flight style of other species before. Several times at Cape May, New Jersey I saw Merlins adopt the undulating flight style of a Northern Flicker, or the irregular flicking wingbeats of a Mourning Dove. It was only for a second or two and always when they were low and actively hunting.

This behavior is so infrequent, and so brief, that I suspect it will be very hard to confirm that it is deliberate aggressive mimicry, but I believe that all of these predators are trying to disguise themselves in order to sneak up on their prey.

http://www.sibleyguides.com/2014/11/a-hawk-in-pigeons-clothing/

posted November 23rd, 2014; last edited November 24th, 2014 — David Sibley

Since the age of seven, **David Sibley** has been watching and drawing birds, traveling throughout North America indulging his love of nature study. This work culminated in the publication of The Sibley Guide to Birds in 2000, which became the fastest-selling bird guide ever, and several companion volumes including The Sibley Guide to Bird Life and Behavior in 2001, Sibley's Birding Basics in 2002, and The Sibley Guide to Trees in 2009. He lives with his family in Concord, Massachusetts.

### A Barn Owl in Concord

Cole Winstanley and Jalen Winstanley

At dusk on Saturday, January 10th, 2015 the two of us and our father, Carter, saw an intriguing "short-eared" owl at Pine Hill just west of Hanscom Field in Concord, Massachusetts. The bird was hunting over a marsh about 0.3 miles from us. In the low light, we felt in the field that it was a Barn Owl, not a Short-eared. We took about 70 dimly lit photos of the bird, of which only a couple showed discernible marks. Upon reviewing the photos at home, we decided that it was impossible to make a call based only on those photos, especially for such a rare bird as a Barn Owl. We decided to go back and try for better documentation.

The next day, the 11th, Jalen was tied up so only Cole and Carter returned to Pine Hill where they met David and Tim Swain. That evening they observed the bird flying



Barn Owl (Photograph by Cole Winstanley)

around the exact same area as the day before. Cole took ample photos and, this time, video. That night we were able to conclusively identify the bird as a Barn Owl.

We sent word out to a few locals who were interested in the sighting, and they corroborated the identification as Barn Owl. Some joined Jalen and Carter on the 12th to see the bird again.

On the next two days, various local birders observed the Barn Owl at the Pine Hill location. However, observers noted that the owl spent more time perched and less time flying and hunting than before. Far lower temperatures or accumulating stress due to lack of food may have contributed to this change in behavior. On Thursday the 15th, the sole birder at the location could not find the bird, and additional stakeouts each night until Sunday the 18th appeared to paint a picture of an intrepid southern wanderer that had succumbed to the cold of interior Massachusetts.

However, when David Swain reported an owl from a nearby spot on the following Tuesday (January 20th), a number of the original observers recognized the Barn Owl in his video. It had reappeared! Cole returned the following night and captured some of the first close-range, definitive documentation of the bird. Unfortunately, the Barn Owl vanished after that night, not to be found again despite a number of checks in both locations.

When we first observed the bird, we recognized it as a small raptor coursing over the marsh after dusk. Marks included a darker area that was present not only on the primary coverts, but also running in a rough line down the center of the length of the wing. There was no contrast between the primary and secondary coverts, and there appeared to be a paler leading edge of the wing. The photos showed no black markings on the underwings, including at the wrists and wingtips. With a scope, however, Tim Swain saw grayish marks in these areas similar to those that can be found on female

Barns. There was no indication of dark wingtips in the field or in any of the photos. Additionally, there was contrast between the tawny armpit area and the white belly, which is different from the laterally uniform coloring on the underparts of Short-eared Owls. Though not obvious in the field, we noted that some photos appeared to show the distinctive Barn Owl face.

The bird's flight was fluttering with less gliding and more flapping compared to a Short-eared. Its wings were held in a gull-like dihedral when gliding, and it frequently made steep banks that showed off the strikingly white underwings. From the video, Simon Perkins noted that the "proportions (shorter tail, bigger head), wing set (more gull-winged, osprey-like in glide), wing pattern, more deliberate, fluttery flight, long face, [and] the dark line between eye and bill on an otherwise white face" all pointed to Barn Owl (Perkins 2015).

Barn Owls are rare and irregular in Massachusetts, with the exception of Martha's Vineyard and Nantucket where they were recorded in the second Breeding Bird Atlas (Kamm et al. 2013). On these islands, Barn Owls roost in old barns, tree cavities, and other structures during the day, and hunt over coastal marshes at night. They generally nest in man-made structures.

This sighting in Concord apparently represents the first Barn Owl recorded in Middlesex County since the 1995 sighting in Pepperell by M. Resch (Resch 1995). In Concord or the Concord-Sudbury River Valley, the last previous sighting of a Barn Owl had been in April 1984 by R. K. Walton. Walton notes that Concord had a pair of Barn Owls that were seen by Gardler in the summer of 1959 (Walton 1984, p. 139). A breeding pair and hatchlings were observed by Armstrong in 1945, though all perished in a blizzard (Griscom 1949, p. 235).

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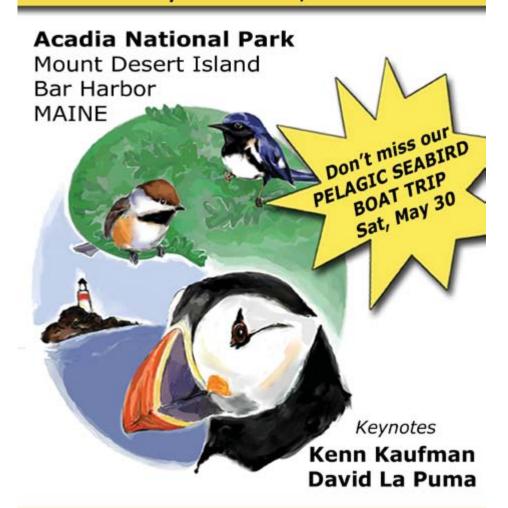
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Cole and Jalen Winstanley are teenaged birders who live in Concord. They are focused on birding as locally as possible, and have found over 160 species in their yard alone. As such, they contribute significantly to the local bird data in Concord, with over 500 eBird checklists in 2013 and 2014. In 2014, they found uncommon breeding birds including Sharp-shinned Hawk, Canada Warbler, and Louisiana Waterthrush all within walking distance of their home. They frequently discover new areas to bird and share them with the local community; their favorite patches in Concord include Estabrook Woods, Great Meadows NWR, Barrett's Mill Conservation Land, and the Massport 13C trails.

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## MUSINGS FROM THE BLIND BIRDER

## Song of Spring

Martha Steele

It is early March and time to head to Rock Meadow in Belmont as the sun sets. The fields are a patchwork of snow and frozen grass. We park our car and start walking out into the meadow, Bob with his eyes to the sky and me with my ears ready to hear the bird that to me signals the coming avalanche of spring bird song. As light fades from the sky, we suddenly hear *peent*! off to our left.

#### "WELCOME BACK!"

Such is my reaction to my first American Woodcock of the receding winter. We cannot tear ourselves away, following any flight song or calls we hear across the fields. We eventually call it a night and head home, looking forward to repeating this experience multiple times over the coming weeks.

It probably goes without saying that spring migration is the most exciting and anticipated time of year for the majority of birders in the Northeast. We are fortunate to have the opportunity to see up to 35 or more species of warblers in breeding plumage pass through during spring migration. We are ecstatic over fallout days where birds are everywhere, starting with our backyards. We want to be in 100 places at the same time and see every bird that passes through. Mount Auburn Cemetery, Marblehead Neck Wildlife Sanctuary, the Beech Forest Trail on Cape Cod, October Mountain State Forest in western Massachusetts, and other hot spots take on a whole new façade during spring migration, morphing from quiet and serene places to walk and contemplate into a birder's version of Times Square, with our returning avian friends lighting up our days with their brilliant colors.

The excitement of the spring is even more striking on the heels of winter birding. What I find most challenging about the winter and fall seasons is identifying birds based on their calls and chip notes, as full song is rarely heard. I marvel at those, such as Bob, who know the bird that just gave that barely audible, short, and single chip note.

"See how sharp that is? It is really different from any other bird."

Yeah, right. Easy as pie.

Still, winter has its own treasures, its own leisurely rhythm, and birds typically not present at any other time of the year, such as Snow Buntings, boreal species—Snowy Owl, Bohemian Waxwing, Pine Grosbeak, crossbills—and the myriad of handsome sea ducks, such as King Eider and Harlequin Duck. But as the days begin to lengthen (and the cold begins to strengthen), it is hard not to be looking forward to the renewal that is spring.

Spring is not the only migration season, of course. The fall migration brings its fair share of returning migrants, some more common in the fall than spring, and occasional rarities and unusual stories.

One of my favorite stories is recounted by Tom Gagnon of Northampton about a female Rufous Hummingbird that showed up during the fall of 1996 at a feeder in Agawam. Birders flocked to see the bird throughout the fall. As winter approached, considerable discussion ensued about what to do with the bird, which was unlikely to survive the winter. Federal and state permits were acquired, and the hummingbird was mist-netted and transported to Tom's greenhouse in Northampton to spend the winter. When spring arrived, the bird was released, presumably never again to be seen in these parts.

The following September 1997, the hummingbird showed up at the exact same feeder in Agawam and resumed its autumnal routines. Again, the bird was captured (after the required federal and state permits were secured) and transported back to the Northampton greenhouse. Upon arrival in the early evening, the female went to roost in the exact same spot on a sweet olive bush that she had used the previous winter. The spring of that second year, Trevor Lloyd-Evans of the Manomet Bird Observatory (now the Manomet Center for Conservation Sciences) banded the Rufous Hummingbird. This cycle continued for seven straight years. During the seventh season, the Agawam homeowner reported seeing the bird feeding just before dark, but never saw the bird again. Tom reports that he and the homeowner believed that some predator got the bird overnight, and the two mourned the loss of their avian companion.

Stories like this only intensify my appreciation of and fascination with the feats of migratory birds and spur me on to spend as much time as possible birding during migration. The spring migration is such a scintillating time of year to bird and just so much fun. But I am always struck by how quickly it seems to pass. Song gradually increases from late March through April, with an emphatic crescendo in May. Heading to northern New England gives a birder opportunities for surround-sound bird song through June. But by early July, the woods and meadows have quieted substantially. We realize with a sinking feeling that another migration and courtship season has passed and it will be another year before we hear the songs of the spring again. It seems so unfair how quickly it passes, and how abruptly it ends.. Yes, there will be some song. and yes, the birds are still there, but they are harder to find in their silence and the noise they make turns more muted, less frequent, and more challenging to identify. This is especially true for the birder who does not see well. The difference between the spring and early summer and the rest of the year for me is so striking. Still, I work hard at trying to master the calls and chip notes because I know that most of the year, those are the only sounds that I will hear.

In the end, spring migration means nearly everything to me as a birder without vision. It is my time of year when the playing field evens out just a little between me, the blind birder, and you, the sighted birder. I can perhaps identify the bird song that others may not, and I can participate in vigorous debates about who just sang. It means optimism, joyousness, and anticipation not present most other times of the birding year.

It means a buzz in the air, constant checking with our devices and among ourselves to see if anything showed up somewhere else. It means a profound connection between us and our passion—the birds—in ways that I do not often feel at other times of the year. It is the pinnacle of my birding year, a season to savor, even if it always seems to flash by. So, enjoy. We are about to embark on another spring migration in Massachusetts.

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.

### The Benefits of Using Bird Observer's Website

Have you ever spent time searching through past issues of *Bird Observer* for an article you wanted to reread? Have you remembered a *Where to Find Birds* feature with a wonderful map and description of one of your favorite birding locations, but were unable find it again?

Find what you need on *Bird Observer*'s web site at <a href="http://birdobserver.org">http://birdobserver.org</a>. The menu options provide information on many aspects of the content and workings of the journal, including subscription information. If you click on the *Index* menu option, it will display a page that organizes the content of all of the issues of *Bird Observer* for the past 40 years.

The *Index* page links to a complete *Table of Contents* that dates back to the journal's first issue in 1973. It also contains links to *Where to Find Birds* listings sorted alphabetically, by geographic location, and by keywords. The indices also list all book reviews, all cover art and artists, and the popular *At a Glance* photo quizzes to fine-tune your identification skills. A search of these indices will quickly lead you to the appropriate issue. If you are a long-time subscriber and have saved back issues in print, you can then access the publication you need. If the article of interest appeared between 2003 and the current issue, **and you are a current subscriber**, you can read it online or download it to your smart phone or other personal device.

The indices are open to everyone, but you must be a subscriber and log in to access the online journals. To obtain the user name and current password, please send an email to birdobserver@jocama.com and include your name as it appears on your *Bird Observer* mailing label.

## **GLEANINGS**

# Serendipity and Science

David M. Larson



Golden-winged Warbler (Photograph by Dennis Cooke, CC BY-NC 2.0)

One of the great technical advances of recent times that has allowed for fine-tuning of our understanding of many aspects of bird behavior has been the invention and improvement of geolocators. Often deployed on birds captured on their breeding or wintering grounds, these recorders can provide data on the location of birds for up to a year. They can be useful in helping to plot the annual movements of individual birds and the differences in migratory patterns of subpopulations of a species (Larson 2014). The geolocators are small and have no transmitter capability, so the birds have to be recaptured in order to read the data.

An important skill in science is the ability to recognize the existence and importance of serendipity in data collection. When you combine geolocator data with serendipity, you may discover some interesting phenomena. And this is the crux of the article described here.

Streby et al. (2015) were carrying out a fairly standard migration study on Goldenwinged Warblers when serendipity hit. Several of their geolocator-carrying warblers arrived on the breeding grounds in eastern Tennessee between April 13 and April 27, 2014, following migration from eastern Colombia. The researchers captured five of the birds on May 3–9 and read the geolocators. The data revealed that rather than stay on territory, the birds departed on April 26–27 and flew toward the Gulf of Mexico. Between April 27 and April 30, a huge storm system swept through the breeding-

ground region, producing 84 confirmed tornadoes, 35 human fatalities, and over a billion dollars in property damage. After the storm passed, on May 1–2, the five tracked warblers returned to their breeding grounds and resumed defending territories. Without the geolocator data, the researchers would not have known that the warblers had flown some 700 kilometers from the breeding grounds apparently to avoid this oncoming storm. The researchers had evacuated the storm path as well.

Although each of the warblers carried out this evacuation using a different route, their general flight paths corresponded to their normal fall and spring migration routes via the Gulf of Mexico coast and, in one case, along the Florida coast to Cuba.

Golden-winged Warblers are obligate migrants, meaning that migration occurs on a regular schedule and is considered to be innate or genetically determined. This migration pattern is in contrast to facultative migration, which is triggered by acute weather changes or food availability. Although obligate migrants can delay, alter, or reverse parts of their migration path because of weather or other external stimuli, it was not clear that obligate migrants could undertake facultative migrations. Yet this is exactly what appears to have happened with these five warblers.

It seems inescapable that these male Golden-winged Warblers performed a brief facultative migration of over 1500 kilometers in order to avoid the oncoming storm system. They then returned to defend their breeding territories throughout the remainder of the season. The trigger for their exodus remains speculative. At the time of their departure the weather patterns onsite were not unusual; temperature, atmospheric pressure, wind speed and direction, cloud cover, and precipitation were all unremarkable. The storm system was still 400–900 kilometers distant. The remaining environmental clue that seems most likely to have provided the trigger was infrasound, frequencies below the range of human hearing. Infrasound can propagate at over 100 decibels thousands of kilometers ahead of such storms, and the frequencies involved are well within the range of bird hearing.

The most reasonable explanation for this behavior of the warblers is that they heard the sound of the approaching storm system and decamped to avoid personal risk. They returned when the coast was clear and continued on with their breeding season. Serendipity came into play because the birds involved were carrying geolocators that were recovered, revealing unsuspected and unexpected behavior.

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David M. Larson, PhD, is the Science and Education Coordinator at Mass Audubon's Joppa Flats Education Center in Newburyport, the Director of Mass Audubon's Birder's Certificate Program and the Certificate Program in Bird Ecology (a course for naturalist guides in Belize), a domestic and international tour leader, Vice President of the Nuttall Ornithological Club, and a member of the editorial staff of Bird Observer.

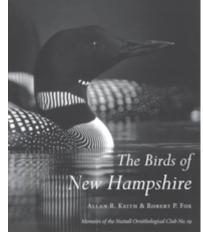
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## **ABOUT BOOKS**

## Making It Big

Mark Lynch

Complete Birds of North America (second edition). Jonathan Alderfer (editor) with Jon L. Dunn. 2014. Washington, D.C. National Geographic Society.

"The bigger the better; in everything." (Freddie Mercury, frontman for Queen)

Birders really like it big. Bigger scopes and camera lenses and more powerful binoculars have become the fieldmarks of the hardcore birder. Birders thrive on big lists, big days, and big years. Big birds are the species that get all the attention. A Gyrfalcon or a Snowy Owl trumps a Merlin or Screech Owl every time. The same is true for bird books. We want to believe the bigger the book, the more information on birds, the more identification tips, the more details on where to look for a species, and more lush photographs. I would need several coffee tables in every room of my house just to showcase all the oversized volumes I own on birds. The truth is, though I may glance at these big books a few times, I don't go back time and again to *use* them like I use a field guide. Most of these large volumes become simply decorations, trophies, or room accessories. Admit it, we may not read most of these large books even once because they are not really important to our birding. They are not *useful*. The *Complete Birds of North America* is another doorstopper of a book that rivals the size and thickness of a modern college dictionary. But is it *useful*?

The Complete Birds of North America is a companion volume to the National Geographic Field Guide to the Birds of North America. This popular field guide was first published in 1983. Younger birders may have no idea what a splash this guide made when it first came out. To begin with, it was a different-looking field guide, printed in a larger format than the Peterson field guides, which most people used at the time. Because it did not fit in your pocket, a cottage industry started designing special cloth carriers for the guide. The illustrations were by a variety of artists, and the identification information was cutting edge for the time. Finally, all the birds of North America were now in one volume. This was a breakthrough for birders who, up until then, had been using Peterson's Eastern and Western guides. Originally, you had to order the new guide from the National Geographic offices, and those first orders of the field guide came with a fine companion coffee-table book on birds, a beautiful full color map of bird migration, and a set of odd floppy records of bird calls that were actually quite good. (NB: I understand that some of you may have to ask your grandparents what records were.) The National Geographic guide ushered in a new competitive era in the publishing of bird guides. Most of these guides failed to catch on, and I have shelves of these doomed publications. The National Geographic guide remained competitive with the Peterson until the arrival of the Sibley field guide, which



rapidly became *the* popular guide to the birds. Today, the National Geographic guide remains popular, and I keep a copy in the car along with my Sibley.

