

# Bird Observer

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# Bird Observer

A bimonthly journal — to enhance understanding, observation, and enjoyment of birds  
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# Culture and Seabird Conservation Work Together Along the North Shore of the Gulf of St. Lawrence

*Kathleen A. Blanchard*

This article is a summary of a 22-year project to help restore populations of seabirds that nest along the North Shore of the Gulf of St. Lawrence and winter off the New England coast. The project is a collaborative effort of the Quebec-Labrador Foundation (QLF), the Canadian Wildlife Service (CWS), and residents of a remote section of the North Shore of the Gulf of St. Lawrence who traditionally harvest seabirds. Recent increases in populations of seabirds that were depleted severely during the middle of the twentieth century demonstrate the efficacy of conservation strategies that work within the context of local culture. A longitudinal study tracked changes in local knowledge, attitudes, and hunting behavior concomitant with increases in seabird populations.

## Study Area

The North Shore of the Gulf of St. Lawrence forms the southern boundary of the Quebec-Labrador peninsula in eastern Canada. Although historically referred to as the Canadian or Quebec Labrador, the approximately 720 kilometers of coastline lie entirely within the Province of Quebec. Two important conditions make the region suitable for seabirds nesting in colonies. First, there is an abundance of prey, due to the extremely productive waters produced by the mixing of the cold Labrador current with the fresh water from the St. Lawrence River and Great Lakes. Second, there are several thousand small islands, many of which are free of land-based predators. The current approximate population size for seabird colonies of the North Shore of the Gulf of St. Lawrence is more than 120,400 birds (Chapdelaine 1995).

The Lower North Shore, the eastern section extending 400 kilometers from Kegaska to Blanc-Sablon, comprises 15 villages with a total population of fewer than 6000 people. Residents are predominantly anglophone (about 65 percent English, 21 percent French, 14 percent Montagnais) and few of the villages are linked by roads. The economy was overwhelmingly fishery-dependent until a moratorium on cod fishing was enacted in 1992.

## History

Since the beginning of recorded history, nonnative residents of this isolated coast have been part of a market economy that depended on the exploitation of fish, furs, and seals. People also engaged in semisubsistence activities to supplement their diets; for example, they hunted seabirds and gathered seabird eggs for food. In recent decades, however, neither hunting seabirds nor gathering eggs has been crucial to meeting vital food needs. However, the acquisition, preparation, and consumption of seabirds are still important to the culture, since they are linked to tradition, identity, social norms, recreation, and feelings of self-worth (Blanchard 1984, 1994).

The North Shore seabird colonies are linked historically to commercial and conservation interests from New England. During the seventeenth and eighteenth centuries, parties from New England traveled to the North Shore to collect down feathers from the nests of eider ducks; eiderdown was used in making mattresses, blankets, pillows, and clothing. Intense commercial exploitation of seabirds and their eggs reached its peak during the 1800s, during the time John James Audubon and other naturalists were visiting the coast. Thousands of seabirds were shot or clubbed to death and used for a variety of purposes, including food, bait, and clothing. The eggs of Common Murre and Razorbill were collected by the tens of thousands and sold in markets of Boston and New York for 20-50 cents per dozen. This was the most destructive period in the history of North Shore seabird colonies.

During the early part of the twentieth century, conservationists visiting the coast saw the potential for restoring seabird and eider populations through the implementation of new regulations under the (U.S.-Canada) Migratory Bird Treaty of 1916, and the creation of a network of sanctuaries that would protect the birds during the breeding season. The Treaty made seabird hunting illegal, by classifying the auks, gulls, terns, and loons as nongame birds. Charles W. Townsend from Boston and Ipswich, Massachusetts, was one of the early promoters of the sanctuary movement. By 1925 the government of Canada established ten migratory bird sanctuaries along the North Shore of the Gulf of St. Lawrence and began a population monitoring program that has continued to this day. A census of seabirds nesting on the sanctuaries is conducted every five years. The sanctuaries of the North Shore are the oldest continually monitored seabird sanctuaries in the world.

In the years following 1925, however, it became obvious that regulations and the creation of sanctuaries alone were not enough to restore seabird populations. During several decades of impressive work by federal migratory bird officer Harrison F. Lewis, seabird populations began to recover; following his retirement, they declined again (see reports of censuses published in the journal *Canadian Field Naturalist*). It would take a new, more collaborative management strategy that worked *with* the local culture, and not just by imposing rules upon that culture, to bring about long-term changes in people's behavior that would benefit seabird populations, particularly along the Lower North Shore. This approach, which was being developed in northern Canada among indigenous communities, subsequently helped to broaden the perspectives of natural resource agencies in Canada and elsewhere around the world, toward more collaborative forms of management.

### **The Project**

The collaborative project between QLF, CWS, and local residents began in 1978, following two decades of serious population declines among seabirds nesting on federal migratory bird sanctuaries. Between 1955 and 1978, populations of Razorbill and Atlantic Puffin had dropped from about 18,500 to 3,000 (-84 percent) and 62,000 to 15,000 (-76 percent) individuals, respectively. Population decreases also occurred among Common Eider, Common Murre, and Black Guillemot (Chapdelaine 1980). At

the Bradore Bay Sanctuary near Blanc-Sablon, numbers of nesting puffins had dropped from 55,000 to 7,000 individuals.

Numerous biologists working along the coast had linked the seabird population declines to excessive harvest and colony disturbance by residents. Concern focused on the two important sanctuaries of the Lower North Shore, the St. Mary's Islands and Bradore Bay sanctuaries, where the majority of auks breed. A study conducted by QLF along the Lower North Shore in 1981 provided details on harvest levels and human dimensions that were crucial to understanding root causes of excessive harvest, and to formulating appropriate management strategies. This face-to-face survey showed that 95 percent of households considered the harvest of seabirds for food acceptable. The survey also found that the eggs, young, or adults of many species were being harvested illegally: Red-throated Loon, Common Eider, Ring-billed Gull, Herring Gull, Great Black-backed Gull, Black-legged Kittiwake, Common Tern, Arctic Tern, Common Murre, Thick-billed Murre, Razorbill, Black Guillemot, and Atlantic Puffin (Blanchard 1984).



In 1982, following research and extensive community consultation, the project articulated a new management objective to reflect a common goal of both the residents and the management agency: to restore depleted seabird populations while preserving the integrity of the local culture. The culture included a norm that stated it was wrong to take more birds than needed. This key element formed the basis of a management plan and education strategy for the Lower North Shore. Procedures of the education strategy are described in detail in various papers (Blanchard 1994, Blanchard and Nettleship 1992). Following are some of the highlights.

There were three desired outcomes of the new plan: increased population levels for seabirds breeding in sanctuaries; sustained improvements in local knowledge, attitudes, and behavior toward seabirds; and greater local involvement in the management

process. Over the years, project staff planned, conducted, and evaluated a series of community-based educational strategies that worked with existing group norms, patterns of communication, opinion leaders, and other aspects of the local culture. The Canadian Wildlife Service broadened its enforcement program by hiring and training some local hunters as law enforcement officers. To facilitate greater local participation, QLF created jobs and provided skills training in wildlife research and interpretation. Residents and QLF staff built bird blinds, boardwalks, and interpretive signs. The conservation message was communicated to all relevant audiences through school and informal programs, study tours, poster contests, community events, and documentary television and radio programs. As local leadership realized the potential value of their seabird colonies to community economic development, they set out to build an appropriate infrastructure for ecotourism.

In communities near the Bradore Bay Sanctuary, where at first people were hostile to conservation agents, QLF staff used nonthreatening intervention techniques, such as a community play for children about the biology of seabirds. The actors, who were the sons and daughters of the individuals causing the most damage to the seabird colonies, practiced their lines at home, thus provoking the interest of their parents, who immediately backed off from disturbing the local puffin colony.

The educational strategy cited by the people of the coast as most effective was a children's conservation camp, held at the St. Mary's Islands seabird sanctuary. Over a period of several days, children gained first-hand knowledge of field biology and practical management, which culminated in observing nesting seabirds closeup. Upon returning to their families, these children, filled with pride over their newly acquired knowledge, surprised their parents and siblings by sparking discussions about the need for conservation. The program at the St. Mary's Islands has been running since 1978. Parents are extremely supportive, and their children have become the new generation of conservation-minded citizens.

By 1988, ten years after the program's inception, the management plan had achieved all of its major aims. Since then, its efficacy has improved with increasing cooperation among all parties. Populations of several seabird species increased dramatically; for example, Razorbill increased from 3,600 to 7,000 and Atlantic Puffin from 15,200 to 35,100 individuals. Common Murre increased from 10,200 to 26,000 and Common Eider from 3,000 to 8,500 individuals (Chapdelaine and Brousseau 1991). The 1993 and 1998 censuses showed continued increases for each of these species (Chapdelaine 1995, pers. comm.). Results from a follow-up survey of households in 1988 showed significant changes in consumptive use between 1981 and 1988. For example, the proportion of respondents who believed it should be legal to hunt Razorbill, Common Murre, and Atlantic Puffin fell from 59 percent to 38 percent, 76 percent to 65 percent, and 54 percent to 27 percent, respectively (Blanchard 1994). Further changes in knowledge, attitudes, and behavior were evidenced by another household survey in 1995. For example, the mean number of birds harvested per family each year dropped from 44 in 1981, to 24 in 1988, to 14 in 1995 (Blanchard 1994, Hull and Blanchard in prep.). Various explanations are offered as to why local knowledge, attitudes, and behavior toward seabirds changed significantly (Blanchard

1994, Blanchard and Monroe 1990). Without the educational intervention and a management approach that worked within the cultural context, the management strategies of the 1950s-1970s likely would have failed in the long term. The campaign to change knowledge, attitudes, and behaviors was woven into the web of the local culture, such that the success of the program belongs in large part to the culture itself.



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**Kathleen A. Blanchard** developed QLF's seabird conservation program and is currently writing a book about the project on the North Shore of the Gulf of St. Lawrence. The Quebec-Labrador Foundation is a nonprofit conservation organization, incorporated in the U.S. and Canada, with offices in Ipswich, Massachusetts and Montreal, Quebec.

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# Studying the Design of Bird Refuges Along the Connecticut River

*Robert J. Craig*

The Connecticut Bird Observatory and Center for Conservation Research is our region's newest organization devoted to the conservation of birds. It differs from traditional bird observatories in not being primarily banding-oriented. We indeed have a substantial banding capability, but our principal focus is practical, long-term research into the design and management of open space for birdlife. We also provide research-based assistance to municipalities, land trusts, private landowners, and others who need technical input on how to develop a viable system of preserves. With the rapidly fragmenting and suburbanizing natural landscape of southern New England, a sustained and focused effort of this sort is imperative for the continued survival of our region's birdlife.

Although we are just a year old, we have already begun the process of researching the design of refuges. This first CBO project began investigating the question, "If everything else is held constant, how big is big enough for a wildlife refuge?" It is a deceptively hard question to answer, and must be approached in stages. In a first step toward finding an answer, we looked at how bird species respond as refuge size increases. For example, can certain species only inhabit areas greater than a certain size? The habitats chosen for study were the freshwater tidal marshes of the Connecticut River- an area of great conservation interest in our region.

Not only is the Connecticut River an area of major conservation concern, it is also a well-studied system, with its birds the subject of ongoing investigations for 25 years. Additional bird studies here are particularly valuable, because they build upon what already has been learned. For example, between 1974 and 1987, Craig and Beal (1992) found that along the Connecticut River in Connecticut, marsh size, water cover, and habitat diversity all exerted important influences on the number of bird species that could nest in the river's marshes. So, to understand more completely how marsh size (i.e. refuge size) affects bird species, we studied sites in which other habitat factors were held constant, and only marsh size varied. This allowed us to critically evaluate differences in populations and species distributions without the complicating effects of other influences. Also, because we have many years of observations on how bird numbers change in this system over time, (e.g., over a 20 year period at least 23.5 percent of species declined and 37.3 percent increased; Craig 1990, 1994), it is possible to examine new data in light of long-term variation in populations. Long term data help to clarify whether trends observed are real or just artifacts of short-term, externally driven (e.g., conditions on the wintering ground) population phenomena.

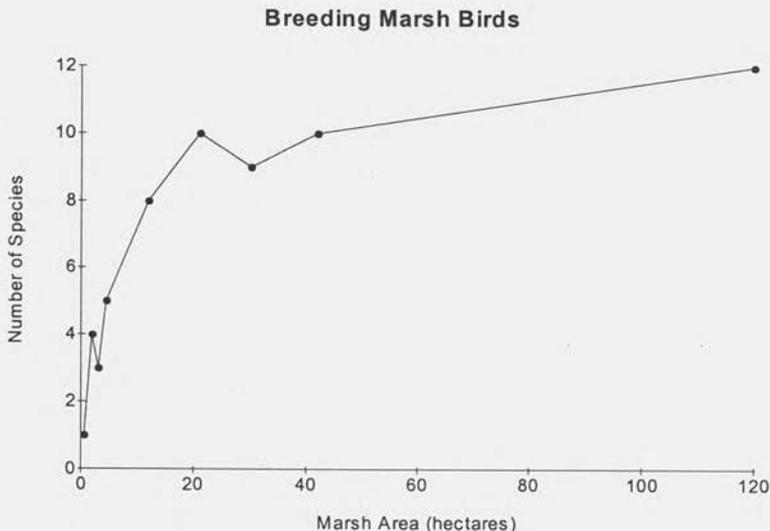
Although there is great local concern for these habitats, in many instances the birds that live in them are poorly known. As most birdwatchers know, birds of tidal marshes are notoriously difficult to observe, because many (such as the Virginia Rail in Figure 1) are very secretive. Many also have the bad habit of getting up very early,

which means that investigations must begin well before first light. And, of course, wading around in soggy, cold, smelly, sometimes even dangerous, tidal marshes is rather less than the most enjoyable activity for a spring morning. Despite such drawbacks, we initiated a series of bird counts at nine sites, and in the process field tested a new bird survey protocol which is being developed by the U.S. Fish and Wildlife Service.



