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HOT BIRDS



Mississippi Kites have been increasingly reported in spring in Massachusetts. This year, kites were reported from Cape Cod, Westwood, Scituate, and Warren. On May 29, Bennet Porter sighted both Mississippi and Swallow-tailed kites in Falmouth, and on May 30, Ian Davies took these terrific photos of a **Mississippi** (left above) and **Swallow-tailed kite** (right above).

On July 10, Peter and Fay Vale discovered this **Little Egret** (right), the first in Massachusetts since 2004. Billy Wrobel took this stunning photograph of the bird.







Mary Richmond discovered an immature **Brown Booby** (right) on Corporation Beach in Dennis on August 16. Several Cape Cod birders were able to get there and take photos from a distance like this one from Mary Keleher. This is only the fifth record for Massachusetts. It was only the second **Elegant Tern** (left) in Massachusetts, found by Steve Grinley on July 23 and photographed by Suzanne Sullivan. Orginally thought to be a Royal Tern, Ian Davies checked out the photos and realized it was too small compared to the Common Tern next to it.



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LESSER YELLOWLEGS BY DAVID CLAPP

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The Duck Stops Here: Fall Migration Monitoring at Bunker Meadows

Ava Steenstrup and MaryAnn DeSisto

Monitoring Project Background

For years during fall migration, staff, volunteers, and visitors at Mass Audubon's Ipswich River Wildlife Sanctuary (IRWS) have observed the dusk flights of ducks, particularly Wood Ducks, winging their way down to the buttonbush swamp known as

Bunker Meadows. The sounds of Canada Geese and ducks settling in for the night can be heard from atop the drumlin on Bradstreet Hill. By first light, they are gone. These anecdotal observations sparked an interest in finding a way to determine how many ducks were flying in and what other species besides Wood Ducks depend on this valuable habitat-and ultimately led us to create the Ipswich River Wildlife Sanctuary Waterfowl Monitoring Project.



Figure 1. View of Bunker Meadows at sunset from the Observation Tower - photograph courtesy of Rick Smulski.

As students in Mass Audubon's Birder's Certificate Program, an 11-module yearlong ornithology course developed and taught by Mass Audubon staff at the Joppa Flats Education Center, we were looking for a self-directed project to fulfill a requirement for graduation. Since we are both docents and volunteers at IRWS, we wanted to work on a project that would benefit the sanctuary.

With the encouragement and support of Sanctuary Director Carol Decker, we embarked on a multi-year study to document the number and species of waterfowl flying into Bunker Meadows during fall migration and to set it up as a citizen science project. Beginning in the fall of 2008, to monitor the ducks during their southward migration, we chose an observation period from September to early December, until the marsh froze. The project objectives were to count the ducks flying in each evening, identify the species if possible, document the environmental factors affecting the number of ducks recorded, and determine trends over the monitoring period. Long-term, we also hoped to gain a better understanding of the factors which make this shrub-swamp wetland a desirable and important stopover for migrating waterfowl.

Ipswich River Wildlife Sanctuary and Bunker Meadows



Figure 2. Aerial view of Ipswich River Wildlife Sanctuary showing Bunker Meadows marsh in relation to the Visitor Center and other sanctuary landmarks. Aerial photo from Google Maps.

Situated in the town of Topsfield in Essex County, Massachusetts, IRWS has 2168 acres of forest, field, and wetland habitats. With eight miles of the Ipswich River flowing through it, silver maple floodplain forests, and open grassy meadows, the sanctuary is especially appealing to ducks and other waterfowl, and its wetlands have one of the largest concentrations of nesting Wood Ducks in Massachusetts.

Bunker Meadows is a sixty-five-acre, highly productive freshwater shrub marsh where buttonbush predominates. Ducks and geese eat the buttonbush seeds, and Wood Ducks often roost in the shrubs at night. Adjacent to the Ipswich River silver maple floodplain forest and the

Great Wenham Swamp, the largest freshwater wetland in Essex County, Bunker Meadows provides a nesting and resting environment for Wood, Black, and Ringnecked ducks, Mallards, Blue-winged and Green-winged teal, Virginia Rails, Soras, Marsh Wrens, Tree Swallows, and Red-winged Blackbirds.

In 1965, with assistance provided by the Soil and Conservation Services and the Massachusetts Division of Fisheries and Game, a 400-foot-long dike and watercontrol structure were constructed at the outflow of the meadow, which effectively impounded seasonal floodwaters and created a preeminent habitat for waterfowl and wildlife. Because Bunker Meadows is adjacent to the Ipswich River, it is adversely affected by the increased usage of water by the twenty-one communities in the Ipswich River Watershed. Summer drawdowns of water on the river, particularly since 1997, at times caused dangerously low water levels, resulting in degradation of this wetland. When the marsh dried completely during low-water years, for example, purple loosestrife seeded into the bare substrate. Since this non-native plant provides neither seeds that are edible by ducks nor resting material, the rich dynamic system of the marsh was threatened and most probably would have diminished this habitat as a favorite for Wood Ducks. With assistance from Natural Resources Conservation Services, a water control device was installed in 2002. There have been optimum water levels for the duration of the project to date.

To learn more about the river and the problem of low summer flow, check out Mass Audubon's website http://www.massaudubon.org/rivers/> and the Ipswich River Watershed Association website at <www.ipswichriver.org>—in particular <http://ipswichriver.org>

Species of Interest

The primary species of interest were Wood Duck, Green-winged Teal, Mallard, and Blue-winged Teal, with a secondary interest in recording the presence of any other waterfowl, including Canada Geese. It is important to note that we were observing the different species of waterfowl along with the total number entering Bunker Meadows each monitoring evening. It was not our objective to count the number of individuals of each species.

Volunteer Recruitment and Training

Because the success of the project depended heavily on the skills and commitment of volunteers, we first identified the qualifications we felt were necessary and created a volunteer job description. We were not looking for expert birders, although familiarity with using binoculars and sighting birds was essential, as was the physical ability to walk trails in low light.

We recruited project monitors among the existing volunteers and staff of IRWS, through networking with local birding organizations and clubs, and by advertising in IRWS publications. For each season of the study we were successful in enrolling twelve to fourteen volunteers; many dedicated monitors contributed their efforts during the three years of the project.

Project leaders conducted monitor training in early September, prior to the start of the monitoring season. The time commitment for a typical evening observation period was approximately one-and-a-half to two hours; volunteers committed to at least one evening per week over a ten-to-twelve-week period, although many participated more frequently.

We coordinated volunteer participation through a sign-up schedule managed and distributed through e-mail. Monitors conducted waterfowl counts every day of the week except Mondays, when IRWS is closed to the public. To ensure the safety of our volunteers, we cancelled monitoring on evenings during severe weather events (heavy rain or snow); however, this occurred on only a handful of occasions during the entire three-year period.

Equipment and Logistics

Another important component of the project was to identify appropriate equipment and to work out the logistics of the monitoring. Fortunately, we were able to accomplish this with a minimum of cost.

We established the sanctuary garage as the central base of operations. We used this location for storage of supplies and equipment, since it was easily accessible and open even when the sanctuary office was closed. To register the bird count numbers, we selected inexpensive mechanical hand-held counters as our technology of choice. Other critical supplies were flashlights, monitoring forms, pencils, clipboard, anemometer, and a weather station, all of which could be carried in a backpack.



Monitoring location

The logical location for viewing was the twotiered Observation Tower, which stands at the edge of Bunker Meadows, commanding an unobstructed view of at least 85% of the marsh area. It is an easy five-minute walk from the parking lot and project base location.

Monitoring Protocol

To meet the project objectives and to ensure a consistent procedure for gathering data, we developed a formal monitoring protocol and a form to capture the data.

We established a minimum requirement of two monitors per evening. This was to ensure the safety of volunteers and adequate coverage of the observed area. On many occasions there were three or four monitors.

Before starting the count, monitors recorded the date, observer names, and environmental conditions, including wind direction, speed, temperature, barometric pressure, precipitation, and cloud cover, as well as the time of sunset.

Monitors positioned themselves at the Tower and started the count forty-five minutes to one hour before sunset. To better manage large numbers of observations, each monitoring session was divided into fifteen-minute counting intervals.

From the Observation Tower vantage point, we divided the observable marsh area into quadrants A and B and assigned a monitor to each quadrant. Primary monitors for A and B each had a mechanical counter and clicked the counter for each bird observed descending into the marsh. When additional monitors were present, they assisted the primary counters, depending on the number of birds and the direction of entry.

Monitors recorded the start time and end time of each fifteen-minute interval, the species observed during that interval, and the total count from the designated observers for that interval. At the end of each interval, monitors reset the mechanical counters to zero and began the next interval's count. Monitors repeated the process until it became too dark to continue. Monitors then added the totals of all counting intervals for the nightly total.

Data processing

At the end of each monitoring session, monitors deposited the completed forms in a designated folder at the base location. Project leaders periodically retrieved the forms, reviewed the form data for accuracy and omissions, and entered each session's data into an Excel spreadsheet.

Figure 3. The Observation Tower at Bunker Meadows, Ipswich River Wildlife Sanctuary, showing volunteers conducting an evening waterfowl count—photograph courtesy of Rick Smulski.

Monitoring Results

The primary flight paths for waterfowl descending into the marsh at dusk are shown in Figure 4.

Table 1 compares the average, median, and maximum nightly counts as well as the total birds counted for each year of the study. It is evident that there is a steady increase in the numbers from 2008 to 2010.

Graphs of the daily totals plotted against the date for each of the three monitoring seasons demonstrate a similar pattern (Figure 5). Count numbers increased gradually through September and October, with peak numbers



Figure 4. Aerial map showing primary paths taken by waterfowl flying into Bunker Meadows at sunset. Aerial photo from Google Maps.

observed during the time period October 22 through November 8. Numbers steadily decline through November and fall to zero in the first week of December when Bunker Meadows freezes over.

TABLE 1

YEAR	<u>2008</u>	<u>2009</u>	<u>2010</u>
AVG	542.5	782.7	1342.8
MEDIAN	569.0	726.5	1170.0
MAX	1164 (10/26)	2194 (10/29)	4034 (11/03)
TOTAL	29,835	54,791	83,255

In the chart, the day-to-day variation in the count numbers is evident. Part of this variation we attribute to factors such as the number of monitors, the experience level of the monitors, and local variations in weather and light conditions that affected overall visibility. Much of the variation is related to factors beyond the scope of our investigation, such as regional weather and wind patterns affecting southward migration timing and the length of stopovers along the migration path.

Discussion and Summary

Since the monitoring began in 2008, we have seen a steady increase in the number of ducks and geese, indicating that Bunker Meadows is an important resource for migrating waterfowl. Our observations over the past three years suggest that, because Bunker Meadows is a large, open wetland that offers the protective cover of the buttonbush shrub, it is a very appealing roosting site for waterfowl during migration.

This was designed as a three-year project, but with higher numbers of waterfowl recorded each year, we have questioned whether this is due to the experience level of monitors or if it could be attributed to the breeding success of waterfowl in these



Figure 5. Comparison of nightly waterfowl count totals plotted against the calendar date for project years 2008, 2009, and 2010.

years. Thus we plan to continue monitoring on an abbreviated basis for the next two years, concentrating our efforts during the weeks of the highest recorded counts.

A beneficial aspect of this effort has been the participation of citizen scientists, since their involvement has been critical to the project. Another has been the educational component; the volunteers are not only interested in monitoring waterfowl, but also in the health of this essential habitat. The data collected also indicate that Mass Audubon should continue to monitor for invasive plant species that could degrade this valuable wetland and manage for optimum water levels for waterfowl.

Acknowledgments

On behalf of Carol Decker and the Ipswich River Wildlife Sanctuary, we would like to acknowledge all the volunteers that have participated in the monitoring since the project's inception in September 2008. A more dedicated and enthusiastic group could not be assembled. Twenty-two volunteers participated, contributing countless hours to the project. We would especially like to thank the following terrific volunteers: Kate Ackerson, Brenda Baugh, Jim Brown, Chris Cataldo, Jon Connelly, Cheri Corrado, Andreas Eleftheriou, Kirk Elwell, Laurette Folk, Sue Grimwood, Michele Kierstead, Brett Kirkpatrick, Miriam Lasher, Reggie Lockwood, Stephanie MacIntosh, Andy Northrup, Rick Smulski, Peter Stuart, and Angela Walsh.

MaryAnn DeSisto has volunteered as a docent at Ipswich River Wildlife Sanctuary since 2000 and has assisted in many IRWS programs. MaryAnn greatly enjoys learning about nature and sharing that knowledge with others. Ava Steenstrup is a volunteer and docent at the Ipswich River Wildlife Sanctuary and also serves on the Sanctuary Advisory Committee. Ava is an avid birder and developed her passion for birds and the natural world through her lifelong association with Mass Audubon.

The Great English Sparrow War

Jim Berry

In a field where big battles are fairly routine, the "Great Sparrow War" of the late nineteenth and early twentieth centuries was one of the biggest battles among North American ornithologists. It came about after the introduction and subsequent rapid spread of the House, or English, Sparrow throughout the United States. In this article my goal is to give readers a summary of how the war came about, a flavor of the personalities involved and the arguments used, and an understanding of how it was eventually resolved by the gradual decline of the House Sparrow in relation to certain historical changes in technology.

The introduction of the House Sparrow to North America is well described by Townsend (1905), Brewster (1906), Forbush (1929), Batchelder (1937), and Kastner (1986), among many others. The birds were first released in Brooklyn in 1850–52 by one Nicholas Pike of the Brooklyn Museum and in Portland in 1854 (Forbush 1929), then in Boston in 1868–69 by the city government (Townsend 1905). The ostensible reason for the introduction was that the birds were thought to be insectivores that would devour cankerworms and other insect pests that were plaguing farmers. In reality, the birds ate "mostly grains, wild and domestic; weed seeds; [and] insects and other arthropods *during breeding season*" (Lowther and Cink 2006; emphasis supplied). What they really liked was working over horse droppings for undigested grain. Their introduction was one of the biggest mistakes in American ornithological history, but it took many years for some people to realize it. Others caught on right away when they saw the effect the burgeoning sparrows were having on native songbirds, especially—but not limited to—those that nested in cavities.

By 1875 the mistake had been repeated in most eastern cities and a few western ones, whence the birds were spreading into the countryside. Townsend (1905) found them abundant in Ipswich center in 1891 but not far beyond. "In 1901, they began nesting at a farm about a mile from the sea, and the next year all the farms in the vicinity . . . were thus invaded." The hen yards were the main attraction, where "they descend in swarms to eat the food thrown out there." In both city and countryside the sparrows commenced their attacks on native cavity-nesting birds. Astute people quickly became alarmed, although the birds had their defenders.

The misguided ones were enjoying feeding the Sparrows, and municipal ignorance was supplying nesting-boxes on Boston Common . . . [to protect the sparrows] the Boston City Forester attested that eighty-nine Northern Shrikes [it was apparently a good shrike year!] and five hawks had been shot under his direction on the Common and other parks in Boston during the winter of 1876-1877" (Batchelder 1937).

Most ornithologists, however, lined up against them. And, as Townsend discovered from his own attempts to repel the invaders, the House Sparrows quickly learned how to be gun-shy.

They needed to be. The Agriculture Department and the bulk of the ornithological community declared war on them. "The Great Sparrow War" lasted for decades and occasioned an array of measures taken against these birds that amounted to what today we call "extreme prejudice" on a massive scale. The war was raged on several fronts: in the ornithological journals, in the newspapers, in the Agriculture Department, in the legislative bodies, and, of course, in the field.

Passions were high on both sides. The early primary defender of the "sparrows" (actually weaverbirds) was Dr. Thomas M. Brewer (1814–1880), of the trio of Baird, Brewer, and Ridgway, who published a huge treatise called *A History of North American Birds* beginning in the 1870s. An irascible man, Brewer, for some reason, actually *liked* English Sparrows. In Volume I of their work, in which Brewer wrote the narratives of all the species accounts, he praised the bird as "fearless and gentle," saying it had "achieved a right to a place in the avi-fauna of North America by its complete introduction, and its reproduction in large numbers . . . They are very prolific, have broods of five, six, and even seven at a time, three or four times in a season" (Baird, Brewer, and Ridgway 1874).

Brewer's primary opponent was Elliott Coues (1842–1899), to whom such numbers were horrifying. Coues, an Army surgeon and prolific writer of avian natural histories, carried on an intermittent feud with Brewer in the newspapers and journals of the period. But the Sparrow war, outlasted both men, as we shall see.

Kastner (1986) devotes an entire chapter to this phenomenon, as entertaining as anything in ornithological history—less for what it says about the sparrows than about the warriors, many of whom were giants in ornithology.

Nowhere did [the sparrows] engender so much bitterness as in Boston, where the arguments over the abrasive birds were aggravated by a number of abrasive birders . . . The Boston partisans denounced both the birds and each other. Elliott Coues attacked the sparrow as 'a nuisance without a redeeming quality.' Thomas Brewer, who led the defense, responded by suggesting that Coues was a liar. Henry Ward Beecher, the great Unitarian preacher, came into the fight by accusing Coues of 'treason' for having 'incited a riot' against the sparrow, and Henry Bergh, founder of the American Society for the Prevention of Cruelty to Animals, called Coues a murderer.

Dr. Townsend, to his credit, was on the side of reason and science. In writing about Northern Shrikes and their usefulness (if left undisturbed) in controlling the House Sparrow population, he recalled that in 1877, "as a member of the Nuttall Ornithological Club, I had the pleasure of voting with J. A. Allen, Theodore Roosevelt, Minot, Purdie, Brewster and all the rest, 'That the further increase of the House Sparrow in this country is undesirable,' much to the wrath of Dr. T. M. Brewer" (Townsend 1933).

Brewer, a Nuttall member, had taken on the rest of the Club in the Boston newspapers, to which he had many former connections and which backed him by publishing his diatribes until J. A. Allen, editor of the club's quarterly bulletin, published an effective counter-attack that quieted the debate in Boston for a time.

The text of some of the key letters can be found in Batchelder (1937), who wrote that "published reports of the Club's action [summarized by Townsend above] seemed to be more than Dr. Brewer's self-control could bear." In letters to various Boston papers, he "committed the fatal indiscretions, not only of distorting facts, but of trying to malign the club, implying that its members were merely a group of ignorant and irresponsible boys [presumably excepting himself]. This was too much even for the peaceful Mr. J. A. Allen, and he took up his pen. The Boston Journal and the Boston Transcript could not well avoid printing letters from a man of his official standing."

Batchelder further elaborated on Brewer's defense of the sparrows,

No man in Boston at the time was better known to the general public as an ornithologist. He possessed a stubborn loyalty toward any cause, once he had espoused it, he had a ready pen, and he did not avoid controversy. If it were to be taken into court, the Sparrow's advocate was prepared. In Boston the campaign was carried on actively in the newspapers—a favorable battle-ground for Dr. Brewer, for he obviously had friends in Boston newspaper offices, dating back, no doubt, to the time when he was connected with them as an editor and as a Washington correspondent.

But Brewer came out on the wrong side of history by going counter to the rest of the ornithological community. Even in retrospect, it is difficult to judge him as anything less than obtuse on this issue. The birds multiplied fast, but the canker worms did not go away. What did go away was a large percentage of other insectivorous birds whose nests the sparrows were taking over, in turn exacerbating the insect problem. By 1880 Coues was already appealing to the public to exterminate the birds for two reasons, as reported by Estabrook (1907).

1. They do not perform the work for which they were imported.

2. They attack, harass, fight, drive away, and kill native birds, much more insectivorous than themselves.

Estabrook added an argument that had been made by many, namely that the House Sparrow "has been a pest in every country in which it has been introduced," and backed it up with examples.

William Brewster (1906) was another who gave a convincing argument for eradication.

When the House Sparrow began to invade Cambridge, the native bird fauna of this city was rich and varied for so large and populous a place. As the alien hordes multiplied and spread, several of the indigenous species which, up to that time, had bred numerously throughout the entire city, retired first from its central portions and finally beyond its suburbs. The Bluebirds, House Wrens and Tree Swallows were the first to go, and the Eave [Cliff] Swallows soon followed them. So quickly and completely were these four species banished that they had nearly or quite ceased to breed anywhere in

the thickly settled parts of Cambridge within ten years from the first appearance of the House Sparrows.

The problem became so serious so quickly that as early as 1889 the U.S. Department of Agriculture published a 500-page book on the English Sparrow problem (Barrows 1889) and officially urged its extermination. Estabrook's 1907 article was another plea for control of this destructive pest. But, as that author realized, "a pest must become overwhelming before the general public will pay the slightest heed." Some things never change.

Others were less politic in their descriptions of the English Sparrow problem. Herbert K. Job, in his popular book *The Sport of Bird-Study* (1911) said, in discussing the various sparrows, "We do not count that foreign pest, the English Sparrow, which does not deserve to be considered as a bird, but rather as a feathered rat, a pestiferous mongoose to destroy bird life and drive out our beloved native birds." And now you know where that particular epithet came from.

Despite the impossibility of eradicating such an abundant species, by 1920 Townsend had begun to sense a mitigation of the problem. The species account in his *Supplement to the Birds of Essex County* is worth quoting:

I am inclined to think that the English Sparrow has passed the summit of the curve of increase in this part of the country and has begun to decline in numbers, and that he will in time take a more humble place in respect to other birds as is the case in his native country. Our birds are less afraid of him than formerly, and are not so easily imposed on. They are gradually coming back to the suburban towns.

The perceptive Brewster (1906) had already shed some light on this approaching phenomenon, even as the sparrows were still at or just past their zenith. He noted that the rural birds could survive average winters by moving into the towns if necessary, "but during heavy and long-continued snowstorms, especially those accompanied or closely followed by low temperatures, the Sparrows sometimes perish by thousands, of cold and starvation. This has repeatedly happened within the past ten years." But, he added, the birds

are so very prolific that in the course of a single summer they often make good whatever losses they may have suffered during the previous winter . . . Nevertheless there are reasons for believing that they will never again become so inordinately numerous as they were ten or fifteen years ago. Apparently they have already begun to suffer from adverse influences other than those just mentioned, and at present obscure. All this was to have been expected, of course, for Nature's laws are inexorable and her balance, which, for a time, the alien birds have so violently and generally disturbed in America, must readjust itself sooner or later.

Eaton (1924) also noticed a decline in the greater Boston area and documented it quantitatively. He wondered whether the causes included "some disease of overcrowding," the loss of horse manure as a food supply, a natural cyclical

population decline, or "the natural adjustment of an introduced species to American conditions." Phillips (1938) cited Townsend's observation and added, "Since then [1920] the decline has been rapid and the bird is almost rare now in many rural districts of our County." The trend continued into the fifties, when Griscom and Snyder (1955) put the peak numbers of "this quarrelsome and aggressive species" between 1890 and 1915, after which "a marked decline began with the passing of the horse and the arrival of the automobile age; this decline still continues." This, of course, was a reference to undigested grain that had been filtered through the urban horses, which had provided a bonanza for the opportunistic sparrows. No horses, no free lunch.

Even a decade or two after the sparrows had begun to decline and the other birds (except the Purple Martins and Cliff Swallows) had returned to the cities and farmyards, the ill feeling toward them lingered. Forbush (1929), who had written often about the House Sparrow problem in his annual reports to the state in his capacity as Massachusetts State Ornithologist, summed up the prejudice:

Wherever it appeared in large numbers it speedily became a nuisance and a pest, destroying small garden crops, grain and fruit, and driving out useful indigenous birds. As the Sparrows became more numerous they mobbed and killed many native birds, and destroyed their nests, eggs and young. They drove nearly all the smaller hole-nesting birds from cities and villages, as well as many that nested among the branches of trees . . . [One man in Maine] wrote to me that one female Sparrow took nearly every egg out of thirty-five Cliff Swallows' nests at his place, by merely driving her bill into them and letting them drop from the nests. The interlopers tore down the nests of other birds to get material with which to build their own nests.

