Bird Observer

VOLUME 40, NUMBER 1

FEBRUARY 2012



HOT BIRDS

On Nantucket, a **Scissor-tailed Flycatcher** (right) was discovered on October 21. It continued to be seen sporadically, and on November 3 Vern Laux was able to photograph it.



On November 25, Paul Ruvido discovered a kingbird at Cherry Hill Reservoir in West Newbury. The bird turned out to be a **Cassin's Kingbird** (right). David Larson photographed it on November 26.



On the Buzzards Bay CBC, Chris Dalton discovered a **Western Tanager** (right) in Falmouth on December 17. Ryan Schain took this photograph on December 24.



On November 6, Phil Brown discovered a **Barnacle Goose** (left) in West Newbury and took this photograph.



Eric Labato was at Fort Hill in Eastham on November 26 and spished up and photographed a female **Painted Bunting** (left)!



CONTENTS

BIRDING THE WESTBOROUGH WILDLIFE MANAGEMEN	JT AREA		
	Nickilas Paulson	5	
REDEFINING THE CHRISTMAS COUNT AT STELLWAGEN	BANK Anne Smrcina	12	
NOAA/STELLWAGEN BANK NATIONAL MARINE SANG MASS AUDUBON PRESENT THE STELLWAGEN SAN			
Seabird Stewards Program		16	
Breeding Bird Atlas 2: A First Look	Matthew Kamm	19	
THE ACORN CRASH OF 2011 AND RED-TAILED HAWKS Paul M. Rober			
Interactions of Two Salt Marsh Dwelling Spal England: Past, Present, and Future	rrows in New		
Adrienne I. Kova	ch and Jennifer Walsh	25	
ABOUT BOOKS Thinking Globally and Birding Locally	Mark Lynch	33	
BIRD SIGHTINGS September/October 2011		39	
ABOUT THE COVER: Common Merganser	William E. Davis, Jr.	54	
ABOUT THE COVER ARTIST: Barry Van Dusen		55	
AT A GLANCE	Wavne R. Petersen	57	



NORTHERN PINTAIL BY DAVID LARSON

Bird Observer regrets the misspelling of Judy Chupasko's name on page 337 of Volume 39 (6).

For online indices, birding maps, and more, visit the *Bird Observer* website at http://massbird.org/birdobserver/.



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Birding the Westborough Wildlife Management Area

Nickilas Paulson

Westborough Wildlife Management Area is a 427-acre tract of public land with a wide variety of good birding habitats. Large fields kept at various stages of succession and bordered by several types of forests dominate the west side. There are two beaver ponds, one



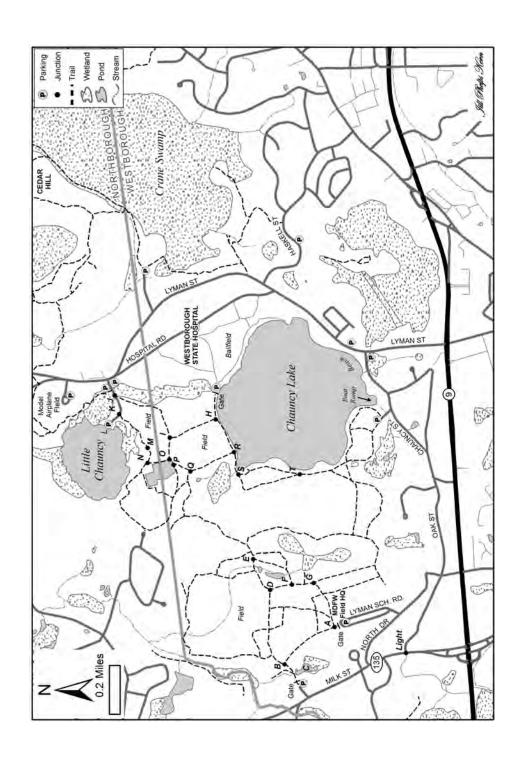
surrounded by forest, the other in the fields. The east side has two large bodies of water with a mixture of swamps and agricultural land between them. Chauncy Lake (known locally as Big Chauncy) is surrounded by forest and wooded swamps, while an extensive cattail marsh and a cedar swamp surround Little Chauncy Pond. A nice marsh connects the two ponds, and there are agricultural fields between the ponds as well. The area between the two sides is made up of mixed woodlands.

The Wildlife Management Area (WMA) is located primarily in the northern part of Westborough between Route 135 and Lyman Street, with the northern edge of the property in Northborough. The trails in the eastern section of the WMA connect with the trails of Crane Swamp Conservation Area. A mixture of residential, industrial, and state-owned property borders the rest of the tract.

The site is most often birded in the spring and fall for migrants, but due to the variety of habitats, is a great place to bird year-round. Mosquitoes can be a hassle in summer, and deer ticks are often abundant. The WMA is open to hunting year-round with the exception of Sundays. Hunting pressure is highest in the fall, when the area is stocked with pheasants, and around Little Chauncy in duck and goose season. Some of the trails are in safe zones, but other parts are not, so from fall to early winter, wearing a regulation hunter-orange hat or vest is recommended. Due to stocking, Ring-necked Pheasants can be seen year-round, even though they are no longer considered viable in Worcester County. Hikers, mountain bikers, cross-country skiers, and dog-walkers use the trails. Horses are not allowed.

The fields of Westborough WMA are also noted for their butterflies. Beavers, muskrats, and otters are often seen in the many watery areas, especially after spring thaw. It is also possible to see many other mammals. With the abundance of swampland, frogs are numerous. Northern water snakes are the reptiles seen most often.

As a side note, this area was almost lost to us when it came close to being developed into a Six Flags amusement park in the early 1980s. Luckily, town members had the wisdom to vote against this development.



Directions

For the west side (two main entrances): From I–495 take exit 23B onto Route 9 west. Follow for 3.8 miles, and take the ramp for Route 135 west (it actually runs north here). Merge onto Route 135 (Milk Street), go straight through the light, and drive 0.2 miles to the sign for MassWildlife Field Headquarters. Take a right here onto North Drive. Go 0.3 mile and turn left onto Lyman School Drive. Follow Lyman School Drive to the gate at the end, turn left, and park in the first parking lot, immediately on the left. The MassWildlife Field Headquarters is across the street, and the Westborough WMA is just through the gate.

The other entrance on the west side is 0.2 mile down Route 135 after you pass North Drive. This entrance gate is opened seasonally for hunting, but there is a small pull-off for parking along the road if the gate is closed.

For the east side: (two main entrances): To reach the east side entrances from I–495, take exit 23B onto Route 9 west. Follow Route 9 for 2.6 miles to the first light (1.2 miles short of Route 135), where you will turn right onto Lyman Street. Then follow these directions for the two main entrances:

For the Big Chauncy entrance, drive north on Lyman Street 0.8 mile and turn left onto Hospital Road. Take the first road on the left at the sign for Chauncy ball field. This road is paved at first, but quickly turns into a dirt road; follow it past the maintenance buildings to the ball field. At the ball field, turn left down to Big Chauncy, then take a right and follow the road along Big Chauncy to the gate and parking area at the end.

For the Little Chauncy entrance, go 1.7 miles on Lyman Street 0.9 mile past Hospital Road), and take a left onto the dirt road entrance. Note that the dirt road is often flooded in the wetter months and after heavy rains, so a high-clearance vehicle is needed to drive down to the pond. Otherwise, there are two parking areas before the water.

West entrance trails

From the main entrance there is a nice loop trail which, combined with two side trails to the beaver ponds, allows for a good variety of birds. Allow one to three hours for the route. The highest point of the area is just after the entrance gate; from there you will have a nice view of the fields. Scanning for hawks can be rewarding as American Kestrels nest in the boxes in the fields, and Broad-winged Hawks nest in the woods on the left. In spring, this is a great vantage point for listening to American Woodcocks displaying in the evening. In winter, Great Horned Owls are often heard here.

From the entrance gate, point A on the map, go straight down the paved trail into the forest. Pinewoods will be on your left, where owls occasionally roost in winter. The area where the trail flattens out at the bottom of the hill is often one of the best birding areas. In spring and fall, wood warblers can be seen and heard along this trail. The underbrush is thick, making it attractive to skulkers like thrushes and wrens.

Woodcocks can sometimes be seen along the path here. The area between the first boulders and the end of the paved path is a great spot to observe Blue-winged Warblers in the old apple trees. These fields support a large breeding population. This area has hosted a Golden-winged Warbler or a hybrid several times in the spring. Be aware that many of the Blue-winged Warblers regularly sing the songs of both species.

Take the left trail at intersection B on the map, and head west down to the first beaver pond, point C on the map. Warblers and sparrows can be seen here. Check the edges of the beaver pond for Green and Great Blue herons. In early summer, Wood Duck and Hooded Merganser ducklings can be seen on the pond. Other birds to look for are Rusty Blackbirds (spring and fall) and unusual ducks like Northern Shoveler, Green-winged Teal, and Ring-necked Duck in spring. Check the water also for the beavers, which are often active here.

Head back to intersection B and take the trail to the east, the one you have not yet taken. Follow this trail uphill to a cluster of box elders, then proceed through the fields. Keep an eye out for American Kestrels, Blue-winged Warblers, and Eastern Bluebirds. In summer, search the snags for Willow Flycatchers. Check the fields for



SAVANNAH SPARROW BY DAVID LARSON

Savannah Sparrows and Indigo Buntings, and, in migration, other sparrows, Palm Warblers, and Orange-crowned Warblers. Throughout the summer, listen for Yellow-billed and Black-billed cuckoos; this is a good spot to hear both cuckoo species calling at once. On one day in June two Black-billed Cuckoos and three Yellow-billed Cuckoos were seen and heard along this path.

At the end of this trail at intersection D take a left and loop around the second beaver pond. This area, with fields to your left and the pond and small trees to the

right, can be very good for sparrows with Savannah, Song, and Swamp sparrows being common, and Fox, White-crowned, and Lincoln's sparrows possible in migration. Also in migration and during the winter, White-throated Sparrows, Darkeyed Juncos, and finches can be found. After the trail passes the stream that comes out of the pond, take the trail at intersection E that goes to the right and loops around the pond back to the main loop trail. The field has potential for more of the birds mentioned before. The trail passes by the south side of the pond and is a good spot to look for ducks.

Take a left to get back onto the main loop trail at intersection F, and follow the edge of the woods. Here you may encounter wood warblers in migration or other common woodland birds. Take the next trail to the right at intersection G; this trail takes you back to the entrance. The field along here is good for more sparrows.

Grasshopper Sparrows have been seen in the past, and sometimes this field hosts a few Bobolinks in spring and summer.

East entrance trails

This side can be accessed from multiple entrances, and I am going to describe the route that starts at the Big Chauncy entrance. It is important to note that this entrance is now posted as open from dawn to dusk. If entering before dawn, use the Little Chauncy entrance. When driving along Big Chauncy, you will see pull-offs to take for checking the lake, and you can scope it from the parking area as well. The lake is always worth a look and can be very productive in spring and fall. Over twenty species of ducks have been seen on the lake. Hundreds of Common Mergansers can regularly be found here each spring and fall. Rarer inland ducks occurring here include all three scoter species, Long-tailed Ducks in May, and Red-breasted Mergansers. Also keep an eye out for Red-throated Loons; Horned, Red-necked, and Pied-billed grebes; Great Cormorants; and American Coots in migration. Swallows can be seen in numbers flying over the lake and fields. All six regular swallows can be seen in migration, and Tree, Northern Rough-winged, and Barn swallows are here in summer. Purple Martins can be found occasionally in summer, but they are rare. Usually only the common gulls are found, but Iceland Gull has occurred in winter. Also check the shrubby area by the parking lot as Gray Catbirds, Hermit Thrushes, Eastern Towhees, and Northern Flickers have wintered here.

Go through the gate and follow the trail along the water to the first intersection, H on the map. In migration, you may find warblers at the entrance, and sparrows should be near the beginning of the trail. This intersection is worth your time, as many sparrows are often in the hedgerow by the path. In fall, Rusty Blackbirds often can be found in the trees. Be aware that Rusty Blackbirds are regular on these trails in migration, and some stay through the winter. Common Grackles and Red-winged Blackbirds may also remain here all winter, and in spring and fall thousands may descend upon the fields.

This intersection is part of the Big Chauncy Loop, and the best way to go depends on the time of year and time of day and where you are hearing birds. For a short trip, you may choose to do only this loop, or you can follow the full two Chauncy loops, since the two loops overlap. The latter, larger loop is described here. Watching for sparrows, take a right at intersection H into the field. Twelve sparrow species have been seen in migration in these fields including rarities like Clay-colored and Vesper sparrows. Scan the treetops in winter for Northern Shrikes, as one to three are annual here in winter. Eastern Bluebirds can be found in the fields year-round in good numbers. The abundance of birds and rodents in the fields attracts raptors to the area. Most notably, Cooper's and Sharp-shinned hawks are often seen in migration, and several stay all winter. American Kestrels can be seen as well.

Follow the trail to the second set of pines, and take a right heading east at intersection I. This trail continues through the field, then parallels the marsh down to the Little Chauncy entrance road at intersection J. Along the trail and from the road you are afforded views of the marsh. In summer, Virginia Rail, Sora, Least Bittern,

Green Heron, Swamp Sparrow, Wood Duck, Hooded Merganser, and other more common marsh breeders can be seen or heard here. Sparrows and warblers in migration are found along the swamp edge. On the other side of the entrance road you can view the marsh on the Little Chauncy side. In migration, an American Bittern can occasionally be seen in the marsh. Sora and Virginia Rail also can be heard, and one



SORA BY DAVID LARSON

May a King Rail was calling here. Warbling Vireos are common. Follow the entrance road left to intersection K. From here, continue down the entrance road to Little Chauncy Pond, L on the map. The field on the right often hosts flocks of sparrows and Willow Flycatchers from spring through to early fall. Scan the pond for ducks. Redheads have been seen here in spring. Tree Swallows often arrive here early. Also of note are the three large aquatic mammals: otter, beaver, and muskrat. Minks may also be seen along the edges of these swamps.

Head back along the road and take a right down the trail through the rocks at intersection K. There will be woodland to the left and cedar swamp to the right. Wood Ducks breed in the swamp, and the dead trees attract woodpeckers. Yellow-throated Vireos are found in the woods here. Check for warbler flocks in migration. The trail comes out into a cornfield where the path disappears, M on the map. The path is the edge of the cornfield. Follow the edge of the field to intersection N, and go left along the edge of the field until you reconnect with the Big Chauncy loop at intersection O. To the right of the cornfields are old sandpits, which Great-crested Flycatchers and Baltimore Orioles seem to like in summer. Then keep left at the next two intersections, P and Q. The sumac along here attracts Hermit Thrushes, American Robins, Northern Flickers, Cedar Waxwings, Dark-eyed Juncos, and sparrows— also finches in winter. A Cooper's Hawk is often nearby in the winter. After you pass the intersections, keep looking for sparrows along the hedgerows.

You will reach a tee intersection, R on the map, by Big Chauncy, where you can turn left toward the parking lot. Alternatively, take a right for a small side loop through pine forest. To reach the side loop, follow the path past the marsh on the right and bear right into the woods at intersection S. Follow that trail until it reconnects with the trail along the water at intersection T, then take a left to head back to intersection R. The side loop may yield forest species like Brown Creeper, woodpeckers, and Scarlet Tanager. In late winter, Winter Wrens are sometimes heard singing here. Wood Ducks like to sit in these trees in spring and summer. In migration, look for waves of warblers. From intersection R, heading back to the parking lot along the Big Chauncy loop, you will have a hedgerow on your left with fields behind and trees to your right with Big Chauncy behind them. This area creates

a funnel for warblers in migration. If you are here on a good fallout day, it can be quite the experience as all the warblers travel down the corridor of trees.

There are several other side trails and several trails connecting the two sides that can be walked. Trails also continue from Little Chauncy into the Crane Swamp Conservation Area, a large tract of connected conservation land, which when added to the Westborough WMA, protects more than 2,225 acres of open space. The land straddles the borders of Westborough, Northborough, Southborough, and Marlborough and is one of the most significant areas of open space in the SuAsCo River Watershed. The properties are owned by a variety of state agencies as well as the Sudbury Valley Trustees, which owns Cedar Hill and Sawink Reservation. There are several trails through the hills and around the edge of Crane Swamp, which dominates the area.

Other areas or entrances worth checking:

Big Chauncy Pond may also be viewed for ducks from the town beach, which has a parking area on Lyman Street, or from a dirt parking area at the intersection of Lyman Street and Chauncy Street. Make sure to check the beach for roosting gulls. After late summer and fall storms, unusual birds may set down among the common gull species that roost here. After some storms, Common Terns and Bonaparte's Gulls have been seen. Sandpipers, notably Dunlins, Greater Yellowlegs, and Black-bellied Plovers, also show up after storms or in the fall.

Along Chauncy Street, there is another trail entrance and a boat ramp. From this small loop you can also check the lake for ducks. This area may also be good for songbird migrants. A Prothonotary Warbler was here one spring, and Orchard Orioles and Louisiana Waterthrushes can sometimes be seen in May. Hundreds of Yellow-rumped Warblers can be found in fallouts during migration. In late summer, young Brown Thrashers may sometimes be found in the field here.

Farther north, continuing along Lyman Street after the Little Chauncy Pond entrance, take a left on the next dirt road to the model airplane field. There is a small parking area separate from the model airplane field. From here you can access some of the trails. The area is good for sparrows and Rusty Blackbirds, and American Kestrels nest in a box here.

If you are visiting the Westborough WMA during waterfowl migration, be sure to visit Watson Park, which is farther north along Lyman Street, well into Northborough (off the map). From the park you can view Bartlett Pond, which can be good for American Coot, Pied-billed Grebe, Gadwall, and, with luck, American Wigeon.

Nickilas Paulson has been a naturalist and outdoor enthusiast as long as he can remember. He started birding while still in high school in 1992 and has been an avid birder ever since. He has birded extensively in New England, Florida, California, Washington, Texas, and Hawaii. He has also birded in all but one of the United States, many of the Canadian provinces, and parts of Europe, Asia, Africa, and Central America. Nick studied Biology at Worcester State College. He grew up in San Diego and Upton, Massachusetts, and now resides in Upton.

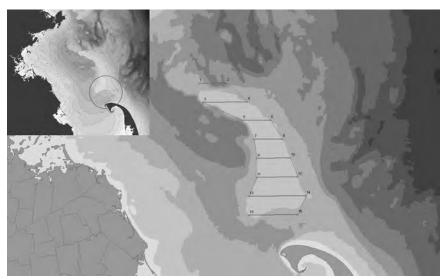
Redefining the Christmas Count at Stellwagen Bank

Anne Smrcina

For years, the Stellwagen Bank Christmas Bird Count has offered a snapshot of seabird presence off the coast of Massachusetts. But in 2009 a reconfiguration of the count area and changes in the survey methods raised the visibility and value of the data collected from this Important Bird Area and the Northeast's only National Marine Sanctuary.

Initiated in 1987 by former Mass Audubon ornithologist Simon Perkins, the Stellwagen Bank Count has often faced daunting challenges. In good years the counters braved freezing temperatures, biting winds, and slippery decks on board whale watch vessels to reach the center of the count circle, where they hoped to be greeted by hundreds of kittiwakes, razorbills, and other winter pelagics. In less favorable years, inclement weather forced counters to stay on land in Provincetown at the edge of the circle, where the overall species composition was very different. In terms of scientific use, the data were gathered under such variable conditions that only broad assumptions could be generated.

In 1998, Stellwagen Bank National Marine Sanctuary began to co-sponsor the count with Mass Audubon. But the sanctuary team had no control over weather and sea conditions, and over the years many trips were cancelled. As a partial solution to the vagaries of weather, starting in 2009, the sanctuary contributed the use of its research vessel *Auk* as an observation platform. The ship was made available during the entire mid-December to early January count period. On the first day of favorable



Stellwagen Bank Christmas Bird Count maps: Original count circle (inset) and current count survey tracks. Graphics courtesy of Stellwagen Bank National Marine Sanctuary.

weather (less than fifteen knots of wind), a volunteer team of birders would be mobilized for the count.

"In the past, we recruited bird enthusiasts to help charter a whale watch vessel to take us out to the bank," said Perkins. "Unfortunately, with a single target day for the count, we were often skunked due to bad weather. Now, thanks to the Sanctuary's support and the use of its dedicated research vessel, our chances of getting to the Bank are much better."



View during a Stellwagen Bank CBC (all photographs by the author)

Unless procedures were standardized, however, the count would not generate the rigorous data needed for scientific analyses of habitat use. To reduce disparities in data collection, Perkins and the sanctuary staff settled on a unique revision of the traditional fifteen mile-diameter Christmas Count circle, centered in this case on the southern portion of the Stellwagen Bank. The new count area would include the entire north-south length of this underwater plateau, and would be surveyed along a series of fixed transects, based on a track line developed by sanctuary research coordinator David Wiley for earlier whale and sanctuary use studies. The new count area would be confined to the sanctuary, with no land component.

The waypoints defining the new transects were programmed into the vessel's navigation system, and for the past three Christmas Counts, birds have been counted along this new course. A customized data-entry computer program allows real-time input of sea state and weather conditions, GPS coordinates, and species and their numbers. It notes whether they are observed closer or farther than a distance of 300 meters from the boat. The program also allows for the inclusion of comments about individual bird behaviors and the presence of non-avian species such as marine mammals.

The new survey tracks are laid out in east-west segments two and a half nautical miles apart. The end-points of each track intersect the forty-meter bathymetry line, keeping the count area at the top of the bank. The tracks range the entire length of the bank, for a total survey length of sixty-three nautical miles. These tracks comprise a subset of Wiley's whale study area, which was surveyed in the mid-1990s and 2001–2002. During his studies, Wiley also counted fishing gear and birds as well as whales.

Mass Audubon and the Stellwagen Bank sanctuary researchers hope to see if there is any correlation between the new counts and Dave's earlier findings. The track lines are also being employed in a number of seasonal counts in the sanctuary to give a better picture of bird population numbers, ranges, and diversity over time.

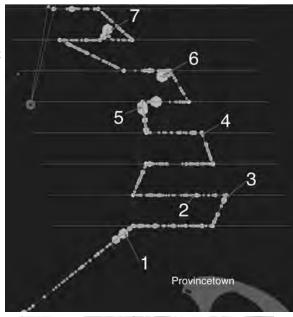
"We'd like to see the sanctuary become a sentinel site for studies of regional global change and ocean acidification," said sanctuary superintendent Craig

MacDonald. "These surveys will provide us with a dataset for a group of animals that has not yet been well studied on the bank."

Editor's Note: The following table is a comparison of species spotted during the 2010 and 2011 Stellwagen Christmas Bird Counts. Among the many highlights of the 2011 count were the totals for Northern Fulmars, Dovekies, and Common Murres—each representing an all-time high for the twenty-four-year count—Atlantic Puffins, and the Pomarine Jaeger, a species that is very rare in Massachusetts waters in late December. Most surprising was the 70/30 ratio of dark to light morph fulmars (a polymorphic species). In the Atlantic population, birds in the high Arctic, at the northernmost reaches of the species' range are mostly dark, whereas those that occupy the southern portions of its range (and the birds we typically see on Stellwagen) are mostly light. Why this pattern was reversed among the birds seen in December is a mystery, although it certainly raises concerns that the phenomenon may be linked to ecological disruption in the Arctic due to climate change.

	2010	2011	
	(12/30/2010)	(12/30/2011)	
			Notes
Canada Goose	10	0	
American Black Duck	3	2	
Common Eider	0	3	
White-winged Scoter	2	4	
Surf or Black scoter	1	1	(Surf Scoter)
Red-breasted Merganser	2	0	
Common Loon	1	0	
Northern Fulmar	1	46	70% dark morph
Northern Gannet	18	331	
Bonaparte's Gull	54	0	
Herring Gull	5525	468	
Iceland Gull	20	10	
Glaucous Gull	0	2	
Lesser Black-backed Gull	1	0	
Great Black-backed Gull	1807	556	
Black-legged Kittiwake	32	66	
Dovekie	22	138	
Common Murre	5	56	
Thick-billed Murre	0	1	
murre sp.	0	2	
Razorbill	56	73	
Atlantic Puffin	1	2	
alcid sp.	0	68	
total species	18	17	
total individuals	7579	2043	

Example of the GPS linked computer program that displays the Stellwagen CBC track lines and specific locations of sightings along with real-time annotations. The sizes of dots along the track indicate the relative numbers of birds counted at specific locations. Numbers 5 to 7, indicate large swarms of birds congregated around fishing vessels. 1. First and largest pod of dolphins (~100); 2. Pomarine Jaeger; 3. Atlantic Puffin; 4. First fulmar; 5. First fishing vessel: 2 fulmars and ~250 gulls including 2 Icelands; 6. Second fishing vessel: 26 fulmars and 5 Iceland Gulls; 7. Third fishing vessel with 7 fulmars, 75 gannets, 2 Iceland Gulls, and 2 Glaucous Gulls.





Stellwagen Bank CBC team aboard the Auk.

To view data from past Christmas Bird Counts at Stellwagen Bank, go to http://audubon2.org/cbchist/count_table.html, then select Massachusetts under State/Province and Stellwagen Bank (begins in 1987 and runs until 2009) or Stellwagen Bank National Marine Sanctuary (begins in 2010) under the CBC Count Code category.

Anne Smrcina is the Education and Outreach Coordinator for the Stellwagen Bank National Marine Sanctuary.

NOAA/Stellwagen Bank National Marine Sanctuary and Mass Audubon Present the Stellwagen Sanctuary Seabird Stewards Program

The Sanctuary and Its Seabirds

Shearwaters, storm-petrels, gannets, phalaropes, gulls, terns, jaegers, alcids, as well as various sea duck species dominate the list of avian species supported by the Stellwagen Bank National Marine Sanctuary. The Wilson's Storm-petrel, a regular visitor, is thought by some ornithologists to be the most abundant bird in the world, with a global population in the hundreds of millions. The shallow banks and shelves



Northern Gannet by Anne Smrcina

of the Gulf of Maine region, including Stellwagen Bank, have long been known to support large numbers of seabirds. Mass Audubon has designated Stellwagen Bank an Important Bird Area (IBA). An IBA is a site that provides essential habitat to one or more species of breeding, wintering or migrating birds, and that supports high-priority species, large concentrations of birds, exceptional bird habitat, and/or has substantial research or educational value. (For information on

the Mass Audubon IBA program visit ">http://www.massaudubon.org/Birding/IBAs/>">http://www.massaudubon.org/Birding/IBAs/>">http://w

Despite their variety and numbers, our knowledge of seabirds' lives is fragmentary at best. Until recently, much of what we knew about them came from studying their behavior on their breeding grounds. Stellwagen Bank affords a unique opportunity to study seabirds where they spend most of their time—at sea. Areas with high seabird abundance and richness such as Stellwagen Bank are often of special interest in marine resource management strategies. Determining which areas of open ocean are most important to seabirds requires, at least, quantitative information on the spatial and temporal distribution of seabird species.

Seabirds are an important resource in the sanctuary because they coexist with, and depend upon, a variety of other marine organisms. Their flight lines have been used for centuries by sailors looking for land and by fisherman studying fish stocks. Scientists now use them as barometers for changes in the environment and food abundance, the natural cyclic changes within the habitat, and the overall health of the marine ecosystem.

Stellwagen Bank National Marine Sanctuary

Stellwagen Bank National Marine Sanctuary was designated as a marine protected area in 1992 for a multitude of reasons, including its high natural

productivity and species diversity, as well as its long history of human use. The 842-square-mile sanctuary supports 575 known species, including at least thirty four species of seabirds, and that list is surely incomplete.

More information on the Stellwagen Bank National Marine Sanctuary can be found at http://stellwagen.noaa.gov/welcome.html>and in the Stellwagen Bank National Marine Sanctuary Final Management Plan (State of seabirds on pp. 90-97) http://stellwagen.noaa.gov/management/fmp/fmp2010.html>.

Staff and volunteers of Stellwagen Bank National Marine Sanctuary conduct an annual National Audubon Christmas Bird Count (CBC) with Mass Audubon each year, following a scientific protocol to track bird populations and behavior for a day. However, in order to better understand these birds, we need to monitor them more often at sea. Mass Audubon has advised that, in addition to the CBC, we move toward at least five cruises per year on our research vessel *R/V Auk*, and use vessels of opportunity to document bird sightings on a weekly basis. Our valued volunteers can help us achieve this goal and help us communicate the status and importance of seabirds to the public.

Stellwagen Sanctuary Seabird Stewards Program Summary

Stellwagen Bank National Marine Sanctuary, in collaboration with Mass Audubon, is expanding its study of seabirds in the sanctuary. Our goals are threefold: to systematically collect baseline data on seabirds within sanctuary boundaries to compare populations over time; to educate the public about seabirds and the sanctuary; and to train a group of observers to join our scientists in this groundbreaking project. The resulting data will help us to understand population changes within the sanctuary and their possible impacts on local ecosystems, and to serve as a barometer for other changes in the environment.

Application Period Open Now for Experienced Birders

If you are an experienced birder who can identify migratory seabirds, are comfortable on the open water, and can follow basic protocol, then we have an exciting opportunity for you.

Volunteers accepted into the Stellwagen Sanctuary Seabird Stewards Program will have the rare chance to join sanctuary and Mass Audubon staff at sea as part of a professional research project. Stewards will be trained to count birds on the Stellwagen Bank sanctuary research vessel, *Auk*, or on commercial whale watch boats and other vessels of opportunity.

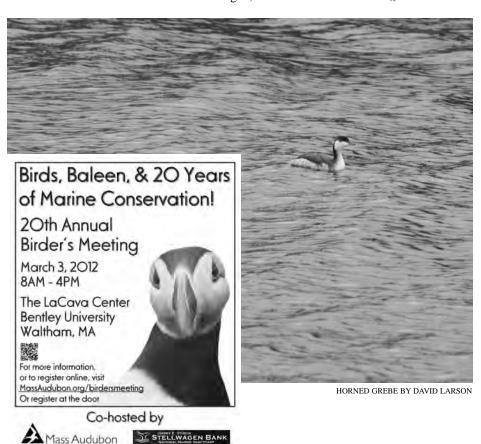
The *Auk* will run full-day cruises at least five times per year, including a Christmas Bird Count, and will require at least six trained volunteers per trip.

Six to ten volunteers per week will have the opportunity to be bird observers on whale watch vessels during the season. Trips last approximately four hours and leave from several ports.

Criteria for Volunteer Selection: A successful candidate will be able to:

- Identify seabirds (training will be provided but prior birding experience is necessary),
- Travel comfortably on open water and in a variety of weather conditions;
- Stand on deck for prolonged periods of time,
- Follow basic protocol and use basic equipment, such as a GPS unit,
- Report data/communicate in a timely fashion via phone and email,
- Attend at least one training session,
- Offer to participate for a block of time—at least four whale watch cruises.
 Those most experienced and consistent will be considered first for Auk cruises.
- Have reasonable flexibility for scheduling (changes in cruise schedules occur due to weather).

If the program matches your skills, interests, and availability, please obtain an application at http://stellwagen.noaa.gov/involved/volunteers.html or by contacting Anne-Marie Runfola, Stellwagen Bank National Marine Sanctuary Volunteer Coordinator at anne-marie.runfola@noaa.gov, or 781-545-8026 x240.

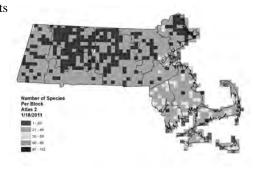


Breeding Bird Atlas 2: A First Look

Matthew Kamm

From 1974 to 1979 Mass Audubon conducted surveys for America's first-ever state Breeding Bird Atlas. That document would inspire birders across the country to create other atlases. At present, 47 states and the District of Columbia have

undertaken Breeding Bird Atlas projects at the county or state level. Now the data collection is finally complete for the second Massachusetts Breeding Bird Atlas. Having one atlas is good, but having two atlases is even better. An atlas measures the distribution of each breeding bird species within a given area (Massachusetts) during a given time period (2007–2011). Comparing the results from the two



time periods makes us more aware of the surprising speed with which bird distribution can change. In some cases, it has changed dramatically.

Many species have become less widespread in Massachusetts as a result of habitat loss. Grassland and shrubland birds have been particularly hard hit as former farmlands have become second growth forests or housing developments. Active birders will not be surprised to learn that Eastern Meadowlarks have vanished from more than 280 of the 371 blocks in which they were found thirty years ago. American Kestrels, Horned Larks, and other grassland specialists are clearly declining, especially in areas of significant suburban expansion. Less conspicuous has been the decline of birds that depend on the equally ephemeral shrubland habitat. Brown Thrashers have dropped out of more than 220 blocks in which they were previously found, and Northern Bobwhites have become essentially restricted as breeding birds to Cape Cod and Martha's Vineyard. Perhaps most troubling of all is the apparent extirpation of Golden-winged Warbler as a breeding bird; found breeding in 64 blocks three decades ago, it has now been found in only four, with no actual breeding confirmations.

Birds such as Eastern Whip-poor-wills, Common Nighthawks, Bank Swallows, and Cliff Swallows that feed primarily on insects captured in flight are likewise absent from many of their former ranges. Some of these birds face specific challenges: Cliff Swallows face competition for nest sites from the House Sparrows that have followed humanity's advance across the state, and Common Nighthawks are no longer finding our cities as hospitable as they once did in the absence of gravel rooftops on which to lay their eggs. The possibility that pesticides or other factors may be making it more difficult for these birds to find food must also be considered.

Nonetheless, we do ourselves a disservice when we focus only on the negative. Conservation efforts have benefited a number of species that were rare or absent

Atlas 1 Atlas 2 (969 blocks atlased) (1037 blocks atlased) breeding blocks breeding blocks **INCREASES** 377 38.9% 723 Wood Duck 69.7% 0.3% 26 Common Eider 3 2.5% Wild Turkey 17 1.8% 819 79.0% Osprey 24 2.5% 277 26.7% Cooper's Hawk 15 1.6% 531 51.2% Red-bellied Woodpecker 0.4% 783 75.5% Willow Flycatcher 122 12.6% 436 42.0% Warbling Vireo 271 28.0% 725 69.9% Common Raven 5 0.5% 327 31.5% Carolina Wren 66 751 6.8% 72.4% 338 34.9% 620 59.8% Hermit Thrush Orchard Oriole 75 7.7% 295 28.4% **DECLINES** 38.9% 239 American Black Duck 508 23.0% **Bobwhite** 311 32.1% 80 7.7% 498 51.4% 215 20.7% American Kestrel 1.3% Short-eared Owl 13 3 0.3% Whip-poor-will 215 22.2% 12 11.7% Cliff Swallow 144 14.9% 69 6.7% 430 Brown Thrasher 661 68.2% 41.5% Canada Warbler 281 29.0% 189 18.2% 336 166 White-throated Sparrow 34.7% 16.0%

during the first Atlas. Bald Eagles and Peregrine Falcons, both of which had been extirpated as breeding birds during the era of DDT, were successfully reintroduced through hacking programs. Bald Eagles are now present in almost seventy blocks, most of which are on the coast or near large lakes or rivers. Evidence of breeding Peregrine Falcons has been found in 20 blocks, and these birds seem to be finding a new niche hunting feral pigeons in our towns and cities. Another raptor victim of pollution, the Osprey, has made a spectacular recovery. It was found in only ten coastal blocks during Atlas 1, but has now been reported as at least a possible breeder in over 250 blocks, as far inland as Berkshire County.

44.1%

64.0%

427

620

Eastern Meadowlark

Purple Finch

Raptors are not the only species to have benefited from human intervention. The return of the Wild Turkey may be the most successful wildlife reintroduction program in Massachusetts's history. At the time of the Atlas 1 survey, they occurred in only 16 blocks at Quabbin Reservoir and in the Berkshires; today, breeding evidence has been found in over 800 blocks across the state. Wood Ducks, which were already recovering during Atlas 1, increased from 339 blocks to over 700 in Atlas 2, thanks in part to nest boxes erected for their use. Common Eiders, originally introduced shortly

105

441

10.1%

42.5%

before Atlas 1 in the Elizabeth Islands, now have breeding colonies at Cape Ann, Boston Harbor, Buzzards' Bay, and a few other locations. Protection of our waterways has allowed open water species like Common Merganser and Common Loon to increase their distribution by tenfold or more.

These gains are impressive, but many of the most noteworthy range expansions captured by the second Atlas were not the result of human programs.



WILD TURKEYS BY SANDY SELESKY

Common Ravens are expanding eastward at a remarkable pace. The species was not even confirmed as a breeder in the state until 1982, three years after the first Atlas, yet ravens were found in over 300 blocks in Atlas 2 and were confirmed breeding as far east as Plymouth County. The incredible expansion of southern birds, especially Redbellied Woodpecker and Cooper's Hawk, is a continuation of a trend documented in the first Atlas. Other southern birds such as Northern Cardinal and Tufted Titmouse had already become common during Atlas 1, and these have continued to increase during Atlas 2, even as formerly uncommon and local species such as Carolina Wren and Willow Flycatcher have appeared in hundreds of new blocks. The Willet is now present in almost 100 blocks along our coastline, whereas in Atlas 1 it was present in only four. This may be indicative of a changing climate, especially as northern birds such as Short-eared Owl and Northern Goshawk, while admittedly never common, are found in fewer blocks today than they were thirty years ago.

Naturally, there are many more stories to be told by the Atlas. The American Black Duck and the Purple Finch both hold spots among the top ten fastest declining birds (in terms of blocks no longer occupied), yet they have almost nothing in common with other top decliners or each other. Piping Plovers have flourished under state protection, while bitterns still appear to be struggling. New species have made their way into the state just in time to be caught by the new Atlas; these include Black Vulture, Merlin, and Sandhill Crane.

Keep your eyes open for the Massachusetts Breeding Bird Atlas 2, which will be released in 2013 as the second installment of the ongoing State of the Birds project.

Matthew Kamm, born in the Garden State, relocated to the Bay State for university and has remained here ever since. He now works as a Bird Conservation Assistant for Mass Audubon, where he has been fortunate enough to participate in the Breeding Bird Atlas 2 and State of the Birds projects. In addition, Matt coordinates Mass Audubon's fledgling American Kestrel nest box program. He has been birding since the age of eight. Matt's nemesis bird is the Short-tailed Hawk.

The Acorn Crash of 2011 and Red-tailed Hawks

Paul M. Roberts

The acorn crop in 2011 was not good, but I didn't fully comprehend how bad it was until I read an article by David Abel in the November 16, 2011, *Boston Globe*. Abel quotes Mark Ashton, a professor of forest ecology at Yale and an authority on acorns, "I'm not sure when we last had so few acorns in our region." Ashton indicated that a mature oak would produce about 250 pounds of acorns in a typical fall. This year's yield is less than half a pound. Because acorns are "a vital source of food for rodents, turkeys, deer, bears, and many other animals, this crash could have a devastating effect on wildlife." This winter we can expect to see more bears visiting backyard feeders, more deer munching on the trees and shrubs in our yards and gardens, and more small mammals digging up garden bulbs in a search for food.

The synchronous production of large numbers of seeds within a population of plants is called "mast seeding" (Liebhold, et. al., 2004). There is a vast, diverse literature on masting (production of huge quantities of nuts in a single year), which has been documented frequently in oak species. In theory, oaks will produce enormous numbers of acorns, enabling seed predators to store more acorns than they can eat so that they function as distributors of seeds. In the process, however, seed predator populations will increase as well, so the trees have evolved a strategy of producing few if any acorns for one or more years following high production, leading to a dramatic decline of seed predators, lest there be too many predators eating all the seeds. Environmental conditions and nutrient resources also play major but hard-to-evaluate roles in determining seed production.