*Figure 1. The Virginia Rail was a common but secretive inhabitant of the tidal marshes of the Connecticut River (photograph by the author).*

With the 1999 research season's focus on marsh size alone, we immediately discovered trends that had not previously been apparent, as well as reaffirmed general trends noted in previous years. In this new project we added a series of study sites that were much smaller than those previously surveyed, so we also were able to determine the minimum viable habitat size for breeding marsh species.



*Figure 2. The relationship between the number of breeding bird species and marsh area.*

Not surprisingly, we found that marshes of greater size held more species (Figure 2). This is a well known phenomenon in ecology, the "species-area effect," and one that we had documented in earlier years. The positive relationship between habitat size and species richness has been called one of the few real laws of ecology.

New to this study were findings that three principal responses to habitat size existed: from small to large sites, there were species that (1) maintained a uniform density, (2) increased in population density, and (3) did not appear until a threshold habitat size was reached. With data thus far in hand, the abundant Red-winged Blackbird appeared to be an example of (1). It occurred at all sites regardless of size and showed little trend in density between sites. An example of (2), the Swamp Sparrow also appeared at most sites, but occurred most abundantly at the largest sites. The Marsh Wren was an example of (2) and (3), being absent from small sites, and showing its greatest density at the largest sites.

An additional observation made about the breeding marsh birds was that about five hectares (twelve acres) seemed to be the minimum habitat size suitable for a number of species. Sites smaller than this size can be seen to have considerably fewer species than those greater than five hectares (Figure 2). Larger, wider ranging species like ducks were absent from the smallest sites, as were rare species, like the Sora. From observations such as these we can reasonably conclude that, for many marsh species, habitat size is positively related to habitat quality.

The observations reported here will be repeated this coming spring so that the generality of the findings can be assessed. Moreover, related upcoming investigations are being designed to clarify how refuge size is related to the long-term stability of bird populations. As we come to understand how it is that bird species respond to increasing habitat size, we can draw conclusions about what a minimum effective refuge size is for marsh birds. In other words, if a town or land trust is considering purchasing a wetland for preservation, these findings will assist in determining whether the purchase will be a significant one for preserving birdlife.

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# Birds and Divorce

*William Moskoff*

It is often instructive to study the social behavior of birds because, like humans, they routinely provide biparental care and are socially monogamous. And like us, birds divorce. But instead of the complicated emotions that drive our own behavior, birds are presumably motivated by powerful biological forces to divorce. The key to understanding divorce in birds is in understanding their reproductive behavior and the urge to maximize individual lifetime reproductive success, i.e., the total number of young that are successfully fledged over a lifetime. This paper reviews the literature on avian divorce, specifically focusing on the benefits and costs of divorce.

With regard to birds, divorce is generally taken to mean that at least one partner pairs with another individual, even though both partners are still living and residing within the same population. Needless to say, the notion of avian divorce bears little resemblance to what we think of as divorce. The concept is simply a convenient way for ornithologists to measure mate fidelity. By definition, in any given breeding season, the percentage of surviving mates that "divorce" is one hundred minus the percentage of surviving pairs that reunite (Ens *et al.* 1996). Divorce is an active choice by at least one individual within the population rather than some unintended consequence as occurs when partners during one season migrate separately and do not return to the same breeding site. Divorce rates vary widely among species, from no known divorce in the Australian Raven (*Corvus coronoides*) and Wandering Albatross (*Diomedea exultans*) to virtually 100 percent in House Martins (*Delichon urbica*) (Choudhury 1995). Field work done on European tits showed that divorce rates can even vary between populations of the same species (Dhondt and Adriaensen 1994).

There are three principal explanations for why divorce is adaptive in birds: the incompatibility hypothesis, the better-option hypothesis, and the asynchronous arrival of paired birds on the breeding grounds. The incompatibility hypothesis suggests that while neither individual in a pair is inherently of poor quality, their interaction is unsuccessful and they can both improve their reproductive fitness by divorcing and finding another mate, one with whom they are more compatible (Johnston and Ryder 1987, Ens *et al.* 1993, Catry *et al.* 1997). The better-option hypothesis states that divorce takes place when one member of the pair chooses a higher quality mate in order to improve its reproductive success, making the other partner a victim of this decision (Ens *et al.* 1993, Choudhury 1995). The asynchronous-arrival hypothesis argues that the partner that first arrives on the breeding ground will wait only so long for the other partner to return before choosing another mate in order to assure itself of a breeding opportunity that season (Ens *et al.* 1996, Olsson 1998). One version of the asynchronous-arrival hypothesis has been dubbed the "musical chairs hypothesis," the idea being that if a bird arrives too late, it will find its place occupied by another individual (Dhondt and Adriaensen 1994).

It is almost always the female that initiates the divorce. This is true for Blue Tits (*Parus caeruleus*) (Dhondt and Adriaensen 1994), Willow Tits (*Parus montanus*)

(Orell *et al.* 1994), Black-capped Chickadees (*Parus atricapillus*) (Smith 1992), Oystercatchers (*Haematopus ostralegus*) (Ens *et al.* 1993), and Great Skuas (*Catharacta skua*) (Catry *et al.* 1997). A variant of the axiom that male birds attract and females choose appears to hold true in the case of divorce. Females may assess their breeding options using extra-pair copulations and then divorce their present mate if they find a more attractive partner (Cezilly and Nager 1995).

### Benefits of Divorce

It is generally accepted that the principal reason for a bird to divorce its partner is to maximize its lifetime reproductive success (Choudhury 1995). For individuals seeking to improve their breeding performance, the basic benefits of divorce could entail finding an older, more experienced mate (Grant and Grant 1987) or a higher quality territory. Divorce would be beneficial if a higher quality territory is available, but only one of the partners wants to move (Lindén 1991).

Let us examine the evidence of the relationship between reproduction and divorce for several species. A study of the Large Cactus Finch (*Geospiza conirostris*) showed that females that divorced younger males within a breeding season and then mated with older males improved their reproductive success because the more experienced males were better providers of parental care, providing more food and more vigorous nest defense than the previous mate (Grant and Grant 1987). Among Willow Tits, females that divorced typically remated with males that were older than their original mate and experienced greater reproductive success after remating. Divorced males had quite the opposite experience, and some were unable to find a mate the breeding season following divorce (Orell *et al.* 1994). Thus, the behavior of Willow Tits supports the better option hypothesis. This is also true for Black-capped Chickadees, where all but one of the individuals initiating a divorce moved up in rank within the flock. Enhanced status within a chickadee flock brings with it greater advantages, notably access to resources (e.g., a breeding territory) and more copulations for alpha males (Smith 1992, Otter and Ratcliffe 1996). Lindén (1991) experimentally manipulated the brood size of Great Tits (*Parus major*) to see whether there was an impact on the divorce rate. He found that those broods that were artificially enlarged had a lower divorce rate than pairs whose brood size was artificially reduced. In a study of divorce in Blue Tits, the researchers used the presence of unhatched eggs in a nest as a measure of the virtue of divorce, and they found that both males and females of the species benefited from divorce by having fewer unhatched eggs in their nests after remating (Kempnaers *et al.* 1998).

### Costs of Divorce

Divorce is not without its costs. Changing mates may have an adverse effect on lifetime breeding success if the time required to remate is long. If the search for another mate takes place while the individual is already mated, the success of current reproductive activity may be jeopardized (Ens *et al.* 1996). Blue tits that divorced laid their eggs later and successfully fledged fewer young in the year preceding divorce than did pairs that remained together (Dhondt and Adriaensen 1994). Among Larids (both gulls and terns), by all relevant measures, recently divorced individuals had

lower reproductive success than continuing pairs: the laying date was always later, the clutch size was smaller, and the number of young fledged was lower (Johnston and Ryder 1987). Barnacle Geese (*Branta leucopsis*) require 3-9 months to find a mate, suggesting that some birds may not breed the following season (Black *et al.* 1996). The Wandering Albatross is a long-lived species (33 years for males, 25 years for females) with a low divorce rate. Mate fidelity may be adaptive for this species because of the length of time required to remate. Widowed males needed 3.2 years, and widowed females 2.3 years to find a new mate, resulting in a decline in the lifetime chick production rate of 14.3 percent for males and 15.2 percent for females (Jouventin *et al.* 1999). Mate change among Great Skuas, another species with a low divorce rate, was also costly because new pairs laid their eggs later in the season and reared fewer young (Catty *et al.* 1997). For these two species divorce may be low because the reproductive costs are too high.

Earlier I said that waiting for a partner to return entails a risk. This is nowhere clearer than in the case of King and Emperor Penguins, the largest penguin species (Olsson 1998; Bried *et al.* 1999). Both are long-lived species, but in contrast to other species with a long-life expectancy, these two have high divorce rates. In neither case was breeding performance a cause of divorce, nor did divorce affect the production of young in the following year. Instead Emperor Penguins divorced because of the asynchronous arrival of mates but only when females returned to the breeding grounds before their previous mates. Asynchrony was also a factor in explaining divorce in the King Penguin colony. Indeed, the greater the asynchrony, the greater the likelihood of divorce. Asynchrony therefore explains part, but not all of divorce. Olsson (1998) proposed the "expensive fat-storing hypothesis" to explain why King Penguins divorced. When the birds arrive on the breeding grounds, both sexes have only about half of their maximum possible fat reserves, and these reserves are close to zero by the time their fast ends. King Penguins whose mates arrive late choose a new one before they exhaust all their fat reserves. While they are capable of storing fat reserves sufficient to allow them to wait for the arrival of their previous mate, they often do not do so, suggesting that the costs of storing additional fat is greater than the benefits derived from mate retention.

The impact of asynchrony was also significant for Common Terns (*Sterna hirundo*) (González-Solís *et al.* 1999). The median arrival asynchrony for divorcing pairs was 7.5 days, while pairs that remained united only arrived 2 days apart. If there was a difference of more than 16 days in the arrival of mates, they always divorced.

### Factors Predicting Divorce

Based on what we know about the costs and benefits of avian divorce, it is possible to make a number of predictions about the conditions under which divorce is likely to occur. Populations in which there is substantial variation in quality provide opportunities for individuals to search for mates that will improve their breeding success (Cezilly and Nager 1995). Willingness to wait for the previous partners seems most likely to occur in long-lived species since it is only a small proportion of total lifetime productivity that might be lost. There are a number of studies that have shown

that long-lived and reproductively monogamous species have low divorce rates (Johnston and Ryder 1987, Choudhury 1995). On the other hand, short-lived species do not have the luxury of missing a breeding season, and it is among these species that divorce rates are highest. These species typically have high mortality rates and therefore a low probability that both mates will survive to the next breeding season. Selection may therefore favor divorce and frequent remating (Choudhury 1995). As females grow older, there appears to be a decrease in the likelihood that they will divorce their mates, possibly because there is a direct correlation between age and reproductive success (Orell *et al.* 1994). The number of unpaired individuals in a population will also determine the divorce rate. Unavailability of unmated individuals will impose a constraint on mate switching and increase the costs of divorce. There is evidence that when openings do occur through predation, for example, the divorce rate rises (Ens *et al.* 1993). It has also been suggested that mate retention may be more tied to nest site fidelity than it is to a particular individual. If so, then one would predict a high divorce rate among species with low site fidelity as individuals seek a higher quality site, either to find a better food supply or to cope with frequent habitat changes (Ens *et al.* 1996). Finally, asynchronous arrival at the breeding grounds and uncertainty about a partner's return would encourage divorce if that breeding season was in danger of being lost (Olsson 1998).

## Conclusion

There is little doubt that divorce is an adaptive strategy for birds in their effort to maximize lifetime reproductive success. However, this survey of the literature shows that there is no blanket explanation for why birds divorce. The large differences in divorce rates between species are likely explained by the broad range in life histories, and therefore differential costs and benefits associated with divorce. This means that there are several plausible explanations for divorce. Even though we are confident that the ultimate goal is to maximize lifetime reproductive success, it may be that we do not know all of the proximate factors leading to divorce. There is a need for more theoretical work as well as additional field work to study the phenomenon of divorce. In particular there is a need for experimental work to tease apart the complex reasons why divorce occurs.

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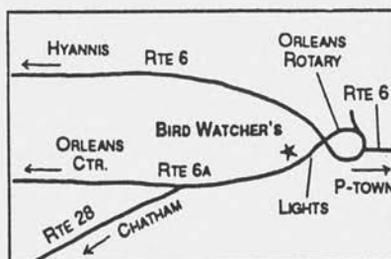
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# Birding Spots in Carlisle, Massachusetts: Great Brook Farm State Park and Cranberry Bog Conservation Lands

*J. Thomas and D'Ann W. Brownrigg*

Carlisle is a small (population 4700) town located about twenty-five miles northwest of Boston and about five miles north of Concord, Massachusetts. The habitat is diverse with extensive wetlands, some farms, and large conservation areas. We have been birding in Carlisle since 1985, and have kept detailed records of our sightings. The purpose of this article is to share our love of these special places with others. Although there are many places to bird in Carlisle, we have selected some of those places with the greatest species diversity.

The places described in this article are Great Brook Farm State Park and the Cranberry Bog, including the Chelmsford part. As of January 1, 2000, we have recorded 119 bird species at the State Park, 129 species at the Cranberry Bog (Carlisle and Chelmsford), and 147 species total for both locations. The excellent booklet *Trails in Carlisle*, available from the Town Clerk for \$5, has maps of the places mentioned here and many others. Great Brook Farm State Park has a free trail map, available at the Park Visitors Center on Lowell Street in Carlisle, or at the kiosk near the main farm.

For those who live in the Boston area, the easiest way to get to Carlisle center is to take Route 225 west from Route 128, through Bedford, making sure to stay on Route 225 (bear left) when it separates from Route 4 after Bedford Center. All of the directions below are given with respect to the rotary in Carlisle center.

## **I. Great Brook Farm State Park**

This park consists of 975 acres, and has been part of the Massachusetts Forest and Park Service since 1974. Mark and Tamma Duffy operate the dairy farm and the nearby cranberry bog. From spring through fall, a stand sells ice cream and some farm products including sweet corn in summer. In the winter, a cross-country ski concession operates from the Hart Barn located near Lowell Road. Winter visitors should be aware that many of the trails are groomed for skiing, and are closed to other uses if the snow depth is four inches or more. There is a \$5-9 fee for skiing and ski rentals are available. From spring through fall the State Park is a popular place with joggers, bicyclists, and horseback riders, so plan to arrive early on weekends. Fortunately, most of these people use the larger main trails, which are less interesting to birders.

