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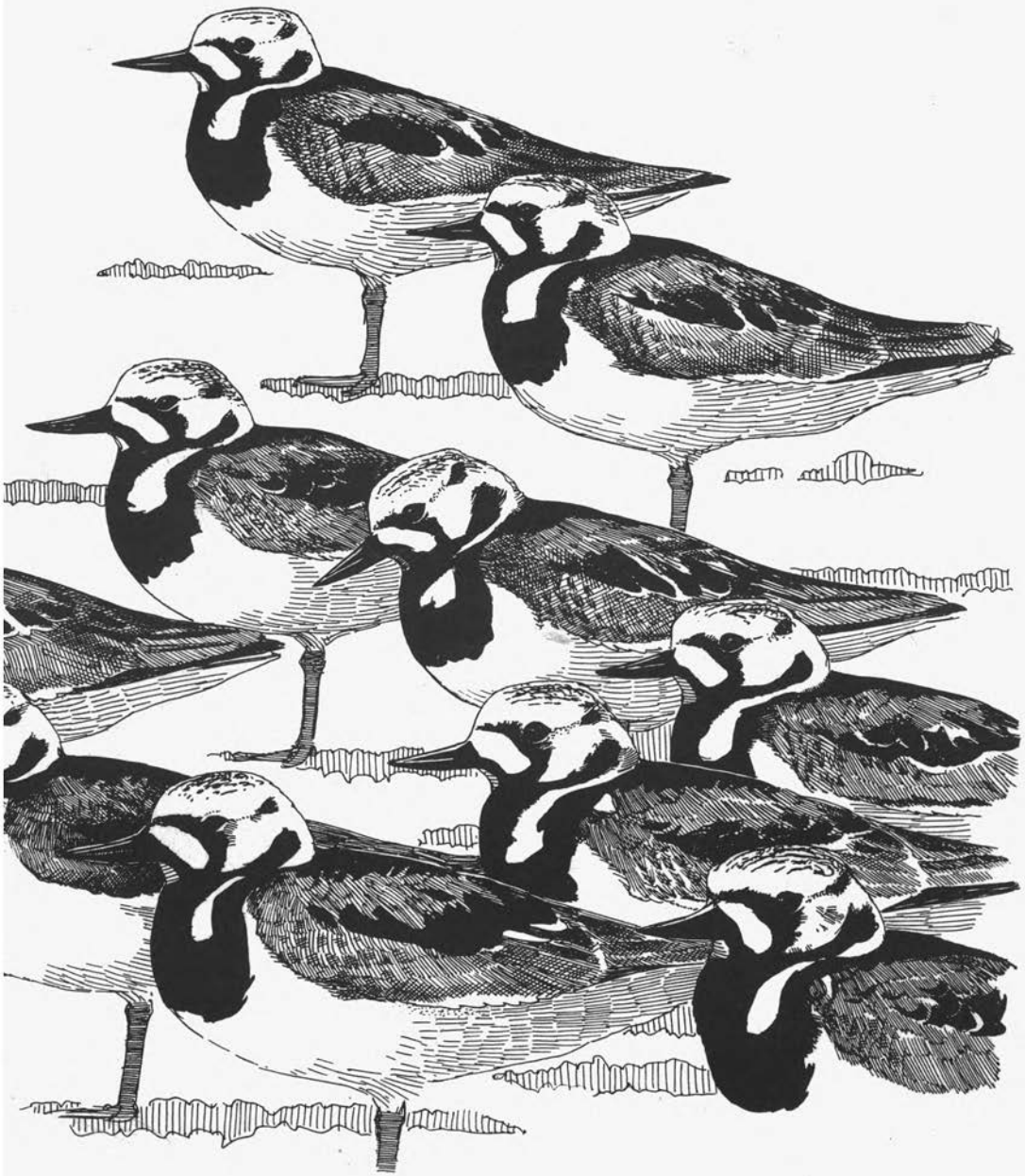

Bird Observer

A bimonthly journal — to enhance understanding, observation, and enjoyment of birds

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CONTENTS

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The Uncommon Common Thing

Matthew L. Pelikan

The artistic science of bird identification has made astronomical progress in recent decades: first the transition from shotgun ornithology to visual identification in the field; then the advent of convenient field guides like the brilliant one Roger Tory Peterson introduced in 1934; and more recently still the consolidation of new knowledge of plumage details, molt schedules, structure, and distribution into advanced field and identification guides. There is no question that, in general, progress has been made: identifications considered impossible just a few years ago are now made, routinely and correctly, even by beginning birders. But wise observers temper their enjoyment of new-found power: some of today's truths will surely succumb to better information in the future.

Meanwhile, like any body of knowledge, today's vast corpus of bird-identification information is structured in a particular way — structure that, while organizing the information into useable form, also imposes on it certain limitations. For any specific identification guide, a host of factors (from the author's purpose, to the nature and extent of his or her personal experience, to the vagaries of the publishing industry) determine what information is selected and emphasized. In any field situation, the particular mix of information in the guides at hand interacts with the experience and knowledge of the birder involved, the conditions that prevail in the field, and the variability of the species under consideration. Sometimes, it turns out, we know less than we think we do, and it is the unfortunate nature of knowledge that we don't know what it is that we don't know.

Using a challenging identification problem I encountered this past spring as a case study, this article examines how gaps in various bodies of information can exacerbate each other, sometimes making a wrong answer look alarmingly right. The instance involved the lamentably common birding dilemma of an odd-looking bird that might (or might not) belong to one of several unusual species with which the observers have limited first-hand experience. Relying on what I could piece together from my own experience and the books on my shelves, I tried to decide whether it was worth calling in reinforcements.

On March 30, 2000, I received a call from Allan Keith reporting that he had found a martin flying over Crackatuxet Cove, at the southeastern corner of the Edgartown Great Pond on Martha's Vineyard. Following several days of sustained southerly winds, a late-March martin on the Vineyard was not too much of surprise: migrants such as Little Blue Heron, Great Egret, American Kestrel, Pine Warbler, and Sora had been found on the Island the day before, and it turned out later that a Prothonotary Warbler and two early Indigo Buntings arrived around the same time as the martin. I assumed that Allan's bird was a Purple Martin, and Allan said nothing to dissuade me; still, he hinted, the bird looked odd enough so that I might enjoy taking a peek. After all, one species of tropical martin — a Brown-chested on Monomoy on

June 12, 1983 (Veit and Petersen 1993) — has already been recorded along the southeastern coast of Massachusetts, and Martha's Vineyard has a well-deserved reputation for intercepting vagrants.

Allan's directions brought me to the bird without difficulty, and within moments it obligingly made a low-level pass directly over my head. I ruled out Brown-chested Martin almost instantly: the bird lacked the distinctive Bank Swallow pattern of a well-defined breast-band with a much paler throat that is the best field mark for this species (see photo captions in *Field Notes* 52[1], p. 4). Still, I had to agree with Allan: the bird fit badly with my mental image of a Purple Martin. Small and pale underneath, it showed, very obviously, a pale nuchal collar extending up behind the face: this characteristic of Brown-chested Martin is obvious in the cover photo of *Field Notes* 52(1), but I had never noticed it on a Purple Martin. So I took some notes, returned home, and consulted as many relevant identification guides as I could lay my hands on, even returning with the books for a second look later that day, when I was able to snap several poor but marginally helpful photographs. In all, I watched the bird for a total of about two hours.

Photograph by the author

That the bird was a martin was beyond doubt, given its overall shape and mix of powerful straight-line sprints, towering spirals, and protracted, fixed-wing airplane glides, mostly over the water of the cove and nearby portions of the Great Pond. It was associating with several Tree Swallows and a single Barn Swallow, sometimes engaging in midair squabbles with the former species, facilitating comparison of size. In contrast to my image of Purple Martin, this bird appeared only marginally larger than a Tree Swallow in length and wingspan; I estimated that the difference in each of these measurements could scarcely have exceeded half an inch, although broader wings and a bulkier body made the martin appear much the more substantial bird. Quite uniform in color, the martin's back was brown, with faint, glossy, purple highlights visible in some light. The bird had a fairly uniform dusky wash limited to the extreme upper breast and throat: most of the breast, the belly and undertail coverts, and the flanks all appeared white — about the pattern you would expect on a Northern Rough-winged Swallow. (A photograph subsequently showed that the dark wash extended along the armpits under the wings — one example of how careful field observation can miss significant details.) At some moments, the bird appeared to have a partial dark belly-band, a characteristic independently noted by Gus Daniels (pers. comm.) when he and Allan returned to view the bird, but it was hard to tell whether this band was truly present or merely resulted from ruffled feathers around the legs. The end of the tail was moderately forked; the head coloration (this turns out to be

Summary of Various Characteristics of Immature Female Purple Martins According to Various Sources

	SIZE	FOREHEAD	UNDERPARTS	"COLLAR"
Peterson 1980	7-1/4 – 8-1/2 inches (vs. 5-6 for Tree Swallow)	No info; not shown in drawing	No info. on imm.; female "light-bellied; throat and breast grayish"; drawing suggests extensive streaking	Often present on female
National Geographic 3rd Ed.	8 inches (vs. 5-3/4 for Tree Swallow)	Not mentioned in text; appears dark on drawings of imm. m. and f.	"Gray below"; drawing shows pale belly, extensive dark wash on throat, breast, flanks, undertail coverts	Not mentioned in text, absent in drawings
Pyle et al. 1987	Female wing chord 132-145 mm. (vs. 98-125 for Tree Swallow)	No info.	Without purple feathers; undertail coverts without dusky centers	No info.
Howell & Webb 1995	7.3-8 inches (vs. 6.3-7 inches for Gray-breasted Martin, 5.2-5.7 for Tree Swallow)	Gray-brown crown with paler forehead	Chest and flanks paler, more uniform than ad. female, w/ indistinct fine dark spots and streaks. A whiter belly contrasting with chest suggests other martin spp.	Pale collar: f. Purple "only martin with pale forehead and collar"
Stiles and Skutch 1989	6-3/4 inches (vs. 6-1/2 for Gray-breasted Martin, 5-1/2 for Tree Swallow)	Dusky brown with pale feather tips	Chest like forehead and collar; lower breast and belly whitish to grayish-buff, "more heavily marked" than Gray-breasted	Dusky brown with pale feather tips
Hilty and Brown 1986	7.5 inches (vs. 6.8 for Gray-breasted, 5 for Tree Swallow)	Frosty grayish; forecrown occasionally dark; otherwise useful for separating from other martins	Lower underparts lightly to heavily streaked; darker, more heavily streaked than similar martins ("Gray-breasted virtually lacks streaks")	Pale area on sides of neck and nape

important in distinguishing New-World martins) was quite uniform, except for the pale crescent along the rear margin of the auriculars, mentioned above. On my second visit, in looking for the pale forehead mentioned by several sources, I thought I could detect in some lights a thin, paler area above the bill and on the very lowest portion of the forehead, but the pronounced pale area some sources (e.g., Howell and Webb 1995) attribute to female-type Purple Martins was not apparent.

The characteristics that were most troubling to me (and I believe to Allan) were the bird's small size and its extensively pale underparts. I think of Purple Martins as being dark even in female-type plumages, and substantially larger than Tree Swallows, an impression enhanced by most field guides: the dimensions given in Peterson 1980, 7-1/4 – 8-1/2 inches for Purple Martin versus 5-6 inches for Tree Swallow, yield a size difference ranging from 1-1/4 to as much as 3-1/2 inches, and other field guides consulted fall pretty much within this range. Since Central and South American guides suggest that Gray-breasted Martin is significantly smaller than Purple, I began to wonder whether Allan had done it again. Adding momentum to this possibility was the pigmentation of the underparts of the martin, which seemed to fit much better with Gray-breasted than with Purple Martin. At one extreme, the National Geographic field guide (third edition) shows heavily marked underparts on all female and immature Purple Martins, with the dusky wash extending to the lower breast and dark streaking on the flanks and undertail coverts; to varying degrees, other sources concur that an immature female Purple Martin should be more heavily marked on the underparts than a female Gray-breasted.

But the characteristics suggestive of Gray-breasted turn out to be less clear-cut than they appear. Wing-chord measurements in Pyle et al. 1987 suggest that a very large male Tree Swallow and a very small female Purple Martin can differ by as little as seven millimeters in this measurement, which might work out to a difference in wingspan of a bit over an inch. (Wing chord is a useful dimension because it is not much affected by the position the bird or specimen is in when measured, or how hard the measurer is tugging!) Although establishing more difference than I felt was apparent in the field, this figure is close enough to undermine any certainty that the bird was too small to be a Purple Martin, especially when I reminded myself that I had only been able to compare birds in flight, and at a fair distance. The coloration of the underparts is a bit harder to explain away, but the carefully qualified descriptions (e.g., "lightly to heavily streaked" in Hilty and Brown 1986) of Purple Martins in some sources remind us that female-type individuals of this species show considerable variation. With this in mind, it seemed much less certain that an unusually small and pale Purple Martin, appearing in worn plumage, could not show a size and pattern like that of the bird at Crackatuxet.

The significance of the underparts was further clouded, paradoxically, by my familiarity with Purple Martins. Had anyone asked, I would have said I know this species well. While martins are rather scarce on the Vineyard, I viewed this species many times annually during some thirty years of living and birding on the mainland, seeing nesting martins on every summer trip I made (and there were a lot of them) to Plum Island. And I've generally encountered the species in migration, or elsewhere in

the United States, at least a few times a year, as well. But Purple Martin falls into a peculiar class of birds, the ones common enough and generally easy enough to identify so that I don't pay much attention to them, but sufficiently limited in their distribution so that I don't see them on a daily or even weekly basis. Typically, I take note of martins the first few times I see them each year — usually adult males, since these ordinarily precede females and immatures in the spring — and then pay little attention to them for the rest of the year, except perhaps to spend a few moments casually admiring their powerful flight. Unfortunately, birds of the year molt into their first-winter plumage on their wintering grounds, returning north in that plumage and wearing it until the next fall's molt (Bent 1942). Because of how my attention to this species intersected with its molt schedule, I realized, *I had probably never looked carefully at a female Purple Martin in first-winter plumage*, despite having seen this species literally hundreds of times. (I would feel worse if North American field guides did not also give short shrift to this plumage.) The gap in my knowledge could mean that the bird was not as unusual as I thought.

Having explained away the characteristics that seem to fit with Gray-breasted Martin, we also find that the bird showed some characteristics, *unmentioned by current North American field guides* because they don't help distinguish Purple Martins from our other swallows, that Mexican and Central and South American guides use for separating martin species. The pale collar, shared by Brown-chested and Purple but absent on Gray-chested, probably offers the most compelling plumage-based evidence that the bird was a Purple Martin, since the throat and upper breast pattern rules out Brown-chested. (Interestingly, the collar is obvious on the drawing of a female Purple Martin in my facsimile first edition of the 1934 Peterson guide, and in general this picture is a surprisingly good match for the bird at Crackatuxet: sometimes progress isn't progress!) The pale forehead (said by various sources to be present at least sometimes on Purple Martin in this plumage but absent on the other two species) may indeed have been there — this is a case in which viewing conditions rendered ambiguous an important field mark. But even if it were absent, one source (Hilty and Brown 1986) suggests that a dark forehead does not necessarily rule out immature female Purple. An observer relying solely on the standard North American field guides would have no reason even to look for these traits, which in this case turned out to be important for preventing oneself from leaping to a wild surmise.

What about the role of probability? Late March records of Purple Martins in Massachusetts are not common, but they are not really rare, either (Veit and Petersen 1993). Most early-season records occur on the southeast coast (but usually involve adult males). At the time we were observing this bird on Martha's Vineyard, a few martin reports had appeared on Internet rare-bird alerts from as far north as upstate New York, and the species was already pretty well established on the Atlantic coast as far north as Delaware Bay (not very far from the Vineyard, for a swallow, if a strong southwest wind is blowing). So the Vineyard bird fit fairly well with both historical knowledge of Purple Martin movements and with the pattern evident to that point during the 2000 season. In contrast, there are apparently only two United States records for Gray-breasted Martin, both from southern Texas and both from the

nineteenth century (ABA 1996). However, some populations of this species are known to be migratory, making vagrancy at least a theoretical possibility: the chances of finding this species in Massachusetts seemed vanishingly small — but not quite zero. No doubt Brown-chested Martin seemed like an outrageous long-shot in the Bay State on June 11, 1983 — but the next day, *voila*! Probability matters, but when even the most unlikely event comes to pass, the probability of it occurring at least once rises sharply indeed.

But it is necessary to rule out the more common bird unambiguously before seriously considering rare alternatives. And however unusual Allan's bird looked, I was left with no unambiguous evidence that it was anything other than a Purple Martin, presumably an atypically small and pale immature female arriving, also atypically, before any adult males had shown up. Allan reasoned along the same lines, while for Gus Daniels, the bird was a Purple from the start. Still, if I had encountered this bird in some hypothetical location in which Gray-breasted was fairly likely and Purple only a pipe-dream, its small size and very pale underparts would probably have made me call it the former species with very little thought. So to be fastidious, wasn't the bird simply a martin sp.? I confess to just enough lingering doubt so that I will never again take a martin for granted.

This humbling episode underscored the way limited knowledge can bushwhack even a cautious observer (that's me). A birder relying on certain combinations of sources to identify this bird (say, the National Geographic guide, with its very dark female-type Purple Martins, in conjunction with Howell and Webb, with its emphasis on the pale forehead that was not apparent) could easily have been convinced that the bird was a Gray-breasted Martin, furnishing Martha's Vineyard (not to mention Allan Keith) with yet another mind-boggling ornithological discovery. It is only by actively considering the possibility that these two excellent sources might be inadequate that the error could be avoided. At the other extreme, relying mainly on probability, any New England observer could be excused for failing to note either the peculiarities that caught Allan's shrewd eye in the first place, or the traits (relevant mainly to birders in the tropics) that in the end turned this bird back into a humdrum Purple Martin.

In the absence of unambiguous photographs or a specimen, bird records committees are entirely correct in holding sight records (even ones involving multiple skilled observers) to a very high standard of proof. Ever more identification articles are published; book-length identification guides proliferate. But differences in opinion, the imprecision of verbal description or pictures, and differing selections of details mean that this wealth of information can confuse rather than clarify. How you identify a bird can depend in large measure on what sources you are looking at, as well as on where, when, and how you have experienced the possible species in the past.

This is not to say that rarities do not occur, or that birders should not look for them: if this bird *had* been a Gray-breasted Martin, you would be reading a very different article! But before jumping to conclusions, it is useful to consider variation within the most common species being considered, which may exceed what field

guides lead one to expect. It is necessary to assess the gaps in one's own experience with the species under consideration: just because a bird is not what you are used to seeing doesn't mean it isn't perfectly normal. And it is important to remember that regional or individual variation, or even just artistic style, can result in misleading or confusing information even in sources that are considered to be authoritative. Moreover, any identification guide discusses only a selection of the characteristics of a species. Finally, it is helpful to recall that species is a concept that has biological validity: most of the time, different species really do look different in the field, because they are different organisms, and if you feel like you are trying too hard — well, you probably are. It is a sound birder's adage that an atypical member of a common species — the uncommon common thing — is far more often encountered than a typical member of a rare species. If you stray very far from that maxim, it is surprisingly easy to find yourself defending an exciting identification that is utterly wrong.

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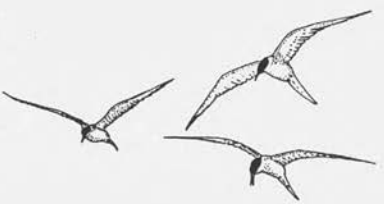

The Oxbow Philadelphia Vireo

Ron Lockwood

In 1998 a Philadelphia Vireo (*Vireo philadelphicus*) was present during the spring and summer months in the Oxbow National Wildlife Refuge in Harvard, an occurrence that was unusual since Harvard is well south of the region where this vireo species normally breeds. In the spring of 1999, a Philadelphia Vireo, possibly the same individual that was observed in 1998, was again present from the middle of May until at least August. In 1999, however, the vireo sang a song that was similar to the song of the Warbling Vireos (*Vireo gilvus*) that commonly breed along the Nashua River. It sang this aberrant song, as well as the normal Philadelphia Vireo song, for about the first month after arriving. Later in the summer it sang the normal Philadelphia Vireo song exclusively. Except for a mimid or starling, this was the first time I had heard an individual of one passerine species sing the song of another. To my ear, the aberrant song sounded very much like an abbreviated Warbling Vireo song, but sweeter and not quite so throaty. Upon careful observation, the bird's plumage was consistent with that of a typical Philadelphia Vireo with dark lores, a yellow breast, a slightly less bright yellow belly and undertail coverts, and a gray crown grading into an olive nape and back. There was no visual indication that the vireo was a hybrid.

Bird song serves multiple functions including the establishment and maintenance of breeding and feeding territories, and mate attraction (e.g., Kroodsma and Byers 1991; McDonald 1989). Birders often observe territorial countersinging between males that sometimes escalates into physical aggression. Additionally, song is important for those species that share the same habitat and are interspecifically territorial. In the present example, this Philadelphia Vireo was defending a territory against a Warbling Vireo, which is a behavior not unusual for vireos (Rice 1978). Songs are also used for species recognition and mate attraction. Indeed, song can act as an ethological, or behavioral, isolating mechanism, which forms a highly effective reproductive barrier between closely related species (see Mayr 1963 for an excellent discussion of isolating mechanisms).

Since the acquisition of this Philadelphia Vireo's heterospecific vocalizations is so unusual, it is interesting to consider the circumstances that brought it about. Also, what is the likelihood that his aberrant song would attract a female of the other species? To address these questions, we must have an understanding of how passerines of the suborder Passeres, which are called oscines and which includes the vireos, learn their own species' songs and not the songs of other species. Additionally, a female bird's ability to recognize conspecific song will be examined.

Song Characterization Terminology and Sonograms

First, I'll discuss the terminology used to describe bird song. Figure 1 is a sonogram of the familiar song of a Song Sparrow. The abscissa represents the duration of song in units of seconds, and the ordinate represents the song frequency in units of kilocycles per seconds, or kilohertz. A continuous line on the sonogram

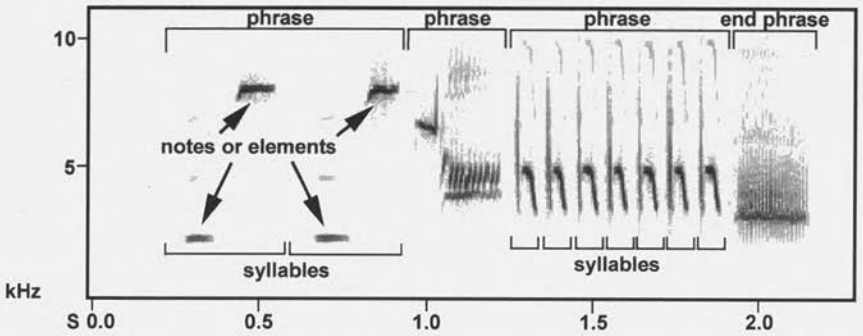

Figure 1: A sonogram representing one song type of a Song Sparrow. The y-axis or ordinate represents frequency, and the x-axis or abscissa represents time. See the text for a detailed description.

represents one note of the song. A horizontal line, such as the first note in the Song Sparrow song, is a pure tone. A vertical line represents a note that is made up of many different tones. A single note, or a series of notes that is repeated, is called a syllable. Finally, a distinct section within a bird song is called a phrase. Phrases may be constructed of repeated syllables, they may form a unique pattern of notes without repetition, or both. For example, the second phrase of the Song Sparrow song has a checkmark-shaped introductory note that is not repeated, followed by a series of vertical notes, which represent a buzzing sound. Some species, such as the Song Sparrow, produce a variety of songs, called song types, with an individual bird singing its own repertoire, or group of song types.

Sonograms of representative songs of the Oxbow Philadelphia Vireo, a Warbling Vireo, and a typical Philadelphia Vireo are displayed in Figure 2. All three songs have about the same frequency range (approximately two to six kilohertz). One of the two song types sung by the Oxbow Philadelphia Vireo that were similar to the song of the Warbling Vireo is illustrated. The two song types were usually alternated during an extended bout of singing. Typically, each song lasted about 0.8 seconds with a 3.7-second gap between songs. A Warbling Vireo song type lasts about 2.4 seconds with about 3.5 seconds between songs. The typical Philadelphia Vireo sings a series of short song types, each about 0.4 seconds long with an approximately 1.7-second pause between song types (Elliott et al. 1997). The Oxbow Philadelphia Vireo song is quite similar to that of a Warbling Vireo in terms of the pause between songs, but it is intermediate between the two species for song duration. Its song structure is analogous to that of a Warbling Vireo, with many notes having the same sort of frequency structure. The resulting songs sound remarkably similar to a typical Warbling Vireo and quite different from the normal Philadelphia Vireo song.

Part I: Song-learning

In order to understand how this Philadelphia Vireo may have acquired his aberrant song, the song-learning process in oscines will be examined. The general model of song development, evidence of song-learning preferences, and the role that

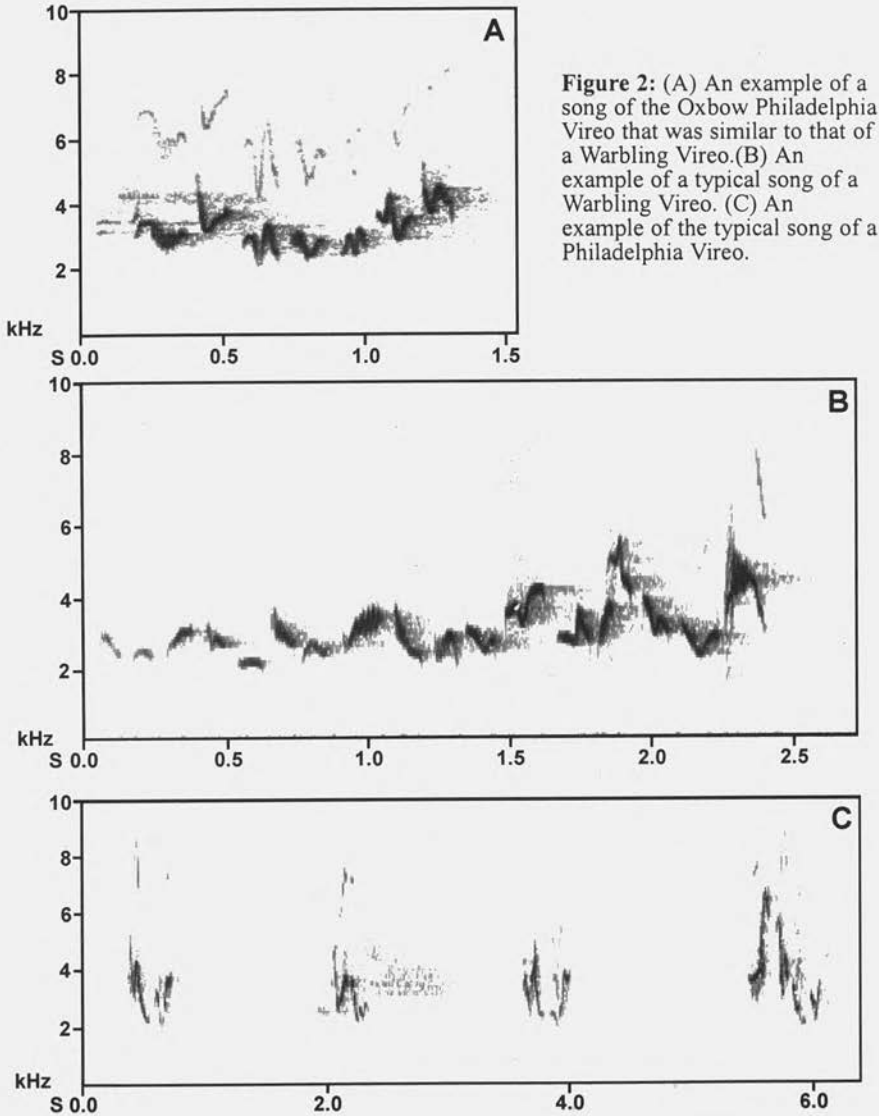

Figure 2: (A) An example of a song of the Oxbow Philadelphia Vireo that was similar to that of a Warbling Vireo.(B) An example of a typical song of a Warbling Vireo. (C) An example of the typical song of a Philadelphia Vireo.

social interactions play in song-learning will be presented. Where possible, specific information on vireos will be included. Also, situations in which wild oscines have acquired songs of other species will be discussed so that we might better understand how this vireo may have acquired his Warbling Vireo song.

The Song-Learning Process

As a young oscine learns song, it generally goes through three stages of song vocalization that are intimately related to the song-learning process. The learning process underlying these three stages of song production is described by the "auditory

template model" (Catchpole and Slater 1995; Marler 1970; Konishi and Nottebohm 1969; Konishi 1965; Konishi 1964; Marler 1952). The young male begins by hearing song, and then by storing song to augment its own innate, but unrefined, auditory template. This early sensitive phase begins when the bird fledges and continues for the next few weeks (Marler and Peters 1987). During the later portion of this early part of the song-learning process, the young male may engage in subsong, the first stage of song production. During subsong the young bird produces notes that bear little resemblance to adult song and appears to be learning the mechanics of sound vocalization. During the next stage, called plastic song, memorized songs are recalled and rehearsed. Songs produced in this more advanced stage of vocalization are still highly variable, but they are characterized by the first signs of identifiable memorized song patterns. As an individual matures, it will often sing a wider variety of different song types during this period than after it acquires its final repertoire, a phenomenon known as overproduction. Usually, but not always (see DeWolfe et al. 1989), the vocalization of songs during the plastic song phase is induced by heightened testosterone levels, as the birds come into breeding condition.

The song-learning process culminates in song stabilization and crystallization, which results in the production of the stereotyped song characteristic of adult breeding birds of the species. During crystallization, the overproduction of song types present during the plastic song stage is subjected to attrition, and only one song or group of songs (depending upon the species) forms the stereotyped adult repertoire (Marler and Peters 1987). For some species, the production of a crystallized song is greatly facilitated by the interaction of a young bird with other individuals of its species. The process often involves song matching between the bird and one or more of his neighbors, called his tutor or tutors, during territorial bouts of countersinging, chasing, and supplanting behavior. These interactions usually take place during the first breeding season, when the yearling male tries to establish a territory. Songs that fail to match those sung by a neighbor are discarded. This interactive tutoring process is crucial to song-learning in several species that have been studied (Liu and Kroodsma 1999; Beecher et al. 1994).

Oscine songbirds demonstrate a high degree of variability in the timing of song-learning by young birds. However, four broad patterns are apparent (Slater *et al.* 1993). In some species, song is memorized in the fledgling and juvenile stage only: for example, Bewick's Wren (Kroodsma 1974), Song Sparrow (Beecher et al. 1994), Swamp Sparrow (Marler and Peters 1988), White-crowned Sparrow (Petrinovich and Baptista 1987), Chipping Sparrow (Liu and Kroodsma 1999), Field Sparrow (Liu and Kroodsma 1999; Nelson 1992), and Zebra Finch (*Taeniopygia guttata*, Eales 1985). In other species, song is memorized as a young adult during the first breeding season. Payne (1981) showed that yearling Indigo Buntings require social interaction with mature males in order to learn song and that these interactions take place early in their first spring as they establish territories and engage in territorial behavior. In other species, such as Marsh Wrens (Kroodsma and Pickert 1984a), Chaffinchs (*Fringilla coelebs*, Catchpole and Slater 1995), and Northern Cardinals (Kroodsma 1974), song is memorized during both the first summer and the first spring but not at any subsequent time. Finally, birds such as European Starlings appear to be able to continuously learn songs as adults; birds as old as two and four years are able to

extensively change their repertoires (Mountjoy and Lemon 1995). This is also true of the Village Indigobird (*Vidua chalybeata)*, an African Estrildid finch that displays in groups and sings a particular group song that may change from year to year. When an individual indigobird switches groups, it will modify its song to conform to the song of the new group (Catchpole and Slater 1995). One must be cautious, however, in interpreting the production of new song types in years subsequent to the first year as constituting the learning of new songs, since it is possible that the songs were memorized in an early sensitive period and are only crystallized as needed later in life (Slater et al. 1993).

