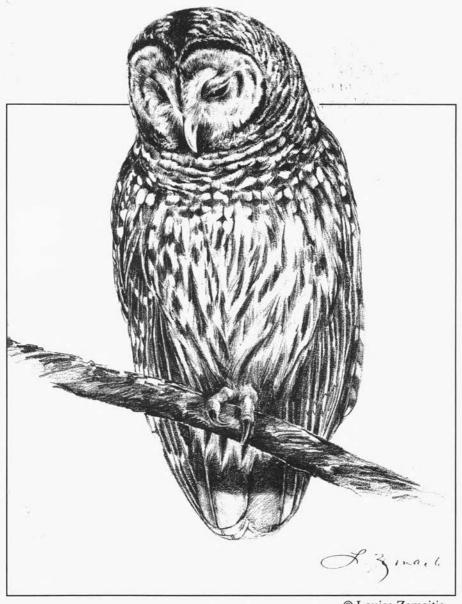
# BIRD OBSERVER



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## BIRD OBSERVER

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To enhance understanding, observation, and enjoyment of birds.

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#### THE MATING GAME

## By Marta Hersek

Avian characteristics that are especially fascinating to birders — elaborate song, ornate plumage, striking coloration — have also been the focus of much inquiry and debate among researchers. The Peacock's tail seems to be so burdensome; the bright red of the Cardinal must make it more conspicuous to predators; and the singing and displaying of a Mockingbird at the top of a tree is surely energetically costly. Charles Darwin in *On the Origin of Species* (1859) asked, "Why have such characters evolved?" Today we are still trying to find an answer to that question.

Darwin's suggestion, which most people still agree with, was that such traits have evolved via sexual selection. As under natural selection,\* heritable traits that confer an advantage to the bearer of the traits become more common in the next generation. Under sexual selection, the traits confer a reproductive advantage due to the ability to better (1) compete with others of the same sex, or (2) attract individuals of the opposite sex. For example, traits that are important in male-male competition include large male body size, weapons (such as spurs), and song. It is relatively easy to imagine how such features could evolve: the male that dominates during a fight wins the territory or access to the female. He then fathers many offspring, out-reproducing his competitor. He passes on his genes — including those for large size or long spurs — to those offspring, so that his genes are better represented in the next generation than his rival's genes. We call this mode of sexual selection "intrasexual selection."

Traits that make an animal (usually a male) more attractive to the opposite sex include elaborate plumage, ornaments such as wattles and combs, and song (note that song can function in both scenarios, as can many traits). This type of sexual selection is termed epigamic (or intersexual) selection. It is rather more difficult to think about how epigamic selection works. That is, what cues should a female use to choose a mate? What sort of benefit would a female obtain by choosing to mate with, for example, an extravagant, brightly colored male, rather than a dull one? Is it really, as Darwin (1859) suggested, that "a great number of male animals . . . have been rendered beautiful for beauty's sake"? The paradox that presented itself to Darwin was how an animal that was more

<sup>\*</sup>Natural selection is the mechanism for evolution which Charles Darwin elucidated. Basically, the theory is that (1) more organisms are produced than survive; (2) there is variation in heritable characteristics which affect survival and/or reproduction; and (3) those animals that have particular characteristics which allow them to survive and/or reproduce better than others will leave more offspring, and hence more of their genes, in the next generation.

vulnerable, or less efficient in its environment, could be preferred as a mate. In this article I'll focus on epigamic selection, and discuss our current understanding of how and why males have evolved gaudy coloration and extravagant ornamentation.

## **Cues Available to Choosy Females**

First, we must discuss what types of traits or cues females might use when choosing a mating partner. I say females because generally they put more energy into the production of their offspring, and so would be expected to be the "choosier" sex. Females are limited, compared with males, in the number of offspring they can produce, and they invest relatively more in each offspring (including investment in eggs, incubation, etc.). It is imperative, then, for females not to "waste" reproductive effort with a low-quality mate. Males, on the other hand, make many relatively inexpensive sperm, and they often expend little or no effort in caring for young. Their best reproductive strategy is usually to try to mate with as many females as possible; by definition, then, males are often not choosy with respect to mating partners.

So how should females go about choosing a good mate? Mate choice cues available to females are generally placed into three categories: (1) arbitrary traits; (2) indicators of the resources or parenting ability of the male; or (3) indicators of the male's genetic quality.

## **Arbitrary Traits**

The first possibility, that mate choice is based on some arbitrary trait, seems to fit in with Darwin's "beauty for beauty's sake," and was actually first postulated by him (Darwin 1871). Although aesthetically it is easy to see why females might choose flamboyant males, it's rather harder to understand why such preferences would evolve. That is, why would a female choose a mate that is very conspicuous to predators — especially when her offspring will suffer the same fate? R.A. Fisher (1915, 1958), the famous statistician and population geneticist, came up with an answer. Fisher suggested that if females prefer some trait, for whatever reason, the trait could be adaptive simply because her offspring will possess it, and therefore themselves be attractive to prospective mates.

Over time the trait could become greatly elaborated by what Fisher called runaway selection. The basic idea is that a positive feedback loop would occur; if females prefer a trait, then genes for that preference are passed on to their daughters, while the genes for the preferred trait are passed on to their sons (via their chosen mate). In the next generation, more males should possess the preferred trait, so females might choose to mate with those that are just a bit

more striking than the others - maybe the tail is a bit longer than all the rest, or the breast a bit redder. This leads to an evolutionary arms race, with each generation of males being a bit fancier, and each generation of females preferring the most extreme males. The reason for the initial preference is unimportant in this scenario; it could be based on aesthetics, or the trait could have originally given the female some useful clue about her prospective mate. Overall, this theory is difficult to test; unfortunately, people often simply assume that it has occurred in cases where we see no obvious adaptive value for a trait. The classic example is the elaborate tail of the Peacock. Why would a female mate with a male burdened by such plumage? There is evidence that females do prefer larger tails — they investigate a number of males, and choose to mate with the male with the most feathers in his tail (Petrie et al. 1991). In this case Petrie found that the offspring of males with more elaborate tails actually grow and survive better than offspring of less spectacular males (Petrie 1994), but in most cases it's not at all clear what sort of advantages females obtain from their choices.

## **Indicators of Male Ability or Resources**

The second possibility, that females choose males with some necessary resource, is relatively intuitive, and it is well documented for some animals. A female that chooses to mate with a male whose territory is good for raising offspring will obviously do better (i.e., raise more offspring to fledging) than a female that mates with a male in an unsuitable area. For example, Indigo Bunting females prefer to settle in territories that contain good food resources. even if it means sharing the territory with another female (Carey and Nolan 1975). Females might be able to judge how good of a provider a male will be by listening to his song, or estimating his body size, and so those characteristics come to be cues used in mate choice. Furthermore, in many cases older males tend to be larger, so females can judge experience using body size. One elaboration of this idea, called the handicapping principle, suggests that by selecting for males that have outrageous traits, and the problems that go along with them, females are able to choose males that can live and flourish despite a handicap (Zahavi 1975). These males must be of extremely high quality, and therefore should be chosen as mates.

Studies of plumage patterns in birds have recently produced interesting insights into the "male quality" hypothesis for female choice. First, work by Hill on House Finches has shown that plumage brightness and color can be reliable indicators of male quality and foraging ability. Hill (1994, 1995) found that females prefer more brightly colored males, and that the brightness of a male's plumage depends upon his diet. The red pigment is derived from carotenoids which the male obtains from his food (the same pigments which give carrots

their orange color), so the brightness of the male indicates something about his ability to find food, and possibly about his overall level of health.

Furthermore, this is a signal that cannot be faked — a male cannot have red feathers without having a proper diet. Work done by Slagsvold and colleagues with European Pied Flycatchers shows that females can use plumage coloration as an indication of other male characteristics (Sætre et al. 1994, Dale and T.Slagsvold 1996). In this species, females prefer brighter males, and brighter males tend to be larger, older, and more experienced. They also tend to disappear more often, apparently due to predation by Eurasian Sparrowhawks. This is an interesting point — there is a cost to being attractive to females, and probably not all males can sustain that cost. Females can therefore use these "honest" cues to reliably determine male quality.

### **Good Genes**

The third possible type of cue used by females is the most controversial. Can females really choose a male with "good genes," based on some external cue? Wouldn't all males advertise "good genes," whether or not they had them? In 1982 Hamilton and Zuk wrote a provocative paper which has influenced many studies of sexual selection ever since. They suggested that one set of "good genes" that should be very important to prospective mates is the genes that confer resistance to parasites. In domestic poultry, for example, genetic resistance to one important parasite is known to be heritable (Johnson and Edgar 1982). Since parasitic infections are often very important in the life-history of animals, and since they are often debilitating, females should select mates that carry resistance genes whenever possible. General good health and freedom from parasites is important for the maintenance of healthy plumage, especially when it is brightly colored, so Hamilton and Zuk suggested that bright coloration could be used as a cue to an animal's health. They reasoned that this type of cue should be especially important in species that face heavy parasitism, so they hypothesized, and found, a positive relationship between how brightly colored various bird species were and how much parasitism they faced. They also predicted that within a species, birds with lower parasite loads would be better able to maintain their brightly colored plumage, and other elaborate traits, than more parasitized birds. In one test of this hypothesis, Møller (1991) studied male Barn Swallows, which attract mates by singing and displaying their long tails. He found that increasing their parasite load decreased their singing rate, indicating that parasitic infections can take a toll on birds, and that females might be able to use song as a cue about the male's health. Since then, many other studies have looked at how individual characteristics vary with individual parasite loads, and whether females use such information during mate choice. A number of examples follow.

In Red Jungle Fowl, Zuk and colleagues (1990a, 1990b, 1990c) found that females prefer to mate with males that have large, brightly colored combs, and that comb size and color are decreased when the animal is burdened by nematode parasites. Since bare skin reflects the current state of the animal (while feathers reflect the bird's health at the time of molting and new feather growth), its coloration and general appearance can be reliable cues about the male's present state. At a recent scientific meeting (Animal Behaviour Society 1997), Zuk presented more evidence that comb color and size may indicate male genetic quality. She showed that males with larger combs have stronger immune responses, indicating their better ability to fight off disease and infection. This is especially interesting in light of the fact that most male secondary sexual characteristics are under the control of the male hormone testosterone, which tends to suppress the immune system (e.g., Folstad and Karter 1992). So while we might expect a "macho" male to have a suppressed immune system, he is actually strong enough to maintain his immune system and, therefore, his health. Saino and Møller (1994) found a similar relationship between parasites and testosterone in Barn Swallows. They found that males with longer tails (which are preferred by females) had higher levels of testosterone, but they had fewer lice. Finally, Buchholz (1995) found that female Turkeys prefer males with larger, brighter ornaments, and those males also had lower parasite loads. In general, these studies indicate that females apparently are able to use external cues to choose mates that are healthy and able to fend off parasites, and that such resistance may be a reflection of genetic quality.

Of course, things can't be that simple, with each system providing more evidence for our theories! In 1993 Davidar and Morton were studying Purple Martins, and they found that females preferred older, brighter males over younger ones. So far, so good. They also found that Purple Martins have fairly high levels of blood parasites (Davidar and Morton 1993). Unlike the above studies, however, the older, preferred males were more likely to be parasitized than the younger, nonpreferred males. Although this finding seems exactly opposite to the hypotheses outlined above, Davidar and Morton provided the following explanation. They suggested that although many animals attempt to avoid parasitism, another way to approach the problem is to evolve ways of living with the parasites. That is, instead of resistance genes, these birds would have some "coping" genes. They suggested that the reason so many older males have parasites is that they have lived through the initial, virulent infection to which many younger birds succumb. In a sense, these males have been "tested" and found able to live with a chronic infection. Furthermore, infection does not decrease a male's ability to guard his mate, or provision his young (Wagner et al. 1997). Adult Purple Martins have glossy purple feathers, and those males that can maintain such plumage, often in the face of chronic parasitic infection, are the ones females prefer to mate with.

Finally, a recent study calls into question the original Hamilton and Zuk finding of a relationship between species-typical coloration and the amount of parasitism the species is subject to. Garvin and Remsen (1997) suggest that there is an important factor that few researchers have considered with respect to parasitism. They point out that nest height is positively related to overall parasitism — those birds that nest in the canopy face significantly more parasitism than those that nest on the ground. Furthermore, canopy dwellers also tend to be more brightly colored. Therefore, the relationship between bright coloration and parasites might be a by-product of the relationships between nest height and coloration, and nest height and parasitism.

## In Conclusion

Although it might be obvious to most listeners that a male Winter Wren is singing a love song, it probably isn't so evident that we're eavesdropping on a very complex system. Not only is the male trying to keep other males away and gain the attention of a female, he may also be demonstrating his good health and parenting ability. When you next flush a Ring-necked Pheasant and are considering the weight of his tail, you might imagine that it really could make him more vulnerable to predators; perhaps then you'll be impressed that he's managed to survive at all, given such a handicap. And next time you're birding and you see a flash of red as a Scarlet Tanager flies through the forest, you'll wonder if there's a well-informed female nearby, and just what choices she's making. . . .

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# OUTRAM BANGS AND THE CREATION OF A WORLD-CLASS BIRD COLLECTION AT HARVARD'S MUSEUM OF COMPARATIVE ZOOLOGY

By William E. Davis, Jr.

Outram (pronounced *ooh-tram*) Bangs was a very lucky man: he found a job in later life that was exactly suited to his personality and the way he wished to spend his time; and through his position as a curator of birds at the Museum of Comparative Zoology (MCZ), he gained an international reputation in ornithology. He was also fortunate to live during an era in ornithology that suited well his temperament and ambitions.

Outram Bangs was born on January 12, 1863, in Watertown, Massachusetts, which was then a rural area of farm, fields, and forests. He was named after his great-uncle, Sir James Outram, and Outram was his mother's middle name (Barbour 1932). Outram and his brother Edward, who was two years older, roamed the local countryside as boys, making collections of birds' eggs and nests as well as small mammals that they procured with sling-shots (Peters 1933a). Although their interests remained focused on mammals until the turn of the century, both Edward and Outram were elected to the Nuttall Ornithological Club on March 15, 1880. Batchelder, in his history of the Club (1937), comments on the inseparable Ned and Outram, and of the latter says:

None among us had the inspired vision even to dream what the latter had before him. We knew him as a youthful boxer, as a keen quail-shooter, we saw his dazzling waistcoats, but no wild imagining could have pictured the all-embracing systematic knowledge of birds and the great collections of his building, that together have added to the fame of a great museum. [Museum of Comparative Zoology (MCZ), Harvard University]

Outram Bangs was to have a career of long and distinguished service to the Nuttall Club. He was a member of its governing council from 1897 to 1930, and was nominated for vice-president (but not elected) in 1919, following the death of president William Brewster (Davis 1987).

His career at the MCZ is even more outstanding, and it was at the MCZ that Outram Bangs was to carve himself a niche in ornithological circles and provide a legacy that extends to the present day. Outram attended Noble's School in Boston, entered Harvard College in 1880, and graduated in 1884. Presumably he made connections at the MCZ during his undergraduate years. After college he tried working but apparently found it distasteful, and since he came from a well-to-do family, he turned his attention to his first love — collecting birds and mammals with his brother. During the last decade of the nineteenth century, he

devoted his energies to the study of the mammals of eastern North America, trapping and hunting from Nova Scotia to Florida and hiring collectors to supplement his own efforts. He published his first paper in 1894 on mammalogy, and by 1900 had published more than 70 papers, of which fifteen were about birds (Porter 1943). His formal connection with the MCZ began in 1899, when the MCZ Visiting Committee raised \$5000 to purchase the Bangs brothers' mammal collection of about 10,000 skins and skulls (Barrow 1995). Following the sale of his collection, Outram was duly appointed Honorary Assistant in Mammalogy. He was already changing the focus of his energies to birds, and in addition to curating the mammal collection, functionally took over the curatorship of birds from William Brewster. Brewster was nominally the curator, but put most of his energies into amassing his own private collection of birds. This was consistent with the attitude of Alexander Agassiz, who was concerned about reducing expenses (Brewster received no salary) and thought that there was an overemphasis on acquiring specimens in the MCZ (Barrow 1995). When Outram began formally working at the MCZ (also at no salary) in 1899, the bird collection stood at slightly over 30,000 skins. When he died in 1932, the collection was at about a quarter million, making it about equal in number to the U.S. National Museum (Smithsonian) collection, and ranking behind only the collection of the American Museum of Natural History in New York, which at the time may have been the largest collection in the world (Peters 1933b).



Photograph of Outram Bangs reproduced by permission of the Museum of Comparative Zoology Archives, Harvard University.

Although responsible for curating the birds and mammals of the MCZ, he lived in the shadow of William Brewster, who retained the title of Curator of Birds until his death in 1919. Outram's title was changed over the years — Assistant in Charge of Mammals in 1904, Curator of Mammals in 1911, Curator of Mammals and Birds in 1919 — but it was not until 1924 that he finally became the official MCZ Curator of Birds, a title which described what he had been doing for more than a quarter century (Peters 1932a). In addition, he had chronic difficulties with the MCZ Director, Samuel Henshaw, who came to that office in 1904, several years after Alexander Agassiz had decided to step down. Henshaw, "who, by training and temperament, was utterly unfitted" for the job, and whose appointment was described as "one of Mr. Agassiz's extraordinarily stupid acts" (Barbour 1935), remained as Director until 1927, when he was forced to retire at age 75. Apparently enraged by the decision, he is reputed to have burned a sizable number of MCZ documents, and he never reentered the MCZ during the remaining 14 years of his life (Winsor 1991).

Outram's troubles with Henshaw show up from time to time in letters to Henshaw, and suggest that Outram was a rather sensitive soul, and one who would not tolerate insult. Their troubles began early, as a 1904 letter indicates:

#### Dear Mr. Henshaw

I am very sorry I carelessly left the door of the bird room open yesterday. I believe this is the only time I ever did such a thing, and I am so particular about such that I have often gone up stairs again to be sure I had shut the doors.

As to your other accusation, that I took birds belonging to the Museum and left no record, I did nothing of the sort. . . . Not a bird belonging to the Museum was disturbed in any way. If anyone said that I did such a thing they simply said what was not true.

I also yesterday compared some West Indian hummingbirds in company with Austin Clark, with material in the bird room, bringing out my own skins and taking them back again. This — to compare any of my birds with birds in the museum — Mr. Brewster told me to do whenever I wanted to. Still if there is going to be any fuss made about it I shall never put my foot in the bird room again.

In a March 1, 1909, letter to Henshaw (MCZ Archives), Outram offered his personal collection of bird skins to the MCZ, with the proviso that he would have space available to write, work, and keep his papers and books, and have free access to the Museum bird collection and the right to work on it. He valued the collection at \$20,000, and described it as "about 23,000 skins (all picked with no rubbish)." The gift and stipulations were apparently accepted, but despite the fact that the MCZ got his considerable curatorial services for

nothing, as well as the birds, troubles with Henshaw continued to flare up from time to time, as illustrated in a October 17, 1914, letter to Henshaw:

There is some misunderstanding about birds in some way. I certainly took no birds belonging to the Museum. In fact I took no birds at all. . . However this may be I had taken a good deal of interest in the col. of birds in the Museum, and had named and identified many things that came in. I had also been instrumental in getting quite a lot of stuff there, but as I hate rows and petty jealousy more than any thing else in the world I shall never again touch a bird skin belonging to the Museum or enter the bird room under any circumstances whatever, Except once, and that will be to collect up a lot of my own things that are there.

Once again his threat to leave the Museum went unfulfilled, and he continued to play the dominant role in the Bird Department. Outram was a meticulous person who insisted in keeping the collection of birds tidy with bird skins arranged in neat rows in their trays. He was also meticulous about preparing bird skins. This obsession with neatness and order produced an MCZ bird collection that was eminently user-friendly.

Outram worked together with his wealthy friend John Eliot Thayer to hire collectors to help build the MCZ collections, and together they attracted other patrons, including John Phillips, who is best remembered for his four-volume *The Natural History of Ducks* (1922-1926). The burgeoning collections — particularly of the 1920s — drew a number of local ornithologists with their collections, mostly Nuttall Ornithological Club members including Thomas E. Penard and Frederic H. Kennard. This renaissance was aided by the generous patronage and support of Thomas Barbour, who was to become the next Director of the MCZ, and the generous bequest of William Brewster. Outram responded by undertaking the ambitious plan of acquiring specimens of all the world's genera of birds, and by 1932 the MCZ had all but 49 of the then-recognized genera (Barrow 1995). Outram Bangs was largely responsible for converting the MCZ bird collection from mediocre to world-class. In addition, he was the mentor and teacher of James Lee Peters, who would replace him as Curator of Birds.

His own research was decidedly nineteenth century in its orientation. He produced about 275 papers, primarily involving descriptions of new genera, species, and subspecies, together with taxonomic and nomenclature discussions (Peters 1933a). Even his best friends admitted that he would not "generalize or put a surmise on paper" (Barbour 1932), and he has been described as an "uninspired author who avoided making the kind of generalizations that might have made a more lasting mark on the literature of ornithology and evolutionary biology" (Barrow 1995). Outram had little formal training in biology and lacked an advanced degree, which may have made him hesitant to make those

generalizations. Many of these papers were published in the *Proceedings* of the New England Zoological Club, a "club" that Outram and four other naturalists created solely to give them a rapid publication outlet for their taxonomic papers. Like most of the traditional museums that had developed in the nineteenth century, the MCZ was oriented toward natural history, which meant collecting, describing, naming, and classifying organisms, and had been increasingly challenged and/or superseded by academic departments which were laboratory oriented and emphasized cytology, embryology, and genetics (Barrow 1995). Nonetheless, he developed a special interest in the birds of China, and during a 1925 trip to Europe, where he made visits to the important museums, he arranged to buy the J. D. LaTouche collection of the birds of China, which helped build the MCZ China collection to preeminence in the world (Peters 1933a).