The Complete Birds of North America is a greatly expanded version of the National Geographic field guide. Most of the illustrations in the Complete Birds of North America are the same as those in the field guide and are about the same size. These illustrations are augmented by new ones of vagrants and recently split species and some nice color photographs that begin the description of each bird family. The maps are slightly larger and more detailed. There are also larger maps showing the ranges and migratory routes of particular species like American and Pacific golden-plovers and the Arctic Tern.

The emphasis in this book is on the text rather than the illustrations. There are just a few pages of introduction that describe the basics of taxonomy, plumage variation, and feather topography. The species descriptions begin on page 10 of this 743-page book. Each one has been rewritten and greatly expanded from the field guide. There are details about identification, similar species, status and distribution, voice, and population. There is an introductory paragraph of varying length. Most species descriptions run to about half a page. But species that have a number of recognizable plumages, regional variations, or subspecies have much longer entries. Cackling and Canada geese have a full page devoted to each. The Red-tailed Hawk has two full pages of dense text. Each species description includes the bird's ABA abundance code number and its four-letter banding code.

Recently split species are fully described and illustrated. These include birds like the Sooty and Dusky grouse, recent splits from Blue Grouse. Species that have occurred in North America only as extremely rare vagrants are given a full descriptive treatment complete with an illustration. The Scaly-naped Pigeon is included even though there are only two very old records for North America. Some of these extreme rarities are quite recent, however, like the Rufous-necked Wood-Rail that was seen at the Bosque del Apache National Wildlife Refuge in July of 2013.

Every family has a lengthy introductory section that includes topics like structure, plumage, behavior, distribution, taxonomy, and conservation. Many genera also have a short descriptive introduction, like this one for eagles, genus *Aquila*:

Worldwide, there are ten species in this genus, only one of which occurs in North America, the Golden Eagle. Large raptors with wide wings, all are fierce hunters of mammals and birds, and many are prized for falconry. The human descriptive term "aquiline nose" refers to the hooked beak of *Aquila* eagles. (p. 163)

These sections put the North American avifauna in a global perspective.

Well-written special sections are devoted to describing particularly difficult field problems. These include the separation of Taiga and Tundra Bean geese, the Tule Goose subspecies of the Greater White-fronted Goose, and subspecies identification of male Common Eiders, including *Borealis*, which has been identified here in Massachusetts in winter. There are other detailed subsections on separating Common Ringed and Semipalmated plovers, the challenges of winter longspurs, redpoll identification, and Atlantic and Gulf Coast Clapper Rails versus King Rails. All of these sections are far too long to be included in a typical general field guide.

The book ends with a short two pages of additional reading suggestions and a long list of credits.

The Complete Birds of North America occupies an interesting place in bird literature. It is much more informative than a standard field guide but not quite as scientifically thorough and fully referenced as the species entries in the Birds of North America Online. That website is a great resource but concerns itself only with species that breed in North America. The Complete Birds of North America bears some resemblance to the classic reference book the Handbook of Bird Identification for Europe and the Western Palearctic, although the large illustration plates in the Handbook are separate from the text. Even though that book is several decades old, I still use it as a reference whenever a European species shows up here. Like the Handbook, the Complete Birds of North America is aimed at active birders; its thrust is species identification, while at the same time offering much interesting information on species behavior, breeding, and migration.

The *Complete Birds of North America* is an impressive and well-written book. But will birders find it useful? Because it is too large to carry about, even in the car, it is a book to use at home. The *Complete Birds of North America* has the potential to be a handy go-to reference guide for the serious birder who wants to know more about species than he can find in any field guide or many on-line resources. Will it become a standard home reference or end up gathering dust like so many other bird books? Time will tell, but for now, it is sitting on my desk.

"Any intelligent fool can make things bigger and more complex... It takes a touch of genius - and a lot of courage to move in the opposite direction." E. F. Schumacher (Brainyquote online 2015)

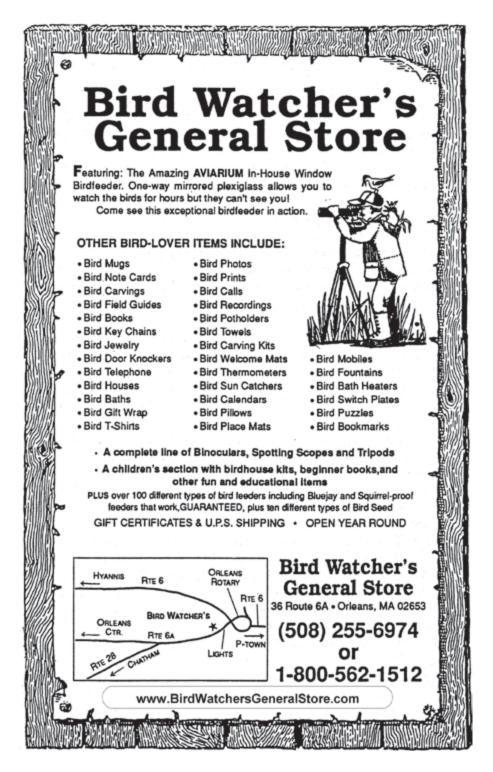
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## **BIRD SIGHTINGS**

#### November/December 2014

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

November opened with a weekend storm, which turned into a nor'easter bringing the first snow of the season along with strong winds and some coastal flooding. Boston's snow quickly turned into rain, but snow piled up in southeastern Massachusetts, and some flooding closed roads in Plymouth County. Most of the month saw near normal temperatures. Boston averaged 42°, with the first freeze on November 15. The first major snowstorm occurred the day before Thanksgiving and dumped up to 16 inches in parts of the state. Many areas lost power, creating havoc for those preparing Thanksgiving festivities. Snowfall totals were highest in Franklin and Worcester counties, Hawley recorded 16 inches, and Royalston had 14 inches. Boston had only 2.6 inches of snow but 1.57 inches of rain during the Thanksgiving storm.

December was warmer than normal; Boston averaged 38°, three degrees above normal. The high was 64° on December 1, and the low was 18° on December 8. The big story for the month was the nor'easter that occurred on December 9, which brought record rainfall to the state. Many areas reported more than three inches of rain; Wakefield recorded the most with 3.94 inches. Strong winds caused coastal flooding and power outages.

R. Stymeist

#### WATERFOWL THROUGH ALCIDS

On December 20 a Ross's Goose was discovered at Turners Falls. Because it was accompanied by two Snow Geese, birders had an opportunity to make comparisons. The Ross's Goose lingered through December 26, and many enjoyed it.

Cackling Geese were well reported during this period. On December 7 a Tundra Swan was discovered in Seekonk, where it was foraging in a cornfield with Canada Geese. It remained through December 19, during which time it moved around between Seekonk and Rehoboth. Tufted Ducks were reported from Falmouth and Nantucket. Because a Tufted Duck had been reported from Nantucket during the past two seasons, this was likely a repeating bird. Barrow's Goldeneyes were well reported, especially from inland locations. Inland reports appear to be increasing, but it is difficult to tell whether they signify a trend or simply better coverage as birding increases in popularity across the state.

**Eared Grebes** were reported from Quabog Pond in Brookfield and Wakeby Pond in Mashpee. This species is always an exceptional find, but the one in Worcester County appears to be the first inland record in 35 years.

For years a significant vulture roost has been assumed to exist in Westport because of reports of high numbers during the winter. Black Vultures have often been included in these tallies, but a count of 31 on December 2 shattered all previous records. A hybrid Red-tailed Hawk x Red-shouldered Hawk was photographed in West Boylston on November 9. According to the observer, there appear to be only about 10 records of this hybrid.

On November 28 at 8:13 am, a flock of 24 Sandhill Cranes was sighted flying south over Interstate 95 in Newburyport. Before this month, this number of Sandhills was unprecedented in Massachusetts and probably in the entire northeast United States. Earlier in November as

many as 30 Sandhills were reported near Skowhegan, Maine. On November 27 a flock of 24 was seen flying south over Seabrook, New Hampshire, and the next morning was the Massachusetts sighting. Also on November 28 at 2:00 pm, 23 were reported flying over Lighthouse Point in Connecticut (they were flying high; undoubtedly one was missed). On November 29 at 10:15 am, the flock was seen over Philadelphia. These sightings give us an idea of the Sandhills' movements. It is fascinating to be able to follow these birds, something made possible only by today's technology, which combines reports from email Listservs, eBird maps, and Facebook posts.

Black-headed Gulls were reported from five locations, including a rare inland sighting in Hadley. Little Gulls were reported from four locations. A Mew Gull was discovered on the Nantucket Christmas Bird Count (CBC) on December 28, and a Thayer's Gull was found at Niles Pond in Gloucester on December 27. As usual, Nantucket boasted large numbers of Lesser Black-backed Gulls.

							M. Rines
Greater Whi	te-fronted Goose			American W	/igeon		
11/15-12/3			Goetschkes + v.o.	11/1	P.I.	80	T. Wetmore
11/16-23	Lunenburg	3	V.O.	11/2	C. Berkshire	17	T. Tyning
11/23	Lakeville	1	J. Young	12/2	Fairhaven	44	R. Stymeist
12/10-13	Nantucket	1	J. Papalay#	12/2	Waltham	65	J. Forbes
Snow Goose	Namucket	1	<b>3.</b> г арагау#	12/0	Barnstable	80	
11/25	Randolph	6	P. Peterson	American B		80	C. Lapite#
		255				217	M T1.41
11/28	Pittsfield		T. Collins	11/23	Acoaxet	217	M. Lynch#
12/2	Sheffield	5	R. Wendell	11/29	P.I.	600	T. Wetmore
12/14	Hatfield	5	S. Sauter	Blue-winged			m m :
12/18	Nantucket	4	V. Laux#	11/2	C. Berkshire	1	T. Tyning
12/20	Turners Falls	2	J. Smith	11/4	Marstons Mills		P. Crosson
Ross's Goose				11/5	Newbypt H.	1	D. Larson
12/20-26	Turners Falls	1 ph	B. Zajda + v.o.	11/28	Chatham	2	R. Schain
Brant				12/29	Sheffield	1	C. Jones
11/1	Quabbin Pk	7	L. Therrien	Northern Sh	oveler		
11/10	Wellfleet	225	P. Kyle	thr	Arlington Res.	9 max	V.O.
11/15	Bourne	179	M. Lynch#	thr	P.I.	12 max	V.O.
12/23	Nahant	350	L. Pivacek	11/19	Belchertown	10	E. Dalton
Cackling Go	ose			11/22	Marstons Mills	6	L. Waters
11/1-18	Turners Falls	1	J. Coleman#	12/6	Pittsfield (Onot	a) 3	J. Pierce
11/9	Agawam	1	L. Therrien	12/14	E. Boston	11 CB	C (R. Stymeist)
11/9	Concord	2 ph	D. Sibley#	12/26	Fall River	15	C. Longworth
11/10	Amherst	1 *	I. Davies	Northern Pir	ntail		8
11/22-12/3	1 Belmont	2 ph	B. Miller + v.o.	thr	P.I.	175 max	v.o.
12/5-07	Rochester	1	J. Sweeney	11/22	Yarmouth	6	E. Hoopes
12/14-19	GMNWR	1	S. Perkins	11/23	Acoaxet	37	M. Lynch#
12/14	Hadley	1	E. Dalton	11/30	Marstons Mills		J. Davis
Tundra Swar	1			12/6	Quabog IBA	27	M. Lynch#
12/7-19	Seekonk/Rehob	oth 1	S. Davis $+$ v.o.	12/14	Hadley	20	L. Therrien
Wood Duck				12/28	Sudbury	29	B. Black#
11/1	Douglas-Sutton	81	M. Lynch#	Green-winge			Di Diaci.
11/6	GMNWR	30	A. Bragg#	11/9	Nantucket	75	K. Blackshaw
11/16	Brookline	49	P. Peterson	11/16	P.I.	450	T. Wetmore
12/30	Jamaica Plain	13	P. Peterson	11/18	Longmeadow	21	M. Moore
Gadwall	Juniarea I ram	13	1.1 eterson	11/20	Pittsfield (Pont.		J. Pierce
11/8	Pittsfield (Pont.)	6	Allen Club	12/25	Turners Falls	1	J. Coleman
11/22	Hyannis	40	L. Waters	Canvasback		1	J. Coleman
11/22	W. Yarmouth	54	P. Bono	thr	Cambr. (F.Pd)	4 max	V.O.
11/28	Ipswich	25	P. + F. Vale	11/3	Hudson	2	T. Spahr
11/29	Nantucket	51	B. Perkins	11/16	Nantucket	8	K. Blackshaw
12/27	P.I.	100	T. Wetmore	11/23	Richmond	5	J. Pierce
Eurasian Wig		100	1. Wellilore		/19 Turners Falls	5 max	
11/1-25	P.I.	1 m	T. Wetmore	12/2		5 max 5	v.o. J. Pierce
11/1-23	Marstons Mills	1 111	S. Paventy + v.o.	12/2	Stockbridge	68	
11/3		1 1 m			Nantucket		M. Malin#
	Westport 1 Fairhaven		E. Nielsen	12/28	Brookline	1	R. Schain#
		1 m	D. Logan#	Redhead	C th-1	4	
11/23	Somerset	1 m	S. Davis	thr	Southboro	4 max	V.O.
12/27	Nantucket	1	J. Smith#	11/25	Nantucket	1	K. Blackshaw