The acorn shortage will likely have devastating effects on our rodent populations, including mice, chipmunks, and squirrels, and on the raptors that feed heavily on rodents, such as Great Horned Owls and especially Red-tailed Hawks, I am inclined to believe that there are more Red-tailed Hawks in eastern Massachusetts now than at any time in history. Fifty years ago there were virtually no Red-tails breeding in Massachusetts's cities, and relatively few in eastern Massachusetts. Following a population curve strikingly similar to that of the baby boomers, in the 1960s and '70s Red-tails began to invade and occupy new and existing interstate highway interchanges, hunting the rights-of-way year-round. They found ideal homes and hunting around golf courses and in any cemetery of size. Harvesting pigeons and squirrels, they moved into our inner cities and nested on a variety of buildings, including our hospitals and universities. Red-tail nests at MIT and Harvard were among the first to be documented with webcams. More people, including non-birders, saw and knew about Red-tails than ever before. When Red-tailed Hawks nested in Manhattan for the first time in centuries—if ever—it became a national sensation. "Pale Male" became the subject of television shows, a movie, and several books for adults and children.

Following the last acorn crash seven years ago, gradually improving crops for several years and incredible acorn production in 2009 and 2010 fostered a population explosion in eastern Massachusetts of gray squirrels, and presumably of chipmunks and many smaller rodents as well. The growing rodent population supported ever more Red-tails, with more nests and more young fledged per nest. Many, if not most, of the adults breeding in cities and suburbs now appear to be year-round residents, preying on squirrels, pigeons, voles, and rats. We also see numbers of Red-tails from farther north migrating into the region every winter.

I've been monitoring several locally nesting pairs of Red-tails for years, and I can attest to the forest floor being carpeted with so many acorns in 2009 and 2010 that it was challenging to walk through the woods. On a one-mile walk through a relatively small oak woodlot I would count 30–35 squirrels crossing my path. I walked that same route in November 2011 and saw just three squirrels; I did not see, much less step on, a single acorn! By late November, I began to notice hordes of road-killed squirrels, crushed by cars as the rodents frantically crossed the roads time and again searching for elusive acorns. Such scenes were also common six to seven years ago. Following a MassBird post on this subject, I received a number of emails from people whose neighborhood streets were already strewn with squirrel carcasses. While looking for the Barnacle Goose in West Newbury recently, I counted five fresh gray squirrel carcasses in less than a mile stretch of a wooded back road. This could be a very tough winter for our resident Red-tails—as well as our winter visitors—and an even more difficult breeding season in 2012.

In 2010, Buzz and Ruby, the Red-tails nesting on 185 Alewife Brook Parkway in Cambridge that have made television and newspaper reports, relied heavily on the

abundant squirrel population to raise and fledge three healthy chicks. Squirrels were like fast food, usually brought in daily, and often more than once a day, to feed the kids and the mate. Buzz and Ruby raised three chicks again in 2011, but I noticed a significant decline in squirrel deliveries, with a heavier reliance on young and nestling birds (starlings, blackbirds, robins, pigeons), a number of voles, occasional rats, and significantly increased seasonal deliveries of snakes (in Cambridge!). Two other Red-tail pairs that I followed in 2010 produced only one chick each. In 2011, both produced three young. (Other factors also affect productivity, such as age and experience of breeding adults, predators, weather, etc.)



Buzz and Ruby's young in 2011(photograph by Sandy Selesky)

Monitoring another pair that nests in a small oak forest—a more typical suburban environment than Buzz and Ruby's—I saw far fewer deliveries of prey in 2011 than with Buzz and Ruby, but almost all the deliveries I saw were squirrels, with chipmunks added in much smaller measure. (This was the area where I had more than 30 squirrels in one mile.) The pair fledged three young in 2011; other Red-tail nests in the area were similarly successful. For the past two years at several locations I could stand in one spot and see at least four to five different nesting pairs of Red-tails (and they could clearly see one another, too). We have as intensive an urban population of Red-tails as I have seen in forty years of birding, an observation supported by preliminary results from the Massachusetts Breeding Bird Atlas.

With the abysmal acorn crop of 2011, we will have far fewer rodents over the next year or more, and I expect that in 2012 we will have fewer nesting Red-tailed Hawks and certainly a lower rate of fledging. The overall population will likely contract as well. Similar trends could occur in Great Horned and Barred owl populations. The latter have been expanding into suburban areas for the past decade or longer. All three species are generalists, or opportunists, that switch to the most easily obtainable prey as prey populations fluctuate. It will be several years before rodent populations begin to recover from the acorn crash, which will put additional pressure on the local pigeon populations that are already stressed by increasing numbers of Red-tailed Hawks as well as by greater numbers of breeding and wintering Cooper's Hawks. We should look for many changes in prey and predator populations over the next several years, especially with respect to Red-tailed Hawks. It may well be that 2011 represents the pinnacle of Red-tail populations in Massachusetts, and perhaps New England, in our lifetime.

NOTE: For a discussion of raptor responses to the availability of food, see Ian Newton, 1979.

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Paul M. Roberts of Medford MA is recently retired from academia and more than thirty years in Marketing and Corporate Communications. This has given him more time to pursue his love of raptors at a more granular level, following as best as possible several individual raptors, some of which have red tails. Paul founded the Eastern Massachusetts Hawk Watch (EMHW) and is a director of EMHW and the Hawk Migration Association of North America and president of the NorthEast Hawk Watch.

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Interactions of Two Salt Marsh Dwelling Sparrows in New England: Past, Present, and Future

Adrienne I. Kovach and Jennifer Walsh

Salt marshes are uniquely productive but physically harsh environments, influenced by cyclic patterns of tidal inundation to which few terrestrial vertebrates are adapted. In North America, only eight species of songbirds are known to rely primarily or exclusively on tidal marsh habitats in all or parts of their ranges (Greenberg, et al., 2006). Six of these are emberizid sparrows (in the genera *Ammodramus*, *Melospiza* and *Passerculus*), three of which inhabit tidal marshes of the Atlantic coast: Seaside Sparrow (*A. maritimus*), Saltmarsh Sparrow (*A. caudacutus*) and Nelson's Sparrow (*A. nelsoni*). The latter two species, formerly called Sharptailed Sparrows, are sister species with a rich taxonomic history and the focus of increasing scientific research. In this paper, we summarize past research on the taxonomic history, distribution, and interspecific differences of Saltmarsh and Nelson's sparrows and describe our ongoing investigations into the interactions between these two species in New England.

Current Distribution, Habitat Use, and Behavior

Currently, the American Ornithological Union (AOU) recognizes five subspecies—three subspecies of Nelson's Sparrow and two subspecies of Saltmarsh Sparrow: *A.n. nelsoni* (Prairie Sharp-tailed Sparrow) inhabiting freshwater marshes of the interior plains of the upper Midwest and Canada, *A.n. alterus* (James Bay Sparrow) inhabiting freshwater marshes in the James and Hudson bays, *A.n. subvirgatus* (Acadian Sharp-tailed Sparrow) inhabiting brackish and tidal marshes from the Canadian Maritimes to northern Massachusetts, *A.c. caudacutus* (Saltmarsh Sparrow) inhabiting salt marshes from southern Maine to New Jersey, and *A.c. diversus* (Southern Sharp-tailed Sparrow) inhabiting salt marshes from southern New Jersey to Virginia (Figure 1: Greenlaw and Rising 1994; Shriver, et al., 2011). Interactions between *A.n. subvirgatus* and *A.c. caudacutus* have been of particular interest to ornithologists over the past century due to the overlap in their distribution.

Although Nelson's and Saltmarsh sparrows coinhabit salt marshes where their breeding ranges overlap, they display differences across their respective ranges in habitat tolerance, morphology, behavior, and song. In addition to tidal marshes, Nelson's Sparrows can inhabit freshwater and brackish marshes that are less tidal as well as upland habitats including hayfields (Nocera, et al., 2007), whereas Saltmarsh Sparrows are exclusively restricted to expansive, intertidal areas that are influenced strongly by tidal flow (Greenlaw 1993; Hodgman, et al., 2002). Based on these habitat differences, early ornithologists suggested that the range limits of the Saltmarsh and Nelson's sparrows correspond geographically to a transition in marsh habitat from small, isolated marshes in northern Maine to larger, continuous marshes in the southern part of the state (Norton 1897; Montagna 1942).

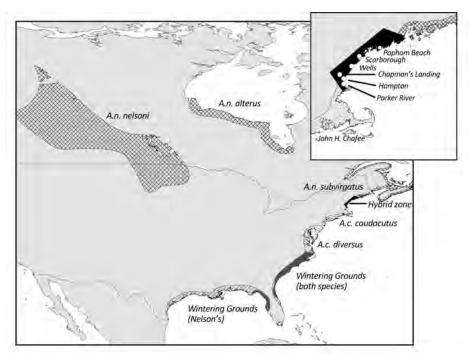


Figure 1: Distribution of Nelson's and Saltmarsh sparrow breeding and wintering grounds, and the hybrid zone. Inset shows Popham Beach, historically considered the southern extent of the Nelson's range (see text) and sites where hybrid individuals were identified in the study of Walsh, 2011. Range data from NatureServe. Available online at http://www.natureserve.org/getData/birdMaps.jsp.

Nelson's Sparrows are differentiated morphologically by a smaller body, a smaller bill, and pale plumage with narrow, indiscrete ventral streaking in comparison to Saltmarsh Sparrows, which are more vibrant in plumage, with more distinct streaking patterns and richer orange facial coloration (Figure 2: Greenlaw 1993; Shriver, et al., 2005). Both species exhibit an unusual mating system among emberizines characterized by nonterritoriality, lack of male parental care, and high levels of promiscuity (Greenlaw 1993). However, Nelson's Sparrow males spend substantial time mate guarding and have a more distinctive song and flight display (Greenlaw 1993; Shriver, et al., 2010). Although both species build nests on the ground in marsh vegetation and are highly vulnerable to tidal flooding in salt marshes, the Saltmarsh Sparrow has greater nesting synchrony with tidal cycles (Shriver, et al., 2007). Nelson's and Saltmarsh sparrows are species of high conservation priority in the northeastern United States (USDI 2008), and the Saltmarsh Sparrow is considered vulnerable to extinction globally (IUCN Red List criteria in Birdlife International 2004). These conservation concerns are based largely on the limited distribution of available nesting habitat and the imminent threats of sea level rise.





Figure 2: Photos taken in the field: a pure Nelson's (*A.n. subvirgatus*) is on the left and a pure Saltmarsh Sparrow (*A.c. caudacutus*) is on the right (see text for descriptions of plumage).

Taxonomic History

The distribution and taxonomic classification of Nelson's and Saltmarsh sparrows have been a topic of ornithological debate for over a century (Dwight 1896; Montagna 1942; Greenlaw 1993; Rising and Avise 1993; Shriver, et al., 2005). Until 1995, the AOU recognized a single species of Sharp-tailed Sparrow (*A. caudacutus*). Jonathan Dwight was the first to distinguish among different races of Sharp-tails, and in 1896 he described three races of *A. caudacutus*: *A.c. caudacutus*, *A. c. nelsoni*, and *A. c. subvirgatus*. The latter two races were noted to be more similar to each other in habitat and morphology than to *A.c. caudacutus*. Subsequently, Todd (1938) described *A.c. altera* as another race with an affinity to *subvirgatus* and *nelsoni* in the marshes of James Bay. Oberholser (1931) distinguished the southern race of coastal Sharp-tails (Montagna 1942) as *A.c. diversus*.

The area of New England from northern Massachusetts to southern Maine has proven to be of great interest in the ecology and distribution of Sharp-tails, puzzling ornithologists since the earliest field observations and continuing to do so today. Interactions between the two species in this region of distributional overlap have influenced taxonomic recommendations over time. The *subvirgatus* and *caudacutus* races were originally thought to have geographically distinct ranges, with the former extending only as far south as Maine and the latter only as far north as Massachusetts. Dwight (1887, 1896) first noted the probable occurrence of Sharp-tails in Maine and New Hampshire and raised questions about the identity of the race inhabiting this geographic region. He also stated that once specimens surfaced from this area, the question would be resolved for certain, as there was no confusing the two races morphologically: "even the palest streaked *caudacutus* in any plumage may be

recognized at a glance by being more distinctly streaked than any specimen of *subvirgatus*" (Dwight 1887). Although there had been no observation of distributional overlap at the time, Dwight recommended that if the two races were eventually discovered to inhabit the same marshes they should be considered separate species.

In 1940, William Montagna conducted a detailed field study of the Acadian Sharp-tailed Sparrow in Popham Beach, Maine. While confirming the previously characterized distributional limits of *caudacutus* and *subvirgatus*, he also identified the approximately 48-km region between Scarborough and Popham Beach as an area of intergradation, wherein he identified individuals of intermediate morphology (Montagna 1942). Despite this intermediacy, Montagna (1942) and Greenlaw (1993) reported almost exclusively *caudacutus* in Scarborough and *subvirgatus* in Popham Beach, consistent with a narrow overlap zone. The studies of Montagna (1940, 1942), Greenlaw (1993) and Rising and Avise (1993) described much variation in morphology, particularly plumage, within each race, especially in specimens from southern Maine, in contrast to Dwight's earlier accounts of clear distinction between the two.

More recently, several genetic studies have established that the amount of divergence between the two groups is small compared to that observed among other species of emberizines and other species of birds in general (Rising and Avise 1993; Klicka and Spellman 2007; Walsh, et al., 2011). Greenlaw (1993) described the taxonomic status as "a case of evolutionary intermediacy between full biological species and traditional subspecies levels of differentiation." He suggested that the group be considered as allospecies within a superspecies, with a southern allospecies (Saltmarsh Sparrow) and a northern allospecies (Nelson's Sparrow). Rising and Avise (1993) found concordant morphological and genetic (mitochondrial DNA) differentiation among the northern and southern races, supporting the existence of two monophyletic groups. In light of small genetic divergence and evidence of introgression, however, they concluded that without further information on the strength of intrinsic reproductive barriers a conservative approach was warranted, whereby a condensed form of the subspecific status would be maintained with A.c nelsoni encompassing all northern races (nelsoni, alterus, and subvirgatus) and A.c. caudacutus encompassing the southern races (caudacutus and diversus). A few years later, based on the sum of genetic, morphological, and behavioral differences hybridization not withstanding—the AOU split the races into the two currently recognized species (AOU 1995).

Overlap Zone and Hybridization

After the AOU's decision to recognize Nelson's and Saltmarsh sparrows as distinct species, there was renewed interest in the extent of the interaction within the overlap zone. Hodgman, et al., (2002) surveyed 244 marshes from Maine to Connecticut and found Saltmarsh and Nelson's Sparrows co-occurring in marshes as far south as Parker River National Wildlife Refuge in northern Massachusetts. They documented an expansion of the previously reported overlap zone from 48 km to 208 km in width. Shriver, et al., (2005) assessed variation in morphological traits and

microsatellite markers among sympatric and allopatric Saltmarsh and Nelson's sparrows to evaluate the extent of introgression within the overlap zone. They confirmed that hybrid individuals were intermediate in plumage and size to both species, but were morphologically and genetically more similar to Saltmarsh Sparrows. Further, genetic composition of the hybrids sampled within the overlap zone was approximately 62% Saltmarsh and 38% Nelson's alleles, indicating that the direction of introgression is asymmetrical and that hybrids are more likely to backcross with Saltmarsh Sparrows. Shriver, et al., (2005) also found that individuals in the overlap zone that appeared to be pure based on plumage had relatively high proportions of alleles from the non-parental species, suggesting that backcrossing was a frequent occurrence.

The work of Shriver, et al., (2005) and Hodgman, et al., (2002) established that not only was the overlap zone expanding, but also the frequency of hybridization was likely higher then previously observed. These findings were confirmed in a study by Walsh, et al., (2011), in which a genetic barcoding approach was used to identify Nelson's Sparrow mitochondrial DNA in individuals that were sampled from nine marshes in the breeding range. This work showed that 8% of the individuals identified in the field as Saltmarsh Sparrow were of hybrid origin. Surprisingly, the highest proportion of hybrid individuals (19%) was found in the most southern part of the hybrid zone—Parker River National Wildlife Refuge—and one hybrid individual was identified in Rhode Island at the John H. Chafee National Wildlife Refuge, which is 150 km south of the currently-assumed hybrid zone. Thus introgression appears to be common throughout the overlap zone, and there may be a southern expansion of Nelson's Sparrow alleles.

Expansion of the overlap zone with introgressive hybridization effectively decreases the range of pure populations of each species, which has conservation implications, especially for the Saltmarsh Sparrow with its limited breeding distribution (Hodgman, et al., 2002; Shriver, et al., 2005; Walsh, et al., 2011). Although hybridization is common in nature and occurs in approximately 10% of all avian species (Grant and Grant 1992), it can lead to harmful effects, including reduced fitness and lowered persistence of parental species (Rhymer and Simberloff 1996; Allendorf, et al., 2001). Further investigation of the impacts of hybridization on Saltmarsh Sparrows is warranted.

Future Directions

The next steps toward understanding the implications of hybridization between Nelson's and Saltmarsh sparrows require a thorough evaluation of the frequency and direction of hybrid matings and backcrossings and an assessment of the fitness of hybrid individuals. Knowledge of hybrid fitness and interactions between the two parental taxa will enable us to predict future dynamics of the hybrid zone. Hybrids may have reduced, equal, or greater fitness than their parental taxa; in the last case, population impacts will be more severe and may result in swamping of pure parental populations, especially for the Saltmarsh Sparrow.

In ongoing research, we are monitoring fitness differences between hybrids and parental forms by comparing productivity (clutch size and number of chicks fledged) and nesting behavior of hybrid and pure females on three marshes in the hybrid zone. We are also using genetic paternity testing to identify the species or hybrid status of males siring chicks of monitored nesting females. These efforts will be aided by a database of genetic information that we have collected from pure Nelson's and Saltmarsh sparrow individuals outside of the hybrid zone. Using these data, we will develop a genetic hybrid index for each individual we capture, which will provide an overall estimate of the purity of its genetic make-up with respect to one of the parental taxa.

Given observations of extensive morphological variation among individuals throughout the hybrid zone, we now use a plumage index developed by Shriver, et al., (2005) to score all captured individuals. We find that few birds score near the two extremes of morphological purity for the two species, consistent with a high amount of intergradation from potentially widespread hybridization and backcrossing.

Comparison of the genetic hybrid index with the plumage index may reveal additional clues about patterns of morphological and genetic introgression. Observational studies will also characterize behavioral and mating strategies of hybrid individuals compared to pure individuals to investigate possible causes for asymmetrical rates of hybridization. Although many questions remain to be answered, the combination of field and genetic data can provide new insights into the current and future dynamics of the hybrid zone. We hope that we can begin to resolve the complexities surrounding the hybrid zone and better understand the evolutionary and conservation implications of interspecific interactions between Nelson's and Saltmarsh sparrows.

We pursue our continued investigations of these fascinating birds with inspiration from Jonathan Dwight who recognized the rewards and challenges of their study, about which he wrote in 1896: "...the study of the Sharp-tails is beset with many difficulties and necessitates excursions devoted almost exclusively to their pursuit. Their exasperating shyness is another factor to battle the bold observer who, regardless of mud and mosquitoes, invades their stronghold; but perseverance must win in the end..."

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From the Birding Community E-Bulletin

BOOK NOTES: D.U. STORY

Most books that describe the history of a company or organization are packed with insider chronologies, the names of recent exalted executive vice presidents, and an abundance of self-aggrandizement.

A recently released title, *The Ducks Unlimited Story* by Michael Furtman (2011, Ducks Unlimited) contains a few of these elements, however not to excess. This is largely because much of the internal pride for DU is justified.

This book tells the story of how a small group of waterfowlers launched an organization in the 1930s during a period of economic depression, pervasive unemployment, and oppressive drought that eventually grew, by trial and error, to a 600,000-member major player in wetland conservation. The narrative is packed with vital conservation lessons still useful today. Shifting conservation priorities, organizational options, fundraising, and membership experimentation are all part of the unfolding story. The first half of the book is filled with an interesting historical narrative that may be especially interesting to readers of this E-bulletin.

This Ducks Unlimited history is important for anyone interested in understanding and appreciating landscape-level wetland-and-waterfowl conservation—its successes and its implications—that transcend the wildest dreams of the founders of that organization.

You can access all the past E-bulletins on the National Wildlife Refuge Association (NWRA) website:

http://refugeassociation.org/news/birding-bulletin/.

ABOUT BOOKS

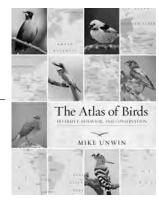
Thinking Globally and Birding Locally

Mark Lynch

The Atlas of Birds: Diversity, Behavior, and Conservation. Mike Unwin. 2011. Princeton, New Jersey: Princeton University Press.

"By the time you've read to the bottom of this page—wherever in the world you are—you will probably have seen or heard a bird." (p. 7 *The Atlas of Birds*)

In between bouts of sibling one-upmanship in field identification, my oldest brother Jim and I used to have long talks about the state of global bird populations. Before his untimely death, he was a field researcher at the



Smithsonian and had done field work in many parts of North America, Mexico, Kenya, Western Australia, and India. He attended conferences and presented papers around the world and did some of the seminal research on habitat fragmentation. He really wasn't a birder but a hard working ornithologist. More than anyone else I knew personally, Jim had the global perspective on the state of birds that I was interested in, and I was always hoping that he would have something positive to say, some ray of hope that things were getting better for wildlife around the world. No such luck. Jim would say that that the situation around the world was grim. Relentless habitat destruction, pollution, the unending explosion of the human population, and the concomitant need for resources meant that much of what was left of wildlife habitat was at risk of being pushed to obliteration. The problems were huge, typically crossing many political boundaries. The challenges to broker practical solutions were many: the financial costs were high, the clock was ticking, and hope was just another dwindling resource. There would come a time in our conversations about the global challenges of bird protection when I could not bear to hear any more. An individual looking at the state of wildlife populations and habitats worldwide cannot help but get hopelessly depressed at the size and number of problems and feel like just giving up.

But then my bro would caution me against getting emotionally paralyzed by the seemingly insurmountable scale of the problem. Granted, an individual can do little personally to help preserve mountain forests in Sarawak or seabirds breeding on the tiny atolls of the Pacific or the hundred other far-flung environmental crises. But there are already existing global conservation organizations that do have the trained personnel and global know-how to deal with international treaties and cultures. The efforts of many of these groups are unknown to the average birder, but for decades some have worked hard to help preserve large areas of habitat or help save an exotic species on the brink of destruction. They include groups like BirdLife International. There are global organizations you may have heard of but do not know exactly what

they stand for or do. Jim encouraged me to learn what the problems were, research the organizations that are trying to solve these problems, evaluate their efforts, and then, if so moved, support them, preferably with some cash.

But this is only part of the solution as Jim saw it. Throwing cash at a big problem may help the target organization, but it doesn't do much for you personally. Individuals need some positive sense of accomplishment; a need to win at least some small preservation battles, and winning them is typically achieved on a much smaller geographical scale. Like many before and after him, Jim urged me to work locally. Help preserve some local piece of habitat, lead field trips to help promote a deeper understanding of birds and their relationship to habitat, and support local conservation and preservation efforts, not just with dollars, but with boots on the ground. Yes, it is an old concept, but if you are a birder who wants to leave behind something more satisfying that just a big list, you do need to keep abreast of the global problems and the efforts to help solve them. And you also need to help save the habitat and birds in your local patch.

How do we begin to understand birds and their survival challenges on a world-wide scale? One of the most recent and best statements of a global appreciation of birds is Mike Unwin's *The Atlas of Birds: Diversity, Behavior, and Conservation*. The unifying concept of this wide-ranging book is to describe our current understanding of bird distribution, behavior, migration, and the hazards that birds and their habitats face in terms of geography. Doing so requires maps on most pages: maps of distribution of endemics; maps of global migratory flyways; maps of the world's Important Bird Areas (IBAs). But this book is far from a dry and boring academic assessment. *The Atlas of Birds* is profusely illustrated with color photography, entertainingly written, and well designed. The information is as up-to-date as can be expected, and because much of the statistics and analysis comes from organizations like BirdLife International, it is also reliable.

The Atlas of Birds is divided into eight major parts, and each topic within that section is given a large format two-page spread. An amazing amount of information is crammed into each two-page feature with maps, photography, a main text, and a number of sidebars. Surprisingly, the layout does not seem cramped.

Part One, An Introduction To Birds, briefly covers subjects like avian evolution, taxonomy, and morphology. Part Two is Where Birds Live. This is an interesting summary of the world's large biogeographic areas (like the Palearctic) and the distinctive birds found in these areas. Other topics covered include a country-by-country map of species distribution, a nice section on the world's endemics, and a global appreciation of the IBA program. Everywhere the eye wanders over these pages, there is an interesting tidbit of information to ponder. For example, "Ecuador has 88% as many bird species as Brazil despite being only 3% its size." (p. 24)

In ranking countries with the greatest diversity of bird species, the text is not about the "twitch" or accruing a big life list. Unwin's focus is what these numbers mean for broad conservation concerns.

"Birds, of course, do not recognize national boundaries. Nonetheless, ascertaining in which countries a species occurs is important in conservation terms, as countries differ dramatically in both culture and resources. This is of particular concern with migrants, whose annual journeys may take them over a number of different countries. It is significant in this respect that most bird-rich countries are all in the developing world, where conservation may be down on a list of national priorities. The highest fully developed nation on the list is the USA, at number 23. No European nation makes it into the top 60." (p.24)

Part Three is a nice summary of taxonomy and the world's 10,000 species listed by Families and Orders. Part Four, How Birds Live is a fascinating if brief overview of bird behavior including sexual and territorial displays, habitat adaptation, migration, and social behavior. These two sections of *The Atlas of Birds* could easily serve as the core text for an introduction to ornithology for a high school biology class.

These first four parts of *The Atlas of Birds* are actually just a setup for the rest of the book. Parts Five through Eight are about the interactions, positive and negative, between birds and human societies. Part Five: Birds and People is a well written history of how people have used birds: for food, as decoration, as couriers, as commodities, as pets, as mythological symbols, and as subjects for scientific research. The final section in this part is titled Conflicts with Birds and touches on such topics as human aviation and collisions with birds, the spread of the H5N1 bird flu, and the devastation of cereal crops caused by some bird species. If you think House Sparrows or European Starlings are a problem here, they are a mere distraction compared to the African quelea.

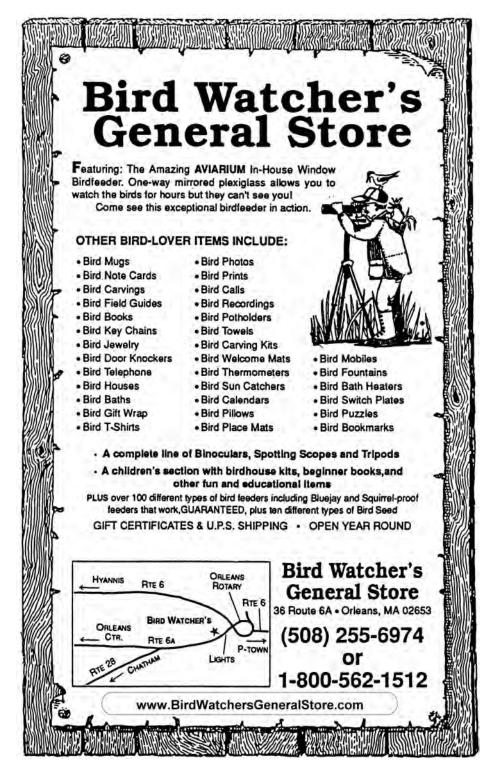
"Red-billed Quelea gather across Africa in flocks of millions, their breeding triggered by seasonal food and rainfall. Each bird eats around 10g of seeds a day, so a 2-million-strong flock may consume 20 tonnes of cereal in that time. Breeding colonies are eradicated by spraying with the organophosphate pesticide fenthion or, in Kenya and South Africa, by fire bombing. Such operations can cause great damage to wider biodiversity." (p. 95)

Part Six, Birds Under Threat, begins with classic accounts of human-caused avian extinction like the Dodo and the Great Auk. This is followed by a review of living birds that are rapidly declining and threatened with extinction. The reasons why "an estimated 1,200 of the world's 10,000 bird species—roughly one in eight—faces extinction" (p.100) is outlined in the rest of this part of the *Atlas*, and these sections are a well organized summary of the problems facing not just the world's birds, but all wildlife. It is one of the real successes of *The Atlas of Birds* that complex topics like urbanization and development, habitat loss, pollution, overexploitation, oceanic pollution, and global warming are discussed in just enough detail to give the reader an essential, if by no means in depth, understanding of the scope of the challenges wildlife now faces. Once again this section could easily be used in ecology and biology courses in high schools or even in freshman college courses.

Now that the problems have been presented, what can be done to save birds? This brings us unsurprisingly to Part Seven, Protecting Birds, another nice overview, this time of the on-going global efforts to save birds. This part leads off with an introduction to BirdLife International, its history and accomplishments. This is followed by a review of treaties; conventions, local and global; and organizations that work to save species and habitats. Many of these treaties and organizations may be unfamiliar to American birders. For instance a detailed world map shows the areas of protected wetlands in the counties that were signatories to RAMSAR as of 2010. Never heard of RAMSAR? RAMSAR, or the Convention on Wetlands of International Importance, which has been in existence since 1971, is a global treaty organization focusing on protecting critical wetland habitats. This well written and nicely illustrated part of *The Atlas of Birds* ends appropriately with a needed personal positive note, a call for readers to get involved in local conservation efforts while supporting these large global organizations.

The last part of *The Atlas of Birds* stands out from the rest of the book as there are no maps, no color photography, no writing. It is eight pages of statistics listed country by country in alphabetical order. On one page a country's population is given as well as its land area, amount of agricultural land, length of coastline, fisheries capture in tons, and the carbon emissions that country is responsible for. The opposite page gives the number of that country's bird species, number of endemics, number of threatened species, and RAMSAR sites. It also tells if that country is party to CITES, the Convention on International Trade in Endangered Species of World Flora and Fauna, which was started in 1973. The average birder may simply gloss over this visually static final section of *The Bird Atlas*, but if you are an international birder, it would certainly be interesting to see how your next destination rates in threatened species or if it is party to CITES.

The Atlas of Birds is a surprisingly trim book for such a huge topic. The Princeton University Press paperback clocks in at a mere 144 pages, making this book truly a marvel of concise and attractive presentation of complex information. Because The Atlas of Birds also includes a long list of sources on a section-by-section basis, including websites and further reading, it is perfect as a teaching resource. This is not a book that one reads from beginning to end, but it is certainly a great reference to dip into and sample. Some chapters should be read by everyone who cares about the future of birds around the world. If you have never heard of CITES, RAMSAR, the Royal Society for the Protection of Birds (RSPB), the Born To Travel Campaign, or BirdLife International, The Atlas of Birds will give you an introduction to what these groups do. Now that we have our own summary of what is happening to birds in our state, and you would now like to get a good sense of the state of the birds globally, I can't think of a better or more enjoyable book.



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BIRD SIGHTINGS

September/October 2011

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

September was warm with an average temperature in Boston of 67.3° , which was 2.6° above normal. The high reached 87° in Boston on September 5, and the low was 48° on September 17. Boston recorded 4.40 inches of rain for the month, about an inch above normal. Heavy rains caused by the remnants of Tropical Storm Lee in early September drenched the western part of the state, swelling waterways, flooding highways, and even washing away some roads. Fog was recorded on 16 days, and rain fell on 12 days during the month.

October was also mild and wet. The temperature averaged 57.6° , nearly 4° above normal. The high of 87° on October 9 surpassed the previous record for the date, 82° in 1935. There was no freeze in Boston, although some suburbs dropped to 32° or even colder on October 27, about two weeks later than the average date for the first freeze. Boston recorded 6.78 inches of rain, 2.82 over normal with measurable amounts falling on 13 days. The first wintry storm of the season on Halloween produced an unseasonable inch of snow in Boston, but this storm was much more forceful in the central and western parts of the state, where as much as two feet of snow was recorded in Fitchburg and 11 inches in Worcester. This unusually heavy snowfall occurred while leaves were still on the trees and caused a lot of tree damage and resulted in extensive power blackouts.

WATERFOWL THROUGH ALCIDS

A **Pink-footed Goose** at Turners Falls at the end of October was only the fourth state record for this species and a first for western Massachusetts. The first record in Massachusetts for Pink-footed Goose occurred on Cape Cod in 1999, the second again on the Cape in 2009, and the third in the Sudbury River Valley in 2010. **Greater White-fronted Geese** were again well reported in this period, and soon will no longer merit bold type in these records. **Cackling Goose** was split into a new species only in 2004, and reports prior to this date are scant. Since 2004, they have been reported regularly in the fall with the bulk of the records from western Massachusetts. All four records for September/October 2011 were from there. On October 14 a birder in Dorchester was not surprised to see two swans flying overhead but was astonished to see that one of these was a **Tundra Swan**. In case he had the slightest doubt about its identification, it vocalized as it was passing over. A drake **Tufted Duck** was discovered on Manchester Reservoir in Attleboro on October 22 and obligingly remained through the end of the month to be enjoyed by many birders.

Rick Heil, who has been sea watching at Andrews Point in Rockport for many years, has compiled an impressive collection of sightings. On October 27 he described an amazing flight of scoters, "far greater than anything I have witnessed here in 36 years." All three species exceeded previous records by an order of magnitude. Here is a review of this day's totals compared to previous high counts.

Species	10/27/2011 count	Previous high			
Surf Scoter	58,670	10/27/92	13,830		
White-winged Scoter	4,300	10/12/05	2,800		
Black Scoter	20,660	11/4/03	9,055		

The Nantucket Birding Festival on October 20–22 started out with a bang with the sighting of a **Magnificent Frigatebird** flying over the town dock, then lingering until the second day for many to enjoy. A **Brown Booby** spent the reporting period in Provincetown; undoubtedly it was the same bird spotted in Dennis in mid-August. A **Brown Pelican**, seen on August 31 on Cuttyhunk, stayed until September 6. The Brown Pelican seen two days later in Dennis was likely the same bird.

A **White Ibis** discovered on Plum Island on September 4 moved to Newbury later in the day and was enjoyed by many. A Glossy Ibis on Plum Island on October 24 was unusually late. Three mainland birders decided to explore Cuttyhunk Island on October 8 and were rewarded with close-up looks at a juvenile **Purple Gallinule.**

A **Wilson's Plover** was discovered on South Beach in Chatham on September 3 and was seen again a week later. An **American Avocet** was discovered on Labor Day weekend in Salisbury and lingered through September 10. On September 13 an avocet was discovered on Plum Island, less than 10 miles south of the Salisbury bird. A **Curlew Sandpiper** on Plum Island on September 17 rounded out the shorebird highlights for the season.

Sabine's Gulls were unusually well reported during this period. Historically, they have been sighted most often in offshore waters in the fall, and these sightings may represent the highest number seen from land in September. Gull-billed Tern is a rare summer visitor and two sightings were better than typical. A Great Skua was an exceptional sighting from land, and Long-tailed Jaegers were reported in unusually high numbers.