His personality traits and character are somewhat enigmatic. He is referred to by his friends and mentors as "forceful," "kind," "genuine," "enthusiastic," "philosophical and calm." But he was also described as shrinking fearfully from speaking before even a small group, shunning honors and recognition, and as "painfully harassed as he stood in Sanders Theatre to receive the honorary degree which Harvard gave him" [1918] (Barbour 1932). None of the memorials mention his having any employment, and yet he managed the family cranberry business in Wareham, and although shy and retiring, he states in a September 22, 1910, letter about problems with the cranberry pickers, "They have struck on me once this year, but this year being a light crop around here, I could tell them to go to hell. Which I promptly did, and next day they were back again, and went on at my figures." Barbour (1932) recounts a story of a rushhour episode on the Boston subway when a woman carrying a heavy bundle was jostled by a young man forcing his way on board: "Bangs was next to her, and like a flash his fist struck out and the man fell limp to the pavement." Kind, shy, and hating confrontation not withstanding, it appears that the old Outram Bangs as a boxer and champion wrestler at Harvard still emerged from time to time.

Witmer Stone, editor of the American Ornithologists' Union journal *The Auk* for a quarter of a century, suggested that Outram had a better knowledge of the birds of the world than any other American ornithologist of the time. Certainly, his accomplishments at the MCZ support such a claim. But his letters preserved in the MCZ Archives demonstrate that he was more than just an ornithologist. They show him to be a broadly based naturalist, with references to "those big southern grasshoppers" which turned up in September; chasing that "long-bodied dragonfly"; having "done up another cigar box of insects and will send them to you next time I go to Wareham"; or "haven't found a single box turtle, but they will turn up." Perhaps his published work has a nineteenth century ring to it, and perhaps many of his subspecies and a few of his species have, or will disappear into the oblivion of synonymy as DNA-hybridization and other molecular techniques frame new a context for taxonomic ornithology.

But his more important legacy is the bird collection at the MCZ. With the passing of Outram Bangs the acquisition renaissance for the bird collections of the MCZ lost its momentum, although it would continue to a lesser degree under the curatorship of James Lee Peters.

Outram Bangs was one of those fortunate people who was able to do pretty much what he wanted to do in life — and make a substantial contribution at the same time.

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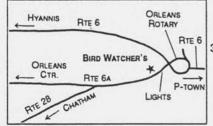
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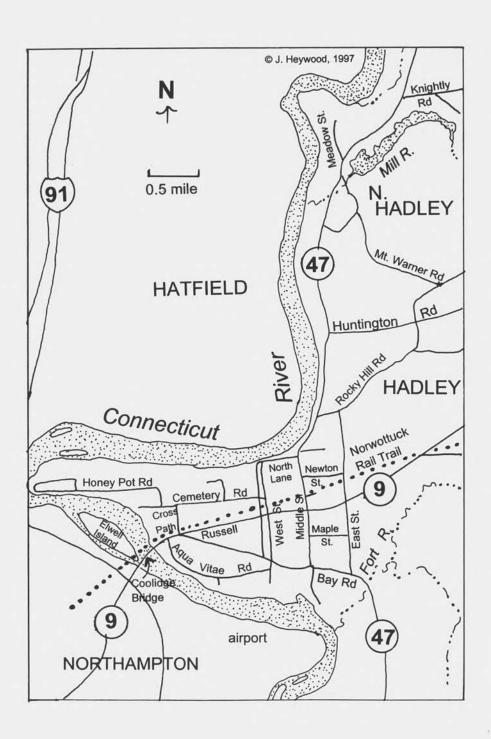
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## BIRDING THE CONNECTICUT RIVER VALLEY IN HADLEY, MASSACHUSETTS

(Editor's note: This month's where-to-go article is an excerpt from a new birding guide called Birding Western Massachusetts: The Central Connecticut River Valley — The Kestrel Trust Area. The Kestrel Trust, the area's conservation land trust, joined with the Hampshire Bird Club to publish this guide. Since its founding in 1970, Kestrel has taken a lead role in protecting the bird and wildlife habitat of this rich area. The Hampshire Bird Club was established in 1984 and is now one of the largest and most active bird groups in western Massachusetts.

Chapters from some fifteen contributors, among the most experienced birders in the region, cover more than fifty of the best birding sites in the Kestrel Trust area, which comprises nine towns in north-central Massachusetts between the Connecticut River on the west and Quabbin Reservoir on the east. Their descriptions include the best seasons to visit, birding high points, past records, rarities, and directions. The guide is aimed at both local birders and visitors to the region, offering a wide range of possible stops, drives, or walks. Also included are a seasonal checklist for the area, chapters on owls and other specialties, and a history of the area's Christmas Bird Count.

To order the guide, send \$13 to the Kestrel Trust at P.O. Box 1016, Amherst, Mass. 01004. For more information on the Trust, call chairman Jim Scott at 413-256-6233 or write to him at the same address.)

## The Honey Pot and Adjacent Connecticut River

**Habitat**: Corn and vegetable fields, tree and shrub nurseries, river and river's edge, shrubby edges, river dike, very small airport, and town transfer station (formerly landfill).

Birds of Special Interest: Great and Snowy egrets, Common Merganser, Northern Harrier, Vesper Sparrow, Horned Lark, Snow Bunting, Common Goldeneye, Bufflehead, Ring-necked Duck, White-crowned Sparrow, Claycolored Sparrow, Short-eared Owl, Common Redpoll, many others.

**Directions**: From Route 9 immediately east of the Coolidge Bridge over the Connecticut River, take Cross Path Road north into the Honey Pot farmland area. Note: left turns onto Cross Path are now prohibited for eastbound traffic; for those coming across the bridge from Northampton, proceed on past Cross Path to West Street and turn left there and left again onto Cemetery Road, which meets Cross Path at a T-intersection (see map).

Historically, the Honey Pot has been one of the best areas along the Connecticut River in Hadley for encountering birds of the open country. In recent years the flavor of the landscape has changed a bit and may not be quite so good as in years past — instead of corn and asparagus, a large portion of the area has been converted to ornamental shrubbery requiring more thorough removal of weeds. This change may have benefited Vesper Sparrows, but the areas best for hawks, owls, and sparrows have shrunk. However, it is still a highly worthwhile stop.

Once you turn onto Cross Path Road from Route 9 (from the east only), you'll immediately cross the Norwottuck Rail Trail, the paved bike path running from South Amherst across Hadley to Northampton. The rail trail is used heavily, especially in the summer and fall, so if you decide to bird anywhere along the bike path, do it in the early morning to avoid traffic. The thickets along the path leading either west to the bridge or east toward the center of Hadley produce species like Downy and Hairy woodpecker, Northern Mockingbird, Northern Cardinal, Tree Sparrow (winter), Song Sparrow, and White-throated Sparrow.

A walk out to the bridge in the early morning to scan up and down the river may produce Great and Snowy egrets (summer), Canada Goose, Hooded and Common merganser, Bald Eagle and, if the river is low enough sometime from late July through early September, an occasional shorebird on Elwell Island north of the bridge.

Once you've returned to Cross Path Road, continue north to a T-intersection. Take a left (west) here onto Cemetery Road (not marked) and park a short way down the road.

From late fall through early spring the Honey Pot can be fairly good for hawks. Scan the trees for Bald Eagle, Red-tailed Hawk (fairly common), and maybe even a Rough-legged Hawk. Your tree-top viewing may also produce a Northern Shrike. Years ago in April Loggerhead Shrikes would turn up from time to time, but that hasn't happened recently. Scan the fields and you may come across a Northern Harrier, Sharp-shinned Hawk, Cooper's Hawk, Merlin, or even a Peregrine Falcon. In spring, this is an area in which to listen for Vesper and Savannah sparrows. Continue west toward the river and take your first and only right, following this road until it bears left and straightens out again. Park here. In winter, check the harvested corn fields for flocks of Horned Larks, scan through the flock for possible Lapland Longspurs (rare) and the more frequent Snow Buntings. During spring, Snow Bunting numbers have approached 500. The corn fields can also produce hundreds of Mourning Doves.

Just a short way down the road look for a small airstrip on the right-hand side. This runway is used by a local hobby club for remote-control aircraft. The road that leads down to the main area has sumac on the left-hand side, sometimes producing wintering Eastern Bluebirds. Also check for Downy Woodpeckers and Northern Flickers along with Song Sparrows and Tree Sparrows that have been seen in the area.

If you're feeling adventurous, continue down the road and bird the tree line down by the Connecticut River. In winter, you'll probably encounter more woodpeckers: Downy and Hairy are the most likely, but Red-bellied and Pileated cannot be ruled out. Black-capped Chickadee, Tufted Titmouse, White-breasted Nuthatch, and maybe a Brown Creeper should be here. Depending on the severity of the winter, you may scare out a Belted Kingfisher or two. Even though this area along the river can be quiet, one observer found a Black-backed Woodpecker just a few years ago, so there's always hope for a surprise or two.

Back on the main road, keep heading west until you come to a wide turnaround. The road does continue, but it's private from here on. At the turnaround you'll have a fairly clear view of the river. In winter check for Common Goldeneye and Common Merganser. If the river is low, look for gulls on the exposed banks — Ring-billed, Herring, and Great Black-backed will be your best bets. During the spring, you may come across Wood Duck, American Black Duck, Mallard, Ring-necked Duck, and Bufflehead.

Follow the road back to the intersection with Cross Path. Continue straight ahead (east) and go up and over the dike. Proceed down Cemetery Road and look for the remains of an old tobacco barn on your right that once produced a Barn Owl. Scan the fields on both sides of the road. Here during spring or fall you may find American Pipits; in winter a Snowy Owl has been known to appear. As a rule, this area is not as productive for sparrows as the land west of the dike, although Vesper Sparrows have nested in the ornamental nursery.

A little farther down the road you'll see a road on your left that leads to the Hadley Transfer Station. Take this road and park near where the road bears left. The transfer station is not like most landfills in the region — it does not attract hordes of gulls, but its brushy edges are good for sparrows. Work your way to the dike and head west, birding around the backside of the area. In the fall you are likely to encounter Chipping, Song, Lincoln's, Swamp, White-throated, and White-crowned sparrows. Scan the river for more waterfowl and the trees across the way on the Hatfield side for Red-tailed Hawk, Bald Eagle, and who knows what. A Gyrfalcon once glimmered on top of those trees years back, and a Long-eared Owl appeared in the red pine grove near the river northeast of the transfer station.

Some of the most important spots to bird while in the Honey Pot vicinity are the weedy fields. As mentioned earlier, recent farming trends in the Honey Pot area have reduced the number of these weedy fields, but those that remain should still be birded. There can be a great number of sparrows — Field, Savannah, Song, Swamp, White-throated, and White-crowned. Less likely but also possible are Clay-colored, Lark, Vesper, and Fox sparrows. While walking the fields you may flush a Short-eared Owl, which has happened on more than one occasion. If it happens to be a "finch winter," Common Redpolls may occur by the hundreds.

The Honey Pot is not birded much for vireos or warblers, mainly because it has few wooded areas. If you venture in between April and mid-September, remember to keep off the farm fields.

There are also several nice birding spots along the Connecticut River as you head north on Route 47 from Route 9 (intersecting at the center of Hadley about a mile east of Cross Path Road). I will focus on only a few, but there are others to discover.

After birding the Honey Pot, continue east on Cemetery Road and at the stop sign take a left onto West Street. When West Street starts to bend to the right, just in front of you is a pulloff. This spot gives you a good opportunity to view the river. Look here for waterfowl during migration and in the winter. From here, continue around the bend, where West Street becomes North Lane. Follow North Lane to the stop sign at Route 47 and take a left (north).

Head up Route 47 for 1.2 miles to a right turn onto Huntington Road. Park immediately on your right. Back across Route 47, opposite Huntington Road, you'll see a farm road heading down toward the river. The area along this farm road is best primarily from late summer through the beginning of October. At the corner of Huntington Road a Great Gray Owl hung out for more than three weeks in February 1984.

The area has two parts to it, the upper and lower areas. As you head down the road (upper area), bird the tree line and thickets that separate you from the cornfield on the right-hand side. There are thickets on the left where a Mourning Warbler has turned up on a couple of occasions, but most of the action has traditionally been on the right.

As mentioned above, the best time here is from mid-August through early October. During this period, look for flycatchers — Olive-sided (rare), Alder, Willow (good luck), Least, Eastern Phoebe, and Eastern Kingbird. Along with Warbling, Philadelphia (rare) and Red-eyed Vireos there are often numerous warblers — Tennessee, Nashville, Northern Parula, Chestnut-sided, Yellowrumped, Black-throated Green, Blackburnian, Bay-breasted, Blackpoll, Black-and-white, American Redstart, Connecticut (rare), Mourning (rare), Wilson's, and Canada. Also keep an eye peeled toward the sky for migrating geese and hawks. Check the power lines for Red-tailed Hawks; the power poles have also produced Red-headed Woodpecker.

Continuing down the road, you'll notice that the road descends sharply into phase two of this little walk. The area here is a little more enclosed, with thickets and nice patches of jewelweed on the left side. Check this site for more flycatchers, vireos, and warblers. This is also pretty good for a variety of sparrows — Chipping, Song, Lincoln's, Swamp, White-throated, and White-crowned. Also look for Scarlet Tanager, Northern Cardinal, Rose-breasted Grosbeak, and Indigo Bunting. A Blue Grosbeak was even discovered here once in recent years.

Follow the road through a dense area of trees out to the Connecticut River. In July and August, if the river is low, look for shorebirds on exposed flats. The most common shorebirds will be Killdeer and Spotted Sandpipers. However, Greater and Lesser yellowlegs and Semipalmated and Least sandpipers have been reported on a number of occasions. Scan the river and you may see Double-crested Cormorants, Osprey fishing, and hundreds of Tree and Bank swallows around the high tension lines from late July through most of August. Bird your way back to the car and continue.

Back in your car, head north up Route 47 for 1.2 miles and enter a driveway on your left just after you go through an S curve. Quickly bear off to the left from the main driveway and walk down toward the river. (A few years ago the property owner placed a barrier about three-quarters of the way down the road to prevent late night activities.)

This area along the Mill River has not been birded as much in the spring and fall as in winter months. You will find that the forest on the left side is good for spring and fall migrants, although better views can be had elsewhere. This area also has less of the thick weedy vegetation found at Huntington Road and consequently fewer species that prefer that habitat type.

In the winter months, look and listen for Belted Kingfisher along the stream down to the Connecticut River. Great Blue Herons have also been recorded during mild winters. In recent years, a Red-bellied Woodpecker has staked a claim to this area, and Pileated Woodpeckers can appear at any time. In the brushy spots, look for Carolina Wren, Tree and White-throated sparrows, and the Eastern Bluebirds that sometimes feed in the sumac along the edge of the fields.

Park your car at the road block and walk down to the main river. In winter look for Common Goldeneye and Common Mergansers. In spring and fall, Double-crested Cormorant, Wood Duck, American Black Duck, Mallard, and Ring-necked Ducks are possibilities. In summer, look to the south for a large sandbar where at times a large flock of mostly American Black Ducks and Mallards will mass. Scoping through them, you may pick out something different like Northern Pintail or American Wigeon. The sandbar has produced more than fifteen species of shorebirds over the years, but unfortunately, you will have difficulty picking out much from this distance. Access to the sandbar can be had back toward Huntington Road, but is on private property!

Return to Route 47, proceed north 0.4 miles, and take a left onto Meadow Street. Head down Meadow Street while checking nearby feeders in winter. Dickcissel and White-crowned Sparrow have turned up here in past years. At the end of Meadow Street you'll notice that the road starts to slope down. Park your car off to the left, making sure you don't block the entrance to the barn or other roads. Again, this area is birded more in the winter than at other times, although it shows great promise for spring and fall migrations.

Head down the road and check the marshy area on the right for Swamp Sparrow in mild winters, and then continue around to the left and bird along the edge of the woods as you head toward the river. Along the way look for Downy Woodpecker, Northern Flicker and other typical New England species — Black-capped Chickadee, Tufted Titmouse, White-breasted Nuthatch, Northern Cardinal, American Tree Sparrow, Song Sparrow, and Dark-eyed Junco. Keep a watchful eye out for Sharp-shinned and Cooper's hawks.

As you get closer to the river, approach quietly; at times waterfowl will be close to the bank. Past visits during the winter months have produced a couple of thousand Canada Geese, Wood Duck, American Black Duck, Mallard, American Wigeon, Common Goldeneye, and Hooded and Common mergansers. Scan the trees along the river for Bald Eagle and Red-tailed Hawk. Continue along the edge of the field heading north. Here you may find Northern Cardinal or in the sumac Eastern Bluebird. Scan the trees for blackbirds — Common Grackle, Brown-headed Cowbird, and less commonly during the winter, both Red-winged and Rusty Blackbirds.

Continue on and you'll see where a stream comes up to the edge of the field. Check the brushy areas along the stream for more American Tree, Song, and White-throated sparrows, and Dark-eyed Juncos. Across the stream you should see a weedy field; check here for more sparrows. To get to the field, continue along the stream until you come to a road that crosses it. After birding the field, make your way back to your car. On the way back you'll see a nice cattail marsh on the left, which is worth checking even in winter. A little farther down the road the marsh fades into a brushy swamp. During finch winters, Common Redpolls have been found feeding on the seed pods of these trees.

As I mentioned earlier, this last spot has seen limited birding, and practically none during spring and fall migrations. With its diverse habitat, this area has great potential. If you do venture here in the spring or fall, remember that this is active farmland and stay out of the fields. Enjoy your trip!

## **Aqua Vitae Road**

This small area of farmland wedged between the Connecticut River, Route 47, and Route 9 has been a favorite for local birders for many years. The area is best in spring, fall, and winter. In summer, during the growing season, access is fairly restricted by the crops.

As mentioned above, one may enter Aqua Vitae Road from either Route 47 or Route 9. In the spring, especially from late March through mid-April, the entrance to Aqua Vitae road off Route 47 (Bay Road) may be closed by flooding. If so, you should enter from Route 9 (Russell Street) and follow Aqua Vitae Road until you see water.

The waterfowl to be found here in March and April will largely be the same ones you can see at Hadley Cove. However, Aqua Vitae Road gives you a different angle from which to scan and perhaps get even better looks. You should walk straight in to the west off Aqua Vitae. Other birds to look for around the water's edge or in any small pools created by floods or spring downpours are herons, most likely Great Blue and Green, Greater and Lesser Yellowlegs, Solitary Sandpiper, Spotted Sandpiper, and Common Snipe.

During late March and April check the fields for Horned Larks, American Pipit, Vesper Sparrow (rare), Red-winged Blackbird, and Common Grackle. Occasionally you may run into a lingering Tree Sparrow, Lapland Longspur (rare) or Snow Bunting. Other April migrants to watch for in the open fields or overhead include a variety of raptors, Turkey Vulture, Osprey, Northern Harrier, Sharp-shinned, Cooper's, Broad-winged, and Red-tailed hawks, American Kestrel, Merlin, Peregrine Falcon, and Chimney Swift along with Tree, Bank, Cliff, and Barn swallows.

During the height of spring and fall migration, the forests and thickets around the fields can be productive. However, the woodlands that run along the east side of the Connecticut River have in recent years been posted with "no trespassing" signs. If you bird this area, you will have to stay at the edge of the field. The woods and thickets on the south and east sides have no signs, but your exploration will be limited by thickets and marshy areas.

In these areas look for Red-bellied (uncommon), Downy and Hairy woodpeckers. Red-headed Woodpecker (rare) has also been recorded here. Flycatchers, wrens (Carolina, House, and Winter), kinglets, vireos (Solitary, Warbling, and Red-eyed), more than twenty species of warblers, sparrows (Tree, Field, Vesper, Savannah, Fox, Song, Lincoln's, Swamp, White-throated, and White-crowned), Dark-eyed Junco, blackbirds (Red-winged and Rusty), Grackle, Brown-headed Cowbird, and finches may also be found.

Note that summer birding on Aqua Vitae Road tends to be on the quiet side and is usually better along the river where at times, depending on the water level, a fairly large sandbar will develop. Access to the sandbar is somewhat difficult — it is situated about 100 yards south of the last house on the road as you come from Route 9. Look for Double-crested Cormorant, Great Blue Heron, Great and Snowy (rare) egrets, Little Blue Heron (rare), and Green Heron. You can also scope this sand bar from the Northampton side of the river.

Shorebirding begins around the middle of July and some twenty species of shorebirds have been recorded, including Black-bellied, American Golden, and Semipalmated plovers, Killdeer, Greater and Lesser yellowlegs, Sanderling, and sandpipers (Semipalmated, Least, White-rumped and Pectoral). Many gulls congregate on the sandbar during the summer; the most common will be Ringbilled, Herring, and Great Black-backed, but there will occasionally be

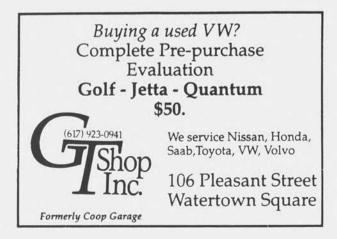
terrific weedy field you birded in the fall and winter might not be in the same place next year.

In winter, check the thickets as you enter from Route 9 for typical winter residents like Blue Jay, Black-capped Chickadee, Tufted Titmouse, White-breasted Nuthatch, Northern Cardinal, American Tree, Song, and White-throated sparrows, Dark-eyed Junco, and House Finch. In among these winter regulars, birders have found lingering Carolina Wrens, Ruby-crowned Kinglets, and Common Yellowthroats. As you continue out into the fields, scan the trees for Bald Eagle. All three accipiters are possible, and the ever-present Red-tailed Hawk is a good bet.

Every once in a while a Rough-legged Hawk will put in an appearance, as will Merlin and Peregrine Falcon. Northern Shrike is never to be ruled out. In the fields, look for Horned Larks and scan the flock for a few Snow Buntings. Walk the weed patches for large numbers of Tree Sparrows; this area is also probably one of the best around for wintering Savannah Sparrows. During invasion years of northern finches, I've had well over 150 Common Redpolls. If you are very lucky, you may scare up a Short-eared Owl. Birders have also recorded Eastern Screechowl and Great Horned Owl during the day as well as the night.

The thickets at the south end of Aqua Vitae Road or the Route 47 (Bay Road) side should not be skipped, although they will probably produce about the same variety as the northern thickets (Route 9 side). Because this area has some marshy sections, birders have found Winter Wren, Swamp Sparrow, and on one Christmas Bird Count a lingering Wilson's Warbler. Some other highlights over the years have been Northern Gannet, Glossy Ibis, Whitefronted Goose, Swainson's Hawk, Northern Saw-whet Owl, and Sedge Wren.

-- Scott Surner



## BOOK REVIEW: All the Birds of North America

## By Wayne R. Petersen

All the Birds of North America (American Bird Conservancy's Field Guide), by Jack L. Griggs. New York: Harper Collins Publishers, Inc. 1997. 183 pages, extensively illustrated. \$19.95.