Redhead (cor			0.35	11/22	Nant. Shoals	6420	BBC Pelagic
12/4	W. Newbury	3	S. Mirick	12/16	P.I.	420	T. Wetmore
12/7	Lee	1	R. Wendell	Long-tailed I		4.0	D. 1. 1. 1.
12/18	Clinton	2	J. Lawson#	11/1	Wachusett Res.		P. Morlock
12/26	N. Dennis	1	M. Faherty		3 Quabbin Pk	59, 2	L. Therrien
12/27	Nantucket	5	M. Malin#	11/1	Dennis (C.B.)	575	P. Flood
Ring-necked		250		11/2	Eastham (F.E.)		B. Nikula
thr	Waltham	270 max		11/22	Nant. Sound 1:		BBC Pelagic
thr	Cambr. (F.Pd)	186 max		11/27	Richmond	3	C. Jones
thr		1151 max		12/15	Newbypt H.	340	R. Heil
11/5	W. Newbury	150	P. + F. Vale	Bufflehead	a 5	120	m.m. :
11/9	Pittsfield	700	S. Surner	11/2	C. Berkshire	130	T. Tyning
11/16	Falmouth	225	C. Caron	11/5	Falmouth	250	M. Malin
Tufted Duck			G 77 11	11/8	Marion	385	M. Lynch#
12/13-31	Falmouth	1	S. Kellogg	11/9	Edgartown	210	R. Stymeist#
12/28	Nantucket	1	F. Gallo	11/9	Eastham (F.H.)		P. Crosson
Greater Scau		4.0	TD 1111	11/13	Nahant	500	J. Berry#
11/4	P.I.	19	T. Wetmore	12/28	Nantucket CBC	2200	J. Trimble#
	2 Wachusett Res.		M. Lynch#	Common Go		20	3.5.7. 1.0
12/1	Marion	91	M. Lynch#	11/5	Southboro	38	M. Lynch#
12/14		1320	J. Trimble	11/8	Brewster	30	K. Fiske
12/22	Stockbridge	3	R. Wendell	12/6	Mashpee	42	M. Malin
12/31	Waltham	4	J. Forbes	12/11	Turners Falls	70	J. Rose
Lesser Scaup				12/20	Agawam	100	S. Kellogg
11/20	Clinton	11	M. Lynch#	12/22	Wachusett Res.	66	M. Lynch#
11/25	Lynnfield	20	D. Williams	Barrow's Go			
12/3	Gloucester (E.P.	.) 21	MAS (B. Gette)	11/5	Southboro	1	M. Lynch#
12/20	Mashpee	276	M. Faherty	12/9-31	Turners Falls	1	J. Smith
12/29	Southboro	20	M. Lynch#	12/14	Boston (Deer I.	.) 1	R. Stymeist
King Eider				12/18-31	Agawam	1	A. & L. Richardson
11/8	Gloucester	1 m	B. Pfeiffer	12/18-31	Northfield	1	J. Smith
11/22-12/3	3 Weymouth	1 m	K. Rawdon	12/20	Bourne	1	M. Faherty
11/23	Dennis (C.B.)	1 f	A. Burdo#	12/26	W. Yarmouth	1	P. Trimble
12/3	N. Chatham	1 m	K. Yakola	12/27	Gloucester (E.I	P.) 1	N. Bonomo#
12/5	N. Scituate	1 M	IAS (D. Ludlow)	12/28	Orleans	2	B. Lagasse
12/6	P.I.	1 m	C. Whitebread	12/31	Hyannis	1	R. Debenham
10/0							
12/9	Rockport (A.P.)	1 f		Hooded Mer		-	
12/9	Rockport (A.P.) Nahant	1 f 1 m	T. Spahr J. Malone	Hooded Mer	ganser	120	T. Pirro
12/27	Nahant		T. Spahr		ganser Lunenburg		T. Pirro
	Nahant		T. Spahr J. Malone	11/16	ganser	120	
12/27 Common Eid	Nahant ler Bourne	1 m	T. Spahr	11/16 11/25	ganser Lunenburg W. Newbury	120 160	T. Pirro J. Berry
12/27 Common Eid 11/15	Nahant ler Bourne	1 m 515 3500	T. Spahr J. Malone M. Lynch# B. Nikula	11/16 11/25 11/29	ganser Lunenburg W. Newbury Turners Falls	120 160 133	T. Pirro J. Berry M. Lynch#
12/27 Common Eid 11/15 11/16 11/22	Nahant er Bourne N. Truro Nant. Sound 6	1 m 515 3500	T. Spahr J. Malone M. Lynch#	11/16 11/25 11/29 12/3 12/6	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro	120 160 133 120 124	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove
12/27 Common Eid 11/15 11/16 11/22 Harlequin Du	Nahant ler Bourne N. Truro Nant. Sound 6	1 m 515 3500 0615	T. Spahr J. Malone M. Lynch# B. Nikula BBC Pelagic	11/16 11/25 11/29 12/3 12/6 12/20	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee	120 160 133 120 124 66	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin#
12/27 Common Eid 11/15 11/16 11/22 Harlequin Du	Nahant er Bourne N. Truro Nant. Sound 6 ick Rockport	1 m 515 3500 60615 75 max	T. Spahr J. Malone M. Lynch# B. Nikula BBC Pelagic v.o.	11/16 11/25 11/29 12/3 12/6 12/20 12/25	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls	120 160 133 120 124	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove
12/27 Common Eid 11/15 11/16 11/22 Harlequin Duthr 11/4	Nahant er Bourne N. Truro Nant. Sound ick Rockport Manomet	1 m 515 3500 60615 75 max 9	T. Spahr J. Malone M. Lynch# B. Nikula BBC Pelagic v.o. J. Chisholm	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls erganser	120 160 133 120 124 66 40	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman
12/27 Common Eid 11/15 11/16 11/22 Harlequin Du thr 11/4 11/10	Nahant ler Bourne N. Truro Nant. Sound 6 lck Rockport Manomet Chilmark	1 m 515 3500 0615 75 may 9 11	T. Spahr J. Malone  M. Lynch# B. Nikula BBC Pelagic  v.o. J. Chisholm R. Stymeist#	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls erganser Pittsfield (Pont	120 160 133 120 124 66 40	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman J. Pierce
12/27 Common Eid 11/15 11/16 11/22 Harlequin Du thr 11/4 11/10 11/23	Nahant er Bourne N. Truro Nant. Sound 6 ick Rockport Manomet Chilmark Acoaxet	1 m 515 3500 0615 75 max 9 11 12	T. Spahr J. Malone M. Lynch# B. Nikula BBC Pelagic v.o. J. Chisholm R. Stymeist# M. Lynch#	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me 11/16 11/16	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls erganser Pittsfield (Pont Quabog IBA	120 160 133 120 124 66 40 ) 338 1322	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman J. Pierce M. Lynch#
12/27 Common Eid 11/15 11/16 11/22 Harlequin Du thr 11/4 11/10 11/23 11/26	Nahant er Bourne N. Truro Nant. Sound 6 ick Rockport Manomet Chilmark Acoaxet Chappaquiddick	1 m 515 3500 0615 75 max 9 11 12 5 15	T. Spahr J. Malone  M. Lynch# B. Nikula BBC Pelagic  v.o. J. Chisholm R. Stymeist# M. Lynch# C. Blauvelt#	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me 11/16 11/16	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls rganser Pittsfield (Pont Quabog IBA Northboro	120 160 133 120 124 66 40 1328 1322 178	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman J. Pierce M. Lynch# P. Morlock
12/27 Common Eid 11/15 11/16 11/22 Harlequin Du thr 11/4 11/10 11/23 11/26	Nahant ler Bourne N. Truro Nant. Sound 6 lck Rockport Manomet Chilmark Acoaxet Chappaquiddick Aquinnah	1 m 515 3500 0615 75 max 9 11 12 5 15 25	T. Spahr J. Malone  M. Lynch# B. Nikula BBC Pelagic  v.o. J. Chisholm R. Stymeist# M. Lynch# C. Blauvelt# C. Plimpton#	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me 11/16 11/16 11/23 11/25	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls erganser Pittsfield (Pont Quabog IBA Northboro Lynnfield	120 160 133 120 124 66 40 1) 338 1322 178 265	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman J. Pierce M. Lynch# P. Morlock D. Williams
12/27 Common Eid 11/15 11/16 11/22 Harlequin Du thr 11/4 11/10 11/23 11/26 11/26 11/29	Nahant ler Bourne N. Truro Nant. Sound 6 lck Rockport Manomet Chilmark Acoaxet Chappaquiddick Aquinnah Dennis (C.B.)	1 m 515 3500 0615 75 max 9 11 12 5 15 25 6	T. Spahr J. Malone  M. Lynch# B. Nikula BBC Pelagic  v.o. J. Chisholm R. Stymeist# M. Lynch# C. Blauvelt# C. Plimpton# R. Doherty	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me 11/16 11/16 11/23 11/25 11/29	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls erganser Pittsfield (Pont Quabog IBA Northboro Lynnfield Arlington	120 160 133 120 124 66 40 2) 338 1322 178 265 165	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman J. Pierce M. Lynch# P. Morlock D. Williams J. Forbes
12/27 Common Eid 11/15 11/16 11/22 Harlequin Du thr 11/4 11/10 11/23 11/26 11/26 11/29 12/28	Nahant ler Bourne N. Truro Nant. Sound 6 lck Rockport Manomet Chilmark Acoaxet Chappaquiddick Aquinnah	1 m 515 3500 0615 75 max 9 11 12 5 15 25 6	T. Spahr J. Malone  M. Lynch# B. Nikula BBC Pelagic  v.o. J. Chisholm R. Stymeist# M. Lynch# C. Blauvelt# C. Plimpton#	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me 11/16 11/23 11/25 11/29 12/6	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls erganser Pittsfield (Pont Quabog IBA Northboro Lynnfield Arlington Westboro	120 160 133 120 124 66 40 2) 338 1322 178 265 165 517	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman J. Pierce M. Lynch# P. Morlock D. Williams J. Forbes G. Gove
12/27 Common Eid 11/15 11/16 11/22 Harlequin Du thr 11/4 11/10 11/23 11/26 11/26 11/29 12/28 Surf Scoter	Nahant ler Bourne N. Truro Nant. Sound 6 lck Rockport Manomet Chilmark Acoaxet Chappaquiddick Aquinnah Dennis (C.B.) Nantucket CBC	1 m  515 3500 00615  75 max 9 11 12 x 15 25 6 27	T. Spahr J. Malone  M. Lynch# B. Nikula BBC Pelagic  v.o. J. Chisholm R. Stymeist# M. Lynch# C. Blauvelt# C. Plimpton# R. Doherty J. Trimble#	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me 11/16 11/23 11/23 11/25 11/29 12/6 12/31	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls srganser Pittsfield (Pont Quabog IBA Northboro Lynnfield Arlington Westboro Southwick	120 160 133 120 124 66 40 2) 338 1322 178 265 165	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman J. Pierce M. Lynch# P. Morlock D. Williams J. Forbes
12/27 Common Eid 11/15 11/16 11/22 Harlequin Du thr 11/4 11/10 11/23 11/26 11/26 11/29 12/28 Surf Scoter 11/1	Nahant ler Bourne N. Truro Nant. Sound 6 lck Rockport Manomet Chilmark Acoaxet Chappaquiddick Aquinnah Dennis (C.B.) Nantucket CBC Wachusett Res.	1 m  515 3500 0615  75 max 9 11 12 515 25 6 27	T. Spahr J. Malone  M. Lynch# B. Nikula BBC Pelagic  v.o. J. Chisholm R. Stymeist# M. Lynch# C. Blauvelt# C. Plimpton# R. Doherty J. Trimble# P. Morlock	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me 11/16 11/16 11/23 11/25 11/29 12/6 12/31 Red-breasted	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls erganser Pittsfield (Pont Quabog IBA Northboro Lynnfield Arlington Westboro Southwick	120 160 133 120 124 66 40 ) 338 1322 178 265 165 517 185	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman J. Pierce M. Lynch# P. Morlock D. Williams J. Forbes G. Gove S. Kellogg
12/27 Common Eid 11/15 11/16 11/22 Harlequin Du thr 11/4 11/10 11/23 11/26 11/26 11/29 12/28 Surf Scoter 11/1	Nahant ler Bourne N. Truro Nant. Sound 6000000000000000000000000000000000000	1 m 515 3500 0615 75 max 9 11 12 515 25 6 27	T. Spahr J. Malone  M. Lynch# B. Nikula BBC Pelagic  v.o. J. Chisholm R. Stymeist# M. Lynch# C. Blauvelt# C. Plimpton# R. Doherty J. Trimble#  P. Morlock L. Therrien	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me 11/16 11/16 11/23 11/25 11/29 12/6 12/31 Red-breasted	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls erganser Pittsfield (Pont Quabog IBA Northboro Lynnfield Arlington Westboro Southwick I Merganser Wellfleet	120 160 133 120 124 66 40 2) 338 1322 178 265 517 185	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman J. Pierce M. Lynch# P. Morlock D. Williams J. Forbes G. Gove S. Kellogg M. Dettrey
12/27 Common Eid 11/15 11/16 11/22 Harlequin Du thr 11/4 11/10 11/23 11/26 11/26 11/29 12/28 Surf Scoter 11/1 11/1	Nahant ler Bourne N. Truro Nant. Sound 6 lck Rockport Manomet Chilmark Acoaxet Chappaquiddick Aquinnah Dennis (C.B.) Nantucket CBC Wachusett Res. S. Quabbin P.I.	1 m 515 3500 00615 75 max 9 11 12 x 15 25 6 27	T. Spahr J. Malone  M. Lynch# B. Nikula BBC Pelagic  v.o. J. Chisholm R. Stymeist# M. Lynch# C. Blauvelt# C. Plimpton# R. Doherty J. Trimble#  P. Morlock L. Therrien T. Wetmore	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me 11/16 11/16 11/23 11/25 11/29 12/6 12/31 Red-breasted 11/4	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls rganser Pittsfield (Pont Quabog IBA Northboro Lynnfield Arlington Westboro Southwick I Merganser Wellfleet Mattapoisett	120 160 133 120 124 66 40 2) 338 1322 178 265 165 517 185	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman J. Pierce M. Lynch# P. Morlock D. Williams J. Forbes G. Gove S. Kellogg M. Dettrey M. Lynch#
12/27 Common Eid 11/15 11/16 11/22 Harlequin Du thr 11/4 11/10 11/23 11/26 11/26 11/29 12/28 Surf Scoter 11/1 11/1	Nahant ler Bourne N. Truro Nant. Sound 6 lck Rockport Manomet Chilmark Acoaxet Chappaquiddick Aquinnah Dennis (C.B.) Nantucket CBC Wachusett Res. S. Quabbin P.I. Marion	1 m 515 3500 0615 75 max 9 11 12 515 627 1 1 35 29	T. Spahr J. Malone  M. Lynch# B. Nikula BBC Pelagic  v.o. J. Chisholm R. Stymeist# M. Lynch# C. Blauvelt# C. Plimpton# R. Doherty J. Trimble#  P. Morlock L. Therrien T. Wetmore M. Lynch#	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me 11/16 11/23 11/23 11/25 11/29 12/6 12/31 Red-breasted 11/4 11/8	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls reganser Pittsfield (Pont Quabog IBA Northboro Lynnfield Arlington Westboro Southwick Merganser Wellfleet Mattapoisett P.I.	120 160 133 120 124 66 40 2) 338 1322 178 265 165 517 185	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman J. Pierce M. Lynch# P. Morlock D. Williams J. Forbes G. Gove S. Kellogg M. Dettrey M. Lynch# E. Labato
12/27 Common Eid 11/15 11/16 11/22 Harlequin Du thr 11/4 11/10 11/23 11/26 11/26 11/29 12/28 Surf Scoter 11/1 11/6 11/8 11/8	Nahant ler Bourne N. Truro Nant. Sound 6 lck Rockport Manomet Chilmark Acoaxet Chappaquiddick Aquinnah Dennis (C.B.) Nantucket CBC Wachusett Res. S. Quabbin P.I. Marion Nant. Sound	1 m 515 3500 0615 75 max 9 11 12 5 15 25 6 27 1 1 35 29 1110	T. Spahr J. Malone  M. Lynch# B. Nikula BBC Pelagic  V.O. J. Chisholm R. Stymeist# M. Lynch# C. Blauvelt# C. Plimpton# R. Doherty J. Trimble#  P. Morlock L. Therrien T. Wetmore M. Lynch# BBC Pelagic	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me 11/16 11/16 11/23 11/25 11/29 12/6 12/31 Red-breasted 11/4 11/8 11/16	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls erganser Pittsfield (Pont Quabog IBA Northboro Lynnfield Arlington Westboro Southwick I Merganser Wellfleet Mattapoisett P.I. P'town	120 160 133 120 124 66 40 2) 338 1322 178 265 165 517 185 1150 72 30 2000	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman J. Pierce M. Lynch# P. Morlock D. Williams J. Forbes G. Gove S. Kellogg M. Dettrey M. Lynch# E. Labato B. Nikula
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12/27 Common Eid 11/15 11/16 11/22 Harlequin Du thr 11/4 11/10 11/23 11/26 11/26 11/29 12/28 Surf Scoter 11/1 11/6 11/8 11/22 12/28 White-winge thr 11/1	Nahant ler Bourne N. Truro Nant. Sound 6 lck Rockport Manomet Chilmark Acoaxet Chappaquiddick Aquinnah Dennis (C.B.) Nantucket CBC Wachusett Res. S. Quabbin P.I. Marion Nant. Sound Nantucket CBC d Scoter Wachusett Res. Rockport (A.P.)	1 m  515 3500 0615  75 max 9 11 12 5 15 25 6 27 1 1 35 29 1110 2750 1-2 350	T. Spahr J. Malone  M. Lynch# B. Nikula BBC Pelagic  V.O. J. Chisholm R. Stymeist# M. Lynch# C. Blauvelt# C. Plimpton# R. Doherty J. Trimble#  P. Morlock L. Therrien T. Wetmore M. Lynch# BBC Pelagic J. Trimble#  V.O. P. + F. Vale	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me 11/16 11/16 11/23 11/25 11/29 12/6 12/31 Red-breasted 11/4 11/8 11/16 11/16 11/16 11/16 11/16 11/16	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls erganser Pittsfield (Pont Quabog IBA Northboro Lynnfield Arlington Westboro Southwick I Merganser Wellfleet Mattapoisett P.I. P'town Quabbin Chestnut Hill Sterling	120 160 133 120 124 66 40 132 1322 178 265 165 517 72 30 2000 1 409 52	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman J. Pierce M. Lynch# P. Morlock D. Williams J. Forbes G. Gove S. Kellogg M. Dettrey M. Lynch# E. Labato B. Nikula CBC R. Stymeist S. LaBree
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12/27 Common Eid 11/15 11/16 11/22 Harlequin Du thr 11/4 11/10 11/23 11/26 11/29 12/28 Surf Scoter 11/1 11/6 11/8 11/22 12/28 White-winge thr 11/1 11/1 11/4 11/16 11/22 12/22 Black Scoter	Nahant ler Bourne N. Truro Nant. Sound 6 lck Rockport Manomet Chilmark Acoaxet Chappaquiddick Aquinnah Dennis (C.B.) Nantucket CBC Wachusett Res. S. Quabbin P.I. Marion Nant. Sound Nantucket CBC d Scoter Wachusett Res. Rockport (A.P.) S. Quabbin P.I. N. Truro Nant. Sound Stockbridge Barnstable (S.N	1 m  515 3500 0615  75 max 9 11 12 515 25 6 27 1 1 35 29 1110 2750 1-2 350 13 120 1000 2303 7	T. Spahr J. Malone  M. Lynch# B. Nikula BBC Pelagic  V.O. J. Chisholm R. Stymeist# M. Lynch# C. Blauvelt# C. Plimpton# R. Doherty J. Trimble#  P. Morlock L. Therrien T. Wetmore M. Lynch# BBC Pelagic J. Trimble#  V.O. P. + F. Vale L. Therrien T. Wetmore B. Nikula BBC Pelagic R. Wendell P. Flood	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me 11/16 11/23 11/25 11/29 12/6 12/31 Red-breasted 11/4 11/8 11/16 11/16 12/27 Ruddy Duck 11/3 11/5 11/5 11/5 11/5 11/8 11/9 11/16, 12/19 Northern Bol	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls erganser Pittsfield (Pont Quabog IBA Northboro Lynnfield Arlington Westboro Southwick I Merganser Wellfleet Mattapoisett P.I. P'town Quabbin Chestnut Hill Sterling Southboro W. Newbury Pittsfield Wachusett Res. (28 Waltham 1 Eastham bwhite	120 160 133 120 124 66 40 1322 178 265 517 185 1150 72 30 2000 1 409 52 80 185 55 159 17, 23 196	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman J. Pierce M. Lynch# P. Morlock D. Williams J. Forbes G. Gove S. Kellogg M. Dettrey M. Lynch# E. Labato B. Nikula CBC R. Stymeist S. LaBree M. Lynch# P. + F. Vale Allen Club M. Lynch# J. Forbes M. Malin
12/27 Common Eid 11/15 11/16 11/12 Harlequin Du thr 11/4 11/10 11/23 11/26 11/26 11/26 11/29 12/28 Surf Scoter 11/1 11/1 11/6 11/8 11/22 12/28 White-winge thr 11/1 11/1 11/4 11/16 11/22 12/22 Black Scoter 11/1 11/1	Nahant ler Bourne N. Truro Nant. Sound 6 lock Rockport Manomet Chilmark Acoaxet Chappaquiddick Aquinnah Dennis (C.B.) Nantucket CBC Wachusett Res. S. Quabbin P.I. Marion Nant. Sound Nantucket CBC d Scoter Wachusett Res. Rockport (A.P.) S. Quabbin P.I. N. Truro Nant. Sound Stockbridge Barnstable (S.N Waltham	1 m  515 3500 0615  75 max 9 11 12 515 627 1 1 35 29 1110 2750 1-2 350 13 120 1000 2303 7 .) 1800 51	T. Spahr J. Malone  M. Lynch# B. Nikula BBC Pelagic  v.o. J. Chisholm R. Stymeist# M. Lynch# C. Blauvelt# C. Plimpton# R. Doherty J. Trimble# P. Morlock L. Therrien T. Wetmore M. Lynch# BBC Pelagic J. Trimble#  v.o. P. + F. Vale L. Therrien T. Wetmore B. Nikula BBC Pelagic R. Wendell  P. Flood J. Forbes	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me 11/16 11/23 11/25 11/29 12/6 12/31 Red-breasted 11/4 11/8 11/16 11/19 11/16 11/19 11/16 11/19 11/16 11/19 11/16 11/19 Northern Bol 11/3	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls erganser Pittsfield (Pont Quabog IBA Northboro Lynnfield Arlington Westboro Southwick I Merganser Wellfleet Mattapoisett P.I. P'town Quabbin Chestnut Hill Sterling Southboro W. Newbury Pittsfield Wachusett Res. (28 Waltham 1 Eastham bwhite Marstons Mills	120 160 133 120 124 66 40 265 517 185 1150 72 30 2000 1 409 52 80 185 55 517 1150 1150 1200 1200 1200 1200 1200 1200	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman J. Pierce M. Lynch# P. Morlock D. Williams J. Forbes G. Gove S. Kellogg M. Dettrey M. Lynch# E. Labato B. Nikula CBC R. Stymeist S. LaBree M. Lynch# P. + F. Vale Allen Club M. Lynch# J. Forbes M. Malin E. Hoopes
12/27 Common Eid 11/15 11/16 11/22 Harlequin Du thr 11/4 11/10 11/23 11/26 11/26 11/29 12/28 Surf Scoter 11/1 11/6 11/8 11/22 12/28 White-winge thr 11/1 11/4 11/16 11/22 12/22 Black Scoter 11/1 11/1 11/1	Nahant ler Bourne N. Truro Nant. Sound 6 lck Rockport Manomet Chilmark Acoaxet Chappaquiddick Aquinnah Dennis (C.B.) Nantucket CBC Wachusett Res. S. Quabbin P.I. Marion Nant. Sound Nantucket CBC d Scoter Wachusett Res. Rockport (A.P.) S. Quabbin P.I. N. Truro Nant. Sound Stockbridge Barnstable (S.N Waltham Wachusett Res.	1 m  515 3500 0615  75 max 9 11 12 515 627  1 1 35 29 1110 2750  1-2 350 13 120 1000 2303 7  (1) 1800 51 49	T. Spahr J. Malone  M. Lynch# B. Nikula BBC Pelagic  v.o. J. Chisholm R. Stymeist# M. Lynch# C. Blauvelt# C. Plimpton# R. Doherty J. Trimble#  P. Morlock L. Therrien T. Wetmore M. Lynch# BBC Pelagic J. Trimble#  v.o. P. + F. Vale L. Therrien T. Wetmore B. Nikula BBC Pelagic R. Wendell  P. Flood J. Forbes P. Morlock	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me 11/16 11/16 11/16 11/23 11/25 11/29 12/6 12/31 Red-breasted 11/4 11/8 11/16	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls rganser Pittsfield (Pont Quabog IBA Northboro Lynnfield Arlington Westboro Southwick I Merganser Wellfleet Mattapoisett P.I. P'town Quabbin Chestnut Hill Sterling Southboro W. Newbury Pittsfield Wachusett Res. (28 Waltham I Eastham bwhite Marstons Mills W. Yarmouth	120 160 133 120 124 66 640 132 178 265 165 517 185 1150 72 30 2000 1 409 52 80 185 55 55 159 17,23 196	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman J. Pierce M. Lynch# P. Morlock D. Williams J. Forbes G. Gove S. Kellogg M. Dettrey M. Lynch# E. Labato B. Nikula CBC R. Stymeist S. LaBree M. Lynch# P. + F. Vale Allen Club M. Lynch# J. Forbes M. Malin E. Hoopes CBC
12/27 Common Eid 11/15 11/16 11/12 Harlequin Du thr 11/4 11/10 11/23 11/26 11/26 11/26 11/29 12/28 Surf Scoter 11/1 11/1 11/6 11/8 11/22 12/28 White-winge thr 11/1 11/1 11/4 11/16 11/22 12/22 Black Scoter 11/1 11/1	Nahant ler Bourne N. Truro Nant. Sound 6 lock Rockport Manomet Chilmark Acoaxet Chappaquiddick Aquinnah Dennis (C.B.) Nantucket CBC Wachusett Res. S. Quabbin P.I. Marion Nant. Sound Nantucket CBC d Scoter Wachusett Res. Rockport (A.P.) S. Quabbin P.I. N. Truro Nant. Sound Stockbridge Barnstable (S.N Waltham	1 m  515 3500 0615  75 max 9 11 12 515 627 1 1 35 29 1110 2750 1-2 350 13 120 1000 2303 7 .) 1800 51	T. Spahr J. Malone  M. Lynch# B. Nikula BBC Pelagic  v.o. J. Chisholm R. Stymeist# M. Lynch# C. Blauvelt# C. Plimpton# R. Doherty J. Trimble# P. Morlock L. Therrien T. Wetmore M. Lynch# BBC Pelagic J. Trimble#  v.o. P. + F. Vale L. Therrien T. Wetmore B. Nikula BBC Pelagic R. Wendell  P. Flood J. Forbes	11/16 11/25 11/29 12/3 12/6 12/20 12/25 Common Me 11/16 11/23 11/25 11/29 12/6 12/31 Red-breasted 11/4 11/8 11/16 11/19 11/16 11/19 11/16 11/19 11/16 11/19 11/16 11/19 Northern Bol 11/3	ganser Lunenburg W. Newbury Turners Falls Waltham Westboro Mashpee Turners Falls erganser Pittsfield (Pont Quabog IBA Northboro Lynnfield Arlington Westboro Southwick I Merganser Wellfleet Mattapoisett P.I. P'town Quabbin Chestnut Hill Sterling Southboro W. Newbury Pittsfield Wachusett Res. (28 Waltham 1 Eastham bwhite Marstons Mills	120 160 133 120 124 66 40 265 517 185 1150 72 30 2000 1 409 52 80 185 55 517 1150 1150 1200 1200 1200 1200 1200 1200	T. Pirro J. Berry M. Lynch# J. Forbes G. Gove M. Malin# J. Coleman J. Pierce M. Lynch# P. Morlock D. Williams J. Forbes G. Gove S. Kellogg M. Dettrey M. Lynch# E. Labato B. Nikula CBC R. Stymeist S. LaBree M. Lynch# P. + F. Vale Allen Club M. Lynch# J. Forbes M. Malin E. Hoopes

