Bird Observer

VOLUME 33, NUMBER 1

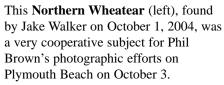
FEBRUARY 2005



HOT BIRDS



Phil Brown was also on location on October 24 to photograph this **Ross's Goose** (right) discovered on October 21 at Turner's Falls by Greg Mcguane and Susan Saffel.

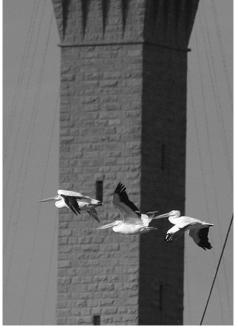




Tom Burke found an **Ash-throated Flycatcher** (left) at Halibut Point State Park in Rockport on November 26, 2004, and Phil Brown was there the next day to get this stunning photograph.



Relax, your eyes are not the problem! Three wayward **White Pelicans** (right) were photographically captured by Scott Landry as they flew past the Pilgrim Monument in Provincetown on December 5, 2004.



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We are looking for a new Managing Editor to take *Bird Observer* to new heights of excellence. Call Carolyn Marsh at 781-237-4899 or e-mail at cmarsh@jocama.com.

Correction

The reference to the Ross's Goose in Sunderland in the December issue 32 (6) p. 371 incorrectly reads May 25-26, 1997. The month was, in fact, March. It is noted as well that this was the last life bird for Dick Forster.



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Horn Pond Reservation, Woburn, Massachusetts

Marjorie W. Rines

Horn Pond was a popular destination as a vacation resort in the early nineteenth century when the creation of the Middlesex Canal made it easily accessible to Boston citizens. Today, the traces of the canal are all but gone, but Horn Pond Reservation still serves as a great



attraction for joggers, dog walkers, and naturalists. The town-owned conservation area covers a wide variety of habitats and is a year-round favorite birding spot.

The pond now serves as a water supply for the town of Woburn, and it is divided by a dike separating the main pond from the upper lagoon. Several other smaller ponds feed into the pond. The main path that circles the pond and the upper lagoon is wide enough for maintenance vehicles and is easy to follow. Beyond this, a rabbit's warren of paths weaves throughout the area and provides access to some of the most interesting habitats for birders.

In the warm seasons Horn Pond is an ideal location to bring a budding naturalist. The walk can be long or short, depending on the attention span of the child, and there is so much to see and discuss. Even a simple row of painted turtles lined up on a log is exciting to a youngster, so bring your binoculars and bring a child.

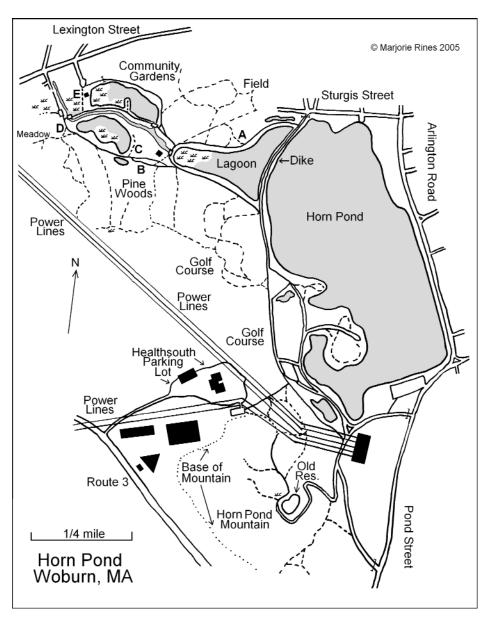
The Seasons at Horn Pond

In early March blackbirds invade the marshes, and by April dabbling ducks have arrived, with Gadwall being the specialty of the house. Later in April there can be scores of Yellow-rumped, Pine, and Palm warblers actively feeding along the edge of the ponds. As spring progresses, migrants can be found almost anywhere.

In summer a wide variety of species breed here. There are at least six pairs of Orchard Orioles, a remarkable number for a relatively small area. Two pairs of Eastern Bluebirds breed in natural cavities, encouraging news for a species that so often relies on humans for housing. Yellow Warblers and Warbling Vireos are so plentiful that it is often difficult to sort one territory from the next.

A large community garden is the place to go in fall, where seedeaters are abundant. In some years the water on the main pond is low enough to expose mudflats that draw an impressive selection of shorebirds. Unfortunately, these conditions have not happened for five years, leading to the supposition that the water management strategy has changed since then.

In the winter the water does not typically freeze over until after the New Year, and waterfowl can be diverse and plentiful. Long-eared Owls have wintered several



times, and more common owls are annual (if you can find them). Birches along the edges of the wet areas host redpolls and siskins in flight years.

Getting Started

There are several ways to start a walk at Horn Pond, but the simplest and most central is on Sturgis Street, just off Arlington Road. From Route 95 (better known as Route 128) take Exit 34 (Winn Street) and head south 1.8 miles. At the rotary, turn

right on Pleasant Street, drive less than 0.25 mile to the traffic light, and turn left on Arlington Road. There are two lefts at this light – take the far one. Drive about 0.25 mile, and take your first right on Sturgis Street.

Turn into the first pull-off on the left, which is a boat ramp where people feed the ducks. In addition to the numerous dabblers of dubious parentage, you can almost always find a small flock of American Coots in the winter. In every season except summer there are usually large flocks of gulls which may include Iceland Gulls. In winter, if the pond is unfrozen, scan the water for diving ducks. In spring and fall look for sea ducks, loons, and grebes.

Once you have checked out the pond, continue down Sturgis Street to the metal gate on your left opposite Woburn Parkway. Parking on the south side of Sturgis Street is plentiful. The gate leads to the dike that separates the main pond to the east from the lagoon to the west. Most maps show this dike as an extension of Woburn Parkway, but it is not open to traffic. It is possible to circle the main pond, but half of the two-mile walk (on the east side) is outside the reservation, adjacent to heavy traffic, and there is little habitat on the edges to support birds. The best birding is in the reservation itself to the west of the main pond.

Exploring the Reservation

The walk described here is only one of many possibilities, but it covers the widest variety of habitats. Several "Side Trips" are described, detours you can try or ignore. They are lettered on the map. Directions that follow continue from the point prior to the side trip.

Walk through the metal gate and turn right, leaving the lagoon to your left. In spring and summer you are immediately assaulted by bird song: Warbling Vireos, Yellow Warblers, and orioles are plentiful along this edge. On your right, between the path and the houses beyond, there is a small wet spot with a tangle beyond. Some of the homes have feeders and this can be a good spot to look for sparrows, although it is sometimes a challenge looking for them among the large flock of House Sparrows that are there year-round. Continue walking along the edge of the lagoon.

Side Trip A: On your right there is a small path that leads into the pine woods. Pine Warblers and Red-eyed Vireos breed in here, and Great Horned Owls occasionally roost in these pines. On a warm day look for painted turtles sunning in the wet areas. A little exploration will take you to an open field, then double back to the main path.

Partway down the path the water of the lagoon gives way to a marshy area, and if the water is low there are often exposed mudflats which draw in shorebirds in the fall. One year there was a Stilt Sandpiper here among the peeps and yellowlegs, plus a surprise Sora foraging on the flats.

At the end of the lagoon, turn left over the bridge. Eastern Phoebes have nested here as long as I have been visiting Horn Pond. Don't continue on the main path to the left, but go straight on the grassy path that leads past the red brick pump house.

Check the wet woodland beyond the pump house for spring and fall migrants. The path continues through marshy woods; when you get to the intersection with the sandy path, turn right, passing pine woods with little understory on your left.

Side Trip B: In winter, turn left into the pine woods. Golden-crowned Kinglets love this area, and Brown Creepers and Red-breasted Nuthatches are not uncommon. At the far edge there is a marsh, and Hermit Thrushes frequently overwinter along this edge. The real fun here is looking for owls. Long-eared Owls (up to three) have been almost annual since 1998, as have been one or two Barred Owls. Great Horned Owls and Eastern Screech-Owls have also been seen here.

The trail that leads through the pines and past the marsh eventually ends at a trail in an area of secondary growth. In the summer, thrashers, towhees, and Rose-breasted Grosbeaks breed in this area, and if you turn right, the trail eventually leads to one of the pockets of unexpected habitat that are typical of Horn Pond. A small bog makes the path all but impassable, but those interested in botany will enjoy looking for the sundew that grows there. If you are able to continue along this path, you will come out at Station 8 (see below). Or, double back through the pines to resume the main path.

As you follow the sandy path past the pines, look for the sign on the left saying "Station 6, Deep Stretch." This is part of an exercise trail, and in summer it is sometimes overgrown and hard to see. Directly opposite this sign is a trail that leads between a pond and another pine woods with a heavier understory.

Side Trip C: In spring and fall migration turn right down this path to look for what can often be a bonanza of warblers. It leads only a short distance into a clearing, but it is well worth the diversion. The sandy soil is a favorite place for snapping turtles to lay eggs (most often seen after being exhumed by skunks or raccoons). Also, note the beaver workings on the left at the pond's edge.

Continue along main path with one pond on your right and a smaller pond on the left. In the fall, if conditions are right, the smaller pond can have sandpipers. A woodsy area on the right is damp, but generally accessible in spring to look for warblers (in fall it is generally overgrown). The path eventually leads to "Station 8, Pull-ups" (part of the exercise trail), and the path to the left leads to the bog mentioned above in Side Trip B. Although it can be good birding, it is often overgrown in summer since the bog creates a dead end. Continue on the main trail until you come to a bridge in front of you and another to the right.

Side Trip D: On the left is a path that leads uphill through a small grove of sumac into a meadow. The meadow is surrounded by fruit trees that draw in large flocks of frugivores in fall and winter. On one Christmas Bird Count six Hermit Thrushes were counted in this area. On the right side of the meadow, you get an excellent vantage point to view a wet area below, which is often good for migrants.

Walk straight ahead onto the bridge, and use the break in the foliage on all sides to look for birds. You can continue a short distance beyond the bridge where there are wet areas on both sides, excellent for hiding a Northern Waterthrush or Winter Wren. Double back when you reach the driveway, go back over the bridge, and turn left, crossing a second bridge over a small brook. Breeding season bird song is particularly intense here, and it is well worth pausing to scan the edges of the brook and trees. If you look carefully at the brook itself, you are likely to see ebony jewelwings hovering over the water and perching on leaves.

Beyond the bridge the path continues between a cattail marsh on the left and the brook on the right. The left edge is lined with small birches, and on the right are fruiting trees and willows with a dense tangle of undergrowth. This path is a delight at any time of year. In breeding season there is a cacophony of song: Eastern Kingbirds, Warbling Vireos, House and Carolina wrens, Gray Catbirds, Yellow Warblers, Common Yellowthroats, and both Baltimore and Orchard orioles. On a few occasions I have heard Virginia Rails calling from the cattails. In spring and fall migration, both sides of the path can be filled with songbirds. There is a small gap of water between the path and the cattails where you can sometimes find a Northern Shoveler or Bluewinged Teal. Beyond the tangle on the right are numerous dead snags which are ideal perches for Olive-sided Flycatchers. In winter check all the birches for redpolls or siskins. A short distance down, you will see a path on the left.

Side Trip E: In fall do not miss this detour. Turn left on the path, and follow it past the brick pump house until it merges onto a dirt driveway which leads out to Lexington Street if you go straight, and goes right to lead to the Woburn Community Gardens. Turn right on this driveway, checking the thickets on both sides for sparrows. Continue along the drive, past the metal gate which is the entrance to the gardens. Most of the gardens are utilitarian vegetable gardens, but many are bordered by massive stands of sunflowers. Unused plots are covered with grasses that bring in impressive numbers of sparrows, and small flocks of Bobolinks are not uncommon. On a good day you could easily spend a morning just walking the edges of the gardens watching the activity.

Continue on the main path with a pond on left and the same stream on right. Check out the pond in spring and fall for Gadwalls and other ducks. If the water is low enough, look for shorebirds on the mud at the edges. One fall an immature Little Blue Heron spent a week here. At the end of the pond you will cross over a bridge that provides a good view of the thickets across the stream, and it's worth climbing down the bank to check these out. A left turn after the bridge takes you to the Community Gardens (see Side Trip E). Go straight on the path after the bridge, and take your first right to again cross the bridge where the phoebes nest, referred to before (Side Trip B).

This time stay on the main path bearing left. Take your first right, which follows a small set of power lines up a hill, and continue as the path (and power lines) turn left. On your left is a flat expanse of low secondary growth, beyond which are burnt-

out woods going down the hill toward Horn Pond. On your right are thin mixed deciduous and conferous woods.

This combination of habitats makes for a wonderful diversity of breeding species. Eastern Wood-Pewees, Great Crested Flycatchers, and Pine Warblers can be heard from both woods, while Brown Thrashers, Prairie Warblers, Field Sparrows, and Indigo Buntings often perch up to sing on a snag in the lower vegetation. In early June of 2003 and 2004, I found Common Nighthawks roosting on tree branches on the right edge, and for several years I have seen Cooper's Hawks cruising the area during breeding season.

The path eventually spills out on a paved path beside the golf course. When the paved path goes right, turn left onto an overgrown path, walk a short distance, and turn left again. This leads you out of the overgrowth into a more open area. Continue past several intersecting paths to a fork, bear right, and walk downhill through the thin, fire-damaged woods. For several years Eastern Bluebirds have nested here in a natural cavity, and in mid-summer it is not uncommon to see the adults feeding fledged young in this area. This path eventually leads to the road around the lagoon where you turn right.

Early exit: The dike across Horn Pond appears immediately on your left, and you can return to your car here, or continue on to Horn Pond Mountain.

Bear right on the paved road past the dike, past a grassy area and garden with a lion statue, and past the golf course on your right. When the mountain comes into view, the paving narrows and peters out and leads to an opening (where Red-bellied Woodpeckers nested in 2004). Take the unpaved road to your right toward the base of the mountain.

At 287 feet above sea level, Horn Pond Mountain was actually an operating ski "resort" in the 1960s, chair lift and all, but folded rather quickly when the lift equipment was repossessed by its Italian manufacturer. Artifacts of the ski lift can be seen in many places.

Today this side of the mountain is a steep, rocky hillside with a big set of power lines climbing across the rim. The power company comes in every few years to rip away vegetation that may have begun getting out of hand, so this area stays open, creating ideal habitat for Brown Thrashers, Prairie Warblers, Field Sparrows, and Indigo Buntings. At least two pairs of Orchard Orioles have nested here for several years as well. Standing at the base of the mountain, you can often hear any and all of these singing without even climbing a step. In addition to birds, the mountain is excellent for butterflies (I have logged forty-nine species here), and its botany is exceptionally diverse.

When you reach the base of the mountain, the first path on your left forks right away, and both paths lead to the summit. The mountain is covered with paths crisscrossing each other, and the best approach is to take whichever path appeals to you and keep heading up. In breeding season you will hear song from everywhere, so

follow the song. There is no way to get lost since you have a clear view of the base at all times.

At the top, you will find yourself on a wide path heading south across the summit, which is a large flat area. Scattered here and there are slabs of concrete, probably vestiges of the ill-fated chairlift. Most vegetation is short, with scattered live and dead trees providing plenty of snags for songbirds to use as perches, so you can get excellent views when males are singing. The second pair of bluebirds nest here (again in a natural cavity), and in June 2003 I discovered a male Blue Grosbeak singing on a snag.

The main path eventually leads past a chain-link fence which you follow until you see a gate on your left. Walk to your right, and climb the large rock for a spectacular view of the Boston skyline. The gate is an entrance to an old reservoir, now dry and overgrown with sumac and shorter vegetation. In 2004, the steep rock sides hid several dens for a family of foxes.

The main path continues onto a old black-topped road leading downhill through the woods. Scarlet Tanagers, Eastern Wood-Pewees, and Red-eyed Vireos serenade you as you wind down the mountain. At the bottom, bear left on the paved road and under the power lines again. Shortly after passing the power lines you will see Horn Pond on your right. Look for a depressed wet area on the left, where birds often like to bathe. Follow the main path until it leads you out to the lion statue, and eventually to the dike and back to your car.

Marj Rines is a naturalist at Massachusetts Audubon Society, webmaster of Massbird.Org, secretary of the Massachusetts Avian Records Committee, and compiler and editor of bird sightings for Bird Observer. She is Chair of the Steering Committee of the Menotomy Bird Club, an organization dedicated to birding in the areas surrounding Arlington, including Horn Pond in Woburn.



PINE SISKIN AND AMERICAN GOLDFINCHES BY DAVID LARSON

A Springtime Exploration of Essex County's Coastal Islands, with Notes on Their Historical Use by Colonially Nesting Birds

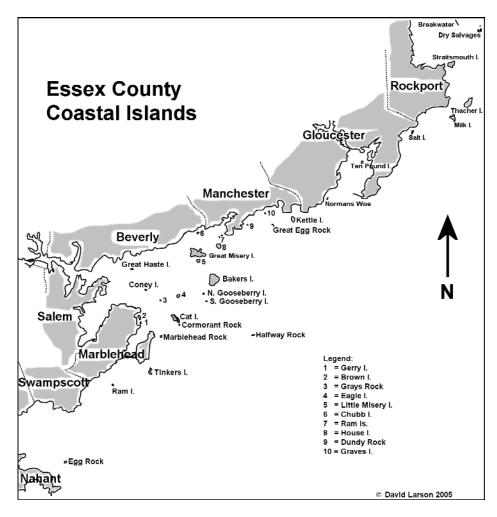
Jim Berry

For over thirty years I have lived on the North Shore of Massachusetts without a boat and have long wondered what colonially nesting birds, in what numbers, have nested on the many islands along the Essex County coast. All I knew was that large gulls and cormorants nest on some of them, that terns used to nest on them, and that herons have used at least three of them, but beyond that I didn't know many details.

In 2004 I got a chance to learn more when I found out that my friends Mary Capkanis and Dave Peterson had acquired a boat, and that Mary had obtained a pilot's license. Both are longtime birders, and both have experience surveying waterbird colonies in various parts of the U.S. Finally, I had the means to do some island-hopping with friends who were serious about surveying for nesting birds.

We made three outings, on May 12, May 14, and May 31. Linda Pivacek accompanied us on the third trip. We were unable to get out in June and of course needed more trips, later in the nesting season, to complete even a preliminary census. But in those three days we visited (with very few landings) most of the 30+ islands between Rockport and Nahant that are large enough to support nesting birds. I had three goals for these trips: (1) to see where gulls and cormorants are nesting and in roughly what numbers, and whether terns still nest on any of the islands; (2) to find out whether herons are currently nesting on any islands other than Kettle, off Manchester; and (3) to look for evidence of nesting by other species, such as Common Eiders (Somateria mollissima), which have increased dramatically as nesters in Boston Harbor, and Great Cormorants (*Phalacrocorax carbo*), Black Guillemots (Cepphus grylle), and American Oystercatchers (Haematopus palliatus), for which there are no documented nesting records in Essex County. Surveying nesting songbirds was not one of my goals, because I knew we would not be landing on many islands. In addition, we did not see or hear any but the most common songbird species on the islands that are vegetated (generally the larger islands).

Before a discussion of the results of our informal survey, some background is in order on the ornithological history of the Essex County islands, particularly the three large ones off Rockport — Straitsmouth, Thacher, and Milk, each sixteen to eighteen acres in extent. (Only Bakers and Great Misery Islands off Beverly are larger, at twenty-nine and thirty acres, respectively). As I delved into the subject, I discovered that the mix of nesting birds on the various islands has changed a great deal over the decades. It may come as a surprise to some readers to learn that Herring Gulls (*Larus argentatus*), Great Black-backed Gulls (*L. marinus*), and Double-crested Cormorants (*Phalacrocorax auritus*) did not nest along the Massachusetts North Shore until well into the twentieth century, though it is likely the cormorants did before they were



persecuted by the European settlers (Forbush 1925; Hatch 1982). Today those three species dominate the county's islands, as they do much of the New England coast. But in the years before the big gulls began nesting, and before the senseless millinery trade wreaked havoc on so many avian species, these islands were the province of the terns.

Terns: Charles Wendell Townsend, author of *The Birds of Essex County, Massachusetts* (1905) and the *Supplement* thereto (1920), is a good source of information on the pre-twentieth-century nesting history of the local terns, primarily the **Common Tern** (*Sterna hirundo*). It is sobering to read his words a century after they were written. "The Common Tern once bred on all the rocky islands and back of all the sandy beaches on the Essex County coast," he wrote in 1905, but he named only four islands and did not cite numbers of birds. "The latter breeding places have long since been abandoned. The rocky islands were less subject to the invasion of

man, and the birds have continued longer to breed there...The Common Tern still breeds at Milk Island, off the end of Cape Ann, to the number of about fifty pairs of late years." In 1920 he wrote that he found nine aggressive territorial pairs and one nest on the same island in 1919, and added that to his knowledge it was the only place in the county where Common Terns still nested. But by 1925, though Milk Island had come under state protection (along with Egg Rock off Nahant), the terns had been "driven off by an infestation of rats and snakes" (Fletcher 1925; the snakes may have been apocryphal). And, as we shall see, that is about when the large gulls moved in, making further offshore nesting by terns problematic, whether or not a given island had rats.



NESTING COMMON TERN BY DAVID LARSON

There have been sporadic nesting attempts on various Essex County islands since then, summarized through 1972 by Nisbet (1973). Maximum numbers of birds were 250 on Ram Island, Marblehead, in 1947 and 320 on Thacher Island in 1954. Other islands occasionally supporting nesting Common Terns were Dundy Rock off Manchester, Chubb Island off Beverly Farms, and Coney Island off Salem. Since 1974 there have been annual tern surveys of the Massachusetts coast under the aegis of the Massachusetts Division of Fisheries and Wildlife (MDFW 1974-2003). These surveys have shown rather consistent nesting of Common Terns on Tinkers Island off Marblehead at least through 2001, despite the presence of summer human habitation on that island. Maxima were 125 pairs in 1977, 1982, and 1983; 160 pairs in 1989; and 195 pairs in 1990. No other coastal island in the county has been documented with nesting terns of any species during this period, though it is unlikely that many others have been checked on a regular basis.

In recent years, in a happy reversal of the situation Townsend lamented (abandonment of the breeding places "back of all the sandy beaches"), Common Terns have resumed—or commenced, depending on what Townsend meant by the quoted phrase—nesting on various saltmarsh islands, where they are less susceptible to gull

predation but have to contend with wipeouts from high tides and storms. The largest of these colonies has consistently been Woodbridge Island in Newburyport, with a maximum of 275 pairs in 1989. Small numbers have also occasionally nested on Plum Island and Ipswich (Crane) Beach, the former location approaching 100 pairs once or twice in the 1970s (MDFW; data sketchy). In Boston Harbor they also nest on deserted pilings where they are safe from rats, if not from other perils. That phenomenon just reaches Essex County, where they have used the old wooden bridge abutments below the General Edwards Bridge between Lynn and Revere since about 1981, with a maximum of sixty-four pairs in 1996 (Hatch 2001) and again in 2003 (MDFW).

Townsend (1905, 1920) described Arctic (Sterna paradisaea) and Roseate (Sterna dougallii) Terns as "formerly summer resident[s]." Neither was ever as numerous on the North Shore (or elsewhere in Massachusetts) as the Common Tern, and their nesting days were essentially over by the 1880s due to the wanton shooting of terns for the millinery trade and other senseless purposes (Townsend 1921). **Arctic Terns** came back on occasion in small numbers, as on Milk Island in 1932 ("several pairs apparently breeding") and 1938 ("fifteen pair..., some with nests and eggs") (from the annotated lists of birds observed in the annual Bulletins of the Essex County Ornithological Club; hereafter, *BECOC*). At least several pairs nested with Commons on Dundy Rock off Manchester in 1945 (Records of New England Birds; hereafter, RNEB); ten birds were on Coney Island, Salem, in 1947 (RNEB); and John Kieran reported a "few" on Thacher Island in mid-July 1955 (RNEB). Nisbet (1973) summarizes these records and adds that a few probably nested on Tinkers Island, Marblehead, in 1967. I am not aware of any nesting attempts in the county since. Andrews (1990) listed seven pairs of nesting Arctics on Tinkers in a 1977 coastal inventory, but the survey method in this case was an estimate of adult birds from the air. The report may be true, but separating Arctic from Common Terns from a passing airplane strains credibility. (I hasten to add that Andrews was the compiler, not the observer.)

Roseate Terns were even scarcer as historical breeders in Essex County than Arctics, with only a single old confirmed record of breeding "on the islands of Beverly Harbor" in 1846 (Townsend 1921). They held on in southeastern Massachusetts through the lean years at the end of the nineteenth century and made a gradual (though uneven) comeback there in the twentieth (Nisbet 1973; Veit and Petersen 1993). There have been many published nesting-season reports of Roseate Terns in Essex County in the twentieth century, but unfortunately almost all have lacked any indication of whether the birds were nesting. The only exception I have found is the notation in Griscom and Snyder (1955) that forty pairs bred on Thacher Island in 1954, *fide* John Kieran. In essence, then, the county has apparently been without either Roseate or Arctic Terns as nesting birds for five and three-to-four decades, respectively. (In the case of Arctic Terns, it should be remembered that they are at the southern extreme of their nesting range in Massachusetts.)

On our own excursions in 2004 we found no terns whatsoever. On none of the three trips did we so much as *see* a tern near any of the islands, including Tinkers and

the other islands where nesting has taken place in the past, though our forays were all in May, and terns often move around before settling on a nesting site. The large **Least Tern** (*Sterna antillarum*) colony on Ipswich Beach and the various salt-marsh Common Tern nesting sites north of Cape Ann remain the only significant ones in the county. (The Crane Beach Least Tern colony was begun in 1946, when two nests were discovered, "providing [the] first nesting record for [the] area since the 1860s" [*RNEB*]. This colony reached a peak of 328 nesting pairs in 2003; Franz Ingelfinger, pers. comm.) On the bright side, a successful tern colony has been reestablished just since 1997 on Seavey Island in the New Hampshire section of the Isles of Shoals under the auspices of the Audubon Society of New Hampshire (ASNH). The colony has been growing each year and in 2004 contained about 2700 nesting pairs, including almost 2600 pairs of Common Terns, seven pairs of Arctics, and 112 pairs of Roseates (data from ASNH). Perhaps the success of this carefully managed colony will result in birds recolonizing formerly used islands in Essex County, though the gulls will, of course, have something to say about that.

Gulls: Only the two large species, Herring and Great Black-backed, breed in Essex County. The Herring Gull was one of Townsend's favorite birds, judging by the amount of time he spent studying them. He devoted no fewer than eight pages to their behavior in his 1905 book — the most space he gave to any species. This despite the fact that they did not then breed in Massachusetts; their nearest nesting colony at the time was in Penobscot Bay, "111 miles to the northeast of Ipswich Light."

Herring Gulls extended their breeding range southwest from Maine in conjunction with a huge population increase in New England, estimated at ninefold in the first three quarters of the twentieth century (Drury 1973). The expansion stemmed partly from deliberate protection, then later unintended assistance via refuse dumps, sewage treatment plants, and the like. These changes are well documented and do not need exhaustive treatment here. Suffice it to say that the first state nest record was on the Weepecket Islands in Buzzards Bay in 1888, followed by nesting on Martha's Vineyard in 1912 and on various sandbars around the Vineyard, Muskeget Island, and Monomoy Island from 1919 on (Forbush 1925). It is not clear whether these were indeed the first nestings in the state or whether, as Forbush surmised, Herring Gulls "probably once nested on small islands all along the coast of New England" before being driven off by human persecution.

Other history aside, the first nesting record in Essex County was in July 1926, when a boating party landed on North Gooseberry Island, Salem, and discovered "quite a lot of young Herring Gulls that were unable to fly" and "at least twenty nests" (Lawson 1926). In 1928 twenty nests were found on Great Egg Rock, Manchester. In 1929 a hundred nests were found there, along with thriving colonies on both North and South Gooseberry Islands, where about 200 young were banded in 1930 and about 300 in 1931 (Means and Eaton 1931). The numbers kept increasing over the next few decades, albeit not consistently, as did the number of islands colonized (*RNEB*). By 1984, a U.S. Fish and Wildlife census found 35,421 pairs of Herring Gulls nesting along the Massachusetts coast (Veit and Petersen 1993). This was apparently their peak; more on this below.

The **Great Black-backed Gull** has undergone a similar expansion. In this case the first modern nest record was established on North Gooseberry Island on July 7, 1931, when Means and Eaton were banding young Herring Gulls. They were distracted by a pair of excited Black-backs, and within minutes had captured a juvenile Black-back. They did not collect it, pending an investigation of the status of the species as a breeding bird. The result is worth quoting:

The status of the Great Black-backed Gull in Atlantic North America was promptly investigated at the Museum of Comparative Zoology, Cambridge. No breeding record south of Nova Scotia was discovered. According to Messrs. [James] Peters and [Ludlow] Griscom we had reported the first known breeding occurrence of this gull in the United States. Obviously, such an important range extension should be supported by an authentic specimen. Accordingly, Means collected the bird on July 9, a male, probably about five weeks old (Means and Eaton 1931).

Further correspondence revealed the discovery of thirteen breeding pairs in ten locations scattered along the Maine coast that same summer, all on islands from Machias Bay west to Boothbay, and almost all in conjunction with nesting Herring Gulls (Norton and Allen 1931). That many nests indicated that Black-backs could have been nesting in Maine for several years prior to 1931, and the authors provided evidence that that was indeed possible, as far back as 1916. It was thus clear that a southwesterly range extension was well underway in 1931, and their increase as breeders in Massachusetts after that time is well known. The same USFWS survey mentioned above found 10,577 nesting pairs along the Massachusetts coast in 1984 (Veit and Petersen 1993).

In our brief 2004 survey we were focused more on counting cormorant nests than gull nests, and on searching for nesting evidence of the target species listed earlier. There were so many nesting gulls on so many islands that counting them from a moving boat, with many of the nests not visible to us, was virtually impossible. I can thus offer only a rough guess at their numbers, which were easily in the low thousands for each species. I am not in a position to state which gull was the more numerous. My impression was that it was the Herring Gull, but Blodget and Livingston (1996), in summarizing the results of their 1994-1995 census of coastal waterbird colonies, discovered that breeding Herring Gulls had declined almost 51 percent statewide, to 17,583 pairs, since the 1984 census, while Great Black-backs had increased "40 percent" (actually over 42 percent) to 15,078 pairs in the same period. At that rate, a comprehensive statewide survey today might find that Great Black-backs have overtaken Herring Gulls as nesting birds, and that could of course be true in Essex County. On-the-ground nest counts would be necessary to establish the real numbers in any given year.

A further clue to the present-day large-gull populations on the North Shore is contained in Blodget and Livingston's 1996 report, which gives the numbers of nesting pairs of each species for all colonies and highlights those where they were most numerous. Thacher Island in Rockport had the third-largest number of Herring

Gull pairs in the state in 1994 (1185, increasing to 1359 in 1995), while nearby Milk Island had the third-largest number of Great Black-backed Gull pairs in 1994 (1070). The Essex County totals for that survey were 3475 pairs of Herring Gulls and 2670 pairs of Great Black-backs. If the 2004 large-gull numbers were even close to the 1994-1995 numbers, my estimate of "low thousands" for the county as a whole certainly holds true.

Cormorants: The Double-crested Cormorant is another species that did not extend its breeding range south into Massachusetts until well into the twentieth century, though there is evidence from bone remains on Calf Island in Boston Harbor that the birds probably nested there about 1500 A.D. (Hatch 1982), and presumably into colonial times, when the birds were apparently still common (Townsend 1905). A good summary of the species' nesting history in the northeast is given by Drury (1973). The cormorant was always considered a pest (read rival) by fishermen, and was "killed off the New England coast in the early 19th century." A few abortive nest attempts were made in Maine in the 1890s, but the birds were not recorded nesting in Maine again until 1925. Over the next two decades the Maine population exploded, with over 10,000 nesting pairs by 1944 (Palmer 1949). This aroused the inevitable complaints from fishermen, resulting in control measures — spraying the eggs with oil — being taken between 1944 and 1953. The Maine population leveled off for the next twenty years (Drury 1973).

Meanwhile, the species had begun to colonize the Massachusetts coast, starting with fifty-three nests on Shag Rocks in Boston Harbor in 1940 and almost certain nesting there as early as 1937 (Hagar 1941). Soon thereafter, nests were found on various islands in Essex County, thanks to the diligent work of Frances Burnett of Manchester, a Ph.D. in zoology from Cornell and a giant in land conservation, who rowed herself to these islands on a regular basis. She found the first two nests on Great Egg Rock off Manchester in June 1942, four nests there in 1943, and two in 1944. Also in 1944 she found forty-four nests on South Gooseberry Island in Salem (Bulletin of New England Bird Life; hereafter, BNEBL). The latter colony grew to 124 nests by 1946 and to 200 nests by 1949 (RNEB).

Jeremy Hatch (1982) documented the subsequent increase of Double-crested Cormorants as nesting birds in southern New England and Long Island, New York. He described this expansion in the 1970s as "phenomenal," as demonstrated by an increase in Massachusetts Bay from six to thirteen nesting sites and an increase in nesting pairs from about 300 to over 2000 between 1972 and 1981, not counting the northeastern-most nesting sites off Rockport. Surveys of the entire Massachusetts coastline found 4957 pairs statewide in 1984 and 7833 pairs in 1994-1995 — a 58 percent increase in just a decade (Blodget and Livingston 1996). The corresponding increase on the Essex County islands was from 1645 pairs at eight sites in 1984 to 2509 pairs at twelve sites in 1994, a 53 percent increase (MDFW 1995).

Though we did not survey all the Essex County islands in May 2004, we did visit the vast majority, and tried to count the cormorant nests from the boat in all cases but one, South Gooseberry Island, where we landed, counted the nests quickly, and

retreated. Following are the *minimum numbers of active nests* (a good indication of the minimum numbers of nesting pairs!) on the various islands. The name of the island is followed by its size in acres and its substrate (data taken from Andrews 1990). If an island is not listed, either cormorants weren't nesting there or we didn't visit it (see below).

ISLAND	SIZE, SUBSTRATE	ACTIVE NESTS
Dry Salvages, Rockport	<2, rock	6
Milk I., Rockport	16, rock, grass	200+
Great Egg Rock, Manchester	<2, rock	50+
Graves I., Manchester	2, rock	40+
Dundy Rock, Manchester	<2, rock	7
S. Gooseberry I., Salem	<2, rock	49
N. Gooseberry I., Salem	<2, rock	90+
Coney I., Salem	<2, rock	100+
Gray's Rock, Marblehead	<2, rock	20+
Cormorant Rock, Marblehead*	<2, rock	200+
Marblehead Rock, Marblehead	<2, rock	11
Ram I., Marblehead	<2, rock	135+
Egg Rock, Nahant	<2, rock	320+

^{*} The name "Cormorant Rock" is given on the navigation charts to a large rock immediately south of Cat Island, Marblehead. This rock is not named on the USGS topographical maps and was consequently labeled in the various coastal waterbird inventories as "island south of Cat Island."

That's a minimum of 1228 nests, surely well under the actual total, since we could count only the nests we could see from a moving boat. Later, on a July 14 outing, my friends Mary and Dave counted about 900 cormorants on Milk Island, mostly adults, which means there could have been far more than the 200+ nests we estimated earlier. In addition, Milk had 1081 nesting pairs of cormorants in the 1994 survey, making it the second-largest colony in the state (Blodget and Livingston 1996). Given that not all of Milk Island is visible from a small boat, and that the 1994 number was from an actual on-the-ground nest count, it is likely that our estimate there on May 14 was way too low.

We did not visit Ten Pound Island or Norman's Woe Rock in Gloucester or Kettle Island in Manchester. Chris Leahy (pers. comm.) confirmed that cormorants have long nested on Norman's Woe, and a visit there would almost certainly have added to the number of nests, since 199 pairs were there in 1994 (MDFW). Other islands with nesting cormorants in previous years but not in 2004 were Cat in Marblehead (thirty-four pairs in 1994) and Great Haste in Salem (seven pairs). On the other hand, we found nesting cormorants on Graves Island. and Dundy Rock in Manchester, where colonies were not found on previous surveys. Any other Essex County islands not listed above *were* visited but did not appear to have any nesting cormorants. In future years we will try to conduct more thorough surveys, or, preferably, assist in any state-

level surveys that may be organized. Meanwhile, it is clear that Double-crested Cormorants continue to do very well as breeding birds on the county's coastal islands.

We also observed **Great Cormorants** on all three trips. Most of these were immatures, which is not surprising. The biggest group was of six on the largest of the Dry Salvages on May 14, but this group included two adults in breeding plumage. I must confess that my heart quickened on seeing these birds, but while half a dozen Double-crested Cormorants were sitting on obvious nests, the two Greats were not. I suppose they could have been paired, but if they were going to nest it presumably would have happened at roughly the same time as the other cormorants, and so far as we could tell they had not even started a nest. There are at least three nest records for the species in Massachusetts, in the Weepecket Islands in Buzzards Bay, where a single pair nested each year 1984-86 (Jeremy Hatch, pers. comm.; Andrews 1990, and Veit and Petersen 1993, mention only the 1984 nesting), but Essex County remains without a confirmed nest record. This one seems just a matter of time and effort.

Herons: We did not survey Kettle Island off Manchester because the heron nests on this island are normally counted each year by the Massachusetts Audubon staff (MAS owns the island), and landing there is prohibited without that organization's permission. That survey could not be organized in 2004, though the various herons and ibises were obviously nesting there as usual (pers. obs.). Herring and Great Blackbacked gulls also nest there; we did not see nesting cormorants when we passed the island. The most interesting discovery (for me) was of a second heron colony on Eagle Island, Salem. It is known that Cattle Egrets (Bubulcus ibis) have been nesting there at least since 1982 (Chris Leahy, pers. comm.), but I had not realized that this island, a little smaller than Kettle but with the same hilly topography and thick shrubby vegetation, was also used by Great Egrets (Ardea alba), Snowy Egrets (Egretta thula), Little Blue Herons (Egretta caerulea), Black-crowned Night Herons (Nycticorax nycticorax), and Glossy Ibises (Plegadis falcinellus). The numbers appeared much smaller than on Kettle Island, but of course there could have been many more herons than we observed, since their nests, normally in thick vegetation, are seldom visible from a boat. Black-crowned Night Herons, in particular, have used this island extensively, with forty-two nesting pairs in 1984 and eighty-six pairs in 1994 (MDFW). (The third heronry island I alluded to earlier is House Island, also off Manchester, which was used in the 1970s and was replaced by Kettle in the 1980s.)