So if you think the House Sparrow problem is significant today, be thankful you weren't around a century ago. You could have gone to war over it. \checkmark

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Jim Berry vows to complete his book on the birds of Essex County now that the Breeding Bird Atlas project is finally over.



HOUSE SPARROW BY WILLIAM E. DAVIS, JR.

Nocturnal Flight Calls

Benjamin Van Doren

It's a starry September night. The warm, humid, stagnant, late summer air from the south is replaced by a rush of cool, dry air from the north. Leaves rustle, grasses sway, and many singing insects quiet down, silenced by this sudden change. A strong cold front sweeping over the Eastern Seaboard looses a steady wind originating far to the northwest, setting the stage for one of nature's amazing spectacles.

Millions of migratory songbirds notice this shift, too, and as the sun sets, something stirs deep within them. *Zugunruhe*—migratory restlessness—takes over. It is an urge to move to points south, an urge so strong that, after the fervor of migration has subsided and the dust has settled, not a single member of many species remains on the continent.

Many of us notice the aftermath of this force when we wake up to the song of a newly returned Wood Thrush in the spring or when we venture outside to be greeted by the chips of a flock of migrant warblers, tanagers, and vireos working their way along the tree line in the fall. Perhaps if we are really lucky, we discover a rarity nearby. These are merely bits of evidence of the ubiquitous yet marvelously extraordinary nocturnal journeys of migrant songbirds.

Some of our birds will travel but a few dozen miles. Others will journey several hundred miles. Still others will fly thousands of miles to the far reaches of the South American continent.

Witnessing birds in active migration is a thrilling event but too often requires one to be in precisely the right place at exactly the right time. Seeing kettles of Broad-winged Hawks form over New England is awe-inspiring, but not for those who happen to miss the big day. Watching the morning flight of warblers can likewise be overwhelming, but only if one correctly interprets the weather conditions, rises before dawn, and heads to the right spot. Me? I sit out in the backyard after the sun has set and let the flight calls of thrushes, warblers, sparrows, grosbeaks, tanagers, buntings, cuckoos, herons, bitterns, rails, terns, shorebirds—and many others—wash over me, as they wing their way south, spurred on by a force we can't begin to comprehend.

Tuning in to invisible migrations using our ears is nothing new. In 1899, Orin G. Libby published the first count of nocturnal flight calls—3600 in five hours of listening atop a Wisconsin hill. Much has changed since that September night; now we do not have to rely on our bare ears, reel-to-reel tape, VCRs, or even cassettes to document and identify calls. Today, we can deploy an "autonomous recording unit" to the middle of a salt marsh and let the microphone, batteries, memory cards, and built-in computer do the entire recording. Computer software can make identification much easier by extracting calls of interest from hundreds of hours of recordings and displaying spectrograms, or visual representations of sound as a function of frequency and time. Of course, we can use just our ears and experience the river of birds—sometimes a trickle, other times a torrent—passing overhead.

What exactly is a nocturnal flight call?

Many species of nocturnal migrants utter vocalizations while they are engaged in migratory flights. Ranging from just a few hundredths to a few tenths of a second in duration, flight calls are exceedingly short. Furthermore, many related species utter similar-sounding calls that can baffle even the most experienced listener. However, with practice, many flight calls can be easily heard and even identified to species or species group.

Nocturnal flight calls are a discrete class of vocalization, different from songs and other types of calls, such as the daytime chips of a warbler flock. However, not all bird species take part in this aural phenomenon. Many finches, blackbirds, corvids, swallows, and other species are mainly diurnal (daytime) migrants, so they are not usually heard calling at night. Doves, vireos, and wrens generally do not give flight calls at any point during the day or night (Evans and O'Brien 2002). But many species do, and it can be fascinating to hear the variety of birds that fly overhead. Why these species utter flight calls is not known for certain, although research has suggested that flight calls help to maintain loose groups of birds during nocturnal migration and may serve to stimulate *Zugunruhe* (Farnsworth 2005).

Paradoxically, many bird species that are difficult for birders to find during the day on migration because they are shy or cryptic can be downright vociferous while migrating at night. *Catharus* thrushes are great examples. Whereas a lucky observer at a migration hot spot might find only a handful of thrushes on a good morning, call counts in the hundreds during a single night are not uncommon. In the Northeast, Veeries and Swainson's Thrushes can dominate a night's calling, sometimes outnumbering all other species combined. Gray-cheeked Thrushes are also readily heard later in September and in May, or perhaps even a Bicknell's. Wood and Hermit



Figure 1. Nocturnal flight calls can be recorded with many microphone types, from a self-made \$30 "flowerpot" model <http://www.oldbird.org> to this \$799 Song Meter SM2 autonomous recording unit from Wildlife Acoustics, Inc. <http://www.wildlifeacoustics.com> thrushes regularly give flight calls, too, so it's possible with some luck, to hear six species of thrushes in a night. Both species of cuckoo are also nocturnal flight callers that are readily heard and easily recognizable.

For birders working on their yard lists or running a Big Day, a good migration night can be a godsend. Wouldn't it be great to hear a Least Bittern flight call from your front porch, or pick out an Upland Sandpiper from far above while listening for owls and rails?

For casual birders and researchers alike, listening to and monitoring flight calls can shed light on a number of valuable and interesting patterns. Migration timing is the most obvious, since flight calls are sometimes detected before the first birds are seen on the ground in a given area (and after the last have left). In spring of 2011 in Westchester County, New York, I didn't have the fortune of crossing paths with a Gray-cheeked Thrush during the day, but nearly all nocturnal flight calls of this species were recorded in a relatively short span, May 22–25. This gives me a better idea of when to search for the species in the county (if I'd actually like to see one), and it will also be interesting to note whether the temporal window shifts in future years. This is but one small example.

Since autonomous recording units (ARUs) can be set to record all night long every night, acoustic monitoring can also enlighten us on the presence of rarer migrants. In Westchester County, only two seasons of monitoring have suggested that Dickcissels and Least Bitterns may be more common migrants through the area than birders' reports suggest—and so may Le Conte's Sparrow, a species undocumented in the county but whose flight call appears to have been recorded twice in the fall of



Figure 2. High frequency calls. (A) Zeep group: A member of the confusing zeep warbler group, this call can probably be identified to species with relative certainty using date, location, and this spectrogram, but identifying it by ear only would be a considerable challenge. (B) American Redstarts have a relatively distinctive call, easily picked out visually on this spectrogram and audibly separable with some practice. (C) One of the most distinctive flight calls in the eastern United States is that of the Canada Warbler, a low pcht. (D) Often heard later in fall migration, the Chipping Sparrow's night flight call is very similar to its daytime flight call, a pattern exhibited by many species. (E) Easily picked out amongst the calls of other warblers and sparrows, the Common Yellowthroat's low, buzzy call can often be heard in large numbers. (F) This high, long, deeply modulated buzz belongs to an Indigo Bunting. (G) Northern Parulas give sharply descending *tsew* calls during nocturnal flights, a call very much unlike most other warblers. (H) Northern Waterthrushes give one of the more distinctive zeep calls in the East, audibly long and rising. (I) Fairly easily picked out when heard well, Ovenbirds' flight calls are a steeply rising *pseet*! (J) A flight call heard across much of the continent, this descending, double-banded Savannah Sparrow call is very recognizable with just a bit of practice. (K) White-throated Sparrow flight calls sound very much like those this species gives often during the day. All images created by the author using the Raven Pro 1.4 sound analysis software from the Cornell Bioacousitics Research Program.

2010. Further research on the range of variation in the flight calls of *Ammodramus* sparrows will either confirm or contradict this tentative conclusion. Such acoustic "discoveries" are exciting and interesting. Was this an isolated occurrence due, perhaps, to anomalous weather conditions, or will similar patterns be found during fall of 2011?

In the long term, nocturnal acoustic monitoring can be used to estimate the abundance of calling migrants. However, not all of the variability in calling rates can be explained by the number of birds in the atmosphere on a given night (Farnsworth et al. 2004); weather, artificial lighting, and other variables come into play. Comparing species' call rates relatively, or the number of calls over a very long term, may reveal accurate trends.

It is possible to hear flight calls any time there are birds migrating, though other factors have definite effects on the number of calls heard. Many birders already pay close attention to the weather during the migration season; for observers in New England favorable winds originate from the north in fall and from the south in spring. In fall, northerly winds are closely associated with the passage of cold fronts through the region. The weather ahead of a front is generally unfavorable for migration, while the weather after the front is favorable. One can also look at Doppler radar http://rap.ucar.edu/weather/radar> to determine the amount of migration taking place in real time on a given night, but that topic is beyond the scope of this article.

A number of variables beyond the number of birds in the air affect the rate at which they call. Disorientation may be a major factor; a low, thick cloud ceiling that obscures the stars, especially combined with artificial lighting on the ground, may entice birds to call more frequently. Although the first day or two after the passage of a fall cold front with clear skies and stiff northerly winds may bring large numbers of migrating birds (and generally a good amount of calling), nights with northerly winds, but subpar weather (clouds, perhaps even a little precipitation), may be just as good for hearing flight calls. Weather conditions that can cause fallouts of migrants, such as when a front stalls, are interesting nights to listen, because calling often increases when migrating birds face deteriorating conditions and are forced to descend.

In fall, northerly winds in the Northeast often have a westerly component, meaning that birds heading south will be pushed towards the coast. Marked increases in calling may occur in coastal areas on northwest winds, as birds pile up, unwilling to go over water.

Not surprisingly, flight calls are heard more readily atop hills than in valleys, and lower ambient noise can make it much easier to detect flight calls, especially when first starting out.

Despite the fluctuations in call rates due to topography, lighting, weather, and other factors, flight calls can be heard in any quiet outside area on any night with birds moving. Your home may turn out to be a superb listening location.

Once you start hearing flight calls, you will understandably want to identify them. This is a challenging endeavor, but not impossible by any means. Those living in eastern North America are in luck. There is a CD-ROM flight call guide, *Flight Calls of Migratory Birds: Eastern North American Landbirds*, by William R. Evans and Michael O'Brien http://oldbird.org/fcmbirds.htm. The guide covers the vast majority of the species you would hear during a typical night of migration. It does not include waders and shorebirds, but fortunately many of those calls are documented by other sources, including widely-available bird CDs, such as the Stokes guides. Other websites that are good to check include Cornell's Macaulay Library http://macaulaylibrary.org/> and Xeno-Canto http://www.xeno-canto.org/, where users upload their bird recordings from around the world.

If you are intent on learning how to identify nocturnal flight calls, I recommend the following method. After purchasing the guide mentioned above, familiarize yourself with the spectrograms of local species' flight calls. Spectrograms are visual representations of sound, and I have found that by first learning what calls *look* like, it becomes easier to identify them. Because of flight calls' short durations, it is essential



Figure 3. Low frequency calls. (A) The flight call of a Bicknell's Thrush is one sought after by East Coast yard listers, big day teams, and casual birders alike. Very similar to Gray-cheeked Thrush but separable with a good amount of practice, Bicknell's calls are higher and and more evenly descending. A rule I like to go by is, if there is any doubt, it probably wasn't a Bicknell's! (B) A fun call to hear and one that is easily picked out is the low gurgle of a Blackbilled Cuckoo. (C) One of the most distinctive flight calls in North America is that of the Dickcissel. An uncommon sight in the East, Dickcissels probably migrate through your area more often than you realize. Beware an early-rising Northern Rough-winged Swallow-though the two are very readily separable with a bit of practice. (D) There is always a reasonable chance to hear a Gray-cheeked Thrush flight call during the latter half of September or May. heard, call of Bicknell's Thrush. (E) Least Bitterns give very distinctive nocturnal flight calls, if you know what to listen for. Shorter and higher pitched than most other low-frequency calls of herons and bitterns, Least Bittern flight calls are always a pleasant surprise! (F) One of the most abundant flight calls in the region, the pure-toned pwee of the Swainson's Thrush is distinctive. Though be aware of surprisingly similar-sounding spring peepers. All images created by the author using the Raven Pro 1.4 sound analysis software from the Cornell Bioacousitics Research Program.

to know what to expect *before* hearing calls; it is hard to remember after the fact exactly how so short a vocalization sounded.

After learning some spectrograms, start listening to the recordings included in the guide and look at the spectrogram while listening to every call. I suggest beginning with the thrushes because they give lower-frequency calls with relatively long durations, so they are easy to hear and differentiate. Warbler and sparrow calls are more difficult to identify audibly and are of higher frequencies, though in many cases they are distinctive *spectrographically*, so by learning what the calls look like, differentiating them by ear becomes easier. Some warblers with distinctive calls include Northern Parula, Black-throated Blue, Black-and-white, American Redstart, Chestnut-sided, and Common Yellowthroat. Savannah and White-throated sparrows call often and are fairly easy to pick out as well.

Other species with distinctive flight calls include Bobolink, Dickcissel, Indigo Bunting, and Rose-breasted Grosbeak. However, some birds, especially warblers, including the notorious *zeep* group (named because their calls are short, buzzy, and sweet), have calls that are nearly impossible to differentiate by ear without extensive experience—or even *with* extensive experience—so it is perfectly fine to identify calls to *"zeep* group."

As in all aspects of birding, field experience is where the real learning comes in. If you can record while listening, you can check tentative by-ear identifications by looking at the spectrograms, which are much more distinctive and stay on screen for as long as you want.

Instructions for building budget flight-call microphones can be found on <http://oldbird.org>. All that you need is \$30 and a couple hours' time. ARUs can be purchased from Wildlife Acoustics, Inc. <http://wildlifeacoustics.com> and run in the \$800 range; they may be good for organizations that want to do flight call monitoring and have more functionality than the casual observer would desire. To process recordings and view spectrograms of them, download Raven Lite, or purchase Raven Pro for more capabilities, from the Cornell Bioacoustics Research Program <htps://www.birds.cornell.edu/brp/raven/RavenOverview.html>. The nocturnal flight call community has its own listserv, NFC-L, which hosts e-mail discussions pertaining to flight calling. Questions are readily answered by list members, and there is often interesting discussion <htps://www.northeastbirding.com/NFC_WELCOME>.

This fall, get out and listen for flight calls! Nocturnal migrants take off between 30–45 minutes after sunset, so any time after that is fair game. Thrushes, interestingly, call often towards the very end of the night, typically in the hour or two before first light. Warblers and sparrows seem to peak a bit earlier in the few hours after midnight. Perhaps this is because they are flying shorter distances per night than thrushes, hence descending sooner; much has yet to be learned. Getting up very early rather than staying up very late may be more productive for hearing nocturnal flight calls. Remember, these are overall patterns—calls can be heard at any time of night if enough birds are moving. Some nights are better than others, but chances are that, on a mid-September night with light, northerly winds, you'll be able to hear the faint

voices of hundreds—maybe even thousands—of birds passing overhead, spurred south on a journey that has been undertaken for millennia.

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Benjamin Van Doren, a student from White Plains, New York, has been interested in birds for many years. He is conducting research on nocturnal migration and morning flight and especially enjoys listening for and recording nocturnal flight calls. He is currently involved with seabird conservation work on Matinicus Rock in Maine. He has also contributed articles to North American Birds and Birding.



YELLOW-RUMPED WARBLER BY DAVID LARSON

FIELD NOTES

Leapfrog Foraging by Red-winged Blackbirds and Brown-headed Cowbirds

William E. Davis, Jr.

On March 11, 2011, I observed a foraging flock of an estimated 1000+ Redwinged Blackbirds (*Agelaius phoeniceus*) that included some Brown-headed Cowbirds (*Molothrus ater*) leapfrog foraging in a cornfield near Kearney, Nebraska. The flock was foraging among the corn stubble and moving rapidly across the field, with the birds at the back end of the flock flying up and over those at the front end of the flock. As soon as birds were at the back edge of the flock, they flew and landed to become the front edge, producing a swirling or rolling effect for the mass of birds. I watched this dynamic foraging-flock movement for several minutes.

Leapfrog foraging (or feeding) (Meyerriecks 1960) or roller feeding (Blaker 1969) is well documented in herons, with at least five species known to practice this behavior (Kushlan 1978), where ground-foraging birds fly to a forward position from the rear of a moving foraging flock. The hypothesized function is to scare up prey (Meyerriecks 1960) or to achieve an improved feeding location (Kushlan 1976). There is no mention of this foraging behavior in the Birds of North America accounts of either Red-winged Blackbirds (Yasukawa and Searcy 1995) or Brown-headed Cowbirds (Lowther 1993). It is mentioned in the literature for Tricolored Blackbirds (Agelaius tricolor): "Large flocks of foraging tricolors may appear to roll across the landscape as smaller groups leap-frog over those in front of them" (Beedy and Hamilton 1997) and for Red-winged Blackbirds: "One flock of several hundred redwings was observed . . . as it repeatedly moved across the field from south to north in somewhat of a 'leap frog' fashion." (Avery and DeHaven 1982), and "Flocks of foraging blackbirds advance in a leapfrog-type movement . . ." (Avery et al. 2002). I found no reference to leapfrog foraging by Brown-headed Cowbirds. I consulted with colleagues who describe this blackbird foraging behavior as common (e.g., J. A. Jackson, pers. comm.), and I conclude that leapfrog foraging in blackbirds is a common but under-reported foraging behavior for several species. 1

Acknowledgments

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BROWN-HEADED COWBIRDS BY GEORGE C. WEST

ABOUT BOOKS

Three's Company

Mark Lynch

Kaufman Field Guide To Advanced Birding: Understanding What You See and Hear. Kenn Kaufman. 2011. Boston, Massachusetts: Houghton Mifflin Harcourt.

Molt In North American Birds. Steve N. G. Howell. 2010. Boston, Massachusetts: Houghton Mifflin Harcourt.

The Crossley ID Guide. Richard Crossley. 2011. Princeton, New Jersey: Princeton University Press.

I'll try anything once, twice if I like it, three times to make sure. - Mae West

We are coming to the close of the era of the printed general ID field guide. As birding has gotten more sophisticated in identifying criteria and knowledge about avian movements and behavior, it seems impossible to cram so much up-to-date and detailed information into a single book to carry in a pack or jeans pocket. Because of the abundance of new data, there has been an increase in specialty guides to single groups or families of birds such as hummingbirds, gulls, hawks, and shorebirds. The quality and depth of information in these specialty volumes make general guides seem insufficient. And so the trunks and back seats of the cars of contemporary birders now resemble bookmobiles as increasing numbers of specialty guides are crammed into plastic bins or makeshift shelves. Once a single small volume would do; now we find ourselves needing and using piles of detailed guides. But this is also changing. The rapid development of on-line guides and birding apps for smart phones is allowing tech-savvy birders to carry a vast amount of identification resources on their very portable phones. The iPhone (or whatever smart phone you like) is ushering in an era when any aspect of bird identification will be available to a birder, in the words of Apple, "anything-anytime-anywhere"— unimaginable less than a decade ago.

So, have printed bird guides gone the way of the moa? Far from it. What we now see is the publication of second-level birding guides. These are not brief outlines of key identification points, but meta-guides that attempt to teach us how to bird and become better birders. These are not guides that can be translated easily to an app for an iPhone, though they can obviously be read on a Kindle. These are guides to read at home, to settle in with, and to actually study. Below are three recent examples.

I bet *Molt in North American Birds* by Steve N. G. Howell has met the same fate as Stephen Hawking's *A Brief History of Time*. Many people bought the book, put the book down after reading only a few pages, and never opened the book again. I confess that *Molt in North American Birds* sat on my work desk for months before I finally read it in earnest. The delay was not surprising because *Molt in North American Birds* is a very technical book, more like a university-level textbook than a guide for the average birder. It is part of the Peterson Reference Guides series and is to be used quite differently from a field guide.

Despite its jargon-ladened text, this *is* an important book to read. *Molt in North American Birds* is a beautiful book, wonderfully illustrated with numerous color photographs to complement the text. Howell is a fine writer and does his best to make very technical material seem interesting and lively. Make no mistake, reading this book will be a tough slog if technical jargon makes you want to turn on HBO. The first 67 pages of *Molt in*



North American Birds are the book's foundation. Pick a rainy day, sit down with a strong cup of coffee, and be sure to read through this section at least once. Don't worry about memorizing all the terminology. Concentrate on getting the gist of what molt is and why it is critical to birds and bird identification.

Right off, Howell familiarizes the reader with the names and locations of feather groups. He then describes exactly what a molt is, how feathers grow, how long a molt takes, how long feathers last, and the energy costs of molting. Howell uses the Humphrey-Parkes (H-P) approach to naming molts in birds. He describes four fundamental molt strategies: simple basic, complex basic, simple alternate, and complex alternate. To further complicate matters, wing molts can be standard, sequential, synchronous, or stepwise. Each term is completely described and often clearly illustrated. If you find yourself distracted at this point in my review, THAT is precisely the challenge of reading a book like Howell's. As in a medical textbook, there are only so many ways to present technical information. Howell does his best to make it engaging. Of particular interest are the sections on the evolution of molt, how molting affects behavior, and the relationship of molt strategies to migration. What is surprising is how much remains to be learned about molt.

The rest of the book is dedicated to "Family Accounts," general overviews of the molt strategies of the various bird groups. Each section is completely referenced. You can sit down and try to read the family accounts sequentially, but unless you are an ornithologist, a better strategy is to turn to these accounts only when you come across some odd plumage in the field. But please do crack this book. There is a lot of interesting information tucked into the technical writing.

Molt in swans, ducks, and geese is particularly intriguing and unique. As Howell puts it:

Looking at duck molts opens up a Pandora's box of fascinating but often unanswered questions about how molts in waterfowl have evolved. (p.70) Why do males of Northern hemisphere ducks desert the females after the eggs have hatched? Is it simply because the bright male plumages might attract predators? If male desertion causes higher female mortality, does this increase pressure on males to form pairs earlier in the season? Did bright male plumages or desertion of young come first? Is this another chicken-andegg (well, duck-and-egg) conundrum? (p.78) Such passages demonstrate that *Molt in North American Birds* is not simply a dry compendium of minutiae about feathers, but rather a statement that molt can tell us something fascinating about the evolution of birds and bird behavior. Is *Molt in North American Birds* for all birders? No, not for all or even most birders. You can find the basics of feather and molt nomenclature in the beginning of most field guides. But if your interest in birds goes beyond a simple grocery list of identification points and you are curious about bird behavior and evolution, *Molt in North American Birds* has much to offer.

The mammoth *Crossley ID Guide* is one of the most experimental concepts for a bird guide in recent history. Not unsurprisingly, it has been widely misunderstood. This is NOT a "field" guide by any stretch of the imagination. This is not a book to trundle out into marsh and forest. Richard Crossley's intention is to create a study guide to be used at home, specifically to help train the birder's eye to recognize species in different poses at various distances and in different lighting conditions:

This book is for beginners, experts and everyone in between, indeed anyone who loves to identify birds, or just look at them, or simply enjoys the beauty of the outdoors. Its main goal, using unique photographs and page layouts, is to show birds as we really see them in the field. Straight-talking text, in conjunction with abundant and painstakingly selected images, provides keys to improve and hone basic and advanced identification skills and enhance all around enjoyment of birds in their varied habitats. (p.5)



In other words, Crossley wants to show you the way birds really look in the field, as opposed to the sanitized, perfected illustrations found in your typical field guide. His hope is that looking at birds this way in a text will better prepare you for looking at birds in the field. *The Crossley ID Guide* is a fiercely personal vision of what is important and helpful in identifying birds and is very much a work in progress.