Ring-necked	Pheacant			Sooty Shearw	ater		
11/10	Aquinnah	2	R. Stymeist#	11/16, 30		1, 1	B. Nikula
11/15	Wellfleet	1	Č. Caron	Manx Shearw	ater		
11/29	Newbury	1	P. + F. Vale#	11/1, 15		10, 7	B. Nikula
12/31	P'town	1	F. Gallo#	11/16	Chatham (MI)	1	B. Nikula
Ruffed Grous 11/15	e Quabbin	3	C. Allen#	11/22 Leach's Storr	Nant. Shoals	3	BBC Pelagic
11/13	Mashpee	1	M. Malin	11/3	Dennis (C.B.)	1	E. Hoopes
12/20	Camp Edwards	_	J. McCumber	Northern Gar		1	L. Hoopes
Red-throated		_		11/1, 12/2		300	B. Nikula
11/1	Quabbin Pk	1	L. Therrien	11/23	Chatham	5500	R. Schain
11/2	Pittsfield (Pont.		V.O.	11/27	Eastham (F.E.)		B. Nikula
11/4	Brookfield	1	R. Jenkins	12/2	Rockport (A.P.)		R. Heil
11/6	P.I.	120	T. Wetmore	12/7 Double-creste	Eastham (F.E.)	350	B. Nikula
11/10 11/15	Dennis (C.B.) Wellfleet	120 250	T. Green# C. Caron	11/6	P'town	400	B. Nikula
11/16	Chatham (MI)		B. Nikula	11/7	Chatham (MI)	600	B. Nikula
11/21	Gloucester	90	J. Nelson	11/8	Marion	101	M. Lynch#
Pacific Loon				11/9	Eastham (F.H.)		S. Sullivan#
12/20	P'town (R.P.)	1 ph	P. Flood	11/29	Arlington	22	J. Forbes
Common Loc				12/20	Belmont	20	R. Jilek
thr	P.I.	190 max	V.O.	Great Cormo			To 61 1 1 11
11/9	Wachusett Res.		M. Lynch#	11/10	Aquinnah	4	R. Stymeist#
11/11 11/22	Orleans Nant. Shoals	60 115	P. Trull BBC Pelagic	11/28 11/29	Monomoy P'town	47 33	R. Schain A. Burdo
11/24	Dennis (C.B.)	138	S. Paventy	American Bit		33	A. Buluo
12/16	Ipswich (C.B.)	41	J. Berry	11/6	Barnstable	2	S. Paventy
12/30	Nant. Sound	44	F. Gallo#	11/7	Eastham (F.H.)	5	S. Paventy
Pied-billed G	rebe			11/11	Concord	1	D. Sibley
11/2	C. Berkshire	6	T. Tyning	11/16	P.I.	2	E. Labato
11/10	Brewster	6	E. Hoopes	11/25	Wellfleet	1	S. Broker
11/16	Jamaica Plain	4	P. Peterson	12/1	N. Truro	1	D. Reynolds
11/25 12/1	Nantucket Brewster	12 6	K. Blackshaw	Great Blue H 11/9	P.I.	10	T. Wetmore
12/1	Hyannis	11	E. Hoopes CBC	11/9	Saugus	11	S. Zendeh#
Horned Grebe		11	СВС	11/28	Squantum	12	P. Peterson
11/9	Wellfleet	45	T. Green	12/26	Mid-Cape CBC	40	CBC
11/22	S. Quabbin	6	L. Therrien	Great Egret			
11/23	Barnstable (S.N		P. Crosson	12/13	Eastham	6	J. Trimble
12/1	Marion	39	M. Lynch#	12/17	Ipswich (C.B.)	1	P. Brown
12/16	P.I.	32 24	T. Wetmore	12/22	Orleans	5 1	V.O.
12/16 12/26	Ipswich (C.B.) Mid-Cape CBC		J. Berry CBC	12/31 Snowy Egret	Nantucket	1	T. Pastuszak
Red-necked C		. 100	СВС	11/2	Nantucket	1	G. Andrews
11/9	Wachusett Res.	3	M. Lynch#	Little Blue H		•	G.7 marews
11/13	Brookfield	3	R. Jenkins	11/18	Quincy	1	J. Sweeney
11/21	Gloucester	18	J. Nelson	11/25	Yarmouth	1	S. Paventy
11/24	Dennis (C.B.)	24	S. Paventy	Cattle Egret			
12/16	P.I.	12	T. Wetmore	11/8	Edgartown	2	J. Young
12/21 Eared Grebe	P'town	20	B. Nikula	11/12 Green Heron	Gill	1	J. Smith
11/15-21	Brookfield	1	J. Young + v.o.	11/1	Eastham (F.H.)	1	D. Clapp
11/20-22	Mashpee		Keleher + v.o.	11/11	Longmeadow	1	M. Moore
Northern Fuli					ed Night-Heron		
11/22	Nant. Sound	2	BBC Pelagic	11/9	Edgartown	2	R. Stymeist#
12/9	Rockport (A.P.)		T. Spahr	11/15	P'town	1	C. Caron
12/16	Stellwagen	2	CBC	11/24	Plymouth	1	R. Bowes
12/29 Cory's Sheary	Eastham (F.E.)	1	F. Atwood	12/12 Black Vulture	Nantucket	2	T. Pastuszak
11/1, 16		00, 15	B. Nikula	11/11	Hadley	2	L. Therrien
11/1, 10	Manomet	1	I. Davies	11/23	Williamstown	3	C. Jones
11/3	Dennis (C.B.)	272	E. Hoopes	11/25	Uxbridge	3	M. Lynch#
11/3	Eastham (F.É.)	600	B. Nikula	12/2	Westport	31	L. Waters#
11/3	Orleans	300	B. Nikula	12/29	Sheffield	6	C. Jones
Great Shearw				Turkey Vultu			
11/1, 12/2		350, 7	B. Nikula	11/5	Georgetown	4	P. + F. Vale
11/16 11/22	Chatham (MI) Nant. Shoals	25 71	B. Nikula BBC Pelagic	11/8 11/14	Essex Cambr. (Danehy	3	BBC (I. Giriunas) R. Stymeist
11/27	Eastham (F.E.)	12	B. Nikula	11/14	Nantucket	28	D. Blatt
			munu				
	Rockport (A.P.)	2	R. Heil	12/2	Westport	35	L. Waters#
12/2 12/16	Rockport (A.P.) Stellwagen	62	R. Heil CBC	12/2 Osprey 11/thr	Westport Reports of indiv	35	

Osprey (conti	nuad)			Common Ga	llinule		
12/3	Brewster	1	M. Faherty	11/1-16	Fairhaven	1	C. Longworth
12/6	Newbypt. H.	1	S. + C. Whitebread	11/16	Nantucket	1	E. Ray
12/8	Westboro	1	T. Spahr	American Co	oot		•
12/14	Wachusett Res.	1	J. Lawson	thr	Waltham	160 r	
Bald Eagle	O1-1-1 (C5)	-	M. I	thr	GMNWR	230 r	
11/4 12/11	Quabbin (G5) GMNWR	5 4	M. Lynch#	thr 11/2	Woburn (HP) C. Berkshire	98 r 145	
12/11	P.I.	4	A. Bragg# N. Landry	11/2	Richmond	88	T. Tyning Allen Club
Northern Hari		4	iv. Landry	11/22	Eastham	120	L. Waters
11/9	Orleans	6	C. Harris	11/29	W. Newbury	95	J. Berry#
11/23	Plymouth B.	2	M. Sylvia#	12/27	Nantucket	80	J. Smith#
11/28	GMNWR	2	A. Bragg#	Sandhill Cra	ane		
11/29	Hadley	2	M. Lynch#	11/7	Pittsfield (Pont.)		J. Pierce
12/1	Cumb. Farms	5	I. Davies	11/28	Newburyport	24	D. Lovitch#
12/19	P.I.	8 17	P + J. Roberts J. Trimble	Black-bellied		70	E Loboto
12/26 Sharp-shinned	Barnstable	1 /	J. Trimble	11/9 11/10	P.I. Duxbury B.	70 31	E. Labato R. Bowes
11/2	Quabog IBA	2	M. Lynch#	11/11	Katama	70	R. Stymeist#
11/3-15	Barre Falls	27	Hawkcount (DS)	11/15	E. Quabbin	2	C. Allen
12/26	Mid-Cape CBC	11	CBĆ	11/20	Eastham (F.H.)	109	E. Hoopes
Cooper's Haw	vk .			12/30	Wellfleet	3	Truro CBC
11/5	Lexington (DM)	2	M. Rines#	American Go			
11/9	P.I.	3	T. Wetmore	11/1	P.I.	2	T. Wetmore
11/16	Barnstable	3	P. Crosson	11/11	Katama	1	R. Stymeist#
12/26 Northern Gosl	Mid-Cape CBC	12	CBC	11/23 Semipalmate	Nantucket	1	K. Blackshaw
11/8	P.I.	1	MAS (P. Roberts)	11/9	Eastham (CGB)	2	B. Sullivan
11/8	Eastham (F.H.)	1	J. Trimble#	11/27	Falmouth	1	J. Hiam
11/12	New Salem	1	J. Smith	11/29	P.I.	1	C. Morgan
11/14	Barre Falls	1	Hawkcount (DG)	12/14	Boston H.	1	CBC (R. Schain)
12/5	Belchertown	1	D. Griffiths	12/31	Dennis (C.B.)	1	R. Hamman
12/7	Southwick	1	S. Kellogg	Killdeer			
12/27	Quabbin	3	CBC	11/4	Acton	18	R. Stymeist
Red-shouldere 11/3-15	Barre Falls	9	Hawkcount (DS)	11/25 12/26	Lynn Hyannis (CBC)	4	R. Heil
11/14	Mt. Watatic	8	Hawkcount (TP)	American O		3	K. Rosenberg#
12/27	Westfield		A. & L. Richardson	11/9	Nantucket	10	K. Blackshaw
Red-tailed Ha		_		11/9	Chappaquiddick		R. Stymeist#
11/3-15	Barre Falls	63	Hawkcount (DS)	11/10	Chatham	4	B. Harris
12/26	Mid-Cape CBC	55	CBC	12/3	Quincy	1	C. Leuchtenburg
	ed Hawk X Red-ta			Spotted Sand			
11/10	W. Boylston	1	R. Schain	11/23	Orleans	1	B. Lagasse
Rough-legged thr	P.I.	4	max v.o.	Greater Yello		50	C Doventy
11/5	Windsor	1	max v.o. G. Hurley	11/8	Eastham (F.H.) Essex	6	S. Paventy BBC (I. Giriunas)
11/23	Williamstown	1	C. Jones	11/10	Yarmouth	46	G. d'Entremont
11/28	Squantum	1	P. Peterson#	11/12	Quabbin (G43)	2	B. Kamp
11/30	Saugus	2	S. Zendeh#	12/7	Marion	2	J. Sweeney
12/1	Pittsfield (Pont.)	1	G. Hurley	12/24	P.I.	3	MAS (B. Gette)
12/4	Windsor	1	J. Pierce	Willet	P 4 (PY)		0.5
12/12	Southwick	2	J. Weeks	11/7	Eastham (F.H.)	1 1	S. Paventy
12/23 12/30	DWWS Dalton	1	E. Dalton# J. Morris-Siegel	11/10 Lesser Yello	Duxbury B.	1	R. Bowes
Golden Eagle		1	J. Wiorns-Sieger	11/5	Nantucket	1	R. Ouren
11/4	New Salem	1	ad M. Lynch#	Hudsonian C		•	Tt. Guren
11/7	Lexington	1	imm P. + F. Vale	11/10	Duxbury B.	1	R. Bowes
11/8	Fairhaven	1	ph A. Morgan#	Ruddy Turns	stone		
Yellow Rail				11/18	Osterville	15	M. Malin
12/28	Nantucket CBC	1	T. Johansson#	12/26	Mid-Cape CBC	71	CBC
Clapper Rail 11/9	Wellfleet	4	S. Broker	12/29 Red Knot	Nantucket	25	D. Bates
12/1	Cotuit	1	P. Crosson	11/9	P.I.	3	E. Labato
12/29	Wellfleet	1	S. Broker	11/23	Chatham	12	R. Schain
Virginia Rail	<del>-</del>	-	~	12/5	Duxbury B.	2	R. Bowes
12/15	GMNWR	1	A. Bragg	Sanderling	•		
12/26	Barnstable	14	J. Trimble	11/1	Barnstable (S.N.		P. Crosson
12/30	Milford	1	N. Paulson	11/11	Orleans	250	P. Trull
Sora 12/8	GMNWR	1	D. Pettee	11/16 12/4	P'town (R.P.) P.I.	275 150	P. Flood T. Wetmore
12/14	Cape Cod CBC	2	CBC	12/4	Dennis	300	P. Kyle
1-1	IMPE COM CIPC	_	CBC	12/10	<b></b>	200	1.11910