With an ever-expanding selection of bird field guides to choose from, the neophyte birder is no longer obliged to select from a field consisting of only two or three leading identification manuals. On the contrary, today's plethora of field guides is so great that the problem often facing the entry level birder is, "Which field guide should I buy?" Obviously, part of the answer lies in what appeals to the user. If innovative organizational features, icons, and high quality color illustrations (rather than photographs) appeal to the reader, then don't miss the American Bird Conservancy's (ABC) new North American field guide — "A revolutionary system based on feeding behaviors and field-recognizable features."

Another solid argument for selecting this guide is the cast of high profile ornithological consultants who assisted Jack Griggs in pulling the project together: Eirik Blom, Louis Bevier, Pete Dunne, Kimball Garrett, Kenn Kaufman, Paul Lehman, Larry McQueen, Nancy Newfield, Brian Patteson, Hans Peeters, and Thede Tobish. It doesn't get much better than this, folks! The combined expertise of this all-star cast is almost reason enough to drop \$20 on the book.

So what's new and what's not so new? First, a quick flip through the vinyl-bound pages of this back-pocket-shaped book shows some departures from the traditional taxonomic sequence with which many of us have grown accustomed. As examples, Sooty and Bridled tern, Black-legged Kittiwake, and all the skuas and jaegers appear within the first five pages of the book; swans and geese are separated from the rest of the waterfowl by loons and cormorants; hawks are followed by swifts and swallows; and cuckoos and thrashers appear on successive pages. Lest you've not picked up on the pattern, most of the birds in the book are grouped by either their feeding behaviors (e.g., aerialists, swimmers, wading birds, tree climbers, etc.) or habitats or, in the case of the passerine species, their bill shape. Arctic birds and Arctic rarities are placed in their own section at the end of the book. Likewise, a series of rather bizarre color photographs at the front of the book depicts mounts of seven extinct North American bird species set against a variety of artificial-looking backgrounds.

In addition to organizing species by feeding strategy, most of the color plates depict birds in realistic and colorful habitat settings, the majority of which are aesthetically appealing and ecologically accurate. For nearly every one of the regularly occurring North American bird species, brief species accounts provide most of the standard field guide information: English and Latin names, length (and wingspread for some species) in inches, a few words of explanation about each species' abundance in North America, a summary plumage description, appropriate behavioral comments, phonetic descriptions of song and call notes, and a range map showing the range of the species in North America. Unfortunately, the brevity of the species accounts created by the spatial limitations imposed by the format of the book preclude the kind of detailed plumage descriptions that the increasingly sophisticated birding market seems to demand.

To identify an unfamiliar bird using the ABC field guide, the reader makes a selection from a series of icons and brief descriptions located inside the front and back covers, depending upon whether the bird is a waterbird or a landbird. Waterbird choices include "Pelagic Waterbirds," "Aerialists," "Swimmers," "Wading Birds," "Shorebirds," and "Upland Waterbirds." For landbirds the groupings are "Nocturnal," "Aerialists," "Ground-walkers," and "Tree-climbers." Perching landbirds are grouped by bill shape: "Flycatching," "Curved," "Straight," and "Conical." Once a tentative grouping has been selected from the choices provided on the end papers, a colored bar and number key directs the reader to the appropriate pages in the book. On the margins of each page of the text there are colored bars, small bird icons, and bird group names (e.g., "dark geese," "forest grouse," "drab vireos") that coincide with the reference keys inside the front and back covers. Having made an association from the choices above, the reader then matches the unfamiliar bird with one of the colored illustrations on the appropriate pages of the book.

An especially nice feature of the ABC field guide is the presence of expanded text pages that cover groups of birds in more detail than is afforded in the individual species accounts. These are generally informative, succinctly crafted, and technically excellent. Some (e.g., Empidonax flycatchers, sparrows) are accompanied by useful illustrations that accurately depict characteristics and comparisons that are conspicuously lacking in many other popular field guides. Perhaps the most disconcerting thing about certain of these essays is their placement within the text. For example, between pages 62-63 there are six unnumbered pages whose text includes discussions of feathers and bird flight, an explanation of how the book is organized, tips on birdwatching, and the basis for avian taxonomy. Since all are important topics, why are they buried in the middle of the book and not at the front? Similarly, why are a number of other equally interesting subjects integrated into other text in a way that makes finding and reading them almost serendipitous? To make matters worse, none of these essay topics are indexed anywhere in the book! A final point about the essays is the strong conservation theme that runs throughout. While perhaps not surprising considering that the project was sponsored by the American Bird

Conservancy, this conservation theme, particularly the way it is handled in the text, is one of the innovations that sets the ABC field guide apart from some of its chief competitors.

Ultimately, however, it is the color plates that usually seem to make or break a new field guide. In this regard, the ABC book does not disappoint. In fact, the brilliance and artistry of many of the paintings makes them arguably among the most attractive accurate of any to be found in a North American field guide. The cast of luminaries that collaborated to illustrate this book include some of the most accomplished bird painters working in the United States today: Jonathan Alderfer, Larry McQueen, Doug Pratt, and Barry Van Dusen, to name but a few. Especially pleasing examples of artistic excellence are Van Dusen's gulls and terns, Alderfer's waterfowl and shorebirds, Pratt's woodpeckers, and McQueen's warblers. If nothing else, this field guide provides the reader with a visual treat — a collection of bird paintings that has to be among the best compendiums of North American bird depictions currently available under one cover at an affordable price. Really a bargain!

Having offered this description of *All the Birds* as a field guide, would I recommend it? The answer, a qualified "Yes." As a field guide for someone with little experience in trying to identify birds in the field, some of the book's quirky organizational features make it less than satisfactory. Likewise, the brevity of most of the species accounts hardly makes the book "cutting edge." However, as a backup alternative to one or another of the more popular existing field guides (e.g., Peterson, Robbins, National Geographic, Stokes), I would buy the book in a minute. The illustrations alone make the guide a worthwhile addition to any birder's library, and the well-written essays and general species accounts have much to offer, even to experienced birders. Overall, I'm not convinced that the American Bird Conservancy has built a better mousetrap; however, they have definitely produced an attractive and innovative book that any birder would be well advised to add to his or her arsenal of tools. And for less than \$20, how can you go wrong?

Wayne R. Petersen is a field ornithologist with the Massachusetts Audubon Society. He also serves on the editorial board of *Bird Observer*.

## FIELD NOTES FROM HERE AND THERE \_\_

## GONE GOOSE?

On Wednesday, November 12, 1997, I witnessed one of those rare wildlife events that you hear about but seldom see. As I drove to work on an icy, wintry morning, I noticed a flock of some 15 Canada Geese crossing low over the road. They had probably just left someone's residential lawn and were headed toward the open pastures on the other side of the road. The lumbering birds had more than the traffic to contend with to cross the road; they somehow had to navigate the electric wires that paralleled the road on the pasture side. They seemed to be working extra hard to get a few more feet of lift to just barely pass above the wires before making a rapid descent into the fields. To my surprise, just after they passed over the car I was following, the last bird of the group didn't quite make it over the highest wire, but rather struck the wire and came barreling to the ground, landing on its feet on the side of the road. The bird quickly skidded off the ice-covered shoulder in time to avoid an oncoming car. As traffic prevented me from stopping, I never did see the final disposition of the goose.

Although I had heard of geese striking telephone or electricity wires, I never expected to see such a rare occurrence, and to tell you the truth I doubted whether these strikes really occurred. There is a story in the building where I work that frequent electricity outages had been caused by "goose strikes." As a deterrent, authorities had placed large plastic pink balls on the wires to make them more visible to the geese. Here in Fort Collins, Colorado, as in most other places I presume, the Goose population is somewhat out of control. Most ponds and parks seem to be colonized by these semi-feral animals, a result of a misguided attempt to reintroduce them to many areas of North America, including suburban areas. Food for the geese is plentiful, as agricultural fields and pastures provide a supplement to the usual suburban diet. As the Canada Goose adapts to human settlements and its population continues to explode, it will be interesting to monitor what types of predicaments these innocent birds get themselves into.

Nick Komar

#### INLAND MARBLED GODWIT RECORD

Late on the morning of August 10, 1997, I found a Marbled Godwit, a first record for Worcester County, at the Quinapoxet Reservoir in Holden, Massachusetts. This City of Worcester reservoir is not accessible to the public; however, for the past five years I have received a license to conduct fall shorebird surveys at this site. There is only one place where the shoreline can be viewed by the public from outside the fence. This is the spot where this Marbled Godwit was seen by many observers for at least the next five days.

Very low water levels at Quinapoxet provided extensive mudflats this fall migration season. This Marbled Godwit, however, preferred the shoreline covered with large rocks, where I observed it feeding in pools among these rocks. It would feed in water several inches deep by inserting its long bill into the water and mud, sometimes even immersing a portion of its head. This feeding was successful as it consumed larvae or small worms that were visibly held in its bill before swallowing. A Greater Yellowlegs was often in the same area. Despite this Godwit's size, it was often hidden among the large rocks and several observers commented that they spent several hours before the bird was spotted.

This Marbled Godwit was the nineteenth shorebird species that I have observed at Quinapoxet during my surveys on 106 different days from 1993 through 1997. The difficulty of one person or team surveying any given area is illustrated by the fact that four additional shorebird species (Buff-breasted Sandpiper, Short-billed Dowitcher, Upland Sandpiper, and Wilson's Phalarope) have been reported from Quinapoxet during this same time period.

Robert C. Bradbury



Marbled Godwit, Holden, MA, 10 August 1997

Photo by R. Bradbury

#### CEDAR WAXWINGS AND MULTIFLORA ROSES

On the morning of March 9, 1997, I watched a flock Cedar Waxwings (Bombycilla cedrorum) foraging in multiflora rose bushes around the southwest corner of the Arlington Reservoir (where a substantial stream flows in through a culvert). The weather was cold and sunny with a moderate northwest wind; there were about two inches of fresh snow on the ground. This flock had been being reported for several days by other birders, but no birds had been present when I had visited two days before. There were about twenty waxwings in the flock, feeding by plucking rose hips and swallowing them whole. Often, the birds plucked while they were hovering in the air. Before swallowing, they rolled each berry around in their bills a few times; I assumed they were orienting it to make it easier to swallow. Each bird seemed to be taking about three or four berries a minute—certainly not more.

The rose hips, which were plentiful, were oval in shape, and about 3 x 5 mm in size. Swallowing them appeared to take considerable effort on the part of the birds. The vast majority of the volume of these berries was taken up by a few hard, white seeds, covered only by a thin pulp and an even thinner skin.

After feeding in this manner for ten minutes or so, the birds perched on a birch tree. The branches were covered by fresh snow, which some of the waxwings ate, scooping it up with their lower mandibles.

The waxwings apparently persisted in the area for only a few days more, and when they left, the rose hips had been noticeably reduced in number but were by no means sparse. I observed a similar pattern of fairly intensive, but brief and incomplete, exploitation of multiflora rose by another, larger flock of Cedar Waxwings around this time. Forty birds were eating rose hips on March 8, 1997, along Lower Vine Brook in Lexington, Massachusetts, but were not present on several subsequent visits. Again, the bushes on which the birds had been feeding were left with significant numbers of berries still on them.

It seems likely that this introduced shrub plays an important role in the winter diet of Cedar Waxwings in our region, as it does for several other avian species. But I suspect that multiflora rose hips are viewed as a marginal food source by the waxwings, to be relied on only when nothing better is available.

Matthew L. Pelikan

## Write for Bird Observer

*Bird Observer* gladly considers for publication manuscripts or article proposals from any member of the birding community. The only requirement is that material be relevant to southern New England birds and birders.

Among the types of material we'd like to see:

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- Documentation of significant records
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- Biographies of ornithologists or birders with regional ties
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- "Where to Go" articles describing good birding locales
- Articles on birding equipment or methods
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In addition, the magazine is always in need of book reviewers and qualified peer-reviewers for scientific and technical articles. Send mansucripts or proposals to *Bird Observer* at P.O. Box 236, Arlington, MA 02174, or email the editor at mpeli74592@aol.com.

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# BIRD SIGHTINGS JULY 1997 SUMMARY



South Polar Skua

M. Goolev

by Marjorie W. Rines, Simon Perkins and Robert H. Stymeist

#### LOONS THROUGH WOODPECKERS

Whereas (mostly subadult) Common Loons annually over-summer at the coast, over-summering Redthroated Loons are much more unusual. So three reports of Red-throateds, including one in breeding
plumage, were noteworthy. For the second consecutive summer, the birding on Stellwagen Bank was
excellent. Highlights included a high count of Cory's Shearwaters and an Audubon's Shearwater. Both of
these species are more typically found in the warmer waters south of Cape Cod; Audubon's almost
exclusively so. A count of ten Audubon's over Oceanographer Canyon, at the edge of the Continental Shelf,
was exemplary. A report of four Black-capped Petrels south of Nantucket was not accompanied by details.
However, the observer was a veteran fishing boat captain who is familiar with the more common pelagic
species. An American White Pelican was sighted at several coastal localities before it finally settled at Plum
Island for the rest of the month.

Unseasonal ducks included single Greater Scaup, King Eider and Oldsquaw. The eider was present throughout the month. A Swallow-tailed Kite was seen on successive days at Nantucket and Tuckernuck. A Swainson's Hawk, originally discovered in June, continued to be seen in Provincetown throughout the month. This species, rare in any month in Massachusetts, has never been reported in summer, and never for such an extended period of time (Birds of Massachusetts, Veit and Petersen). A Peregrine Falcon at Nantucket represented a rare summer record for that locale.

A pair of Clapper Rails at Nantucket was unusual for that locale, and a **Purple Gallinule** on Nantucket continued from June, through the first few days of July. Upland Sandpipers continued to nest at Hanscom Field, and two pairs were also noted on the former Fort Devens property in Lancaster. The rarity of the month was a **Bar-tailed Godwit** that spent most of the month at South Beach in Chatham.

As with other pelagics, jaegers were more numerous than usual during the month. A South Polar Skua on Georges Bank was carefully observed and photographed. The few reports of this species in the state have been from far offshore, especially from Georges Bank. An adult Little Gull delighted many observers in Nahant. Royal Terns are scarce but regular visitors in July, and are, generally, seen only on one day, usually around the Cape and Islands. One (or more?) Royal Tern, seen in the Plum Island and Newburyport area, was reported for nearly two weeks. A well-described Sandwich Tern in Eastham was reported by a visiting out-of-state birder. By the end of the month, numbers of Roseate Terns at South Beach in Chatham had built to above-average numbers at this important post-breeding staging spot.

Chuck-will's-widows have been reported regularly from Martha's Vineyard during the breeding season at least since the early 1970s, though breeding has never been confirmed anywhere in the state. This July, a report of ten on the Vineyard, and additional reports of singles from Nashawena Island and Wellfleet, further fueled the hope that, eventually, they may be found nesting in the Commonwealth. A pair of Red-headed Woodpeckers, observed feeding young in Melrose, furnished the only known nesting record, this year, in the eastern part of the state. A single Red-headed was also noted in Sherborn, where the species has nested in recent years.

M. W. R., S. P.

Date	Location	Number	Observers	Date	Location	Number	Observers
Red-thro	ated Loon			20	Scituate	5	M. Lynch#
5	P.I.	1	R. Heil	Pied-bill	led Grebe		
20	Katama	1	A. Keith#	9	P.I.	1	R. Donovan
22	Wareham	1 br pl	M. LaBossiere	Northern	n Fulmar		
Common		P-		7	Georges Bank	2	M. Gooley
11	Gardner	ad + 1 yg	T. Pirro	Black-c	apped Petrel * (		
11	Ashburnham	2 ad	T. Pirro	13	South of Fishi		F. Blount
18	Rockport	10	M. Flor			0 1	

Cory's She	earwater Stellwagen	1	N. Comeon	Little Blu			
7		1	N. Samson	26	P.I.	3	M. Lynch#
7	Georges Bank	5	M. Gooley	26	Rowley	1	R. Finch
	Lydonia Canyon		M. Gooley	27	Ipswich	2 im	m P. + F. Vale
8	Oceanogr. Can.	3	M. Gooley	Tricolore			
30	Stellwagen	8	R. Donovan	5	P.I.	2	R. Heil
Greater Sh				26	Rowley	1	M. Lynch#
5	M.V.	2 d		Cattle Eg	ret		
5	N. Monomoy	1	J. Gottsche	12	Ipswich	6	C. Cook
7	Georges Bank	190	M. Gooley	12	Ĥamilton	3	C. Cook
7	Lydonia Canyon	89	M. Gooley	Green He			0, 000%
8	Oceanogr. Can.	119	M. Gooley	13	GMNWR	6	J. Hoye#
9	Gt. S. Channel	70	M. Gooley	19	ONWR	3	R. Lockwood#
12	Stellwagen	30	M. Lynch#	24	DWWS	4	D. Furbish
30	Stellwagen	450	R. Donovan	26	P.I.	6	
Sooty She		100	re. Donovan		wned Night-Hero		M. Lynch#
7	Georges Bank	11	M. Gooley	5			F . T 1
ģ	Gt. S. Channel	50			Wayland	21	E. Taylor
12			M. Gooley	13	P.I.	6	R. Lockwood#
THE RESERVE OF THE PARTY OF THE	Stellwagen	140	M. Lynch#	28	Sudbury	16	M. Reed
Manx She					rowned Night-H		
2	Stellwagen	8	M. Lynch#	20	Chatham (S.B.)	1 im	m F. Mantlik#
5	M.V.	1	A. Keith#	27	Chappaquiddicl	c 1	A. Keith#
7	Georges Bank	5	M. Gooley	27	P.I.		m W. Petersen
9	Gt. S. Channel	3	M. Gooley	Glossy Ib		54.7555	
26	Eastham (F.E.)	2	B. Nikula	11	Squantum	2	R. Donovan
30	Stellwagen	15	R. Donovan	14	Ipswich	35	J. Berry
Audubon	s Shearwater (no			16	Peabody	5	
7	Lydonia Canyon	1	M. Gooley	19	E. Boston (B.I.)		D. Hill
8	Oceanogr. Can.	10	M. Gooley	27			R. Cressman
	s Shearwater (de				Chatham (S.B.)		H. Ferguson
				27	Randolph		G. d'Entremont
12	Stellwagen Bank	1	R. Lockwood#	27	P.I.	65	W. Petersen
	torm-Petrel			Whooper			
7	Lydonia Canyon		M. Gooley	thr	P.I.	4 ad	R. Heil
7	Georges Bank	91	M. Gooley	Wood Du	ck		
8	Oceanogr. Can.	96	M. Gooley	5	Oak Bluffs	f + 4 yg	A. Keith
9	Gt. S. Channel	32	M. Gooley	13	GMNWR	60	J. Hoye#
10	Gloucester	50	J. Soucy	13	Wakefield 12	ad, 9 yg	P. + F. Vale
12	Stellwagen Bank	800	R. Lockwood#	26	Cumb. Farms	7	R. Finch
30	Stellwagen 1	200	R. Donovan	Green-wi			
Leach's S	torm-Petrel			13	P.I.	13	R. Lockwood#
7	Lydonia Canyon	7	M. Gooley	Blue-win			re. Dook woods
7	Georges Bank	7	M. Gooley	19	P.I.	11	M. Lynch#
8	Oceanogr. Can.	10	M. Gooley	Northern		11	M. Lynch#
25	Barnstable (S.N.)		S. Miller#	26		1	D. Carrentine
26	Eastham (F.E.)	1	B. Nikula	Gadwall	E. Boston	1	R. Stymeist
Northern (		1	D. INIKUIA		D.I.	24	W D "
		4	M. Conton	21	P.I.	34	W. Drew#
7	Georges Bank	1	M. Gooley	Greater S			52 27
12	Stellwagen Bank	2	R. Lockwood#	5	M.V.	1 m	T. Rivers
24	Rockport	4	J. Soucy	Common	Eider		
26	Eastham (F.E.)		B. Nikula	4	Duxbury	90	D. Clapp
	White Pelican *	(detail:	s submitted)	5	Gloucester H.	20	J. Berry
13	Kingston	1	T. Lloyd-Evans	12	P'town H.	57	M. Lynch#
14	Hull	1	H. Cross	26	Chatham	7 G	d'Entremont#
14	Boston H.	1	F. Christian	27	Boston H.	107	R. Stymeist
18	Scituate	1	D. Clapp	King Eid			Tit Dej melot
21-31	P.I.	1	V.O.	thr	Nantucket	1 f	E. Ray
	ested Cormorant	-		Oldsquaw	Tantucket	1.1	L. Ray
20		690	M. Lynch#	19	P.I.	1	D 11-21
31	Chatham (S.B.)					1 m	R. Heil
		030	R. Heil	Surf Scote			
American .			D 77 1	12	Vineyard Haven		A. Brown
	Halifax	1	R. Finch	26		imm m	W. Petersen#
30	Reading	1	D. Williams	29	Nantucket	2	E. Ray
Least Bitte				White-win	nged Scoter		**
thr	P.I.	1-2	v.o.	4	Yarmouth	2	L. High
13	GMNWR	1	R. Finch	18	Rockport	2	M. Flor
Great Egre	t			Hooded M			ALC: U.S.
27	Randolph	5	G. d'Entremont	8	Stow	5	L. Hennin
28	Sudbury	6	M. Reed		ted Merganser		D. Heililli
30		100	D. Chickering	4		1 f	I Dame
30	Middleton	11			Rockport (H.P.)	1.1	J. Berry
		11	R. Heil	Turkey Vi		-	W 17 1
	Ct.		22/02/03/03	11	Sharon	5	K. Holmes
Snowy Egr 28	P.I.	235	R. Heil	30	Worc. (BMB)	2	J. Liller