M. Rines

Pink-footed				American Wig	geon		
10/26-28	Turners Falls	1	J. $Smith + v.o.$	thr	P.I.	285 max	v.o.
Greater Whi	te-fronted Goose			9/17-10/31	Arlington Res.	20 max	v.o.
10/5	W. Newbury	1	D. Chickering#	10/13	Longmeadow	8	T. Alicea
10/9	Concord	2	W. Hutcheson	10/20	Marstons Mills	96	M. Keleher
10/16	Charlton	1	R. Jenkins#	10/27	Rockport (A.P.)) 13	R. Heil
Snow Goose				Blue-winged 7	Teal •		
9/27	N. Andover	130	B. + D. Fox	thr	P.I.	34 max	v.o.
9/30	Acton	1	P. Cozza#	9/4	DWWS	13	SSBC (V. Zollo)
10/4	Ipswich	1	J. Berry	9/14	Longmeadow	15	S. Kellogg
10/5	Belchertown	21	L. Therrien	9/14	GMNWR	30	W. Hutcheson
10/21	P.I.	5	R. Heil	9/17	Northampton	24	I. Davies
Brant				9/25	Chatham	20	C. Goodrich
9/thr	Thompson I.	1	R. Stymeist#	10/20	Marstons Mills	7	M. Keleher
10/10	Concord	1	J. Forbes#	Northern Short	veler		
10/20	S. Quabbin	8	L. Therrien	9/17-10/31	Arlington Res.	1-4	V.O.
10/26	P.I.	80	T. Wetmore	10/8	Brookfield	7	R. Jenkins
10/27	Gill	2	J. Smith	10/13-25	Longmeadow	5-8	V.O.
10/29	Pittsfield (Pont.)	1 N	I. & K. Conway#	10/21	P.I.	15	R. Heil
Cackling Go			•	10/21	Nantucket	3	E. Ray#
10/8	Quabbin (G35-3'	7) 2	M. Lynch#	Northern Pinta	ail		•
10/14	Ĝill `	´ 3	J. Smith	9/16-10/31	P.I.	200 max	v.o.
10/24	Amherst	1	I. Davies	9/17	Westport	2	S. Perkins#
10/28	Turners Falls	1	L. Therrien	10/10	S. Qûabbin	10	L. Therrien
Tundra Swai	1			10/15	GMNWR	4	S. Perkins#
10/14	Dorchester	1 ad	R. Donovan	10/21	Acton	20	K. Hartel
Wood Duck				10/28	Cheshire	2	T. Gagnon
thr	GMNWR	47 max	A. Bragg#	Green-winged	Teal		Ü
9/17	ONWR	20	BBC (J. Center)	thr	P.I.	3400 max	v.o.
9/20	Waltham	62	R. Stymeist	9/8	Northfield	24	Z. Jakub
10/25	Easton	25	K. Ryan	9/10	Gill	30	E. Masterson
Gadwall			•	10/16	Assabet NWR	45	BBC (B. Volkle)
9/8	Southwick	2	S. Kellogg	10/27	Rockport (A.P.)	84	R. Heil
10/17	S. Quabbin	3	L. Therrien	10/27	Longmeadow	140	S. Kellogg
10/18-20	Grafton	2 m	N. Paulson#	Canvasback	-		
10/19	P.I.	200	T. Wetmore	10/26-31	Cambr. (F.P.)	2 f	R. Stymeist#
10/21	Nantucket	22	S. Perkins#	Redhead			•
10/26-29	Pittsfield (Onota)) 2	G. Hurley	10/17-31	P.I.	10 max	v.o.
Eurasian Wi	geon		•	10/21	Plymouth	1 m	E. Dalton
9/10-10/31	P.I.	2 m	v.o.	10/28	Randolph	1	D. O'Brien
9/5-10/31	Marstons Mills	1 m	M. Keleher#		•		

Ring-necked	Duck		10/29	Waltham 15	J. Forbes
9/17	Randolph 8	G. d'Entremont#	10/29	Pittsfield (Onota) 25	
10/17	W. Newbury 80		10/31	Pittsfield (Pont.) 63	
10/20	Marlboro 50		10/31	Cambr. Res. 24	
10/21	Lynnfield 250	P. + F. Vale	Common Me		•
10/25	Easton 70		9/21	Sandwich 13	
10/26	Cambr. (F.P.) 145		10/23	Wachusett Res. 22	K. Bourinot#
10/29	Pittsfield 900		Red-breasted		D M1 1.
10/31 Tufted Duck	Middleboro 170	K. Ryan	9/1 10/26	P'town 14 P.I. 30	
10/22-31		m J. Sweeney+ v.o.	10/26	Winthrop B. 30	
Greater Scau		III J. Sweency+ v.o.	10/27	Rockport 2190	
10/1	Turners Falls 1	S. Surner	10/28	Stockbridge 2	
10/15	Nahant 24		Ruddy Duck		ii ougion
10/21	Nantucket 350		10/4	Turners Falls 1	J. Drucker
10/26	Lakeville 63	M. Sylvia	10/16	Chestnut Hill 42	BBC (R.Stymeist)
10/26	Clinton 46		10/16	Brookfield 38	R. Jenkins#
10/27	Rockport (A.P.) 182	R. Heil	10/18	Cambr. (F.P.) 52	
Lesser Scaup		D (1:1: "	10/20	Marlboro 100	
10/20	Groveland 12		10/23	Pembroke 230	
10/21	Nantucket 15 Clinton 2		10/28 Northern Bol	W. Newbury 400	P. + F. Vale
10/26 10/28	Clinton 2 P.I. 33		9/17	Wellfleet 10	BBC (Stymeist)
10/28	Lakeville 30		9/28	Truro 1	J. Hoye#
Common Eid		K. Kyan	10/13	Falmouth 5	
9/24	Duxbury B. 42	R. Bowes	Ring-necked		71. I cheginii-100ic
10/21	P.I. 115		9/25	Saugus (Bear C.) 2	P. Randall#
10/22	P'town 2458		10/21	Wrentham 1	
10/27	Rockport (A.P.) 740		10/22	Cumb. Farms 6	
Harlequin Du			10/23	Cuttyhunk 1	M. Sylvia
10/23	Plymouth 1	E. Neumuth	Ruffed Grou	se	•
10/26	Duxbury B. 1		10/1	C. Quabbin 4	L. Therrien
10/29	Rockport (A.P.) 17		10/20	Plymouth 1	K. Doyon
10/30	Nantucket 5	K. Blackshaw#	Wild Turkey		* m
Surf Scoter	D 1 D 14	n n	9/14	C. Quabbin 25	L. Therrien
9/28	Duxbury B. 44		10/9	Lincoln 33	
10/23 10/23	Lakeville 12 Wachusett Res. 12		10/21 Red-throated	Washington 34	E. Neumuth
10/23	Wachusett Res. 12 Rockport 58,670		9/18	P.I. 1	B. Harris
10/27	Chatham 1000		10/10	Mattapoisett 2	
10/28	P.I. 200		10/26	Ipswich (C.B.) 14	
White-winge		1. Wednote	10/27	Rockport (A.P.) 141	R. Heil
10/12	Revere B. 1830	M. Iliff#	10/29	Pittsfield (Onota) 2	
10/20	S. Quabbin 5	L. Therrien	10/29	P'town 53	
10/21-23	Nantucket 1550	S. Perkins#	Pacific Loor	1	
10/26	Pittsfield (Pont.) 5		10/27	Rockport (A.P.) 2	R. Heil
10/27	Rockport 4300	R. Heil	Common Lo		
Black Scoter	W 1 D T.	** **	10/8	E. of Chatham 26	
10/23	Wachusett Res. 76		10/10	S. Quabbin 11	L. Therrien
10/24	S. Quabbin 110		10/15	P.I. 38	
10/26 10/27	Cheshire 29 Rockport 20,660		10/18 10/21	Wachusett Res. 32 Nantucket 45	
10/27	Rockport 20,660 Gardner 60		Pied-billed C		3. Ferkins#
10/27	Chatham 1500		10/2	Fairhaven 6	C. Longworth
10/31	P.I. 500		10/21	Cheshire 12	
Long-tailed I			10/21	Nantucket 13	
10/21-22	Nantucket 10	S. Perkins#	10/26	Lakeville 7	M. Sylvia
10/27	Rockport 1720	R. Heil	10/29	W. Newbury 7	J. Berry#
10/28	Wachusett Res. 1	A. Marble	10/29	Cambr. (F.P.) 6	BBC (S. Martin)
10/28	Stockbridge 1		Horned Greb		
10/28	Eastham (F.E.) 330		9/20,10/29		
10/31	GMNWR 1	f W. Hutcheson#	10/15	S. Quabbin 14	
Bufflehead	W. Newbury 2	S. McGrath	10/23	Wachusett Res. 11 Ipswich (C.B.) 18	
10/15 10/26	W. Newbury 2 Duxbury B. 14		10/26 10/29	Gloucester (E.P.) 14	
10/29	P.I. 21		10/29	Lakeville 10	
10/29	W. Gloucester 10		Red-necked		ix. Kydii
Common Go		2. muchant		S. Quabbin 1, 13	L. Therrien
10/27	Orange 1	M. Taylor	10/21	Nantucket 3	
10/28	Lincoln 2		10/23	Wachusett Res. 3	
10/29	Pittsfield (Onota) 1	M. & K. Conway#	10/27	Rockport (A.P.) 10	R. Heil
Hooded Merg			10/28	Turners Falls 10	L. Therrien
10/9	Cumb. Farms 6	J. Sweeney#			

					_		
Northern Fuli 10/1, 8	nar E. of Chath	om 2 15	B. Nikula#	Great Blue F 9/12		30	D Champlin
10/1, 8	Rockport (A			9/12	S. Dart. (A.Pd) Wellfleet	24	P. Champlin BBC (Stymeist)
10/18	Stellwagen		W. Petersen	9/29	WBWS	28	M. Faherty
10/23	Jeffries L.	6	J. Frontierro	9/30	Duxbury B.	22	R. Bowes
10/30	Eastham (F.	E.) 8	B. Nikula	Great Egret	·		
Cory's Sheary				9/4	S. Dartmouth	74	A. Morgan
9/5, 29	P'town	15, 16	B. Nikula	9/4	Deerfield	2	T. Gagnon
9/21	Stellwagen	21	W. Petersen#	10/20-23	Nantucket	12	S. Perkins#
10/1, 9	E. of Chath		B. Nikula	10/25	P.I.	41	J. Berry#
10/2 10/23, 29	Rockport (A P'town	A.P.) 4 7, 14	R. Heil B. Nikula	Snowy Egret thr	P.I.	142 ma	ax v.o.
10/23, 25	Eastham (F.		B. Nikula	9/3	N. Scituate	21	G. d'Entremont#
Great Shearw		.L.) 00	D. Prikula	9/12	S. Dart. (A.Pd)		P. Champlin
9/3, 25	Chatham	400, 50	B. Nikula	9/16	Eastham	18	BBC (Stymeist)
	Rockport (A	A.P.) 400,		10/2	E. Boston (B.I.)) 12	P. Peterson
10/1, 9	E. of Chatha			10/21	Nantucket	3	S. Perkins#
10/2, 29		610, 480	B. Nikula	Little Blue H			
10/18	Stellwagen		MAS (Petersen)	9/9	P.I.	2 ju	
10/30	Eastham (F.	E.) 40	B. Nikula	9/17	S. Dart. (A.Pd)		
Sooty Shearw 9/3	Chatham	150	B. Nikula	Tricolored H	2 Gloucester	6, 1	Hedman, Spahr
10/1, 9	E. of Chath			10/10, 25		1, 1	Murphy, Berry
10/29	P'town	3	B. Nikula	Cattle Egret	1.1.	1, 1	marphy, Berry
Manx Shearw		-		10/3	Brewster	1 ph	P. Trull
9/3	Chatham	2	B. Nikula	10/22	Concord	1	W. Hutcheson#
9/10,10/29	P'town	20, 6	B. Nikula	Green Heron			
	Stellwagen	16, 4	W. Petersen	9/3	DWWS	3	BBC (GdE)
9/25	N. Truro	5	B. Nikula	9/5	Waltham	6	J. Forbes#
10/1	E. of Chath	am 39	B. Nikula#	10/3	Sudbury		MAS (Brownrigg)
Wilson's Stor 9/1, 10/2	P'town	65, 2	B. Nikula	10/25	Concord ed Night-Heron	1	S. Perkins
9/1, 10/2	N. Truro	450	B. Nikula	9/12	P.I.	40	T. Wetmore
9/3, 8	Chatham	1500, 50	B. Nikula	9/14	Longmeadow		A.& L. Richardson
9/9	N. Truro	100	B. Nikula	9/23	Ipswich	15	J. Berry
9/12	Jeffries L.	342	MAS (D. Larson)	9/25	Fairhaven	11	C. Longworth
9/21	Stellwagen	17	W. Petersen	10/8	Eastham	28	SSBC (GdE)
		1 /	W. Fetersen			20	DDDC (GdL)
Leach's Storn	n-Petrel			Yellow-crow	ned Night-Heron		
Leach's Storn 10/7	n-Petrel Stellwagen	1	J. Frontierro	Yellow-crow 9/2	ned Night-Heron Eastham	2	D. Clapp
Leach's Storn 10/7 10/29	n-Petrel Stellwagen P.I.			Yellow-crow 9/2 9/27	rned Night-Heron Eastham P.I.	2 2	D. Clapp D. Chickering
Leach's Storn 10/7 10/29 Magnificent	n-Petrel Stellwagen P.I. Frigatebird	1 1	J. Frontierro T. Wetmore	Yellow-crow 9/2 9/27 10/23	ned Night-Heron Eastham	2	D. Clapp D. Chickering
Leach's Storn 10/7 10/29 Magnificent 10/20-21	n-Petrel Stellwagen P.I. Frigatebird Nantucket	1	J. Frontierro	Yellow-crow 9/2 9/27 10/23 White Ibis	rned Night-Heron Eastham P.I. Gloucester H.	2 2 1 im	D. Clapp D. Chickering J. Frontierro
Leach's Storn 10/7 10/29 Magnificent	n-Petrel Stellwagen P.I. Frigatebird Nantucket	1 1	J. Frontierro T. Wetmore	Yellow-crow 9/2 9/27 10/23	rned Night-Heron Eastham P.I.	2 2 1 im	D. Clapp D. Chickering
Leach's Storn 10/7 10/29 Magnificent 10/20-21 Brown Boob	n-Petrel Stellwagen P.I. Frigatebird Nantucket y P'town	1 1 1 imm m	J. Frontierro T. Wetmore J. Carlson + v.o	Yellow-crow 9/2 9/27 10/23 White Ibis 9/4	rned Night-Heron Eastham P.I. Gloucester H.	2 2 1 im	D. Clapp D. Chickering J. Frontierro
Leach's Storm 10/7 10/29 Magnificent 10/20-21 Brown Boob thr Northern Gan 9/16,10/30	n-Petrel Stellwagen P.I. Frigatebird Nantucket y P'town nnet Eastham (F.	1 1 imm m 1 imm E.) 600, 1	J. Frontierro T. Wetmore J. Carlson + v.o B. Nikula + v.o.	Yellow-crow 9/2 9/27 10/23 White Ibis 9/4 Glossy Ibis 9/2 10/24	rned Night-Heron Eastham P.I. Gloucester H. P.I./Newbury Sutton P.I.	2 2 1 im 1 ju	D. Clapp D. Chickering J. Frontierro v ph C. Ciccone#
Leach's Storn 10/7 10/29 Magnificent 10/20-21 Brown Boob thr Northern Gan 9/16,10/30 9/21,10/18	n-Petrel Stellwagen P.I. Frigatebird Nantucket y P'town unet Eastham (F. Stellwagen	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	J. Frontierro T. Wetmore J. Carlson + v.o B. Nikula + v.o. 400 B. Nikula W. Petersen	Yellow-crow 9/2 9/27 10/23 White Ibis 9/4 Glossy Ibis 9/2 10/24 Black Vultur	rned Night-Heron Eastham P.I. Gloucester H. P.I./Newbury Sutton P.I.	2 2 1 im 1 ju 3 1	D. Clapp D. Chickering J. Frontierro v ph C. Ciccone# M. Joubert P. + F. Vale
Leach's Storm 10/7 10/29 Magnificent 10/20-21 Brown Boob thr Northern Gan 9/16,10/30 9/21,10/18 10/2, 29	n-Petrel Stellwagen P.I. Frigatebird Nantucket y P'town net D Eastham (F. Stellwagen P'town	1 imm m 1 imm 1 imm E.) 600, 1- 240, 235 155, 1125	J. Frontierro T. Wetmore J. Carlson + v.o B. Nikula + v.o. 400 B. Nikula W. Petersen B. Nikula	Yellow-crow 9/2 9/27 10/23 White Ibis 9/4 Glossy Ibis 9/2 10/24 Black Vultur 9/5	ned Night-Heron Eastham P.I. Gloucester H. P.I./Newbury Sutton P.I. e Worcester	2 2 1 im 1 jur 3 1	D. Clapp D. Chickering J. Frontierro v ph C. Ciccone# M. Joubert P. + F. Vale A. Marble
Leach's Storm 10/7 10/29 Magnificent 10/20-21 Brown Boob , thr Northern Gan 9/16,10/30 9/21,110/18 10/2, 29 10/12	n-Petrel Stellwagen P.I. Frigatebird Nantucket Y P'town inet Eastham (F. Stellwagen P'town Duxbury B.	1 imm m 1 imm E.) 600, 1 240, 235 155, 1125 300	J. Frontierro T. Wetmore J. Carlson + v.o B. Nikula + v.o. 400 B. Nikula W. Petersen B. Nikula R. Bowes	Yellow-crow 9/2 9/27 10/23 White Ibis 9/4 Glossy Ibis 9/2 10/24 Black Vultur 9/5 9/9	rned Night-Heron Eastham P.I. Gloucester H. P.I./Newbury Sutton P.I. ee Worcester Oxford	2 2 1 im 1 jur 3 1	D. Clapp D. Chickering J. Frontierro v ph C. Ciccone# M. Joubert P. + F. Vale A. Marble M. Joubert
Leach's Storm 10/7 10/29 Magnificent 10/20-21 Brown Boob thr Northern Gan 9/16,10/30 9/21,10/18 10/2, 29 10/12	n-Petrel Stellwagen P.I. Frigatebird Nantucket y P'town met Eastham (F. Stellwagen P'town 4 Duxbury B. P.I.	1 imm m 1 imm LE.) 600, 1- 240, 235 155, 1125 300 250	J. Frontierro T. Wetmore J. Carlson + v.o B. Nikula + v.o. 400 B. Nikula W. Petersen B. Nikula R. Bowes P. + F. Vale	Yellow-crow 9/2 9/27 10/23 White Ibis 9/4 Glossy Ibis 9/2 10/24 Black Vultur 9/5 9/9	rned Night-Heron Eastham P.I. Gloucester H. P.I./Newbury Sutton P.I. e Worcester Oxford Great Barringto	2 2 1 im 1 ju 3 1 2 1 on 2	D. Clapp D. Chickering J. Frontierro v ph C. Ciccone# M. Joubert P. + F. Vale A. Marble M. Joubert M. Lynch#
Leach's Storm 10/7 10/29 Magnificent 10/20-21 Brown Boob thr Northern Gan 9/16,10/30 9/21,10/18 10/2, 29 10/12 10/15 10/27	n-Petrel Stellwagen P.I. Frigatebird Nantucket Y P'town Inet Eastham (F. Stellwagen P'town 4 Duxbury B. P.I. Rockport (A	1 imm m 1 imm LE.) 600, 1- 240, 235 155, 1125 300 250 A.P.) 550	J. Frontierro T. Wetmore J. Carlson + v.o B. Nikula + v.o. 400 B. Nikula W. Petersen B. Nikula R. Bowes	Yellow-crow 9/2 9/27 10/23 White Ibis 9/4 Glossy Ibis 9/2 10/24 Black Vultur 9/5 9/9 9/18 9/21	rned Night-Heron Eastham P.I. Gloucester H. P.I./Newbury Sutton P.I. Worcester Oxford Great Barringto Mt. Wachusett	2 2 1 im 1 jur 3 1	D. Clapp D. Chickering J. Frontierro v ph C. Ciccone# M. Joubert P. + F. Vale A. Marble M. Joubert
Leach's Storm 10/7 10/29 Magnificent 10/20-21 Brown Boob thr Northern Gan 9/16,10/30 9/21,10/18 10/2, 29 10/12	n-Petrel Stellwagen P.I. Frigatebird Nantucket Y P'town Inet Eastham (F. Stellwagen P'town 4 Duxbury B. P.I. Rockport (A	1 imm m 1 imm 1 imm 1.E.) 600, 1-240, 235 155, 1125 300 250 A.P.) 550	J. Frontierro T. Wetmore J. Carlson + v.o B. Nikula + v.o. 400 B. Nikula W. Petersen B. Nikula R. Bowes P. + F. Vale	Yellow-crow 9/2 9/27 10/23 White Ibis 9/4 Glossy Ibis 9/2 10/24 Black Vultur 9/5 9/9	rned Night-Heron Eastham P.I. Gloucester H. P.I./Newbury Sutton P.I. Worcester Oxford Great Barringto Mt. Wachusett	2 2 1 im 1 ju 3 1 2 1 on 2	D. Clapp D. Chickering J. Frontierro v ph C. Ciccone# M. Joubert P. + F. Vale A. Marble M. Joubert M. Lynch# S. Olson
Leach's Storm 10/7 10/29 Magnificent 10/20-21 Brown Boob, thr Northern Gan 9/16,10/30 9/21,10/18 10/2, 29 10/12 10/15 10/27 Double-creste	n-Petrel Stellwagen P.I. Frigatebird Nantucket Y P'town He Eastham (F. Stellwagen P'town Duxbury B. P.I. Rockport (A	1 imm m 1 imm E.) 600, 1 240, 235 155, 1125 300 250 A.P.) 550	J. Frontierro T. Wetmore J. Carlson + v.o B. Nikula + v.o. 400 B. Nikula W. Petersen B. Nikula R. Bowes P. + F. Vale R. Heil B. Nikula#	Yellow-crow 9/2 9/27 10/23 White Ibis 9/4 Glossy Ibis 9/2 10/24 Black Vultur 9/5 9/9 9/18 9/21 Turkey Vultu	rned Night-Heron Eastham P.I. Gloucester H. P.I./Newbury Sutton P.I. Worcester Oxford Great Barringto Mt. Wachusett	2 2 1 im 1 ju 3 1 2 1 2 3 3	D. Clapp D. Chickering J. Frontierro v ph C. Ciccone# M. Joubert P. + F. Vale A. Marble M. Joubert M. Lynch#
Leach's Storm 10/7 10/29 Magnificent 10/20-21 Brown Boob thr Northern Gan 9/16,10/30 9/21,10/18 10/2, 29 10/15 10/27 Double-creste 10/8 10/20 10/21	n-Petrel Stellwagen P.I. Frigatebird Nantucket Y P'town unet Eastham (F. Stellwagen P'town 4 Duxbury B. P.I. Rockport (A d Cormorant Chatham Nahant P.I.	1 imm m 1 imm 1 imm E.) 600, 1 240, 235 455, 1125 300 250 A.P.) 550 2000 800+ 5600+	J. Frontierro T. Wetmore J. Carlson + v.o B. Nikula + v.o. 400 B. Nikula W. Petersen B. Nikula R. Bowes P. + F. Vale R. Heil B. Nikula# L. Pivacek R. Heil	Yellow-crow 9/2 9/27 10/23 White Ibis 9/4 Glossy Ibis 9/2 10/24 Black Vultur 9/5 9/9 9/18 9/21 Turkey Vultur 10/6-28 9/5 9/10	rned Night-Heron Eastham P.I. Gloucester H. P.I./Newbury Sutton P.I. Worcester Oxford Great Barringto Mt. Wachusett ire Barre Falls Worcester P.I.	2 2 1 im 1 ju 3 1 2 1 2 1 2 1 3 2 3 3 233 35 25	D. Clapp D. Chickering J. Frontierro v ph C. Ciccone# M. Joubert P. + F. Vale A. Marble M. Joubert M. Lynch# S. Olson Hawkcount (BK) A. Marble R. Schain
Leach's Storm 10/7 10/29 Magnificent 10/20-21 Brown Boob, thr Northern Gan 9/16,10/30 9/21,10/12 10/12 10/15 10/27 Double-creste 10/8 10/20 10/21 10/21	n-Petrel Stellwagen P.I. Frigatebird Nantucket y P'town net Eastham (F. Stellwagen P'town Duxbury B. P.I. Rockport (Ad Cormorant Chatham Nahant P.I. Duxbury B.	1 imm m 1 imm 1 imm E.) 600, 1 240, 235 155, 1125 300 250 A.P.) 550 2000 800+ 5600+ 3500	J. Frontierro T. Wetmore J. Carlson + v.o B. Nikula + v.o. 400 B. Nikula W. Petersen B. Nikula R. Bowes P. + F. Vale R. Heil B. Nikula# L. Pivacek R. Heil R. Bowes	Yellow-crow 9/2 9/27 10/23 White Ibis 9/4 Glossy Ibis 9/2 10/24 Black Vultur 9/5 9/9 9/18 9/21 Turkey Vultu 10/6-28 9/5 9/10 10/20	rned Night-Heron Eastham P.I. Gloucester H. P.I./Newbury Sutton P.I. Worcester Oxford Great Barringto Mt. Wachusett Ire Barre Falls Worcester P.I. Nantucket	2 2 1 im 1 ju 3 1 2 2 3 3 3 5 2 5 2 5	D. Clapp D. Chickering J. Frontierro v ph C. Ciccone# M. Joubert P. + F. Vale A. Marble M. Joubert M. Lynch# S. Olson Hawkcount (BK) A. Marble R. Schain S. Perkins#
Leach's Storm 10/7 10/29 Magnificent 10/20-21 Brown Boob, thr Northern Gan 9/16,10/30 9/21,110/18 10/2, 29 10/12 10/15 10/27 Double-creste 10/8 10/20 10/21 10/22 10/23	n-Petrel Stellwagen P.I. Frigatebird Nantucket y P'town inet 1 Eastham (F. Stellwagen P'town 4 Duxbury B. P.I. Rockport (A dCormoration Chatham Nahant P.I. Duxbury B. Nantucket	1 imm m 1 imm 1 imm E.) 600, 1 240, 235 455, 1125 300 250 A.P.) 550 2000 800+ 5600+	J. Frontierro T. Wetmore J. Carlson + v.o B. Nikula + v.o. 400 B. Nikula W. Petersen B. Nikula R. Bowes P. + F. Vale R. Heil B. Nikula# L. Pivacek R. Heil R. Bowes	Yellow-crow 9/2 9/27 10/23 White Ibis 9/4 Glossy Ibis 9/2 10/24 Black Vultur 9/5 9/9 9/18 17 Turkey Vultu 10/6-28 9/5 9/10 10/20 10/22	rned Night-Heron Eastham P.I. Gloucester H. P.I./Newbury Sutton P.I. Worcester Oxford Great Barringto Mt. Wachusett Ire Barre Falls Worcester P.I. Nantucket Granville	2 2 1 im 1 ju 3 1 2 1 2 3 2 3 2 3 2 3 2 3 2 5 2 5 2 5 2 5 2 5	D. Clapp D. Chickering J. Frontierro v ph C. Ciccone# M. Joubert P. + F. Vale A. Marble M. Joubert M. Lynch# S. Olson Hawkcount (BK) A. Marble R. Schain S. Perkins# J. Weeks
Leach's Storm 10/7 10/29 Magnificent 10/20-21 Brown Boob, thr Northern Gan 9/16,10/30 9/21,110/18 10/2, 29 10/12 10/15 10/27 Double-creste 10/8 10/20 10/21 10/22 10/23 Great Cormon	n-Petrel Stellwagen P.I. Frigatebird Nantucket y P'town inet Eastham (F. Stellwagen P'town Duxbury B. P.I. Rockport (A d Cormorant Chatham Nahant P.I. Duxbury B. Nantucket rant	1 imm m 1 imm E.) 600, 1 240, 235 455, 1125 300 250 A.P.) 550 2000 800+ 5600+ 3500 700 m	J. Frontierro T. Wetmore J. Carlson + v.o B. Nikula + v.o. 400 B. Nikula W. Petersen B. Nikula R. Bowes P. + F. Vale R. Heil B. Nikula# L. Pivacek R. Heil R. Bowes S. Perkins#	Yellow-crow 9/2 9/27 10/23 White Ibis 9/4 Glossy Ibis 9/2 10/24 Black Vultur 9/5 9/9 9/18 9/21 Turkey Vultu 10/6-28 9/5 9/10 10/20 10/22 10/28	rned Night-Heron Eastham P.I. Gloucester H. P.I./Newbury Sutton P.I. e Worcester Oxford Great Barringto Mt. Wachusett ure Barre Falls Worcester P.I. Nantucket Granville Russell	2 2 2 1 im 1 ju 3 1 2 1 2 3 3 3 5 2 5 2 5 4 9 7 3	D. Clapp D. Chickering J. Frontierro v ph C. Ciccone# M. Joubert P. + F. Vale A. Marble M. Joubert M. Lynch# S. Olson Hawkcount (BK) A. Marble R. Schain S. Perkins# J. Weeks Hawkcount (TS)
Leach's Storm 10/7 10/29 Magnificent 10/20-21 Brown Boob, thr Northern Gan 9/16,10/30 9/21,10/18 10/2, 29 10/12 10/15 10/27 Double-crester 10/8 10/20 10/21 10/23 Great Cormon thr	n-Petrel Stellwagen P.I. Frigatebird Nantucket y P'town He Eastham (F. Stellwagen P'town A Duxbury B. P.I. Rockport (A d Cormorant Chatham Nahant P.I. Duxbury B. Nantucket rant P.I.	1 imm m 1 imm 240, 235 155, 1125 300 250 A.P.) 550 2000 800+ 5600+ 3500 700 m	J. Frontierro T. Wetmore J. Carlson + v.o B. Nikula + v.o. 400 B. Nikula W. Petersen B. Nikula R. Bowes P. + F. Vale R. Heil B. Nikula# L. Pivacek R. Heil R. Bowes S. Perkins#	Yellow-crow 9/2 9/27 10/23 White Ibis 9/4 Glossy Ibis 9/2 10/24 Black Vultur 9/5 9/9 9/18 9/21 Turkey Vultu 10/6-28 9/5 9/10 10/20 10/22 10/28 10/29	rned Night-Heron Eastham P.I. Gloucester H. P.I./Newbury Sutton P.I. Worcester Oxford Great Barringto Mt. Wachusett Ire Barre Falls Worcester P.I. Nantucket Granville	2 2 1 im 1 ju 3 1 2 1 2 3 2 3 2 3 2 3 2 3 2 5 2 5 2 5 2 5 2 5	D. Clapp D. Chickering J. Frontierro v ph C. Ciccone# M. Joubert P. + F. Vale A. Marble M. Joubert M. Lynch# S. Olson Hawkcount (BK) A. Marble R. Schain S. Perkins# J. Weeks
Leach's Storm 10/7 10/29 Magnificent 10/20-21 Brown Boob; thr Northern Gan 9/16,10/30 9/21,10/18 10/2, 29 10/12 10/15 10/27 Double-creste 10/8 10/20 10/21 10/22 10/23 Great Cormon thr 9/30	n-Petrel Stellwagen P.I. Frigatebird Nantucket y P'town met Eastham (F. Stellwagen P'town Duxbury B. P.I. Rockport (A d Cormorant Chatham Nahant P.I. Duxbury B. Nantucket rant P.I. Duxbury B. Nantucket rant Duxbury B. Nantucket rant Duxbury B.	1 imm m 1 imm 1 imm E.) 600, 1 240, 235 155, 1125 300 250 A.P.) 550 2000 800+ 5600+ 3500 700 m	J. Frontierro T. Wetmore J. Carlson + v.o B. Nikula + v.o. 400 B. Nikula W. Petersen B. Nikula R. Bowes P. + F. Vale R. Heil B. Nikula# L. Pivacek R. Heil R. Bowes S. Perkins#	Yellow-crow 9/2 9/27 10/23 White Ibis 9/4 Glossy Ibis 9/2 10/24 Black Vultur 9/5 9/9 9/18 9/21 Turkey Vultu 10/6-28 9/5 9/10 10/20 10/22 10/28 10/29 Osprey	rned Night-Heron Eastham P.I. Gloucester H. P.I./Newbury Sutton P.I. Worcester Oxford Great Barringto Mt. Wachusett Ire Barre Falls Worcester P.I. Nantucket Granville Russell Carlisle	2 2 1 im 1 ju 3 1 2 1 2 3 2 3 233 35 25 25 49 73 21	D. Clapp D. Chickering J. Frontierro v ph C. Ciccone# M. Joubert P. + F. Vale A. Marble M. Joubert M. Lynch# S. Olson Hawkcount (BK) A. Marble R. Schain S. Perkins# J. Weeks Hawkcount (TS) T. Brownrigg#
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Leach's Storm 10/7 10/29 Magnificent 10/20-21 Brown Boob, thr Northern Gan 9/16,10/30 9/21,10/15 10/27 Double-crester 10/8 10/20 10/21 10/23 Great Cormon thr 9/30 10/8 10/17 Brown Pelica 9/1-3 9/8, 9 American Bit 9/1 9/24 9/30 10/17	n-Petrel Stellwagen P.I. Frigatebird Nantucket y P'town Inet Eastham (F. Stellwagen P'town Inet Eastham (F. Stellwagen P'town Inet Eastham (F. Inet Inet Inet Inet Inet Inet Inet Inet	1 imm m 1 imm 1 imm 2.E.) 600, 1 240, 235 155, 1125 300 250 2.E.) 550 2000 800+ 5600+ 3500 700 m 10 m 5 55 23 1 pi 1, 1 n 4 1 1 1	J. Frontierro T. Wetmore J. Carlson + v.o B. Nikula + v.o. 400 B. Nikula W. Petersen B. Nikula R. Bowes P. + F. Vale R. Heil B. Nikula# L. Pivacek R. Heil R. Bowes S. Perkins# ax v.o. R. Bowes R. Schain# M. Lynch# Marcy, Avis# L. Therrien CCBC (G. Hirth) M. Faherty J. Forbes#	Yellow-crow 9/2 9/27 10/23 White Ibis 9/4 Glossy Ibis 9/2 10/24 Black Vultur 9/5 9/9 9/18 9/21 Turkey Vultu 10/6-28 9/5 9/10 10/22 10/28 10/29 Osprey 9/9-27 9/9-30 9/10-18 9/28 10/28 10/28 10/28 10/28 Bald Eagle 9/9-27 9/10-18	rned Night-Heron Eastham P.I. Gloucester H. P.I./Newbury Sutton P.I. Worcester Oxford Great Barringto Mt. Wachusett ITE Barre Falls Worcester P.I. Nantucket Granville Russell Carlisle Mt. Wachusett Barre Falls Mt. Wachusett Barre Falls Mt. Watatic Granville Worcester Barre Falls Mt. Wathusett Barre Falls Mt. Wathusett Barre Falls Pittsfield (Onot Mt. Wachusett Mt. Wachusett Mt. Wachusett	2 2 1 im 1 ju 3 1 2 1 2 3 3 35 25 25 49 73 21 55 134 42 50 1 2 2 1 2 1 2 2 1 2 1 2 2 1 2	D. Clapp D. Chickering J. Frontierro v ph C. Ciccone# M. Joubert P. + F. Vale A. Marble M. Joubert M. Lynch# S. Olson Hawkcount (BK) A. Marble R. Schain S. Perkins# J. Weeks Hawkcount (TS) T. Brownrigg# Hawkcount (BK) Hawkcount (TP) Hawkcount (TP) Hawkcount (BK) T. Gagnon Hawkcount (SO) Hawkcount (SO) Hawkcount (SO) Hawkcount (SO) Hawkcount (SO) Hawkcount (SO)
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Leach's Storm 10/7 10/29 Magnificent 10/20-21 Brown Boob; thr Northern Gan 9/16,10/30 9/21,10/18 10/2, 29 10/12 10/15 10/27 Double-creste 10/8 10/20 10/21 10/22 10/23 Great Cormon thr 9/30 10/8 10/17 Brown Pelica 9/1-3 9/8, 9 American Bit 9/1 9/24 9/30 10/17 10/26	n-Petrel Stellwagen P.I. Frigatebird Nantucket y P'town Inet Eastham (F. Stellwagen P'town Inet Eastham (F. Stellwagen P'town Inet Eastham (F. Inet Inet Inet Inet Inet Inet Inet Inet	1 imm m 1 imm 1 imm 2.E.) 600, 1 240, 235 155, 1125 300 250 2.E.) 550 2000 800+ 5600+ 3500 700 m 10 m 5 55 23 1 pi 1, 1 n 4 1 1 1	J. Frontierro T. Wetmore J. Carlson + v.o B. Nikula + v.o. 400 B. Nikula W. Petersen B. Nikula R. Bowes P. + F. Vale R. Heil B. Nikula# L. Pivacek R. Heil R. Bowes S. Perkins# ax v.o. R. Bowes R. Schain# M. Lynch# Marcy, Avis# L. Therrien CCBC (G. Hirth) M. Faherty J. Forbes#	Yellow-crow 9/2 9/27 10/23 White Ibis 9/4 Glossy Ibis 9/2 10/24 Black Vultur 9/5 9/9 9/18 9/21 Turkey Vultu 10/6-28 9/5 9/10 10/22 10/28 10/29 Osprey 9/9-27 9/9-30 9/10-18 9/28 10/28 10/28 10/28 Bald Eagle 9/9-27 9/10-18 9/10-30	rned Night-Heron Eastham P.I. Gloucester H. P.I./Newbury Sutton P.I. Worcester Oxford Great Barringto Mt. Wachusett Ire Barre Falls Worcester P.I. Nantucket Granville Russell Carlisle Mt. Wachusett Barre Falls Mt. Watatic Granville Worcester Barre Falls Pittsfield (Onot Mt. Wachusett Mt. Wachusett Barre Falls	2 2 1 im 1 ju 3 1 2 1 2 3 3 233 35 25 25 49 73 21 55 134 42 50 1 2 20 45	D. Clapp D. Chickering J. Frontierro V ph C. Ciccone# M. Joubert P. + F. Vale A. Marble M. Joubert M. Lynch# S. Olson Hawkcount (BK) A. Marble R. Schain S. Perkins# J. Weeks Hawkcount (TS) T. Brownrigg# Hawkcount (BK) Hawkcount (JW) R. Quimby Hawkcount (JW) R. Quimby Hawkcount (BK) T. Gagnon Hawkcount (SO) Hawkcount (PP) Hawkcount (BK)