To get to Great Brook Farm, take Route 225 to the rotary in Carlisle Center. As you approach the rotary from the east, take the first right turn off the rotary, which is Lowell Street. Daisy's Market (good food) will be immediately on the right. From the rotary, continue about 1.9 miles on Lowell Street to the intersection with North Road on the right (just before Curve Street goes left). Near the intersection with North Road

is a large sign for Great Brook Farm State Park; turn right onto North Road and drive about 0.3 mile, at which point you will see a large parking lot on the left. At the end of this parking lot are several green latrines. A kiosk with trail maps, the ice cream stand, and farm animals are located near this parking lot. Last year Yellow-throated Vireos nested in one of the large oaks near the Lowell Road sign.

There are three areas in the park where we tend to concentrate our attention. We will refer to these places as the *Log Cabin*, *Meadow Pond*, and the *Acorn Trail*. The first two are more easily accessed from a parking area about 0.5 mile east of the main parking lot on North Road. You will first see a small parking area on your right; this parking area is intended for use by people launching boats. Great Brook passes under North Road here, and Meadow Pond is visible from the road looking south. It is preferable not to park here, unless you plan to launch a boat. Continue a short distance east and park in another lot a few feet farther on the right.

### *The Log Cabin*

The Log Cabin was a hunting lodge, and is located near the site of an old grist mill. An early colonial settlement called "The City" is located nearby, as is an ancient grinding stone used by Native Americans. This area, with nearby Meadow Pond, is one of the most scenic places in the park.

After parking, cross North Road and look for the trail entrance, which is near the brook and has a metal gate. This is called the Woodchuck Trail; most trails are marked with triangular plastic blue signs on trees. Follow this trail to the log cabin, which is about 1/8 mile (0.125) from the road. After the bridge, take a small path to the left (behind the cabin), and check the outlet dam for the pond. The rocky gorge is a good place to check in spring for Winter Wren, Red-breasted Nuthatch, Hermit Thrush, Pine Warbler, Black-and-White Warbler, Black-throated Green Warbler, and Louisiana Waterthrush. Last August an adult Winter Wren and three young wrens were seen in the rocky gorge near the outlet of the pond, as well as a Pine Warbler feeding a fledgling. Black-throated Green Warblers are present in summer and probably breed here. Return to the main trail, which soon comes to another wet area, which is popular with Wood Ducks.

Instead of continuing straight ahead, we usually double back a few feet and take a trail to the right. This trail parallels a small stream, and eventually crosses a bridge over this stream and passes through a stand of hemlock. Winter Wrens, nuthatches, warblers, and thrushes may be along the small stream. The trail continues through a stand of white pines and bears left downhill to a larger bridge over Great Brook. The area around the bridge is often good for warblers and flycatchers. The trail continues uphill and enters an agricultural field. *Note:* Visitors are requested not to walk on fields in agricultural use. The field is a good place to look for Indigo Buntings and sparrows. An occasional (transient) Field Sparrow has been seen here, and Great Crested Flycatchers have nested in the nearby forest. The brushy edges on the west side of the field often attract flocks of migrating warblers. There is an overgrown field on the left (east) side of the trail that should be checked. Blue-gray Gnatcatchers have sometimes been seen there. Scarlet Tanagers are often seen in the oak forest. The trail continues south and enters the woods, eventually intersecting North Road. The trail is

approximately one mile; allow about an hour to bird the locations described. After arriving at North Road, you can turn left and return to the parking area. The large pond on the right is called Meadow Pond, and is another place you will want to visit.

### ***Meadow Pond***

Meadow Pond should be checked carefully for ducks, geese, and herons. Wood Duck, Great Blue Heron, and Green Heron are often seen here. In the late summer this is a good place to look for migrating flycatchers. We have seen Spotted and Solitary sandpipers along the pond edges. One year we saw an Olive-sided Flycatcher perched in one of the tallest trees. Woodpeckers, including Red-bellied and Pileated, have been seen feeding in the dead trees bordering the pond. Here we once discovered the nest of a Brown Creeper, built under the peeling bark of a stump in the water. Veerys are sometimes heard in the wet woodlands that border the pond. Hermit Thrushes are fairly common in upland wooded areas and are probably breeding.

There are several ways to bird Meadow Pond. We usually start from the canoe launch and walk right (northwest) to a trail entering the woods on the north side of the pond. There are small trails bordering the pond. We use these smaller trails rather than the large, wide trails featured on the map because the likelihood of seeing birds and other wildlife is better near water.

Continue west through the woods near the pond. You will come to a small, wet meadow, which might be too muddy to walk through, but can be good for sparrows and warblers. There is a large stand of white pine bordering this meadow where we have seen Great Horned Owls. There is a small island in Meadow Pond, with many dead trees. These trees are a good place to look for woodpeckers and flycatchers. One summer a pair of Pileated

Woodpeckers flew overhead during our bird club trip! In spring Northern Rough-winged Swallows and Bank Swallows are seen in this area among the more numerous Tree and Barn swallows. A beaver lodge is located on this island, and you are likely to see chewed stumps and scent mounds. The alders bordering the pond attract warblers in the spring. This area looks like it should be good for rails, since there is a lot of cattail.

Continuing west, you will reach a grassy field called The Meadows. This area is kept mowed for the benefit of equestrians, although we usually don't see them in the early morning. This field is a very good place to see raptors, since it affords an excellent view of a wide expanse of sky. Broad-



*Pileated Woodpecker by D'Ann Brownrigg*

winged Hawks, American Kestrels, and Cooper's Hawks have been seen here. One summer the call of a Red-shouldered Hawk flushed a Northern Waterthrush in this area.

After birding The Meadows, you can return to the parking area or continue around Meadow Pond, either on the main trail (Pine Point Loop) or on smaller trails. We usually continue only a short distance farther west, where Great Brook passes under the Pine Point Loop trail, and then return to the parking area. Return can be either by the same route, or for variety, along a section of the Pine Point Loop passing through a large stand of white pines. You should allow about one-to-two hours to bird the areas on the north side of the pond, and three-to-four hours to cover the entire trail system around Meadow Pond

### ***The Acorn Trail***

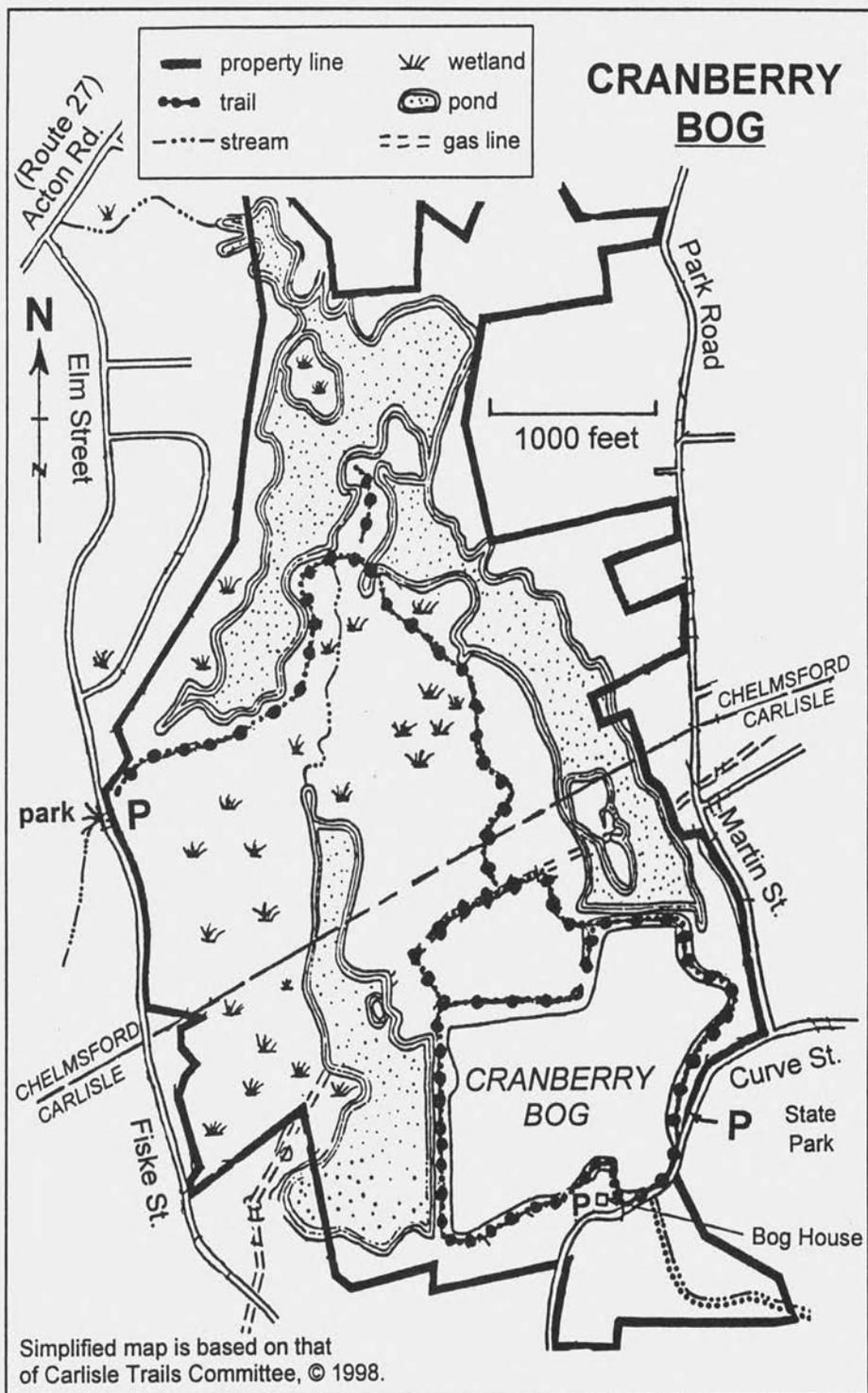
The Acorn Trail starts near the Hart Barn Ski Center, located a short distance from North Road on Lowell Street. Either drive back west to the main parking lot at the farm, or continue beyond it back to Lowell Street, and turn right (north). The Hart Barn is marked by a sign saying "Ski Touring Center" and is only 0.1 mile on the right. Do not park here if there is an equestrian event or if the ski center is open. A few nonskiing spaces are available in the main lot near the farm. Trails west of Lowell Street are open for hikers even when there is snow. The field edges between the Hart Barn and the farm are often good for Indigo Bunting (a probable breeding bird) in summer and sparrows in fall. During the spring and fall migrations, American Pipit, Horned Lark, and Common Snipe have been seen in the parking lot and cornfields.

The Acorn trail continues west across Lowell Street, where it leads through overgrown fields, woodlands, and eventually to large cornfields bordering Curve Street. After passing the cornfields, the trail continues uphill into a larger wooded section (Blueberry Hill) and then circles back. As you approach the cornfield, you will see a wetland to your right. This wetland and the bordering fields are good places to look for flycatchers, sparrows, Bobolinks, finches, and hawks. Lincoln's Sparrows and Northern Shrikes have been seen here occasionally in the fall. Eastern Bluebirds have nested in snags in the wetlands, and in nest boxes in the backyard of a house on Curve Street. Both Red-bellied and Pileated woodpeckers have been seen in this area. During migration, it is a good place to watch for hawks; Cooper's, Sharp-shinned, and Broad-winged hawks, and Osprey have been observed. Red-Tailed Hawks have nested in this area. Wild Turkeys (or more commonly their tracks) have been seen along the edges of the fields.

If you start from the main farm parking area, allow about two hours to bird the Acorn Trail as far as the cornfields and wetlands west of Lowell Street.

## **II. Carlisle Cranberry Bog**

The Cranberry Bog Conservation Lands are owned by the towns of Carlisle and Chelmsford. Carlisle owns 151 acres, of which 40 acres are leased to the cranberry grower. An additional 159 acres are owned by the town of Chelmsford. It is permissible for people and dogs to walk the various trails around the cranberry bog



including the dikes, but not on the bog itself. A spotting scope is useful for viewing the impoundments in both towns, especially during spring and fall migration.

The Carlisle section of the Cranberry Bog is located about 1.3 miles west of the Great Brook Farm barn on Curve Street. To reach the Cranberry Bog from Carlisle center, travel north on Lowell Street as if you were going to the State Park. In about two miles you will come to the intersection with North Road, and you will see the sign for Great Brook Farm on the right. However, instead of turning here, go a few feet farther north and turn left (west) on Curve Street. Continue about one mile down Curve Street until you see an open field (actually, bogs) on the right (north) side of the road. You can park off the right side of Curve Street, or continue farther until you see a three-story shingled frame building on the right. This is The Bog House and was built by the original owners of the Cranberry Bog for processing the berries and storing equipment. A small parking area is located on the far west side of the building.



*The Cranberry Bog (photograph by the authors)*

Walk around the circumference of the bog, and along two dikes of more recent construction. The bog is a good place to look for sparrows in fall, and swallows in spring and early summer. In late summer, if the water level is low in the impoundments, shorebirds may be present. Savannah Sparrows seem to be especially fond of the overgrown (and disappearing) bog fields. Bobolinks are often seen here in spring, and some may have actually bred in the past. Also in spring, many swallows can be seen flying over the water in the ponds west and north of the Bog House. We have seen Bank and Northern Rough-Winged swallows, in addition to the much more common Barn and Tree swallows. Spotted Sandpipers can often be seen in this area, especially if the water level in the ponds is low. One year we saw an adult and juvenile Spotted Sandpiper foraging together in the bog.

The impoundments should be checked carefully for herons, ducks, and shorebirds. We have seen Snowy and Great egret here once; Great Blue Herons and Green Herons

are common. A Greater White-fronted Goose was once seen sitting alone on a muddy island. In fall, check for ducks and shorebirds on mudflats (see Chelmsford below). The Carlisle Bog, with open vistas, is a good place to look for hawks during fall migration. Northern Harriers, Sharp-shinned Hawks, Cooper's Hawks, Northern Goshawks, and Broad-winged Hawks have been seen. Check the cattail marshes bordering the north impoundment. Virginia Rails and Marsh Wrens have been heard here. Last July, a possibly breeding male Canada Warbler was seen in the brushy area bordering the northern edge of the bog.