The	0				DI 1 1 1	U. J.DI		
20	Osprey	Weathorn	2	P. Taulan			-	T D 1
Samilow-tailed Kite   21   Nantucket   1   P. Carl, fide E. Ray   22   Tuckernuck   1   P. Carl, fide E. Ray   23   Revere   35   P. Ferkins#   23   Chatham (S.B.)   500   R. F. Ferkins#   23   Chatham (S.B.)   500   R. F. Ferkins#   24   P. Ferkins#   25   P. Ferkins#   26   R. Ferkins#   27   Randolph   17   G. d'Entremont   28   P. Ferkins#   29   P. Ferkins#   29   P. Ferkins#   29   P. Ferkins#   29   P. Ferkins#   20   Chatham (S.B.)   500   R. F. Ferkins#   20   Chatham (S.B.)   500   R. F. Ferkins#   20   Chatham (S.B.)   500   R. F. Ferkins#   20   P. Fe								
Swallow-tailed Kite   21								
Nantucket			3 0	d Entremoner				R. Heil
Part			1 P.C	rl fide F Pay			50	w. retersen
Bald Eagle							1	T Paymond
Truro			1	L. Allulews#				
Northern Harrier			2 imm	fide I Voung				
Northern Harrier								
Second column   Second colum			2 1111111	S. I CIKIIIST				
19			1	I Dores				
20							300	K. Hell
28							2	C . I Hamin
Sharp-shinned Hawk								
N. Middleboro   1			2	R. Hell				
13				IZ II-l			23	R. Heil
19	CODE I							m n
20   Medfield   1   E. Niclsen   20   Chatham (S.B.)   16   R. Lockwood   R. Farms   S. Dart. (A.Pd)   5   T. Rayms   S. Dart. (A.								
Cooper's Hawk			1.7					E. Pierce
Cooper's Hawk								M. Lynch#
The Northern Goshawk   Section   S			1	J. Brown#			16	R. Lockwood#
Northern Goshawk   18	Cooper's F		4					
18	1		1	E. Pierce				
Red-shouldered Hawk			2.0	20.20				T. Raymond
The box box   The box			2 imn	n M. Rines		Lexington		M. Rines
11	Red-shoul					Quincy		D. Clapp
Broad-winged Hawk	thr	E. Boxford	3	J. Brown#	27	Newbypt		P. + F. Vale
The color of the			1 ad	J. Young	27			G. d'Entremont
The color of the	Broad-wir	nged Hawk			30	E. Boston	3	P. + F. Vale
Swainson's Hawk * (details submitted)			1	D. Ludlow	31	Chatham (S.B.)	45	R. Heil
Swainson's Hawk * (details submitted)	6	Barre	3	M. Lynch#	Lesser Ye	ellowlegs		
thr         Provincetown 1 lt ad American Kestrel         K. Jones + v.o.         19 Cumb. Farms         5 Cumb. Farms         R. Finch           26 Cumb. Farms         3 R. Finch         26 Lexington         1 M. Ri           27 Randolph         3 G. d'Entremont         27 Randolph         5 G. d'Entremont           28 Newbypt         3 B. Parker         30 E. Boston         25 P+F. V.           30 DWWS         7 D. Furbish         27 P. I.         400 W. Peter           thr         Bedford         3 R. Lockwood         Solitary Sandpiper           Peregrine Falcon         12 Chilmark         1 A. K.           11 Squantum         1 R. Donovan         16 Lexington         1 M. Ri           28 Nantucket         1 E. Ray         26 Wakefield         3 P. Fr. V.           Ruffed Grouse         27 Wayland         2 D. Furb           4 Quabbin (G40)         4 R. Lockwood#         Willet           19 ONWR         1 R. Lockwood#         Willet           19 ONWR         1 R. Lockwood#         4 Duxbury B.         10+ D. Cl.           Wild Turkey         5 Newbypt/P.I.         106 ad         R. Fr.           14 Weston         ad + 12 yg         J. Punch         8 N. Monomowy         150 B. Nik           15 Lancaster	30	Worc. (BMB)	2	J. Liller	6	S. Dart. (A.Pd)	2	T. Raymond
thr         Provincetown I lt ad American Kestrel         K. Jones + v.o.         19         Cumb. Farms         5         R. Fi. Pich           26         Cumb. Farms         3         R. Finch         26         Lexington         1         M. R. Fi.           27         Randolph         3         G. d'Entremont         27         Randolph         5         G. d'Entremont           28         Newbypt         3         B. Parker         30         E. Boston         25         P. F. F. V.           30         D. WWS         7         D. Furbish         27         P. I.         400         W. Peter           thr         Bedford         3         R. Lockwood         Solitary Sandpiper         Peregrine Falcon         12         Chilmark         1         A. K.           11         Squantum         1         R. Donovan         16         Lexington         1         M. R.           28         Nantucket         1         E. Ray         26         Wakefield         3         P. F. F. V.           Ruffed Grouse         27         Wayland         2         D. Furb           18         Lancaster         1         R. Lockwood#         Willet           19 <td< td=""><td>Swainson</td><td>'s Hawk * (deta</td><td>ails submitt</td><td>ed)</td><td>13</td><td>P.I.</td><td>15</td><td>R. Lockwood#</td></td<>	Swainson	's Hawk * (deta	ails submitt	ed)	13	P.I.	15	R. Lockwood#
26					19	Cumb. Farms	5	R. Finch
27         Randolph         3         G. d'Entremont         27         Randolph         5         G. d'Entremont           28         Newbypt         3         B. Parker         30         E. Boston         25         P.F. V.           30         DWWS         7         D. Furbish         27         P.I.         400         W. Peter           30         DWWS         7         D. Furbish         27         P.I.         400         W. Peter           4         Bedford         3         R. Lockwood         Solitary Sandpiper         1         A. K.           11         Squantum         1         R. Donovan         16         Lexington         1         M. R.           28         Nantucket         1         E. Ray         26         Wakefield         3         P. F. F. V.           Ruffed Grouse         2         Wayland         2         J. Ho         M. R.           Ruffed Grouse         2         Wayland         2         J. Ho           4         Quabbin (G40)         4         R. Lockwood#         Willet         Willet           19         ONWR         1         R. Lockwood#         4         Duxbury B.         10+ D. Cl.	American	Kestrel			20	Newbypt	920	R. Heil
27         Randolph         3         G. d'Entremont         27         Randolph         5         G. d'Entremont           28         Newbypt         3         B. Parker         30         E. Boston         25         P.F. V.           30         DWWS         7         D. Furbish         27         P.I.         400         W. Peter           thr         Bedford         3         R. Lockwood         Solitary Sandpiper         12         Chilmark         1         A. K.           11         Squantum         1         R. Donovan         16         Lexington         1         M. R.           28         Nantucket         1         E. Ray         26         Wakefield         3         P. F. V.           Ruffed Grouse         27         Wayland         2         J. Ho           4         Quabbin (G40)         4         R. Lockwood#         Willet           19         ONWR         1         R. Lockwood#         4         Duxbury B.         10+         D. Cl           Wild Turkey         1         R. Lockwood#         4         Duxbury B.         10+         D. Cl           Wild Turkey         1         S Newbypt/P.I.         106 ad	26	Cumb. Farms	3	R. Finch	26	Lexington	1	M. Rines
28         Newbypt 30         B. Parker 30         B. Akar 31         B. Akar 31         B. Akar 32         B. Akar 33         B. Akar 33         B. Akar 34         B. Akar 34<	27	Randolph	3 (	G. d'Entremont	27		5	G. d'Entremont
30 DWWS	28				30		25	P + F. Vale
thr   Bedford   3   R. Lockwood   Peregrine Falcon   12   Chilmark   1   A. K.     11   Squantum   1   R. Donovan   16   Lexington   1   M. Ri     28   Nantucket   1   E. Ray   26   Wakefield   3   P. + F. V.     Ruffed Grouse   27   Wayland   2   J. Ho     4   Quabbin (G40)   4   R. Lockwood   31   DWWS   2   D. Furt     18   Lancaster   1   R. Lockwood   Willet     19   ONWR   1   R. Lockwood   4   Duxbury B.   10+   D. Cl.     Wild Turkey   5   Newbypt/P.I.   106 ad   R. F.     14   Weston   ad + 12 yg   J. Punch   8   N. Monomoy   150   B. Nik     15   Lancaster   7 fl   R. Lockwood   5   Pepperell   3   M. Ri     29   Worc. (BMB)   13   J. Liller   16   Lexington   8   M. Ri     Northern Bobwhite   19   P.I.   8   M. Lyn     1   Sharon   25   K. Holmes   26   Arlington   5   M. Ri     2   DWWS   2   D. Furbish   27   Wayland   8   J. Ho     10   Lancaster   1   R. Lockwood   Upland Sandpiper     17   Bedford   1   R. Lockwood   Upland Sandpiper     19   Lancaster   1   R. Lockwood   Upland Sandpiper     10   Lancaster   1   R. Lockwood   Upland Sandpiper     11   Redford   1   R. Lockwood   Upland Sandpiper     12   Lancaster   1   R. Lockwood   Upland Sandpiper     13   Nantucket   pr   D. Sutherland   Upland Sandpiper     14   P.I.   1   C. Floyd   4   Yarmouth   3   L. How     15   Clapper/King Rail   12   P.I.   2   C.	30		7	D. Furbish	27		400	W. Petersen
Peregrine Falcon	thr	Bedford	3	R. Lockwood	Solitary S	andpiper		
11	Peregrine						1	A. Keith
28			1	R. Donovan				M. Rines
Ruffed Grouse								P. + F. Vale
4         Quabbin (G40)         4         R. Lockwood#         31         DWWS         2         D. Further           18         Lancaster         1         R. Lockwood#         Willet         Willet         Willet         Willet         Willet         Upage 1         Boxborouph         10+         D. Cl.         D. Cl.         D. Cl.         Willet								J. Hoye#
18			) 4	R. Lockwood				D. Furbish
19							15	
Wild Turkey         5         Newbypt/P.I.         106 ad         R. F. B. Nik           14         Weston ad + 12 yg         J. Punch         8         N. Monomoy         150         B. Nik           15         Lancaster         7 fl R. Lockwood         Spotted Sandpiper						Duxbury B	10+	D. Clapp
14         Weston         ad + 12 yg         J. Punch         8         N. Monomoy         150         B. Nik           15         Lancaster         7 fl         R. Lockwood         Spotted Sandpiper         3         M. Ri           24         Boxborough         1f w/6 ygC. Calcagni         5         Pepperell         3         M. Ri           29         Worc. (BMB)         13         J. Liller         16         Lexington         8         M. Ri           Northern Bobwhite         19         P.I.         8         M. Lyn           1         Sharon         25         K. Holmes         26         Arlington         5         M. Ri           2         DWWS         2         D. Furbish         27         Wayland         8         J. Ho           17         Bedford         1         R. Lockwood         Upland Sandpiper         4         D. Furbish           19         Lancaster         1         R. Lockwood#         Upland Sandpiper         5         R. Lockwood           19         Lancaster         1         R. Lockwood#         18 max         R. Lockwood           Clapper Rail         4         P.I.         1         C. Floyd         4 <td< td=""><td></td><td></td><td></td><td>it. Book ii oodii</td><td></td><td></td><td></td><td></td></td<>				it. Book ii oodii				
15			d + 12 va	I Punch				B. Nikula
24         Boxborough 29         1f w/6 ygC. Calcagni 13         5         Pepperell 16         3         M. Ri M. Ri M. Ri 19           Northern Bobwhite 1         19         P.I.         8         M. Ri M. Lyn           1         Sharon 2         25         K. Holmes 2         26         Arlington 30         5         M. Ri M. Lyn           16         Kingston 17         2         D. Furbish 17         30         DWWS         4         D. Furbish 17           17         Bedford 19         1         R. Lockwood 1         Upland Sandpiper 1         thr         Lancaster 1         5         R. Lockwood 1         Thr         Bedford 18 max 1         18 max 1         R. Lockwood 1         C. Leckwood 2         Whimbrel 4         P. I.         1         C. Floyd 4         Yarmouth 4         Yarmouth 3         3         L. H           Clapper/King Rail 5         P. I.         1         R. Heil         13         WBWS 10         10         M. Lyn M. Lyn M. Lyn           Virginia Rail         22         Newbypt         15         R. F.	95724				100000		100	D. I tillulu
29         Worc. (BMB)         13         J. Liller         16         Lexington         8         M. Ri           Northern Bobwhite         19         P.I.         8         M. Ri           1         Sharon         25         K. Holmes         26         Arlington         5         M. Ri           2         DWWS         2         D. Furbish         30         DWWS         4         D. Furbish           16         Kingston         2         D. Furbish         30         DWWS         4         D. Furbish           17         Bedford         1         R. Lockwood         Upland Sandpiper         Upland Sandpiper         5         R. Lockwood           19         Lancaster         1         R. Lockwood#         thr         Bedford         18 max         R. Lockwood           Clapper Rail         0         3         Nantucket         1         C. Leckwood           King Rail         4         P.I.         1         C. Floyd         4         Yarmouth         3         L. H           Clapper/King Rail         1         R. Heil         13         WBWS         10         M. Lyn           Virginia Rail         22         Newbypt         15 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3</td> <td>M. Rines</td>							3	M. Rines
Northern Bobwhite								M. Rines
1         Sharon         25         K. Holmes         26         Arlington         5         M. Ri           2         DWWS         2         D. Furbish         27         Wayland         8         J. Ho           16         Kingston         2         D. Furbish         30         DWWS         4         D. Furbish           17         Bedford         1         R. Lockwood         Upland Sandpiper         Upland Sandpiper         Tuber Lancaster         5         R. Lockwood           Clapper Rail         thr         Lancaster         5         R. Lockwood         Tuber Lancaster         5         R. Lockwood           King Rail         Thr         D. Sutherland         3         Nantucket         1         C. Lee           Whimbrel         Whimbrel         4         Yarmouth         3         L. H           Clapper/King Rail         1         C. Floyd         4         Yarmouth         3         L. H           5         P.I.         1         R. Heil         13         WBWS         10         M. Lyn           Virginia Rail         22         Newbypt         15         R. H			13	J. Linei				
2         DWWS         2         D. Furbish         27         Wayland         8         J. Ho           16         Kingston         2         D. Furbish         30         DWWS         4         D. Furbish           17         Bedford         1         R. Lockwood         Upland Sandpiper         Upland Sandpiper         5         R. Lockwood           19         Lancaster         1         R. Lockwood         thr         Lancaster         5         R. Lockwood           Clapper Rail         thr         Bedford         18 max         R. Lockwood           King Rail         Whimbrel         4         Yarmouth         3         L. H           Clapper/King Rail         1         C. Floyd         4         Yarmouth         3         L. H           Clapper/King Rail         1         R. Heil         13         WBWS         10         M. Lyn           Virginia Rail         22         Newbypt         15         R. H			25	K Holmes				M. Rines
16								J. Hoye#
17   Bedford   1   R. Lockwood   Upland Sandpiper   19   Lancaster   1   R. Lockwood#   thr   Lancaster   5   R. Lockwood#   thr   Lancaster   5   R. Lockwood#   thr   Bedford   18 max   R. Lockwood#   thr   Rodford   18 max   R. Lockwood#   Sandpiper   Sa								
19		m 10 1		D. Pulbish	Unland S	andninar	7	D. Tulbish
Clapper Rail	100000						5	D. Lookwood#
thr         Nantucket         pr         D. Sutherland         3         Nantucket         1         C. Le           King Rail         4         P.I.         1         C. Floyd         4         Yarmouth         3         L. H           Clapper/King Rail         12         P.I.         2         C. C.           5         P.I.         1         R. Heil         13         WBWS         10         M. Lyn           Virginia Rail         22         Newbypt         15         R. H			1	R. Lockwood#				
King Rail         Whimbrel           4         P.I.         1         C. Floyd         4         Yarmouth         3         L. H           Clapper/King Rail         12         P.I.         2         C. C.           5         P.I.         1         R. Heil         13         WBWS         10         M. Lyn           Virginia Rail         22         Newbypt         15         R. H			1.000	D Cut-dad				
4       P.I.       1       C. Floyd       4       Yarmouth       3       L. H         Clapper/King Rail       12       P.I.       2       C. Co.         5       P.I.       1       R. Heil       13       WBWS       10       M. Lyn         Virginia Rail       22       Newbypt       15       R. H			pr	D. Sumeriand			1	C. Leany
Clapper/King Rail         12         P.I.         2         C. Co.           5         P.I.         1         R. Heil         13         WBWS         10         M. Lyn           Virginia Rail         22         Newbypt         15         R. H.				C FL 1			2	T TELL
5 P.I. 1 R. Heil 13 WBWS 10 M. Lyn Virginia Rail 22 Newbypt 15 R. H			1	C. Floyd				L. High
Virginia Rail 22 Newbypt 15 K. I				D 11 11				C. Cook
			1	R. Heil				M. Lynch#
8 Stow 5 L. Hennin 26 N. Monomov 548 W. Harringto								R. Heil
	8		5	L. Hennin		N. Monomoy		W. Harrington#
			2				19	S. + L. Hennin
23 P.I. 1 T. Leverich Hudsonian Godwit							121	D - D
20 2011181011 2 111111111								R. Farrell
Tight Title and Title of the Ti			1 juv	P. + F. Vale				R. Heil
To Pro Summer			570					R. Heil
1-4 Nantucket 1 v.o. 26 P.I. 10 R. Lockwo	1-4	Nantucket	1	V.O.	26	P.I.	10	R. Lockwood#

7-31	ed Godwit * (no de Chatham (S.B.)	etails) 1	V. Laux + v.o.	25 26	Barnstable (S.N Chatham (S.B.)		S. Miller# W. Petersen#
Marbled 19		1		Jaeger Sp	pecies		
26	Chatham (S.B.)	1	S. Perkins#	26	Eastham (F.E.)	3	B. Nikula
28	N. Monomoy P.I.	1	Wi. Harrington R. Heil	South Po	olar Skua * (photo 41.13.44N, 68.2		
Ruddy T		1	R. Hell	Laughing		1.33 W	M. Gooley
23	Chatham (S.B.)	90	R. Heil	13	Nauset Marsh	1000	M. Lynch#
23	P.I.	54	R. Heil	Little Gu		1000	IVI. Lyncin
Red Kno	t			5-31	Nahant	1 I	Pivacek + vo
23	Chatham (S.B.)	2400	R. Heil	Black-he	aded Gull		
Sanderlin	ng			19-31	P.I.	1 L. c	le la Flor + v.o.
22	Nahant	200+	L. Hennin	Bonapart			
28	P.I.	110	R. Heil	20	P.I.		d'Entremont#
31	Chatham (S.B.)	1900	R. Heil	23	Revere	18	P. + F. Vale
	nated Sandpiper	- 2	T D		lack-backed Gull	1.00	D 100 1
6 11	S. Dart. (A.Pd)	10	T. Raymond	8 22	N. Monomoy	1 2S	B. Nikula
22	Squantum M.V.	250	R. Donovan V. Laux	Royal Te	P.I.	1 1S	R. Heil#
22	Nahant	800	L. Hennin	7	Wellfleet	1 ad	E. Pierce
23	Revere	250	P. + F. Vale	8	Eastham	1 ad	E. Pierce
31	Chatham (S.B.)		R. Heil		Newbypt H.		R. Heil + v.o.
27		5000+	W. Petersen		P.I.	1	J. Soucy + v.o.
	Sandpiper		100 ALT 0505 F. (1505)		Chatham (S.B.)	î	R. Clem + v.o.
30	P.I.	1	R. Heil		h Tern (details sul		
Least Sai	ndpiper			8	Eastham	1 ad	E. Pierce
11	P.I.	500	R. Heil	Roseate '			
12	Stellwagen	5	R. Lockwood#	12	Stellwagen		R. Lockwood#
16	Lexington	29	M. Rines		Chatham (S.B.)		
27	Randolph	25	G. d'Entremont	30	P.I.	5 ad	R. Heil
27	Cumb. Farms	96	R. Finch	Common		0.77	D
	mped Sandpiper		T M.1	12	Stellwagen		R. Lockwood#
19 30	Chatham (S.B.)	1	T. Maloney#	22	Newbypt/P.I.	250	R. Heil
30	E. Boston P.I.	1 27	P. + F. Vale R. Heil	23, 37	Chatham (S.B.)		
	Sandpiper	21	K. Hell	Arctic Te	Arlington	2	M. Rines
15	P.I.	1	R. Heil	26	Chatham (S.B.)	2 imr	n W. Petersen#
26	Cumb. Farms	1	R. Finch	Forster's		2 11111	II W. I CICISCII
26	Cotuit	2	M. Partridge	20	Newbypt	1 W	pl R. Heil
Dunlin		-	THE T WITTER	27	Chappaquiddick		A. Keith
19	P.I.	2	M. Lynch#	Least Ter			5.00-700
19	Chatham (S.B.)	1	S. Perkins#	23	Chatham (S.B.)	220	R. Heil
Stilt Sand	dpiper			28	P.I.	25	R. Heil
26	Quincy	2	D. Clapp	Black Te			20.00
30	P.I.	48	R. Heil	1	Nantucket	1	fide E. Ray
31	S. Monomoy	14	R. Prescott	8	N. Monomoy	1	B. Nikula
	led Dowitcher	10	D CI	12	Stellwagen	1	M. Lynch#
4	Duxbury B.	13	D. Clapp	21	P.I.	1	W. Drew#
8 11	N. Monomoy	850 12	B. Nikula R. Donovan	26 26	Eastham (F.E.) Chatham (S.B.)	1 5 G	B. Nikula . d'Entremont#
12	Squantum Stellwagen	33	R. Lockwood#	Black Sk		5 0	. d Entremont#
13	Boston H.	23	K. Hartel	13	Nauset Marsh	3	M. Lynch#
22	M.V.	120	V. Laux	19	Chatham (S.B.)	2	J. Paluzzi
23	Chatham (S.B.)		R. Heil	20	Plymouth B.	2	L. Torella
28	P.I.	700	R. Heil	26	N. Monomoy		W. Harrington
30	E. Boston	12	P. + F. Vale	Mourning			
Long-bill	led Dowitcher			thr	DWWS	465 max	x D. Ludlow
28	P.I.	12	R. Heil	Black-bil	led Cuckoo		
America	n Woodcock			2	Marshfield	1	D. Furbish
28	Lancaster	2	R. Lockwood	4	Rockport	1	M. Flor
	Phalarope	20000	and annual to	6	Barre	5	M. Lynch#
5, 11	P.I.		, 3 f R. Heil	6	E. Boxford	1	J. Brown#
5	Rowley	1 f	R. Heil	13	P.I.		R. Lockwood#
phalarop		1	D Milada	Vallow b	Lancaster	1	R. Lockwood#
26 Pomorino	Eastham (F.E.)	1	B. Nikula		illed Cuckoo	3	I Day
Pomarine 7		2	M. Coolan	4 6	Ipswich Andover	1	J. Berry
1	Lydonia Canyon Stellwagen	2 dk	M. Gooley M. Lynch#	6	Barre	1	J. Berry M. Lynch#
1.2	Stellwagell						
12		1	R Finch	1.4	CTIVI IV W R		Hove#
12	Mass. Bay	1	R. Finch	13 16	GMNWR Marshfield	1	J. Hoye# D. Furbish#
	Mass. Bay	3	R. Finch J. Young	13 16 17	Marshfield Groveland	1 1	D. Furbish# R. Heil

Barn Ov	vI			16	Newbury	2	M. Rines
- 26	N. Middleboro	2	K. Holmes	Chimner			
Eastern :	Screech-Owl			thr	Sherborn	15	E. Taylor
11	Rockport	1	M. Flor	24	Wakefield	21	P. + F. Vale
26	Melrose	1	R. Stymeist	27	Waltham	20	E. Taylor
Great Ho	orned Owl			Ruby-th	roated Hummingbi	rd	
8	Wellfleet	1	E. Pierce	thr	N. Middleboro	8 pr	K. Holmes
Barred C	Owl			thr	E. Boxford	2-4	J. Brown#
7	Concord	1	R. Lockwood	18	W. Newbury		R. Heil
7	Holliston	2 w/:	2 yg H. Platt	27	S. Dartmouth	2 2	S. + L. Hennin
18	Acton	1	J. Center	thr	Concord	3	R. Lockwood
19	W. Newbury	3	R. Heil	Red-hea	ded Woodpecker		
Northern	Saw-whet Owl			thr	Sherborn	1	E. Taylor
12	Wellfleet	1	R. Stymeist#	thr	Melrose	pr n	C. Jackson
Commo	n Nighthawk			Red-bell	ied Woodpecker	-	
12	Brookline	2	C. Cook	thr	E. Boxford	2	J. Brown#
Chuck-	will's-widow			thr	Marlboro	2	B. Parker
thr	Edgartown	10+	V. Laux	thr	Medford	3 pr	n M. Rines
7	Nashawena I.	1	R. Hoping	Hairy W	oodpecker		
14	Wellfleet	1	E. Pierce	4	Ipswich	3	J. Berry
Whip-po	or-will			21	Medford	3	M. Rines
1	Tyngsboro	4	J. Center	Pileated	Woodpecker		
11	Gardner	1	T. Pirro	6	Barre	3	M. Lynch#
11	Lancaster	25	R. Lockwood	18	Sherborn	3	E. Taylor
12	Wellfleet	6	R. Stymeist#				1

#### FLYCATCHERS THROUGH GROSBEAKS

Breeding bird surveys were continued at Barre Falls Dam, a 557-acre Army Corps of Engineers property located in the towns of Barre, Rutland, Oakham and Hubbardston, composed of a mix of woodlands, open fields, and riverine and other wetland habitats. These types of surveys, and others such as those conducted weekly at the Broad Meadow Brook Audubon Sanctuary in Worcester, provide valuable information about the breeding status of summering songbirds at a time when most of our attentions are being directed toward more coastal localities. Let's see more of these next summer.