Other species: We did see Common Eiders on our boat trips, up to two hundred near the Rockport islands, with lesser numbers around the islands farther south. In no case did we see young birds or nests, despite much recent evidence of nesting in Essex County (see Berry 2000 and 2002 for the history of eider nesting in Massachusetts; Drury [1974] gives further insight into the relationship between nesting eiders and large gulls). Most likely we were too early for ducklings, and finding nests from a boat would not be easy in any case if they were in vegetation. Yet the species continues to do well in Boston Harbor. On May 24, 2004, Bob Stymeist joined naturalists from the National Park Service to do a breeding-bird survey of Calf Island in the outer harbor. They found forty-nine eider nests, 183 eggs, and six ducklings swimming. Bob stated that 90 percent of the nests were in tall grass, which

means they would indeed be hard to find without landing (Bob Stymeist, *massbird* and pers. comm.). Notably, on July 11, Mary and Dave observed six half-grown Common Eider ducklings at Ten Pound Island in Gloucester Harbor with twenty adults, and six more ducklings with twenty-five adults off Milk Island in Rockport. Reports of eider ducklings have now become annual in the county; it remains only to find some nests to see which islands they are using.

We were also on the lookout for **Black Guillemots**, and our first trip on May 12 was promising indeed. We counted thirty-nine of them that day, all in or close to breeding plumage. The majority were concentrated off South Gooseberry Island, but others were seemingly paired off in other locations south of Manchester. Two days later we found three birds off Rockport, but on our return trip to the more southern islands (including the Gooseberrys) on May 31 we found none. It is likely that these birds returned to breeding grounds farther north, but there was one subsequent development of interest. A birder kayaking near Straitsmouth Island in Rockport reported to *massbird* that he saw a breeding-plumaged guillemot resting on the granite of the island on July 31, and two days later saw one feeding in the same area. My efforts to contact this birder were unsuccessful, and when I went to the area soon after I could not locate any guillemots from the shore nearby.

Similarly, John Cushing of Essex (pers. comm.) had a good view of a guillemot in breeding plumage as it flew out of the cliffs of Little Misery Island off Beverly on September 7, 1997, an indication of possible nesting despite the late date. On September 4, 2000, Wayne Petersen (pers. comm.) and Dave Larson saw a guillemot in juvenile plumage along the shore of Plum Island, another indication of possible nesting nearby. The birds are known to nest as close as the Isles of Shoals off Rye, New Hampshire, and there are other summer records of breeding-plumaged birds in the county, but Massachusetts' first confirmed nesting still eludes us.

American Oystercatchers have been approaching Essex County from the south rather than the north, but the situation here is similar to that of the cormorants. These birds are in the process of recolonizing former breeding grounds in New England and the Maritime Provinces, where they had been shot out by the nineteenth century (Forbush 1925). They have been nesting in Boston Harbor, as far north as Snake Island in Winthrop, Suffolk County, for several years. They have also hopscotched up the coast and in recent years have nested at Stratton Island and Biddeford Pool in southern Maine, as well as in southern Nova Scotia (*North American Birds* and its predecessors). We did not find any oystercatchers on our expeditions, but I have since gotten a tip from Joe McLaughlin of Marblehead that they may have nested on one of the islands off that town in 2004, based on his observations of as many as five birds there, on multiple dates, from his kayak. A family of four, with two grown young, has shown up on Marblehead Neck each of the last two summers, indicating nearby breeding. A county nest record for this species too seems just a matter of time.

A few random species fill out this account. Scores of Canada Geese (newly renamed *Anser canadensis*) were nesting on various islands, as were occasional pairs of Mallards (*Anas platyrhynchos*). To my delight, we saw real Rock Pigeons

(*Columba livia*) evidently nesting in crevices on several of the islands and living up to their time-honored name. Apparently no cliff-nesting pigeons were found during the field work for the Massachusetts Breeding Bird Atlas in the 1970s, for the atlas account mentions cliff nests only as "ancestral" (Petersen and Meservey 2003).

A final thought is that a lack of frequent and regular survey data from the Essex County islands on colonially nesting birds should be evident from this article. The two exceptions are terns, as discussed, and herons, for which Massachusetts Audubon has been collecting data almost annually since the 1970s. The statewide cooperative surveys of the other colonially nesting species have, unfortunately, been much less frequent. Consequently, the research for this article was not easy, and there are many gaps in the chronological history. If anything is to be recommended from this research, it is for the state and federal wildlife agencies, in conjunction with each other and in cooperation with interested nonprofits, to increase the frequency of such island surveys, preferably by means of on-the-ground nest counts, as is done for the beach- and marsh-nesting terns. These agencies often bewail the lack of funds for such work, but they do not seem to be tapping enough of the nongovernmental and volunteer sources that could be made available. The task is not beyond our reach.

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Jim Berry is publishing a series of articles on significant Essex County nesting records in Bird Observer as he works to complete an annotated checklist of the county's birds and how their populations and nesting status have changed over the last century. He is grateful to Mary Capkanis and David Peterson for joining so enthusiastically in the search for coastal nesting birds; to Jeremy Hatch, Chris Leahy, Wayne Petersen, and David Weaver for critically reviewing earlier drafts of this article; and to Jim MacDougall for creating the map. Carolyn Mostello of MDFW, Diane Pence of USFWS, and Wayne Petersen kindly provided copies of critical sources needed for the research for this article.

Subtle Thrills: Rewards for the Birding Atlaser

Rosalind Renfrew

Ever play "spy" when you were a kid? Read Nancy Drew or The Hardy Boys, or watch Inspector Clouseau? We humans love the challenge of being presented with a puzzle and figuring it out. Perhaps it's a vestige from our ancestors, left over from the days when we had to clue in to the habits of our prey to track them down. Regardless of the reason, curiosity isn't just for cats: just look at our pop culture, steeped in mystery TV shows and novels.

Breeding Bird Atlases are the epitome of bird spying and present the best opportunity a birder can find to satiate those human cravings to solve mysteries. At first this may seem like a stretch, but think about it: after watching something move in the brush for what seems like hours, do you not feel a tinge of excitement when suddenly the bird pops out, and you exclaim, "Ah! It's a towhee!" That instant of discovery, when you've just unraveled that little mystery, gives us a brief moment of joy, even an adrenaline rush, as does the beauty of the bird itself.

Indeed, birding is no stranger to mystery, and we birders are not far removed from the classic pipe-toting inspector who pokes around with his gloves. We even have our own specialized magnifying lenses.

Atlassing is especially gratifying because the delight of discovery doesn't end with locating the bird. You've only just begun! Peering into the private world of a bird is at the heart of every Breeding Bird Atlas. What is the bird up to? What is it communicating? How is it interacting with other birds and its environment? This is where the real spying starts. Wait patiently, and it will offer clues right before your eyes. You'll find that deepening your birding experience, just by watching, will teach you so much more about the world of birds. The payoff? There's no feeling quite like it.

Atlassing is birding with a purpose, and that purpose is conservation. To atlas, birders select a specific area and keep track of what species they find and whether they saw evidence that the species is breeding there. Multiply this small act by hundreds of volunteer birders, and you have the fodder for statewide maps depicting the distribution of each bird species, otherwise known as a Breeding Bird Atlas. Think of it as a snapshot in time that gives us the avian version of "the state of the state." Atlases are public information, often found in libraries as well as the offices of planners, managers, and landowners interested in bird conservation – and you won't find any dust on them.

It's no wonder that atlases are one of the most frequently used tools for bird conservation. Because they provide basic, widespread data about where a species occurs in a state, they convey information that is useful yet easy to grasp. And because atlases are more thorough than most other bird surveys, they often provide the most complete information available on rare species. Vermont's first atlas,

published in 1985, was the first comprehensive resource on birds in the state for planners, state agencies, and nonprofits alike.

Massachusetts and Vermont earned the distinction of being the first states in the U.S. to conduct an atlas, bringing the tradition across the ocean from Britain in the 1970s. Typically conducted every twenty-five years, atlases are carried out over a five-year period. The participation of hundreds of volunteer birders makes the Atlas Vermont's most comprehensive birding extravaganza.

Vermont's Breeding Bird Atlas, Round 2

In 2003, Vermont became one of the first states to initiate a second state atlas. Heading into its third of five years of bird espionage, the Vermont Breeding Bird Atlas has already taken great strides. Based on 6000 hours of volunteer effort so far, the current atlas already indicates changes in the distribution of some species since the first atlas twenty-five years ago. Because of the small human population in Vermont, complete state coverage was impossible for the first effort; instead, blocks of land were randomly selected throughout the state, and one-sixth of the state's land mass was atlassed. Thanks to the growing popularity of birding, we've doubled the survey effort for Round 2. We're covering the blocks surveyed in the last atlas, plus another whole set of randomly selected blocks, for a grand total of one-third of the state to be surveyed by the end of 2007.

In order to compare apples and apples, here we present results only from blocks covered in the first atlas that are being repeated in Round 2. Limiting our comparisons to blocks covered in both the first and second atlas ensures that any changes we see aren't just an artifact of our increased effort this time around.

Because each state is covered so comprehensively, atlases are filled with exciting new discoveries. In Vermont, we're finding new nesting records of Merlins as this species expands its range southward. In 2004 Great Egrets were documented nesting for the first time ever in the state. Biologists watched adults feeding chicks at two nests on the same island in the Mississquoi National Wildlife Refuge. It will be interesting to see whether next year brings more.

Some of the changes already seen since the first atlas are not surprises. Populations of some species considered to be quite rare in the first atlas, such as Tufted Titmouse, Carolina Wren, Canada Goose, and Double-crested Cormorant have increased dramatically and expanded their range in Vermont. Breeding Red-bellied Woodpeckers are a relatively new phenomenon in Vermont as well. Species recovery programs have brought back the Wild Turkey, Common Loon, Osprey, and Peregrine Falcon. On the other hand, we expect some species to be comparatively rare this time around, such as Whip-poor-will and Common Nighthawk, and initial results from this atlas lend more evidence for the disturbing downward trend in their populations.

Although we won't be able to draw any conclusions until the full five years of the atlas are completed, some interesting trends are appearing. For example, there is already evidence suggesting that some species now have more limited distributions in Vermont than they did twenty-five years ago. Results thus far suggest a more limited

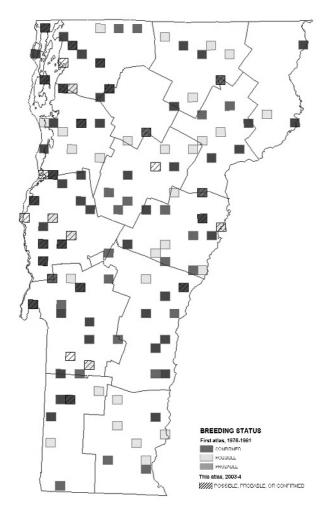


Figure 1: Has loss of farmland reduced the range of Eastern Meadowlarks in Vermont?

Eastern Meadowlark distribution (Figure 1). Loss of farmland in the state may be restricting this species to the Champlain Valley where the most extensive grasslands remain. Vermont has lost shrub habitat in the last twenty-five years as well, so we might expect a decrease in shrub-dependent species such as Brown Thrasher. Although our current data suggest that there are fewer areas occupied by thrashers, many of the areas without thrashers are those areas with low block coverage so far (Figure 2). Undoubtedly, more thrashers will be found during the next three years, and it will be interesting to see whether their distribution pattern remains more limited compared to the first atlas.

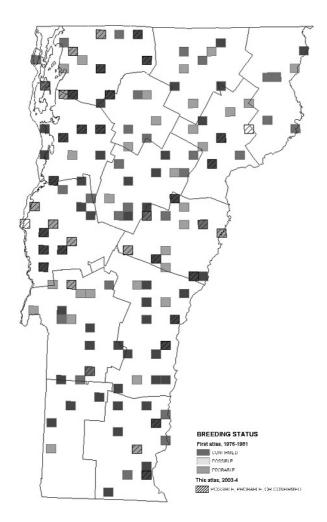


Figure 2: Initial results suggest that Brown Thrashers may have declined, but limited atlas coverage so far, particularly in the northeast and northwest sections of the state, makes this a premature conclusion.

Yellow-throated Vireo presents a more complicated story. Based on data collected through the North American Breeding Bird Survey (BBS), their populations are stable in North America, and population increases or decreases occur at local or regional levels. Despite the stability of populations on a continental scale, they still are of conservation concern in the northeast.

According to BBS data, the Yellow-throated Vireo has been declining significantly in Vermont since 1980, despite apparent increases in the northeastern part of the state. As logging declines in the Northeast Kingdom, the regeneration of mature forests will likely benefit this species, but expansion of urban and suburban

areas will hinder overall population growth. Threats to wintering populations in Central and South America due to logging are suspected to be contributing to the decline in numbers, but such threats have not been studied. Additionally, the Yellow-throated Vireo is closely associated with wooded floodplains along streams. BBS surveys are conducted along roadsides, and therefore may not provide the most accurate profile of this vireo's local occurrence. Because atlassing requires venturing away from roads to find as many species as possible, the atlas may well provide more accurate data on this species.

So far, our results echo the BBS trends for Yellow-throated Vireo. It was recorded in sixty-five blocks in the first atlas, but so far only fourteen priority blocks have

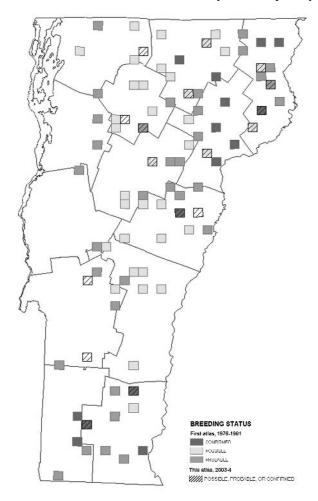


Figure 3: Because of the decline in Olive-sided Flycatcher populations in the Northeast, we can expect this atlas to produce fewer sightings of them than the first atlas, but their range appears to have changed little.

reported this species in the 2003–2007 atlas. Sightings in the Northeast Kingdom are almost nonexistent, but this may be due to low block coverage in that part of the state so far. However, Yellow-throated Vireos are even missing in counties that have been covered fairly well at this point in this atlas, such as Orange County. Atlasers will need to make sure they're not overlooking this species so we can be confident that their range in Vermont really has become smaller.

The beloved Olive-sided Flycatcher is of particular interest to conservationists because it has been declining throughout its range, including in the Northeast. According to the Breeding Bird Survey, its *quick-three-beers* song is fading in its northern boreal habitat, including Vermont's coniferous forests. In this round of the Vermont atlas, atlasers have found this species on only seventeen priority blocks so far, compared with eighty-five blocks in the first atlas (Figure 3).

Results from the second Vermont Breeding Bird Atlas cannot come too soon. Regional planning efforts are currently underway to develop comprehensive wildlife plans for many taxonomic groups, including birds. The plans will be revisited and revised based on new information, and planners are looking to the atlas to help guide this process for the avifauna in the state.

Rosalind Renfrew is headquartered in Woodstock at the Vermont Institute of Natural Science, where she is Director of the Vermont Breeding Bird Atlas. In addition to the many monitoring and survey projects that she has participated in, both in Vermont and Wisconsin, she serves as the Principal Investigator for the Bobolink Wintering Ecology Project. She is working with collaborators in Paraguay, Bolivia, and Argentina, with the ultimate goal of determining how to best conserve Bobolink wintering habitat. She also serves as Co-chair of the Vermont Bird Records Committee.

Come to Vermont for a weekend!

Atlassing provides a great excuse to escape the bills, the laundry, and the leaky sink and go out birding instead. Even if you can only come up for a weekend or two, Vermont needs experienced birders to lend a hand in order to complete the atlas. If you're interested in attending a "blockbusting" weekend in the Northeast Kingdom, or would like to take on a Vermont block closer to home, please contact Rosalind Renfrew at rrenfrew@vinsweb.org, or 802-457-1053 X127. Visit the atlas website to learn more: http://www.uvm.edu/vbba.

J. A. Allen: The Shy and Retiring Giant

William E. Davis, Jr.

Joel Asaph Allen, who always signed his manuscripts J. A. Allen, was a truly remarkable man. Shy and retiring to the point of disability, suffering from debilitating long-term illness for much of his life, born into humble surroundings, and with a father who expected him to spend his life taking care of the family farm, it is difficult to believe that he became one of the most influential theoretical biologists of the late nineteenth and early twentieth centuries, with an international reputation and influence—a true intellectual giant. He became the dominant figure in North American ornithology and was a premier mammalogist as well. He is referred to by Frank M. Chapman and Witmer Stone, both significant figures in North American ornithology, as "Father of the American Ornithologists' Union," for more than a century the premier ornithological organization of the Western Hemisphere (Chapman 1927; Stone 1921).

J. A. Allen was born in 1838 in Springfield, Massachusetts, raised by puritanical parents on a farm a half mile from the nearest neighbor, and educated in the traditional red schoolhouse a mile from home. His father had no interest in natural history, but his mother apparently understood the inclinations that developed in Allen by his early teenage years, and she provided sympathy and influence on his behalf. Allen acquired his first gun at age thirteen and soon was absorbed in the collection of the local bird species, as was the custom of the times. We see a glimmer of what he was to become, however, in words from his autobiography [all unreferenced quotes are from Allen 1916]: "Warblers, vireos, kinglets, sparrows and many other kinds of birds were shot, measured, weighed, described and given provisional names...I made attempts to draw and color them..." This quantitative approach is the harbinger of a scientist, not a hobbyist. Then followed a series of fortuitous acquaintances that served to shape his early life and ultimately launch him on what would be a most influential career. An art teacher, Bradford Horsford, was an amateur ornithologist and taxidermist who sold Allen a copy of the Brewer edition of Alexander Wilson's American Ornithology, and the young boy soon discovered books by Thomas Nuttall and Audubon in the Springfield public library.

Allen's obvious ability and academic interests quickly put him into a class by himself at the district school, and he spent several winters at Wilbraham Academy, where he chose an eclectic group of subjects which included physiology, natural philosophy, botany, chemistry, astronomy, rhetoric, algebra, French, and German. In the summer, his free time was severely limited by his farm duties, but he managed to learn by reading about geology, mineralogy, and meteorology. Clearly, a man of extraordinary intellect and ambition was developing. He practiced writing by keeping a daily journal and developed the goals of writing about the birds of New England, and doing editorial work. Oliver Marcy, his teacher in the natural sciences, became his mentor and submitted one of Allen's compositions — a summary of three months from his weather journal — to the *New England Farmer*, which published both it and

a series of subsequent articles on the same subject. This was in 1858 when Allen was twenty years old. The following year the New England Farmer published a series of twenty-five of his articles on New England birds. J. A. Allen was on his way to a writing career that spanned nearly six decades. He already had developed a critical scientific attitude, dispelling popular myths about the influence of the lunar cycle on various agricultural practices. From 1859-1861 he skinned and mounted some 300 birds of nearly 100 species, many mammals, and made pickled collections of fish, amphibians, and reptiles, along with displays of mollusks and insects, rocks and minerals — all resulting in a veritable museum. He was later to write: "The whole was amateurish in the extreme, and represented merely a superficial acquaintance with a wide range of subjects, but enough to aid immensely to the pleasure of living, giving, as it did, the sense of being in touch with the plant and animal life and the geological features of my immediate environment." Allen had become a broadly educated naturalist by the age of twenty-four, but the intensity of his physical labor on the farm combined with long hours spent on his natural history subjects affected his health, and he began periods of semi-invalidism that were to plague him throughout life. Family financial difficulties prompted him to sell his museum to Wilbraham Academy and use the money to support himself at the school.

At Wilbraham he befriended William Harmon Niles, a nephew of his mentor Oliver Marcy, and when Niles made application to the Lawrence Scientific School in Cambridge to become a student of Louis Agassiz, Allen decided to do the same. Hence, in 1862, at the age of twentyfour, J. A. Allen moved to Cambridge and joined the mainstream of North American science. Along with laboratory work with Agassiz, Allen was to take lecture courses with, among others, Jeffries Wyman in comparative anatomy and Asa Gray in botany. Agassiz never could bring himself to believe in the evolutionary principles of Charles Darwin — a retrospective blot on an otherwise sterling record in science but Asa Gray became the major North American defender and advocate of Darwinian evolution, and it is probable that he influenced Allen in that regard. Allen became part of the swirl of intellectual atmosphere that Agassiz generated, an atmosphere which drew notables in all fields of science to the museum and laboratories. Here Allen worked and conversed in German with the eccentric



A young J. A. Allen. Photograph courtesy of the Ernst Mayr Library, Harvard University.

preparer of fish skeletons — a heady world for an ambitious and brilliant young man. He was given a group of corals to study and told to discover their patterns of growth and laws of development — "a trial of persistence" and a study in "learning to observe," the pedagogical method of Agassiz. His health deteriorated, with serious eye problems following a bout of measles. He nevertheless persisted in his work, spending the summer on the family farm: "Although in wretched health, suffering from chronic indigestion as well as from weak eyes, I collected over four hundred specimens of animals, chiefly vertebrates, and largely birds, besides taking a share in the farm work." For the next two and a half years Allen worked at the Agassiz Museum of Comparative Zoology (MCZ) cataloging the bird collections and spending his summers on the farm collecting for the museum.

Collecting expeditions and the MCZ collections

When Allen took over the bird and mammal collections at the MCZ, there were fewer than 3000 bird specimens, and the collection was not of national significance — Agassiz had not wanted to compete with other museums in all taxa. But Allen was to expand the collection greatly, partly through purchase and donation, and by major collecting efforts as well. Allen's first large-scale collecting expedition was with Agassiz to Brazil in 1865. As they sailed south, they could see the smoke from the battle of Richmond in the closing phases of the Civil War. The trip into the wilderness involved a cavalcade of fourteen mules, followed by travel in a fifty-foot dugout canoe, and it featured several close scrapes with shipwreck and disaster. Not unexpectedly, Allen was sick during the entire trip, and the collecting trip route had to be modified to accommodate him. Arriving at the port with eight mules carrying his specimens, Allen found his local contact gone and hence, "I was thus received as a stranger, and as my funds had become exhausted, and I was seriously ill, the outlook was not exhilarating." He was fortunately befriended by a Gloucester, Massachusetts, ship captain who arranged for him and his collected specimens to sail home. The trip home was, however, far from uneventful — a major storm off Cape Hatteras forced the damaged ship to sail to St. Thomas for repairs, and turned a month-and-a-half trip into three. Allen and his colleagues brought back an impressive 1400 specimens (Barrow 1995). Frank Chapman, commenting on the dangerous conditions faced by Allen, said, "The present day naturalist, who travels in palatial steamers or follows well-worn trails has but faint conception of the discomforts of a 90-day voyage in a small sailing vessel, and perhaps never experienced the risk of being himself collected" (Chapman 1922).

In 1867 Allen collected in Illinois, Iowa, and other parts of the Middle West, and then returned to resume his duties at Agassiz's Museum of Comparative Zoology (MCZ) at Harvard, where he remained until 1885, as Assistant in Ornithology and, later, as Curator of Birds and Mammals. In 1868 and 1869, Allen collected in eastern Florida, where, "Parakeets were still abundant, and alligators had almost undisputed possession of the bayous and river banks."

In 1871-1872, Allen spent nine months collecting in the Great Plains and Rocky Mountains, in a time when camping was a bit on the rough side: "The experience was

one long to be remembered, as we took no camp outfit but our blankets, a little flour and canned fruits, depending naturally upon buffalo meat for our main subsistence, buffalo chips supplying us with fuel." Marauding Indians were also a problem. The trip was most successful, however, with 1500 bird skins, 100 preserved in alcohol, and many nests and eggs added to the MCZ collections, along with a substantial collection of mammals. In 1873 Allen joined a Smithsonian Institution expedition, organized by Spencer Fullerton Baird, to accompany the army and engineers for a survey of the Northern Pacific Railway route. The expedition included 1400 troops with General George A. Custer in command, and hostile Indian attacks forced abandonment of bird collecting for several weeks; 60 miles north of the Little Bighorn (where Custer three years later met his Waterloo) the troops had a major engagement with Sioux Indians with substantial loss of life. Collecting birds for a museum in those days was challenging, to say the least. Allen summed up the experience: "To me it was an experience of great value from the naturalists' point of view, and one I have never ceased to recall with much pleasure for its personal associations and its dash of military flavor."

Ill health prevented further major expeditions, but while Allen was recuperating from pleurisy in Colorado in 1882, he managed six weeks of bird collecting with his friend William Brewster of Cambridge and the MCZ. By the time that Allen left the MCZ for the greener pastures of the American Museum of Natural History in New York, the MCZ collection of birds had grown to 33,000 mounts, skins, skeletons, and specimens preserved in alcohol (Barrow 1995). Allen also promoted the MCZ and improved its stature through his extensive publications on birds and mammals. He also initiated the first course in scientific ornithology offered at any major university, although his shyness and resulting failure as a public speaker combined with low student turnout served to convince him that the course was a failure, and he gave less than half of the scheduled lectures. He never attempted formal teaching again.

The Nuttall Ornithological Club

The Nuttall Ornithological Club (NOC), the oldest organization in North America devoted to ornithology, was founded in Cambridge in 1873 by an extraordinary group of nine boys with an average age of twenty-two (Davis 1987). In 1876, C. J. Maynard, editor of the NOC's new *Bulletin*, proposed J. A. Allen for membership. This proved to hold an ironic twist since Allen would replace Maynard, who had gone on an extended collecting expedition to Florida, as editor-in-chief of the *Bulletin* later that year, an event that led to Maynard's resignation from the Club (Batchelder 1937). Allen was thirty-eight years old, much older than most other NOC members, and had been publishing scientific papers on birds for sixteen years. He was thus held in awe by most of the NOC membership, and when problems with editorship of the *Bulletin* arose he quickly stepped into a leadership role, accepting the editorship — called by Batchelder (1937), "...the most important action the Club has ever taken." He recruited as associate editors George N. Lawrence, Spencer F. Baird, and Elliot Coues, three of the most prominent North American Ornithologists, thus giving stature and prestige to the *Bulletin* and to the NOC.

Under Allen's guidance, the *Bulletin* of the Nuttall Ornithological Club became the premier journal of scientific ornithology in North America. As a major figure in science, he represented the Club on occasions where clout was important. Such an occasion arose in the winter of 1877-1878 when the NOC became embroiled in the "Sparrow War." The House Sparrow had been introduced into Boston to control "cankerworms," and the merits of this introduction were being fiercely debated. The NOC dedicated one of its meetings to a discussion of this introduction, and the consensus was unfavorable to the House Sparrow. An abstract of the arguments against the House Sparrow by J. A. Allen and others was published in local newspapers and drew a nasty editorial response that downgraded the Club and challenged the competence of its members. Allen responded with vigor and an acerbic tone. In a letter of March 17, 1878, to William Brewster, Allen discusses his impending response to the slanderous editorials: "Since your letter was written more abuse than ever has appeared — the last time as an editorial in the [Boston] Journal! This was too much for me and I could keep silent no longer." The major proponent of the House Sparrow, and the suspected author of the slanderous newspaper comments, was Thomas Brewer, a prominent Boston ornithologist who was officially, although not actively, a member of the NOC. In the same letter to Brewster, Allen states that he is going to try to get Brewer to admit to the authorship:

I have also today mailed a personal letter to Mr. B. charging him with the authorship of the Journal attack. I ask him...to authorize me to deny authoritatively from him that the current belief that he is its is [sic] author is erroneous! Farther than this, I shall not rest till a denial of all the base misrepresentations against the Club has been inserted in every Boston paper in which these slanders have appeared.

His letters soon appeared. He opens his remarks in one letter:

In consequence of the various false and injurious statements respecting the character of the Nuttall Club, which have recently appeared in this and other Boston newspapers, in which the Club has been referred to contemptuously as a body of Cambridge 'juveniles,' 'precocious boys,' 'over-modest youths,' and in other terms of similar import, I beg leave to state briefly in your columns just what the Nuttall Ornithological Club is.

He then outlined the national status of the *Bulletin* and the members of the Club, defended the competency of the evidence the Club members has amassed, the competency of the members themselves, and branded the editorial remarks as "gross misrepresentation" (Batchelder 1937). Allen's letters to the leading Boston papers were published and effectively won the Sparrow War for the Club. One didn't pick a fight with J. A. Allen and expect gentle treatment.

The American Ornithologists' Union

By 1883, things were not going well for the Nuttall Ornithological Club, with membership at fifteen and often not a quorum in attendance at meetings. A discouraged William Brewster, then president of the NOC, together with *Bulletin*

editor Allen and associate editor Coues, hatched a plan for founding a North American ornithological organization. They duly sent out invitations to prominent ornithologists for a seminal meeting at the American Museum of Natural History in New York. At that meeting the American Ornithologists' Union (AOU) was born, complete with bylaws, committees, the intent to publish a quarterly journal in ornithology, and a new president — J. A. Allen. Allan and Brewster apparently had ideas about the journal, and the following month the NOC voted to discontinue publication of its Bulletin and "offer the American Ornithologists Union our good will and subscription list — to place the 'Bulletin' in the Council of the Union, with the tacit understanding that the new serial of the Union shall be ostensibly a second series of the Nuttall 'Bulletin." Thus, The Auk was born, fully developed with a subscription list, format, editorial board, and editor — J. A. Allen. Allen remained editor of *The Auk* for twenty-seven years, during which time it became, with Allen's firm guidance, arguably the premier ornithological journal in the world. Allen also led the AOU through its first seven years as president, by which time it was thoroughly established as the premier ornithological organization of the Western Hemisphere. He maintained his influence within the AOU as member of the powerful Check-list Committee that established a standardized checklist of North American birds, providing for the first time a procedure and code for standardizing ornithological nomenclature, hitherto a hodgepodge of discordant bird names and checklists. Allen was the editor of the first three editions of the AOU's Check-list of North American Birds. The AOU code of nomenclature was to have far-reaching effects, becoming the basis for the International Code of Zoological Nomenclature that stabilized nomenclature worldwide. Allen was in the vanguard that led to prominence for the AOU internationally. Other AOU committees that were to produce important results included the committee on migration and geographical distribution of North American birds, whose work eventually led to the formation of the Biological Survey (now US Fish and Wildlife Service). The Committee on the Protection of North American Birds influenced the formation of the local and national Audubon societies and produced the "AOU Model Bird Law" which served as a model for laws in most states and provinces (Barrow 1998). Allen was influential in all of these endeavors — he was a man of broad vision and a capable politician.

On a local level, J. A. Allen was involved with the Boston Society of Natural History, serving on its Council for a number of years and for short terms as Acting Secretary and editor of its publications. He was also the Museum's Curator of Birds and Mammals. After Allen moved to New York in 1885 to become Curator of Birds and Mammals at the American Museum of Natural History (AMNH), he was active in the Linnaean Society of New York, serving as their president, and he served as vice president of the New York Academy of Sciences. At the AMNH, in addition to his curatorial duties, he was editor of the *Bulletin* and zoological series of the *Memoirs* for thirty-two years.

American Museum of Natural History

After the death of Louis Agassiz, his son Alexander became Director of the MCZ and began to de-emphasize collection building, presiding over a decline in the number



An older J. A. Allen at his desk. Photograph courtesy of the Ernst Mayr Library, Harvard University.

of staff. By 1885 financial considerations made the possibility of closing the museum a distinct possibility. J. A. Allen had to decide whether to remain with the MCZ and its uncertainties, take a job with the U.S. Geological Survey, or to accept the curatorship at the AMNH. It is clear that Allen had disagreements with many of the young Agassiz's policies. In a February 9, 1887, letter to William Brewster, Allen expresses his displeasure with Agassiz's desire to discard some specimens preserved in alcohol:

...in the case of the small mammals, while the number of specimens was in some cases large, the series was really of great value for monographic research. Mr. A. is a 'little off' on this subject of throwing away alcoholics, & I fear the distemper is chronic. His revered father, under whose explicit direction this valuable material was accumulated, would I fear rest uneasy in his grave could he know of the proposed sacrilege!

The feeling was apparently mutual, as Agassiz was clearly unhappy with the long absences that Allen had from the museum due to his chronic ill-health. Agassiz wrote a note on the bottom of Allen's resignation letter: "This is pretty cool considering the

treatment he received from the museum... [and for Allen] not to mention in any way that for 3 years he was kept drawing his full salary for doing nothing."

Allen's wife had died, leaving him to raise a three-year old son alone, which dissuaded him from taking a position with the Geological Survey that would require extensive field work, and so he took the opportunity to preside over a new department, Ornithology and Mammalogy at the AMNH (Lanyon 1995). Allen found the collections of birds and mammals meager — 1300 mounted mammal skeletons and skins, with virtually no study skin collection, and about 13,000 bird mounts, skins, and skeletons, mostly on display. In his first annual report Allen emphasized, "...the formation of adequate study collections, to serve as the basis for scientific research, was strenuously insisted upon in order to bring the department to a proper standard of efficiency." In 1887 he convinced the museum Trustees to purchase a collection of 12,000 bird skins of the George N. Lawrence collection, the Herbert Smith collection of 4000 Brazilian specimens, D. G. Elliot's collection of 2000 hummingbirds, Edgar Mearns' collection of 2250 Arizona birds, and an additional 500 specimens, for a grand total of 21,000 birds — not a bad year for acquisition. The ornithological collection had "suddenly been transformed from merely a show collection to one of impressive scientific importance." He also arranged for the acquisition of D. G. Elliot's ornithological library of 1000 volumes. In 1888, Frank Chapman was hired as an assistant, and by 1915 the Department had six assistants. Thus, Allen was able to pass on routine curatorial duties to others and turn his attention to scientific research — something that he was very good at. By 1915, the mammal collection had gone from 0 to 40,000 study skins. The bird collection had gone from a handful of study skins to more than 190,000, mostly from the Americas: "collectively they doubtless formed the largest and by far the most valuable collection of American birds yet assembled in any single museum." Allen had orchestrated the development of one of the finest bird research collections in the world.

Research and publications

J. A. Allen had a long and distinguished research career. He made seminal contributions to a broad spectrum of scientific disciplines that included ornithology, mammalogy, biogeography, evolutionary biology, and ecology. He published on conservation issues and made his thoughts known on a range of controversial subjects. His prolific writing is reflected in the more than 1450 titles in his bibliography. In *The Auk* alone, he published 643 scientific papers, notes, reviews, and obituaries (Chapman 1922). This prodigious output included 966 titles about birds, 271 on mammals, 134 in biography, 35 on nomenclature, 22 in biogeography, 22 on evolution, 5 on reptiles, and a few miscellaneous publications. He described or renamed three new genera of birds, 37 species, and a dozen subspecies, and was more prolific with mammals, naming 431 new species or subspecies.

His influence on taxonomy went far beyond the naming of new species. As previously mentioned, he was largely responsible for the stabilization of bird nomenclature through his dominant role on the AOU Check-list Committee and internationally through his ten years on the International Commission on Zoological

Nomenclature. Further, he was one of the leading figures in the establishment of a trinomial system for naming geographic races or subspecies in North American birds and was instrumental in convincing his European colleagues, who were slow to accept the idea. In an early paper he states:

The next step...will doubtless be the general adoption of a trinomial system of nomenclature for the more convenient expression of the relationship of what are conventionally termed 'sub-species'... The system is already, in fact, to some extent in use here, though looked upon with strong disfavor by our transatlantic fellow-workers, who seem as yet not fully to understand the nature of the recent rapid advance ornithology has made in this country, or to appreciate the thoroughly substantial nature of the evidence on which it is based (Allen 1876).

He also realized that the naming of subspecies could be dangerous through the unjustified naming of vast numbers of subspecies. He wrote, "Only the exercise of due discretion can prevent the reduction of 'our beneficent system of trinomials' to an absurdity. It is much easier to name a dozen new species or subspecies than to get rid of one, though erected on a false basis" (Allen 1890).

Although he supported a somewhat neo-Lamarckian view of evolution that envisioned, for example, evolution of new species by direct climatic influence— "climatic modification" — a view that was dominant in North America up to the time of the 'new synthesis' of the 1940s and 1950s, he nonetheless understood and wrote about many of the fundamental principles of evolution, including isolation of populations as a factor in evolution, the importance of reproductive isolation in defining a species, and the subspecies as important to the evolution of species (Allen 1890, 1905).

Allen was a conservationist who understood the fundamental problems that wildlife faced and wrote extensively about conservation issues. He was one of the early proponents of raptor conservation. He saw habitat destruction as a major conservation issue:

Man's destructive influence is to some extent unavoidable, but in far greater part selfish and wanton. The removal of forests, the drainage of swamps and marshes, the conversion of wild lands into farms, and the countless changes incident to the settlement of a country, destroy the haunts and means of subsistence of numerous forms of animal life, and practically result in their extermination over vast areas. The birds, particularly the larger species, suffer in common with vertebrate life in general. Electric-light towers, lighthouses, and light-ships are also a fruitful and modern source of disaster, particularly during their migrations... (Allen 1886a).

He knew that ultimately public opinion was important: "Here and there bird protective associations are being formed, and more care is taken to secure proper bird-protective legislation; but the public at large is still too apathetic, or too ignorant of the real state of the case, to insist upon, and support by proper public sentiment, the

enforcement of legislative acts already on our statute-books" (Allen 1886a). When J. W. Langdon of Cincinnati gave a talk and eventually published an article (1888) arguing that the millinery trade had only a negligible impact on songbirds, and the destruction of herons, gulls and terns didn't matter much, J. A. Allen again responded:

Until recently the only discordant notes heard [about the work of the Audubon Societies in bird protection] from any quarter were the subdued mutterings of a few reprehensible taxidermists, caterers of the milliners, whose pockets were affected by the movement in favor of the birds....Like some of our astute congressmen, he [Langdon] took the precaution to 'revise' his paper before it was printed, removing many of its grossest absurdities; leaving, however, enough to disgust the intelligent ornithologists throughout the country, yet presenting so plausible an aspect as to be misleading to the general reader, unable to detect the false premises, misstatements, and misrepresentations of which it is mainly composed (Allen 1886b).

He did, however, defend scientific collecting — not surprising for a man who made his living as a museum curator and scientist — and reacted strongly when anyone spoke harshly of collectors. Such was the case when John Burroughs suggested in print that ornithologists were an enemy of birds and "...should be put down, either by legislation or with dogs and shotguns." Allen responded:

[Burroughs article] ...is for him at least an unfortunate production, being surprisingly weak on the score of intelligence, to say nothing of good taste. It is grossly erroneous in statement, slanderous in spirit, and betrays a degree of ignorance and a narrowness of vision on the part of this well-known writer....While intelligent criticism is generally welcome, and usually beneficial, an ignorant tirade is unquestionably harmful, even to the cause it is intended to promote (Allen 1886c).