Learning Preferences

The singing of heterospecific songs is very rare in nature, due in part to an innate preference for conspecific song that biases a young bird to copy conspecific, rather than heterospecific, song. This preference has been demonstrated for several species in laboratory experiments. For example, naive Marsh Wrens will preferentially learn conspecific syllables when they are exposed to Marsh Wren, Sedge Wren, Bewick's Wren, and Song Sparrow songs (Kroodsma and Pickert 1984b). Song Sparrows also have a clear preference for conspecific song; they are sensitive to several levels of song organization, including note and syllabic structure, as well as the temporal organization of the phrases (Marler and Peters 1988). Male Swamp Sparrows, on the other hand, prefer conspecific song, but they place greater importance on the syllables from which the song is constructed than on the overall temporal organization of the song (Marler and Peters 1977). In some species, learning appears to be unimportant for development of normal song. For example, Gray Catbirds raised in complete isolation are able to sing perfectly normal songs (Kroodsma et al. 1997). Innate preferences and abilities, therefore, strongly influence song development in oscines.

The Learning Process in Vireos

The song-learning process in vireos has not been well studied, and no studies have been performed for the Philadelphia Vireo. It is not known, for example, whether a Philadelphia Vireo will change its repertoire from year to year. Red-eyed Vireos, however, have been studied (Borror 1981) and, since Philadelphia and Red-eyed vireos are closely related, it is expected that their song-learning patterns are similar. Red-eyed Vireos develop large repertoires of songs. They appear to go through the normal sequence of song acquisition, progressing from subsong to song crystallization. During the plastic song phase, which may span the first summer and part of the following spring, syllables vary at first, but they become more stereotyped as song development progresses. Overproduction is evident with the final crystallized repertoire consisting of a subset of the overproduced repertoire. There is a tendency, demonstrated by both Red-eyed and White-eyed vireos, for males not to duplicate the songs of neighboring conspecifics (Borror 1981; Bradley 1981), a clear departure from the song behavior displayed by many of the oscines that have been studied.

Species Singing Heterospecific Song

In what situations do oscine, other than mimids, starlings, and lyrebirds, imitate heterospecific song? In the highly artificial conditions of the laboratory, ethological

barriers can be degraded or destroyed, making the production of heterospecific song much more common. Table 1 gives examples of birds singing heterospecific song in the laboratory.

There are a few examples of birds singing heterospecific song in the wild (Table 2), so apparently there is no physiological barrier to producing these songs; however, it is a rarely observed phenomenon. In each of these examples, the species involved are sympatric, often sharing habitats, and they may be in direct competition for resources. For example, in areas of sympatry for White-crowned and Lincoln's Sparrows, the two species exhibit interspecific territoriality, which rarely may lead to the acquisition of the other species' song (Baptista and Morton 1988). This is also the

Table 1: Examples of Heterospecific Song in the Laboratory

Species	Species imitated	Degree	Reference
Marsh Wren	Sedge Wren	entire song	Kroodsma and Pickert 1984 b
Marsh Wren	Bewick's Wren	entire song	Kroodsma and Pickert 1984 b
Chipping Sparrow	Field Sparrow	one syllable	Liu and Kroodsma 1999
Field Sparrow	Sedge Wren	some syllables	Liu and Kroodsma 1999
Song Sparrow	Swamp Sparrow	some syllables	Marler and Peters 1987
White-crowned Sparrow	Dark-eyed Junco	some syllables	Baptista and Petrinovich 1986
White-crowned Sparrow	Song Sparrow	some syllables	Baptista and Petrinovich 1986
White-crowned Sparrow	Strawberry Finch (*Amandava amandava*)	entire song	Baptista and Petrinovich 1984; Baptista and Morton 1981

case with Song Sparrows and White-crowned Sparrows, and Song Sparrows and Wrentits. In the laboratory, White-crowned Sparrows have learned Strawberry Finch song (Amandava amandava), probably during intense countersinging bouts when housed in adjacent cages, which supports the hypothesis of heightened interspecific interactions leading to heterospecific song-learning (Baptista and Morton 1988).

Sympatric species may also learn heterospecific song when isolated individuals of a rare species are underexposed to conspecific song but frequently hear a more common species' song. This is the case with House Wrens that have learned Bewick's Wren songs (Kroodsma 1973). In these instances of unbalanced sympatry, birds still rarely learn heterospecific song. Observations in the wild are supported by laboratory studies in which juvenile birds learn heterospecific song after being taken from the nest, underexposed to conspecific song, and tutored with the song of another species. Both direct competition, resulting in interspecific territoriality, and unbalanced sympatry result in heightened interspecific interactions and are probably requisite for heterospecific song-learning in the wild. (Table 2)

Table 2: Examples of Heterospecific Song in the Wild

Species	Species imitated	Degree	Reference
Red-eyed Vireo	Eastern Towhee	some syllables	Borror 1968
House Wren	Bewick's Wren	multiple songs	Kroodsma 1973
Eastern Towhee	Field Sparrow	entire song	Borror 1968
Bachman's Sparrow	Field Sparrow	entire song	Borror 1968
Chipping Sparrow	Field Sparrow	some syllables	Borror 1968
Chipping Sparrow	Clay-colored Sparrow	entire song	Tasker 1955
Field Sparrow	Chipping Sparrow	entire song	Short 1966
Field Sparrow	Prairie Warbler	entire song	Borror 1968
Savannah Sparrow	White-crowned Sparrow	entire song	Cooper and Murphy 1985
Song Sparrow	White-crowned Sparrow	entire song	Baptista 1988
Song Sparrow	Wrentit	some syllables	Eberhardt and Baptista 1977
Lincoln's Sparrow	White-crowned Sparrow	entire song	Baptista et al. 1981
White-crowned Sparrow	Lincoln's Sparrow	entire song	Baptista and Morton 1988
White-crowned Sparrow	Savannah Sparrow	entire song	Baptista and Morton 1988
Western Meadowlark	Eastern Meadowlark	entire song	Lanyon 1957
Chaffinch (*Fringilla coelebs*)	Canary (*Serinus canaria*)	some syllables	Knecht and Scheer 1968
House Finch	White-crowned Sparrow	entire song	Baptista 1972

How might the Oxbow Philadelphia Vireo have learned his aberrant song? This Philadelphia Vireo may have been exposed to the song of a sympatric Warbling Vireo during its early sensitive period and may, therefore, have memorized the Warbling Vireo song, as well as its own. Warbling Vireo song may have been expressed during overproduction in the plastic song phase, but the normal Philadelphia Vireo song was crystallized, explaining why the bird also sang the normal species specific song. If the Warbling Vireo song remained stored in memory, however, it could have been produced from memory in response to intense interspecific territorial behavior. Philadelphia Vireos are known to display interspecific territoriality with Red-eyed

Vireos (Rice 1978), so it is possible that they may also display interspecific territoriality with Warbling Vireos. The Oxbow Philadelphia Vireo was observed on one occasion during the 1999 breeding season chasing and scolding one Warbling Vireo, while being chased himself by a second Warbling Vireo. This observation suggests that he had intense interspecific interactions with Warbling Vireos that might have stimulated him to produce the Warbling Vireo song.

Part II: Song Recognition by Females

Since the Oxbow Philadelphia Vireo learned, at least to some degree, the Warbling Vireo song, is it possible that he may also be able to defend a territory and attract a female Warbling Vireo? Will she recognize his song as an imperfect copy, or will it be an acceptable imitation? If a male Warbling Vireo recognizes the Philadelphia Vireo's song as being similar to his own and defends his territory as he would against a conspecific, his error results only in the expenditure of energy in defense of his territory from an intruder that potentially could be a Warbling Vireo but is not. Also, it is possible that Warbling and Philadelphia vireos are in competition for resources and are normally interspecifically territorial in areas of sympatry. The female, on the other hand, has more at stake. If she mates with the Philadelphia Vireo and produces offspring, it is likely that they will be of reduced viability; they may also be reproductively incompetent or sterile. In that case her reproductive effort for the year would be wasted.

Distinguishing Conspecific and Heterospecific Song

Several studies have shown that female birds have a significantly greater ability to distinguish conspecific from heterospecific song than males do. Much of this evidence comes from laboratory tests. *Melospiza* sparrows, particularly Song and Swamp sparrows, and Red-winged Blackbirds are well-studied examples of species whose females demonstrate a heightened ability to differentiate birdsong.

In the lab, receptive female Song Sparrows show copulation solicitation displays in response to Song Sparrow song but not to either Swamp Sparrow or Chaffinch songs, demonstrating that they are able to discriminate between conspecific and heterospecific song. Studies indicate that female Song Sparrows are sensitive to both individual syllables and overall temporal pattern construction but that the specific syllables appear to be more important in song recognition. Male Song Sparrows, on the other hand, learned and reproduced both Song and Swamp Sparrow syllables, particularly if the Swamp Sparrow syllables were presented in a Song Sparrow temporal pattern. The males' ability to reproduce Swamp Sparrow syllables that were incorporated into a Song Sparrow song pattern, and the females' unresponsiveness to the same artificial song indicate a reduced degree of discrimination on the part of the male.

Since male Song Sparrows often sing several different song types in the wild, female Song Sparrows were further tested to determine if they were sensitive to the use or order of multiple song types. Female sparrows were significantly more responsive to song bouts that contained multiple song types, as opposed to those containing only one song type. Male Song Sparrows also tend to repeat a particular

song type several times before switching to another type, a pattern which elicits a stronger response from females than when one song is immediately followed by a different song without repetition. Therefore, female Song Sparrows are able to discriminate syllables, temporal pattern, and song type order, and they are most responsive to songs that match what is heard in the wild (Searcy and Marler 1981; Searcy et al. 1981).

Other species have been shown to demonstrate a similar level of discrimination. Female Swamp Sparrows are able to distinguish conspecific from heterospecific song on the basis of both syllables and temporal pattern (Searcy et al. 1981); male Swamp Sparrows, on the other hand, are sensitive to syllables but not to temporal pattern (Marler and Peters 1981). Female, but not male, Red-winged Blackbirds are able to distinguish between the Red-winged Blackbird's song and a Northern Mockingbird's imitation (Searcy and Brenowitz 1988; Brenowitz 1982). Female Red-winged Blackbirds are also able to distinguish different Red-winged Blackbird dialects, and they demonstrate a clear preference for their local dialect (Searcy 1990). It is clear from these examples that female passerines possess highly developed abilities to distinguish song types.

Even though there is considerable variability in conspecific songs of vireos, I suggest that a female Warbling Vireo's refined ability to distinguish conspecific from heterospecific song would have enabled her to identify the Oxbow Philadelphia Vireo's Warbling Vireo song as being foreign. A female that scrutinized the several singing males in the area and made a comparative choice would almost certainly have selected a conspecific mate. Conspecific song recognition in mate selection is an extremely effective ethological isolating mechanism that would prevent interspecific hybridization between this male Philadelphia Vireo and a female Warbling Vireo. These factors make it highly improbable that the Oxbow Philadelphia Vireo was able to attract a female Warbling Vireo as a mate.

The Oxbow Philadelphia Vireo provided an interesting example of a rare occurrence in nature when one of the behavioral differences that help to reproductively isolate one species from another is degraded. This is all the more remarkable in light of the song-learning process that most oscines go through. As we have seen, even though the process varies greatly from species to species, very seldom does an individual in the wild learn heterospecific song. It is also interesting to speculate about the effect of this male's aberrant song on female Warbling Vireos. Studies of female song recognition suggest that, even though the Oxbow Philadelphia Vireo produced a song similar to that of a Warbling Vireo, it is unlikely that a female of that species would have been enticed to pair with him. In the end, the mechanisms that serve to maintain the distinct character of each species were probably effective in this case too.

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Beauty On The Wing: The Double Lives of Butterflies

On September 29, 2000, the Harvard Museum of Natural History will present a new exhibition entitled ***Beauty on the Wing: The Double Lives of Butterflies.*** This exhibit is from the vast collection of butterflies at the Museum, one of the most historically significant in North America. This will be a rare opportunity to see so many of these beautiful insects up close.

Specimens of every size, shape and color will be on display. One wall of the exhibition will be covered with butterflies from all over the world, from the giant blue Morphos of tropical America to the huge Birdwing butterflies of Papua New Guinea. The specimens will be accompanied by images by Darlyne Murawski, a National Geographic photographer who has captured these butterflies on film in the wild. The exhibit will also feature a live display of interactions between caterpillars and ants.

There will also be two lectures on butterflies to complement the exhibition. On October 24 at 6 p.m. Robert Michael Pyle will present "Vladmir Nabokov and the Blues," and on December 5 at 6 p.m. Maraleen Manos-Jones will present "The Spirit of Butterflies: Myth, Magic and Art." Both these lectures are free and open to the general public and will be held in the Geological Lecture Hall at 24 Oxford St., Cambridge, MA.

The Harvard Museum of Natural History is open from 9 a.m. until 5 p.m. with an admission charge of $6.50 for adults and $4.00 for children. The Museum offers free admission on Sunday from 9 a.m. until noon and on Wednesdays from 3 p.m. until 5 p.m. The entrance is at 26 Oxford St., Cambridge, MA, and the telephone number is 617-495-3045.

A Season of Plover Monitoring on Martha's Vineyard

Greg Levandoski

On April 2, 2000, I boarded the *Islander* in Wood's Hole, MA. The cloud-choked sky was both expected and welcomed. Coming from points west where the sun overstays its welcome and precipitation is usually a tease at best, I was looking forward to a slow and dreary spring on Martha's Vineyard. Although somewhat out of reach of friends and family off-island, the prospect of spending a summer in the Northeast had me in a good mood. I grew up in southeastern Massachusetts; the first birds I ever learned were there and in New Hampshire. Now I would have the chance to better acquaint myself with many of them. This was a motivating factor in accepting a job monitoring the Piping Plovers (*Charadrius melodus)* of the Vineyard. A member of an underworld of itinerant field ornithologists, I have been traveling around, finding ornithological field work in return for housing, good scenery, and modest payment. What follows is the summation of one of those jobs, the experience of a spring and summer as a plover monitor for the Sheriff's Meadow Foundation on an overly visited island.

Sheriff's Meadow Foundation (SMF) is a Vineyard nonprofit land trust. Mainly concerned with the acquisition, protection, and stewardship of the remaining and rapidly dwindling undeveloped land on the island, it owns over 100 properties comprising more than 1750 acres. SMF also sponsors a shorebirds program, developed and still run by Debra Swanson. This broad-sounding program is mostly limited to Piping Plover monitoring but also involves some oversight of Least Terns, the only Common Tern colony on the island, and a growing population of American Oystercatchers. The unique value of the SMF's program is its cooperation with private landowners. Piping Plover management across the island is split between Dukes County, Massachusetts Audubon, The Trustees of Reservations, and SMF, depending upon land ownership. Many private landowners find themselves more comfortable dealing with a local private group instead of large nonprofits or government agencies. The latter, by their very nature, can seem to apply pressure without intention. While a couple of property owners on the island refused us access, the vast majority allowed for plover management. This nearly unanimous gesture is a comforting indicator of public interest in the environment and allows protection efforts where none existed twelve years ago.

Sheriff's Meadow Foundation is generally responsible for about half the island's nesting pairs, depending on where the plovers find appropriate habitat each year. The island's population has varied recently from 45-57 pairs, up from a dismal nine pairs just a decade ago. Most sites remain attractive to home-shopping plovers from year to year, but with the dynamic nature of ocean shores this can readily change. Anyone familiar with New England winters and the accompanying storms does not have to stretch the imagination very far to see how this is possible. Therefore, early in the

season it is important to walk all beaches with known habitat or with the potential to have been transformed into habitat during the winter. This walking, through April's damp demeanor, was to characterize my first month of work.

On April 3 I met my supervisor at SMF, Debra Swanson. An eleven-year veteran of Piping Plover protection, she familiarized me with the various plover sites around the island and what plover behavior and sign to look for. She is a fiercely dedicated and extremely knowledgeable woman who contributed many hours of help and guidance each week. After Debra's initial instruction, it soon became easy for me to spot the inconspicuous scrapes the males make shortly after arriving in mid-to-late March. In attempting to attract a female, the male plovers maintain a territory and will often make these practice nests even before paired. This behavior is not so unusual among birds; Verdins and males of many wren species will also make multiple nests before one is chosen by the female. Eventually, when the plovers are paired and the female has chosen a suitable scrape, the pair begins to adorn it with small white bits of shell. This decoration will continue even after egg laying has commenced. But we must not forget courtship, that interesting set of behaviors that stimulates avian hormonal changes yet befuddle the minds of humans trying to tease out the evolutionary processes that lead to such complexity. Courtship begins with the male making a scrape by pushing his breast into the beach and kicking sand out with his feet. During this effort he calls incessantly in hopes of attracting the female's attention. If she approaches, he stands up on the edge of the scrape, with his back to her, tail up, and wings slightly spread. She inspects the scrape and may work on it a bit herself if she deems his efforts and site selection worthy. She then stands up with her head under his tail for a few moments. He moves off slightly to the side, then picks up shell fragments and tosses them haphazardly over his shoulder into and around the scrape. She may also contribute to this shell-tossing before she moves off a few feet. The male crouches low with feathers ruffled and stalks after her, head down, rump up. If she does not move away when he has bridged half the distance between them, he stands up as tall as possible. Then, with breast protruding, he marches toward her, with feet raised high and forward, a behavior known as high-stepping. His orange legs rapidly pumping up and down, he reaches her and continues to march in place against her side. Five to ten seconds later, he mounts her, sitting on her back while they copulate for forty-five to ninety seconds, his feet twitching, seemingly in ecstasy, the whole time.

Piping Plovers are wraiths of the beach, their tan-colored mantles very closely matching the hue of dry sand. With practice, their silhouettes can be teased out of the

similar colored background, if their sharply contrasting black collars are not hidden from sight. The human eye is adept at picking up on motion, and often the only chance of spotting the plovers is to wait until they move. Even after a whole season of having a search image beaten into my brain, I can still occasionally scan over a motionless bird two or three times before it resolves itself out of its habitat. Fortunately, the plovers usually give themselves away with an anxious *peep*.

When one stops to ponder their continued, albeit tenuous, presence these days, a feeling of admiration is unavoidable. If nesting on an open beaches with chicks that are flightless for nearly a month was not hard enough, humans have provided additional challenges. At the turn of the 20th century there was pressure from market gunning and the millinery industry. Then there was the explosion of beach use with the attendant four-wheel-drive vehicles. Most recently, growing populations of predators such as skunks, raccoons, crows, and gulls are being subsidized by human slovenliness. Fortunately, unlike many native species, Piping Plovers have surprisingly little competition with the myriad of exotic species introduced during the past few centuries. However, two main threats are hard to ignore — unrestrained cats from nearby beachfront homes and unleashed, overly exuberant beach-going dogs. Even though reproduction was surely easier in precolonial times, there can be little doubt that it was still difficult. By simply laying their eggs on the open beach with little or no cover, plovers have always had to rely on their cryptic coloration and their ability to remain motionless in the presence of danger in order to survive. They are the epitome of patience when the situation calls for it.

Sometimes it seems that groups involved in plover conservation are the only forces on their side. I was quite surprised that I saw no "Plovers Taste Like Chicken" bumperstickers on the Vineyard as I have before on Cape Cod. But I still ran into that attitude here, at least indirectly. Our signs frequently disappeared or were vandalized. One time someone drove illegally onto the beach, through our symbolic fencing (rope and signs), just feet away from the exclosure containing an active nest. Another night, a group decided to have a beach party only a few meters from an exclosure. The next morning fire pits and broken glass lingered as evidence, along with several stones and a bottle on top of the netting that covered the exclosure. Clearly, the slow road of education is one we will have to keep driving if we hope to change peoples' attitudes toward wildlife and nature. But stopping here in my description of beachgoers would represent a half-truth. The plover-haters worked at night or under the security of isolation and were rarely seen. Not once did I hear more than a subtly disapproving comment on a beach. In contrast, daytime beachgoers frequently came up to me with curiosity and kind comments, thanking me for looking out for these lovely little creatures. This year was poor in terms of reproductive success for the plovers, and these people often made my day bearable after sitting in Vineyard traffic and arriving at a site to find missing chicks yet again.

The thought of these downy little fluffballs filling the bellies of another creature is not so awful to me, nor should it be to anyone. To denounce predation is to question the morality of natural processes (a job not for us mortals) and would be hypocritical coming from the lips of almost any member of modern societies. What frustrates me

is that nearly every one of the predators on the Vineyard has been brought here, directly or indirectly, by Europeans. There are various local tales of how raccoons and skunks arrived, some even pinning guilt on named individuals who brought a few over as a part of a prank. Skunks are now so common that to go for a walk at night and not see one is something to talk about. Herring Gulls and Great Black-Backed Gulls were not breeders this far south until fishing was industrialized and open dumps swelled with refuse. In addition to their predation on plover chicks, the gulls have usurped some of the islands that once harbored Roseate and Common tern breeding colonies. The American Crow was once a reticent dweller of the deep woods, according to Thoreau, but it did not take long for this corvid to learn there was a living to be made cleaning up after man. Following us to the beach was only the next logical step. And surely there is no need to discuss the role man has played in bringing cats and dogs to the beach.

The obvious result of all these predators this year was poor reproduction. Twenty-one of the twenty-four pairs we monitored hatched eggs. The remaining three pairs abandoned their nests without a renesting attempt. From these twenty-one pairs, some of which nested a second time after an initial failure, a total of twenty-two chicks were fledged. This is the second lowest fledgling rate in the history of this program. We were largely spared the devastating effects of the June 6–7 Nor'easter which wiped out many nests across the state, most notably at Crane Beach in Ipswich, MA. Predatory pressures and several weeks of wet weather in July made for rough going for young chicks lacking adequate feathering. Once soaked, and with no sun in sight to dry their down, their poor thermoregulatory abilities made them especially vulnerable to hypothermia and death. This year's reproductive success of 0.92 fledglings/pair was far below the 1.25/pair that the Plover Recovery Team has estimated necessary for long-term survival of the species. The news from the statewide plover and tern conference this year revealed a predicted productivity of 0.75-1.21 young per pair. The higher value would be obtained if all unfledged chicks on the beaches as of this writing were to survive until their twenty-fifth day, and the lower value if none were to do so. Productivity somewhere around 1.0 is expected. The Massachusetts Rare and Endangered Species Zoologist, Scott Melvin, promises grief counseling for all field technicians who put in hundreds of hours of hard work this summer for disappointing results!

In grateful contrast to the somber fate of the plovers this year, there was some good news from a Least Tern colony on the island. At Little Beach in Edgartown, the only beach property owned by SMF, there was a Least Tern colony estimated at 350 pairs. This was by far the largest colony on the island this year and the second largest ever. In 1992 Norton Point in Edgartown had roughly 225 pairs and was very successful. The following year saw a returning colony of over 500 pairs in the same area but was unsuccessful. This year's colony on Little Beach at the end of Fuller Street was located at the tip of a spit, on dredge spoils derived from the town's efforts to keep Eel Pond open. The local food source of sand lances (*Ammodytes* spp.) was extremely abundant this summer, and with a fence we erected to keep out skunks, dogs, and raccoons, the terns were able to raise a great number of fledglings. This is

not to say that they were without any disturbance. The occasional person disregarded our signs, and a male Northern Harrier was seen taking chicks several times as was a local crow, its back speckled in whitewash, testifying to its guilt. Common Terns frequently chased adult Least Terns, pirating their catch jaeger-style.

This beach was also home to a successfully nesting American Oystercatcher pair, two pairs of Piping Plovers that produced four fledglings, and Roseate Terns that visited daily. The interactions between the plovers and the Least Terns were amusing at times. One plover pair, commencing an amazing third nesting attempt, laid their eggs on the outskirts of the colony. While this afforded wonderful protection, with Least Terns mobbing any intruder, the colony quickly expanded, and terns laid nests all around the plover nest. One day, the female plover came off her nest, and the male walked over to take her place incubating. But on the way, among the hundreds of Least Tern nests, he got confused and tried to incubate some Least Tern eggs. Needless to say, the attending Least Tern had a problem with his mistaken effort. They scuffled for several minutes, the plover managing to sit on the tern eggs for a second or two several times. Eventually the female plover returned to incubating, no doubt concluding that even when males want to help, they still lack a certain intuition.

Another great enjoyment for me this summer was reading the tales left in the sand. When the beach was conducive to imprinting from the light plover feet, it left wonderful stories. The tracks let you know what the plovers were up to. A beach covered homogeneously with tracks indicated that no nesting behavior was taking place. A beach with areas of dense tracks leading to a scrape was an obvious sign of birds likely to lay eggs soon. A scrape found already decorated with shell fragments should be well remembered, since there is a good chance it will be used as a nest. These scrapes often had the stages of courtship left around them: the male's tracks approaching the female's, then a line of imbricated or overlapping tracks as he high-stepped toward her, terminating in a messy blur as he marched in place at her side before jumping to her back. Another tale I came across was equally interesting but far more sobering. After arriving to find no plovers around a nest that had just hatched the day before, I looked around the exclosure for clues. There were skunk tracks leading from bunch to bunch of sea rocket, a common beach forb. It was likely that the chicks were hiding in these plants, which represented the only cover away from the dunes. I soon noticed there were plover tracks crossing the skunk's at a right angle. The skunk tracks turned from the sea rocket and followed the plover's. As this happened, a drag mark became evident alongside the plover tracks. Its wing was dragging, a common display among plovers, used to distract potential predators away from chicks or nests. This tactic is

surprisingly realistic, complete with false attempts at flying, quick drops to the ground to feign fatigue, and pathetic whinings as if it were sure its end was near. This plover was successful at averting the skunk's attention for a time, but the disappearance of all of its chicks made it likely that the skunk was ultimately successful in obtaining sustenance.

While at times depressing, working with Piping Plovers proved an enjoyable experience overall. The ocean holds a mystique that beckons louder every year one is away from it. To simply be able to walk the beaches daily, especially in the solitude of April and May, was an experience worth the whole effort. But also to have this window into the life of an amazing, adorable, and threatened shorebird was the real reward. Witnessing every stage of reproduction was moving. Seeing their daily struggle for life and the survival of their species gave me a unique perspective for viewing my own life. I will always remember this summer for the trills and bubbles of the Song Sparrow, the soft, raspy song of the Savannah Sparrow, the piercing cry of the Osprey, the frantic squeals of the oystercatcher, the ascending notes of the Prairie Warbler, and the soft, endearing *peep* from the aptly named *Charadrius melodus*.

Current grants are never guaranteed for the next year, and the ability to hire additional staff would be a great asset for the monitoring and protection of Piping Plovers and the other species mentioned above. To contribute to the Shorebirds Program at Sheriff's Meadow Foundation, send a check payable to: Sheriff's Meadow Foundation, Shorebirds Program, RR1 319X, Vineyard Haven, MA 02568.

Greg Levandoski *is a traveling field ornithologist, usually taking three seasonal jobs to fill the year. He will be returning to Big Bend National Park in Texas this winter for an ongoing study of winter avian distribution and abundance and is currently tending to his sunburn and struggling to count the vertiginous kettles of hawks in Veracruz.*

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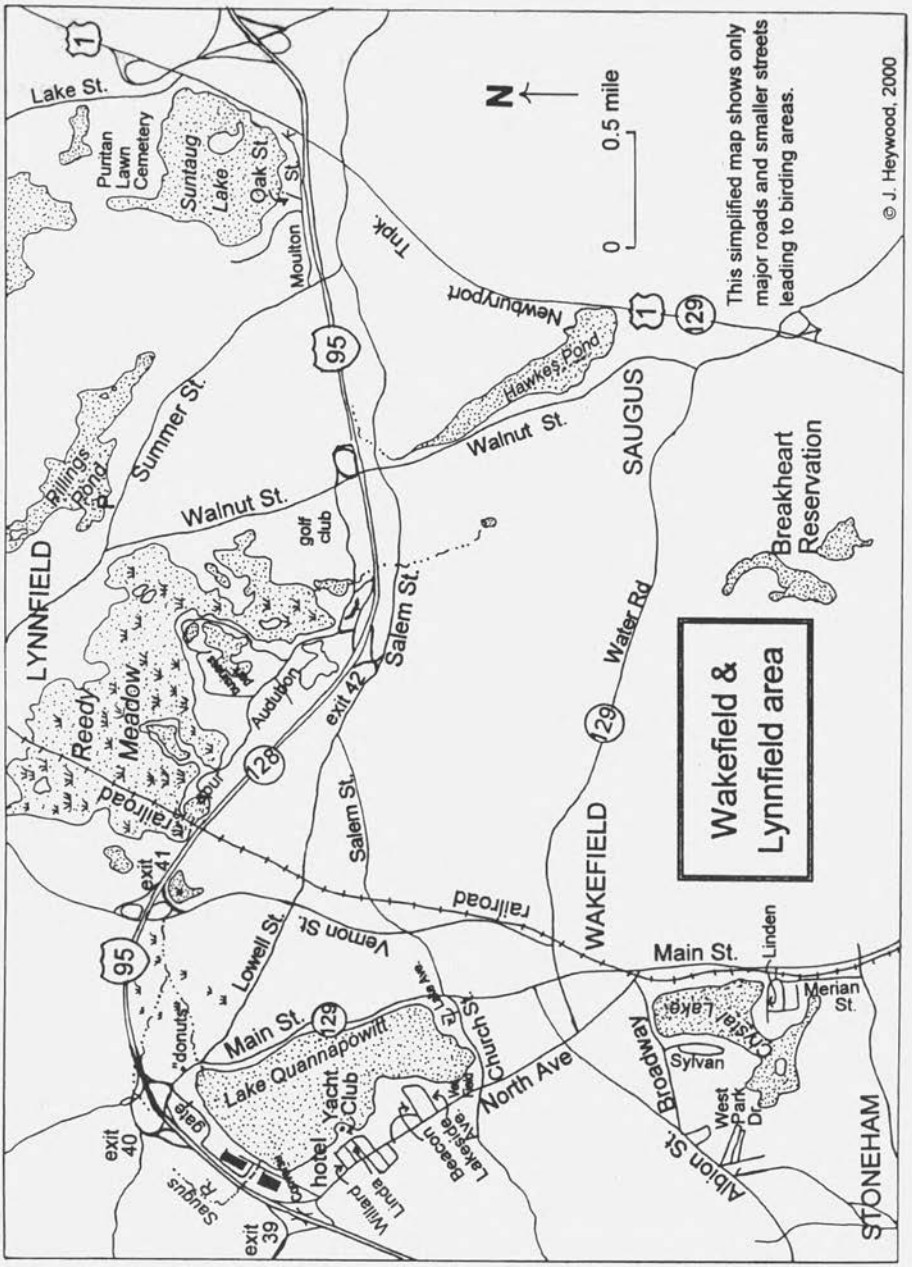
Wakefield & Lynnfield area
LYNNFIELD
WAKEFIELD
SAUGUS
STONEHAM
Lake St.
Summer St.
Walnut St.
Salem St.
Main St.
Water Rd
Newburyport Tnpk.
railroad
Lake Quannapowitt
Reedy Meadow
Pillings Pond
Suntaug Lake
Hawkes Pond
Breakheart Reservation
Purtian Lawn Cemetery
golf club
Audubon
hotel
Yacht Club
Linden
Merian St.
Sylvan
West Park Dr.
Broadway
Albion St.
North Ave
Church St.
Lakeside Ave.
Beacon
Willard
Linda
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This simplified map shows only major roads and smaller streets leading to birding areas.
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Birding the Lakes and Marshes of Wakefield and Lynnfield

David Williams

Located ten miles northwest of Boston, the towns of Wakefield and Lynnfield contain some easily accessible lakes for busy suburban birders to explore in their free time. Because these lakes are popular with the general public, the focus of this article will be on birding the off season, the months of November through March.