The plates are the heart of the book, with typically one large plate per page showing one species. Using photoshopping and other digital techniques, Crossley crams numerous photographs into each plate: birds near and far, in flocks and alone, in flight and feeding. The bird photographs are all set against photographs of realistic backgrounds, life-like dioramas, sometimes with a wink to Crossley's Cape May, New Jersey. Crossley gives details of plumage, behavior, migration, and habitat at the bottom of each plate. Like Crossley's previous book, *The Shorebird Guide*, this is a book to keep on a nearby table to look at when you have a few moments. Both books seek to evoke the visual discovery of the reader at his or her own pace.

The results in *The Crossley ID Guide* are a mixed bag. For larger birds such as waterfowl, shorebirds, and seabirds, the plates are quite successful in achieving Crossley's goal. This is how we see waterfowl in the field: flying away, loafing in dense flocks, or feeding in a field. The effect can be an entertaining and useful learning experience for a reader trying sort out what he or she is looking at.

But other plates of the larger birds are not as successful. The Ruffed Grouse (p. 226) get lost against the complex leaf litter and forested background (perhaps on purpose?), and the Spruce Grouse (p. 227) plate appears to have been printed too dark.

The success of Crossley's layout concept is even more of a mixed bag with the smaller birds. For hummingbirds, the Crossley layout is definitely not as effective as that in a typical field guide. Because hummers are too damned fast, we see them at a distance often as an unidentifiable blur. It is only when hummers are at a flower, at a feeder, or in the hand that we see worthwhile details. Because these distant, in-flight views are useless to birders, Crossley's guide sticks mostly to close-up pictures of the hummers in pretty much the same poses that most typical field guides show. Except Crossley's pictures are less clear and detailed.

With other small species, the Crossley method does have something unique to offer the birder. For example, the two facing plates that compare Cave Swallow and Cliff Swallow (p. 326–27) offer a unique, quite good, and very useful comparison that may help in further field work.

In some cases Crossley plays with lighting. One of the shots of Pied-billed Grebes (p. 91) shows the birds in silhouette in bad light, which is indeed how I often see this secretive species. It is at such little moments that this guide is most successful. By looking at these pictures, you can pick out the small, subtle details that allow you to identify the species in the field. These are often not the field marks mentioned in the usual guides. You soon realize that there is a massive amount of information on every plate. Crossley makes an attempt to show each species close up in several poses, then in the middle distance, often in flight, and finally far out in the field.

Sometimes, however, Crossley's photoshopping techniques need some tweaking, as in the plate for the Olive-sided Flycatcher (p. 334). In this plate, the close bird seems to have a disproportionately huge head. It looks like the head was digitally inserted over a different body.

Other plates suffer from overcrowding. The plate for Rock Pigeon (p. 275) is so crowded with fat pigeons cooing, flocking, walking, and flying that my eye could not make sense of it. It ceased to look like a natural history plate and looked like an art collage.

This guide needs more careful visual editing to check the overall appearance of the plates and to make sure that they are not too dark or too crowded. But even when a plate does not live up to the concept, it is always entertaining to see what Crossley has done to each species, because the plates show how *he* views and thinks about these species.

The Crossley ID Guide is a distinctly independent vision of how to look at birds. Certainly no other guide looks like it. With 520 large-format pages, it is not a typical field guide, but instead a guide that Crossley hopes will get you to look at birds more realistically in the field and learn new cues to identification. Though *The Crossley ID*

Guide is not always successful in these goals, one hopes he will continue to tweak and perfect some of his ideas in future learning guides. He is, at least, trying something different.

The Kaufman Field Guide to Advanced Birding is the second edition of a classic text that first appeared twenty years ago. (Can it be that long?) It has been extensively revised and updated and includes line drawings by the author as well as 700 color, computer-enhanced images. Although this book is field guide in size and in format, it is not a book to peruse while out in the forest or marsh or at the shore. Reading this book is like taking an advanced birding class with Kaufman, and his sage advice comes from decades of teaching birding classes and learning from his own mistakes.



The first 140 pages are devoted to tips, principles, and exercises to improve your birding skills. Kaufman is neither a "giss-o-phile" who uses general, sometimes ill-defined characteristics in the identification of a bird, or a "feather edger" who focuses solely on minute details of feather molt and color. Instead, Kaufman suggests what Buddha, had he been a birder, would have called the divine middle path, an integrated approach.* It is all good, and no one method is sufficient.

Kaufman begins by writing that not everyone will become, or should become, an expert. If you want merely to know the birds

that come to your feeder, fine, but don't feel pressure to excel at sophisticated global gull identification. Find a level of birding that you enjoy and are comfortable with, and relax.

The "Principles and Pitfalls of Field Identification"(p. 18–43) should be read by everyone at least once a year just to keep us humble. The section includes brilliant discussions of problems of determining size in the field, the perceived color of a bird and how it can be affected by a number of factors, the challenges of abnormal pigmentation, variations in voice, and the inevitable hybrids and escapees we all come across.

There is a concise but critical section on "*Techniques and Resources for Learning Bird Identification*" (p. 130–40), which will really resonate with anyone who has taught a birding class. Among other topics, this section covers the importance of note taking and field sketching as ways of "seeing", suggestions on using feeders as learning tools, knowing what can be gleaned from visiting museum collections, and learning from bird photographs. There are even some exercises to do in the field. Kaufman suggests that you "find a bird with a complicated pattern and describe it in words." Referring to a photo of a Vermillion Flycatcher male, he asks you to "describe how you would identify this bird without looking at its color or markings." (p. 138–39). The exercises are designed to break birders of bad habits that we can develop after birding a certain amount of time. We tend to see only a particular set of field marks in order to identify a bird quickly before moving on to the next bird. Very few of us can actually say we study common birds. By not actually looking closely at

the bird in front of us, we may misidentify it later, mistake it for a similar-looking species, or get stymied when there is some plumage variation.

Kaufman even dares to suggest this:

Don't count your list. This might seem like an odd suggestion, but I'm serious. Any time we measure anything that can be affected by our own actions, the very fact we're measuring it can alter our behavior. If we step on the scale twice a day, it may affect our behavior at the fridge; if we calculate our gas mileage every time we fill up, it may affect our driving. Likewise, if we count up our list of bird species at the end of every field trip, it can alter our birding—we may go out of our way to pick up a few more species, rather than spend more time studying the birds we have found. I'm not saying that we shouldn't keep notes on the birds we've seen, just that on a day when we really want to study identification, we need to de-emphasize the species total. (p. 140)

The last part of the *Kaufman Field Guide to Advanced Birding* is a family-byfamily review of specific field challenges, such as telling female scaup apart or identifying stints. The information included in this section is often not discussed at length in most general field guides and, therefore, will be very useful to many birders.

Kaufman has learned a lot about the art of birding in his decades of writing about birds and teaching birding classes, and he has included all of his hard-won wisdom in this extremely helpful and thoroughly enjoyable book.

By three methods we may learn wisdom: First, by reflection, which is noblest; Second, by imitation, which is easiest; and third by experience, which is the bitterest. – Confucius

*Buddha was very likely a great field birder and a superb, general natural historian, but of course kept no lists whatsoever. \checkmark

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CANADA WARBLER BY DAVID LARSON

From MassWildlife: Public Input Needed for a Statewide Outdoors Survey

Anglers, bird watchers, hunters, trappers, hikers, naturalists, boaters, and other Bay State outdoor enthusiasts have an important opportunity to voice their recreational needs by participating in a statewide recreation survey. The Energy and Environmental Affairs Division of Conservation Services (DCS) is strongly encouraging Massachusetts residents to fill out an important survey that will help guide decisions on how state funding can be best used for the acquisition of conservation or park land, development of new parks, or renovation of existing parks and recreation facilities. DCS is conducting three surveys to gather data from state residents, land trust organizations, and community officials as part of updating the Massachusetts Statewide Comprehensive Outdoor Recreation Plan (SCORP). The SCORP outlines the state's priorities and unmet needs for conservation and recreational facilities and activities. Public input is a crucial component of the Plan, and the surveys gather data about Commonwealth residents' preferences and needs for recreational facilities and activities. The deadline for completing surveys is October 31, 2011.

"It is critical for us to hear from as many people as possible to guide how future LWCF funding could be spent most effectively in Massachusetts," said Melissa Cryan, DCS Grant Coordinator. "We also appreciate any efforts from sporting and other conservation and outdoor recreation organizations to ask their members to fill out the surveys. E-mail blasts, newsletters, Facebook messages, or links on websites are great ways to help spread the word."

Massachusetts residents fill out the User Survey at: https://www.surveymonkey.com/s/BL79V26>.

Spanish-speaking residents of Massachusetts can visit <https://www.surveymonkey.com/s/W7HDQ9K> for a Spanish language User Survey. Para una encuesta de ciudadano en español visite: <https://www.surveymonkey.com/s/W7HDQ9K>.

Officers, board members, or employees of a Massachusetts land trust or related organization should fill out the Land Trust Survey link at: <https://www.surveymonkey.com/s/BLWN7Q3>. Community officials such as recreation directors, conservation agents, community planners, and open space committee members should fill out the Community Officials Survey at: <https://www.surveymonkey.com/s/BLTJ92Q>.

For hard copies of surveys, send a self-addressed stamped envelope and a request for the appropriate survey to: SCORP Survey, EEA-DCS, 100 Cambridge Street, 9th Floor, Boston, MA 02114 or call 617/626-1171 and request a survey be sent to you. Please be sure to indicate which type of survey you wish to complete.

The National Park Service requires the Commonwealth to complete a Statewide Comprehensive Outdoor Recreation Plan every five years to remain eligible for funding from the Land and Water Conservation Fund (LWCF) grant program. Since 1965, when the LWCF was established, over \$95 million of federal funding has been awarded to projects in every county in Massachusetts for the acquisition of public conservation/park land, development of new parks and recreation facilities, or renovation of existing parks and recreation facilities. Currently MA receives about \$800,000 annually from LWCF, but if a proposal to fully fund the LWCF is passed by Congress that amount could increase significantly, perhaps up to \$15 million. For more information about the surveys or SCORP, contact Melissa Cryan, LWCF Stateside Coordinator, at (617) 626-1171 or melissa.cryan@state.ma.us.

From Mass Wildlife: 3000 Acres of Fish and Wildlife Habitat Protected in FY11

Just over 3000 acres of fish and wildlife habitat were protected by the Department of Fish and Game (DFG) and the Division of Fisheries and Wildlife (MassWildlife) in the past fiscal year (July 1, 2010 - June 30, 2011) for a total investment of \$7,913,700. These acquisitions were distributed across the Commonwealth, with 46 projects completed in 34 towns. These new lands bring the total amount of Wildlife Management Areas (WMA) currently under the care and control of MassWildlife and DFG to over 190,000 acres. Benefitting both wildlife and people, WMAs are open to fishing, hunting, trapping, wildlife observation, boating, hiking, and other passive wildlife-related recreation. A listing by town of all newly acquired FY 2011 properties can be found on the DFW website at <http://www.mass.gov/dfwele/dfw/habitat/land/land_acquisitions.htm>.

Through the land acquisition program, DFG and MassWildlife seek to protect wildlife diversity by acquiring the most important fish and wildlife habitat and natural communities and providing public access to the lands and waters of the Commonwealth. The agency's holdings stretch from the Berkshires to the Cape and Islands. Maps for many WMAs are posted on the DFW website at : <htp://www.mass.gov/dfwele/dfw/habitat/maps/wma/wma_maps.htm>. Boating and fishing access ramp information may be found at: <htp://www.mass.gov/dfwele/pab/index.htm>.

"We truly appreciate the conservation leadership and funding provided by Governor Patrick and Energy and Environmental Affairs Secretary Rick Sullivan," said DFG Commissioner Mary Griffin. "I would also like to thank our conservation partners and the entire land team at DFG and MassWildlife who worked so hard to protect some of the most critical habitats in the Commonwealth that will benefit the people of Massachusetts and our wildlife in perpetuity."

"This past fiscal year was marked by a combination of targeted projects, opportunistic purchases, and philanthropic support. In addition, donations of land and easements were a significant part of this year's habitat protection efforts," said Craig MacDonnell, MassWildlife's Realty Chief. "With substantial assistance provided by the non-profit community, municipalities, and many private donors, over 500 acres of habitat were protected at no cost to the state. In light of the challenges presented by the current economy, we are thankful for this remarkable generosity of spirit."

The Western District completed eight acquisitions and protected a total of 715 acres. The most notable conservation effort in this district was the completion of the first two (of three) phases of the acquisition of Maple Hill Farm in West Stockbridge, a long-sought target for protection. These transactions conserved 290 acres of magnificent fish and wildlife habitat, including a pristine pond and wetland complex that will be known as the Flat Brook WMA. The Berkshire Natural Resources Council was an invaluable partner on this project and brought significant private funding to the table.

Three projects were completed in the Connecticut Valley District protecting a total of 155 acres. An important project in this district was the acquisition of 26 acres along the Ware River in Ware, including 2400 feet of frontage along the western bank. This river frontage is important habitat for five state-listed invertebrates. Anglers and other river users will also benefit from this acquisition as access to this section of the Ware River historically has been a challenge. The East Quabbin Land Trust was a helpful, facilitating partner on this project.

The Central District completed 14 acquisitions in 10 municipalities for a total of 1170 protected acres. The most noteworthy conservation effort in the district was the addition of several parcels in the Winchendon section of the Miller's River WMA. The combined acreage totaled 423 acres. This acquisition provides substantial protection to a pristine and unique wetland/level bog/pond complex encompassing Lake Jones and Lake Sal.

In the Northeast District, 14 projects conserving almost 500 acres were completed. Although it was not the largest parcel acquisition in the Northeast District, the 24.5-acre Scotland Road purchase in Newbury protected a key piece of land originally slated for intensive residential development. At risk was a parcel bounded on three sides by the 1657-acre Martin Burns WMA. With the financial support of the Essex County Greenbelt Association and a very generous local sportsman, Jim LeBoeuf, Jr. of Northern Ocean Marine, Inc., DFG acquired the land and secured this virtual inholding from a development project that would have precluded hunting on a significant portion of the WMA. A combination of bond capital and Wildland Stamp funding was also utilized for this important acquisition.

In the Southeast District, seven land conservation projects involving a total of 500 acres in six towns were completed. In this district, a 146-acre project for the Haskell Swamp WMA containing a pristine Atlantic White Cedar Swamp was concluded in Mattapoisett. Visitors to this area will enjoy the cathedral–like forest and may hear a barred owl calling. As a result of this most recent purchase, the Haskell Swamp WMA now protects over 3000 acres of fish and wildlife habitat. The Haskell Swamp WMA has nearly doubled in size since the initial acquisition from the Acushnet Saw Mills Company in 1997 with later acquisitions from 14 different landowners.



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BIRD SIGHTINGS

March/April 2011

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

March 2011 saw the end of the wintery weather that had begun in December. March 1 was bright and sunny, with a temperature just above average. The weather was mostly mild through mid-month, with a high of 70° on March 18, which tied the record for that date set in 1999. This was followed by persistent colder temperatures through the end of the month, and March averaged 39.0° in Boston, just slightly above normal. Rainfall totaled 2.10 inches, 1.75 inches below normal and a far cry from a year ago when a record 14.87 inches fell in our area. Only 1.3 inches of snow fell, 6.7 inches below average.

April was warm in Boston, with an average temperature of 50.1° , nearly two degrees above average. April had 13 days with temperatures above 60° and a high of 78° on April 27. The low for the month was 33° on All Fools Day, resulting in an unusual April with no reading under 32° . Rainfall totaled 4.04 inches, about a half-inch above normal, and less than an inch of snow was recorded. The seasonal snowfall totaled 81.0 inches in Boston, 38.3 inches more than normal and the most snow since the winter of 2004–2005, when 86.6 inches fell. Winds were from the southwest on April 6th, 11th, and 29th. *R. H. Stymeist*

WATERFOWL THROUGH ALCIDS

If accepted by the MARC, a report of five **Black-bellied Whistling Ducks** in Duxbury on April 29 will represent the second state record. The first was a flock of nine on June 6, 2008, in Ipswich. Although this species is kept in captivity, it has an established history of vagrancy, and birds seen in late spring are likely to be wild individuals.

Winter reports of **Greater White-fronted Goose** are becoming more and more common, but it was unusual that three individuals lingered through the end of April. The **Tufted Duck** seen in Seekonk was undoubtedly the same individual that was reported last winter.

Pacific Loons were reported from three locations. An **Eared Grebe** in Chatham on March 26 was an exceptional sighting, but unfortunately subsequent observers could not relocate the bird. The Revere Beach Manx Shearwaters arrived on April 2, the same date they arrived in 2010. These birds have been returning to Revere Beach annually since 2006.

A Great Egret photographed in Quincy on March 9 was unusually early. One or two **White-faced Ibis** have been reported in Essex County almost annually since 2003, including an apparent visit in 2009 to a nest at the heron rookery on Kettle Island in Manchester. An adult was discovered this year on April 22, but on April 26 a group of birders witnessed it being killed by a Peregrine Falcon.

Black Vultures appear to be increasing exponentially, with reports from 19 locations, including many away from their stronghold in Sheffield. A **Mississippi Kite** was a rare spring sighting. The only **Golden Eagle** was from the Barre Falls hawk count. Seth Kellogg reports that the Barre Falls count was poor this year, averaging 30% below the average for the past ten years. The worst dips were for Turkey Vulture (down 51%), Northern Harrier (47%), Red-shouldered Hawk (65%), and American Kestrel (57%).

The only large rails were a **King Rail** in Truro and a **Clapper**/King type in Harwichport. A **Common Moorhen** at Great Meadows NWR in Concord was probably one of the pair that

has been reported there for a number of years; breeding has yet to be confirmed here for this species. **Sandhill Cranes** have been reported from New Marlboro since 2004 and were confirmed breeding in 2007, just in time for the first year of the Breeding Bird Atlas. Sandhill Cranes are now regular visitors in Massachusetts. American Golden-Plovers are rare in spring but even rarer away from the coast, and an individual reported in Wayland may be only the second inland spring record.

A **Mew Gull** discovered on February 24 in Lynn continued through March 8. On April 9, Keelin Miller described a gull seen in Hyannis as "about Herring Gull sized but bright yellow legs," and tentatively guessed Lesser Black-backed Gull. Other birders went to check it out, and as photographs became available many believed it was a **Yellow-legged Gull**. Gulls of the genus *Larus* are notoriously complicated, and Yellow-legged Gull is more so because of a lack of worldwide consensus on its taxonomy. Hybridization is also common among gulls, adding another level of potential confusion. If accepted by the MARC, it will be only the second state record. Although Caspian Terns are regular (if uncommon) spring visitors, they were unusually well reported in late April from eight different locations. *M. Rines*

Black-bellied	Whistling-Du	ck		3/8-13	S. Dart. (A.Pd)	1 m	P. Champlin
4/29	Duxbury	5	L. Massey	4/15	Chatham	1	B. Nikula
Greater Whit	e-fronted Goo	se		American Wig	geon		
3/5-17	Sharon	1	W. Sweet $+$ v.o.	3/6	Watertown	4	S. Martin
3/18	Deerfield	1	B. Kamp	3/12	S. Dart. (A.Pd)	27	N. Paulson
3/19-4/30	Winthrop	1	L. Ferraresso#	3/15	Concord (NAC) 11	S. Perkins#
3/19-4/24	Lex./Arlingtor	n 2	J. Forbes	3/16	Longmeadow	12	S. Kellogg
3/22-4/30	Waltham	1 J.	Crookes# + v.o.	3/19, 4/20	Newbury 2	0, 15	v.o.
3/26-29	Southwick	1	S. Kellogg	3/20, 4/12	E. Boston (B.I.)	4, 23	P. Peterson
Snow Goose			00	3/31	Rowlev	30	D. Jones
3/13	Hadlev	26	B. Zaida	4/6	Turners Falls	15	A. Richards
3/13	Sheffield	42	J. Drucker	American Bla	ck Duck		
3/19-4/15	P.I.	110 max	V.O.	3/2	Gloucester	250	J. Nelson
3/20	Deerfield	44	B Zaida	3/5	Acoaxet	434	M Lynch#
3/21	Windsor	50	B Wood	3/5	Cumb Farms	700	G d'Entremont
3/28	GMNWR	16	M Salett+ v o	3/12	PI	550	R Heil
4/3	S Quabbin	49	I Therrien	3/12	W Harwich	170	B Nikula
4/5	Bolton Flats	41	T Pirro	3/26	Hatfield	160	S Surner
Brant	Donoii 1 lats	71	1.11110	Blue winged	Taal	100	5. Sumer
3/7 1/3	Duvbury B 40	0 400	P Bowes	3/18_1/0	PI	11 may	VO
3/12	Westport	320	N. Dowlson	3/10-4/)	Lorwich	5	A Thomas#
3/12	Nontuckot	285	K Plackshow#	3/28	Longmondow	4	E Dutmon
2/10 4/20	DI	20J	K. DiacKsilaw#	4/10	CMNWD	14	D. Dataraan
2/25	F.I. Chothom	100 max	V.U. E Atwood	4/10	Owned ID A	14	r. reterson M. Lunch#
3/23	Chathan	200	F. Alwood	4/10	Quadog IDA	4	D Dataman
5/20	Squantum	500	J. roung	4/12	E. BOSION (B.I.)	2	P. Peterson M. Kalahan
4/24 Coalding Coa	Revere	145	R. Stymeist	4/10	Mashpee	2	M. Keleher
Cacking Goo	ise	1.1	D 7.11	4/19	Hadley	4	I. Gagnon
3/13 M 40 S	Hadley	1 ad	B. Zajda	4/20	Squantum	2	L. Ferraresso
Mute Swan	T T 11	27	тc	Northern Show	veler	1	
3/9	Turners Falls	27	T. Gagnon	thr	Marstons Mills	1	V.O.
3/26	Westboro	43	S. Arena	3/1	Lynn	1 m	R. Heil
Wood Duck	D 7	1 4 9 9 7		3/13	P.I.	2	Wetmore, Harris
3/13	P.I.	16 SSE	BC (E. LeBlanc)	3/19,4/10	Winthrop	4, 15	L. Ferraresso#
3/15-4/30	GMNWR	38 max	V.O.	3/20	Longmeadow	1	T. Alicea
3/17	Northampton	32	T. Gagnon	4/15	Chatham	2	B. Nikula
3/19, 4/23	Westboro	44, 14	N. Paulson	4/18	GMNWR	2	A. Bragg#
3/27	Rehoboth	20	R. Marr	Northern Pinta	ail		
3/29	Cumb. Farms	34	J. Sweeney	3/1-4/12	P.I.	190 max	V.O.
4/30	Bolton Flats	32	N. Paulson	3/8	Turners Falls	4	S. Surner
Gadwall				3/10	Cumb. Farms	14	J. Sweeney
3/1	E. Gloucester	58	R. Heil	3/12	S. Dart. (A.Pd)	68	N. Paulson
3/13, 4/6	Turners Falls	2, 2	V.O.	3/13	Concord (NAC)) 21	S. Perkins#
3/13	W. Harwich	17	B. Nikula	3/19	Longmeadow	20	N. Eaton
3/31	Rowley	24	D. Jones	3/20	W. Bridgewater	11	S. Arena
4/9	DWWS	47	G. d'Entremont	4/17	Brookline	2	M. Garvey
4/12	P.I.	136	R. Heil	Green-winged	l Teal		
4/12	Newbypt H.	19	R. Heil	thr	P.I.	850 max	v.o.
Eurasian Wig	zeon			3/11-4/4	Concord (NAC)105 max	S. Perkins#
3/1, 4/2	Nantucket	1, 2	K. Blackshaw	3/20	Newbury	130	J. Hoye#