An area across Curve Street from the Bog House is used for storage of sand (and cow manure) and has a weedy border that can be attractive to sparrows and finches during fall migration. Indigo Buntings and Lincoln's, Savannah, White-crowned, White-throated, and Field sparrows have been seen in the weedy borders in the back of the sandpit. The trees bordering the bog have produced the occasional fall migrant Yellow-bellied Sapsucker. Migrating warblers and shorebirds have also been seen here feeding on insects. Veerys are sometimes heard in the wooded area across Curve Street from the Bog House and might breed here. Both Veery and Wood Thrush have also been heard in the wooded areas bordering the eastern section of the Carlisle Cranberry Bog.

### **III. Chelmsford Cranberry Bog Reservation**

The Chelmsford property has extensive wetlands and a large (unnamed) pond used for irrigation of the Carlisle cranberry bogs. These wetlands are often excellent places to look for ducks and shorebirds during the spring and fall migrations. The bordering wooded areas are often excellent for warblers and other spring/fall migrants.

To reach this area, continue driving past the Bog House on Curve Street until you reach the intersection with Fiske Street in about 0.5 mile, and then go right. You will pass by a large field, recently acquired by the Town of Carlisle as conservation land, on the right. In the fall, it is worth checking this field for geese; an occasional Snow Goose has been seen here among the numerous Canada Geese. The fields are also a good place to look for Northern Shrike in fall, and Eastern Bluebirds sometimes nest in the boxes near the road. Red-shouldered Hawks have been seen (but more commonly heard) in an area farther south and east of these fields where there are wooded wetlands. The trees along the road are worth checking for passerines.

The small parking area for the Cranberry Bog Reservation, marked with a sign, is located on Elm Street (the continuation in Chelmsford of Fiske Street) about 0.9 mile from the intersection in Carlisle of Fiske and Curve Streets. After parking here, take the trail leading through the woods. You will soon see wetlands on both sides of the trail. The wetlands to the left are closer, and may have water, depending on the time of year and the water usage by the cranberry grower. In spring and fall, these ponds attract shorebirds and ducks. The trail bears left and leads to a large expanse of deeper water, eventually ending at a small peninsula. This peninsula offers an excellent view of the pond and marshes to the east. Several years ago, a pair of Great Horned Owls nested in a large white pine to the east. This is an excellent place to look for ducks and

hawks, especially Osprey, during migration. You should allow about two hours to bird the trail from Elm Street to the large pond.

The impoundments in both Carlisle and Chelmsford are often very good for ducks in spring and fall. The Chelmsford pond has deeper water, and attracts diving ducks. Ring-necked Ducks, Common Goldeneye, Common Merganser, Greater Scaup, Bufflehead, and both teal have been seen. If the water level is low, check for shorebirds on the exposed mudflats. Greater and Lesser Yellowlegs, and Solitary, Spotted, Pectoral, and Least sandpipers have been seen in late summer.

It is possible to park in either Carlisle or Chelmsford and walk the entire property. If you park in Carlisle and walk around the bog, there is a trail that enters the wooded north section of the property and leads to a path along a natural gas pipeline, marked by vertical white cylinders. The pipeline is often popular with Eastern Towhees. Another trail intersects this path and leads north, toward the large pond in Chelmsford mentioned above. This trail leads through the woods, and passes a large cattail marsh on the right (east). The vegetated borders of the marsh are often good for spring warblers, Virginia Rails, Rusty Blackbirds, and other migrants.

The distance from the Bog House to the peninsula in Chelmsford is about 3/4 mile, and the distance from the Elm Street parking lot to the peninsula is about 1/2 mile. Allow at least four hours for birding both the Carlisle and Chelmsford Cranberry Bog properties.

Besides birds, the Cranberry Bog supports a variety of other wildlife. We have seen painted, snapping, and musk turtles. Some mammals we have seen are deer, mink, ermine, river otter, and beaver.

#### IV. Other Places

There are many places to bird in Carlisle, and we hope to include more of these in a future article. Of particular interest are Towle Conservation Land, which has a breeding population of Bobolinks, and Foss Farm, which has breeding Woodcocks. Towle Conservation Land is located about 0.7 mile west of Carlisle center on Route 225 (Westford Street); park in the Westford Street lot and walk the large fields and wooded sections. Foss Farm is located off Route 225 about two miles east of Carlisle center, not far from the Concord River near Bedford. The parking area is about 0.3 miles from the Concord River on the north side of Route 225. Note: In the summer, Carlisle residents have gardens in a section of the property, and visitors are expected to not drive beyond the first parking area. For details of the trail systems, consult the booklet *Trails in Carlisle* mentioned previously.

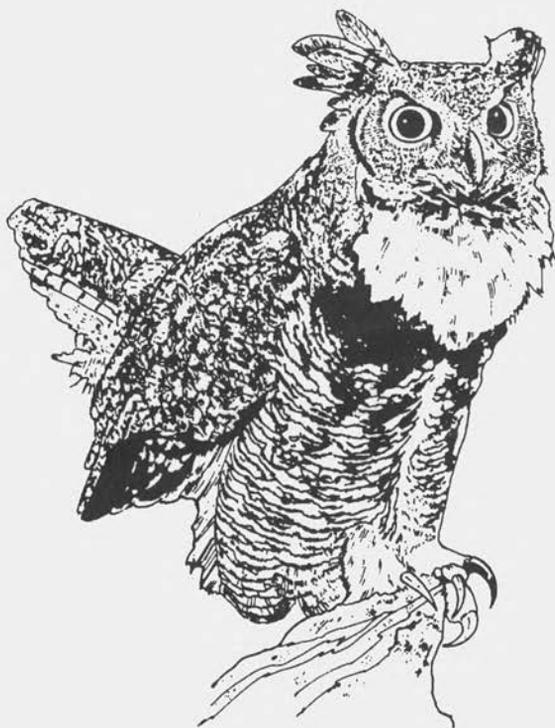
We bird in Carlisle because of its variety of conservation lands with diverse habitats, located close to our home. During the migrations we spend less time near home and more time elsewhere, so there are likely more birds around than we have seen. It is worthwhile coming here for the sake of variety. Our time estimates are rough approximations and will vary depending on personal style and the number of birds in the area. ↗

## Acknowledgements

We thank the Carlisle Trails Committee for the use of their maps and for establishing and maintaining trails in town. Thanks also to Ken Harte, JoRita Jordan, Dennis Oliver, and Betty Valentine for reviewing the manuscript and providing helpful suggestions.

**D'Ann Brownrigg** began birding in 1984 when she took the Massachusetts Audubon "Birding for Fun" course taught by fellow Carlisian Betty Valentine. She now teaches a section of that class and paints (primarily watercolors) seriously.

**Tom Brownrigg** is Senior Scientist at American Holographic in Fitchburg, Massachusetts. American Holographic manufactures holographic diffraction gratings and spectrometers used in analytical, clinical, and telecommunications instruments. He has been interested in all aspects of nature since his childhood in suburban Chicago, where he spent many hours exploring the local forest preserves. The Brownriggs have been birding together since 1985, and try to combine business trips with birding.



# YOUNG BIRDERS

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## Massachusetts Audubon Birdathon of 1999

*Joseph Moffett*

I have been interested in backyard birds and hiking since preschool, but in third grade I started to take birding seriously. It was at that time when I was first taken on a bird club walk. My mother and I went with the Brookline Bird Club to Mount Auburn Cemetery in Cambridge — the many different species of warblers that we saw there hooked me. Birding has brought me to places I have never been before. Without birds and birding, I would not appreciate the world around me as much as I do. Birding allowed me to visit Florida this past November, where I was asked to be part of a youth team that participated in the Space Coast Flyway Festival Birdathon. We raised money for ABA educational programs. (*Editor's note: According to the January issue of Winging It, Joe's team came in a "very respectable fourth place" with 139 species.*)

For four years now, I have participated in the annual Massachusetts Audubon Birdathon. I love these events because they allow me to test my birding skills, and at the same time raise money for my local sanctuary, Stony Brook. This past year was by far our team's best (we were able to identify 120 bird species).

On May 14 our team began the 24-hour birdathon in Mendon, where we found grassland species such as Bobolink, Eastern Meadowlark, Savannah Sparrow, and American Woodcock. The area we birded, formerly a small airfield, offers a great habitat for all of these species. It is a Woodcock breeding ground, and the birds were displaying that evening. We then went to West Hill Dam in Uxbridge. This dam was built to prevent flooding in the Blackstone River area. The land surrounding the dam is a wildlife management area, and has a variety of habitats, including grassland, swamp, and deciduous and coniferous forests. We saw a Common Nighthawk, Northern Rough-winged Swallows, Greater Yellowlegs, and Turkey Vultures.

At 3:00 a.m. our team traveled north to check out Oak Hill Cemetery in Newbury, which had been filled with great passerine species the year before. Unfortunately, the area was not very active that morning, and we decided to move on to Turkey Hill Road in West Newbury. As we drove along this road, we were able to pick out and identify bird songs. Off this road is a dirt road (Pike's Bridge Road), and we birded its forest and swamp habitats. We saw or heard a Brown Thrasher, a Cape May Warbler, and a Black-billed Cuckoo. The cuckoo was particularly nice to find - after hearing its distinctively mellow *cu-cu-cu*, we followed the song to its source. The bird was out in the open, singing from the middle of a tree. Probably one of the more disappointing moments at Pike's Bridge Road was the realization that Blue-winged Warblers are capable of singing a Cerulean Warbler-like song. In the same area we have heard another variation of the *bee-buzz* song of the Blue-winged Warbler that sounds similar to the Golden-wing's song (*bee-buzz-buzz*).

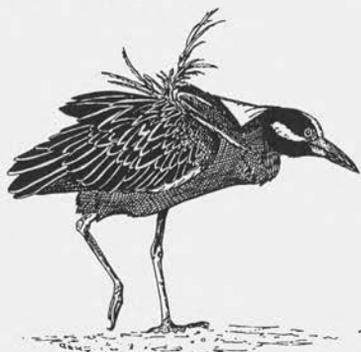
After birding at Pike's Bridge Road, we traveled to Newburyport and stopped at the seawall. We soon found out that, unfortunately, we had missed the ideal tide; the stop was fruitless. We moved on to the Parker River NWR on Plum Island, the most productive birding spot of our route. In addition to spotting the usual shorebirds and waders, we came across a large pocket of warblers, including Chestnut-Sided, Magnolia, and a beautiful Wilson's. We also saw a Ruby-throated Hummingbird, a Wilson's Phalarope, and Piping Plovers at the refuge. The hummingbird, in an interesting spectacle, hovered around a red car for some time before flying off to a different area. At our next stop, Gloucester, we spotted a Pacific Loon at Bass Rocks. This was very exciting; we could tell that the bird was a Pacific Loon by the chinstrap visible in wintering adults and most juveniles. Pacific Loons appear casually on the east coast, making this a write-in for us. At Marblehead Neck Sanctuary (one of our last stops), we were able to check off a Blue-headed Vireo and a Yellow-crowned Night-Heron. The night-heron was especially pleasant to see; it was not far from us, standing on a rock with its wings outspread. It was the best look at a Yellow-crowned Night-Heron I had ever had (it was also calling, which made it even more interesting).

In all, it was a great day for us. As usual, we missed some of the birds we expected to get, including Ovenbird, which may have been there all along, but which sang only after the event was over (naturally)! Still, we were able to break our previous record for number of species identified, which made us very proud, and we hope to break this past year's record in the birdathon of 2000. 🐦

**Joseph Moffett**, 16, lives in Mendon, Massachusetts, and is a sophomore at Nipmuc Regional High School. He is involved in many school activities, including concert band, jazz band, National Honor Society, Peer Education, and Student Council. Last year, he instituted a Rainforest Club at school that has raised money to save rain forest acreage. Joseph is a member of the ABA and the Massachusetts Audubon Society. He is a volunteer naturalist and a councilor in training at the Stony Brook Wildlife Sanctuary in Norfolk and is a member of the Stony Brook, Brookline, and Forbush Bird Clubs.



*Digital image by Dotty Moffett*



## HOT BIRDS

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Rare birds in the state are captured occasionally, on film or digitally. Many of these images are posted on *Massbird.Org*, the website sponsored by Bird Observer. We will publish images of some of these "hot birds" here as they become available.

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**Hybrid Snow/Ross's Goose** seen 11/9 - 11/27/99, on Plum Island



*Photograph by Joseph McLaughlin*



*Digital image from video still by Simon Perkins (taken through a telescope)*



**MacGillivray's Warbler** lurking in the Boston Victory Garden, 11/28 - 12/20/99

*Digital image from video still by Don Crockett ©*

<http://www.virtualbirder.com/vbirder/>

Winter adult male **Western Tanager** at a feeder in Orleans, 2/9/00

*Digital image from video still by Don Crockett ©*

<http://www.virtualbirder.com/vbirder/>



## YARD BIRDS

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*Editors note: A post on Massbird asking if birders had yard lists that they would like to share has elicited the following responses to date. I think we can agree with Rick Heil's observation that "just about any yard, even if there is only one tree and a patch of sky, can produce an interesting and diverse list of species if the observer is diligent enough." We encourage readers to continue sending their observations to brookestev@aol.com*

I don't think I have an actual count but I do have some interesting sightings. I built a pond and waterfall in my back yard about 5 years ago. Since then I have had a Northern Waterthrush, Blackburnian Warbler drinking, Wilson's Warbler, Black-throated Blue and Yellow warblers, and two years in a row I had a Cooper's Hawk. This year I had Pine Siskins. I had the only Red Crossbills reported in RI several years ago. They came into the hemlock trees that line the edge of my yard. I have tried to plant numerous native trees and shrubs and those that bear fruit to attract birds. I think the running water is the big draw. I live on the east side of Providence in a residential neighborhood. I have a small backyard with the pond and a small vegetable garden.