The first lake to be covered is the very popular **Lake Quannapowitt** in Wakefield. This lake and its surrounding lands are in almost continual use year-round. Walkers, joggers, and rollerbladers keep the perimeter of the lake active while sailboats, fishing boats, windsurfers, and ice boats keep the lake itself very busy. Needless to say, the birding is affected by all this activity, but still, many fine birds can be seen at the lake. For a watershed management plan prepared by the Friends of Lake Quannapowitt in August 1997, Peter and Fay Vale and I compiled a list of 118 species of birds seen by us over the years in and around the lake.

Lake Quannapowitt can be easily accessed from Route 128 (I-95). Take exit 39, head southeast on North Avenue (toward Boston), and take your first left into Converse Park. As you drive down this road, the lake will be on your right and a small field on your left. A new office building has reduced the size of the field, but it is still worth a look for Killdeer, Ring-necked Pheasant, and an occasional Whimbrel. There is a small swale just before you get to the first Converse building that during wet times holds water and sometimes birds. On weekends, pull into the Converse parking lot, and scan the lake for ducks. Good looks at Common Mergansers, Buffleheads, Ruddy Ducks, and Hooded Mergansers can often be had here. In the winter, make sure you check out the ditched remnants of the Saugus River that divide the two parking lots. The water is usually open and may hold some birds.

Continue on the road around the old Converse building, where you can view the lake again. At the end of the road, be careful; it is sometimes gated, and you will have to retrace your steps to get to the next stop on this tour. To do this, head back to Route 128N, and follow it for one exit. Off the exit follow the rotary almost halfway around, and bear right on to Route 129 eastbound. If it is not gated, simply turn right at the end of the road directly onto Route 129. If you want another look at the lake, pull over to the right and park; if not, continue along Route 129. If you need sustenance, there are the Gingerbread Construction Company and Honey Dew Donuts on your left, both worth the stop. As you follow Route 129, there is legal parking on the right, and you may want to take advantage of it to scan for ducks. During November and December the numbers of Common Mergansers can build to almost 400, and they often favor this shore of the lake. Scan these rafts carefully for Hooded Mergansers, Ruddy Ducks, and scaup that may be mixed in with the Commons.

Follow Route 129 for one mile. At the stoplight turn right onto Church Street,

and quickly take your next right onto Lake Avenue. This road dead-ends at a playground where you can park and scan the lake. Leaving Lake Avenue, turn right back onto Church Street. You will pass an old cemetery on your right which has a lot of fruiting trees. Check them out, but do not try to park along this side of Church Street; it is illegal. At the end of Church Street, turn right at the lights onto North Avenue, and then turn right into the softball park known as **Veteran's Field**. Park here to check the gulls, geese, and ducks as well as the many mature trees in this park. If you want to walk over to the cemetery you just passed, follow the path to the right. It is an easy five-minute walk, and there are many fruit and berry trees and shrubs that can hold birds year-round. In the winter, keep an eye open for American Robins and Cedar Waxwings.

Leaving the softball park, turn right back onto North Avenue, take your first right onto Lakeside Street, and park on the right. You can walk to the lake to get additional views of any ducks, or walk Lakeside Street checking out the **Temple Emanuel Cemetery** on your left and the brushy areas along the shoreline to your right. This area holds sparrows in the fall and many of the common winter birds.

When you leave Lakeside Street, turn right back onto North Avenue, and take your first right onto Beacon Street. At this point you have two options. First, you can continue straight down Beacon Street, which runs between Emanuel and Lakeside cemeteries and dead-ends at the lake. The end of the road is unpaved, but you can scan from here. On several occasions I have seen Canvasbacks from this site. The second option is to turn left into the **Lakeside Cemetery**. Once inside, take your first right, Elm Street, and slowly follow it as it loops around close to the lake. This is the quietest part of the Lake Quannapowitt area, and the many mature trees and shrubs bear scrutiny for migrants and winter residents. Screech Owls have nested here in the past. As Elm Street bears left, it turns into Lakeside Street, which comes very close to the lake and offers a good view of the cove by the Quannapowitt Yacht Club. In this cove I have seen fifteen species of waterfowl over the years including Pintail, Black and Ruddy ducks, Hooded and Common mergansers, Pied-billed and Horned grebes, Green-winged Teal, and others. Belted Kingfishers, Great Blue Herons, and in the fall Ospreys can be found in and around this cove.

Lakeside Street goes down a slight incline and then bears left. At the bottom of the incline examine the woodlot to the right. Sharp-shinned and Cooper's hawks frequent this area in the winter, feeding on the birds that make use (but not good enough use!) of this cover. Follow along Lakeside Street and leave the cemetery. Turn right back onto North Avenue, and proceed about 200 yards until you come to a blinking light. Turn right here onto Linda Road. As you head slowly down this road check out the last two houses on the right. Not only do they abut the lake, but they often have stocked feeders that attract most of the common birds. Linda Road dead-ends at the **Quannapowitt Yacht Club**. This is private property and should be birded only very early in the morning or from early November through mid-April when the yacht club has pulled its moorings. During these months the folks at the QYC have been fine with people birding the area. The yacht club offers some good vantage points to scope the lake for ducks.

Head toward the sandy beach to the right of the yacht club. Approach the water cautiously so as not to spook the birds. Great looks can be had of ducks in this cove. Scan the trees on the opposite shore for hawks, Ospreys, and kingfishers. If the water level is low, you can walk along the shoreline toward the back of the cove. To your right is a swampy area backed by trees that is often a bird magnet in the winter. Golden-crowned Kinglets, Redpolls, Winter Wrens, and sparrows may frequent this area. About halfway down this shoreline a little creek enters, and it is here that you might jump a Common Snipe in the fall or early winter. In some years there has been a Black-crowned Night-Heron roost here. On foggy mornings in May, huge numbers of several species of swallows have been seen here, too.

Return to the parking lot, and cross over to a path that leads into a stand of trees dominated by half-a-dozen big beeches. It is a two-minute walk to the lake along this path, but you may end up spending a lot longer, since this area can hold many birds. To your left is swamp, often with Green and Great Blue herons, both in the water and in the surrounding trees. During spring migration warblers abound in the trees and brush below. Approach the lake slowly, as Common and Hooded mergansers frequent this shore. It is from here that I have seen Oldsquaws, White-winged Scoters, and Common Loons after strong November storms. If the water level is low, it may be worth your while to walk the shoreline to your right, heading for the swampy area. In winter some judicious pishing may cause this swamp to become alive with birds, such as American Tree Sparrows, American Goldfinches, lingering Red-winged Blackbirds, and others.

After exploring this area, retrace your route to North Avenue. Turn right, and take your second right onto Willard Road. This street also ends at the lake, offering another perspective of the area you just came from. As you start to leave Willard Road, quickly turn right into, and slowly proceed through the Lord Wakefield Best Western hotel parking lot. Stop in to get a cup of coffee if you want; otherwise, once through the parking lot, turn right and park next to the lake. This is the last stop of the trip around Lake Quannapowitt and provides you with a final look at the waterfowl.

The next destination is **Crystal Lake**, just south of Lake Quannapowitt in Wakefield and touching Stoneham on the southwest. Crystal Lake is what I call a two-part lake. The main body of it is rather deep and attracts a good number of diving ducks including Ring-necked Duck, both scaups, Bufflehead, Ruddy Duck, Common

Merganser, and an occasional Canvasback. The back part of the lake is shallow with a lot of weeds, and is swampy along the back shore. Pied-billed Grebe, Black and Wood ducks, American Wigeon, Hooded Merganser, Green-winged Teal, American Coot, and occasionally Gadwall can be seen here. The lake is three-quarters surrounded by woods, with many large white pines close to the shore. These pines often attract migrating Ospreys through mid-November: they use these pines as perches from which to hunt and consume their prey. Belted Kingfishers are commonly found at the lake, too.

To get to Crystal Lake from Lake Quannapowitt, leave the Best Western parking lot, and head out toward North Avenue. Turn left (southeast) on North Avenue and drive for 1.7 miles until North Avenue ends at Main Street. Turn right on Main Street, follow it for 0.6 mile, and turn right onto Merian Street and over the small railroad bridge. Take your first right over the bridge onto Linden Avenue, and park on the right about 100 feet down at the Town Watershed sign. Follow the path through the pine grove, and make a cautious approach to the lake so as not to spook any ducks, which will often be close to shore. From here you get a good look at the main body of the lake. About 100 yards out are two tiny islands, and ducks can often be seen feeding near them. Look along the shoreline to the right to a swampy area that often holds Belted Kingfishers and Wood Ducks and provides cover for land birds. As you head back to the car, check out the pine grove, especially in winter, since it may have Brown Creepers, Red-breasted Nuthatches, Golden-crowned Kinglets, and other birds associated with coniferous habitats.

Once back to your car, turn around and retrace the route you took, going left out of Linden Street onto Merian Street, over the railroad bridge, and left onto Main Street. Follow Main Street back to the lights, turn left onto North Avenue, and take your first left after going over the railroad tracks onto Broadway Street. Follow Broadway for 0.2 mile, and turn left into the Town of Wakefield Water Treatment Building parking lot. From here you can scan the lake, looking back toward where you just were. There are often scaup very close to the retaining wall here, providing good identification practice for those of us who struggle with scaup identification.

Upon leaving this site, turn left back onto Broadway, take your next left onto Sylvan Street, and follow it until it makes a sharp right. Don't take the right; rather, park on the left side of the road. This stop will provide access to both parts of the lake and is worth the walk. Head down the path, but be careful: you will be walking on oak leaves and pine needles, and the combination can be slippery. Follow the path down toward the lake, where you have some good vantage points to view any waterfowl that are present. The path then heads back uphill parallel to the waterline and takes you to the back portion of the lake. Approach the lake slowly since the waterfowl are often close to shore. There are numerous vantage points along here. Carefully scan the marshy section on the opposite side for ducks that may be feeding or resting there. Check out the trees along the shoreline for hawks, and in the fall for Osprey. The trees can hold a good number of songbirds, especially during migration. As you move away from the lake, the forest changes from predominantly pine to mixed deciduous, and the variety of birds increases. Great Crested Flycatcher has bred

in this area. Heading right, you can continue to walk partway around the lake to the next stop on this tour of Crystal Lake, but at some point you will have to retrace your steps to the car.

Back in your car, follow Sylvan Street until it loops back to Broadway, and turn left onto Broadway. Follow this for 0.3 mile to a stoplight. Turn left on to Albion Street. You are now looking for West Park Drive on the left, which is a circle. Go past the first sign for West Park Drive, take the next left onto West Park Drive, follow it to the bottom of the hill, and park on the right in front of an empty lot. Take the path that runs out the back left corner of the lot. As you head along this path, which is a good example of an esker, there is a thicket on the right that provides cover for many of the permanent residents and bears checking out in winter as well. Follow the path up the hill, where the lake will be on your left and a small impoundment on your right. The impoundment has contained Wood Duck, Green-wing Teal, Black Duck, Virginia Rail, Black-crowned Night Heron, American Coot, and in 1998 an American Bittern. You can follow the path straight to the shore where it will offer another perspective of the lake. You can also turn left and walk toward the area you just left. Mute Swan, American Wigeon, American Coot, Ring-neck Duck, and Hooded Merganser often congregate in this part of the lake.

This completes the tour of Crystal Lake. To get to the next stop, the Lynnfield Marsh, you will have to return to Route 128. To do this, follow West Park Drive out to Albion Street and turn right. Follow Albion Street straight through the stoplight for 0.6 mile until you come to a blinking light. Turn left at this blinking light onto North Avenue, and follow it 1.4 miles back to the entrance to Routes 128/95 north. Take 128N to exit 42, Salem Street Montrose. At the end of the exit turn left, and then take your first left back under the highway. This is Audubon Road, formerly known as Pleasure Island Road.

The **Lynnfield Marsh**, or **Audubon Marsh** as it is called by some, has been prized by birders over the years as a great place to see and hear rails. Stories from the early 1900s right up through the 1960s told of common sightings of Virginia, Sora, and King rails, as well as, on occasion, the fabled Yellow Rail. Common Moorhens were also prevalent here as were Least and American bitterns. Unfortunately, time has not been kind to this area, as encroaching development and loss of habitat have taken their toll. However, the Lynnfield Marsh still offers wonderful birding.

As you head down Audubon Road, you will pass the entrance to the Sheraton Hotel. Your first views of the marsh will be on the right. You can pull over and park to scan for ducks, herons, and Tree, Barn, Cliff, and Rough-winged swallows in the summer. A Purple Gallinule was seen here in 1986 and a Eurasian Wigeon in 1998. Continue to the first right into the **Edgewater Business Park**. On weekends when most of the businesses are closed, the security people that patrol the area have been very understanding of people birding the area. A friendly wave or a brief word with them will get you on your way. Many of the office buildings have berry-laden ornamental trees and shrubs. Cedar waxwings are often seen around these in the winter.

Once in the park, turn right and slowly proceed along the road next to the marsh. Black Ducks, Wood Ducks, American Coots, Buffleheads, and Green-winged Teal can be seen from this road. When you come to building number 401, park and walk through the picnic area to the right of the building. A path heads out a short way into the marsh. Rusty Blackbirds are sometimes spotted in this area. Back in your car, continue slowly toward the parking garage and check out the weedy areas around it. One Thanksgiving several years back, a *Myiarchus* flycatcher was found here. Continue along the road, turning right at the intersection. There will be more grassy, weedy areas to check for sparrows and other field birds, especially in the fall. You are asked not to walk out into these areas so you will have to view them from the road. Be certain to scan the large body of water in the middle of the park since it often has Hooded Mergansers in late fall and early winter.

Upon leaving the office park, turn right, and follow Audubon Road to the end. There is a factory at the end of the road, and it is gated. Park outside the gate on the right. Walk along the railroad spur until it meets the mainline tracks, and follow them to the right, under and beyond the power lines and away from the traffic noise of 128. This is where Virginia Rails and Soras can be found. Both breed here and in the spring can be heard calling. Early in the breeding season the rails are quite vocal, and tapes are not necessary. Please do all you can not to stress these birds. Marsh Wrens breed here as well; also be on the lookout for Willow Flycatcher and American Bittern, both former nesters here. In the fall, Common Grackles congregate here in enormous numbers, which always gives hope of finding less common blackbirds.

When you return to your car, instead of leaving consider taking the dirt trail out into the **Reedy Meadow**. It is about a five-minute walk through woods along a dirt road that is often wet, until you come to a small pond. The trees along this road can hold good numbers of warblers in the spring and on occasion, during low water, shorebirds can be seen around the pond. Least Bitterns have been reported along here, too.

Drive out the way you came in, but turn left onto the road that leads into the hotel. Proceed slowly over the speed bumps and check out the small pond on your left. During low water there may be shorebirds present in late summer and fall. Continue along this road through the hotel and golf complex, and at the end of it turn left onto Walnut Street. Follow Walnut Street for 1.1 miles until it ends. If you want an additional view of the Lynnfield Marsh, turn left and follow Summer Street for 0.8 mile until you come to the Baptist Church. Park in the church parking lot, and walk along the railroad bed to reach the marsh. It is a seven- to ten-minute walk until you can expect to see or hear marsh birds.

If you don't take this additional view of the marsh, when Walnut Street ends, turn right onto Summer Street. Just ahead on your left will be **Pillings Pond**, also in Lynnfield. During the early 1990s, as part of a reclamation project, the pond was drained and dug out. It was refilled in 1997, but the ducks have yet to return there. Maybe with time it will be worth the stop. Continue east on Summer Street for 1.3 miles, and turn left on to Moulton Street to get to the last stop of this tour, Suntaug

Reservoir. Moulton Street runs parallel to Route 128 on the north side of the highway. Take your second left onto Oak Street, just before the Bali Hai restaurant, proceed to the end of the street, and park in the playground parking lot. From here you can view the lake from the southwest side.

Suntaug Reservoir, which straddles the towns of Lynnfield and Peabody, holds a good number of ducks from September until it freezes over. Ring-necked Ducks, Ruddy Ducks, both scaup species, Buffleheads, American Coots, and Common and Hooded mergansers are all common birds here in the fall and early winter. A Tufted Duck was here for three weeks in April 1998, associating with the flock of scaups. This an excellent place to spot migrating Ospreys in the fall. At the eastern end of the reservoir is an island, on which there is currently a small Great Blue Heron rookery. For the last several years the half-dozen or so nests have been built in live white pine trees, visible from Route 1 as you drive south (but don't stop on the highway to look!). From the playground parking lot you can walk about 200 yards to your right to scan the reservoir. If you want to get to the other (north) side of the reservoir, you can drive over to the Puritan Lawn Cemetery, but the viewing of the reservoir from there is best done early in the morning or in mid- to late afternoon to avoid looking into the sun.

It is rather involved to get to the **Puritan Lawn Cemetery** in Peabody, but there can be some excellent year-round birding there. Retrace your steps until you come to the end of Moulton Street, and turn left onto Summer Street. Go under Route 128, take a left onto Salem Street, and follow this 0.4 mile until you get to a set of lights. Go through the lights and turn left, following the signs for Route 1N. Stay on 1N for just about 1.0 mile until you come to what the locals call "The Jug Handle," which is the legal U-turn exit. Take this U-turn and head back along Route 1S for 0.4 mile, and take a right onto Lake Street. Follow Lake Street 0.2 mile, and turn left into the Puritan Lawn Cemetery. For the best views of the reservoir, once in the cemetery take your first left onto Humphrey Drive, which parallels the reservoir. There is a pull-off ahead on the left, and you can scan the reservoir from here or walk down to the shoreline for additional views. A discussion of the year-round birding in Puritan Lawn Cemetery is beyond the scope of this article, but suffice it to say that the birding there can be excellent, especially in spring.

I hope this article has presented some new and exciting birding opportunities for you. I have birded these areas for the past fifteen years and enjoy these bodies of water and the birds they hold. Like many other busy birders, I gravitated to these places because they were close to home and quick and easy to get to. I hope that the close proximity of these lakes and marshes to one another and to Route 95 and Route 1 will allow the resident or visiting birder the chance to get in some interesting and enjoyable birding not far from Boston.

David Williams *is a middle-school science teacher in Reading, Massachusetts. He has been a birder for twenty years and leads numerous bird walks for his town, school, and other groups. He is an active member of the Ipswich River Watershed Association.* *The author would like to thank Peter and Fay Vale and Dana M. Jewell for their contributions to this article. Their knowledge of these areas is extensive.*

POCKET PLACES

Mattapoisett

Marc Sylvia

On August 19, 1991, while a breeze was rustling the leaves of the trees along Commonwealth Avenue, a storm surge plowed up funnel-shaped Buzzards Bay just fifty miles to the south. Flooding was fifteen feet above mean sea level by the time the surge reached the narrow end of the funnel, at the entrance to the Cape Cod Canal. Today, one can still see the many fallen trees in the woods of southern Bristol and Plymouth counties, all aligned southeast to northwest, toppled by Hurricane Bob's one hundred mile-per-hour winds.

Mattapoisett is one of the off-cape towns that comprise the up-glacier shore of Buzzards Bay. In April and May, no one around here can be made to believe that the glacier has left, as in gloves and hooded parkas we view the returning egrets, while twenty miles inland kids are running under sprinklers. But this is a microclimate that also provides us with midwinter robins and waxwings, bluebirds and blackbirds, Carolina Wrens, towhees, catbirds, and Turkey Vultures. Spring migrants work their way along the coast and forest margins, and then comes the time to watch the breeders settle in.

A little park-and-walk at the end of Mattapoisett Neck Road in Mattapoisett takes you through a woodlot to the southwest shore of the point, which looks out onto Brant Cove. Past the seasonal passerines working the trees and brush along the rutted road, you are likely to find Willets and American Oystercatchers in numbers in the salt meadows to the south and north. This is sharp-tailed sparrow habitat, with several active Osprey nests nearby. Song Sparrows, of course, are all around, and some of the smaller shorebirds may be along the beach. Note the cloud of terns around Ram Island, about a third of a mile to the south. Dick Harlow has been managing this colony, which includes some establishment of Roseate Terns in the last few years. Mattapoisett Neck Road is a spur running a little over two miles south beginning at Route 6, about a mile-and-a-half east of the Fairhaven line. There is a circular widening of the road at the end, before the entrance to Antassawamock. Park along the circle, and walk past the vehicle gate to the right of the circle to get to the rutted road.

Mid-to-late fall is a good time to check Angelica Point, in the southeast corner of Mattapoisett. This is a scrubby teardrop dangling southward from a short barrier beach. The transition from the sand spit to the area of bushy growth is a stretch of boggy flats and littoral shallows. The inland side of the beach is familiar salt marsh cut by mosquito ditching, leading to a salt pond before meeting the uplands. You can access the point from Route 6 by turning south onto Prospect Road, which winds through the community of Crescent Beach, past a creek which empties into Pine Island Pond. Across this pond you will see a couple of dozen new cottages on stilts.

These houses are on Cove Street, which is the barrier beach, and each is a replacement for one demolished by Hurricane Bob in 1991. To get there, continue along the same road as it bends ninety degrees to the right and ends at the shore. You can take a right onto a hard sand road and park near the beginning of the road. This is Cove Street. Walk to the end of the road, with the tidal marsh to your right and Buzzards Bay to your left, as you look out under the houses. The road ends, but you can walk to the point, no more than a half mile from where you parked. Angelica Point can afford sightings of a variety of shorebirds and bay ducks, as well as Common Yellowthroats and Yellow-rumped Warblers in the tangles. Being of mixed habitat and peninsular configuration, it is also a place to find Bird "X", such as the Snowy Owl that showed up for the Christmas count several years ago.

Dress warmly and post that Yellow-breasted Chat on MASSBIRD.

The Old Dump and Vicinity, Northfield, MA

Mark Taylor

One of my favorite birding spots in Northfield, especially in the spring, is a place I affectionately refer to as the Old Dump. This is an area just off the main street in the center of town and was the town dump many years past. Now, it has no resemblance to a landfill, except for an old glass bottle poking though the vegetation here and there. This area also includes the Northfield Center Cemetery, which precedes Old Dump, a wetland region, and a large tract of cornfields after that. These cornfields extend to the Connecticut River. All together the area includes several diverse habitats in a relatively small area.

To get there, you take a left, if heading north, off Main Street (Routes 10 and 63), on Parker Avenue (this is the first left after the first pedestrian crossing). Follow this road a short way, and park just before the set of railroad tracks. The dump access road begins just the other side of the tracks.

The cemetery itself, which is the highest in elevation of the four habitats, is surrounded by large white pines, locust, and maple trees with a mature spruce, yew,

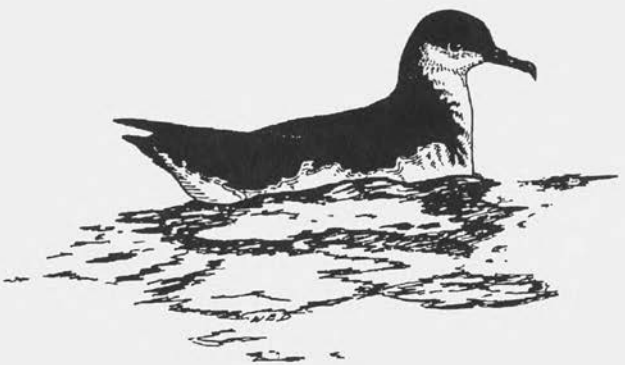
and several arborvitae scattered about. This is where I look for many of the migrating warblers and breeding species that prefer the canopy, but have also found Swainson's Thrush occasionally in the spring perched on the gravestones.

Continuing past the cemetery, down the access road, there is an overgrown but walkable path off to the left, marked by a pile of organic debris (the town still uses this area to discard leaves and fallen trees). This is the Old Dump and is the second tier in elevation. This short, one-way walk through grasses mixed with sumac and willow takes you out to a somewhat overgrown lookout. From here you can scan the cattail wetland and the tangle of wild roses and alder below, a great place for those scrub- and ground-loving bird species.

Back to the access road you head down through to the third habitat, which is the wetland area, with a cattail pond on the left and alder swamp to the right. This is one of the most reliable places, I've found, to see Wilson's Warblers in the spring, along with Wood Ducks and many other species of birds such as Virginia Rail and Warbling Vireos. The bittersweet-entangled trees bordering the road also attract a variety of berry-eating species in the fall and winter. This wetland area extends north and south along the edge of the cornfields, so once out to this opening, you can walk in either direction and be able to view both habitats.

The cornfields (fourth and final habitat) are best viewed in spring before planting time, and in fall after the corn has been harvested. This vantage point gives great long-distance views west toward the Connecticut River. Horned Larks, American Pipits, Canada Geese, and a variety of hawks are frequent visitors here, but as in any area a rarity could appear. I have seen a Common Moorhen in the cattail pond here and Peregrine Falcons hunting along the cornfields.

Northfield, because of its rural location and its placement along the Connecticut River (the town is divided practically in half by it), has many more great birding places to explore, but the Old Dump area is one of the good ones and I highly recommend it. The town itself has a beautiful main street with set-back sidewalks and colonial homes on both sides, so it's an attractive place to visit also.



ODD BIRDS

On June 8, two days after a strong nor'easter, this Northern Gannet was discovered by teacher Robert Kenney and his Technology Education classes at Hull (MA) High School, uncharacteristically sitting on the lawn behind the school. The next morning, the gannet stood, spread his wings, flopped his way across the field for about twenty feet, and took to the sky. Photograph by Mr. Kenney.

It is rare enough to find a Cattle Egret in Fitchberg, but on April 26 homeowners were startled to see this bird perching on their railing. Photograph by George Peterson.

In January, commuters in Lincoln faced an interesting new driving obstacle when they were repeatedly "attacked" by two tom Wild Turkeys. The turkeys would strut along the road, and if a motorist slowed down, would rush the car and peck at it. If drivers honked, the birds responded with a loud gobbling. Photograph by Marjorie W. Rines.

YARD BIRDS

Prior to our move to Worcester in 1999, we lived in Bolton for nine years. We started birding in 1994 and maintained a yard list from that time. By the time we moved, we had tallied 109 yard species. That bounty was attributable both to the variety of habitat within our five-acre yard (including stream, wetlands, woods, and open meadow) and to our proximity to other varied habitats. Our yard on one side was bordered by a farm field and an old orchard, and we were no more than a mile (as the duck flies) from the Delaney Wildlife Management Area (Bolton Flats was on the other side of town).

The proximity to Delaney accounted for Green Heron in the yard, and many flyovers of ducks and geese. The neighboring farm field and orchard accounted for Bobolink, Eastern Meadowlark, and Common Snipe, among other species. We also recorded a wide variety of hawks, thrushes, vireos, warblers, and sparrows. Owls included Great Horned, Eastern Screech, and Barred. And among our winter visitors were Evening Grosbeaks, Common Redpolls, and Pine Siskins.

But two things really stand out as highlights of our Bolton yard – one an annual event, the second a one-day wonder.

The annual event was the return in spring of American Woodcocks that used our back meadow and neighboring field as launch pads for their display flights. We could stand out back unobtrusively and have woodcocks come in to land within ten feet, clearly seeing them *peent* and strut around. Sometimes doing yard work during the day, we would come across them hiding in the dense thickets against one of the boundary walls.

The one-day wonder happened in late December 1995. We were about to leave on a road trip but were delayed at home by a blizzard. Waiting for the snow to stop, we heard Blue Jay alarm calls and looked outside. There, perched in a tree, was a Northern Goshawk. After a while it made several passes through the yard. Its powerful flight and maneuverability were awe inspiring. Within an hour of the Goshawk's visit, the Blue Jay alarm sounded again. This time we looked out to find a Northern Shrike sitting on our bird table. That was quite a day!

As a postscript, we saw the Goshawk several more times, and the following spring/summer it was confirmed to be breeding at Delaney. The shrike's visit was not the first or the last either.

Now in Worcester, we have started a new yard list. With a smaller yard we don't expect the same variety as in Bolton, but we already have two species that never made the Bolton list. Wild Turkeys (adult and young) frequent our new yard. And quite unexpectedly, on three nights this July we had a Whip-poor-will calling from the woods behind us.

Simon and Lisa Hennin
Worcester, MA

FIELD NOTES

South Polar Skua

Peter Trull, Wild Cape Cod

While most people have been complaining about this dismal summer, I've been loving the easterlies that have been hammering Cape Cod for what seems like over a month. If you don't know already, the day to go on a whalewatch to see pelagic species is during, or the day after, east or northeast winds; the snottier the weather, the better.

This has been the best year in memory for observing and photographing Parasitic and Pomerine jaegers on Stellwagen Bank. They have been thick, both species seen frequently in twos and threes. On July 17, a dark phase South Polar Skua (*Stercorarius maccormicki*) came over the boat, looking down, glancing around, and as I said out loud to myself "Look at this nice big" the word "Pom" turned into "Whoa, Skua"! It circled the boat twice, clearly looking here and there, like we had fish guts on board, and then b-lined east, out of sight. Wow. I called Blair Nikula at work, from sixteen miles off shore. I was so pumped. On that day, I observed the skua, two adult Arctic Terns sitting on a floating board, 7,000 Greater Shearwaters, 4,500 Sooty Shearwaters, 1,500 Wilson's Storm-Petrels, and three Northern Gannets.

Two weeks later on July 31, with winds from the east, I observed twenty Parasitic Jaegers (six visible at once in a flock of terns around 3 p.m.) and five Pomarine Jaegers, one beating up seriously on a Herring Gull that was making more noise than you ever hear a Herring Gull make! But the skua was the highlight of my summer whalewatch research trips. I've only been out thirty-seven times this year; according to my data sheets, my last August 15 trip was number 1,055 in ten years at the Center for Coastal Studies. So if you want to see pelagic birds from a whalewatch boat, pick a misty, foggy, nasty day with an east wind. The birds are blown in, land disappears quickly, and you might even see a whale.

P.S. Go for Sabine's Gull between September 1 and 12, on or after an easterly blow.

(Editor's note: This may be the first sighting of a South Polar Skua from Stellwagen Bank.)

Nocturnal Foraging by Common Nighthawks

Aaron Roth, Center for Vertebrate Studies, Northeastern University

During a study of Common Nighthawks (*Chordeiles minor*) in Boston, Massachusetts, in 1999, I made some incidental observations of nocturnal foraging. Specialization of the nighthawk's eye limits foraging to dusk and dawn under most natural conditions (Aldridge and Brigham 1991, Brigham and Fenton 1991). Unlike Whip-poor-wills (*Caprimulgus vociferus*) (Mills 1986) and Common Poorwills (*Phalaenoptilus nuttallii*) (Brigham and Barclay 1992), nighthawks do not forage in moonlight (Aldridge and Brigham 1991), and diurnal foraging by nighthawks is considered rare (Brigham and Fenton 1991).

Nighthawks are known to feed on insects attracted to artificial light (Sheilds and Bildstein 1979, Poulin et al. 1996), which should enable them to forage throughout the night, but this has not been investigated. The current literature states that this species does not forage nocturnally (Poulin et al. 1996).