Cases win and							
Green-winged	Teal (continued)			4/18	P'town	300	B. Nikula
3/20	W. Bridgewater	300	G. d'Entremont	4/20	Marblehead	90	R. Heil
3/23	Longmeadow	178	T. Gagnon	White-winged	l Scoter		
3/24	Inswich	180	I Berry	3/13	P'town	300	B Nikula
3/25 4/30	Bolton Flats 175	145	N Paulson	3/20	Plymouth	47	M Lynch#
Eurosian Groo	n winged Teel	145	1 1. 1 auison	1/2	Povoro P	200	$\mathbf{D} + \mathbf{E} Volo$
2/12	Middlahama	1	I. Taimhla#	4/2	REVEIC D.	200	$\Gamma_{1} + \Gamma_{2}$ value D_{1} U H_{2}
5/15	Middleboro	1	J. Immole#	4/12 D1 1 C /	P.I.	50	K. Hell
4/15	Ipswich	Im	J. Berry	Black Scoter			
4/18-19	Hadley	1	I. Davies#	3/18	Falmouth	600	M. Keleher
4/23	Chilmark	1	M. Keleher	3/20	Nantucket	100	K. Blackshaw#
Canvasback				3/20	Rockport	178	J. Berry#
3/5	Acoaxet	11	M. Lvnch#	3/20	P'town	125	B. Nikula
3/12	Westport	22	N Paulson	3/26	Wellfleet	400	F Atwood
3/13	Nantucket	26	K Blackshaw#	3/27	N Truro	210	B Nikula
3/13	Accessot	3 m () f E Nielson	Long tailed D	nok mak	210	D. Mikula
2/10	ACOAXEL	5 m, 4	D Cl 1	Long-taneu D	Class	1.40	E 44 1
3/19	S. Dart. (A.Pu)	1	P. Champhin	3/23	Chathain	140	F. Alwod
3/20	Plymouth	9	M. Lynch#	3/27	Nantucket	125	K. Blackshaw#
3/22	Westboro	2 m, 4	f N. Paulson	3/31	Turners Falls	4	H. Allen
Redhead				4/5	Southwick	8	S. Kellogg
3/5-27	Turners Falls	1	M. Fairbrother	4/26	Newbypt	500 +	R. Heil
3/6	Brewster	1	B. Nikula	Bufflehead	••		
3/13	Acoaxet	3	E. Nielsen	3/18	GMNWR	16	S. Perkins
3/14	Groveland	2	D Chickering	3/19	Winthron	100	L Ferraresso#
3/18	Braintree	1	P Peterson	3/22	Orleans	310	E. I that is sold
2/10	Dandalah	1	D Deterson	2/26 1/24	Walasfield	25 14	D + E Vala
5/18	Ranuoiph	1	r. Peterson	5/20, 4/24	wakeneid	23, 14	\mathbf{r} + \mathbf{r} vale
3/20	P.I.	2 m	1. Wetmore	4/6	Turners Falls	12	A. Richards
4/2	Canton	1 m	G. d'Entremont	4/12, 26	Newbypt 1	50, 25	R. Heil
4/8	Maynard	2	B. Dolan	4/15	Pittsfield (Pon	t.) 8	G. Hurley
Ring-necked I	Duck			4/27	Ipswich	30	J. Berry
3/13	Randolph	100	P. Peterson	Common Gol	deneve		
3/16	Longmeadow	100	T Alicea	3/thr	GMNWR	47 ma	x vo
3/18 4/23	GMNWR 26	5 6	S Perkins	3/3	Turners Falls	65	H Allen
3/27	Turnors Folls	221	J. Thorrison	3/10	Lakovillo	28	I Swoonov
2/27	Wassland	100	C. Lana	2/12	DI	26	S. Sweeney
3/27	wayiand	108	G. Long	5/15	P.I.	30	S. Sullivan#
3/28	Sheffield	100	G. Ward	3/20	Dighton	42	SSBC (V. Zollo)
3/30	Westboro	137	N. Paulson	4/12, 26	Newbypt	60, 22	R. Heil
1.0						,	
4/2	Canton	425	G. d'Entremont	Barrow's Gol	ldeneye	<i>,</i>	
4/2 4/3	Canton W. Bridgewater	425 225	G. d'Entremont SSBC (Petersen)	Barrow's Gol 3/1-25	Ideneye Wellfleet	1	V.O.
4/2 4/3 4/5	Canton W. Bridgewater Sterling	425 225 225	G. d'Entremont SSBC (Petersen) T. Pirro	Barrow's Gol 3/1-25 3/10	ldeneye Wellfleet Lakeville	1 2	v.o. J. Sweeney
4/2 4/3 4/5 4/10	Canton W. Bridgewater Sterling New Salem	425 225 225 134	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley	Barrow's Gol 3/1-25 3/10 3/12	ldeneye Wellfleet Lakeville S. Dart. (A.Pd	1 2) 1 m	v.o. J. Sweeney N. Paulson
4/2 4/3 4/5 4/10 4/27	Canton W. Bridgewater Sterling New Salem Cambr (FP)	425 225 225 134 2	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R Stymeist	Barrow's Gol 3/1-25 3/10 3/12 3/13	ldeneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop	1 2) 1 m 1 m	v.o. J. Sweeney N. Paulson W. Manter
4/2 4/3 4/5 4/10 4/27	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.)	425 225 225 134 2	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14	ldeneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salichury	1 2) 1 m 1 m	v.o. J. Sweeney N. Paulson W. Manter P. Brown
4/2 4/3 4/5 4/10 4/27 Tufted Duck 2/20	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.)	425 225 225 134 2	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14	ldeneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury	1 2) 1 m 1 m 1 f pl	v.o. J. Sweeney N. Paulson W. Manter P. Brown
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk	425 225 225 134 2 1	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger#	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg	ldeneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser	1 2) 1 m 1 m 1 f pl	v.o. J. Sweeney N. Paulson W. Manter P. Brown
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk	425 225 225 134 2 1	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger#	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5	ldeneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet	1 2) 1 m 1 m 1 f pl 15	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch#
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset	425 225 225 134 2 1 415	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13	ldeneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose	1 2) 1 m 1 m 1 f pl 15 31	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls	425 225 225 134 2 1 415 1, 20	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o.	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26	ldeneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro	1 2) 1 m 1 m 1 f pl 15 31 47	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls 1 Nantucket 250	425 225 225 134 2 1 415 1, 20 0, 75	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw#	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28	Idencye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield	1 2) 1 m 1 m 1 f pl 15 31 47 68	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10 3/13	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Nantucket 250 Acoaxet	425 225 225 134 2 1 415 1, 20 0, 75 282	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31	ldeneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls	1 2) 1 m 1 m 1 f pl 15 31 47 68 75	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10 3/13 Lesser Scaup	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Nantucket 250 Acoaxet	425 225 225 134 2 1 415 1, 20 0, 75 282	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer	Ideneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser	1 2) 1 m 1 m 1 f pl 15 31 47 68 75	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10 3/13	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls 1 Nantucket 250 Acoaxet	425 225 225 134 2 1 415 1, 20 0, 75 282 7	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen E. Nielsen	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/21 Common Mer 3/11	Idencyc Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10 3/13 Lesser Scaup 3/13	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Nantucket Acoaxet Seekonk	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen L. Nielsen	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/28 3/31 Common Mer 3/11 3/14	Ideneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10 3/13 Lesser Scaup 3/13 3/24 2/27	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Nantucket Acoaxet Acoaxet Seekonk Pembroke	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen J. Hoye# E. LaBlanc#	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer 3/11 3/14 3/14 3/14	Ideneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10 3/13 1/3 3/24 3/27 4/6	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Mantucket 250 Acoaxet Acoaxet Seekonk Pembroke Purnore Felle	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen J. Hoye# E. LeBlanc# A Bischarde	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer 3/11 3/14 3/30 2/21	Idencye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northewarten	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 251 227	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson P. Beiado
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10 3/13 Lesser Scaup 3/13 3/24 3/27 4/6 4/22	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Nantucket 250 Acoaxet Acoaxet Seekonk Pembroke Turners Falls	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen J. Hoye# E. LeBlanc# A. Richards	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer 3/11 3/14 3/30 3/31	Ideneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton	1 2 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/10 3/13, 4/6 3/13, 4/10 3/13 Lesser Scaup 3/13 3/24 4/6 4/23	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Acoaxet Acoaxet Seekonk Pembroke Turners Falls Chilmark	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20 14	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/21 Common Mer 3/11 3/14 3/30 3/31 4/6	Ideneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10 3/13 1/3 3/24 3/27 4/6 4/23 4/30	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Acoaxet Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA	425 225 225 134 2 1 415 1,20 0,75 282 7 24 17 20 14 1 f	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch#	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer 3/11 3/14 3/30 3/31 4/6 4/15	Ideneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 t.) 100	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10 3/13 Lesser Scaup 3/13 3/24 3/27 4/6 4/23 4/30 King Eider	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Acoaxet Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20 14 1 f	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch#	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer 3/11 3/14 3/30 3/31 4/6 4/15 Red-breasted	Ideneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser	1 2 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 t.) 100	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/10 3/13, 4/6 3/13, 4/10 3/13 Lesser Scaup 3/13 3/24 3/27 4/6 4/23 4/30 King Eider 3/1-6	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Nantucket 250 Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R	425 225 225 134 2 1 415 1,20 0,75 282 7 24 17 20 14 1 f	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o.	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/28 3/28 3/21 Common Mer 3/11 3/14 3/30 3/31 4/6 4/15 Red-breasted 3/5	Idencye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Westport	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 t.) 100 65	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley M. Lynch#
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10 3/13 1/3 1/3 3/24 3/27 4/6 4/23 King Eider 3/1-6 4/23	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls 1 Acoaxet Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R P'town	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20 14 1 f	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o. J. Young	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer 3/11 3/14 3/30 3/31 4/6 4/15 Red-breasted 3/5 3/19,4/29	Ideneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Westport P'town 1200	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 t.) 100 65 0.1500	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley B. Nikula
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10 3/13 Lesser Scaup 3/13 3/24 3/27 4/6 4/23 4/30 King Eider 3/1-6 4/24	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Acoaxet Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R P'town Rocknort (A P)	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20 14 1 f .) 1 1 m 1 imm	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o. J. Young M. B. Harris	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer 3/11 3/14 3/30 3/31 4/6 4/15 Red-breasted 3/5 3/19,4/29 3/27	Ideneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Westport P'town 1200 Wareham	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 1.) 100 65 0, 1500 26	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley M. Lynch# B. Nikula M Lynch#
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/10 3/13, 4/6 3/13, 4/10 3/13 4/2 3/27 4/6 4/23 4/30 King Eider 3/1-6 4/23 4/24 Common Eide	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Nantucket 250 Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R P'town Rockport (A.P.)	425 225 225 134 2 1 415 4,20 0,75 282 7 24 17 20 14 1 1 f .) 1 1 1 m 1 imm	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o. J. Young m. B. Harris	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/28 3/21 3/26 3/28 3/21 3/14 3/26 3/28 3/31 4/6 4/15 Red-breasted 3/5 3/19, 4/29 3/27 4/6	Idencye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Pittsfield (Pon Merganser Pitown 1200 Wareham Turners Falls	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 t.) 100 65 0, 1500 26 6	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley M. Lynch# B. Nikula M. Lynch#
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10 3/13 3/24 3/27 4/6 4/23 4/30 King Eider 3/1-6 4/23 4/24 Common Eide	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Acoaxet Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R P'town Rockport (A.P.) T	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20 14 1 f 1 m 1 imm	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o. J. Young m. B. Harris	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer 3/11 3/14 3/30 3/31 4/6 4/15 Red-breasted 3/5 3/19,4/29 3/27 4/6 4/20	Ideneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Westport P'town 1200 Wareham Turners Falls Nabaot	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 t.) 100 65 9, 1500 26 6 26 26	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley M. Lynch# B. Nikula M. Lynch# A. Richards J. Malone
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10 3/13 3/24 4/6 4/23 4/6 4/23 4/6 4/23 4/24 Common Eider 3/3 2/6	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls 1 Nantucket 250 Acoaxet Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R P'town Rockport (A.P.) r P.I. Cherkhere	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20 14 1 f 1 m 1 imn 3000	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o. J. Young m. B. Harris R. Crowley#	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer 3/11 3/14 3/30 3/31 4/6 4/15 Red-breasted 3/5 3/19, 4/29 3/27 4/6 4/20	ldeneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Westport P'town 1200 Wareham Turners Falls Nahant	1 2 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 100 65 6 26	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley M. Lynch# B. Nikula M. Lynch# A. Richards J. Malone
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/10 3/13, 4/6 3/13, 4/10 3/13 4/2 4/30 King Eider 3/1-6 4/23 4/24 3/27 4/6 4/23 4/20 King Eider 3/1-6 4/23 4/24	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Nantucket 250 Acoaxet Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R P'town Rockport (A.P.) PI. Chatham	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20 14 1 f 1 m 1 imm 300 8000	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o. J. Young m. B. Harris R. Crowley# B. Nikula	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/28 3/28 3/28 3/28 3/28 3/21 2/2 3/28 3/31 4/6 4/15 Red-breasted 3/5 3/19,4/29 3/27 4/6 4/20 Rudy Duck	Idencye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Westport P'town 1200 Wareham Turners Falls Nahant	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 t.) 100 65 0, 1500 26 26 27	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley M. Lynch# B. Nikula M. Lynch# A. Richards J. Malone
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10 3/13 3/24 3/24 3/24 3/24 4/23 4/20 King Eider 3/1-6 4/23 4/24 Common Eider 3/3 3/6 3/22	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Acoaxet Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R P'town Rockport (A.P.) r P.I. Chatham	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20 14 1 f 1 m 1 imm 300 8000 1200	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o. J. Young nm. B. Harris R. Crowley# B. Nikula F. Atwood	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer 3/11 3/14 3/30 3/31 4/6 4/15 Red-breasted 3/5 3/19,4/29 3/27 4/6 4/20 Ruddy Duck 3/13	Idencye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Westport P'town 1200 Wareham Turners Falls Nahant Arlington	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 t.) 100 65 9, 1500 26 6 26 7 7 7 100 105 105 105 105 105 105 105	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley M. Lynch# B. Nikula M. Lynch# A. Richards J. Malone
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/13, 4/6 3/13, 4/10 3/13 Lesser Scaup 3/13 3/24 4/6 4/23 4/6 4/23 4/6 4/23 4/24 Common Eider 3/3 3/6 3/22 Harleguin Duck	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Mantucket 250 Acoaxet Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R P'town Rockport (A.P.) T P.I. Chatham	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20 14 1 f 1 m 1 imm 3000 8000	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o. J. Young m. B. Harris R. Crowley# B. Nikula F. Atwood	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer 3/11 3/14 3/30 3/31 4/6 4/15 Red-breasted 3/5 3/19, 4/29 3/27 4/6 4/20 Ruddy Duck 3/13 3/18	ldeneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Westport P'town 1200 Wareham Turners Falls Nahant Arlington Pembroke	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 5, 1500 26 6 26 7 100 N	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley M. Lynch# B. Nikula M. Lynch# A. Richards J. Malone M. Rines IAS (J. Galluzzo)
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/10 3/13, 4/6 3/13, 4/10 3/13 4/20 King Eider 3/1-6 4/23 4/20 King Eider 3/1-6 4/23 4/24 3/2 4/24 Common Eide 3/3 3/6 3/22 Harlequin Duc	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Nantucket 250 Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R P'town Rockport (A.P.) P.I. Chatham Sch P'town H.	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20 14 1 f 1 m 1 imm 300 3000 1200 5	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o. J. Young m. B. Harris R. Crowley# B. Nikula F. Atwood B. Nikula	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/28 3/28 3/28 3/21 Common Mer 3/11 3/14 3/30 3/31 4/6 4/15 Red-breasted 3/5 3/19, 4/29 3/27 4/6 4/20 Ruddy Duck 3/18 3/20	Idencye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Westport P'town 1200 Wareham Turners Falls Nahant Arlington Pembroke Somerset	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 t.) 100 65 0, 1500 26 7 100 N 26	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley M. Lynch# B. Nikula M. Lynch# A. Richards J. Malone M. Rines IAS (J. Galluzzo) SSBC (V. Zollo)
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10 3/13 3/24 3/27 4/6 4/23 4/30 King Eider 3/1-6 4/23 4/24 Common Eider 3/3 3/6 3/22 Harlequin Duc 3/12	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Acoaxet Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R P'town Rockport (A.P.) r P.I. Chatham Scher Ster P'town H. Rockport	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20 14 1 f 1 m 1 imm 300 3000 1200 5 82	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o. J. Young nm. B. Harris R. Crowley# B. Nikula F. Atwood B. Nikula J. Nelson	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer 3/11 3/14 3/30 3/31 4/6 4/15 Red-breasted 3/5 3/19,4/29 3/27 4/6 4/20 Ruddy Duck 3/13 3/18 3/20 3/24	Ideneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Westport P'town 1200 Wareham Turners Falls Nahant Arlington Pembroke Somerset Seekonk	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 t.) 100 65 9, 1500 26 6 26 7 100 M 26 20	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley M. Lynch# B. Nikula M. Lynch# A. Richards J. Malone M. Rines IAS (J. Galluzzo) SSBC (V. Zollo) J. Hoye#
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/10 3/13, 4/6 3/13, 4/10 3/13 3/24 4/23 4/30 King Eider 3/1-6 4/23 3/1-6 4/24 Common Eider 3/3 3/6	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Nantucket 250 Acoaxet Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R P'town Rockport (A.P.) r P.I. Chatham Orleans K P'town H. Rockport Dennis (Corp. B	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20 14 1 f 1 m 1 imm 3000 8000 1200 5 82 2 2	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o. J. Young m. B. Harris R. Crowley# B. Nikula F. Atwood B. Nikula J. Nelson B. Nikula	Barrow's Gol 3/1-25 3/10 3/12 3/13 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer 3/11 3/14 3/30 3/31 4/6 4/15 Red-breasted 3/5 3/19, 4/29 3/27 4/6 4/20 Ruddy Duck 3/13 3/18 3/24 4/10	ldeneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Westport P'town 1200 Wareham Turners Falls Nahant Arlington Pembroke Somerset Seekonk Nantucket	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 5, 1500 26 6 26 7 100 N 26 6 20 21	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley M. Lynch# B. Nikula M. Lynch# A. Richards J. Malone M. Rines IAS (J. Galluzzo) SSBC (V. Zollo) J. Hoye# K. Blackshaw#
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/10 3/13, 4/6 3/13, 4/10 3/13 4/2 4/30 King Eider 3/1-6 4/23 4/20 King Eider 3/1-6 4/23 4/24 Common Eide 3/3 3/6 3/22 Harlequin Duc 3/16 4/9	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Nantucket 250 Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R P'town Rockport (A.P.) P.I. Chatham P'town H. Rockport Portown H. Rockport Dennis (Corp. B N. Scituate	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20 14 1 f 1 m 1 imm 300 3000 1200 5 82 2, 10	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o. J. Young m. B. Harris R. Crowley# B. Nikula F. Atwood B. Nikula J. Nelson B. Nikula G. d'Entremont	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer 3/11 3/14 3/30 3/31 4/6 4/15 Red-breasted 3/5 3/19, 4/29 3/27 4/6 4/20 Ruddy Duck 3/18 3/20 3/24 4/10 4/30	Idencye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Westport P'town 1200 Wareham Turners Falls Nahant Arlington Pembroke Somerset Seekonk Nantucket Chestput Hill	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 t.) 100 65 0, 1500 26 6 26 7 100 N 26 26 20 21 8	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley M. Lynch# B. Nikula M. Lynch# A. Richards J. Malone M. Rines IAS (J. Galluzzo) SSBC (V. Zollo) J. Hoye# K. Blackshaw# R. Stvmeist#
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10 3/13 3/24 3/27 4/6 4/23 4/30 King Eider 3/1-6 4/23 4/24 Common Eider 3/3 3/6 3/22 Harlequin Duc 3/12 3/6 4/9 4/23	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Acoaxet Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R P'town Rockport (A.P.) r P.I. Chatham Sck P'town H. Rockport Dennis (Corp. B N. Scituate Chilmark	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20 14 1 f 1 m 1 imn 300 3000 1200 5 82 2,0 12 39	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o. J. Young nm. B. Harris R. Crowley# B. Nikula F. Atwood B. Nikula J. Nelson B. Nikula G. d'Entremont M. Keleher	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer 3/11 3/14 3/30 3/31 4/6 4/15 Red-breasted 3/5 3/19, 4/29 3/27 4/6 4/20 Ruddy Duck 3/13 3/18 3/20 3/24 4/10 Northern Bob	Ideneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Westport P'town 1200 Wareham Turners Falls Nahant Arlington Pembroke Somerset Seekonk Nantucket Chestnut Hill white	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 t.) 100 65 6 26 6 26 6 27 100 N 26 26 20 21 8	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley M. Lynch# B. Nikula M. Lynch# A. Richards J. Malone M. Rines (AS (J. Galluzzo) SSBC (V. Zollo) J. Hoye# K. Blackshaw# R. Stymeist#
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/10 3/13, 4/6 3/13, 4/10 3/13 3/24 4/23 4/30 King Eider 3/1-6 4/23 4/30 King Eider 3/1-6 4/24 Common Eider 3/3 3/6 4/9 4/23 Surf Scoter	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Nantucket 250 Acoaxet Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R P'town Rockport (A.P.) r P.I. Chatham Orleans Chens	425 225 225 134 2 1 415 1,20 0,75 282 7 24 17 20 14 1 f 1 m 1 imn 300 8000 1200 5 82 .) 2 10 39	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o. J. Young m. B. Harris R. Crowley# B. Nikula F. Atwood B. Nikula G. d'Entremont M. Keleher	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/28 3/28 3/21 Common Mer 3/11 3/14 3/20 3/31 4/6 4/15 Red-breasted 3/5 3/19, 4/29 3/27 4/6 4/20 Ruddy Duck 3/18 3/24 4/10 4/30 Northern Bob 4/16	Ideneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Westport P'town 1200 Wareham Turners Falls Nahant Arlington Pembroke Somerset Seekonk Nantucket Chestnut Hill white W Dennis	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 5, 1500 26 6 26 7 100 N 26 6 26 7 100 N 26 20 21 8	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Riness N. Paulson B. Bieda A. Richards G. Hurley M. Lynch# B. Nikula M. Lynch# A. Richards J. Malone M. Riness IAS (J. Galluzzo) SSBC (V. Zollo) J. Hoye# K. Blackshaw# R. Stymeist#
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/10 3/13, 4/6 3/13, 4/10 3/13 4/20 King Eider 3/14 4/23 4/20 King Eider 3/1-6 4/23 4/24 Common Eider 3/2 4/24 Common Eider 3/2 4/24 Suff Scoter 3/2 3/6 4/9 4/23	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Nantucket 250 Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R P'town Rockport (A.P.) P.I. Chatham P'town H. Rockport Dennis (Corp. B N. Scituate Chilmark	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20 14 1 f 1 m 1 imm 300 3000 1200 5 82 2,0 2 10 39	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o. J. Young m. B. Harris R. Crowley# B. Nikula F. Atwood B. Nikula J. Nelson B. Nikula G. d'Entremont M. Keleher	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer 3/11 3/14 3/30 3/31 4/6 4/15 Red-breasted 3/5 3/19, 4/29 3/27 4/6 4/20 Ruddy Duck 3/18 3/20 3/24 4/10 4/30 Northern Bob 4/16	Idencye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Westport P'town 1200 Wareham Turners Falls Nahant Arlington Pembroke Somerset Seekonk Nantucket Chestnut Hill white W. Dennis	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 t.) 100 65 0, 1500 26 6 26 7 100 N 26 26 26 26 26 26 26 26 26 26	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley M. Lynch# B. Nikula M. Lynch# A. Richards J. Malone M. Rines IAS (J. Galluzzo) SSBC (V. Zollo) J. Hoye# K. Blackshaw# R. Stymeist#
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/20 Greater Scaup 3/10 3/13, 4/6 3/13, 4/10 3/13 1/3 3/24 3/27 4/6 4/23 4/30 King Eider 3/1-6 4/23 4/24 Common Eide 3/3 3/6 3/22 Harlequin Duc 3/16 4/9 4/23 Surf Scoter 3/22 2/26	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Nantucket 250 Acoaxet Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R P'town Rockport (A.P.) r P.I. Chatham Chatham Sockport Dennis (Corp. B N. Scituate Chilmark Weitfloret	425 225 225 134 2 1 415 1, 20 0, 75 282 7 24 17 20 14 1 f 1 m 1 imm 300 8000 1200 5 82 230 1 4 230	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o. J. Young nm. B. Harris R. Crowley# B. Nikula F. Atwood B. Nikula J. Nelson B. Nikula J. Nelson B. Nikula J. Nelson B. Nikula J. Nelson B. Nikula J. Nelson B. Nikula	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/28 3/31 Common Mer 3/11 3/14 3/30 3/31 4/6 4/15 Red-breasted 3/5 3/19, 4/29 3/27 4/6 4/20 Ruddy Duck 3/13 3/18 3/20 3/24 4/10 Northern Bob 4/16 4/23 Ping nocled M	Idencye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Westport P'town 1200 Wareham Turners Falls Nahant Arlington Pembroke Somerset Seekonk Nantucket Chestnut Hill white W. Dennis Turuo	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 165 t.) 100 65 6 26 6 26 6 20 21 8 1 1 1 1 1 1 1 1 1 1 1 1 1	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley M. Lynch# B. Nikula M. Lynch# A. Richards J. Malone M. Rines IAS (J. Galluzzo) SSBC (V. Zollo) J. Hoye# K. Blackshaw# R. Stymeist# M. Cocoran F. Caruso#
4/2 4/3 4/5 4/10 4/27 Tufted Duck 3/10 3/13, 4/6 3/13, 4/10 3/13 3/24 4/23 4/30 King Eider 3/1-6 4/23 4/30 King Eider 3/1-6 4/24 Common Eider 3/3 3/6 4/2 Harlequin Duc 3/thr 3/2 3/6 4/9 4/23 Surf Scoter 3/22 3/26 4/17	Canton W. Bridgewater Sterling New Salem Cambr. (F.P.) Seekonk Somerset Turners Falls Nantucket 250 Acoaxet Acoaxet Seekonk Pembroke Turners Falls Chilmark Quabog IBA Gloucester (B.R P'town Rockport (A.P.) r P.I. Chatham Rockport Pri P.I. Chatham Rockport Dennis (Corp. B N. Scituate Chilmark Westboro Wellfleet Even with	425 225 225 134 2 1 415 1,20 0,75 282 7 24 17 20 14 1 f 1 m 1 imn 300 8000 1200 5 82 .) 2 10 39 1 m 230	G. d'Entremont SSBC (Petersen) T. Pirro B. Lafley R. Stymeist J. Koger# J. Sweeney v.o. K. Blackshaw# E. Nielsen E. Nielsen J. Hoye# E. LeBlanc# A. Richards M. Keleher M. Lynch# J. Nelson + v.o. J. Young M. B. Harris R. Crowley# B. Nikula F. Atwood B. Nikula G. d'Entremont M. Keleher N. Paulson F. Atwood	Barrow's Gol 3/1-25 3/10 3/12 3/13 3/14 Hooded Merg 3/5 3/13 3/26 3/28 3/31 Common Mer 3/11 3/14 3/26 3/28 3/31 Common Mer 3/11 3/14 3/20 3/31 4/6 4/15 Red-breasted 3/5 3/19, 4/29 3/27 4/6 4/20 Ruddy Duck 3/18 3/24 4/10 4/30 Northern Bob 4/10 4/23 Ring-necked I	Ideneye Wellfleet Lakeville S. Dart. (A.Pd Winthrop Salisbury anser Acoaxet Melrose Westboro Sheffield Turners Falls ganser Belmont Winchester Westboro Northampton Turners Falls Pittsfield (Pon Merganser Westport P'town 1200 Wareham Turners Falls Nahant Arlington Pembroke Somerset Seekonk Nantucket Chestnut Hill white W. Dennis Truro Pheasant	1 2) 1 m 1 m 1 f pl 15 31 47 68 75 237 251 227 100 65 5, 1500 26 6 26 7 100 N 26 6 26 7 100 N 26 100 10 27 100 100 100 100 100 100 100 10	v.o. J. Sweeney N. Paulson W. Manter P. Brown M. Lynch# D. + I. Jewell S. Arena G. Ward H. Allen J. Trimble M. Rines N. Paulson B. Bieda A. Richards G. Hurley M. Lynch# B. Nikula M. Lynch# A. Richards J. Malone M. Rines IAS (J. Galluzzo) SSBC (V. Zollo) J. Hoye# K. Blackshaw# R. Stymeist# M. Cocoran F. Caruso#