White-rumpe	d Sandniner			12/7	Hyannis	1	E. Hoopes
11/9	Duxbury B.	2	R. Bowes	Mew Gull	119 4111113	•	E. Hoopes
11/16	P.I.	1	T. Wetmore	12/28	Nantucket CBC	1	J. Trimble#
11/26	Pittsfield (Pont.)		J. Pierce	Thayer's Gu			
11/30	Nantucket	2	J. Young	12/27	Gloucester (E.P.	) 1 <u>p</u>	ph N. Bonomo#
Pectoral Sand 11/2	Piper Nantucket	3	T. Pastuszak#	Iceland Gull 11/8	Gloucester (E.P.	) 2	L. Ferraresso
11/2	P.I.	1	P. + F. Vale#	11/16	P'town (R.P.)	3	P. Flood
11/10	Pittsfield (Pont.)	-	G. Hurley	12/28	Nantucket	77	CBC (J. Trimble#)
11/23	Nantucket CBC	1	R. Ouren	Lesser Black-			,
Purple Sandp				thr	Reports of indiv		
12/6	Gloucester		BC (N. Hayward)	11/22	Nant. Shoals	12	BBC Pelagic
12/11 12/11	Salisbury Rockport	19 88	P. + F. Vale BBC (B. Volkle)	12/28 Glaucous Gui	Nantucket CBC	111	J. Trimble#
12/20	Falmouth	5	M. Malin#	thr	Reports of indiv	from	7 locations
12/29	Nantucket	20	D. Bates	Common Ter			7 1004110110
Dunlin				11/2	Eastham (F.E.)	5	B. Nikula
11/10	W. Gloucester	105	J. Nelson	11/6, 30		70, 1	B. Nikula
11/23	Westport	90	M. Lynch#	11/30	N. Truro	1	B. Nikula
11/23 11/25	Plymouth B. P.I.	500 700	M. Sylvia# T. Wetmore	Forster's Terr	1 Yarmouth	10	P. Crosson
11/23	Eastham (F.E.)	550	B. Nikula	11/8	P'town	8	P. Brown
12/15	Dennis	420	P. Kyle	11/23	Barnstable (S.N		P. Crosson
Short-billed I				11/24	Dennis (C.B.)	1	B. Lagasse#
11/30	Edgartown	1	S. Whiting#	Pomarine Jae			-
Wilson's Snip		_	~	11/2, 12/7			
11/2	Saugus	3	S. Zendeh#	11/3	Orleans	16	B. Nikula
11/9 11/15	Stockbridge Worc. (BMB)	2	J. Pierce J. Liller#	12/2, 27 12/7	Rockport (A.P.) Orleans	3, 1 47	R. Heil B. Nikula
12/30	Nantucket	2	R. Ouren	12/16	Stellwagen	16	CBC
American Wo		_	R. Outen	12/21	N. Truro	1	B. Nikula
11/5	S. Hadley	2	S. Desrosier	Parasitic Jaeg			
12/26	Mid-Cape CBC	4	CBC	11/11, 12/	5 P'town	3, 1	B. Nikula
Red Phalarop		_		Dovekie			
11/3	Dennis (C.B.)	3	E. Hoopes	11/2, 12/7		2, 16	B. Nikula
Black-legged 11/22	Nant. Shoals	139	BBC Pelagic	12/16 12/28	Stellwagen Nantucket CBC		CBC J. Trimble#
11/27	Eastham (F.E.)	255	B. Nikula	12/28	P'town	9	B. Nikula
12/2	Rockport (A.P.)		R. Heil	12/30	Truro CBC	30	CBC
12/28	P'town	475	B. Nikula	Common Mu			
Bonaparte's C				11/30	Gloucester (B.R		J. Nelson
11/16		2500	P. Flood	12/2	Rockport (A.P.)	41	R. Heil
11/20 11/23	Pittsfield (Pont.) Plymouth B.	300	J. Pierce P. Edmundson	12/16 Thick-billed	Stellwagen	70	CBC
11/23	Eastham (F.E.)	280	B. Nikula	12/2	Rockport (A.P.)	3	R. Heil
11/30	N. Truro	450	B. Nikula	12/27	Gloucester	1	R. Heil
12/28	Nantucket CBC	875	J. Trimble#	12/29	Marblehead	1	D. Noble
Black-headed				Razorbill			
11/15	Plymouth H.	1 ad		11/22	Nant. Shoals	97	BBC Pelagic
11/19 12/14-18	Hull Hadley	1 ad		12/16 12/26	Stellwagen	134 24	CBC V. Zollo
12/14-18	Newbypt H.	1 ad	C. Page ph R. Heil	12/27	Cohasset Cape Ann	695	R. Heil
12/28	Nantucket CBC	3	J. Trimble#	12/28	P.I.	30	T. Wetmore
Little Gull	Transaction CDC		or minoren	12/30		1233	CBC
11/9-16	P'town	1 ad	B. Nikula	Black Guiller	not		
11/18	Orleans	1	B. Lagasse	11/16	Rockport (H.P.)	4	J. Berry#
11/30	N. Truro	1 ad	B. Nikula	11/23	Dennis (C.B.)	1	T. Green#
12/28 Laughing Gul	Nantucket CBC	2	J. Trimble#	11/30 12/7	Gloucester P'town	3	J. Nelson M. Faherty#
11/9	Chappaquiddick	82	R. Stymeist#	12/26	Cohasset	2	V. Zollo
11/9	Westport	70	E. Nielsen	Atlantic Puf		_	v. 20110
11/11, 23		5, 10	B. Nikula	12/16	Stellwagen	13	CBC
11/22	Nant. Shoals	21	BBC Pelagic	12/30	Wellfleet	3	J. Liller
11/30	N. Truro	4	B. Nikula				

#### **OWLS THROUGH FINCHES**

There was no repeat of last year's incredible Snowy Owl invasion, but the flight this season has been better than average. During this period there were reports from over 30 locations with a maximum of six from Plum Island. Norm Smith had thirteen Snowys at Logan Airport on the day of the Greater Boston CBC, and nine were tallied on the Nantucket CBC. The Northern Sawwhet Owl migration was much better than last season's as reported by the banding stations in Northbridge and Lincoln. This was the eleventh season for these two sites, and the grand total of Saw-whets banded was an amazing 2942! Saw-whets were well reported on Christmas Counts: Quabbin recorded 19, Truro 10, and Mid Cape 8.

There were six reports of **Rufous Hummingbirds** this period; Sue Finnegan of Brewster banded five. Last year there was only one report during the same period. There were reports of **Ash-throated Flycatchers** from three places: Harwich, Plymouth, and Milton. A **Gray Jay** took up residence at Quabbin's Gate 41 for nearly two weeks, although many birders had to make multiple trips to catch a glimpse. A **Townsend's Solitaire**, named after John Kirk Townsend—an ornithologist and contemporary of Audubon—made a one-day appearance at Halibut State Park in Rockport, and another Solitaire delighted many birders in Marion for over a month. A **Townsend's Warbler**—named for the same ornithologist—took up residence for most of December at Marblehead Neck Sanctuary. The most exciting find this month was a **Smith's Longspur**, well documented with several photos taken at East Point in Nahant. This was just the second record for this species in Massachusetts; the only other record was from Salisbury State Park on October 12, 1968. Other unusual birds seen during this period were several **Bohemian Waxwings**, a Yellow-throated Warbler, a **LeConte's Sparrow**, and a **Painted Bunting**.

December signals the Christmas Count season, and many birders were busy scouting their areas. The weather cooperated for most of the counts, and this year the recurring theme was record high counts of woodpeckers. All-time high counts for Downy, Hairy, Red-bellied, and Pileated woodpeckers and Northern Flicker were tallied in many counts. Eastern Bluebirds occurred in record numbers on the Athol, Cape Cod, Concord, Groton, Greenfield, Quabbin, and Worcester CBCs. For complete results of the various Christmas Counts visit http://netapp.audubon.org/CBCObservation/CurrentYear/ResultsByCount.aspx.

R. Stymeist

Barn Owl				12/21	Ipswich	2	S. Riley
11/9	Edgartown	1	R. Stymeist#	12/27	Mendon	2	B. Cassie
Eastern Scree	ech-Owl			Long-eared	Owl		
12/21	Ipswich	4	S. Riley	12/2	Northampton	1	A. Magee
12/26	Mid-Cape CBC	26	CBČ	12/2	Hadley	3	J. Oliverio
12/27	Mendon	35	B. Cassie	12/26	Mid-Cape CBC	1	CBC
Great Horned	d Owl			Short-eared	Owl		
11/27	Newton	2	P. Gilmore	11/4	Rockport (H.P.)	1	J. McCoy#
12/13	Mt.A.	2	R. Stymeist	11/25	Orleans	1	B. Lagasse#
12/13	W. Newbury	2	Ř. Heil	11/29	Hadley	1	S. Motyl
12/26	Mid-Cape CBC	12	CBC	11/30	Rowley	1	B. Rusnica
12/27	Mendon	9	B. Cassie	12/20	P.I.	1	N. Landry
Snowy Owl				12/26	Mid-Cape CBC	2	CBČ
11/8-12/3	1 P.I.	6 n	nax v.o.	Northern Sa	w-whet Owl		
11/10-12/	31 Reports of 1-2	2 indiv	r. from 26 locations	11/3	DFWS	10 b	fide K. Seymour
12/7	Ipswich (C.B.)	7	N. Dubrow	11/3-15	Northbridge	29 b	fide B. Milke
12/14	Boston (Logan)	13	CBC (N. Smith)	12/14	Hadley	2	S. Surner
12/26	Barnstable (S.N.	) 5	CBC	12/21	Sudbury	3	B. Harris
12/27	Duxbury B.	3	R. Bowes	12/26	Mid-Cape CBC	8	CBC
12/28	Nantucket	9	CBC	12/27	Quabbin	19	CBC
Barred Owl				12/30	Truro CBC	10	CBC
11/8	P.I.	2	MAS (P. Roberts)				