Acadian Flycatchers are very local breeders in Massachusetts, especially in eastern portions. So the discovery of a single Acadian in West Townsend, at a site where the species has not been known to breed previously, was intriguing. The same could be said for the four Cliff Swallows in Pepperell. Another very scarce and local nester, Golden-crowned Kinglet, was actually confirmed breeding in Barre. White-eyed Vireos were well reported from their stronghold in the Westport area, and, although breeding of this species on Martha's Vineyard has never been confirmed, the report of an individual on Chappaquiddick, Edgartown, July 20th, suggested they might have nested there this summer. Unfortunately, no Golden-winged Warblers were reported during the month. Their apparent absence provided sad commentary on the plight of this rapidly disappearing species. Inexplicable was the presence of a singing male Blackpoll Warbler in Rockport and a singing male Bay-breasted Warbler in Lincoln. At the old Fort Devens in Lancaster and Ayer (now designated "Devens"), 23 adult and 18 young Grasshopper Sparrows, plus two adult and four young Vesper Sparrows, were counted, as part of a statewide effort on the part of the Massachusetts Audubon Society to survey state-listed species of grassland birds.

Red Crossbills have been found nesting in the state only following certain winters in which major irruptions occurred, and no such event took place during the winter of '96-'97. Yet, among reports of this species from three different localities was a pair with three young in Rockport. Since the juveniles had well-developed feathers (the observer commented that the juveniles' tails were the same length as the adults'), they could have arrived from out of state, but a local, natal origin could not be ruled out. An additional four adult Red Crossbills were noted in W. Newbury. Consistent with a recent summertime trend, the occurrence of Evening Grosbeaks at three different localities included a pair in Boxford that was present throughout the month.

S. P., R. H. S.

Eastern '	Wood-Pewee			19	P.I.	5	M. Lynch#
4	Quabbin (G40)	16	R. Lockwood	22	Lancaster	6	R. Lockwood
5	Barre	16	M. Lynch#	23	Bolton Flats	8	L. Hennin
7	Concord	9	R. Lockwood	26	Lexington	4	M. Rines
19	Boxford (C.P.)	18	R. Heil	Least Fl	ycatcher		
23	Worc. (BMB)	9	J. Liller	4	Quabbin (G40)	20	R. Lockwood
29	Medford	7	M. Rines	6	Barre	24	M. Lynch#
Acadian	Flycatcher			Great Cr	rested Flycatcher		
4	W. Townsend	1	B. Nikula	4	Quabbin (G40)	3	R. Lockwood
Willow	Flycatcher			16	DWWS	6	D. Furbish
6	Andover	3	J. Berry	19	ONWR	3	R. Lockwood
13	Wakefield	4	P. + F. Vale	21	Medford	3	M. Rines

31 Horned	Worc. (BMB)	3	J. Liller	19 19	ONWR Groveland	6	R. Lockwood
26	Chatham (S.B.)	4	G. d'Entremont#	Wood T		3 m	R. Heil
Purple N	<b>I</b> artin			4	Ipswich	5	J. Berry
19	P.I.	85+	M. Lynch#	6	Andover	4	J. Berry
29	Chatham (S.B.)	2	J. Brown#	10	Medford	5	M. Rines
	Rough-winged Sv	vallow		12	Concord	6	R. Lockwood
5 13	P.I.	11	R. Heil	16	N. Marshfield	4	D. Furbish
31	Wakefield	11	P. + F. Vale	Brown 7			
Bank Sw	Chatham (S.B.)	3	R. Heil	5	Pepperell	4	M. Rines
8	Stow	20	L. Hennin	10	Medford	8	M. Rines
11	P.I.	200		16	Worc. (BMB)	5	J. Liller
16	Acton	85	R. Heil J. Center	26	P.I.	5	M. Lynch#
18	Lancaster	7	R. Lockwood#	30	Bedford	5	R. Lockwood
19	Chatham (S.B.)	70	S. Perkins#	20	yed Vireo		A 77 54
Cliff Sw	allow	,,	S. I CIKIIIS#	27	Chappaquiddick Westport	1 9	A. Keith
4	Pepperell	4	E. Stromsted	Solitary		9	M. Lynch#
12	DWWS	2	D. Furbish#	4	Quabbin (G40)	9	R. Lockwood
Fish Cro			D. I di Olstin	6	Barre	9	M. Lynch#
4	Mt.A.	6	R. Stymeist	19	Boxford (C.P.)	2	R. Heil
17	Marshfield	3	D. Furbish	E-71	hroated Vireo	2	K. Hell
26	Bedford	1	M. Rines	4	Quabbin (G40)	1	R. Lockwood
Red-brea	sted Nuthatch	70		6	Barre	1	M. Lynch#
thr	Marlboro	4	B. Parker	8	Stow	2	L. Hennin
4	Ipswich	2	J. Berry	19	Boxford (C.P.)	3	R. Heil
4	Quabbin (G40)	8	R. Lockwood	19	ONWR	1	R. Lockwood
6	Barre	10	M. Lynch#	Warbling			IC. LOURWOOD
8	Stow	3	L. Hennin	6	Barre	5	M. Lynch#
17	Groveland	3	R. Heil	12	Wakefield	5	P. + F. Vale
Brown C	reeper			26	Arlington	3	M. Rines
4	Quabbin (G40)	14	R. Lockwood	Red-eye			
Carolina				4	Quabbin (G40)	37	R. Lockwood
thr	Ipswich	1	J. Berry	6	Barre	146	M. Lynch#
4	Mt.A.	1	R. Stymeist	19	ONWR	11	R. Lockwood
7	Worcester	1	M. Lynch#	Blue-wir	ged Warbler		
17	Groveland	3	R. Heil	16	Worc. (BMB)	3	J. Liller
21	Medford	1	M. Rines	21	Medford	3	M. Rines
27	Westport	12	M. Lynch#		e Warbler		
Winter V			D 7 1 1	6	Barre	2	M. Lynch#
6	Quabbin (G40)	4	R. Lockwood	Yellow V		-	1
7	Barre Concord	3	M. Lynch#	5	P.I.	22	M. Lynch#
12	Ashburnham	2	R. Lockwood T. Pirro	6	Barre	22	M. Lynch#
25	Lexington	1	M. Rines	Chastrut	Bedford	20	R. Lockwood
Marsh W		1	IVI. KINGS		-sided Warbler	16	D T 1
4	DWWS	1	D. Furbish	6	Quabbin (G40)	16	R. Lockwood
12	GMNWR	20	G. d'Entremont#	2.7	Barre Warbler	37	M. Lynch#
13	Wakefield	10	P. + F. Vale	6	Barre	9	M Lungh#
19	P.I.	24	M. Lynch#	Black-th	oated Blue Warble		M. Lynch#
23	Bolton Flats	3	L. Hennin	4	Quabbin (G40)	2	R. Lockwood
	rowned Kinglet		D. Heimin	6	Barre	5	M. Lynch#
6	Barre ad	1 + 3 y	g M. Lynch#		umped Warbler	J	IVI. Lylicii#
	y Gnatcatcher		b in Djilonii	4	Quabbin (G40)	13	R. Lockwood
2 .	Concord	3	R. Lockwood	6	Barre	31	M. Lynch#
5	Pepperell	3	M. Rines		oated Green Warbl		IVI. Lynchin
19	Boxford (C.P.)	8	R. Heil	4	Quabbin (G40)	9	R. Lockwood
Eastern E		-	*******	6	Barre	26	M. Lynch#
17	Ayer	4	G. d'Entremont#		nian Warbler	20	III. Lyncin
17	Lancaster	4	R. Lockwood#	4	Quabbin (G40)	11	R. Lockwood
31	Worc. (BMB)	6	J. Liller	6	Barre	9	M. Lynch#
Veery				Pine War	bler	5	aj nom
4	Ipswich	7	J. Berry	4	Quabbin (G40)	31	R. Lockwood
4	Quabbin (G40)	33	R. Lockwood	- 6	Barre	29	M. Lynch#
6	Barre	53	M. Lynch#	Prairie W		1000	
7	Concord	6	R. Lockwood	5	Pepperell	4 pr	M. Rines
17	Groveland	14	R. Heil	10	Lancaster	10	R. Lockwood
19	ONWR	4	R. Lockwood	19	Groveland	8	R. Heil
Hermit T				19	Barre	6	M. Lynch#
4	Quabbin (G40)	4	R. Lockwood		sted Warbler		
6	Barre	35	M. Lynch#	18	Lincoln	1 m	K. Calmer
7		4	R. Lockwood				

1-3 Plack and	Rockport d-white Warbler	1 m	M. Flor	17 17	Bedford Marshfield	5	R. Lockwood D. Furbish
4		4	R. Lockwood			'	D. Pulbisii
	Quabbin (G40)	8		Vesper Sp 12	Wellfleet	8+	D Ctumolat#
6	Barre		M. Lynch#				R. Stymeist#
28	E. Sandwich	2	S. + E. Miller	18		ad + 4 yg	R. Lockwood
	Redstart		D V 1	Savannah		00	D 7 1
4	Quabbin (G40)	22	R. Lockwood	2	Bedford	89	R. Lockwood
6	Barre	27	M. Lynch#	8	Stow	15	L. Hennin
20	P.I.	5	D. Furbish#	10	Lancaster	20	R. Lockwood
Ovenbird				Grasshopp	per Sparrow		
4	Quabbin (G40)	33	R. Lockwood	19	Pepperell	2	E. Stromsted
4	Ipswich	22	J. Berry	24	Lancaster 23 a	d + 18 yg	R. Lockwood
6	Barre	68	M. Lynch#	thr	Bedford	6	R. Lockwood
6	Andover	10	J. Berry	Sharp-taile	ed sparrow speci	es	
7	Concord	11	R. Lockwood	27	P.I.	10	P. + F. Vale
	Waterthrush	1.1	R. LUCKWOOD	30	E. Boston	3	P. + F. Vale
		1	T. Dames				r. + r. vaic
4	Ipswich	1	J. Berry		Sharp-tailed Spa		T D
7	Concord	2	R. Lockwood	6	S. Dart. (A.Pd)		T. Raymond
19	Boxford	1	R. Heil	26	Rowley	25+	M. Lynch#
23	Worc. (BMB)	1	J. Liller	26	P.I.	30+	M. Lynch#
27	S. Dartmouth	1	S. + L. Hennin	Seaside Sp	parrow		
Common	Yellowthroat			23	P.I.	2	T. Leverich
4	Quabbin (G40)	38	R. Lockwood	Swamp St	parrow		
5	P.I.	45	M. Lynch#	6	Barre	21	M. Lynch#
6	Barre	117	M. Lynch#	23	Bolton Flats	14	L. Hennin
8	Stow	20	L. Healy		oated Sparrow	***	D. Hemini
100		24		4	Quabbin (G40)	4	R. Lockwood
16	Worc. (BMB)	24	J. Liller	6		8	
Canada V		,			Barre	0	M. Lynch#
6	Barre	6	M. Lynch#	Bobolink			
17	W. Newbury	1 m	R. Heil	8	Stow	15	L. Hennin
Scarlet T	anager			9	Bedford	5	R. Lockwood
4	Ipswich	6	J. Berry	12	Pepperell	42	E. Stromsted
4	Quabbin (G40)	4	R. Lockwood	13	P.I.	10	R. Lockwood#
6	Barre	25	M. Lynch#	22	Lancaster	78	R. Lockwood
7	Concord	9	R. Lockwood	Eastern M	leadowlark		
16	Worc. (BMB)	4	J. Liller	9	Bedford	14	R. Lockwood
19	ONWR	5	R. Lockwood	13	P.I.	5	R. Lockwood#
	asted Grosbeak	2	IC. LOCKWOOD	15	Lancaster	14	R. Lockwood
	Barre	5	M. Lynch#	Common		1.7	R. LOCKWOOD
6				7	Wellfleet	500	R. Stymeist
7	Concord	4	R. Lockwood				
16	Worc. (BMB)	3	J. Liller	31	Framingham	2000	E. Taylor
17	Bedford	4	R. Lockwood	Orchard C		40000	
17	Groveland	12	R. Heil	13	Wayland	1 m	S. Perkins#
18	Lancaster	4	R. Lockwood	15	Woburn	2 f	M. Rines
19	ONWR	4	R. Lockwood	17, 19	Groveland	1 m,	
Indigo B	unting			24	Boxborough	1 m	C. Calcagni
4	Quabbin (G40)	3	R. Lockwood	27	S. Dartmouth	6	S. + L. Hennin
5	Pepperell	7 m	M. Rines	Baltimore	Oriole		
6	Andover	3	J. Berry	17	Groveland	32	R. Heil
17	Marshfield	6	D. Furbish	23	Worc. (BMB)	18	J. Liller
18	Lancaster	6	R. Lockwood	Purple Fir		10	J. Liller
100000000000000000000000000000000000000		3		thr	E. Boxford	6	J. Brown#
24	Sharon	3	D. Furbish			6 pr	
Eastern 7			22 2 2 2	6	Barre	7	M. Lynch#
4	Quabbin (G40)	14	R. Lockwood	Red Cross		72	222
17	Groveland	32	R. Heil	6	Barre	2	M. Lynch#
23	Worc. (BMB)	38	J. Liller	19	Rockport	2 ad	+ 3 yg M. Flor
Field Spa				26	W. Newbury	4	R. Heil
5	Pepperell	4 pr	M. Rines	Evening (			
	P.I.	5	R. Lockwood#	1-30	E. Boxford	pr	J. Brown#
1.4	E-100		R. Lockwood	4	Quabbin (G40)		R. Lockwood
13	ancactor						
15	Lancaster Work (PMP)	17					
	Worc. (BMB) Groveland	10 16	J. Liller R. Heil	5	Westford	2	G. Marley

# BIRD SIGHTINGS AUGUST 1997 SUMMARY

by Marjorie W. Rines, Simon Perkins and Robert H. Stymeist

August 1997 was a bit cool, with frequent light rain. The temperature averaged 71.2° at Boston, just below normal. The high mark was 94° on August 16, and in all there were six days with 90° or higher temperature, double the average number. Rain was frequent, although accumulation of 3.01 inches was a quarter of an inch below normal.

R. H. S.

#### LOONS THROUGH WOODPECKERS

Two Red-necked Grebes in Gloucester probably spent the summer in the area, though they were not recorded there prior to August. Stellwagen Bank continued to be highly productive for pelagic species. Following the first-ever record of Audubon's Shearwater on Stellwagen in July, two more were reported there in August. Also continuing a pattern from July were the record numbers of Cory's Shearwaters on Stellwagen and other points north of Cape Cod. Especially noteworthy were pelagic counts from Andrew's Point in Rockport during coastal storms August 13 and 21. Some of the totals cited for the storm on the 21st represent summed subtotals tallied independently by R. Heil and J. Soucy at different times during the day. The American White Pelican that arrived on Plum Island in July lingered throughout August. Evening counts of roosting herons on Plum Island revealed numbers substantially lower than those noted last year. This was, at least in part, due to the fact that the main roost was fragmented into several smaller roosts located elsewhere. Tricolored Herons very rarely visit sites away from salt or brackish water in the state, so an individual at the IRWS came as a surprise, even more so since it represented the only report of the month. A small flock of migrant Ring-necked Ducks arrived a bit early, while the first migrant scoters arrived right on schedule. A Brant seen on Plum Island early in the month probably over-summered. Also oversummering were two single King Eiders in Rockport and Nantucket. Breeding records for Common Mergansers are scarce in the state, so the report of a female with young at Quabbin Reservoir was significant.

A pair of Ospreys that successfully bred on Plum Island apparently furnished the first modern-day nesting record for this species in Essex county. The Osprey's return as a nesting species in the state, following its nationwide decline in the 1950s and 1960s, was, until recently, limited to the southeastern coast. However, the Plum Island pair, in addition to newly established pairs in Westboro and Pepperell, provide hope that the secies will eventually become more widepread within the state. Breeding Sharp-shinned Hawks are rarely detected in the state, so a pair that successfully raised young in Gardner was an exciting find. The Swainson's Hawk, originally discovered in June, continued to be seen regularly in Provincetown. An unusually high total of eight Merlins was reported during the month.

The pair of Clapper Rails noted in July at Nantucket produced young. This represented only the second breeding record for the island. The Bar-tailed Godwit in Chatham, originally discovered in July, and an American Avocet in Eastham represented the centerpieces among shorebird highlights this month. An exceptional count of 2600 Semipalmated Plovers came from Chatham. An adult Baird's Sandpiper reported from Princeton represented only the third inland record of an adult bird (Veit and Petersen). A handful of Red and Red-necked Phalaropes were reported from Stellwagen Bank, and between one and three Red-necked Phalaropes were reported from the Hellcat impoundment on Plum Island. Jaegers were well-reported from various shore points, particularly on Cape Cod. Both Little and Black-headed gulls were found in good numbers, and a juvenile Black-legged Kittiwake, seen during the August 21 storm, was exceptionally early. Forster's Terns had a poor showing this month, a Caspian Tern put in a rare inland showing in Sharon, and a Royal Tern seen at Plum Island may have been the same individual that was present there during the latter half of July. Roseate Tern numbers continued to build to above-average totals at South Beach in Chatham. This site is the most important staging area in North America for this federally endangered species.

A Long-eared Owl evidently became disoriented and landed on a fishing boat roughly 100 miles southeast of Nantucket. It was captured and later released on Martha's Vineyard. Reports of migrating Common Nighthawks were particularly widespread on the evening of the 30th. The pair of Red-headed Woodpeckers breeding in Malden successfully fledged at least two young.