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Ring-necked l	Pheasant (contin	nued)		4/17	Falmouth	1000	I. Nisbet
3/16	Walpole	1 m	B. Lawless	4/22	P.I.	37	R. Schain
3/17/	N. Andover		B. Drummond	4/24 Double erect	Revere	14	R. Stymeist
3/19 4/8	Rowley	() 1 1 m	S McGrath		Hadley	24	P Veskie
4/17	Saugus (Bear	C.) 6	T. Factor#	4/6	Turners Falls	29	A. Richards
Ruffed Grous	e (4/12	E. Boston (B.I.)	200	P. Peterson
4/10	Woburn (HP)	1 BE	BC (P. Ippolito#)	4/23	Edgartown	275	M. Keleher
4/10	Upton	1	N. Paulson	4/26	Newbypt	400	R. Heil
4/22	Monterey	2	M. Lynch#	4/27	P.I.	650	P. Roberts#
4/30	C. Quabbin W Barnstahla	10	L. I nerrien M. Kolobor	4/29 Graat Cormo	P town	/00	B. Nikula
Wild Turkey	w. Darnstable	1	WI. Kelenei	3/5	P'town	14	I Trimble#
3/17	Woburn	30	M. Rines	3/27	N. Scituate	51	E. LeBlanc#
3/29	Petersham	28	N. Paulson	3/30	Duxbury B.	22	R. Bowes
3/31	Northfield	48	Z. Jakub	4/10	P.I.	3	T. Wetmore
4/5	Hardwick	40	S. Ricker	4/12	Newbypt	1 1S	R. Heil
4/13	Concord (NA	C) 23	S. Perkins	4/24	Lakeville	1	S. Arena
Red-throated	Loon D'town 14	0.250	P. Milmle	American Bit	Concord	1	C Winstenlay
3/19, 4/8	P IOWII 14	18	B. INIKUIA R. Bowes	4/3	Salisbury	1	L Woolf
3/31	N Truro	1200	B Nikula	4/9	Nantucket	1	M Aguiar
4/9	Nantucket	807	E. Ray	4/10	P.I.	2	T. Wetmore
4/30	Wachusett Res	s. 1	N. Paulson	4/21	Barnstable	1	P. Crosson
4/30	Revere B.	20	R. Stymeist#	4/21	N. Truro	1	B. Nikula
Pacific Loon				4/22	Lenox	1	G. Hurley
3/5, 13	P'town (R.P.)	2	Trimble, Nikula	4/22	Monterey	1	M. Lynch#
3/20	N Truno	1 br pi	M. Lyncn#	4/26	Amnerst	1	I. Davies
Common Loo	n. IIulo	1	D. INIKUIA	4/29	C Quabbin	1	I Therrien
3/8	Nantucket	15	K. Blackshaw	4/30	Bolton Flats	3	N. Paulson
3/13	P.I.	26	S. Sullivan#	Great Blue H	eron		
3/31	N. Truro	200	B. Nikula	3/20	Middleboro	113 nests	K. Anderson
4/5	S. Quabbin	4	L. Therrien	4/2	Seekonk	14 n	K. Bartels
4/5	Southwick	4	S. Kellogg	4/6	Concord	18 n	M. Rosenstein
4/28	Falmouth	20	I. Nisbet	4/7	Northampton	32	T. Gagnon
4/30 Pied-billed G	wachusett Kes	5. 14	N. Paulson	4/7	P.I. Westhoro	22	P. + F. Vale#
3/13	Concord (NA	C) 2	S. Perkins#	Great Egret	Westbold	20	IV. I autson
3/26	Hatfield	3	S. Surner	3/9	Ouincy	1 ph	P. Fifield
3/26	Gloucester (E.	.P.) 2	S. Hedman	3/20	Essex	1	I. Giriunas#
4/5	Sterling	2	T. Pirro	4/5	P.I.	9	P. + F. Vale
4/6	Saugus	2	D. + I. Jewell	4/7	Orleans	3	P. Trull
4//	Northampton	3	T. Gagnon	4/14	Salisbury E Boston (B I)	51	S. McGrath#
Horned Grebe	Southwick	5	5. Kenogg	Snowy Egret	E. Dostoli (D.I.)	0	$\Gamma_{+} + \Gamma_{-}$ vale
3/20	Rockport	3	J. Berrv#	4/2	Essex	1	P. + F. Vale
3/21, 4/10	P.I.	16, 10	T. Wetmore	4/3	Duxbury B.	2	R. Bowes
4/6	Turners Falls	2	A. Richards	4/3	Saugus	1	S. Zendeh#
4/8, 25	S. Quabbin	3,2	L. Therrien	4/3	Winthrop	2	S. Moore#
4/9	Westport	72	M. Lynch#	4/16	Ipswich	32	P. Brown
4/20	Nanant Marblahaad	28 45	J. Malone	4/19	E Roston (P I)	23	S. Maguire
4/20	Revere B	10	R Stymeist#	Little Blue H	eron	0	$\Gamma_{+} + \Gamma_{-}$ vale
Red-necked C	Grebe	10	iti biyincista	4/5	P.I.	1	S. Hardy
3/4	Gloucester (B	.R.) 36	T. Robben	4/12	Essex	1	P. Brown
3/31	N. Truro	11	B. Nikula	4/21	N. Truro	1 ad	B. Nikula
4/9	N. Scituate	22	G. d'Entremont	4/27	E. Boston (B.I.)	1 imm	P. Peterson
4/15	Pittsfield (Ond	ota) 2	G. Hurley	Cattle Egret	N. Turne	1	D. Milaula
4/17	Quadog IBA Marblehead	27 1 DF PI	R Hoil	4/29 Green Heron	N. ITUFO	1	B. MIKUIA
4/22	Nahant	170	L Pivacek	4/15	Seekonk	1	K Bartels
4/24	Winthrop B.	36	R. Stymeist	4/22	Winchester	1	A. Robinson
Eared Grebe	1		2	4/22	Newbury	1	D. + I. Jewell
3/26	Chatham	1	F. Atwood	4/25	Amherst	2	L. Therrien
Manx Shearw	ater	12		4/30	W. Roxbury	2	T. Factor#
4/2-30	Revere B.	13 max	V.O. D N::11	Black-crowne	ea Night-Heron	1	D Datama
4/14 4/30	r town P'town	1	D. INIKUla K. Mueller	3/13 3/27	W Harwich	1	P. Peterson B. Nikula
Northern Gan	net	1	ix. muchel	4/15	Watertown	13	D. Logan
3/19-4/30	P'town	2000 max	B. Nikula	4/22	Newbury	3	S. McGrath#
2/27 1/20			D N U 1	~	2		
5/27-4/50	N. Truro	1400 max	B. Nikula	Glossy Ibis			

Glossy Ibis (c	ontinued)			4/24	Boxford (C.P.)	1	S. Grinley#
4/7	P.I.	30	T. Wetmore	4/27	Upton	1	N. Paulson
4/10	Fairhaven	1	C. Longworth	Red-shoulder	ed Hawk	2	LD
4/10	Concord	1	K. Hudgins	3/3	Cumb. Farms	2	J. Damien#
4/12	Grafton	1	J. Griffin A. Marble	3/12	N. ITUTO PI		Hawkcount (DM)
4/12	Cumb Farms	12	I Moosbruker	3/12	Acoaxet	2	E Nielsen
White-faced	lbis	12	J. 10003010KC1	3/26	S. Dart. (A.Pd)	3	P. Champlin#
4/22-26	P.I. 1 ph		S. Havdock# + v.o.	3/29	N. Truro	44	Hawkcount (DM)
Black Vulture	ľ			4/10	New Salem	2	B. Lafley
thr	Reports of 1-2 in	ndiv. F	from 14 locations	Broad-winged	l Hawk		-
3/12	Sheffield	20	J. Drucker	4/10	Pelham	1	B. Lafley
4/5	Blue Hills	5	N. Smith	4/14-24	Barre Falls	621	Hawkcount (BK)
4/10	Leominster	3	G. Marley	4/15	Barre Falls	178	Hawkcount (BK)
4/15	Northematon	5	N. Mole	4/15	Granville Barra Falla	131	J. Wojtanowski
4/10 Turkov Vultur	Normanipton	5	C. HOIII	4/10	Barro Falls	122	Hawkcount (BK)
3/thr	N Truro	65	Hawkcount (DM)	4/26	Southwick	55	I Weeks
3/2	Northampton	20	M. & K. Conway	4/26	Mt Holvoke	110	M. A. Wilson
3/12	P.I.	24	R. Heil	Red-tailed Ha	wk		
3/12	Sheffield	50	J. Drucker	3/12	Wayland	10	S. Perkins#
3/26	S. Dart. (A.Pd)	15	P. Champlin#	3/12-30	Barre Falls	48	Hawkcount (BK)
3/27	Lexington	22	M. Rosenstein	3/29	Petersham	9	N. Paulson
4/thr	N. Truro	455	Hawkcount (DM)	Rough-legged	l Hawk		
4/9	Concord	11 m	igr S. Perkins#	3/1-4/22	P.I.	1-2	V.0.
4/19	Westfield	30	P. Crossen	3/1-4/3	Cumb. Farms	5 m	ax v.o.
Osprey		2		3/5	Worcester	I di	k N. Paulson
3/13	Acoaxet	2	E. Nielsen	3/13	Westport		E. Nielsen
3/17	Dighton	1	A. Curus	3/13 1/2	Source (NAC)) III) 1	D. Carison S. Zondoh#
3/20	Barra Falle	80	Hawkcount (BK)	4/3	P'town	.) 1	E Caruso
4/6-30	PI	31	Hawkcount (DR)	4/10	Barre Falls	1	Hawkcount (BK)
4/15	Granville	11	J. Woitanowski	Golden Eagle	e		municount (Dit)
4/23	Concord (NAC)	1	E. Nielsen#	4/6	Barre Falls	1	Hawkcount (BK)
4/26	Mt Holyoke	18	M. A. Wilson	American Ke	strel		· · · ·
Mississippi K	lite			4/thr	N. Truro	279	Hawkcount (DM)
4/23	Truro	1	F. Caruso#	4/2-24	Barre Falls	23	Hawkcount (BK)
Bald Eagle				4/6-28	P.I.	1157	Hawkcount (PR)
3/thr	Medford	2-3	v.o.	4/7	Wellfleet	6	M. Faherty
3/1-4/17	P.I.	2-3	V.O.	4/7	Orleans	14	C. Thompson
3/2	Newbypt	2	MAS (B. Gette)	4/1/	Saugus (Bear C	.) 5	I. Factor#
3/15	Westboro	3 91	ibad S Arena	4/21	PI	388	Hawkcount (PR)
4/2	Quabbin Pk	7	M I vnch#	4/21	Cumb Farms	61	H + I Levesque
4/2-18	Barre Falls	17	Hawkcount (BK)	Merlin	Cumo. Furnis	01	II. I J. Devesque
4/17	New Salem	3 ac	B. Lafley	4/thr	N. Truro	63	Hawkcount (DM)
Northern Hari	rier			4/6-29	P.I.	80	Hawkcount (PR)
3/4	Cumb. Farms	5	C. Cook	4/27	P.I.	20	Hawkcount (PR)
3/20	W. Bridgewater	2	S. Arena	Peregrine Fal	con		
4/6	P.I.	56	Hawkcount (PR)	3/2	W. Roxbury	2	P. Peterson
4/6-24	Barre Falls	8	Hawkcount (BK)	3/25	Gloucester	2	S. Hedman
4/9	Concord	2 m	igr E. Nielsen	3/31	Deerfield	2	H. Allen
4/24	Cumb. Farms	4	S. Arena	4/thr	Sagamore	pr	M. Kelener#
A/thr	N Truro	100	Hawkcount (DM)	4/10		23	Hawkcount (PR)
4/11	Barre Falls	85	Hawkcount (BK)	4/21	Cambridge	2	P Roberts
4/6-30	PI	103	Hawkcount (PR)	4/26	Boston (Fens)	2	P Peterson
4/18	P.I.	45	Hawkcount (PR)	King Rail		-	
4/22	Barre Falls	22	Hawkcount (BK)	4/30	Truro	1	J. Trimble
Cooper's Haw	/k			Clapper/King	g Rail		
3/31	W. Newbury	pr n	P. + F. Vale	4/14, 18	Harwichport	1	B. Nikula
4/2-24	Barre Falls	14	Hawkcount (BK)	Virginia Rail			
4/6-27	P.I.	17	Hawkcount (PR)	4/6	GMNWR	2	P. Loranger
4/29	Carlisle	pr	A. Ankers	4/18	Truro	2	M. Keleher
4/29	Ashburnham	3	C. Caron	4/22	Wayland	4	B. Harris
4/50 Northerm Card	westboro	pr	S. Arena	4/30	Quadog IBA Bolton Elata	2	M. Lynch#
3/8	HRWMA	1	T Pirro	4/30 Sora	BORON Flats	ð	IN. Paulson
3/12	W Newbury	2	K Flwell	4/19	Pittsfield	1	P Crossen
3/15	Mt. Tom	1	T Gagnon	4/30	Bolton Flats	1	N Paulson
3/17	Barre Falls	pr	B. Kamp	4/30	P.I.	3	J. Berrv#
4/3	W. Newbury	1	E. Nielsen	Common Mo	orhen	5	0. Doily#
4/15-24	Groveland	1	K. Elwell	4/26	GMNWR	1	S. Wheelock#

American Coo	ot			Lesser Yellow	wlegs		
3/1	Lynn	3	R. Heil	3/13	Cumb. Farms	1	J. Trimble
3/13	Acoaxet	2	E. Nielsen	4/8	P.I.	1	C. Gras
3/30	Northfield	25	Z. Jakub K. Blackshow#	4/10	W Horwich	1	S. Surner B. Nikula
4/2	PI	1	E Labato	4/21	Newbynt H	5	P + F Vale#
4/30	W. Roxbury	1	T. Factor#	4/30	Bolton Flats	3	N. Paulson
Sandhill Crai	ne	•	111 40101/	Upland Sand	piper	0	1
4/3	New Marlboro	2	M. & K. Conway	4/14	Chatham (S.B.)	1	B. Harris
4/11	Northfield	3 ad	B. Zajda	4/27	Nantucket	1	T. Pastuszak
4/17	Hadley	1	P. Yeskie	Whimbrel			
4/30	Mt.A.	3	BBC (J. Forbes)	4/9	Nantucket	1	M. Aguiar#
Black-bellied	Plover	21	IZ D1 1 1 //	Ruddy Turns	tone	0	
4/10	Nantucket	21	K. Blackshaw#	3/1	Revere B.	12	F. Lehman
4/12	Chothern $(S \mathbf{P})$	0 117	R. Bowes	3/3	Nantuckot	12	J. Miller K. Blocksbow#
4/14	Wellfleet	12	M Keleher	3/27	N Scituate	7	F LeBlanc#
4/29	PI	12	B Flemer	4/1	Duxbury B	1	R Bowes
American Gol	den-Plover		D. Tienier	4/17	Osterville	25	B. Nikula
4/26	Wayland	1 ph	B. Harris	Red Knot			
4/27	Duxbury B.	1 f	R. Bowes	4/14	Chatham (S.B.)	3	B. Harris
Semipalmated	Plover			Sanderling			
4/30	P.I.	1	S. Sullivan#	3/3, 4/22	P.I.	15, 1	V.O.
Piping Plover				3/5	Quincy	34	J. Miller
3/12	Plymouth	1	S. Hecker	3/20	Rockport	30	J. Berry
3/13, 30	Duxbury B.	2,4	R. Bowes	3/22	Duxbury B.	57	R. Bowes
3/19	P.I. C Dort (A Dil)	6	S. Grinley#	4/8	Ipswich (C.B.)	50	D. Jones
3/20	S. Dart. (A.Pd) Winthron	5	E. Meisen T. Bradford	4/10 Loost Sondni	Nantucket	40	K. Blacksnaw#
4/5	Plymouth B	14	S Hecker		Nantucket	1	F Pav
4/6	Fairhaven	6	C Longworth	4/24	W Harwich	4	B Nikula
4/8	Ipswich (C.B.)	16	D. Jones	4/30	Longmeadow	9	S. Kellogg
4/14	Chatham (S.B.)	33	B. Harris	Pectoral San	dpiper		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Killdeer	· · · ·			3/19	Newbury	1	B. Gette
3/13	Hadley	47	S. Surner	4/10, 24	W. Harwich	5,6	B. Nikula
3/20	Deerfield	11	B. Zajda	4/15	Hadley	4	T. Gagnon
3/21	Newbury	17	R. Heil	4/18	Arlington Res.	2	M. Rines
3/25	Lancaster	33	N. Paulson	4/30	Lancaster	4	N. Paulson
3/27	Hatfield	20	L. Therrien	Purple Sandr	nper	70	T M.L.
4/23	Acton	12	S. Perkins#	5/2	Rockport (A.P.)	14	J. Nelson
American Oys	Nontuckot	1 15	V.O	4/4	N Scituato	25	G d'Entromont
3/19	Winthron	6	I Ferraresso#	4/10	Nahant	23	I Malone
3/21	S Dart (A Pd)	2	A Morgan	4/17	Osterville	20	B Nikula
4/14	Chatham (S.B.)	16	B. Harris	Dunlin	ostervine	20	Dirimun
4/24	Fairhaven	4	C. Longworth	3/5	Westport	26	M. Lynch#
4/27	Duxbury B.	4	R. Bowes	3/9, 20	Duxbury B.500,	1367	R. Bowes
Spotted Sandp	iper			4/26	Newbypt	350	R. Heil
4/17	Wachusett Res.	1	M. Lynch#	4/29	P.I.	30	T. Wetmore
4/20	Melrose	1	D. + I. Jewell	4/30	Longmeadow	2	S. Kellogg
4/22	Arlington Res.	2	J. Forbes	Dowitcher sp	becies	2	E 1/1
4/26	Devens Bolton Floto	2	K. Bourinot	4/24 Wilcon's Sni	P.I.	3	F. vale
4/29 Solitory Sondr	bollon Flats	3	K. Dourmot	2/1	Grafton	2	N Doulson
	Sheffield	1	F Neumuth	3/4	Sandwich	3	M Keleher
4/9	Hadley	1	L. Redindun	3/21	Newbury	83	R Heil
4/18	Arlington Res.	1	M. Rines	4/8	Concord	34	K. Hartel
4/30	Mattapan (BNC) 2	R. Stymeist#	4/9	Fairhaven	31	C. Longworth
Greater Yellov	vlegs			4/16	Rochester	26	M. Lynch#
3/6, 4/10	W. Harwich	2, 12	B. Nikula	4/30	Bolton Flats	75	N. Paulson
3/20	Essex	1	I. Giriunas#	American We	oodcock		
4/17	Duxbury B.	39	R. Bowes	3/11	Cambridge	10	R. Stymeist
4/21	Newbypt H.	110	P. + F. Vale#	3/12	Fairhaven	12	C. Longworth#
4/23	Wellfleet	170	B. Nikula	3/19	P.I.	18	T. Wetmore
4/30	Barnstable Bolton Elete	/0	M. Kelener	3/22 Wilcon's Dhe	Amnerst	18	I. Davies
4/30 Willot	Bonon Flats	1/	in. Paulson	4/30	Rowley	1 f	I Borry#
3/12	S Dart (A Pd)	1	N Paulcon	Black-legged	Kittiwake	11	J. Delly#
4/20 26	Duxburv B	1.7	R Bowes	3/2	P.I.	5	T. Wetmore
4/21	Barnstable	2	M. Richmond	3/25	Wellfleet	4	F. Atwood
4/26	Ipswich	$\overline{2}$	J. Berry	Bonaparte's	Gull	-	
4/30	P.I.	18	J. Berry#	4/11	Southwick	2	S. Kellogg
			2	4/15	Pittsfield (Onota	a) 2	G. Hurley