On ten nights, between July 2 and August 19, 1999, a total of twenty-one instances of nocturnal foraging by at least three different individuals were observed. Observations were made from the roof of a five-story apartment building on Huntington Avenue. Birds were identified by plumage characteristics as an adult male, adult female, and a hatch-year individual of undetermined sex. Foraging was identified when a bird ceased calling and made several erratic, fly-catching deviations in flight. For the purposes of this study, instances that occurred between 9:30 p.m. and 4:00 a.m. were considered nocturnal. The observed time spent foraging ranged from 12.5 to 2.0 minutes per night (average 5.7 minutes). The majority of the observed instances of nocturnal foraging (n=18/21) took place over Huntington Avenue, a well-lit urban street. All observed foraging bouts took place several meters above downward-oriented light sources.

For six nights the stadium lights were on at Fenway Park. During these nights, the area used by nighthawks for nocturnal foraging expanded to include areas away from Huntington Avenue. The stadium is 0.8 km from the study site. Although previously reported to forage in the light of Fenway Park during night baseball games (Levin 1993), no nighthawks were observed feeding there during this study. The lights were usually out by 11:00 p.m.

It is certain that some foraging could not be observed during the nights in question. However, these observations raise questions about Common Nighthawk

biology in urban habitats. The ability to use artificial light to extend foraging periods removes a natural constraint on Common Nighthawk foraging behavior. Consequently, the use of lighted, urban habitats to increase the time within which foraging is possible may be advantageous to this species.

This note came from research funded by a grant from the Nuttall Ornithological Club. I thank Gwilym Jones for reviewing this note.

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Jack the Pelican

Maura J. Amrich

It would have been easier if Jack had been a Lark Bunting. A Lark Bunting, although just as geographically misplaced, would never have produced the type of comments I had to endure regarding my sanity, eyesight, and drinking habits when I announced the presence of an American White Pelican (AMWP) on Flint Pond, practically in my backyard. Since the average person has probably never heard of a Lark Bunting, they would never know where it should or shouldn't be. But a *pelican*? Everyone knows they are those big birds with the huge bills that you see along the coast of Florida and California, right? But there it was: an American White Pelican on a small pond in Tyngsborough, Massachusetts, forty miles from the nearest ocean.

I have no professional or educational training in the natural sciences, and to me birding is just a fun hobby. So this story simply represents my casual observations of a really cool yard bird, whom my children dubbed "Jack."

I discovered Jack just before 8:00 a.m. on April 15, 2000 (prompting me to

observe that never before has a "big bill" arriving on this date ever been so welcomed by so many!). Mass. Audubon was closed for the long Patriot's Day weekend so it wasn't until April 18 that I was able to get the word out to the birding community. Once I did, there was much excitement about Jack's presence, and birders from three states eventually visited my yard to see him (and to sign my daughter's guest book). They posted many observations to MASSBIRD, including the fact that Jack was missing his left eye.

Many people began doing their own research on AMWP sightings in Massachusetts, all trying to find where Jack had been before arriving in Tyngsborough. Because of their efforts, it can be assumed that Jack was the same right-eyed AMWP that was on a pond in Ellenville, Ulster County, NY, from March 18 until April 7, 2000. An AMWP also briefly touched down in Berkshire County, MA, during a snowstorm on April 9, 2000. In 1997, a single AMWP with a missing left eye was carefully documented as it eventually made its way to Plum Island, MA (July 13 Kingston, July 14 Hull, July18-19 Scituate – where the missing eye was first noted, Plum Island July 21-October 16). It's reasonably safe to assume that these sightings all pertained to the same individual. This list of occurrences is not intended to be inclusive, yet it represents those sightings most relevant to Jack's history.

There are several theories about why Jack appeared in Massachusetts, but all are subject to speculation. As to why Jack landed specifically on Flint Pond, my own theory is that he was lost, lonely and/or tired, and with his impaired eyesight, he noticed our local pair of Mute Swans and hoped they were kindred souls. After determining that it really was an AMWP on the pond, not an impaired swan as I originally thought, my first observations were simply aimed at trying to determine what our native waterfowl thought of this strange visitor with the huge bill. The Mallards and Canada Geese seemed completely unconcerned as they swam along next to Jack, just as if he'd always been present on the pond.

The Great Blue Herons seemed to act differently, however. My observations of Great Blues suggest that they take flight when frightened, and that normally they are very slow-moving birds (except of course when darting out their necks while fishing). So, when I saw Jack swimming along the shoreline to approach some feeding herons, I was surprised to see the herons run. This was most comical, since it was very different from their usual slow, stilted walk. Perhaps the herons were a little unsure, but not frightened enough to take wing. The herons soon got used to Jack, which ultimately led to my favorite Jack sighting. One morning, I looked out my sliding glass doors to see a Great Blue emerge from behind the cattails to an open area on our small beach. The heron was walking just a couple of feet out from shore, and right behind it was Jack. I could see Jack's big feet slowly paddling him along, as the two birds made their way along the shoreline and around the bend.

As to Jack's disposition, he seemed like an easy-going, laid-back individual. If boaters approached too closely, he'd just casually swim off, or continue to where he was going, sometimes passing quite closely. He did not seem to be people-shy (although certainly not tame), since he would sometimes swim right along the

shoreline unconcerned with the residents rushing to the shore to take photographs, nor did he appear too concerned when our dogs were down at the shoreline. He would even occasionally sleep on my neighbor's beach, at the end of their dock. Other than when chased by the swan, I recall seeing Jack fly off quickly only twice: each time he was approached suddenly and loudly by motorboats. Canoeists, on the other hand, were able to get quite close to him, since he just calmly kept a little ahead of them.

Jack

I had ample opportunity to watch Jack feed. He would typically swim along the edge of the pond, repeatedly dipping his bill in the water, tipping it back to drain the water, and sometimes tossing his head far back several times, which made me think he may have caught a large fish. Jack was not particularly active, but every few days he would fly back and forth several times across the length of the pond making repeated low sweeps just above the water. I don't know if this was to simply stretch his wings or an attempt to locate fish (a one-bird attempt at fish herding). Whatever the reason, it was a truly magnificent sight to watch this aerial display by a bird with a roughly ten-foot wingspan. I was fortunate to have been standing on the shoreline during several of these passes, so I had a wonderful view.

On April 26 we had a late snowstorm. I didn't bother to put out the guest book, since I figured no one would come in that weather. Although the snow didn't amount to much, there were times when it was quite heavy. Despite the weather Jack swam along the shore feeding in the morning, seemingly unperturbed, then later settled down by the cattail marsh. I felt a little crazy standing in my back yard in a slicker holding an umbrella over my head while watching a pelican in a snowstorm. But, apparently, I wasn't alone. Soon after I went in, my doorbell rang, and there was a gentleman asking if he could sign the guest book. So we wandered out into my backyard together to take advantage of this strange and unique opportunity to watch a pelican feeding in a small pond during a New England snowstorm. Birders are certainly a determined lot!

On May 3 Jack did something I had never seem him do before. Around 10:00 a.m. he took wing and kept climbing higher and higher in widening circles. Then when he was just a tiny spot in the sky, off he went heading northwest. I thought Jack was finally on his way home. Feeling a mixture of happiness that he would soon be with others of his kind and sadness that he had left my pond, I went in the house to post his departure to MASSBIRD. But, before I could press "send," Jack was back! I

felt, however, that this extended flight was a sign that he might soon be departing; perhaps he was getting his bearings and testing the winds. I later learned that this circling behavior was quite normal for flocks of AMWPs. The next morning Jack was still on the pond. However, when I returned from dropping my son at school, I was unable to locate him. During Jack's extended stay, it was rare that he couldn't be found somewhere on the pond. Even when he wandered into Flint Marsh, he would regularly return to the pond. So I thought my original guess was correct. Jack had left.

However, the story doesn't end here. On May 16 I went out just before dark to check on the swans (since the female swan had been missing for a few weeks and the male for several days, I was hoping that they might both be hiding in the marsh with young), when Jack came gliding in for a landing. It was amazing how he just suddenly appeared out of nowhere, and seemed to float down to the water without ever flapping his wings. I watched him feed rather furiously until it was too dark to see him.

I was able to watch Jack in all types of weather – sunny blue skies, sleet, snow, and on May 18 I watched him in a thunder-and-lightning storm. He stood out on his favorite perch, a submerged branch, surrounded by water with his neck craned toward the sky, making, in my opinion, a perfect lightning rod. I was relieved to still find him in good health the next morning. On May 22 Jack left again, but on May 23 he returned. I was out on the pond's shore and watched him gently float out of the sky for a landing. There had been no sightings of him during his first absence, even though there were birders wandering all over the state for the Mass Audubon's Bird-a-thon on May 12-13. This time, however, we did get reports of his wanderings. On May 22, soon after he left, he was seen east of Tyngsborough along the Merrimack River in Lowell, and the next day a call to Mass Audubon reported that he had been seen in Nashua, NH (just north of Tyngsborough).

Jack left again on May 25, this time for good. A posting to MASSBIRD reported a single AMWP in Freeville, NY, (near Ithaca) on May 28, and another sighting of a single pelican at Braddock Bay, Lake Ontario, NY, on May 30. While no mention was made of a missing left eye, it seems plausible to assume that the bird in question was Jack.

This ends my tale of "Jack the Pelican," at least part one of the saga. Part two is the story of how I first discovered Jack, what I went through to let the birding public know of his presence, my daughter's very popular guest book, the distances that so many wonderful people traveled to see Jack, the incredible knowledge these people shared with us, and what it's like to play host to a rare bird. Perhaps someday there will even be a sequel – the story of Jack's return! I don't know what you will be doing on April 15 next year, but I will be sitting in a lounge chair on my shoreline waiting for our gentle, great-winged friend to return, and maybe if I'm lucky, he'll bring a friend.

ABOUT BOOKS:

A MEMORIAL AND A MEDITATION

Mark Lynch

The Great Auk. Errol Fuller. 1999. Harry N. Abrams. 448 pages.
Hope is the Thing With Feathers: A Personal Chronicle of Vanishing Birds. Christopher Cokinos. 2000. Tarcher/Putnam. 360 pages.

"One death is a tragedy – a million deaths a statistic." Josef Stalin, *The Great Auk* (p.120).

How can we make sense of the human-caused extinction of a species? How should we react? How do we choose to remember an extinct species?

These are difficult and deep questions that anyone with an interest in natural history must ponder from time to time. Humans are complex and seemingly illogical creatures when it comes to death. We will feel acutely depressed about the loss of a family pet while hardly blinking an eye over the horrible massacre of thousands of other humans in central Africa. When we read accounts of the Great Auk or the Dodo, we may react with outrage, fatalistic cynicism, depression, plain sadness, regret for not being able to tick that species on our world list, or any combination of these emotions. Errol Fuller and Christopher Cokinos have wrestled with the big topic of the meaning of human-caused extinction in two very different ways.

Errol Fuller is a British painter with more than a passing interest in extinct birds. Previously he has authored the well-known *Extinct Birds* (1987, Facts On File) as well as *The Lost Birds of Paradise* (1995, Swan Hill Press). Both books are now out of print. In his latest book he has singled out the Great Auk as the subject of his considerable passion.

"The Great Auk has always been peculiarly fascinating. Quite why is difficult to say" (p.18).

In this coffee-table-sized monograph, Fuller has pieced together a picture of the Great Auk by compiling a vast collection of illustrations of eggs and mounted specimens, combined with accounts, stories, and biographies. It is as if he obsessively sought out every object still extant that had to do with the Great Auk and has included it in this single volume. The results can be a little overwhelming.

Included in the book are many of the familiar tales of this woebegotten alcid often found in other books. For example, he writes about the sad story of one of the last Great Auks that was caught alive on the island of St. Kilda and was thought to be a witch. But Fuller does not stop with a simple rehashing of what has been written

before. He piles on detail after detail as if the sheer weight of information can bring back the auk. He titles an entire chapter simply "1844" and recounts thoroughly what is known about the death of the last Great Auks. Included is a full color photograph of the exact rock ledge on Eldey Island where the last auks were killed. In another gruesome coda to the story, the eyes and internal organs of these last auks are still preserved in a jar at the Royal Museum at Copenhagen. Of course, Fuller provides a half-page crisp black and white photograph of these bizarre specimens.

Fuller then catalogs every piece of artwork and illustration of the auk that he could find, beautifully reproducing many of these. Included are a few of his own heartfelt and more expressive paintings. He has relentlessly sought out any object that pictured the Great Auk, so we see Great Auk T-shirts, Great Auk salt-and-pepper shakers, and even a Great Auk tattoo.

All of this is just a lead-in to the bulk of the book. Fuller documents and illustrates every skin, stuffed specimen, mummy, and collection of bones and eggs of a Great Auk that are known from this century. A veritable Catalogue Raisonné of an extinct bird.

"A detailed list of 80 or so stuffed birds might seem excessive. The reason for it is simple. Each of these auks represents a little tragedy of its own" (p.120).

Included in each entry is the specimen number, a detailed account of the provenance, all references to that specimen, what is known about the origin of the specimen, and an account of the specimen's present location and condition. Also included is either a photo or illustration of the specimen or a picture of the person associated with that skin or egg. There is little doubt that Fuller intends this to be the definitive and exhaustive work on the Great Auk. Personally, I found it mind-numbing. Staring at the seemingly hundreds of color illustrations of auk eggs, I succumbed to sensory overload. All I could think about was how much they looked like Jackson Pollack paintings, especially the Earl of Derby's egg (p.282).

Fuller rounds out the book with the biographies of all the naturalists and curators who have been important to the natural history of the Great Auk.

There is little doubt that this book is a stunning achievement of research and passion. I do not think this expensive monograph is for the casual natural history reader; there is just too much technical information. There is something so obsessive and personal about Fuller's unending and relentless parade of facts combined with state-of-the-art reproduction of illustrations that the book seems to transcend being a simple monograph and becomes instead a piece of conceptual or performance art. It is as if Fuller wants this book to be a shining monument to memorialize the passing of a lost species. After all, the book *is* about the size of a small gravestone.

How different in intent and attitude is Christopher Cokinos' ***Hope is the Thing With Feathers***. Cokinos is a writer, poet, and professor of English at Kansas State University. He is also a birder and passionate environmentalist. It is Cokinos' skill at vivid writing and self-examination that makes this volume one of the most important books on extinction ever written.

His story begins while out birding in Kansas. He spots two feral parrots and is immediately struck by their astonishing and alien brilliant color set against the landscape with which he is so familiar. Later, he is amazed to learn that historically a parrot species, the Carolina Parakeet, actually did live in Kansas. Thus begins an enormous journey for Cokinos that is by turns physical, emotional, and spiritual. He sets out not only to research six species of birds that have become extinct in North America, but in the way of a pilgrimage – to visit those spots where these birds last existed. Cokinos writes about the Passenger Pigeon, the Carolina Parakeet, the Ivory-billed Woodpecker, the Heath Hen, the Labrador Duck, and the Great Auk. Along the way, his thoughts, reactions and questions are carefully recorded. It is through reading his inner dialogue of discovery that readers find themselves examining their own feelings about what the extinction of a species means.

Cokinos sums up his intentions in this way: "So I have tried to write not only a natural history, but something more – a chronicle at once personal and historical, a collection of factual narratives that engage where we stand now in relation to the birds gone and the birds remaining. We may never restore vanished birds through the promise of cloning. That may remain a Hollywood fantasy. But we can restore – we can *restory* – these vanished birds to our consciousness" (p.3).

By conjuring up a vivid portrait of these birds from the eyes of someone in today's world, Cokinos wants us to certainly mourn these species' passing. Thus emotionally motivated, we must get out of our chair and do something. Cokinos wants to make clear the necessity of "redefining hope from wish to work" (p.335).

Cokinos has done an amazing amount of original research for this book. The American Antiquarian Society awarded him a residency in 1998. This gave him access to an incredible collection of original source material. You may think there is nothing new that could be written about the Passenger Pigeon, but Cokinos always seems to look for the new angle. For instance, he speaks with Mary Kruse, the daughter of Press Clay Southworth, the man who actually shot the last wild pigeon. She shows Chris a scrapbook of articles that Southworth kept about the pigeon, including a 1968 letter he wrote to *Modern Maturity* about his experiences with the last Passenger Pigeon. Cokinos' sensitive writing reveals Press Clay Southworth as not some red-necked executioner, but as a caring person who took a strange specimen he found on his farm in the way everyone took a specimen in those days before optics became popular. Cokinos later tries to find the location of this farm where the incident took place, and as dusk falls, meditates on extinction.

In the chapters on the Ivory-billed Woodpecker, Cokinos talks with Nancy Tanner, now eighty-two, whose husband James Tanner did most of the seminal field research on the species and is revealed as a hero. The effect of these investigations is both to make the extinctions more real and vivid, not just a depressing statistic, and also to bring a species extinction into the realm of everyday human experience. Through his first-person monologues, Cokinos always

seems to get to the heart of the matter, the deep questions and experiences we all have. For instance, he talks about the "the forgetting-of-self that comes from looking" (p.8) that anybody who has lost himself or herself birding can identify with.

Some personal incidents recorded in the book are poetically transcendent. Cokinos visits curator and ornithologist Town Peterson at the Museum of Natural History at the University of Kansas with the purpose of looking at Carolina Parakeet skins. Peterson starts by showing Cokinos a tiny brown feather and asks him if he knows what it is. Peterson reveals it to be a feather from a moa. Later, while examining the parrot skins, a tiny bright green feather comes loose. Momentarily Cokinos, caught in a "matrix of awe, grief, disgust and desire" from handling the dead parakeets, is sorely tempted to keep the feather for his own. He imagines everything he could do with the wisp of a feather at home, including talking about it at dinner parties. Finally, for several reasons, he decides to put the feather down. It is a very human and very complex moment.

Cokinos' choice of illustrations for the book, all modestly black and white, are often unique. Some of the photography emphasizes the human connection to these birds' lives. In one chapter we see an amusing photograph of a certain Mr. Bryan and his pet Carolina Parakeet, Doodles. Doodles is perched right in front of his face and looks like he is ready to plant a kiss. Another photograph shows ornithologist Alfred Gross tenderly holding a Heath Hen in his lap. There are two stills from James Tanner's amazing films made of a nesting pair of Ivory-billed Woodpeckers. These films were made at tremendous physical effort by the ornithologists who were desperately trying to document and hopefully save a disappearing species. We begin to understand that although humans certainly caused these species extinctions, there were also people who cared deeply for these birds.

Certainly there are also unabashed villains in these extinction stories. Ornithologists try to keep the Singer Tract in Louisiana, where some of the last few Ivory-bills breed, from impending industrial development. James F. Griswold, Chicago Mills chairman of the board, simply tells them: "We are just money grubbers." "We are not concerned, as are you folks, with ethical considerations" (p.102). Later in the book, Cokinos takes a walk in what is left of the Singer Tract amid the ruins of the Chicago Mill Lumber Company. The irony is palpable.

At the end of the book, Cokinos writes about the Great Auk. It is interesting to compare his more personal writing in these chapters with Errol Fuller's monumental tome. Cokinos visits some of the old breeding islands of the auk on a wild trip in a Zodiac. Finally back ashore, he writes what can only be called a prayer: "What we have lost – and what we have now – oblige us to savor and save what we have" (p.335). It is a testament to Christopher Cokinos' writing that we believe this is still possible.

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BIRD SIGHTINGS

MAY/JUNE 2000

Jim Berry, Seth Kellogg, Marjorie Rines, and Robert Stymeist

May is always the most anticipated month of the year for the birding community. The weather sometimes refuses to abide by our wishes of sustained south winds and dry days, but this year it did. May was dry, with near normal temperatures and about a half inch less rain than normal in eastern Massachusetts. In Boston the temperature averaged 57.2 degrees with a high of 91 degrees on May 7; the low was 42 degrees on the first. Inland areas were a bit warmer, not affected by the frequent sea breeze that lingers on the coast. Rainfall totaled 2.88 inches in Boston with measurable amounts falling on 14 days. There were many "waves." On May 2, a really big one dropped migrants out of the sky throughout our entire area. The fog along the coast in the morning helped keep the birds down, and new southerly winds on May 3 and 4 brought additional migrants. It was nice to have nearly a week of east and northeast winds with little rain to help keep the birds around to enjoy! Another push occurred May 16 through 18 when strong southwest winds dropped more migrants on New England.

June started out dry, but wet days prevailed. A total of 6.61 inches fell in Boston, nearly double the average. The temperature averaged out a bit below normal; the high was 92 degrees on June 17. On June 12 the high was only 54 degrees, about 14 degrees below the average for that date.

R.H.S.

LOONS THROUGH ALCIDS

Pacific Loons were some of the stars of the season this spring, with single breeding-plumaged adults documented off Plum Island and Wellfleet on May 6 and 13, respectively, and a basic-plumaged bird off Rockport June 6. The latter was a fly-by, viewed through a telescope at 300-400 yards, allowing observation of almost all key field marks, including a vent strap. Pied-billed Grebes apparently nested in the Quabbin Reservoir, where three juveniles were seen June 26. The undisputed star of the season was a **Yellow-nosed Albatross** sighted off Penikese Island May 9 by a group of biologists working on the island. Given the rarity of albatrosses in the Northwest Atlantic, it was most likely the same bird that was reported a month later from Nantucket and from several other places in Rhode Island and around Long Island Sound in the same time period. This is only the third Massachusetts record, and details are yet to be considered by the MARC.

Greater and Sooty shearwaters were found in quadruple digits on one day, June 21, from the Gloucester-Provincetown ferry, which transverses most of Stellwagen Bank. Manx Shearwaters were found, as usual, in much smaller numbers, while Cory's, with their predilection for warmer water, were seen only south of Martha's Vineyard. Leach's Storm-petrels, hard to find in spring and summer, were seen from three locations, most notably seven off Rockport June 6 during a nor'easter. The **American White Pelican** that had adopted a Tyngsborough pond for much of the spring was last seen in that town May 25 (see the field note by Maura Amrich on page 325); another, or, more likely, the same bird was reported from Salisbury May 27.

Least and American bitterns were both reported in moderate numbers (sixteen and twenty-seven respectively) without any definitive evidence of nesting. The Least Bitterns in western Massachusetts were encouraging, since there had been only ten May-June reports since 1972. Reports of the primarily coastal herons from the western part of the state were limited to a

single Great Egret in Westfield and a single Black-crowned Night-Heron in Washington; the latter is not annual in western Massachusetts in June, and the former not annual there at all. Nesting herons on Kettle Island off Manchester included a dozen or more pairs of Little Blue Herons and a probable nesting pair of Tricolored Herons (one adult seen at nest). Interestingly, Great Egret nests were fully two-thirds the number of Snowy Egret nests. Cattle Egret reports were limited to a paltry three along the North Shore, their former stronghold - so few that they were outnumbered two to one statewide by Yellow-crowned Night-Herons!

Black Vulture reports were limited to southwestern Massachusetts, in contrast to the early spring, when they seemed to be exploring other areas of the state. A Greater White-fronted Goose was a holdover in Concord until May 2, while the spring's latest reported Snow Goose was in Brookline, of all places. Forty-four Brant at Turners Falls May 21 were not only the latest, but the only ones reported away from the coast. More Mute Swans (twenty-seven) were reported from Chicopee than from anywhere along the coast. Two American Wigeon, also in Chicopee, were the first in western Massachusetts after May 2 since 1982. Pairs of shovelers at Arlington Reservoir June 4 and of Green-winged Teal in Boxford May 31 were unusually late.

Among the diving ducks, a King Eider remained on Martha's Vineyard and five Harlequin Ducks at North Scituate into the first week of May, while 158 Common Eiders on Cape Ann June 14 showed the extent to which immature birds remain there for the summer. Meanwhile, a pair of Common Eiders with three young at Muskeget Island off Nantucket through the period constituted a rare breeding record for Massachusetts. Small numbers of Surf Scoters, White-winged Scoters, Oldsquaws, and Red-breasted Mergansers migrated through the western part of the state in May; Surf Scoters are rarely found there at that time of year. A very late, probably summering, diving duck was an adult or subadult Black Scoter in the Parker River June 30, two weeks later than two male Common Goldeneyes that lingered in Gloucester.

Hawk migration lasted well into May for many species, as usual, including three Merlins in western Massachusetts and a very late Broad-wing at Muskeget Island June 17. At least four pairs of Ospreys nested on the North Shore this spring, consolidating that species' continued expansion into the historical gap in their breeding range between the South Shore and southern Maine. Swallow-tailed and Mississippi kites, annual on Cape Cod in recent years, were again observed there in small numbers, though the Mississippi reports were without details. Swallow-tails were also observed in both Cambridge and Harvard, bringing the number of observations to an amazing six. Other than nesting pairs at the established locations around Quabbin Reservoir and west, several Bald Eagles were still cruising the state through June, reflecting this species' propensity to wander widely. Information was lacking on whether Northern Harriers are still nesting on the islands; the few June reports were all from nonnesting locations.

A pair of adult Sharp-shinned Hawks held territory in a spruce forest on Choate (formerly Hog) Island in Essex throughout the period, giving hope of nesting. (The nest was found in July; stay tuned.)

Clapper Rails were observed in their usual, but very local, haunts at Plumbush and Plum Island, both in Newbury. King Rails, equally rare in Massachusetts, were identified in Pittsfield and West Bridgewater on the same day. A Purple Gallinule was reported from Nantucket without details. The only Common Moorhen report was from Delaney WMA - a sad commentary on the decline of this species as a breeding bird in New England, even if uncommon. The same may be said for the American Coot, with only a single June record, also at Delaney. Single Sandhill Cranes in Chatham and South Amherst, on the other hand, may be a precursor of things to come; the species has extended its breeding range east over the last five years into east-central Ohio and western Pennsylvania, and may well continue its eastward

march. As it is, this was the first May record of a Sandhill in western Massachusetts.

Stellar shorebirds this season included a **Wilson's Plover** on Martha's Vineyard (photograph in August issue), a **Black-necked Stilt** in Marion, a spring Marbled Godwit in Westport, a **Red-necked Stint** on North Monomoy, and single **Ruffs** in Rowley and on Plum Island, the latter at the end of June. The stint, historically a very rare visitor to eastern North America, was the fourth documented record in the state in the last two years! Whether this is because observers are getting sharper or the birds more regular remains to be seen.

A Black-bellied Plover in Hadley June 7 was not only rare for western Massachusetts, but the second-latest ever reported there in spring. Other shorebird highlights from out west were a Short-billed Dowitcher in Amherst and six White-rumped Sandpipers in Hatfield, the latter on the late date of June 7, showing that inland shorebirding can be rewarding, not to mention valuable in terms of better understanding migration patterns. In a remarkable contrast, more Wilson's Phalaropes were reported statewide than Pectoral Sandpipers.

There were two reports of **Long-tailed Jaegers** this spring: seven at First Encounter Beach in Eastham after the June 6 nor'easter and a first-summer bird at Muskeget Island off Nantucket June 17. These birds are hard to find in New England even at sea, and seeing them from land is exceptional. Little Gulls outnumbered Black-headed Gulls eight to one, none lasting into June. A single Glaucous Gull and twenty-seven Black-legged Kittiwakes, however, including some adults, were found during and after the June 6 nor'easter. A rare spring **Sabine's Gull** was on Stellwagen May 11, while an equally (or more) rare **Gull-billed Tern** was reported without details from Plum Island June 18. *The importance of documenting such rare birds cannot be overemphasized.*

Remarkable alcid records were, not surprisingly, linked to the June 6 nor'easter. Along with several unidentified large alcids, a veteran sea-watcher reported two **Common Murres** and three Black Guillemots, all in breeding plumage, flying close by Halibut Point in Rockport. Single guillemots were also observed at North Shore locations on June 14 and 20. These are unusual dates for these species south of their breeding grounds, especially for the murres, which nest no closer than downeast Maine. Black Guillemots nest as close as the Isles of Shoals, and the first Massachusetts breeding record is eagerly awaited. *J.B.*

Red-throated Loon

5/10	Truro	35	S. Perkins
5/11	Hingham	1	D. Peacock
5/13	Rockport (H.P.)	6	T. Pirro#
5/13	Wellfleet	45	S. Perkins
6/13	E. Orleans	1	R. Emerson

Pacific Loon

5/6	P.I.	1 br pl	S. Perkins#
5/13	Wellfleet	1 br pl.	S. Perkins
6/6	Rockport (A.P.)	1	R. Heil

Common Loon

5/5	N. Scituate	15	G. d'Entremont#
5/10	Turner's Falls	55	H. Allen
5/10	Gill	23	M. Taylor
5/12	Haydenville	2	R. Packard
5/13	Wellfleet	39	S. Perkins
5/13	P'town (R.P.)	65	S. Perkins
5/16	Winchester	2	P. + F. Vale
5/28	S. Stellwagen	5 imm	G. d'Entremont#
6/3	Wachusett Res.	3	M. Lynch#
6/6	Rockport (A.P.)	12	R. Heil
6/10	Quabbin (G37)	3 BBC	(R. Lockwood)

Pied-billed Grebe

5/4	Mattapoisett	1	F. Smith
5/7	W. Barnstable	1	S. + E. Miller
5/11	Hingham	2	D. Peacock
5/13	Goshen	1	T. Gagnon
5/13	Petersham	1	D. Small#
5/27	S. Egremont	1	L. Schulze
6/18	Wakefield	1	P. + F. Vale
6/18	Belchertown	1	M. Lynch#
6/24	Granville	1	S. Kellogg#
6/24	W. Bridgewater	1	S. Arena
6/26	Quabbin	3 juv	D. Norton

Horned Grebe

5/13	Randolph	1 alt	G. d'Entremont#
5/13	P.I.	1 br pl	R. Heil
5/31	Mattapoisett	1	R. Finch

Red-necked Grebe

5/20	N. Scituate	1 alt	SSBC (P. O'Neill)
6/2	Gloucester (E.P.)	1	C. Leahy

Yellow-nosed Albatross (details submitted) *

5/9	Penekese I.	1	C. Mostello
6/5	Nantucket	1	D. Sutherland

Cory's Shearwater

6/21	20-110 mi S. of M.V.	150+	V. Laux#

Greater Shearwater

6/17	Stellwagen Bank	4	R. Lockwood#
6/21	20-110 mi S. of M.V.	800-1000	V. Laux#
6/21	P'town-Stellw.	210	R. Heil

Sooty Shearwater

5/28	S. Stellwagen	1	G. d'Entremont#
5/30	Nantucket	1	fide E. Ray
6/6	Rockport (A.P.)	29	R. Heil
6/7	Chatham (S.B.)	250+	B. Nikula
6/13	E. Orleans	6	R. Emerson
6/21	20-110 mi S. of M.V.	450+	V. Laux#
6/21	P'town-Stellw.	2500	R. Heil