	rier			Merlin			
Northern Hai 9/10-27	Barre Falls	19	Hawkcount (BK)	9/10	P.I.	3	T. Wetmore
10/6-25	Barre Falls	24	Hawkcount (BK)	9/10-28	Barre Falls	18 F	Hawkcount (BK)
10/21	Nantucket	14	S. Perkins#	10/5	Westport	7	P. Champlin
10/22	Cumb. Farms	7	S. Arena	10/6-28	Barre Falls		Hawkcount (BK)
10/28 10/30	Russell P.I.	6 8	Hawkcount (TS) S. Riley	10/21-23 Peregrine Fal	Nantucket	8	V. Laux, v.o.
Sharp-shinne		0	S. Kiley	9/18	Lawrence	2	L. Kaplan
9/9-27	Mt. Wachusett	77	Hawkcount (SO)	9/21	Cambr. (Daneh		K. Hartel#
9/9-30	Barre Falls	372	Hawkcount (BK)	9/24	Duxbury B.	2 juv	R. Bowes
9/10-18	Mt. Watatic	92	Hawkcount (TP)	9/29	P.I.	4	D. Chickering#
9/25, 27		45, 60	Hawkcount	10/10	Gloucester (E.P	2.) 4	K. Ryan
10/2-30 10/5	Malden (PR) Gardner	98 37	Hawkcount (CJ) T. Pirro	Clapper Rail 9/11	P.I.	1	J. Taylor
10/5-25	Barre Falls	784	Hawkcount (BK)	9/25	Thompson I.	1	K. Hartel
10/5-25	Barre Falls 11		Hawkcount	10/2	Eastham (F.H.)	1	J. Sweeney#
10/8, 10	Malden (PR)		Hawkcount (CJ)	Virginia Rail	,		
10/22	Russell	77	Hawkcount (TS)	9/8	Ipswich	3+	R. Heil
Cooper's Ha		70	II 1 (DIC)	9/12	P.I.	2	T. Wetmore
9/9-30	Barre Falls Mt.Watatic	72 15	Hawkcount (BK)	9/18	Dorchester	2 2	R. Donovan
9/10-18 9/27	Barre Falls	13	Hawkcount (TP) Hawkcount (BK)	10/1 10/8	GMNWR Cuttyhunk	4	BBC (B. Volkle) R. Schain#
10/5	Gardner	8	T. Pirro	Sora	Cuttynunk	7	R. Schamii
10/5-28	Barre Falls	106	Hawkcount (BK)	thr	GMNWR	2-3	v.o.
10/6-23	Malden (PR)	25	Hawkcount (CJ)	9/6	P.I.	2	R. Heil
10/23	Barre Falls	13	Hawkcount (BK)	9/18	Dorchester	2	R. Donovan
10/28	Russell	8	Hawkcount (TS)	9/25	Bolton Flats	2	K. Bourinot#
Northern Go		1	Hambara (TC)	10/6	Mashpee	1 3	M. Keleher R. Donovan
9/18 9/18	Russell Mt. Tom	1 1	Hawkcount (TS) T. Gagnon	10/7 10/26	Dorchester Petersham	3 1	J. Galluzzo
9/25, 26	Barre Falls	1, 1	Hawkcount (BK)	Purple Gallin		1	J. Ganuzzo
10/11	Cumb. Farms	1 in		10/8	Cuttyhunk	1 juv p	h R. Schain#
10/12	Granville	1	Hawkcount (JW)	Common Gal		3 1	
10/28	Barre Falls	2	Hawkcount (BK)	9/thr	Groveland	7	K. Elwell
10/30	Cumb. Farms	1 ac	J. Young	American Co		1 1/	A.C. (D
Red-shoulder 9/17	Mt. Watatic	3	T. Pirro	10/3 10/18-31	Sudbury	1 M 265 max	AS (Brownrigg)
9/17	Westport	2 m		10/18-31	P.I. Mashpee	150	v.o. C. Brothers
9/28	Carlisle	2	T. Brownrigg	10/24	GMNWR	135	A. Bragg#
10/5	Westport	2	P. Champlin	10/25	Groveland	210	R. Heil
10/7-28	Barre Falls	16	Hawkcount (BK)	10/25	Brookfield	225	J. Zumpfe
10/23	S. Dart. (A.Pd)		E. Nielsen	10/26	Lakeville	742	M. Sylvia
10/31					Waltham	350	M. Rines
	Lakeville	2	K. Ryan	10/27			T Comon
Broad-winge	d Hawk		•	10/28	Richmond	223	T. Gagnon
Broad-winge 9/9-27	d Hawk Mt. Wachusett	2364	Hawkcount (SO)	10/28 Sandhill Cran	Richmond ne	223	•
Broad-winge	d Hawk		•	10/28	Richmond	223	T. Gagnon S. Surner + v.o. M. Maurer + v.o.
Broad-winge 9/9-27 9/9-30 9/10-18 9/17	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville	2364 5884 3195 1130	Hawkcount (SO) Hawkcount (BK)	10/28 Sandhill Cran 10/8-10	Richmond ne Cumb. Farms Wareham Plover	223 1 5-6 N	S. Surner + v.o.
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett	2364 5884 3195 1130 1600	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (JW) Hawkcount (SO)	10/28 Sandhill Cran 10/8-10 10/13-24 Black-bellied thr	Richmond ne Cumb. Farms Wareham Plover P.I.	223 1 5-6 M 400 max	S. Surner + v.o. M. Maurer + v.o. v.o.
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom	2364 5884 3195 1130 1600 1904	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (JW) Hawkcount (SO) T. Gagnon	10/28 Sandhill Cran 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B.603	223 1 5-6 M 400 max 1, 122	S. Surner + v.o. M. Maurer + v.o. v.o. R. Bowes
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic	2364 5884 3195 1130 1600 1904 1139	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (JW) Hawkcount (SO) T. Gagnon Hawkcount (TP)	10/28 Sandhill Cran 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B.603 Northampton	223 1 5-6 M 400 max 3, 122 3	S. Surner + v.o. M. Maurer + v.o. v.o. R. Bowes A. Magee
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17 9/17	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic Barre Falls	2364 5884 3195 1130 1600 1904 1139 4411	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (SO) T. Gagnon Hawkcount (PP) Hawkcount (BK)	10/28 Sandhill Cran 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8 10/10	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB)	223 1 5-6 M 400 max 402 3 1500	S. Surner + v.o. M. Maurer + v.o. v.o. R. Bowes A. Magee B. Nikula
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic	2364 5884 3195 1130 1600 1904 1139	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (JW) Hawkcount (SO) T. Gagnon Hawkcount (TP)	10/28 Sandhill Cran 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB) Nantucket	223 1 5-6 M 400 max 3, 122 3	S. Surner + v.o. M. Maurer + v.o. v.o. R. Bowes A. Magee
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17 9/17 9/17 10/5-22 10/24	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic Barre Falls Amherst Barre Falls Concord	2364 5884 3195 1130 1600 1904 1139 4411 420	Hawkcount (SO) Hawkcount (TP) Hawkcount (JW) Hawkcount (SO) T. Gagnon Hawkcount (BK) J. Drucker Hawkcount (BK)	10/28 Sandhill Cran 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8 10/10 10/21 American Go	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB) Nantucket	223 1 5-6 M 400 max 4, 122 3 1500 255 10 max	S. Surner + v.o. M. Maurer + v.o. v.o. R. Bowes A. Magee B. Nikula S. Perkins#
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17 9/17 10/5-22 10/24 Red-tailed H	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic Barre Falls Amherst Barre Falls Concord awk	2364 5884 3195 1130 1600 1904 1139 4411 420 18 1 in	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (SO) T. Gagnon Hawkcount (TP) Hawkcount (BK) J. Drucker Hawkcount (BK) S. Perkins	10/28 Sandhill Cran 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8 10/10 10/21 American Go thr 9/1-16	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB) Nantucket olden-Plover P.I. Duxbury B.	223 1 5-6 M 400 max 3, 122 3 1500 255 10 max 3 max	S. Surner + v.o. M. Maurer + v.o. v.o. R. Bowes A. Magee B. Nikula S. Perkins# v.o. R. Bowes
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17 9/17 10/5-22 10/24 Red-tailed H 9/10-28	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic Barre Falls Amherst Barre Falls Concord awk Barre Falls	2364 5884 3195 1130 1600 1904 1139 4411 420 18 1 in	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (JW) Hawkcount (SO) T. Gagnon Hawkcount (BK) J. Drucker Hawkcount (BK) S. Perkins Hawkcount (BK)	10/28 Sandhill Cran 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8 10/10 10/21 American Go thr 9/1-16 9/1-24	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB) Nantucket Idden-Plover P.I. Duxbury B. Northampton	223 1 5-6 M 400 max 3, 122 3 1500 255 10 max 3 max 13 max	S. Surner + v.o. M. Maurer + v.o. v.o. R. Bowes A. Magee B. Nikula S. Perkins# v.o. R. Bowes
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17 9/17 10/5-22 10/24 Red-tailed H 9/10-28 10/6-28	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic Barre Falls Amherst Barre Falls Concord awk Barre Falls Barre Falls Barre Falls	2364 5884 3195 1130 1600 1904 1139 4411 420 18 1 in	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (SO) T. Gagnon Hawkcount (BK) J. Drucker Hawkcount (BK) s. Perkins Hawkcount (BK) Hawkcount (BK)	10/28 Sandhill Cran 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8 10/10 10/21 American Go thr 9/1-16 9/1-24 9/5	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB) Nantucket Iden-Plover P.I. Duxbury B. Northampton Scituate	223 1 5-6 M 400 max 3, 122 3 1500 255 10 max 3 max 13 max 11	S. Surner + v.o. M. Maurer + v.o. v.o. R. Bowes A. Magee B. Nikula S. Perkins# v.o. R. Bowes V.o. J. Restivo
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17 9/17 10/5-22 10/24 Red-tailed H 9/10-28 10/6-28 10/12	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic Barre Falls Amherst Barre Falls Concord awk Barre Falls Barre Falls Barre Falls Barre Falls	2364 5884 3195 1130 1600 1904 1139 4411 420 18 1 in 18 172 23	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (SO) T. Gagnon Hawkcount (BK) J. Drucker Hawkcount (BK) S. Perkins Hawkcount (BK) Hawkcount (BK) Hawkcount (BK) Hawkcount (BK)	10/28 Sandhill Cran 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8 10/10 10/21 American Go thr 9/1-16 9/1-24 9/5 9/26	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB) Nantucket olden-Plover P.I. Duxbury B. Northampton Scituate P'town	223 1 5-6 M 400 max 4, 122 3 1500 255 10 max 3 max 11 3	S. Surner + v.o. M. Maurer + v.o. V.o. R. Bowes A. Magee B. Nikula S. Perkins# V.o. R. Bowes V.o. J. Restivo R. Heil
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17 9/17 10/5-22 10/24 Red-tailed H 9/10-28 10/6-28 10/12	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic Barre Falls Amherst Barre Falls Concord awk Barre Falls Barre Falls Barre Falls Barre Falls Barre Falls Barre Falls	2364 5884 3195 1130 1600 1904 1139 4411 420 18 1 in	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (SO) T. Gagnon Hawkcount (BK) J. Drucker Hawkcount (BK) s. Perkins Hawkcount (BK) Hawkcount (BK)	10/28 Sandhill Cran 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8 10/10 10/21 American Go thr 9/1-16 9/1-24 9/5	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB) Nantucket Iden-Plover P.I. Duxbury B. Northampton Scituate	223 1 5-6 M 400 max 3, 122 3 1500 255 10 max 3 max 13 max 11	S. Surner + v.o. M. Maurer + v.o. v.o. R. Bowes A. Magee B. Nikula S. Perkins# v.o. R. Bowes V.o. J. Restivo
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17 9/17 10/5-22 10/24 Red-tailed H 9/10-28 10/6-28 10/12 10/28 Rough-legge 10/12, 31	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic Barre Falls Amherst Barre Falls Concord awk Barre Falls Amherst	2364 5884 3195 1130 1600 1904 1139 4411 420 18 1 in 18 172 23	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (SO) T. Gagnon Hawkcount (BK) J. Drucker Hawkcount (BK) S. Perkins Hawkcount (BK) Hawkcount (BK) Hawkcount (BK) Hawkcount (BK)	10/28 Sandhill Cran 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8 10/10 10/21 American Go thr 9/1-16 9/1-24 9/5 9/26 10/20	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB) Nantucket olden-Plover P.I. Duxbury B. Northampton Scituate P'town Revere Cumb. Farms	223 1 5-6 M 400 max 4, 122 3 1500 255 10 max 3 max 13 max 11 3 5 3	S. Surner + v.o. M. Maurer + v.o. V.o. R. Bowes A. Magee B. Nikula S. Perkins# V.o. R. Bowes V.o. J. Restivo R. Heil P. Peterson
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17 9/17 10/5-22 10/24 Red-tailed H 9/10-28 10/6-28 10/12 10/28 Rough-legge 10/12, 31 Golden Eagle	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic Barre Falls Amherst Barre Falls Concord awk Barre Falls	2364 5884 3195 1130 1600 1904 1139 4411 420 18 1 in 18 172 23 53	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (SO) T. Gagnon Hawkcount (BK) J. Drucker Hawkcount (BK) M. S. Perkins Hawkcount (BK) Hawkcount (BK) Hawkcount (BK) Hawkcount (BK) Hawkcount (BK) Hawkcount (BK)	10/28 Sandhill Crar 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8 10/10 10/21 American Go thr 9/1-16 9/1-24 9/5 9/26 10/20 10/22 Wilson's Plo 9/3-10	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB) Nantucket olden-Plover P.I. Duxbury B. Northampton Scituate P'town Revere Cumb. Farms ver Chatham (S.B.)	223 1 5-6 M 400 max 4, 122 3 1500 255 10 max 3 max 13 max 11 3 5 3	S. Surner + v.o. M. Maurer + v.o. V.o. R. Bowes A. Magee B. Nikula S. Perkins# V.o. R. Bowes V.o. J. Restivo R. Heil P. Peterson
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17 9/17 10/5-22 10/24 Red-tailed H 9/10-28 10/6-28 10/12 10/28 Rough-legge 10/12, 311 Golden Eagle 10/7, 25	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic Barre Falls Amherst Barre Falls Concord awk Barre Falls	2364 5884 3195 1130 1600 1904 1139 4411 420 18 1 in 18 172 23 53 1, 3	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (SO) T. Gagnon Hawkcount (TP) Hawkcount (BK) J. Drucker Hawkcount (BK) Mm S. Perkins Hawkcount (BK) Hawkcount (BK) Hawkcount (TS) Gette, Vale Hawkcount (BK)	10/28 Sandhill Crar 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8 10/10 10/21 American Go thr 9/1-16 9/1-24 9/5 9/26 10/20 10/22 Wilson's Plo 9/3-10 Semipalmated	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB) Nantucket olden-Plover P.I. Duxbury B. Northampton Scituate P'town Revere Cumb. Farms ver Chatham (S.B.) d Plover	223 1 5-6 M 400 max 4, 122 3 1500 255 10 max 3 max 11 3 5 3	S. Surner + v.o. M. Maurer + v.o. V.o. R. Bowes A. Magee B. Nikula S. Perkins# V.o. R. Bowes V.o. J. Restivo R. Heil P. Peterson S. Arena M. Kasprzyck#
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17 9/17 9/17 10/5-22 10/24 Red-tailed H 9/10-28 10/12 10/28 Rough-legge 10/12, 31 Golden Eagle 10/7, 25 10/18, 28	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic Barre Falls Amherst Barre Falls Concord awk Barre Falls Granville	2364 5884 3195 1130 1600 1904 1139 4411 420 18 1 in 18 172 23 53 1, 3	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (SO) T. Gagnon Hawkcount (BK) J. Drucker Hawkcount (BK) am S. Perkins Hawkcount (BK) Hawkcount (TS) Gette, Vale Hawkcount (BK) Hawkcount (BK) Hawkcount (BK)	10/28 Sandhill Cran 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8 10/10 10/21 American Go thr 9/1-16 9/1-24 9/5 9/26 10/20 10/22 Wilson's Plo 9/3-10 Semipalmated thr	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB) Nantucket Iden-Plover P.I. Duxbury B. Northampton Scituate P'town Revere Cumb. Farms ver Chatham (S.B.) d Plover P.I.	223 1 5-6 M 400 max 1, 122 3 1500 255 10 max 3 max 11 3 5 3 1 1250 max	S. Surner + v.o. M. Maurer + v.o. V.o. R. Bowes A. Magee B. Nikula S. Perkins# V.o. R. Bowes v.o. J. Restivo R. Heil P. Peterson S. Arena M. Kasprzyck# v.o.
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17 9/17 10/5-22 10/24 Red-tailed H 9/10-28 10/6-28 10/12 10/28 Rough-legge 10/12, 31 Golden Eagle 10/7, 25 10/18, 28	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic Barre Falls Amherst Barre Falls Concord awk Barre Falls Russell d Hawk P.I.	2364 5884 3195 1130 1600 1904 1139 4411 420 18 1 in 18 172 23 53 1, 3	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (SO) T. Gagnon Hawkcount (TP) Hawkcount (BK) J. Drucker Hawkcount (BK) Mm S. Perkins Hawkcount (BK) Hawkcount (BK) Hawkcount (TS) Gette, Vale Hawkcount (BK)	10/28 Sandhill Crar 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8 10/10 10/21 American Go thr 9/1-16 9/1-24 9/5 9/26 10/20 10/22 Wilson's Plo 9/3-10 Semipalmated thr	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB) Nantucket olden-Plover P.I. Duxbury B. Northampton Scituate P'town Revere Cumb. Farms ver Chatham (S.B.) d Plover P.I. Revere B.	223 1 5-6 M 400 max 3, 122 3 1500 255 10 max 3 max 11 3 5 3 1 1250 max 225 max	S. Surner + v.o. M. Maurer + v.o. V.o. R. Bowes A. Magee B. Nikula S. Perkins# V.o. R. Bowes v.o. J. Restivo R. Heil P. Peterson S. Arena M. Kasprzyck# V.o. V.o.
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17 9/17 9/17 10/5-22 10/24 Red-tailed H 9/10-28 10/12 10/28 Rough-legge 10/12, 31 Golden Eagle 10/7, 25 10/18, 28	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic Barre Falls Amherst Barre Falls Concord awk Barre Falls Russell d Hawk P.I.	2364 5884 3195 1130 1600 1904 1139 4411 420 18 1 in 18 172 23 53 1, 3	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (SO) T. Gagnon Hawkcount (BK) J. Drucker Hawkcount (BK) am S. Perkins Hawkcount (BK) Hawkcount (TS) Gette, Vale Hawkcount (BK) Hawkcount (BK) Hawkcount (BK)	10/28 Sandhill Cran 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8 10/10 10/21 American Go thr 9/1-16 9/1-24 9/5 9/26 10/20 10/22 Wilson's Plo 9/3-10 Semipalmated thr	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB) Nantucket Iden-Plover P.I. Duxbury B. Northampton Scituate P'town Revere Cumb. Farms ver Chatham (S.B.) d Plover P.I.	223 1 5-6 M 400 max 1, 122 3 1500 255 10 max 3 max 11 3 5 3 1 1250 max	S. Surner + v.o. M. Maurer + v.o. V.o. R. Bowes A. Magee B. Nikula S. Perkins# V.o. R. Bowes v.o. J. Restivo R. Heil P. Peterson S. Arena M. Kasprzyck# v.o.
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17 9/17 10/5-22 10/24 Red-tailed H 9/10-28 10/6-28 10/12 10/28 Rough-legge 10/12, 31 Golden Eagle 10/7, 25 10/18, 28 10/25 American Ke 9/9-28 9/10-18	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic Barre Falls Amherst Barre Falls Concord awk Barre Falls	2364 5884 3195 1130 1600 1904 1139 4411 420 18 1 in 18 172 23 53 1, 3 1, 1 1, 1 1 67	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (SO) T. Gagnon Hawkcount (BK) J. Drucker Hawkcount (BK) m S. Perkins Hawkcount (BK) Hawkcount (BK) Hawkcount (BK) Hawkcount (BK) Hawkcount (BK) Hawkcount (BK) Hawkcount (TS) Gette, Vale Hawkcount (JW) Hawkcount (TS) Hawkcount (TS) Hawkcount (TS) Hawkcount (TS)	10/28 Sandhill Cran 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8 10/10 10/21 American Go thr 9/1-16 9/1-24 9/5 9/26 10/20 10/22 Wilson's Plo 9/3-10 Semipalmated thr thr thr 10/10	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB) Nantucket Idden-Plover P.I. Duxbury B. Northampton Scituate P'town Revere Cumb. Farms ver Chatham (S.B.) d Plover P.I. Revere B. Duxbury B. Northampton Chatham (S.B.)	223 1 5-6 M 400 max 4, 122 3 1500 255 10 max 3 max 13 max 11 3 5 3 1 1250 max 225 max 982 max 15	S. Surner + v.o. M. Maurer + v.o. V.o. R. Bowes A. Magee B. Nikula S. Perkins# V.o. R. Bowes V.o. J. Restivo R. Heil P. Peterson S. Arena M. Kasprzyck# V.o. R. Bowes
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17 9/17 10/5-22 10/24 Red-tailed H 9/10-28 10/6-28 10/6-28 10/12, 31 Golden Eagle 10/7, 25 10/18, 28 10/25 American Ke 9/9-28 9/10-18	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic Barre Falls Amherst Barre Falls Concord awk Barre Falls Barre Falls Barre Falls Barre Falls Russell d Hawk P.I. Barre Falls Granville Russell strel Barre Falls Granville Russell Strel Barre Falls Barre Falls Granville Russell Stages Barre Falls Barre Falls Granville Russell	2364 5884 3195 1130 1600 1904 1139 4411 420 18 1 in 18 172 23 53 1, 3 1, 1 1, 1 1, 1 1, 1 1, 1 1, 1 1,	Hawkcount (SO) Hawkcount (IP) Gette, Vale Hawkcount (IW) Hawkcount (IW) Hawkcount (IW) Hawkcount (IW) Hawkcount (IS) Hawkcount (IS) Hawkcount (IP) P. Randall#	10/28 Sandhill Crar 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8 10/10 10/21 American Go thr 9/1-16 9/1-24 9/5 9/26 10/20 10/22 Wilson's Plo 9/3-10 Semipalmated thr thr thr 9/7 10/10 Piping Plover	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB) Nantucket olden-Plover P.I. Duxbury B. Northampton Scituate P'town Revere Cumb. Farms ver Chatham (S.B.) d Plover P.I. Revere B. Duxbury B. Northampton Chatham (S.B.)	223 1 5-6 M 400 max 3, 122 3 1500 255 10 max 3 max 11 3 5 3 1 1250 max 225 max 982 max 15 0	S. Surner + v.o. M. Maurer + v.o. V.o. R. Bowes A. Magee B. Nikula S. Perkins# V.o. R. Bowes V.o. J. Restivo R. Heil P. Peterson S. Arena M. Kasprzyck# V.o. R. Bowes Z. Jakub B. Nikula
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17 9/17 9/17 10/5-22 10/24 Red-tailed H 9/10-28 10/6-28 10/12 10/28 Rough-legge 10/12, 31 Golden Eagle 10/7, 25 10/18, 28 10/25 American Ke 9/9-28 9/10-18 9/25	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic Barre Falls Amherst Barre Falls Concord awk Barre Falls Barre Falls Russell d Hawk P.I. e Barre Falls Granville strel Barre Falls Granville cstrel Granville Granville Granville	2364 5884 3195 1130 1600 1904 1139 4411 420 18 1 in 18 172 23 53 1, 3 1, 1 1, 1 1 67 77 C.) 4 28	Hawkcount (SO) Hawkcount (BK) Hawkcount (TP) Hawkcount (JW) Hawkcount (SO) T. Gagnon Hawkcount (BK) J. Drucker Hawkcount (BK) Mawkcount (BK) Hawkcount (BK) Hawkcount (BK) Hawkcount (TS) Gette, Vale Hawkcount (JW) Hawkcount (TS) Hawkcount (TS) Hawkcount (TS) Hawkcount (TP) P. Randall# Hawkcount (JW)	10/28 Sandhill Crar 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8 10/10 10/21 American Go thr 9/1-16 9/1-24 9/5 9/26 10/20 10/22 Wilson's Plo 9/3-10 Semipalmated thr thr thr 9/7 10/10 Piping Plover	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB) Nantucket olden-Plover P.I. Duxbury B. Northampton Scituate P'town Revere Cumb. Farms ver Chatham (S.B.) d Plover P.I. Revere B. Duxbury B. Northampton Chatham (S.B.)	223 1 5-6 M 400 max 3, 122 3 1500 255 10 max 3 max 13 max 11 3 5 3 1 1250 max 225 max 982 max 15 00	S. Surner + v.o. M. Maurer + v.o. V.o. R. Bowes A. Magee B. Nikula S. Perkins# V.o. R. Bowes V.o. J. Restivo R. Heil P. Peterson S. Arena M. Kasprzyck# V.o. R. Bowes Z. Jakub B. Nikula D. Williams
Broad-winge 9/9-27 9/9-30 9/10-18 9/17 9/17 9/17 9/17 9/17 10/5-22 10/24 Red-tailed H 9/10-28 10/6-28 10/6-28 10/12, 31 Golden Eagle 10/7, 25 10/18, 28 10/25 American Ke 9/9-28 9/10-18	d Hawk Mt. Wachusett Barre Falls Mt. Watatic Granville Mt. Wachusett Mt Tom Mt. Watatic Barre Falls Amherst Barre Falls Concord awk Barre Falls Barre Falls Barre Falls Barre Falls Russell d Hawk P.I. Barre Falls Granville Russell strel Barre Falls Granville Russell Strel Barre Falls Barre Falls Granville Russell Stages Barre Falls Barre Falls Granville Russell	2364 5884 3195 1130 1600 1904 1139 4411 420 18 1 in 18 172 23 53 1, 3 1, 1 1, 1 1, 1 1, 1 1, 1 1, 1 1,	Hawkcount (SO) Hawkcount (IP) Gette, Vale Hawkcount (IW) Hawkcount (IW) Hawkcount (IW) Hawkcount (IW) Hawkcount (IS) Hawkcount (IS) Hawkcount (IP) P. Randall#	10/28 Sandhill Crar 10/8-10 10/13-24 Black-bellied thr 9/2, 10/8 9/8 10/10 10/21 American Go thr 9/1-16 9/1-24 9/5 9/26 10/20 10/22 Wilson's Plo 9/3-10 Semipalmated thr thr thr 9/7 10/10 Piping Plover	Richmond ne Cumb. Farms Wareham Plover P.I. Duxbury B. 603 Northampton Chatham (SB) Nantucket olden-Plover P.I. Duxbury B. Northampton Scituate P'town Revere Cumb. Farms ver Chatham (S.B.) d Plover P.I. Revere B. Duxbury B. Northampton Chatham (S.B.)	223 1 5-6 M 400 max 3, 122 3 1500 255 10 max 3 max 11 3 5 3 1 1250 max 225 max 982 max 15 0	S. Surner + v.o. M. Maurer + v.o. V.o. R. Bowes A. Magee B. Nikula S. Perkins# V.o. R. Bowes V.o. J. Restivo R. Heil P. Peterson S. Arena M. Kasprzyck# V.o. R. Bowes Z. Jakub B. Nikula

Killdeer				9/9	Revere B.	10	P. Peterson
9/4	Concord	109	W. Hutcheson	9/18	Essex	43	D. Brown
9/5	C. Quabbin	37	L. Therrien	10/10	Chatham (S.B.)	550	B. Nikula
10/22 10/22	Hamilton Cumb. Farms	48 38	J. Berry S. Arena	Sanderling thr	P.I.	1100 max	v.o.
10/25	Ipswich	52	R. Heil	9/6	Deerfield	2	M. Fairbrother
10/29	Acton	65	S. Perkins	9/29	Arlington Res.	1	R. Stymeist#
American Oy		10	D 0:	10/8	Duxbury B.	1090	R. Bowes
9/1 9/12	Winthrop S. Dart. (A.Pd)	13 10	R. Stymeist P. Champlin	10/10 10/21	Chatham (S.B.) Nantucket	400 550	B. Nikula S. Perkins#
9/24	Wollaston	16	V. Zollo	Semipalmate		330	J. I CIKIIISπ
10/4	Chatham	55	B. Nikula	thr		3000 max	v.o.
10/22	Nantucket	39	E. Ray#	9/1-10/8	Duxbury B.	918 max	R. Bowes
American Av 9/4-10	ocet Salisbury	1 D (Chickering+ v.o.	9/10, 10/1 9/14		3) 200, 30 1332) B. Nikula N. Yusuff
9/13-17	P.I.	1 D. C	R. Schain+ v.o.	10/5	Barre Falls		Iawkcount (BK)
9/20-10/31		1 ph	K. Brunell#	10/6	Granville	65	J. Weeks
Spotted Sand		_		10/29	Acton	1	S. Perkins
9/2-14	Duxbury B.	3 4	R. Bowes	Western Sand		1-2	
9/17 9/20	Westport Cambr. Res.	4	S. Perkins# R. Stymeist	9/1-15 9/1-10/11	Revere B.	80 max	V.O. V.O.
10/thr	Arlington Res.	3 max	V.O.	9/7	Northampton	1	Z. Jakub
10/15	Amesbury	3	S. McGrath	9/10, 10/1	0 Chathâm (S.I.	3.) 2, 4	B. Nikula
Solitary Sand		2	G 175	Least Sandpi		4.6	34.7. 1.0
9/10 9/11	Nahant Northampton	3 7	G. d'Entremont L. Therrien	9/4 9/5	Westport P.I.	46 80	M. Lynch# R. Heil
9/24	Deerfield	3	D. Mako	9/3 9/10	Chatham (S.B.)		B. Nikula
10/15	Arlington Res.	2	J. Forbes	9/18	Northampton	31	I. Davies
10/23	Easton	1	K. Ryan	10/14	Longmeadow	4	S. Kellogg
Greater Yello		~ ~		White-rumpe		10	D D
thr	P.I.	56 max 27 max	v.o. R. Bowes	thr thr	Duxbury B. P.I.	12 max 170 max	R. Bowes
thr 10/20	Duxbury B. Revere	24	P. Peterson	9/8	Northampton	10	v.o. A. Magee
10/21	Nantucket	34	R. Veit#	9/10, 10/1			
10/22	Cumb. Farms	18	S. Arena	10/8	Arlington Res.	5	M. Rines
10/26	Ipswich (C.B.)	15	J. Berry	Baird's Sand		1.0	
Willet 9/2	Duxbury B.	32	R. Bowes	9/1-17 9/2	P.I. Revere B.	1-2 1 ph	v.o. R. Schain
9/5	Chatham	26	B. Nikula	9/5	Deerfield	3	S. Surner
9/14	Duxbury B.	3	R. Bowes	9/5	C. Quabbin	3	L. Therrien
10/8	P.I.	2	P. Lang	9/8	Northampton	2	A. Magee
Lesser Yellov		125		10/23	Plymouth	1	E. Neumuth
thr 9/4	P.I. Ipswich	135 max 125 l	v.o. M. Goetschkes#	Pectoral Sand 9/8	apiper Ipswich	18	R. Heil
9/5	Newbypt H.	325	R. Heil	9/24	Deerfield	14	D. Mako
9/11	Northampton	26	A. Magee	10/9	Cumb. Farms	41	J. Sweeney#
10/29	Rowley	5	J. Berry#	10/10	Chatham (S.B.)		B. Nikula
Upland Sand		(D) 1	M 11:66	10/20	October Mt.	14 20	E. Neumuth
9/7 Whimbrel	W. Roxbury (M	P) I	M. Iliff	10/21 10/23	Nantucket S. Dart. (A.Pd)	20 37	S. Perkins# B. Cassie
9/1-25	P.I.	5 max	V.O.	Dunlin	5. Dart. (71.1 d)	31	B. Cassic
9/1	Plymouth	1	L. Fuller	9/28	Duxbury B.	740	R. Bowes
	Duxbury B.		juv R. Bowes	10/10	Chatham (S.B.)		B. Nikula
9/3 9/8	Ipswich (C.B.) Northampton	1 1	D. Williams A. Magee	10/21 Curlew Sand		2175	R. Heil
10/18	WBWS	3	M. Faherty	9/17	P.I.	1	B. Cassie#
Hudsonian G				Stilt Sandpip		_	
thr	P.I.	19 max	v.o.	thr	P.I.	19 max	v.o.
9/4	Ipswich	2 1	M. Goetschkes#	9/8 D (6.1	Ipswich	4 juv	R. Heil
9/10 Marbled God	Chatham (S.B.)	8	B. Nikula	Buff-breasted 9/1-24	P.I.	5 max	v.o.
9/4	P.I.	1	P. + F. Vale#	9/3	Chatham	1	B. Nikula
9/11	Chatham	13	M. Iliff	9/7	Northampton	2	Z. Jakub
Ruddy Turnst		2	D	9/15	Revere (POP)	2	P. Peterson
9/3 9/5	Deerfield C. Ouchbin	2 3	D. Mako	9/17	Westport	2 juv	S. Perkins#
9/5 9/18	C. Quabbin Rockport	38	L. Therrien R. Heil	9/24 Short-billed I	Newbury Dowitcher	5 1	MAS (Petersen)
9/24	W. Gloucester	3	S. Hedman#	thr	P.I.	35 max	v.o.
9/28	Duxbury B.	109	R. Bowes	9/2, 10/21	Duxbury B. 1	62, 4	R. Bowes
10/22	Nantucket	40	P. Alden#	9/3	Petersham	2	M. Lynch#
Red Knot thr	P.I.	260 max	•• ~	10/8 10/10	Eastham (F. E.)		SSBC (GdE) B. Nikula
thr	Duxbury B.	41 max	v.o. R. Bowes	10/10	Chatham (S.B.)	1	D. MIKUIA
	, 25.		22. 2000				