*Alan Strauss*

*Providence, RI* 🐦

Mainly, we get finches, sparrows and starlings with two pair of cardinals and a few jays. Once in a while, something surprising lands – a Northern Goshawk once and a Merlin this past month. I have a special connection to birds of prey and find myself always on the alert for a raptor passing through. I live on a main road that is a noisy well-traveled route by humans and there are three huge Norway maples surrounding my property. They are home to flickers and squirrels, crows, starlings and sparrows. I keep my feeders stocked but seem to mainly feed finches and sparrows, though I have a foursome of cardinals and a couple of noisy jays. One of them landed on my head. The goshawk passed through a year ago last November, the day before I went out hawkking with Paul Roberts. The Merlin was here just a couple of weeks ago. These are the most unusual of my "yard birds." I did have a wounded crow take shelter before a nor'easter in my garage. His wing was broken and he let us pick him up and bring him into our house. We cared for him for about 48 hours before taking him to the wildlife rehabilitator in Ipswich.

*Elise Caswell*

*Marblehead, MA* 🐦

Our yard is in the northwest corner of the town of York, Maine, a semi-rural area that is rapidly being developed. However, significant open space remains by virtue of wetlands laws, land trust purchases around Mount Agementicus, and large lot sizes in our immediate vicinity. The yard itself is 4+ acres of second growth woodland dominated by white pine (last cut about 1920). The only open area is our "lawn" (about

half an acre). Our property is bounded on the west by several hundred acres of pine/oak woodland, and on the north by 20+ acres of mowed fields and other open areas punctuated by a few houses. We moved here in late December 1998, so 1999 was our first year in residence. After a slow start we were pleasantly surprised and sometimes even amazed by the variety of birds we eventually saw and heard — a total of 73 species for the year.

Of special interest were several male Blackburnian Warblers that vocalized throughout the nesting season, but we observed no other breeding activity. Two common birds not yet on our list are European Starling and House Sparrow. We missed out on the winter finch craze this past season, but are looking forward to adding Cape May Warbler among others to our list this spring!

Our “top ten” yard birds for 1999:

Black-billed Cuckoo (August)	Red-shouldered Hawk (local nester)
Red-bellied Woodpecker (winter 99/00; a hotline bird in these parts)	Philadelphia Vireo (May)
Tennessee Warbler (May)	Swamp Sparrow (October)
American Woodcock (local nester -- PEENT!)	Golden-crowned Kinglet (common in winter 98/99 but very sporadic this past winter)
Great Horned Owl (winter only, so far)	Snow Goose (fall flyover)

Other frequently seen local nesters:

Common Raven	Rose-breasted Grosbeak
Pileated Woodpecker	Eastern Bluebird
Broad-winged Hawk	Wood Thrush
Cooper's Hawk	Veery
Sharp-shinned Hawk	Black-throated Green Warbler
Scarlet Tanager	Ovenbird

*Scott Cronenweth and Rebecca Lovejoy*  
*Cape Neddick, ME* ↗

Although I recently sold the property and no longer live there, between 1 February 1992 and 14 January 2000 I recorded 175 species on or over my 1.75 acre yard on Chase Street in West Newbury. The habitat is mostly young to medium-aged deciduous woods, with a few small grassy meadows and lawn. At the rear was a view of a small pond (perhaps 20,000 sq.ft.) and wooded swamp. The location is about eight miles inland from Plum Island on the southeast side of Pipestave Hill and adjacent to the well-known hawk watching site at the Page School.

Highlights of the list include the following: thirteen species of diurnal raptors including many sightings of Bald Eagle and Peregrine Falcon; a flyover adult breeding-plumaged Franklin's Gull on 10 May 1992; five species of owls including Barn and Long-eared; two Ravens soaring overhead, calling on 15 May 1992; three observations for Bohemian Waxwing with five seen eating multiflora berries on 14 January 1994; twenty-five species of warblers including a Worm-eating 17 September 1993, and a

MacGillivray's watched for 20 minutes along an herbaceous border of a meadow 14 October 1996; at least seven Dickcissels, several of which were calling flyovers; a Gambell's race of the White-crowned Sparrow coming to seed in late October 1997; both crossbills; and Hoary Redpoll at feeders with large flocks of Commons on several occasions, including two on 19 January 1994.

Other noteworthy birds seen, some on multiple occasions, were Great Cormorant, Iceland Gull, Pileated Woodpecker, Yellow-bellied Flycatcher, Northern Shrike, Mourning Warbler, and Lapland Longspur. Some of the worst misses in the eight years were Black-crowned Night-Heron, Bufflehead, Winter Wren, Yellow-throated Vireo, Bay-breasted Warbler, and Snow Bunting.

*Richard S. Heil*  
*West Newbury, MA* 🐦

Here is my yard list. It is notable only because my yard is 20 x 50 feet in the middle of Boston's South End. It is a "sunken garden" with several flowering trees and lots of ivy and small shrubs. And it will be my yard not much longer; we are moving to Jamacia Plain in a few months, where my immediate yard will be about 140 x 100, and my big yard will be the Arnold Arboretum just 3 blocks away! Anyway here is the list of thirty-two species:

Black-crowned Night-Heron (overflights)	Hermit Thrush (seen every year since 1996; latest was December 1998)
Peregrine Falcon (overflights — from the Christian Science Center)	American Robin
Herring Gull	European Starling
Rock Dove	Gray Catbird
Mourning Dove	Northern Mockingbird
Barred Owl (for about 2 weeks in December 1995)	Brown Thrasher
Common Nighthawk (they have nested on my gravel roof)	Blackpoll Warbler
Downy Woodpecker	Black-and-white Warbler
Hairy Woodpecker	American Redstart
Northern Flicker	Ovenbird (seen every year since 1995; nested in neighbor's yard in 1996)
Blue Jay	Common Yellowthroat
American Crow (nested in large White Pine on edge of property)	Wilson's Warbler
Black-capped Chickadee	White-throated Sparrow
White-breasted Nuthatch	Dark-eyed Junco
	Northern Cardinal
	House Finch
	American Goldfinch
	House Sparrow

*Bob Mayer*  
*Boston, MA* 🐦

I do not have a yard list since my yard lacks any trees and we were only supposed to be here five years. We just passed twelve years. There are two birds, though, I would like to share. Living in Randolph, I am landlocked. Once, I looked up and saw a Northern Harrier up several hundred feet making a beeline for the coast. This was in July. Another time I was working in the yard with headphones listening to music. I heard a familiar whistle from above. Taking off the headphones and looking skyward I saw a Whimbrel following the same path as the harrier did. I whistled to it. I saw it veer and look down at the yard. It changed course and flew directly south-south-east. I woke up one May morning to hear an Orchard Oriole in a tree across the street. It was a first year male.

*Glenn d'Entremont*  
*Randolph, MA* ↗

When we bought a house in Stoughton in 1987, we bought it for the back yard – a long narrow plot edged with trees and lots of multiflora rose. So far, our yard list has 88 species, somewhat impressive as we are rarely home to look. While we have seen Common Loons, 3 species of heron, 6 species of hawks, both cuckoos, and 11 species of warblers, certain unusual birds stand out in our memories. In May of 1997 there was a White-eyed Vireo that stayed for two days, foraging in the multiflora and singing. In May of 1999, our first Indigo Bunting, a vibrant male, appeared at our mixed seed feeder. During the fall 1999 invasion, finally, a Red-breasted Nuthatch appeared. Other memorable birds have included a weird, light-colored Ring-necked Pheasant (11/99, see <http://larsonweb.org/birds/pheasant.html>), and an out-of-place Northern Bobwhite (6/95), never seen but heard calling from a spruce. One evening in May of 1995, we found 5 White-crowned Sparrows foraging under our suet feeder. A Mallard hen and 5 chicks spent a day under our feeders one summer (three *very* busy blocks from the nearest pond), followed the next year by a hen and two very attentive drakes, but no chicks. In 1993, we had a brief October invasion of Evening Grosbeaks. In 1999, we finally had our first owl, an Eastern Screech Owl, calling on 9/25.

In the spring of 1998 we had a budgie visiting our feeders for a few days (obviously an escape), clearly fearless and clueless. We prefer not to speculate on its eventual fate, except to suggest that being oblivious and outlandishly colored is a bad combination.

Probably the most frustrating bird for our yard has been Common Nighthawk. We used to live in Newton, and came to take for granted a great nighthawk show in the evening in the fall. Since moving, we have seen one nighthawk in Stoughton in 9/88, another a few years later, and none again until September, 1999, when we saw several in what appears to have been an odd migration year.

So far, our choice of a domicile based on the backyard has worked out pretty well, although Dan Furbish clearly has us beat.

*David Larson and Susan Carlson*  
*Stoughton, MA* ↗

# FIELD NOTES

## A Massachusetts Yellow Rail Experience

*Dan Furbish*

One morning while I was operating a huge hay-cutting rig on Massachusetts Audubon property at the Daniel Webster Wildlife Sanctuary (DWWS) in Marshfield, Massachusetts, I experienced something awesome.

DWWS manages its lower fields in a three-year rotation, cutting one-third of the fields each year to keep them free of woody vegetation, and to recycle nitrogen back into the soil for better grasses. This benefits many species of mammals, birds, and insects by providing thick cover for them.

November 1, 1999, was a beautiful morning. The sun was shining, it was reasonably warm, a dark-morph Rough-legged Hawk was flying overhead. We decided to mow on this day because the section to be cut was nearly dry. The fields down back have to be negotiated very carefully because if you're not on your toes, you could bury that mammoth rig in no time flat.

It was unbelievable: there I was, cranking along in a four-wheel-drive, diesel-powered tractor that makes a Geo Metro look like a pedal car, and the 15-foot phragmites beside the tractor towered over the cab by three feet. The dust was flying, the John Deere 5500 tooling along at 2400 rpm's, the 16-foot-wide John Deere Cut-conditioner churning behind the tractor. I had just cut about four acres of grasses one-and-a-half to two feet tall, and I was negotiating the rig between a slightly wet area and a ten-foot-square patch of grasses that was left to be cut. Suddenly, out popped a very small honey-colored RAIL, with white lines making a checkerboard effect on its back, and white patches on both wings!

It flew from left to right, in front of the tractor, with the machine still moving forward. I opened the door of the rig to get a perfect view of this bird in flight only five or six feet away. From that point on everything went in slow motion...in my mind I was shouting YELLOW RAIL! Then out loud I shouted YELLOW RAIL! Then I motioned "two thumbs up" when the rail touched the ground and disappeared — just like magic. I steered the machine well away from where the bird landed and finished mowing. I love my job! 🦶



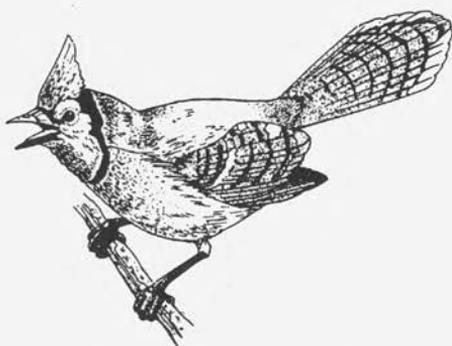
*Yellow Rail by David A. Sibley*

## Robber Blue Jay

*Susan Carlson and David Larson*

On a sunny day in February, we were walking with Marj Rines along a path near the edge of the woods at Dunback Meadows Conservation Area in Lexington when Susan noticed a Blue Jay (*Cyanocitta cristata*) swoop down into the underbrush about ten feet off to our left.

The jay immediately rose again, this time carrying a largish, light-colored object in its bill. It flew only a few feet, apparently having difficulty hauling its heavy load, and landed again, rather awkwardly. By this time we all had our binoculars on the bird. It was perched on a stick lying on the ground, with one foot on a limp, apparently dead mouse (*Peromyscus sp.*). Not more than 10 seconds after we got on the jay, which was hammering at the underside of the mouse, an adult Northern Shrike (*Lanius excubitor*) blasted into view from the right with a yell. In an instant, the jay abandoned its booty and fled. The shrike alit briefly, grabbed the mouse in its bill, and flew off into the underbrush. The Blue Jay looped and made one pass at the departing shrike, then perched and let the world know how tough it is to be a jay.



At the time, the three of us had the impression that the jay had found the shrike's food cache, and that the shrike was recovering its rightful property. Certainly, small rodents are a staple diet item for Northern Shrike in the winter, and a shrike makes a more convincing predator than a jay. However, in the *Lives of North American Birds* (Houghton-Mifflin, Boston, 1996), Kenn Kaufman notes that a minor part of the diet of the opportunistic Blue Jay is small rodents, so it is possible that we misinterpreted the scene.



On the other hand, Renee LaFontaine has seen on two separate occasions at Dunback what could be evidence of similar activity. Some weeks before the above incident, she caught a glimpse of a jay carrying what might have been a small rodent. Two weeks later in the same area, she saw a dead mouse propped up in a bush. These sightings, particularly the dead mouse in the bush, suggest that the Blue Jay was raiding the cached food of the Northern Shrike, and may have been doing so for some time.

Clearly, the moral is — if you are birding at Dunback, watch your lunch. ↗

## ABOUT BOOKS: Looking Back

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(Bird Observer continues its series celebrating the books that have inspired, delighted, or enlightened our book reviewers.)

### E.H. Forbush and Other Treasures

Dorothy R. Arvidson

"Reverend J.H. Linsley. Opened the stomach of a gannet, found bird. Opened stomach of *that* bird, found another bird. Bird within bird within bird."

"Mrs. Gene Stratton Porter. Examined food remains in nest of kingfisher, found one-tenth of them to be nearly equally divided between berry seeds and the hard parts of grasshoppers. Exacting work but easier than writing."

"Owner of a bar in Fairhaven (no name given). Had pair of Carolina Wrens build nest in basket containing sticks of dynamite. No untoward results."

"Mr. William Brewster, of Concord. Was standing by corner of one of his barns. Phoebe pursued by sharp-shinned hawk used Brewster's body as shield in eluding hawk."

"Mr. Stanley C. Jewett. Asserts that wounded red-breasted merganser at Netarts Bay, Oregon, dived to submerged root in three feet of water and died while clinging there. Apparent suicide. May 1915."

"Mr. T. Gilbert Pearson. Lady of his acquaintance, while sitting alone in her room, was startled when beef bone fell out onto hearth. Went outside, discovered turkey buzzard peering down chimney. Carelessness on part of bird."