Manx Shearwater
5/13 Rockport (H.P.) 1 T. Pirro#
5/18 Squantum 1 D. Larson
6/6 Rockport (A.P.) 26 R. Heil
6/7 Chatham (S.B.) 2 B. Nikula
6/9 P.I. 1 R. Heil
6/21 20-110 mi S. of M.V. 10 V. Laux#
6/24 Stellwagen 1 D. Larson#
Audubon's Shearwater (no details) *
6/21 20-110 mi S. of M.V. 1 V. Laux#
large shearwater species
6/6 Dennis (Corp. B.) 2 B. Nikula
6/7 Eastham (F.E.) 2 B. Nikula
Wilson's Storm-Petrel
5/13 Stellwagen 25 K. Hartel
5/19 Gloucester (B.R.) 1 J. Soucy
6/6 Rockport (A.P.) 355+ R. Heil
6/7 Eastham (F.E.) 150 B. Nikula
6/11 off Chatham 2 R. Emerson
6/18 Jeffrey's Ledge 250+ S. Cronenweth
6/21 Stellwagen Bank 900 R. Heil
6/21 20-110 mi S. of M.V. 10,000+ V. Laux#
6/24 off Marshfield 35 J. Young
Leach's Storm-Petrel
6/6 Rockport (A.P.) 7 R. Heil
6/7 P.I. 1 M. Taylor
6/24 off P'town 1 J. Young
Northern Gannet
5/7 N. Monomoy 300 B. Nikula
5/10 Truro 200 S. Perkins
5/13 P'town (R.P.) 110 S. Perkins
5/24 P.I. 22 R. Heil
6/6 Rockport (A.P.) 171 R. Heil
6/7 Chatham (S.B.) 30 B. Nikula
6/7 Eastham (F.E.) 180 B. Nikula
6/18 Jeffrey's Ledge 5 S. Cronenweth
6/21 20-110 mi S. of M.V. 12 V. Laux#
6/25 Stellwagen 16 S. Moore#
American White Pelican
5/3-4 Tyngsboro 1 ph M. Amrich + v.o.
5/27 Salisbury 1 N. Jukins
Great Cormorant
5/5 N. Scituate 5 imm G. d'Entremont#
5/11 Nahant 1 imm R. Heil
5/12 Magnolia 2 imm R. Heil
5/13 Plymouth 2 imm S. + L. Hennin
Double-crested Cormorant
5/14 Arlington 98 M. Rines
5/20 Hampden Cnty 82 Allen Club Census
5/22 Gill 25+ M. Taylor
American Bittern
5/13 Bolton Flats 2 R. Lockwood
6/22 Franklin Cnty 2 R. Packard
6/24 W. Brookfield 2 M. Lynch#
thr Reports of indiv. from 21 locations
Least Bittern
5/11 MNWS 1 C. Holzapfel
5/13 Cumb. Farms 1 W. Petersen
5/13 W. Bridgewater 1 m S. Arena
5/13 Bolton Flats 2 R. Lockwood
5/20-31 Ipswich 2 J. Berry
5/21 S. Quabbin 1 E. Neilsen#
5/28 Cotuit 1 S. + E. Miller
5/28 Sterling Peat 1 M. Lynch#
5/28 Milford 1 J. Hoye#
6/4 DWMA 1 M. Lynch#
6/10 IRWS 1 BBC (D. Oliver)
6/20 P.I.(Hellcat) 1 f R. Heil
6/22 Franklin Cnty 1 R. Packard
6/30 Rowley 1 J. Berry
Great Egret
5/1 Magnolia 25 BBC (S. Hedman)
5/10 Watertown 1 L. Cocca
5/12 N. Monomoy 5 B. Nikula#
5/21 Westfield 1 T. Swochak
5/23 Hingham 5 N. Swirka
5/28 P.I. 9 P. + F. Vale
6/14 Medford 2 R. LaFontaine
6/29 Manchester (KI) 95 pr S. Perkins#
6/30 Rowley 17 J. Berry
Snowy Egret
5/18 Rowley 16 J. Berry
5/21 Annisquam 16 M. Lynch#
5/23 Hingham 23 N. Swirka
5/29 Mattapoisett 5 F. Smith
6/29 Manchester (KI) 146 pr S. Perkins#
6/30 Rowley 26 J. Berry
Little Blue Heron
5/5 Duxbury B. 1 S. Perkins#
5/5 Ipswich 1 ad J. Berry
5/6 E. Boston (B.I.) 1 E. Taylor
5/7 P.I. 1 ad. S. Perkins#
5/12 Essex 1-2 ad J. Berry#
5/14 Chilmark 1 D. Kraichnam
5/31 Nantucket 2 E. Ray
6/29 Manchester (KI) 12-14 pr S. Perkins#
Tricolored Heron
5/12 Manchester 1 R. Heil
5/13 E. Boston (B.I.) 1 R. Stymeist#
5/14 P.I. 1 P. + F. Vale
5/16 Nantucket 2 fide E. Ray
5/30 S. Dartmouth 1 R. Couse
6/29 Manchester (KI) 1 ad n. S. Perkins#
Cattle Egret
5/1 Beverly 2 H. D'Entremont
5/18 Newbypt 1 S. Grinley
Green Heron
5/6 Hadley 3 E. Labato
5/7 Bolton Flats 3 M. Lynch#
5/9 Worc. (BMB) 5 J. Liller
5/12 Ashfield 2 R. Packard
5/17 WBWS 2 J. Barthel
5/20 Hampden Cnty 7 Allen Club Census
6/1-30 Falmouth 2 max R. Farrell
6/15 DWWS 2 D. Furbish
6/17 Bolton 2 T. Pirro
6/23 Mattapoisett 5 M. Lynch#
6/24 W. Brookfield 4 M. Lynch#
Black-crowned Night-Heron
5/6 Reading 3 D. Williams
5/10 Brookline 6 R. Stymeist#
5/11 Hingham 26 D. Peacock
5/22 Arlington 51 R. LaFontaine
5/28 Winthrop 4 S. Zendeh
5/31 M.V. 7 G. Levandoski
6/20 Lynn 3 J. Quigley
6/29 Manchester (KI) 14 pr S. Perkins#
6/30 Washington 1 D. St. James
Yellow-crowned Night-Heron
5/2 Chilmark 1 R. Conway
5/4 N. Reading 1 J. Haselton#
5/16 Nantucket 1 fide E. Ray
5/28-31 Mattapoisett 2 M. Sylvia
6/4 Westport 1 K. Preston#
6/18 Tuckernuck 1 ad R. Veit#
Glossy Ibis
5/1 N. Middleboro 18 K. Holmes
5/1 Marblehead 3 R. Heil
5/3 DWWS 3 D. Furbish
5/4 W. Bridgewater 2 R. Finch
5/6 Newbury 6 D. + S. Larson
5/7 Bolton Flats 2 M. Lynch#
5/13 Squantum 11 G. d'Entremont#
6/1 N. Quincy 1 R. Min
6/3 Boston H. 8 K. Vespaziani
6/25 Topsfield 10 F. Vale
6/29 Manchester (KI) 59 pr S. Perkins#
Black Vulture
5/6 Sheffield 5 T. Pirro
Turkey Vulture
5/1 Hingham 5 K. Vespaziani
5/1 N. Truro 42 EMHW (M. Lowe)
5/1 Stoneham 4 D. + I. Jewell
5/2 Tyngsboro 6 M. Amrich
5/6 N. Truro 11 EMHW (M. Lowe)
5/8 Duxbury 8 K. Robinson

Turkey Vulture (continued)
5/9 N. Truro 10 EMHW (M. Lowe)
5/13 Sheffield 60+ M. Lynch#
5/20 Wakefield 7 P. + F. Vale
6/3 Wachusett Res. 4 M. Lynch#
Greater White-fronted Goose
5/2 Concord (NAC) 1 S. Perkins
Snow Goose
5/17 Brookline 1 E. Taylor
Brant
5/5 E. Boston (B.I.) 300+ A. Joslin
5/6 Revere 400 E. Taylor
5/7 Newbypt H. 410 S. Perkins#
5/11 Nahant 208 R. Heil
5/13 Squantum 231 G. d'Entremont#
5/13 Eastham (F.E.) 148 S. Perkins
5/18 Duxbury B. 24 D. Furbish
5/21 Turners Falls 44 M. Fairbrother
Mute Swan
5/15 Gloucester (E.P.) 13 BBC (S. Hedman)
5/20 Holyoke 2 D. McLain
5/20 Chicopee 27 T. Swochak
6/3 Wachusett Res. 3 M. Lynch#
6/23 Mattapoisett 2 M. Lynch#
6/26 S. Hadley 1 H. Allen
Whooper Swan
5/21 Ipswich 3 R. Stymeist#
Wood Duck
5/1 Bolton Flats 8 J. Hoye#
5/6 E. Middleboro 14 K. Anderson
5/13 Ipswich R. 18 ECOC (J. Berry)
5/15 DWWS 6 D. Furbish
5/16 Williamstown 14 L. Therrien
5/20 Hampden Cnty 85 Allen Club Census
5/28 Westboro 8 M. Lynch#
5/29 Worcester 9 M. Lynch#
6/8 Chesterfield 8 ad, 3 juv R. Packard
6/14 Goshen 12 R. Packard
6/29 Longmeadow 12 S. Kellogg
Gadwall
5/12 P.I. 27 W. Drew#
6/23 Lenox 1 f w/2 yg R. Graefe
American Wigeon
5/13 W. Bridgewater 1 S. Arena
5/20 Chicopee 2 T. Swochak
5/26 P.I. 1 W. Drew#
6/9 W. Newbury (C.H.) 1 m R. Heil
6/24 GMNWR 1 P. + F. Vale
Blue-winged Teal
5/13 W. Bridgewater 2 S. Arena
5/15 Hadley 2 R. Packard
5/15 Nantucket 4 fide R. Ray
5/26 DWWS 1 m D. Furbish
5/27 Truro 1 J. Young
Northern Shoveler
5/6 P.I. 4 P. + F. Vale
6/4 Arlington Res. 1 pr J. Rathbun
Green-winged Teal
5/1 W. Bridgewater 17 R. Finch
5/2 Concord (NAC) 7 S. Perkins
5/13 Gardner 1 m T. Pirro#
5/13 P.I. 12 R. Heil
5/20 Holyoke 5 D. McLain
5/31 W. Boxford 2 J. Berry
Ring-necked Duck
5/3 Randolph 3 G. d'Entremont
5/20 Quabbin 1 D. Small
Greater Scaup
5/3 Cambr. (F.P.) 1 pr J. Barton
5/3 Randolph 30 G. d'Entremont
5/14 Falmouth 2 S. + E. Miller
Lesser Scaup
5/5 Randolph 4 G. d'Entremont#
5/7 W. Newbury (C.H.) 2 m R. Heil
King Eider
5/6 Gay Head 1 m V. Laux
Common Eider
5/18 Duxbury B. 20 D. Furbish
6/14 Cape Ann 158 R. Heil
6/24 Stellwagen 30 BBC (E. Tarry)
Harlequin Duck
5/5 N. Scituate 5 f D. Brown#
Surf Scoter
5/5 N. Scituate 150 G. d'Entremont#
5/13 P'town (R.P.) 2 S. Perkins
5/13 Lanesboro (Pont.) 4 M. Lynch#
5/14 Falmouth 650 R. Farrell
5/19 Manomet 250 W. Petersen
5/20 Fairhaven 14 D. + S. Larson
5/21 Nahant 22 R. Stymeist#
5/23 Gill 3 T. Gagnon
5/24 P.I. 7 R. Heil
5/30 M.V. 16 G. Levandoski
6/14 Gloucester 4 R. Heil
White-winged Scoter
5/6 Revere 200 E. Taylor
5/7 P.I. 200+ R. Heil
5/7 S. Quabbin 2 T. Gagnon#
5/20 N. Scituate 30 SSBC (P. O'Neill)
5/23 Gill 6 T. Gagnon
Black Scoter
5/20 N. Scituate 150 SSBC (P. O'Neill)
5/20 Fairhaven 4 D. + S. Larson
5/21 Nahant 14 R. Stymeist#
5/30 M.V. 56 G. Levandoski
6/30 P.I. 1 m J. Berry
Oldsquaw
5/2 Newbypt H. 3 S. Moore#
5/13 P'town (R.P.) 1 m S. Perkins
5/18 Turner's Falls 1 H. Allen
5/31 M.V. 1 m br G. Levandoski
6/10 Hyannisport 1 B. Nikula#
6/18 Chappaquiddick 1 N. Bettancourt
Bufflehead
5/5 Randolph 50 G. d'Entremont#
5/9 Marstons Mills 7 S. + E. Miller
5/12 P.I. 2 W. Drew#
5/13 Sandwich 2 B. Nikula#
5/21 Nahant 1 C. Floyd#
5/29 Southwick 1 S. Kellogg
Common Goldeneye
5/5 Randolph 1 f G. d'Entremont#
5/19 Gloucester 2 m R. Heil
6/6 Turners Falls 1 f R. Packard
Hooded Merganser
5/13 Plainfield 1 R. Packard#
5/22-23 Leeds 1 R. Packard
6/4 DWMA 7 M. Lynch#
6/8 Chesterfield 2 R. Packard
6/9 Great Barrington 1 J. Hoye#
6/9 Pittsfield 5 J. Hoye#
6/13 Lenox 1 R. Laubach
6/14 Goshen 2 ad + 2 yg R. Packard
6/16 Northampton 1 f R. Packard
6/25 Barre F.D./Rutland S.P. 1 f M. Lynch#
Red-breasted Merganser
5/7 P.I. 115 R. Heil
5/9 Marblehead 12 J. Berry
5/13 Squantum 9 G. d'Entremont#
5/13 Lanesboro (Pont.) 2 M. Lynch#
5/13 P'town (R.P.) 107 S. Perkins
5/21 S. Quabbin Park 1 f J. Liller#
6/1-30 Falmouth 2 R. Farrell
Common Merganser
5/11 Quabbin (G40) 1 R. Lockwood
5/13 Stoneham 5 D. + I. Jewell
5/22 Gill 2 M. Taylor
6/2 Northampton 4 T. Gagnon
6/4 Quabbin (G15) 1 E. Labato
6/10 Northampton 6 T. Gagnon
6/19 Charlemont 1 R. Laubach
6/21 Westfield 1 S. Kellogg
Ruddy Duck
5/thr W. Newbury 3 max R. Heil
5/5 Randolph 5 G. d'Entremont#
5/11 Arlington Res. 1 K. Hartel

Ruddy Duck (continued)

5/12	Westport	32	S. + L. Hennin
5/12	Lincoln	4	D. Diggins
5/21	Hanson	1	W. Petersen
6/3	Melrose	1	D. + I. Jewell
6/9	W. Newbury (C.H.)	1 m	R. Heil

Osprey

5/1	P.I.	6	T. Carrolan
5/1, 2	N. Truro	11, 6	EMHW (M. Lowe)
5/8, 9	N. Truro	7, 7	EMHW (M. Lowe)
5/14	Pepperell	2	E. Stromsted
5/27	Westboro	pr n	E. Taylor
5/28	P.I.	1 pr	P. + F. Vale
6/1	N. Quincy	2	R. Min
6/9, 30	Rowley	2, 3	J. Berry
6/15	DWWS	2	D. Furbish
6/18	Medford	1	D. Oliver
6/23	Mattapoisett	6	M. Lynch#

Swallow-tailed Kite

5/7	Chatham	1 fide	R. Prescott
5/8	W. Tisbury	1 ad	C. + T. Parton
5/10	Truro	1	J. Sones
5/12	Harvard	1	M. Holland
5/13	Mt.A	1	R. Naticchioni#
6/10	N. Truro	1	T. Carrolan#

Mississippi Kite (no details) *

5/6	Truro	1	T. Carrolan#
5/27	N. Truro	1 imm	EMHW (M. Lowe)

Bald Eagle

5/1, 4	P.I.	1, 1	T. Carrolan
5/7	Cheshire	2	L. Therrien
5/10	Northfield	1	H. Allen
5/13	Truro	2 imm	D. Crockett#
5/13	Turners Falls	pr n	M. Lynch#
5/13	Hingham	1	W. Petersen
5/15	P.I.	1	D. Wilkinson
5/20	Quabbin	3 ad, 2 imm	ABNC (D. Small)
5/27	N. Truro	9 imm	EMHW (M. Lowe)
5/29	Carlisle	1 imm	T. + D. Brownrigg
5/31	Nantucket	1	E. Ray
6/6	Turners Falls	1 ad, 1 juv	R. Packard
6/11	P'town	1 imm	B. Nikula
6/18	Medford	1 imm	D. Oliver
6/18	Arlington	1 imm	R. LaFontaine#
6/18	Swansea	1 imm	R. Couse#
6/19	Holyoke	1 ad	M. Williams
thr	Gill	2	v.o.
thr	W. Springfield	2	v.o.

Northern Harrier

5/1	P.I.	8	T. Carrolan
5/1-18	DWWS	pr	D. Furbish
5/5	Truro	2	R.Turner
5/5-13	Windsor	1	R. Rancatti
5/6	P.I.	5 migr	S. Perkins#
5/8	Cheshire	1	R. Rancatti
5/12	Lancaster	1 f	R. Lockwood
5/13	Turners Falls	1 imm m	M. Lynch#
5/13	P'town (R.P.)	1 ad. m	S. Perkins
5/16	Cumb. Farms	1	R. Finch
5/16	Wakefield	1	BBC (W. Drummond)
6/9	P.I.	2 f	J. Berry
6/9	GMNWR	1	M. Rines
6/21	Provincetown	1 ad m	R. Heil
6/26	Bedford	1 imm	R. Lockwood#

Sharp-shinned Hawk

5/1	Salem	36	R. Heil
5/1	N. Truro	44	EMHW (M. Lowe)
5/1	P.I.	97	T. Carrolan
5/4, 5	P.I.	10, 25	T. Carrolan
5/6, 7	N. Truro	49, 88	EMHW (M. Lowe)
5/8, 9	N. Truro	25, 76	EMHW (M. Lowe)
5/12-6/30	Essex	pr ad	J. Berry#
6/4	DWMA	1	M. Lynch#
6/10	IRWS	1	BBC (D. Oliver)
6/27	Clarksburg	1	L. Therrien
6/28	New Marlboro	1	Hoffmann Club

Cooper's Hawk

5/1	Salem	3	R. Heil
5/1, 2	N. Truro	11	EMHW (M. Lowe)
5/5	Nantucket	pr n	P. Gardner
5/6, 7	N. Truro	4, 4	EMHW (M. Lowe)
5/9	N. Truro	3	EMHW (M. Lowe)
5/13	Hingham	2	W. Petersen
6/4	DWMA	2	M. Lynch#
6/7, 24	Sunderland	1	M. Williams
6/8	Quabbin (G11)	1	B. Kane
6/9	Lincoln	1	J. Forbes
6/11	P'town	1 imm	B. Nikula
6/14	Gloucester	1 f	R. Heil
6/15	Sudbury	1	R. Lockwood
6/19	Groveland	pr	R. Heil
6/22	GMNWR	1	R. Lockwood
6/22	N. Falmouth	1	R. Farrell

Northern Goshawk

5/1	N. Truro	3	EMHW (M. Lowe)
5/11	DWWS	1 ad	D. Furbish
5/16	GMNWR	1	R. Lockwood
5/20	E. Middleboro	pr n	K. Anderson
5/20	Boxford (C.P.)	1	F. Vale
6/16	Northampton	1 ad	R. Packard
6/24	Templeton	1	T. Pirro
6/24	Southwick	1	S. Kellogg#

Red-shouldered Hawk

5/1	Salem	2 imm	R. Heil
5/thr	E. Middleboro	pr	K. Anderson
6/4	Hingham	3	SSBC (D. Peacock)
thr	Reports of indiv. from 19 locations		

Broad-winged Hawk

5/1	Maynard	6	L. Nachtrab
5/1	N. Truro	65	EMHW (M. Lowe)
5/1	Salem	10	R. Heil
5/6, 7	N. Truro	25, 38	EMHW (M. Lowe)
5/9, 27	N. Truro	29, 7	EMHW (M. Lowe)
6/11	P'town	13	B. Nikula

American Kestrel

5/1	N. Truro	21	EMHW (M. Lowe)
5/1	Salem	20	R. Heil
5/1, 2	P.I.	105, 53	T. Carrolan
5/4, 5	P.I.	57, 38	T. Carrolan
5/6	P.I.	12 migr	S. Perkins#
5/6	N. Truro	8	EMHW (M. Lowe)
5/7	P.I.	9 migr	S. Perkins#
5/10	Truro	8	S. Perkins
5/13	P'town (R.P.)	3	S. Perkins
5/15	Stow	2	R. Lockwood
5/21-30	Wrentham	2	R. Emerson

Merlin

5/1	N. Truro	1	EMHW (M. Lowe)
5/1	Melrose	1	P. + F. Vale
5/1, 2	P.I.	1, 9	T. Carrolan
5/4	P.I.	4	T. Carrolan
5/5	E. Boston (B.I.)	1	A. Joslin
5/5	Southwick	1	S. Kellogg
5/6	Reading	1	D. Williams
5/7	Gloucester (E.P.)	1	BBC (J. Nove)
5/7	Bolton Flats	1	M. Lynch#
5/7	P.I.	3 migr	S. Perkins#
5/9	N. Truro	3	EMHW (M. Lowe)
5/10	MNWS	1	J. Paluzzi
5/12	Boston	1	S. Katz#
5/12	Ludlow	1	T. Gagnon
5/13	Stockbridge	1	M. Lynch#
5/21	P.I.	3	R. Stymeist#

Peregrine Falcon

5/1	N. Truro	2	EMHW (M. Lowe)
5/2, 4	P.I.	2, 2	T. Carrolan
5/7	Worcester	1 f	M. Lynch#
5/8, 9	N. Truro	1	EMHW (M. Lowe)
5/12	Springfield	1	T. Gagnon
5/13	Old Deerfield	1	D. Small#
5/13	Newbypt	1	R. Heil
5/31	Fall River	pr n	K. Anderson
6/4	Sheffield	1	K. Lee
6/25	Boston	3	J. Hoye#
thr	Springfield	2	v.o.

Ruffed Grouse
5/1, 3 Hudson 2 E. Salmela
5/2 Hingham 1 W. + E. Lackey
5/2 Mt.A. 1 BBC (S. Moore)
5/3 Ipswich 1 m J. Berry
5/8 Grafton 1 f S. Pierce
5/11 Quabbin (G40) 4 R. Lockwood
5/12 Savoy 2 M. Lynch#
5/12 Lancaster 2 R. Lockwood
5/13 Windsor 1 R. Packard#
5/17 Boxford (C.P.) 1 J. Berry
5/20 Barre F.D./Rutland S.P. 3 M. Lynch#
5/22 Northampton 2 R. Packard
5/29 Boxboro 2 J. Michaels
5/31 Pepperell 1 E. Stromsted
6/24 Ayer 2 P. + F. Vale

Wild Turkey
5/4 N. Middleboro 2 K. Holmes
5/11 Petersham 6 R. Lockwood
5/12 Lancaster 2 R. Lockwood
5/12, 19 Ipswich 3 J. Berry#
5/15 Quabbin Park 5 C. Holzapfel
6/10 Quabbin (G37) 3 BBC (R. Lockwood)
6/19 Groveland 1 f w/ 2 yg R. Heil
6/23 Hawley 3 R. Packard
6/24 New Salem 3 B. Lafley

Northern Bobwhite
5/17 P'town 1 J. Barthel
5/17 WBWS 1 J. Barthel
5/28 Falmouth 8 BBC (R. Peterson)
6/12 Eastham 2 R. Emerson

Clapper Rail
5/18 Newbury 1 J. Paluzzi
5/20 S. Dart. (A.P.) 1 E. Neilsen#
6/30 P.I. 1 J. Berry

King Rail
5/13 Pittsfield 1 M. Lynch#
5/13 W. Bridgewater 2 S. Arena

Virginia Rail
5/5 Paxton 3 M. Lynch#
5/6, 27 Worc. (BMB) 2, 2 J. Liller
5/7 Bolton Flats 5 M. Lynch#
5/12 Lenox 3 M. Lynch#
5/13 W. Bridgewater 17 S. Arena
5/13 S. Peabody 2 R. Heil
5/16 Wakefield 6 BBC (W. Drummond)
5/16 Cumb. Farms 2 R. Finch
5/21 Ipswich 2 J. Berry
5/24 Newbury 8 R. Heil
5/28 Sterling Peat 3 M. Lynch#
6/4 DWMA 15 M. Lynch#
6/9, 30 Rowley 2 J. Berry
6/22 Franklin Cnty 3 R. Packard
6/23-24 Southwick 2 S. Kellogg#
6/24 Hawley 2 R. Packard
6/24 W. Brookfield 7 M. Lynch#

Sora
5/1, 12 Bolton Flats 3, 1 J. Hoye#
5/6 W. Newbury 1 P. + F. Vale
5/7 P.I. 1 R. Heil
5/8 Wayland 1 J. Hoye#
5/8-23 Pittsfield 1 G. Shampang
5/12 Lenox 2 M. Lynch#
5/12 Ludlow 1 T. Gagnon
5/13 Stockbridge 2 M. Lynch#
5/13 W. Bridgewater 14 S. Arena
5/13 Gardner 2 T. Pirro#
5/13 Cumb. Farms 1 W. Petersen
5/13 Petersham 1 D. Chapman#
5/14-19 Agawam 1 R Stone
5/16 GMNWR 2 R. Lockwood
5/21-22 Ipswich 1 J. Berry
5/27 Worc. (BMB) 1 J. Liller#
6/22 Franklin Cnty 3 R. Packard
6/25 HRWMA 2 T. Pirro

Purple Gallinule
5/2 Nantucket 1 ad M. Phillips

Common Moorhen
6/4 DWMA 1 M. Lynch#

American Coot
5/13 W. Bridgewater 1 S. Arena
5/14 Wayland 1 D. Diggins
5/22 P.I. 2 BBC (W. Drummond)
6/18 DWMA 1 C. Cook

Sandhill Crane
5/8 Chatham 1 R. Clem
5/15-19 S. Amherst 1 D. McKenna#

Black-bellied Plover
5/1-31 N. Monomoy 650 max B. Nikula
5/12 Essex 36+ J. Berry#
5/18 Duxbury B. 22 D. Furbish
5/20 Squantum 125 SSBC (P. O'Neill)
5/25 E. Boston (B.I.) 43 A. Joslin
5/28 Plymouth 120 E. Neumuth
5/28 Winthrop 250 S. Zendeh
6/7 Hadley 1 R. Packard
6/15 M.V. 6 G. Levandoski

American Golden-Plover
5/9-15 Plymouth 1 S. Hecker
5/13 Newbypt H. 1 R. Heil

Wilson's Plover (no details) *
5/24 Edgartown 1 ph S. Hecker#

Semipalmated Plover
5/5 W. Bridgewater 1 G. d'Entremont#
5/9 M.V. 5 G. Levandoski
5/13 Nahant 35 R. Heil
5/13, 24 P.I. 8, 38 R. Heil
5/18 Duxbury B. 5 D. Furbish
5/20 GMNWR 3 S. Perkins
5/20 W. Bridgewater 5 W. Petersen
5/21 N. Monomoy 20 B. Nikula
5/26 P.I. 110 W. Drew#
5/28 Plymouth 60 E. Neumuth
6/1 N. Quincy 5 R. Min
6/10 Hyannisport 3 B. Nikula#

Piping Plover
5/20 Fairhaven 1 D. + S. Larson
5/21 M.V. 4 G. Levandoski
5/28 Plymouth 1 E. Neumuth
6/5 Ipswich (C.B.) 10+ BBC (J. Berry)

American Oystercatcher
5/28 Plymouth 2 E. Neumuth
5/28 Winthrop 6 S. Zendeh
5/thr M.V. 2 ad 3 yg G. Levandoski
5/thr Squantum 2 G. d'Entremont + v.o.
6/1-30 N. Monomoy 25 max B. Nikula
6/3 Fairhaven 5 D. + S. Larson
6/16 Orleans 1 S. Hedman#
6/22 Falmouth 2 R. Farrell
6/25 Mattapoisett 2 J. Nelson

Black-necked Stilt
6/11 Marion 1 J. Hatch

Greater Yellowlegs
5/1 Northampton 5 E. Labato
5/2 Concord (NAC) 38 S. Perkins
5/3 DWWS 50+ D. Furbish
5/6 P.I. 35 P. + F. Vale
5/6 Rowley 30 P. + F. Vale
5/7 Bolton Flats 36 M. Lynch#
5/26 Amherst 1 H. Allen

Lesser Yellowlegs
5/2 Concord (NAC) 17 S. Perkins
5/7 Newbypt 20 R. Heil
5/20 S. Hadley 1 H. Allen
5/28 P.I. 3 P. + F. Vale
6/1 N. Quincy 1 R. Min

Solitary Sandpiper
5/1 Newburyport 9 R. Emerson
5/6 Newbury 22 D. + S. Larson
5/7 Rowley 6 R. Heil
5/7 Bolton Flats 11 M. Lynch#
5/7 W. Newbury 7 BBC (S. Grinley)
5/7 E. Middleboro 4 K. Anderson
5/8 Arlington Res. 9 Sa. Miller
5/9 Northampton 8 E. Labato

Solitary Sandpiper (continued)

5/10	Longmeadow	6	S. Kellogg#
5/10	ONWR	4	R. Lockwood
5/11	Southwick	6	S. Kellogg
5/13	Essex Co	6	R. Heil
5/13	Ipswich R.	8	ECOC (J. Berry)
5/13	Middleboro	4	S. + L. Hennin
5/15	Amherst	7	H. Allen
5/15	Wayland	4	G. Long
5/16	GMNWR	6	R. Lockwood
5/20	Hampden Cnty	7	Allen Club Census
5/26	Southwick	1	S. Kellogg
5/26	Boston (F.Pk)	1	J. Young

Willet

5/1-31	N. Monomoy	40 max	B. Nikula
5/2	Plymouth	12	R. Couse
5/2	M.V.	12	G. Levandoski
5/7	Newbypt/P.I.	41	R. Heil
5/17	Gloucester (E.P.)	1	J. Soucy
5/20	Fairhaven	9	D. + S. Larson
6/2	Wachusett Res.	1	F. McMenemy
6/4	S. Dartmouth	8	R. Finch
6/23	Mattapoisett	8	M. Lynch#
6/29	Newbury	38	J. Young
6/30	P.I.	25+	J. Berry

Spotted Sandpiper

5/2, 20	Concord (NAC)	3, 7	S. Perkins
5/4	Sudbury	16	L. Nachtrab
5/10	Mt.A.	4	G. Long
5/12	Wakefield	6	P. + F. Vale
5/13	Ipswich R.	8	ECOC (J. Berry)
5/17	Lynn	4	J. Quigley
5/19	Gloucester	5	R. Heil
5/20	Hampden Cnty	44	Allen Club Census
5/24	Savoy	8	R. Packard
5/28	Sterling Peat	8	M. Lynch#
5/28	GMNWR	10	J. Hoye#
6/3	Wachusett Res.	4	M. Lynch#
6/7	Hadley	3	H. Allen
6/15	Savoy	4	R. Packard

Upland Sandpiper

5/1	Newbypt	2	H. D'Entremont
5/8	Leicester	1	M. Lynch#
5/8	Lancaster	2	R. Lockwood
5/9	Marstons Mills	1	S. + E. Miller
5/15	W. Bridgewater	1	R. Finch
5/16	Cumb. Farms	4	R. Finch
5/20	Ludlow	2	H. Allen
6/3	Westover	25+	Allen Club Census
6/thr	Bedford	4	R. Lockwood#

Whimbrel

5/2	Plymouth	6	R. Couse
5/21	P.I.	1	P. Morlock

Marbled Godwit

5/2	Westport	1	R. Couse

Ruddy Turnstone

5/18	Duxbury B.	65	D. Furbish
5/20	Fairhaven	13	D. + S. Larson
5/21	M.V.	5	G. Levandoski
5/21	P.I.	10	P. Morlock
5/24	Nantucket	16	fide E. Ray
5/28	Winthrop	29	S. Zendeh
5/28	Plymouth	125	E. Neumuth
5/29	N. Monomoy	250	B. Nikula
6/21	Chatham (S.B.)	9	R. Heil

Red Knot

5/13	Winthrop	6	R. Stymeist#
5/28	WBWS	1 br	M. Partridge
5/28	Plymouth	3	E. Neumuth
5/29	N. Monomoy	30	B. Nikula
6/4	P.I.	3	J. Young
6/21	Chatham (S.B.)	100	R. Heil

Sanderling

5/6, 29	N. Monomoy	600, 800	B. Nikula
5/21	Nahant B.	500	C. Marsh
5/21	M.V.	40	G. Levandoski

Semipalmated Sandpiper

5/5	E. Boston (B.I.)	23	A. Joslin
5/13, 29	P.I.	2, 250	R. Heil
5/28	Plymouth	90	E. Neumuth
5/28	Winthrop	75	S. Zendeh
5/29	N. Monomoy	250	B. Nikula
6/5	Ipswich (C.B.)	20	BBC (J. Berry)
6/21	Chatham (S.B.)	3	R. Heil