M. W. R., S. P.

Date	Location	Number	Observers	Date	Location	Numbe	r Observers
Common	Loon			13	Watertown	1	L. Cocca
8	Wachusett Res.	7	M. Lynch#	24	Lexington	2	C. Cook
10	S. Monomoy	14	H. Ferguson	25	P.I.	800	R. Heil
14		or + 1 yg	S. Perkins#	29	S. Dart. (A.Pd)		LCES (J. Hill)
26	Quabbin (G35)p	r + 2 va	T. Pirro	30	E. Boston (B.I.		
Pied-bille		n + 2 yg	1.1110	Little Blu		) /0+	R. Clessillali
	P.I.	1	M Dinos			2:	TI MOIL
1		1	M. Rines	2	Wellfleet		mm H. Miller
31	P.I.	2	R. Heil	10	P.I.		BBC (R. Petersen)
Red-neck				16	Essex R.	10	J. Berry#
10	Gloucester	2	R. Lockwood	17	Boston H.	1	TASL (M. Hall)
Cory's Sh	earwater			Tricolore	d Heron		
3	Stellwagen	32	R. Heil	16	IRWS	1	fide R. Speare
21	Rockport (A.P.)	41	R. Heil#	Cattle Eg	ret		
Greater Sl	hearwater			10	Essex	1	J. Berry
3	Stellwagen	750	R. Heil	17	Hamilton	7	J. Paluzzi
13	Rockport (A.P.)		R. Heil	Green He			
21	Rockport (A.P)		R. Heil#	7	P.I.	5	S. Carey#
26	Stellwagen	350	W. Petersen	10	Wakefield	7	
		330	W. Petersen	77.7			P. + F. Vale
Sooty She		-	D 11 11	16	Webster	8	M. Lynch#
13	Rockport (A.P.)		R. Heil	17	Boston H.	5	TASL (M. Hall)
21	Rockport (A.P.)		R. Heil		wned Night-Her		
10	Stellwagen Ban	k 90	R. Lockwood	13	Reading	9	D. Williams#
Manx She	arwater			16	Yarmouth	100	G. d'Entremont#
3	Stellwagen	48	R. Heil	24	Wayland	50	E. Taylor
13	Rockport (A.P.)	3	R. Heil	30	E. Boston	6-1	
21	Rockport (A.P.)		R. Heil#		rowned Night-He		
26	Stellwagen	20	M. Morgante	thr	P.I.		mm v.o.
29	Nantucket	2	S. Perkins#	30	Chappaquiddic		mm A. Keith#
						K 1.1	IIIII A. Kelui#
	's Shearwater *			Glossy Ib	the state of the s		C PE-
10	Stellwagen	2	T. Leverich#	3	Randolph	3	G. d'Entremont
	Storm-Petrel			3	GMNWR	1	D. Brownrigg#
3	Stellwagen	2300	R. Heil	3	DWWS	1	D. Furbish
31	Nantucket	2	S. Perkins#	6	Newbury	65	R. Heil
Leach's S	torm-Petrel			9	P.I.	105	P. + F. Vale
3	Stellwagen	2	R. Heil	12	S. Peabody	3	R. Heil
9	Stellwagen	5	E. Tarry#	16	Wayland	2	E. Taylor
21	Rockport (A.P.)		R. Heil	20	Braintree	1	S. Carey
Northern				Brant	2141114.00	-	o. c.m.c.j
10	Stellwagen	9	J. Berry	7	P.I.	1	R. Heil
13			R. Heil	Wood Du		1	IV. LICII
21	Rockport (A.P.)					39	P. + F. Vale
	Rockport (A.P.)		R. Heil	10	Wakefield		
23	Stellwagen	30	J. Hoye#	19	GMNWR	35	S. Perkins#
29	Nantucket	6	S. Perkins#	25	Newbypt	23	R. Heil
American	White Pelican	*			nged Teal		
thr	P.I.	1	V.O.	12	Tisbury	18	V. Laux#
Double-ci	rested Cormorant			15	Nantucket	17	fide E. Ray
17	Chatham (S.B.)	1200	R. Heil	24	Lexington	9	C. Cook
19	Stellwagen	400 mig		30	Tuckernuck	7	S. Perkins#
American				31	P.I.	80	M. Lynch#
2	Reading	1	D. Williams	Northern		00	In. Dynom
		1				15	B. Nikula#
	GMNWR		S. Perkins#	26	S. Monomoy	13	D. INIKUIA#
30	P.I.	1	M. Resch	Blue-win			** ****
Great Egr		12	84.88	16	P.I.	12	H. Miller
thr	Lexington	8 max	M. Rines	26	S. Monomoy	70	B. Nikula#
4	Barnstable	30	S. + E. Miller	31	Nantucket	1	S. Perkins#
8	Wayland	19	E. Taylor	Northern			
10	Hingham	25+	S. Carey	17	Boston H.	1	TASL (M. Hall)
10	Reading	12	D. Williams	23	P.I.	2	P. + F. Vale
		3		26		7	B. Nikula#
10	Wakefield		P. + F. Vale		S. Monomoy	1	D. INIKUIA#
12	Braintree	6	S. Carey	Gadwall	CLART		0.0.1
17	Holliston	1	E. Taylor	23	GMNWR	1	S. Perkins
18	Groton	1	T. Pirro	26	S. Monomoy	50	B. Nikula#
19	GMNWR	2	S. Perkins#	31	P.I.	6	M. Lynch#
25	P.I.	125	R. Heil	American	Wigeon		
Snowy Es				26	S. Monomoy	10	B. Nikula#
thr	Woburn	9 max	M. Rines	31	Arlington	1	M. Rines
10	Hingham	50+	S. Carey		ked Duck		
						4	R. Heil
10	Reading	4	D. Williams	26	W. Newbury	4	K. Hell
12	Braintree	3	S. Carey				

17	Common	Eider			19	Mt. Wachusett	4	T. Carrolan
17		P'town		R. Heil	Swainson			
17							1	K. Jones + v.o.
Merlin					Americar	n Kestrel		
The Nantucket				R. Stymeist#		DWWS	6	D. Furbish
unterpresentation         Name of the content o			14 BB	C (R. Stymeist)				
13							v. from	8 locations
Surf Scotor				E. Ray + v.o.	Peregrine	Falcon		
21			1 f	R. Heil		E. Cambridge		F. Bouchard
26		W						R. Heil
White-winged Scoter	277.7							
17			6	R. Turner				
19							-	
Hooded Merganser								
17			5	R. Heil				
28			4	D. 11.11			1 imm	D. + I. Jewell
29-31 Chilmark   1							1	7.7.10
31 P.I.   1 M. Lynch#   8 Newton   1f + yg   T. Force   1							1	J. Liller
14   Kingston   3 ad + yg   D. Ludlon   26   Quabbin (G35)   If + 6yg   T. Pirro   Red-breasted Merganser   10   Gloucester   1   If   G. d'Entremont#   12   Glapper Rail   W. Concord   1   R. Sodan   Clapper Rail   W. Concord   1   R. So							16.	T Food
Red-breasted Merganser   10   Gloucester   1f   G   Gloucester   1f   Gloucester   1f   G   Gloucester   1f   Gloucester   1f   G   Gloucester   1f   Gloucester   1f   G   Gloucester   1f   G   Gloucester   1f   G   Glouce   1f   Glouce   1			1	M. Lynch#				
Red-breasted Merganser   10   Gloucester   1f   J. Berry   16   Dennis   1 f   G. d'Entremont#   17   Nantucket pr + yg D. Sutherland + v.c   18   Nantucket pr + yg D. Sutherland + v.c   18   Nantucket pr + yg D. Sutherland + v.c   18   Nantucket pr + yg D. Sutherland + v.c   Nantuck			16 .	6ug T Direc			3 au -	yg D. Ludiow
10   Gloucester   1 f   J. Berry   16   Dennis   1 f   G. Cleathermont   1			11 +	oyg 1. Fillo			1	D. Codono
16			1.6	I Dames			1	R. Sodano
23							wa D	Cuthorland
27   Falmouth   3   R. Farrell   28   Chatham   1   S. + E. Mille   30   Tuckernuck   3   S. Perkins#   2   Oxford   3   D. Chickerin   2   Oxford   3   D. Chickerin   2   Oxford   3   D. Chickerin   3   P.I.   1   D. Chickerin   1   Oxford   3   J. Lille   2   Westboro   2   ad + 3   E. Taylor   2   Westboro   2   ad + 3   E. Taylor   2   Westboro   2   ad + 3   E. Taylor   2   Westboro   2   A. H. Heil   10   GMNWR   1   imm   J. Forbe   16   Oxford   21   M. Lynch#   Black-bellied Plover   8   Chatham (S.B.) 2200   R. Heil   10   Westport   66   M. Lynch#   16   Dxbury B.   450   D. Clap   17   Boston H.   407   TASL (M. Hall   12   Braintree   2   S. Carey   22   Ipswich   1000   S. Perkins   17   Boston H.   407   TASL (M. Hall   12   Braintree   2   S. Carey   22   Ipswich   1000   S. Perkins   27   Falmouth   pr n   R. Turner   29   Nantucket   10   S. Perkins   21   S. Boston   2   R. Donova   28   Groton   1   T. Pirro   30   Insurance   30   Insuran			1 DD	C (P. Stymoist)				
Solution   Solution								
Ruddy Duck							1	S. + E. Miller
D. Clapp   3			3	S. Perkins#			2	M Lunch#
26   S. Monomoy   3   B. Nikula#   10   GMNWR   1 imm   J. Forbeth   17   Oxford   3   J. Lille   2   Westboro   2 ad + 3   E. Taylor   2   P'town   6   M. Rines#   10   GMNWR   1 imm   J. Forbeth   16   Oxford   21   M. Lynch#   17   Boston H.   407   TASL (M. Hall   12   Braintree   2   S. Carey   22   Ipswich   1000   J. Giriuna   27   Woburn   2   M. Rines   27   Falmouth   pr n   R. Turner   27   Woburn   2   M. Rines   27   Falmouth   pr n   R. Turner   27   Woburn   2   M. Rines   28   Groton   1   T. Pirro   30   M. V.   22   V. Laux   30   Barnstable (S.N.)   2   H. Ferguson   28   Groton   1   T. Pirro   30   M. V.   22   V. Laux   30   Nantucket   15   E. Ra   Semipalmated Plover   21   DWWS   3   D. Furbish   29   31   Nantucket   7   S. Perkins#   16   Webster   2 imm   M. Lynch#   16   Webster   2 imm   M. Lynch#   17   Boston H.   870   TASL (M. Hall   17   Boston H.   870   TAS			1	D Clann				
Turkey Vulture								
2			,	D. Itikulan				
Province   Province			2 ad	+3 F Taylor				
7						Oterning	-	IVI. Lynchii
16						GMNWR	1 ir	nm I Forbes
Osprey         3         P.I.         pr w l yg         J. Berry         16         Duxbury B.         4 50         D. Clap           10         Westport         66         M. Lynch#         17         Boston H.         450         TASL (M. Hall           27         E. Falmouth         pr n         R. Turner         29         Nantucket         100         S. Perkins           27         Falmouth         3         R. Farrell         29         Nantucket         100         S. Perkins           27         Falmouth         3         R. Farrell         29         Nantucket         100         S. Perkins           28         Grandwr         1 imm         C. Jackson         26         Newbury         1 ad         R. He           18         Nantucket         1         fide E. Ray         30         Ipswich         3         G. Gov           18         Nantucket         1         Frigro         30         Ipswich         3         G. Gov           19         Wayland         1         T. Pirro         30         M.V.         22         V. Laux           Northern Harrier         1         D. Furbish         42         P.I.         5         M. Lynch#							1.11	J. 1 01003
3		OMIGIG	~.	III. Lay III III			2200	R Heil
10		P.I. p	rw 1 vg	J. Berry				
12		Westport		M. Lynch#				
27   E. Falmouth   pr n   R. Turner   29   Nantucket   100   S. Perkins   27   Falmouth   3   R. Farrell   21   S. Boston   2   R. Donova   28   Groton   1   T. Pirro   30   Barnstable (S.N.)   2   H. Ferguso   28   Groton   1   T. Pirro   30   M.V.   22   V. Laux   30   Barnstable (S.N.)   2   H. Ferguso   21   DWWS   3   D. Furbish   29, 31   Nantucket   7   S. Perkins#   12   P.I.   650   R. Hei   14   Gardner   2 ad + 2-3 yg   S. Perkins#   14   Gardner   2 ad + 2-3 yg   S. Perkins#   17   Boston H.   870   TASL (M. Hall   17   Boston H.   870   TASL (M. Hall   17   Boston H.   870   TASL (M. Hall   18   D. Furbish   17   Boston H.   870   TASL (M. Hall   19-31   E. Middleboro pr + 3 yg   K. Anderson   28   Harvard   1   R. Lockwood   Broad-winged Hawk   3   P. town   2   R. Heil   2   Newbypt   7   P. F. Vall   2   New								
27   Woburn   2   M. Rines   R. Farrell   27   Falmouth   3   R. Farrell   21   S. Boston   2   R. Donova   28   GMNWR   1 imm   C. Jackson   26   Newbury   1 ad   R. He   18   Nantucket   1   fide E. Ray   30   Ipswich   3   G. Gov   30   Nantucket   15   E. Ra   30   Nantucket   15   Nant								S. Perkins#
27   Falmouth   3   R. Farrell   21   S. Boston   2   R. Donova	27				American			
Bald Eagle   2   GMNWR	27	Falmouth	3	R. Farrell	21	S. Boston	2	R. Donovan
2	Bald Eagl	le			25	P.I.	1	R. Heil
18	2	GMNWR	1 im	m C. Jackson	26	Newbury	1 ac	d R. Heil
28	18	Nantucket	1	fide E. Ray	30	Ipswich	3	G. Gove
28	19	Wayland	1	S. Arena	30	Barnstable (S.N	1.) 2	H. Ferguson
10	28	Groton	1	T. Pirro	30		22	V. Laux#
21 DWWS   3 D. Furbish   29, 31 Nantucket   7 S. Perkins#   12 P.I.   650 R. He   30 Tuckernuck   3 S. Perkins#   14,26 N. Monomoy   700, 600 B. Nikul   31 P.I.   5 M. Lynch#   15 Scituate   1200 S. Perkins   16 Ipswich   900 S. Perkins   16 Ipswich   900 S. Perkins   16 Ipswich   900 S. Perkins   17 Chatham (S.B.) 2600 R. He   16 Webster   2 imm M. Lynch#   17 Boston H.   870 TASL (M. Hall   24 P.I.   3 BBC (S. Grinley)   30 Mt. Wachusett   2 E. Taylor   29 S. Dart. (A.Pd)   6 LCES (J. Hill   20 Plymouth   1 C. Ralph   17 Boston H.   80, 130 B. Nikul   17 Boston H.   18 Dart. (A.Pd)   1 LCES (J. Hill   20 Plymouth   1 C. Ralph   17 Boston H.   17 Boston H.   18 Dart. (A.Pd)   1 LCES (J. Hill   20 Plymouth   1 C. Ralph   17 Boston H.   5 TASL (M. Hall   20 Plymouth   1 C. Ralph   17 Boston H.   5 TASL (M. Hall   20 Plymouth   1 C. Ralph   17 Boston H.   5 TASL (M. Hall   20 Plymouth   1 C. Ralph   17 Boston H.   5 TASL (M. Hall   20 Plymouth   1 C. Ralph   17 Boston H.   5 TASL (M. Hall   20 Plymouth   1 C. Ralph   17 Boston H.   5 TASL (M. Hall   20 Plymouth   1 C. Ralph   17 Boston H.   5 TASL (M. Hall   20 Plymouth   1 C. Ralph   17 Boston H.   5 TASL (M. Hall   20 Plymouth   1 C. Ralph   17 Boston H.   5 TASL (M. Hall   20 Plymouth   2 R. Farrel   20 Plymouth   2 Plymouth   20 Plymouth   2 Plymo	Northern	Harrier			30	Nantucket	15	E. Ray
29, 31 Nantucket   7	10	P.I.		BBC (Petersen)	Semipaln	nated Plover		
30	21	DWWS	3	D. Furbish	6	Woburn	35	M. Rines
Sharp-shinned Hawk	29, 31	Nantucket	7	S. Perkins#			650	R. Heil
Sharp-shinned Hawk	30	Tuckernuck		S. Perkins#	14,26	N. Monomoy	700, 60	30 B. Nikula
14         Gardner         2 ad + 2-3 yg         S. Perkins#         17         Chatham (S.B.) 2600         R. Heil           16         Webster         2 imm         M. Lynch#         17         Boston H.         870         TASL (M. Hall           24         P.I.         3 BBC (S. Grinley)         Piping Plover         10         Chatham (S.B.)         22         S. Moore           Cooper's Hawk         29         S. Dart. (A.Pd)         6         LCES (J. Hill           Thr         Reports of 1-2 indiv. From 12 loc.         American Oystercatcher         14,26         N. Monomoy         80, 130         B. Nikul           16         DWWS         1 imm         D. Furbish         14         S. Dart. (A.Pd)         1         LCES (J. Hill           20         Plymouth         1         C. Ralph         17         Boston H.         5         TASL (M. Hall           Red-shouldered Hawk         20         P. W. Harringto         23         Chatham (S.B.)         1         LCES (J. Hill           4-24         E. Boxford         1         J. Brown#         27         Falmouth         2         R. Farrel           19-31         E. Middleboro pr + 3 yg         K. Anderson         31         Nantucket         15	31	P.I.	5	M. Lynch#	15		1200	S. Perkins#
16         Webster 24         P.I. 3         3 BBC (S. Grinley) 4 BBC (S. Gri	Sharp-shi	nned Hawk			16			S. Perkins#
16       Webster 24       P.I. 3 BBC (S. Grinley)       17       Boston H. Piping Plover       870       TASL (M. Hall Piping Plover In Contact Plants of Incomplete Plants of I	14	Gardner 2 ad	+2-3 y	g S. Perkins#	17	Chatham (S.B.)	2600	R. Heil
24       P.I.       3 BBC (S. Grinley)       Piping Plover       3 DWt. Wachusett       2 E. Taylor       10 Chatham (S.B.)       22 S. Moore         Cooper's Hawk       29 S. Dart. (A.Pd)       6 LCES (J. Hill         Northern Goshawk       41 D. Furbish       14 D. WS       1 imm D. Furbish       14 S. Dart. (A.Pd)       1 LCES (J. Hill         Red-shouldered Hawk       23 Chatham (SB)       76 W. Harrington         4-24 E. Boxford       1 J. Brown#       27 Falmouth       2 R. Farrel         19-31 E. Middleboro pr + 3 yg       K. Anderson       31 Nantucket       15 S. Perkinst         23 DWWS       1 J. Adamson       American Avocet       22-30 Eastham       1 fide J. Sone         Broad-winged Hawk       Greater Yellowlegs       2 Newbypt       7 P. + F. Val	16		2 im	m M. Lynch#	17	Boston H.	870	TASL (M. Hall)
30         Mt. Wachusett         2         E. Taylor         10         Chatham (S.B.)         22         S. Moore           Cooper's Hawk         29         S. Dart. (A.Pd)         6         LCES (J. Hill           Thr         Reports of 1-2 indiv. From 12 loc.         American Oystercatcher           Northern Goshawk         14,26         N. Monomoy         80, 130         B. Nikul           16         DWWS         1 imm         D. Furbish         14         S. Dart. (A.Pd)         1         LCES (J. Hill           Red-shouldered Hawk         23         Chatham (S.B.)         76         W. Harrington           4-24         E. Boxford         1         J. Brown#         27         Falmouth         2         R. Farrel           19-31         E. Middleboro pr + 3 yg         K. Anderson         31         Nantucket         15         S. Perkinst           28         Harvard         1         R. Lockwood         22-30         Eastham         1         fide J. Sone           Broad-winged Hawk         Greater Yellowlegs         2         Newbypt         7         P. + F. Val	24	P.I.	3 B	BC (S. Grinley)	Piping Ple	over		
Thr         Reports of 1-2 indiv. From 12 loc.         American Oystercatcher         80, 130         B. Nikul           16         DWS         1 imm         D. Furbish         14         S. Dart. (A.Pd)         1 LCES (J. Hill           20         Plymouth         1         C. Ralph         17         Boston H.         5         TASL (M. Hall           Red-shouldered Hawk         23         Chatham (SB)         76         W. Harringto           4-24         E. Boxford         1         J. Brown#         27         Falmouth         2         R. Farrel           19-31         E. Middleboro pr + 3 yg         K. Anderson         31         Nantucket         15         S. Perkins           23         DWWS         1         J. Adamson         American Avocet         22-30         Eastham         1         fide J. Sone           Broad-winged Hawk         Greater Yellowlegs         2         Newbypt         7         P. + F. Val	30	Mt. Wachusett	2		10	Chatham (S.B.)	22	S. Moore#
Northern Goshawk	Cooper's	Hawk			29	S. Dart. (A.Pd)	6	LCES (J. Hill)
16         DWWS         1 imm         D. Furbish         14         S. Dart. (A.Pd)         1         LCES (J. Hill 2000)           20         Plymouth         1         C. Ralph         17         Boston H.         5         TASL (M. Hall 2000)           Red-shouldered Hawk         23         Chatham (SB)         76         W. Harrington 2000           4-24         E. Boxford         1         J. Brown#         27         Falmouth 2000         2         R. Farrel 2000           19-31         E. Middleboro pr + 3 yg         K. Anderson 2000         31         Nantucket         15         S. Perkinst           28         Harvard         1         R. Lockwood         22-30         Eastham 2000         1         fide J. Sone           Broad-winged Hawk 3         P'town 2         R. Heil         2         Newbypt 7         P. + F. Vall	Thr	Reports of 1-2 ir	ndiv. Fro	m 12 loc.	American	Oystercatcher		
20         Plymouth         1         C. Ralph         17         Boston H.         5         TASL (M. Hall 23 Chatham (SB) 76         W. Harrington 23 Chatham (SB) 76         W. Harrington 24 R. Farrel 25         W. Harrington 26 R. Farrel 27         Falmouth 2         R. Farrel 27         R. Farrel 28         R. Farrel 29         Nantucket 15         S. Perkinston 25         S. Perkinston 26 Region 26         R. Farrel 27         R. Farrel 27         R. Farrel 28         R. Farrel 29         R. Far	Northern				14,26	N. Monomoy	80, 13	<ol><li>B. Nikula</li></ol>
Red-shouldered Hawk 4-24 E. Boxford 1 J. Brown# 27 Falmouth 2 R. Farrel 19-31 E. Middleboro pr + 3 yg K. Anderson 31 Nantucket 15 S. Perkinsi 23 DWWS 1 J. Adamson 28 Harvard 1 R. Lockwood Broad-winged Hawk 3 P'town 2 R. Heil 2 Newbypt 7 P. + F. Val.			1 im					LCES (J. Hill)
4-24       E. Boxford       1       J. Brown#       27       Falmouth       2       R. Farrel S. Perkins         19-31       E. Middleboro pr + 3 yg       K. Anderson       31       Nantucket       15       S. Perkins         23       DWWS       1       J. Adamson       American Avocet       2         28       Harvard       1       R. Lockwood       22-30       Eastham       1       fide J. Sone         Broad-winged Hawk       Greater Yellowlegs       Greater Yellowlegs       7       P. + F. Val         3       P'town       2       R. Heil       2       Newbypt       7       P. + F. Val			1	C. Ralph		Boston H.		TASL (M. Hall)
19-31       E. Middleboro pr + 3 yg       K. Anderson       31       Nantucket       15       S. Perkinst         23       DWWS       1       J. Adamson       American Avocet       2         28       Harvard       1       R. Lockwood       22-30       Eastham       1       fide J. Sone         Broad-winged Hawk       Greater Yellowlegs       Greater Yellowlegs       7       P. + F. Val         3       P'town       2       R. Heil       2       Newbypt       7       P. + F. Val	Red-shou	ldered Hawk						W. Harrington
23 DWWS 1 J. Adamson American Avocet 28 Harvard 1 R. Lockwood 22-30 Eastham 1 fide J. Sone Broad-winged Hawk 3 P'town 2 R. Heil 2 Newbypt 7 P. + F. Val						Falmouth		R. Farrell
28 Harvard 1 R. Lockwood 22-30 Eastham 1 fide J. Sone Broad-winged Hawk Greater Yellowlegs 3 P'town 2 R. Heil 2 Newbypt 7 P. + F. Val			r + 3 yg	K. Anderson	31	Nantucket	15	S. Perkins#
Broad-winged Hawk Greater Yellowlegs 3 P'town 2 R. Heil 2 Newbypt 7 P. + F. Val			1					
3 P'town 2 R. Heil 2 Newbypt 7 P. + F. Val			1	R. Lockwood			1	fide J. Sones
	Broad-win	nged Hawk			Greater Y	ellowlegs		
3 Barre 3 M. Lynch# 3 Randolph 2 G. d'Entremon								P. + F. Vale
7. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	3	Barre	3	M. Lynch#	3	Randolph	2	G. d'Entremont