Ruby-throate	d Hummingbird			White-eyed V	/ireo		
11/1-15	E. Dennis	1 b	S. Finnegan	11/11	Westport	1	J. Young
11/1-21	Chestnut Hill	1 b	M. Garvey	11/12	Mashpee	1	M. Keleher
11/19 Rufous Humi	Plymouth mingbird	1 b	S. Finnegan	12/26 12/28	Osterville Taunton	1 1	C. Caron V. Zollo#
thr	Brewster	1 b	M. Myers	Blue-headed		1	v. Zolion
11/1-12/16	6 Orleans	1 b	S. Finnegan	11/8	Newton	1	M. Gooley
11/7-16	Roslindale	1 b	C. Wenc	11/9	Dennis	2	P. Flood
11/15-18	Arlington 21 Woods Hole	1 b 1	S. Simpson D. Remsen	11/10 11/21	Chilmark Sandwich	1 1	R. Stymeist# T. Green
12/1-16	Orleans	1 b	S. Finnegan	11/21	Scusset B.	1	B. Harris
American Ke				12/15	Nantucket	1	R. Ouren
11/8	Eastham (F.H.)	1	T. Green#	Gray Jay	OI-I-: (C(41)	1	M. Laurelle Laure
11/9 11/16	Chappaquiddick Saugus	1 4	R. Stymeist# S. Zendeh#	11/4-16 Fish Crow	Quabbin (G41)	1	M. Lynch + v.o.
11/30	Medford	1	M. Rines#	12/1	Boston (F.Pk)	40	S. Walker
12/16	Cumb. Farms	1	J. Sweeney	12/20	Bourne	480	J. Trimble#
12/26	Newburyport	1	P + F. Vale	12/22	W. Roxbury (M		P. Peterson
Merlin 11/11	DWWS	2	L. Wightman	12/30 Common Ray	Waltham	3	J. Forbes
11/15	P.I.	2	T. Wetmore	11/5	Mt. Wachusett	2	S. Olson
11/28	Hadley	2	S. Surner	11/14	Mt. Watatic	5	T. Pirro
11/30	Saugus	2	S. Zendeh#	11/30	Ware R. IBA	2	M. Lynch#
Peregrine Fal 11/7	Medford	2	P. Roberts	12/2 12/7	Swansea Quabbin Pk	2 2	S. Davis J. Rose
11/16	Saugus	$\frac{2}{2}$	S. Zendeh#	12/18	Northbridge	2	S. Ricker
11/24	Squantum	2	P. Peterson	12/thr	W. Roxbury (M.		V.O.
11/29	Nantucket	2	D. Blatt	Horned Lark	G1 1 (G.D.)	25	37.37.11
12/14 12/29	Greater Boston P.I.	11 2	CBC T. Wetmore	11/15 11/16	Chatham (S.B.)	35 80	M. Malin S. Zendeh#
Monk Parake		2	1. Wednote	11/18	Saugus Acton	75	J. Forbes
12/2	Brighton	2	G. Gurka	11/29	Hadley	300	H. Galbraith
Red-bellied V		_		12/14	Rehoboth	80	M. Lynch#
11/1 11/6	Douglas-Sutton W. Barnstable	5 6	M. Lynch# P. Crosson	12/21 12/31	P.I. Northampton	90 225	T. Wetmore
						223	T. Gagnon
12/14	Cape Cod CBC	.) /	CBC	Tree Swallow	7		
12/14 Yellow-bellie	Cape Cod CBC ed Sapsucker	57	CBC	Tree Swallow 11/10	Aquinnah	120	R. Stymeist#
Yellow-bellie 11/25	ed Sapsucker Mt.A.	2	R. Stymeist	11/10 11/16	Aquinnah GMNWR	1	M. Gooley
Yellow-bellie 11/25 11/27	ed Sapsucker Mt.A. Vineyard Haven	2 3	R. Stymeist C. Plimpton	11/10 11/16 12/1	Aquinnah GMNWR Nantucket	1 50	M. Gooley T. Pastuszak
Yellow-bellie 11/25	ed Sapsucker Mt.A. Vineyard Haven Boston	2 3	R. Stymeist	11/10 11/16	Aquinnah GMNWR	1	M. Gooley
Yellow-bellie 11/25 11/27 11/30 12/14 12/26	d Sapsucker Mt.A. Vineyard Haven Boston Cape Cod CBC Winchester	2 3 3 Bl	R. Stymeist C. Plimpton BC (R. Stymeist)	11/10 11/16 12/1 12/2 12/3 12/27	Aquinnah GMNWR Nantucket P.I. Yarmouth Barnstable	1 50 2	M. Gooley T. Pastuszak T. Graham
Yellow-bellie 11/25 11/27 11/30 12/14 12/26 Northern Flic	ed Sapsucker Mt.A. Vineyard Haven Boston Cape Cod CBC Winchester	2 3 3 BI 21 2	R. Stymeist C. Plimpton BC (R. Stymeist) CBC C. Gibson	11/10 11/16 12/1 12/2 12/3 12/27 Red-breasted	Aquinnah GMNWR Nantucket P.I. Yarmouth Barnstable Nuthatch	1 50 2 6 1	M. Gooley T. Pastuszak T. Graham P. Crosson S. Thomas
Yellow-bellie 11/25 11/27 11/30 12/14 12/26 Northern Flic 11/7	d Sapsucker Mt.A. Vineyard Haven Boston Cape Cod CBC Winchester Eker Eastham (F.H.)	2 3 3 BI 21 2	R. Stymeist C. Plimpton BC (R. Stymeist) CBC C. Gibson M. Keleher	11/10 11/16 12/1 12/2 12/3 12/27 Red-breasted 11/5	Aquinnah GMNWR Nantucket P.I. Yarmouth Barnstable Nuthatch Boston (A.A.)	1 50 2 6 1	M. Gooley T. Pastuszak T. Graham P. Crosson S. Thomas P. Peterson
Yellow-bellie 11/25 11/27 11/30 12/14 12/26 Northern Flic	ed Sapsucker Mt.A. Vineyard Haven Boston Cape Cod CBC Winchester	2 3 3 BI 21 2	R. Stymeist C. Plimpton BC (R. Stymeist) CBC C. Gibson	11/10 11/16 12/1 12/2 12/3 12/27 Red-breasted	Aquinnah GMNWR Nantucket P.I. Yarmouth Barnstable Nuthatch Boston (A.A.) W. Barnstable	1 50 2 6 1	M. Gooley T. Pastuszak T. Graham P. Crosson S. Thomas P. Peterson P. Crosson
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Yellow-bellie 11/25 11/27 11/30 12/14 12/26 Northern Flic 11/7 11/10 11/25 12/26 Pileated Woo 11/22 11/29 12/21 Empidonax s 12/1 Eastern Phoe	ed Sapsucker Mt.A. Vineyard Haven Boston Cape Cod CBC Winchester eker Eastham (F.H.) Aquinnah Orleans Mid-Cape CBC dpecker Quabbin (G37) W. Newbury Ipswich pecies Cambridge be	2 3 3 Bl 21 2 11 12 10 97 3 2 2	R. Stymeist C. Plimpton BC (R. Stymeist) CBC C. Gibson M. Keleher R. Stymeist# K. Yakola CBC B. Lafley J. Berry# S. Riley T. Spahr	11/10 11/16 12/1 12/2 12/3 12/27 Red-breasted 11/5 11/16 11/16 11/23 12/4 12/26 12/27 12/30 Brown Creep 11/5 11/6	Aquinnah GMNWR Nantucket P.I. Yarmouth Barnstable Nuthatch Boston (A.A.) W. Barnstable Quabog IBA Mashpee P.I. Mid-Cape CBC Quabbin Truro CBC eer Boston (A.A.) Newton	1 50 2 6 1 5 8 8 9 5 61 39 98	M. Gooley T. Pastuszak T. Graham P. Crosson S. Thomas P. Peterson P. Crosson M. Lynch# M. Keleher T. Wetmore CBC CBC CBC CBC CBC P. Peterson J. Forbes
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Winter Wren				12/20	Williamstown	2	G. Soucie
11/23	Lexington (DM)	5	M. Rines#	12/30	Truro CBC	1	B. Nikula#
11/26	Shirley	2	T. Aversa	Cedar Waxy			
12/5	Woburn (HP)	2	D. Williams	11/8	Aquinnah	55	S. Whiting
12/13	W. Newbury	2	R. Heil	11/11	Falmouth	55	M. Keleher
12/30	Truro CBC	11	CBC	11/16	Yarmouth	50	P. Bono
Marsh Wren				11/20	Barnstable	65	P. Crosson
11/16	Wayland	4	B. Harris	12/14	Rockport	120	B. Harris
12/14	Cape Cod CBC	13	CBC	Lapland Lo			
12/15	Newbury	3	R. Heil	11/3	P.I.	15	T. Wetmore
12/18	GMNWR	3	K. Dia	11/8	Newbury	2	P. + F. Vale#
12/19	IRWS	3	S. Santino	11/29	Hadley	4	H. Galbraith
12/26	Mid-Cape CBC	13	CBC	12/14	Hatfield	3	S. Sauter
Blue-gray Gn	atcatcher			12/22	Acton	2	S. Perkins
11/29	Squantum	1	S. Williams	Smith's Lo	ngspur		
12/26	Hyannis (CBC)	1	S. Williams#	11/9	Nahant	1 pł	n A. Trautmann
Golden-crown	ned Kinglet			Snow Bunti	ng		
11/3	Nantucket	8	G. Andrews	11/4	Wachusett Res.	40	E. Kittredge
11/9	Wachusett Res.	5	M. Lynch#	11/11	P.I.	80	T. Wetmore
11/9	N. Truro	10	S. Sullivan#	11/15	Chatham (S.B.)	120	M. Malin
11/13	Mashpee	9	P. Kyle	11/15	Sandwich	130	C. Schlotterbeck
12/1	Boston (F.Pk)	2	S. Walker	11/15	S. Quabbin	43	J. Young
12/29	Southboro	2	M. Lynch#	11/16	N. Truro	150	B. Nikula
Ruby-crowne			•	11/22	Plymouth B.	150	S. van der Veen
11/8	Aquinnah	3	S. Whiting	11/22	Hyannis	40	BBC Pelagic
11/28	Falmouth	2	R. Doherty	11/23	Acoaxet	40	M. Lynch#
11/28	Cambr. (Danehy)		K. Hartel	11/29	Hadley	40	H. Galbraith
12/28	Milton	1	P. Peterson	12/14	Ipswich (C.B.)	80	J. Berry#
12/29	Westboro	î	N. Paulson	Ovenbird	ipowien (Cibi)	00	o. Belly
Eastern Blueh		•	11114415011	12/14	Brighton	1	CBC (R. Doherty)
11/9	Westport	22	E. Nielsen	12/22	N. Dighton	i	J. Eckerson#
12/14	DFWS	20	P. Sowizral	Northern W		•	or Destersoin
12/14	Cape Cod CBC	89	CBC	11/11	Brookline	1	P. Peterson
12/26	Mid-Cape CBC	66	CBC		white Warbler	•	1. I eterson
Townsend's S		00	СВС	11/6	N. Brookfield	1	R. Jenkins
11/4	Rockport (H.P.)	1	H. Galbraith	11/30	Nantucket	1	D. Blatt
	31 Marion	1 ph		12/7	Chestnut Hill	1	M. Garvey
Swainson's T		ı pii	v. Z0110 + v.0.	12/7	Brookline	1	M. Hunt
11/4	Manomet	1 b	T. Lloyd-Evans	Tennessee V		1	WI. HUIII
12/6	Carlisle			12/16	Milford	1 nl	B. Parette
		1 ph	S. Hellilich			1 pł	D. Falette
Hermit Thrus		8	Т Water	11/9	wned Warbler	4	E Mislam
11/4	P.I.	8	T. Wetmore	11/9	Westport	4 4	E. Nielsen
11/9	Westport	7	E. Nielsen		Truro	3	B. Harris#
11/10	Chilmark		R. Stymeist#	11/10	Aquinnah		R. Stymeist#
11/23	Boston (RKG)	9	R. Stymeist#	11/29	Squantum	2	S. Williams
12/1	Wayland		B. Harris	11/29	Nantucket	2	T. Pastuszak
12/26	Mid-Cape CBC	37	CBC	12/14	Greater Boston	8	CBC
Gray Catbird		1.5	E N: 1	12/26	Mid-Cape CBC	3	CBC
11/9	Westport	15	E. Nielsen	12/30	Truro CBC	2	CBC
11/10	Aquinnah	11	B. Stymeist	Nashville W		1	D. C
11/10	Chilmark	7	R. Stymeist#	11/10	Chilmark	1	R. Stymeist#
12/14	Rockport	5	B. Harris	11/10	P'town	1	M. Keleher
12/30	Truro CBC	30	CBC	Common Ye		_	D II ' "
Brown Thrasl			E N: 1	11/8	Eastham	2	B. Harris#
11/9	Westport	1	E. Nielsen	11/23	N. Dighton	3	A. Eckerson
11/10	Chilmark	1	R. Stymeist#	12/29	Salisbury	1	S. Sullivan#
11/16							
	Saugus	1	J. Smith	American R			9.9
11/23	Saugus Chatham	1 1	R. Schain	11/15	Wellfleet	1	C. Caron
11/23 12/14	Saugus Chatham Rockport	1		11/15 12/2	Wellfleet Cohasset	1	S. Avery
11/23 12/14 American Pip	Saugus Chatham Rockport iit	1 1 1	R. Schain B. Harris	11/15 12/2 12/28	Wellfleet Cohasset Nantucket		
11/23 12/14 American Pip 11/2	Saugus Chatham Rockport bit Saugus	1 1 1 50	R. Schain B. Harris S. Zendeh#	11/15 12/2 12/28 Cape May V	Wellfleet Cohasset Nantucket Varbler	1 1	S. Avery J. Trimble
11/23 12/14 American Pip 11/2 11/3	Saugus Chatham Rockport oit Saugus Longmeadow	1 1 1 50 75	R. Schain B. Harris S. Zendeh# A & L Richardson	11/15 12/2 12/28 Cape May V 12/10	Wellfleet Cohasset Nantucket Varbler Nantucket	1	S. Avery
11/23 12/14 American Pip 11/2 11/3 11/3	Saugus Chatham Rockport bit Saugus Longmeadow P.I.	1 1 1 50 75 25	R. Schain B. Harris S. Zendeh# A & L Richardson T. Wetmore	11/15 12/2 12/28 Cape May V 12/10 Northern Pa	Wellfleet Cohasset Nantucket Warbler Nantucket urula	1 1	S. Avery J. Trimble T. Pastuszak
11/23 12/14 American Pip 11/2 11/3 11/3 11/5	Saugus Chatham Rockport bit Saugus Longmeadow P.I. Newbury	1 1 1 50 75 25 20	R. Schain B. Harris S. Zendeh# A & L Richardson T. Wetmore MAS (B. Gette)	11/15 12/2 12/28 Cape May V 12/10 Northern Pa 11/4	Wellfleet Cohasset Nantucket Warbler Nantucket urula Brookline	1 1 1	S. Avery J. Trimble T. Pastuszak P. Peterson
11/23 12/14 American Pip 11/2 11/3 11/3 11/5 11/10	Saugus Chatham Rockport  it Saugus Longmeadow P.I. Newbury Chilmark	1 1 1 50 75 25 20 33	R. Schain B. Harris S. Zendeh# A & L Richardson T. Wetmore MAS (B. Gette) R. Stymeist#	11/15 12/2 12/28 Cape May V 12/10 Northern Pa 11/4 12/16-31	Wellfleet Cohasset Nantucket Warbler Nantucket urula Brookline Uxbridge	1 1	S. Avery J. Trimble T. Pastuszak
11/23 12/14 American Pip 11/2 11/3 11/3 11/5 11/10 11/28	Saugus Chatham Rockport oit Saugus Longmeadow P.I. Newbury Chilmark Nantucket	1 1 1 50 75 25 20 33 25	R. Schain B. Harris S. Zendeh# A & L Richardson T. Wetmore MAS (B. Gette) R. Stymeist# R. Ouren	11/15 12/2 12/28 Cape May V 12/10 Northern Pa 11/4 12/16-31 Magnolia W	Wellfleet Cohasset Nantucket Warbler Nantucket rula Brookline Uxbridge Varbler	1 1 1 1 1	S. Avery J. Trimble T. Pastuszak P. Peterson E. Lodi
11/23 12/14 American Pip 11/2 11/3 11/3 11/5 11/10 11/28 12/12	Saugus Chatham Rockport  it Saugus Longmeadow P.I. Newbury Chilmark Nantucket Acton	1 1 1 50 75 25 20 33 25 50	R. Schain B. Harris S. Zendeh# A & L Richardson T. Wetmore MAS (B. Gette) R. Stymeist# R. Ouren P. + F. Vale	11/15 12/2 12/28 Cape May V 12/10 Northern Pa 11/4 12/16-31 Magnolia W 11/5	Wellfleet Cohasset Nantucket Warbler Nantucket urula Brookline Uxbridge /arbler Boston (PG)	1 1 1	S. Avery J. Trimble T. Pastuszak P. Peterson
11/23 12/14 American Pip 11/2 11/3 11/3 11/5 11/10 11/28 12/12 12/17	Saugus Chatham Rockport  it Saugus Longmeadow P.I. Newbury Chilmark Nantucket Acton Rehoboth	1 1 1 50 75 25 20 33 25 50 40	R. Schain B. Harris S. Zendeh# A & L Richardson T. Wetmore MAS (B. Gette) R. Stymeist# R. Ouren P. + F. Vale S. Miller	11/15 12/2 12/28 Cape May V 12/10 Northern Pa 11/4 12/16-31 Magnolia W 11/5 Bay-breaste	Wellfleet Cohasset Nantucket Warbler Nantucket urula Brookline Uxbridge /arbler Boston (PG) d Warbler	1 1 1 1 1	S. Avery J. Trimble T. Pastuszak P. Peterson E. Lodi T. Factor
11/23 12/14 American Pip 11/2 11/3 11/3 11/5 11/10 11/28 12/12 12/17	Saugus Chatham Rockport  it Saugus Longmeadow P.I. Newbury Chilmark Nantucket Acton Rehoboth Nantucket	1 1 1 50 75 25 20 33 25 50	R. Schain B. Harris S. Zendeh# A & L Richardson T. Wetmore MAS (B. Gette) R. Stymeist# R. Ouren P. + F. Vale	11/15 12/2 12/28 Cape May V 12/10 Northern Pa 11/4 12/16-31 Magnolia W 11/5 Bay-breaste 11/8-11	Wellfleet Cohasset Nantucket Warbler Nantucket urula Brookline Uxbridge /arbler Boston (PG) d Warbler E. Quabbin (G41	1 1 1 1 1	S. Avery J. Trimble T. Pastuszak P. Peterson E. Lodi
11/23 12/14 American Pip 11/2 11/3 11/3 11/5 11/10 11/28 12/12 12/17 12/28 <b>Bohemian W</b>	Saugus Chatham Rockport  it Saugus Longmeadow P.I. Newbury Chilmark Nantucket Acton Rehoboth Nantucket Vaxwing	1 1 1 50 75 25 20 33 25 50 40 1	R. Schain B. Harris S. Zendeh# A & L Richardson T. Wetmore MAS (B. Gette) R. Stymeist# R. Ouren P. + F. Vale S. Miller P. Trimble	11/15 12/2 12/28 Cape May V 12/10 Northern Pa 11/4 12/16-31 Magnolia W 11/5 Bay-breaste 11/8-11 Yellow War	Wellfleet Cohasset Nantucket Warbler Nantucket rula Brookline Uxbridge /arbler Boston (PG) d Warbler E. Quabbin (G41 bler	1 1 1 1 1 1	S. Avery J. Trimble T. Pastuszak P. Peterson E. Lodi T. Factor J. Kraus
11/23 12/14 American Pip 11/2 11/3 11/3 11/5 11/10 11/28 12/12 12/17 12/28 <b>Bohemian W</b>	Saugus Chatham Rockport  it Saugus Longmeadow P.I. Newbury Chilmark Nantucket Acton Rehoboth Nantucket 'axwing 'axwing Rockport	1 1 1 50 75 25 20 33 25 50 40 1	R. Schain B. Harris S. Zendeh# A & L Richardson T. Wetmore MAS (B. Gette) R. Stymeist# R. Ouren P. + F. Vale S. Miller P. Trimble B. Harris	11/15 12/2 12/28 Cape May V 12/10 Northern Pa 11/4 12/16-31 Magnolia W 11/5 Bay-breaste 11/8-11 Yellow War 11/9	Wellfleet Cohasset Nantucket Warbler Nantucket urula Brookline Uxbridge /arbler Boston (PG) d Warbler E. Quabbin (G41) bler WBWS	1 1 1 1 1 1 1 1 1 b	S. Avery J. Trimble T. Pastuszak P. Peterson E. Lodi T. Factor J. Kraus J. Junda
11/23 12/14 American Pip 11/2 11/3 11/3 11/5 11/10 11/28 12/12 12/17 12/28 <b>Bohemian W</b>	Saugus Chatham Rockport  it Saugus Longmeadow P.I. Newbury Chilmark Nantucket Acton Rehoboth Nantucket Vaxwing	1 1 1 50 75 25 20 33 25 50 40 1	R. Schain B. Harris S. Zendeh# A & L Richardson T. Wetmore MAS (B. Gette) R. Stymeist# R. Ouren P. + F. Vale S. Miller P. Trimble	11/15 12/2 12/28 Cape May V 12/10 Northern Pa 11/4 12/16-31 Magnolia W 11/5 Bay-breaste 11/8-11 Yellow War	Wellfleet Cohasset Nantucket Warbler Nantucket rula Brookline Uxbridge /arbler Boston (PG) d Warbler E. Quabbin (G41 bler	1 1 1 1 1 1	S. Avery J. Trimble T. Pastuszak P. Peterson E. Lodi T. Factor J. Kraus