LONG-DIRECT	Oowitcher			Roseate Tern			
9/5-10/12		1	v.o.	9/3	P.I.	30	S. Sullivan
9/18	Essex	1	D. Brown	10/2	P'town	15	B. Nikula
9/21	Duxbury B.	1	R. Bowes	Common Ter		1.500	
Wilson's Snip 9/23	e W. Bridgewater	. 5	S. Arena	9/9 9/27	N. Truro P.I.	1500 750	B. Nikula R. Heil
10/2	Bolton Flats	10	BBC (J. Center)	10/2, 29), 835	B. Nikula
10/9	Cumb. Farms	49	J. Sweeney#	10/6	Revere B.	168	R. Stymeist
10/26	E. Boston (B.I.)	3	D. Bernstein	10/30	Eastham (F.E.)	45	B. Nikula
American Wo				Forster's Ten			
10/5	Nantucket	2	T. Pastuszak	thr	P'town	87 max	
10/21 Red-necked F	Tuckernuck	5	R. Veit#	thr 9/2	P.I. Dennis	95 max 110	v.o. B. Nikula
9/1	Turners Falls	1 juv	B. Zajda	10/6	Revere B.	10	R. Stymeist
9/8	Northfield	1	Z. Jakub	10/28	Eastham (F.E.)	76	B. Nikula
9/12	Jeffries L.		MAS (D. Larson)	10/31	Acoaxet	47	G. Gove#
9/21	Stellwagen	26	W. Petersen	Royal Tern			
10/3	Sterling	1	A. Robinson	9/3	Newbypt H.	1	M. Emmons
10/8 Red Phalarop	Egremont	1	M. Conway	9/5 9/7	Martha's Viney P.I.	ard 1	T. Spahr M. Kim#
9/2	Scituate	1 N	MAS (J. Galluzzo)	9/12	S. Dart. (A.Pd)	2	P. Champlin
9/11	Stellwagen	1	J. Hoye#	Sterna specie		-	ri chumpim
10/3	Arlington Res.	1	C. Floyd#	9/10	P'town	2000	B. Nikula
10/3	Wayland	1	B. Parker	10/8	Duxbury B.	9	R. Bowes
10/30	Eastham (F.E.)	3	B. Nikula	10/12	Revere B.	40+	M. Iliff#
Black-legged 10/2	Rockport (A.P.)	8	R. Heil	Black Skimm 9/1	P.I.	5 imm	T. Wetmore
10/2	E. of Chatham	3	B. Nikula#	9/1	Duxbury B.	7 juv	R. Bowes
10/29	P.I.	25	M. Brengle#	9/4	Chatham	7 juv	B. Nikula
10/29	P'town	25	B. Nikula	9/9	Revere (POP)	9 imm	
10/30	Eastham (F.E.)	710	B. Nikula	9/21	Swampscott	8 juv	D. Ely
Sabine's Gul		1 ad	D. Largon	9/25	Westport	8	G. d'Entremont#
9/3 9/11	P.I. P'town	2	D. Larson W. Petersen	Great Skua 10/30	Eastham (F.E.)	1	B. Nikula
9/16	Eastham (F.E.)	1 ad.		Pomarine Jae	` ,	•	D. TVIKulu
9/29	Wellfleet	1 ph	M. Faherty		Eastham (F.E.)	1, 49	B. Nikula
Bonaparte's C				10/13	P.I.	1	M. Watson
thr	P.I.	325 ma		10/18	Stellwagen	1	MAS (Petersen)
9/9 9/9	Amherst Revere B.	1 500	L. Therrien P. Peterson	Parasitic Jaeg thr	ger P.I.	5 max	v.o.
		300	r. reterson	UII			
10/8	N Quabbin	3	M Lynch	thr	P'town	118 max	10/2 B Nikula
10/8 10/15	N. Quabbin Nahant	3 1200	M. Lynch L. Pivacek	thr 9/3, 10/2	P'town Chatham	118 max 10, 16	10/2 B. Nikula B. Nikula
			M. Lynch L. Pivacek B. Nikula				
10/15 10/29 Little Gull	Nahant P'town	1200 190	L. Pivacek B. Nikula	9/3, 10/2 9/11 10/5	Chatham 4 Stellwagen Eastham (F.E.)	0, 16	B. Nikula
10/15 10/29 Little Gull 9/1	Nahant P'town P.I.	1200	L. Pivacek	9/3, 10/2 9/11 10/5 Long-tailed	Chatham 4 Stellwagen Eastham (F.E.) Jaeger	10, 16 8 27	B. Nikula J. Hoye# B. Nikula
10/15 10/29 Little Gull 9/1 Laughing Gui	Nahant P'town P.I.	1200 190 1	L. Pivacek B. Nikula T. Wetmore	9/3, 10/2 9/11 10/5 Long-tailed . 9/3	Chatham 4 Stellwagen Eastham (F.E.) Jaeger Orleans	10, 16 8 27	B. Nikula J. Hoye# B. Nikula M. Iliff#
10/15 10/29 Little Gull 9/1 Laughing Gui	Nahant P'town P.I. Il Revere (POP)	1200 190 1 22	L. Pivacek B. Nikula T. Wetmore R. Stymeist	9/3, 10/2 9/11 10/5 Long-tailed . 9/3 9/5	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro	10, 16 8 27 1 1 1st yr	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula
10/15 10/29 Little Gull 9/1 Laughing Gui	Nahant P'town P.I. II Revere (POP) Squantum	1200 190 1	L. Pivacek B. Nikula T. Wetmore	9/3, 10/2 9/11 10/5 Long-tailed . 9/3	Chatham 4 Stellwagen Eastham (F.E.) Jaeger Orleans	1 1 1st yr	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux
10/15 10/29 Little Gull 9/1 Laughing Gui 9/14 9/17 9/26,10/29 10/5, 28	Nahant P'town P.I. II Revere (POP) Squantum P'town 120 Duxbury B. 12	1200 190 1 22 94 00, 60 17, 12	L. Pivacek B. Nikula T. Wetmore R. Stymeist G. d'Entremont# R. Heil R. Bowes	9/3, 10/2 9/11 10/5 Long-tailed 9/3 9/5 9/5 9/7 9/12	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro Nantucket P.I. Jeffries L.	10, 16 8 27 1 1 1st yr 1 1 imm 1 lt	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux ph M. Iliff# MAS (Larson)
10/15 10/29 Little Gull 9/1 Laughing Gu 9/14 9/17 9/26,10/29 10/5, 28 10/20	Nahant P'town P.I. II Revere (POP) Squantum P'town 120 Duxbury B. 12 Nantucket	1200 190 1 22 94 00, 60	L. Pivacek B. Nikula T. Wetmore R. Stymeist G. d'Entremont# R. Heil	9/3, 10/2 9/11 10/5 Long-tailed 9/3 9/5 9/5 9/7 9/12 9/15, 10/2	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro Nantucket P.I. Jeffries L.	1 1 1st yr 1 1 imm	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux ph M. Iliff#
10/15 10/29 Little Gull 9/1 Laughing Gu 9/14 9/17 9/26,10/29 10/5, 28 10/20 Lesser Black-	Nahant P'town P.I. II Revere (POP) Squantum P'town 120 Duxbury B. 12 Nantucket backed Gull	1200 190 1 22 94 90, 60 97, 12 330	L. Pivacek B. Nikula T. Wetmore R. Stymeist G. d'Entremont# R. Heil R. Bowes S. Perkins#	9/3, 10/2 9/11 10/5 Long-tailed 9/3 9/5 9/5 9/7 9/12 9/15, 10/2 Dovekie	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro Nantucket P.I. Jeffries L. P'town	10, 16 8 27 1 1 1st yr 1 1 imm 1 1t 1, 2	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux ph M. Iliff# MAS (Larson) B. Nikula
10/15 10/29 Little Gull 9/1 Laughing Gu 9/14 9/17 9/26,10/29 10/5, 28 10/20 Lesser Black 9/11, 10/4	Nahant P'town P.I. II Revere (POP) Squantum P'town 120 Duxbury B. 12 Nantucket backed Gull Chatham 1	1200 190 1 22 94 10, 60 17, 12 330 1, 41	L. Pivacek B. Nikula T. Wetmore R. Stymeist G. d'Entremont# R. Heil R. Bowes S. Perkins# M. Iliff	9/3, 10/2 9/11 10/5 Long-tailed 9/3 9/5 9/5 9/7 9/12 9/15, 10/2 Dovekie 10/22	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro Nantucket P.I. Jeffries L. P'town	10, 16 8 27 1 1 1st yr 1 1 imm 1 1t 1, 2	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux ph M. Iliff# MAS (Larson) B. Nikula M. Lynch
10/15 10/29 Little Gull 9/1 Laughing Gu 9/14 9/17 9/26,10/29 10/5, 28 10/20 Lesser Black-	Nahant P'town P.I. II Revere (POP) Squantum P'town 120 Duxbury B. 12 Nantucket -backed Gull Chatham 1 P'town	1200 190 1 22 94 90, 60 17, 12 330 1, 41 3, 2	L. Pivacek B. Nikula T. Wetmore R. Stymeist G. d'Entremont# R. Heil R. Bowes S. Perkins#	9/3, 10/2 9/11 10/5 Long-tailed 9/3 9/5 9/5 9/7 9/12 9/15, 10/2 Dovekie	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro Nantucket P.I. Jeffries L. P'town P'town Eastham (F.E.)	10, 16 8 27 1 1 1st yr 1 1 imm 1 1t 1, 2	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux ph M. Iliff# MAS (Larson) B. Nikula
10/15 10/29 Little Gull 9/1 Laughing Gu 9/14 9/17 9/26,10/29 10/5, 28 10/20 Lesser Black- 9/11, 10/4 9/15, 10/2	Nahant P'town P.I. II Revere (POP) Squantum P'town 120 Duxbury B. 12 Nantucket backed Gull Chatham 1	1200 190 1 22 94 90, 60 17, 12 330 1, 41 3, 2	L. Pivacek B. Nikula T. Wetmore R. Stymeist G. d'Entremont# R. Heil R. Bowes S. Perkins# M. Iliff B. Nikula	9/3, 10/2 9/11 10/5 Long-tailed 9/3 9/5 9/5 9/7 9/12 9/15, 10/2 Dovekie 10/22 10/28 Common Mu 10/23	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro Nantucket P.I. Jeffries L. P'town P'town Eastham (F.E.)	10, 16 8 27 1 1 1st yr 1 1 imm 1 1t 1, 2	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux ph M. Iliff# MAS (Larson) B. Nikula M. Lynch
10/15 10/29 Little Gull 9/1 Laughing Gu 9/14 9/17 9/26,10/29 10/5, 28 10/20 Lesser Black 9/11, 10/4 9/15, 10/2 10/20 Least Tern	Nahant P'town P.I. II Revere (POP) Squantum P'town 120 Duxbury B. 12 Nantucket backed Gull Chatham 1 P'town Rockport (A.P.) Nantucket	1200 190 1 22 94 10, 60 7, 12 330 1, 41 3, 2 2 ad 40	L. Pivacek B. Nikula T. Wetmore R. Stymeist G. d'Entremont# R. Heil R. Bowes S. Perkins# M. Iliff B. Nikula R. Heil S. Perkins#	9/3, 10/2 9/11 10/5 Long-tailed 9/3 9/5 9/5 9/7 9/12 9/15, 10/2 Dovekie 10/22 10/28 Common Mu 10/23 10/27	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro Nantucket P.I. Jeffries L. P'town P'town Eastham (F.E.)	10, 16 8 27 1 1 1st yr 1 imm 1 lt 1, 2 1	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux Aph M. Iliff# MAS (Larson) B. Nikula M. Lynch B. Nikula
10/15 10/29 Little Gull 9/1 Laughing Gui 9/14 9/17 9/26,10/29 10/5, 28 10/20 Lesser Black- 9/11, 10/4 9/15, 10/2 10/20 Least Tern 9/5	Nahant P'town P.I. II Revere (POP) Squantum P'town 120 Duxbury B. 12 Nantucket -backed Gull Chatham 1 P'town Rockport (A.P.) Nantucket	1200 190 1 22 94 90, 60 77, 12 330 1, 41 3, 2 2 ad 40 3	L. Pivacek B. Nikula T. Wetmore R. Stymeist G. d'Entremont# R. Heil R. Bowes S. Perkins# M. Iliff B. Nikula R. Heil S. Perkins# D. Brown#	9/3, 10/2 9/11 10/5 Long-tailed 9/3 9/5 9/5 9/7 9/12 9/15, 10/2 Dovekie 10/22 10/28 Common Mu 10/23 10/27 Razorbill	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro Nantucket P.I. Jeffries L. P'town P'town Eastham (F.E.) rre Jeffries L. Rockport (A.P.)	10, 16 8 27 1 1 1st yr 1 1 imm 1 lt 1, 2 1 1	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux M. Iliff# MAS (Larson) B. Nikula M. Lynch B. Nikula J. Frontierro R. Heil
10/15 10/29 Little Gull 9/1 Laughing Gui 9/14 9/17 9/26,10/29 10/5, 28 10/20 Lesser Black- 9/11, 10/4 9/15, 10/2 10/2 10/20 Least Tern 9/5 9/14	Nahant P'town P.I. Revere (POP) Squantum P'town 120 Duxbury B. 12 Nantucket backed Gull Chatham 1 P'town Rockport (A.P.) Nantucket Essex P.I.	1200 190 1 22 94 00, 60 7, 12 330 1, 41 3, 2 2 ad 40	L. Pivacek B. Nikula T. Wetmore R. Stymeist G. d'Entremont# R. Heil R. Bowes S. Perkins# M. Iliff B. Nikula R. Heil S. Perkins# D. Brown# D. Chickering	9/3, 10/2 9/11 10/5 Long-tailed 9/3 9/5 9/5 9/7 9/12, 10/2 Dovekie 10/22 10/28 Common Mu 10/23 10/27 Razorbill	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro Nantucket P.I. Jeffries L. P'town P'town Eastham (F.E.) rre Jeffries L. Rockport (A.P.) Stellwagen	10, 16 8 27 1 1 1st yr 1 1 imm 1 lt 1, 2 1 1 1 1 3	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux M. Iliff# MAS (Larson) B. Nikula M. Lynch B. Nikula J. Frontierro R. Heil MAS (Petersen)
10/15 10/29 Little Gull 9/1 Laughing Gui 9/14 9/17 9/26,10/29 10/5, 28 10/20 Lesser Black- 9/11, 10/4 9/15, 10/2 10/20 Least Tern 9/5 9/14 9/24	Nahant P'town P.I. II Revere (POP) Squantum P'town 120 Duxbury B. 12 Nantucket backed Gull Chatham 1 P'town Rockport (A.P.) Nantucket Essex P.I. Duxbury B.	1200 190 1 22 94 90, 60 77, 12 330 1, 41 3, 2 2 ad 40 3	L. Pivacek B. Nikula T. Wetmore R. Stymeist G. d'Entremont# R. Heil R. Bowes S. Perkins# M. Iliff B. Nikula R. Heil S. Perkins# D. Brown#	9/3, 10/2 9/11 10/5 Long-tailed 9/3 9/5 9/5 9/7 9/12 9/15, 10/2 Dovekie 10/22 10/28 Common Mu 10/23 10/27 Razorbill 9/21 10/27	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro Nantucket P.I. Jeffries L. P'town P'town Eastham (F.E.) rre Jeffries L. Rockport (A.P.) Stellwagen Rockport (A.P.)	10, 16 8 27 1 1 1st yr 1 1 imm 1 lt 1, 2 1 1 1 1 3	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux M. Iliff# MAS (Larson) B. Nikula M. Lynch B. Nikula J. Frontierro R. Heil
10/15 10/29 Little Gull 9/1 Laughing Gui 9/14 9/17 9/26,10/29 10/5, 28 10/20 Lesser Black- 9/11, 10/4 9/15, 10/2 10/2 10/20 Least Tern 9/5 9/14	Nahant P'town P.I. II Revere (POP) Squantum P'town 120 Duxbury B. 12 Nantucket backed Gull Chatham 1 P'town Rockport (A.P.) Nantucket Essex P.I. Duxbury B.	1200 190 1 22 94 00, 60 7, 12 330 1, 41 3, 2 2 ad 40	L. Pivacek B. Nikula T. Wetmore R. Stymeist G. d'Entremont# R. Heil R. Bowes S. Perkins# M. Iliff B. Nikula R. Heil S. Perkins# D. Brown# D. Chickering	9/3, 10/2 9/11 10/5 Long-tailed 9/3 9/5 9/5 9/7 9/12, 10/2 Dovekie 10/22 10/28 Common Mu 10/23 10/27 Razorbill	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro Nantucket P.I. Jeffries L. P'town P'town Eastham (F.E.) rre Jeffries L. Rockport (A.P.) Stellwagen Rockport (A.P.)	10, 16 8 27 1 1 1st yr 1 1 imm 1 lt 1, 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux M. Iliff# MAS (Larson) B. Nikula M. Lynch B. Nikula J. Frontierro R. Heil MAS (Petersen)
10/15 10/29 Little Gull 9/1 Laughing Gui 9/14 9/17 9/26,10/29 10/5, 28 10/20 Lesser Black- 9/11, 10/4 9/15, 10/2 10/2 10/20 Least Tern 9/5 9/14 9/24 Gull-billed T 9/10	Nahant P'town P.I. Revere (POP) Squantum P'town 120 Duxbury B. 12 Nantucket backed Gull Chatham 1 P'town Rockport (A.P.) Nantucket Essex P.I. Duxbury B. ern P'town P.I.	1200 190 1 22 94 90, 60 77, 12 330 1, 41 3, 2 2 ad 40 3	L. Pivacek B. Nikula T. Wetmore R. Stymeist G. d'Entremont# R. Heil R. Bowes S. Perkins# M. Iliff B. Nikula R. Heil S. Perkins# D. Brown# D. Chickering R. Bowes C. Goodrich	9/3, 10/2 9/11 10/5 Long-tailed 9/3 9/5 9/7 9/15, 10/2 9/15, 10/2 Dovekie 10/22 10/28 Common Mu 10/23 10/27 Razorbill 9/21 10/27 Black Guiller	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro Nantucket P.I. Jeffries L. P'town P'town Eastham (F.E.) rre Jeffries L. Rockport (A.P.) Stellwagen Rockport (A.P.)	10, 16 8 27 1 1 1st yr 1 1 imm 1 lt 1, 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux M. Iliff# MAS (Larson) B. Nikula M. Lynch B. Nikula J. Frontierro R. Heil MAS (Petersen) R. Heil
10/15 10/29 Little Gull 9/1 Laughing Gui 9/14 9/17 9/26,10/29 10/5, 28 10/20 Lesser Black- 9/11, 10/4 9/15, 10/2 10/20 Least Tern 9/5 9/14 9/24 Gull-billed T 9/4 9/10 Caspian Tern	Nahant P'town P.I. Revere (POP) Squantum P'town 120 Duxbury B. 12 Nantucket backed Gull Chatham 1 P'town Rockport (A.P.) Nantucket Essex P.I. Duxbury B. ern P'town P.I.	1200 190 1 22 94 10, 60 77, 12 330 1, 41 3, 2 2 ad 40 3 4 8	L. Pivacek B. Nikula T. Wetmore R. Stymeist G. d'Entremont# R. Heil R. Bowes S. Perkins# M. Iliff B. Nikula R. Heil S. Perkins# D. Brown# D. Chickering R. Bowes C. Goodrich B. Harris	9/3, 10/2 9/11 10/5 Long-tailed 9/3 9/5 9/7 9/15, 10/2 9/15, 10/2 Dovekie 10/22 10/28 Common Mu 10/23 10/27 Razorbill 9/21 10/27 Black Guiller	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro Nantucket P.I. Jeffries L. P'town P'town Eastham (F.E.) rre Jeffries L. Rockport (A.P.) Stellwagen Rockport (A.P.)	10, 16 8 27 1 1 1st yr 1 1 imm 1 lt 1, 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux M. Iliff# MAS (Larson) B. Nikula M. Lynch B. Nikula J. Frontierro R. Heil MAS (Petersen) R. Heil
10/15 10/29 Little Gull 9/1 Laughing Gui 9/14 9/17 9/26,10/29 10/5, 28 10/20 Lesser Black- 9/11, 10/4 9/15, 10/2 10/2 10/20 Least Tern 9/5 9/14 9/24 Gull-billed T 9/4 9/10 Caspian Tern 9/2-23	Nahant P'town P.I. II Revere (POP) Squantum P'town 120 Duxbury B. 12 Nantucket -backed Gull Chatham 1 P'town Rockport (A.P.) Nantucket Essex P.I. Duxbury B. ern P'town P.I. Reports of 1-2 i	1200 190 1 22 94 10, 60 17, 12 330 1, 41 3, 2 2 ad 40 3 4 8 1 1 ph.	L. Pivacek B. Nikula T. Wetmore R. Stymeist G. d'Entremont# R. Heil R. Bowes S. Perkins# M. Iliff B. Nikula R. Heil S. Perkins# D. Brown# D. Chickering R. Bowes C. Goodrich B. Harris	9/3, 10/2 9/11 10/5 Long-tailed 9/3 9/5 9/7 9/15, 10/2 9/15, 10/2 Dovekie 10/22 10/28 Common Mu 10/23 10/27 Razorbill 9/21 10/27 Black Guiller	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro Nantucket P.I. Jeffries L. P'town P'town Eastham (F.E.) rre Jeffries L. Rockport (A.P.) Stellwagen Rockport (A.P.)	10, 16 8 27 1 1 1st yr 1 1 imm 1 lt 1, 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux M. Iliff# MAS (Larson) B. Nikula M. Lynch B. Nikula J. Frontierro R. Heil MAS (Petersen) R. Heil
10/15 10/29 Little Gull 9/1 Laughing Gui 9/14 9/17 9/26,10/29 10/5, 28 10/20 Lesser Black- 9/11, 10/4 9/15, 10/2 10/20 Least Tern 9/5 9/14 9/24 Gull-billed T 9/4 9/10 Caspian Tern 9/2-23 9/11	Nahant P'town P.I. Revere (POP) Squantum P'town 120 Duxbury B. 12 Nantucket backed Gull Chatham 1 P'town Rockport (A.P.) Nantucket Essex P.I. Duxbury B. ern P'town P.I. Reports of 1-2 i Braintree	1200 190 1 22 94 10, 60 7, 12 330 1, 41 3, 2 2 ad 40 3 4 8 1 ph.	L. Pivacek B. Nikula T. Wetmore R. Stymeist G. d'Entremont# R. Heil R. Bowes S. Perkins# M. Iliff B. Nikula R. Heil S. Perkins# D. Brown# D. Chickering R. Bowes C. Goodrich B. Harris om 10 locations M. Iliff	9/3, 10/2 9/11 10/5 Long-tailed 9/3 9/5 9/7 9/15, 10/2 9/15, 10/2 Dovekie 10/22 10/28 Common Mu 10/23 10/27 Razorbill 9/21 10/27 Black Guiller	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro Nantucket P.I. Jeffries L. P'town P'town Eastham (F.E.) rre Jeffries L. Rockport (A.P.) Stellwagen Rockport (A.P.)	10, 16 8 27 1 1 1st yr 1 1 imm 1 lt 1, 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux M. Iliff# MAS (Larson) B. Nikula M. Lynch B. Nikula J. Frontierro R. Heil MAS (Petersen) R. Heil
10/15 10/29 Little Gull 9/1 Laughing Gui 9/14 9/17 9/26,10/29 10/5, 28 10/20 Lesser Black- 9/11, 10/4 9/15, 10/2 10/20 Least Tern 9/5 9/14 9/24 Gull-billed T 9/4 9/10 Caspian Tern 9/2-23 9/11	Nahant P'town P.I. II Revere (POP) Squantum P'town 120 Duxbury B. 12 Nantucket -backed Gull Chatham 1 P'town Rockport (A.P.) Nantucket Essex P.I. Duxbury B. ern P'town P.I. Reports of 1-2 i	1200 190 1 22 94 10, 60 17, 12 330 1, 41 3, 2 2 ad 40 3 4 8 1 1 ph.	L. Pivacek B. Nikula T. Wetmore R. Stymeist G. d'Entremont# R. Heil R. Bowes S. Perkins# M. Iliff B. Nikula R. Heil S. Perkins# D. Brown# D. Chickering R. Bowes C. Goodrich B. Harris	9/3, 10/2 9/11 10/5 Long-tailed 9/3 9/5 9/7 9/15, 10/2 9/15, 10/2 Dovekie 10/22 10/28 Common Mu 10/23 10/27 Razorbill 9/21 10/27 Black Guiller	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro Nantucket P.I. Jeffries L. P'town P'town Eastham (F.E.) rre Jeffries L. Rockport (A.P.) Stellwagen Rockport (A.P.)	10, 16 8 27 1 1 1st yr 1 1 imm 1 lt 1, 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux M. Iliff# MAS (Larson) B. Nikula M. Lynch B. Nikula J. Frontierro R. Heil MAS (Petersen) R. Heil
10/15 10/29 Little Gull 9/1 Laughing Gui 9/14 9/17 9/26,10/29 10/5, 28 10/20 Lesser Black- 9/11, 10/4 9/15, 10/2 10/2 10/2 Least Tern 9/5 9/14 9/10 Caspian Tern 9/2-23 9/11 9/19 Black Tern 9/4	Nahant P'town P.I. II Revere (POP) Squantum P'town 120 Duxbury B. 12 Nantucket -backed Gull Chatham 1 P'town Rockport (A.P.) Nantucket Essex P.I. Duxbury B. ern P'town P.I. Reports of 1-2 in Braintree Squantum P.I.	1200 190 1 22 94 10, 60 7, 12 330 1, 41 3, 2 2 ad 40 3 4 8 1 1 ph.	L. Pivacek B. Nikula T. Wetmore R. Stymeist G. d'Entremont# R. Heil R. Bowes S. Perkins# M. Iliff B. Nikula R. Heil S. Perkins# D. Brown# D. Chickering R. Bowes C. Goodrich B. Harris om 10 locations M. Iliff R. Donovan S. Motyl	9/3, 10/2 9/11 10/5 Long-tailed 9/3 9/5 9/7 9/15, 10/2 9/15, 10/2 Dovekie 10/22 10/28 Common Mu 10/23 10/27 Razorbill 9/21 10/27 Black Guiller	Chatham Stellwagen Eastham (F.E.) Jaeger Orleans N. Truro Nantucket P.I. Jeffries L. P'town P'town Eastham (F.E.) rre Jeffries L. Rockport (A.P.) Stellwagen Rockport (A.P.)	10, 16 8 27 1 1 1st yr 1 1 imm 1 lt 1, 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B. Nikula J. Hoye# B. Nikula M. Iliff# B. Nikula V. Laux M. Iliff# MAS (Larson) B. Nikula M. Lynch B. Nikula J. Frontierro R. Heil MAS (Petersen) R. Heil
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CUCKOOS THROUGH FINCHES

Yellow-billed Cuckoos have typically left the state by early October, but for the second year in a row there were numerous reports throughout the month. This phenomenon occurs from time to time, and Veit and Petersen suggested that these birds are more likely "reverse migrants from the south rather than locally raised birds." The 2011 banding season for Northern Saw-whet Owls was disappointing at sites in Northbridge and at Lincoln as well as at many other banding stations along the East Coast. Some ideas of why the flight was poor were the mild weather and southerly winds and a full moon in early October. Common Nighthawks were noted in good numbers in the first days of September, but two birds seen on Nantucket on October 31 were exceptionally late. Chimney Swifts are on a schedule similar to that of nighthawks with the largest number early in the period; late reports in October are more apt to be reverse migrants. There were reports of **Rufous Hummingbirds** at feeders in Wareham and Lunenberg; both females were banded in mid-October and remained through the end of the period. There were also two Ruby-throated Hummingbirds reported in late October. October 22 was Red-headed Woodpecker day in Massachusetts with five different birds noted throughout the state.

The vagrant of the period was a **Yellow-green Vireo** that was caught in the nets at the Mass Audubon banding site on the Parker River National Wildlife Refuge on Plum Island on September 5. This is the first record of this species on the East Coast north of Florida. Yellow-green Vireos have been recorded rarely along coastal California in the fall, in south Texas in the summer, and along the upper US Gulf Coast in the spring. Remarkably, during this period birders also recorded five different **Ash-throated Flycatchers**: two different birds on Plum Island and singles in Winthrop, Salisbury, and Cuttyhunk. Others were noted at Cape May, New Jersey, and on Monhegan Island in Maine. It is thought that the severe drought in Texas may have caused these hatch-year birds to move; all of the reported birds were juveniles, and many were noted to have worn wings, indicating they were moving before molting. Three **Western Kingbirds** were noted this period, and a **Scissor-tailed Flycatcher** was found on Nantucket.

It was a good fall for Philadelphia Vireo with reports from over 30 locations. Tree Swallows were estimated at over 10,000 on Plum Island at the beginning of the month, and for the first time in recent years there were no reports of Cave Swallows in the state. A **Sedge Wren** was noted in the East Meadows of Northampton being chased by two House Wrens. At Great Meadows, 23 Marsh Wrens were tallied on September 1.

The evenings of September 7 and 8 were ideal for nocturnal migrants. The areas to our north were clear with a brisk northeast wind, but in our area there were clouds and fog with a light drizzle. In good weather birds move at higher altitudes but tend to fly low in bad weather, ideal conditions for hearing many birds, especially thrushes, passing overhead. Observers in several locations heard hundreds of Veeries and several Swainson's Thrushes, as well as many other songbirds, passing low overhead. Gray-cheeked Thrushes were noted from three banding locations, and unusual members of the thrush family included two **Townsend's Solitaires** and two **Northern Wheatears**, one of which was discovered by a vacationing Irishman who thought nothing of it until he returned home.

Thirty-three warbler species were noted during the period. A **MacGillivray's** Warbler in Squantum on October 8 was only the thirteenth record for the state. Other warbler highlights included two **Golden-winged**, a **Prothonotary**, 40 Orange-crowned, 26 Connecticut, 8 Hooded, 14 Cape May warblers, and 42 Chats. Notable sparrows during the period included at least 34 Clay-colored, 8 Vesper, 14 Lark, 7 Grasshopper, 10 Nelson sparrows, and a **Lark Bunting** in Gloucester. It was a great period for Dickcissels—more than 50 were noted throughout the state with many areas reporting two or more. Blue Grosbeaks likewise had a

good showing with nearly 40 individuals reported. Other highlights included a **Western Tanager** in Dorchester and **Yellow-headed Blackbirds** in Revere and East Boston. There was no indication of a good winter finch flight with only a handful of Pine Siskin reports and no redpolls or crossbills noted.

R. H. Stymeist

9/25	d Cuckoo	2	R. Stymeist#	10/31 Rufous Hun	S. Dartmouth	1 f	G. Dennis
10/1-23	Thompson I.	3 from 1		10/20-31	Wareham	1 f b =	oh C. Roy
10/1-23	Reports of indi P.I.		E. Labato#	10/20-31	Lunenburg	1 f b p 1 f b p	
10/2	MNWS	2 3	D. Ely	Belted Kingf		110 p	ii ivi. Andena
10/4	Nantucket	4	S. Perkins#	10/1	Truro	6	J. Young
10/21	Tuckernuck	3	R. Veit#	10/1	P.I.	3	P. + F. Vale
10/26	Mattapan (BNC		P. Peterson	Red-headed		3	r. + r. vale
Black-billed		-) 1	r. reterson	10/19-23	Woods Hole	1 ad	R. Lash
9/16		1	P Zaida	10/19-23	Westboro	1 au 1 imm	
9/24	Quabbin (G53) Milton	1	B. Zajda R. Donovan	10/21-23	Lexington	1 imm	
10/6	Arlington	1	J. Rathbun	10/22	Gloucester (E.1		B. Harris#
10/8	Rockport (H.P.)		B. Harris#	10/22	Maynard	1 imm	
10/17	WBWS	1	M. Faherty	10/23	Nantucket	1	T. Pastuszak#
10/17	P.I.	1	R. Heil	Red-bellied V		1	1. Fastuszak#
Eastern Scree		1	K. Heli	9/17	Braintree	4	G. d'Entremont#
9/9	Belmont	3	R. Stymeist#	10/7	Westport	6	P. Champlin
9/17	Wellfleet	2	BBC (Stymeist)	10/11	Woburn	4	M. Rines
10/6	Woburn	$\frac{2}{2}$	M. Rines	10/21-22	Nantucket	4	S. Perkins#
10/23	S. Dart. (A.Pd)	$\frac{2}{2}$	E. Nielsen	Yellow-bellie		•	S. I CIRIIIS
Great Horned		~	E. Tuelsen	9/25	W. Newbury	12	F. Vale
9/1	GMNWR	2	W. Hutcheson#	10/7	P.I.	10	T. Wetmore
9/10	Ipswich	pr	J. Berry#	10/8	Cape Ann	20	T. Spahr#
10/26	Bradford	2	D. Larson	10/17	Quabbin (G49-	44) 6	M. Lynch#
10/30	W. Bridgewater		D. Cabral	Northern Flic		, .	
Barred Owl				10/5	Westport	14	P. Champlin
9/2	Middleboro	1	K. Anderson	10/6	Nahant	10	J. Berry#
10/1	Washington	2	E. Neumuth	10/23	Westboro	11	M. Lynch#
10/9	Lincoln	1	N. Levey	Pileated Woo			, J
10/24	Medfield	2	B. Cassie	9/17	Quabbin (G49-	44) 6	M. Lynch#
Short-eared C	Owl			9/28	Carlisle `	2	T. Brownrigg
10/22	Cumb. Farms	1	S. Arena	10/17	Quabbin (G49-	44) 6	M. Lynch#
10/27	Chatham	1	M. Faherty	Olive-sided I		1	·
10/30	P.I.	1	S. Riley	9/1-18	Reports of indi	v. from 10	locations
Northern Sav	w-whet Owl		·	9/3	PeÎham	2	L. Therrien
10/thr							
	Lincoln	95 b	K. Seymour	Eastern Woo	d-Pewee		
10/thr	Lincoln S. Hadley	95 b 40 b	K. Seymour A. Hill	9/5	d-Pewee Petersham	13	M. Lynch#
10/thr 10/thr	S. Hadley Northbridge	40 b 30 b	A. Hill S. Wheelock	9/5 9/15	Petersham Waltham	2	J. Forbes
10/thr 10/thr 10/thr	S. Hadley Northbridge Williamstown	40 b 30 b 134 b	A. Hill S. Wheelock A. Jones	9/5 9/15 9/26	Petersham Waltham GMNWR	2 2	J. Forbes A. Bragg#
10/thr 10/thr 10/thr 11/thr	S. Hadley Northbridge Williamstown Lincoln	40 b 30 b 134 b 23 b	Å. Hill S. Wheelock A. Jones K Seymour	9/5 9/15 9/26 10/20-21	Petersham Waltham GMNWR P.I.	2 2	J. Forbes
10/thr 10/thr 10/thr 11/thr 11/thr	S. Hadley Northbridge Williamstown Lincoln S. Hadley	40 b 30 b 134 b 23 b 26 b	A. Hill S. Wheelock A. Jones K Seymour A. Hill	9/5 9/15 9/26 10/20-21 Yellow-bellie	Petersham Waltham GMNWR P.I. ed Flycatcher	2 2 1 S	J. Forbes A. Bragg# S. Sullivan + v.o.
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge	40 b 30 b 134 b 23 b 26 b 20 b	A. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock	9/5 9/15 9/26 10/20-21 Yellow-bellie 9/1	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton	2 2 1 S	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown	40 b 30 b 134 b 23 b 26 b	A. Hill S. Wheelock A. Jones K Seymour A. Hill	9/5 9/15 9/26 10/20-21 Yellow-bellie 9/1 9/1-4	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I.	2 2 1 S 2 3 b	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk	40 b 30 b 134 b 23 b 26 b 20 b 86 b	Å. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones	9/5 9/15 9/26 10/20-21 Yellow-bellie 9/1 9/1-4 9/9	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet	2 2 1 S 2 3 b 2 imm b	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown	40 b 30 b 134 b 23 b 26 b 20 b 86 b	Å. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien	9/5 9/15 9/26 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/9	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster	2 2 1 S 2 3 b 2 imm b 2 b	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghtlakak Belchertown Sturbridge	40 b 30 b 134 b 23 b 26 b 20 b 86 b	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse	9/5 9/15 9/26 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/9 9/12	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster Burlington	2 2 1 S 2 3 b 2 imm b 2 b 1	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton	40 b 30 b 134 b 23 b 26 b 20 b 86 b	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon	9/5 9/15 9/26 10/20-21 Yellow-bellic 9/1 9/1-4 9/9 9/9 9/12 9/18	Petersham Waltham GMNWR P.I. ad Flycatcher Northampton P.I. Manomet Brewster Burlington P'town	2 2 1 S 2 3 b 2 imm b 2 b	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1 9/1 9/3, 14	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37	40 b 30 b 134 b 23 b 26 b 20 b 86 b	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert	9/5 9/15 9/26 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/9 9/12 9/18 Least Flycato	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster Burlington P'town	2 2 1 S 2 3 b 2 imm b 2 b 1	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist)
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1 9/3, 14	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37 ONWR	40 b 30 b 134 b 23 b 26 b 20 b 86 b 77 85 251 79, 95 76	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert D. Knowlton	9/5 9/15 9/26 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/9 9/12 9/18 Least Flycato 9/6	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster Burlington P'town cher P.I.	2 2 1 S 2 3 b 2 imm b 2 b 1 1	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist)
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1 9/1 9/3, 14 9/3 10/1	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37 ONWR W. Bridgewater	40 b 30 b 134 b 23 b 26 b 20 b 86 b 77 85 251 79, 95 76	Å. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert D. Knowlton K. Ryan	9/5 9/15 9/26 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/9 9/12 9/18 Least Flycato 9/6 9/8	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster Burlington P'town cher P.I. Boston (Fens)	2 2 3 b 2 imm b 2 b 1 1	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist) R. Heil P. Peterson
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1 9/1 9/3, 14 9/3 10/1 10/9	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37 ONWR W. Bridgewater W. Roxbury (M	40 b 30 b 134 b 23 b 26 b 20 b 86 b 77 85 251 79, 95 76 1 IP) 1	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert D. Knowlton K. Ryan M. Iliff	9/5 9/15 9/15 9/26 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/9 9/12 9/18 Least Flycato 9/6 9/8 9/17	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster Burlington P'town Cher P.I. Boston (Fens) Squantum	2 2 3 b 2 imm b 2 b 1 1	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist) R. Heil P. Peterson G. d'Entremont#
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1 9/3, 14 9/3 10/1 10/9 10/20-31	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37 ONWR W. Bridgewater W. Roxbury (M. Nantucket	40 b 30 b 134 b 23 b 26 b 20 b 86 b 77 85 251 79, 95 76	Å. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert D. Knowlton K. Ryan	9/5 9/15 9/26 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/9 9/12 9/18 Least Flycato 9/6 9/8 9/17 9/17	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster Burlington P'town ther P.I. Boston (Fens) Squantum Westport	2 2 3 b 2 imm b 2 b 1 1 3 1 1	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist) R. Heil P. Peterson G. d'Entremont# S. Perkins#
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1 9/3, 14 9/3 10/9 10/20-31 Chimney Sw	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37 ONWR W. Bridgewater W. Roxbury (M. Nantucket	40 b 30 b 134 b 23 b 26 b 20 b 86 b 77 85 251 79, 95 76 1 IP) 1 2	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert D. Knowlton K. Ryan M. Iliff S. Perkins#	9/5 9/15 9/26 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/12 9/18 Least Flycato 9/6 9/8 9/17 9/17	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster Burlington P'town cher P.I. Boston (Fens) Squantum Westport Cuttyhunk	2 2 3 b 2 imm b 2 b 1 1 3 1 1	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist) R. Heil P. Peterson G. d'Entremont# S. Perkins# M. Sylvia#
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1 9/1 9/3, 14 9/3 10/1 10/9 10/20-31 Chimney Sw 9/5	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37 ONWR W. Bridgewater W. Roxbury (M. Nantucket ift Taunton	40 b 30 b 134 b 23 b 26 b 20 b 86 b 77 85 251 79, 95 76 1 IP) 1 2	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert D. Knowlton K. Ryan M. Iliff S. Perkins#	9/5 9/15 9/16 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/12 9/18 Least Flycate 9/6 9/8 9/17 10/16 10/16-21	Petersham Waltham GMNWR P.I. ad Flycatcher Northampton P.I. Manomet Brewster Burlington P'town cher P.I. Boston (Fens) Squantum Westport Cuttyhunk P.I.	2 2 3 b 2 imm b 2 b 1 1 3 1 1	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist) R. Heil P. Peterson G. d'Entremont# S. Perkins#
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1 9/3, 14 9/3 10/1 10/9 10/20-31 Chimney Sw 9/5	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37 ONWR W. Bridgewater W. Roxbury (M. Nantucket ift Taunton Northampton	40 b 30 b 134 b 134 b 23 b 26 b 20 b 86 b 77 85 251 79, 95 76 1P) 1 2	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert D. Knowlton K. Ryan M. Iliff S. Perkins#	9/5 9/15 9/16 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/12 9/18 Least Flycato 9/6 9/8 9/17 9/17 10/16 10/16-21 Empidonax s	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster Burlington P'town cher P.I. Boston (Fens) Squantum Westport Cuttyhunk P.I. peccies	2 2 1 S 2 simm b 2 b 1 1 1 3 1 1 1 1 ph	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist) R. Heil P. Peterson G. d'Entremont# S. Perkins# M. Sylvia# J. Center+ v.o.
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1 9/3, 14 9/3 10/1 10/9 10/20-31 Chimney Sw 9/5 9/9	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37 ONWR W. Bridgewater W. Roxbury (M. Nantucket ift Taunton Northampton GMNWR	40 b 30 b 134 b 23 b 26 b 20 b 86 b 77 85 251 79, 95 76 1 IP) 1 2 480 roo 4 174	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert D. Knowlton K. Ryan M. Iliff S. Perkins# st J. Sweeney B. Zajda W. Hutcheson#	9/5 9/15 9/26 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/9 9/12 9/18 Least Flycato 9/6 9/8 9/17 9/17 10/16 10/16-21 Empidonax s 10/20	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster Burlington P'town cher P.I. Boston (Fens) Squantum Westport Cuttyhunk P.I. species Boston (PG)	2 2 3 b 2 imm b 2 b 1 1 3 1 1	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist) R. Heil P. Peterson G. d'Entremont# S. Perkins# M. Sylvia#
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1 9/3, 14 9/3 10/1 10/9 10/20-31 Chimney Sw 9/5 9/9	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37 ONWR W. Bridgewater W. Roxbury (M. Nantucket ift Taunton Northampton GMNWR Waltham	40 b 30 b 134 b 23 b 26 b 20 b 86 b 77 85 251 79, 95 76 1 IP) 1 2 480 roo 4 174 8	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert D. Knowlton K. Ryan M. Iliff S. Perkins# st J. Sweeney B. Zajda W. Hutcheson# J. Forbes	9/5 9/15 9/26 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/9 9/12 9/18 Least Flycato 9/6 9/8 9/17 10/16 10/16-21 Empidonax s 10/20 Eastern Phoe	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster Burlington P'town cher P.I. Boston (Fens) Squantum Westport Cuttyhunk P.I. species Boston (PG)	2 2 3 b 2 imm b 2 b 1 1 1 1 1 1 1 1 ph 1	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist) R. Heil P. Peterson G. d'Entremont# S. Perkins# M. Sylvia# J. Center+ v.o. T. Factor
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1 9/1 9/3, 14 9/3 10/1 10/9 10/20-31 Chimney Sw 9/5 9/9 9/20 10/10	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37 ONWR W. Bridgewater W. Roxbury (M. Nantucket iff Taunton Northampton GMNWR Waltham Wayland	40 b 30 b 134 b 23 b 26 b 20 b 86 b 77 85 251 79, 95 76 1 IP) 1 2 480 roo 4 174 8 1	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert D. Knowlton K. Ryan M. Iliff S. Perkins# st J. Sweeney B. Zajda W. Hutcheson# J. Forbes B. Harris	9/5 9/15 9/16 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/12 9/18 Least Flycate 9/6 9/8 9/17 10/16 10/16-21 Empidonax s 10/20 Eastern Phoe 9/25	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster Burlington P'town Cher P.I. Boston (Fens) Squantum Westport Cuttyhunk P.I. species Boston (PG) bbe Thompson I.	2 2 3 b 2 imm b 2 b 1 1 3 1 1 1 1 ph 1	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist) R. Heil P. Peterson G. d'Entremont# S. Perkins# M. Sylvia# J. Center+ v.o. T. Factor R. Stymeist#
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1 9/3, 14 9/3 10/1 10/9 10/20-31 Chimney Sw 9/5 9/9 9/20 10/10 10/21	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37 ONWR W. Bridgewate W. Roxbury (M. Nantucket ift Taunton Northampton GMNWR Waltham Wayland Nantucket	40 b 30 b 134 b 23 b 26 b 20 b 86 b 77 85 251 79, 95 76 1 IP) 1 2 480 roo 4 174 8	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert D. Knowlton K. Ryan M. Iliff S. Perkins# st J. Sweeney B. Zajda W. Hutcheson# J. Forbes	9/5 9/15 9/15 9/26 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/12 9/18 Least Flycato 9/6 9/8 9/17 9/17 10/16 10/16-21 Empidonax s 10/20 Eastern Phoe 9/25 9/30	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster Burlington P'town cher P.I. Boston (Fens) Squantum Westport Cuttyhunk P.I. pecies Boston (PG) che Thompson I. P.I.	2 2 1 S 2 1 S 2 1 S 2 1 S 2 1 S 2 1 S 2 1 S 2 1 S 1 S	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist) R. Heil P. Peterson G. d'Entremont# S. Perkins# M. Sylvia# J. Center+ v.o. T. Factor R. Stymeist# R. Schain
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1 9/3, 14 9/3 10/1 10/9 10/20-31 Chimney Sw 9/5 9/9 9/20 10/10 10/21 Ruby-throate	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37 ONWR W. Bridgewater W. Roxbury (M. Nantucket ift Taunton Northampton GMNWR Waltham Wayland Nantucket dd Hummingbird	40 b 30 b 134 b 134 b 23 b 26 b 20 b 86 b 77 85 251 19, 95 76 1 1 1 P) 1 2 480 roo 4 174 8 1 1	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert D. Knowlton K. Ryan M. Iliff S. Perkins# st J. Sweeney B. Zajda W. Hutcheson# J. Forbes B. Harris V. Laux#	9/5 9/15 9/15 9/26 10/20-21 Yellow-bellic 9/1 9/1-4 9/9 9/9 9/12 9/18 Least Flycato 9/6 9/8 9/17 9/17 10/16 10/16-21 Empidonax s 10/20 Eastern Phoe 9/25 9/30 10/9	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster Burlington P'town cher P.I. Boston (Fens) Squantum Westport Cuttyhunk P.I. peecies Boston (PG) bbe Thompson I. P.I. Cumb. Farms	2 2 1 S 2 simm b 2 imm b 2 b 1 1 1 1 1 1 1 ph 1	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist) R. Heil P. Peterson G. d'Entremont# M. Sylvia# J. Center+ v.o. T. Factor R. Stymeist# R. Schain J. Sweeney#
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1 9/3, 14 9/3 10/1 10/9 10/20-31 Chimney Sw 9/5 9/9 9/20 10/10 10/21	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37 ONWR W. Bridgewater W. Roxbury (M. Nantucket ift Taunton Northampton GMNWR Waltham Wayland Nantucket d Hummingbird GMNWR	40 b 30 b 134 b 23 b 26 b 20 b 86 b 77 85 251 19, 95 76 71 1P) 1 2 480 roo 4 174 8 1 1	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert D. Knowlton K. Ryan M. Iliff S. Perkins# st J. Sweeney B. Zajda W. Hutcheson# J. Forbes B. Harris V. Laux# W. Hutcheson#	9/5 9/15 9/15 9/26 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/12 9/18 Least Flycato 9/6 9/8 9/17 9/17 10/16 10/16-21 Empidonax s 10/20 Eastern Phoe 9/25 9/30	Petersham Waltham GMNWR P.I. ad Flycatcher Northampton P.I. Manomet Brewster Burlington P'town cher P.I. Boston (Fens) Squantum Westport Cuttyhunk P.I. pecies Boston (PG) bbe Thompson I. P.I. Cumb. Farms Westport	2 2 3 b 2 imm b 2 b 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist) R. Heil P. Peterson G. d'Entremont# S. Perkins# M. Sylvia# J. Center+ v.o. T. Factor R. Stymeist# R. Schain
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/3, 14 9/3 10/1 10/9 10/20-31 Chimney Sw 9/5 9/9 9/20 10/10 10/21 Ruby-throate	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37 ONWR W. Bridgewater W. Roxbury (M. Nantucket ifit Taunton Northampton GMNWR Waltham Wayland Nantucket d Hummingbird GMNWR Cumb. Farms	40 b 30 b 134 b 134 b 23 b 26 b 20 b 86 b 77 85 251 19, 95 76 1 1 11 1 6 3 3 3	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert D. Knowlton K. Ryan M. Iliff S. Perkins# st J. Sweeney B. Zajda W. Hutcheson# J. Forbes B. Harris V. Laux# W. Hutcheson# G. d'Entremont	9/5 9/15 9/15 9/26 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/9 9/12 9/18 Least Flycato 9/6 9/8 9/17 9/17 10/16 10/16-21 Empidonax s 10/20 Eastern Phoe 9/25 9/30 10/9 10/9 10/24	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster Burlington P'town cher P.I. Boston (Fens) Squantum Westport Cuttyhunk P.I. species Boston (PG) be Thompson I. P.I. Cumb. Farms Westport W. Roxbury	2 2 1 S 2 simm b 2 imm b 2 b 1 1 1 1 1 1 1 ph 1	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist) R. Heil P. Peterson G. d'Entremont# S. Perkins# M. Sylvia# J. Center+ v.o. T. Factor R. Stymeist# R. Schain J. Sweeney# M. Lynch#
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1 9/3, 14 9/3 10/1 10/9 10/20-31 Chimney Sw 9/5 9/9 9/20 10/10 10/21 Ruby-throate 9/1 9/5	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37 ONWR W. Bridgewater W. Roxbury (M. Nantucket ift Taunton Northampton GMNWR Waltham Wayland Nantucket dd Hummingbird GMNWR Cumb. Farms Medford	40 b 30 b 134 b 134 b 23 b 26 b 20 b 86 b 77 85 251 19, 95 76 1 1 11 1 6 3 3 3	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert D. Knowlton K. Ryan M. Iliff S. Perkins# st J. Sweeney B. Zajda W. Hutcheson# J. Forbes B. Harris V. Laux# W. Hutcheson# G. d'Entremont P. Devaney#	9/5 9/15 9/15 9/26 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/9 9/12 9/18 Least Flycato 9/6 9/8 9/17 9/17 10/16 10/16-21 Empidonax s 10/20 Eastern Phoe 9/25 9/30 10/9 10/9 10/24	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster Burlington P'town cher P.I. Boston (Fens) Squantum Westport Cuttyhunk P.I. pecies Boston (PG) be Thompson I. P.I. Cumb. Farms Westport W. Roxbury d Flycatcher	2 2 3 b 2 imm b 2 b 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist) R. Heil P. Peterson G. d'Entremont# S. Perkins# M. Sylvia# J. Center+ v.o. T. Factor R. Stymeist# R. Schain J. Sweeney# M. Lynch#
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1 9/3, 14 9/3 10/1 10/9 10/20-31 Chimney Sw 9/5 9/5 9/9 9/20 10/10 10/21 Ruby-throate 9/1 9/1 9/1	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37 ONWR W. Bridgewater W. Roxbury (M. Nantucket ift Taunton Northampton GMNWR Waltham Wayland Nantucket dd Hummingbird GMNWR Cumb. Farms Medford Northampton	40 b 30 b 134 b 23 b 26 b 20 b 86 b 77 85 251 79, 95 76 1 IP) 1 2 480 roo 4 174 8 1 1	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert D. Knowlton K. Ryan M. Iliff S. Perkins# st J. Sweeney B. Zajda W. Hutcheson# J. Forbes B. Harris V. Laux# W. Hutcheson# G. d'Entremont	9/5 9/15 9/16 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/9 9/12 9/18 Least Flycate 9/6 9/8 9/17 10/16 10/16-21 Empidonax s 10/20 Eastern Phoe 9/25 9/30 10/9 10/9 10/24 Ash-throater	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster Burlington P'town cher P.I. Boston (Fens) Squantum Westport Cuttyhunk P.I. pecies Boston (PG) be Thompson I. P.I. Cumb. Farms Westport W. Roxbury d Flycatcher	2 2 1 S 2 imm b 2 b 1 1 1 1 1 ph 1 1 10 12 14 58 2	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist) R. Heil P. Peterson G. d'Entremont# S. Perkins# M. Sylvia# J. Center+ v.o. T. Factor R. Stymeist# R. Schain J. Sweeney# M. Lynch# P. Peterson
10/thr 10/thr 10/thr 11/thr 11/thr 11/thr 11/thr Common Nig 9/1 9/1 9/3, 14 9/3 10/1 10/9 10/20-31 Chimney Sw 9/5 9/9 9/20 10/10 10/21 Ruby-throate 9/1 9/18 9/24	S. Hadley Northbridge Williamstown Lincoln S. Hadley Northbridge Williamstown ghthawk Belchertown Sturbridge Northampton Sutton 37 ONWR W. Bridgewater W. Roxbury (M. Nantucket ift Taunton Northampton GMNWR Waltham Wayland Nantucket dd Hummingbird GMNWR Cumb. Farms Medford	40 b 30 b 134 b 23 b 26 b 20 b 86 b 77 85 251 79, 95 76 1 1 11 11 6 3 3 3 3	Ä. Hill S. Wheelock A. Jones K Seymour A. Hill S. Wheelock A. Jones L. Therrien N. Lacasse T. Gagnon M. Joubert D. Knowlton K. Ryan M. Iliff S. Perkins# st J. Sweeney B. Zajda W. Hutcheson# J. Forbes B. Harris V. Laux# W. Hutcheson# G. d'Entremont P. Devaney# T. Gagnon	9/5 9/15 9/26 10/20-21 Yellow-bellie 9/1 9/1-4 9/9 9/9 9/12 9/18 Least Flycate 9/6 9/8 9/17 10/16 10/16-21 Empidonax s 10/20 Eastern Phoe 9/25 9/30 10/9 10/9 10/24 Ash-throate 9/27-10/16	Petersham Waltham GMNWR P.I. ed Flycatcher Northampton P.I. Manomet Brewster Burlington P'town cher P.I. Boston (Fens) Squantum Westport Cuttyhunk P.I. species Boston (PG) che Thompson I. P.I. Cumb. Farms Westport Westport V. Roxbury d Flycatcher O P.I.	2 2 3 b 2 imm b 2 b 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	J. Forbes A. Bragg# S. Sullivan + v.o. B. Zajda B. Flemer Lloyd-Evans S. Finnegan M. Rines BBC (Stymeist) R. Heil P. Peterson G. d'Entremont# S. Perkins# M. Sylvia# J. Center+ v.o. T. Factor R. Stymeist# R. Schain J. Sweeney# M. Lynch# P. Peterson B. Harris + v.o.