C	.111			10	Chatham (C.D.)	250	S M#
	ellowlegs (continu	13	M. Rines	10 12	Chatham (S.B.) P.I.	250 84	S. Moore# R. Heil
4 10	Lexington Chatham (S.B.)	110	S. Moore#	15	Scituate	40	S. Perkins#
	N. Monomoy	300, 225		16	Duxbury B.	400	D. Clapp
15	Nauset	600	M. Lynch#	17	Boston H.		TASL (M. Hall)
17	Boston H.		ASL (M. Hall)	31	Nantucket	25	S. Perkins#
30	Squantum		G. d'Entremont	Red Knot		20	D. I CIRIIS
Lesser Ye		50	J. d Endomont	6	Revere	3	P. + F. Vale
thr	Lexington	4-6	M. Rines	8	Chatham (S.B.)		R. Heil
2	Newbypt	550	R. Heil	15	Scituate	150	S. Perkins#
3	Randolph		G. d'Entremont	16	Chilmark	28	V. Laux#
10	Reading	11	D. Williams	25	P.I.	37	R. Heil
10	Chatham (S.B.)		S. Moore#	Sanderlin			11.11011
10	Wakefield	12	P. + F. Vale	8	Nahant	500	L Pivacek
17	Boston H.		ASL (M. Hall)	10	Chatham (S.B.)		S. Moore#
30	Cumb. Farms	1	K. Anderson	16	Ipswich (C.B.)	250	S. Perkins#
31	Arlington	9	M. Rines	16	Duxbury B.	400	D. Clapp
Solitary S		,	IVI. KINGS	17	Chatham (S.B.)		R. Heil
6	Woburn	3	M. Rines	18	Revere	1000	BBC (P. Vale)
10	WBWS	3+	M. Partridge	26	N. Monomoy	1700	B. Nikula
11	Reading	5	D. Williams		ated Sandpiper	1700	D. IVIKUIA
16	Webster	6	M. Lynch#	2		7500	R. Heil
2,6	Newton	1,2	H. Miller	3	Randolph	100	G. d'Entremont
	Newton	1,2	ri. Miller	4, 16		2200, 28	
Willet	DI	35	R. Heil	8, 17	Chatham (S.B.)		
7	P.I.			15		4000, 40	M. Lynch#
10	Chatham (S.B.)	130	S. Moore#	15		1000+	S. Perkins#
14,26		200, 40	B. Nikula	16		600	D. Clapp
16	Duxbury B.	6	D. Clapp	7.7	Duxbury B.		
19	S. Dart. (A.Pd)	8	LCES (J. Hill)	16	Ipswich (C.B.)	350	S. Perkins#
27	Falmouth	4	R. Farrell	17	Boston H.	1977	TASL (M. Hall)
Spotted S		-	N/ T LB	Western S		2	D Danauan
5	Wachusett Res.	5	M. Lynch#	4	Squantum	1	R. Donovan P. + F. Vale
6	Woburn	5	M. Rines		Revere		L Pivacek
10	Reading	5	D. Williams	8	Nahant	1	
10	Wakefield	4	P. + F. Vale	15	Scituate	2 ac	
12	Braintree	4	S. Carey	16	Ipswich (C.B.)	1 ac	
16	Webster	5	M. Lynch#	19	Lynn B.	1	C. Floyd
23		5 BB	C (R. Stymeist)	23	P.I.	3	D. Chickering
Upland Sa				24	Rowley	1	J. Hoye#
1	DWWS	1	N. Ludlow	27	Falmouth	1	R. Farrell
6	Bedford	18	R. Lockwood	28	Eastham	2	W. Petersen
18	Nantucket	2	fide E. Ray	Least San		100	D 77 11
19	Katama	12	V. Laux	14	Newbury	120	R. Heil
29	Halifax	1	D. Clapp	14	P.I.	200	R. Heil
1	Lancaster	1	R. Lockwood	22	Cumb. Farms	400	K. Anderson
Whimbre		5		24	Lexington	120	C. Cook
2	Newbypt	8	P. + F. Vale		mped Sandpiper	2.2	
2	Wellfleet	60	H. Miller	3	P.I.	15	J. Berry
4	Nantucket	12	fide E. Ray	4	S. Peabody	2 a	
10	Chatham (S.B.)	6	S. Moore#	8	Woburn	2	M. Pelikan#
10	Westport	3	M. Lynch#	14	P.I.	32 ac	
10	WBWS	75	M. Partridge	17	Chatham (S.B.)		
15	Scituate	1 juv		17	Boston H.	5	TASL (M. Hall)
19	S. Dart. (A.Pd)	2	LCES (J. Hill)	25	E. Sandwich	10	S. + E. Miller
23	N. Monomoy	175	W. Bailey	29	P.I.	50	D. Chickering
Hudsonia	n Godwit			Baird's S	andpiper		
2	Newbypt	17	R. Heil	4	Princeton		d R. Bradbury
14	N. Monomoy	95+	B. Nikula	23-30	P.I.	1	V. O.
17	Chatham (S.B.)	100+	J. Sones	Pectoral S	Sandpiper		
17	Boston H.	9 7	TASL (M. Hall)	4	Holden	2	R. Bradbury
18	Chatham (S.B.)	131	H. Ferguson	11	Reading	6	D. Williams
Bar-taile	d Godwit * (no d	etails)		12	Cumb. Farms	3	M. Emmons
1-27	Chatham (S.B.)		V. Laux + v.o.	17	Chatham (S.B.)	2 a	
14,26	N. Monomoy	1	B. Nikula	17	Nantucket	5	fide E. Ray
Marbled (				24	Lexington	3	C. Cook
4	P.I.	1	D. + I. Jewell	Dunlin			
10	Holden	1 ph		7	P.I.	1	R. Heil
14,26		1, 4	B. Nikula	17	Chatham (S.B.)	2	R. Heil
25	P.I.	2 juv		Stilt Sand			
31	Boston (Lovell		D. Turin	thr	P.I.	27 n	nax 8/7 R. Heil
Ruddy Tu		10 f. 150	2010/07/07/07	2	Newbypt H.	3 a	
2	SW Stellwagen	4	R. Stymeist#	12	WBWS	2	S. + E. Miller
1000		157		17777	0.054510.0055		

Stilt Sand	lpiper (continued)			Royal Te	rn		
20	Braintree	1	S. Carey	13	P.I.	1	C. Ralph
26	S. Monomoy	3	J. Sones#	Roseate '	Гегп		
28	Eastham	2	W. Petersen	8, 17	Chatham (S.B.)4	1500, 110	00 R. Heil
	ed Dowitcher	100		16	Ipswich	3	S. Perkins#
3	Revere	100	P. + F. Vale	28	Katama	600	V. Laux#
8, 17	Chatham (S.B.)			30	Tuckernuck	600	S. Perkins#
12 14	Braintree P.I.	25+ 150	S. Carey	Commor		000	E D 1 1
15		2000	R. Heil M. Lynch#	8 8, 17	Plymouth	800	F. Bouchard
16	Duxbury B.	225	D. Clapp	14	Chatham (S.B.)3 P.I.	120	
17	Boston H.		ASL (M. Hall)	16	Ipswich	250	R. Heil S. Perkins#
	ed Dowitcher	140 1	AGE (IVI. Hall)	17	Boston H.		TASL (M. Hall)
12	P.I.	17 ad	R. Heil	21	Rockport (A.P.)		J. Soucy
22	Ipswich	3	I. Giriunas	30	Tuckernuck	200	S. Perkins#
Common				Arctic Te			O. I CIAINS
29	Halifax	3	D. Clapp	8	Plymouth	1+	F. Bouchard
30	Cumb. Farms	1	K. Anderson	Forster's	Tern		
	Woodcock			thr	P.I.	1-3	V.O.
13	Reading	1	D. Williams	8	Chatham (S.B.)	1	R. Heil
13	Rockport	1	R. Heil	10	Westport	1	M. Lynch#
16	Chatham	2	W. Bailey	12	Tisbury	1	V. Laux#
	Phalarope			15	Nauset	1	I'A' Loj nom
14-31		1-2	V.O.	16	Ipswich	1 juv	
16	Chilmark	1	V. Laux#	23	Cuttyhunk		C (R. Stymeist)
Dad saals	Eastham	2	R. Donovan	26	S. Monomoy	1	B. Nikula#
	ed Phalarope	2 D	I Ismall	31	Nantucket	1	S. Perkins#
12-30 30	P.I. 1- Stellwagen	8	I. Jewell + v.o.	Least Te		150	D. TT-11
Phalarope		0	L. Healy	8 10	Chatham (S.B.)	150 20+	R. Heil
17	Stellwagen	6	A. Jones#	15	Hingham Scituate	60	S. Carey S. Perkins#
Pomarine		0	A. Jones	Black Te		00	S. Perkins#
21	Rockport (A.P)	1	J. Soucy	13	Rockport (A.P.)	6	R. Heil
Parasitic .		*	J. Boucy	16	Duxbury B.	4	D. Clapp
8	Stellwagen	4	F. Bouchard	21	W. Barnstable	10	S. + E. Miller
20	Chatham (S.B.)	2	J. Stein	25	Nauset Marsh	25+	B. Nikula#
21	Rockport (A.P.)	1	R. Heil	26	Chatham (SB)	11	N. Eaton
25	Nauset Marsh	5+	J. Sones#	26	Stellwagen	6	W. Petersen
25	WBWS	2	W. Petersen	29	Sandwich	7-8	B. Chiasson
30	Orleans	1	M. Rines#	30	Tuckernuck	4	S. Perkins#
31	Nantucket	1	S. Perkins#	Black Sk			
Jaeger sp	ecies			2	Chatham (S.B.)	1	D. Lange
3	Stellwagen	2	R. Heil	8	Eastham (F.H.)	2	T. Leverich
13	Rockport (A.P.)	1	R. Heil		lled Cuckoo	922	Suprant Control
21	Rockport (A.P.)	1	R. Heil	3	Barre	3	M. Lynch#
Laughing			F	23	P.I.	1	D. Chickering
2	Stellwagen	2 2	E. Tarry#		oilled Cuckoo		N. 7 1.0
4	P.I.	5	D. + I. Jewell	3	Barre	1	M. Lynch#
8	Revere Plymouth	60	P. + F. Vale	6 23	Newbury	1	R. Heil
15	Nauset	300	F. Bouchard M. Lynch#	30	P.I. MNWS	1	P. + F. Vale P. + F. Vale
17	Boston H.		ASL (M. Hall)		Screech-Owl		I. TI. Vale
Little Gu		0, 1	AUD (IVI. ITAII)	12	Wayland	1	J. Hoye#
8	P.I.	1 ad	N. Nash	14	Medford	1	M. Rines
9	Nahant	1	P. + F. Vale	25	Wakefield	î	F. Vale
26	Winthrop	1	R. Cressman	26	Worc. (BMB)	i	J. Liller
	aded Gull		711. 27.7224111111	27	Lynn	1	I. Lynch
thr	P.I.	1	v.o.	31	Ipswich	2	J. Berry
4	Eastham	1	R. Donovan		rned Owl		
16	Ipswich .	1	S. Perkins#	16	DWWS	1	D. Furbish
Bonaparte	e's Gull			22	Westboro	1	A. Boover
2	Newbypt	320	R. Heil	23	Maynard	2	L. Nachtrab
16	Ipswich	290	S. Perkins#	31	Ipswich	2 juv	J. Berry
17	Boston H.	560 T	ASL (M. Hall)	Barred O	wl		
	ack-backed Gull		THE MAN PROPERTY.	26	Mattapoisett	2	M. LaBossierre
10	Stellwagen	1	T. Leverich#	Long-ear		-	2012
14	N. Monomoy	1	B. Nikula	19	120 mi SE Nant.	1	S. Gamsby
	ged Kittiwake				Nighthawk	-	D 0
21	Rockport (A.P.)	1 juv	R. Heil#	17	Mt.A.	1	R. Stymeist
Caspian 7		1	C A	19	Wayland	14	S. Arena
17 29-31	Sharon	1	S. Arena	22	Marlboro	250	B. Volkle
29-31	T.L.	1	v.o.	23	Mt.A.	175	R. Stymeist

Commo	n Nighthawk (cont	inued)		Belted K	Lingfisher		
24	Mt.A.	205	R. Stymeist	17	Oxford	4	J. Liller
25	Natick	100	E. Taylor#	Red-hea	ded Woodpecker		
30	Reading	60	G. Gove	thr	Malden	pr + 2yg	C. Jackson
30	Westwood	64	E. Nielsen	Red-bell	ied Woodpecker		
30	Natick	1000	R. Naticchioni	1	Medford	pr n	M. Rines
30	Maynard	471	L. Nachtrab	30	Braintree	2 (	G. d'Entremont
30	W. Newbury	630	R. Heil	Hairy W	oodpecker		
30	Harvard	1000	S. + L. Hennin	3	Milton (F.M.)	3 (	G. d'Entremont
Chimner	v Swift			19	Worc. (BMB)	5	J. Liller
19	GMNWR	70	S. Perkins#	Northern	n Flicker		
21	W. Concord	500+	B. Volkle	8	Worc. (BMB)	25	J. Liller
24	Dover	50	E. Taylor	31	DWWS	22	D. Furbish
26	Mt.A.	60	R. Stymeist	Pileated	Woodpecker		
30	W. Newbury	180	Ř. Heil	3	Barre	1	M. Lynch#
Ruby-th	roated Hummingb	ird		17	E. Boxford	1 im	m J. Brown#
thr	W. Newbury	3	R. Heil	24	Wayland	1	J. Hoye#
thr	E. Boxford	4-8	J. Brown#H	24	Quabbin (G33)	) 1	D. Brownrigg#
9	Lancaster	2	R. Lockwood#	24	Wayland	1	J. Hoye
19	E. Middleboro	2	K. Anderson	31	GMNWR	1	P. DeBruyn
28	Groton	2	T. Pirro				

#### FLYCATCHERS THROUGH GROSBEAKS

Olive-sided Flycatcher, one of the later migrants in spring, is one of the earliest of the passerines to head south. Seven individual Olive-sideds were reported from a variety of locations. Other migrant flycatchers included Yellow-bellied in Waltham and Least on Tuckernuck. Single Rough-winged and Cliff Swallows were out of place on Stellwagen Bank, and a high count of Barn Swallows came from Plum Island. Common Ravens appear to be increasing in Middlesex County; a report of two came from Groton. A small flurry of Red-breasted Nuthatches at various coastal locations hinted at the possibility of a more significant autumn flight of this irruptive species. Carolina Wrens continued to appear in various non-traditional locations, especially north and west of Boston. Two migrant Philadelphia Vireos on Plum Island were a bit early, and a record-high, summertime count of Red-eyed Vireos came from the Barre Falls area of Worcester County. A total of 30 species of warblers were reported during the month. At Marblehead Neck Wildlife Sanctuary alone, unusual species included Golden-winged, "Brewster's," Cerulean, Prothonotary, and Hooded warblers. The Prothonotary Warblers were reported on three widely separate dates, and represented at least two different individuals; the August 14 bird was missing tail feathers, and the August 24 individual was not. Another Prothonotary was banded at the Manomet Center. Early Connecticut Warblers were found in Northboro and at Plum Island. A healthy count of 33 Grasshopper Sparrows from a colony at the Devons area in Lancaster included 9 fledglings. An early Lark Sparrow was found at Gay Head, Martha's Vineyard, at the end of the month. Some sharp-tailed sparrows (now split into Saltmarsh and Nelson's Sharp-tailed sparrows) were reported only as sharp-tailed, and though the dates associated with these reports suggest that locally breeding Saltmarsh Sharp-tailed Sparrows were involved. This conservative reporting approach will be preferable until we become more knowledgeable about the timing of these species' movements in New England. Reports of single White-winged Crossbills from Tuckernuck Island and Warwick represented the first August records since 1969, and signaled the beginning of an irruption of this and several other finch species. The Evening Grosbeak reports referred mostly to birds that were known to have over-summered.

R. H. S., S. P.

Olive-sic	led Flycatcher			3	GMNWR	4 D	. Brownrigg#
9	Marshfield	1	D. Clapp	8	Worc. (BMB)	6	J. Liller
10	Petersham	1	J. Baird	Least Fly	ycatcher		
14	Gardner	1	S. Perkins#	3	Barre	8	M. Lynch#
14	P.I.	1	R. Heil	30	MNWS	2	P. + F. Vale
20	Oxford	1	J. Liller	30	Tuckernuck	2	S. Perkins#
24	Quabbin (G33)	1	D. Brownrigg#	Great Cr	ested Flycatcher		
26	Worc. (BMB)	1	J. Liller	23	Hopkinton	5	D. Furbish
	Wood-Pewee			30	MNWS	1	P. + F. Vale
8	Worc. (BMB)	13	J. Liller	Horned	Lark		
17	Barre	18	M. Lynch#	31	Nantucket	4	S. Perkins#
20	Oxford	6	J. Liller	Purple N	Martin		
24	Quabbin (G33)	7	D. Brownrigg#	3	DWWS	45	D. Clapp
9	Lancaster	13	R. Lockwood	12	P.I.	60	R. Heil
Yellow-l	bellied Flycatcher			22	Gay Head	1	R. Shreiber
29	Waltham	1	M. Rines	29	Nantucket	1 imm	S. Perkins#
Alder Fl		-		Tree Sw	allow		
3	Barre	8	M. Lynch#	25	P.I.	75,000	R. Heil
Willow	Flycatcher		1000 mg 4 1000 mg	26	S. Monomoy	2000	B. Nikula#
1	Lancaster	7	R. Lockwood	30	Cuttyhunk	2000	B. Nikula#

Northern I	Rough-winged Sv S. Peabody	vallow 12	R. Heil	6	Ipswich	4 11	J. Berry
10					Worc. (BMB)		J. Liller
	Stellwagen	1	J. Berry	20	Oxford	5	J. Liller
liff Swal				Veery			12/20/20 77/70/10
17	Chatham (S.B.)	2	R. Heil	3	Barre	5	M. Lynch#
19	Stellwagen	1	R. Heil	19	Lancaster	4	R. Lockwood
arn Swal				25	W. Barnstable	1	S. + E. Miller
17	Chatham (S.B.)	120	R. Heil	30	Braintree	1	G. d'Entremont
25	P.I.	250	R. Heil	30	Chatham	1	R. Stymeist#
merican	Crow			30	P.I.	1	D. Chickering
12	Cumb. Farms	65	M. Emmons	Swainson	n's Thrush		
ish Crow				31	MNWS	1	D. Chickering
16	N. Marshfield	5	D. Furbish	Hermit T			D. Chickering
17	Barnstable	1	G. d'Entremont#	3, 17	Barre	33, 8	M. Lynch#
28		1	G. d'Entremont	30			P. + F. Vale
28	Randolph WBWS				MNWS	1	P. + P. Vale
		1	W. Petersen	Wood Th			G UP
ommon l			2/2/2/2/	3	Milton (F.M.)	3	G. d'Entremont
14	Gardner	2	S. Perkins	8	Worc. (BMB)	4	J. Liller
18	Groton	2	T. Pirro	31	Ipswich	3	J. Berry
19	Mt. Wachusett	6	T. Carrolan	Gray Cat	bird		
30	Holden	1	M. Lynch#	3	Milton (F.M.)	34	G. d'Entremont
	ted Nuthatch			8	Worc. (BMB)	42	J. Liller
9	Lancaster	4	R. Lockwood#	23	Cuttyhunk	34	R. Stymeist#
17	Barre	33		26	P.I.	120	
			M. Lynch#			120	R. Heil
19	P'town	2	R. Heil	Brown T			
23	Cuttyhunk		BBC (R. Stymeist)	8	Worc. (BMB)	6	J. Liller
25	MNWS	4	R. Heil	14	Gardner	1	S. Perkins#
27	S. Monomoy	2	W. Petersen	17	Oxford	1	J. Liller
30	Chatham	5	M. Rines#	18	Medford	4	M. Rines
31	Rockport	2	P. + F. Vale	26	P.I.	38	R. Heil
31	P.I.	2	P. + F. Vale	Solitary			
31	Gay Head	15	V. Laux#	14	Gardner	1	S. Perkins#
rown Cr		15	V. Dauxii	17	Barre	6	
3	Barre	6	M. Lynch#	a contra de la la la contra de la contra del la	hroated Vireo	0	M. Lynch#
	724 777 777 777		M. Lynch#				D T 1 10
6	Cotuit	2	S. + E. Miller	9	Lancaster	2	R. Lockwood#
17	Oxford	2	J. Liller	13	Barre	2	M. Lynch#
24	Quabbin (G33)	1	D. Brownrigg#	30	MNWS	1	J. Hoye#
9	Lancaster	5	R. Lockwood#	31	Chilmark	1	G. Daniels#
arolina V	Vren			Warbling	Vireo		
thr	Ipswich	1	J. Berry	17	Barre	6	M. Lynch#
1-19	Concord	2	R. Lockwood	27	Woburn	3	M. Rines
4	Waltham	1	C. Ralph		hia Vireo	7.	
8	Worc. (BMB)	2	J. Liller	31	P.I.	2	T. Maloney#
13		2	R. Heil			-	1. Iviaioney#
	Rockport			Red-eyed		7	C 27F-1
18	Medford	1	M. Rines	3	Milton (F.M.)	7	G. d'Entremont
20	Mt.A.	1	M. Rines	3	Barre	131	M. Lynch#
22	Winchester	1	M. Rines	9	Lancaster	8	R. Lockwood#
23	Rowley pr	w/3	yg J. Berry	17	Barre	18	M. Lynch#
23	Cuttyhunk	5 E	BBC (R. Stymeist)	31	MNWS	5	D. Chickering
26-31	Newton	1	H. Miller	Blue-wir	ged Warbler		
29	Northboro	1	A. Boover	17	Barre	2	M. Lynch#
ouse Wr				19	Worc. (BMB)	3	J. Liller
3	Milton (F.M.)	5	G. d'Entremont		winged Warbler	-	J. Dillor
3	Barre					1 f	T 17#
		4	M. Lynch#	24	MNWS		J. Hoye#
22	Woburn	4	M. Rines	30	Chappaquiddick	1 f	A. Keith
23	Cuttyhunk	4 E	BBC (R. Stymeist)	"Brewste	er's" Warbler		
27	Medford	6	M. Rines	17	E. Boxford	1	J. Brown#
31	Lexington	10	M. Rines	27	MNWS	1	R. Cressman
Vinter W				Tennesse	e Warbler		
3	Barre	5	M. Lynch#	24	Quabbin (G33)	1	D. Brownrigg#
Iarsh Wr			Dy non		Warbler Warbler	•	D. Dio III. BB.
23	Dorchester	5	R. Donovan	24		2	D. Brownrigg#
					Quabbin (G33)		
24	P.I.	5	M. Lynch#	24	MNWS	1	J. Hoye#
	wned Kinglet		V2000000111	Northern		75	11274227
27	MNWS	1	R. Cressman	22	Arlington	1	M. Rines
lue-gray	Gnatcatcher			30	Bolton	1	R. Lockwood
	Lancaster	5	R. Lockwood#	Yellow V			
9	P'town	5	B. Nikula	3	Barre	22	M. Lynch#
9			M. Rines	14	P.I.	27	R. Heil
17	Wohurn			14	I'.I.		K. Hell
17 22	Woburn	2			Conthorn (CII)	20	M T
17 22 23	Cuttyhunk	2 E	BBC (R. Stymeist)	15	Eastham (F.H.)	20	M. Lynch#
17 22	Cuttyhunk MNWS			15	-sided Warbler	20 24, 6	M. Lynch#