Disalmoli W	arhlar			12/27	Arlington Dog	1	V Hortol
Blackpoll W 11/3	Barnstable	1	R. Debenham#	12/27 Clay-colore	Arlington Res.	1	K. Hartel
11/4	Sudbury	1	J. Lawson	11/3	Hadley	1	J. Drucker
11/4	Wayland	1	B. Harris	11/3	Cambr. (F.Pd)	î	R. Stymeist
11/4	Marlboro	ī	T. Spahr	11/10	Aquinnah	1	R. Stymeist#
11/19	Manomet	1	T. Lloyd-Evans	11/16	Harwich	1	Č. Caron
Black-throat	ed Blue Warbler		·	11/29	Brewster	1	R. Doherty
11/5	Stoughton	1	A. Johnston	12/4-31	Belchertown	1	D. Griffiths
11/8	Rockport (H.P.)	1	L. Ferraresso	12/21	W. Newbury	1 p	h CBC (D. Lange)
11/9	Groton	1	T. Murray	Field Sparre			D 0
Palm Warble		2	D C: : .!!	11/10	Chilmark	4	R. Stymeist#
11/10	Chilmark	3	R. Stymeist#	11/11	Katama	4	R. Stymeist#
11/10 11/10	W. Dennis Harwich	6 5	E. Hoopes	11/16 11/23	Falmouth N. Eastham	10	M. Malin
11/10	Katama	12	J. Hoye#	12/28	Marlboro	10 2	K. Yakola T. Spahr
11/11	Edgartown	12	R. Stymeist# B. Stymeist	12/20	Boxboro	2	S. Miller
12/26	Mid-Cape CBC	10	CBC	Vesper Spar		_	S. Williei
12/28	Uxbridge	1	E. Lodi	11/3	Hadley	1	J. Drucker
Pine Warbler		_		11/16	Falmouth	1	K. Fiske
11/6	Waltham	1	J. Forbes	11/18	Deerfield	1	J. Rose
11/16	DFWS	1	P. Sowizral	11/22	Turners Falls	1	E. Huston
12/2	Westport	1	L. Waters	Lark Sparro	)W		
12/12	Roxbury	1	P. Peterson	11/22-12	2/31 Hingham	1	V. Zollo#
12/30	Plymouth	1	R. Bowes	11/25	Longmeadow	1	M. Moore
Yellow-rump				11/28	Hadley	1	S. Surner#
11/4	Barnstable (S.N.		P. Crosson	12/15	Eastham	1	S. Williams
11/8	Harwich	40	A. Curtis	Savannah S			
11/8	Rockport (H.P.)	10	L. Ferraresso	11/4	Concord	16	R. Stymeist
11/8	Marion	14	M. Lynch#	11/4	P.I.	4	T. Wetmore
11/9	Nantucket	51	M. Malin	11/8	Newbury	1	P. + F. Vale#
12/1	Squantum	4	P. Peterson	11/29	Hadley	19	M. Lynch#
12/1 12/28	Marion	8	M. Lynch# J. Trimble#	11/29	W. Newbury	1 1	S. McGrath# J. Forbes
Audubon's	Nantucket CBC	127	J. IIIIIIbie#	11/30 12/12	GMNWR Boston (F.Pk)	2	P. Peterson
11/21-12/		1 p	h S. Williams#	12/12	W. Roxbury (M)		P. Peterson
	19 Hingham ated Warbler	ı p	ii 5. Willianis#	12/22	Waltham	1	J. Forbes
		1	J. Trimble#			1	J. Polbes
12/14-16	Orleans	1	J. Trimble#	Ipswich Spa	arrow		
	Orleans	1	J. Trimble# S. Williams			1 1 1	P. Champlin T. Wetmore
12/14-16 Prairie Warb	Orleans ler Squantum			Ipswich Spa 11/8	arrow Westport	1	P. Champlin
12/14-16 Prairie Warb 11/29	Orleans ler Squantum			Ipswich Spa 11/8 11/9 11/9 11/22	Westport P.I.	1 1	P. Champlin T. Wetmore
12/14-16 Prairie Warb 11/29 <b>Townsend's</b> 12/7-31	Orleans ler Squantum <b>Warbler</b>	1	$S. \ Williams$ $A. \ Sanford + v.o.$	Ipswich Spa 11/8 11/9 11/9 11/22 12/11	arrow Westport P.I. Duxbury B. Plymouth B. P.I.	1 1 3 1	P. Champlin T. Wetmore R. Bowes
12/14-16 Prairie Warb 11/29 <b>Townsend's</b> 12/7-31 Black-throat 11/5	Orleans ler Squantum <b>Warbler</b> MNWS ed Green Warbler Hadley	1	S. Williams	Ipswich Spa 11/8 11/9 11/9 11/22 12/11 12/14	Westport P.I. Duxbury B. Plymouth B. P.I. Ipswich (C.B.)	1 1 3 1	P. Champlin T. Wetmore R. Bowes S. van der Veen
12/14-16 Prairie Warb 11/29 <b>Townsend's</b> 12/7-31 Black-throat 11/5 Wilson's Wa	Orleans ler Squantum <b>Warbler</b> MNWS ed Green Warbler Hadley rbler	1 1 1	S. Williams A. Sanford $+$ v.o. A. Bartols	Ipswich Spa 11/8 11/9 11/9 11/22 12/11 12/14 Grasshoppe	Westport P.I. Duxbury B. Plymouth B. P.I. Ipswich (C.B.)	1 1 3 1 1 2	P. Champlin T. Wetmore R. Bowes S. van der Veen D. Adrien J. Berry#
12/14-16 Prairie Warb 11/29 <b>Townsend's</b> 12/7-31 Black-throat 11/5 Wilson's Wa 11/23	Orleans ler Squantum Warbler MNWS ed Green Warbler Hadley rbler Milton	1 1 1	S. Williams A. Sanford $+$ v.o. A. Bartols P. O'Neill	Ipswich Spa 11/8 11/9 11/9 11/22 12/11 12/14 Grasshoppe 11/4	Westport P.I. Duxbury B. Plymouth B. P.I. Ipswich (C.B.) er Sparrow Falmouth	1 1 3 1 1 2	P. Champlin T. Wetmore R. Bowes S. van der Veen D. Adrien J. Berry# M. Malin
12/14-16 Prairie Warb 11/29 <b>Townsend's</b> 12/7-31 Black-throat 11/5 Wilson's Wa 11/23 12/6	Orleans ler Squantum Warbler MNWS ed Green Warbler Hadley rbler Milton Gloucester	1 1 1	S. Williams A. Sanford $+$ v.o. A. Bartols	Ipswich Spa 11/8 11/9 11/9 11/22 12/11 12/14 Grasshoppe 11/4 11/16	Westport P.I. Duxbury B. Plymouth B. P.I. Ipswich (C.B.) er Sparrow Falmouth Lexington	1 1 3 1 1 2	P. Champlin T. Wetmore R. Bowes S. van der Veen D. Adrien J. Berry# M. Malin J. Forbes
12/14-16 Prairie Warb 11/29 <b>Townsend's</b> 12/7-31 Black-throat 11/5 Wilson's Wa 11/23 12/6 Yellow-brea:	Orleans ler Squantum Warbler MNWS ed Green Warbler Hadley rbler Milton Gloucester sted Chat	1 1 1 1	S. Williams A. Sanford + v.o. A. Bartols P. O'Neill S. Hedman	Ipswich Spa 11/8 11/9 11/9 11/22 12/11 12/14 Grasshoppe 11/4 11/16 11/23	Westport P.I. Duxbury B. Plymouth B. P.I. Ipswich (C.B.) er Sparrow Falmouth Lexington Dennis	1 1 3 1 1 2 1 1 1	P. Champlin T. Wetmore R. Bowes S. van der Veen D. Adrien J. Berry# M. Malin J. Forbes P. Flood
12/14-16 Prairie Warb 11/29 <b>Townsend's</b> 12/7-31 Black-throat 11/5 Wilson's Wa 11/23 12/6 Yellow-brea: 11/12	Orleans ler Squantum Warbler MNWS ed Green Warbler Hadley rbler Milton Gloucester sted Chat Boston (Fens)	1 1 1 1 1	S. Williams A. Sanford + v.o. A. Bartols P. O'Neill S. Hedman P. Peterson	Ipswich Spa 11/8 11/9 11/9 11/22 12/11 12/14 Grasshoppe 11/4 11/16 11/23 12/14	Westport P.I. Duxbury B. Plymouth B. P.I. Ipswich (C.B.) or Sparrow Falmouth Lexington Dennis Eastham	1 1 3 1 1 2 1 1 1 1	P. Champlin T. Wetmore R. Bowes S. van der Veen D. Adrien J. Berry# M. Malin J. Forbes P. Flood V. Zollo
12/14-16 Prairie Warb 11/29 <b>Townsend's</b> 12/7-31 Black-throat 11/5 Wilson's Wa 11/23 12/6 Yellow-brea: 11/12 11/15	Orleans ler Squantum Warbler MNWS ed Green Warbler Hadley rbler Milton Gloucester sted Chat Boston (Fens) P.I.	1 1 1 1 1 1	S. Williams A. Sanford + v.o. A. Bartols P. O'Neill S. Hedman P. Peterson S. McGrath#	Ipswich Spa 11/8 11/9 11/9 11/22 12/11 12/14 Grasshoppe 11/4 11/16 11/23 12/14 12/21	Westport P.I. Duxbury B. Plymouth B. P.I. Ipswich (C.B.) or Sparrow Falmouth Lexington Dennis Eastham W. Roxbury (MI)	1 1 3 1 1 2 1 1 1 1 1 1 1 1 1 1 1	P. Champlin T. Wetmore R. Bowes S. van der Veen D. Adrien J. Berry# M. Malin J. Forbes P. Flood V. Zollo M. Garvey
12/14-16 Prairie Warb 11/29 <b>Townsend's</b> 12/7-31 Black-throat 11/5 Wilson's Wa 11/23 12/6 Yellow-brea: 11/12 11/15 12/14	Orleans ler Squantum Warbler MNWS ed Green Warbler Hadley rbler Milton Gloucester sted Chat Boston (Fens) P.I. Cape Cod CBC	1 1 1 1 1 1 1 3	S. Williams A. Sanford + v.o. A. Bartols P. O'Neill S. Hedman P. Peterson S. McGrath# CBC	Ipswich Spa 11/8 11/9 11/9 11/22 12/11 12/14 Grasshoppe 11/4 11/16 11/23 12/14 12/21 12/29	Westport P.I. Duxbury B. Plymouth B. P.I. Ipswich (C.B.) F Sparrow Falmouth Lexington Dennis Eastham W. Roxbury (MI Mattapan (BNC	1 1 3 1 1 2 1 1 1 1 1 1 1 1 1 1 1	P. Champlin T. Wetmore R. Bowes S. van der Veen D. Adrien J. Berry# M. Malin J. Forbes P. Flood V. Zollo
12/14-16 Prairie Warib 11/29 <b>Townsend's</b> 12/7-31 Black-throat 11/5 Wilson's Wa 11/23 12/6 Yellow-brea: 11/12 11/15 12/14	Orleans ler Squantum Warbler MNWS ed Green Warbler Hadley rbler Milton Gloucester sted Chat Boston (Fens) P.I. Cape Cod CBC Mid-Cape CBC	1 1 1 1 1 1	S. Williams A. Sanford + v.o. A. Bartols P. O'Neill S. Hedman P. Peterson S. McGrath#	Ipswich Spa 11/8 11/9 11/9 11/9 11/22 12/11 Grasshoppe 11/4 11/16 11/23 12/14 12/21 12/29 <b>Le Conte's</b>	Westport P.I. Duxbury B. Plymouth B. P.I. Ipswich (C.B.) or Sparrow Falmouth Lexington Dennis Eastham W. Roxbury (MI Mattapan (BNC Sparrow	1 1 3 1 1 2 1 1 1 1 1 P) 1	P. Champlin T. Wetmore R. Bowes S. van der Veen D. Adrien J. Berry# M. Malin J. Forbes P. Flood V. Zollo M. Garvey P. Peterson
12/14-16 Prairie Warb 11/29 <b>Townsend's</b> 12/7-31 Black-throat 11/5 Wilson's Wa 11/23 12/6 Yellow-breat 11/12 11/15 12/14 12/26 Eastern Tow	Orleans ler Squantum Warbler MNWS ed Green Warbler Hadley rbler Milton Gloucester sted Chat Boston (Fens) P.I. Cape Cod CBC Mid-Cape CBC hee	1 1 1 1 1 1 1 3 2	S. Williams A. Sanford + v.o. A. Bartols P. O'Neill S. Hedman P. Peterson S. McGrath# CBC CBC	Ipswich Spa 11/8 11/9 11/9 11/9 11/22 12/11 12/14 Grasshoppe 11/4 11/16 11/23 12/14 12/21 Le Conte's 12/14-15	Westport P.I. Duxbury B. Plymouth B. P.I. Ipswich (C.B.) or Sparrow Falmouth Lexington Dennis Eastham W. Roxbury (M) Mattapan (BNC Sparrow Eastham	1 1 3 1 1 2 1 1 1 1 1 1 1 1 1 1 1	P. Champlin T. Wetmore R. Bowes S. van der Veen D. Adrien J. Berry# M. Malin J. Forbes P. Flood V. Zollo M. Garvey
12/14-16 Prairie Warb 11/29 Townsend's 12/7-31 Black-throat 11/5 Wilson's Wa 11/23 12/6 Yellow-brea: 11/12 11/15 12/14 12/26 Eastern Tow 11/9	Orleans ler Squantum Warbler MNWS ed Green Warbler Hadley rbler Milton Gloucester sted Chat Boston (Fens) P.I. Cape Cod CBC Mid-Cape CBC hee Westport	1 1 1 1 1 1 1 3 2	S. Williams A. Sanford + v.o. A. Bartols P. O'Neill S. Hedman P. Peterson S. McGrath# CBC CBC E. Nielsen	Ipswich Spa 11/8 11/9 11/9 11/9 11/22 12/11 12/14 Grasshoppe 11/4 11/16 11/23 12/14 12/29 Le Conte's 12/14-15 Nelson's Sp	Westport P.I. Duxbury B. Plymouth B. P.I. Ipswich (C.B.) or Sparrow Falmouth Lexington Dennis Eastham W. Roxbury (MI) Mattapan (BNC) Sparrow Eastham Sparrow Eastham Sparrow Eastham Sparrow Eastham	1 1 3 1 1 2 1 1 1 1 1 P) 1	P. Champlin T. Wetmore R. Bowes S. van der Veen D. Adrien J. Berry# M. Malin J. Forbes P. Flood V. Zollo M. Garvey P. Peterson V. Zollo#
12/14-16 Prairie Warb 11/29 <b>Townsend's</b> 12/7-31 Black-throat 11/5 Wilson's Wa 11/23 12/6 Yellow-breat 11/12 11/15 12/14 12/26 Eastern Tow	Orleans ler Squantum Warbler MNWS ed Green Warbler Hadley rbler Milton Gloucester sted Chat Boston (Fens) P.I. Cape Cod CBC Mid-Cape CBC hee	1 1 1 1 1 1 1 3 2	S. Williams A. Sanford + v.o. A. Bartols P. O'Neill S. Hedman P. Peterson S. McGrath# CBC CBC E. Nielsen R. Stymeist#	Ipswich Spa 11/8 11/9 11/9 11/9 11/22 12/11 12/14 Grasshoppe 11/4 11/16 11/23 12/14 12/21 Le Conte's 12/14-15	Westport P.I. Duxbury B. Plymouth B. P.I. Ipswich (C.B.) or Sparrow Falmouth Lexington Dennis Eastham W. Roxbury (MI Mattapan (BNC) Sparrow Eastham barrow Eastham Eastham Eastham Eastham Eastham Eastham Eastham Eastham	1 1 3 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	P. Champlin T. Wetmore R. Bowes S. van der Veen D. Adrien J. Berry# M. Malin J. Forbes P. Flood V. Zollo M. Garvey P. Peterson
12/14-16 Prairie Warb 11/29 Townsend's 12/7-31 Black-throat 11/5 Wilson's Wa 11/23 12/6 Yellow-brea: 11/12 11/15 12/14 12/26 Eastern Tow 11/9 11/10	Orleans ler Squantum Warbler MNWS ed Green Warbler Hadley rbler Milton Gloucester sted Chat Boston (Fens) P.I. Cape Cod CBC Mid-Cape CBC hee Westport Aquinnah	1 1 1 1 1 1 1 3 2	S. Williams A. Sanford + v.o. A. Bartols P. O'Neill S. Hedman P. Peterson S. McGrath# CBC CBC E. Nielsen	Ipswich Spa 11/8 11/9 11/9 11/9 11/22 12/11 12/14 Grasshoppe 11/4 11/16 11/23 12/14 12/21 12/29 <b>Le Conte's</b> 12/14-15 Nelson's Sp 11/23	Westport P.I. Duxbury B. Plymouth B. P.I. Ipswich (C.B.) or Sparrow Falmouth Lexington Dennis Eastham W. Roxbury (MI Mattapan (BNC) Sparrow Eastham barrow Eastham Eastham Eastham Eastham Eastham Eastham Eastham Eastham	1 1 3 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	P. Champlin T. Wetmore R. Bowes S. van der Veen D. Adrien J. Berry# M. Malin J. Forbes P. Flood V. Zollo M. Garvey P. Peterson V. Zollo#
12/14-16 Prairie Warb 11/29 Townsend's 12/7-31 Black-throat 11/5 Wilson's Wa 11/23 12/6 Yellow-brea: 11/12 11/15 12/14 12/26 Eastern Tow 11/9 11/10 12/1 12/8 12/12	Orleans ler Squantum Warbler MNWS ed Green Warbler Hadley rbler Milton Gloucester sted Chat Boston (Fens) P.I. Cape Cod CBC Mid-Cape CBC hee Westport Aquinnah Cambridge	1 1 1 1 1 1 1 3 2 3 6 1 1 1	S. Williams A. Sanford + v.o. A. Bartols P. O'Neill S. Hedman P. Peterson S. McGrath# CBC CBC E. Nielsen R. Stymeist# T. Spahr	Ipswich Spa 11/8 11/9 11/9 11/9 11/22 12/11 Grasshoppe 11/4 11/16 11/23 12/14 12/21 12/29 Le Conte's 12/14-15 Nelson's Sp 11/23 Saltmarsh S	Westport P.I. Duxbury B. Plymouth B. P.I. Ipswich (C.B.) or Sparrow Falmouth Lexington Dennis Eastham W. Roxbury (M) Mattapan (BNC Sparrow Eastham Darrow Eastham (F.H.) Sparrow Eastham (F.H.)	1 1 3 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P. Champlin T. Wetmore R. Bowes S. van der Veen D. Adrien J. Berry# M. Malin J. Forbes P. Flood V. Zollo M. Garvey P. Peterson V. Zollo# K. Yakola S. Paventy
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12/14-16 Prairie Warin 11/29 Townsend's 12/7-31 Black-throat 11/5 Wilson's Wa 11/23 12/6 Yellow-brea: 11/12 11/15 12/14 12/26 Eastern Tow 11/9 11/10 12/1 12/8 12/12 12/30 American Tr 11/4 11/6 11/27 11/29 12/2 12/2 12/2	Orleans ler Squantum Warbler MNWS ed Green Warbler Hadley rbler Milton Gloucester sted Chat Boston (Fens) P.I. Cape Cod CBC Mid-Cape CBC hee Westport Aquinnah Cambridge MNWS Quabbin Pk Wayland Truro CBC ee Sparrow P.I. GMNWR Bolton Flats Hadley Fairhaven Waltham	1 1 1 1 1 1 1 1 3 2 2 3 6 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	S. Williams A. Sanford + v.o. A. Bartols P. O'Neill S. Hedman P. Peterson S. McGrath# CBC CBC E. Nielsen R. Stymeist# T. Spahr J. Hoye# L. Therrien B. Harris CBC D. Williams A. Bragg# T. Aversa M. Lynch# R. Stymeist J. Forbes R. Stymeist#	Ipswich Spa 11/8 11/9 11/9 11/9 11/12 12/14 Grasshoppe 11/4 11/16 11/23 12/14 12/29 Le Conte's 12/14-15 Nelson's Saltmarsh S 11/7 Seaside Spa 11/23 11/23 11/23 12/15 12/26 Fox Sparrov 11/7 11/10 11/12 12/5 12/20 12/22	Westport P.I. Duxbury B. Plymouth B. P.I. Ipswich (C.B.) or Sparrow Falmouth Lexington Dennis Eastham W. Roxbury (MI Mattapan (BNC) Sparrow Eastham Eastham (F.H.) Dennis Newbypt H. Mid-Cape CBC W Brookline Paxton Lexington (DM) Wakefield P.I. W. Roxbury (MI	1 1 3 3 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1	P. Champlin T. Wetmore R. Bowes S. van der Veen D. Adrien J. Berry# M. Malin J. Forbes P. Flood V. Zollo M. Garvey P. Peterson V. Zollo# K. Yakola S. Paventy K. Yakola P. Flood R. Heil CBC P. Peterson M. Lynch# M. Rines P. + F. Vale
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T: 11 G	,			11/15	D .	-	D (1
	arrow (continued)		77 77 1 1	11/15	Brewster	7	D. Clapp
11/29	N. Eastham	1	K. Yakola	11/20	Brookline	8	A. Morgan
11/29	Squantum	1 ph	S. Williams	11/25	Wayland	8	J. Forbes
12/28	Concord	1	E. Nielsen	12/5	Agawam	2	K. Daniels
Swamp Spar			3.6 D: "	Baltimore On			D 1711
11/5	Lexington (DM)		M. Rines#	11/5	P.I.	2	P. + F. Vale
11/7	Eastham (F.H.)	14	M. Keleher	11/5	Boston (PG)	1	T. Factor
11/16	Wayland	22	B. Harris	11/9	Truro	3	B. Harris#
11/16	Harwich	14	C. Caron	11/9	N. Truro	2	S. Sullivan
12/22	W. Roxbury (MF		P. Peterson	11/12-12/	. I		from 9 locations
12/26	Mid-Cape CBC	119	CBC	12/26	Mid-Cape CBC	4	CBC
White-throat				Purple Finch			
11/10	Paxton	62	M. Lynch#	11/5	Lexington (DM)	61	M. Rines#
11/11	Falmouth	48	M. Keleher	11/8	Chilmark	30	J. Young
11/23	Boston (RKG)	47	R. Stymeist#	11/9	N. Truro	10	S. Sullivan#
White-crown				11/9	Falmouth	12	M. Schanbacher
11/2	Holden	6	S. Corazzini	12/14	Ipswich (C.B.)	9	J. Berry#
11/10	Paxton	2	M. Lynch#	12/26	Mid-Cape CBC	10	CBC
11/12	Concord	2	D. Swain	Red Crossbil	1		
11/29	Hadley	5	H. Galbraith	12/27	Quabbin	1	CBC
12/20	Agawam	2	J. Zepko	White-winge	ed Crossbill		
12/29	Sheffield	2	C. Jones	12/14	Amherst	1	E. Dalton
Oregon Jun	co			Common Re	dpoll		
12/28	Marlboro	1	T. Spahr	11/26	Amherst	25	J. Rose
Scarlet Tanas	ger		•	11/26	Belchertown	4	L. Therrien
11/28	Falmouth	1	M. Schanbacher	12/14	N. Chatham	2	B. Nikula#
Rose-breaste	d Grosbeak			12/14	Pittsfield	22	G. Hurley
11/9	Athol	1	D. Small	12/23	DWWS	20	E. Dalton#
11/10	Nantucket	1	T. Pastuszak	12/26	Mid-Cape CBC	15	CBC
Blue Grosbe	ak			12/27	Quabbin	5	CBC
11/1	Sudbury	1	B. Black	12/30	Watertown	6	R. Stymeist
Indigo Bunti				Pine Siskin			•
11/8	Harwich	1	D. Clapp#	11/1	Douglas-Sutton	38	M. Lynch#
11/20	Cambridge	1	T. Spahr	11/4	Brookline	30	P. Peterson
12/4	Falmouth	1	M. Schanbacher	11/4	Lexington (DM)	22	M. Rines
Painted Bur				11/7	Medford	30	P. Roberts
11/1-3	Brighton	1 ph	P. DeGennaro#	11/8	Aguinnah	95	S. Whiting
12/14	Nantucket	1	S. Langer#	11/9	Brookline	35	P. Peterson
Dickcissel		-		11/9	Wachusett Res.	25	M. Lynch#
12/2	Watertown	1	A. Gurka	11/12	Lincoln	40	J. Forbes
Eastern Mea		•	TI Guina	11/28	New Salem	60	B. Lafley
11/11	DWWS	12	L. Wightman	12/11	Falmouth	3	M. Schanbacher
11/14	Barre Falls	1	D. Grant	12/20	Mashpee	3	J. Trimble#
11/30	Hadley	î	S. Surner	12/21	Ipswich	12	S. Riley
12/1	Cumb. Farms	13	I. Davies	12/27	Essex	1	M. Brengle#
12/26	Mid-Cape CBC	15	CBC	12/28	Milton	i	P. Peterson
12/28	Saugus	4	A. Schliemann#	Evening Gro		•	1. I eterson
	led Blackbird		71. Demiemann	11/1	Turners Falls	1	J. Coleman
11/5	Nantucket	1	G. Andrews	11/3	Adams	3	J. Jones
11/11	Hadley	1	L. Waters#	11/9	N. Brookfield	1	J. Smith
11/22	Groton	1	R. Templeton	11/13	Plainfield	1	J. Williams
11/25	Concord	1	S. Perkins	11/19	Conway	1	S. Baker
Rusty Blackl		1	D. I CIKIIIS	12/2	Brighton	1	G. Gurka
11/3	Pittsfield (Pont.)	15	J. Pierce	12/20	Williamstown	1	G. Soucie
11/3	i moneia (i ont.)	13	J. I ICICE	14/40	** IIIIaiiisto wii	1	G. Soucie