Red-necked Stint (details submitted) *

6/4	N. Monomoy	1	B. Nikula

Least Sandpiper

5/2	Southwick	1	S. Kellogg
5/4	W. Bridgewater	24	R. Finch
5/4, 19	Concord (NAC)	7, 60	S. Perkins
5/6	N. Monomoy	60	B. Nikula
5/6	Rowley	54	P. + F. Vale
5/7	Newbypt/P.I	250+	R. Heil
5/7	E. Middleboro	30	K. Anderson
5/9	M.V.	74	G. Levandoski
5/10	Southwick	24	S. Kellogg
5/12	N. Monomoy	250	B. Nikula#
5/13	Newbypt	2000	R. Heil
5/16	Cumb. Farms	100+	R. Finch
5/20	GMNWR	20	S. Perkins

White-rumped Sandpiper

5/12	P.I.	22	W. Drew#
5/12	Chatham (S.B.)	30	J. Sones#
5/19	W. Bridgewater	3	S. Arena
5/28	Plymouth	18	E. Neumuth
5/29	P.I.	51	R. Heil
5/29	N. Monomoy	10	B. Nikula
6/7	Hatfield	6	R. Packard
6/21	Chatham (S.B.)	1	R. Heil

Pectoral Sandpiper

5/1	Salem	3	R. Heil
5/6	Newbypt H.	1	M. Halloran
5/9	Northampton	1	E. Labato
5/13	Easton	1	S. Arena
5/17	Gloucester (E.P.)	1	J. Soucy

Purple Sandpiper

5/4, 20	Chilmark	4	A. Keith#
5/13	Winthrop	94	R. Stymeist#
5/20	N. Scituate	25	SSBC (P. O'Neill)
5/20	Fairhaven	1	D. + S. Larson
5/21	Lynn	85	R. Stymeist#
5/21	Westport	20	W. Petersen

Dunlin

5/10	Eastham (F.E.)	500	S. Perkins
5/13	Newbypt	175+	R. Heil
5/17	Nauset	600	B. Nikula
5/21, 29	N. Monomoy	800, 50	B. Nikula
5/27	Merrimac R.	308	M. Lynch#
5/28	Plymouth	35	E. Neumuth
5/28	Winthrop	17	S. Zendeh

Ruff

5/5-7	Rowley	1 f	H. D'Entremont + v.o.
6/27	P.I.	1 m	J. Berry#

Short-billed Dowitcher

5/13	W. Bridgewater	3	S. Arena
5/13	Newbypt	4	R. Heil
5/15	Amherst	1	H. Allen
5/20	Plymouth B.	6	SSBC (P. O'Neill)
5/20	Fairhaven	4	D. + S. Larson
5/21	N. Monomoy	15	B. Nikula
5/24	Newbury	35	R. Heil
5/25	E. Boston (B.I.)	12	A. Joslin

Common Snipe

5/1	Hadley	5	H. Allen
5/3	DWWS	10+	D. Furbish
5/4	Concord (NAC)	5	S. Perkins
5/12	Windsor	2	M. Lynch#
5/12	Bolton Flats	4	R. Lockwood
5/13	Northampton	1	R. Packard
5/13	W. Bridgewater	2	S. Arena

American Woodcock

5/3	Hudson	4	E. Salmela
5/8	Leicester	6	M. Lynch#
5/12	Windsor	15+	M. Lynch#
5/12	Savoy	6	M. Lynch#
5/17	Newbury-Ipswich	17	J. Berry

American Woodcock (continued)

5/20	Hampden Cnty	23	Allen Club Census
6/21	ONWR	4	R. Lockwood

Wilson's Phalarope

5/3	Rowley	2	D. + I. Jewell
5/6	Concord (NAC)	1	D. Diggins
5/12	P.I.	4	W. Drew#
5/13	Truro	1 f	D. Crockett#
5/13	W. Bridgewater	1 m	S. Arena
6/11	S. Dartmouth	1	S. Hedman#

Parasitic Jaeger

5/21	Stellwagen	1	K. Holmes
6/7	Eastham (F.E.)	3	B. Nikula
6/13	E. Orleans	2	R. Emerson
6/21	Chatham (S.B.)	2	R. Heil#

Long-tailed Jaeger (no details) *

6/7	Eastham (F.E.)	7	B. Nikula
6/17	Muskeget	1 1S	R. Veit#

jaeger species

6/7	Chatham (S.B.)	1	B. Nikula

Laughing Gull

5/10	Truro	20	S. Perkins
5/13	Provincetown	250	S. Perkins
5/14	Plymouth B.	200	S. Hecker
5/27	Merrimac R.	4	M. Lynch#
5/27	Lynn	3	J. Quigley
6/23	Eastham	50+	M. Taylor#

Little Gull

5/12	N. Monomoy	4+ imm.	B. Nikula#
5/13	Newbypt	1 1S	R. Heil
5/23, 26	Lynn	2 1S	J. Quigley
5/27	Nahant	1 1S	L. Pivacek

Black-headed Gull

5/13	Nahant	1 1S	R. Heil

Bonaparte's Gull

5/7	Newbypt H.	50	S. Perkins#
5/10	Southwick	1	S. Kellogg#
5/12	N. Monomoy	150+	B. Nikula#
5/13	P'town (R.P.)	28	S. Perkins
5/13	Nahant	350	R. Heil
5/21	Northampton	4	B. Bieda
5/22	Gill	4	M. Taylor
6/5	Ipswich (C.B.)	10 im	BBC (J. Berry)
6/17	Lynn	2	J. Quigley

Iceland Gull

5/5	Marshfield	1 1yr	D. Clapp
5/10	Truro	1 1S	S. Perkins
5/13	P'town (R.P.)	4 imm.	S. Perkins
5/13	Manchester	1	T. Pirro#
5/17	Gloucester (E.P.)	1	J. Soucy

Lesser Black-backed Gull

5/10	Truro	1 ad	S. Perkins
5/12	Plymouth B.	1 imm	W. Peterson
5/12, 21	N. Monomoy	4, 3	B. Nikula#
5/13	Provincetown	5	S. Perkins
6/25	Stellwagen	1	S. Moore#

Glaucous Gull

5/5	Edgartown	1	A. Keith
5/13	P'town (R.P.)	1	G. Marley#
6/7	P.I.	1 1S	M. Taylor

Black-legged Kittiwake

5/10	Truro	5	S. Perkins
5/13	P'town (R.P.)	9	S. Perkins#
5/13	Wellfleet	1	S. Perkins
6/6	Rockport (A.P.)	20	R. Heil
6/7	Eastham (F.E.)	7	B. Nikula

Sabine's Gull

5/11	Stellwagen	1 ad	P. Trull

Gull-billed Tern (no details) *

6/18	P.I.	1	P. Brown + v.o.

Caspian Tern

5/10	Eastham (F.E.)	1	S. Perkins

Royal Tern

6/9, 21	M.V.	1 ad	G. Levandoski

Roseate Tern

5/5	Muskeget I.	30	S. Zendeh
5/13	Nantucket	248	fide E. Ray
5/13	P'town (R.P.)	3	S. Perkins
5/20	P.I.	2	R. Stymeist#
5/25	Plymouth B.	3	B. + J. Chiasson
5/31	M.V.	55	G. Levandoski
6/21	Chatham (S.B.)	30	R. Heil
6/23	Mattapoisett	10	M. Lynch#

Common Tern

5/2	Turners Falls	2	M. Fairbrother
5/5	Muskeget I.	300	S. Zendeh
5/6	Revere	150	E. Taylor
5/14	Plymouth B.	900	S. Hecker
5/23	Gill	1	T. Gagnon
5/27	Merrimac R.	81	M. Lynch#
5/28	Winthrop	35	S. Zendeh
5/31	M.V.	70	G. Levandoski
6/21	S. Monomoy	5000+	R. Heil
6/23	Mattapoisett	120	M. Lynch#
6/23	Eastham	200	M. Taylor#

Arctic Tern

5/14	Plymouth B.	2	S. Hecker
5/24	Turner's Falls	1	B. Lafley + v.o.
6/7	Eastham (F.E.)	135	B. Nikula
6/21	Chatham (S.B.)	25 1S	R.Heil#
6/21	20-110 mi S. of M.V.	2	V. Laux#

Least Tern

5/18	Duxbury B.	65	D. Furbish
5/18	Squantum	8	D. Larson
5/19	Essex	11	J. Berry#
5/21	M.V.	35 pr	G. Levandoski
5/23	P.I.	7	D. + I. Jewell
5/28	Winthrop	4	S. Zendeh
5/28	Plymouth	5	E. Neumuth
6/5	Ipswich (C.B.)	50+	BBC (J. Berry)
6/23	Eastham	20+	M. Taylor#

Black Tern

5/5	Muskeget I.	1	S. Zendeh
5/8	Edgartown	1	A. Keith#
5/10	Turners Falls	1 br pl	M. Fairbrother#
5/22	Gill	2	M. Taylor
5/24	Worcester	1 ad	M. Lynch#
5/24	P.I.	3	R. Heil
6/6	Rockport (A.P.)	2	R. Heil
6/15	M.V.	2	G. Levandoski

Black Skimmer

5/21	M.V.	1	G. Levandoski
6/23	Eastham	7	M. Taylor#

Thick-billed Murre

5/13	P'town (R.P.)	1	G. Marley#

Common Murre

6/6	Rockport (A.P.)	2 br pl	R. Heil

murre species

5/28	S. Stellwagen	1	G. d'Entremont
6/6	Rockport (A.P.)	1 br pl	R. Heil

Razorbill

5/13	Truro	1	S. Perkins
5/13	P'town (R.P.)	1 br pl	S. Perkins
5/13	Wellfleet	3	S. Perkins

large alcid species

6/6	Rockport (A.P.)	4	R. Heil

Black Guillemot

5/5	Marshfield	2	G. d'Entremont#
6/6	Rockport (A.P.)	3	R. Heil
6/14	Magnolia	1	R. Heil
6/20	Rockport (A.P.)	1	J. Soucy

DOVES THROUGH FINCHES

Birders eagerly await the month of May. There's much to see, and the earlier the migrants arrive the better. The weather has a lot to do with it; in recent years cool east winds have retarded the process here in Massachusetts. This year on May 1 the first southerly wind since April 15 occurred. On the morning of May 2 thousands of nocturnal migrants, backed up to our south, arrived en masse. A front with fog and rain literally dropped the birds out of the sky just before dawn. White-throated Sparrows were everywhere and in big numbers. Birders at Marblehead Neck recorded eight species of warblers, and at Mount Auburn Cemetery 13 species were tallied. Among individuals, Yellow-rumped Warblers dominated with 175 reported from Newburyport, 76 in Medford, and over 50 from Mount Auburn. The weather continued to cooperate with additional southerly winds on May 3 and 4 followed by nearly a week of adverse winds that actually kept most of the birds around! Southwest winds again on the nights of May 17 and 18 produced another wave of migrants.

A valuable source of data is organized counts; the Allen Bird Club of Springfield conducted a census of Hamden County on May 20 that produced some very interesting reports. Noteworthy is the continued increase of traditionally more southern species, expanding their range into Massachusetts. A total of 75 Red-bellied Woodpeckers, 7 Carolina Wrens, 57 Blue-gray Gnatcatchers, and 7 Louisiana Waterthrushes was tallied. Note also in the summary below the counts of Pileated Woodpeckers, Red-eyed Vireos, and the very encouraging count of Wood Thrushes. Another valuable source of significant data is long-term census such as the Essex County Ornithological Club's annual canoe trip along the Ipswich River. This event began in 1904 and demonstrates how important river-bank habitat is for species such as Blue-gray Gnatcatcher, Warbling Vireo, Yellow Warbler, and Baltimore Oriole. Breeding bird surveys are yet another source of bird population trends. Such surveys, especially long-term projects, will help us to monitor the increase or decline of our nesting birds. In the records below you will find the results of a census at Ipswich River Wildlife Sanctuary conducted by the Brookline Bird Club, a census in Hingham, and one in the Rutland State Park.

Perhaps it was the favorable weather, but birders noticed significant numbers of Olive-sided and Yellow-bellied flycatchers, both of which have been scarce in recent years. Blue-headed Vireos came early and lingered longer, and among warblers, Nashvilles, Parulas, Magnolias, Black-throated Blue, and Black-and-white warblers, and Ovenbirds were everywhere and in higher numbers than average. On the down side of migration, only one Bicknell's Thrush was positively identified, although a bird found at Marblehead was believed to be a Bicknell's due to the extent of yellow on the lower mandible — nearly to the tip — and the slightly rufous tinge to the tail. Seventeen Gray-cheeked/Bicknell's thrushes were reported, of which just one was a positive Gray-cheeked. Seth Kellogg notes that there has been just one report of this species in western Massachusetts for the last three springs! Swainson's Thrush numbers were also way down in western Massachusetts; sixteen is the lowest number reported in May since 1982. Golden-winged Warblers continue their downward spiral with only four individuals reported statewide, and the bird noted in Erving was the first June report since 1996 in the western part of the state.

On Martha's Vineyard, birders confirmed the nesting of two species for the first time on the island. On June 20 a nest with three eggs of an Acadian Flycatcher was found in Chilmark, and Tufted Titmice were discovered in both Chilmark and West Tisbury. A **Sedge Wren** from Egremont was just the sixth June record for western Massachusetts since 1980. Pine Siskin reports were widespread, and nesting was suspected. One nest was found in Ipswich, a first for Essex County, but the outcome was not successful. A Chuck-will's-widow and hopefully a mate returned to the White Cedar Swamp at the Marconi Site in Wellfleet for the fourth year in a row.

Unusual sightings always add to the overall flavor of the migration, and this season was exceptional. Highlights include a **Yellow-throated Warbler** in Gloucester, a white-lored individual and probably of the subspecies *albilora*; a **Connecticut Warbler** from Mount Everett in southwest Berkshire County, only the fourth spring record for the state; a male **Lark Bunting** continuing from April in Truro on Cape Cod, and probably the same bird noted from the Beech Forest and from a yard in Provincetown; an adult **Harris' Sparrow** photographed and banded in Amherst, the sixteenth record from western Massachusetts but the first from April-September (see field note by Mark Lynch in *Bird Observer*, August 2000); a **Black-headed Grosbeak** from Quabbin Park, a rare find anytime but more so in the spring; and a fallout of Summer Tanagers on Cape Cod. A **Bohemian Waxwing** in May is out of the ordinary as is a Snow Bunting in breeding plumage on Nantucket in June! Unusual can also refer to unexpected birding experiences, like watching a tremendous swarm of Chimney Swifts numbering around 600 foraging low off a Newbury field. The temperature was 9 degrees below the average that day, and the insects were sparse and near the ground. Long-eared Owls are not often recorded during migration, tending to be more retiring, so finding one is an unexpected surprise: this spring birds were noted from Brookline and Easton. *R.H.S.*

Black-billed Cuckoo
- 5/3 Westfield 1 N. Eaton
- 5/13 Hingham 2 D. + S. Larson
- 5/27 MNWS 2 M. Lynch#
- 5/27 Truro 3 J. Young
- 5/31 Nantucket 2 E. Ray
- 6/1 Manchester/Essex 3 J. Berry
- 6/1 Braintree 2 K. Vespaziani
- 6/4 Hingham 4 SSBC (D. Peacock)
- 6/19 Groveland 2 R. Heil
- 6/20 Brewster 4 B. Nikula
- 6/25 Barre F.D./Rutland S.P. 4 M. Lynch#
- 5/9-6/30 Reports of indiv. from 24 locations

Yellow-billed Cuckoo
- 5/9 Arlington Res. 1 D. Hartman
- 6/4 Hingham 4 SSBC (D. Peacock)
- 6/5 Braintree 2 M. Taylor#
- 6/11 Milton 2 R. Finch
- 6/23-24 Manchester 3 J. Berry
- 5/13-6/30 Reports of indiv. from 11 locations

Eastern Screech-Owl
- 5/3, 7 N. Middleboro 1,3 yg K. Holmes
- 5/12 Needham 1 G. d'Entremont
- 5/16 Medford 1 M. Rines#
- 5/21 Mt.A. 1 juv P. + F. Vale

Great Horned Owl
- 5/12, 19 Essex 3 J. Berry#
- 5/20 Bridgewater 3 SSBC (P. O'Neill)
- 5/26 Lancaster 2 R. Lockwood#
- 6/10 DWWS 3 D. Furbish

Barred Owl
- 5/10 Ipswich 3 J. Berry#
- 5/11 Quabbin (G40) 2 R. Lockwood
- 5/13 Windsor 2 R. Packard#
- 5/31 Pepperell 2 E. Stromsted
- 6/16-18 Mt. Greylock 3 J. Young
- thr Reports of indiv. from 16 locations

Long-eared Owl
- 5/9, 10 Brookline 1 B. Merrifield + v.o.
- 5/13 Easton 1 S. Arena

Short-eared Owl
- 5/5 Muskeget I. 1 S. Zendeh
- 6/thr Tuckernuck 2 pr R. Veit

Northern Saw-whet Owl
- 5/3 Savoy 1 R. Rancatti
- 5/7 Florida 1 R. Rancatti
- 5/9 Windsor 1 R. Rancatti
- 5/11 Edgartown 2 A. Keith
- 5/12 Plymouth 2 W. Petersen
- 5/12 Savoy 1 M. Lynch#
- 5/13 Easton 1 S. Arena
- 5/13 N. Quabbin 1 B. Lafley#
- 5/16 Nantucket 1 N. Van Voorst
- 5/28 Northampton 1 R. Packard
- 5/30 Greylock 1 R. Rancatti
- 5/31 Savoy 1 R. Rancatti

Common Nighthawk
- 5/8 Boston 1 J. Chisholm
- 5/9 Northampton 2 E. Labato
- 5/11 Amherst 2 H. Allen
- 5/12 ONWR 4 R. Lockwood
- 5/12 Longmeadow 10 S. Kellogg
- 5/15, 24 Weston 26, 17 G. Ferguson
- 5/18 Bolton Flats 6 G. d'Entremont#
- 5/20 Granby 8 H. Allen
- 5/25 Weston 17 G. Ferguson
- 5/27 GMNWR 2 G. d'Entremont#
- 5/29 Wenham 6 P. + F. Vale
- 6/1 Northampton 1 T. Gagnon
- 6/10 Somerville 1 D. Oliver

Chuck-will's-widow
- 5/12-31 S. Wellfleet 1 v.o.

Whip-poor-will
- 5/3 Hudson 3 E. Salmela
- 5/4 Southwick 1 S. Kellogg
- 5/7 W. Gloucester 2 J. Soucy#
- 5/12 Dover 1 E. Taylor
- 5/13 New Salem 1 D. Small#
- 5/13 Stow 4 R. Lockwood
- 5/13 Gardner 2 T. Pirro#
- 5/14-21 Hatfield 1 C. Gentes

Whip-poor-will (continued)
- 5/15 Nantucket 3 fide E. Ray
- 5/17 Newbury-Ipswich 10 J. Berry
- 5/26 Lancaster 75 R. Lockwood#
- 5/28 Northampton 1 R. Packard
- 6/9 Montague 10 H. Allen
- 6/25 Truro, Wellfleet 6, 3 J. Young

Chimney swift
- 5/1 Sherborn 3 E. Taylor
- 5/2 Newbypt 3 BBC (S. Grinley)
- 5/2 Northampton 2 E. Labato
- 5/2 Watertown 4 E. Nelson-Melby
- 5/3 Worcester 6 J. Liller
- 5/3 Cambr. (F.P.) 4 J. Barton
- 5/13 Ipswich R. 33+ ECOC (J. Berry)
- 5/20 W. Bridgewater 200 W. Petersen
- 5/21 Arlington Res. 50-70 K. Hartel
- 5/24 Newbury 600 R. Heil
- 6/14 Gloucester 65+ R. Heil

Ruby-throated Hummingbird
- 5/1 Salem 1 R. Heil
- 5/5 Orleans 2 R. McGinley
- 5/6 P.I. 5 migr S. Perkins#

Ruby-throated Hummingbird (continued)
5/6 Mt.A. 3 R. Stymeist#
5/7 P.I. 5 migr S. Perkins#
5/18 MNWS 4 F. Vale
5/20 Hampden Cnty 11 Allen Club Census
5/29 P.I. 5 R. Heil

Red-headed Woodpecker
5/1-8 Natick 1 L. Long
5/15 Tisbury 1 m M. Dix
6/17 Sheffield 1 T. Pirro

Red-bellied Woodpecker
5/3 Concord 3 R. Lockwood
5/7 Medford 6 M. Rines
5/7 Milton 4 G. d'Entremont
5/13 Ipswich R. 4 ECOC (J. Berry)
5/20 Hampden Cnty 75 Allen Club Census
5/22 Wayland 3 G. Long

Yellow-bellied Sapsucker
5/1-13 Reports of indiv. from 9 locations
5/12 Monroe 3 M. Lynch#
5/12 Savoy 3 M. Lynch#
5/15 Quabbin Park 3 C. Holzapfel
5/18 Quabbin (G10) 11 R. Lockwood#
5/29 W. Royalston 1 M. Lynch#
6/8 Chesterfield 2 R. Packard
6/11 Petersham 4 M. Lynch#
6/14 Goshen 3 R. Packard
6/15 M.V. 1 G. Levandoski
6/24 New Salem 5 B. Lafley
6/24 Lenox pr feeding yg R. Graefe
6/24 Erving 3 D. Peacock#

Hairy Woodpecker
5/2 Wakefield 5 F. Vale
5/12 Monroe 4 M. Lynch#
5/20 Ipswich 4 J. Berry

Pileated Woodpecker
5/6 Upton 2 R. Brill
5/11 Quabbin (G40) 2 R. Lockwood
5/13 Stockbridge 2 M. Lynch#
5/13 Topsfield(Ipswich River) 2 R. Heil
5/15 Quabbin Park 2 C. Holzapfel
5/20 Hampden Cnty 15 Allen Club Census
5/29 W. Royalston 2 M. Lynch#
6/11 Petersham 2 M. Lynch#
6/24 Erving 3 D. Peacock#
thr Reports of indiv. from 28 locations

Olive-sided Flycatcher
5/6 S. Hadley 1 S. Surner#
5/7 MBWMA 1 S. Hedman#
5/7 New Salem 1 D. Small
5/8 Truro 1 M. Murphy#
5/14 Amherst 2 T. Gagnon
5/16 Holyoke 2 R. Stone
5/23 Athol 2 R. Coyle
5/26 Marblehead 2 J. Berry#
5/26-28 P'town 1-2 v.o.
6/1 Ipswich 1 J. Berry
6/2 Lexington 1 C. Floyd
6/23-24 Manchester 1 m J. Berry
5/9-29 Reports of indiv. from 28 locations

Eastern Wood-Pewee
5/9 Worc. (BMB) 2 J. Liller
5/9, 19 Medford 1, 3 M. Rines#
5/11, 29 Hingham 4, 10 D. Peacock
5/20 Barre F.D./Rutland S.P. 7 M. Lynch#
5/27 Gloucester (E.P.) 12 C. Leahy
5/29 W. Royalston 9 M. Lynch#
5/29 Boxford (C.P.) 6 P. + F. Vale
6/3 Topsfield 7 m J. Berry#
6/4 Hingham 11 SSBC (D. Peacock)
6/4 Ipswich 8 m J. Berry#
6/10 IRWS 6 BBC (D. Oliver)
6/10 Quabbin (G37) 9 BBC (R. Lockwood)
6/19 Groveland 12 R. Heil

Yellow-bellied Flycatcher
5/14 Amherst 2 T. Gagnon
5/19, 28 Medford 1, 2 M. Rines
5/20 Holyoke 5 D. McLain
5/20 MNWS 2 J. Hoye#
5/25, 26 Mt.A. 2, 4 C.Floyd
5/26 Burlington 3 M. Rines
5/28 Marblehead 3 BBC (L. de la Flor)
5/30 Westfield 2 J. Hutchison
5/30 Quabbin (G15) 2 M. Taylor#
5/10-30 Reports of indiv. from 20 locations

Acadian Flycatcher
5/12 Quabbin (G15) 1 R. Lockwood
5/19 Medford 1 M. Rines
5/22 Granville 2 S. Kellogg#
5/23, 25 Mt.A. 1 C. Floyd
5/27 MNWS 1 M. Lynch#
5/28 Sunderland 1 m E. Minear
5/29 Boxford (C.P.) 1 P. + F. Vale
5/29 Hingham 2 D. Peacock
6/4 Hingham 2 D. Peacock
6/4 Mt.A. 1 R. Stymeist
6/7 Sunderland 1 H. Allen
6/10 DWWS 1 SSBC (D. Clapp)
6/15 Quabbin (G11) 1 pr B. Kane
6/19 Quabbin (G15) 4 m B. Lafley
6/20 Chilmark pr n A. Keith
6/21 Granville 1 S. Kellogg

Alder Flycatcher
5/13 Windsor 1 R. Packard
5/13 Gardner 1 T. Pirro#
5/20 Barre F.D./Rutland S.P. 5 M. Lynch#
5/21 ONWR 2 J. Hoye#
5/21 Bolton Flats 3 J. Hoye#
5/23 Hawley 4 R. Packard
5/27 Worc. (BMB) 2 J. Liller#
5/27 Gloucester (E.P.) 4 C. Leahy
5/27 New Salem 4 G. d'Entremont#
5/28 P.I. 3 P. + F. Vale
5/31 W. Boxford 3 J. Berry
6/10 Hawley 8 M. Lynch#
6/25 Barre F.D./Rutland S.P. 7 M. Lynch#

Willow Flycatcher
5/5 Wayland 1 G. Long
5/13 Stockbridge 2 M. Lynch#
5/13, 29 P.I. 1, 19 R. Heil
5/20 Hampden Cnty 9 Allen Club Census
5/26 Lancaster 4 R. Lockwood#
5/27 Worc. (BMB) 5 J. Liller#
5/28 Sterling Peat 4 M. Lynch#
5/31 W. Boxford 4 J. Berry
6/3 Boston H. 6+ K. Vespaziani
6/10 IRWS 11 BBC (D. Oliver)
6/19 Groveland 4 R. Heil
6/21 ONWR 4 R. Lockwood
6/24 W. Brookfield 7 M. Lynch#

Least Flycatcher
5/1 Holyoke 1 B. Bieda
5/3, 6 HRWMA 2, 10 T. Pirro
5/4 Royalston 9 J. Morris-Siegel
5/6, 27 Worc. (BMB) 6, 1 J. Liller#
5/7 Quabbin 18 T. Gagnon
5/11 Nahant 7 R. Heil
5/11 Quabbin (G47) 14 R. Lockwood
5/20 Barre F.D./Rutland S.P. 33 M. Lynch#
5/20 Hampden Cnty 11 Allen Club Census
5/27 MNWS 6 M. Lynch#
6/10 Quabbin (G37) 21 BBC (R. Lockwood)
6/24 New Salem 5 B. Lafley

Great Crested Flycatcher
5/3 Brookline 2 R. Stymeist#
5/4 Amherst 3 H. Allen
5/5, 20 Ipswich 2, 9 J. Berry
5/6-31 Medford 8 max M. Rines
5/13 Ipswich R. 21 ECOC (J. Berry)
5/14 S. Quabbin 8 M. Lynch#
5/20 Hampden Cnty 77 Allen Club Census
6/10 IRWS 20 BBC (D. Oliver)
6/19 Groveland 9 R. Heil
6/25 Barre F.D./Rutland S.P. 9 M. Lynch#

Eastern Kingbird
5/1 Boston (F.Pk) 1 J. Young

Eastern Kingbird (continued)

5/2	Northfield	1	R Coyle
5/7, 29	P.I.	22, 26	R. Heil
5/20	Hampden Cnty	76	Allen Club Census
6/25	Barre F.D./Rutland S.P.	15	M. Lynch#

White-eyed Vireo

5/9	Yarmouthport	1	St. Miller
5/11-12	Nahant	1	R. Heil
5/12-27	Marblehead	1-2	K. Haley + v.o.
5/20	Nantucket	1	K. Blackshaw
5/20	Chicopee	1	T. Swochak
5/21	Erving	2	V. Yurkunas
5/21	S. Dartmouth	1	W. Petersen
5/27	Nantucket	1	C. Jackson
5/29	W. Bridgewater	1	S. Arena
6/1	Westport	2	H. D'Entremont
6/23	N. Middleboro	1	K. Holmes
6/26	Lakeville	1	K. Holmes

Blue-headed Vireo

5/2	Wakefield	8	F. Vale
5/4	Royalston	11	J. Morris-Siegel
5/5-19	Medford	9 max 5/7	M. Rines
5/6	MNWS	12	BBC (L. de la Flor)
5/6	Mt.A.	10	R. Stymeist#
5/9	P'town	10	B. Nikula
5/12	Ashburnham	16	R. Heil
5/15	Gloucester (E.P.)	12	BBC (S. Hedman)
5/20	Barre F.D./Rutland S.P.	15	M. Lynch#
5/29	W. Royalston	18	M. Lynch#
6/11	Petersham	8	M. Lynch#
6/15	Sudbury	1	R. Lockwood
6/15	Plainfield	2	R. Packard
6/18	Mt. Greylock	3	M. Lynch#
6/24	Erving	1	D. Peacock#
6/26	Ipswich	pr	J. Berry

Yellow-throated Vireo

5/1	Southwick	1	S. Kellogg
5/2	Arlington	1	K. Hartel
5/7	Bolton Flats	7	M. Lynch#
5/10	ONWR	4	R. Lockwood
5/11	Quabbin (G40)	3	R. Lockwood
5/13	Boxford (C.P.)	8	R. Heil
5/13	Ipswich R.	4	ECOC (J. Berry)
5/14	S. Quabbin	7	M. Lynch#
5/20	Hampden Cnty	6	Allen Club Census
5/20	Barre F.D./Rutland S.P.	6	M. Lynch#
5/21	Lancaster	3	R. Lockwood
6/10	Quabbin (G37)	2	BBC (R. Lockwood)
6/24	Ayer	1 m	P. + F. Vale

Warbling Vireo

5/2	Woburn	2	M. Rines
5/3	Cambr. (F.P.)	4	J. Barton
5/6	S. Hadley	15	S. Surner#
5/7	Bolton Flats	23	M. Lynch#
5/13	Ipswich R.	24	ECOC (J. Berry)
5/20	Hampden Cnty	127	Allen Club Census
6/10	IRWS	21	BBC (D. Oliver)

Philadelphia Vireo

5/13	P'town	1	J. Sones#
5/13	W. Newbury	1	R. Heil
5/20	Holyoke	1	D. McLain
5/26	Marblehead	1 m	J. Berry#

Red-eyed Vireo

5/5	Hingham	1	E. Nielsen
5/6	Westfield	3	J. Hutchison#
5/7-31	Medford	21 max 5/19	M. Rines
5/14	S. Quabbin	57	M. Lynch#
5/20	Barre F.D./Rutland S.P.	96	M. Lynch#
5/20	Hampden Cnty	191	Allen Club Census
5/27	Marblehead	23	M. Lynch#
5/29	W. Royalston	45	M. Lynch#
6/7	Sunderland	20+	M. Williams
6/10	Quabbin (G37)	50	BBC (R. Lockwood)
6/10	Hawley	62	M. Lynch#
6/10	IRWS	24	BBC (D. Oliver)
6/11	ONWR	13	R. Lockwood
6/18	Mt. Greylock	48	M. Lynch#
6/19	Groveland	19	R. Heil

Blue Jay

5/6	P.I.	139 migr	S. Perkins#
5/7	P.I.	1548 migr	S. Perkins#
5/8	P.I.	1312 migr	T. Carrolan
5/13	P'town (R.P.)	681 migr	S. Perkins