It didn't pay to rile J. A. Allen. For a gentle man, he could certainly be a harsh critic.

J. A. Allen is considered the foremost biogeographer of the latter third of the nineteenth century, and "could easily be called the 'father of American avian biogeography" (Vuilleumier and Andors 1995). Biogeography, the description of distribution patterns of animals and their causal analysis, was one of Allen's favorite fields of study for both mammals and birds. One result of his biogeographic studies is "Allen's Rule" that states that, for an animal with a broad latitudinal distribution, individuals in colder parts of their range will have proportionally shorter extremities than individuals in the warmer, e.g., individuals of a bird species that live in colder climes should have shorter, less robust bills and legs. The explanation for this rule is that shorter extremities would be advantageous for heat retention and thus are selected for in animals that live in colder climes. Allen made numerous contributions to the understanding of how climate affects the distribution of animal species. His paper "Mammals and Winter Birds of East Florida" (1871) is a classic that set forth the theoretical principles of the geographic distribution of birds in North America and won him the Humboldt Scholarship of the Lawrence Scientific School.

Allen the man

J. A. Allen was revered by his colleagues. Frank Chapman, who worked with Allen for decades at the AMNH, states:

Doctor Allen's distinguishing characteristics as a man were modesty, sincerity, unselfishness, goodness, consideration for others, and a purity of mind.... I do not recall ever hearing him speak ill of another, but he was unsparing in his condemnation of careless work... I have seen him treat with fatherly kindness a man whose theories he had subjected to fatally destructive criticism (Chapman 1927).

Clearly, he was a very nice person, but you wanted to make sure that your science was in good order.

Allen was an almost pathologically shy individual. He never received a degree from the Lawrence Scientific School, despite all his years with Agassiz, because of his shyness, and thus his doctorate was an honorary Ph.D., given him in 1886 by Indiana University where David Starr Jordan was then president. In his own words:

From early boyhood I was painfully embarrassed in the presence of strangers. Later in life attempts to present papers verbally before scientific societies were always unsatisfactory and often failures, not from lack of familiarity with the details of the subject but from embarrassment. The same timidity prohibited my seriously considering teaching as a possible means of raising funds to aid in meeting the expenses of an education, or of giving public lectures for the same purpose, as many of my associates at the Agassiz Museum were doing, with both pleasure and profit. The ordeal of an examination for a degree at the Lawrence Scientific School at Harvard was sufficient to banish all aspiration for such honors.

He was embarrassed about publishing an autobiography while he was still alive, but did so at the request of Henry Fairfield Osborn, President of the American Museum of Natural History and thus his boss. William Brewster, who remained a lifelong friend, sent him a letter in which he lauded the publication, and Allen's discomfort and relief are clearly stated in his reply to Brewster in January 4, 1917 letter:

I cannot fully express to you my deep appreciation of your kind letter of yesterday. It has cheered me up amazingly and does much to relieve — indeed almost completely banishes — the many misgivings I have had for several months past over giving out to the world so confidential an account of myself as has now appeared in the 'Autobiographical Notes.' Your approval would have been greatly valued, your hearty commendation rejoices my heart, for I have the greatest confidence in your judgment regarding such a delicate matter.

Frank Chapman summed up Allen's legacy:

For more than three score years and ten he had dedicated himself to the study of nature and he has left to the world the fruits of his labors, a marvelous record of achievement, and an inspiring example of pure, unselfish devotion to the cause of science.

A fitting epitaph for the gentle giant of science. 🖈

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- William E. Davis, Jr. (Ted) is Professor Emeritus at Boston University where he taught biology and natural science for thirty-eight years. He is an ornithologist with research interests in foraging ecology and the history of ornithology, specializing in Australian birds. He is past president of the Nuttall Ornithological Club, the Association of Field Ornithologists, the Wilson Ornithological Society, and Bird Observer of Eastern Massachusetts, Inc. An accomplished artist as well, Ted is the Department Head for cover art for Bird Observer.

Alexander Skutch Remembered

Elissa Landre

On May 12, 2004, Dr. Alexander F. Skutch passed away peacefully at his home in Costa Rica. He leaves the legacy of over forty books and hundreds of scientific articles.

Early in his scientific career, after changing focus from botany to ornithology, the Chapman Fund of the American Museum of Natural History gave Dr. Skutch a grant with which he studied Resplendent Quetzals in Costa Rica. He spent a year living alone in the forest carefully observing and recording the details of the birds' lives. Later, his wife Pamela and adopted son Edwin contributed their observations and became partners in his fieldwork.

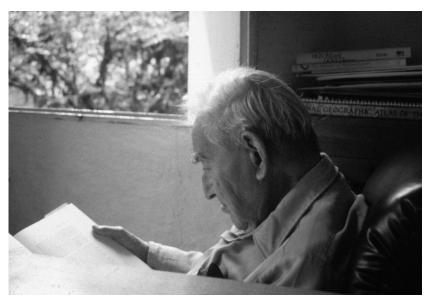
He lived intentionally, simplifying his life so that he could make choices that were consistent with his philosophy. He built his home, farmed the land for his food, and studied the birds that lived on the farm. He never had a telephone, only recently had indoor plumbing, and when his wife Pamela's health declined in the past few years reluctantly installed electricity. He was a vegetarian who preferred not to wear clothes using leather, although his reverence for life was not universal. He killed the snakes that threatened his beloved songbirds on his property and was not fond of birdeating raptors.



Dr. and Mrs. Skutch. Photograph by Elissa Landre.

For many years, Mass Audubon tours to Costa Rica stopped in Quizzara, a little town outside San Isidro del General, five hours' bus ride from San Jose. That's where Alexander and Pamela Skutch lived in the home they built on their farm, Los Cusingos. Their farm was a mecca for scientists and naturalists who had read Skutch's books. A Naturalist on a Tropical Farm describes the Skutches' lives and work in Costa Rica and introduced many nonscientists to the nature of the tropics. The Skutches always greeted visitors warmly, inviting them to sit on the porch of their home overlooking fruit feeders. As Dr. Skutch discussed his work on bird behavior, including the pioneering ideas about helpers at the nest. visitors tried hard to focus on the conversation. while being distracted by many colorful tanagers and honeycreepers visiting the feeders on the lawn.

While Dr. Skutch had not left the country in recent decades, he maintained an active correspondence with scientists all over the world, responding with letters typed



Dr. Skutch reading at Los Cusingos. Photograph by Elissa Landre.

on his manual typewriter. One could not expect a fast reply since there was no postal delivery to Los Cusingos, and a two-month lag between letter and response was not uncommon. Many correspondents never actually met Dr. Skutch. I met the late Dr. Donald Griffin a few years ago on Cape Cod and learned that he had corresponded with Dr. Skutch for years and had hoped one day to meet him, but never did.

In 1998 the Association of Field Ornithologists and the American Birding Association met with the Costa Rican Ornithological Association in San Jose. It seemed fitting to honor the scientist who had put ornithology in Costa Rica on the world map, so the Alexander F. Skutch Award for excellence in ornithology was established. Pamela and Alexander made the five-hour trip to San Jose, staying for the first time in a hotel that used keycards. At the culminating banquet, Alexander presented the first award to Dr. F. Gary Stiles of Colombia. Stiles, together with artist Dana Gardner, was coauthor with Skutch of the *Birds of Costa Rica*.

After the banquet, Dr. Skutch told me he had planned to leave his money to the American Museum of Natural History because he had been the recipient of a Chapman Fund award and wanted to establish a similar fund. Because the Association of Field Ornithologists had honored him, and because of their focus on field ornithology, he had changed his mind and decided A.F.O. would be a more appropriate organization to administer his funds. In 1999 the Pamela and Alexander F. Skutch Fund of the A.F.O. was established. The purpose of the fund is to provide grants that support life history studies of little-known neotropical birds, especially their reproductive biology and behavior, with minimal disturbance to the birds. In short, Dr. Skutch wanted to encourage researchers who would follow in his tradition,

the type of study for which very little money is currently available, especially in Latin America.

The Fund he established may give up to \$10,000 annually and to date has supported a Peruvian studying the life history of a newly described antbird (*Percnostola arenarum*), a Colombian studying suites of Andean birds, and a Brazilian observing the life history and reproductive biology of the Restinga Antwren (*Formicivora littoralis*) on the island Cabo Frio.

The measure of Skutch's influence was most visible in the coverage of his passing away on May 12, 2004, a week short of his one hundreth birthday. Comprehensive obituaries appeared in Costa Rican newspapers as well as the *Boston Globe, New York Times, Los Angeles Times, Seattle Times*, and *Irish Times*, and a lengthy interview was broadcast on National Public Radio. He was buried on his farm. Los

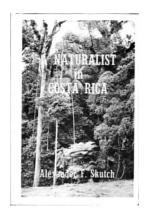


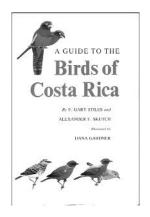
Dr. Skutch at the window of Los Cusingos. Photograph by Elissa Landre.

Cusingos, which is now owned and administered by the Costa Rican Tropical Science Center. They plan to turn his former home into a museum of his life and work.

For more information about the Pamela and Alexander F. Skutch Fund, including applications and deadlines in English, Spanish and Portuguese, please visit the Website of the Association of Field Ornithologists at http://www.afonet.org.

Elissa M. Landre is chair of the Skutch Fund Committee, past president of the Association of Field Ornithologists, and director of Mass Audubon's Broadmoor Wildlife Sanctuary in Natick, MA.





ABOUT BOOKS

Some Natural History History

Mark Lynch

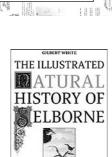
The Rarest of the Rare: The Stories Behind the Treasures at the Harvard Museum of Natural History. Text by Nancy Pick and photographs by Mark Sloan. 2004. HarperCollins Publishers Inc. New York.

The Illustrated Natural History of Selbourne.

Gilbert White. 2004. Thames and Hudson. London.

"I seldom go into a natural history museum without feeling as if I were attending a funeral." John Burroughs, American essayist and naturalist.

I confess openly to having been a natural history geek as a child and a teen. Now I fully embrace the often-derogatory moniker "geek," wear the title proudly, and fully own up to everything it implies. But in high school it was quite another thing entirely. While other adolescents were out playing football, listening to the Beatles, sipping their first brew, and getting to



The RAREST of the RARE

second base with that field hockey player, I was wandering the dark, over-stuffed galleries of the Museum of Comparative Zoology in genuine rapture and awe. To bear witness to that overwhelming diversity of life past and present that was on display there was to experience the nirvana of natural history and evolution. Yes, I achieved satori while staring at the articulated bones of a kronosaurus and contemplating a tall jar of tapeworms.

But exciting as it was, shuffling through those museum galleries with the creaking wooden floors and sleepy guards was not enough for me; I needed to see some of those wonders of life for myself. So I took my passion for the natural world out of the museum and spent as many hours enjoying wildlife firsthand along the banks of the upper Charles River where I lived. Even in that most urban of riparian wilds, monstrous antediluvian snapping turtles could be found lumbering out of the water to lay eggs, and I could be dumbstruck by the last runs of spawning smelt and herring.

Years passed. I left Watertown, and I learned that playing Frisbee, listening to Jimi Hendrix, and imbibing in substances other than brew while having a wild affair with a theater arts major was a helluva lot more fun than anything that went on with those other jocks in high school. Still, despite the veneer of being hip that came with reaching adulthood in the late 60s, I was definitely still a nature geek at heart, and (no surprise!) I still am today. It was that particular combination of experiences in both a museum and in the field that made me the passionate natural historian that I am today.

Recently, two books have been published that celebrate these two focuses of interest for the naturalist: the collection of a great museum, and the joys of nature found in your local patch.

For the slice of time they preserve in human events, we visit battlefields and historical monuments. For panoramas of contemporary life-forms, we travel to zoos, botanical gardens and wildlife reserves. For knowledge of science and the humanities, we go to libraries and art galleries. And for all of the above, we visit natural history museums. Edward O. Wilson, in his introduction to *The Rarest of the Rare*.

The passion for assembling and exhibiting unique collections of oddities dates back to the tradition of the Wunderkammer [German for "wonder cabinet"] in the 16th and 17th centuries. Rich collectors would finance expeditions to exotic and far-flung locales of the newly explored globe, ventures charged with bringing back the most unusual skins of birds and mammals, odd-looking insects, and strange formations of minerals. The creatures that were the most rare, and the most bizarre, were those the most cherished, especially if no one else owned something similar. These "objects de nature" would not be exhibited in any systematic fashion, but arranged "aesthetically" in odd groupings, all the better to inspire awe and wonder in the viewer (and hopefully a bit of jealousy for the wealth and connections of the collector too). The purpose of these collections was not to further understand nature, but rather to gaze in bewilderment at all the arcane forms nature took. Even human anatomical specimens were given this artistic treatment. Nothing spoke of a patron of the arts' power and intellect better than exhibiting a surreal assemblage of organs, skeletons, and calculi preserved by Dutch anatomist and artist Frederick Ruysch. He used bits of preserved fetuses, organs, and even other creatures to create original sculptures that often had a "memento mori" moral to them. One of Ruysch's pieces included a skeleton playing a fiddle made of a sequestrum [fragment of dead bone separated from healthy bone as a result of an injury or a disease], with the bow made from an injected and preserved artery. In another piece, a uterus, complete with illegitimate fetus was displayed with the label: "Fish may be found in pools where one least suspects them."

With the coming of the Scientific Revolution and the taxonomy of Linnaeus, these collections of oddities became organized along more systematic schemes and were more often associated with leading universities. Harvard University's first scientific collection began in the 1790s, when it established its Mineralogical Cabinet. In *The Rarest of the Rare*, journalist and staff writer for the Harvard Museum of Natural History, Nancy Pick recounts the highs and lows of the long history of this venerable institution and the gradual amassing of its collection of twenty-one million specimens of "animal, vegetable and mineral—from every imaginable part of the earth" (p. 7). This is not a dull story by any means, and the history of the Harvard Museum includes several downright strange events like a horrifying murder with dismemberment and an amusing, but deadly serious, living frog toss off the museum roof. It was Louis Agassiz who arrived at Harvard in 1848 with his "grand vision" to turn Harvard's collection into a world-class museum. As Pick points out, though

Agassiz was a raving anti-Darwinist as well as a racist, his importance to the history of the museum cannot be overstated.

The Harvard Museum seems to have been a family interest. Louis' son, Alexander, was a philanthropist and oceanographer and, unlike his father, an acceptor of Darwin's theories. It was Alexander who, in the late 1800s, helped to really modernize the exhibitions at the museum, arranging specimens according to geographical regions or geological time periods. A photograph in the book of the museum from 1892 demonstrates Alexander Agassiz's new designs of the galleries and shows a room with a wonderful papier-mâché Giant Squid swimming over the exhibit cases. This photograph elicited a deep feeling of nostalgia in me because this was the museum I grew up with.

It seems surprising, but it was the 1953 discovery of the structure of DNA that led to a period of decline of the museum. The focus of the university became molecular biology, and the idea of a dusty collection of long-dead creatures seemed quaint and quite beside the point. After all, what can some moldy bird skin tell us, when we can now peer into the very genetic structure of that same bird? This shortsighted attitude only changed in the 1980s when professors like Edward O. Wilson began expounding on the importance of biodiversity. Like a veil lifting, it was realized that those millions of skins and specimens held the genetic history of life on this planet. The collection has thus become a treasure-trove for modern taxonomists seeking to trace the genetic links between species and better understand evolution and distribution of species. Finally, in the 1990s, a decision to make the public mission a priority brought the museum into the 21st century, and this has encouraged many more new visitors to enjoy the grand tapestry of life on earth that the Harvard Museum has on display.

The real purpose of *The Rarest of the Rare* is not to just recount the Harvard Museum's colorful history, important and interesting as that is, but rather to expose to the light of day some of the real oddities that are tucked away in this vast collection, the bulk of which the public never sees. As Pick puts it:

Behind every specimen in this book is a good story. There are tales of wealthy explorers, obsessive collectors, bone hunters, mushroom seekers, and visionary scientists. The specimens themselves are immensely varied and appealing. They come from the farthest reaches of the globe, the deepest depths of the sea and even outer space. Some are beautiful (the tanagers, the gold). Others are intriguing (the dodo skeleton, the fossil of the gigantic dragonfly wing). Others are heartbreaking (the wolf pelt, the extinct butterfly). And still others are simply strange (the tapeworms from the digestive tracts of upper-crust Bostonians, the birdwing butterfly collected by a man later eaten by cannibals (p. 33).

Mark Sloan has sumptuously and lovingly photographed each of the specimens chosen for this book. Each photograph is accompanied by a lively text from Nancy Pick. Best of all, Pick has chosen some very entertaining specimens for the reader to behold. What birder can resist gazing at the delicate skin of the now extinct Mamo of

Hawaii taken on Captain James Cook's third and final voyage? Another section shows the namesake specimen of Lewis's Woodpecker taken in 1806 by Meriwether Lewis himself on the Clearwater River in what is now Idaho. Yes, the woodpecker is a bit the worse for wear, but imagine how it got here? In these pages are Great Auks, Carolina Parakeets, and an egg of the Elephant Bird. E.O. Wilson's vast but orderly holdings of neatly pinned ant specimens (to date he has named 337 species) vie for the reader's attention with author Vladimir Nabokov's more folksy and personal, but equally obsessive, collection of the genitalia of butterflies. (The author of *Lolita* claimed the minute genitalia were the only safe way to separate specimens of blues.) Here's a shell named after a Fanny, there a mastodon involved in a murder. On one page an extinct skink, on another Asa Gray's nemesis flower. There are fossil butterflies, giant turtles, and even magic mushrooms. You read this book like you visit the Harvard Museum: dashing from one display case to the next to see what new wonder you will find.

The Rarest of the Rare brings back some of the giddy sense of awe and wonder that spectators felt during the golden age of the *Wunderkammer* and combines it with a serious appreciation of a collection of the utmost scientific interest. Pick and Sloan have created a deeply entertaining celebration of an important chapter in the long and often odd record of scientific natural history.

To a person uninstructed in natural history, his country or sea-side stroll is a walk through a gallery filled with wonderful works of art, nine-tenths of which have their faces turned to the wall. Thomas Henry Huxley.

In the mid-1700s an unassuming Reverend living in the secluded and quiet English village of Selbourne wrote a book that has been remarkably influential to birders in England today. Natural historian James Fisher has described the Reverend Gilbert White as "the man who started us all birdwatching." John Eyre, in a recent issue of *British Birds*, describes the importance of this book:

There are few natural history books that can be described as classics, but Gilbert White's *The Natural History of Selbourne* surely ranks as one of the finest. Since its publication in 1789, it has rarely, if ever, been out of print and has appeared in almost 300 editions and reissues, qualifying it as one of the most published books in the English language (*British Birds* [97], July 2004, p. 360).

Though it is likely that any serious British birder knows this book well, it is a safe bet that most of you on THIS side of the Atlantic are scratching your collective heads at the moment mumbling something like, "Selbourne, where's that?" It's sadly true that many important books written in other countries, especially those that have a local flavor, have not been well received here. I would like to make a case that *The Illustrated Natural History of Selbourne* is an internationally important natural history book that deserves a wider American audience.

The Oxford-educated Reverend Gilbert White (1720-93) lived most of his life in the tiny rural village of Selbourne in Hampshire, England. Though he did travel somewhat, he suffered horribly from what was called "coach sickness" in those days, and this restricted the amount of traveling he could do. A fortunate consequence of this pre-Dramamine malaise is that this encouraged him to look more closely at the area around his own neighborhood.

All the White brothers had a real interest in natural history, especially his brother Benjamin, who was a bookseller and publisher. Benjamin also traveled extensively and would send Gilbert his observations of migrants from abroad. In addition, Benjamin's business put him in close contact with notable natural history authors of the day, and Benjamin in turn would put them in contact with Gilbert. In this way, the Reverend White built up a number of close correspondents to whom he could forward his observations of the natural world in Selbourne. The ensuing discussions helped to put those observations into a broader perspective. Two of these correspondents were the lawyer/naturalist, the Honourable Daines Barrington, and the famous zoologist, Thomas Pennant. Barrington had invented a form diary for nature notes called *The Naturalist's Journal*, and he gave one to Gilbert White. White kept this journal until his death and used these recorded observations as the basis for extensive letters to Pennant and Barrington. It was these letters that became the foundation for the book *The Natural History of Selbourne*.

The book was finally published in 1789 as *The Natural History and Antiquities of Selbourne, In the County of Southampton: with Engravings, and an Appendix* in two parts. The first part, consisting of the natural history letters, was always more popular than the second part, a parish history of antiquities. The antiquities section was dropped from later editions of the book.

Through reading *The Natural History of Selbourne*, the world of the bucolic countryside of 18th century Britain comes alive in wondrous and meticulous detail. White is revealed to the reader as an enthusiastic, consistent, and careful observer of the natural world in his own backyard. He was a firm believer in fieldwork and firsthand observations of nature and had little patience with naturalists who remained locked up in museums poring over their collections of skins.

Faunists, as you observe, are too apt to acquiesce in bare descriptions, and a few synonyms: the reason is plain; because all that may be done at home in a man's study, but the investigation of the life and conversation of animals, is a concern of much more trouble and difficulty, and is not to be attained but by the active and inquisitive, and by those that reside much in the country (p. 129).

White was passionate about observing the behavior of animals and was especially interested in bird migration. This was at a time when extremely little was understood about where birds went in the winter. Though White believed most birds did migrate south and out of Selbourne, he still held on to the ancient idea that swallows hibernated in the mud under ponds. Throughout his letters, you can see him struggling with trying to figure out what is really happening to certain species as the seasons change. He includes charts of the first dates in the year that migrant species appeared in Selbourne as well as complete details of those species that stayed to breed, and in

what habitat. White was fascinated by every aspect of a bird's habits and how those behaviors differed from other similar species.

I have discovered an anecdote with respect to the fieldfare (*turdus pilaris*), which I think is particular enough: this bird, though it sits in the trees in the daytime, and procures the greatest part of its food from the white-thorn hedges; yea, moreover, builds on very high trees; as may be seen by the *Fauna Suecica* ["Swedish Zoology" written by Linnaeus in 1746]; yet always appears with us to roost on the ground. They are seen to come in flocks just before it is dark, and to settle and nestle among the heath of our forest. And, besides, the larkers, in dragging their nets by night, frequently catch them in the wheat stubbles; while the bat-fowlers, who take many redwings in the hedges, never entangle any of this species. Why these birds, in the matter of roosting, should differ from all their congeners, and from themselves with respect to their proceedings by day, is a fact for which I am by no means able to account. (p. 76).

The Natural History of Selbourne is also of great interest as a snapshot of a study area very much in flux due to overwhelming social and political forces. During the time of White's observations, Britain was rapidly changing. The Industrial and Agricultural Revolutions were just underway; many new roads were being built, thus opening up access to areas previously wild. The last remaining open free land was being enclosed. All of these affected the distribution of the animals and birds. Politically, Britain was in a period of turmoil with wars with Spain, France, the Seven Years War (1756-62) and, of course, that little skirmish that ended up with the creation of an entity that we call the United States.

The White household and gardens have been restored and can be visited today. Though much of the surrounding countryside seems unchanged, the Honey Buzzards, Stone Curlews, Grasshopper Warblers, and several other species that White carefully described as nesting species are no longer to be found breeding in the area due to habitat changes that began in his time.

This version of White's masterpiece has been augmented by the addition of appropriate color illustrations from the British Library taken from various sources contemporary with White's journals. The overall effect is to make even livelier the extremely entertaining text. As of this writing, this handsome and sturdy paperback can only be purchased in Britain, but is easily available through the British Amazon.com

Any birder who has carefully written down in his journal some description of an interesting behavior that he has observed, or kept long-term consistent records of the changing fortunes of birds from some local patch, will find a kindred spirit in Gilbert White and an important and fascinating historic precedent in *The Illustrated Natural History of Selbourne*.

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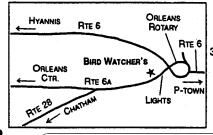
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BIRD SIGHTINGS

September/October, 2004

After three months of below-normal temperatures, September was close to normal. At 65.2°, the temperature was just 0.5° above the average in Boston. The high was 85° on September 4; the low was 47° on September 19. Boston recorded 7.44 inches of rain, more than double the normal for September. This was the seventh wettest September in Boston since 1872. Despite the record precipitation, measurable amounts fell on just seven days. The unusually sunny weather was interrupted by tropical storms or remnants of tropical storms. The remains of Hurricane Frances on September 8 and 9 brought heavy rain to New England after exercising its wrath on Florida. The effects of Hurricane Ivan on September 18 again produced heavy rain; and on September 28-29 the region felt the effects of Hurricane Jeanne with still more heavy rain. Luckily there was no major damage in our area, though these storms brought significant damage to the Gulf States, especially Florida. The winds from these storms were not significant, and there were just a few birds noted from coastal areas.

October was also close to normal, with an average temperature of 53.8°, just 0.3° below average. In Boston the high of 74° was reached on October 8, and the low for the month was 38° on October 28. There was no killing frost in the Boston area, although some suburbs far to the west ended their growing season on October 6. Several suburbs closer to Boston did not freeze until October 28, about three weeks later than average. Precipitation totaled 1.90 inches in Boston, 1.89 inches under the average. There was no snow recorded in eastern Massachusetts.

R. Stymeist

WATERFOWL THROUGH ALCIDS

The most exciting waterfowl sighting of the season was an adult **Ross's Goose** spotted at Turners Falls in late October. If accepted by the MARC, this would represent only the third record for the state. This species has been showing up with increasing regularity in the region, and more records should be expected in the near future. A count of 216 Wood Ducks at Bolton Flats in early October was one of the highest counts in the last ten years anywhere in the state. The male Harlequin Duck that spent the summer on Martha's Vineyard continued through September and October and was joined, at a more seasonal time, by small numbers at Scituate and Rockport in late October. A **Pacific Loon** was observed at Andrew's Point on October 22. In addition to Race Point in Provincetown, this location has proven to be one of the best places to see this species in Massachusetts. Although this is particularly true in the winter, over the last few years Pacific Loons have routinely been seen by diligent observers as they passed Andrew's Point during the fall migration. An **Eared Grebe** was observed on Martha's Vineyard at the end of October. Unfortunately, it did not stick around. Could this be the long-staying Gloucester bird, a little tardy in his return?

By October small numbers of Northern Fulmars were being spotted in Massachusetts waters. Shearwaters continued to be scarce in onshore and northern Massachusetts waters, although thousands of Cory's and Greater shearwaters were seen in early September 30 miles south of Martha's Vineyard. The pelagic highlight of the season was the nine **Audubon's Shearwaters** reported on a trip to Oceanographer Canyon October 2-3. A few storms brought decent numbers of Northern Gannets close to shore, with the best blow producing 7200 at Andrew's Point in Rockport on October 24. A sure sign of the changing status of the Double-crested Cormorant in the region was the count of 8000 from North Monomoy in Chatham at the end of September, which represented the highest single day count ever in Massachusetts.

The only Tricolored Heron report of the season came from Cape Cod (Orleans), where this species is traditionally much more uncommon than it is north of Boston. Also on Cape Cod was an adult Yellow-crowned Night-Heron which hung out for a few days in early September in West Falmouth. Black Vultures turned up at a number of western Massachusetts hawkwatches and their traditional sites in the southwest corner of the state. Stealing the show, perhaps, were the Turkey Vultures which were reported in good numbers throughout the period. Most impressive was the single day count of 174 which was tallied at Barre Falls on October 20. This represents the highest single-day count in Massachusetts of this southern species, which has been steadily expanding its range northwards through Massachusetts in the last 50+ years.

Most unusual was the report of a Rough-legged Hawk at Plum Island on the very early date of October 6. Rough-legged Hawks typically begin showing up in Massachusetts during the second half of October. In fact, the earliest previous record was October 16, 1998, on Nomans Land. On September 4, one lucky observer found nine Virginia Rails, one Sora, and a **Yellow Rail** in Rowley. **Common Moorhen** is a species which has struggled in Massachusetts during recent years, so it was encouraging to receive a report of an adult with two juveniles in Stockbridge on September 19. Three additional birds were reported in October at various sites throughout the state. **Sandhill Cranes** showed quite well at a number of locations around Massachusetts. The reports included a sighting of five Sandhill Cranes together in Carver, the most ever seen at one time in the state.

Western Massachusetts enjoyed more shorebirds than normal this year, thanks in part to the heavy rains brought on by several hurricanes and cold fronts that plowed through the region during the period. Sample counts included 60 American Golden-Plovers and 7 Buff-breasted Sandpipers at Northampton, 11 American Golden-Plovers, 20 Semipalmated Plovers, 52 Killdeer, 7 Lesser Yellowlegs, 1 Upland Sandpiper, 1 Hudsonian Godwit, 190 Semipalmated Sandpipers, 14 Least Sandpipers, and 40 White-rumped Sandpipers in Northfield. All told, some twenty-three species of shorebirds were found throughout the period in western Massachusetts, including eighteen species at various locations on September 9 alone! The five Red-necked Phalaropes sighted at Turners Falls represented only the second Western Massachusetts record in the last 15+ years. Not to be pushed too far out of the shorebird spotlight, coastal areas hosted a number of shorebird highlights. These included a Pacific Golden-Plover reported from Martha's Vineyard, unfortunately not in time for other observers to track this bird down, which was not seen again. Details of the sighting have been submitted to the MARC, and if accepted represent only the second record for Massachusetts and one of very few from eastern North America. Other shorebird highlights were an American Avocet in East Boston, two Curlew Sandpipers (one each reported in Chatham and Scituate), and two Ruffs on Cape Cod.

Two **South Polar Skuas** were reported south of Martha's Vineyard. Another uncommon pelagic larid, **Sabine's Gull**, was reported twice during the period. A decent number of Caspian Terns were observed during the period, probably due to the tropical disturbances that threatened us. These included a report of nine from Dorchester. More interesting was the report of a single bird in Northampton, which represents only the third fall record from western Massachusetts and the first since 1963. An impressive number of Forster's Terns were reported from Westport at the end of September and the beginning of October. On October 10, 150 Forster's Terns were counted there. This was one of the highest counts ever for Massachusetts.