E.B. White, "Mr. Forbush's Friends,"  
*The New Yorker*, February 26, 1966

A generation ago, the essay, "Mr. Forbush's Friends," from which the above quotes were taken, appeared in my favorite magazine. It caught my eye at once. E.B. White was and still is the writer I most admire. And the name Forbush rang a bell. Elwyn Brooks White, generally regarded by editors, writers, and literary critics as the finest essayist of the twentieth century, explains early in his Forbush piece: "Although not a student of birds, I am thrown with them a good bit...When I encounter a new face or renew my acquaintance with an old one, I turn to Forbush for help in comprehending what I have been looking at."

Mr. White is best known for his delightful children's books (*Stuart Little*, *Charlotte's Web*) but noted as well for his long association with *The New Yorker*, where he perfected while editor of the magazine's much admired "news breaks" (the amusing fillers used to justify the length of the columns) a droll, spare style of writing. The E.B. White style is evident in the opening quotations, where he is paraphrasing anecdotes related by Massachusetts ornithologist Edward Howe Forbush (1858-1929) in his much revered

work, *Birds of Massachusetts and Other New England States* (published by the Commonwealth of Massachusetts 1925-29). However, before I turn to Mr. Forbush, a few more words about E.B. White. In 1970, *The Trumpet of the Swan* was published. Presumably for children, it is as well a great book for birdwatchers — young or old, with or without children to read to. In 1988, Mr. White was persuaded to read it for a CD recording, and that disc is a treasure in my library.

By 1966 when E.B. White's witty essay sent me straight to the library to have a look at Forbush's book, this three-volume work had been long regarded as a literary classic. At the library I found only Volumes I and II, but my first perusal told me I must possess these hard-to-find, out-of-print books. And I was lucky: Early on, I picked up for 25 cents at a Florida library sale a falling-apart copy of Volume III, published in 1929. Opening this volume for the first time, I was greeted on the frontispiece by a twinkling-eyed, handsome, and friendly face — Forbush looking me straight in the eye. I was enchanted by the photo. The ensuing preface by editor John Richard May proved fascinating. Shortly after Forbush's death at 71 on March 7, 1929, May, a friend who had worked beside Forbush as editor for many years and knew him well, provided a moving 32-page account of the famous birdman's life and character to be included in Volume III. Skillfully inserting lengthy excerpts from the author's own writings, May created a portrait so vibrant that Forbush seems still alive. Thanks to Editor May and a grieving staff of co-workers in the state Department of Agriculture, the final volume was in print within the year of Forbush's death.

For a decade, I possessed only Volume III. Finally, a friend, naturalist Brian Cassie, a knowledgeable, first-rank bibliophile then in the book business, found for me an affordable secondhand set — volumes that have been within easy reach of my desk ever since — to browse for pleasure, to examine again the beautiful color plates of the reknowned Louis Agassiz Fuertes, or to seek information about ornithology and birdwatching in the early part of the twentieth century.

On July 9, 1880, the *Worcester Spy* published the first of a series of articles by 22-year-old Forbush, "Our Birds in July." Thus began the writing career that culminated in the now treasured *Birds of Massachusetts*. Much honored by scientists in his lifetime (1858-1929) for his accomplishments in ornithology and wildlife conservation, Forbush also, according to May, "held a most unusual place in the hearts of hundreds of persons who had never met him face to face but who knew him through the revelation of his writings. His sincerity and singleness of purpose, his patience and tactful consideration, his friendly interest in the problems of the veriest tyro in bird study, gave a personal touch to all his relations with others." (Vol. III, p. xlvi). Not bad for a boy who at fifteen quit school, determined to earn his living, be independent, and educate himself "by experience, observation and reading" because he believed that "the use of the hands and the study of the living world should at least accompany that of the text book and the dead world." For the next seven years young Forbush worked as "a farmer, laborer and mechanic — my avocation the study of nature. Thus I grew up...preparing myself for the work that I seemed best fitted to do." (Vol. III, p. xxiv)

What endears these books to me are the anecdotes about birds and people found in the sections titled "Haunts and Habits" — a wonderful compilation by a very gifted

writer of bird reports sent him by his friends, by fellow ornithologists, and by ordinary birdwatching people who only knew him by reputation but felt connected to him. Whenever I open a Forbush volume, I am lost —always reluctant to put it down, swept along by these amusing, often bizarre encounters between man and bird. For my money, Forbush is as good a read as you'll find anywhere in ornithological literature.

*The New Yorker* led me to Mr. Forbush, just as, years earlier, the magazine had introduced me to Rachel Carson's writings, a determining influence in my life. In 1950, prior to the publication of Carson's *The Sea Around Us*, portions of the manuscript appeared as articles in *The New Yorker*. Twelve years later the magazine published *Silent Spring*, first as a series of articles and then as a book.

*The Sea Around Us* (1951) was on the best-seller lists for 86 weeks and later translated into 30 languages. Having read the selections in *The New Yorker*, I put the book on the required reading list for my Simmons College life science students. Within a year the author, dedicated biologist and skilled writer Rachel Carson, became world-famous. The success of this book enabled Carson to retire from her position as Editor-in-chief of the U.S. Fish and Wildlife Service to devote herself to writing. The focus of her interest, however, remained the same — the relation of life to its environment. From 1958 on, she collected data from scientists all over the world, documenting the devastating effect on the earth's ecosystems caused by the widespread use of pesticides, herbicides, and other poisonous and carcinogenic chemicals. The result was *Silent Spring* (1962), a courageous and damning protest that applied an effective spur to the environmentalist movement. The title of this landmark book was prompted by the many letters and calls that Carson received from alarmed birdwatchers and field biologists who sought an explanation for the absence of birdsong and the decline in numbers of birds in former avian-rich sanctuaries. Carson became an icon for many biologists, myself included. Her books aroused me to become a conservation activist and a volunteer worker for environmental protection organizations. My casual birdwatching evolved into a serious study of ornithology and a passionate concern for the environment and the birds I love to watch.

Limitations of space permit only brief mention of other books that I treasure or which have been much used and appreciated by me in my work, most of which I have reviewed over the years in *Bird Observer* or elsewhere. Foremost among them is *The Life of Birds* (1963) by Professor Joel Carl Welty, who was an important friend to me in my college years, a mentor during graduate school, and a role model in my teaching career. I began birdwatching at age three with my grandmother's purple martin house and was taught by my hunter father to recognize most of the birds in my area of Wisconsin and Illinois by age ten without benefit of field guide or field glasses. However, Carl Welty and Dr. Tage Johansson, then a student of Welty's at Beloit College, were the first people to acquaint me with the science of ornithology. Welty frequently referred to a "popular" bird book he was writing when I first knew him, 25 years before it was published. The preface in *The Life of Birds* states that "the book is directed toward the general student," its aim being "to present, simply and straightforwardly, the basic facts of bird biology...to arouse in the reader a lasting enthusiasm for birds and for the wonderful things they do." Joel Carl Welty, like Edward Forbush, loved birds. He was revising the fourth edition of

his book when he died, and Dr. Luis Baptista of the California Academy of Sciences, whom Welty had asked to help him, saw it through to publication in 1988. The book is a famous textbook, still widely used in university ornithology courses, a very good read, and certainly the best reference text on ornithology ever published to date.

Another reference book that I value and recommend highly is *The Audubon Society Encyclopedia of North American Birds* by John K. Terres (1980). It bore a price tag initially of \$65, out of reach for most birders I knew. Fortunately for me, a copy to review was sent me by the publisher. This book is a gold mine of facts and has become for me indispensable, invariably providing the information I seek, though its roundabout cross-referencing sometimes drives me mad. Although the book is an overweight 7-lb.-2-oz. tome, clumsy in the hand, heavy on the lap, it does have beautiful photographs, a useful bibliography of periodical literature, and requires less shelf space than the 26 volumes of Arthur Bent which it has supplanted.

A different encyclopedia, one that I enjoy hugely whenever I open it, is Chris Leahy's *The Birdwatcher's Companion* (1982), a.k.a. the "poor man's Terres," a book that the author claims (p. ix) will tell you, "for example: whether birds have a well-developed sense of taste; what 'agonistic' means; ...how to pronounce 'parula'; who Bendire was; how many species of woodpeckers there are in the world; what kind of bird a 'hagdon' is; what special birds [you] might hope to see in the Pribilof Islands; ...when to visit the Florida Keys in order to be sure of finding a Black-whiskered Vireo...." In my *Bird Observer* review (October 1983) I lauded the author for providing "a wealth of fascinating information in lively prose that is erudite, literate, witty, and, for this reviewer, readable to the point of addiction." Seventeen years later, my opinion has changed not one iota.

Among field guides, I have grown fond of Richard H. Pough's three *Audubon Bird Guides* with color plates by Don Eckelberry. The text is well written and gives more information than most guides about habits and behavior, and the color plates are very beautiful. Another guide I like is the first edition (and only the first) of the Golden Press' *Birds of North America* by Robbins, Brunn, and Zim with illustrations by Arthur Singer. It was recommended to me by my tour guide on my first trips to Mexico in 1967-68, a college kid named Peter Alden. On one trip I recall this young fellow pointing out birds from the bus, clutching in his waving hand long strips of paper that threatened to fly out the open window — the printer's proofs for his first book. *Finding the Birds in Western Mexico* was published in 1969 with color plates by John O'Neill and was followed by *Finding Birds Around the World* (1981), both splendid books that I have long prized. Peter has since become a world-famous tour leader, and has probably found, identified, and shown more birds to more people than anyone else anywhere. He is also the author/editor of a series of comprehensive wildlife guides, the *National Audubon Society* field guides to Africa and to regions of the United States (Knopf, 1995-98). 

**Dorothy R. Arvidson** is a retired college professor and editor emerita of this journal. She currently works as a freelance editor, writer, and ornithological consultant. She has often wished she could write like E.B. White, could have birded with Mr. Forbush, and worked with Rachel Carson. But she is happy she began birdwatching a long time ago, when there were still lots of birds everywhere.

# The 100th Christmas Bird Count 12/16/99-1/3/00

*Compiled by Marjorie W. Rines and Robert H. Stymeist*

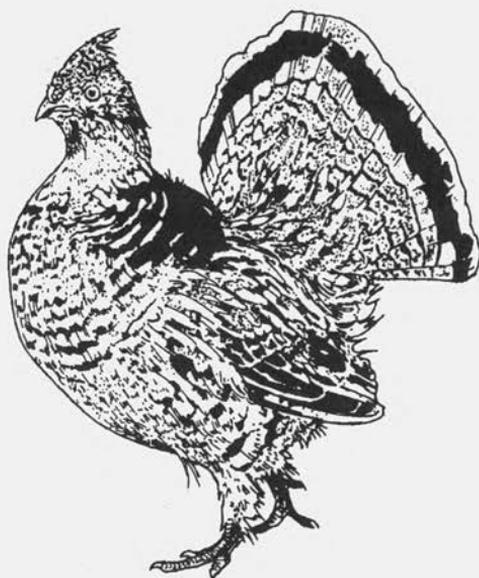
It is fitting that the observance of the 100th anniversary of the Christmas Bird Count coincides with *Bird Observer* covering for the first time all the counts in Massachusetts. The thirty-three counts tallied an amazing 209 different species plus an Oregon Junco, which by the way was not found on a count day but during the count period. The Massachusetts total was 207; the Black Vulture and Greater White-fronted Goose were seen in Rhode Island on the Newport R.I.-Westport MA CBC. It is always fun to see how many species are represented by a single individual; there were 23 and they deserve special mention: Pacific Loon, Eared Grebe, Black Vulture, Blue-winged Teal, Golden Eagle, Clapper Rail, Sandhill Crane, Semipalmated Plover, Semipalmated Sandpiper, Whimbrel, Long-billed Dowitcher, Parasitic Jaeger, Boreal Chickadee, Blue-gray Gnatcatcher, Cape May, Black-throated Blue, Prairie, Blackpoll and MacGillivray's warblers, Northern Waterthrush, Spotted Towhee, Salt Marsh Sharp-tailed and Clay-colored sparrows. There were just 20 species that were seen on all 33 counts, and what is surprising is that neither Rock Dove nor House Sparrow were represented on all counts!



**Count Circles:** Each Christmas Count Circle is located by the latitude and longitude of its center, and its approximate location is shown on this map. Northern Berkshire (1), Central Berkshire (2), Southern Berkshire (3), Cobble Mountain (4), Greenfield (5), Northampton (6), Springfield (7), Athol (8), Quabbin (9), Sturbridge (10), Westminster (11), Worcester (12), Uxbridge (13), Concord (14), Millis (15), Taunton-Middleboro (16), Cape Ann (17), Newburyport (18), Andover (19), Greater Boston (20), Quincy (21), Marshfield (22), Plymouth (23), Stellwagen Bank (24), Truro (25), Cape Cod (26), Mid-Cape Cod (27), Buzzards Bay (28), New Bedford (29), Martha's Vineyard (30), Tuckernuck Island (31), Nantucket (32), Newport, RI-Westport, MA (33)

Top honors for most species went to Greater Boston with 134 and the runner-up was Newport-Westport with 132 species. Cape Cod got the Bronze with 128 species and nine other counts broke over 100 species. Mild weather from October right through the end of December certainly contributed to the overall high numbers for many species. There were 14 species of warblers recorded in Massachusetts and the Boston MacGillivray's has a good chance of being a high count for the United States! The national high count for Yellow-breasted Chat is usually under five individuals; Cape Cod this year tallied sixteen, and twenty-five were counted statewide. The numbers for many species continue to rise: 396 Red-bellied Woodpeckers, 1766 Carolina Wrens (which were seen on all but the Northern Berkshire CBC), 1993 Eastern Bluebirds, and 30,758 American Robins. Also on the increase, to the dismay of some, were the numbers of certain species: 63,422 Canada Geese, 1021 Wild Turkey, and 54,877 American Crows. It was a good year for Northern Shrike with 87 individuals reported. Other totals were 122 Winter Wrens, 8458 Cedar Waxwings, 72 Turkey Vultures (all from southeastern sections), 84 Common Ravens, and 38 Bald Eagles. Common Redpolls were the most numerous of winter finches with 2871 individuals noted.