Bonaparte's G	ull (continue	ed)		4/9	N. Truro	1	D. Manchester
4/17	Nahant	32	L. Pivacek	Caspian Tern			
4/17	Swampscot	t 23	L. Pivacek	<i>4</i> /24-25	Burrage Pd W	VMA 4	J. Sweeney + v.o.
4/19	Newbypt H	. 4	S. McGrath	4/26	Duxbury B.	1	R. Bowes
4/29	Turners Fal	ls 3	J. Smith	4/27	Bridgewater	1	R. Finch
Laughing Gul	1			4/27	Hadley	1	N. Barber
3/19	P'town	1	B. Nikula	4/28-29	Turners Falls	1	J. Smith
3/23	Plymouth	1	E. Neumuth#	4/29	P.I.	1	T. Wetmore#
4/5	Duxbury	1	R. Bowes	4/29	Plymouth B.	1	S. Hecker
4/14	Chatham (S	.B.) 8	B. Harris	Roseate Tern	•		
4/30	P'town	21	K. Mueller	4/28	Falmouth	4	I. Nisbet
Mew Gull				Common Terr	1		
3/1-8	Lynn/Swam	pscott 1 pl	h S. Sullivan + v.o.	4/28	Falmouth	12	I. Nisbet
Yellow-legged	l Ġull	· ·		Jaeger species	5		
4/9-17	Hyannis	1 ad ph	K. Miller and v.o.	4/29 [°]	P'town	1	B. Nikula
Iceland Gull		-		Dovekie			
3/1	E. Gloucest	er 3	R. Heil	3/9	Manomet	1	E. Dalton
3/10	P.I.	2	W. Tatro	Common Mu	re		
3/11	N. Scituate	5	MAS (Galluzzo)	3/13	P'town	3	B. Nikula
3/13	Winthrop	5	W. Manter	4/30	P'town	1	J. Trimble
3/20, 4/16	P'town	24, 22	V.O.	Thick-billed M	Aurre		
Lesser Black-	backed Gull			4/10, 30	P'town	3	J. Trimble
thr	Reports of i	ndiv. from	10 locations	Razorbill			
Glaucous Gul				3/2, 4/16	P.I.	80, 10	T. Wetmore
3/1	Lynn B.	1 1 W	/ R. Schain	3/19, 4/14	P'town	40, 18	B. Nikula
3/2	Gloucester	1	J. Nelson	3/20, 4/2	N. Truro	65, 15	B. Nikula
3/5	Turners Fal	ls 2	T. Pirro	3/27	Wellfleet	38	R. Stymeist#
3/12	Winthrop	1 1 W	R. Stymeist	Black Guillen	not		
3/13	P.I.	1	S. Sullivan#	3/4	Gloucester (B	B.R.) 1	T. Robben
3/19, 4/30	P'town	1	B. Nikula	3/27	Marshfield	8	E. LeBlanc#
4/2	Wellfleet	1	B. Nikula	4/21	P'town	1	P. Trull

PARAKEETS THROUGH FINCHES

The three East Boston Monk Parakeets were seen in mid-April adding fresh nesting material to their home. A very early Yellow-billed Cuckoo was found at Mount Auburn Cemetery on April 29, only the ninth April record in the last ten years; last year a freshly killed Yellow-billed Cuckoo was picked up in Salisbury on March 28, the earliest date ever for this species. Among the owl reports this period, a pair of Great Horned Owls nesting at Mt. Auburn Cemetery was without a doubt the most watched of all time. Barn Owls were noted only on Martha's Vineyard, and a high count of ten Barred Owls was noted in Monterey in southern Berkshire County. It was a bad year for Snowy Owls in Massachusetts; the only two were birds captured and banded at Logan Airport by Norm Smith. Whip-poor-wills were heard calling by mid-month in Fitchburg, and the first Ruby-throated Hummingbirds were reported on April 22. At least thirty hummingbirds were reported in April, compared to just three in April 2010. A **Red-headed Woodpecker**, a rare and local bird in the state, was reported in Sturbridge, and 27 Yellow-bellied Sapsuckers were tallied along the roads of Monterey.

A **Scissor-tailed Flycatcher** was a one-day visitor on Plum Island on April 29; the only other April report of this species was from Harwichport on April 21, 1968. There were at least 15 reports of Northern Shrike throughout the state through April 7 compared to just three reports during the same period last year. A stalled weather system with fog and rain followed by clearing and a westerly wind brought the first big wave of spring migrants to our area on April 22. Double-digit numbers of Ruby-crowned Kinglets and Hermit Thrushes were reported from a wide area. Another fallout occurred on April 26, when warm air brought in many more migrants; at Plum Island 85 species were noted that day, with the diversity and numbers for many species being about a week earlier than normal. A high count of 27 warbler species was reported during April, compared with 20 species last April. Notable were a **Golden-winged Warbler** in Medford, an incredibly early **Prothonotary** in Brewster on April 6, four **Yellow-throated Warblers**, and very early Tennessee and Wilson's warblers.

Bohemian Waxwings were reported in good numbers through April 1, making it the fifth flight year since 2000. The highest concentrations were seen in Berkshire County, with none reported east of Worcester County. Thirteen species of sparrows were noted during the period, with honors going to the **Harris's Sparrow**, which was present on Duxbury Beach from November 21, 2010. Good numbers of Fox Sparrows were noted, especially in late March and early April. An early Lincoln's Sparrow was seen in Amherst on April 27, and late American Tree Sparrows lingered through the end of April in West Roxbury and on Plum Island. A **Yellow-headed Blackbird** was photographed in Somerset, and a Dickcissel was noted on Nantucket. Large flocks of Common Redpolls continued to be reported from a wide area of the state, with a total of four **Hoary Redpolls** carefully identified among redpoll flocks in Concord, Marlboro, and Cumberland Farms. Single numbers of Evening Grosbeaks were seen in many areas from Worcester County west, with one flock of 64 noted in Royalston. *R.H. Stymeist*

Monk Parakee	et			4/25	N. Beverly	9	W. Tatro
thr	E. Boston	3	V.O.	4/25	Lowell	3	M. Baird
Yellow-billed	Cuckoo			4/28	Mt.A.	3	J. Offermann
4/29	Mt.A.	2 B	BC (L. O'Brvan)	4/28	Boston (Fens)	4	R. Schain
Barn Owl				4/29	Wavland	3	BBC (G. Long)
3/27	Edgartown	1	J. Hove#	4/29	Gloucester	10	S. Hedman
4/23	Chilmark	2	M. Keleher#	Ruby-throate	d Hummingbird		~
Eastern Screed	ch-Owl	-		4/22	Brewster	1	P Trull
3/4	Boston (A A)	2	B Mayer	4/24	Fairhaven	1	P Perry
3/5	Cumb Farms	2	SSBC (V Zollo)	4/24	Manomet	1 m	n K Dovon#
3/16	Medford	2	P Devaney	4/25-30	Reports of 1-3 i	ndiv f	rom 25 locations
3/19	Monson	2	M Lynch#	Belted Kingf	isher		Tom 25 Toeutions
Great Horned	Owl	2	Mi. Lynein	4/6	Littleton	2	M Rosenstein
3/6	N Andover	1 n	D Chickering#	4/9	S Amherst	2	B Zaida
3/8	Groveland	1 n	D. Chickering#	4/9	Natick	2	I Mattuchio
3/26	Plymouth	1 n	K Dovon	4/11	Sudbury	2	D Swain
4/thr	Westboro	ad 1 voi	K. Doyon	4/26	PI	2	R Heil
4/thr	Mt A	r_{3}	1 V.O.	4/27	Inswich	3	I Borry
4/111	Seekonk	ad 2 vg	K Bartels	Red-beaded	Woodpecker	5	J. Delly
4/2	Hamilton	ad, 2 yg	P Brown	4/10	Sturbridge	1	M Lynch#
4/3	Northboro	ad, 2 yg	P. doGroof	Pod balliad V	Voodpocker	1	Ivi. Lynch#
4/12	Unton	au, 1 yg 1	N Daulson	2/12	Monson	11	M Lunch#
4/13	Wohum (HD)	pi, 2yg	D Innolito	2/10	S Dortmouth	11	G d'Entromont
Shown Owl	wobulli (III)	au, 2 yg i	i i. ippointo	3/19	Jinghom	4	G. d'Entrement#
2/1 4/10	Poston (Logan	.) 1	N. Smith	4/9	Inigham	5	U. U EIIIIeIIIoIII#
5/1, 4/10 Porred Out	Boston (Logan	1) 1	in. Simui	4/20	Modford	5	J. Delly
Darred Owr	Middlahaaa	2	SEDC (V. Zalla)	4/30	Owahaa ID A	5	M Longh#
3/3 2/10	Manager	3	SSBC (V. Z0110)	4/30 Vallass hallia	Quadog IBA	9	M. Lynch#
5/19	Compand	4	M. Lynch#	renow-beine	Malaaaa	1	D L Iamali
4/10	Unter	2	C. Winstanley	3/3	Merose	1	$D_{1} + 1$. Jewell
4/17	Opton	10	N. Paulson	5/18	MLA.	1	K. Stymeist
4/22	Monterey	10	M. Lynch#	4/8	Princeton	2	J. Dekker
Short-eared U	WI D	1	D D	4/11	P.I.	8	C. Gras
3/6, 4/20	Duxbury B.	1	R. Bowes	4/17	New Salem	4	B. Latiey
3/25	w. warren	1 ad	B. Zajda detalis	4/22	Monterey	26	M. Lyncn#
4/3	Cumb. Farms	2	H. Levesque	4/24	Boston (PG)	5	R. Stymeist#
4/7-24	Burrage Pd W	MAI	J. Sweeney	4/25	Quabbin Pk	/	M. Lynch#
4/22	Newbury	1	P. + F. Vale#	4/26	Boston (Fens)	- 2	P. Peterson
4/30	P.I.	1	S. Riley	4/30	Ashburnham 4-	5 /	C. Caron
Northern Saw	-whet Owl		N D 	Hairy Woodp	becker	_	DDG (D X III III
3/1-22	Woburn (HP)	1	M. Rines#	4/10	Woburn (HP)	1	BBC (P. Ippolito#)
3/14	Burlington	1	M. Rines	Northern Flic	cker		B W 11
3/27-4/3	IRWS	1	v.o.	4/12	P.I.	27	R. Heil
4/2	Winchendon	1	C. Caron	4/25	Quabbin Pk	10	M. Lynch#
4/3	IRWS	1	J. Berry#	Pileated Woo	dpecker		
4/3	Squantum	1	L. Tyrala#	3/3	Carlisle	2	T. Brownrigg
4/17	Upton	1	N. Paulson	3/29	Petersham	5	N. Paulson
4/22	Monterey	2	M. Lynch#	4/9	WMWS	2	G. Dysart
Eastern Whip-	poor-will			4/9	Quabbin (G43)	3	S. Ricker#
4/19	Fitchburg-8	1	C. Caron	4/22	Monterey	5	M. Lynch#
4/27	Southwick	1	S. Kellogg	4/24	Ipswich	pr n	J. Berry#
4/29	Amherst	1	J. Rose	4/24	Concord	2	S. Perkins#
Chimney Swif	İt			4/30	Bolton Flats	2	N. Paulson
4/21	Waltham	2	W. Freedberg	Least Flycate	cher		
4/25	W Springfield	9	J. Zepko	4/25	Longmeadow	1 .	A. & L. Richardson