Ash-throated							
	l Flycatcher (cor	ntinued)		10/22	Mattapan (BN	C) 120	P. Peterson
10/16	Cuttyhunk	1	M. Sylvia#	10/27	Longmeadow	20	S. Kellogg
10/28-29	Salisbury	1 ph	J. Fenton + v.o.	Common Ra	iven		
Great Crested	l Flycatcher	•		9/4	Deerfield	24	T. Gagnon
9/3	P.Ĭ.	1	F. Vale	9/5	C. Quabbin	36	L. Therrien
9/4	S. Quabbin	1	L. Therrien	9/9	Barre Falls	15	D. Schilling
9/19	DFWS	1	D. Swain	9/10	Mt. Wachusett	12	R. Chase
Western Kin				10/3	Granville	19	J. Weeks
9/17, 10/1		1, 1	V. Laux	10/10	Devens	12	C. Johnson
10/2	Barnstable	1 ph	P. Crosson	Horned Lark		12	C. Johnson
10/17-21	Marstons Mills		M. Malin#	9/17	Chatham	50	C. Goodrich
Eastern King		•	111. ITILITIII	10/6	Revere B.	2	R. Stymeist
9/1	P.I.	8	N. Landry	10/10	Hadley	3	S. Surner
9/9	Belmont	4	R. Stymeist#	10/10	P.I.	8	T. Wetmore
		2	J. Forbes	10/19		2	S. Perkins#
9/10	Lincoln	1			Nantucket	2	S. Perkins#
9/25	Newton		D. Levenson	Tree Swallo		0.000	D. Chialania
9/25	Bolton Flats	1	K. Bourinot#	9/1		0,000	D. Chickering
Scissor-tailed		1	G D 1: "	9/4	Boston (Deer I		M. Garvey
10/21-31	Nantucket	1	S. Perkins#	9/13	Chatham	2000	B. Nikula
Northern Shr			a n:	10/2	Falmouth	1500	T. Collins
10/12	W. Newbury	1	S. Pierce	10/12	Duxbury B.	1000	R. Bowes
10/25	Ipswich	1 ad p	h R. Heil	10/21	Nantucket	2000	S. Perkins
White-eyed V				10/22	Cumb. Farms	250	S. Arena
9/27	Dorchester	1	R. Donovan	10/23	S. Dart. (A.Pd)	200	B. Cassie
10/3	P.I.	2	E. Labato	Northern Ro	ugh-winged Swa	llow	
10/10	Mattapoisett	1 imm	A. Morgan	9/20	Wayland	47	B. Harris
10/18	Nantucket	1	V. Laux	10/8	Cumb. Farms	1	S. Surner#
10/23	S. Dart. (A.Pd)	2	E. Nielsen	10/10	W. Roxbury (N	IP) 59	M. Iliff
Yellow-throat				Bank Swallo			
9/1-9/11	Wayland	1-2	B. Harris#	9/4	Southwick	65	S. Kellogg
9/2	Newton	1	M. Kaufman	9/9	GMNWR	12	W. Hutcheson#
9/10	C. Quabbin	1	L. Therrien	9/20	P.I.	3	T. Wetmore
9/10	Nahant	i	G. d'Entremont	10/8	Cumb. Farms	2	S. Surner
9/10	W Springfield	i	J. Hutchison	10/14	W. Bridgewate		K. Ryan
10/4	Cambr. (F.P.)	1	J. Trimble	10/16	Nahant	1 1	M. Iliff
10/5-6	Salisbury	1	E. Labato	Cliff Swallo		1	141. 11111
10/23	P.I.	1	D. + S. Larson	9/4	w Southwick	1	S. Kellogg
Blue-headed		1	D. + S. Larson	9/20	Wayland	1	B. Harris
		2	DDC (Stymoist)			1	
9/17	Wellfleet	3 7	BBC (Stymeist)	10/8	Cuttyhunk		R. Schain#
9/25	P.I.		E. Nielsen	10/16	Cumb. Farms	1	C. Turnbull
10/4, 31	Medford	3, 1	R. LaFontaine	Barn Swallo		50	XX
10/6	Manomet	4 b	T. Lloyd-Evans	9/9	GMNWR	50	W. Hutcheson#
10/6	Melrose	4	D. + I. Jewell	9/9 9/10	P.I.	38	R. Schain
10/6 10/8	Melrose Quabbin (G35-	4 37) 5	D. + I. Jewell M. Lynch#	9/9 9/10 9/24	P.I. Cumb. Farms	38 28	R. Schain S. Arena
10/6 10/8 10/17	Melrose Quabbin (G35- Amherst	4 37) 5 5	D. + I. Jewell M. Lynch# I. Davies	9/9 9/10 9/24 10/20	P.I. Cumb. Farms Woburn (HP)	38 28 1	R. Schain S. Arena M. Rines
10/6 10/8 10/17 10/29	Melrose Quabbin (G35- Amherst Cambr. (F.P.)	4 37) 5	D. + I. Jewell M. Lynch#	9/9 9/10 9/24 10/20 10/21	P.I. Cumb. Farms Woburn (HP) Nantucket	38 28	R. Schain S. Arena
10/6 10/8 10/17	Melrose Quabbin (G35- Amherst Cambr. (F.P.)	37) 5 5 1	D. + I. Jewell M. Lynch# I. Davies	9/9 9/10 9/24 10/20	P.I. Cumb. Farms Woburn (HP) Nantucket	38 28 1 1	R. Schain S. Arena M. Rines
10/6 10/8 10/17 10/29	Melrose Quabbin (G35- Amherst Cambr. (F.P.)	37) 5 5 1	D. + I. Jewell M. Lynch# I. Davies	9/9 9/10 9/24 10/20 10/21	P.I. Cumb. Farms Woburn (HP) Nantucket	38 28 1	R. Schain S. Arena M. Rines
10/6 10/8 10/17 10/29 Warbling Vire	Melrose Quabbin (G35- Amherst Cambr. (F.P.)	37) 5 5 1	D. + I. Jewell M. Lynch# I. Davies P. Peterson	9/9 9/10 9/24 10/20 10/21 Swallow spe	P.I. Cumb. Farms Woburn (HP) Nantucket	38 28 1 1	R. Schain S. Arena M. Rines S. Perkins
10/6 10/8 10/17 10/29 Warbling Vire 9/12	Melrose Quabbin (G35- Amherst Cambr. (F.P.) eo Cambr. (F.P.) Lexington	37) 5 5 1	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist	9/9 9/10 9/24 10/20 10/21 Swallow spe 10/20	P.I. Cumb. Farms Woburn (HP) Nantucket ecies W. Concord S. Dart. (A.Pd)	38 28 1 1	R. Schain S. Arena M. Rines S. Perkins D. Swain
10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17	Melrose Quabbin (G35- Amherst Cambr. (F.P.) eo Cambr. (F.P.)	37) 5 5 1 7 2	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines	9/9 9/10 9/24 10/20 10/21 Swallow spe 10/20 10/23	P.I. Cumb. Farms Woburn (HP) Nantucket ecies W. Concord S. Dart. (A.Pd)	38 28 1 1	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie
10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25	Melrose Quabbin (G35- Amherst Cambr. (F.P.) eo Cambr. (F.P.) Lexington Thompson I.	37) 5 5 1 7 2 1	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist#	9/9 9/10 9/24 10/20 10/21 Swallow spe 10/20 10/23 Red-breasted	P.I. Cumb. Farms Woburn (HP) Nantucket ecies W. Concord S. Dart. (A.Pd)	38 28 1 1	R. Schain S. Arena M. Rines S. Perkins D. Swain
10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25 10/1 10/8	Melrose Quabbin (G35- Amherst Cambr. (F.P.) O Cambr. (F.P.) Lexington Thompson I. P.I. Rockport (H.P.)	37) 5 5 1 7 2 1	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist# E. Nielsen	9/9 9/10 9/24 10/20 10/21 Swallow spe 10/20 10/23 Red-breasted	P.I. Cumb. Farms Woburn (HP) Nantucket ecies W. Concord S. Dart. (A.Pd) d Nuthatch Quabbin (G35-	38 28 1 1 1 1 -37) 8	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie M. Lynch#
10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25 10/1	Melrose Quabbin (G35- Amherst Cambr. (F.P.) O Cambr. (F.P.) Lexington Thompson I. P.I. Rockport (H.P.)	4 37) 5 5 1 7 2 1 1	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist# E. Nielsen B. Harris#	9/9 9/10 9/24 10/20 10/21 Swallow spe 10/20 10/23 Red-breasted 10/8 10/8	P.I. Cumb. Farms Woburn (HP) Nantucket scies W. Concord S. Dart. (A.Pd) d Nuthatch Quabbin (G35- WBWS	38 28 1 1 1 1 .37) 8 2	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie M. Lynch# SSBC (GdE) G. d'Entremont#
10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25 10/1 10/8 Philadelphia	Melrose Quabbin (G35- Amherst Cambr. (F.P.) O Cambr. (F.P.) Lexington Thompson I. P.I. Rockport (H.P.) Vireo	4 37) 5 5 1 7 2 1 1	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist# E. Nielsen B. Harris#	9/9 9/10 9/24 10/20 10/21 Swallow spe 10/20 10/23 Red-breasted 10/8 10/16	P.I. Cumb. Farms Woburn (HP) Nantucket scies W. Concord S. Dart. (A.Pd) d Nuthatch Quabbin (G35- WBWS Mashpee P.I.	38 28 1 1 1 1 -37) 8 2 6	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie M. Lynch# SSBC (GdE)
10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25 10/1 10/8 Philadelphia 9/1-10/21 9/10	Melrose Quabbin (G35- Amherst Cambr. (F.P.) O Cambr. (F.P.) Lexington Thompson I. P.I. Rockport (H.P.) Vireo Reports of indir C. Quabbin	37) 5 5 1 7 2 1 1 1 1 1 v. from 28 2	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist# E. Nielsen B. Harris# I locations L. Therrien	9/9 9/10 9/24 10/20 10/21 Swallow spet 10/20 10/23 Red-breasted 10/8 10/8 10/16 10/24 Brown Cree	P.I. Cumb. Farms Woburn (HP) Nantucket scies W. Concord S. Dart. (A.Pd) d Nuthatch Quabbin (G35- WBWS Mashpee P.I.	38 28 1 1 1 -37) 8 2 6 2	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie M. Lynch# SSBC (GdE) G. d'Entremont# G. Billingham
10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25 10/1 10/8 Philadelphia 9/1-10/21 9/10	Melrose Quabbin (G35- Amherst Cambr. (F.P.) O Cambr. (F.P.) Lexington Thompson I. P.I. Rockport (H.P.) Vireo Reports of indi C. Quabbin P.I.	37) 5 5 1 7 2 1 1 1 1 1 v. from 28 2 2	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist# E. Nielsen B. Harris# s locations L. Therrien J. Taylor	9/9 9/10 9/24 10/20 10/21 Swallow spe 10/20 10/23 Red-breasted 10/8 10/16 10/24 Brown Cree	P.I. Cumb. Farms Woburn (HP) Nantucket scies W. Concord S. Dart. (A.Pd) d. Nuthatch Quabbin (G35- WBWS Mashpee P.I. per Manomet	38 28 1 1 1 337) 8 2 6 2 7 b	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie M. Lynch# SSBC (GdE) G. d'Entremont# G. Billingham T. Lloyd-Evans
10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25 10/1 10/8 Philadelphia 9/1-10/21 9/10 9/11	Melrose Quabbin (G35- Amherst Cambr. (F.P.) Combr. (F.P.) Lexington Thompson I. P.I. Rockport (H.P.) Vireo Reports of indir C. Quabbin P.I. Wellfleet	37) 5 5 1 7 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist# E. Nielsen B. Harris# Flocations L. Therrien J. Taylor BBC (Stymeist)	9/9 9/10 9/24 10/20 10/21 Swallow spe 10/23 Red-breasted 10/8 10/16 10/24 Brown Cree 10/6 10/15	P.I. Cumb. Farms Woburn (HP) Nantucket cies W. Concord S. Dart. (A.Pd) d Nuthatch Quabbin (G35: WBWS Mashpee P.I. per Manomet WMWS	38 28 1 1 1 1 37) 8 2 6 2 7 b 2	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie M. Lynch# SSBC (GdE) G. d'Entremont# G. Billingham T. Lloyd-Evans G. Billingham
10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25 10/1 10/8 Philadelphia 9/1-10/21 9/10 9/11 9/17	Melrose Quabbin (G35- Amherst Cambr. (F.P.) Combr. (F.P.) Lexington Thompson I. P.I. Rockport (H.P.) Vireo Reports of indi C. Quabbin P.I. Wellfleet Sudbury	37) 5 5 1 7 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist# E. Nielsen B. Harris# I locations L. Therrien J. Taylor BBC (Stymeist) T. Spahr	9/9 9/10 9/24 10/20 10/21 Swallow spet 10/23 Red-breasted 10/8 10/16 10/24 Brown Cree 10/6 10/15 10/16	P.I. Cumb. Farms Woburn (HP) Nantucket scies W. Concord S. Dart. (A.Pd) dl Nuthatch Quabbin (G35- WBWS Mashpee P.I. per Manomet WMWS Mashpee	38 28 1 1 1 37) 8 2 6 2 7 b 2 2	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie M. Lynch# SSBC (GdE) G. d'Entremont# G. Billingham T. Lloyd-Evans G. Billingham G. d'Entremont#
10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25 10/1 10/8 Philadelphia 9/1-10/21 9/10 9/11 9/17 9/18 9/25	Melrose Quabbin (G35- Amherst Cambr. (F.P.) O Cambr. (F.P.) Lexington Thompson I. P.I. Rockport (H.P.) Vireo Reports of indi C. Quabbin P.I. Wellfeet Sudbury P'town	37) 5 5 1 7 2 1 1 1 1 1 1 2 2 2 3 3 2 2 2	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist# E. Nielsen B. Harris# I locations L. Therrien J. Taylor BBC (Stymeist) T. Spahr C. Floyd	9/9 9/10 9/24 10/20 10/21 Swallow spe 10/20 10/23 Red-breasted 10/8 10/16 10/24 Brown Cree 10/6 10/15 10/16 10/23	P.I. Cumb. Farms Woburn (HP) Nantucket scies W. Concord S. Dart. (A.Pd) d Nuthatch Quabbin (G35-WBWS Mashpee P.I. per Manomet WMWS Mashpee Cuttyhunk	38 28 1 1 1 37) 8 2 6 2 7 b 2 2 2 2	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie M. Lynch# SSBC (GdE) G. d'Entremont# G. Billingham T. Lloyd-Evans G. Billingham G. d'Entremont# M. Sylvia
10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25 10/1 10/8 Philadelphia 9/1-10/21 9/10 9/11 9/17 9/18 9/25 10/22	Melrose Quabbin (G35- Amherst Cambr. (F.P.) Cambr. (F.P.) Lexington Thompson I. P.I. Rockport (H.P.) Vireo Reports of indir C. Quabbin P.I. Wellfleet Sudbury P'town Mattapan (BNC	37) 5 5 1 7 2 1 1 1 1 1 1 2 2 2 3 3 2 2 2	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist# E. Nielsen B. Harris# I locations L. Therrien J. Taylor BBC (Stymeist) T. Spahr	9/9 9/10 9/24 10/20 10/21 Swallow spe 10/20 10/23 Red-breasted 10/8 10/16 10/24 Brown Cree 10/6 10/15 10/16 10/23 10/24	P.I. Cumb. Farms Woburn (HP) Nantucket scies W. Concord S. Dart. (A.Pd) 1 Nuthatch Quabbin (G35- WBWS Mashpee P.I. per Manomet WMWS Mashpee Cuttyhunk GMNWR	38 28 1 1 1 37) 8 2 6 2 7 b 2 2 2 2 3	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie M. Lynch# SSBC (GdE) G. d'Entremont# G. Billingham T. Lloyd-Evans G. Billingham G. d'Entremont# M. Sylvia A. Bragg#
10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25 10/1 10/8 Philadelphia 9/1-10/21 9/10 9/11 9/17 9/18 9/25 10/22 Red-eyed Vir	Melrose Quabbin (G35- Amherst Cambr. (F.P.) O Cambr. (F.P.) Lexington Thompson I. P.I. Rockport (H.P.) Vireo Reports of indi C. Quabbin P.I. Wellfleet Sudbury P'town Mattapan (BNCeo	37) 5 5 1 7 2 1 1 1 1 1 1 1 1 2 2 2 2 3 2 2 2 2 CC) 2 E	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist# E. Nielsen B. Harris# Flocations L. Therrien J. Taylor BBC (Stymeist) T. Spahr C. Floyd BBC (Ferraresso)	9/9 9/10 9/24 10/20 10/21 Swallow spectors of the control of the c	P.I. Cumb. Farms Woburn (HP) Nantucket scies W. Concord S. Dart. (A.Pd) d Nuthatch Quabbin (G35: WBWS Mashpee P.I. per Manomet WMWS Mashpee Cuttyhunk GMNWR P.I.	38 28 1 1 1 37) 8 2 6 2 7 b 2 2 2 2	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie M. Lynch# SSBC (GdE) G. d'Entremont# G. Billingham T. Lloyd-Evans G. Billingham G. d'Entremont# M. Sylvia
10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25 10/1 10/8 Philadelphia 9/1-10/21 9/10 9/11 9/17 9/18 9/25 10/22 Red-eyed Vir	Melrose Quabbin (G35- Amherst Cambr. (F.P.) Co Cambr. (F.P.) Lexington Thompson I. P.I. Rockport (H.P.) Vireo Reports of indir C. Quabbin P.I. Wellfleet Sudbury P'town Mattapan (BNC eo P.I.	37) 5 5 1 7 2 1 1 0) 1 v. from 28 2 2 3 3 2 2 2 2 17 max	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist# E. Nielsen B. Harris# Flocations L. Therrien J. Taylor BBC (Stymeist) T. Spahr C. Floyd BBC (Ferraresso) v.o.	9/9 9/10 9/24 10/20 10/21 Swallow spet 10/20 10/23 Red-breasted 10/8 10/16 10/24 Brown Creet 10/6 10/15 10/16 10/23 10/24 10/31 Carolina Wr	P.I. Cumb. Farms Woburn (HP) Nantucket scies W. Concord S. Dart. (A.Pd) d Nuthatch Quabbin (G35: WBWS Mashpee P.I. per Manomet WMWS Mashpee Cuttyhunk GMNWR P.I. en	38 28 1 1 1 337) 8 2 6 2 7 b 2 2 2 2 3 2	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie M. Lynch# SSBC (GdE) G. d'Entremont# G. Billingham T. Lloyd-Evans G. Billingham G. d'Entremont# M. Sylvia A. Bragg# P. + F. Vale
10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25 10/1 10/8 Philadelphia 9/1-10/21 9/10 9/11 9/17 9/18 9/25 10/22 Red-eyed Vir	Melrose Quabbin (G35- Amherst Cambr. (F.P.) Co Cambr. (F.P.) Lexington Thompson I. P.I. Rockport (H.P.) Vireo Reports of indic C. Quabbin P.I. Wellfleet Sudbury P'town Mattapan (BNCeo P.I. Chatham	4 37) 5 5 1 7 2 1 1 1 0) 1 vv. from 28 2 2 3 3 2 2 2 1 7 7 7 7 8 8 9 9 1 9 1 9 1 9 1 9 1 1 1 1 1 2 1 2 1 2	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist# E. Nielsen B. Harris# Glocations L. Therrien J. Taylor BBC (Stymeist) T. Spahr C. Floyd BBC (Ferraresso) V.O. C. Goodrich	9/9 9/10 9/24 10/20 10/21 Swallow spe 10/20 10/23 Red-breasted 10/8 10/16 10/24 Brown Cree 10/6 10/15 10/16 10/23 10/24 10/31 Carolina Wr 9/3	P.I. Cumb. Farms Woburn (HP) Nantucket scies W. Concord S. Dart. (A.Pd) d Nuthatch Quabbin (G35-WBWS) Mashpee P.I. per Manomet WMWS Mashpee Cuttyhunk GMNWR P.I. en DWWS	38 28 1 1 1 37) 8 2 6 2 7 b 2 2 2 3 2	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie M. Lynch# SSBC (GdE) G. d'Entremont# G. Billingham T. Lloyd-Evans G. Billingham G. d'Entremont# M. Sylvia A. Bragg# P. + F. Vale BBC (GdE)
10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25 10/1 10/8 Philadelphia 9/1-10/21 9/10 9/11 9/17 9/18 9/25 10/22 Red-eyed Virthr 9/18	Melrose Quabbin (G35- Amherst Cambr. (F.P.) Cambr. (F.P.) Lexington Thompson I. P.I. Rockport (H.P.) Vireo Reports of indir C. Quabbin P.I. Wellfleet Sudbury P'town Mattapan (BNC eo P.I. Chatham Rockport	37) 5 5 1 7 2 1 1 1 1 1 1 1 1 2 2 2 2 3 2 2 2 2 2 2	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist# E. Nielsen B. Harris# Flocations L. Therrien J. Taylor BBC (Stymeist) T. Spahr C. Floyd BBC (Ferraresso) V.O. C. Goodrich R. Heil	9/9 9/10 9/24 10/20 10/21 Swallow spe 10/20 10/23 Red-breasted 10/8 10/16 10/24 Brown Cree 10/6 10/15 10/16 10/23 10/24 10/31 Carolina Wr 9/3 9/11	P.I. Cumb. Farms Woburn (HP) Nantucket scies W. Concord S. Dart. (A.Pd) d Nuthatch Quabbin (G35: WBWS Mashpee P.I. per Manomet WMWS Mashpee Cuttyhunk GMNWR P.I. en DWWS Nahant	38 28 1 1 1 37) 8 2 6 2 7 b 2 2 2 2 2 3 2	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie M. Lynch# SSBC (GdE) G. d'Entremont# G. Billingham T. Lloyd-Evans G. Billingham G. d'Entremont# M. Sylvia A. Bragg# P. + F. Vale BBC (GdE) P. + F. Vale
10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25 10/1 10/8 Philadelphia 9/1-10/21 9/10 9/11 9/17 9/18 9/25 10/22 Red-eyed Vir thr 9/18 9/27	Melrose Quabbin (G35- Amherst Cambr. (F.P.) Co Cambr. (F.P.) Lexington Thompson I. P.I. Rockport (H.P.) Vireo Reports of indi C. Quabbin P.I. Wellfleet Sudbury P'town Mattapan (BNC eo P.I. Chatham Rockport Belmont	4 37) 5 5 1 7 2 1 1 0) 1 v. from 28 2 2 2 2 2 2 2 17 max 12 10 11 12	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist# E. Nielsen B. Harris# Elocations L. Therrien J. Taylor BBC (Stymeist) T. Spahr C. Floyd BBC (Ferraresso) C. Goodrich R. Heil R. Stymeist	9/9 9/10 9/24 10/20 10/21 Swallow special poly special po	P.I. Cumb. Farms Woburn (HP) Nantucket scies W. Concord S. Dart. (A.Pd) d Nuthatch Quabbin (G35: WBWS Mashpee P.I. per Manomet WMWS Mashpee Cuttyhunk GMNWR P.I. en DWWS Nahant Fairhaven	38 28 1 1 1 1 1 337) 8 2 6 2 7 5 4 7	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie M. Lynch# SSBC (GdE) G. d'Entremont# G. Billingham T. Lloyd-Evans G. Billingham G. d'Entremont# M. Sylvia A. Bragg# P. + F. Vale BBC (GdE) P. + F. Vale R. Stymeist
10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25 10/8 Philadelphia 9/1-10/21 9/10 9/11 9/17 9/18 9/25 10/22 Red-eyed Vir thr 9/17 9/18 9/27 10/6, 25	Melrose Quabbin (G35- Amherst Cambr. (F.P.) Co Cambr. (F.P.) Co Cambr. (F.P.) Lexington Thompson I. P.I. Rockport (H.P.) Vireo Reports of indir C. Quabbin P.I. Wellfleet Sudbury P'town Mattapan (BNC eo P.I. Chatham Rockport Belmont Manomet	4 37) 5 5 1 7 2 1 1 1 0 1 1 v. from 28 2 2 3 3 2 2 2 2 1 1 1 0 1 2 1 2 2 2 3 3 2 2 2 1 1 1 1 1 1 1 1 1	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist# E. Nielsen B. Harris# Glocations L. Therrien J. Taylor BBC (Stymeist) T. Spahr C. Floyd BBC (Ferraresso) V.O. C. Goodrich R. Heil R. Stymeist Lloyd-Evans	9/9 9/10 9/24 10/20 10/21 Swallow spe 10/20 10/23 Red-breasted 10/8 10/16 10/24 Brown Cree 10/6 10/15 10/16 10/23 10/24 10/31 Carolina Wr 9/3 9/11 9/21	P.I. Cumb. Farms Woburn (HP) Nantucket scies W. Concord S. Dart. (A.Pd) d Nuthatch Quabbin (G35: WBWS Mashpee P.I. per Manomet WMWS Mashpee Cuttyhunk GMNWR P.I. en DWWS Nahant Fairhaven Manomet	38 28 1 1 1 337) 8 2 6 2 7 b 2 2 2 3 2 5 4 7 11	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie M. Lynch# SSBC (GdE) G. d'Entremont# G. Billingham T. Lloyd-Evans G. Billingham G. d'Entremont# M. Sylvia A. Bragg# P. + F. Vale BBC (GdE) P. + F. Vale R. Stymeist G. d'Entremont
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10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25 10/8 Philadelphia 9/1-10/21 9/10 9/11 9/17 9/18 9/25 10/22 Red-eyed Vir thr 9/17 9/18 9/27 10/6, 25 10/21 Yellow-green 9/5	Melrose Quabbin (G35- Amherst Cambr. (F.P.) Cambr. (F.P.) Cambr. (F.P.) Lexington Thompson I. P.I. Rockport (H.P.) Vireo Reports of indir C. Quabbin P.I. Wellfleet Sudbury P'town Mattapan (BNC eo P.I. Chatham Rockport Belmont Manomet Salisbury Nantucket	4 37) 5 5 1 7 2 1 1 0) 1 1 v. from 28 2 2 3 2 2 2 2 1 1 1 0) 1 2 1 2 2 2 3 2 2 2 1 1 1 2 1 2 1 2 1 2	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist# E. Nielsen B. Harris# Elocations L. Therrien J. Taylor BBC (Stymeist) T. Spahr C. Floyd BBC (Ferraresso) V.O. C. Goodrich R. Heil R. Stymeist Lloyd-Evans J. Berry# V. Laux#	9/9 9/10 9/24 10/20 10/21 Swallow spe 10/20 10/23 Red-breasted 10/8 10/16 10/24 Brown Cree 10/6 10/15 10/16 10/23 10/24 10/31 Carolina Wr 9/3 9/11 9/21 10/28 House Wren 9/8	P.I. Cumb. Farms Woburn (HP) Nantucket scies W. Concord S. Dart. (A.Pd) d Nuthatch Quabbin (G35: WBWS Mashpee P.I. per Manomet WMWS Mashpee Cuttyhunk GMNWR P.I. en DWWS Nahant Fairhaven Manomet Nantucket Falmouth Burlington	38 28 1 1 1 37) 8 2 6 2 7 b 2 2 2 2 3 2 5 4 7 11 22 15	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie M. Lynch# SSBC (GdE) G. d'Entremont# G. Billingham T. Lloyd-Evans G. Billingham G. d'Entremont# M. Sylvia A. Bragg# P. + F. Vale BBC (GdE) P. + F. Vale R. Stymeist G. d'Entremont S. Perkins# M. Keleher M. Rines
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10/6 10/8 10/17 10/29 Warbling Vire 9/12 9/17 9/25 10/1 10/8 Philadelphia 9/1-10/21 9/10 9/11 9/17 9/18 9/25 10/22 Red-eyed Vir thr 9/17 9/18 9/27 10/6, 25 10/7 10/21 Yellow-green 9/5 Fish Crow	Melrose Quabbin (G35- Amherst Cambr. (F.P.) Cambr. (F.P.) Cambr. (F.P.) Lexington Thompson I. P.I. Rockport (H.P.) Vireo Reports of indir C. Quabbin P.I. Wellifleet Sudbury P'town Mattapan (BNC eo P.I. Chatham Rockport Belmont Manomet Salisbury Nantucket Vireo P.I.	37) 5 5 1 7 2 1 1 1 1 1 1 1 1 2 2 2 2 2 2 1 1 1 2 2 2 2 4 1 4 2 1 1 b ph	D. + I. Jewell M. Lynch# I. Davies P. Peterson R. Stymeist M. Rines R. Stymeist# E. Nielsen B. Harris# Blocations L. Therrien J. Taylor BBC (Stymeist) T. Spahr C. Floyd BBC (Ferraresso) v.o. C. Goodrich R. Heil R. Stymeist Lloyd-Evans J. Berry# V. Laux# B. Flemer#	9/9 9/10 9/24 10/20 10/21 Swallow spe 10/20 10/23 Red-breasted 10/8 10/16 10/24 Brown Cree 10/6 10/15 10/16 10/23 10/24 10/31 Carolina Wr 9/3 9/11 9/21 10/28 House Wren 9/8 9/23	P.I. Cumb. Farms Woburn (HP) Nantucket scies W. Concord S. Dart. (A.Pd) d Nuthatch Quabbin (G35: WBWS Mashpee P.I. per Manomet WMWS Mashpee Cuttyhunk GMNWR P.I. en DWWS Nahant Fairhaven Manomet Nantucket Falmouth Burlington Falmouth	38 28 1 1 1 37) 8 2 6 2 7 b 2 2 2 3 2 5 4 7 11 22 15	R. Schain S. Arena M. Rines S. Perkins D. Swain B. Cassie M. Lynch# SSBC (GdE) G. d'Entremont# G. Billingham T. Lloyd-Evans G. Billingham G. d'Entremont# M. Sylvia A. Bragg# P. + F. Vale BBC (GdE) P. + F. Vale R. Stymeist G. d'Entremont S. Perkins# M. Keleher M. Rines M. Keleher