J. Trimble



Snow Goose	Canvasback
9/26 GMNWR 1 G. Dysart#	10/31 Cambr. (F.P.) 1 BBC (R. Petersen)
10/5 Granville 190 J. Weeks	Ring-necked Duck
10/7 P.I. 5 T. Wetmore 10/10 Maynard 12 L. Nachtrab	9/thr Pittsfield 459 max 10/20 v.o. 9/13-10/31 Cambr. (F.P.) 134 max 10/23 v.o.
10/10 Maynard 12 L. Nachtrab 10/22 Richmond 25 D. St James	9/13-10/31 Cambr. (F.P.) 134 max 10/23 v.o. 10/1-31 W. Newbury 730 max 10/28 v.o.
10/23 Mt. Watatic 12 T. Pirro#	10/2 Southborough 30 E. Taylor
Ross's Goose (details submitted) *	10/27 Southboro 40 E. Morrier
10/21-23 Turners Falls 1 ph M. Fairbrother + v.o.	10/31 Framingham 45 E. Morrier
Brant 10/3, 30 Plymouth2, 210 d'Entremont, Bowes	10/31 Middleboro 38 J. Sweeney 10/31 Lakeville 248 J. Sweeney
10/9 Revere 56 P. + F. Vale	Greater Scaup
10/11, 16 Barre Falls 20, 28 B. Kamp#	10/8, 17 Lynnfield 5, 28 P. + F. Vale
10/12 Amherst 1 B. Weeks	10/10 Falmouth 27 R. Farrell
10/25 Pittsfield (Pont.) 4 N. Purdy Wood Duck	10/25 Richmond 1 D. St James 10/27 Cambr. (F.P.) 1 m B. Miller
9/6 Wakefield 66 P. + F. Vale	10/27 Cambi. (1.1.) 1 m B. Miller 10/30 P.I. 7 T. Wetmore
9/12 Agawam 35 S. Kellogg	10/31 Westport 33 G. d'Entremont#
9/15 Longmeadow 85 G. Kingston#	Lesser Scaup
9/19 Stockbridge 80 M. Lynch# 10/4 Bolton Flats 216 T. Pirro	10/8 Lynnfield 11 P. + F. Vale 10/20 Pittsfield 2 HBC (E. Neumuth)
10/17 IRWS 27 J. MacDougall	10/29 Nahant 4 L. Pivacek
10/20 Pittsfield 42 HBC (E. Neumuth)	10/30 Scituate 3 D. Furbish
Gadwall	10/31 Westport 47 G. d'Entremont#
9/20-10/20 Arlington Res. 1-6 J. Forbes 10/1 GMNWR 2 S. Perkins#	10/31 Framingham 9 E. Morrier 10/31 Berkshire Cnty 3 T. Tyning
10/1 GWIVWR 2 3. FEIRINS# 10/2 Wakefield 4 P. + F. Vale	10/31 Berkshire Cnty 3 T. Tyning Common Eider
10/4, 29 Woburn 6, 12 M. Rines	9/4 Westport 32 M. Lynch#
10/9, 20 Ipswich 103, 137 J. Berry	9/11 Stellwagen 20 W. Petersen#
10/16, 30 Plymouth 8, 15 Anderson, Bowes 10/26 P.I. 44 R. Heil	9/18, 10/19 Rockport (A.P.)10, 1560 R. Heil 9/29, 10/23 Dennis (Corp. B.)17, 3500 Flood, Nikula
10/27 Seekonk 54 R. Farrell	10/16 Plymouth 200 K. Anderson#
Eurasian Wigeon	10/24 Barnstable (S.N.)324 G. d'Entremont
10/18-19 Ipswich 1 m R. Heil	10/29 Nahant 48 L. Pivacek 10/30 Scituate 90 D. Furbish
American Wigeon 9/thr P.I. 4-10 v.o.	10/30 Scituate 90 D. Furbish Harlequin Duck
9/3 Pepperell 3 T. Pirro	9/thr Chilmark 1 m A. Keith
9/16 Marstons Mills 10 M. Keleher	10/19, 24 Rockport (A.P.)1, 27 R. Heil
9/22-10/30 Arlington Res. 81 max M. Rines 10/8 Marstons Mills 51 M. Keleher	10/30 Scituate 21 D. Furbish Surf Scoter
10/9, 20 Ipswich 204, 247 J. Berry	9/18, 10/24 Rockport (A.P.)7, 2850 R. Heil
10/21 Turners Falls 2 W. Lafley	9/29 Dennis (Corp. B.) 375 P. Flood
10/27 Swansea 62 R. Farrell	
	9/30 Eastham (F.E.) 200 M. Sampson#
10/31 Berkshire Cnty 2 T. Tyning	10/7 Orleans 150 G. Ĝove#
10/31 Berkshire Cnty 2 T. Tyning American Black Duck	10/7 Orleans 150 G. Gove# 10/20-28 Reports of 1-10 indiv. from 7 inland loc.
10/31 Berkshire Cnty 2 T. Tyning American Black Duck 10/9 Ipswich 104 J. Berry 10/9 Ipswich 104 J. Berry 10/26 P.I. 340 R. Heil	10/7 Orleans 150 G. Gove# 10/20-28 Reports of 1-10 indiv. from 7 inland loc. 10/24 Barnstable (S.N.) 3032 G. d'Entremont 10/29 Nahant 120 L. Pivacek
10/31 Berkshire Cnty 2 T. Tyning American Black Duck 10/9 J. Berry 10/9 Ipswich 104 J. Berry 10/26 P.I. 340 R. Heil 10/31 Berkshire Cnty 192 T. Tyning	10/7 Orleans 150 G. Gove# 10/20-28 Reports of 1-10 indiv. from 7 inland loc. 10/24 Barnstable (S.N.) 3032 G. d'Entremont 10/29 Nahant 120 L. Pivacek 10/30 Plymouth 125 R. Bowes
10/31 Berkshire Cnty 2 T. Tyning American Black Duck 10/9 Ipswich 104 J. Berry 10/26 P.I. 340 R. Heil 10/31 Berkshire Cnty 192 T. Tyning Blue-winged Teal	10/7 Orleans 150 G. Gove# 10/20-28 Reports of 1-10 indiv. from 7 inland loc. 10/24 Barnstable (S.N.) 3032 G. d'Entremont 10/29 Nahant 120 L. Pivacek 10/30 Plymouth 125 R. Bowes White-winged Scoter
10/31 Berkshire Cnty 2 T. Tyning	10/7 Orleans 150 G. Gove# 10/20-28 Reports of 1-10 indiv. from 7 inland loc. 10/24 Barnstable (S.N.) 3032 G. d'Entremont 10/29 Nahant 120 L. Pivacek 10/30 Plymouth 125 R. Bowes
10/31 Berkshire Cnty 2 T. Tyning	10/7 Orleans 150 G. Gove# 10/20-28 Reports of 1-10 indiv. from 7 inland loc. 10/24 Barnstable (S.N.) 3032 G. d'Entremont 10/29 Nahant 120 L. Pivacek 10/30 Plymouth 125 R. Bowes White-winged Scoter 9/3 Chapaquiddick 200 A. Keith# 9/11 Stellwagen 25 W. Petersen# 9/29 Dennis (Corp. B.) 250 P. Flood
10/31 Berkshire Cnty	10/7
10/31 Berkshire Cnty 2 T. Tyning	10/7 Orleans 150 G. Gove# 10/20-28 Reports of 1-10 indiv. from 7 inland loc. 10/24 Barnstable (S.N.) 3032 G. d'Entremont 10/29 Nahant 120 L. Pivacek 10/30 Plymouth 125 R. Bowes White-winged Scoter 9/3 Chapaquiddick 200 A. Keith# 9/11 Stellwagen 25 W. Petersen# 9/29 Dennis (Corp. B.) 250 P. Flood 9/29 Eastham (F.E.) 350 M. Sampson 10/7 Orleans 100 G. Gove#
10/31 Berkshire Cnty	10/7
10/31 Berkshire Cnty 2 T. Tyning	10/7 Orleans 150 G. Gove# 10/20-28 Reports of 1-10 indiv. from 7 inland loc. 10/24 Barnstable (S.N.) 3032 G. d'Entremont 10/29 Nahant 120 L. Pivacek 10/30 Plymouth 125 R. Bowes White-winged Scoter 9/3 Chapaquiddick 200 A. Keith# 9/11 Stellwagen 25 W. Petersen# 9/29 Dennis (Corp. B.) 250 P. Flood 9/29 Eastham (F.E.) 350 M. Sampson 10/7 Orleans 100 G. Gove# 10/9 Revere 285+ P. + F. Vale 10/19 Rockport (A.P.) 325 R. Heil 10/23 Cambr. (F.P.) 1 f J. Crystal#
10/31 Berkshire Cnty 2 T. Tyning	10/7 Orleans 150 G. Gove# 10/20-28 Reports of 1-10 indiv. from 7 inland loc. 10/24 Barnstable (S.N.) 3032 G. d'Entremont 10/29 Nahant 120 L. Pivacek 10/30 Plymouth 125 R. Bowes White-winged Scoter 8/3 Chapaquiddick 200 A. Keith# 9/11 Stellwagen 25 W. Petersen# 9/29 Dennis (Corp. B.) 250 P. Flood 9/29 Eastham (F.E.) 350 M. Sampson 10/7 Orleans 100 G. Gove# 10/9 Revere 285+ P. F. Vale 10/19 Rockport (A.P.) 325 R. Heil 10/23 Cambr. (F.P.) 1 f J. Crystal# 10/28 Cheshire 1 T. Collins
10/31 Berkshire Cnty	10/7 Orleans 150 G. Gove# 10/20-28 Reports of 1-10 indiv. from 7 inland loc. 10/24 Barnstable (S.N.) 3032 G. d'Entremont 10/29 Nahant 120 L. Pivacek 10/30 Plymouth 125 R. Bowes White-winged Scoter 9/3 Chapaquiddick 200 A. Keith# 9/11 Stellwagen 25 W. Petersen# 9/29 Dennis (Corp. B.) 250 P. Flood 9/29 Eastham (F.E.) 350 M. Sampson 10/7 Orleans 100 G. Gove# 10/9 Revere 285+ P. + F. Vale 10/19 Rockport (A.P.) 325 R. Heil 10/23 Cambr. (F.P.) 1 f J. Crystal#
10/31 Berkshire Cnty 2 T. Tyning	10/7
10/31 Berkshire Cnty	10/7
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10/31 Berkshire Cnty 2 T. Tyning	10/7
10/31 Berkshire Cnty 2 T. Tyning American Black Duck 10/9 Ipswich 104 J. Berry 10/26 P.I. 340 R. Heil 10/31 Berkshire Cnty 192 T. Tyning Blue-winged Teal 9/thr P.I. 3-8 v.o. 9/3 Pepperell 4 T. Pirro 9/8-10/13 GMNWR 4-10 USFW (S. Koch) 9/15, 10/1 Marstons Mills 6, 8 Foster, Keleher 9/18, 29 Turners Falls 3, 2 Surner, Allen 10/3 Boston 2 BBC (R. Stymeist) Northern Shoveler 9/23 Boston 1 D. Hunneman 9/27-10/31 P.I. 1-3 v.o. 9/30-10/31 Arlington Res. 1-3 v.o. Northern Pintail 9/19-10/31 GMNWR 20 max v.o. 9/19 Quincy Bay 5 G. d'Entremont# 10/1, 26 P.I. 23, 102 R. Heil 10/8, 26 Egremont 3, 4 St James, Collins 10/11 Turners Falls 2 H. Allen	10/7
10/31 Berkshire Cnty	10/7
10/31 Berkshire Cnty 2 T. Tyning American Black Duck 10/9 Ipswich 104 J. Berry 10/26 P.I. 340 R. Heil 10/31 Berkshire Cnty 192 T. Tyning Blue-winged Teal 9/thr P.I. 3-8 v.o. 9/3 Pepperell 4 T. Pirro 9/8-10/13 GMNWR 4-10 USFW (S. Koch) 9/15, 10/1 Marstons Mills 6, 8 Foster, Keleher 9/18, 29 Turners Falls 3, 2 Surner, Allen 10/3 Boston 2 BBC (R. Stymeist) Northern Shoveler 9/23 Boston 1 D. Hunneman 9/27-10/31 P.I. 1-3 v.o. 9/30-10/31 Arlington Res. 1-3 v.o. Northern Pintail 9/19-10/31 GMNWR 20 max v.o. 9/19 Quincy Bay 5 G. d'Entremont# 10/1, 26 P.I. 23, 102 R. Heil 10/8, 26 Egremont 3, 4 St James, Collins 10/31 Berkshire Cnty G. d'Entremont# G. d'Entremont# 10/31 Berkshire Cnty G. d'Entremont# Green-winged Teal T. Tyning T. Ty	10/7
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10/31 Berkshire Cnty 2 T. Tyning American Black Duck 10/9 Ipswich 104 J. Berry 10/26 P.I. 340 R. Heil 10/31 Berkshire Cnty 192 T. Tyning Blue-winged Teal 9/thr P.I. 3-8 V.o. 9/30 Pepperell 4 T. Pirro 9/8-10/13 GMNWR 4-10 USFW (S. Koch) 9/15, 10/1 Marstons Mills 6, 8 Foster, Keleher 9/18, 29 Turners Falls 3, 2 Surner, Allen 10/3 Quabbin (G45) 1 M. Lynch# 10/3 Boston 2 BBC (R. Stymeist) Northern Shoveler 9/23 Boston 1 D. Hunneman 9/27-10/31 P.I. 1-3 V.o. 9/30-10/31 Arlington Res. 1-3 V.o. Northern Pintail 9/19-10/31 GMNWR 20 max V.o. 9/19 Quincy Bay 5 G. d'Entremont# 10/1, 26 P.I. 23, 102 R. Heil 10/3 Plymouth 50 G. d'Entremont# 10/8, 26 Egremont 3, 4 St James, Collins 10/31 Westport 8 G. d'Entremont# 10/31 Westport 8 G. d'Entremont# 10/31 Berkshire Cnty 3 T. Tyning Green-winged Teal 9/thr GMNWR 722 max 10/27 USFWS 9/thr P.I. 120 max 10/26 V.o. V.o.	10/7
10/31 Berkshire Cnty 2 T. Tyning American Black Duck 10/9 Ipswich 104 J. Berry 10/26 P.I. 340 R. Heil 10/31 Berkshire Cnty 192 T. Tyning Slue-winged Teal 9/thr P.I. 3-8 v.o. 9/3 Pepperell 4 T. Pirro 9/8-10/13 GMNWR 4-10 USFW (S. Koch) 9/15, 10/1 Marstons Mills 6, 8 Foster, Keleher 9/18, 29 Turners Falls 3, 2 Surner, Allen 10/3 Boston 2 BBC (R. Stymeist) Northern Shoveler 9/23 Boston 1 D. Hunneman 9/27-10/31 P.I. 1-3 v.o. v.o. 9/30-10/31 GMNWR 20 max v.o. 9/19 Quincy Bay 5 G. d'Entremont# 10/1, 26 P.I. 23, 102 R. Heil 10/3 Plymouth 50 G. d'Entremont# 10/31 Berkshire Cnty 3 T. Tyning Green-winged Teal 9/thr GMNWR 722 max 10/27 USFWS 9/thr P.I. 120 max 10/26 v.o. 9/5, 10/26 Egremont 7, 45 St James, Collins 10/26 V.o. 120 max 10/27 USFWS 9/thr P.I. 120 max 10/26 v.o. 9/5, 10/26 Egremont 7, 45 St James, Collins 10/27 USFWS 10/26 Egremont 7, 45 St James, Collins 10/27 USFWS 10/26 Egremont 7, 45 St James, Collins 10/26 Egremont 10/26 Egr	10/7
10/31 Berkshire Cnty 2 T. Tyning	10/7
10/31 Berkshire Cnty 2 T. Tyning American Black Duck 10/9 Ipswich 104 J. Berry 10/26 P.I. 340 R. Heil 10/31 Berkshire Cnty 192 T. Tyning Slue-winged Teal 9/thr P.I. 3-8 v.o. 9/3 Pepperell 4 T. Pirro 9/8-10/13 GMNWR 4-10 USFW (S. Koch) 9/15, 10/1 Marstons Mills 6, 8 Foster, Keleher 9/18, 29 Turners Falls 3, 2 Surner, Allen 10/3 Boston 2 BBC (R. Stymeist) Northern Shoveler 9/23 Boston 1 D. Hunneman 9/27-10/31 P.I. 1-3 v.o. 1-3 v.o. Northern Pintail 9/19-10/31 GMNWR 20 max v.o. 9/19 Quincy Bay 5 G. d'Entremont# 10/3 Berkshire Cnty 3 T. Tyning Green-winged Teal 9/thr GMNWR 722 max 10/27 USFWS 9/5, 10/26 Egremont 7, 45 St James, Collins 9/19 Randolph 59 G. d'Entremont# 9/19, 10/5 Arlington Res. 24, 94 M. Rines 10/19 Rockport (A.P.) 28 R. Heil R. Heil 10/31 Rershire Cnty 3 St James, Collins 9/19 Randolph 59 G. d'Entremont# 10/36 Egremont 7, 45 St James, Collins 9/19 Randolph 59 G. d'Entremont# R. Heil	10/7
10/31 Berkshire Cnty 2 T. Tyning	10/7

Long-tailed I	Ouck (continued)			9/22	Wellfleet 2	M. Sampson
10/28	Lincoln	1	J. Forbes	10/21, 24	Rockport (A.P.)15, 24	R. Heil
10/28	W. Newbury	1 m	J. Berry	10/28	W. Newbury 1	J. Berry
10/30	Scituate	4	D. Furbish	10/30	Scituate 64	D. Furbish
Bufflehead	D.*	4.0	m ***	10/31	P.I. 50	J. Forbes
10/20	P.I.	1 f	T. Wetmore		(no details) *	D 11 '1
10/25	Richmond	2	D. St James	10/22	Rockport (A.P.) 1	R. Heil
10/25	Lincoln	2	J. Forbes	Common Loc		XX D
10/27	Cambr. (F.P.)	1 m	B. Miller	9/11	Stellwagen 8	W. Petersen#
10/28	Northampton	10	H. Allen	9/11, 10/2		T. Wetmore
10/30	Scituate	26	D. Furbish		2 Rockport (A.P.)19, 19 Jeffrey's L. 9	R. Heil
Common Go		1 f	P. + F. Vale	9/20	Jeffrey's L. 9 0 Wachusett Res. 5, 16	MAS (Larson) S. Sutton
10/17	Lynnfield Turner's Falls	1		10/3	Ouabbin 6	T. Gagnon
10/22			W. Petersen#	10/3		
10/28	New Salem W. Newbury	1 1 imm	W. Lafley m J. Berry	10/16	Plymouth 12	K. Anderson# R. Heil
10/28		1 m	M. Tuttle#	10/19, 24	Rockport (A.P.)113, 63	B. Nikula#
10/28	Eastham Wachusett Res.	5		10/23	Dennis (Corp. B.) 36 Barnstable (S.N.) 23	G. d'Entremont
10/31	Berkshire Cnty	8	M. Lynch#	10/24	New Salem 8	W. Lafley
Hooded Merg		o	T. Tyning	Pied-billed G		w. Laney
9/4	Leicester	2	M. Lynch#	9/19	New Braintree 3	M. Lynch#
9/14	Northampton	4	R. Packard	9/19	Randolph 4	G. d'Entremont#
9/19	Randolph		G. d'Entremont#	9/19		d+1juv M. Lynch#
10/20	Ipswich	6	J. Berry#	9/21		
10/23	Arlington Res.	6	C. Floyd#	10/20	GMNWR 1 ju Pittsfield 21	HBC (E. Neumuth)
10/29	Lynn	8	L. Pivacek	10/20	Cheshire 5	HBC (E. Neumuth)
10/29	Ware	15	D. Norton	10/20		HBC (E. Neumuth)
Common Me		13	D. Norton	10/20	Westport 3	G. d'Entremont#
9/1	Westfield	10	S. Kellogg	Horned Greb		O. U Eliticiliolit#
10/20	S. Quabbin	12	H. Allen	10/3	Boston 2	BBC (R. Stymeist)
10/20	Ware	9	D. Norton	10/16	Plymouth 2	K. Anderson#
10/28	W. Newbury	2 f	J. Berry	10/17	Quabbin Pk 4	M. Lynch#
10/28	Wachusett Res.	13	S. Sutton	10/20		HBC (E. Neumuth)
10/30	Berkshire Cnty	10	T. Tyning	10/29	Manchester 3	D. Weaver
Red-breasted		10	1. Tynnig	Red-necked		D. Weaver
9/12	Truro	4 BI	BC (R. Stymeist)	9/30	Eastham (F.E.) 8	M. Sampson#
10/7, 31		7, 30	T. Wetmore	10/3	Dennis (Corp. B.) 2	M. Tuttle
10/23	Dennis (Corp. E		B. Nikula#	10/3	Boston 4	BBC (R. Stymeist)
10/24	Wareham	48	R. Farrell	10/19	Rockport (A.P.) 4	R. Heil
10/24	Barnstable (S.N		G. d'Entremont	10/24	New Salem 1	W. Lafley
10/24	Rockport (A.P.)		R. Heil	10/31	Berkshire Cnty 5	T. Tyning
10/30	Scituate	40	D. Furbish	Eared Grebe		78
Ruddy Duck				10/24	Gay Head 1	A. Keith
9/1	P.I.	1 m	T. Wetmore	Northern Ful		
9/2, 28	W. Newbury 16	, 120	Heil, Berry	9/30	Eastham (F.E.) 1	M. Sampson#
10/4-31	Melrose 27 n	nax 10/31	D. + I. Jewell	10/1	Stellwagen 1	O. Spalding#
10/7	Marlboro	7	L. Nachtrab	10/2-3	Oceanographer C.47	R. Donovan
10/11, 31	Cambr. (F.P.)35.	, 103	Miller, Petersen	10/4	Nomans Land 1	S. Stephens
10/20	Pittsfield	7 HE	C (E. Neumuth)	10/6	20 m E of Chatham1	B. Perkins#
10/29	Arlington Res.	6	O. Spalding	10/22, 24	Rockport (A.P.)11, 18	R. Heil
10/31	Berkshire Cnty	17	T. Tyning	Cory's Shear	water	
Ring-necked	Pheasant		, ,	9/3	30 m. S of MV 1000s	V. Laux#
10/11	Belmont	3	D. Bates	10/2-3	Oceanographer C.45	R. Donovan
10/17	Gardner	1 f	T. Pirro	Greater Shea		
10/17	MBWMA	1	S. Walch	9/3	30 m. S of MV 1000s	V. Laux#
10/23	Deerfield	2	M. Lynch#	10/2-3	Oceanographer C.75	R. Donovan
Ruffed Grous				10/21	Rockport (A.P.) 1	R. Heil
9/11	Quabbin		BC (Lockwood)	Sooty Sheary		
9/12	Ware R. IBA	3	M. Lynch#	9/3	30 m. s of MV 2	V. Laux#
9/22	Ipswich	4	J. Berry	10/2-3	Oceanographer C. 2	R. Donovan
10/3	Quabbin	5	T. Gagnon	10/24	Rockport (A.P.) 1	R. Heil
10/24	Mt. Watatic	1	T. McCullough#	Manx Shearv		
Wild Turkey				9/11	Stellwagen 1	W. Petersen#
9/1	Leicester	29	M. Lynch#		1 Rockport (A.P.) 4, 1	R. Heil
9/16	Mt. Watatic	33	T. Pirro	9/20	Jeffrey's L. 1	MAS (Larson)
9/17	Sharon		G. d'Entremont#	10/2-3	Oceanographer C. 8	R. Donovan
10/3	Quabbin	32	T. Gagnon	10/22, 24	Rockport (A.P.) 2, 2	R. Heil
10/3	Boston		BC (R. Stymeist)	10/23	P.I.	BBC (C. Ciccone)
	M.V.	21	SSBC (Clapp)		Shearwater (no details)	
10/10		10	E. Stromsted	10/2-3	Oceanographer C. 9	R. Donovan
10/31	Pepperell		II M.O		Datual 1	
10/31 10/31	Hadley	20	H. McQueen	Wilson's Stor		VI I #
10/31 10/31 Northern Bol	Hadley owhite	20		9/3	30 m. s of MV 100+	
10/31 10/31 Northern Bob 9/21	Hadley owhite Wellfleet	20 8	R. Heil	9/3 9/11	30 m. s of MV 100+ Stellwagen 325	W. Petersen#
10/31 10/31 Northern Bol 9/21 9/21	Hadley owhite Wellfleet Eastham	20 8 18	R. Heil R. Heil	9/3 9/11 9/21	30 m. s of MV 100+ Stellwagen 325 Chatham 23+	W. Petersen# R. Heil
10/31 10/31 Northern Bob 9/21 9/21 10/8	Hadley owhite Wellfleet Eastham Cotuit	20 8 18 2	R. Heil R. Heil M. Keleher	9/3 9/11 9/21 10/2-3	30 m. s of MV 100+ Stellwagen 325 Chatham 23+ Oceanographer C. 60	W. Petersen# R. Heil R. Donovan
10/31 10/31 Northern Bol 9/21 9/21 10/8 10/23	Hadley owhite Wellfleet Eastham Cotuit Barnstable	20 8 18	R. Heil R. Heil	9/3 9/11 9/21 10/2-3 10/24	30 m. s of MV 100+ Stellwagen 325 Chatham 23+ Oceanographer C.60 Dennis (Corp. B.) 1+	W. Petersen# R. Heil R. Donovan B. Nikula
10/31 10/31 Northern Bot 9/21 9/21 10/8 10/23 Red-throated	Hadley owhite Wellfleet Eastham Cotuit Barnstable Loon	20 8 18 2 10	R. Heil R. Heil M. Keleher M. Keleher	9/3 9/11 9/21 10/2-3 10/24 10/24	30 m. s of MV 100+ Stellwagen 325 Chatham 23+ Oceanographer C.60 Dennis (Corp. B.) 1+ Sandwich 1+	W. Petersen# R. Heil R. Donovan B. Nikula B. Nikula
10/31 10/31 Northern Bot 9/21 9/21 10/8 10/23 Red-throated	Hadley owhite Wellfleet Eastham Cotuit Barnstable	20 8 18 2 10	R. Heil R. Heil M. Keleher	9/3 9/11 9/21 10/2-3 10/24	30 m. s of MV 100+ Stellwagen 325 Chatham 23+ Oceanographer C.60 Dennis (Corp. B.) 1+	W. Petersen# R. Heil R. Donovan B. Nikula

Leach's Storm-		MAG(T	10/7	Amherst	1	L. Therrian
	Jeffrey's L. 1 Oceanographer C. 2	MAS (Larson) R. Donovan	10/20 10/24	Chatham Amherst	1 1	D. Manchester H. Allen
	Rockport (A.P.) 2, 2	R. Heil		d Night-Heron	1	II. Alleli
	Barnstable (S.N.)14, 6	G. Gove#	9/3	GMNWR	5	S. Perkins#
10/24	Dennis (Corp. B.) 1	B. Nikula	9/3-5	Pittsfield	1	B. Bailey
	Sandwich 6+	B. Nikula	10/8	Newbury	3	P. + F. Vale
	Rockport (A.P.) 8	R. Heil	10/9, 18		8, 26	Berry, Heil
Northern Ganne	et Eastham (F.E.)100, 110	0 B. Nikula#	9/4-5	ned Night-Heron W. Falmouth	ı 1 ad	J. Palmer#
9/29 10/23 1	Dennis (Corp. B.)63, 13	800 Flood Nikula	Glossy Ibis	w. raimoum	1 40	J. I aimciπ
	Rockport (A.P.)1410, 72		9/5	P.I.	1	P. + F. Vale
10/23, 30 I	P'town 800, 800	B. Nikula#	9/6	S. Monomoy	1	J. Trimble#
	Barnstable (S.N.)775	G. d'Entremont	9/6	Squantum	10	G. d'Entremont
Double-crested		D 11 '1	Black Vulture			TT 1 (TTT)
	N. Monomoy 8000 Chatham 800, 3500	R. Heil D. Manchester	9/6, 14 9/12	Granville Mt. Tom	1, 1 1	Hawkcount (JW)
	Squantum 2000+	P. O'Neill	9/12	Sheffield	6	BBC (T. Gagnon) M. Lynch#
	Ipswich 500	J. Berry	9/19	Great Barringto	n 2	M. Lynch#
	Acoaxet 1099	M. Lynch#	10/1, 22	Granville	3, 3	Hawkcount (JW)
10/11	Newbypt/P.I. 537	S. Šutton	10/31	Granville	4	J. Weeks
	Rockport (A.P.)385, 74:		Turkey Vultur		10	** 1
	Dorchester 4500	R. Donovan#	9/5-21	Barre Falls	18	Hawkcount (BK)
Great Cormoral	Stellwagen 1	W. Petersen#	9/5 9/12	Sheffield Mt. Tom	50 15	T. Gagnon BBC (T. Gagnon)
	Arlington 1 im		9/19	Sheffield	17	M. Lynch#
	Rockport (A.P.)7, 32	R. Heil	10/thr	Chatham	19	Hawkcount (DM)
	Newbypt 3 1W	R. Heil	10/1-14	Barre Falls	253	Hawkcount (BK)
	W. Falmouth 4	R. Farrell	10/4-28	Granville	175	Hawkcount (JW)
	Northampton 1	B. Bieda	10/18	Ipswich	14	R. Heil
10/31 American Bitte	Westport 4	G. d'Entremont#	10/20 10/20	Granville Barre Falls	47 174	Hawkcount (JW) Hawkcount (BK)
	GMNWR 1	v.o.	10/20	Westport	14	G. d'Entremont#
	Edgartown 1	M. Pelikan	Osprey	Westport	17	G. d Entremont
	W. Brookfield 1	S. Hedman#	9/thr	Granville	126	Hawkcount (JW)
	Barnstable 1	G. d'Entremont	9/thr	Chatham	15	Hawkcount (DM)
9/30-10/20 1		V.O.	9/thr	Barre Falls	159	Hawkcount (BK)
	Edgartown 1	M. Pelikan#	9/11-22	Mt. Wachusett	117	Hawkcount (JS)
	Salisbury 1 Westport 1	D. Chickering M. Lynch#	9/11-25 9/11, 21	Mt. Watatic Mt. Watatic 2	139 2, 26	Hawkcount (TP) Hawkcount (TP)
	Duxbury 1	R. Bowes#	9/11, 21	Falmouth 2	21	CCBC (G. Hirth)
Great Blue Her		ic. Bowesii	9/13, 21	Mt. Wachusett 1		Hawkcount (JS)
9/8	GMNWR 20	USFW (S. Koch)	9/13, 21		3, 24	Hawkcount (BK)
	Longmeadow 11	G. Kingston#	10/1-18	Granville	35	Hawkcount (JW)
	Eastham (F. H.) 22 Sandwich 23	G. d'Entremont#	10/1-18	Chatham	9	Hawkcount (DM)
	Sandwich 23 Ipswich 12	D. Furbish# R. Heil	10/1-23 10/23	Barre Falls Barre Falls	42 3	Hawkcount (BK) Hawkcount (BK)
Great Egret	ipswich 12	K. Hen	10/23	Princeton	1	M. Lynch#
	P.I. 8-40	v.o.	Bald Eagle	11111001011	-	111. 25 11011
		x 9/2 S. Perkins#	9/thr	Barre Falls	26	Hawkcount (BK)
9/4 (Quincy 8	E. Taylor	9/thr	Granville	68	Hawkcount (JW)
9/4, 10/10	Westport 66, 78	M. Lynch#	9/11-19	Mt. Watatic	13 11	Hawkcount (TP)
	Sheffield 3 Furners Falls 7	T. Gagnon S. Surner	9/12-21 9/21	Mt. Wachusett Mt. Wachusett	6	Hawkcount (JS) Hawkcount (JS)
	Barnstable 21	G. d'Entremont#	9/21	Barre Falls	7	Hawkcount (BK)
	Acoaxet 61	M. Lynch#	9/26	Granville	10	Hawkcount (JW)
	Ipswich 21	Ř. Heil	10/thr	Barre Falls	12	Hawkcount (BK)
	Scituate 11	G. d'Entremont	10/thr	Granville	31	Hawkcount (JW)
Snowy Egret	Wasterest 0.6	M T la #	10/31 Northern Hari	Barre Falls	3	Hawkcount (BK)
	Westport 9, 6 P.I. 160, 1	M. Lynch# Vale, Forbes	9/thr	Barre Falls	20	Hawkcount (BK)
	E. Boston 53	BBC (S. Zendeh)	9/thr	Granville	33	Hawkcount (JW)
9/21	Eastham 19	R. Heil	9/11-21	Mt. Watatic	14	Hawkcount (TP)
	Falmouth 31	R. Farrell	9/11-22	Mt. Wachusett	8	Hawkcount (JS)
	Ipswich 4	R. Heil	9/12	N. Monomoy	5	B. Nikula
Little Blue Here 9/5, 15	on P.I. 1 imm, 1 ad	Moore, Sutton	9/15 9/19	Mt. Watatic Granville	5	Hawkcount (TP) Hawkcount (JW)
	Manchester 3	S. Hedman	9/19	GMNWR	5	S. Perkins#
	Duxbury 1 ad		9/26	Bolton Flats	4	M. Lynch#
Tricolored Hero	on		10/thr	Barre Falls	21	Hawkcount (BK)
	Orleans 1	F. Vale	10/thr	Granville	25	Hawkcount (JW)
Cattle Egret	M 11	C C "	10/thr	Chatham	10	Hawkcount (DM)
	Magnolia 4 Manchester 1	G. Gove# S. Hedman	10/20, 23 10/26	Barre Falls	5, 4 8	Hawkcount (BK) R. Heil
		Bolton, Sherwood	Sharp-shinned	P.I. I Hawk	٥	к. пен
Green Heron	1	Donon, Sherwood	9/thr	Barre Falls	460	Hawkcount (BK)
9/9	GMNWR 5	S. Perkins#	9/thr	Chatham	152	Hawkcount (DM)
10/1	Arlington 1	R. LaFontaine	9/thr	Granville	442	Hawkcount (JW)

Sharp-shinned Hawk (continued)	10/23, 27 Barre Falls 23, 12 Hawkcount (BK)
9/11-22 Mt. Wachusett 172 Hawkcount (JS)	Rough-legged Hawk
9/11-25 Mt. Watatic 340 Hawkcount (TP)	10/6, 26 P.I. 1 lt, 1 dk Vale, Heil
9/11, 13 Mt. Watatic 42, 101 Hawkcount (TP)	10/22 Mt. Tom 1 R. Titus
9/13, 19 Granville 40, 82 Hawkcount (JW)	Golden Eagle
9/14, 21 Mt. Wachusett 34, 27 Hawkcount (JS)	10/6, 18 Granville 1, 1 Hawkcount (JW)
9/14, 19 Mt. Watatic 51, 55 Hawkcount (TP)	10/17 Sunderland 1 D. Minnear
9/22, 26 Granville 35, 60 Hawkcount (JW)	10/18 Barre Falls 1 juv Hawkcount (BK)
10/thr Barre Falls 501 Hawkcount (BK)	10/26, 27 Barre Falls 1, 1 Hawkcount (BK)
10/thr Chatham 440 Hawkcount (DM)	American Kestrel
10/thr Granville 397 Hawkcount (JW)	9/thr Granville 250 Hawkcount (JW)
10/1, 11 Barre Falls 71, 60 Hawkcount (BK)	9/thr Barre Falls 99 Hawkcount (BK)
10/11 Granville 58 Hawkcount (JW)	9/11-22 Mt. Wachusett 45 Hawkcount (JS)
10/12, 18 Barre Falls 42, 62 Hawkcount (BK)	9/11-23 Mt. Watatic 73 Hawkcount (TP)
10/23 Mt. Watatic 37 Hawkcount (TP)	9/14 Mt. Watatic 23 Hawkcount (TP)
Cooper's Hawk	9/19, 26 Granville 55, 32 Hawkcount (JW)
9/thr Barre Falls 26 Hawkcount (BK)	9/21 Groton 12 T. Pirro
9/thr Chatham 32 Hawkcount (DM)	9/21 Barre Falls 20 Hawkcount (BK)
9/thr Granville 26 Hawkcount (JW)	10/1-21 Granville 140 Hawkcount (JW)
9/11-21 Mt. Wachusett 24 Hawkcount (JS)	10/1-23 Barre Falls 72 Hawkcount (BK)
	Merlin /2 Hawkcount (BK)
9/13, 14 Mt. Wachusett 15, 7 Hawkcount (JS) 10/thr Granville 72 Hawkcount (JW)	9/thr Chatham 11 Hawkcount (DM)
	9/thr Barre Falls 10 Hawkcount (BK)
10/thr Chatham 68 Hawkcount (DM)	9/4-30 Granville 5 Hawkcount (JW)
10/thr Barre Falls 68 Hawkcount (BK)	9/11-14 Mt. Watatic 9 Hawkcount (TP)
10/3 Granville 17 Hawkcount (JW)	9/13-30 Barre Falls 10 Hawkcount (BK)
10/18, 20 Barre Falls 11, 21 Hawkcount (BK)	10/thr Chatham 21 Hawkcount (DM)
10/23 Mt. Watatic 7 Hawkcount (TP)	10/1-19 Granville 16 Hawkcount (JW)
Northern Goshawk	10/1-23 Barre Falls 27 Hawkcount (BK)
9/5 Pepperell 1 E. Stromsted	10/18, 20 Barre Falls 5, 5 Hawkcount (BK)
9/10-10/26 Granville 7 Hawkcount (JW)	Peregrine Falcon
9/11 Northampton 1 T. Gagnon	9/thr Chatham 12 Hawkcount (DM)
9/12, 10/22 Mt. Tom 1, 1 Gagnon, Titus	9/20 Dorchester 2 R. Donovan
9/14-20 Mt. Wachusett 3 Hawkcount (JS)	9/23-24 Barre Falls 2 Hawkcount (BK)
9/15, 10/23 Mt. Watatic 1, 1 T. Pirro#	9/25 P.I. 2 L. Pivacek
9/17 Medford 1 imm M. Rines	9/30 Nantucket 3 E. Ray
9/25 P.I. 1 imm P. Roberts	10/thr Chatham 70 Hawkcount (DM)
10/17-28 Barre Falls 3 Hawkcount (BK)	10/2 Gay Head 4 A. Keith# 10/2-7 Granville 4 Hawkcount (JW)
10/17 Arlington 1 K. Hartel	
10/20 S. Quabbin 1 H. Allen	
	10/3 Boston 2 BBC (R. Stymeist)
Red-shouldered Hawk	10/10 Rockport (H.P.) 3 T. Wetmore
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp#	10/10 Rockport (H.P.) 3 T. Wetmore 10/11, 14 Barre Falls 2, 2 Hawkcount (BK)
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish	10/10 Rockport (H.P.) 3 T. Wetmore 10/11, 14 Barre Falls 2, 2 Hawkcount (BK) 10/13 Nomans Land 30+(2 b) N. Smith#
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp#	10/10 Rockport (H.P.) 3 T. Wetmore 10/11, 14 Barre Falls 2, 2 Hawkcount (BK) 10/13 Nomans Land 30+(2 b) N. Smith# 10/16 Chilmark 8+ A. Keith#
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish	10/10 Rockport (H.P.) 3 T. Wetmore 10/11, 14 Barre Falls 2, 2 Hawkcount (BK) 10/13 Nomans Land 30+(2 b) N. Smith#
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes	10/10 Rockport (H.P.) 3 T. Wetmore 10/11, 14 Barre Falls 2, 2 Hawkcount (BK) 10/13 Nomans Land 30+(2 b) N. Smith# 10/16 Chilmark 8+ A. Keith# 10/20 Ipswich 2 J. Berry#
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes 9/19, 21 Mt. Wachusett 1. 1 Hawkcount (JS)	10/10 Rockport (H.P.) 3 T. Wetmore 10/11, 14 Barre Falls 2, 2 Hawkcount (BK) 10/13 Nomans Land 30+(2 b) N. Smith# 10/16 Chilmark 8+ A. Keith# 10/20 Ipswich 2 J. Berry# Yellow Rail (no details) *
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes 9/19, 21 Mt. Wachusett 1. 1 Hawkcount (JS) 9/19 Granville 2 Hawkcount (JW)	10/10
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes 9/19, 21 Mt. Wachusett 1. 1 Hawkcount (JS) 9/19 Granville 2 Hawkcount (JW) 10/thr Granville 15 Hawkcount (JW)	10/10
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes 9/19, 21 Mt. Wachusett 1. 1 Hawkcount (JS) 9/19 Granville 2 Hawkcount (JW) 10/th Granville 15 Hawkcount (JW) 10/4 Bolton Flats 1 N. Paulson	10/10
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes 9/19, 21 Mt. Wachusett 1.1 Hawkcount (JS) 9/19 Granville 2 Hawkcount (JW) 10/thr Granville 15 Hawkcount (JW) 10/4 Bolton Flats 1 N. Paulson 10/5 GMNWR 1 migr S. Perkins#	10/10
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes 9/19, 21 Mt. Wachusett 1. 1 Hawkcount (JS) 9/19 Granville 2 Hawkcount (JW) 10/thr Granville 15 Hawkcount (JW) 10/4 Bolton Flats 1 N. Paulson 10/5 GMNWR 1 migr S. Perkins# 10/11-31 Barre Falls 44 Hawkcount (BK)	10/10
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes 9/19 Granville 2 Hawkcount (JS) 9/19 Granville 15 Hawkcount (JW) 10/4 Bolton Flats 1 N. Paulson 10/5 GMNWR 1 migr S. Perkins# 10/11-31 Barre Falls 44 Hawkcount (BK) 10/20 Barre Falls 18 Hawkcount (BK)	10/10
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes 9/19 Lexington 1 imm J. Forbes 9/19 Granville 2 Hawkcount (JS) 9/19 Granville 2 Hawkcount (JW) 10/4 Granville 15 Hawkcount (JW) 10/4 Bolton Flats 1 N. Paulson 10/5 GMNWR 1 migr S. Perkins# 10/11-31 Barre Falls 44 Hawkcount (BK) 10/20 Barre Falls 18 Hawkcount (BK) 10/23 Mt. Watatic 9 Hawkcount (TP)	10/10
Red-shouldered Hawk 9/2	10/10
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes 9/19, 21 Mt. Wachusett 1. 1 Hawkcount (JS) 9/19 Granville 2 Hawkcount (JW) 10/thr Granville 15 Hawkcount (JW) 10/4 Bolton Flats 1 N. Paulson 10/5 GMNWR 1 migr S. Perkins# 10/11-31 Barre Falls 44 Hawkcount (BK) 10/20 Barre Falls 18 Hawkcount (BK) 10/23 Mt. Watatic 9 Hawkcount (TP) Broad-winged Hawk 9/thr Barre Falls 3555 Hawkcount (BK)	10/10
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes 9/19 Lexington 1 imm J. Forbes 9/19 Granville 2 Hawkcount (JS) 9/19 Granville 2 Hawkcount (JW) 10/4 Bolton Flats 1 N. Paulson 10/5 GMNWR 1 migr S. Perkins# 10/11-31 Barre Falls 44 Hawkcount (BK) 10/20 Barre Falls 18 Hawkcount (BK) 10/23 Mt. Watatic 9 Hawkcount (TP) Broad-winged Hawk 9/thr Barre Falls 3555 Hawkcount (JW) 9/thr Granville 2850 Hawkcount (JW)	10/10
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes 9/19, 21 Mt. Wachusett 1. 1 Hawkcount (JS) 9/19 Granville 2 Hawkcount (JW) 10/thr Granville 15 Hawkcount (JW) 10/4 Bolton Flats 1 N. Paulson 10/5 GMNWR 1 migr S. Perkins# 10/11-31 Barre Falls 44 Hawkcount (BK) 10/20 Barre Falls 18 Hawkcount (BK) 10/23 Mt. Watatic 9 Hawkcount (TP) Broad-winged Hawk 9/thr Granville 2850 Hawkcount (JW) 9/11-22 Mt. Wachusett 2978 Hawkcount (JS)	10/10
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes 9/19, 21 Mt. Wachusett 1. 1 Hawkcount (JS) 9/19 Granville 2 Hawkcount (JW) 10/thr Granville 15 Hawkcount (JW) 10/4 Bolton Flats 1 N. Paulson 10/5 GMNWR 1 migr S. Perkins# 10/20 Barre Falls 18 Hawkcount (BK) 10/23 Mt. Watatic 9 Hawkcount (BK) 10/23 Mt. Watatic 9 Hawkcount (TP) Broad-winged Hawk 9/thr Barre Falls 3555 Hawkcount (JW) 9/11-22 Mt. Wachusett 2978 Hawkcount (JW) 9/11-25 Mt. Watatic 5305 Hawkcount (TP)	10/10
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes 9/19 21 Mt. Wachusett 1.1 Hawkcount (JS) 9/19 Granville 2 Hawkcount (JW) 10/4h Granville 15 Hawkcount (JW) 10/4 Bolton Flats 1 N. Paulson 10/5 GMNWR 1 migr S. Perkins# 10/11-31 Barre Falls 44 Hawkcount (BK) 10/20 Barre Falls 18 Hawkcount (BK) 10/23 Mt. Watatic 9 Hawkcount (TP) Broad-winged Hawk 9/thr Barre Falls 3555 Hawkcount (TP) Broad-winged Hawk 9/thr Granville 2850 Hawkcount (JW) 9/11-22 Mt. Wachusett 2978 Hawkcount (JS) 9/11-25 Mt. Watatic 5305 Hawkcount (TP) 9/112 Becket 125 R. Laubach	10/10
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes 9/19, 21 Mt. Wachusett 1. 1 Hawkcount (JS) 9/19 Granville 2 Hawkcount (JW) 10/thr Granville 15 Hawkcount (JW) 10/4 Bolton Flats 1 N. Paulson 10/5 GMNWR 1 migr S. Perkins# 10/11-31 Barre Falls 44 Hawkcount (BK) 10/20 Barre Falls 18 Hawkcount (BK) 10/20 Mt. Watatic 9 Hawkcount (JTP) Broad-winged Hawk 9/thr Barre Falls 3555 Hawkcount (JTP) 9/11-22 Mt. Wachusett 2978 Hawkcount (JW) 9/11-25 Mt. Watatic 5305 Hawkcount (JTP) 9/12 Becket 125 R. Laubach Hawkcount (JTP) 9/13 18 Granville 1084 852 Hawkcount (JTP) R. Laubach Hawkcount (JTP) Hawkcount (JTP) 13 18 Granville 1084 852 Hawkcount (JTP) R. Laubach Hawkcount (JTP) Hawkcount (JTP) 13 18 Granville 1084 852 Hawkcount (JTP) R. Laubach Hawkcount (JTP) Hawkcount (JTP) 13 14 14 14 14 14 14 14	10/10
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes 9/19, 21 Mt. Wachusett 1. 1 Hawkcount (JS) 9/19 Granville 2 Hawkcount (JW) 10/thr Granville 15 Hawkcount (JW) 10/4 Bolton Flats 1 N. Paulson 10/5 GMNWR 1 migr S. Perkins# 10/11-31 Barre Falls 44 Hawkcount (BK) 10/20 Barre Falls 18 Hawkcount (BK) 10/20 Mt. Watatic 9 Hawkcount (JW) Broad-winged Hawk 9/thr Barre Falls 3555 Hawkcount (JW) 9/11-25 Mt. Watatic 2978 Hawkcount (JW) 9/11-25 Mt. Watatic 2978 Hawkcount (JW) 9/12 Becket 125 R. Laubach 125 9/13, 18 Granville 1094 Hawkcount (JW) Hawkcount (JW) 13, 21 Barre Falls 1201, 1094 Hawkcount (JW) Hawkcount (JW) 13, 21 Barre Falls 1201, 1094 Hawkcount (JW) Hawkcount (JW) 13, 21 Barre Falls 1201, 1094 Hawkcount (JW) Hawkcount (JW) 13, 21 Barre Falls 1201, 1094 Hawkcount (JW) Hawkcount (JW) 13, 21 Barre Falls 1201, 1094 Hawkcount (JW) Hawkcount (JW) 13, 21 Barre Falls 1201, 1094 Hawkcount (JW) Hawkcount (JW) 13, 21 Barre Falls 1201, 1094 Hawkcount (JW) 1400 1400 150	10/10
Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes 9/19, 21 Mt. Wachusett 1.1 Hawkcount (JS) 9/19 Granville 2 Hawkcount (JW) 10/4h Granville 15 Hawkcount (JW) 10/4 Bolton Flats 1 N. Paulson 10/5 GMNWR 1 migr S. Perkins# 10/11-31 Barre Falls 14 Hawkcount (BK) 10/20 Barre Falls 18 Hawkcount (BK) 10/23 Mt. Watatic 9 Hawkcount (TP) Broad-winged Hawk 9/thr Barre Falls 3555 Hawkcount (JW) 9/11-22 Mt. Wachusett 2978 Hawkcount (JW) 9/11-25 Mt. Watatic 5305 Hawkcount (JW) 9/12 Becket 125 R. Laubach 9/13, 21 Barre Falls 10/94 Hawkcount (JW) 9/13, 21 Mt. Wachusett 11/94 Hawkcount (JW) Hawkcount (JW) 13/13, 21 Mt. Wachusett 11/94 Hawkcount (JW) 13/13, 21 Mt. Wachusett 11/94 Hawkcount (JW) 13/13, 21 Mt. Wachusett 11/94 Hawkcount (JK) 13/13, 21 Mt. Wachusett 11/94 Hawkcount (JK) 13/13, 21 Mt. Wachusett 11/94 Hawkcount (JK) 13/13, 21 Mt. Wachusett811, 1135 Hawkcount (JK) 13/13, 21 Mt. Wachusett8	10/10
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Red-shouldered Hawk 9/2 Barre Falls 3 B. Kamp# 9/3 Scituate 2 ad D. Furbish 9/16 Arlington 1 imm M. Rines# 9/19 Lexington 1 imm J. Forbes 9/19, 21 Mt. Wachusett 1.1 Hawkcount (JW) 10/thr Granville 2 Hawkcount (JW) 10/thr Granville 15 Hawkcount (JW) 10/4 Bolton Flats 1 N. Paulson 10/5 GMNWR 1 migr S. Perkins# 10/11-31 Barre Falls 44 Hawkcount (BK) 10/20 Mt. Watatic 9 Hawkcount (JW) 10/23 Mt. Watatic 9 Hawkcount (JW) 10/24 Mt. Watatic 5305 Hawkcount (JW) 10/25 Mt. Watatic 5305 Hawkcount (JW) 10/25 Mt. Watatic 10/25 Mt. Watatic 10/25 Mt. Watatic 10/25 Mt. Wachusett 125 R. Laubach Hawkcount (JW) 13/21 Mt. Wachusett811, 1135 Makcount (JW) 13/21 Mt. Wachusett811, 1135 13/21 Mt. Wachusett811, 1135 13/21 Mt. Wachusett811, 1135 13/21 Mt. Tom1016, 514 Hawkcount (JW) 10/1-6 Granville 1 dk Hawkcount (JW) 10/1-6 Granville 5 Hawkcount (JW) 10/1-6 Hawkcount (JW) 10/1-6 Hawkcount (JW) 10/1-6	10/10