I goot Elvootal							
Least Flycalci	ner (continued)			4/30	Westboro	6	S. Arena
4/27	PI	2	D Chickering	Red-eved Vin	eo		
4/20	Jamaica Plain	1	T Bradford	1/28	Poston (Eans)	1	P Schain
4/27	Janiaica Flain	1	1. Diautoiu	4/20	Doston (Pens)	1	R. Scham
Eastern Phoet	be			4/28	Mt.A.	1	R. Stymeist#
3/5	Lee & Cole R.	1	M. Lynch#	4/30	Medford	1	M. Rines
3/13	Fairhaven	1	C. Longworth	4/30	Wompatuck S	P 1	J. Offermann
3/13	Everett	1	K Hartel	Fish Crow	·····		
3/13	Everen	1	K. Hallel	1 ISH CIOW	C 1 F	0	L D : "
3/21	Groton	2	B. Hill	3/15	Cumb. Farms	9	I. Davies#
4/5	P.I.	83	R. Heil	3/17	Canton	5	P. Peterson
4/7	Melrose	10	D. + I. Jewell	3/27	Marshfield	15	E. LeBlanc#
4/10	PI	15	B Harrie#	3/27	Wellfloot	20	B Nikula
4/10	We want of CD	1.1	L Off	5/21	E i i i	20	D. Nikula
4/30	wompatuck SP	11	J. Offermann	4/2	Framingnam	30	B. Harris
Great Crested	Flycatcher			4/10	Longmeadow	5	S. Kellogg
4/24	Westport	1	M. Lvnch#	4/11	Dedham	11	S. Perkins#
4/26	PI	6	R Heil	4/24	Mattanan (BN	C) 10	R Stymeist
4/20	1.1. A mala annaé	4	I Davias	Common Dos	Mattapan (DI)	C) 10	R. Brymeist
4/20	Annierst	4	I. Davies	Common Kav			
4/28	Mt.A.	3	R. Stymeist#	thr	Quincy	pr n	V. O.
4/29	W. Gloucester	3	J. Nelson	3/2	W. Roxbury	pr	P. Peterson
4/30	Wompatuck SP	7	I Offermann	3/3	Marion	2	M Mauer
1/20	Modford	2	M Dinos	2/7	Marrimaa	2	D D Duvton
4/50 F + K 1	Medioru	3	WI. KIIIes	5/1	Merrinac	2	D. + D. DUXION
Eastern Kingt	oird			3/25	w. warren	2	B. Zajda
4/21	DFWS	1	D. Swain	3/26	Quabbin Pk	pr 1 yg	M. Lynch#
4/22	Woburn (HP)	1	M Rines	3/28	Unton	4	N Paulson
1/23	Grovaland	2	D S Larson	1/2	Winchandon	2	C Caron
4/25	Gioveland	3	D. + S. Larson	4/2	whichendon	2	C. Caloli
4/25	Mt.A.	3	M. Rosenstein	4/6	Topsfield	4	S. McGrath
4/27	Westboro	3	N. Paulson	4/15	Barre Falls	10	B. Kamp
4/27	Medford	3	M Rines#	4/25	Petersham	$nr + 2 v\sigma$	M Lynch#
4/20	Marklahaad	2	C MaCrath	I ambad I amb	1 etersnam	pi 2 ys	WI. Lynenn
4/29	Marbieneau	3	S. MCGIau	Homed Lark		10	
4/29	Wompatuck SP	3	R. Schain	3/5	Westport	49	M. Lynch#
4/30	Boston (F.Pk)	4	R. Stymeist#	3/12	P.I.	23	R. Heil
Scissor-tailed	Flycatcher			3/20	Saugus (Bear	C > 30	S Zendeh#
4/20	DI	1	W Totro#	2/21	A aton	25	W Hutcheson
4/29	F.I.	1	w. 1au0#	5/21	Acton	55	w. Hutcheson
Northern Shri	ke			3/27	Newbury	60	E. Nielsen
3/1-4/7	P.I.	1	V.O.	3/29	Cumb. Farms	35	J. Sweeney
3/5	Moran WMA	1 ad	B Zaida#	4/2	Truro	20	I Young
2/9	Wasdand	1	D. Llauria	4/7	Monthematon	120	T Case
5/8	wayiand	1 mm.	B. Harris	4/7	Northampton	150	I. Gagnon
3/12	Truro	1	J. Trimble#	4/20	Hadley	8	B. Zajda
3/13	Windsor	1	G. Hurley	Purple Martin	I		
3/13-17	Hadley	1	I Rose	$\frac{1}{4}$ /5	PI	4 m	R Heil
2/12	Dittafiald	1	C Hurley	4/0	1.1. Maabaaa	10	M Kalahan
5/15	Piusiieid	1	G. Hurley	4/8	Mashpee	10	M. Keleher
3/13	Eastham	1	K. Miller	4/9, 26	Rehoboth	3, 28	R. Marr
3/17	Northampton	1	T. Gagnon	4/21	W. Warren	1 f	B. Zaida
3/19	Burrage Pd WMA	1	P O'Neill#	4/24	Lakeville	80	M Sylvia
2/10	Dullage I u Wiwin			1/20	Lakevine	00	1v1. 5 y1 v la
	Coliobarra	1			1333/33/0		D Calin
5/19	Salisbury	1 imm	S. Grinley#	4/29	DWWS	2	R. Schin
3/20	Salisbury S. Dart. (A.Pd)	1 imm 1 ad	S. Grinley# S. Arena	4/29 Tree Swallow	DWWS	2	R. Schin
3/20 3/23	Salisbury S. Dart. (A.Pd) New Salem	1 imm 1 ad 1	S. Grinley# S. Arena B. Lafley	4/29 Tree Swallow 3/6	Sharon	2	R. Schin M. Rigano
3/20 3/23 3/26	Salisbury S. Dart. (A.Pd) New Salem Carlisle	1 imm 1 ad 1	S. Grinley# S. Arena B. Lafley	4/29 Tree Swallow 3/6 3/7	DWWS Sharon Halifax	2 1 8	R. Schin M. Rigano L. Sweeney
3/19 3/20 3/23 3/26	Salisbury S. Dart. (A.Pd) New Salem Carlisle	1 imm 1 ad 1 1	S. Grinley# S. Arena B. Lafley A. Ankers	4/29 Tree Swallow 3/6 3/7 2/12	DWWS Sharon Halifax	2 1 8	R. Schin M. Rigano J. Sweeney
3/20 3/23 3/26 4/2	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro	1 imm 1 ad 1 1 1 ad	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena	4/29 Tree Swallow 3/6 3/7 3/13	DWWS Sharon Halifax Concord (NAG	2 1 8 C) 4	R. Schin M. Rigano J. Sweeney S. Perkins#
3/20 3/23 3/26 4/2 White-eyed V	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo	1 imm 1 ad 1 1 1 ad	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena	4/29 Tree Swallow 3/6 3/7 3/13 4/3	DWWS Sharon Halifax Concord (NAC Cumb. Farms	2 1 8 C) 4 500	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen)
3/20 3/23 3/26 4/2 White-eyed V 4/22-30	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I.	1 imm 1 ad 1 1 ad 1 ad	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wavland	2 1 8 C) 4 500 229	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich	1 imm 1 ad 1 1 ad 1 ad 1 N	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleber	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16	DWWS Sharon Halifax Concord (NAC Cumb. Farms Wayland Inswich	2 1 8 C) 4 500 229 200	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris I. Berry
3/19 3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich	1 imm 1 ad 1 1 ad 1 ad 1 M 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21	DWWS Sharon Halifax Concord (NAC Cumb. Farms Wayland Ipswich	2 1 8 C) 4 500 229 200	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry
3/17 3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland	1 imm 1 ad 1 1 ad 1 ad 1 N 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21	DWWS Sharon Halifax Concord (NAC Cumb. Farms Wayland Ipswich W. Warren	2 1 8 2) 4 500 229 200 300	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo PI. Sandwich Wayland Falmouth	1 imm 1 ad 1 1 ad 1 ad 1 N 1 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris S. Sutherland	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wayland Ipswich W. Warren Richmond	2 1 8 500 229 200 300 300 300	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch#
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/27 4/29	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A.	1 imm 1 ad 1 1 1 ad 1 1 1 1 2	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena V. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 4/21	DWWS Sharon Halifax Concord (NAt Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick	2 1 8 500 229 200 300 300 430	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kelloeg
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/29 Yellow-throat	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo	1 imm 1 ad 1 1 ad 1 ad 1 N 1 1 2	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 4/21 4/21 Northern Rou	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gbwinged Swa	2 1 8 C) 4 500 229 200 300 300 430	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/29 Yellow-throate	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Aclington Bas	1 imm 1 ad 1 1 ad 1 N 1 1 2 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Bings	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 4/21 4/21 Northern Rou	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swa Wortwingter	1 8 500 229 200 300 300 430 illow	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/27 4/29 Yellow-throat 4/28	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Arlington Res.	1 imm 1 ad 1 1 ad 1 ad 1 N 1 1 2 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Rines	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 4/21 Northern Rou 4/6	DWWS Sharon Halifax Concord (NA4 Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swa Westminster	2 1 8 C) 4 500 229 200 300 300 430 dlow 1	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg T. Pirro
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/27 4/29 Yellow-throate 4/29	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Arlington Res. Needham	1 imm 1 ad 1 1 ad 1 ad 1 N 1 1 2 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Rines P. Oehlkers	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 4/21 4/21 Northern Rou 4/6	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swaa Westminster Waltham	2 1 8 500 229 200 300 430 110w 1 2	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg T. Pirro D. Scott
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/29 Yellow-throate 4/28 4/29 4/29	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Arlington Res. Needham Milton	1 imm 1 ad 1 1 ad 1 ad 1 1 1 2 1 1 1 1 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Rines P. Oehlkers P. O'Neill	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 4/21 4/21 4/21 Northern Rou 4/6 4/9	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swa Westminster Waltham Northampton	2 1 8 500 229 200 300 300 430 illow 1 2 2	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg T. Pirro D. Scott I. Davies
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/29 Yellow-throate 4/28 4/29 4/29 4/20	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Arlington Res. Needham Milton P.I	1 imm 1 ad 1 1 ad 1 ad 1 ad 1 N 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Rines P. O'ehlkers P. O'Neill E. Labato	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/2 4/2 4/2 4/2 4/2 4/2 4/2 4/2	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swa Westminster Waltham Northampton Mt A	2 1 8 500 229 200 300 430 430 1 2 5	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg T. Pirro D. Scott I. Davies L. Kramer
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/27 4/29 Yellow-throate 4/28 4/29 4/29 4/20	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Arlington Res. Needham Milton P.I. Cill	1 imm 1 ad 1 1 ad 1 ad 1 n 1 1 1 1 1 1 1 1 1 1 1 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Rines P. Oehlkers P. O'Neill E. Labato J. Swith	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 4/21 Northern Rou 4/6 4/9 4/15 4/10	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swa Westminster Waltham Northampton Mt.A.	2 1 8 500 229 200 300 300 430 dlow 1 2 2 5 6	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg T. Pirro D. Scott I. Davies L. Kramer
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/29 Yellow-throate 4/28 4/29 4/20 4/30 4/30	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Arlington Res. Needham Milton P.I. Gill	1 imm 1 ad 1 1 ad 1 ad 1 n 1 1 1 1 1 1 1 1 1 1 1 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena V. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Rines P. O'sheill E. Labato J. Smith	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 Northern Rou 4/6 4/6 4/9 4/15 4/19	DWWS Sharon Halifax Concord (NA4 Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swa Westminster Waltham Northampton Mt.A. W. Peabody	1 8 500 229 200 300 300 300 430 Illow 1 2 5 6	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg T. Pirro D. Scott I. Davies L. Kramer R. Heil
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/27 4/29 Yellow-throate 4/28 4/29 4/29 4/29 4/30 4/30	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Arlington Res. Needham Milton P.I. Gill Upton	1 imm 1 ad 1 1 ad 1 ad 1 N 1 1 1 1 1 1 1 1 1 1 1 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Rines P. Oehlkers P. O'Neill E. Labato J. Smith N. Paulson	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 4/21 Northern Rou 4/6 4/9 4/15 4/19 4/21	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swaa Westminster Waltham Northampton Mt.A. W. Peabody W. Warren	2 1 8 500 229 200 300 430 110w 1 2 5 6 4	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg T. Pirro D. Scott I. Davies L. Kramer R. Heil B. Zajda
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/29 Yellow-throate 4/28 4/29 4/29 4/29 4/30 4/30 Blue-headed V	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Arlington Res. Needham Milton P.I. Gill Upton Vireo	1 imm 1 ad 1 1 ad 1 ad 1 n 1 1 1 1 1 1 1 1 1 1 1 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Rines P. O'ehllkers P. O'Neill E. Labato J. Smith N. Paulson	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 4/21 4/21 Northern Rou 4/6 4/9 4/19 4/19 4/21 Bank Swallow	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swa Westminster Waltham Northampton Mt.A. W. Peabody W. Warren V	1 8 500 229 200 300 430 (llow 1 2 2 5 6 4	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg T. Pirro D. Scott I. Davies L. Kramer R. Heil B. Zajda
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/27 4/29 4/29 4/29 4/29 4/29 4/29 4/30 4/30 Blue-headed V 4/11	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Arlington Res. Needham Milton P.I. Gill Upton Vireo Sheffield	1 imm 1 ad 1 1 ad 1 n 1 ad 1 N 1 1 1 1 1 1 1 1 1 1 1 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Rines P. O'Neill E. Labato J. Smith N. Paulson S. MacDonald	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swa Westminster Waltham Northampton Mt.A. W. Peabody W. Warren	2 1 500 229 200 300 430 110w 1 2 5 6 4 5	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg T. Pirro D. Scott I. Davies L. Kramer R. Heil B. Zajda
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/27 4/29 Yellow-throate 4/29 4/29 4/30 4/30 Blue-headed V 4/11	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Arlington Res. Needham Milton P.I. Gill Upton Vireo Sheffield Brookling	1 imm 1 ad 1 1 ad 1 1 ad 1 1 1 1 1 1 1 1 1 1 1 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Rines P. Oehlkers P. O'Neill E. Labato J. Smith N. Paulson S. MacDonald N. V	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 4/21 4/21 Northern Rou 4/6 4/9 4/15 4/19 4/19 4/21 Bank Swallow	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swa Westminster Waltham Northampton Mt.A. W. Peabody W. Warren	2 1 8 500 229 200 300 430 110w 1 2 5 6 4 5 2	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg T. Pirro D. Scott I. Davies L. Kramer R. Heil B. Zajda S. Perkins S. Valk-er
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/29 Yellow-throate 4/28 4/29 4/20 4/30 4/30 4/30 Blue-headed V 4/11 4/19	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Arlington Res. Needham Milton P.I. Gill Upton Vireo Sheffield Brookline	1 imm 1 ad 1 1 ad 1 1 ad 1 1 1 1 1 1 1 1 1 1 1 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena V. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Rines P. Oehlkers P. Oehlkers P. O'Neill E. Labato J. Smith N. Paulson S. MacDonald N. Yusuff	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/2 4/2 4/2 4/2 4/2 4/2 4/2 4/2	DWWS Sharon Halifax Concord (NAt Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swa Westminster Waltham Northampton Mt.A. W. Peabody W. Warren GMNWR Southwick	2 1 500 229 200 300 300 430 (llow 1 2 5 6 4 5 2 2	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg T. Pirro D. Scott I. Davies L. Kramer R. Heil B. Zajda S. Perkins S. Kellogg
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/27 4/27 4/29 Yellow-throate 4/28 4/29 4/29 4/30 4/30 Blue-headed V 4/19 4/19 4/19	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Arlington Res. Needham Milton P.I. Gill Upton Vireo Sheffield Brookline Medford	1 imm 1 ad 1 1 ad 1 1 ad 1 1 1 1 1 1 1 1 1 1 1 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Rines P. Oehlkers P. O'Neill E. Labato J. Smith N. Paulson S. MacDonald N. Yusuff R. LaFontaine	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 4/21 4/21 Northern Rou 4/6 4/6 4/9 4/15 4/19 4/21 Bank Swallow 4/13 4/20 4/21	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swa Westminster Waltham Northampton Mt.A. W. Peabody W. Warren	2 1 8 500 229 200 300 430 110w 1 2 5 6 4 5 2 3 3	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg T. Pirro D. Scott I. Davies L. Kramer R. Heil B. Zajda S. Perkins S. Kellogg B. Zajda
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/27 4/29 Yellow-throate 4/28 4/29 4/30 4/30 Blue-headed V 4/11 4/19 4/20	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Arlington Res. Needham Milton P.I. Gill Upton Vireo Sheffield Brookline Medford MNWS	1 imm 1 ad 1 1 1 ad 1 1 1 1 1 1 1 1 1 1 1 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena V. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Rines P. O'ehlkers P. O'Neill E. Labato J. Smith N. Paulson S. MacDonald N. Yusuff R. LaFontaine R. Heil	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 4/21 4/21 Northern Rou 4/6 4/9 4/15 4/19 4/21 Bank Swallow 4/13 4/20 4/21 4/21	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swa Westminster Waltham Northampton Mt.A. W. Peabody W. Warren W GMNWR Southwick W. Warren Wayland	2 1 8 500 229 200 300 430 430 110w 1 2 5 6 4 5 2 3 2 3 2	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg T. Pirro D. Scott I. Davies L. Kramer R. Heil B. Zajda S. Perkins S. Kellogg B. Zajda
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/27 4/29 4/29 4/29 4/29 4/29 4/30 4/30 Blue-headed V 4/11 4/19 4/19 4/19 4/20 4/24	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Arlington Res. Needham Milton P.I. Gill Upton Vireo Sheffield Brookline Medford MNWS Carlisle	1 imm 1 ad 1 1 ad 1 1 ad 1 1 1 1 1 1 1 1 1 1 1 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Rines P. O'heill E. Labato J. Smith N. Paulson S. MacDonald N. Yusuff R. LaFontaine R. Heil A. Ankers	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/22 4/21 4/22 4/21 4/22 4/21 4/22 4/21 4/22 4/21 4/22 4/21 4/22 4/21 4/22 4/21 4/22 4/21 4/22 4/21 4/22 4/21 4/22 4/20 4/23 4/23 4/20 4/23 4/23 4/20	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swa Westminster Waltham Northampton Mt.A. W. Peabody W. Warren W GMNWR Southwick W. Warren Wayland PI.	2 1 8 500 229 200 300 430 110w 1 2 2 5 6 4 5 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg T. Pirro D. Scott I. Davies L. Kramer R. Heil B. Zajda S. Perkins# K. Elwell
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/27 4/29 Yellow-throate 4/29 4/29 4/30 4/30 Blue-headed V 4/11 4/19 4/19 4/19 4/26	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Arlington Res. Needham Milton P.I. Gill Upton Vireo Sheffield Brookline Medford MNWS Carlisle PI	1 imm 1 ad 1 1 ad 1 1 ad 1 1 1 1 1 1 1 1 1 1 1 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Rines P. Oehlkers P. Ochlkers P. O'Neill E. Labato J. Smith N. Paulson S. MacDonald N. Yusuff R. LaFontaine R. Heil A. Ankers D U:'	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 4/21 4/21 4/21 Northern Rou 4/6 4/9 4/15 4/19 4/21 Bank Swallow 4/13 4/20	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swa Westminster Waltham Northampton Mt.A. W. Peabody W. Warren W. Peabody W. Warren W. Marren Southwick W. Warren Wayland P.I. Ouabec IB A	2 1 8 500 229 200 300 430 110w 1 2 5 6 4 5 2 3 3 3 3 3 3 3 3 3 3 3 3 3	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg T. Pirro D. Scott I. Davies L. Kramer R. Heil B. Zajda S. Perkins S. Kellogg B. Zajda S. Perkins# K. Elwell M. Lynch#
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3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/29 Yellow-throate 4/28 4/29 4/30 4/30 Blue-headed V 4/11 4/19 4/20 4/20 4/26 Warbling Vire 4/26 4/20	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Arlington Res. Needham Milton P.I. Gill Upton Vireo Sheffield Brookline Medford MNWS Carlisle P.I. o Boston (Fens) P.I.	1 imm 1 ad 1 1 1 ad 1 1 1 1 1 1 1 1 1 1 1 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Rines P. Oehlkers P. Oehlkers P. O'Neill E. Labato J. Smith N. Paulson S. MacDonald N. Yusuff R. LaFontaine R. Heil A. Ankers R. Heil P. Peterson R. Heil P. O'Nei'll	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 4/21 4/21 4/21 Northern Rou 4/6 4/6 4/9 4/15 4/19 4/21 Bank Swallow 4/13 4/20 4/20 4/20 4/20 4/20 4/20 4/20 4/20 4/20 4/20 4/20 4/20 4/20 4/20 4/20 4/20 4/20 4/20 4/20 4/21 4/21 Bank Swallow 4/15 4/20 4/20 4/20 4/20 4/20 4/21 4/21 Bank Swallow 4/15 4/20 4/20 4/20 4/20 4/20 4/20 4/20 4/21 4/21 Bank Swallow 4/15 4/20 4/20 4/20 4/20 4/20 4/21 4/20 4	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swa Westminster Waltham Northampton Mt.A. W. Peabody W. Warren Work Southwick W. Warren Wayland P.I. Quabog IBA P'town W. Warren Southwick	1 8 500 229 200 300 430 110w 1 2 2 5 6 4 4 5 2 3 3 3 1 2 2 3 3	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg T. Pirro D. Scott I. Davies L. Kramer R. Heil B. Zajda S. Perkins S. Kellogg B. Zajda S. Perkins K. Elwell M. Lynch# R. Schain B. Zajda
3/20 3/23 3/26 4/2 White-eyed V 4/22-30 4/27 4/27 4/27 4/29 4/29 4/29 4/29 4/29 4/29 4/29 4/20 4/30 4/30 8lue-headed V 4/11 4/19 4/19 4/19 4/20 4/24 4/26 4/26 4/29	Salisbury S. Dart. (A.Pd) New Salem Carlisle Westboro ireo P.I. Sandwich Wayland Falmouth Mt.A. ed Vireo Arlington Res. Needham Milton P.I. Gill Upton Vireo Sheffield Brookline Medford MNWS Carlisle P.I. o Boston (Fens) P.I. Milton	1 imm 1 ad 1 1 1 ad 1 1 1 1 1 1 1 1 1 1 1 1 1	S. Grinley# S. Arena B. Lafley A. Ankers S. Arena J. Landry + v.o. M. Keleher B. Harris S. Sutherland R. Stymeist M. Rines P. O'heill E. Labato J. Smith N. Paulson S. MacDonald N. Yusuff R. LaFontaine R. Heil A. Ankers R. Heil P. Peterson R. Heil P. O'Neill	4/29 Tree Swallow 3/6 3/7 3/13 4/3 4/7 4/16 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/2 4/21 4/20 4/21 4/20 4/20 4/20 4/20 4/20 4/20 4/21 4/22 4/20 4/21 4/22 4/20 4/21 4/22 4/20 4/21 4/22 4/20 4/21 4/22 4/20 4/21 4/22 4/20 4/21 4/22 4/20 4/21 4/22 4/21 4/22 4/21 4/22 4/21 4/22 4/21 4/22 4/21 4/22 4/21 4/22 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/22 4/20 4/22 4/23 4/30 4/25 4/2	DWWS Sharon Halifax Concord (NAG Cumb. Farms Wayland Ipswich W. Warren Richmond Southwick gh-winged Swa Westminster Waltham Northampton Mt.A. W. Peabody W. Warren Wayland P.I. Quabog IBA P'town W. Warren Southwick	2 1 500 229 200 300 430 110w 1 2 2 5 6 4 5 2 3 3 1 2 3 3 1 2 3 3 3 1 2 3 3 3 3 3 3 3 3 3 3 3 3 3	R. Schin M. Rigano J. Sweeney S. Perkins# SSBC (Petersen) B. Harris J. Berry B. Zajda M. Lynch# S. Kellogg T. Pirro D. Scott I. Davies L. Kramer R. Heil B. Zajda S. Perkins# K. Elwell M. Lynch# R. Schain B. Zajda S. Kellogg

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Cliff Swallow	(continued)			4/23	Westboro	5	N. Paulson
4/28	Southwick	1	S. Kellogg	4/24	P.I.	7	F. Vale
4/5	Ы	2	T Wetmore	4/29	Wompatuck SP	25	R Schain
4/6	Waltham	2	D. Scott	4/30	Bolton Flats	- 9	N. Paulson
4/6	Truro	6	L. Cole	Eastern Blu	uebird		
4/7	Wayland	4	B. Harris	3/6	Harwich	21	A. Curtis
4/12	P.I. GMNWR	17	K. Hell S. Perkins	3/26	S. Dart. (A.Pd)	16	E. Nielsen P. Sowizral
4/23	Westboro	25	N. Paulson	4/10	Ipswich	18	M. Brengle
Red-breasted I	Nuthatch			4/26	Concord	10	C. Winstanley
3/17	Ipswich	6	J. Berry	Veery			
3/29	Petersham	23	N. Paulson	4/22	Amherst	1	L. Therrien#
3/30 4/2	P.I. Nantucket	15	B. Harris K Blackshaw#	4/26	PI	2	J. Smith R Heil
4/10	Upton	9	N. Paulson	4/27	Quabbin (G35)	ĩ	B. Zajda
4/10	P'town	10	B. Nikula	4/29	Milton	1	A. Joslin
4/16	Wompatuck SP	6	G. d'Entremont	4/30	Medford	1	M. Rines
4/22 Prouve Croope	Monterey	9	M. Lynch#	Hermit Thi	ush Soliahum	1	S. MaCroth
3/25	Recket	5	R Laubach	3/29	Lincoln	1	B. McGrain
4/10	Southwick	4	S. Kellogg	3/29	Waltham	1	J. Forbes
4/11	P.I.	6	P. + F. Vale	4/10	P.I.	20	B. Harris#
4/16	Wompatuck SP	4	G. d'Entremont	4/11	Springfield	13	A. & L. Richardson
4/20	Brookline	6	P. Peterson	4/12	E. Boston (B.I.)	32	P. Peterson
4/21	Springfield	4	A. & L. Richardson	4/20		14	R. Heil
4/22	Petersham	8	м. паley M Lynch#	4/22	Ashburnham	14	C Caron
House Wren	retersham	0	iii. Lynein	Wood Thru	Ish	15	e. curon
4/14	Chestnut Hill	1	S. Simpson	4/21	Hadley	1	P. Yeskie
4/15	Granville	1	J. Wojtanowski	4/25	Russell	1	S. Kellogg
4/25	Medford	4	M. Rines	4/27	P.I.	1	P. Cooney
4/28	Ashburnham	2	R. Schain	4/27 20	Quabbin (G35) Medford	1 4	B. Zajda M. Rines#
4/29	W Gloucester	2	L Nelson	4/28	Sharon	1, 4	G d'Entremont#
Winter Wren		-		Gray Catbi	rd		
4/10	Upton	2	N. Paulson	3/19	S. Dartmouth	3	G. d'Entremont
4/12	P.I.	3	R. Heil	4/25	Amherst	2	I. Davies
4/15	Medford Wompstuck SP	2	R. LaFontaine	4/27	E. Boston (B.I.)	6	P. Peterson
4/20	Ashburnham 4-5	6	C Caron	4/29	PI	6	P + F Vale
Marsh Wren	rishburnhunn + 5	0	e. curon	4/30	W. Barnstable	18	M. Keleher
3/5	Acoaxet	1	M. Lynch#	4/30	Boston (F.Pk)	9	P. Peterson
4/10	W. Newbury	1	S. McGrath#	Brown Thr	asher		
4/11	Harwich	1	B. Nikula	3/26	S. Dart. (A.Pd)	1	P. Champlin#
4/12	Westboro	1	A. Diagg#	4/12	Woburn (HP)	2	R LaFontaine
4/30	P.I.	4	N. Landry	4/23	Westboro	2	N. Paulson
4/30	W. Roxbury (MP)) 1	R. Stymeist#	4/25	Boston (Fens)	5	R. Schain
Golden-crown	ed Kinglet	_		4/29	P.I.	10	T. Spahr#
4/5	Randolph	5	P. Peterson	American I	Pipit	1	D II.I
4/0	Melrose	4	D + L Jewell	3/12	Cumb Farms	2	I Trimble#
4/8	P.I.	10	T. Wetmore	3/13	Fairhaven	ĩ	C. Longworth
4/8	Nahant	6	L. Pivacek	4/3	Hadley	1	S. Surner
4/10	P.I.	26 ł	B. Flemer	4/8	Mashpee	1	M. Keleher
4/10	P'town	7	B. Nikula B. Stumpist	4/10 Rohamian	P.I. Worwing	1	T. Wetmore
4/15	Boston (FPk)	2	P Peterson	3/4	Florence	43	T Gagnon
Ruby-crowned	l Kinglet	2	1.100015011	3/5	Windsor	160	T. Dorazio
3/28	Cambr. (Danehy)	1	R. Stymeist	3/9	Great Barringtor	n 90	C. Blake
4/7	Holyoke	5	T. Gagnon	3/12	Lenox	150	R. Laubach
4/15	Mt.A.	7	R. Stymeist	3/12	New Salem	67	S. Surner
4/20 4/24	C Quabbin	23 24	K. Hell I. Therrien	5/12 3/13	Cheshire	50	1. Gagnon G Hurley
4/25	Petersham	32	M. Lynch#	3/13	HRWMA	103	V. Zollo#
4/26	Belmont	24	R. Stymeist	3/14	Chesterfield	130	T. Gagnon
4/26	P.I.	52	Ř. Heil	4/1	Turners Falls	36	Z. Jakub
4/27	Medford	21	M. Rines#	Cedar Wax	wing	100	T (
Blue-gray Gna	Reatcher Pittsfield	1	N Mola	3/12	Northampton	100	I. Gagnon
4/16	Woburn (HP)	1	M Rines#	3/27	Georgetown	96	P + F Vale
4/21	Springfield	3	A. + L. Richardson	5,21	00015010111	20	1 1. vale

Blue-winged V	Warbler			4/24	Fall River	1	L. Abbey
4/27, 29	Medford	1, 3	M. Rines#	4/26	P.I.	10	R. Heil
4/27	P.I. Natick	1	J. Carroll	4/27 Blackburnier	Medford	6	M. Rines#
4/27	Brookline	1	D Tobias	4/26	PI	2 m	R Heil
4/27	Amherst	1	I. Davies	4/26	Concord	1 ph	C. Winstanley
4/27	Lenox	1	G. Hurley	4/26	GMNWR	1	S. Wheelock#
4/30	Westboro	7	S. Arena	4/26	Longmeadow	1	E. Rutman
Golden-wing	ed Warbler	1	M Dimen	4/27	Medford	3	M. Rines#
4/30 Browstor's W	Mediora	1	M. Kines	4/30 Vellow-thros	Asnburnnam 4-5	0	C. Caron
4/27	Medford	1 m	P. + F. Vale	4/16-30	Jamaica Plain	1 ph	J. Miller + v.o.
4/29	Acton	1 m	L. Grundstrom	4/19	W. Peabody	1	R. Heil
Tennessee Wa	rbler			4/27	Concord	1	D. Sibley
4/29	Medford	1 m	M. Rines	4/29	MNWS	1	C. Lapite
Orange-crown	Reston (EPk)	1	P Stympist#	Pine Warbler	Nouton	1	P Gilmora
Nashville War	bler	1	K. Stymeist#	4/5	Randolph	2	P Peterson
4/25	Amherst	1	I. Davies	4/11	Sudbury	7	D. Swain
4/25	Petersham	1	M. Lynch#	4/16	Ipswich	7 m	J. Berry
4/26	P.I.	2	R. Heil	4/16	Wompatuck SP	15	G. d'Entremont
4/29	Medford	7	M. Rines	4/18	Sudbury	24	L. Joyal
4/29	MI.A. Boston (EUC)	2	K. Stymeist	4/19	W. Peabody	20	K. Hell M. Kalahar
Northern Paru	la	2	1. 1 actol#	4/27	Quabbin (G35)	22	B Zaida
4/17	Woburn (HP)	1	K. Sweadner	Prairie Warbl	ler		Di Eujau
4/24	Fairhaven	1	P. Perry	4/21	Duxbury	1	S. Hecker
4/25	Sandwich	1	M. Keleher	4/28	Woburn (HP)	1	M. Rines
4/30	Mt.A.	13	G. d'Entremont#	4/28	Mt.A.	1	J. Offermann#
4/30 Vellow Warbl	Mediora	21	M. Kines	4/29	P.I. Wachusett Res	1	I. Spanr# N. Paulson
4/19	GMNWR	1	C Winstanley	Palm Warble	r	1	IN. I autsoli
4/19	Bridgewater	2	R. Finch	3/6-31	Harwich	1	A. Curtis
4/23	Westboro	10	N. Paulson	4/5	Randolph	2	P. Peterson
4/28	Bolton Flats	28	D. Swain	4/5-30	P.I.	28 ma	K R. Heil
4/29	P.I. Milton	15	T. Spahr#	4/7	Holyoke Dittofiald	40	T. Gagnon
4/29	Mattanan (BNC)	10	R Stymeist#	4/19	Medford	40 34	M Rines#
Chestnut-side	1 Warbler	, 14	R. Stymeista	4/21	P'town	25	B. Nikula
4/26	Gill	1	J. Smith	4/26	Concord	75	C. Winstanley
4/27	Medford	1	M. Rines#	Black-and-w	hite Warbler		'
4/30	Boston (F.Pk)	1	R. Stymeist#	4/19	Middleboro	2	H. + J. Levesque
4/30	Concord	1	M. Lyncn#	4/19	Winchester PI	15	R. LaFontaine
Magnolia War	bler	1	C. Whistanley	4/29	Medford	12	M Rines
4/26	Amherst	1	I. Davies	4/29	Mt.A.	10	C. Cook
4/29	Ipswich	1 m	J. Berry	4/30	Wompatuck SP	23	J. Offermann
4/29	Medford	1	M. Rines	American Re	edstart		
4/30 Dia dia dia mandra	Mattapan	1	R. Stymeist#	4/26	P.I. Compand	1 m	R. Heil
A/25	Amberst	1	I Therrien	4/27	Amberst	$\frac{2}{2}$	L Therrien
4/26	P.I.	1 b	B. Flemer	4/30	Natick	1 m	J. Normandin
4/27	Waltham	1	D. Scott	4/30	Wachusett Res.	1	N. Paulson
4/29	Carlisle	1	A. Ankers	4/30	Wompatuck SP	1	M. Salett
4/29	Wompatuck SP	2	R. Schain	Prothonotar	y Warbler		D Class
4/29	Medford Mt A	4	M. Rines	4// Worm optin	Brewster g Worblor	1	D. Clapp
Yellow-rumpe	d Warbler	5	C. COOK	4/27	PI	1	B Buxton
3/8	Wayland	1	B. Harris	4/27	Manomet	1 b	T. Lloyd-Evans#
3/20	W. Roxbury (MI	?) 3	M. Kaufman	4/29	Wompatuck SP	3	R. Schain
4/18	Westboro	23	N. Paulson	4/29-30	Mt.A.	1	C. Cook
4/19	W. Peabody	35	R. Heil	4/29-30	Medford	1	M. Rines
4/20	Concord	120	C Winstanley	4/24	Fall River	1	I Abbey
4/27	P'town	100	B. Nikula	4/26	Southwick	2	S. Kellogg
4/27	Medford	225	M. Rines#	4/28	Sharon	3	G. d'Entremont#
4/29	Ashburnham	123	C. Caron	4/29	Milton	6	A. Joslin
Black-throated	d Green Warbler	4	T D '	4/30	Wompatuck SP	45	J. Offermann
4/22	Westminster	1	T. Pirro	Northern Wa	terthrush	1	D L Iow-11
4/24 4/24	Belchertown	1	J. Dekker	4/12	Pittsfield	1	D. + I. Jewell
4/24	Quabbin Pk	1	L. Therrien	4/23	Nahant	1	S. Grinlev#
4/24	Boxford (C.P.)	1	S. Grinley#	4/27	E. Boston (B.I.)	2	P. Peterson