American Crow

5/6	Framingham	1300	E. Taylor

Fish Crow

5/2	Mt.A.	10	S. Perkins#
5/6	Wellfleet	8	B. Nikula
5/7	P.I.	2 migr	S. Perkins#
5/9	Marshfield	4	D. Furbish
5/13	P'town (R.P.)	7	S. Perkins
5/18, 26	DWWS	4, 10	D. Furbish
5/20	Holyoke	1	D. McLain
5/22	Westfield	5	S. Kellogg#
5/27	Truro	4	M. Partridge
6/4	Pittsfield	1	H. Allen#
6/10-15	Northampton	2-5	T. Gagnon #

Common Raven

5/11	Quabbin (G40)	1	R. Lockwood
5/13	Cheshire	1	M. Lynch#
5/14	S. Quabbin	2 fl yg	M. Lynch#
5/20	Barre F.D./Rutland S.P.	2 ad	M. Lynch#
5/24	Savoy	1	R. Packard
5/28	Holyoke	1	D. + S. Larson
5/29	W. Royalston	1	M. Lynch#
6/8	Chesterfield	10	R. Packard
6/10	Mt. Greylock	6	J. Hoye#

Horned Lark

5/13	Provincetown	2	S. Perkins
5/13	Northampton	1	E. Labato#
5/20	Plymouth	1	SSBC (P. O'Neill)
6/17	Westover	1	H. Allen
6/19	Orange	2	B. Lafley
6/24	Templeton	2	T. Pirro

Purple Martin

5/3, 26	DWWS	2, 48	W. + E. Lackey
5/5	Hingham	2	E. Nielsen
5/27	P.I.	40+	M. Lynch#

Tree Swallow

5/24	Newbury	500+	R. Heil

Northern Rough-winged Swallow

5/5	Charlton	10	M. Lynch#
5/6	Mt.A.	15	R. Stymeist#
5/10	Montague	12	H. Allen
5/11	Boston	10	J. Dekker
5/20	Holyoke	17	D. McLain
5/20	Agawam	69	Allen Club Census

Bank Swallow

5/1	Burlington	35	M. Rines
5/20	Chicopee	600	H. Allen
5/20	GMNWR	120	S. Perkins
5/27	Belchertown	40+	H. D'Entremont#
6/6	Turners Falls	50	R. Packard
6/16	Burlington	299 nest holes	M. Rines
6/19	Groveland	110+	R. Heil

Barn Swallow

5/20	GMNWR	100	S. Perkins
5/20	Hampden Cnty	171	Allen Club Census
5/24	Newbury	175	R. Heil

Cliff Swallow

5/8	Truro	3	J. Sones#
5/9	Northampton	1	E. Labato
5/12	Palmer	10	N. Eaton
5/13	DWWS	1	S. Hedman#
5/13	Cheshire Res.	1	R. Packard#
5/13	Williamsburg	40	T. Gagnon
5/16	N Adams	35	L. Therrien
5/22	Whitman	1	K. Holmes
5/24	Newbury	20+	R. Heil
5/27	P.I.	2	M. Lynch#
5/28	Lenox	12	R. Laubach
6/10	Hawley	4	M. Lynch#
6/12	Lunenburg	43 pr	T. Pirro
6/14	Gloucester	1	R. Heil

Tufted Titmouse

5/1-31	Chilmark-W. Tisbury	5-6	fide A. Keith

Tufted Titmouse (continued)

5/6-7	P.I.	1	S. Perkins#

Red-breasted Nuthatch

5/7	P.I.	4 migr	S. Perkins#
5/11	Quabbin (G40)	5	R. Lockwood
5/12	Monroe	7	M. Lynch#
5/18	Quabbin (G10)	3	R. Lockwood#
5/20	Barre F.D./Rutland S.P.	3	M. Lynch#
5/20	Hampden Cnty	10	Allen Club Census
6/10	IRWS	8	BBC (D. Oliver)
6/18	Mt. Greylock	8	M. Lynch#

Brown Creeper

5/5	Douglas	3	M. Lynch#
5/20	Barre F.D./Rutland S.P.	9	M. Lynch#
5/20	Hampden Cnty	11	Allen Club Census
5/20	Salem	4	BBC (I. Lynch)
5/21	Lancaster	4	R. Lockwood
5/27	Truro	3	J. Young
5/27	Quabbin (G15)	3	G. d'Entremont#
6/4	DWMA	4	M. Lynch#
6/8	Chesterfield	4	R. Packard
6/10	IRWS	6	BBC (D. Oliver)
6/10	Quabbin (G37)	6	BBC (R. Lockwood)
6/11	Petersham	3	M. Lynch#
6/16	Gardner	4	T. Pirro
6/19	Groveland	3	R. Heil
6/22	GMNWR	3	R. Lockwood

Carolina Wren

5/2	MNWS	7	R. Heil
5/2	Agawam	1	S. Kellogg
5/4	Winchester	4	M. Rines
5/6	Lexington	6	M. Rines
5/7	Gloucester (E.P.)	6	BBC (J. Nove)
5/11	Nahant	5	R. Heil
5/12	Northampton	1	H. Allen
5/16	Westfield	1	S. Kellogg
5/20	Hampden Cnty	7	Allen Club Census
5/23	Chicopee	1	H. Allen
6/17	Worc. (BMB)	4	M. Lynch#
6/22	Southwick	1	S. Kellogg
6/22	GMNWR	4	R. Lockwood
6/23	Mattapoisett	13	M. Lynch#
thr	Amherst	2	H. Allen

House Wren

5/1	Burlington	1	M. Rines
5/2, 7	Medford	1, 7	M. Rines#
5/3, 6	Lexington	2, 7	M. Rines
5/5	Douglas	12	M. Lynch#
5/20	Hampden Cnty	33	Allen Club Census

Winter Wren

5/12	Savoy	2	M. Lynch#
5/12	Haydenville	2	R. Packard
5/12	Mt. Watatic	3	R. Heil
5/20	Ipswich	2 m	J. Berry
5/29	Hingham	5	D. Peacock
5/30	Boxford	3	D. + I. Jewell
6/4	Hingham	6	SSBC (D. Peacock)
6/8	Stow	2	R. Lockwood
6/24	Erving	3	D. Peacock#

Sedge Wren

6/4	Egremont	1	D. St. James

Marsh Wren

5/2	Gloucester	1	C. Leahy
5/5	Salem	1	I. Lynch
5/7	P.I.	9	R. Heil
5/9	Wayland	4	J. Hoye#
5/16	Wakefield	4	BBC (W. Drummond)
5/20-23	Holyoke	1	D. McLain
6/3	Richmond	5	K Lee
6/10	DWWS	3	SSBC (D. Clapp)
6/10	IRWS	6	BBC (D. Oliver)
6/22	Franklin Cnty	4	R. Packard
6/24	W. Brookfield	10	M. Lynch#
6/24	W. Bridgewater	11	S. Arena

Blue-gray Gnatcatcher

5/5	Douglas	11	M. Lynch#
5/7	Quabbin	14	T. Gagnon
5/7	Bolton Flats	6	M. Lynch#
5/7	Wayland	6	J. Bartos
5/11	Quabbin (G40)	8	R. Lockwood
5/13	Ipswich R.	19	ECOC (J. Berry)
5/14	S. Quabbin	14	M. Lynch#
5/20	Hampden Cnty	57	Allen Club Census
5/22	Northampton	5	R. Packard

Golden-crowned Kinglet

5/10	Newbury	1	MAS (R. Gough)
5/12	Savoy	2	M. Lynch#
5/12	Monroe	2	M. Lynch#
5/19	Essex	3	J. Berry#
5/20	Barre F.D./Rutland S.P.	10	M. Lynch#
6/3-18	Mt. Greylock	10	v.o.
6/15	Gardner	2	T. Pirro
6/24	Granville	2	S. Kellogg#

Ruby-crowned Kinglet

5/1, 28	P'town	25, 1	B. Nikula
5/2	Newbypt	21	BBC (S. Grinley)
5/2	Wakefield	28	F. Vale
5/2	Gloucester	60	C. Leahy
5/2	Mt.A.	20	S. Perkins#
5/6	MNWS	20	BBC (L. de la Flor)
5/11	Nahant	16	R. Heil
5/26	Burlington	1	M. Rines
5/29	MNWS	1	M. Taylor

Eastern Bluebird

5/1	Westford	4 fl	L. Clark
5/7	N. Middleboro	5 yg	K. Holmes
5/14	S. Quabbin	7	M. Lynch#
5/20	MBWMA	6	P. + F. Vale
5/20	Hampden Cnty	19	Allen Club Census
6/4	Marlboro	5	BBC (B. Howell)
6/4	DWMA	4	M. Lynch#
6/24	New Salem	4	B. Lafley

Veery

5/1	Hingham	1	C. Dalton
5/2	Mt.A.	4	S. Perkins#
5/12	Savoy	22	M. Lynch#
5/13	Pittsfield	30+	M. Lynch#
5/14	S. Quabbin	12	M. Lynch#
5/18	ONWR	13	G. d'Entremont#
5/18	Quabbin (G10)	10	G. d'Entremont#
5/31	Stow	12	R. Lockwood
6/1	Manchester/Essex	13	J. Berry
6/4	Hingham	27	SSBC (D. Peacock)
6/4	Hockomock Swamp	21	J. Hoye#
6/10	IRWS	22	BBC (D. Oliver)
6/10	Quabbin (G37)	11	BBC (R. Lockwood)
6/11	Petersham	12	M. Lynch#
6/19	Groveland	10	R. Heil

Gray-cheeked Thrush

5/26-30	Mt.A.	1	C. Floyd

Bicknell's Thrush

5/16	Hingham	1	D. Peacock#

Gray-cheeked/Bicknell's Thrush

5/4	MNWS	1	R. Heil
5/9, 16	Hingham	1, 7	D. Peacock
5/10	S. Hadley	1	B. Bieda
5/11	Worcester	1	M. Lynch#
5/12	Nantucket	1	fide E. Ray
5/13	Pittsfield	1	M. Lynch#
5/20	ONWR	1	S. Mardis
5/26	Lancaster	1	W. Petersen#
5/29	Quabbin (G37)	1	D. Furbish#
6/1	Braintree	1	K. Vespaziani

Swainson's Thrush

5/5	S. Quabbin	1	E. Labato
5/5	Agawam	1	S. Kellogg
5/10	Mt.A.	11	G. Long
5/11	Nahant	8	R. Heil
5/13	Pittsfield	5+	M. Lynch#
5/16	Worcester	4	M. Lynch#
5/17, 25	MNWS	1, 3	K. Haley
5/20	Hampden Cnty	9	Allen Club Census
5/21	Gloucester (E.P.)	3	M. Lynch#
5/28	Medford	5	M. Rines
5/31	Savoy	2	R. Rancatti
6/17-18	Mt. Greylock	1	v.o.

Hermit Thrush
5/2 MNWS 16 R. Heil
5/2 Mt.A. 25 S. Perkins#
5/2 Boston 10 J. Miller
5/3 Wakefield 10 F. Vale
5/12 Monroe 39 M. Lynch#
5/20 Barre F.D./Rutland S.P. 33 M. Lynch#
5/29 W. Royalston 10 M. Lynch#
6/10 Hawley 13 M. Lynch#
6/24 Erving 21 D. Peacock#

Wood Thrush
5/1 Mendon 1 J. Moffett
5/3, 6 HRWMA 1, 8 T. Pirro
5/5 Douglas 13 M. Lynch#
5/6 S. Hadley 10 S. Surner#
5/8, 21 Lancaster 2, 12 R. Lockwood
5/12 Monroe 12 M. Lynch#
5/13 Ipswich R. 16 ECOC (J. Berry)
5/13 Pittsfield 20+ M. Lynch#
5/18 ONWR 11 G. d'Entremont#
5/20 Hampden Cnty 220 Allen Club Census
6/10 IRWS 23 BBC (D. Oliver)
6/19 Groveland 14 R. Heil

Gray Catbird
5/5 Hingham 30 E. Nielsen
5/7 Bolton Flats 71 M. Lynch#
5/7 P.I. 76 R. Heil
5/10 Mt.A. 100 G. Long
5/11 Nahant 71 R. Heil
5/20 Hampden Cnty 438 Allen Club Census
5/21 Gloucester (E.P.) 60+ M. Lynch#
6/19 Groveland 118 R. Heil
6/23 Mattapoisett 54 M. Lynch#

Brown Thrasher
5/thr Medford 1-3 M. Rines#
5/1 Magnolia 3 BBC (S. Hedman)
5/2 Wakefield 5 F. Vale
5/7 Gloucester (E.P.) 3 BBC (J. Nove)
5/7 P.I. 15 R. Heil
5/9 Marblehead Neck 3 R. Heil
5/10 Truro 5 S. Perkins
5/20 Hampden Cnty 20 Allen Club Census
5/20 Salem 3 BBC (I. Lynch)
5/28 Westboro 3 M. Lynch#
6/5 Groton 2 pr T. Pirro
6/19 Groveland 11 R. Heil

American Pipit
5/1 W. Bridgewater 3 R. Finch
5/2 Manchester 25+ S. Hedman
5/2 MNWS 1 R. Heil
5/7 P.I. 1 R. Heil
5/8 HRWMA 1 T. Pirro
5/10 Longmeadow 6 S. Kellogg#
5/14 Salem 1 BBC (J. Paluzzi)
5/16 Nantucket 1 fide E. Ray

Bohemian Waxwing
5/1 Truro 27 J. Sones

Cedar Waxwing
5/17 P'town 45 B. Nikula
6/7 Ipswich 29 J. Berry
6/10 IRWS 32 BBC (D. Oliver)
6/10 Quabbin (G37) 37 BBC (R. Lockwood)
6/25 Barre F.D./Rutland S.P. 53 M. Lynch#

Blue-winged Warbler
5/2 Erving 1 M. Taylor
5/2 Northfield 1 M. Taylor#
5/3 Ipswich 1 m J. Berry
5/3 E. Middleboro 4 m K. Anderson
5/3, 27 Worc. (BMB) 1, 9 J. Liller
5/5 W. Bridgewater 4 R. Finch
5/6 Amherst 4 J. Chapman
5/6 W. Newbury 8 P. + F. Vale
5/6 Lexington 4 M. Rines
5/7 Wayland 5 J. Bartos
5/7 ONWR 4 BBC (J. Center)
5/8 Lancaster 4 R. Lockwood
5/13 Hingham 8 D. + S. Larson
5/20 Hampden Cnty 53 Allen Club Census
5/20 Barre F.D./Rutland S.P. 6 M. Lynch#
5/26 Burlington 5 M. Rines
6/19 Groveland 19 R. Heil

Golden-winged Warbler
5/9 Medford 1 M. Rines#
5/13 Harwich 1 B.Loughran#
5/20 MNWS 1 J. Lawrence
6/23 Erving 1 H. Allen

Brewster's Warbler
5/15 Northfield 1 H. Allen
5/22 Northampton 1 R. Packard

Lawrence's Warbler
5/13-31 Erving 1 V. Yurkunas
5/29 W. Bridgewater 1 S. Arena
6/19 Groveland 1 f R. Heil

Tennessee Warbler
5/5 Grafton 1 b M. Blazis
5/6 Mt.A. 2 R. Stymeist#
5/6 Worcester 4 m M. Lynch#
5/14 Winchester 2 M. Rines
5/16, 25 Medford 1, 2 M. Rines#
5/20 W. Springfield 10 J Zepko#
5/20 Hampden Cnty 22 Allen Club Census
5/23 Worcester 5 M. Lynch#
5/25 Nahant 3 G. Wood
5/26 Marblehead 2 J. Berry#
5/30 Boston (F.P.) 2 C. Gentow

Orange-crowned Warbler
5/5, 8 Mt.A. 1 S. King, v.o.
5/6 Worcester 1 M. Lynch#
5/7 S. Boston 1 R. Donovan

Nashville Warbler
5/5-12 Medford 9 max 5/7 M. Rines
5/6 Mt.A. 12 R. Stymeist#
5/6 Worc. (BMB) 6 J. Liller#
5/6 Lexington 7 M. Rines
5/9 MNWS 7 R. Heil
5/11 Nahant 18 R. Heil
5/12 Ashburnham 10 R. Heil
6/7 Essex 1 m J. Berry#
6/23 Manchester 1 m J. Berry
6/24 New Salem 1 B. Lafley

Northern Parula
5/2 Newbypt 8 BBC (S. Grinley)
5/2-26 Medford 43 max 5/12 M. Rines#
5/4, 10 Winchester 2, 19 M. Rines
5/6 Mt.A. 15 R. Stymeist#
5/7 P.I. 14 R. Heil
5/7 Gloucester (E.P.) 26 BBC (J. Nove)
5/9 MNWS 12 R. Heil
5/9 Marshfield 15 D. Furbish
5/9 Milton 19 D. + S. Larson
5/10 Mt.A. 20+ G. Long
5/11 Nahant 36 R. Heil
5/12 Worcester 35 M. Lynch#
5/12, 16 P'town 20, 15 B. Nikula
5/20 Hampden Cnty 16 Allen Club Census

Yellow Warbler
5/1 Southwick 1 S. Kellogg
5/3, 6 Lexington 6, 32 M. Rines
5/3, 10 ONWR 3, 23 R. Lockwood
5/7 P.I. 142 R. Heil
5/11 Nahant 37 R. Heil
5/13 Ipswich R. 73 ECOC (J. Berry)
5/20 Barre F.D./Rutland S.P. 59 M. Lynch#
5/20 Hampden Cnty 209 Allen Club Census
6/10 IRWS 59 BBC (D. Oliver)
6/19 Groveland 40 R. Heil

Chestnut-sided Warbler
5/2 W. Bridgewater 1 R. Finch
5/3 Marblehead 1 K. Haley
5/6 HRWMA 10+ T. Pirro
5/11 Quabbin (G40) 17 R. Lockwood
5/12 Monroe 31 M. Lynch#
5/12 Ashburnham 10 R. Heil
5/18 Quabbin (G10) 32 R. Lockwood#
5/20 Barre F.D./Rutland S.P. 42 M. Lynch#
5/20 Hampden Cnty 56 Allen Club Census

Chestnut-sided Warbler (continued)

5/29	W. Royalston	12	M. Lynch#
6/15	Savoy	8	R. Packard
6/18	Quabbin	5	M. Tingley

Magnolia Warbler

5/2	Amherst	1	H. Allen
5/5	Ipswich	1	J. Berry
5/6	Lexington	4	M. Rines
5/7	P.I.	7	R. Heil
5/7-28	Medford	37 max 5/12	M. Rines
5/10	MNWS	25	J. Paluzzi
5/10	Mt.A.	15	G. Long
5/11	Nahant	22	R. Heil
5/12	Worcester	23	M. Lynch#
5/19	Gloucester	28	R. Heil
5/20	Hampden Cnty	47	Allen Club Census
5/21	P'town	15	B. Nikula
5/21	Gloucester (E.P.)	16	M. Lynch#
6/17	Mt. Greylock	10	J. Hutchison #
6/25	Barre F.D./Rutland S.P.	5	M. Lynch#

Cape May Warbler

5/6	Sheffield	1	T. Pirro
5/6-23	Worcester	1-3	M. Lynch#
5/6-9	Mt.A.	1	R. Stymeist#
5/9	N. Middleboro	1	K. Holmes
5/9	Boston (F.Pk)	1	J. Young
5/13	Milton	1	G. d'Entremont
5/13	Petersham	1	D. Chapman#
5/13	Stockbridge	2	M. Lynch#
5/13	New Salem	1	D. Small#
5/13	W. Bridgewater	1 m	S. Arena
5/17	MNWS	1	K. Haley
5/20	Holyoke	1	D. McLain
5/25	Northampton	2	C. Gentes
5/30	Westfield	1	J. Hutchison

Black-throated Blue Warbler

5/2-16	Medford	20 max 5/12	M. Rines#
5/6	Mt.A.	10	R. Stymeist#
5/11	Quabbin (G40)	14	R. Lockwood
5/11	Nahant	12	R. Heil
5/14	P.I.	10	J. Berry
5/18	Quabbin (G10)	26	R. Lockwood#
5/20	Hampden Cnty	15	Allen Club Census
6/24	Erving	12	D. Peacock#

Yellow-rumped Warbler

5/thr	Medford	140 max 5/16	M. Rines
5/2	Newbypt	175	BBC (S. Grinley)
5/3	E. Middleboro	100+	K. Anderson
5/3	Worcester	270	M. Lynch#
5/4	Amherst	100	H. Allen
5/5	Hingham	300	G. d'Entremont#
5/5	Wayland	100+	G. Long
5/6	Westfield	100	J. Hutchison#
5/10	Cambr. (F.P.)	125	BBC (J. Barton)
5/10	Mt.A.	200+	G. Long
5/20	Hampden Cnty	40	Allen Club Census
6/3	Mt. Greylock	15	T. Gagnon
6/10	Quabbin (G37)	8	BBC (R. Lockwood)
6/15, 16	Gardner	8	T. Pirro

Black-throated Green Warbler

5/thr	Medford	30 max 5/12	M. Rines#
5/4	Royalston	12	J. Morris-Siegel
5/9, 12	P'town	10	B. Nikula
5/10	Mt.A.	12+	G. Long
5/11	Nahant	19	R. Heil
5/11	Quabbin (G40)	22	R. Lockwood
5/12	Ashburnham	19	R. Heil
5/12	Monroe	38	M. Lynch#
5/20	Hampden Cnty	32	Allen Club Census
5/29	W. Royalston	23	M. Lynch#
6/10	Quabbin (G37)	15	BBC (R. Lockwood)
6/11	Petersham	19	M. Lynch#
6/24	Erving	14	D. Peacock#

Blackburnian Warbler

5/4	Royalston	1	J. Morris-Siegel
5/4	Gardner	1	T. Pirro
5/11	Nahant	6	R. Heil
5/11	Hingham	7	D. Peacock
5/12	Monroe	15	M. Lynch#
5/12	Ashburnham	14	R. Heil
5/15	Gloucester (E.P.)	12	BBC (S. Hedman)
5/18	Quabbin (G10)	13	R. Lockwood#
5/20	Hampden Cnty	17	Allen Club Census
5/23	Hawley	11	R. Packard
5/27	MNWS	8	M. Lynch#
6/7	Sunderland	8	M. Williams
6/11	Petersham	16	M. Lynch#
6/17	Mt. Greylock	35	J. Hutchison #
6/24	Erving	11	D. Peacock#

Yellow-throated Warbler

5/18-19	Gloucester (E.P.)	1	M. Baldock + v.o.

Pine Warbler

5/11	Quabbin (G40)	14	R. Lockwood
5/20	Barre F.D./Rutland S.P.	24	M. Lynch#
5/20	Hampden Cnty	55	Allen Club Census
6/10	Quabbin (G37)	12	BBC (R. Lockwood)
6/16	DWMA	13	C. Cook

Prairie Warbler

5/2	Woburn	1	B. Wright#
5/2	Agawam	1	R Stone
5/13	Milton	6	G. d'Entremont#
5/14	S. Quabbin	21	M. Lynch#
5/20	Hampden Cnty	20	Allen Club Census
6/5	Groton	6	T. Pirro
6/10	Quabbin (G37)	9	BBC (R. Lockwood)
6/19	Groveland	27	R. Heil
6/22	N. Falmouth	6	R. Farrell
6/26	Southwick	6	M. Williams

Palm Warbler

5/1, 3	Canton	8, 12	S. Donovan
5/2	Newbypt	6	BBC (S. Grinley)
5/2	Gloucester	5	C. Leahy
5/4	Mt.A.	10+	P. + F. Vale
5/5	Hingham	9	E. Nielsen
5/7	Bolton Flats	1	M. Lynch#
5/15	Mt.A.	1	D. Wilkinson

Bay-breasted Warbler

5/6	Mt.A.	1	R. Stymeist#
5/6	M.V.	1	V. Laux
5/7	Bolton Flats	1	M. Lynch#
5/8, 12	Worcester	1, 6	M. Lynch#
5/9-26	Medford	1-3	M. Rines
5/10	Winchester	3	M. Rines
5/10	Mt.A.	8	G. Long
5/28	Marblehead	6	BBC (L. de la Flor)

Blackpoll Warbler

5/4	Royalston	1	J. Morris-Siegel
5/7	Longmeadow	1	N. Eaton
5/7-31	Medford	10 max 5/28	M. Rines
5/12	Worcester	26	M. Lynch#
5/20	Hampden Cnty	43	Allen Club Census
5/20	Agawam	12	J. Hutchison#
5/20	Holyoke	11	D. McLain
5/21	Gloucester (E.P.)	14	M. Lynch#
5/27	MNWS	15	M. Lynch#
6/3-18	Mt. Greylock	5	v.o.
6/4	Hingham	2SS	BC (D. Peacock)
6/6	Montague	1	R. Packard

Cerulean Warbler

5/5	Hingham	1 m	W. + E. Lackey
5/6	Worcester	1 m	M. Lynch#
5/8	Brewster	1	S. Highley#
5/9	Natick	1 m	G. Long
5/10	Cambr. (F.P.)	1	BBC (J. Barton)
5/11	Quabbin (G47)	2	R. Lockwood
5/12-30	Hadley	2	H. Allen + vo
5/13	Quabbin Park	3	R. Lockwood#
5/24-25	Hardwick	1 m	C. Buelow
5/29	Mt. Tom	1	T. Gagnon
6/4	N. Middleboro	1	K. Holmes
6/21	Hadley	3	B. Bieda

Black-and-white Warbler

5/thr	Medford	21 max 5/7	M. Rines#
5/4	Royalston	13	J. Morris-Siegel
5/5	Douglas	24	M. Lynch#
5/5	Marshfield	15	G. d'Entremont#

Black-and-white Warbler (continued)

5/6	Mt.A.	28	R. Stymeist#
5/6	Worcester	16	M. Lynch#
5/10	Winchester	15	M. Rines
5/11	Nahant	15	R. Heil
5/12	P'town	15	B. Nikula
5/12	Wakefield	12	F. Vale
5/20	Hampden Cnty	51	Allen Club Census
6/10	IRWS	13	BBC (D. Oliver)

American Redstart

5/3	Longmeadow	1	S. Kellogg#
5/4	Royalston	1	J. Morris-Siegel
5/5-28	Medford	36 max 5/19	M. Rines
5/8	Holyoke	24	J. LaPointe#
5/11	Quabbin (G47)	18	R. Lockwood
5/12	Monroe	23	M. Lynch#
5/13	Ipswich R.	23	ECOC (J. Berry)
5/14	S. Quabbin	47	M. Lynch#
5/18	Quabbin (G10)	29	R. Lockwood#
5/20	Hampden Cnty	163	Allen Club Census
5/21	Gloucester (E.P.)	29	M. Lynch#
6/10	Quabbin (G37)	29	BBC (R. Lockwood)
6/18	Mt. Greylock	43	M. Lynch#
6/25	Barre F.D./Rutland S.P.	29	M. Lynch#

Prothonotary Warbler

5/6	Marshfield	1	N. Swirka#
5/9, 12	Hingham	1 m	C. Nims#
5/13	Newbypt	1 m	R. Heil
5/13, 21	Nantucket	1	E. Andrews
5/18	P.I.	1	D. Chickering

Worm-eating Warbler

5/1	MNWS	1	J. Paluzzi
5/4	Chatham	1	M. Tuttle
5/6	Lunenburg	1	H. Shainheit
5/6	S. Hadley	4	S. Surner#
5/8	Holyoke	3	J. LaPointe#
5/9	Boston (F.Pk)	1	J. Young
5/9	MNWS	1	K. Haley
5/13	N. Quabbin	1	B. Lafley#
5/13	Sheffield	1	M. Lynch#
5/13	Newbypt	1	S. Grinley
5/15	Freetown	2	M. Boucher
5/27	Gloucester (E.P.)	1	C. Leahy
5/29	Milton	1	G. d'Entremont#
6/4	Mt Washington	1	D. St. James
6/10	Mt. Tom	2	J. Hoye#
6/21	Hadley	2	B. Bieda

Ovenbird

5/4	Royalston	16	J. Morris-Siegel
5/5	Douglas	50	M. Lynch#
5/5-26	Medford	20 max 5/12	M. Rines
5/10	Mt.A.	20+	G. Long
5/11	Hingham	38	D. Peacock
5/11	Quabbin (G40)	24	R. Lockwood
5/12	Monroe	38	M. Lynch#
5/18	Quabbin (G10)	44	R. Lockwood#
5/20	Barre F.D./Rutland S.P.	106	M. Lynch#
5/20	Ipswich	25	J. Berry
5/21	Boxford (C.P.)	24	S. Hedman#
6/1	Manchester/Essex	27 m	J. Berry
6/4	Hingham	22	SSBC (D. Peacock)
6/7, 23	Sunderland	20, 12	M. Williams
6/10	IRWS	21	BBC (D. Oliver)
6/10	Hawley	44	M. Lynch#
6/11	Petersham	58	M. Lynch#

Northern Waterthrush

5/1	E. Middleboro	5 m	K. Anderson
5/3, 10	Brookline	6, 3	R. Stymeist#
5/4	Royalston	5	J. Morris-Siegel
5/4	W. Bridgewater	4	R. Finch
5/6	Mt.A.	3	R. Stymeist#
5/6, 18	HRWMA	3, 2	T. Pirro
5/9	Wayland	3	J. Hoye#
5/11	Hingham	5	D. Peacock
5/12	Longmeadow	3	J. LaPointe
5/13	Ipswich R.	7	ECOC (J. Berry)
5/18	ONWR	4	R. Lockwood#
5/20	Barre F.D./Rutland S.P.	5	M. Lynch#
5/20	Hampden Cnty	15	Allen Club Census
5/29	Boxford	3 m	J. Berry
6/22	Halifax	4	D. Furbish

Louisiana Waterthrush

5/3	Belchertown	2	B. Kane
5/4	Royalston	1	J. Morris-Siegel
5/5	Douglas	1	M. Lynch#
5/6	HRWMA	3	T. Pirro
5/13	Gt. Barrington	1	M. Lynch#
5/15	Whateley	1	R. Packard
5/20	Hampden Cnty	7	Allen Club Census
5/20	Barre F.D./Rutland S.P.	2	M. Lynch#
5/21	Lancaster	4	R. Lockwood
5/28	Quabbin (G15)	1	S. Hedman#
5/29	Boxford (C.P.)	2	P. + F. Vale
5/31	Sunderland	4	R. Stone
6/4	Hingham	3	SSBC (D. Peacock)
6/10	Hawley	1	M. Lynch#

Kentucky Warbler

5/6-7	MNWS	1 m	R. Finch + v.o.
5/7-9	Edgartown	1	G. Levendoski#
5/7	S. Boston	1	R. Donovan
5/8	P'town	1	J. Sones#
5/23	Mt.A.	1 f	D. Larson
5/25	Florida	1 m	B. Lafley

Connecticut Warbler

5/7	Mt. Everett	1	T. Tyning

Mourning Warbler

5/12	Monroe	1 m	M. Lynch#
5/16-28	Medford	3 total	M. Rines#
5/20-27	Reports of indiv. from 9 locations		
5/28	Marblehead	2	BBC (L. de la Flor)
6/2	Gloucester (E.P.)	2	C. Leahy
6/3-18	Mt. Greylock	1-4	v.o.
6/15	Savoy	1	R. Packard
6/19	N. Adams	1	J. Young
6/28	Washington	1	C Barrett

Common Yellowthroat

5/3, 29	Worc. (BMB)	3, 23	J. Liller
5/7	Bolton Flats	42	M. Lynch#
5/11	Nahant	46	R. Heil
5/13	Ipswich R.	104	ECOC (J. Berry)
5/20	Barre F.D./Rutland S.P.	119	M. Lynch#
5/20	Hampden Cnty	180	Allen Club Census
6/10	IRWS	75	BBC (D. Oliver)
6/19	Groveland	38	R. Heil