	ot (continued)			9/9	Northampton	4	A. Magee
10/23	W. Newbury	6	D. Chickering	9/18	Newbury	97	R. Heil
Sandhill Cra				9/18	Northfield	7 7	C. Gentes
9/5	Granville	1	J. Weeks	9/25	P'town		G. d'Entremont#
9/14	GMNWR	1	S. Mardis	10/1	P.I.	7	R. Heil
10/5	Carver	5	L. Robinson	10/30	Scituate	1	D. Furbish
10/18-9	Ipswich	1 ad	R. Heil	Solitary Sand			
10/21	Medford	1	R. LaFontaine	9/4	GMNWR	4	S. Mardis
Black-bellied		-	rti Dai omame	9/8	Hatfield	3	C. Gentes
thr	P.I.	80-19	0 v.o.	9/10	Hadley	3 4	A. Magee
9/2	Chatham (S.B.		B. Nikula	9/11	Wellfleet	3	BBC (R. Stymeist)
9/5	Eastham (CGB		B. Nikula	9/18	Newbury	5	R. Heil
9/7-12	Paparts of 1.0	ind Eror	n 4 W. Mass. loc.	9/25		5	G. d'Entremont#
		350			P'town 22 Arlington Res.	7, 1	M. Rines
9/10	Edgartown		V. Laux#				
9/29, 10/3		4, 1	C. Gentes	9/29	Boston	3	G. Tepke
10/6	N. Monomoy	800	B. Nikula	10/9	Amherst	3	C. Gentes
10/26	New Salem	4	W. Lafley	Willet	CI 1 (C.D.	20	D M11 1
10/31	Westport	3	G. d'Entremont#	9/2	Chatham (S.B.		B. Nikula
American Go				10/3	Plymouth	2	E. Neumuth
9/1-10/16		1-2	V.O.	Western Will			
9/2-27	Chatham (S.B.) 2-4	V.O.	9/12	N. Monomoy	19	B. Nikula
9/8, 19	Hatfield	10, 2	C. Gentes	Spotted Sand			
9/9, 28	Southwick	7, 18	S. Kellogg	9/3	Pepperell	2	T. Pirro
9/9, 12	Northampton	60, 6	Gagnon, Magee	9/4	Westport	3	M. Lynch#
9/10	Northfield	11	M. Taylor	10/2	Wachusett Res		S. Šutton
9/10	Edgartown	3	V. Laux#	10/3	Quabbin	2	T. Gagnon
9/20	Wellfleet	4	M. Sampson	Upland Sand		_	
10/6	N. Monomoy	ż	B. Nikula	9/1	Leicester	1	M. Lynch#
10/30	P'town	1	B. Nikula#	9/3	Edgartown	1	M. Pelikan
	en-Plover (detail			9/10	Northfield	1	M. Taylor
9/11		is sublilit 1	A. Keith	Whimbrel	Northinela	1	WI. Taylor
	Edgartown	1	A. Keitii	9/2	Chatham (C.D.	20	B. Nikula
Semipalmated		7 20	0.0	9/3	Chatham (S.B.) 28	
9/1, 8	Northfield	7, 20	C. Gentes		Scituate		S. Maguire#
9/2	Chatham (S.B.		B. Nikula	9/3-19	P.I.	4-	
9/5, 27	Eastham 1100,		Nikula, Gove	9/5	Ipswich (C.B.)	2	J. Berry#
9/5, 13	Ipswich (C.B.)			9/10	Northampton	1	A. Magee
9/12	Essex	126	D. Brown#	9/12	Falmouth	1	CCBC (G. Hirth)
9/18	Deerfield	10	C. Gentes	9/13	Chatham	11	D. Manchester
9/25, 10/9	Revere 1'	79, 64 0, 260	P. + F. Vale	9/21	Eastham	5	R. Heil
10/1, 26	P.I. 460	0, 260	R. Heil	9/23	N. Monomoy	30	B. Nikula
10/6	N. Monomoy	150	B. Nikula	9/23	Wellfleet	14	M. Sampson
10/31	Westport	17	G. d'Entremont#	9/25	Westport	2	G. Gove#
10/31	Truro	12	J. Young	10/3	P.I.	1	BBC (I. Giriunas)
Piping Plover			v. roung	Hudsonian G		•	DDC (II GIITAIIAS)
9/2	Chatham (S.B.) 49	B. Nikula	9/4, 20	Chatham (S.B.	126 6	D M11 1.
9/4	Chaman (S.D.						
	Inewich (C B)						B. Nikula
	Ipswich (C.B.)	4 juv	J. Berry	9/8	Hatfield	2	C. Gentes
9/30	Ipswich (C.B.) Nantucket			9/8 9/8	Hatfield Northfield	2	C. Gentes C. Gentes
9/30 Killdeer	Nantucket	4 juv 2	J. Berry E. Ray	9/8 9/8 9/9, 30	Hatfield Northfield P.I.	20, 2	C. Gentes C. Gentes Gove, Wetmore
9/30 Killdeer 9/4	Nantucket Northfield	4 juv 2 52	J. Berry E. Ray C. Gentes	9/8 9/8 9/9, 30 10/6	Hatfield Northfield P.I. N. Monomoy	2 20, 2 1	C. Gentes C. Gentes Gove, Wetmore B. Nikula
9/30 Killdeer 9/4 9/9	Nantucket Northfield Southwick	4 juv 2 52 40	J. Berry E. Ray C. Gentes S. Kellogg	9/8 9/8 9/9, 30 10/6 10/20	Hatfield Northfield P.I. N. Monomoy P.I.	20, 2	C. Gentes C. Gentes Gove, Wetmore
9/30 Killdeer 9/4 9/9 9/18	Nantucket Northfield Southwick Newbury	4 juv 2 52 40 58	J. Berry E. Ray C. Gentes S. Kellogg R. Heil	9/8 9/8 9/9, 30 10/6 10/20 Marbled Goo	Hatfield Northfield P.I. N. Monomoy P.I. Iwit	20, 2 1 20, 2 1 2	C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson)
9/30 Killdeer 9/4 9/9 9/18 9/19	Nantucket Northfield Southwick Newbury Ipswich	4 juv 2 52 40 58 85	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Heil	9/8 9/8 9/9, 30 10/6 10/20 Marbled Goo 9/12	Hatfield Northfield P.I. N. Monomoy P.I. lwit Scituate	20, 2 1 20, 2 1 2	C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30	Nantucket Northfield Southwick Newbury Ipswich Montague	4 juv 2 52 40 58 85 40	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Heil R. Packard	9/8 9/8 9/9, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3	Hatfield Northfield P.I. N. Monomoy P.I. Iwit Scituate 1 Chatham (S.B.	20, 2 1 20, 2 1 2	C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley	4 juv 2 52 40 58 85 40 60	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Packard C. Gentes	9/8 9/8, 9/9, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns	Hatfield Northfield P.I. N. Monomoy P.I. Iwit Scituate 1 Chatham (S.B.	20, 2 1 20, 2 1 2 1 5-	C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose	4 juv 2 52 40 58 85 40	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Heil R. Packard	9/8 9/8, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2	Hatfield Northfield P.I. N. Monomoy P.I. Iwit Scituate 1 Chatham (S.B.	20, 2 1 20, 2 1 2 1 5-	C. Gentes C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula B. Nikula
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose	4 juv 2 52 40 58 85 40 60	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Packard C. Gentes	9/8 9/8, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2 9/8	Hatfield Northfield P.I. N. Monomoy P.I. dwit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield	20, 2 1 20, 2 1 2 1 5- 1 5- 1 60 4	C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose	4 juv 2 52 40 58 85 40 60	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Packard C. Gentes	9/8 9/8, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2	Hatfield Northfield P.I. N. Monomoy P.I. Iwit Scituate 1 Chatham (S.B. tone Chatham (S.B.	20, 2 1 20, 2 1 2 1 5- 1 60 4 1	C. Gentes C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula B. Nikula
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21 American Oy 9/1-19	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum	4 juv 2 52 40 58 85 40 60 27	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Packard C. Gentes D. + I. Jewell	9/8 9/8, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2 9/8	Hatfield Northfield P.I. N. Monomoy P.I. dwit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield GMNWR	20, 2 1 20, 2 1 2 1 5- 1 5- 1 60 4	C. Gentes C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins#
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21 American Oy 9/1-19	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher	4 juv 2 52 40 58 85 40 60 27	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula	9/8 9/8, 9/9, 30 10/6 10/20 Marbled God 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11	Hatfield Northfield P.I. N. Monomoy P.I. dwit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield	20, 2 1 20, 2 1 2 1 5- 1 60 4 1	C. Gentes C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula B. Nikula C. Gentes
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead	4 juv 2 52 40 58 85 40 60 27 2 0195, 56	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale	9/8 9/8, 9/9, 30 10/6 10/20 Marbled Goc 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10	Hatfield Northfield P.I. N. Monomoy P.I. dwit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield GMNWR Plymouth Sandwich	20, 2 1 20, 2 1 2 1 5- 1 5- 1 60 4 1 8	C. Gentes C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish#
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth	4 juv 2 52 40 58 85 40 60 27 2 0195, 56	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell	9/8 9/8 9/9, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30	Hatfield Northfield P.I. N. Monomoy P.I. Witt Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield GMNWR Plymouth	20, 2 1 2 1 2 1 5- 1 5- 1 60 4 1 8 6	C. Gentes C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans	4 juv 2 52 40 58 85 40 60 27 2 0195, 56	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale	9/8 9/8, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot	Hatfield Northfield P.I. N. Monomoy P.I. Wwit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate	20, 2 1 2 1 2 1 5- 1 5- 1 60 4 1 8 6 6 2	C. Gentes C. Gentes Cove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish# D. Furbish
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10 9/21	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans Eastham	4 juv 2 52 40 58 85 40 60 27 2 0)195, 56 1 2 5 7	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale R. Heil	9/8 9/8, 30 10/6 10/20 Marbled Goc 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot 9/10	Hatfield Northfield P.I. N. Monomoy P.I. dwit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate	20, 2 1 2 2 1 2 1 5- 0) 60 4 1 8 6 2 48	C. Gentes C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish# D. Furbish V. Laux#
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/31 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10 9/21 9/30	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans Eastham Nantucket	4 juv 2 52 40 58 85 40 60 27 2 0195, 56 1 2 5 7	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale R. Heil E. Ray	9/8 9/8 9/9, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot 9/10	Hatfield Northfield P.I. N. Monomoy P.I. dwit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate	2 20, 2 1 2 1 2 1 5- 1 5- 1 8 6 2 4 4 8 9	C. Gentes C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish V. Laux# D. Brown#
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10 9/21 9/30 10/10	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans Eastham Nantucket Oak Bluffs	4 juv 2 52 40 58 85 40 60 27 2 0)195, 56 1 2 5 7	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale R. Heil	9/8 9/8, 9/9, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot 9/10 9/12 9/20	Hatfield Northfield P.I. N. Monomoy P.I. twit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate Edgartown Essex Chatham (S.B.	2 20, 2 1 2 1 2 1 5- 1 5- 1 8 6 2 4 4 8 9 700	C. Gentes C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish# D. Furbish V. Laux# D. Brown# B. Nikula
9/30 Killdeer 9/4 9/9 9/18 9/19 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10 9/21 9/30 10/10 American Av	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans Eastham Nantucket Oak Bluffs	4 juv 2 52 40 58 85 40 60 27 2 0195, 56 1 2 5 7 5 5	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale R. Heil E. Ray SSBC (Clapp)	9/8 9/8, 9/9, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot 9/10 9/12 9/20	Hatfield Northfield P.I. N. Monomoy P.I. dwit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate Edgartown Essex Chatham (S.B. Revere	2 1 20, 2 1 2 1 2 1 5- 0) 60 4 1 8 6 2 2 48 9 9) 700 10	C. Gentes C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish# D. Furbish V. Laux# D. Brown# B. Nikula P. + F. Vale
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10 9/21 9/30 10/10 American Av 9/23-26	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans Eastham Nantucket Oak Bluffs ocet E. Boston	4 juv 2 52 40 58 85 40 60 27 2 0195, 56 1 2 5 7 5 5	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale R. Heil E. Ray	9/8 9/8, 9/9, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot 9/10 9/12 9/20 9/25 10/1	Hatfield Northfield P.I. N. Monomoy P.I. dwit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate Edgartown Essex Chatham (S.B. Revere Plymouth B.	2 1 20, 2 1 2 1 5-) 60 4 1 8 6 2 48 9) 700 10 480	C. Gentes C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish# D. Furbish V. Laux# D. Brown# B. Nikula P. + F. Vale J. Walker
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10 9/21 9/30 10/10 American Av 9/23-26 Greater Yello	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans Eastham Nantucket Oak Bluffs occt E. Boston wlegs	4 juv 2 52 40 58 85 40 60 27 2 0195, 56 1 2 5 7 5 5 1 D.	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale R. Heil E. Ray SSBC (Clapp)	9/8 9/8 9/9, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot 9/10 9/12 9/20 9/25 10/1 10/6	Hatfield Northfield P.I. N. Monomoy P.I. twit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate Edgartown Essex Chatham (S.B. Revere Plymouth B. N. Monomoy	2 1 20, 2 1 2 1 5- 1 0 60 4 1 1 8 6 2 48 9 9 1700 180 180 180 180 180 180 180 180 180 1	C. Gentes C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish# D. Furbish V. Laux# D. Brown# B. Nikula P. + F. Vale J. Walker B. Nikula
9/30 Killdeer 9/4 9/9 9/18 9/19 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10 9/21 9/30 10/10 American Av 9/23-26 Greater Yellov 9/5, 19	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans Eastham Nantucket Oak Bluffs rocet E. Boston wlegs Eastham 200	4 juv 2 52 40 58 85 40 60 27 2 0195, 56 1 2 5 7 5 5 1 D.	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale R. Heil E. Ray SSBC (Clapp) Hunneman + v.o. B. Nikula	9/8 9/8 9/9, 30 10/6 10/20 Marbled Goc 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot 9/10 9/12 9/20 9/25 10/1 10/6 10/31	Hatfield Northfield P.I. N. Monomoy P.I. dwit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate Edgartown Essex Chatham (S.B. Revere Plymouth B.	2 1 20, 2 1 2 1 5-) 60 4 1 8 6 2 48 9) 700 10 480	C. Gentes C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish# D. Furbish V. Laux# D. Brown# B. Nikula P. + F. Vale J. Walker
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10 9/21 9/30 10/10 American Av 9/23-26 Greater Yellor 9/5, 19	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans Eastham Nantucket Oak Bluffs rocet E. Boston wlegs Eastham Squantum	4 juv 2 52 40 58 85 40 60 27 2 0)195, 56 1 2 5 7 5 5 1 D. 0, 150 50	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale R. Heil E. Ray SSBC (Clapp) Hunneman + v.o. B. Nikula G. d'Entremont	9/8 9/8 9/9, 30 10/6 10/20 Marbled Goc 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot 9/10 9/12 9/20 9/25 10/1 10/6 10/31 Sanderling	Hatfield Northfield P.I. N. Monomoy P.I. dwit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate Edgartown Essex Chatham (S.B. Revere Plymouth B. N. Monomoy P.I.	2 1 20, 2 1 2 1 3 1 5- 1 60 4 1 8 6 2 48 9 9 170 180 180 180 180 180 180 180 180 180 18	C. Gentes C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish# D. Furbish V. Laux# D. Brown# B. Nikula P. + F. Vale J. Walker B. Nikula T. Wetmore
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10 9/21 9/30 10/10 American Av 9/23-26 Greater Yello 9/5, 19 9/6 9/9	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans Eastham Nantucket Oak Bluffs rocet E. Boston wlegs Eastham Squantum Southwick	4 juv 2 52 40 58 85 40 60 27 2 0195, 56 1 2 5 7 5 5 1 D. 0, 150 6	J. Berry E. Ray C. Gentes S. Kellogg R. Heill R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale R. Heil E. Ray SSBC (Clapp) Hunneman + v.o. B. Nikula G. d'Entremont S. Kellogg	9/8 9/8 9/9, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot 9/10 9/12 9/25 10/1 10/6 10/31 Sanderling 9/2	Hatfield Northfield P.I. N. Monomoy P.I. twit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate Edgartown Essex Chatham (S.B. Revere Plymouth B. N. Monomoy P.I. Chatham (S.B.	2 1 20, 2 1 2 1 3 1 5- 1 6 4 1 8 8 6 2 2 48 9 9 1 80 180 180 180 180 180 180 180 180 18	C. Gentes C. Gentes C. Gentes Cove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish# D. Furbish V. Laux# D. Brown# B. Nikula P. + F. Vale J. Walker B. Nikula T. Wetmore B. Nikula
9/30 Killdeer 9/4 9/9 9/18 9/19 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10 9/21 9/30 10/10 American Av 9/23-26 Greater Yellor 9/5, 19 9/6 9/9	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans Eastham Nantucket Oak Bluffs rocet E. Boston wlegs Eastham Squantum Squantum Southwick GMNWR	4 juv 2 52 40 58 85 40 60 27 2 0195, 56 1 2 5 7 5 5 1 D. 0, 150 6 6, 2	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale R. Heil E. Ray SSBC (Clapp) Hunneman + v.o. B. Nikula G. d'Entremont S. Kellogg S. Perkins#	9/8 9/8 9/9, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot 9/10 9/12 9/20 9/25 10/1 10/6 10/31 Sanderling 9/2 9/5	Hatfield Northfield P.I. N. Monomoy P.I. dwit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate Edgartown Essex Chatham (S.B. Revere Plymouth B. N. Monomoy P.I. Chatham (S.B. Inswich (C.B.)	2 20, 2 1 2 2 1 5-) 60 4 1 8 6 2 48 90 10 480 180 90	C. Gentes C. Gentes C. Gentes C. Gentes C. Gentes C. Gentes B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish# D. Furbish V. Laux# D. Brown# B. Nikula P. + F. Vale J. Walker B. Nikula T. Wetmore B. Nikula J. Berry#
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10 9/21 9/30 10/10 American Av 9/23-26 Greater Yello 9/5, 19 9/6 9/9 9/9 9/17	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans Eastham Nantucket Oak Bluffs rocet E. Boston wlegs Eastham Squantum Southwick GMNWR Edgartown	4 juv 2 52 40 58 85 40 60 27 2 0)195, 56 1 2 5 7 5 5 1 D. 0, 150 6 6, 2 75	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale R. Heil E. Ray SSBC (Clapp) Hunneman + v.o. B. Nikula G. d'Entremont S. Kellogg S. Perkins# A. Keith	9/8 9/8 9/9, 30 10/6 10/20 Marbled Goc 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot 9/10 9/12 9/20 9/25 10/1 10/6 10/31 Sanderling 9/2 9/5 9/9	Hatfield Northfield P.I. N. Monomoy P.I. dwit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate Edgartown Essex Chatham (S.B. Revere Plymouth B. N. Monomoy P.I. Chatham (S.B. Ipswich (C.B.) Turners Falls	2 1 20, 2 1 2 1 2 1 3 1 5- 1 60 4 1 1 8 6 2 2 48 9 9 1 700 10 180 180 180 180 180 180 180 180 18	C. Gentes C. Gentes C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish# D. Furbish V. Laux# D. Brown# B. Nikula P. + F. Vale J. Walker B. Nikula T. Wetmore B. Nikula J. Berny# A. Richards
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10 9/21 9/30 10/10 American Av 9/23-26 Greater Yellor 9/5, 19 9/6 9/9 9/9 9/17 9/18	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans Eastham Nantucket Oak Bluffs ocet E. Boston wlegs Eastham Southwick GMNWR Edgartown Newbury	4 juv 2 52 40 58 85 40 60 27 2 0195, 56 1 2 5 7 5 1 D. 0, 150 6 6, 2 7 47	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale R. Heil E. Ray SSBC (Clapp) Hunneman + v.o. B. Nikula G. d'Entremont S. Kellogg S. Perkins# A. Keith R. Heil	9/8 9/8 9/9, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot 9/10 9/12 9/25 10/1 10/6 10/31 Sanderling 9/2 9/5 9/9 9/9, 10/19	Hatfield Northfield P.I. N. Monomoy P.I. wit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate Edgartown Essex Chatham (S.B. Revere Plymouth B. N. Monomoy P.I. Chatham (S.B. Ipswich (C.B.) Turners Falls Northampton	2 20, 2 1 2 1 2 1 5- 1 6 4 1 1 8 6 2 2 48 9 9 1700 180 90 315 5, 1	C. Gentes C. Gentes C. Gentes Cove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish# D. Furbish V. Laux# D. Brown# B. Nikula P. + F. Vale J. Walker B. Nikula T. Wetmore B. Nikula J. Berry# A. Richards Mako, Lafley
9/30 Killdeer 9/4 9/9 9/18 9/19 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10 9/21 9/30 10/10 American Av 9/23-26 Greater Yellor 9/5, 19 9/6 9/9 9/17 9/18 10/1, 26	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans Eastham Nantucket Oak Bluffs ocet E. Boston wlegs Eastham Squantum Southwick GMNWR Edgartown Newbury P.I.	4 juv 2 52 40 58 85 40 60 27 2 0195, 56 1 2 5 7 5 5 1 D. 0, 150 6 6, 2 75 47 60, 75	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale C. Gaptes D. + I. Jewell G. d'Entremont# B. Nikula C. Gaptes B. Nikula C. Heil E. Ray Clapp Hunneman + v.o. B. Nikula G. d'Entremont S. Kellogg S. Perkins# A. Keith R. Heil R. Heil	9/8 9/8 9/9, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot 9/10 9/12 9/20 9/25 10/1 10/6 10/31 Sanderling 9/2 9/9 9/9, 10/19	Hatfield Northfield P.I. N. Monomoy P.I. Istituste Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate Edgartown Essex Chatham (S.B. Revere Plymouth B. N. Monomoy P.I. Chatham (S.B. Ipswich (C.B.) Turners Falls Northampton Revere	2 20, 2 1 2 2 1 5- 1 60 4 1 8 6 2 48 90 700 480 180 90 315 1 5, 1 7, 91	C. Gentes C. Gentes C. Gentes Cove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish# D. Furbish V. Laux# D. Brown# B. Nikula P. + F. Vale J. Walker B. Nikula T. Wetmore B. Nikula J. Berry# A. Richards Mako, Lafley
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10 0/10 American Av 9/23-26 Greater Yello 9/5, 19 9/6 9/9 9/9 9/17 9/18 10/1, 26 10/18	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans Eastham Nantucket Oak Bluffs rocet E. Boston wlegs Eastham Squantum Southwick GMNWR Edgartown Newbury P.I. Ipswich	4 juv 2 52 40 58 85 40 60 27 2 0195, 56 1 2 5 7 5 1 D. 0, 150 6 6, 2 7 47	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale R. Heil E. Ray SSBC (Clapp) Hunneman + v.o. B. Nikula G. d'Entremont S. Kellogg S. Perkins# A. Keith R. Heil	9/8 9/8 9/9, 30 10/6 10/20 Marbled Goc 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot 9/10 9/12 9/20 9/25 10/1 10/6 10/31 Sanderling 9/2 9/5 9/9 9/9, 10/19 9/25 9/30	Hatfield Northfield P.I. N. Monomoy P.I. dwit Scituate 1 Chatham (S.B. tone Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate Edgartown Essex Chatham (S.B. Revere Plymouth B. N. Monomoy P.I. Chatham (S.B. Turners Falls) Northampton Revere Northampton Revere Nantucket	2 20, 2 1 2 20, 2 1 2 3 3 6 48 9 9 1700 480 180 90 315 15, 1 791 200	C. Gentes C. Gentes C. Gentes C. Gentes Gove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish# D. Furbish V. Laux# D. Brown# B. Nikula P. + F. Vale J. Walker B. Nikula T. Wetmore B. Nikula J. Berry# A. Richards Mako, Lafley P. + F. Vale E. Ray
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10 9/21 9/30 10/10 American Av 9/23-26 Greater Yellov 9/5, 19 9/6 9/9 9/17 9/18 10/1, 26 10/18 Lesser Yellow	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans Eastham Nantucket Oak Bluffs Ocet E. Boston wlegs Eastham Southwick GMNWR Southwick GMNWR Edgartown Newbury P.I. Ipswich clegs	4 juv 2 52 40 58 85 40 60 27 2 0)195, 56 1 2 5 7 5 5 1 D. 0, 150 6 6, 2 7 7 5 8 4 7 5 8 5 4 7 5 8 5 8 6 6 6 6 6 6 6 6 6 6 6 6 6	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale R. Heil E. Ray SSBC (Clapp) Hunneman + v.o. B. Nikula G. d'Entremont S. Kellogg S. Perkins# A. Keith R. Heil R. Heil R. Heil	9/8 9/8 9/9, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot 9/10 9/12 9/20 9/25 10/1 10/6 10/31 Sanderling 9/2 9/5 9/9 9/9, 10/19 9/25 9/30 9/9-10	Hatfield Northfield P.I. N. Monomoy P.I. lwit Scituate 1 Chatham (S.B. stone Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate Edgartown Essex Chatham (S.B. Revere Plymouth B. N. Monomoy P.I. Chatham (S.B. Ipswich (C.B.) Turners Falls Northampton Revere Nantucket Southwick	2 20, 2 1 2 2 1 2 1 5- 1 6 2 48 6 2 2 48 9 9 10 40 180 90 315 5, 1 791 200 1	C. Gentes C. Gentes C. Gentes Cove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish# D. Furbish V. Laux# D. Brown# B. Nikula P. + F. Vale J. Walker B. Nikula T. Wetmore B. Nikula J. Berry# A. Richards Mako, Lafley P. + F. Vale E. Ray S. Kellogg
9/30 Killdeer 9/4 9/9 9/18 9/19 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10 9/21 9/30 10/10 American Av 9/23-26 Greater Yellov 9/5, 19 9/6 9/9 9/17 9/18 10/1, 26 10/18 Lesser Yellow 9/5, 21	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans Eastham Nantucket E. Boston wlegs Eastham Squantum Squantum Squantum Squantum Southwick GMNWR Edgartown Newbury P.I. Ipswich vlegs GMNWR	4 juv 2 52 40 58 85 40 60 27 2 0195, 56 1 2 5 7 5 5 1 D. 0, 150 6 6, 2 75 47 60, 75 23 16, 14	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale C. Gaptes D. + I. Jewell G. d'Entremont# E. Ray SSBC (Clapp) Hunneman + v.o. B. Nikula G. d'Entremont S. Kellogg S. Perkins# A. Keith R. Heil R. Heil R. Heil R. Heil R. Heil	9/8 9/8 9/9, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot 9/10 9/12 9/20 9/25 10/1 10/6 10/31 Sanderling 9/2 9/5 9/9 9/9, 10/19 9/25 9/30 9/9-10 10/6	Hatfield Northfield P.I. N. Monomoy P.I. Istituste Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate Edgartown Essex Chatham (S.B. Revere Plymouth B. N. Monomoy P.I. Chatham (S.B. Ipswich (C.B.) Turners Falls Northampton Revere Nantucket Southwick N. Monomoy	2 20, 2 1 2 2 1 5- 1 60 4 4 1 8 6 2 48 90 700 480 180 90 315 1 5, 1 791 200 1800	C. Gentes C. Gentes C. Gentes C. Gentes C. Gentes C. Gentes B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish# D. Furbish V. Laux# D. Brown# B. Nikula P. + F. Vale J. Walker B. Nikula T. Wetmore B. Nikula J. Berry# A. Richards Mako, Lafley P. + F. Vale E. Ray S. Kellogg B. Nikula
9/30 Killdeer 9/4 9/9 9/18 9/19 9/30 10/3 10/21 American Oy 9/1-19 9/2, 10/31 9/5 9/7 9/10 9/21 9/30 10/10 American Av 9/23-26 Greater Yellov 9/5, 19 9/6 9/9 9/17 9/18 10/1, 26 10/18 Lesser Yellow	Nantucket Northfield Southwick Newbury Ipswich Montague Hadley Melrose stercatcher Squantum Chatham (S.B. Marblehead Falmouth Orleans Eastham Nantucket Oak Bluffs Ocet E. Boston wlegs Eastham Southwick GMNWR Southwick GMNWR Edgartown Newbury P.I. Ipswich clegs	4 juv 2 52 40 58 85 40 60 27 2 0195, 56 1 2 5 7 5 5 1 D. 0, 150 6 6, 2 75 47 60, 75 23 16, 14	J. Berry E. Ray C. Gentes S. Kellogg R. Heil R. Heil R. Packard C. Gentes D. + I. Jewell G. d'Entremont# B. Nikula P. + F. Vale R. Farrell P. + F. Vale R. Heil E. Ray SSBC (Clapp) Hunneman + v.o. B. Nikula G. d'Entremont S. Kellogg S. Perkins# A. Keith R. Heil R. Heil R. Heil	9/8 9/8 9/9, 30 10/6 10/20 Marbled Goo 9/12 9/13-10/3 Ruddy Turns 9/2 9/8 9/11 10/3 10/10 10/30 Red Knot 9/10 9/12 9/20 9/25 10/1 10/6 10/31 Sanderling 9/2 9/5 9/9 9/9, 10/19 9/25 9/30 9/9-10	Hatfield Northfield P.I. N. Monomoy P.I. Istituste Chatham (S.B. Hatfield GMNWR Plymouth Sandwich Scituate Edgartown Essex Chatham (S.B. Revere Plymouth B. N. Monomoy P.I. Chatham (S.B. Ipswich (C.B.) Turners Falls Northampton Revere Nantucket Southwick N. Monomoy	2 20, 2 1 2 2 1 5- 1 60 4 4 1 8 6 2 48 90 700 480 180 90 315 1 5, 1 791 200 1800	C. Gentes C. Gentes C. Gentes Cove, Wetmore B. Nikula MAS (Larson) D. Crockett B. Nikula C. Gentes D. Diggins# E. Neumuth D. Furbish# D. Furbish V. Laux# D. Brown# B. Nikula P. + F. Vale J. Walker B. Nikula T. Wetmore B. Nikula J. Berry# A. Richards Mako, Lafley P. + F. Vale E. Ray S. Kellogg

Conderling (continu	rad)		0/17	Saituata	1	D. Eurbich#
Sanderling (continu 10/23 Den	nis (Corp. B.)500	B. Nikula#	9/17 Stilt Sandpipe	Scituate r	1	D. Furbish#
Semipalmated Sand	dpiper		9/2, 11	GMNWR	1, 3	M. Rines#
	thâm (S.B.) 2200 tham 1400, 125	B. Nikula B. Nikula	9/10 9/11, 26	Edgartown P.I.	20, 1	L. McDowell Wetmore, Vale
	vich (C.B.) 1300	J. Berry#	9/20	Harwich	1	E. Banks
9/6 \$. M	Ionomoy 250	B. Nikula#	9/26	E. Boston	3	BBC (S. Zendeh)
	thfield 190 thwick 70	C. Gentes S. Kellogg	10/29 Buff-breasted	E. Boston	1	L. Pivacek
	thampton 50	T. Gagnon	9/3, 10/4	Chatham (S.B.	7, 2	P. Flood#
9/17, 10/3 Reve	ere 1445, 465	P. + F. Vale	9/3-12	P.I.	2-4	V.O.
9/25 Reve 10/1, 26 P.I.	ere 468 95, 21	P. + F. Vale R. Heil	9/6 9/6	S. Monomoy Scituate	2 1	B. Nikula# S. Carey
Western Sandpiper	75, 21		9/8-10	Hatfield	1	C. Gentes
9/5 Lyni		S. Hedman	9/9-11 9/11	Northampton	4-7 1	T. Gagnon
9/5, 25 Reve 9/5 East	ere 3, 3 tham (CGB) 10	P. + F. Vale B. Nikula	9/11	Northfield Ipswich	1 juv	C. Gentes R. Heil
9/6, 26 Squa	antum 2, 1	GdE, Donovan	10/1	P.I.	2 juv	
9/11 Sand 9/11 P.I.	dwich 2	M. Tuttle# J. Trimble	Ruff 9/8-9	Eastham (CGB	3) 1	C. Goodrich
	Soston 3	J. Hoye#	9/12	N. Monomoy	1 juv	
	nomoy/S.B. 10+	B. Nikula	Short-billed D	owitcher	,	
Least Sandpiper 9/3 Pepp	perell 15	T. Pirro	9/2 9/5	Chatham (S.B. Revere	250	B. Nikula P. + F. Vale
9/5, 21 GM	NWR 90, 5	S. Perkins#	9/5, 19	Eastham	80, 50	B. Nikula
9/5 Hatf		C. Gentes	9/11, 10/9		20, 2	T. Wetmore
	nouth 14 thfield 14	R. Farrell C. Gentes	9/19 Long-billed D	Newbypt lowitcher	50	R. Heil
9/15 Hatf	field 10	L. Therrien	9/5	Eastham (CGB		B. Nikula
9/25 P'to 10/3 Cum	wn 11 nb. Farms 4	G. d'Entremont# G. d'Entremont#	10/1, 26 10/10		11, 20	R. Heil A. Keith
	ngton Res. 1	J. Forbes	10/10	Edgartown Westport	1	M. Lynch#
10/22 Edga	artown 1	A. Keith	10/10	Nahant	1	J. Sardell#
White-rumped Sand 9/2 Chil	dpiper mark 7	A. Keith	10/16 Wilson's Snip	Eastham (F. H.) 4	SSBC (GdE)
	tham (S.B.) 250	B. Nikula	9/3, 21	GMNWR	5, 5	S. Perkins#
9/5, 13 Ipsw	vich (C.B.) 6, 3	J. Berry#	9/10, 10/28		2, 2	Magee, Allen
9/5, 17 Revo	ere 8, 5 NWR 4, 3	P. + F. Vale S. Perkins#	9/18 9/25	Newbury P'town	4	R. Heil G. d'Entremont#
9/5, 10/23 East	tham 40, 4	B. Nikula	10/2	Cumb. Farms	17	M. Maurer#
	Ionomoy 120 thfield 40	B. Nikula#	10/4 10/26	Bolton Flats P.I.	5 2	T. Pirro R. Heil
	thfield 40 thwick 4	C. Gentes S. Kellogg	American Wo		2	K. Hell
9/10 Hatf		M. Taylor	9/25	Conway	1	R. Packard
10/1, 26 P.I. Baird's Sandpiper	17, 6	R. Heil	10/2 10/6	Amherst Northfield	2 1	C. Gentes M. Taylor
9/1 Nort	thfield 2	C. Gentes	10/20	Melrose	1	D. + I. Jewell
	tham (S.B.) 1 aue Pt 2	B. Nikula	10/31 Wilson's Phal	Ware R. IBA	1	M. Lynch#
9/10 Was 9/11 P.I.	que Pt 2 5	V. Laux J. Trimble	9/4-10	arope GMNWR	1	S. Mardis + v.o.
9/11 Nort	thfield 1	C. Gentes	Red-necked P	halarope		
	Part.(A.Pd) 1 Boston 1	E. Nielsen J. Hoye#	9/9 9/9	GMNWR Turners Falls	1 juv 5	T. Allison# A. Richards
10/30 P'to		B. Nikula#	9/11	S. Stellwagen	78	W. Petersen#
Pectoral Sandpiper			9/19	Eastham (F.E.)		B. Nikula#
	NWR 22 may tham (S.B.) 2	x 9/9 S. Perkins E. Morrier	9/20 9/30	Jeffrey's L. Eastham (F.E.)	52 5	MAS (Larson) M. Sampson#
9/8, 10/24 Nort	thfield 18, 1	Gentes, Stymeist	10/2-3	Oceanographer		R. Donovan
	thampton 8	T. Gagnon	Red Phalarope		1	MAS (Larson)
9/10 Had 9/17, 10/22 Edg	ley 8 artown 2, 4	A. Magee A. Keith	9/20 10/2-3	Jeffrey's L. Oceanographer		R. Donovan
9/18 Hatf	field 6	L. Therrien	Phalarope spe	cies		
9/19 Rand 10/10 Wes	dolph 5 tport 4	G. d'Entremont M. Lynch#	9/19 9/20	Eastham (F.E.) Jeffrey's L.	20+ 8	B. Nikula# MAS (Larson)
Purple Sandpiper	tport 4	IVI. Lynch#	9/30	P.I.	3	T. Wetmore
	kport (A.P.) 1	R. Heil		Skua (no details		D 11
10/30 Scitt	uate 1	D. Furbish	9/3 10/2-3	just S of Noma Oceanographer		P. Harrington R. Donovan
9/19 GM	NWR 1 juv	S. Perkins#	Pomarine Jaeg	ger		
	tham (S.B.) 700°	B. Nikula	9/3	30 m. S of MV		V. Laux#
9/28 Sout 10/1 P.I.	thwick 9 170 juv	S. Kellogg R. Heil	9/19 10/2-3	Eastham (F.E.) Oceanographer		B. Nikula# R. Donovan
10/3 Plyn	nouth 300°	E. Neumuth	10/7	Orleans	1	G. Gove#
	Monomoy 700 bypt 200	B. Nikula MAS (Larson)	10/19, 24 10/23	Rockport (A.P. Eastham (F.E.)		R. Heil B. Nikula#
10/6 New 10/9 Rev		P. + F. Vale	Parasitic Jaego		,	D. INIKUIA#
Curlew Sandpiper	*		9/1, 20	Chatham (S.B.		Nikula, Flood
9/1-7 Chatha	m (S.B.) 1 partial alt	B. Nikula + v.o.	9/6	S. Monomoy	6	B. Nikula#