	(continued)			10/8	P.I.	6	F. Vale#
10/9	Cumb. Farms	3	J. Sweeney#	10/28	W. Newbury	1	F. Vale
10/22	Mattapan (BNC)		P. Peterson	10/29	Newton	1	P. Gilmore
10/22	Northampton	1	L. Therrien	Hermit Thru	ısh		
Winter Wren				10/10	P.I.	8	F. Vale
10/8	Quabbin (G35-3		M. Lynch#	10/26	Ipswich (C.B.)		J. Berry
10/15	WMWS Medford	2 5	G. Billingham	10/28	Manomet	13 b	T. Lloyd-Evans
10/30 Sedge Wren	Mediord	3	M. Rines#	10/28 10/29	Cambr. (Danel Waltham	ny) 7 7	R. Stymeist J. Forbes
9/23	Northampton	1	B. Zajda	10/29	Medford	42	M. Rines#
Marsh Wren	Northampton	1	D. Zajda	Wood Thrus		72	W. Killesii
9/1	GMNWR	23	W. Hutcheson#	9/18	Amherst	2	I. Davies
9/6	P.I.	21	R. Heil	9/30	Arlington Res.	2	K. Hartel
9/18	Dorchester	5	R. Donovan	10/6	Manomet	1 b	T. Lloyd-Evans
10/17	S. Quabbin	1	L. Therrien	American Ro			
10/23	Burlington	1	M. Rines	9/6	P.I.	850+	R. Heil
10/26	Brewster	1 b	S. Finnegan	9/16	Northampton	300+	B. Zajda
Blue-gray Gn 9/1	GMNWR	2	W. Hutcheson#	9/17 Gray Catbird	Holbrook	500	G. d'Entremont
9/5	Petersham	2	M. Lynch#	9/thr	P.I.	117 b	B. Flemer
9/11	Quabbin Pk	1	S. Surner	9/17	DWWS	30	BBC (GdE)
9/14	P.I.	1	D. Chickering	9/24	Cumb. Farms	34	S. Arena
9/16	Northampton	1	L. Therrien	9/30	Falmouth	47	M. Keleher
9/25	Groveland	1	P. + F. Vale	10/6	Manomet	22 b	T. Lloyd-Evans
10/10	Rockport	1	L. Pivacek	10/23	Cuttyhunk	11	M. Sylvia
Golden-crow			D	Brown Thras			* * * * * * * * * * * * * * * * * * * *
10/5	Salisbury	12	P. + F. Vale	9/15	P.I.	11	J. Berry#
10/6	Yarmouth	30	P. Crosson	9/16	Woburn (HP)	2	M. Rines
10/8 10/8	P.I.	20 22	S. Grinley# R. Schain#	10/23 American Pi	Cuttyhunk	5	M. Sylvia
10/9	Cuttyhunk C. Quabbin	31	L. Therrien	9/9	Granville	1	J. Weeks
Ruby-crowne		31	L. Themen	10/1	Deerfield	30	S. Surner
10/6	Manomet	31 b	T. Lloyd-Evans	10/9	Newbury	40	R. Heil
10/6	P.I.	11	C. Gras	10/25	Concord	70	S. Perkins
10/6	Cambr. (F.P.)	10	M. Rosenstein#	10/29	Acton	80	S. Perkins
10/9	C. Quabbin	47	L. Therrien	Cedar Waxw			
10/10	Arlington Res.	15	C. Cook	9/10	P.I.	77	F. Vale
10/26	Cambr. (Danehy	7) 6	K. Hartel#	9/26	Moran WMA	30	B. Zajda
Northern W 9/14-15	neatear Hull	1 ph	M. Curran	10/29 Lapland Lor	Waltham	250	J. Forbes
9/14-13	Nantucket	1 ph 1 ph	J. Van Vorst#	10/6	Scituate	1	J. Galluzzo
Eastern Bluel		ı pıı	3. van voistn	10/8	Gloucester	1	R. Heil
9/4	Southwick	25	S. Kellogg	10/9	P.I.	2	T. Wetmore
10/2	Harwich	16	A. Curtis				
				10/10	Chatham (S.B.) 10	B. Nikula#
10/3	DFWS	14	P. Sowizral	Snow Buntin) 10	B. Nikula#
10/18	DFWS Wachusett Res.	14	P. Sowizral T. Pirro	Snow Buntin 10/27	ng Gill	1	J. Smith
10/18 10/25	Wachusett Res. Ipswich		P. Sowizral	Snow Buntin 10/27 10/28	ng Gill Granville	1 3	J. Smith J. Weeks
10/18 10/25 Townsend's	Wachusett Res. Ipswich Solitaire	14 30	P. Sowizral T. Pirro R. Heil	Snow Buntin 10/27 10/28 10/29	ng Gill Granville Rockport	1 3 2	J. Smith J. Weeks P. + F. Vale
10/18 10/25 Townsend's 10/22-23	Wachusett Res. Ipswich Solitaire Nantucket	14 30	P. Sowizral T. Pirro R. Heil V. Laux + v.o.	Snow Buntin 10/27 10/28 10/29 10/29	Gill Granville Rockport Nahant	1 3 2 4	J. Smith J. Weeks P. + F. Vale L. Pivacek
10/18 10/25 Townsend's 10/22-23 10/25-28	Wachusett Res. Ipswich Solitaire	14 30	P. Sowizral T. Pirro R. Heil	Snow Buntin 10/27 10/28 10/29 10/29 10/29	ng Gill Granville Rockport	1 3 2	J. Smith J. Weeks P. + F. Vale
10/18 10/25 Townsend's : 10/22-23 10/25-28 Veery	Wachusett Res. Ipswich Solitaire Nantucket Chatham	14 30 1 1 ph	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester#	Snow Buntir 10/27 10/28 10/29 10/29 10/29 Ovenbird	Gill Granville Rockport Nahant Newbypt	1 3 2 4 3	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath
10/18 10/25 Townsend's 10/22-23 10/25-28 Veery 9/1	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR	14 30 1 1 ph 2	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson#	Snow Buntin 10/27 10/28 10/29 10/29 10/29 Ovenbird 10/3	ng Gill Granville Rockport Nahant Newbypt P.I.	1 3 2 4 3	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale
10/18 10/25 Townsend's : 10/22-23 10/25-28 Veery	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR C. Quabbin	14 30 1 1 ph 2 3	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien	Snow Buntir 10/27 10/28 10/29 10/29 10/29 Ovenbird	Gill Granville Rockport Nahant Newbypt	1 3 2 4 3	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath
10/18 10/25 Townsend's : 10/22-23 10/25-28 Veery 9/1 9/5	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR	14 30 1 1 ph 2 3	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien	Snow Buntin 10/27 10/28 10/29 10/29 10/29 Ovenbird 10/3 10/4	ng Gill Granville Rockport Nahant Newbypt P.I. MNWS	1 3 2 4 3	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale D. Ely
10/18 10/25 Townsend's 10/22-23 10/25-28 Veery 9/1 9/5 9/7 9/25 10/6	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR C. Quabbin W. Roxbury (MI P.I. Manomet	14 30 1 1 ph 2 3 P) 198 1	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien migr M. Iliff	Snow Buntin 10/27 10/28 10/29 10/29 10/29 Ovenbird 10/3 10/4 10/6 10/25 Worm-eating	ng Gill Granville Rockport Nahant Newbypt P.I. MNWS Manomet Boston	1 3 2 4 3 2 2 2 2 b 1	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale D. Ely T. Lloyd-Evans
10/18 10/25 Townsend's : 10/22-23 10/25-28 Veery 9/1 9/5 9/7 9/25 10/6 Gray-cheeked	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR C. Quabbin W. Roxbury (MI P.I. Manomet	14 30 1 ph 2 3 P) 198 1 3 b 2 b	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien nigr M. Iliff B. Flemer T. Lloyd-Evans	Snow Buntin 10/27 10/28 10/29 10/29 10/29 Ovenbird 10/3 10/4 10/6 10/25 Worm-eating 9/16	Gill Granville Rockport Nahant Newbypt P.I. MNWS Manomet Boston Warbler Quabbin (G53)	1 3 2 4 3 2 2 2 2 1	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale D. Ely T. Lloyd-Evans E. Labato B. Zajda
10/18 10/25 Townsend's : 10/22-23 10/25-28 Veery 9/1 9/5 9/7 9/25 10/6 Gray-cheeked	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR C. Quabbin W. Roxbury (MI P.I. Manomet 1 Thrush Manomet	14 30 1 1 ph 2 3 P) 198 1 3 b 2 b 1 b	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien migr M. Iliff B. Flemer T. Lloyd-Evans T. Lloyd-Evans	Snow Buntin 10/27 10/28 10/29 10/29 10/29 Ovenbird 10/3 10/4 10/6 10/25 Worm-eating 9/16 9/20	Gill Granville Rockport Nahant Newbypt P.I. MNWS Manomet Boston g Warbler Quabbin (G53) Manomet	1 3 2 4 3 3 2 2 2 b 1	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale D. Ely T. Lloyd-Evans E. Labato B. Zajda T. Lloyd-Evans
10/18 10/25 Townsend's : 10/22-23 10/25-28 Veery 9/1 9/5 9/7 9/25 10/6 Gray-cheeked 9/12 9/15	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR C. Quabbin W. Roxbury (MI P.I. Manomet I Thrush Manomet P.I.	14 30 1 1 ph 2 3 P) 198 1 3 b 2 b	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien migr M. Iliff B. Flemer T. Lloyd-Evans T. Lloyd-Evans B. Flemer	Snow Buntin 10/27 10/28 10/29 10/29 10/29 Ovenbird 10/3 10/4 10/6 10/25 Worm-eating 9/16 9/20 9/24	Gill Granville Rockport Nahant Newbypt P.I. MNWS Manomet Boston g Warbler Quabbin (G53) Manomet Milton	1 3 2 4 3 2 2 2 2 1	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale D. Ely T. Lloyd-Evans E. Labato B. Zajda
10/18 10/25 Townsend's : 10/22-23 10/25-28 Veery 9/1 9/5 9/7 9/25 10/6 Gray-cheeked 9/12 9/15	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR C. Quabbin W. Roxbury (MI P.I. Manomet I Thrush Manomet P.I. Manomet	14 30 1 1 ph 2 3 3 b 2 b 1 b 1 b 3 b	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien nigr M. Iliff B. Flemer T. Lloyd-Evans T. Lloyd-Evans B. Flemer T. Lloyd-Evans	Snow Buntin 10/27 10/28 10/29 10/29 10/29 Ovenbird 10/3 10/4 10/6 10/25 Worm-eating 9/16 9/20 9/24 Northern Wa	Gill Granville Rockport Nahant Newbypt P.I. MNWS Manomet Boston g Warbler Quabbin (G53) Manomet Milton aterthrush	1 3 2 4 3 2 2 2 2 b 1	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale D. Ely T. Lloyd-Evans E. Labato B. Zajda T. Lloyd-Evans R. Donovan
10/18 10/25 Townsend's : 10/22-23 10/25-28 Veery 9/1 9/5 9/7 9/25 10/6 Gray-cheeked 9/12 9/15 9/15	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR C. Quabbin W. Roxbury (MI P.I. Manomet 1 Thrush Manomet P.I. Manomet P.I.	14 30 1 1 ph 2 3 8 P) 198 1 3 b 2 b 1 b 1 b 3 b 1 b	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien nigr M. Iliff B. Flemer T. Lloyd-Evans T. Lloyd-Evans B. Flemer T. Lloyd-Evans B. Flemer	Snow Buntin 10/27 10/28 10/29 10/29 10/29 Ovenbird 10/3 10/4 10/6 10/25 Worm-eating 9/16 9/20 9/24 Northern Wa	Gill Granville Rockport Nahant Newbypt P.I. MNWS Manomet Boston g Warbler Quabbin (G53) Manomet Milton aterthrush Manomet	1 3 2 4 3 2 2 2 2 b 1 1 1 1 1 5 1	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale D. Ely T. Lloyd-Evans E. Labato B. Zajda T. Lloyd-Evans R. Donovan T. Lloyd-Evans
10/18 10/25 Townsend's : 10/22-23 10/25-28 Veery 9/1 9/5 9/7 9/25 10/6 Gray-cheeked 9/12 9/15 9/15 9/17	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR C. Quabbin W. Roxbury (MI P.I. Manomet 1 Thrush Manomet P.I. Manomet P.I. Brewster	14 30 1 1 ph 2 3 P) 198 r 3 b 2 b 1 b 1 b 3 b 1 b 1 b 1 b	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien nigr M. Iliff B. Flemer T. Lloyd-Evans T. Lloyd-Evans B. Flemer T. Lloyd-Evans	Snow Buntin 10/27 10/28 10/29 10/29 10/29 Ovenbird 10/3 10/4 10/6 10/25 Worm-eating 9/16 9/20 9/24 Northern Wa 9/1 9/8, 16	Gill Granville Rockport Nahant Newbypt P.I. MNWS Manomet Boston g Warbler Quabbin (G53) Manomet Milton aterthrush Manomet Boston (Fens)	1 3 2 4 3 2 2 2 2 b 1 0 1 1 b 1 1 5 1 1 5 1 1 1 1 1 1 1 1 1 1 1	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale D. Ely T. Lloyd-Evans E. Labato B. Zajda T. Lloyd-Evans R. Donovan T. Lloyd-Evans P. Peterson
10/18 10/25 Townsend's : 10/22-23 10/25-28 Veery 9/1 9/5 9/7 9/25 10/6 Gray-cheeked 9/12 9/15 9/15 9/17	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR C. Quabbin W. Roxbury (MI P.I. Manomet 1 Thrush Manomet P.I. Manomet P.I.	14 30 1 1 ph 2 3 P) 198 r 3 b 2 b 1 b 1 b 1 b 1 b	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien nigr M. Iliff B. Flemer T. Lloyd-Evans T. Lloyd-Evans B. Flemer T. Lloyd-Evans B. Flemer	Snow Buntin 10/27 10/28 10/29 10/29 10/29 Ovenbird 10/3 10/4 10/6 10/25 Worm-eating 9/16 9/20 9/24 Northern Wa	Gill Granville Rockport Nahant Newbypt P.I. MNWS Manomet Boston g Warbler Quabbin (G53) Manomet Milton aterthrush Manomet	1 3 2 4 3 2 2 2 2 b 1 1 1 1 1 5 1	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale D. Ely T. Lloyd-Evans E. Labato B. Zajda T. Lloyd-Evans R. Donovan T. Lloyd-Evans
10/18 10/25 Townsend's : 10/22-23 10/25-28 Veery 9/1 9/5 9/7 9/25 10/6 Gray-cheeked 9/12 9/15 9/15 9/17 9/26 Gray-cheeked	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR C. Quabbin W. Roxbury (MI P.I. Manomet I Thrush Manomet P.I. Manomet P.I. Brewster Id/Bicknell's Thrus	14 30 1 1 ph 2 3 P) 198 r 3 b 2 b 1 b 1 b 1 b 1 b	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien migr M. Iliff B. Flemer T. Lloyd-Evans T. Lloyd-Evans B. Flemer T. Lloyd-Evans B. Flemer S. Finnegan	Snow Buntin 10/27 10/28 10/29 10/29 10/29 Ovenbird 10/3 10/4 10/6 10/25 Worm-eating 9/16 9/20 9/24 Northern Wa 9/1 9/8, 16	Gill Granville Rockport Nahant Newbypt P.I. MNWS Manomet Boston g Warbler Quabbin (G53) Manomet Milton aterthrush Manomet Boston (Fens) Nahant	1 3 2 4 3 2 2 2 2 b 1 1 1 1 5 1 5 1 1 5 5 5 5 7 5 7 5 7 5 7	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale D. Ely T. Lloyd-Evans E. Labato B. Zajda T. Lloyd-Evans R. Donovan T. Lloyd-Evans P. Peterson P. + F. Vale
10/18 10/25 Townsend's : 10/22-23 10/25-28 Veery 9/1 9/5 9/7 9/25 10/6 Gray-cheeked 9/12 9/15 9/17 9/26 Gray-cheeked 9/7 9/15 9/17	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR C. Quabbin W. Roxbury (MI P.I. Manomet 1 Thrush Manomet P.I. Manomet P.I. Brewster I/Bicknell's Thrus W. Roxbury (MI Wakefield P.I.	14 30 1 1 ph 2 3 P) 198 1 3 b 2 b 1 b 1 b 1 b 1 b 1 b 1 b	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien migr M. Iliff B. Flemer T. Lloyd-Evans T. Lloyd-Evans B. Flemer T. Lloyd-Evans B. Flemer S. Finnegan M. Iliff P. + F. Vale M. Goetschkes#	Snow Buntin 10/27 10/28 10/29 10/29 10/29 10/29 Ovenbird 10/3 10/4 10/6 10/25 Worm-eating 9/16 9/20 9/24 Northern Wa 9/1 9/8, 16 9/11 9/15 10/21 Golden-win	Gill Granville Rockport Nahant Newbypt P.I. MNWS Manomet Boston g Warbler Quabbin (G53) Manomet Milton aterthrush Manomet Boston (Fens) Nahant P.I. Nantucket ged Warbler	1 3 2 4 3 2 2 2 2 b 1 1 1 1 5 1 1 1 5 1 1 1 3 5 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale D. Ely T. Lloyd-Evans E. Labato B. Zajda T. Lloyd-Evans R. Donovan T. Lloyd-Evans P. Peterson P. + F. Vale J. Berry# S. Perkins#
10/18 10/25 Townsend's: 10/22-23 10/25-28 Veery 9/1 9/5 9/7 9/25 10/6 Gray-cheeked 9/12 9/15 9/15 9/17 9/26 Gray-cheeked 9/7 9/15 9/17 9/15	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR C. Quabbin W. Roxbury (MI P.I. Manomet 1 Thrush Manomet P.I. Manomet P.I. Brewster 1/Bicknell's Thrus W. Roxbury (MI Wakefield P.I. Quabbin Pk	14 30 1 1 ph 2 3 3 b 2 b 1	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien migr M. Iliff B. Flemer T. Lloyd-Evans T. Lloyd-Evans B. Flemer T. Lloyd-Evans B. Flemer S. Finnegan M. Iliff P. + F. Vale M. Goetschkes# E. Dalton	Snow Buntin 10/27 10/28 10/29 10/29 10/29 Ovenbird 10/3 10/4 10/6 10/25 Worm-eating 9/16 9/20 9/24 Northern Wa 9/1 9/8, 16 9/11 9/15 10/21 Golden-win	Gill Granville Rockport Nahant Newbypt P.I. MNWS Manomet Boston g Warbler Quabbin (G53) Manomet Milton aterthrush Manomet Boston (Fens) Nahant P.I. Nanucket ged Warbler Chatham	1 3 2 4 3 2 2 2 b 1 1 1 1 5 4 1 1 1 5 4 1 1 1 1 1 1 1 1 1	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale D. Ely T. Lloyd-Evans E. Labato B. Zajda T. Lloyd-Evans R. Donovan T. Lloyd-Evans P. Peterson P. + F. Vale J. Berry# S. Perkins# C. Goodrich
10/18 10/25 Townsend's : 10/22-23 10/25-28 Veery 9/1 9/5 9/7 9/25 10/6 Gray-cheeked 9/12 9/15 9/15 9/17 9/26 Gray-cheeked 9/7 9/15 9/17 9/26 10/26 10/26	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR C. Quabbin W. Roxbury (MI P.I. Manomet 1 Thrush Manomet P.I. Brewster IdBicknell's Thrus W. Roxbury (MI Wakefield P.I. Quabbin Pk Cuttyhunk	14 30 1 1 ph 2 3 b 2 b 1	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien migr M. Iliff B. Flemer T. Lloyd-Evans T. Lloyd-Evans B. Flemer T. Lloyd-Evans B. Flemer S. Finnegan M. Iliff P. + F. Vale M. Goetsches# E. Dalton M. Sylvia#	Snow Buntin 10/27 10/28 10/29 10/29 10/29 Ovenbird 10/3 10/4 10/6 10/25 Worm-eating 9/16 9/20 9/24 Northern Wa 9/1 9/8, 16 9/11 9/15 10/21 Golden-win 9/10	Gill Granville Rockport Nahant Newbypt P.I. MNWS Manomet Boston g Warbler Quabbin (G53) Manomet Milton aterthrush Manomet Boston (Fens) Nahant P.I. Nantucket ged Warbler Chatham MNWS	1 3 2 4 3 2 2 2 2 b 1 1 1 1 5 1 1 1 5 1 1 1 3 5 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale D. Ely T. Lloyd-Evans E. Labato B. Zajda T. Lloyd-Evans R. Donovan T. Lloyd-Evans P. Peterson P. + F. Vale J. Berry# S. Perkins#
10/18 10/25 Townsend's: 10/22-23 10/25-28 Veery 9/1 9/5 9/7 9/25 10/6 Gray-cheeked 9/12 9/15 9/15 9/17 9/26 Gray-cheeked 9/7 9/15 9/17 9/20 10/16 10/18	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR C. Quabbin W. Roxbury (MI P.I. Manomet d Thrush Manomet P.I. Brewster d/Bicknell's Thrus W. Roxbury (MI Wakefield P.I. Quabbin Pk Cuttyhunk Gill	14 30 1 1 ph 2 3 3 b 2 b 1	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien migr M. Iliff B. Flemer T. Lloyd-Evans T. Lloyd-Evans B. Flemer T. Lloyd-Evans B. Flemer S. Finnegan M. Iliff P. + F. Vale M. Goetschkes# E. Dalton	Snow Buntin 10/27 10/28 10/29 10/29 10/29 10/29 Ovenbird 10/3 10/4 10/6 10/25 Worm-eating 9/16 9/20 9/24 Northern Wa 9/1 9/8, 16 9/11 9/15 10/21 Golden-win 9/10 Blue-winged	Gill Granville Rockport Nahant Newbypt P.I. MNWS Manomet Boston Warbler Quabbin (G53) Manomet Milton aterthrush Manomet Boston (Fens) Nahant P.I. Nantucket gged Warbler Chatham MNWS	1 3 2 4 3 2 2 2 b 1 1 1 1 1 5 4 1 1 1 1 1 1 1 1 1 1 1 1 1	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale D. Ely T. Lloyd-Evans E. Labato B. Zajda T. Lloyd-Evans R. Donovan T. Lloyd-Evans P. Peterson P. + F. Vale J. Berry# S. Perkins# C. Goodrich D. Ely
10/18 10/25 Townsend's: 10/22-23 10/25-28 Veery 9/1 9/5 9/7 9/25 10/6 Gray-cheeked 9/12 9/15 9/15 9/15 9/17 9/26 Gray-cheeked 9/7 9/15 9/17 9/16 9/17 9/17 9/16 9/17 9/17 9/16 9/17 9/16 9/17 9/17 9/16 9/17 9/16 9/17 9/16 9/17 9/16 9/17 9/16 9/17 9/16 9/17 9/16 9/17 9/16 9/16 9/17 9/16 9/17 9/16 9/16 9/16 9/16 9/16 9/16 9/16 9/16	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR C. Quabbin W. Roxbury (MI P.I. Manomet 1 Thrush Manomet P.I. Manomet P.I. Brewster d'Bicknell's Thrus W. Roxbury (MI Wakefield P.I. Quabbin Pk Cuttyhunk Gill 'hrush	14 30 1 1 ph 2 3 8 P) 198 1 3 b 2 b 1	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien M. Iliff B. Flemer T. Lloyd-Evans T. Lloyd-Evans B. Flemer T. Lloyd-Evans B. Flemer T. Lloyd-Evans B. Flemer T. Lloyd-Evans B. Flemer M. Iliff P. + F. Vale M. Goetschkes# E. Dalton M. Sylvia# J. Smith	Snow Buntin 10/27 10/28 10/29 10/29 10/29 10/29 Ovenbird 10/3 10/4 10/6 10/25 Worm-eating 9/16 9/20 9/24 Northern Wa 9/1 9/8, 16 9/11 9/15 10/21 Golden-win 9/10 9/16 Blue-winged 9/18	Gill Granville Rockport Nahant Newbypt P.I. MNWS Manomet Boston g Warbler Quabbin (G53 Manomet Milton aterthrush Manomet Boston (Fens) Nahant P.I. Nantucket ged Warbler Chatham MNWS I Warbler Gloucester	1 3 2 4 3 2 2 2 2 b 1 1 1 5 4 1 1 1 5 4 1 1 1 1 1 1 1 1 1 1	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale D. Ely T. Lloyd-Evans E. Labato B. Zajda T. Lloyd-Evans R. Donovan T. Lloyd-Evans P. Peterson P. + F. Vale J. Berry# S. Perkins# C. Goodrich D. Ely S. Hedman
10/18 10/25 Townsend's 10/22-23 10/25-28 Veery 9/1 9/5 9/7 9/25 10/6 Gray-cheeked 9/12 9/15 9/15 9/15 9/17 9/26 Gray-cheeked 9/7 9/15 9/17 9/16 Swainson's T	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR C. Quabbin W. Roxbury (MI P.I. Manomet P.I. Manomet P.I. Brewster I'Bicknell's Thrus W. Roxbury (MI Wakefield P.I. Quabbin Pk Cuttyhunk Gill 'hrush W. Roxbury (MI Wantan W. Roxbury (MI W.	14 30 1 1 ph 2 3 3 b 2 b 1 b 1 b 1 b 1 b 1 b 1 b 1 b 1 b 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien migr M. Iliff B. Flemer T. Lloyd-Evans T. Lloyd-Evans B. Flemer T. Lloyd-Evans B. Flemer S. Finnegan M. Iliff P. + F. Vale M. Goetschkes# E. Dalton M. Sylvia# J. Smith	Snow Buntin 10/27 10/28 10/29 10/29 10/29 Ovenbird 10/3 10/4 10/6 10/25 Worm-eating 9/16 9/20 9/24 Northern Wa 9/1 9/8, 16 9/11 9/15 10/21 Golden-win 9/16 Blue-winged 9/16	Gill Granville Rockport Nahant Newbypt P.I. MNWS Manomet Boston g Warbler Quabbin (G53) Manomet Milton aterthrush Manomet Boston (Fens) Nahant P.I. Natucket ged Warbler Chatham MNWS il Warbler Gloucester P.I.	1 3 2 4 3 2 2 b 1 1 1 5 b 1 1 1 5 5 4 1 1 1 2 1	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale D. Ely T. Lloyd-Evans E. Labato B. Zajda T. Lloyd-Evans R. Donovan T. Lloyd-Evans P. Peterson P. + F. Vale J. Berry# S. Perkins# C. Goodrich D. Ely S. Hedman E. Nielsen
10/18 10/25 Townsend's: 10/22-23 10/25-28 Veery 9/1 9/5 9/7 9/25 10/6 Gray-cheeked 9/12 9/15 9/15 9/15 9/17 9/26 Gray-cheeked 9/7 9/15 9/17 9/16 9/17 9/17 9/16 9/17 9/17 9/16 9/17 9/16 9/17 9/17 9/16 9/17 9/16 9/17 9/16 9/17 9/16 9/17 9/16 9/17 9/16 9/17 9/16 9/17 9/16 9/16 9/17 9/16 9/17 9/16 9/16 9/16 9/16 9/16 9/16 9/16 9/16	Wachusett Res. Ipswich Solitaire Nantucket Chatham GMNWR C. Quabbin W. Roxbury (MI P.I. Manomet P.I. Manomet P.I. Brewster d'Bicknell's Thrus W. Roxbury (MI Wakefield P.I. Quabbin Pk Cuttyhunk Gill 'hrush W. Roxbury (MI Wayland	14 30 1 1 ph 2 3 8 P) 198 1 3 b 2 b 1	P. Sowizral T. Pirro R. Heil V. Laux + v.o. D. Manchester# W. Hutcheson# L. Therrien M. Iliff B. Flemer T. Lloyd-Evans T. Lloyd-Evans B. Flemer T. Lloyd-Evans B. Flemer T. Lloyd-Evans B. Flemer T. Lloyd-Evans B. Flemer M. Iliff P. + F. Vale M. Goetschkes# E. Dalton M. Sylvia# J. Smith	Snow Buntin 10/27 10/28 10/29 10/29 10/29 10/29 Ovenbird 10/3 10/4 10/6 10/25 Worm-eating 9/16 9/20 9/24 Northern Wa 9/1 9/8, 16 9/11 9/15 10/21 Golden-win 9/10 9/16 Blue-winged 9/18	Gill Granville Rockport Nahant Newbypt P.I. MNWS Manomet Boston g Warbler Quabbin (G53 Manomet Milton aterthrush Manomet Boston (Fens) Nahant P.I. Nantucket ged Warbler Chatham MNWS I Warbler Gloucester	1 3 2 4 3 2 2 2 2 b 1 1 1 5 4 1 1 1 5 4 1 1 1 1 1 1 1 1 1 1	J. Smith J. Weeks P. + F. Vale L. Pivacek S. McGrath P. + F. Vale D. Ely T. Lloyd-Evans E. Labato B. Zajda T. Lloyd-Evans R. Donovan T. Lloyd-Evans P. Peterson P. + F. Vale J. Berry# S. Perkins# C. Goodrich D. Ely S. Hedman

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9/30	Warbler (continue ONWR	ed) 1	G. Billingham	Cape May W 9/1-10/9	arbler Reports of indi	v from	14 locations
Black-and-wl		1	O. Dillingham	Northern Par		v. mom	14 locations
9/2	P.I.	3	D. Chickering	9/9	P.I.	14	R. Schain
9/13	Belmont	7	R. Stymeist#	9/10	C. Quabbin	9	L. Therrien
9/13	Waltham	3	E. Dahl	9/18	Belmont	4	J. Forbes
10/5	Natick	3	G. Dysart	10/4	MNWS	5	D. Ely
10/10	GMNWR	1	A. Bragg#	10/5	Arlington Res.	4	M. Rines#
Prothonotar		1	37 T .	10/6	Cambr. (F.P.)	4	M. Rosenstein#
10/16 Tennessee Wa	Nantucket	1	V. Laux	10/17 10/26	Amherst	3 1 m	I. Davies R. Heil
9/18	Sudbury	3	T. Spahr	Magnolia Wa	Rockport	1 111	к. пен
9/18	Amherst	2	I. Davies	9/14	Lexington	7	M. Rines
9/21	Pittsfield	$\frac{1}{2}$	G. Hurley	9/16	P.I.	5	T. Spahr
10/6	P.I.	2	S. Sullivan	10/4	MNWS	2	D. Ely
10/16	Nahant	1	D. Bates	10/6	Manomet	3 b	T. Lloyd-Evans
Orange-crow				10/24	Belchertown	1	L. Therrien
	Reports of indiv			10/26	Amherst	1	I. Davies
9/25	Northampton	2	B. Zajda	Bay-breasted		1	T TP1
10/8 10/9	Gloucester (E.P.	2 2	B. Harris#	9/13 9/13	Amherst Medford	1 1	L. Therrien R. LaFontaine
10/9	Cumb. Farms S. Dart. (A.Pd)	$\frac{2}{2}$	J. Sweeney# P. Champlin	9/15	Lenox	2	K. Larontaine K. Hanson
10/12	Winthrop	3	P. Peterson	9/25	Squantum	1	R. Donovan
10/22	Rockport	2	T. Spahr#	10/12	Northfield	î	Z. Jakub
Nashville Wa		-	Ti opuii ii	10/22	Pepperell	1 m	
9/24	Manomet	3	G. d'Entremont	Blackburnian			
10/2, 25	Lexington	3, 1	M. Rines#	9/4	Waltham	2	J. Forbes
10/4	Belmont	5	R. Stymeist#	9/9	Amherst	2	J. Drucker
10/4	MNWS	4	D. Ely	9/10, 10/8		3, 1	Wetmore, Vale
10/6	Manomet	7 b	T. Lloyd-Evans	10/8	Hanover	1	J. Galluzzo#
10/6 10/8	Mattapan (BNC Eastham	() 5 4	P. Peterson	Yellow Warb	er P.I.	7	R. Heil
10/8	Newbury	3	SSBC (GdE) R. Heil	9/24	Woburn (H.P.)	2	P. Ippolito#
Connecticut V		3	K. Hen	10/16	S. Dart. (A.Pd)		P. Champlin#
9/13	P.I.	1 b	B. Flemer	10/19	Amherst	1	I. Davies
	2 Reports of indiv		1 locations	Chestnut-side			
9/15	Cumb. Farms	3	C. Nims#	9/10	Medford	2	M. Rines#
9/16	Northampton	2	B. Zajda	9/18	Sudbury	3	T. Spahr
9/26	Moran WMA	3 ad	B. Zajda	9/25	P.I.	3	E. Nielsen
10/2	N. Quabbin	2	M. Lynch	10/17	Quabbin (G49-	44) 1	M. Lynch#
10/22 MagCilliana	Nantucket	1 b	R. Veit	Blackpoll Wa		-	I Danker
MacGillivra	Squantum	1 m	R. Donovan	9/4 9/6-10/15	Waltham P.I.	6 48 m	J. Forbes ax v.o.
Mourning Wa		1 111	R. Donovan	9/21	Wayland	21	B. Harris#
9/1-27	Reports of indiv	z. from 10) locations	9/24	Petersham	44	M. Lynch#
9/18	Rockport	2	R. Heil	9/25	Westport	22	G. d'Entremont#
9/18	P.I.	2 b	B. Flemer	10/4	MNŴS	28	D. Ely
9/28		1 imm b	T. Lloyd-Evans	10/6	Manomet	19 b	T. Lloyd-Evans
Common Yel				10/8	Arlington Res.	15	M. Rines
9/8	Burlington	11	M. Rines	10/16	Boston (Fens)	19	BBC (R.Stymeist)
9/15	P.I.	15	J. Berry#		d Blue Warbler	2	0 0
9/17 9/18	Westport Northampton	16 24	S. Perkins# S. Surner	9/11 10/2	Quabbin Pk Quabbin (G35-	30) 8	S. Surner M. Lynch#
10/9	Cumb. Farms	24	J. Sweeney#	10/2	Medford	39) 6 4	R. LaFontaine
10/18	Westboro	4	N. Paulson#	10/6	Manomet	11 b	T. Lloyd-Evans
10/29	Amherst	i	J. Drucker	10/9	Gloucester (E.F		J. Nelson
Hooded War				10/22	Nantucket	2	K. Blackshaw#
9/27	Westport	1	M. Iliff	Palm Warbler	r		
10/2-05	P.I.	1 f	B. + B. Buxton		Cumb. Farms	24	E. Dalton
10/3-09	Salisbury		B. Murphy+ v.o.	10/2	Quabbin	31	M. Lynch#
10/4	MNWS	1 m	D. Ely	10/8	Quabbin Northampton	12	L. Therrien
10/4 10/6	MNWS Nahant	1 m 1	D. Ely W. Manter	10/8 10/10	Quabbin Northampton Burlington	12 11	L. Therrien M. Rines
10/4 10/6 10/6-07	MNWS Nahant Westport	1 m 1 1	D. Ely W. Manter P. Champlin	10/8 10/10 10/21	Quabbin Northampton Burlington Nantucket	12	L. Therrien
10/4 10/6 10/6-07 10/7	MNWS Nahant Westport Salisbury	1 m 1 1 1 m	D. Ely W. Manter P. Champlin J. Berry#	10/8 10/10 10/21 Pine Warbler	Quabbin Northampton Burlington Nantucket	12 11 15	L. Therrien M. Rines S. Perkins#
10/4 10/6 10/6-07	MNWS Nahant Westport Salisbury Cuttyhunk	1 m 1 1	D. Ely W. Manter P. Champlin	10/8 10/10 10/21	Quabbin Northampton Burlington Nantucket	12 11 15	L. Therrien M. Rines S. Perkins# BBC (Stymeist)
10/4 10/6 10/6-07 10/7 10/23 American Re 9/5	MNWS Nahant Westport Salisbury Cuttyhunk	1 m 1 1 1 m	D. Ely W. Manter P. Champlin J. Berry#	10/8 10/10 10/21 Pine Warbler 9/17	Quabbin Northampton Burlington Nantucket Wellfleet Petersham	12 11 15	L. Therrien M. Rines S. Perkins#
10/4 10/6 10/6-07 10/7 10/23 American Re 9/5 9/5	MNWS Nahant Westport Salisbury Cuttyhunk dstart Amherst Petersham	1 m 1 1 m 1 ph 27 21	D. Ely W. Manter P. Champlin J. Berry# M. Sylvia I. Davies M. Lynch#	10/8 10/10 10/21 Pine Warbler 9/17 9/24 Yellow-rump 9/17, 10/1	Quabbin Northampton Burlington Nantucket Wellfleet Petersham ed Warbler Lexington	12 11 15 46 85 1, 66	L. Therrien M. Rines S. Perkins# BBC (Stymeist) M. Lynch# M. Rines
10/4 10/6 10/6-07 10/7 10/23 American Re 9/5 9/5 9/10	MNWS Nahant Westport Salisbury Cuttyhunk dstart Amherst Petersham Medford	1 m 1 1 m 1 ph 27 21 25	D. Ely W. Manter P. Champlin J. Berry# M. Sylvia I. Davies M. Lynch# M. Rines#	10/8 10/10 10/21 Pine Warbler 9/17 9/24 Yellow-rump 9/17, 10/1 10/6	Quabbin Northampton Burlington Nantucket Wellfleet Petersham ed Warbler Lexington Paxton	12 11 15 46 85 1, 66 230	L. Therrien M. Rines S. Perkins# BBC (Stymeist) M. Lynch# M. Rines R. Jenkins
10/4 10/6 10/6-07 10/7 10/23 American Re 9/5 9/5 9/10 9/13	MNWS Nahant Westport Salisbury Cuttyhunk dstart Amherst Petersham Medford Belmont	1 m 1 1 m 1 ph 27 21 25 11	D. Ely W. Manter P. Champlin J. Berry# M. Sylvia I. Davies M. Lynch# M. Rines# R. Stymeist#	10/8 10/10 10/21 Pine Warbler 9/17 9/24 Yellow-rump 9/17, 10/1 10/6 10/8	Quabbin Northampton Burlington Nantucket Wellfleet Petersham ed Warbler Lexington Paxton Cuttyhunk	12 11 15 46 85 1, 66 230 205	L. Therrien M. Rines S. Perkins# BBC (Stymeist) M. Lynch# M. Rines R. Jenkins R. Schain#
10/4 10/6 10/6-07 10/7 10/23 American Re 9/5 9/5 9/10 9/13 10/3	MNWS Nahant Westport Salisbury Cuttyhunk dstart Amherst Petersham Medford Belmont P.I.	1 m 1 1 m 1 ph 27 21 25 11 3	D. Ely W. Manter P. Champlin J. Berry# M. Sylvia I. Davies M. Lynch# M. Rines# R. Stymeist# P. + F. Vale	10/8 10/10 10/21 Pine Warbler 9/17 9/24 Yellow-rump 9/17, 10/1 10/6 10/8	Quabbin Northampton Burlington Nantucket Wellfleet Petersham ed Warbler Lexington Paxton Cuttyhunk Cumb. Farms	12 11 15 46 85 1, 66 230 205 266	L. Therrien M. Rines S. Perkins# BBC (Stymeist) M. Lynch# M. Rines R. Jenkins R. Schain# J. Sweeney#
10/4 10/6 10/6-07 10/7 10/23 American Re 9/5 9/5 9/10 9/13	MNWS Nahant Westport Salisbury Cuttyhunk dstart Amherst Petersham Medford Belmont	1 m 1 1 m 1 ph 27 21 25 11	D. Ely W. Manter P. Champlin J. Berry# M. Sylvia I. Davies M. Lynch# M. Rines# R. Stymeist#	10/8 10/10 10/21 Pine Warbler 9/17 9/24 Yellow-rump 9/17, 10/1 10/6 10/8	Quabbin Northampton Burlington Nantucket Wellfleet Petersham ed Warbler Lexington Paxton Cuttyhunk	12 11 15 46 85 1, 66 230 205	L. Therrien M. Rines S. Perkins# BBC (Stymeist) M. Lynch# M. Rines R. Jenkins R. Schain#