The complete results of all the counts in the country are available on the Birdsource website (sponsored by the National Audubon Society and the Cornell Laboratory of Ornithology). You can view the data going back to 1900 by visiting the following url: <http://www.birdsource.org> and selecting Christmas Bird Count.



Species	And	Ath	BB	C Ann	C Cod	C Berk	Cob	Mt	Con	Gr	Bos	Green	Marsh
Red-throated Loon	0	0	9	7	84	0	0	0	0	43	0	0	29
Pacific Loon	0	0	0	0	0	0	0	0	0	0	0	0	0
Common Loon	0	2	47	58	24	0	0	0	0	13	0	0	58
Pied-billed Grebe	0	0	26	0	61	0	0	0	0	5	0	0	0
Horned Grebe	0	0	323	44	30	cw	0	0	0	178	0	0	17
Red-necked Grebe	0	0	2	14	4	0	0	0	0	74	0	0	45
Eared Grebe	0	0	0	1	0	0	0	0	0	0	0	0	0
Northern Fulmar	0	0	0	0	0	0	0	0	0	0	0	0	0
Greater Shearwater	0	0	0	0	0	0	0	0	0	0	0	0	0
Northern Gannet	0	0	0	142	1,759	0	0	0	0	2	0	0	52
Great Cormorant	0	0	60	276	18	0	0	0	0	19	0	0	7
Dble-cr. Cormorant	2	0	1	8	6	0	0	0	0	15	0	0	0
American Bittern	0	0	0	0	0	0	0	0	0	0	0	0	0
Great Blue Heron	4	0	59	6	141	1	0	17	30	1	0	0	29
Bl-cr. Night-Heron	0	0	0	1	13	0	0	0	1	0	0	0	0
Black Vulture	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey Vulture	0	0	11	0	0	0	0	0	0	cw	0	0	0
G. White-fr. Goose	0	0	0	0	0	0	0	0	0	0	0	0	0
Snow Goose	0	0	0	1	0	2	0	1	1	0	0	0	0
Canada Goose	1,469	192	757	1,418	1,918	1,709	709	5,484	3,735	168	1,526	0	0
Brant	0	0	113	0	512	0	0	0	779	0	243	0	0
Mute Swan	0	0	39	27	33	0	6	14	48	0	63	0	0
Tundra Swan	0	0	0	0	0	0	0	0	0	0	0	0	0
Whooper Swan	0	0	0	0	0	0	0	0	0	0	0	0	0
Wood Duck	1	0	0	1	3	0	1	2	3	0	0	0	0
Gadwall	0	0	19	103	0	cw	cw	3	13	0	2	0	0
Eurasian Wigeon	0	0	0	0	0	0	0	0	0	0	0	0	0
American Wigeon	0	0	43	1	74	2	0	6	54	0	0	0	3
Am. Black Duck	57	59	536	690	2,820	9	87	190	880	85	2,900	0	0
Mallard	836	38	611	722	488	385	398	2,083	2,224	165	728	0	0
Blue-winged Teal	0	0	0	0	0	0	0	0	0	0	0	0	0
Northern Shoveler	0	0	0	2	11	0	0	0	3	0	0	0	0
Northern Pintail	1	0	1	2	1	0	0	19	3	0	3	0	0
Green-winged Teal	0	0	0	23	58	0	0	4	82	0	2	0	0
Canvasback	0	0	6	3	69	3	0	0	84	0	0	0	0
Redhead	0	0	0	0	0	0	0	0	0	0	0	0	0
Ring-necked Duck	1	0	44	33	6	15	cw	27	253	0	0	0	106
Tufted Duck	0	0	0	0	0	0	0	0	0	0	0	0	0
Greater Scaup	11	0	796	7	199	0	1	0	43	0	1	0	0
Lesser Scaup	0	0	8	2	59	4	cw	0	18	0	0	0	0
scaup species	0	0	0	0	8	0	0	0	0	0	0	0	0
King Eider	0	0	0	1	0	0	0	0	1	0	0	0	0
Common Eider	0	0	1,316	2,274	2,131	0	0	0	2,387	0	3,386	0	0
Harlequin Duck	0	0	0	53	16	0	0	0	0	0	2	0	0
Surf Scoter	0	0	84	81	106	0	0	0	281	0	63	0	0
White-winged Scoter	0	0	743	360	952	0	0	0	459	0	431	0	0
Black Scoter	0	0	19	59	35	0	0	0	15	0	53	0	0
Oldsquaw	0	0	150	202	413	0	0	0	8	0	163	0	0
Bufflehead	4	0	1,683	523	2,245	0	1	1	853	0	662	0	0
Common Goldeneye	123	0	495	237	329	17	4	15	602	38	322	0	0
Barrow's Goldeneye	0	0	2	2	0	0	0	0	4	0	0	0	0
Hooded Merganser	18	37	288	8	284	8	6	24	230	0	14	0	0
Red-br. Merganser	0	0	1,164	603	2,405	0	0	0	1,137	0	537	0	0
Common Merganser	53	53	17	25	251	172	73	124	219	114	0	0	0
Ruddy Duck	38	0	69	81	358	1	0	17	266	0	0	0	0
Bald Eagle	0	2	0	0	0	0	0	0	1	5	0	0	0
Northern Harrier	0	0	11	7	30	0	0	6	1	0	22	0	0
Sharp-shinned Hawk	5	2	6	12	10	2	3	13	12	5	10	0	0
Cooper's Hawk	2	6	8	3	12	2	1	10	8	6	8	0	0
Northern Goshawk	0	0	0	0	0	0	0	4	0	0	0	0	0

Species	And	Ath	BB	C Ann	C Cod	C Berk	Cob Mt	Con	Gr Bos	Green	Marsh
Red-shoulder. Hawk	2	0	2	0	0	0	1	5	0	0	5
Red-tailed Hawk	27	9	25	35	41	25	25	89	91	37	36
Rough-legged Hawk	0	0	0	1	0	0	0	0	2	0	3
Golden Eagle	0	0	0	0	0	0	0	0	0	0	0
American Kestrel	1	0	3	1	2	0	0	1	13	1	0
Merlin	0	0	3	3	2	0	0	0	3	1	2
Peregrine Falcon	1	0	0	0	2	0	0	0	2	0	0
Ring-neck. Pheasant	3	1	2	2	0	1	1	2	15	2	0
Ruffed Grouse	2	5	0	1	0	3	0	5	0	4	1
Wild Turkey	29	231	13	18	0	9	20	14	20	151	cw
Northern Bobwhite	0	0	15	0	9	0	0	12	0	0	0
Clapper Rail	0	0	0	0	1	0	0	0	0	0	0
Virginia Rail	0	0	2	0	12	0	0	1	0	0	11
Sora	0	0	0	0	1	0	0	0	0	0	1
American Coot	0	0	94	0	59	1	20	5	404	0	0
Sandhill Crane	0	0	0	0	0	0	0	0	0	0	0
Black-bellied Plover	0	0	11	0	115	0	0	0	2	0	2
Semipalmated Plover	0	0	0	0	1	0	0	0	0	0	0
Killdeer	0	0	4	0	0	0	0	0	0	0	0
Greater Yellowlegs	0	0	5	0	12	0	0	0	9	0	0
Whimbrel	0	0	0	0	0	0	0	0	0	0	0
Ruddy Turnstone	0	0	0	39	0	0	0	0	0	0	0
Red Knot	0	0	0	0	120	0	0	0	0	0	0
Sanderling	0	0	77	595	3,911	0	0	0	312	0	0
Semipalm. Sandpiper	0	0	0	0	1	0	0	0	0	0	0
Western Sandpiper	0	0	0	0	4	0	0	0	0	0	0
Purple Sandpiper	0	0	2	51	0	0	0	0	48	0	0
Dunlin	0	0	24	340	5,545	0	0	0	216	0	553
Long-billed Dowitcher	0	0	0	0	0	0	0	0	0	0	0
Common Snipe	0	0	2	0	13	0	0	3	0	0	3
American Woodcock	0	0	2	1	2	0	0	0	1	0	0
Pomarine Jaeger	0	0	0	0	0	0	0	0	0	0	0
Parasitic Jaeger	0	0	0	0	0	0	0	0	0	0	0
Laughing Gull	0	0	0	0	0	0	0	0	4	0	0
Little Gull	0	0	0	0	0	0	0	0	0	0	0
Black-headed Gull	0	0	0	1	0	0	0	0	3	0	0
Bonaparte's Gull	0	0	72	315	126	0	0	0	93	0	91
Ring-billed Gull	298	11	196	200	588	220	299	662	3,762	161	404
Herring Gull	194	8	771	3,304	3,600	26	66	1,163	6,924	100	3,964
Iceland Gull	0	0	0	1	1	0	0	cw	1	0	1
Lesser Bl.-back. Gull	0	0	0	1	1	0	0	0	1	0	0
Glaucous Gull	0	0	0	1	0	0	0	0	0	0	0
Great Bl.-back. Gull	57	2	79	725	862	34	38	36	389	17	669
Bl.-legged Kittiwake	0	0	0	10	1,570	0	0	0	0	0	26
Dovekie	0	0	0	4	0	0	0	0	0	0	0
Common Murre	0	0	0	0	0	0	0	0	0	0	0
Thick-billed Murre	0	0	0	0	0	0	0	0	0	0	0
Razorbill	0	0	0	92	160	0	0	0	0	0	18
Black Guillemot	0	0	0	35	0	0	0	0	1	0	8
Atlantic Puffin	0	0	0	0	0	0	0	0	0	0	0
alcid species	0	0	0	215	30	0	0	0	0	0	2
Rock Dove	1,094	1,210	308	1,020	98	540	800	764	4,107	886	283
Mourning Dove	261	303	245	247	262	193	239	1,744	676	459	153
Barn Owl	0	0	0	0	0	0	0	0	0	0	0
Eastern Screech-Owl	1	0	7	36	22	0	8	13	22	3	64
Great Horned Owl	1	3	4	15	38	0	4	18	5	0	18
Snowy Owl	0	0	0	cw	0	0	0	0	4	0	0
Barred Owl	0	3	1	1	0	0	2	7	2	1	0
Long-eared Owl	0	0	3	4	1	0	0	0	0	0	5
Short-eared Owl	0	0	2	0	1	0	0	0	2	0	3

Species	And	Ath	BB	C Ann	C Cod	C Berk	Cob Mt	Con	Gr Bos	Green	Marsh
N. Saw-whet Owl	0	6	0	2	4	0	0	1	0	1	2
Belted Kingfisher	6	2	31	7	25	5	4	24	13	3	6
Red-head. Woodpker	0	0	0	0	0	0	0	0	0	0	0
Red-bel. Woodpker	4	0	17	4	8	5	18	63	5	19	8
Ylw-bel. Sapsucker	0	0	0	0	0	0	1	0	1	0	0
Downy Woodpecker	72	65	88	103	125	42	55	422	250	63	58
Hairy Woodpecker	19	28	19	9	17	20	18	90	20	24	7
Northern Flicker	2	0	43	18	125	1	10	37	35	10	43
Pileated Woodpecker	0	8	0	5	0	2	1	11	0	1	0
Eastern Phoebe	0	0	1	0	0	0	0	0	0	0	0
Northern Shrike	4	3	1	3	2	0	3	5	2	4	2
Blue Jay	161	405	497	311	490	101	219	1,815	681	460	202
American Crow	6,930	328	966	680	830	444	868	2,503	9,978	753	752
Fish Crow	3	0	0	0	0	0	0	0	82	0	0
Common Raven	0	28	0	0	0	3	3	0	0	4	0
Horned Lark	0	1	0	75	65	0	0	55	164	103	113
Tree Swallow	0	0	0	0	0	0	0	0	0	0	0
Bl.-cap. Chickadee	321	1,634	1,245	759	1,230	459	408	2,361	916	681	556
Boreal Chickadee	0	0	0	0	0	0	0	0	0	0	0
Tufted Titmouse	148	196	243	167	204	50	124	1,077	341	149	181
Red-br. Nuthatch	21	46	73	40	72	10	5	97	8	9	7
White-br. Nuthatch	82	212	102	101	141	54	72	579	226	96	74
Brown Creeper	11	15	10	2	11	7	2	50	5	9	2
Carolina Wren	7	2	231	25	167	1	4	119	40	4	54
House Wren	0	0	1	0	1	0	0	0	0	0	0
Winter Wren	1	1	26	3	8	0	0	5	10	4	4
Marsh Wren	0	0	2	0	7	0	0	1	3	0	0
Bl.-gray Gnatcatcher	0	0	0	0	0	0	0	0	1	0	0
Golden-cr. Kinglet	10	10	77	3	39	4	15	48	5	1	16
Ruby-cr. Kinglet	1	0	3	3	5	0	0	0	5	0	3
Eastern Bluebird	30	4	33	28	0	25	74	275	0	75	26
Hermit Thrush	0	0	66	8	27	0	1	2	15	0	cw
American Robin	258	138	832	518	1,476	95	185	2,190	7,878	327	2,817
Gray Catbird	0	0	21	3	9	0	0	0	2	0	0
Northern Mockingbird	43	14	116	152	155	9	57	234	276	54	68
Brown Thrasher	0	1	0	0	6	0	0	0	1	0	1
European Starling	3,209	2,037	930	17,418	1,936	2,399	1,898	4,490	17,213	1,918	3,673
American Pipit	0	0	0	0	0	0	0	0	0	0	0
Bohemian Waxwing	0	0	0	0	0	0	0	2	0	0	0
Cedar Waxwing	61	809	158	71	88	423	147	315	40	1,019	56
Orange-cr. Warbler	0	0	0	1	3	0	0	0	1	0	0
Nashville Warbler	0	0	2	0	0	0	0	0	0	0	0
Cape May Warbler	1	0	0	0	0	0	0	0	0	0	0
Black-th. Bl. Warbler	0	0	0	0	0	0	0	0	1	0	0
Ylw-rumped Warbler	0	0	386	132	1,001	0	0	0	28	0	239
Pine Warbler	0	0	2	1	1	0	0	0	0	0	0
Prairie Warbler	0	0	0	0	0	0	0	0	1	0	0
Palm Warbler	0	0	9	0	6	0	0	0	cw	0	0
Blackpoll Warbler	0	0	0	0	1	0	0	0	0	0	0
N. Waterthrush	0	0	0	0	0	0	0	0	0	0	0
MacGillivray's Wbler	0	0	0	0	0	0	0	0	1	0	0
Common Ylwthroat	0	0	0	0	1	0	0	0	3	0	0
Wilson's Warbler	0	0	0	0	0	0	0	0	1	0	0
Yellow-breasted Chat	0	0	2	0	16	0	0	0	1	0	0
Eastern Towhee	0	0	14	cw	10	0	2	0	1	0	
Spotted Towhee	0	0	0	0	0	0	0	0	0	0	0
Am. Tree Sparrow	56	389	221	285	72	94	160	829	374	272	302
Chipping Sparrow	0	0	2	0	2	0	0	0	0	0	0
Clay-clrd. Sparrow	0	0	1	0	0	0	0	0	0	0	0
Field Sparrow	1	0	67	1	29	0	3	10	2	2	1