	sided Warbler		D. Farter		Waterthrush		
9	Lancaster	2	R. Lockwood#	3	Barre	l m	M. Lynch#
	Newton	2, 1	H. Miller	12	W. Groton	1	B. Nikula
24	MNWS	2 :	J. Hoye#		cut Warbler		T . TT L .
31	P.I.	3 imm	G. d'Entremont	23 27	P.I.	1	L. Healy
Magnolia '	Barre	5	M. Lynch#	Mourning	Northboro	1	B. Volkle
26	Chatham	1	W. Bailey	29	Waltham	1	M. Rines
31	MNWS	1	R. Heil	30	Lynn B.	1	J. Berry
	pated Blue Wa		K. Heli	31	MNWS	2	R. Heil
3	Barre	1	M. Lynch#		Yellowthroat	2	K. Heli
24	Quab. (G33)		D. Brownrigg#	3	Milton (F.M.)	35	G. d'Entremont
31	P.I.	1	D. Furbish	3	Barre	45	M. Lynch#
	mped Warble		D. I di Olon	23	Cuttyhunk		C (R. Stymeist)
3, 17	Barre	56, 19	M. Lynch#	Hooded V		51 55	C (It. Otymoist)
24	Quabbin (G:		D. Brownrigg#	24	MNWS	1 f	J. Smith
	oated Green V				MNWS	1 m	R. Heil + v.o.
3, 17	Barre	25, 3	M. Lynch#	27	Malden	1 f	M. Rines
19	P'town	1	R. Heil	Wilson's	Warbler		
24	MNWS	2	R. Stymeist#	24	MNWS	1	R. Stymeist#
24	Quabbin (G:	33) 1 f	D. Brownrigg#	26	Gardner	1	T. Pirro
26	Worc. (BMI	3) 1	J. Liller	26	Worc. (BMB)	1	J. Liller
31	Lexington	1	M. Rines	27	Winchester	2	M. Rines
Blackburn	nian Warbler			29	Waltham	3	M. Rines
3	Barre	5	M. Lynch#	31	MNWS	4	R. Heil
23	Cuttyhunk		C (R. Stymeist)	Canada V			
28	Melrose	1	D. + I. Jewell	3	Barre	4	M. Lynch#
Pine Warb				9	Lancaster	2	R. Lockwood#
3	Barre	12	M. Lynch#	16	Ipswich	1	R. Stymeist#
15	P'town	7	M. Lynch#	18	Medford	1	M. Rines
19	Lancaster	3	R. Lockwood	23	P.I.	1	J. Berry
Prairie Wa			D. F. J. J	24	S. Boston	1	R. Donovan
2	Marshfield	2	D. Furbish	31	MNWS	5	J. Brown#
23	Cuttyhunk		C (R. Stymeist)		reasted Chat	4	D. D.
28	Groton	4	T. Pirro	23	Dorchester	1	R. Donovan
30	Chatham	2	M. Rines#	26 26	S. Monomoy P.I.	1	B. Nikula# R. Heil
	sted Warbler	1	M. Rines	Scarlet T		1	K. Hell
18 Plackpoll	Medford	1	IVI. KINGS	3, 17	Barre	24, 4	M. Lynch#
Blackpoll 31	Lexington	2	M. Rines	8	Worc. (BMB)	2	J. Liller
Cerulean V		2	IVI. KINGS	20	Oxford	2	J. Liller
12	MNWS	1 im	m f R. Heil	23	P.I.	1	P. + F. Vale
	l-white Warbl		III I II. IIIII	30	Braintree		G. d'Entremont
3, 17	Barre	16, 9	M. Lynch#	30	Bolton	1	R. Lockwood
20	Mt.A.	4	M. Rines	75.00	asted Grosbeak		
27	Woburn	2	M. Rines	3, 17	Barre	19, 6	M. Lynch#
30	MNWS	2	P. + F. Vale	17	Ipswich	4	J. Berry
American	Redstart			26	Worc. (BMB)	8	J. Liller
3	Barre	10	M. Lynch#	9	Lancaster	10	R. Lockwood#
8	Woburn	1	M. Rines#	Indigo B	unting		
24	MNWS	9	M. Rines#	2	Marshfield	8	D. Furbish
26	Worc. (BM)		J. Liller	9	Cumb. Farms	5	R. Finch
28	Burlington	5	M. Rines	22	Groton	10	T. Pirro
	tary Warbler			Eastern 7			w
3	MNWS	1	L. Healy	14	P.I.	28	R. Heil
14	MNWS	1	J. Smith	19	Worc. (BMB)	28	J. Liller
22	Chatham	1	W. Bailey	23	Cuttyhunk	47 BE	C (R. Stymeist)
24-26			R. Heil + v.o.		Sparrow		
25	Manomet	1 imm f b	T. Lloyd-Evans	3, 17		46, 6	M. Lynch#
Ovenbird			** *********	29	Taunton	10	G. d'Entremont
3	Barre	4	M. Lynch#	Field Spa		7	D. T. andress and
16	Topsfield	1	M. Rines#	1	Lancaster	7	R. Lockwood
18	Medford	1	M. Rines	2	Marshfield	9	D. Furbish J. Liller
20	Mt.A.	1	M. Rines	8	Worc. (BMB)	15	T. Pirro
24	Maynard	1	L. Nachtrab	28	Groton	6	L. Healy
24	Newton	1	H. Miller	Vaspar S	Salem	6	L. ricaly
		- di-, c 1	1 longitors	Vesper S	Lancaster Lancaster	2	R. Lockwood
Northern	Dancata				Lancasici		IV. LUCKWOOD
Northern thr	Reports of i			ż			R Stymeict#
Northern thr 12	MNWS	4	R. Heil	2 Lark Spa	Wellfleet	4	R. Stymeist#
Northern thr		4		2 Lark Spa 31	Wellfleet		

Grassho	pper Sparrow			14	Newbury	9	R. Heil
7	Lancaster	33	R. Lockwood	Common		-	IX. IIOII
Sharp-ta	iled sparrow specie	S		2	Framingham	2000	E. Taylor
14	Quincy .	2	J. Kuivenhoven	Baltimore	Oriole	2000	L. Taylor
17	Boston H.	3	TASL (M. Hall)	17	Barre	23	M. Lynch#
19	S. Dart. (A.Pd)	19	LCES (J. Hill)	19	Worc. (BMB)	13	J. Liller
Saltmarsh Sharp-tailed Sparrow			25	P.I.	17	R. Heil	
2	N. Monomoy	1	J. Hoye#	30	Tuckernuck	3	S. Perkins#
9	Rowley	10	J. Berry	Purple Fi		3	5. Perkins#
10	Westport	3	M. Lynch#	7	Lancaster	3	R. Lockwood
15	Scituate	2	S. Perkins#	14	Gardner	2 juv	
31	P.I.	2	M. Lynch#	30	P.I.	10+	M. Resch
Seaside	Sparrow		III. Dynonii		nged Crossbill	10+	W. Kesch
10	WBWS	1	M. Partridge	30	Tuckernuck	1	S. Perkins#
Bobolin	k		randinge	31	Warwick	1	B. Nikula
14	Gardner	20	S. Perkins#	Pine Siskin		1	D. MIKUIA
15	Eastham (F.H.)	30	M. Lynch#	5	Reading	-1	I. Giriunas
24	P.I.	30	M. Lynch#	10-31	Hopkinton	2	B. Garron
30	Tuckernuck	30	S. Perkins#	14	E. Boxford	1	
1	Lancaster	34	R. Lockwood	Evening (		1	K. Disney
Fastern	Meadowlark	27	K. LOCKWOOD	3, 17	Barre	7.2	M T
7	Lancaster	4	R. Lockwood	5, 17	E. Boxford	7, 2	M. Lynch#
,	Lancaster	-4	K. LUCKWOOD	3	E. DOXIOIG	pr ph	J. Brown#

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

This publication prints monthly compilations of reports of birds seen in the ten counties of eastern Massachusetts (Worcester County and east) and offshore waters. Space does not permit the inclusion of all material submitted. However, bird sightings sent to Bird Observer are archived at the Massachusetts Audubon Society. Our compilers select and summarize for publication sightings that provide a snapshot of birdlife 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 (*Bird Observer* Vol. 25, #4, page 195), 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 Wayne Petersen, Massachusetts Audubon Society, South Great Road, Lincoln, MA 01773. Include, in addition to the above information, time of day and light available, weather conditions, the optics used and approximate distance from the bird, length of observation, observer's prior experience with the species, and field guide or other references used. Provide a description of the bird based solely on personal observation. Comment on the distinguishing field marks (observed and unobserved), vocalizations, activity, general behavior, habitat, and other birds present. Include with your report copies of any field notes and sketches.

#### LIST OF ABBREVIATIONS

\* 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 which are supported by details, multiple observers, or both.

ad adult	H.	Harbor
alt alternate	I.	Island
b banded	L.	Ledge
br breeding	M.V.	Martha's Vineyard
dk dark (phase)	Mt.A.	Mount Auburn Cemetery, Cambridge
f female	Nant.	Nantucket
fl fledged	Newbypt	Newburyport
imm immature	P.I.	Plum Island
ind individuals	Pd	Pond
juv juvenile	P'town	Provincetown
loc location	Ouab.	Quabbin Reservoir
lt light (phase)	Res.	Reservoir
m male	R.P.	Race Point, Provincetown
max maximum	S.B.	South Beach, Chatham
migr migrating	S. Dart.	South Dartmouth
n nesting	S.N.	Sandy Neck, Barnstable
	Stellw.	Stellwagen Bank
	Worc.	Worcester
* Company of the Comp	BBC	Brookline Bird Club
pr pair S summer (1S = first summer)	BMB	Broad Meadow Brook, Worcester
thr throughout	CCBC	Cape Cod Bird Club
	DFWS	Drumlin Farm Wildlife Sanctuary
vid videotaped	DWWS	Daniel Webster Wildlife Sanctuary
v.o. various observers W winter (2W = second winter)	EMHW	Eastern Massachusetts Hawk Watch
The state of the s	GMNWR	- Carana and Carana an
w/ with	HRWMA	
yg young	HRWMA	High Ridge Wildlife Management Area, Gardner-Westminster
# additional observers	mwe	
A.A. Arnold Arboretum, Boston	IRWS	Ipswich River Wildlife Sanctuary
A.P. Andrews Point, Rockport	LBS	Local Bird Survey
A.Pd Allens Pond, S. Dartmouth	LCES	Lloyd Center for Environmental Studies
Arl. Arlington	MARC	Massachusetts Avian Records Committee
B. Beach	MAS	Massachusetts Audubon Society
B.I. Belle Isle, E. Boston	MBO	Manomet Observatory
B.R. Bass Rocks, Gloucester	MBWMA	
Cambr. Cambridge	MDEW	Newbury
C.B. Crane Beach, Ipswich	MDFW	MA Division of Fisheries and Wildlife
Corp. B. Corporation Beach, Dennis	MNWS	Marblehead Neck Wildlife Sanctuary
C.P. Crooked Pond, Boxford	MSSF	Myles Standish State Forest
Cumb. Farms Cumberland Farms,	NAC	Nine Acre Corner, Concord
Middleboro-Halifax	NBC	Needham Bird Club
E.P. Eastern Point, Gloucester	NEHW	New England Hawk Watch
F.E. First Encounter Beach, Eastha		Oxbow National Wildlife Refuge
F.H. Fort Hill, Eastham	SRV	Sudbury River Valley
F.M. Fowl Meadow, Milton	SSBC	South Shore Bird Club
F.P. Fresh Pond, Cambridge	TASL	Take A Second Look Harbor Census
F.Pk Franklin Park, Boston	USFWS	US Fish and Wildlife Service
	45 10 00 C 10 C 10 C 10 C 10 C 10 C 10 C	
G40 Gate 40, Quabbin	WBWS	Wellfleet Bay Wildlife Sanctuary
G40 Gate 40, Quabbin G45 Gate 45, Quabbin H.P. Halibut Point, Rockport	WBWS WMWS	Wellfleet Bay Wildlife Sanctuary Wachusett Meadow Wildlife Sanctuary

#### ABOUT THE COVER: BARRED OWL

To be walking through a forested swamp and have a Barred Owl (Strix varia) glide by on silent wings, or find one looking down at you through brown/black eyes, is an exciting moment for any bird enthusiast. The species name varia is Latin for variegated, and describes the brown-and-white plumage pattern of this common owl. The folknames "black-eyed owl," "bottom owl," and "swamp owl" tell us more about its appearance and habitat preference. This large, chunky, big-headed owl lacks "ears" of feather tufts, but has concentric rings of brown on its prominent facial discs. Its dark brown eyes contrast sharply with its bright yellow bill. It can be confused with the Spotted Owl in the Pacific Northwest, but is distinguished by its dark barring on the upper breast contrasting with vertical streaking below. It also lacks the spotting on its head and has a distinctive goiter-like ruff of neck feathers. The sexes are similar in plumage, but females are larger than males.

The Barred Owl is a polytypic species with three subspecies generally recognized in North America: one in the northern United States and Canada, one in the southeastern United States, and a third in Texas. Some taxonomists recognize one or more subspecies in Mexico and Central America. The Barred Owl is one of eleven species in the genus *Strix*, a genus that occurs virtually worldwide and belongs to a group of genera often referred to as "wood owls." *Strix varia* is found throughout the eastern half of the U.S. and across southern Canada from Nova Scotia to British Columbia south to Northern California. In Massachusetts it is a common resident in the western and central forests, and is locally common in the southeast; it is largely absent from the Cape and Islands. In winter there appears to be an influx of Barred Owls from the north, possibly triggered by deep snow making small mammals prey unavailable.

Barred Owls prefer dense coniferous, or mixed coniferous-deciduous forests, forested swamps, and river valleys. They are probably monogamous but many of the details of the life history of this species remain obscure. Their courtship involves loud vocal displays including the well-known who cooks for you, who cooks for you-all, which is often sung as an alternating duet, with the male calls lower in pitch. They also produce a wide variety of hoo-ahs, shrieks, chuckles, yells, laughs, cluckings, and yowls. Visual displays include bowing with half-open wings, nodding, side-to-side and twisting head movements.

They prefer to nest in a hollow in a large old tree, and have been know to use the same nest-site for a decade or more. If suitable hollows are not available they will use an abandoned nest of hawks, crows, or squirrels, adding at most a few sprigs of greenery. In Massachusetts they nest from late February or March to May. The usual clutch is two or three white eggs. The female does most of the incubation, which lasts about a month, and the male brings her food. Incubation begins with the first egg so the eggs hatch asynchronously. In years

when food is scarce, the smallest chick may starve, the asynchrony may be a strategy for maximizing the production of young during years of abundant food. Parental care lasts until fall, but the young are on their own for their first winter.

Like other owls, Barred Owls are superb predators with excellent night vision and large asymmetrical ears that produce hearing so acute that they can locate and capture prey in complete darkness. They are largely nocturnal but may hunt by day, particularly when it is overcast. They may hunt by cruising forests scaring up prey or merely sitting, waiting, and pouncing on prey from a perch. They have relatively small feet and hence prefer small prey, so mice, shrews, and rats make up the bulk of their diet. However, sometimes they take squirrels and small rabbits, reptiles, amphibians, insects, and birds. In southern swamps they may take large numbers of crayfish, frogs, and even fish.

Barred Owls have few natural predators, although they lose in contests with Great Horned Owls. Since Barred Owls prefer mature forests with large old nest trees with hollows, they have declined locally in areas where old-growth forest has been harvested and where rotation periods for harvesting have been seriously reduced. However, Barred Owls have expanded their range in the northwestern U.S. and now overlap with the endangered Spotted Owl. Some biologists are concerned that the more aggressive Barred Owls will have a negative impact on the already reduced numbers of Spotted Owls. Barred Owls are behaviorally enigmatic, usually wary but sometimes absurdly tame, and they are know for showing up in urban yards and parks during winter. In southern swamps they frequently call in the daytime. Perhaps because of these behavior peculiarities Barred Owls are probably our most commonly seen large owl—and seeing one is an unforgettable experience.

--William E. Davis, Jr.

#### ABOUT THE COVER ARTIST

Louise Zemaitis, a freelance artist and naturalist, is a regular exhibitor at "The Loft," Cape May Bird Observatory's gallery. Her illustrations have appeared in *The Birds of North America*, *The Birds of Cape May*, ABA's Bird Finding Guides, and a wide variety of magazines, brochures, newsletters, and T-shirts. She is currently illustrating Pete Dunne's next book *Small-headed Flycatcher*. Seen Yesterday. He Didn't Leave His Name. . . . and other stories. She also leads bird and butterfly field trips for Cape May Bird Observatory. Louise lives in Cape May Point, New Jersey, with her two young naturalist sons, Bradley and Alec, and her husband, Michael O'Brien.

Alas, a bird of summer! A tern — the mere name of which conjures up the sound of surf, the smell of salt air, and the sting of greenhead flies. Massachusetts birders are especially well positioned to appreciate and puzzle over terns, not only because 14 species have been recorded in the Commonwealth (plus the Black Skimmer), but because five species nest in the Bay State, two of them in greater abundance than practically anywhere else in North America.

Even a quick glance at October's mystery photograph suggests that it is a tern and not a gull, the only other viable choice for a bird postured the way the mystery bird is standing. If further proof is required, a careful look at the tapered, sharp-pointed bill (not blunt and laterally compressed), the suggestion of sharply pointed wings, the black mask through the eye, and the overall whiteness of the bird's plumage all scream sternid, not larid. Gulls, for the most part, appear big and clumpy, or else they exhibit distinctive plumage or bill features that should readily eliminate them from confusion.

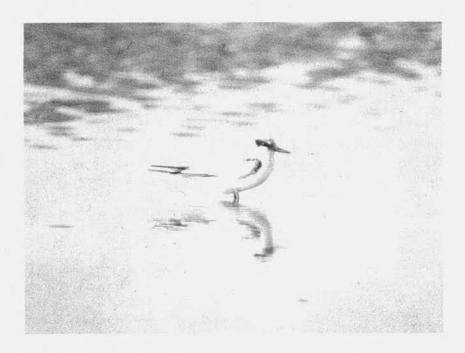


Photo by Wayne R. Petersen

Suspecting that the bird is a tern, it is important to focus on what the somewhat fuzzy photo reproduction lets us see. Perhaps most noticeable is a black mask through the eye. A black eyepatch is typically a hallmark field character for a Forster's Tern in non-breeding plumage. Unfortunately, the mystery tern also seems to exhibit a noticeably dark "shoulder" area on the folded wing — not a feature of Forster's Tern! A closer look shows that the bill appears to be especially short and fine and rather uniform in color (i.e., not strongly bicolored). Also, the crown is not heavily streaked, nor is there an obvious black scarf on the back of the head and nape. What can be seen of the legs suggests that they are light, not dark. And finally, there seems to be no evidence of extended central tail feathers beyond the folded wing tips.

Evaluating these various attributes one by one, it is possible to gradually reduce the possibilities. The very whiteness of the bird at once eliminates Brown Noddy and Sooty and Bridled tern; the light legs, particularly in conjunction with the overall diminutive proportions of the bird, safely remove Bridled, Caspian, Royal, Sandwich, and Gull-billed terns as identification candidates, since all of these have black legs. Similarly, the Black Tern, even in winter plumage, would be notably darker above and would possess a distinctly different head pattern and an obviously blacker bill than the pictured tern.

This elimination process reduces the possibilities to Common, Roseate, Arctic, and Least terns. In adult breeding (alternate) plumage, these species all possess a more or less complete black cap. In adult winter (basic) plumage, these same species feature a well-defined black nape, or scarf, on the back of the head, which contrasts strongly with a more or less unstreaked white forehead and crown. So where does this leave us? Since the tern in question has a whitish nape, it cannot be an adult in either breeding or winter plumage. Additionally, in first-summer plumage, these species look quite similar to winter adults, except that they have black bills and none of them display a strong dark eye patch like the mystery tern. However, Common Terns (and Roseate Terns to a lesser extent) do exhibit the strong black "shoulder" patch shown by the mystery bird when they are in winter plumage or subadult plumage, but never the black eye patch.

Indeed, there is only one tern occurring in Massachusetts that shows the diminutive proportions of the pictured bird in conjunction with a dark shoulder patch, a prominent eye patch, a relatively white nape, and a lightly streaked crown: a Least Tern (*Sterna antillarum*) in juvenal plumage.

Least Terns are fairly common as breeding birds on wide sandy beaches at a number of sites along the Massachusetts coast. The juvenile in the picture was photographed at Third Cliff Beach in Scituate.



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



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