	ed Warbler (contin	med)		Savannah Sp	narrow		
10/21	Nantucket	350	S. Perkins	9/23	Northampton	55	B. Zajda
Prairie Warbl				9/25	Saugus (Bear C.		P. Randall#
9/8	Burlington	2	M. Rines	10/1	P.I.	60	E. Nielsen
10/8	Quabbin	2	M. Lynch#	10/9	Cumb. Farms	272	J. Sweeney#
10/28 10/31	Arlington Res. Boston (A.A.)	1 1	C. Floyd M. Kaufman	10/10 10/23	Hadley Concord	160 50	S. Surner W. Hutcheson
	d Green Warbler	1	Wi. Kaufiliali	Ipswich Spa		30	w. Hutcheson
9/18	Amherst	16	I. Davies	10/16	Nahant	1	J. Trimble
9/24	Petersham	21	M. Lynch#	10/21	Duxbury B.	1	R. Bowes
10/6	P.I.	11	S. Sullivan	10/28	P.I.	1	S. Grinley#
10/23	Cotuit	1	M. Keleher	Grasshopper		1	IZ D
Canada Warb 9/9	Amherst	2	L. Therrien	9/25 10/20	Lancaster GMNWR	1 1 ph	K. Bourinot# R. Stymeist#
9/13	Waltham	2	E. Dahl	10/20	Tuckernuck	1 pii	R. Veit#
9/25	P.I.	1	R. + E. McClure	10/21	Easton	Î.	K. Ryan
Wilson's War				10/22	Dorchester	1	R. Donovan
9/11	Nahant	3	P. + F. Vale	10/27	Chatham	1 ph	M. Faherty
9/15	Amherst	4	L. Therrien	10/30	Wayland	1	B. Harris
9/22 9/27	Wellfleet P.I.	3	M. Keleher	Nelson's Spa 9/29		1	I Horra#
9/30	Pittsfield	2	B. Harris R. Laubach	10/2	Westport Fairhaven	1	J. Hoye# C. Longworth
10/7	Boston (Fens)	1	P. Peterson	10/11	Northampton	1	B. Lafley
Yellow-breas		•	111000000	10/12	Revere	2	M. Iliff#
thr	Reports of indiv.	from	26 locations	10/14	Duxbury B.	1	B. Burong
9/9	Wayland	3	T. Spahr#	10/17	GMNWR	1	J. Forbes
9/23	Duxbury B.		MAS (J. Galluzzo)	10/22	Dorchester	1	R. Donovan
9/30	Manomet	3 b	T. Lloyd-Evans ax B. Harris#	10/26	E. Boston (B.I.)	2	D. Bernstein
9/3-9/11 10/3-05	Wayland P.I.	3 m 2	J. Nelson	Saltmarsh S _J 9/5	Newbury	1	F. Vale
Eastern Towh		2	J. INCISOII	9/27	Dorchester	3	R. Donovan
9/22	Wellfleet	31	M. Keleher	10/2	Fairhaven	5	C. Longworth
10/1	P.I.	45	E. Nielsen	10/6	P.I.	3	R. + E. McClure
10/8	Cuttyhunk	49	R. Schain#	Seaside Spar			
10/17	Quabbin	24	M. Lynch#	10/8	Eastham (F.H.)	5	S. Arena
American Tre	ee Sparrow P.I.	1	C. Barber	Fox Sparrow		1 M	Cuahma Vasina
10/16 10/21	Grafton	3	N. Paulson	10/29 10/31	Douglas Squantum	1 1	I. Sughrue-Yacino M. Iliff
10/31	GMNWR					1	141. 11111
		n		Lincoln's Sp	arrow		
Clay-colored		6	R. Stymeist	Lincoln's Sp 9/12	arrow P.I.	1	T. Wetmore
thr			·	9/12 9/18		5	T. Wetmore I. Davies
thr 9/18	Sparrow Reports of indiv. Wayland	from 2	28 locations G. Long	9/12 9/18 9/23	P.I. Amherst Northampton	5 6	I. Davies B. Zajda
thr 9/18 9/24-27	Sparrow Reports of indiv. Wayland P.I.	from 2	28 locations G. Long S. Sullivan + v.o.	9/12 9/18 9/23 10/4	P.I. Amherst Northampton Belmont	5 6 5	I. Davies B. Zajda R. Stymeist#
thr 9/18 9/24-27 10/18	Sparrow Reports of indiv. Wayland P.I. Nantucket	from 2	28 locations G. Long	9/12 9/18 9/23 10/4 10/7	P.I. Amherst Northampton Belmont Lexington	5 6 5 7	I. Davies B. Zajda R. Stymeist# M. Rines
thr 9/18 9/24-27 10/18 Field Sparrov	Sparrow Reports of indiv. Wayland P.I. Nantucket	from 2 2 2	28 locations G. Long S. Sullivan + v.o. V. Laux	9/12 9/18 9/23 10/4 10/7 10/9	P.I. Amherst Northampton Belmont Lexington Cumb. Farms	5 6 5 7 41	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney#
thr 9/18 9/24-27 10/18	Sparrow Reports of indiv. Wayland P.I. Nantucket	from 2	28 locations G. Long S. Sullivan + v.o.	9/12 9/18 9/23 10/4 10/7 10/9	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP)	5 6 5 7	I. Davies B. Zajda R. Stymeist# M. Rines
thr 9/18 9/24-27 10/18 Field Sparrov 9/17	Sparrow Reports of indiv. Wayland P.I. Nantucket W	from 2 2 2 6 4 5	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins#	9/12 9/18 9/23 10/4 10/7 10/9	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP)	5 6 5 7 41	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney#
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP)	from 2 2 2 6 4 5 4	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines#	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) Trow Bolton Flats GMNWR	5 6 5 7 41 5 112 37	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg#
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/22	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B.	from 2 2 2 2 6 4 5 4 4	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) row Bolton Flats GMNWR ONWR	5 6 5 7 41 5 112 37 23	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/22	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro	from 2 2 2 6 4 5 4	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines#	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) TOW Bolton Flats GMNWR ONWR Cumb. Farms	5 6 5 7 41 5 112 37	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg#
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/23 Vesper Sparrov	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro	from 2 2 2 6 4 5 4 4 6	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes M. Lynch#	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 White-throat	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) TOW Bolton Flats GMNWR ONWR Cumb. Farms	5 6 5 7 41 5 112 37 23 500	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa J. Sweeney#
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/22	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro	from 2 2 2 2 6 4 5 4 4	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes M. Lynch# K. Bourinot#	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 White-throat 9/17	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) TOW Bolton Flats GMNWR ONWR Cumb. Farms	5 6 5 7 41 5 112 37 23	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/22 10/23 Vesper Sparro 9/25	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro DW Lancaster	from 2 2 2 6 4 5 4 4 6 6 2	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes M. Lynch#	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 White-throat	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) TOW Bolton Flats GMNWR ONWR Cumb. Farms ted Sparrow Lexington	5 6 5 7 41 5 112 37 23 500	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa J. Sweeney# J. Forbes
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/23 Vesper Sparro 9/25 9/26 10/15 10/23	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro OW Lancaster Moran WMA Northampton Concord	from 2 2 2 6 4 5 4 4 6 6 2 1 2 1	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes M. Lynch# K. Bourinot# B. Zajda S. Surner W. Hutcheson	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 White-throat 9/17 9/25 10/6 10/9	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) TOW Bolton Flats GMNWR ONWR Cumb. Farms ted Sparrow Lexington Bolton Flats Melrose ONWR	5 6 5 7 41 5 112 37 23 500 2 8 75 48	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa J. Sweeney# J. Forbes K. Bourinot# D. + I. Jewell T Aversa
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/23 Vesper Sparro 9/25 9/26 10/15 10/23 10/26-28	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro DW Lancaster Moran WMA Northampton Concord W. Newbury	from 2 2 2 6 4 5 4 4 6 6 2 1 2 1 1	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes M. Lynch# K. Bourinot# B. Zajda S. Surner W. Hutcheson K. Elwell	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 10/9 White-throat 9/17 9/25 10/6 10/9 10/9	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) row Bolton Flats GMNWR ONWR Cumb. Farms ted Sparrow Lexington Bolton Flats Melrose ONWR P.I.	5 6 5 7 41 5 112 37 23 500 2 8 75	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa J. Sweeney# J. Forbes K. Bourinot# D. + I. Jewell
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/22 10/23 Vesper Sparro 9/25 9/26 10/15 10/23 10/26-28 10/28	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro DW Lancaster Moran WMA Northampton Concord W. Newbury Cheshire	from 2 2 2 6 4 5 4 4 6 6 2 1 2 1	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes M. Lynch# K. Bourinot# B. Zajda S. Surner W. Hutcheson	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 White-throat 9/17 9/25 10/6 10/9 10/16 White-crown	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) Trow Bolton Flats GMNWR ONWR Cumb. Farms sted Sparrow Lexington Bolton Flats Melrose ONWR P.I. ned Sparrow	5 6 5 7 41 5 112 37 23 500 2 8 75 48 60	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa J. Sweeney# J. Forbes K. Bourinot# D. + 1. Jewell T Aversa V. Zollo
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/23 Vesper Sparro 9/25 9/26 10/15 10/23 10/26-28 10/28 Lark Sparrow	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro ow Lancaster Moran WMA Northampton Concord W. Newbury Cheshire	from 2 2 2 6 4 4 6 6 2 1 1 1 1	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes M. Lynch# K. Bourinot# B. Zajda S. Surner W. Hutcheson K. Elwell T. Gagnon	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 White-throat 9/17 9/25 10/6 10/9 White-crown 9/30	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) TOW Bolton Flats GMNWR ONWR Cumb. Farms ted Sparrow Lexington Bolton Flats Melrose ONWR P.I. ned Sparrow Lexington	5 6 5 7 41 5 112 37 23 500 2 8 75 48 60	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa J. Sweeney# J. Forbes K. Bourinot# D. + I. Jewell T Aversa V. Zollo M. Rines
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/23 Vesper Sparrov 9/25 9/26 10/15 10/23 10/26-28 10/28 Lark Sparrow 9/6	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro OW Lancaster Moran WMA Northampton Concord W. Newbury Cheshire Boston (Deer I.)	from 2 2 2 6 4 5 4 4 6 6 2 1 1 1 1 1	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes M. Lynch# K. Bourinot# B. Zajda S. Surner W. Hutcheson K. Elwell T. Gagnon W. Manter	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 White-throat 9/17 9/25 10/6 10/9 10/16 White-crown 9/30 10/6	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) Trow Bolton Flats GMNWR ONWR Cumb. Farms sted Sparrow Lexington Bolton Flats Melrose ONWR P.I. ned Sparrow	5 6 5 7 41 5 112 37 23 500 2 8 75 48 60	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa J. Sweeney# J. Forbes K. Bourinot# D. + I. Jewell T Aversa V. Zollo M. Rines I. Davies
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/23 Vesper Sparro 9/25 9/26 10/15 10/23 10/26-28 10/28 Lark Sparrow	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro DW Lancaster Moran WMA Northampton Concord W. Newbury Cheshire Boston (Deer I.) Salisbury	from 2 2 2 6 4 5 4 4 6 6 2 1 1 1 1 1	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes M. Lynch# K. Bourinot# B. Zajda S. Surner W. Hutcheson K. Elwell T. Gagnon	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 White-throat 9/17 9/25 10/6 10/9 White-crown 9/30	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) TOW Bolton Flats GMNWR ONWR Cumb. Farms ted Sparrow Lexington Bolton Flats Melrose ONWR P.I. ned Sparrow Lexington Amherst	5 6 5 7 41 5 112 37 23 500 2 8 75 48 60	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa J. Sweeney# J. Forbes K. Bourinot# D. + I. Jewell T Aversa V. Zollo M. Rines
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/23 Vesper Sparro 9/25 9/26 10/15 10/23 10/26-28 Lark Sparrow 9/6 9/13, 10/9 9/13, 10/3 9/25	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro ow Lancaster Moran WMA Northampton Concord W. Newbury Cheshire Moston (Deer I.) Salisbury P.I. Chatham	from 2 2 2 2 6 4 4 4 6 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes M. Lynch# K. Bourinot# B. Zajda S. Surner W. Hutcheson K. Elwell T. Gagnon W. Manter Chickering, Elwell Schain, Labado C. Goodrich	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 White-throat 9/17 9/25 10/6 10/9 10/16 White-crowr 9/30 10/6 10/9 10/9	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) TOW Bolton Flats GMNWR ONWR Cumb. Farms ted Sparrow Lexington Bolton Flats Melrose ONWR P.I. ned Sparrow Lexington Amherst ONWR Cumb. Farms	5 6 5 7 41 5 112 37 23 500 2 8 75 48 60 1 6 20	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa J. Sweeney# J. Forbes K. Bourinot# D. + I. Jewell T Aversa V. Zollo M. Rines I. Davies T Aversa
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/23 Vesper Sparrov 9/25 9/26 10/15 10/23 10/26-28 10/28 Lark Sparrow 9/6 9/13, 10/9 9/13, 10/3 9/25 9/29-30	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro Duxbury B. Westboro Westb	from 2 2 2 2 2 6 4 4 6 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes M. Lynch# K. Bourinot# B. Zajda S. Surrer W. Hutcheson K. Elwell T. Gagnon W. Manter Chickering, Elwell Schain, Labado C. Goodrich M. Rines#	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 10/9 White-throat 9/17 9/25 10/6 10/9 10/16 White-crown 9/30 10/6 10/9 10/9 10/9	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) TOW Bolton Flats GMNWR ONWR Cumb. Farms ted Sparrow Lexington Bolton Flats Melrose ONWR P.I. ned Sparrow Lexington Amherst ONWR Cumb. Farms	5 6 5 7 41 5 112 37 23 500 2 8 75 48 60 1 6 20 21 9	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa J. Sweeney# J. Forbes K. Bourinot# D. + I. Jewell T Aversa V. Zollo M. Rines I. Davies T Aversa J. Sweeney# N. Landry
thr 9/18 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/23 Vesper Sparro 9/25 9/26 10/15 10/23 10/26-28 10/28 Lark Sparrow 9/6 9/13, 10/9 9/13, 10/3 9/25 9/29-30 10/8	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro DW Lancaster Moran WMA Northampton Concord W. Newbury Cheshire Boston (Deer I.) Salisbury P.I. Chatham Arlington Res. Gloucester (E.P.)	from 2 2 2 2 2 6 4 4 6 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes M. Lynch# K. Bourinot# B. Zajda S. Surner W. Hutcheson K. Elwell T. Gagnon W. Manter Chickering, Elwell Schain, Labado C. Goodrich M. Rines# B. Harris#	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 10/9 White-throat 9/17 9/25 10/6 10/9 10/16 White-crowr 9/30 10/6 10/9 10/10 Dark-eyed Ju	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) TOW Bolton Flats GMNWR ONWR Cumb. Farms sted Sparrow Lexington Bolton Flats Melrose ONWR P.I. ned Sparrow Lexington Amherst ONWR Cumb. Farms P.I. unco Westport	5 6 5 7 41 5 112 37 23 500 2 8 75 48 60 1 6 20 21 9	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa J. Sweeney# J. Forbes K. Bourinot# D. + I. Jewell T Aversa V. Zollo M. Rines I. Davies T Aversa J. Sweeney# N. Landry S. Perkins#
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/22 10/23 Vesper Sparro 9/25 9/26 10/15 10/23 10/26-28 10/28 Lark Sparrow 9/6 9/13, 10/9 9/13, 10/3 9/25 9/29-30 10/8 10/18	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro DW Lancaster Moran WMA Northampton Concord W. Newbury Cheshire Boston (Deer I.) Salisbury P.I. Chatham Arlington Res. Gloucester (E.P.) Nahant	from 2 2 2 2 6 4 5 5 4 4 6 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes M. Lynch# K. Bourinot# B. Zajda S. Surner W. Hutcheson K. Elwell T. Gagnon W. Manter Chickering, Elwell Schain, Labado C. Goodrich M. Rines# B. Harris# V. L. Pivacek	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 10/9 White-throat 9/17 9/25 10/6 10/9 10/16 White-crown 9/30 10/6 10/9 10/9 10/9 10/10 Dark-eyed Ju 9/17 9/22	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) Trow Bolton Flats GMNWR ONWR Cumb. Farms ted Sparrow Lexington Bolton Flats Melrose ONWR P.I. ned Sparrow Lexington Amherst ONWR Cumb. Farms P.I. unco Westport Boston (Fens)	5 6 5 7 41 5 112 37 23 500 2 8 75 48 60 1 6 20 21 9	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa J. Sweeney# J. Forbes K. Bourinot# D. +1. Jewell T Aversa V. Zollo M. Rines I. Davies T Aversa J. Sweeney# N. Landry S. Perkins# P. Peterson
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/22 10/23 Vesper Sparrov 9/25 9/26 10/15 10/23 10/26-28 10/28 Lark Sparrow 9/6 9/13, 10/9 9/13, 10/9 9/13, 10/3 10/25 9/29-30 10/8 10/18	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro DW Lancaster Moran WMA Northampton Concord W. Newbury Cheshire Boston (Deer I.) Salisbury P.I. Chatham Arlington Res. Gloucester (E.P.)	from 2 2 2 2 2 6 4 4 6 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes M. Lynch# K. Bourinot# B. Zajda S. Surner W. Hutcheson K. Elwell T. Gagnon W. Manter Chickering, Elwell Schain, Labado C. Goodrich M. Rines# B. Harris# L. Pivacek V. Laux#	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 10/9 White-throat 9/17 9/25 10/6 10/9 10/16 White-crowr 9/30 10/6 10/9 10/9 10/10 Dark-eyed Jr 9/17 9/22 10/6	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) TOW Bolton Flats GMNWR ONWR Cumb. Farms ted Sparrow Lexington Bolton Flats Melrose ONWR P.I. ned Sparrow Lexington Amherst ONWR Cumb. Farms P.I. unco Westport Boston (Fens) P.I.	5 6 5 7 41 5 112 37 23 500 2 8 8 75 48 60 1 6 20 21 9	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa J. Sweeney# J. Forbes K. Bourinot# D. + I. Jewell T Aversa V. Zollo M. Rines I. Davies T Aversa J. Sweeney# N. Landry S. Perkins# P. Peterson C. Gras
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/22 10/23 Vesper Sparro 9/25 9/26 10/15 10/23 10/26-28 10/28 Lark Sparrow 9/6 9/13, 10/9 9/13, 10/3 9/25 9/29-30 10/8 10/18	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro OW Lancaster Moran WMA Northampton Concord W. Newbury Cheshire Description Salisbury P.I. Chatham Arlington Res. Gloucester (E.P.) Nahant Nantucket	from 2 2 2 2 6 4 4 5 5 4 4 4 6 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G d'Entremont# M. Rines# R. Bowes M. Lynch# K. Bourinot# B. Zajda S. Surner W. Hutcheson K. Elwell T. Gagnon W. Manter Chickering, Elwell Schain, Labado C. Goodrich M. Rines# B. Harris# L. Pivacek V. Laux# R. Veit#	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 10/9 White-throat 9/17 9/25 10/6 10/9 10/16 White-crown 9/30 10/6 10/9 10/9 10/9 10/10 Dark-eyed Ju 9/17 9/22	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) TOW Bolton Flats GMNWR ONWR Cumb. Farms sted Sparrow Lexington Bolton Flats Melrose ONWR P.I. ned Sparrow Lexington Amherst ONWR Cumb. Farms P.I. unco Westport Boston (Fens) P.I. Cuttyhunk	5 6 5 7 41 5 112 37 23 500 2 8 75 48 60 1 60 21 9	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa J. Sweeney# J. Forbes K. Bourinot# D. +1. Jewell T Aversa V. Zollo M. Rines I. Davies T Aversa J. Sweeney# N. Landry S. Perkins# P. Peterson
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/22 10/23 Vesper Sparro 9/25 9/26 10/15 10/23 10/26-28 10/28 Lark Sparrow 9/6 9/13, 10/9 9/13, 10/9 9/13, 10/18 10/21 10/22 10/22 10/22 10/26-31	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro DW Lancaster Moran WMA Northampton Concord W. Newbury Cheshire Boston (Deer I.) Salisbury P.I. Chatham Arlington Res. Gloucester (E.P.) Nahant Nantucket Tuckernuck Mattapan (BNC) Cambr. (Danehy)	from 2 2 2 2 6 4 4 5 5 4 4 4 6 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes M. Lynch# K. Bourinot# B. Zajda S. Surner W. Hutcheson K. Elwell T. Gagnon W. Manter Chickering, Elwell Schain, Labado C. Goodrich M. Rines# B. Harris# L. Pivacek V. Laux# R. Veit# P. Peterson A. Robinson + v.o.	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 10/9 White-throat 9/17 9/25 10/6 10/9 10/16 White-crown 9/30 10/6 10/9 10/10 Dark-eyed Ju 9/17 9/22 10/6 10/8 Summer Ta 9/25	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) Trow Bolton Flats GMNWR Cumb. Farms ted Sparrow Lexington Bolton Flats Melrose ONWR P.I. ned Sparrow Lexington Amherst ONWR Cumb. Farms P.I. unco Westport Boston (Fens) P.I. Cuttyhunk nager Squantum	5 6 5 7 41 5 112 37 23 500 2 8 75 48 60 1 6 20 21 9	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa J. Sweeney# J. Forbes K. Bourinot# D. + I. Jewell T Aversa V. Zollo M. Rines I. Davies T Aversa J. Sweeney# N. Landry S. Perkins# P. Peterson C. Gras R. Schain# R. Donovan
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/23 Vesper Sparro 9/25 9/26 10/15 10/23 10/26-28 10/28 Lark Sparrow 9/6 9/13, 10/9 9/13, 10/9 9/13, 10/18 10/18 10/18 10/21 10/22 10/22 10/26-31 10/28-31	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro Duxbury B. Westboro Westb	from 2 2 2 2 6 4 5 5 4 4 4 6 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes M. Lynch# K. Bourinot# B. Zajda S. Surner W. Hutcheson K. Elwell T. Gagnon W. Manter Chickering, Elwell Schain, Labado C. Goodrich M. Rines# B. Harris# L. Pivacek V. Laux# R. Veit# P. Peterson	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 10/9 White-throat 9/17 9/25 10/6 10/9 10/16 White-crown 9/30 10/6 10/9 10/8 1	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) TOW Bolton Flats GMNWR ONWR Cumb. Farms ted Sparrow Lexington Bolton Flats Melrose ONWR P.I. ned Sparrow Lexington Amherst ONWR Cumb. Farms P.I. unco Westport Boston (Fens) P.I. Cuttyhunk nager Squantum P.I.	5 6 5 7 41 5 7 41 5 112 37 23 500 2 8 8 75 48 60 1 6 20 21 9 1 1 47 24 1 1	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa J. Sweeney# J. Forbes K. Bourinot# D. + I. Jewell T Aversa V. Zollo M. Rines I. Davies T Aversa J. Sweeney# N. Landry S. Perkins# P. Peterson C. Gras R. Schain# R. Donovan P. + F. Vale
thr 9/18 9/24-27 10/18 Field Sparrov 9/17 10/1-18 10/16 10/22 10/22 10/23 Vesper Sparro 9/25 9/26 10/15 10/23 10/26-28 10/28 Lark Sparrow 9/6 9/13, 10/9 9/13, 10/9 9/13, 10/18 10/21 10/22 10/22 10/22 10/26-31	Sparrow Reports of indiv. Wayland P.I. Nantucket Westport P.I. Falmouth Woburn (HP) Duxbury B. Westboro Duxbury B. Westboro Westb	from 2 2 2 2 6 4 4 5 5 4 4 4 6 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	28 locations G. Long S. Sullivan + v.o. V. Laux S. Perkins# E. Nielsen + v.o. G. d'Entremont# M. Rines# R. Bowes M. Lynch# K. Bourinot# B. Zajda S. Surner W. Hutcheson K. Elwell T. Gagnon W. Manter Chickering, Elwell Schain, Labado C. Goodrich M. Rines# B. Harris# L. Pivacek V. Laux# R. Veit# P. Peterson A. Robinson + v.o. K. Hartel+ v.o.	9/12 9/18 9/23 10/4 10/7 10/9 10/22 Swamp Spar 9/25 10/3 10/9 10/9 White-throat 9/17 9/25 10/6 10/9 10/16 White-crown 9/30 10/6 10/9 10/10 Dark-eyed Ju 9/17 9/22 10/6 10/8 Summer Ta 9/25	P.I. Amherst Northampton Belmont Lexington Cumb. Farms Woburn (HP) Trow Bolton Flats GMNWR Cumb. Farms ted Sparrow Lexington Bolton Flats Melrose ONWR P.I. ned Sparrow Lexington Amherst ONWR Cumb. Farms P.I. unco Westport Boston (Fens) P.I. Cuttyhunk nager Squantum	5 6 5 7 41 5 112 37 23 500 2 8 75 48 60 1 6 20 21 9	I. Davies B. Zajda R. Stymeist# M. Rines J. Sweeney# M. Rines# K. Bourinot# A. Bragg# T Aversa J. Sweeney# J. Forbes K. Bourinot# D. + I. Jewell T Aversa V. Zollo M. Rines I. Davies T Aversa J. Sweeney# N. Landry S. Perkins# P. Peterson C. Gras R. Schain# R. Donovan

Summer Tan	ager (continued)			Red-winged	Blackbird		
10/17	Winthrop	1	P. Peterson	9/5	Northampton	250+	B. Zajda
10/23	Cuttyhunk	1 ad p		9/23	W. Bridgewate		S. Arena
Scarlet Tanager			9/26	Moran WMA	150+	B. Zajda	
10/1	S. Quabbin	2	M. Lynch#	10/9	Cumb. Farms	746	J. Sweeney#
10/3	P.I.	2	E. Labato	10/24	P.I.	180+	P. + F. Vale
10/6	Cambr. (F.P.)	3	M. Rosenstein#	Eastern Mea		1001	1. 11. vaic
10/17	Quabbin (G49-44		M. Lynch#	9/25	Saugus (Bear C	C.) 2	P. Randall#
Western Tan		, 5	IVI. Lynciiii	10/15	Marstons Mills		M. Keleher
10/5	Dorchester	1 f	R. Donovan	10/21	Wrentham	10	E. LoPresti
Rose-breasted			R. Donovan	10/23	Eastham (F.H.)		M. Keleher
9/9	GMNWR	8	W. Hutcheson#		ed Blackbird	10	W. Relener
9/25	P.I.	3	E. Nielsen	10/12	Revere	1 ph	M. Iliff#
9/26	Truro	4	R. Heil	10/17	E. Boston (B.I.		P. Peterson
10/1	Lexington	2	M. Rines#	Rusty Blackh		, 1 111	1. I eterson
10/10	Boston (Fens)	ī	J. Taylor	10/8	Brookfield	36	R. Jenkins
10/22	Nantucket	i	J. Papale	10/9	ONWR	25	T Aversa
Blue Grosbea		•	3. Tupuic	10/15	Northampton	10	S. Surner
thr	Reports of indiv.	from 25	locations	10/22	Nantucket	10	R. Veit#
10/2	P.I.	3	E. Labato#	10/23	Longmeadow	11	T. Dorazio
10/3, 18	Nahant 2	2, 2	L. Pivacek	10/24	Newbury	10	T. Wetmore
10/8	Eastham	2	SSBC (GdE)	Common Gra		10	1. Welliote
10/9	Cumb. Farms	3	J. Sweeney#	10/1		12000	G. d'Entremont#
10/10	Woburn (H.P.)	2 imm		10/3	Westboro	3000+	N. Paulson
Indigo Buntin			1111 1111100	10/9	Cumb. Farms	1010	J. Sweeney#
9/7	Amherst	9	I. Davies	10/23	Concord	2000	J. Forbes
9/16	Lincoln	11	M. Rines	10/26	Ipswich	2000	J. Berry
9/24	Cumb. Farms	13	S. Arena	Brown-heade		2000	o. Belly
9/25	Northampton	11	M. Lynch#	9/10	Salisbury	180 +	R. Stymeist
10/23	Cuttyhunk	6	M. Sylvia	10/21	Hyannis	250	M. Keleher
10/30	Medford	ĩ	M. Rines#	10/24	Woburn	350	S. Perkins
Dickcissel				Baltimore Or	riole		
thr	Reports of indiv.	from 22	locations	9/25	Thompson I.	4	R. Stymeist#
9/8	Ipswich	2 juv	R. Heil	9/30	Falmouth	4	M. Keleher
9/11, 10/9	Wayland 2	2, 2	B. Harris	10/3	P.I.	8	E. Labato
9/25	Squantum	2	R. Donovan	10/18	S. Dart. (A.Pd)	2	P. Champlin
9/26	Belmont	2	R. Stymeist#	10/22	Nantucket	2	S. Perkins#
9/28	Westport	2	P. Champlin	Purple Finch			
9/30	Brewster	4	D. Clapp#	<u>9</u> /18	Great Barringto	on 2	M. Lynch#
10/5	Cambr. (Danehy)	2	R. Stymeist#	9/27	Cumb. Farms	1	P. Crosson
10/9	Cumb. Farms	4	J. Sweeney#	10/1	Mattapan (BNO	C) 1 f	J. Miller
10/9	Newbury	2	R. Heil	10/1	P.I.	17	E. Nielsen
10/15	Woburn (HP)	2	M. Rines	10/6	Amherst	9	I. Davies
10/18	Nantucket	4	V. Laux	Pine Siskin			
Bobolink				10/5	P.I.	1	T. Wetmore#
9/1		513	T. Gagnon	10/6	Westport	1	P. Champlin
9/1	GMNWŔ	76	W. Hutcheson#	10/7	Salisbury	5	J. Berry#
9/3	Lexington	50	M. Rines	10/08	Eastham	2	SSBC (GdE)
9/9	Northampton	30+	B. Zajda	10/21	Nantucket	1	V. Laux#
	2 Cumb. Farms 150		S. Arena				
9/25	Saugus (Bear C.)		P. Randall#				
10/23	S. Dart. (A.Pd)	2	E. Nielsen				



PINE SISKIN BY DAVID LARSON

ABBREVIATIONS FOR BIRD SIGHTINGS

Taxonomic order is based on AOU checklist, Seventh edition, up to the 52nd Supplement, as published in *Auk* 128 (3): 600-13 (2011) (see http://www.aou.org/checklist/north).

		N. G	, , , , , , , , , , , , , , , , , , ,
Locations	MAC Door I'm Digit	NAC	Nine Acre Corner, Concord
Location-#	MAS Breeding Bird	Newbypt	Newburyport
	Atlas Block	ONWR	Oxbow National Wildlife Refuge
A.A.	Arnold Arboretum, Boston	PG	Public Garden, Boston
ABC A.P.	Allen Bird Club	P.I.	Plum Island
	Andrews Point, Rockport	Pd	Pond
A.Pd B.	Allens Pond, S. Dartmouth	POP PR	Point of Pines, Revere
B.I.	Beach Belle Isle, E. Boston	P'town	Pinnacle Rock, Malden
B.R.		Pont.	Provincetown Pontoosuc Lake, Lanesboro
BBC	Bass Rocks, Gloucester Brookline Bird Club	R.P.	Race Point, Provincetown
BMB	Broad Meadow Brook, Worcester	Res.	Reservoir
C.B.	Crane Beach, Ipswich	S.B.	South Beach, Chatham
C.B. CGB	Coast Guard Beach, Eastham	S.N.	Sandy Neck, Barnstable
C.P.	Crooked Pond, Boxford	SRV	Sudbury River Valley
Cambr.	Cambridge	SSBC	South Shore Bird Club
CCBC	Cape Cod Bird Club	TASL	Take A Second Look
Corp. B.	Corporation Beach, Dennis	MSL	Boston Harbor Census
Cumb. Farms	Cumberland Farms.	WBWS	Wellfleet Bay WS
Cumo. I arms	Middleboro	WMWS	Wachusett Meadow WS
DFWS	Drumlin Farm Wildlife Sanctuary	Wompatuck SP	Hingham, Cohasset,
DWMA	Delaney WMA	ompataen 21	Scituate, and Norwell
2 ,, 1,111	Stow, Bolton, Harvard	Worc.	Worcester
DWWS	Daniel Webster WS		
E.P.	Eastern Point, Gloucester	Other Abbreviations	
F.E.	First Encounter Beach, Eastham	ad	adult
F.H.	Fort Hill, Eastham	b	banded
F.P.	Fresh Pond, Cambridge	br	breeding
F.Pk	Franklin Park, Boston	dk	dark (morph)
G40	Gate 40, Quabbin Res.	f	femalé
GMNWR	Great Meadows NWR	fl	fledgling
H.	Harbor	imm	immature
H.P.	Halibut Point, Rockport	juv	juvenile
HP	Horn Pond, Woburn	Ĭt	light (morph)
HRWMA	High Ridge WMA, Gardner	m	male
I.	Island	max	maximum
IRWS	Ipswich River WS	migr	migrating
L.	Ledge	n	nesting
MAS	Mass Audubon	ph	photographed
MP	Millennium Park, W. Roxbury	pl	plumage
M.V.	Martha's Vineyard	pr	pair
MBWMA	Martin Burns WMA, Newbury	Ŝ	summer $(1S = 1st summer)$
MNWS	Marblehead Neck WS	v.o.	various observers
MSSF	Myles Standish State Forest,	W	winter $(2W = second winter)$
	Plymouth	yg	young
Mt.A.	Mount Auburn Cemetery, Cambr.	#	additional observers

HOW TO CONTRIBUTE BIRD SIGHTINGS TO BIRD OBSERVER

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

ABOUT THE COVER

Common Merganser

The Common Merganser (*Mergus merganser*) is a large, gregarious fish-eating duck found mostly in winter on our lakes and rivers. The male is a striking bird with a greenish-black head and gleaming white neck and underparts that contrast with a black back and bright orange bill. Females are smaller with more muted plumage, a rusty head and neck, and a white chin spot, white belly and generally gray body.

Common Mergansers are circumpolar in distribution and polytypic, with three subspecies recognized. The Eurasian subspecies, *M. m. merganser*, usually called Goosander, is a migrant to western Alaska, and the rest of North America is home to *M. m. americanus*. They are closely related to the Red-breasted Merganser.

Common Mergansers breed from the Aleutian Islands across boreal Canada to Newfoundland and in the East south to isolated patches in Pennsylvania and New Jersey. They are widespread in the northwest quadrant of the United States with isolated patches reaching Arizona. All the northern populations are migratory, wintering throughout most of the western United States and across to the East Coast as far south as North Carolina. They tend to be late migrants south in the fall and early migrants north in the spring. In Massachusetts they are considered rare breeders and common to abundant migrants and winter residents. They are most common from October to early April. Inland they winter in large reservoirs, in lakes and ponds, and at the coast in rivers and saltwater bays.

Seasonally monogamous, Common Mergansers nest along lakes and rivers in forests old enough to provide trees with nesting cavities. Communal courtship begins in winter with several males and females displaying. In one display, a male circles the female with neck stretched forward and head feathers erect uttering a twanging *uig-a*. In another, the male, with neck stretched and bill pointing straight up, sounds a bell-like note. Males frequently flap wings and shake feathers. Female displays include rearing up on the water with bill touching the breast. Males also utter a *kragagagag* call in courtship flights.

Common Mergansers usually nest in tree cavities but will also nest in hollow logs, rock or root cavities, or even in holes in banks. They readily use nest boxes. The female selects the site and lines it with downy breast feathers. The pair may reuse a nest in succeeding seasons. The female has a single brood patch exposed by plucking breast feathers, and only she incubates the nine to twelve creamy white eggs for the four to five weeks until hatching. The hatchlings are precocial, down covered with eyes open. They remain in the nest for a day or two, then jump from the nest, and follow the female to water, where the young may ride on the mother's back. The young can swim and feed themselves by the end of the first day. Initially taking mostly insects and other invertebrates, they have switched to fish by two weeks of age.

Common Mergansers visually pursue prey in clear aquatic habitats of rivers, lakes, bays, and estuaries. They capture prey by grasping with their slender, serrated, bills and may swallow fish under water or surface before swallowing. They are divers, spending up to two minutes under water and are most active in early morning and evening. They also probe sediments to stir up prey and may swim along the surface with head submerged searching for prey. Winter flocks may forage cooperatively, swimming in lines, driving fish before them. Their diet is well known because their propensity for trout and salmon fingerlings has prompted extensive dietary studies. They take mostly small fish but also invertebrates including mollusks, insects, worms, and crustaceans.

Common Mergansers parasitize and are parasitized by their own and other duck species, including goldeneyes and Hooded Mergansers, by egg dumping in each other's nests. Because they are at the top of the aquatic food chain, they make good environmental indicators. In the 1970s, for example, high levels of PCBs, DDE, mercury, and dieldrin were found in their eggs. They have also been plagued by acidification of the lakes they depend upon. Because they tend to congregate in northern areas in winter, they can be victims of harsh winter weather. The most likely factor that regulates their population numbers, however, is nest cavity or other nest site availability. Little is known about their population stability, but Breeding Bird Census records indicate positive trends in many areas. Common Mergansers are not considered good table birds and hence are infrequently hunted. This fact and their enormous breeding range, mostly in remote areas, portend a stable future for these elegant ducks.

William E. Davis. Jr.

About the Cover Artist: Barry Van Dusen

Once again, *Bird Observer* offers a painting by the artist who has created many of our covers, Barry Van Dusen. Barry is well known in the birding world, especially in Massachusetts, where he lives in the central Massachusetts town of Princeton. In the spring of 2009 Barry had an exhibition at Massachusetts Audubon's Joppa Flats Education Center in Newburyport, MA, and during the 2010 season he was artist-inresidence at Fruitlands Museum in Harvard, MA. Barry continued his association with Fruitlands during the 2011 season, when he conducted several workshops and displayed his work in the museum's store. In July 2011 Barry was an artist-inresidence again, this time at the Coastal Maine Botanical Gardens in Boothbay, Maine.

Barry has illustrated several nature books and pocket guides, and his articles and paintings have been featured in *Birder's World*, *Birding*, and *Bird Watcher's Digest* as well as *Bird Observer*.

Barry's interest in nature subjects began in 1982 with an association with the Massachusetts Audubon Society. He has been influenced by the work of European wildlife artists and has adopted their methodology of direct field sketching. His skill as a field artist has enabled Barry to participate in projects abroad sponsored by the

Netherlands-based Artists for Nature Foundation. With this organization he has traveled to India, Peru, England, Ireland, Spain, and recently Israel to raise funds for conservation of threatened habitats. While in Israel, Barry, collaborating with Artists for Nature in Israel, provided artwork for a book by Zev Labinger and Edna Gorney called *Drawing Inspiration from the Hula Valley*. This was published in 2011 by the Society for Protection of Nature in Israel.

Barry is currently at work on illustrations for the second volume of *Birds of Brazil* by John Gwynne, Robert Ridgely, Guy Tudor, and Martha Argel, published by Comstock Publishing, a division of the Cornell University Press. For this work he is illustrating the shorebirds and their allies along with the gulls and terns. In addition, Barry continues to enjoy teaching workshops at various locations in Massachusetts.

For more information about Barry's many achievements and activities, see http://www.barryvandusen.com.



WHITE-WINGED CROSSBILL BY DAVID LARSON

AT A GLANCE

December 2011



WAYNE R. PETERSEN

Sometimes field identification is based more on perspective than what is actually the case. In other words, by not knowing *exactly* what is being observed compared to what one *thinks* is being observed can sometimes lead to an incorrect field identification. The December issue's mystery photo may offer such a situation because the *perspective* of the printed image is not immediately obvious.

As you look at the picture, it is obvious that the mystery bird is taking flight because of the foot-patter marks on the water behind it. Observing this leads to the question of the color of the bird's wings. Enter perspective. Are we looking at the upper or lower surface of the exposed wing? Depending upon your perspective, a quick glance at the bird's wings may not make it clear whether the wings are white above or below. A closer look at the shape of the spread wing, however, indicates that the extensive white visible in the photograph is on the underside of the right wing.

Once the question of perspective has been solved, it is possible to concentrate on other clues. It appears that the coloration of the bird's somewhat elongated body, visible beneath the right wing, is pale, possibly blending to white on the ventral surface of the bird. It also appears that the bird has a dark head in sharp contrast to the paler coloration of the neck and body. And finally, the bird's tail looks short and rounded, and the lower back appears to be uniformly gray in color.

A recap of these features shows that the mystery bird has a fairly elongated neck, fairly long wings, a dark (but possibly not black) head, a pale body, white underwings, and an inability to leave the water without first pattering along the surface. The bird's proportions and coloration easily eliminate most swimming birds other than ducks as identification candidates. The only ducks that clearly exhibit these features are female Common and Red-breasted mergansers and Common and

Barrow's goldeneyes. The goldeneyes can be eliminated by their relatively short necks, larger heads, and shorter, more rounded wings than those of the mystery duck. Removing the goldeneyes leaves only the two merganser species as candidates. At this point positive identification becomes very difficult, if not impossible given the view provided. A very close examination of the head of the departing merganser suggests, however, that it is sharply demarcated from the gray of the neck and, with a little imagination it is almost possible to see a hint of a distinct white throat, which is a hallmark of a female Common Merganser. While it can be argued that the image is unidentifiable to the species level, the *gizz* of the mystery duck leans in the direction of Common Merganser (*Mergus merganser*), which the author-photographer knows it to be.

Common Mergansers are common migrants and winter visitors on large freshwater bodies throughout Massachusetts, wherever they can find open water with an abundance of small fish. When interior freshwaters are frozen, they occasionally appear on tidal bays or rivers near the coast. Common Mergansers are also very uncommon to rare breeders on large lakes and rivers in the central and western Massachusetts. The author photographed this female Common Merganser in West Newbury on November 26, 2011.

Wayne R. Petersen



 ${\tt ICLEAND}~({\tt KUMLIEN'S})~{\tt GULL}~{\tt WITH}~{\tt RING-BILLED}~{\tt GULLS}~{\tt AND}~{\tt MALLARD}~{\tt BY}~{\tt DAVID}~{\tt LARSON}$

AT A GLANCE



DAVID LARSON

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

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PERIODICALS POSTAGE PAID AT BOSTON, MA

VOL. 40, NO. 1, FEBRUARY 2012

	Nickilas Paulson	5			
REDEFINING THE CHRISTMAS COUNT AT STELLWAGEN BANK Anne Smrcina					
NOAA/STELLWAGEN BANK NATIONAL MARINE SAN	CTUARY AND				
MASS AUDUBON PRESENT THE STELLWAGEN SAI	NCTUARY		11		
Seabird Stewards Program		16	D://		
Breeding Bird Atlas 2: A First Look	Matthew Kamm	19	=		
THE ACORN CRASH OF 2011 AND RED-TAILED HAWR	KS Paul M. Roberts	22	S		
INTERACTIONS OF TWO SALT MARSH-DWELLING SPA	arrows in New		Ĭ		
ENGLAND: PAST, PRESENT, AND FUTURE			ġ		
Adrienne I. Kovach and Jennifer Walsh					
ABOUT BOOKS	-				
Thinking Globally and Birding Locally	Mark Lynch	33			
BIRD SIGHTINGS	•		erv		
September/October 2011		39	er/		
ABOUT THE COVER: Common Merganser	William E. Davis, Jr.	54			
ABOUT THE COVER ARTIST: Barry Van Dusen		55			
AT A GLANCE	Wayne R. Petersen	57			

BIRDING THE WESTBOROUGH WILDLIFE MANAGEMENT AREA