Parasitic Jaeger (continued)	10/26 Barnstable (S.N.) 40+ G. Gove#
9/7 N. Monomoy 15 B. Nikula	10/28 Wellfleet 4 M. Tuttle#
9/13 Ipswich (C.B.) 1 juv J. Berry# 9/16, 10/17 Chatham 25, 5 Flood, Nikula	Caspian Tern 9/10 Northampton 1 H. Allen
9/16, 10/17 Chatham 25, 5 Flood, Nikula 9/18, 10/24 Rockport (A.P.) 2, 1 R. Heil	9/10 Northampton 1 H. Allen 9/20 Dorchester 9 R. Donovan
9/30, 10/24 Rockport (A.1.) 2, 1 R. Hell 9/30, 10/23 Eastham (F.E.) 2, 8 Sampson, Nikula	9/21 Edgartown 2 A. Keith
10/23 P'town 1 B. Nikula#	9/22, 10/2 P.I. 1, 1 Larson, Haydock
Jaeger species	9/22 Chatham (S.B.) 1 ad B. Nikula
9/16 Chatham 5 P. Flood	9/29 Mattapoisett 3 M. Sylvia
9/18, 10/24 Rockport (A.P.) 5 R. Heil	10/2 Lakeville 1 G. Gove# 10/2 Newbypt H. 2 BBC (S. Grinley)
9/19 Eastham (F.E.) 25+ B. Nikula# 9/29 Dennis (Corp. B.) 12 P. Flood	10/2 Newbypt H. 2 BBC (S. Grinley) 10/6 Nantucket 3 E. Ray
Laughing Gull	Royal Tern
9/5, 13 Ipswich (C.B.) 29, 9 J. Berry#	9/3 Edgartown 1 E. Bogle
9/11 Wellfleet 250 BBC (R. Stymeist)	Roseate Tern
9/26 Woods Hole 120 R. Farrell	9/5 Eastham (CGB) 600 B. Nikula
9/29, 10/10 Edgartown 500, 300 Pelikan, Keith	9/21 Chatham 300 R. Heil 9/21 P'town 30 R. Heil
10/3, 16 Plymouth B. 70, 40 GdE, Anderson 10/10 Acoaxet 250+ M. Lynch#	Common Tern
10/19 Rockport (A.P.) 84 R. Heil	9/10 Orleans 200+ P. + F. Vale
10/30 P'town 200 B. Nikula#	9/11 Plymouth B. 600 W. Petersen#
10/30 Brewster 400 B. Nikula#	9/13, 10/18 Ipswich 40, 1 Berry, Heil
Little Gull	9/18 Rockport (A.P.) 158 Ř. Heil
9/4-10/7 Newbypt H. 2 C. Floyd# 9/20 Jeffrey's L. 1 MAS (Larson)	9/21 Eastham 550+ R. Heil 9/21, 10/31 Chatham 8000, 50 Heil, Nikula
9/20 Jeffrey's L. 1 MAS (Larson) 10/12 S. Boston 1 1st yr R. Donovan#	9/21, 10/31 Chatham 8000, 50 Heil, Nikula 10/2 P'town 2000+ C. Floyd
10/30 Brewster 3 1W B. Nikula#	10/26 P.I. 2 R. Heil
10/30 Orleans 1 1W B. Nikula#	10/30 Truro 11 J. Young
10/30 P'town 1 1W B. Nikula#	Forster's Tern
10/30 Eastham 1 1W B. Nikula#	9/5, 10/23 Eastham 5, 6 B. Nikula
Black-headed Gull	9/23 N. Monomoy 4 B. Nikula
10/10-11 Newbypt H. 1 ad T. Wetmore 10/21 S. Boston 1 ad R. Donovan#	9/25 Revere 15 M. Garvey# 9/25 Newbypt H. 7 T. Wetmore
Bonaparte's Gull	9/27, 10/10 Westport 75, 150 Cole. Lynch
9/20 Newybpt H. 800+ MAS (Larson)	10/11, 31 Chatham (S.B.) 5, 1 Clem, Nikula
10/3 Revere 236 P. + F. Vale	10/30 Orleans 2 B. Nikula#
10/9 Revere 350+ P. + F. Vale	10/30 Wellfleet H. 18+ B. Nikula#
10/12 S. Boston 60 R. Donovan#	Least Tern
10/30 Brewster 300+ B. Nikula# Lesser Black-backed Gull	9/6 Edgartown 1 W. Lee 9/7 Chatham (S.B.) 3 E. Morrier
9/3, 10/6 N. Monomoy 7, 8 B. Nikula	9/11 Duxbury Beach 2 imm W. Petersen#
9/6 S. Monomoy 7 J. Trimble#	9/11 Wellfleet 3 BBC (R. Stymeist)
9/6, 10/11 P.I. 1, 1 Grinley, Roberts	9/21 Eastham 1 ad R. Heil
9/10 Edgartown 1 V. Laux#	Black Tern
9/10 Gay Head 1 A. Keith	9/2, 16 Chatham 5, 1 Gove, Flood 9/21 Eastham 1 R. Heil
9/20-10/31 Boston 1 ad R. Stymeist# 9/20, 10/4 Chatham (S.B.) 9, 2 B. Nikula#	9/21 Eastham 1 R. Heil Black Skimmer
9/30 Nantucket 1 E. Ray	9/2, 22 Chatham (S.B.) 1, 2. B. Nikula
10/16 P'town 1 3W SSBC (GdE)	9/4 Acoaxet 2 ad M. Lynch#
Sabine's Gull	Razorbill
9/11 Stellwagen Bank 1 ad B. Nikula#	10/11, 12 Rockport (A.P.) 1, 2 R. Heil
10/2-03 Oceanographer C. 1 ad R. Donovan	10/22, 24 Rockport (A.P.)6, 10 R. Heil Black Guillemot
Black-legged Kittiwake 9/1 Chatham (S.B.) 1 imm B. Nikula	10/19 Rockport (A.P.) 5 R. Heil
9/11 S. Stellwagen 2 W. Petersen#	Atlantic Puffin
9/18, 10/24 Rockport (A.P.)7, 420 R. Heil	9/20 Jeffrey's L. 1 juv MAS (Larson)
9/19, 30 Eastham (F.E.)10, 150 Nikula, Sampson	10/22, 24 Rockport (A.P.) 5, 1 R. Heil
9/29 Dennis (Corp. B.) 1 ad, 1 juv P. Flood	

CUCKOOS THROUGH FINCHES

Over the past few years we have begun to learn more about the incredible magnitude of the fall migration of the Northern Saw-whet Owl. For the second year, Strickland Wheelock set up a banding site in Uxbridge specifically to capture these little owls. Using a battery-operated audio call of a Northern Saw-whet Owl to lure them into the nets, Strickland and his team caught and banded a total of **87** saw-whets from October 13-31. It is interesting to see that the first birds banded in each year are females, and that the first male was not caught until October 25. Last year 100 females were caught and banded before the first male was banded. The winds subsided enough to band Halloween night. With the clocks turned back, they were able to start catching owls by 6:00 p.m., and by 11:00 p.m. they had banded twenty-one owls! Halloween

was a great night for Saw-whets elsewhere: Mark Lynch noted eleven in the Ware River Important Bird Area.

Most Common Nighthawks migrate during the last two weeks of August, but this year there was significant movement during the first week of September: in Northampton 210 nighthawks on the 7th was the highest count for such a late date. A single Whip-poor-will was noted in Southwick on September 2, the first September date in western Massachusetts since 1994. As many as 2300 Chimney Swifts were roosting in a chimney in Hanover, down from 5000 last year at the same time.

A single *Selasphorus* hummingbird showed up at a feeder in Ashfield on October 20, and it was later caught and banded and determined to be a female **Rufous**. Last year there were six noted during the period. September was a banner month for numbers of Ruby-throated Hummingbirds, many of which were noted from hawk watch locations. It was a great fall for Red-headed Woodpeckers: no fewer than thirteen were noted as compared with just five during the same period last year.

A Say's Phoebe was closely studied at Wasque Point on Martha's Vineyard on October 3, just the third record for the island, the most recent just last September 10, 2003. A second Say's Phoebe was photographed in Lunenburg. A total of five Eastern Wood-Pewees was noted on September 21 on the outer Cape, one of which was still feeding a young bird. A Western Kingbird first found on August 31 on Plum Island continued through September 5. Another, or possibly the same bird, was noted from the island on September 12, and other Western Kingbirds were noted from Westport and Edgartown. Northern Shrikes are irregular migrants and an irruptive species, and in flight years the first ones are usually encountered during the last week of October. A total of six Northern Shrikes was noted from October 25-31, unlike last year when none were noted during the period. A total of at least thirty-one Philadelphia Vireos was reported during the period, including a very late individual on October 26 on Plum Island. Only two Philadelphia Vireos have been reported later in Massachusetts: one banded at Manomet on November 5, 1979, and one carefully described on the Plymouth Christmas Bird Count December 23, 2003.

As many as twenty-eight Common Ravens were counted on Mt. Watatic in late October, the most ever noted from that location. American Crows, victims of West Nile virus, continued to be somewhat scarce in eastern Massachusetts. However, a count of over 2500 from Mt. Watatic was encouraging. Migrating flocks of Blue Jays were noted from a number of places, including hawk watch sites such as Morris Island in Chatham, where nearly 1700 were tallied from September 21 though October 4. Tree Swallows continued to stage in impressive numbers from many coastal locations, especially in early September. There were four reports of **Sedge Wrens** during the period, the most ever during the September-October migration months.

The fall migration is well underway during September; all the thrushes were noted, including a Bicknell's banded in Brewster. A **Northern Wheatear** was discovered on Plymouth Beach on October 1, where it remained through October 3. This is a very rare migrant with almost all records from coastal locations. This is the first record since one noted on Plum Island on September 10, 2001. Banding locations recorded good results: the station on Plum Island banded 831 individual birds during September; their previous record was 675 individuals. Thirty-three species of warblers were noted during the period, one more than during the same period last year. Seth Kellogg, the record guru of western Massachusetts, reported that this season had the most ever for Orange-crowned and Palm warblers, and the most reports of Cape May Warblers since 1995. For the first time since this same period in 1995 there were no Golden-winged Warblers noted during September or October. Noteworthy warbler reports

included a Yellow-throated Warbler from Chilmark, a Prothonotary Warbler on Chappaquiddick, a Worm-eating Warbler in Wellfleet, and two reports each of Kentucky and Hooded warblers. There were seven Cape May Warblers noted during the period, whereas just one was recorded during the same period last year. Connecticut Warblers were noted from thirteen locations, and eleven were banded on Plum Island. Brian Johnson of the Joppa Flats Bird Banding Station on Plum Island reported the recapture of an adult male Connecticut Warbler originally banded on September 21, 2003. Recaptures of transient migrants are thought to be exceedingly rare, far more unusual than even foreign recoveries (birds originally banded at another station). Considering how uncommon Connecticut Warblers are in Massachusetts, the distance from their nearest breeding grounds, and their general scarcity in even optimal breeding habitat, it becomes easy to realize just how phenomenal this recapture is.

Sparrow migration is well underway during October. A total of eighteen species plus "Ipswich" Savannah Sparrow and "Gambell's" White-crowned Sparrow were noted during the period. Clay-colored Sparrows, considered as a rare fall migrant as recently as 1993 (Veit and Petersen), continue to be reported in increasing numbers, and this period saw reports of at least twenty-two individuals. A total of eight Lark Sparrows was reported, and other noteworthy reports included eight Grasshopper, three Nelson's Sharp-tailed, and twenty-three Vesper sparrows. Dickcissels were very much in evidence: a total of at least twenty-eight individuals was noted during the period.

The winter finch outlook was encouraging, at least during the last two weeks of October, when large flocks of Pine Siskins and Purple Finches were noted from several areas. There was a steady flight of Pine Siskins during the morning of October 26 on Plum Island; these birds were flying north along the dunes in flocks of five to twenty-five birds. A total of forty-five Purple Finches was noted migrating past the Gay Head cliffs on October 26; there were just two reports of Evening Grosbeaks during the period.

R. Stymeist

Black-billed				10/17	Boston (Long	I.) 1	R. Donovan#
9/11	Salem	1	BBC (dela Flor)	Northern Saw			
9/12	Longmeadow	1	J. Hutchison#	10/10	M.V.	1	SSBC (Clapp)
9/12	P.I.	1	T. Wetmore#	10/13-31	Uxbridge	87 b	S. Wheelock#
9/26	Bolton Flats	1	J. Hoye#	10/29, 31	Uxbridge	20 b, 2	21 b S. Wheelock
9/27	Granville	1	J. Weeks	10/31	Ware R. IBA	11	M. Lynch#
10/1	Maynard	1	L. Nachtrab	Common Nig	hthawk		•
10/9	OŇWR	1	S. Sutton	9/1-6	Leicester	316	M. Lynch#
Yellow-billed	d Cuckoo			9/1-6	Northampton	390 tota	ıl T. Gagnon
9/21, 10/3	P.I. 2, 1		Forbes, Chickering	9/3	GMNWŔ	30	S. Perkins#
9/23	Chilmark	1	A. Keith	9/3	Ware	24	D. Norton
9/30	Newbury	1	T. Wetmore	9/4	Worcester	30	M. Lynch#
Eastern Scree	ech-Owl			9/7, 12	Northampton	210, 8	T. Gagnon
thr	Reports of indiv.	Fror	n 16 locations	9/7	Gardner ¹	21	T. Pirro
9/2	Southwick	2	J. Wojtanowski	9/12	Mt. Tom	8 1	BBC (T. Gagnon)
9/26	Bolton Flats	2	M. Lynch#	9/13	Barre Falls	4	B. Kamp#
10/3	Boston	3	BBC (R. Stymeist)	9/13	Southwick	1	S. Kellogg
10/9	Winchester	2	M. Rines	9/27	E. Boston (B.)	I.) 1	S. Hedman
10/22	Northampton	2	C. Gentes	Whip-poor-w	rill		
10/22 Great Horne		_	C. Gentes	Whip-poor-w 9/2	ill Southwick	1	J. Wojtanowski
		_	C. Gentes J. Wojtanowski	Whip-poor-w 9/2 Chimney Swi	Southwick	1	J. Wojtanowski
Great Horned	d Owl	2 2		9/2 Chimney Swi 9/1	Southwick	7	J. Wojtanowski M. Lynch#
Great Hornes	d Owl Southwick	2 2 3	J. Wojtanowski E. Stromsted	9/2 Chimney Swi	Southwick ift	1 7 150, 1	,
Great Horner 9/7 9/11	d Owl Southwick Pepperell	_	J. Wojtanowski	9/2 Chimney Swi 9/1	Southwick ift Leicester	7	M. Lynch#
Great Horned 9/7 9/11 9/15 9/16	d Owl Southwick Pepperell Wayland	2 2 3 2	J. Wojtanowski E. Stromsted J. Hoye# R. Haaseth#	9/2 Chimney Swi 9/1 9/3, 10/1 9/25 9/25	Southwick ift Leicester GMNWR	7 150, 1 2 4	M. Lynch# Perkins, Forbes
Great Horned 9/7 9/11 9/15 9/16	d Owl Southwick Pepperell Wayland Waltham 1 Reports of indiv.	2 2 3 2	J. Wojtanowski E. Stromsted J. Hoye# R. Haaseth#	9/2 Chimney Swi 9/1 9/3, 10/1 9/25 9/25 9/26	Southwick ift Leicester GMNWR Granville	150, ⁷ ₂	M. Lynch# Perkins, Forbes J. Weeks
Great Horned 9/7 9/11 9/15 9/16 9/21-10/3	d Owl Southwick Pepperell Wayland Waltham	2 2 3 2 from	J. Wojtanowski E. Stromsted J. Hoye# R. Haaseth#	9/2 Chimney Swi 9/1 9/3, 10/1 9/25 9/25	Southwick ift Leicester GMNWR Granville Groveland	7 150, 1 2 4	M. Lynch# Perkins, Forbes J. Weeks D. Chickering
Great Horner 9/7 9/11 9/15 9/16 9/21-10/3 Barred Owl	d Owl Southwick Pepperell Wayland Waltham 1 Reports of indiv.	2 2 3 2 from	J. Wojtanowski E. Stromsted J. Hoye# R. Haaseth# 17 locations	9/2 Chimney Swi 9/1 9/3, 10/1 9/25 9/25 9/26	Southwick ift Leicester GMNWR Granville Groveland Hanover	7 150, 1 2 4 2300	M. Lynch# Perkins, Forbes J. Weeks D. Chickering W. Petersen#
Great Horner 9/7 9/11 9/15 9/16 9/21-10/3 Barred Owl 9/6	Southwick Pepperell Wayland Waltham Reports of indiv. Boxford	2 2 3 2 from	J. Wojtanowski E. Stromsted J. Hoye# R. Haaseth# 17 locations S. Haydock	9/2 Chimney Swi 9/1 9/3, 10/1 9/25 9/25 9/26 10/9 10/18	Southwick ift Leicester GMNWR Granville Groveland Hanover Cumb. Farms	150, 1 2 4 2300 1	M. Lynch# Perkins, Forbes J. Weeks D. Chickering W. Petersen# G. d'Entremont#
Great Horned 9/7 9/11 9/15 9/16 9/21-10/3 Barred Owl 9/6 9/7	d Owl Southwick Pepperell Wayland Waltham 1 Reports of indiv. Boxford Pepperell	2 2 3 2 from	J. Wojtanowski E. Stromsted J. Hoye# R. Haaseth# 17 locations S. Haydock E. Stromsted#	9/2 Chimney Swi 9/1 9/3, 10/1 9/25 9/25 9/26 10/9 10/18	Southwick ift Leicester GMNWR Granville Groveland Hanover Cumb. Farms Gay Head	150, 1 2 4 2300 1	M. Lynch# Perkins, Forbes J. Weeks D. Chickering W. Petersen# G. d'Entremont#
Great Horned 9/7 9/11 9/15 9/16 9/21-10/3 Barred Owl 9/6 9/7 9/13	d Owl Southwick Pepperell Wayland Waltham 1 Reports of indiv. Boxford Pepperell Hancock	2 2 3 2 from 1 3 2 2	J. Wojtanowski E. Stromsted J. Hoye# R. Haaseth# 17 locations S. Haydock E. Stromsted# R. Laubach	9/2° Chimney Swi 9/1 9/3, 10/1 9/25 9/25 9/26 10/9 10/18 Ruby-throate	Southwick ift Leicester GMNWR Granville Groveland Hanover Cumb. Farms Gay Head d Hummingbird	150, 1 2 4 2300 1	M. Lynch# Perkins, Forbes J. Weeks D. Chickering W. Petersen# G. d'Entremont# V. Laux#
Great Horned 9/7 9/11 9/15 9/16 9/21-10/3 Barred Owl 9/6 9/7 9/13 9/20	d Owl Southwick Pepperell Wayland Waltham 1 Reports of indiv. Boxford Pepperell Hancock Southwick	2 2 3 2 from 1 3 2 2	J. Wojtanowski E. Štromsted J. Hoye# R. Haaseth# 17 locations S. Haydock E. Stromsted# R. Laubach S. Kellogg	9/2 ⁻ Chimney Swi 9/1 9/3, 10/1 9/25 9/25 9/26 10/9 10/18 Ruby-throater 9/1-16	Southwick identified the control of	150, 1 2 4 2300 1 1 23	M. Lynch# Perkins, Forbes J. Weeks D. Chickering W. Petersen# G. d'Entremont# V. Laux# J. Weeks V. Laux#
Great Horned 9/7 9/11 9/15 9/16 9/21-10/3 Barred Owl 9/6 9/7 9/13 9/20 10/16	d Owl Southwick Pepperell Wayland Waltham 1 Reports of indiv. Boxford Pepperell Hancock Southwick Ipswich Ware R. IBA	2 2 3 2 from 1 3 2 2	J. Wojtanowski E. Stromsted J. Hoye# R. Haaseth# 17 locations S. Haydock E. Stromsted# R. Laubach S. Kellogg J. Berry	9/2 ⁻ Chimney Swi 9/1 9/3, 10/1 9/25 9/25 9/26 10/9 10/18 Ruby-throater 9/1-16	Southwick ifft Leicester GMNWR Granville Groveland Hanover Cumb. Farms Gay Head d Hummingbird Granville Gay Head	150, 1 2 4 2300 1 1 1 23 8	M. Lynch# Perkins, Forbes J. Weeks D. Chickering W. Petersen# G. d'Entremont# V. Laux# J. Weeks V. Laux#
Great Horned 9/7 9/11 9/15 9/16 9/21-10/3 Barred Owl 9/6 9/7 9/13 9/20 10/16 10/31	d Owl Southwick Pepperell Wayland Waltham 1 Reports of indiv. Boxford Pepperell Hancock Southwick Ipswich Ware R. IBA	2 2 3 2 from 1 3 2 2	J. Wojtanowski E. Stromsted J. Hoye# R. Haaseth# 17 locations S. Haydock E. Stromsted# R. Laubach S. Kellogg J. Berry	9/2 Chimney Swi 9/1 9/3, 10/1 9/25 9/25 9/26 10/9 10/18 Ruby-throate 9/1-16 9/1 9/2 9/2-6, 29 9/6, 12	Southwick identified the Leicester GMNWR Granville Groveland Hanover Cumb. Farms Gay Head d Hummingbird Granville Gay Head Chilmark	150, 7 2 4 2300 1 1 23 8 20-30	M. Lynch# Perkins, Forbes J. Weeks D. Chickering W. Petersen# G. d'Entremont# V. Laux# J. Weeks V. Laux# E. Waldron
Great Horned 9/7 9/11 9/15 9/16 9/21-10/3 Barred Owl 9/6 9/7 9/13 9/20 10/16 10/31 Long-eared O	d Owl Southwick Pepperell Wayland Waltham 1 Reports of indiv. Boxford Pepperell Hancock Southwick Ipswich Ware R. IBA Owl DWWS	2 2 3 2 from 1 3 2 2 1 2	J. Wojtanowski E. Štromsted J. Hoye# R. Haaseth# 17 locations S. Haydock E. Stromsted# R. Laubach S. Kellogg J. Berry M. Lynch#	9/2 Chimney Swi 9/1 9/3, 10/1 9/25 9/25 9/26 10/9 10/18 Ruby-throate 9/1-16 9/1 9/2 9/2-6, 29 9/6, 12	Southwick idit Leicester GMNWR Granville Groveland Hanover Cumb. Farms Gay Head d Hummingbird Granville Gay Head Chilmark Northampton Barre Falls Mt. Wachuset	150, 1 2 4 2300 1 1 1 23 8 20-30 21, 1 8, 4	M. Lynch# Perkins, Forbes J. Weeks D. Chickering W. Petersen# G. d'Entremont# V. Laux# J. Weeks V. Laux# E. Waldron T. Gagnon B. Kamp# J. Stein#
Great Horned 9/7 9/11 9/15 9/16 9/21-10/3 Barred Owl 9/6 9/7 9/13 9/20 10/16 10/31 Long-eared (10/29	d Owl Southwick Pepperell Wayland Waltham 1 Reports of indiv. Boxford Pepperell Hancock Southwick Ipswich Ware R. IBA Owl DWWS	2 2 3 2 from 1 3 2 2 1 2	J. Wojtanowski E. Štromsted J. Hoye# R. Haaseth# 17 locations S. Haydock E. Stromsted# R. Laubach S. Kellogg J. Berry M. Lynch#	9/2 Chimney Swi 9/1 9/3, 10/1 9/25 9/25 9/26 10/9 10/18 Ruby-throate 9/1-16 9/1 9/2 9/2-6, 29 9/6, 12	Southwick tift Leicester GMNWR Granville Groveland Hanover Cumb. Farms Gay Head d Hummingbird Granville Gay Head Chilmark Northampton Barre Falls	150, 7 2 4 2300 1 1 1 23 8 20-30 21, 1 8, 4	M. Lynch# Perkins, Forbes J. Weeks D. Chickering W. Petersen# G. d'Entremont# V. Laux# J. Weeks V. Laux# E. Waldron T. Gagnon B. Kamp#

Ruby-throated Hummingbird (continued)	9/19 P.I. 1 BBC (S. Moore#) 9/24 Brewster 1 b S. Finnegan#
9/25 Groveland 1 D. Chickering Rufous Hummingbird (no details) *	9/24 Brewster 1 b S. Finnegan# Willow Flycatcher
10/20-31 Ashfield 1 imm m b E. Stewart + v.o.	9/6 Northampton 2 T. Gagnon
Belted Kingfisher	Traill's Flycatcher
9/3 Ware 3 D. Norton 9/25 Wellfleet 3 G. d'Entremont#	9/12 Squantum 1 G. d'Entremont
9/25 Wellfleet 3 G. d'Entremont# 9/26 P.I. 4 P. + F. Vale	Least Flycatcher 9/11 Wellfleet 2 BBC (R. Stymeist)
10/2 Wachusett Res. 3 S. Sutton	9/11 Wedfired 2 BBC (R. Styllielst) 9/11 Medford 1 M. Rines#
10/6 Chatham 4 D. Manchester#	9/12 P.I. 1 T. Wetmore
10/25 Manchester 3 S. Hedman	9/15 Longmeadow 1 G. Kingston#
Red-headed Woodpecker 9/17 Essex 1 ad J. Berry	9/19 Squantum 1 G. d'Entremont# 9/30 Truro 1 CCBC (G. Page)
9/17 Essex 1 ad J. Berry 10/2, 6 Granville 1, 1 J. Weeks	9/30 Truro 1 CCBC (G. Page) Eastern Phoebe
10/4 Canton 1 imm M. Post	9/5 Ware R. IBA 43 M. Lynch#
10/6 Chatham 1 D. Manchester#	9/12, 25 ONWR 20, 13 S. Šutton
10/7, 8 Gay Head 1 ad, 1 imm A. Keith	10/2 Westboro 24 M. Lynch#
10/7 Springfield 1 R. Titus 10/9 Nantucket 1 imm R. Kennedy	10/3 Shutesbury 30 C. Gentes 10/10, 16 Lexington 10, 2 M. Rines#
10/9 Medford 1 juv P. Devaney#	10/16, 16 Eckington 10, 2 W. Kines# 10/26 P.I. 3 R. Heil
10/10, 18 Woburn (H.P.) 1, 1 Ippolito, Wright	Say's Phoebe (details) *
10/16 Savoy 1 J. Williams	10/3 Wasque Point 1 A. Keith
10/16 Mashpee 1 ad C. Gilpatric 10/31 Barre Falls 1 D. Manchester	10/13 Lunenberg 1 ph R. Brown
10/31 Barre Falls 1 D. Manchester Red-bellied Woodpecker	Great Crested Flycatcher 9/11 Pittsfield 2 N. Purdy
9/21, 10/16 Ipswich 3, 5 J. Berry	9/12 MNWS 1 K. + R. Barnes
10/4 Bolton Flats 5 N. Paulson	9/17 Sharon 1 G. d'Entremont#
10/6 Gay Head 4 A. Keith	9/21 Eastham 1 R. Heil
10/6 Chatham 4 D. Manchester# Yellow-bellied Sapsucker	Western Kingbird 9/1-5, 12 P.I. 1, 1 v.o., Spahr
9/19-10/26 P.I. 1-3 v.o.	9/4 Westport 1 M. Lynch#
9/24 MNWS 2 S. Haydock	9/22 Edgartown 1 A. Keith
9/25, 27 Medford 1 ad, 2 imm R. LaFontaine#	Eastern Kingbird
10/1 Belmont 2 C. Cook 10/1 Lincoln 2 M. Rines	9/3, 12 P.I. 10, 2 T. Wetmore 9/17 Essex 1 J. Berry
10/1 Efficient 2 W. Killes 10/2 Arlington 3 A. Ankers#	9/21 Truro 1 R. Heil
10/3 Boston 4 BBC (R. Stymeist)	9/27 Chilmark 1 A. Keith
10/17 Brookline 2 F. Bouchard	Northern Shrike
10/17 Mt.A. 2 R. Stymeist Hairy Woodpecker	10/25 Granville 1 J. Weeks 10/27 New Salem 1 ad M. Polana
9/5 Ware R. IBA 6 M. Lynch#	10/27 New Salem 1 ad M. Folana 10/27-31 DWWS 1 D. Clapp
9/7 Pepperell 3 E. Stromsted#	10/29 Barre Falls 1 B. Kamp#
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton	10/31 Richmond 2 D. St James
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont#	10/31 Richmond 2 D. St James White-eyed Vireo
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch#	10/31 Richmond 2 D. St James White-eyed Vireo 9/5 Ware R. IBA 1 1stW M. Lynch#
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont#	10/31 Richmond 2 D. St James White-eyed Vireo 9/5 Ware R. IBA 1 1stW M. Lynch# 9/27 Medford 1 A. Ankers#
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 F. Vale	10/31 Richmond 2 D. St James White-eyed Vireo 9/5 Ware R. IBA 1 1stW M. Lynch# 9/27 Medford 1 A. Ankers# 10/10 Acoaxet 1 M. Lynch# 10/17 Brewster 1 b S. Finnegan
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 F. Vale 9/21 Chatham 33 D. Manchester#	10/31 Richmond 2 D. St James White-eyed Vireo 9/5 Ware R. IBA 1 1stW M. Lynch# 9/27 Medford 1 A. Ankers# 10/10 Acoaxet 1 M. Lynch# 10/17 Brewster 1 b S. Finnegan 10/18 Chilmark 1 A. Keith
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 F. Vale 9/21 Chatham 33 D. Manchester# Pileated Woodpecker D. Wanchester#	10/31 Richmond 2 D. St James
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pileated Woodpecker 9/6, 10/9 ONWR 1, 1 S. Sutton	10/31 Richmond 2 D. St James White-eyed Vireo 9/5 Ware R. IBA 1 1stW M. Lynch# 9/27 Medford 1 A. Ankers# 10/10 Acoaxet 1 M. Lynch# 10/17 Brewster 1 b S. Finnegan 10/18 Chilmark 1 A. Keith 10/26 P.I. 1 R. Heil Yellow-throated Vireo 1 R. Heil
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pileated Woodpecker 9/6, 10/9 ONWR 1, 1 S. Sutton	10/31 Richmond 2 D. St James
9/7 Pepperell 3 S. Sutton 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pileated Woodpecker 9/6, 10/9 ONWR 1, 1 9/11 Quabbin 4 BBC (Lockwood) 9/12 Ware R. IBA 4 9/15 N. Andover 1 D. + B. Fox	10/31 Richmond 2 D. St James
9/7 Pepperell 3 S. Sutton 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pileated Woodpecker 9/6, 10/9 ONWR 1, 1 9/11 Quabbin 4 9/12 Ware R. IBA 4 9/15 N. Andover 1 1 D. + B. Fox 10/2 Lynnfield 1 P. + F. Vale	10/31 Richmond 2 D. St James
9/7 Pepperell 3 S. Sutton 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pileated Woodpecker 9/6, 10/9 ONWR 1, 1, 1 9/11 Quabbin 4 9/12 Ware R. IBA 4 9/12 Ware R. IBA 4 9/15 N. Andover 1 D. + B. Fox 10/2 Lynnfield 1 P. + F. Vale 10/3 Quabbin (G45) 3 M. Lynch#	10/31 Richmond 2 D. St James
9/7 Pepperell 3 S. Sutton 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pileated Woodpecker 9/6, 10/9 ONWR 1, 1 9/11 Quabbin 4 9/12 Ware R. IBA 4 9/15 N. Andover 1 1 D. + B. Fox 10/2 Lynnfield 1 P. + F. Vale	10/31 Richmond 2 D. St James
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 F. Vale 9/21 Chatham 33 D. Manchester# Pileated Woodpecker 9/6, 10/9 ONWR 1, 1 B. S. Sutton 9/11 Quabbin 4 BBC (Lockwood) 9/12 Ware R. IBA 4 M. Lynch# 9/15 N. Andover 1 D. + B. Fox 10/2 Lynnfield 1 P. + F. Vale 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Sudbury 1 m T. Spahr 10/31 Berkshire Cnty 4 T. Tyning Olive-sided Flycatcher	Note
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pleated Woodpecker 9/6, 10/9 ONWR 1, 1 S. S. Sutton 9/11 Quabbin 4 BBC (Lockwood) 9/12 Ware R. IBA 4 M. Lynch# 9/15 N. Andover 1 D. + B. Fox 10/2 Lynnfield 1 P. + F. Vale 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Sudbury 1 m T. Spahr 10/3 Sudbury 1 m T. Tyning Olive-sided Flycatcher 9/1 HRWMA 1 T. Pirro	Note
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pileated Woodpecker 9/6, 10/9 ONWR 1, 1 9/11 Quabbin 4 BBC (Lockwood) 9/12 Ware R. IBA 4 M. Lynch# 9/15 N. Andover 1 D. + B. Fox 10/2 Lynnfield 1 P. + F. Vale 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Sudbury 1 m T. Spahr 10/3 Sudbury 1 m T. Spahr 10/3 Sudbury 1 T. Tyning Olive-sided Flycatcher 9/1 HRWMA 1 T. Pirro 9/1-2 Barre Falls 1 B. Kamp#	Note
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 F. Vale 9/21 Chatham 33 D. Manchester# Pileated Woodpecker 9/6, 10/9 ONWR 1, 1 B. S. Sutton 9/11 Quabbin 4 BBC (Lockwood) 9/12 Ware R. IBA 4 M. Lynch# 9/15 N. Andover 1 D. + B. Fox 10/2 Lynnfield 1 P. + F. Vale 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Sudbury 1 m T. Spahr 10/31 Berkshire Cnty 4 T. Tyning Olive-sided Flycatcher 9/1 HRWMA 1 T. T. Tyning 9/1-2 Barre Falls 1 B. Kamp# 9/12 Woburn 1 A. Gurka#	10/31
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pleated Woodpecker 9/6, 10/9 ONWR 1, 1 9/11 Quabbin 4 BBC (Lockwood) 9/12 Ware R. IBA 4 M. Lynch# 9/15 N. Andover 1 D. + B. Fox 10/2 Lynnfield 1 P. + F. Vale 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Sudbury 1 m T. Spahr 10/3 Sudbury 1 m T. Tyning Olive-sided Flycatcher 9/1 HRWMA 1 T. Tyring 9/1-2 Barre Falls 1 B. Kamp# 9/12 Ware R. IBA 1 M. Lynch# 9/12 Ware R. IBA 1 M. Lynch# 9/12 Hancock 1 D. St James	10/31
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pileated Woodpecker 9/6, 10/9 ONWR 1, 1 9/11 Quabbin 4 BBC (Lockwood) 9/12 Ware R. IBA 4 M. Lynch# 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Sudbury 1 D. + B. Fox 10/2 Lynnfield 1 P. + F. Vale 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Berkshire Cnty 4 T. Tyning Olive-sided Flycatcher 9/1 HRWMA 1 T. T. Spahr 10/12 Barre Falls 1 B. Kamp# 9/12 Woburn 1 A. Gurka# 9/12 Ware R. IBA 1 9/12 Hancock 1 D. St James 9/19 P.I. 1 BBC (S. Moore#)	Note
9/7 Pepperell 3 S. Sutton 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pleated Woodpecker 9/6, 10/9 ONWR 1, 1 S. S. Sutton 9/11 Quabbin 4 BBC (Lockwood) 9/12 Ware R. IBA 4 M. Lynch# 9/15 N. Andover 1 D. + B. Fox 10/2 Lynnfield 1 P. + F. Vale 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Sudbury 1 m. T. Spahr 10/3 Sudbury 1 m. T	Note
9/7 Pepperell 3 S. Sutton 9/12 ONWR 5 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pleated Woodpecker 9/6, 10/9 ONWR 1, 1 9/11 Quabbin 4 BBC (Lockwood) 9/12 Ware R. IBA 4 M. Lynch# 9/15 N. Andover 1 D. + B. Fox 10/2 Lynnfield 1 D. + B. Fox 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Berkshire Cnty 4 T. Tyning Olive-sided Flycatcher 9/1 HRWMA 1 T. P. Frophic St. Sutton 9/12 Ware R. IBA 1 B. Kamp# 9/12 Ware R. IBA 1 B. Kamp# 9/12 Ware R. IBA 1 M. Lynch# 9/12 Hancock 1 9/19 P.I. 1 BBC (S. Moore#) Eastern Wood-Pewee 9/1 HRWMA 2 T. P. irro 9/15 Ware R. IBA 7 T. Pirro	Note
9/7 Pepperell 3 S. Sutton 9/12 ONWR 5 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pleated Woodpecker 9/6, 10/9 ONWR 1, 1 9/11 Quabbin 4 BBC (Lockwood) 9/12 Ware R. IBA 4 M. Lynch# 9/15 N. Andover 1 D. + B. Fox 10/2 Lynnfield 1 D. + B. Fox 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Berkshire Cnty 4 T. Tyning Olive-sided Flycatcher 9/1 HRWMA 1 T. P. Frophic St. Sutton 9/12 Ware R. IBA 1 B. Kamp# 9/12 Ware R. IBA 1 B. Kamp# 9/12 Ware R. IBA 1 M. Lynch# 9/12 Hancock 1 9/19 P.I. 1 BBC (S. Moore#) Eastern Wood-Pewee 9/1 HRWMA 2 T. P. irro 9/15 Ware R. IBA 7 T. Pirro	Note
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pleated Woodpecker 9/6, 10/9 ONWR 1, 1 9/11 Quabbin 4 BBC (Lockwood) 9/12 Ware R. IBA 4 M. Lynch# 9/15 N. Andover 1 D. + B. Fox 10/2 Lynnfield 1 P. + F. Vale 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Sudbury 1 m T. Spahr 9/12 Ware R. IBA 1 B. Kamp# 9/12 Ware R. IBA 1 B. Kamp# 9/12 Ware R. IBA 1 A. Gurka# 9/12 Ware R. IBA 1 M. Lynch# 9/12 Ware R. IBA 1 M. Lynch# 9/12 Hancock 1 B. Kamp# 9/12 Hancock 1 D. St James 9/19 P.I. 1 BBC (S. Moore#) Eastern Wood-Pewee 9/1 HRWMA 2 T. Pirro 9/5 Ware R. IBA 7 M. Lynch# 9/6 Rutland 2 M. Lynch# 9/11 Sudbury 2 T. Spahr	Note
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pileated Woodpecker 9/6, 10/9 ONWR 1, 1 9/11 Quabbin 4 BBC (Lockwood) 9/12 Ware R. IBA 4 9/15 N. Andover 1 D. + B. Fox 10/2 Lynnfield 1 P. + F. Vale 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Sudbury 1 m T. Spahr 10/3 Sudbury 1 m T. Spahr 10/3 Sudbury 1 m T. Spahr 10/3 Sudbury 1 m T. Tyning Olive-sided Flycatcher 9/1 HRWMA 1 T. T. Pirro 9/12 Barre Falls 1 B. Kamp# 9/12 Ware R. IBA 1 9/12 Ware R. IBA 1 9/12 Ware R. IBA 1 9/12 Hancock 1 D. St James 9/19 P.I. 1 BBC (S. Moore#) Eastern Wood-Pewee 9/1 HRWMA 2 T. Pirro 9/5 Ware R. IBA 7 M. Lynch# 9/6 Rutland 2 T. Spahr 9/11 Sudbury 2 T. Spahr 9/11 Sudbury 2 T. Spahr 9/11 Sudbury 2 T. Spahr	Note
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pleated Woodpecker 9/6, 10/9 ONWR 1, 1 S. S. Sutton 9/11 Quabbin 4 BBC (Lockwood) 9/12 Ware R. IBA 4 BBC (Lockwood) 9/12 Ware R. IBA 4 D. + B. Fox 10/2 Lynnfield 1 P. + F. Vale 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Sudbury 1 m T. Spahr 10/3 Sudbury 1 m T. Spahr 10/3 Sudbury 1 m T. Spahr 10/3 Sudbury 1 m T. Tyning Olive-sided Flycatcher 9/1 HRWMA 1 T. Pirro 9/12 Ware R. IBA 1 B. Kamp# 9/12 Ware R. IBA 1 M. Lynch# 9/12 Ware R. IBA 1 M. Lynch# 9/12 Ware R. IBA 1 D. St James 9/19 P.I. 1 BBC (S. Moore#) Eastern Wood-Pewee 9/1 HRWMA 2 T. Pirro 9/5 Ware R. IBA 7 M. Lynch# 9/6 Rutland 2 M. Lynch# 9/11 Sudbury 2 T. Spahr 9/12 Uster Cape 5 R. Heil 10/2 Wachusett Res. 1 S. Sutton	Note
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pleated Woodpecker 9/6, 10/9 ONWR 1, 1 9/11 Quabbin 4 BBC (Lockwood) 9/12 Ware R. IBA 4 9/15 N. Andover 1 D. + B. Fox 10/2 Lynnfield 1 P. + F. Vale 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Sudbury 1 m T. Spahr 9/12 Barre Falls 1 B. Kamp# 9/12 Woburn 1 A. Gurka# 9/12 Ware R. IBA 1 M. Lynch# 9/12 Ware R. IBA 1 D. St James 9/19 P.I. 1 BBC (S. Moore#) Eastern Wood-Pewee 9/1 HRWMA 2 T. Pirro 9/5 Ware R. IBA 7 M. Lynch# 9/6 Rutland 2 T. Pirro 9/6 Rutland 2 T. Pirro 9/1 Sudbury 2 T. Spahr 9/11 Sudbury 2 T. Spahr 9/12 Wachusett Res. 1 S. Sutton	Note-eyed Vireo
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pleated Woodpecker 9/6, 10/9 ONWR 1, 1, 1 BBC (Lockwood) 9/12 Ware R. IBA 4 M. Lynch# 9/15 N. Andover 1 D. + B. Fox 10/2 Lynnfield 1 P. + F. Vale 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Sudbury 1 m T. Spahr 10/3 Sudbury 1 m T. Spahr 10/3 Sudbury 1 m T. Spahr 10/3 Berkshire Cnty 4 T. Tyning Olive-sided Flycatcher 9/1 HRWMA 1 T. Pirro 9/12 Ware R. IBA 1 B. Kamp# 9/12 Ware R. IBA 1 M. Lynch# 9/12 Ware R. IBA 1 D. St James 9/19 P.I. 1 BBC (S. Moore#) Eastern Wood-Pewee 9/1 HRWMA 2 T. Pirro 9/16 Rutland 2 M. Lynch# 9/6 Rutland 2 T. Spahr 9/10 Ware R. IBA 7 M. Lynch# 9/11 Sudbury 2 T. Spahr 9/12 Wachusett Res. 1 10/3 Boston 1 BBC (R. Stymeist) Yellow-bellied Flycatcher 9/6 Gay Head 1 A. Keith	Note
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pleated Woodpecker 9/6, 10/9 ONWR 1, 1 9/11 Quabbin 4 BBC (Lockwood) 9/12 Ware R. IBA 4 M. Lynch# 9/15 N. Andover 1 D. + B. Fox 10/2 Lynnfield 1 P. + F. Vale 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Sudbury 1 m T. Spahr 9/12 Ware R. IBA 1 T. Pirro 9/1 HRWMA 1 T. Pirro 9/1-2 Barre Falls 1 B. Kamp# 9/12 Ware R. IBA 1 M. Lynch# 9/12 Hancock 1 BBC (S. Moore#) Eastern Wood-Pewee 9/1 HRWMA 2 T. Pirro 9/5 Ware R. IBA 7 M. Lynch# 9/6 Rutland 2 T. Pirro 9/1 Sudbury 2 T. Spahr 9/10 Wachusett Res. 1 S. Sutton 10/3 Boston 1 BBC (R. Stymeist) Yellow-bellied Flycatcher 9/6 Gay Head 1 A. Keith 9/12 MNWS 1 J. Hoye#	Note
9/7 Pepperell 3 E. Stromsted# 9/12 ONWR 5 S. Sutton 9/19 Braintree 3 G. d'Entremont# 10/3 Quabbin (G45) 5 M. Lynch# 10/14 Burlington 3 M. Rines Northern Flicker 9/2 Wakefield 24 9/21 Chatham 33 D. Manchester# Pleated Woodpecker 9/6, 10/9 ONWR 1, 1, 1 BBC (Lockwood) 9/11 Quabbin 4 BBC (Lockwood) 9/12 Ware R. IBA 4 M. Lynch# 9/15 N. Andover 1 D. + B. Fox 10/2 Lynnfield 1 P. + F. Vale 10/3 Quabbin (G45) 3 M. Lynch# 10/3 Sudbury 1 m T. Spahr 10/3 Sudbury 1 m T. Spahr 10/31 Berkshire Cnty 4 T. Tyning Olive-sided Flycatcher 9/1 HRWMA 1 T. Pirro 9/12 Ware R. IBA 1 M. Lynch# 9/19 P.I. 1 BBC (S. Moore#) Eastern Wood-Pewee 9/1 HRWMA 2 T. Pirro 9/19 P.I. 1 BBC (S. Moore#) Eastern Wood-Pewee 9/1 HRWMA 2 T. Pirro 9/19 P.I. 1 BBC (S. Moore#) 10/3 Boston T. Spahr 9/21 Outer Cape 5 R. Heil 10/3 Boston 1 BBC (R. Stymeist) Yellow-bellied Flycatcher 9/6 Gay Head 1 A. Keith	Note