#### Correction

The entry for Cory's Shearwater in the July/August 2014 Bird Sightings (*Bird Observer 42.6*, December 2014) included the the following entry:

Cory's Shearwater 7/21, 8/17 P'town 2000, 4000 B. Nikula the correct entry should be:

Cory's Shearwater 7/21, 8/17 P'town 2000, 10000 B. Nikula

#### ABBREVIATIONS FOR BIRD SIGHTINGS

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

paonisiica iii i	11111 12) (3): 373 00 (2012) (See (11	tp://eneekiist.uod.org/>).	
Locations		ONWR Oxbow National Wildlife Re	fuge
Location-#	MAS Breeding Bird Atlas Block	PG Public Garden, Bo	ston
A.A.	Arnold Arboretum, Boston	P.I. Plum Is	land
ABC	Allen Bird Club	Pd I	Pond
A.P.	Andrews Point, Rockport	POP Point of Pines, Re	vere
A.Pd	Allens Pond, S. Dartmouth	PR Pinnacle Rock, Ma	lden
В.	Beach	P'town Provincet	
Barre F.D.	Barre Falls Dam	Pont. Pontoosuc Lake, Lanes	
B.I.	Belle Isle, E. Boston	R.P. Race Point, Provincet	
B.R.	Bass Rocks, Gloucester	Res. Reser	
BBC	Brookline Bird Club	RKG Rose Kennedy Greenway, Bo	
BMB	Broad Meadow Brook, Worcester	S.B. South Beach, Chat	
BNC	Boston Nature Center, Mattapan	S.N. Sandy Neck, Barnst	
C.B.	Crane Beach, Ipswich	SRV Sudbury River Va	
CGB	Coast Guard Beach, Eastham	SSBC South Shore Bird (	
C.P.	Crooked Pond, Boxford	TASL Take A Second Look, Boston Harbor Ce	
Cambr.	Cambridge	WBWS Wellfleet Bay	
CCBC	Cape Cod Bird Club	WE World's End, Hing	
	Corporation Beach, Dennis	WMWS Wachusett Meadow	
Corp. B. Cumb. Farms	Cumberland Farms, Middleboro	Wompatuck SP Hingham, Cohasset, Scituate, Nor	
DFWS	Drumlin Farm Wildlife Sanctuary	Worc. Worce	
DWMA	Delaney WMA, Stow, Bolton, Harvard	worc.	ester
DWWS	Daniel Webster WS	Other Abbreviations	
E.P.	Eastern Point, Gloucester		Au1+
F.E.	First Encounter Beach, Eastham		adult nded
F.H.			
г.п. F.P.	Fort Hill, Eastham		
F.Pk	Fresh Pond, Cambridge	dk dark (mo	
	Franklin Park, Boston		male
G40 GMNWR	Gate 40, Quabbin Res. Great Meadows NWR	fide on the authori	_
		fl fledg	
H.	Harbor	imm imma	
H.P.	Halibut Point, Rockport		enile
HP	Horn Pond, Woburn	lt light (mo	
HRWMA	High Ridge WMA, Gardner		male
I.	Island	max maxir	
IRWS	Ipswich River WS	migr migra	
L.	Ledge		sting
MAS	Mass Audubon	ph photograp	
MP	Millennium Park, W. Roxbury		nage
M.V.	Martha's Vineyard	pr	pair
MBWMA	Martin Burns WMA, Newbury	S summer $(1S = 1st sum)$	,
MNWS	Marblehead Neck WS	v.o. various obser	
MSSF	Myles Standish State Forest, Plymouth	W winter $(2W = second winter)$	,
Mt.A.	Mount Auburn Cemetery, Cambr.		oung
NAC	Nine Acre Corner, Concord	# additional obser	vers
Newbypt	Newburyport		

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

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

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

# Invest in Endangered Species Conservation this Year *MassWildlife Monthly March 2015*

MassWildlife reminds and encourages Massachusetts taxpayers to invest in endangered wildlife and plant conservation this tax season by donating to the Natural Heritage and Endangered Species Fund on their state tax returns (Line 32a). All donations go into the Natural Heritage & Endangered Species Fund, a critical funding source for the annual budget of MassWildlife's Natural Heritage and Endangered Species Program. About 20,000 tax-filers support the Program each year. If you have made a contribution in the past, thank you for supporting the Program and its conservation efforts!

Contributions can also be made directly by sending a check payable to the "Commonwealth of MA: NHESP" to: MA Division of Fisheries & Wildlife, Natural Heritage & Endangered Species Fund, 1 Rabbit Hill Road, Westborough, MA 01581

Some of the success stories behind the work of the NHESP include the recovery of bald eagles and peregrine falcons. In 1989, there were four pairs of eagles living in the state and the first wild eagle chicks hatched. Currently, there are at least 40 pairs of eagles with over 480 chicks leaving the nests since 1989. In that same time period, there were two pairs of peregrine falcons, which increased to 31 pairs.

While Massachusetts has made considerable progress, more than 425 plants and animals are recognized as rare in the Commonwealth. "The Natural Heritage & Endangered Species Program is the first line of defense for the Massachusetts' most vulnerable plants and animals," said Department of Fish and Game Commissioner George Peterson. "I strongly encourage taxpayers to support the fund as it will help us protect these valuable and endangered resources."



THICK-BILLED MURRE BY SANDY SELESKY

# **ABOUT THE COVER**

#### Northern Shoveler

The Northern Shoveler (*Anas clypeata*) is a beautiful dabbling duck with a large, spatulate bill adapted for filter feeding on small aquatic invertebrates. The former genus name *Spatula* and the current species name, from the Latin *clypeum* meaning shield, both refer to the bill shape of this elegant duck. The medium-sized shoveler is sexually dimorphic in plumage. In breeding plumage—December through May—the male has a shining green head and neck, and chestnut flanks and belly that contrast sharply with its white breast. The female is mottled light brown but can be distinguished from other female ducks of similar plumage by her spatulate bill. In flight, both sexes have white underwings. Males have a large blue patch on their forewings; females have a similar patch of gray. Juveniles resemble females. In nonbreeding plumage, males have gray heads and the rufous underparts are muted. Northern Shovelers are monotypic, with no subspecies recognized. They are, however, closely related to the three shoveler species of the Southern Hemisphere.

Shovelers breed from northern Alaska south through the prairie pothole regions of western Canada and the United States. In the east, breeding is patchy through the Great Lakes, the Saint Lawrence Seaway, and southern Hudson Bay area. Shovelers also breed in Europe and Asia. This species has bred sporadically in Massachusetts, especially on Monomoy and Plum islands where it is a fairly common migrant. Shovelers are rare or uncommon in other parts of the state, although they have become progressively more common since the 1920s. Most Northern Shovelers are migratory, wintering from Washington State across much of the lower half of the United States to Mexico, and Central America. On the East Coast they winter north to southern Massachusetts. Of the dabbling ducks, Shovelers are one of the latest spring migrants and earliest fall migrants.

Shovelers are usually monogamous but are occasionally polygynous. Pair formation occurs on the wintering grounds, usually by the end of February. Courtship by the male includes *took-took* calls, a display in which the male swims away from the female, showing off his shimmering green head. Other displays involve the tip-up posture, wing flapping, and short jump-flights. The male Shoveler defends the core of his home range during breeding season more than any other of the dabbling ducks. Territorial males will chase conspecifics while swimming or flying and may fight with lunging, wing flapping, and biting. Threat displays include open bill and bill-jabbing, and head pumping with an upward-pointing bill. Shovelers may also be aggressive on the wintering grounds.

Northern Shovelers produce a single brood per season. Breeding habitat includes shallow wetlands, ponds, and parklands—habitat typical of the prairie pothole region. The female selects the nest site, usually in vegetation no more than a foot high and within 150 feet of water. She also makes a simple nest scrape, which she lines with down. The clutch is 10–12 pale olive or greenish gray eggs, incubated by the female alone for 22–25 days until the synchronous hatching. The female may give a flapping

distraction display if the nest is threatened and if flushed, may defecate on the eggs as she departs, which may deter predators. The chicks are precocial, covered with down, eyes open, capable of locomotion, and within a day feed themselves on aquatic invertebrates and plants. The female leads the young to water shortly after hatching. She remains with the brood for about seven weeks until fledging. Males eventually desert their mate and young and form cohesive bachelor flocks. During their flightless period during molt, they become solitary and secretive, hide in vegetation, and feed less. After molt, they once again form flocks.

Shovelers forage by swimming with their bills in the water, the comb-like lamellae along the broad, spatulate bill straining invertebrates from the water. Their diet consists primarily of swimming invertebrates, especially *Daphnia* and other cladocerans, and also includes seeds. They usually forage in open water but may also dabble in the mud of the bottom, using a tip-up posture. They also glean food from submerged vegetation. Because Shovelers tend to stir up their environment when foraging, they are sometimes used as beaters by other species such as phalaropes.

During breeding, adult females, eggs and young are preyed upon by foxes and other mammalian predators. Skunks and ground squirrels regularly destroy their nests. Typical avian predators include crows, magpies, and gulls. Hunters kill several hundred thousand Shovelers every year, and habitat loss due to the conversion of wetlands to agricultural lands is widespread. But Breeding Waterfowl Survey data suggest increasing or stable population numbers, possibly influenced by recently improved breeding habitat. Despite hunting pressure, habitat loss, and predation, the future looks promising for this lovely duck species.

William E. Davis Jr.

# About the Cover Artist: Barry Van Dusen

Once again, *Bird Observer* offers a painting by the artist who has created many of our covers, Barry Van Dusen. Barry, who lives in Princeton, Massachusetts, is well known in the birding world. Barry has illustrated several nature books and pocket guides, and his articles and paintings have been featured in *Birding, Bird Watcher's Digest*, and *Yankee Magazine* as well as *Bird Observer*. Barry's interest in nature subjects began in 1982 with an association with the Massachusetts Audubon Society. He has been influenced by the work of European wildlife artists and has adopted their methodology of direct field sketching. Barry teaches workshops at various locations in Massachusetts. For more information, visit Barry's website at <www.barryvandusen.com>. \*\*.

## AT A GLANCE

# February 2015



DAVID M. LARSON

This issue's mystery species features a study (mostly) in black. In fact, the birds in the photograph are blackbirds (family *Icteridae*), which would seem to make their identification straightforward. As is often the case with "At a Glance" photos, however, there are features of the birds that seem distinctive and, at the same time, ambiguous. This uncertainty is partly due to the fact that more than one species is represented in the photo.

First, look at the appearance of the bill on the right-hand bird in the foreground. It is stout and distinctively shaped, which is somewhat atypical for a blackbird. Most icterids—Baltimore Oriole, for example—possess relatively long and sharp-pointed beaks, although others, such as the Common Grackle, have relatively stout and gently curved beaks. The blackbird in the foreground, however, has a thick, conical beak reminiscent of a sparrow or certain other seed-eating species. This distinctive bill shape, coupled with the uniformly glossy black appearance of the bird's wings and body, identify it as a male Brown-headed Cowbird (*Molothrus ater*). Furthermore, at least two other blackbirds in the photo have prominently cocked tails suggesting that these birds are also cowbirds. The cocked tail of feeding cowbirds is often an easy way to pick them out of a mixed flock of ground-feeding blackbirds.

In addition to the three cowbirds in the picture, there is an indeterminate blackbird in the left rear portion. A careful look at the size and posture of this blackbird suggests that it is slightly larger than the cowbirds in the foreground and may not be that species. Although the bird is partially eclipsed by the bird in front of it, its size and posture suggest that it could be a Red-winged Blackbird, but realistically its identity is best left as uncertain.

The remaining blackbird in the center of the picture is noticeably larger than the other blackbirds. In addition to its significantly larger size, this bird also has a prominent pale, perhaps white, circular area around its vent. There is also a slash of white showing on the folded wing. This bird is unequivocally an adult male Yellowheaded Blackbird (*Xanthocephalus xanthocephalus*). Even though its yellow head cannot be seen, no other blackbird shares the unique ventral marking around its anal opening, which is actually rich yellow like the head, and white inner wing coverts which, when the wing is extended, take on the configuration of a white wing patch. This feature is present only in males.

This mixed flock of blackbirds is typical of many such flocks seen throughout Massachusetts in fall. Though Brown-headed Cowbirds, Common Grackles, and Redwinged Blackbirds are seasonally common to abundant throughout the state for much of the year, Yellow-headed Blackbirds are rare and tend to be found near the coast in late summer and fall. David Larson photographed this flock on October 25, 2014, in Seabrook, New Hampshire.

Wayne R. Petersen

#### ANNOUNCEMENT OF PRICE INCREASE

*Bird Observer* last had a price increase in 1996. Since then production costs have risen substantially, in particular for printing and postage. In order to maintain the magazine's financial viability, a price increase is necessary. Starting with Volume 43 (2015), new one-year subscription and renewal rates for *Bird Observer* will increase to \$25.00. The two-year rate will increase to \$48.00.

# AT A GLANCE



DAVID M. LARSON

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

# Bird Observer Online!

Bird Observer has a new website: http://birdobserver.org!

Subscribers to *Bird Observer* have access to a full-color online version in addition to the printed copy. All issues back to February 2003 are online. Future issues will be posted regularly and older issues will keep being added.

To obtain a user name and password, send an email to birdobserver@jocama.com and include your name as it appears on your *Bird Observer* mailing label.

BIRD OBSERVER (USPS 369-850) P.O. BOX 236 ARLINGTON, MA 02476-0003

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