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Northern Waterthrush (continued)				3/24	Lincoln	10	P. Peterson
4/29	Ipswich	2 m	J. Berry	4/2	Quabbin Pk	14	M. Lynch#
4/29	P.I.	4	T. Spahr#	4/3	Turners Falls	11	S. Surner
4/29	Wompatuck SP	1	R. Schain	4/5	P.I.	10	R. Heil
Louisiana wat	Shoffiold	1	6 MapDonald	4/0	Westminster	9	T. Colling
4/11	Nahant	1	J. Divecol	4/23 Lincoln's Spa	Lellox	0	I. Comins
4/11	Southwick	1	S Kellogg	1/27	Amberst	1	I Davies
4/11	Medford	1	R LaFontaine#	Swamp Sparr	ow	1	I. Davies
4/25	Northfield	8	M Taylor#	3/19	Westboro	2	N Paulson
4/30	Unton	2	N Paulson	3/20	PI	2	S Sullivan#
Common Yelle	owthroat	2	itti i uuison	4/5	Nahant	5	L Pivacek
4/12	Melrose	1 m	D. Jewell#	4/6	Boston (PG)	10	F. Bouchard
4/24	N. Truro	1	J. Young	4/22	P.I.	16	R. Schain
4/30	Westboro	8	S. Arena	4/29	Ashburnham	11	C. Caron
4/30	W. Barnstable	3	M. Keleher	White-throate	d Sparrow		
4/30	Bolton Flats	8	N. Paulson	3/19	S. Dartmouth	55	G. d'Entremont
Hooded Warbl	er			4/23	Westboro	28	N. Paulson
4/26-27	P.I.	1	S. Haydock	4/30	Boston (F.Pk)	35	P. Peterson
4/27	Nahant	1 m	D. Wilkinson	Harris's Span	rrow		
4/28-29	MNWS	1 m	J. Smith	3/1-4/28	Duxbury B.	1	R. Bowes $+$ v.o.
Wilson's Warb	oler			White-crowne	ed Sparrow		
4/28	Amherst	1	N. Barber	3/11	Woburn (HP)	2	K. Sweadner
Eastern Towhe	e .			3/13	Cumb. Farms	5	J. Trimble#
3/12	S. Dart. (A.Pd)	4	N. Paulson	3/27	Chatham	3	R. Stymeist#
3/20	Concord	1 m	S. Perkins	4/24	Fairhaven	2 ad	P. Perry
3/21	Upton	3	N. Paulson	4/26	Framingham	3	J. Malone
4/22	Ipswich	6	J. Berry	Dark-eyed Ju	nco	110	x (70)
4/27	Quabbin (G35)	15	B. Zajda	4/5	S. Quabbin	112	L. Therrien
4/29	W. Gloucester	19	J. Nelson	4/5	P.I.	165	R. Heil
4/29	wompatuck SP	20	K. Schain	4/6	Boston (Fens)	80	K. Schain
4/30 Amorican Tra	P.I.	23	J. Berry#	4/27	Manomet	2.0	1. Lloyd-Evans#
2/12	DI	31	E Vala#	4/29 Lopland Lopa	F.I.	10	1. Spani#
3/15	GMNWR 1	125	I. Trimble		Worcester	1	M Lynch#
3/21	Concord	30	W Hutcheson	3/26	Hadley	1	S Surper
4/30	PI	2	I Berry#	3/27	Newbury	7	F Nielsen
4/30	W Roxbury (MP)) Ĩ	R Stymeist#	3/31	E Boston (B I)	n í	P Peterson
Chipping Spar	TOW		iti biyincista	4/9	Eastham	1	I Trimble
3/3	Millbury	1	A. Marble	4/14	Chatham (S.B.)	4	B. Harris
4/5	Southwick	1	S. Kellogg	Snow Bunting	2		
4/27	Quabbin (G35)	40	B. Zajda	3/2, 4/12	P.I.	26, 1	V.O.
4/27	P.I.	25	D. Chickering	3/3	Cumb. Farms	250	J. Damien#
4/29	Mt.A.	23	R. Stymeist	3/5	Worcester	75	N. Paulson
4/30	Quabog IBA	47	M. Lynch#	3/18	Brewster	2	D. Clapp
Field Sparrow				3/25	Ipswich (C.B.)	3	D. Jones
3/21	Burlington	1 m	M. Rines	Scarlet Tanag	er		
3/21	Windsor	1	B. Wood	4/26	Longmeadow	1	E. Rutman
3/27	Wellfleet	9	R. Stymeist#	4/26	P.I.	2	R. Heil
4/10	Upton	4	N. Paulson	4/27	Newbypt	2	L. Southworth#
4/19	Fitchburg-8	3	C. Caron	4/30	Medford	3	M. Rines
4/26	Concord	3	C. Winstanley	4/30	Boston (F.Pk)	3	P. Peterson
4/26	P.I.	/	R. Heil	Rose-breasted	Grosbeak	1	IZ IV.
vesper Sparro	W Malaasa	1	D L Ismall	4/24	Snutesbury	1	K. Weir
4/12	Hadlay	1	D. + I. Jewell	4/24	Incurich	1	A. PICCOIO
4/10-10 Savannah Sna	riouv	1	1. Gagnon	4/29	Rolton Flats	16	J. Delly N. Paulson
3/1	Essex	1	P Heil	4/30	Westboro	3	S Arona
3/13	Eairhaven	7	C Longworth	Blue Grosbe	ak	5	5. Aicha
4/6	E Boston (B I)	10	R Cressman	4/20-24	Nantucket	1 m	T Pastuszak
4/19	Arlington Res	20	M Rines	4/30	C Quabbin	1	L. Therrien
4/20	W Gloucester	40	S Hedman	Indigo Buntin	g		E. memer
4/29	PI	25	T Spahr#	4/26	ЪТ	1 m	R Heil
Inswich Sparre	ow.		r	4/28	Amherst	1	N. Barber
3/25	Ipswich (C.B.)	1	D. Jones	4/29	Wakefield	1	J. Beers
3/30	Duxbury B.	4	R. Bowes	4/29	Medford	1	M. Rines
4/3	Saugus (Bear C.)	1	S. Zendeh#	4/30	Mt.A.	1	BBC (J. Forbes)
4/3	P.I.	1	N. Landry	Dickcissel			
Seaside Sparro)W		2	3/1-4/14	Nantucket	1	T. Pastuszak
4/29	P.I.	2	T. Wetmore	Bobolink			
Fox Sparrow				4/25	Wayland	1	B. Harris
3/6	Amherst	1	J. Rose	4/26	GMNWR	1	S. Wheelock#
3/18	Boston (Fens)	9	B. Mayer	4/27	Southwick	1	S. Kellogg

Bobolink (con	tinued)			4/26	Shutesbury	15	K. Weir
4/27	Amherst	1	L. Therrien	4/30	Wompatuck S	SP 4	J. Offermann
4/29	DWWS	6	R. Schin	White-winged	l Crossbill		
4/30	P.I.	2	N. Landry	thr	Gloucester	10-20	J. Standley
Eastern Mead	owlark		-	3/4	Great Barring	gton 1	J. Hankin
3/13	P.I.	2	T. Wetmore	3/13	Quincy	1	E. Rogers
3/20	Saugus (Bear	C.) 1	S. Zendeh#	3/13	Royalston	2	B. Zajda#
3/20	E. Boston (B.I	I.) 2	P. Peterson	Common Red	poll		5
3/27	Eastham	4	R. Stymeist#	3/1-4/17	Reports of flo	ocks from ma	any locations
4/22	Amherst	3	L. Therrien#	3/6	Rowe	140 +	R. Stymeist#
4/28	Essex	5	J. Nelson	3/7	Sheffield	100	S. MacDonald
Yellow-heade	d Blackbird			3/7	Hinsdale	200	L. Roberson
4/3	Somerset	1 ph	G. Gosselin	3/10	W. Concord	100	D. Sibley
Rusty Blackbi	ird	•		3/12	Grafton	100 +	J. Liller
3/3, 4/22	Milton	9,50	Mussey, Trimitsis	3/12	Cumb. Farms	280	N. Paulson
3/6	Littleton	10	G. Littleton	3/13	Turners Falls	150	S. Svec
3/14	GMNWR	17	C. Gras	3/19	Scituate	218	S. Maguire
3/30, 4/10	Lexington	6,6	M. Rines	3/21	Windsor	100	B. Wood
4/9	Wavland	16	B. Harris	4/2.27	Dalton	200.10	C. Blagdon
4/10	Longmeadow	10	S. Kellogg	4/8	Marlboro	20	T. Spahr
4/12.24	Lincoln	20.10	N. Levev	Hoary Redpol	1		•
4/22	Lenox	8	G. Hurley	3/10	W. Concord	2 f	D. Siblev
Orchard Oriol	e			3/13-17	Cumb, Farms	: 1	J. Trimble
4/19	Nantucket	1	T. Pastuszak	3/16-4/5	Marlboro	1	T. Spahr
4/24	Fairhaven	2	P. Perrv	Pine Siskin			1
4/29	Newbury	2	P. + F. Vale	thr	Reports of flo	ocks from ma	any locations
4/29	Needham	3	P. Oehlkers	3/10	W. Warren	11	B. Zaida
4/30	Boston (F.Pk)	3	R. Stymeist#	3/12	Rovalston	10	S. Surner
4/30	Mt.A.	3	BBC (J. Forbes)	3/23	New Salem	12	B. Lafley
Baltimore Ori	ole		· · · ·	3/24, 4/25	Easton	25.35	K. Rvan
4/21	Winchester	1	D. Pallin	3/28	Upton	31	N. Paulson
4/25	Amherst	1	L. Therrien	4/20	Sheffield	8	S. MacDonald
4/26	Boston (Fens)	2	P. Peterson	4/26	Gill	6	J. Smith
4/27	Medford	3	M. Rines#	4/29	N. Truro	2	B. Nikula
4/29	Boston (F.Pk)	6	A. Joslin#	4/30	Bolton Flats	2	N. Paulson
4/29	Needham	5	P. Oehlkers	4/30	Wakefield	1	J. Beers
4/30	Mt.A.	5	BBC (J. Forbes)	Evening Gros	beak		
				3/1-4/16	Rovalston	64 max	V.O.
Purple Finch				3/5	Oakham	2	N. Paulson
3/29	Oakham	14 m	N. Paulson	3/6	Windsor	4	N. Havward
4/18	Becket	15	R. Laubach	3/29	Petersham	3	N. Paulson
4/20	Sheffield	18	S. MacDonald	4/9	New Salem	3	J. Forbes#
4/20	W. Gloucester	6	S. Hedman	4/29	Ashburnham	2	C. Caron
4/23	New Salem	20	B. Laflev	4/30	C. Ouabbin	$\overline{\overline{2}}$	L. Therrien
4/26	P.I.	19	R. Heil	4/30	Upton	1	N. Paulson



LEAST TERNS FEEDING CHICK BY SANDY SELESKY

ABBREVIATIONS FOR BIRD SIGHTINGS

Taxonomic order is based on AOU checklist, Seventh edition, up to the 51st Supplement, as published in *The Auk* 127 (3): 726-44 (2010) (see http://www.aou.org/checklist/north).

Location-#	MAS Breeding Bird	NAC	Nine Acre Corner, Concord
	Atlas Block	Newbypt	Newburyport
ABC	Allen Bird Club	ONWR	Oxbow National Wildlife Refuge
A.P.	Andrews Point, Rockport	P.I.	Plum Island
A.Pd	Allens Pond, S. Dartmouth	Pd	Pond
В.	Beach	P'town	Provincetown
B.I.	Belle Isle, E. Boston	Pont.	Pontoosuc Lake, Lanesboro
B.R.	Bass Rocks, Gloucester	R.P.	Race Point, Provincetown
BBC	Brookline Bird Club	Res.	Reservoir
BMB	Broad Meadow Brook, Worcester	S.B.	South Beach, Chatham
C.B.	Crane Beach, Ipswich	S.N.	Sandy Neck, Barnstable
CGB	Coast Guard Beach, Eastham	SRV	Sudbury River Valley
C.P.	Crooked Pond, Boxford	SSBC	South Shore Bird Club
Cambr.	Cambridge	TASL	Take A Second Look
CCBC	Cape Cod Bird Club		Boston Harbor Census
Corn B	Corporation Beach Dennis	WBWS	Wellfleet Bay WS
Cumb Farms	Cumberland Farms	WMWS	Wachusett Meadow WS
eumor rumo	Middleboro	Wompatuck SP	Hingham Cohassett
DEWS	Drumlin Farm Wildlife Sanctuary	Woinputder BI	Scituate and Norwell
DWMA	Delanev WMA	Wore	Worcester
Dimini	Stow Bolton Harvard	wore.	Woreester
DWWS	Daniel Webster WS	Other Abbreviations	
EP	Eastern Point Gloucester	ad	adult
E.I.	First Encounter Beach Eastham	h	banded
FP	Fresh Pond Cambridge	br	breeding
F Pk	Franklin Park Boston	dk	dark (morph)
G40	Gate 40 Quabhin Res	f	female
GMNWR	Great Meadows NWR	fl	fledgling
H	Harbor	imm	immature
ир	Halibut Point Rockport	inv	iuvenile
	High Pidge WMA Cordner]uv 1+	light (morph)
I	Ingli Ridge wiwa, Oardier	m	ingiit (inorph)
IRWS	Inswich River WS	III may	mate
INVIS	Ipswich Kiver ws	migr	migroting
L. MAS	Mass Audubon	niigi	ningrating
MD	Millonnium Dork W Dorbum	ll ph	nbotographad
M M	Martha's Vineyard	pii nl	photographed
MAS	Mass Audubon Society	pi	prunage
MDWMA	Martin Purne WMA Neurhury	pr e	pan
	Marhlahaad Narl- WC	3	summer $(1S = 1st summer)$
MEE	Mulas Standish State Forest	V.U. W/	various observers
MOOL	wrytes Statiuisti State Forest,	vv Vo	whiter $(2w) =$ second whiter)
M4 A	Plymouth Mt. Auburn Comotory, Comba	уg	young
wit.A.	Mit. Auburn Cemetery, Cambr.	#	additional observer

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 e-mail. 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 e-mail submission, visit: http://massbird.org/birdobserver/sightings/.

Species on the Review List of the Massachusetts Avian Records Committee (indicated by an asterisk [*] in the Bird Reports), 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 e-mail to <mattpgarvey@gmail.com>.

ABOUT THE COVER

Least Tern

The Least Tern (*Sterna antillarum*) is the smallest of the North American terns and a bird of coastal beaches and interior rivers. In adult breeding plumage it is separated from all other North American terns by its small size, white forehead, and black-tipped yellow bill. In flight the dark outer primaries are noticeable. Plumage is gray above and white below, and the sexes are similar in appearance. Juvenile birds are mottled brownish above with a gray crown, a black bar through the eye, and a black bill. Winter-plumaged birds have more extensive white on the crown and black bills.

Although five subspecies have been described, the validity of these subspecies is open to question. The Least Tern is closely related to the Little Tern (*S. albifrons*) of Europe and Asia, and these two species are grouped with four other species worldwide to form a superspecies of closely related birds. The Least and Little terns are best distinguished from one another by their vocalizations.

Least Terns nest on sandy or shell beaches and mudflats along the Atlantic and Gulf coasts from Maine to Mexico and on the West Coast in southern California. They also breed locally from northern Mexico to northern Central America and throughout the Caribbean region. In the North American interior they nest mostly on sandbars and dredge-spoil islands, primarily in the Mississippi River drainage. Most Least Terns are migratory, spending the winter along the coasts of Central and South America as far south as northern Argentina. In Massachusetts they arrive in May, and most are gone by early September. They are considered a locally common to abundant breeder.

Least Terns are monogamous and may retain the same mate for more than a single season. Most do not breed until their third year, when they produce a single brood, although they will re-nest if their first nest fails. They are colonial nesting birds, but the colonies may be diffuse. Most colonies are located on sandy beaches, but occasionally they are located on gravel roofs near the coast. Least Terns are colony-site faithful even when the colony sites are reconfigured by winter storms. They have a variety of calls, including *ki-dik* contact calls, a sharp *zreek* alarm call, and recognition calls that help in locating their mate or chicks when returning to the colony. They are territorial at their nest site and perform aggressive displays that involve a stiff walk with neck stretched forward and wings raised. They will mob and dive-bomb potential predators. Males use an elevated perch, such as a log, for courtship displays, which include parading, posturing with bill pointed upward or downward, wings extended, and courtship feeding. Aerial displays include chases by a male carrying a fish and stiff-wing gliding.

Both male and female Least Terns make nest scrapes, and eventually the female chooses one for the final nest. The nest is a simple scrape, but it may also be decorated with pebbles, shell fragments, and bits of wood or vegetation. The usual clutch is two or three beige-colored eggs spotted brown or black. The female does

most of the incubation for the three weeks before hatching. The chicks are covered with down when they hatch, and their eyes are open. They remain in the nest for only one or two days before leaving for a more protected area. The female does most of the brooding. Both parents feed the young until they are able to fly, about three weeks after hatching; the parents then lead them to fishing areas.

Least Terns forage throughout the day in bays, lagoons, estuaries, and tidal marshes. They search for fish while flying or hovering, then plunge-dive and capture prey in their bill. They often swallow the captured prey while on the wing. Their diet is mostly small fish such as sand lance (*Ammodytes* spp.), but they also take shrimp, crustaceans, and insects.

Least Terns suffered badly from egg collecting and the millinery trade in the late nineteenth century but recovered nicely once they received protection. Their breeding colonies, however, are still subject to the vagaries of weather and to both avian and mammalian nest predators. Because they nest on beaches, Least Terns tend to be affected by human recreation, human pets, and vehicles, and coastal development has considerably reduced their available natural habitat. On the bright side, dredge-spoil islands have given them added habitat, and extensive gravel roofs on factories and shopping malls have provided new nesting habitat. Nevertheless, the Least Tern is listed as Endangered, Threatened, or a Species of Concern in many states where breeding occurs. Because Least Terns are widely distributed and have adjusted to the use of man-made nesting habitats, there is hope that they will continue to grace our beaches and rivers in good numbers in the future.

William E. Davis, Jr.

About the Cover Artist: Julie Zickefoose

Julie Zickefoose began as an illustrator of natural history subjects in 1976, when she was a college freshman. A six-year stint as a field biologist with The Nature Conservancy's Connecticut Chapter proved a strong motivator both to learn more about ecosystems and to go back to drawing as a career of sorts. (Drawing was easier, and the pay was better.) Along the way, Julie began to write essays about birds and animals, and writing slowly came to the forefront of her interests. Since 1986, *Bird Watcher's Digest* has been the major print venue for her writing as well as her illustrations, and her husband, Editor Bill Thompson III, maintains that it has nothing to do with favoritism. Julie has also contributed short commentaries, mostly critter stories, to National Public Radio's afternoon news program "All Things Considered."

Julie's first book of illustrated essays, *Letters from Eden*, was published in 2006. Her next book, a memoir about birds, will come out when she finishes the paintings. In the meantime, you can visit her blog at http://juliezickefoose.blogspot.com/>.

Julie and her family live in Whipple, Ohio, in a ranch house topped by a forty-two-foot birdwatching tower (Bill's idea). \checkmark

AT A GLANCE

June 2011



DAVID LARSON

This month's mystery bird is another of those "partial" birds, where all the reader gets to see is an obscure view of a portion of a bird. In this instance, the photograph provides a ventral view, which includes the lower belly, undertail coverts, and the underside of the tail of an unidentified passerine. Judging by the apparent thickness of the twigs the bird is perched on and the thickness of its legs, the bird is not a tiny species such as a vireo or warbler. Beyond this, it is necessary to evaluate what we *can* see of the mystery species.

The most obvious features visible in the photograph are strongly barred or paletipped undertail coverts, what appears to be a solid-colored belly, and a fairly long and seemingly broad tail. This distinctive combination of features is found in only one bird species in Massachusetts. Although Carolina and House wrens both have rather prominently barred undertail coverts, they also have barring on their flanks, notably short or narrow tails, and very thin legs and toes commensurate with their overall small size. Otherwise, only some female or immature male Red-winged Blackbirds are likely to show barring on their undertail coverts, but when this feature is present, it is never as conspicuous as shown in the mystery bird. So what's left?

Before answering this question, there is one additional feature that must be considered along with the features shown in the picture. A careful examination of the

mystery photograph shows the presence of pale (white?) but conspicuous tips to the corners of the outer tail feathers. This feature, along with the barred undertail coverts and the solid-colored lower belly all point to a male Blue Grosbeak (*Guiraca caerulea*) in breeding plumage. Neither the barred undertail coverts nor the pale tips on the outer tail feathers of a Blue Grosbeak are terribly obvious in the field, yet they are unique to male Blue Grosbeaks in breeding plumage.

In Massachusetts Blue Grosbeaks occur as rare spring migrants in brushy pastures and as locally uncommon fall migrants in weedy fields and community gardens, most often in eastern and coastal regions of the state. David Larson photographed the pictured male Blue Grosbeak in the Davis Mountains of West Texas in May 2011.

Wayne R. Petersen



RUBY-THROATED HUMMINGBIRD NESTLINGS BY DAVID CLAPP



WAYNE R. PETERSEN

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

BIRDERS!

Duck Stamps are not just for hunters.

By purchasing an annual Migratory Bird Hunting and Conservation ("Duck") Stamp, you contribute to land acquisition and conservation.



Duck Stamps are available for \$15 from U.S. Post Offices, staffed National Wildlife Refuges (where it serves as an annual pass), select sporting goods stores, and at Mass Audubon's Joppa Flats Education Center in Newburyport.

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