Philadelphia '	Vireo (continue	d)		9/23	Wachusett Res	s. 5	S. Sutton
9/24	Gay Head	2	A. Keith#	9/24	WBWS	4	M. Sampson
Red-eyed Vir	eo			9/26	Amherst	8	H. Állen
9/5	Ware R. IBA	31	M. Lynch#	10/10	M.V.	4	SSBC (Clapp)
9/6	Rutland	13	M. Lynch#	10/11, 26	P.I.	8, 6	Sutton, Heil
9/19	Medford	8	M. Řines#	10/17	Mashpee	4	CCBC (Keleher)
9/25	Cuttyhunk	8	R. Stymeist#	10/18	Ipswich	4	R. Heil
10/12	Cape Ann	6	R. Heil	White-breaste	ed Nuthatch		
10/14	P.I.	5 b	B. Johnson	9/12	Ware R. IBA	35	M. Lynch#
10/17	Mt.A.	1	R. Stymeist	9/23	Wachusett Res	s. 24	S. Šutton
10/18	Ipswich	1	Ř. Heil	Brown Creep	er		
Blue Jay	•			9/6	Rutland	5	M. Lynch#
9/21, 25	Chatham 250,	400	D. Manchester#	9/12	Ware R. IBA	31	M. Lynch#
9/23	Wachusett Res	s. 438	S. Sutton	9/26	MNWS	5	K. + R. Barnes
9/25, 29	Granville	196. 1:	53 J. Weeks	10/3	Quabbin (G45) 8	M. Lynch#
10/1, 4	Chatham440,	589	D. Manchester#	10/13	Gloucester (E.	P.) 5	S. Hedman
10/10	Aquinnah	369	SSBC (Clapp)	10/17	Mashpee	4	CCBC (Keleher)
American Cro	ow Î			Carolina Wre	n Î		
10/18	Ipswich	320	R. Heil	9/1	Gloucester (E.	P.) 19	R. Heil
10/20	Granville	851	J. Weeks	9/19	Russell	2	R. Stymeist#
10/23	Mt. Watatic	2522	T. Pirro#	9/19	Braintree	8	G. d'Entremont#
Fish Crow				9/25	Cuttyhunk	11	R. Stymeist#
9/11	Wellfleet	58 I	BBC (R. Stymeist)	10/thr	Washington	2	E. Neumuth
9/15	Longmeadow	2	G. Kingston#	10/2	Marshfield	10	SSBC (GdE) M. Rines
9/25	Mashpee	1	M. Keleher	10/9	Winchester	12	M. Rines
10/9	Marsĥfield	34	D. Furbish	10/10	Acoaxet	14	M. Lynch#
10/16	Bourne	3	SSBC (GdE)	10/12	Cape Ann	11	Ř. Heil
Common Ray	ven		, ,	10/27	Lexington	9	M. Rines
thr	Sudbury	1-2	V.O.	House Wren	C		
9/11, 10/23	3 Mt. Watatic	10, 28	T. Pirro#	9/5	Ware R. IBA	5	M. Lynch#
9/19	Russell	2	R. Stymeist#	9/16, 26	Lexington	14, 4	M. Řines#
9/20	Mt. Wachusett	t 7	J. Stein#	9/25	Burlington	10	M. Rines
9/24, 10/1	Barre Falls	11, 15	B. Kamp#	10/2	Westboro	5	M. Lynch#
10/10	Springfield	4	R. Titus	10/8	Northampton	1	L. Therrian
10/17	Quabbin Pk	3	M. Lynch#	10/10	Sandwich	1	D. Furbish#
10/17	Gardner	1	T. Pirro	10/10	Bolton Flats	1	S. Sutton
10/31	Ware R. IBA	2	M. Lynch#	10/10	Gay Head	1	A. Keith
Horned Lark			•	Winter Wren	•		
9/7	Chatham (S.B	.) 25	E. Morrier	9/11, 19	Medford	2 loc	M. Rines
9/30	Eastham (F.E.		M. Sampson#	9/22, 10/1	7 Mt.A.	1, 3	R. Stymeist
10/7-31	P.I.	12-15	v.o.	10/11	P.I.	3	S. Sutton
10/23	Deerfield	36	M. Lynch#	10/12	Cape Ann	7	R. Heil
10/31	Northfield	30	C. Ğentes	10/14	Wakefield	4	F. Vale
Purple Martin	1			10/17	Quabbin Pk	3 2	M. Lynch#
9/1	Gay Head	1	V. Laux#	10/20	S. Boston		R. Donovan#
Tree Swallow	, -			10/29	Nahant	3	L. Pivacek
9/1, 10/2	P.I. 10	000, 42	T. Wetmore	Sedge Wren			
9/1-10/1		300-3000	D. Manchester	975	Sheffield	1	D. St James
9/3	Chapaquiddic	k 5000	A. Keith#	9/29	Dorchester	1	R. Donovan
9/6	S. Monomoy	2000+	B. Nikula#	10/7	Northampton	1	B. Bieda
9/6	Duxbury B.	5000+	R. Bowes	10/13-14	Nomans Land	1	A. Keith
10/9	Cumb. Farms	325	G. d'Entremont#	Marsh Wren			
10/10	Nantucket	2000	E. Ray#	9/21	GMNWR	3	S. Perkins#
10/23, 30		00, 250	B. Nikula#	9/26	P.I.	3	P. + F. Vale
10/23	Barnstable (S.		G. Gove#	9/29, 10/7		3, 2	R. Donovan
10/31	Chatham	75+	B. Nikula#	10/10	Nantucket	6	E. Ray#
Northern Rou	igh-winged Swa			10/10	Acoaxet	2	M. Lynch#
9/6	Gay Head	1	A. Keith	10/14	Salisbury	1	S. Walch
9/9, 10/7	GMNWR	15, 15	Perkins, Sibley	10/18	Ipswich	1	R. Heil
10/3	Wayland	3	G. Long	Golden-crow			
Bank Swallov					1 Ware Ř. IBA	2, 38	M. Lynch#
9/1	Longmeadow	1	J. Hutchison#	9/21, 10/1		0, 173	J. Forbes
9/3	GMNWR	10	S. Perkins#	10/9	Rutland	39	M. Lynch#
9/13	Ipswich (C.B.) 1	J. Berry#	10/12	Cape Ann	38	R. Heil
Cliff Swallow				10/13	Gloucester (E.		S. Hedman
9/10	Northampton	3	T. Gagnon	10/14	Wakefield	20+	F. Vale
9/21	Eastham	1 juv	R. Heil	10/17	Gardner	10+	T. Pirro
10/1, 7	GMNWR	2, 1	Perkins, Sibley	10/17	Mt.A.	15	R. Stymeist
Barn Swallow		00.		Ruby-crowne	d Kinglet		
9/1, 10/8	Chatham	88, 3	D. Manchester	9/5, 10/31		1, 7	M. Lynch#
9/4	Westport	15+	M. Lynch#	9/11	Medford	1	M. Rines#
9/9, 10/7	GMNWR		S. Perkins, Sibley	9/12	MNWS	1	K. + R. Barnes
9/10	Northampton	100	T. Gagnon	9/21	Chatham	6	D. Manchester#
9/11, 19	P.I.	20, 3	T. Wetmore	10/6	Northfield	25	M. Taylor
9/21	Eastham	3	R. Heil	10/7	Granville	25	J. Weeks
Red-breasted		20	34.4	10/9	Rutland	42	M. Lynch#
9/5	Ware R. IBA	29	M. Lynch#	10/11	P.I.	33	S. Sutton
9/6, 10/9	Rutland	10, 13	M. Lynch#	10/12	Cape Ann	56	R. Heil

n.,				10.0	a		
Ruby-crowne 10/17	ed Kinglet (continu	ed) 29	T. Pirro	10/8 10/9	Cotuit	1 1	M. Keleher M. Rines#
10/17	Gardner Mt.A.	17	R. Stymeist	American Pir	Burlington	1	W. Killes#
Blue-gray Gr		17	K. Styllicist	9/15, 16	Mt. Watatic	1, 3	T. Pirro#
9/19	MNWS	1	S. Hedman	9/18, 10/1		10, 90	R. Heil
9/19	Northampton	1	L. Therrien	9/19, 10/5	GMNWR	6, 15	S. Perkins#
9/22	Granville	1 1	J. Weeks	9/23 9/28	P'town (R.P.)	14 15	M. Sampson
9/23 10/12	Gay Head Rockport	1	A. Keith# R. Heil		Southwick 3 Deerfield	20, 50	S. Kellogg Allen, Lynch
	heatear (no details		K. Hen	9/30	Newbury	100	T. Wetmore
10/1-3	Plymouth B.		J. Walker + v.o.	10/4	Hatfield	15	H. Allen
Eastern Bluel		05 DD		10/11	P.I.	13	S. Sutton
9/11	Wellfleet		SC (R. Stymeist)	10/16	Lexington	10	M. Rines#
10/2 10/3	Westboro Lexington	28 12	M. Lynch# M. Rines	10/30 Cedar Waxwi	Bolton Flats	10	S. Sutton
10/3	Northampton	12	R. Packard	9/1	Leicester	35	M. Lynch#
10/24	Gill	14	R. Stymeist	9/21	Chatham	50	D. Manchester#
10/24	Marlboro	13	T. Spahr	10/10	Aquinnah	91	SSBC (Clapp)
10/24	Lincoln	22	M. Rines	10/13	Gloucester (E.I		S. Hedman
Veery 9/3	Medford	1	R. LaFontaine	10/24 10/27	Northfield Westboro	72 35	R. Stymeist E. Morrier
9/11	Wellfleet		C (R. Stymeist)	10/27	Williamsburg	75	R. Packard
9/12	Longmeadow	i	J. Hutchison#	Blue-winged		,,,	Ti. T tientilu
Gray-cheeked				9/1	Gloucester (E.l	P.) 2	R. Heil
9/25	Brewster	1 b ph	S. Finnegan#	9/13	Hancock	2	D. St James
10/2-3	Auburn	2 b	M. Blazis	9/15	Westboro	2	T. Spahr
Bicknell's Th 10/2	Brewster	1 b	S. Finnegan	9/21 9/21	MNWS P'town	1	K. Haley R. Heil
	d/Bicknell's Thrush		5. I iiiicgan	9/23	Woburn	i	M. Rines#
9/24	Chilmark	1	A. Keith	Tennessee W		_	
9/26	Boston (PO Sq.)	1	R. Donovan	9/7, 15	Northampton	1, 1	T. Gagnon
9/29	Sudbury	1	T. Spahr	9/19	Boston	1, 3	M. Garvey
9/30 10/2	Pittsfield Marshfield	1	T. Collins SSBC (GdE)	9/19, 26 9/21	Granville MNWS	1, 3	S. Kellogg K. Haley
10/17	IRWS	1	J. MacDougall	10/1-2	Gav Head	1	A. Keith#
Swainson's T				10/18	Chilmark	ī	A. Keith
9/1	Belmont	1	R. Stymeist	Orange-crow			
9/12	Ware R. IBA	1	M. Lynch#	9/25	Truro	2 2	G. d'Entremont#
9/16 9/19-30	S. Boston Reports of indiv.	2 from 8.1	R. Donovan	10/3 10/9	Boston Milton	$\frac{2}{2}$	BBC (R. Stymeist) P. O'Neill
9/21	Melrose	2	D. + I. Jewell	10/16	Plymouth	2	K. Anderson#
10/12	Rockport (H.P.)	ī	R. Heil	10/26	Gay Head	3	V. Laux#
10/17	IRWS	1	J. MacDougall	Nashville Wa			
10/18	P.I.	1	D. Chickering	9/5	Ware R. IBA	5	M. Lynch#
Hermit Thrus		3, 8	M. Lynch#		7 Medford 7 Lexington	5, 2 8, 1	M. Rines# Forbes, Rines
10/11, 31		1, 1	M. Rines	9/19	P.I.	4	T. Wetmore
10/17	IRWS	11	J. MacDougall	9/21, 10/1	Granville	4, 4	J. Weeks
10/17	Gardner	6	T. Pirro	10/3, 21	Nahant	3, 2	Vale, Pivacek
10/17	Mt.A.	6	R. Stymeist	10/27	Arlington	1	M. Rines
10/19 10/25	S. Boston Marlboro	9 10	R. Donovan#	Northern Par 9/14	Mt. Tom	5	L. Therrien
Wood Thrush		10	T. Spahr	9/14	Leicester	5	M. Lynch#
9/1	Medford	2	M. Rines#		Northampton	8, 1	L. Therrien
9/13	Northampton	2	L. Therrien	9/23	Wachusett Res		S. Sutton
9/13	Marlboro	1	T. Spahr	10/3	Boston	4	BBC (R. Stymeist)
9/18		4					
	Lenox W Springfield	1	R. Laubach	10/26	Marblehead	1	K. Haley
9/27	W. Springfield	1 1		10/26 10/27	Marblehead Nahant	1 1	L. Pivacek
9/27 American Ro	W. Springfield	1	R. Laubach	10/26	Marblehead Nahant P.I.	1 1 1	
9/27 American Ro 9/20, 10/1 10/10	W. Springfield bin 0 Bolton Flats4150 Gay Head	1 0, 500 225	R. Laubach S. Kellogg S. Sutton A. Keith	10/26 10/27 10/28 Yellow Warb 9/12	Marblehead Nahant P.I. ler Falmouth	1 1 1	L. Pivacek D. Chickering CCBC (G. Hirth)
9/27 American Ro 9/20, 10/1 10/10 10/17	W. Springfield bin 0 Bolton Flats4150 Gay Head Mt.A.	1 0, 500 225 225	R. Laubach S. Kellogg S. Sutton A. Keith R. Stymeist	10/26 10/27 10/28 Yellow Warb 9/12 9/12	Marblehead Nahant P.I. ler Falmouth Squantum	1 1 1 3 4	L. Pivacek D. Chickering CCBC (G. Hirth) G. d'Entremont
9/27 American Ro 9/20, 10/1 10/10 10/17 10/17	W. Springfield bin 0 Bolton Flats4150 Gay Head Mt.A. Gardner	1 0, 500 225 225 250+	R. Laubach S. Kellogg S. Sutton A. Keith R. Stymeist T. Pirro	10/26 10/27 10/28 Yellow Warb 9/12 9/12 9/21	Marblehead Nahant P.I. ler Falmouth Squantum Chatham	1 1 1 3 4 2	L. Pivacek D. Chickering CCBC (G. Hirth) G. d'Entremont R. Heil
9/27 American Ro 9/20, 10/1 10/10 10/17 10/17 10/18	W. Springfield bin 0 Bolton Flats4150 Gay Head Mt.A. Gardner Ipswich	1 0, 500 225 225	R. Laubach S. Kellogg S. Sutton A. Keith R. Stymeist	10/26 10/27 10/28 Yellow Warb 9/12 9/12 9/21 9/21	Marblehead Nahant PI. ler Falmouth Squantum Chatham Truro	1 1 1 3 4 2 2	L. Pivacek D. Chickering CCBC (G. Hirth) G. d'Entremont R. Heil R. Heil
9/27 American Ro 9/20, 10/1 10/10 10/17 10/17	W. Springfield bin 0 Bolton Flats4150 Gay Head Mt.A. Gardner Ipswich	1 0, 500 225 225 250+ 247	R. Laubach S. Kellogg S. Sutton A. Keith R. Stymeist T. Pirro	10/26 10/27 10/28 Yellow Warb 9/12 9/12 9/21	Marblehead Nahant P.I. ler Falmouth Squantum Chatham	1 1 1 3 4 2	L. Pivacek D. Chickering CCBC (G. Hirth) G. d'Entremont R. Heil
9/27 American Ro 9/20, 10/1 10/10 10/17 10/17 10/18 Gray Catbird 9/1, 10/13 9/6	W. Springfield bin O Bolton Flats4150 Gay Head Mt.A. Gardner Ipswich Gloucester (E.P.) ONWR	1 0, 500 225 225 225 250+ 247 46, 3	R. Laubach S. Kellogg S. Sutton A. Keith R. Stymeist T. Pirro R. Heil Heil, Hedman S. Sutton	10/26 10/27 10/28 Yellow Warb 9/12 9/12 9/21 9/21 10/9 10/15 Chestnut-side	Marblehead Nahant P.I. ler Falmouth Squantum Chatham Truro Boston Winchester	1 1 3 4 2 2 1 1	L. Pivacek D. Chickering CCBC (G. Hirth) G. d'Entremont R. Heil R. Heil M. Garvey R. LaFontaine
9/27 American Ro 9/20, 10/1 10/10 10/17 10/17 10/18 Gray Catbird 9/1, 10/13 9/6 9/15, 10/2	W. Springfield bin O Bolton Flats4150 Gay Head Mt.A. Gardner Ipswich Gloucester (E.P.) ONWR 6 P.I.	1 0, 500 225 225 250+ 247 46, 3 44 44, 1	R. Laubach S. Kellogg S. Sutton A. Keith R. Stymeist T. Pirro R. Heil Heil, Hedman S. Sutton Sutton, Heil	10/26 10/27 10/28 Yellow Warb 9/12 9/12 9/21 9/21 10/9 10/15 Chestnut-side 9/1	Marblehead Nahant P.I. ler Falmouth Squantum Chatham Truro Boston Winchester dd Warbler Medford	1 1 1 3 4 2 2 1 1	L. Pivacek D. Chickering CCBC (G. Hirth) G. d'Entremont R. Heil R. Heil M. Garvey R. LaFontaine M. Rines#
9/27 American Ro 9/20, 10/1 10/10 10/17 10/18 Gray Catbird 9/1, 10/13 9/6 9/15, 10/2 9/25, 10/1	W. Springfield bin O Bolton Flats4150 Gay Head Mt.A. Gardner Ipswich Gloucester (E.P.) ONWR 6 P.I. 4 4 Burlington	1 0, 500 225 225 250+ 247 46, 3 44 14, 1	R. Laubach S. Kellogg S. Sutton A. Keith R. Stymeist T. Pirro R. Heil Heil, Hedman S. Sutton Sutton, Heil M. Rines	10/26 10/27 10/28 Yellow Warb 9/12 9/21 9/21 9/21 10/9 10/15 Chestmut-side 9/1 9/5	Marblehead Nahant P.I. ler Falmouth Squantum Chatham Truro Boston Winchester dd Warbler Medford Ware R. IBA	1 1 1 3 4 2 2 1 1 1	L. Pivacek D. Chickering CCBC (G. Hirth) G. d'Entremont R. Heil M. Garvey R. LaFontaine M. Rines# M. Lynch#
9/27 American Ro 9/20, 10/1 10/10 10/17 10/17 10/18 Gray Catbird 9/1, 10/13 9/6 9/15, 10/2	W. Springfield bin O Bolton Flats4150 Gay Head Mt.A. Gardner Ipswich Gloucester (E.P.) ONWR 6 P.I.	1 0, 500 225 225 250+ 247 46, 3 44 44, 1	R. Laubach S. Kellogg S. Sutton A. Keith R. Stymeist T. Pirro R. Heil Heil, Hedman S. Sutton Sutton, Heil M. Rines M. Lynch#	10/26 10/27 10/28 Yellow Warb 9/12 9/12 9/21 9/21 10/9 10/15 Chestnut-side 9/1	Marblehead Nahant PI. ler Falmouth Squantum Chatham Truro Boston Winchester dd Warbler Medford Ware R. IBA Hadley	1 1 1 3 4 2 2 1 1 1 5 11 3 2	L. Pivacek D. Chickering CCBC (G. Hirth) G. d'Entremont R. Heil R. Heil M. Garvey R. LaFontaine M. Rines#
9/27 American Ro 9/20, 10/1 10/10 10/17 10/17 10/18 Gray Catbird 9/1, 10/13 9/6 9/15, 10/2 9/25, 10/1 9/26 10/2 10/10	W. Springfield bin O Bolton Flats4150 Gay Head Mt.A. Gardner Ipswich Gloucester (E.P.) ONWR 6 P.I. 4 4 Burlington 5 Bolton Flats Westboro M.V.	1 0, 500 225 225 250+ 247 46, 3 44 44, 1 52, 2 51 57 24	R. Laubach S. Kellogg S. Sutton A. Keith R. Stymeist T. Pirro R. Heil Heil, Hedman S. Sutton Sutton, Heil M. Rines M. Lynch# SSBC (Clapp)	10/26 10/27 10/28 Yellow Warb 9/12 9/21 9/21 10/9 10/15 Chestnut-side 9/1 9/5 9/20 9/25 9/26	Marblehead Nahant P.I. ler Falmouth Squantum Chatham Truro Boston Winchester d Warbler Medford Ware R. IBA Hadley Burlington Granville	1 1 1 3 4 2 2 2 1 1 1 5 11 3 2 2 2 2	L. Pivacek D. Chickering CCBC (G. Hirth) G. d'Entremont R. Heil R. Heil M. Garvey R. LaFontaine M. Rines# M. Lynch# C. Gentes M. Rines J. Weeks
9/27 American Ro 9/20, 10/1 10/10 10/17 10/18 Gray Catbird 9/1, 10/13 9/6 9/15, 10/2 9/25, 10/1 9/26 10/2 10/10	W. Springfield bin bin Bolton Flats4150 Gay Head Mt.A. Gardner Ipswich Gloucester (E.P.) ONWR 6 P.I. 4 Burlington Bolton Flats Westboro M.V. Ipswich	1 0,500 225 225 250+ 247 46,3 44 44,1 51,2 51 57 24 3	R. Laubach S. Kellogg S. Sutton A. Keith R. Stymeist T. Pirro R. Heil Heil, Hedman S. Sutton Sutton, Heil M. Rines M. Lynch# M. Lynch# SSBC (Clapp) R. Heil	10/26 10/27 10/28 Yellow Warb 9/12 9/21 9/21 9/21 10/9 10/15 Chestnut-side 9/1 9/25 9/20 9/25 9/26 10/8	Marblehead Nahant P.I. ler Falmouth Squantum Chatham Truro Boston Winchester dd Warbler Medford Ware R. IBA Hadley Burlington Granville Northampton	1 1 1 3 4 2 2 1 1 1 5 11 3 2	L. Pivacek D. Chickering CCBC (G. Hirth) G. d'Entremont R. Heil R. Heil M. Garvey R. LaFontaine M. Rines# M. Lynch# C. Gentes M. Rines
9/27 American Ro 9/20, 10/1 10/10 10/17 10/17 10/17 10/18 Gray Catbird 9/1, 10/13 9/6 9/15, 10/2 9/25, 10/1 9/26 10/2 10/10 10/18	W. Springfield bin O Bolton Flats4150 Gay Head Mt.A. Gardner Ipswich Gloucester (E.P.) ONWR 6 P.I. 4 4 Burlington 5 Bolton Flats Westboro M.V. Ipswich Northampton	1 0, 500 225 225 250+ 247 46, 3 44 44, 1 52, 2 51 57 24	R. Laubach S. Kellogg S. Sutton A. Keith R. Stymeist T. Pirro R. Heil Heil, Hedman S. Sutton Sutton, Heil M. Rines M. Lynch# SSBC (Clapp)	10/26 10/27 10/28 Yellow Warb 9/12 9/21 9/21 9/21 10/9 10/15 Chestnut-side 9/1 9/20 9/25 9/26 10/8 Magnolia Wa	Marblehead Nahant P.I. ler Falmouth Squantum Chatham Truro Boston Winchester d Warbler Medford Ware R. IBA Hadley Burlington Granville Northampton rbler	1 1 1 3 4 2 2 2 1 1 1 5 11 3 2 2 1	L. Pivacek D. Chickering CCBC (G. Hirth) G. d'Entremont R. Heil R. Heil M. Garvey R. LaFontaine M. Rines# M. Lynch# C. Gentes M. Rines J. Weeks L. Therrian
9/27 American Ro 9/20, 10/1 10/10 10/17 10/17 10/18 Gray Catbird 9/1, 10/13 9/6 9/15, 10/2 9/25, 10/1 9/26 10/2 10/10 10/18 Brown Thras	W. Springfield bin to Bolton Flats4150 Gay Head Mt.A. Gardner Ipswich Gloucester (E.P.) ONWR 6 P.I. 4 Burlington Bolton Flats Westboro M.V. Ipswich Northampton her	1 0,500 225 225 250+ 247 44, 1 12, 2 51 57 24 3 1	R. Laubach S. Kellogg S. Sutton A. Keith R. Stymeist T. Pirro R. Heil Heil, Hedman S. Sutton Sutton, Heil M. Rines M. Lynch# SSBC (Clapp) R. Heil L. Therrian	10/26 10/27 10/28 Yellow Warb 9/12 9/21 9/21 10/9 10/15 Chestnut-side 9/1 9/5 9/20 9/25 9/26 10/8 Magnolia Wa 9/5	Marblehead Nahant P.I. ler Falmouth Squantum Chatham Truro Boston Winchester d Warbler Medford Ware R. IBA Hadley Burlington Granville Northampton rbler Ware R. IBA	1 1 1 3 4 2 2 1 1 5 11 3 2 2 1 1	L. Pivacek D. Chickering CCBC (G. Hirth) G. d'Entremont R. Heil R. Heil M. Garvey R. LaFontaine M. Rines# M. Lynch# C. Gentes M. Rines J. Weeks L. Therrian M. Lynch#
9/27 American Ro 9/20, 10/1 10/10 10/17 10/17 10/17 10/18 Gray Catbird 9/1, 10/13 9/6 9/15, 10/2 9/25, 10/1 9/26 10/2 10/10 10/18	W. Springfield bin to Bolton Flats4150 Gay Head Mt.A. Gardner Ipswich Gloucester (E.P.) ONWR 6 P.I. 4 Burlington Bolton Flats Westboro M.V. Ipswich Northampton her	1 0,500 225 225 250+ 247 46,3 44 44,1 51,2 51 57 24 3	R. Laubach S. Kellogg S. Sutton A. Keith R. Stymeist T. Pirro R. Heil Heil, Hedman S. Sutton Sutton, Heil M. Rines M. Lynch# M. Lynch# M. Lynch# SSBC (Clapp) R. Heil L. Therrian T. Wetmore	10/26 10/27 10/28 Yellow Warb 9/12 9/21 9/21 9/21 10/9 10/15 Chestnut-side 9/1 9/20 9/25 9/26 10/8 Magnolia Wa	Marblehead Nahant P.I. ler Falmouth Squantum Chatham Truro Boston Winchester dd Warbler Medford Ware R. IBA Hadley Burlington Granville Northampton rbler Ware R. IBA P.I.	1 1 1 3 4 2 2 1 1 5 11 3 2 2 1 1	L. Pivacek D. Chickering CCBC (G. Hirth) G. d'Entremont R. Heil R. Heil M. Garvey R. LaFontaine M. Rines# M. Lynch# C. Gentes M. Rines J. Weeks L. Therrian M. Lynch#
9/27 American Ro 9/20, 10/1 10/10 10/17 10/18 Gray Catbird 9/1, 10/13 9/6 9/15, 10/2 9/25, 10/1 9/26 10/2 10/10 10/18 Brown Thras 9/12, 10/7	W. Springfield bin	1 0,500 225 225 225 250+ 247 46,3 44,1 12,2,2 51 57 24,3 1	R. Laubach S. Kellogg S. Sutton A. Keith R. Stymeist T. Pirro R. Heil Heil, Hedman S. Sutton Sutton, Heil M. Rines M. Lynch# SSBC (Clapp) R. Heil L. Therrian	10/26 10/27 10/28 Yellow Warb 9/12 9/12 9/21 9/21 10/9 10/15 Chestnut-side 9/1 9/25 9/20 9/25 9/26 10/8 Magnolia Wa 9/19, 9/18	Marblehead Nahant P.I. ler Falmouth Squantum Chatham Truro Boston Winchester dd Warbler Medford Ware R. IBA Hadley Burlington Granville Northampton rbler Ware R. IBA P.I.	1 1 1 3 4 2 2 1 1 5 11 3 2 2 1 1	L. Pivacek D. Chickering CCBC (G. Hirth) G. d'Entremont R. Heil R. Heil M. Garvey R. LaFontaine M. Rines# M. Lynch# C. Gentes M. Rines J. Weeks L. Therrian M. Lynch#