Hooded Warbler

5/1	Nahant	1 m	R. Donovan
5/7	Braintree	1	G. d'Entremont
5/7	MNWS	1	S. Moore#
5/8	Cummaquid	1	S. + E. Miller
5/8	Boston	1 m	C. Saunders
5/8	Yarmouthport	1	S. Miller
5/11	Gloucester (E.P.)	1 m	M. L. Barnett
5/11	Nantucket	3	fide E. Ray
5/17	Hingham	1 m	D. Peacock#
5/20-21	P'town	1 f	v.o.
5/21	Mt. A.	1 m	SSBC (T. O'Neil)

Wilson's Warbler

5/5	W. Bridgewater	1	R. Finch
5/6	Northampton	1	T. Gagnon
5/6	Mt.A.	2	R. Stymeist#
5/13	Boston	5	R. Stymeist#
5/14-28	Medford	4 max 5/16	M. Rines
5/15	Norfolk	3	R. Emerson
5/17	P.I.	3	M. Resch
5/19	Gloucester	5	R. Heil
5/20	Chicopee	3	T. Swochak
5/27	MNWS	8	P. + F. Vale

Canada Warbler

5/2-26	Medford	9 max 5/19	M. Rines#
5/3	Canton	1	S. Donovan
5/10	Mt.A.	5	G. Long
5/10	Winchester	4	M. Rines
5/12	Worcester	6	M. Lynch#
5/16	Hingham	4	D. Peacock#
5/16	Granville	10	S. Kellogg
5/17	MNWS	8	S. Hedman#

Canada Warbler (continued)
5/20 Barre F.D./Rutland S.P. 5 M. Lynch#
5/20 Hampden Cnty 10 Allen Club Census
5/26 Marblehead 7 J. Berry#
5/27 Gloucester (E.P.) 10 C. Leahy
6/24 Erving 5 D. Peacock#
Yellow-breasted Chat
5/15 Boston (A.A.) 1 R. Antoni
5/15 Northfield 1 H. Allen
5/17 Nahant 1 L. Pivacek
Summer Tanager
5/2-24 12 indiv. from on Cape Cod and the Islands
5/10-11 Mt.A. 1 f J. Young + v.o.
5/12 Westport 1 S. + L. Hennin
5/16 Nantucket 2 fide E. Ray
5/26-30 Mt.A. 1 imm m C. Floyd + v.o.
Scarlet Tanager
5/4 Amherst 2 H. Allen
5/7 ONWR 3 BBC (J. Center)
5/9-31 Medford 10 max 5/16 M. Rines#
5/11 Mt.A. 10+ T. Roberts
5/20 Barre F.D./Rutland S.P. 4 M. Lynch#
5/20 Hampden Cnty 84 Allen Club Census
5/21 Boxford (C.P.) 12 S. Hedman#
5/29 W. Royalston 14 M. Lynch#
6/10 Hawley 15 M. Lynch#
6/10 Quabbin (G37) 12 BBC (R. Lockwood)
6/11 Petersham 11 M. Lynch#
6/19 Groveland 22 R. Heil
Eastern Towhee
5/5 Douglas 57 M. Lynch#
5/20 Hampden Cnty 101 Allen Club Census
6/19 Groveland 32 R. Heil
Clay-colored Sparrow
5/16 P.I. 1 C. Buelow#
Field Sparrow
5/7 Lynn 5 BBC (J. Benard)
5/20 Barre F.D./Rutland S.P. 9 M. Lynch#
5/20 Hampden Cnty 9 Allen Club Census
5/27 Worc. (BMB) 9 J. Liller#
5/28 Falmouth 8 BBC (R. Peterson)
6/19 Groveland 27 R. Heil
6/26 Southwick 4 M. Williams
Vesper Sparrow
5/3 Newton 1 M. Criscitiello
5/7 Newbury 1 BBC (J. Paluzzi)
5/12 Lancaster 3 R. Lockwood
5/13 Plainfield 2 M. Lynch#
5/13 Orange 1 D. Small#
5/13 P'town (R.P.) 1 m S. Perkins
5/13 N. Quabbin 1 B. Lafley#
5/13 Westfield 1 S. Kellogg#
5/13 S. Hadley 1 T. Gagnon
5/14 Wellfleet 1 S. Hedman
5/20 Plymouth 2 SSBC (P. O'Neill)
6/8 Sunderland 3 H. Allen
6/23-30 Southwick 3 S. Kellogg#
Lark Bunting
5/1-4 Truro 1 G. Russell + v.o.
Savannah Sparrow
5/3 Lexington 93 M. Rines
6/thr Bedford 132 R. Lockwood#
Grasshopper Sparrow
5/6 Hadley 1 N. Eaton
5/6-31 Montague 1-3 H. Allen
5/12 Plymouth 3 W. Petersen
5/12, 29 Lancaster 9, 29 R. Lockwood
5/13 N. Quabbin 1 B. Lafley#
5/13 Orange 1 D. Small#
5/13-22 Westfield 3 S. Kellogg#
5/14 Falmouth 1 S. Hedman#
5/21 Turner's Falls 7 E. Neilsen
6/thr Bedford 4 R. Lockwood#
6/3 Mashpee 3 C. Nims#
6/3 Westover 25+ Allen Club Census
6/4 DWMA 2 M. Lynch#
6/22 N. Falmouth 3 R. Farrell
6/26-30 Southwick 1 S. Kellogg
Saltmarsh Sharp-tailed Sparrow
5/13 Rowley 2 R. Heil
5/13 Newbury 2 R. Heil
5/29 P.I. 21+ R. Heil
5/29 S. Dartmouth 3 D. Larson
Seaside Sparrow
5/7 P.I. 1 R. Heil
5/29 S. Dartmouth 1 D. Larson
6/18 Westport 1 E. Giles
Lincoln's Sparrow
5/6-20 Reports of indiv. from 17 locations
5/11 Nahant 7 R. Heil
5/11 Gloucester 2 M. L. Barnett
5/15 Stow 2 R. Lockwood
5/23 Mt.A. 2 C. Floyd
Swamp Sparrow
5/5 Wayland 25+ G. Long
5/5 Stow 28 R. Lockwood
5/7 Bolton Flats 40 M. Lynch#
6/24 W. Brookfield 32 M. Lynch#
White-throated Sparrow
5/2 Gloucester 300 C. Leahy
5/2 Boston 100+ J. Miller
5/2 MNWS 270 R. Heil
5/2 Manchester 150+ S. Hedman
5/3 P'town 200 B. Nikula
5/3 E. Middleboro 50+ K. Anderson
5/5 Hingham 185 E. Nielsen
5/7 P.I. 48 R. Heil
5/11 Nahant 59 R. Heil
6/9 Brookline ad + 2 yg H. Wiggin
6/11 Petersham 1 M. Lynch#
6/18 Dunstable 1 m M. Rines
6/23 Hawley 3 R. Packard
6/25 Barre F.D./Rutland S.P. 4 M. Lynch#
Harris's Sparrow (details submitted) *
5/13-14 Amherst 1 ad ph B. Lafleche + v.o.
White-crowned Sparrow
5/6 Northampton 6 T. Gagnon
5/7 Bolton Flats 5 M. Lynch#
5/7 DWWS 9 D. Furbish
5/7 Quabbin 3 T. Gagnon
5/7 Adams 4 R. Rancatti
5/9 Nantucket 9 fide E. Ray
5/10 Mt.A. 6 G. Long
5/10, 23 P.I. 14, 3 D. + I. Jewell
5/11 Nahant 7 R. Heil
5/11 Hingham 4 D. Peacock
5/12 Townsend 4 R. Heil
5/15 Gloucester (E.P.) 4 BBC (S. Hedman)
Dark-eyed Junco
5/3 Mt.A. 6 S. Perkins#
5/3 Worcester 5 M. Lynch#
5/3 Wakefield 5 F. Vale
5/12 Ashburnham 4 R. Heil
5/12 Monroe 2 M. Lynch#
6/10 Hawley 4 M. Lynch#
6/18 Mt. Greylock 30 M. Lynch#
6/23 Sunderland 1 M. Williams
Snow Bunting
6/14 Nantucket 1 br pl E. Ray
Rose-breasted Grosbeak
5/6 Newbury 11 J. Berry
5/7 ONWR 9 BBC (J. Center)
5/11 Quabbin (G40) 8 R. Lockwood
5/13 Ipswich R. 15 ECOC (J. Berry)
5/14 S. Quabbin 13 M. Lynch#
5/15 Gloucester (E.P.) 12 BBC (S. Hedman)
5/17 Weston 8 BBC (B. Howell)
5/18 ONWR 16 G. d'Entremont#
5/18 Quabbin (G10) 13 R. Lockwood#
5/20 Hampden Cnty 95 Allen Club Census
5/20 Barre F.D./Rutland S.P. 23 M. Lynch#
5/21 Lancaster 10 R. Lockwood
6/10 IRWS 7 BBC (D. Oliver)
6/11 Petersham 7 M. Lynch#
6/28 GMNWR 7 R. Lockwood

Black-headed Grosbeak (details submitted) *

5/15	Quabbin Park	1 m yg	C. Holzapfel

Blue Grosbeak

5/5	Nantucket	1	fide E. Ray
5/9	West Tisbury	1 m	T. Watson
5/13	Falmouth	1 m	S. + E. Miller
5/31	Nantucket	1	E. Ray
6/23-30	Southwick	1 imm	S. Kellogg + v.o.
6/27	Williamsburg	1 m ad	G. LeBaron

Indigo Bunting

5/9	Northampton	2	T. Gagnon
5/9, 29	Hingham	1, 4	D. Peacock
5/10-31	Medford	1-4	M. Rines
5/14	S. Quabbin	4	M. Lynch#
5/20	Hampden Cnty	23	Allen Club Census
5/21	Beverly Farms	3	M. Lynch#
5/31	W. Boxford	3 m	J. Berry
6/10	Hawley	4	M. Lynch#
6/16	Burlington	3	M. Rines
6/18	Mt. Greylock	9	M. Lynch#
6/19	Groveland	5 m	R. Heil

Bobolink

5/4	ONWR	1	E. Salmela
5/4	Boxboro	1	J. Michaels
5/5	Hingham	7	E. Nielsen
5/6	P.I.	17 migr	S. Perkins#
5/15	Pepperell	50	E. Stromsted
5/18, 31	Rowley	20	J. Berry
5/20	Barre F.D./Rutland S.P.	13	M. Lynch#
5/22	Wayland	40	G. Long
5/29	Lancaster	40	R. Lockwood
6/thr	Bedford	38	R. Lockwood#
6/10	Hawley	11	M. Lynch#
6/11	Sudbury	20	R. Crissman
6/29	Ipswich	25+	J. Berry#

Eastern Meadowlark

5/6	Newbypt	3	P. + F. Vale
5/12	Lancaster	4	R. Lockwood
5/14	P.I.	3	J. Berry
5/20	Hampden Cnty	5	Allen Club Census
6/9	Bedford	18	R. Lockwood#
6/29	Ipswich	8	J. Berry#

Rusty Blackbird

5/1	Wakefield	1	F. Vale
5/1	Southwick	4	S. Kellogg
5/2	Northampton	1	E. Labato
5/3	Wayland	2	W. Petersen
5/3	Lexington	12	M. Rines
5/3	Longmeadow	2	S. Kellogg#
5/6	MNWS	1	BBC (L. delaFlor)
5/10	P.I.	1	D. + I. Jewell

Orchard Oriole

5/2-6/30	Reports of 1-2 indiv. from 44 locations		
5/4	Boston (F.Pk)	3 m ad	J. Young
5/5	Hingham	13	G. d'Entremont#
5/7	Bolton Flats	3	M. Lynch#
6/1	N. Weymouth	2 pr	K. Vespaziani

Baltimore Oriole

5/1	Williamsburg	1	R. Packard
5/1	Arlington	1	A. Golden
5/5	Hingham	27	E. Nielsen
5/11	Nahant	26	R. Heil
5/13	Ipswich R.	66	ECOC (J. Berry)
5/14	S. Quabbin	26	M. Lynch#
5/20	Hampden Cnty	270	Allen Club Census
6/10	IRWS	28	BBC (D. Oliver)
6/19	Groveland	32	R. Heil

Purple Finch

5/1	Maynard	4	L. Nachtrab
5/2	Mendon	5 f	D. Moffett
5/4	Royalston	8	J. Morris-Siegel
5/5	Douglas	8	M. Lynch#
5/6	Worc. (BMB)	5	J. Liller#
5/7	P.I.	15	R. Heil
5/7	Huntington	9	R. Packard
5/10	ONWR	8	R. Lockwood
5/11	Quabbin (G40)	4	R. Lockwood
5/12	Monroe	8	M. Lynch#
5/12	Ashburnham	8	R. Heil
5/20	Hampden Cnty	5	Allen Club Census
6/4	Hingham	6	SSBC (D. Peacock)
6/10	Quabbin (G37)	6	BBC (R. Lockwood)

Red Crossbill

5/3-31	P'town	11 max	B. Nikula#
6/2	Wellesley	pr + 1 juv	C. Marsh
6/5	Chappaquiddick	2+	N. Bettancourt
6/9	Brewster	1	B. Nikula

White-winged Crossbill

5/7	N. Truro	40	B. Nikula
5/7	Huntington	1	R. Packard

Pine Siskin

5/thr	E. Middleboro	2-8	K. Anderson
5/1-27	Reports of 1-3 indiv. from 23 locations		
5/1-6/17	Williamsburg	2-13	R. Packard
5/5	Westford	12	L. Clark
5/5	Maynard	6	L. Nachtrab
5/6	Mt.A.	6	R. Stymeist#
5/22	Haydenville	13	R. Packard
6/3	Scituate	1	E. Burbank

American Goldfinch

5/6	P.I.	77 migr	S. Perkins#
5/7	P.I.	95 migr	S. Perkins#
6/19	Groveland	138	R. Heil

Evening Grosbeak

5/3, 6	HRWMA	1, 2	T. Pirro
5/4	Royalston	2	J. Morris-Siegel
5/6	Wellfleet	1	B. Nikula
5/6	Oakham	4	R. Wolanin
5/9, 12	P'town	1	B. Nikula
5/11	Petersham	3	R. Lockwood
5/11	Gardner	2	T. Pirro
5/12	Monroe	6	M. Lynch#
5/12	Washington	2	E. Neumuth
5/13	N. Quabbin	1	B. Lafley#
5/15	Whateley	2	R. Packard
5/15	Nantucket	2	fide E. Ray
5/15	Topsfield	1	J. MacDougall
5/20	Barre F.D./Rutland S.P.	7	M. Lynch#
5/23	Hawley	5	R. Packard
5/29	W. Royalston	6	M. Lynch#
5/31	Savoy	4	R. Rancatti
6/3	Athol	1	R. Coyle
6/20	Shutesbury	2 m	B. Lafley
6/23	Northampton	3	R. Packard

Corrigenda: March/April 2000. All 17 listings for N. Truro records for the Eastern Massachusetts Hawk Watch should attribute EMHW (M. Lowe).

* Indicates a species on the review list of the Massachusetts Avian Records Committee (MARC). Because these sightings are generally published before the MARC votes, they normally have not been approved by the MARC. The editors publish records that are supported by details, multiple observers, or both.

LIST OF ABBREVIATIONS

ad	adult
alt	alternate
b	banded
br	breeding
dk	dark (phase)
f	female
fl	fledged
imm	immature
ind	individuals
juv	juvenile
loc	location
lt	light (phase)
m	male
max	maximum
migr	migrating
n	nesting
ph	photographed
pl	plumage
pr	pair
S	summer (1S = first summer)
thr	throughout
vid	videotaped
v.o.	various observers
W	winter (2W = second winter)
w/	with
yg	young
#	additional observers
A.A.	Arnold Arboretum, Boston
A.P.	Andrews Point, Rockport
A.Pd	Allens Pond, S. Dartmouth
Arl.	Arlington
B.	Beach
B.I.	Belle Isle, E. Boston
B.R.	Bass Rocks, Gloucester
Cambr.	Cambridge
C.B.	Crane Beach, Ipswich
Corp. B.	Corporation Beach, Dennis
C.P.	Crooked Pond, Boxford
Cumb. Farms	Cumberland Farms, Middleboro-Halifax
E.P.	Eastern Point, Gloucester
F.E.	First Encounter Beach, Eastham
F.H.	Fort Hill, Eastham
F.M.	Fowl Meadow, Milton
F.P.	Fresh Pond, Cambridge
F.Pk	Franklin Park, Boston
G40	Gate 40, Quabbin
G45	Gate 45, Quabbin
H.P.	Halibut Point, Rockport
H.	Harbor
I.	Island
L.	Ledge
M.V.	Martha's Vineyard
Mt.A.	Mount Auburn Cemetery, Cambridge
Nant.	Nantucket
Newbypt	Newburyport
P.I.	Plum Island
Pd	Pond
P'town	Provincetown
Quab.	Quabbin Reservoir
Res.	Reservoir
R.P.	Race Point, Provincetown
S.B.	South Beach, Chatham
S. Dart.	South Dartmouth
S.N.	Sandy Neck, Barnstable
Stellw.	Stellwagen Bank
Worc.	Worcester
Barre F.D.	Barre Falls Dam, Barre, Rutland, Oakham
ABC	Allen Bird Club
BBC	Brookline Bird Club
BMB	Broad Meadow Brook, Worcester
CCBC	Cape Cod Bird Club
DFWS	Drumlin Farm Wildlife Sanctuary
DWMA	Delaney Wildlife Management Area Stowe, Bolton, Harvard
DWWS	Daniel Webster Wildlife Sanctuary
EMHW	Eastern Massachusetts Hawk Watch
GMNWR	Great Meadows National Wildlife Refuge
HRWMA	High Ridge Wildlife Management Area, Gardner-Westminster
IRWS	Ipswich River Wildlife Sanctuary
LBS	Local Bird Survey
LCES	Lloyd Center for Environmental Studies
MARC	Massachusetts Avian Records Committee
MAS	Massachusetts Audubon Society
MBO	Manomet Observatory
MBWMA	Martin Burns Wildlife Management Area, Newbury
MDFW	MA Division of Fisheries and Wildlife
MNWS	Marblehead Neck Wildlife Sanctuary
MSSF	Myles Standish State Forest
NAC	Nine Acre Corner, Concord
NBC	Needham Bird Club
NEHW	New England Hawk Watch
ONWR	Oxbow National Wildlife Refuge
Pont.	Pontoosuc Lake, Lanesboro
SRV	Sudbury River Valley
SSBC	South Shore Bird Club
TASL	Take A Second Look Harbor Census
USFWS	US Fish and Wildlife Service
WBWS	Wellfleet Bay Wildlife Sanctuary
WMWS	Wachusett Meadow Wildlife Sanctuary

HOW TO CONTRIBUTE BIRD SIGHTINGS TO BIRD OBSERVER

This publication prints monthly compilations of reports of birds seen in Massachusetts and offshore waters. Space does not permit the inclusion of all material submitted. However, bird sightings sent to *Bird Observer* are archived in our database. Our compilers select and summarize for publication sightings that provide a snapshot of bird life during the reporting period. These sightings include early and late dates for migratory species, maximum counts of migrants and some common birds, and species found beyond their normal ranges.

Sightings for any given month must be reported in writing by the eighth of the following month. Send to Bird Sightings, Robert H. Stymeist, 94 Grove Street, Watertown, MA 02172. Please organize reports by month and by species in current A.O.U. checklist order. Include name and phone number of observer, common name of species, date of sighting, location, number of birds, number of observers, and information relevant to age, sex, morph, etc.

Species on the Review List of the Massachusetts Avian Records Committee, as well as species unusual as to place, time, or known nesting status in Massachusetts should be reported promptly to the Massachusetts Avian Records Committee, c/o Marjorie Rines, Massachusetts Audubon Society, South Great Road, Lincoln, MA 01773.

ZOO New England's Mission Flamingo

(Yucatan, Mexico) It only took one jaguar attack to destroy a nesting colony of American flamingos, but it's taking an international effort to salvage what's left. Zoo New England is part of that endeavor. Several weeks ago, a jaguar raided a nesting colony of flamingos in the Rio Lagartos Reserva de la Biosfera in Yucatan, Mexico, killing a number of adult flamingos. The rest of the flock abandoned the nesting site, leaving an estimated 1,000 eggs just as they were about to hatch. Reserve biologists, as well as keepers from a local zoo, collected as many eggs as they could — about 400 — and began incubating them in an attempt to hatch and rear the birds.

Two members of Zoo New England's animal care staff — Peter Costello, Assistant Curator at Stone Zoo, and Edward O'Brien, Assistant Curator at Franklin Park Zoo's Bird's World — were among those who answered a call for help. Flamingo chicks need to be hand fed a special liquid diet via eyedroppers every three hours around the clock. The flamingo parents would normally feed the chicks for 3-4 months before they are weaned. However, due to the necessity of hand-feeding such a large number of chicks, protocols have been established that will allow for weaning to begin by the end of one month, with the eventual goal of releasing the birds into the wild in Rio Lagartos.

"This was really the opportunity of a lifetime," said Costello, who took part in the effort from June 21-June 30. "It gave me a lot more experience hand-rearing flamingos, but I think the most rewarding part of it was helping sick and injured chicks in the hospital area [and] bringing chicks back from the brink of death."

Look for updates on the flamingo chicks' progress, as well as photos, on the Zoo New England website at **www.zoonewengland.com.**

ABOUT THE COVER

Ruddy Turnstone

One of the most colorful and striking of our shorebirds, the Ruddy Turnstone (*Arenaria interpres*) is also behaviorally interesting. Its habit of flipping over pebbles, shells, and seaweed with its short black bill to get at the invertebrates beneath earns it its common name. This dumpy, medium-sized shorebird in breeding plumage is unmistakable with its motif of black and white on head, neck and breast, gleaming white below, and rufous and black back and wings, all highlighted by bright orange legs and feet. The sexes are similar in plumage, although the male has a whiter head. In flight they are spectacular with wings flashing black, white, and rufous, a white lower back, and black and white banded tail. Although conspicuous on open beaches, the Ruddy Turnstone virtually disappears against a backdrop of lichen-covered breakwater boulders, or on a tundra nest among the wildflowers. In winter plumage the rufous nearly disappears, and the black is muted. Juveniles resemble winter adults.

The Ruddy Turnstone is polytypic with two subspecies, a Eurasian race that breeds as far east as northwestern Alaska, and the predominantly North American *A. i. morinella* that nests from eastern Alaska across North America in the high arctic. The breeding range is circumpolar. The evolutionary relationships are obscure, since the turnstones have characteristics shared with both sandpipers and plovers. These high arctic breeders migrate as far as southern South America to winter, with the Eurasian subspecies migrating to Asia as far south as Australia. They winter as far north as Oregon and Massachusetts, with a wintering range that is almost exclusively coastal. In Massachusetts they migrate through in May in numbers that have reached several thousand. They are especially common on Monomoy, and are rare inland. They pass through again in the fall, with maximum numbers in early August in Scituate reaching 1000. They are gregarious in winter, with flocks of sixty to eighty on the jetties of Nantucket harbor.

Ruddy Turnstones are seasonally monogamous and sometimes mate with the same partner in succeeding years. Year-old birds usually remain on the wintering grounds and do not migrate and breed until age two. They prefer dry coastal tundra for nesting, usually near fresh water. They often nest near gull or tern colonies. Males are highly territorial and aggressive on the breeding grounds, in contrast to their gregarious feeding and roosting behavior along rocky coasts in winter. Males give territorial displays, often from rocks or other perches, crouching, tails vibrating, and uttering clicking notes. They perform aerial displays, flying with slow exaggerated wingbeats, and pugnaciously give a tail-down hunch display as they patrol territorial boundaries, feathers fluffed, wings and tail drooping, and head down and pointed at adversaries. Their calls and song have been variously described as *tjy-tjy-tjy*, *quitta-quitta-quitta, quit-it-it*, low-pitched rattles, slurred low whistles, and a short *kee-oo*, *chick-ik*, *kititit*, *kik-yu*, or *chirup*, a mixture of contact calls, aggressive and nuptial vocalizations.

By early June they are on the high arctic tundra making scrapes that they line with mosses, grass, or seaweed. The clutch is four drab olive eggs marked with brown or black, invisible in their tundra nest. Both parents have brood patches and share incubation of twenty-two to twenty-four days, and brooding responsibilities. The chicks are precocial and attended by adults for the three weeks until fledging. The female leaves the nesting area before the male. Adults will give wing-dragging distraction displays if approached and are aggressive in defending the young, often driving away birds many times their size. They are often seen chasing jaegers. The young feed heavily on dipterans, especially adult and larval midges.

Ruddy Turnstones forage alone or in small flocks. They not only flip seaweed and pebbles, but also will push larger object with their breasts, sometimes with several birds pushing cooperatively to overturn a large object such as a dead fish. They are picking, probing, prying foragers, that eat worms, small molluscs, crustaceans – just about any aquatic invertebrate. They also prey on tern eggs, puncturing them with their short, stubby bills. They are aggressive and will attack eggs while the adult tern is incubating them. They will also eat carrion and human garbage. They are true omnivores, eating plant material on the breeding grounds before insects become abundant.

On the breeding grounds they are subject to predation by foxes and avian nest predators, but their high arctic location largely frees them from human disturbance. Their extensive, circumpolar breeding range and enormous coastal wintering range favors their survival, and we can look forward to enjoying these beautiful shorebirds indefinitely into the future.

William E. Davis, Jr.

About the Cover Artist

David Sibley, son of the well-known ornithologist Fred Sibley, began seriously watching and drawing birds in 1969, at age seven. He has written and illustrated articles on bird identification for *Birding* and *American Birds* (now *Field Notes*) as well as regional publications and books including *Hawks in Flight* and *The Birds of Cape May*. Since 1980 David has traveled the continent watching birds on his own and as a tour leader for WINGS, Inc. He has spent most of the last six years at a drawing table writing and illustrating the new *Sibley Guide to Birds*, a comprehensive field guide to North American birds due to be published by Alfred A. Knopf, Inc. in October 2000. Visit David's website, www.sibleyart.com, to see more of his artwork. He lives in Concord, MA, with his wife and two sons.

AT A GLANCE

August 2000

Photograph by Wayne R. Petersen

Without a doubt, this month's puzzler is a seabird. Unlike certain mystery photos presented this year, this bird is not depicted flying upside down, and it also appears to have a head! Even better, it shows a number of salient features that should assist in the identification process. So what's the problem? Quite simply the problem is the same problem that exists when trying to identify many seabirds in the field – trying to obtain a definitive view, often at a great distance, of a flying bird. At least in this case, the quiz photo provides a reasonable view at relatively close range.

Since the pictured bird is prominently white below, has a massive bill, and appears to be large in size, all of the storm-petrels can be eliminated as identification candidates, including the very rare White-faced Storm-Petrel which, although white below, is much smaller and has a dark-colored bill. The Black-capped Petrel, a Gulf Stream-associated species rarely seen in Massachusetts waters, is white below but has a black cap, white forehead, short dark bill, and a distinct, dark diagonal bar on the leading edge of the underwing. This leaves only the shearwaters and albatrosses as possibilities. Although the Northern Gannet in certain plumages could resemble the pictured seabird in some respects, gannet can easily be eliminated by the blunt, unpointed bill and tail of the mystery bird, as well as by its different underwing pattern.

Since none of the regularly occurring Massachusetts shearwater species have pure white heads, it is fair to assume that the mystery seabird is not a shearwater unless it is aberrantly plumaged in some way. Further confirmation comes from the absence of

conspicuous "tubes" (i.e., tubular nostrils associated with olfaction and salt glands located in front of the eyes) on the upper mandible of the bill – a hallmark of all the shearwater and gadfly petrel species. This eliminates all but some species of albatross as a possibility.

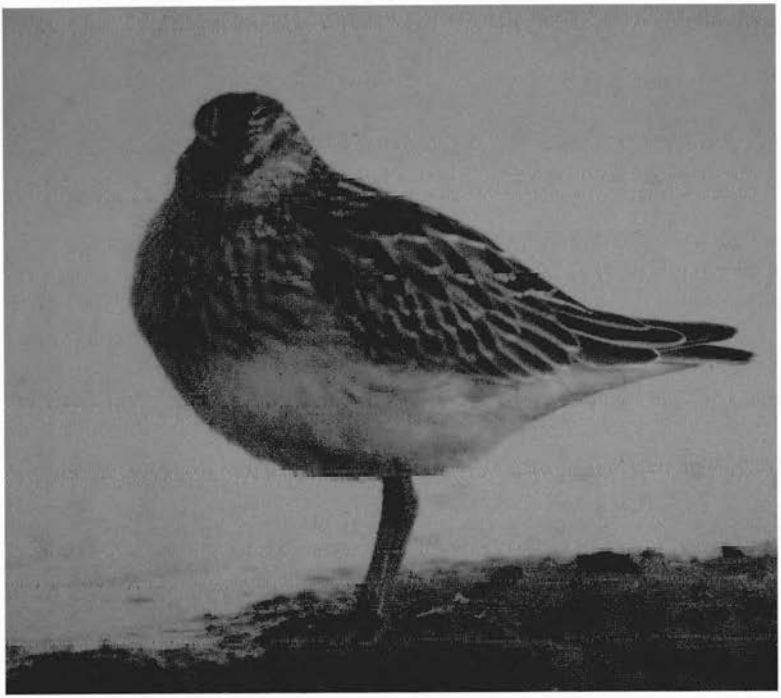
However improbable it may seem, at least two species of albatross have been definitively recorded in the North Atlantic Ocean, as well as in Massachusetts waters. Both recorded species, the Yellow-nosed Albatross and the Black-browed Albatross, belong to a group of relatively small albatross species collectively called mollymawks. Mollymawks are dark-backed, thus superficially resembling Great Black-backed Gulls, although they are much larger, have more massive bills, have a dark trailing edge to the hind wing instead of white as in a gull, and exhibit a flight behavior more like that of a giant shearwater. In identifying any of the smaller albatrosses, among the features to notice are the pattern of the underwings, the color and pattern of the bill, and the coloration of the head.

With these points in mind, the identification of the albatross in the picture is reasonably straightforward. Of the two mollymawks previously recorded in Massachusetts waters, only the Black-browed Albatross has a prominently light-colored bill. Furthermore, this species is distinctive in having a broad, dark leading edge to the underwing and a fairly wide trailing edge as well. Together these wide, dark margins render the underwings less extensively white than in other similar sized species. By comparison, Yellow-nosed Albatrosses exhibit dark (blackish) bills at any distance, with adult individuals possessing a yellow ridge on the top of the upper mandible. More importantly, this species has a narrow, dark border on the underwings and is smaller and slimmer-winged than the Black-browed Albatross. Although both species possess a dark mark around the eye – a feature hardly visible in the photograph – this marking on the Black-browed Albatross is less triangular in shape than that of the Yellow-nosed Albatross. With this information in hand, the seabird in the photo is quite clearly a Black-browed Albatross (*Thalassarche melanophris*). Careful scrutiny of the photo reveals a thin, dark necklace across the upper chest and a dusky marking near the tip of the bill. These two features indicate that the bird is not fully mature, the maturation process in Black-browed Albatrosses usually taking as much as five to six years. The Black-browed Albatross in the mystery photo was photographed in the Scotia Sea south of the Falkland Islands.

The Black-browed Albatross is a rare vagrant in Massachusetts waters with approximately six satisfactory sight reports on record, all of which have occurred in summer or early fall.

Wayne R. Petersen

AT A GLANCE



Photograph by Wayne R. Petersen

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

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CONTENTS