Magnolia Warbler (continued) 9/21 P'town 1 10/12 Cape Ann 1 R. Heil 9/24 Truro 1 N 10/12 Gay Head 1 V. Laux 9/29 Granville 1 Stance of the control	
10/21 Gay Head 1 V. Laux 9/29 Granville 1 Cape May Warbler Blackpoll Warbler 9/5 Ware R. IBA 1 M. Lynch# 9/11 Mt.A. 4	R. Heil
Cape May Warbler Blackpoll Warbler 9/5 Ware R. IBA 1 M. Lynch# 9/11 Mt.A. 4	M. Sampson
9/5 Ware R. IBA 1 M. Lynch# 9/11 Mt.A. 4	J. Weeks
	I Candall
9/0 Diffiffed 1 1. Lyfich 9/19, 10/13 Graffyffe 20, 1	J. Sardell S. Kellogg
9/25 E. Quabbin 1 S. Kellogg# 9/26 Bolton Flats 11	M. Lynch#
10/8 Nantucket 1 R. Kennedy 10/3 Quabbin (G45) 44	M. Lynch#
10/3 Nomans Land 2 A. Keith 10/12 Cape Ann 6	R. Heil
10/31 Truro 1 J. Young 10/24 Waltham 1	J. Forbes
	LaFontaine
9/5 Ware R. IBA 6 M. Lynch# Black-and-white Warbler	Dar omanie
9/14 Mt. Tom 6 L. Therrien 9/1, 10/12 Cape Ann 4, 1	R. Heil
9/21 Granville 6 J. Weeks 9/5 Ware R. IBA 22	M. Lynch#
10/12 Cape Ann 4 R. Heil 9/6 Rutland 5	M. Lynch#
10/25, 28 P.I. 1 b, 1 b B. Johnson 9/12, 21 MNWS 6, 5	K. Haley
10/27 Nahant 1 L. Pivacek 9/21 Manchester 4	S. Hedman
10/29 Winchester 1 m R. LaFontaine 10/1 Mt. Tom 1	L. Therrian
Yellow-rumped Warbler 10/1 Granville 1	J. Weeks
	T. Wetmore
9/11, 10/11 P.I. 1, 107 Wetmore, Sutton American Redstart	D 0: 1:
	R. Stymeist
9/26, 10/6 Granville 70, 100 Kellogg, Weeks 9/1, 10/17 Medford 36, 1	M. Rines#
9/30 Montague 100 R. Packard 9/5 Ware R. IBA 29 10/4 Bolton Flats 72 N. Paulson 9/12 Longmeadow 6 J.	M. Lynch#
	Hutchison#
	M. Rines#
10/10 M.V. 65 SSBC (Clapp) 9/22 Mt.A. 5 10/12 Cape Ann 110 R. Heil 10/3 Boston 6 BBC (Fig. 1)	R. Stymeist R. Stymeist)
	C (Keleher)
10/17 Brewster 40 b S. Finnegan 10/27 Chilmark 1	A. Keith
10/18 Ipswich 62 R. Heil Prothonotary Warbler	71. IXCIIII
10/20 Woburn 50 M. Rines# 9/21 Chappaquiddick 1	A. Keith
Black-throated Green Warbler Worm-eating Warbler	11. 1101111
9/12 Ware R. IBA 39 M. Lynch# 9/21 Wellfleet 1	G. Gove#
9/19 Granville 12 S. Kellogg Ovenbird	
9/19, 10/17 Medford 12, 2 M. Rines# 9/1 Gloucester (E.P.) 2	R. Heil
9/25 Burlington 9 M. Rines 9/5 Ware R. IBA 6	M. Lynch#
10/3 Northampton 6 H. Allen 9/20 Boston 2	G. Tepke
	+ R. Barnes
10/27 Arlington 1 M. Rines 9/26 Lexington 1	M. Rines#
10/30 Truro 1 J. Young 10/3 Quabbin 1	T. Gagnon
	R. Stymeist)
9/5 Ware R. IBA 4 M. Lynch# Northern Waterthrush	3.6 T 1.0
9/19 P.I. 1 J. Hoye# 9/5 Ware R. IBA 2	M. Lynch#
	Haley, Vale
	M. Rines
	P. + F. Vale R. Stymeist)
9/26 Northampton 1 T. Gagnon 10/3 Boston 1 BBC (F 10/14 P.I. 1 b B. Johnson Kentucky Warbler	c. Styllicist)
Yellow-throated Warbler 9/12 MNWS 1	K. Haley
	F. Bouchard
Pine Warbler Connecticut Warbler	. Douenard
9/5 Ware R. IBA 83 M. Lynch# 9/12 Ware R. IBA 2 imm	M. Lynch#
9/11 Quabbin 16 BBC (Lockwood) 9/14-10/8 Reports of indiv. from 14 loca	
9/23 Wachusett Res. 29 S. Sutton 9/15-10/1 P.I. 12 b MAS (
9/21 Outer Cape 67 R. Heil 10/15 Scituate 1	D. Furbish
9/24 Falmouth 20 M. Keleher Mourning Warbler	
9/30 Montague 15 R. Packard 9/1-10/1 Reports of indiv. from 12 loca	tions
10/17 Mashpee 4 CCBC (Keleher) Common Yellowthroat	
Prairie Warbler 9/5 Ware R. IBA 36	M. Lynch#
9/5 Southwick 2 S. Kellogg 9/25, 10/14 Burlington 11, 5	M. Rines
	M. Lynch#
9/21, 10/16 Truro 3, 1 Heil, GdE 9/26 Bolton Flats 32	E. Morrier#
	M. Rines
9/25 Brewster 2 S. Finnegan# 9/26 Nahant 10 9/26 Nahant 8 E. Morrier# 10/3 Boston 9 BBC (Figure 10)	S. Sutton
9/25 Brewster 2 S. Finnegan# 9/26 Nahant 10 9/26 Nahant 8 E. Morrier# 10/3 Boston 9 BBC (F 10/9 Lexington 1 D. Diggins# 10/3 Lexington 9	Entremont#
9/25 Brewster 2 S. Finnegan# 9/26 Nahant 10 9/26 Nahant 8 E. Morrier# 10/3 Boston 9 BBC (Figure 10/3) 10/9 Lexington 1 D. Diggins# 10/3 Lexington 9 BBC (Figure 10/3) 10/9 Boston 1 M. Garvey 10/10 Bolton Flats 7	
9/25 Brewster 2 S. Finnegan# 9/26 Nahant 10 9/26 Nahant 8 E. Morrier# 10/3 Boston 9 BBC (F 10/9 Lexington 1 D. Diggins# 10/3 Lexington 9 10/9 Boston 1 M. Garvey 10/10 Bolton Flats 7 Palm Warbler 10/31 Westport 2 G. d'	
9/25 Brewster 2 S. Finnegan# 9/26 Nahant 10 9/26 Nahant 8 E. Morrier# 10/3 Boston 9 BBC (F 10/9 Lexington 1 D. Diggins# 10/3 Lexington 9 10/9 Boston 1 M. Garvey 10/10 Bolton Flats 7 Palm Warbler 10/31 Westport 2 G. d' 9/12 Marblehead 1 K. Haley Hooded Warbler 9/13, 26 Granville 3, 30 J. Weeks 10/1 Marshfield 1 f	D. Furbish
9/25 Brewster 2 S. Finnegan# 9/26 Nahant 10 9/26 Nahant 8 E. Morrier# 10/3 Boston 9 BBC (F 10/9 Lexington 1 D. Diggins# 10/3 Lexington 9 10/9 Boston 1 M. Garvey 10/10 Bolton Flats 7 Palm Warbler 10/31 Westport 2 G. d' 9/12 Marblehead 1 K. Haley Hooded Warbler 9/13, 26 Granville 3, 30 J. Weeks 10/1 Marshfield 1 f	D. Furbish R. Heil
9/25 Brewster 2 S. Finnegan# 9/26 Nahant 10 9/26 Nahant 8 E. Morrier# 10/3 Boston 9 BBC (F 10/9 Lexington 1 D. Diggins# 10/3 Lexington 9 PBC (F Palm Warbler 1 M. Garvey 10/10 Bolton Flats 7 Palm Warbler 10/2 Marblehead 1 K. Haley Hooded Warbler 9/13, 26 Granville 3, 30 J. Weeks 10/1 Marshfield 1 f 9/15, 10/1 Westboro 2, 30 T. Spahr 10/26 P.I. 1 f 9/26 Arlington 14 R. LaFontaine Wilson's Warbler	R. Heil
9/25 Brewster 2 S. Finnegan# 9/26 Nahant 10 9/26 Nahant 8 E. Morrier# 10/3 Boston 9 BBC (Finnegan# 10/9 Lexington 1 D. Diggins# 10/3 Lexington 9 10/9 Boston 1 M. Garvey 10/10 Bolton Flats 7 Palm Warbler 7 Marblehead 1 K. Haley Hooded Warbler 9/13, 26 Granville 3, 30 J. Weeks 10/1 Marshfield 1 f 9/15, 10/1 Westboro 2, 30 T. Spahr 10/26 P.I. 1 f 9/26 Arlington 14 R. LaFontaine Wilson's Warbler Wilson's Warbler 10/7 Lincoln 20 M. Rines 9/1 Gloucester (E.P.) 2	R. Heil R. Heil
9/25 Brewster 2 S. Finnegan# 9/26 Nahant 10 9/26 Nahant 8 E. Morrier# 10/3 Boston 9 BBC (Finnegan# 10/9 Lexington 1 D. Diggins# 10/3 Lexington 9 10/9 Boston 1 M. Garvey 10/10 Bolton Flats 7 Palm Warbler 7 Marblehead 1 K. Haley Hooded Warbler 9/13, 26 Granville 3, 30 J. Weeks 10/1 Marshfield 1 f 9/15, 10/1 Westboro 2, 30 T. Spahr 10/26 P.I. 1 f 9/26 Arlington 14 R. LaFontaine Wilson's Warbler Wilson's Warbler 10/7 Lincoln 20 M. Rines 9/1 Gloucester (E.P.) 2	R. Heil R. Heil M. Rines#
9/25 Brewster 9/26 Nahant 10 Palm Varbler S. Finnegan# 10/3 9/26 Nahant 10 Palm Varbler Palm Warbler D. Diggins# 10/3 10/3 Lexington 9 Palm Varbler Palm Warbler M. Garvey 10/10 Bolton Flats 7 Palm Varbler D. Diggins# 10/3 Lexington 9 Palm Varbler Varble Nation Plats 7 Palm Varbler Varble Nation Plats 7 Palm Varbler Varble Nation Plats 7 Palm Varbler 10/31 Westport Varble Nation Plats 7 Varble Nation Plats 7 Palm Varbler 10/31 Varble Nation Plats 7 Varble N	R. Heil R. Heil M. Rines# K. Haley
9/25 Brewster 9/26 Nahant Nahant 8 E. Morrier# 10/3 Boston 9 10/3 Boston 9 9 BBC (F. Morrier# 10/3 Boston 9 10/9 Lexington 1 D. Diggins# 10/3 Lexington 9 Lexington 9 9 10/9 Boston 1 M. Garvey 10/10 Bolton Flats 7 7 Palm Warbler 9/12 Marblehead 1 K. Haley Hooded Warbler 10/31 Westport 2 G d' 2 G d' 9/13, 26 Granville 3, 30 9/15, 10/1 Westboro 2, 30 J. Weeks T. Spahr 10/26 P.I. 1 f 10/26 P.I. 1 f 9/26 Arlington 14 10/7 Lincoln 20 M. Rines 10/17 Gardner 20 T. Pirro 9/1 Medford 3 M. Rines 9/1 Gloucester (E.P.) 2 10/17 Gardner 20 T. Pirro 9/1 Medford 3 T. Pirro 9/1 MNWS 2 2 10/31 Truro 1 J. Young 9/26 Nahant 3 3	R. Heil R. Heil M. Rines# K. Haley E. Morrier#
9/25 Brewster 9/26 Nahant 8 E. Morrier# 10/3 10/3 Boston 9 9 BBC (Figure 10/3) 10/9 Lexington 1 D. Diggins# 10/3 Lexington 9 9 10/9 Boston 1 M. Garvey 10/10 Bolton Flats 7 7 Palm Warbler 9/12 Marblehead 1 K. Haley Hooded Warbler 10/31 Westport 2 G. d' 9/15, 10/1 Westboro 2, 30 J. Weeks 10/1 Marshfield 1 f 1 f 9/26 Arlington 14 R. LaFontaine Hooded Warbler 10/7 Warbler 10/7 Wincoln 20 M. Rines 9/1 Gloucester (E.P.) 2 10/17 Gardner 20 T. Pirro 9/1 Medford 3 3 10/31 Gill 1 1 C. Gentes 9/21 MNWS 2 2 10/31 Truro 1 J. Young 9/26 Nahant 3 3 Bay-breasted Warbler Bexington 1 Lexington 1 1	R. Heil R. Heil M. Rines# K. Haley E. Morrier# J. Forbes
9/25 Brewster 9/26 Nahant 10 Palm Varbler S. Finnegan# 10/3 Boston 9/26 Nahant 10/3 Boston 9/20 Condoctor 9/20	R. Heil R. Heil M. Rines# K. Haley E. Morrier#

C 1. W 1	1			10/10	T 1.1.	245	D. II. '1
Canada Warb 9/1	Gloucester (E.F	2.) 5	R. Heil	10/18 10/23	Ipswich Deerfield	245 100	R. Heil M. Lynch#
9/13	Northampton	.) 3	L. Therrien	Ipswich Spar		100	Wi. Lyπcππ
9/17-19	Medford	1	M. Rines#	9/18	Westport	1	E. Nielsen
9/19	Boston	1	M. Garvey	10/8	Edgartown	1	A. Keith
9/21	MNWS	1	K. Haley	10/17	Dorchester	1	R. Donovan
9/24 10/12	Truro	1 1	M. Sampson R. Heil	Grasshopper 9/24	Sparrow Falmouth	1 juv	v M. Keleher
Yellow-breas	Cape Ann	1	к. пен		10/8 Northampto		Gentes, Therrian
9/2, 23	MNWS	1, 1	Haley, Spalding	10/10-17	Lexington	'' i	M. Rines#
9/2, 10/2	Gay Head	1, 1	A. Keith	10/17	Brookfield	1	M. Lynch#
9/26	Brewster	1	S. Finnegan#	10/21, 26		1, 1	Anderson, Laux
10/10	Sandwich	1	D. Furbish#	10/31	Wakefield	1	D. + I. Jewell
10/10-17	S. Boston	1 1	R. Donovan#	Nelson's Sha 9/25	rp-tailed Sparrov P.I.	1	I Diversals
10/17 Summer Tai	Chilmark	1	S. Anderson	9/25	Bolton Flats	1	L. Pivacek M. Lynch#
10/4	Gay Head	1	S. Anderson	10/3	GMNWR	i	S. Mardis
10/18	P.I.	ī	D. + I. Jewell		narp-tailed Sparro		
Scarlet Tanag				9/20, 10/1	7 Dorchester	3, 1	R. Donovan
9/1	Longmeadow	11	J. Hutchison#	9/26	P.I.	6	P. + F. Vale
9/5 9/23	Ware R. IBA Mt.A.	31	M. Lynch#	10/8	Edgartown	5	A. Keith
10/1	Granville	3	B. Miller J. Weeks	Seaside Spar 9/24	P.I.	1	D. Chickering
10/1	Medford	2	M. Rines#	10/16	Eastham (F. H.		SSBC (GdE)
10/20	Woburn	$\bar{1}$	M. Rines#	Fox Sparrow		, .	DDDC (GuL)
10/22	Northampton	1	W. Lafley	10/12	Cape Ann	1	R. Heil
Eastern Towl				10/14	Pittsfield	1	T. Collins
9/5	Ware R. IBA	14	M. Lynch#	10/24	Northfield	3	R Stymeist
9/11	Wellfleet	32	BBC (R. Stymeist)	10/24	Gill	4 4	R. Stymeist
9/25 10/7	Cuttyhunk P.I.	52 10	R. Stymeist# T. Wetmore	10/31 Song Sparro	Ware R. IBA	4	M. Lynch#
10/17	Granville	1	J. Weeks	10/4	Cumb. Farms	103	S. Sutton
10/24	Marlboro	î	T. Spahr	10/10	Bolton Flats	140+	S. Sutton
American Tro	ee Sparrow		•	10/18	Ipswich	123	R. Heil
9/26	Nahant	1	E. Morrier#	Lincoln's Sp			m n:
10/21	Gay Head	2 2	V. Laux	9/2	HRWMA	1	T. Pirro
10/28 10/30	W. Newbury P.I.	$\frac{2}{2}$	J. Berry T. Wetmore	9/14, 10/8	Belmont Northampton	4, 3 14	M. Rines A. Magee
10/30	Bolton Flats	3	S. Sutton		7 Lexington	5, 1	M. Rines#
Chipping Spa		5	S. Sutton	10/1, 10	Wayland	12, 7	G. Long
9/11	Wellfleet	156	BBC (R. Stymeist)	10/2	Westboro	8	M. Lynch#
9/12	Melrose	50	D. + I. Jewell	10/2	Cumb. Farms	17	M. Maurer#
9/21	Eastham	200	R. Heil	10/4	Bolton Flats	12 8, 2	N. Paulson
10/2 10/16	Westboro Plymouth	75 75	M. Lynch# K. Anderson#	10/7, 21 10/20, 26	Truro Woburn	2, 1	G. Gove# M. Rines#
Clay-colored		13	IX. 7 Inderson	10/29	E. Boston	-, i	L. Pivacek
	8 Reports of indi-	v. from	18 locations	Swamp Spar	row		
10/1-21	Gay Head		otal A. Keith#	10/1	Wayland	45	G. Long
10/26	P.I.	1	R. Heil	10/4	Bolton Flats	95	N. Paulson
Field Sparrov 9/5	w Pepperell	7	E. Stromsted	10/14 10/16	Salisbury Truro	40+ 50	S. Walch SSBC (GdE)
9/30	Montague	7	R. Packard	10/17	Brookfield	97	M. Lynch#
10/3	P.I.	6	BBC (I. Giriunas)	10/18	Ipswich	141	R. Heil
10/3	Concord	8	D. Diggins	White-throat	ed Sparrow		
10/16	Plymouth	10	K. Anderson#	9/12	Ware R. IBA	1	M. Lynch#
10/17	Belmont	4	P. + F. Vale#	9/13	Medford	1	R. LaFontaine
10/29 Vesper Sparr	Woburn	4	M. Rines#	9/15 10/10	Lexington Bolton Flats	1 105	J. Forbes S. Sutton
	8 Reports of indiv	v from	12 locations	10/10	Cape Ann	175+	R. Heil
9/14	Newbury		D. Davis	10/17	Brookfield	138	M. Lynch#
10/4	Bolton Flats	3 2	N. Paulson	10/17	Mt.A.	85	R. Stymeist
10/9	Hatfield	2	C. Gentes	10/18	Ipswich	140	Ř. Heil
10/13	Nomans Land	2	A. Keith	White-crown		1, 4	Pivacek, dela Flor
10/26 Lark Sparrov	Gay Head	2	V. Laux#	9/25, 10/9	Newbury	3 3	Morrier, Pivacek
9/1	Northampton	1	A. Magee	9/26, 10/2 10/12	Westboro	3, 3 10	D. Mushrush
9/1, 10/6		, 1	McDowell, Pelikan	10/13	Nomans Land	25	A. Keith#
9/2	P.I.	1	S. Grinley	10/14	Pittsfield	25	T. Collins
			R. LaFontaine#	10/16	Northampton	10	S. Kellogg#
9/19	Medford	1			Canda	7	T Di
9/19 9/19	Newbury	1	R. Heil	10/17	Gardner	7	T. Pirro
9/19 9/19 10/6	Newbury Gay Head	1 1	R. Heil M. Pelikan	10/17	Boston (Long I	.) 8	R. Donovan#
9/19 9/19 10/6 10/31	Newbury Gay Head Fairhaven	1	R. Heil		Boston (Long I Gay Head		
9/19 9/19 10/6 10/31 Savannah Sp 9/21	Newbury Gay Head Fairhaven arrow Northampton	1 1 1 70	R. Heil M. Pelikan M. Maurer A. Magee	10/17 10/21 10/31 Gambell's W	Boston (Long I Gay Head Bolton Flats hite-crowned Spa	.) 8 14 1 arrow	R. Donovan# V. Laux S. Sutton
9/19 9/19 10/6 10/31 Savannah Sp 9/21 10/1	Newbury Gay Head Fairhaven arrow Northampton Wayland	1 1 70 50	R. Heil M. Pelikan M. Maurer A. Magee G. Long	10/17 10/21 10/31 Gambell's W 10/18	Boston (Long I Gay Head Bolton Flats hite-crowned Spa Ipswich	.) 8 14 1	R. Donovan# V. Laux S. Sutton
9/19 9/19 10/6 10/31 Savannah Sp 9/21 10/1 10/9	Newbury Gay Head Fairhaven arrow Northampton Wayland Cumb. Farms	1 1 1 70 50 55	R. Heil M. Pelikan M. Maurer A. Magee G. Long G. d'Entremont#	10/17 10/21 10/31 Gambell's W 10/18 Dark-eyed Ju	Boston (Long I Gay Head Bolton Flats hite-crowned Spa Ipswich inco	1.) 8 14 1 arrow 1 im	R. Donovan# V. Laux S. Sutton R. Heil
9/19 9/19 10/6 10/31 Savannah Sp 9/21 10/1	Newbury Gay Head Fairhaven arrow Northampton Wayland	1 1 70 50	R. Heil M. Pelikan M. Maurer A. Magee G. Long	10/17 10/21 10/31 Gambell's W 10/18	Boston (Long I Gay Head Bolton Flats hite-crowned Spa Ipswich	.) 8 14 1 arrow	R. Donovan# V. Laux S. Sutton

D. 1 1 I .	(10/20	D . 1	6000	0.0
	nco (continued)	1 (7 J'T-44#	10/30 10/31	Bolton Flats	6000 1500	S. Sutton
9/19 10/11	Squantum P.I.	107	G. d'Entremont# S. Sutton	Eastern Mead	Pepperell	1300	E. Stromsted
10/11	Nomans Land	200	A. Keith	9/6	Leicester	6	M. Lynch#
10/13	Mt.A.	60	R. Stymeist	10/16	Plymouth	5	K. Anderson#
10/17	Ware R. IBA	69	M. Lynch#	10/16	Gardner	2	T. Pirro
Lapland Long		07	IVI. LyπCΠπ	10/16	Northampton		S. Kellogg#
9/30	Nantucket	1	E. Rav	10/17	Dorchester	4	R. Donovan
10/31	N. Monomov	25	B. Nikula#	Rusty Blackb		-	R. Donovan
Snow Bunting		23	D. MKulan	9/19	Woburn (H.P.) 1	P. Ippolito#
10/12, 28	Granville	2, 2	J. Weeks	9/21, 10/1		3, 12	S. Perkins#
10/26	P.I.	16	R. Heil	9/25	P'town	25	G. d'Entremont#
10/26	New Salem	í	W. Lafley	10/13	Lincoln	15	M. Rines
10/30	Boston (Long l		R. Donovan#	10/14	Richmond	6	T. Collins
10/30	Scituate	2	D. Furbish	10/16	Cheshire	300+	E. Neumuth
10/31	Barre Falls	9	B. Kamp#	10/17	Brookfield	30	M. Lynch#
10/31	Ware R. IBA	9	M. Lynch#	10/18	Ipswich	46	Ř. Heil
Rose-breasted	Grosbeak		•	10/24	Marlboro	7	T. Spahr
9/1	Longmeadow	24	J. Hutchison#	10/31	Medfield	17	E. Morrier
9/6, 10/1	Lexington	8, 1	J. Forbes	Common Gra			
9/20	Hancock	3	R. Laubach	10/10	M.V.	5000	SSBC (Clapp)
9/26	Bolton Flats	2	M. Lynch#	10/31	Pepperell	1000	E. Stromsted
10/24	Jamaica Plain	1	M. Kaufman	10/31	Bolton Flats	49,800	S. Sutton
10/29	Nahant	1	L. Pivacek	Brown-heade			
Blue Grosbea				9/22	Wilmington	50	E. Taylor
9/19-10/28		1+	V.O.	10/16	Truro	51	SSBC (GdE)
9/21	Eastham	1	R. Heil	10/21	Natick	50	E. Taylor
10/2	Gay Head	1	A. Keith#	10/21	Woburn	50	E. Taylor
10/3	Cumb. Farms	1	E. LeBlanc#	10/22	Littleton	145	R. Stymeist
10/20-21	Nahant	1	L. Pivacek	Baltimore Ori		0	T TT 4.1.1
10/23	W. Barnstable	1	G. Gove#	9/1	Longmeadow	8	J. Hutchison#
Indigo Buntin		20	D C4i-4	9/21, 10/7			Heil, Gove
9/5 9/6	Hatfield Concord	28 12	R. Stymeist J. Hoye#	10/10 10/26	Aquinnah Gay Head	2 6	SSBC (Clapp) V. Laux#
) Lexington	13, 6	M. Rines#	10/26	Jamaica Plain		M. Kaufman
9/20, 10/10	Belmont	9	M. Rines#	Purple Finch	Januarca Fiann	. 2	M. Kauiiliali
10/4	Cumb. Farms	6	S. Sutton	9/19	Stockbridge	6	M. Lynch#
10/4	Gay Head	3	V. Laux	9/23	Truro	2	M. Sampson
10/21	Nahant	2	L. Pivacek	10/10	Springfield	3	R. Titus
10/31	Truro	ī	J. Young	10/25	Marlboro	12	T. Spahr
Dickcissel	IIIIO		J. Toung	10/26	Gay Head	45	V. Laux#
thr	Reports of indi	v. from 19	locations	10/31	Ware R. IBA	12	M. Lynch#
9/24, 10/28	N. Truro	2, 1	Gove, Tuttle	Pine Siskin	,, and 10, 15, 1		III Lynen
9/26	Bolton Flats	2	M. Lynch#	9/28	Pittsfield	2	T. Collins
10/8, 10/27	Lexington	2 2	Forbes, Rines	10/12-26	Reports of 1-	5 indiv. fro	om 8 locations
10/18	Ipswich	2	Ř. Heil	10/23	Newbypt	6	D. Larson
Bobolink	•			10/24	New Šalem	10	W. Lafley
9/1-7	Northampton	54 total	T. Gagnon	10/26	P.I.	136	R. Heil
9/5	Hatfield [*]	27	R. Stymeist	10/30	Boston (Long		R. Donovan#
9/9, 10/7	GMNWR	80, 1	Perkins, Sibley	10/31	Williamsburg		R. Packard
9/26	Bolton Flats	19	M. Lynch#	10/31	Ware R. IBA	5	M. Lynch#
10/4	Cumb. Farms	9	S. Sutton	Evening Gros			
10/18	Ipswich	7	R. Heil	9/8	Gardner	2	T. Pirro
10/23	Barnstable	1	M. Keleher	10/24	Northfield	9	R Stymeist
Red-winged E		1000	C D 1: "				
9/21	GMNWR	1000	S. Perkins#				

HOW TO CONTRIBUTE BIRD SIGHTINGS TO BIRD OBSERVER

Sightings for any given month must be reported in writing by the eighth of the following month, and may be submitted by postal mail or e-mail. Send written reports to Bird Sightings, Robert H. Stymeist, 94 Grove Street, Watertown, MA 02172. Include name and phone number of observer, common name of species, date of sighting, location, number of birds, other observer(s), and information on age, sex, and morph (where relevant). For instructions on e-mail submission, visit: http://massbird.org/birdobserver/sightings/>.

Species on the Review List of the Massachusetts Avian Records Committee (indicated by an asterisk [*] in the Bird Reports), as well as species unusual as to place, time, or known nesting status in Massachusetts, should be reported promptly to the Massachusetts Avian Records Committee, c/o Marjorie Rines, Massachusetts Audubon Society, South Great Road, Lincoln, MA 01773, or by e-mail to <marj@mrines.com>.

ABBREVIATIONS FOR BIRD SIGHTINGS

Taxonomic order is based on AOU checklist, Seventh edition, 44th Supplement, as published in *The Auk* 117: 847-58 (2000); 119: 897-906 (2002); 120: 923-32 (2003).

ABC A.P.	Allen Bird Club Andrews Point, Rockport	ONWR P.I.	Oxbow National Wildlife Refuge Plum Island
A.Pd	Allens Pond, S. Dartmouth	Pd	Pond
В.	Beach	P'town	Provincetown
Barre FD	Barre Falls Dam,	Pont.	Pontoosuc Lake, Lanesboro
	Barre, Rutland	R.P.	Race Point, Provincetown
B.I.	Belle Isle, E. Boston	Res.	Reservoir
B.R.	Bass Rocks, Gloucester	S. Dart.	South Dartmouth
BBC	Brookline Bird Club	S.B.	South Beach, Chatham
BMB	Broad Meadow Brook, Worcester	S.N.	Sandy Neck, Barnstable
C.B.	Crane Beach, Ipswich	SRV	Sudbury River Valley
CGB	Coast Guard Beach, Eastham	SSBC	South Shore Bird Club
C.P.	Crooked Pond, Boxford	TASL	Take A Second Look
Cambr.	Cambridge		Boston Harbor Census
CCBC	Cape Cod Bird Club	WBWS	Wellfleet Bay WS
Cumb. Farms	Cûmberland Farms,	WMWS	Wachusett Meadow WS
	Middleboro	Wompatuck SP	Hingham, Cohassett,
DFWS	Drumlin Farm Wildlife Sanctuary	•	Scituate, and Norwell
DWMA	Delaney WMÁ	Worc.	Worcester
	Stow, Bolton, Harvard		
DWWS	Daniel Webster WS	Other Abbreviations	
E.P.	Eastern Point, Gloucester	ad	adult
EMHW	Eastern Mass, Hawk Watch	alt	alternate
F.E.	First Encounter Beach, 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
HRWMA	High Ridge WMA, Gardner	lt .	light (morph)
I.	Island	m	male
IRWS	Ipswich River WS	max	maximum
L.	Ledge	migr	migrating
M.V.	Martha's Vineyard	n	nesting
MAS	Mass. Audubon Society	ph	photographed
MBWMA	Martin Burns WMA, Newbury	pl	plumage
MNWS	Marblehead Neck WS	pr	pair
MSSF	Myles Standish State	Š	summer (1S = 1st summer)
11221	Forest, Plymouth	V.O.	various observers
Mt.A.	Mt. Auburn Cemetery, Cambr.	W	winter (2W = second winter)
NAC	Nine Acre Corner, Concord	yg	young
Newbypt	Newburyport	,,, #	additional observers
	1.c suryport	**	additional 55501 (CIS



SNOW BUNTINGS IN FLIGHT BY DAVID LARSON

ABOUT THE COVER

Gray Jay

The Gray Jay (*Perisoreus canadensis*), the gray ghost of the boreal forest, is a resident species in parts of Maine, northern New Hampshire, and Vermont. About the size of a Blue Jay, this crestless, short-billed jay is unmistakable — whitish-gray below, darker gray above — with extensive dark gray or black on its head that contrasts with white ear patches and white or tan forehead. Juveniles are a more uniform dark gray with a whitish malar stripe. The species follows Bergmann's Rule, with northern individuals the largest, southern individuals the smallest. This is an adaptation for heat retention, with larger individuals having proportionally smaller surface areas (compared to their volume) through which to lose heat. Plumage varies substantially, with Rocky Mountain birds, for example, having nearly all-white heads. The species is polytypic, with historically thirteen subspecies described, although recent taxonomic assessments recognize only six.

Gray Jays are denizens of boreal forests from Alaska across Canada through Newfoundland. In the west they are found in sub-alpine forests as far south as New Mexico and Arizona, and in the east they appear in northern New England. They are essentially territorial and non-migratory birds, but as with many boreal forest species, they sometimes stray south during hard winters, presumably in search of food. In Massachusetts they are considered a very rare winter visitor, although, for example, fourteen individuals were reported in Massachusetts during the winter of 1965-1966.

Gray Jays are monogamous with resident pairs permanently occupying territories in coniferous or mixed coniferous-deciduous forests, most commonly forests with spruce. They range from boreal forest bogs to high altitude spruce forest. Adaptations to colder climes include feathers that engulf the feet of perching birds, feather-covered nares, and the ability to drop their body temperature up to six degrees centigrade during cold nights. The short bill may also be a cold-weather adaptation. Gray Jays are comparatively silent for jays, but they have a wide range of calls and song. They have distress, alarm, contact, and food-begging calls, whee ooo whistles between mates, chook chook chook calls uttered in times of social conflict, and aggressive chick-wurr calls. Their soft whisper song is given during courtship, and courtship feeding is practiced as well. Highly territorial birds, they attack intruders, supplanting them from perches, and occasionally grappling with them through interlocked claws. Gray Jays mimic a variety of bird species, including Blue Jays, Rough-legged, Redtailed, and Broad-winged hawks, American Crows, and Merlins. Because most of this mimicry is of potential predators, it may serve as warning of the presence of predators, or alternatively, it may serve to confuse them.

Gray Jays nest from March to April when winter conditions prevail. They have been observed incubating eggs with the temperature registered at minus thirty degrees centigrade. This early nesting may be adaptive because it permits concentration on gathering and caching food for the winter from May to October, when food availability is at its height. The nest site, usually near the trunk of a spruce or fir, is

selected by the male, and the female joins the male in nest construction. The nest is constructed of twigs and cocoons of tent caterpillars, with a cup lined with lichen, bark strips, feathers, or fur. The usual clutch is three or four greenish-gray eggs, spotted brown. The female alone incubates for about nineteen days until hatching. The chicks are altricial, born with eyes closed, nearly naked, and helpless. Brooding is also by the female alone; the male initially brings in the food, but is eventually helped by the female for the twenty-three to twenty-four days until fledging. The brood stays in the family territory initially, but when it is eight to nine weeks of age, the dominant chick drives the remaining chicks from the territory and remains with the parents until the following breeding season, when it in turn is driven off by the adult birds. This seemingly strange social behavior may be related to the heavy dependence that Gray Jays have on caching food reserves for winter—there may be only enough cached food for a single juvenile. Juvenile mortality is high, up to eighty-five per cent or more among the siblings driven off by the dominant chick. Life is tough in the harsh northern forests. Adult mortality, however, is low, and adults may live for a decade or more.

Gray Jays use a broad spectrum of feeding techniques and food resources. They forage on arthropods when available, as well as carrion, eggs, and nestlings of other birds, and berries. They often hunt from perches and will pursue insects in flight. They have been observed picking engorged ticks off moose and may carry large food items with their feet to feeding perches. Gray Jays are premier food cachers. They may make up to a thousand food caches during a single long summer day. They have enlarged salivary glands that provide sticky saliva with which they glue food items under bark, in branch forks, or among pine needles. Permanent territories with vast caches of food hidden during summer make surviving harsh winter conditions possible.

Gray Jays are often caught in traps set by humans to catch furred animals and have disappeared from areas where extensive land clearing has occurred, but Breeding Bird Survey results from 1966-1989 suggest the populations are stable on a continent-wide scale. Much of their range is wild and free of human habitation, which bodes well for their continued survival.

William E. Davis, Jr.

About the Cover Artist

Paul Donahue is a bird artist, environmental activist, and tree climber who divides his time between Maine, California, and South America. He has been painting and drawing birds since he began watching them during his early teens. Paul's first trip to South America was in 1972, and since then he has spent a great deal of time in the neotropics, particularly in the rainforests of the western Amazon Basin, birding, painting, tape-recording, and leading natural history trips. Since 1988, his time in the tropics has been concentrated in the rainforest canopy, where he and his wife, Teresa Wood, have constructed two canopy walkways and dozens of canopy observation platforms and taught over two thousand people how to safely climb into the forest canopy on ropes. He has contributed many fine covers to *Bird Observer*.

AT A GLANCE

December 2004



DAVID LARSON

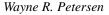
Another streaky brown job! While this is unequivocally a valid impression, a more sophisticated examination reveals a stout, thick-based, bill and a finely streaked breast with the streaks coalescing slightly into a spot in the center. These are classic hallmarks of a sparrow of some sort. However, before proceeding further down the "sparrow path," consider what alternatives might exist. There are some other good candidates that share at least some of the basic features and characteristics of the mystery bird (e.g., Dickcissel, female Lark Bunting, and female Bobolink). Let us try to eliminate these species before thinking more seriously about sparrows.

An immature Dickcissel looks a lot like the bird in the photograph; however, a Dickcissel would typically exhibit a long and fairly prominent supercilium, would not normally show a coalescence of streaking into a breast spot, and would never have the pale eye ring possessed by the mystery bird. If the image were printed in color, the breast would also normally show at least a trace of yellow if the bird was a Dickcissel. Female Lark Bunting can be eliminated in that this species would appear significantly more heavily streaked on the underparts and the malar streaks would be correspondingly thicker and darker. A female or immature Bobolink would normally be clear-breasted, with the ventral streaks confined only to the sides and flanks. Also,

the prominent malar stripes on the pictured bird would be lacking in a female Bobolink.

Having thus eliminated at least three viable identification candidates, it is time to consider some sort of sparrow for the identity of the mystery species. Knowing that adult sparrows can generally be separated into those having clear breasts and those with streaked breasts, it is obvious that the mystery bird clearly belongs in the latter category. With this distinction in mind, other features become more critical. Clearly the pale (white?) eye ring is noticeable, as are the distinct white stripes below the dusky cheeks. Despite the fact that the photo fails to show the definitive white outer tail feathers, when these features are combined with the fine breast streaks, the choice is essentially unambiguous – the mystery bird is a Vesper Sparrow (*Pooecetes gramineus*).

Vesper Sparrows are very uncommon and declining breeding birds in rough pastures, potato fields, and coastal heathlands at widely scattered localities throughout Massachusetts. As migrants they are uncommon in open, sparsely vegetated habitats, rarely occurring in winter. David Larson digitally captured this image of a Vesper Sparrow on a blueberry barren in Washington County, Maine.





This photograph was taken at the height of the blizzard of January 23, 2005. This pair of Northern Flickers rested on the sheltered side of an oak tree in Cambridge. The photograph is by Tom McCorkle.

AT A GLANCE

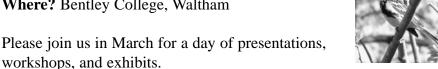


ROGER S. EVERETT

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

Mass Audubon, in Partnership with the Menotomy Bird Club, Announces the 13th Massachusetts Birders Meeting

When? March 5, 2005 Where? Bentley College, Waltham



workshops, and exhibits.

Our keynote speaker will be Scott Weidensaul, author of *The Ghost with Trembling Wings*. Also presenting will be Phillip Hoose, author of the recently published *The Race to Save the Lord God Bird*. Workshops on bird identification, eBirding, and more!

Information and registration forms are available online at http://www.massaudubon.org/ or e-mail Ellen Garcia at egarcia@massaudubon.org.

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