Species	And	Ath	BB	C Ann	C Cod	C Berk	Cob Mt	Con	Gr Bos	Green	Marsh
Vesper Sparrow	0	0	3	0	0	0	0	0	0	0	0
Savannah Sparrow	0	2	2	3	21	0	0	6	9	0	8
Ipswich Sparrow	0	0	0	0	12	0	0	0	0	0	6
Grasshopper Sparrow	0	0	0	0	0	0	0	0	0	0	0
sharp-tailed sparrow	0	0	0	0	1	0	0	0	0	0	1
Saltmarsh ST Sprw	0	0	0	0	1	0	0	0	0	0	0
Seaside Sparrow	0	0	0	0	0	0	0	0	0	0	0
Fox Sparrow	5	0	1	0	8	0	1	12	4	1	1
Song Sparrow	23	23	465	86	419	4	68	208	380	33	87
Swamp Sparrow	4	0	31	9	77	0	0	21	14	1	26
White-thr. Sparrow	11	12	408	114	373	4	35	152	418	22	119
White-cr. Sparrow	0	0	1	0	0	0	0	0	3	0	1
Dark-eyed Junco	336	316	304	248	133	115	643	1,510	1,325	463	215
Oregon Junco	0	0	0	0	0	0	0	0	0	0	0
Lapland Longspur	0	0	0	0	0	0	0	0	9	0	0
Snow Bunting	0	14	2	9	177	18	0	0	168	0	5
Northern Cardinal	54	60	446	166	505	46	125	514	345	120	172
Dickcissel	0	0	0	0	0	0	0	0	1	0	0
Red-wgd Blackbird	18	0	5	9	2	1	1	49	7	0	146
Eastern Meadowlark	0	0	6	0	13	0	0	0	0	0	53
Rusty Blackbird	2	0	0	1	0	0	0	8	20	0	41
Common Grackle	2	0	41	0	0	0	1	10	3	0	1
Br.-headed Cowbird	0	2	67	4	1	0	0	9	1	0	0
Baltimore Oriole	0	0	0	0	3	0	0	0	0	0	0
Pine Grosbeak	0	0	0	0	0	0	0	0	0	0	0
Purple Finch	21	26	1	3	0	5	19	37	0	3	4
House Finch	123	143	540	422	971	79	127	879	503	209	360
Red Crossbill	0	0	9	0	0	0	0	0	1	0	0
White-wing Crossbill	0	0	0	3	0	0	0	0	0	0	0
Common Redpoll	11	138	147	217	16	136	41	69	175	98	169
Pine Siskin	0	227	0	0	0	19	14	74	17	81	5
American Goldfinch	222	254	1,072	300	857	67	183	1,876	569	149	236
Evening Grosbeak	0	167	0	0	0	7	0	0	0	2	0
House Sparrow	398	747	816	1,386	645	167	380	1,605	2,229	690	583

Code	CBC Location	Date	Birds	Species	Compiler
And	Andover	Dec 18, 1999	17288	70	Lou Wagner
Ath	Athol	Dec 18, 1999	10690	59	David Small
BB	Buzzards Bay	Dec 18, 1999	22798	121	Richard Harlow
C Ann	Cape Ann	Dec 19, 1998	39357	120	Richard McHale
C Cod	Cape Cod	Dec 19, 1998	47839	128	Blair Nikula
C Berk	Central Berkshire	Dec 19, 1999	8305	60	Edwin Neumuth
Cob Mt	Cobble Mountain	Dec 26, 1999	8808	65	Seth Kellogg
Con	Concord	Jan 2, 2000	37357	85	Henry Norwood
Gr Bos	Greater Boston	Dec 19, 1999	77053	134	Robert Stymeist
Green	Greenfield	Dec 26, 1999	10347	62	Mark Fairbrother
Marsh	Marshfield	Dec 26, 1999	29381	103	Warren Harrington

Species	MV	Mid-C	Millis	Nant	NB	Nbpt	Nhamp	N Berk	Ply	Quab	Quin
Red-throated Loon	61	77	0	45	1	10	0	0	8	0	4
Pacific Loon	0	1	0	0	0	0	0	0	0	0	0
Common Loon	475	74	0	106	6	26	0	0	114	23	10
Pied-billed Grebe	7	10	0	31	0	1	0	0	6	0	1
Horned Grebe	119	109	0	26	149	25	0	0	296	22	163
Red-necked Grebe	41	4	0	20	0	16	0	0	16	0	51
Eared Grebe	0	0	0	0	0	0	0	0	0	0	0
Northern Fulmar	3	0	0	0	0	0	0	0	0	0	0
Greater Shearwater	0	0	0	0	0	0	0	0	0	0	0
Northern Gannet	430	106	0	342	0	100	0	0	12	0	0
Great Cormorant	667	29	0	33	3	10	0	0	54	0	50
Dble-cr. Cormorant	16	3	0	2	25	2	0	0	2	0	1
American Bittern	1	0	0	cw	0	0	0	0	0	0	0
Great Blue Heron	61	75	13	40	17	10	5	2	21	1	33
Bl-cr. Night-Heron	5	1	0	4	0	0	0	0	0	0	0
Black Vulture	0	0	0	0	0	0	0	0	0	0	0
Turkey Vulture	0	0	0	0	16	0	0	0	0	0	0
G. White-fr. Goose	0	0	0	0	0	0	cw	0	0	0	0
Snow Goose	0	2	0	0	0	4	1	0	3	0	0
Canada Goose	1,260	1,082	1,117	795	991	3,256	7,977	245	1,157	193	1,632
Brant	24	105	0	235	45	0	0	0	46	0	287
Mute Swan	144	134	41	22	173	36	10	1	67	0	24
Tundra Swan	1	0	0	cw	0	0	0	0	0	0	0
Whooper Swan	0	0	0	0	0	4	0	0	0	0	0
Wood Duck	7	6	0	0	1	1	0	0	0	0	0
Gadwall	19	273	0	0	35	26	0	0	42	0	3
Eurasian Wigeon	0	2	0	0	0	0	0	0	cw	0	0
American Wigeon	44	241	0	59	0	36	10	0	29	0	0
Am. Black Duck	1,850	2334	124	498	413	2,026	140	73	1,952	124	686
Mallard	967	1285	413	560	248	1,109	1,089	158	976	208	320
Blue-winged Teal	0	1	0	0	0	0	0	0	0	0	0
Northern Shoveler	1	0	0	cw	0	cw	0	0	4	0	0
Northern Pintail	6	16	0	3	0	3	1	0	1	0	3
Green-winged Teal	45	150	2	73	43	4	0	0	1	0	15
Canvasback	0	61	0	161	0	0	1	0	0	0	28
Redhead	0	0	0	13	0	cw	0	0	1	0	0
Ring-necked Duck	90	59	114	75	0	1	0	0	376	cw	0
Tufted Duck	0	0	0	0	0	0	0	0	1	0	0
Greater Scaup	152	53	2	153	905	2	0	0	66	1	89
Lesser Scaup	4	47	1	47	60	0	0	0	95	0	1
scaup species	15	96	0	0	73	0	0	0	0	0	0
King Eider	2	0	0	0	0	0	0	0	0	0	0
Common Eider	25,600	1,226	0	7,922	109	567	0	0	5,228	0	3,981
Harlequin Duck	33	0	0	26	0	0	0	0	4	0	0
Surf Scoter	453	165	0	95	35	3	0	0	229	0	84
White-winged Scoter	900	292	0	128	42	193	0	0	319	0	317
Black Scoter	6,450	20	0	29	0	4	0	0	11	0	119
Oldsquaw	27	379	0	183,042	55	45	0	0	172	0	271
Bufflehead	1,870	1,580	24	1,304	338	426	0	0	533	cw	789
Common Goldeneye	1,000	362	16	1,492	429	188	18	0	300	48	326
Barrow's Goldeneye	0	0	0	3	0	1	0	0	0	0	0
Hooded Merganser	175	196	23	112	10	20	12	0	207	93	136
Red-br. Merganser	2,200	1276	0	1,062	237	171	0	0	482	2	652
Common Merganser	1	222	4	18	0	220	145	0	590	1,127	59
Ruddy Duck	128	1	1	4	0	1	0	0	11	0	189
Bald Eagle	0	0	0	0	0	2	5	0	3	10	0
Northern Harrier	31	25	4	16	1	27	4	0	1	0	1
Sharp-shinned Hawk	10	10	13	8	3	9	12	1	4	1	4
Cooper's Hawk	5	8	3	9	2	9	16	0	2	1	4
Northern Goshawk	0	0	0	cw	0	2	1	0	0	3	0

Species	MV	Mid-C	Millis	Nant	NB	Nbpt	Nhamp	N Berk	Ply	Quab	Quin
Red-shoulder Hawk	0	1	0	0	1	0	0	0	1	0	0
Red-tailed Hawk	45	26	64	36	6	77	105	10	9	19	19
Rough-legged Hawk	0	0	0	1	0	3	0	0	0	0	0
Golden Eagle	0	0	0	0	0	0	0	0	0	1	0
American Kestrel	1	2	4	2	1	4	3	0	0	0	1
Merlin	2	3	0	5	0	4	2	0	0	1	0
Peregrine Falcon	5	0	0	2	0	0	3	0	0	0	cw
Ring-neck. Pheasant	2	0	8	20	0	4	4	0	0	8	2
Ruffed Grouse	0	0	4	0	0	0	12	4	1	25	0
Wild Turkey	64	6	25	0	0	25	13	15	0	64	0
Northern Bobwhite	cw	7	0	0	0	0	0	0	0	0	0
Clapper Rail	0	0	0	0	0	0	0	0	0	0	0
Virginia Rail	4	11	0	4	0	0	0	0	1	0	1
Sora	1	0	0	cw	0	0	0	0	0	0	0
American Coot	8	94	34	65	17	0	0	23	33	0	44
Sandhill Crane	0	0	0	0	1	0	0	0	0	0	0
Black-bellied Plover	121	2	0	18	2	0	0	0	0	0	2
Semipalmated Plover	0	0	0	0	0	0	0	0	0	0	0
Killdeer	0	8	0	1	0	0	7	1	1	0	5
Greater Yellowlegs	6	13	0	0	0	0	0	0	0	0	2
Whimbrel	0	1	0	0	0	0	0	0	0	0	0
Ruddy Turnstone	1	0	0	16	2	0	0	0	0	0	31
Red Knot	0	0	0	0	0	0	0	0	0	0	0
Sanderling	670	1,111	0	246	9	0	0	0	66	0	95
Semipalm. Sandpiper	0	0	0	0	0	0	0	0	0	0	0
Western Sandpiper	0	0	0	0	0	0	0	0	0	0	0
Purple Sandpiper	29	0	0	52	1	17	0	0	28	0	30
Dunlin	305	668	0	cw	166	2	0	0	3	0	240
Long-billed Dowitcher	0	1	0	0	0	0	0	0	0	0	0
Common Snipe	5	7	0	3	0	7	0	1	1	0	0
American Woodcock	2	1	0	5	0	1	0	0	0	0	0
Pomarine Jaeger	0	0	0	0	0	0	0	0	0	0	0
Parasitic Jaeger	0	0	0	0	0	0	0	0	0	0	0
Laughing Gull	0	0	0	0	0	0	0	0	0	0	0
Little Gull	2	0	0	0	0	0	0	0	0	0	0
Black-headed Gull	0	2	0	2	0	0	0	0	1	0	3
Bonaparte's Gull	172	170	0	219	7	184	0	0	42	0	12
Ring-billed Gull	465	775	273	41	961	1,037	524	23	832	45	1,306
Herring Gull	3,300	1851	520	3,216	944	3,477	868	1	719	179	4,877
Iceland Gull	1	0	0	53	0	4	0	0	1	0	0
Lesser Bl.-back. Gull	1	1	0	9	0	0	cw	0	0	0	0
Glaucous Gull	2	0	0	cw	0	0	0	0	0	0	0
Great Bl.-back. Gull	840	350	16	461	59	322	85	0	203	27	704
Bl.-legged Kittiwake	100	75	0	293	0	8	0	0	0	0	0
Dovekie	0	0	0	0	0	0	0	0	0	0	0
Common Murre	0	0	0	0	0	0	0	0	0	0	0
Thick-billed Murre	0	0	0	0	0	0	0	0	0	0	0
Razorbill	70	0	0	58	0	0	0	0	0	0	0
Black Guillemot	0	0	0	0	0	0	0	0	4	0	5
Atlantic Puffin	0	0	0	0	0	0	0	0	0	0	0
alcid species	125	0	0	0	0	0	0	0	0	0	0
Rock Dove	139	351	723	353	894	696	2,036	497	253	339	402
Mourning Dove	385	312	534	610	113	719	2,798	230	180	440	130
Barn Owl	14	0	0	7	0	0	0	0	0	0	0
Eastern Screech-Owl	cw	19	28	0	1	15	50	0	9	1	26
Great Horned Owl	0	11	6	0	1	11	30	3	2	19	9
Snowy Owl	0	0	0	cw	0	0	0	0	0	0	0
Barred Owl	0	0	0	0	1	3	6	3	0	14	0
Long-eared Owl	0	2	1	0	0	2	0	0	0	0	0
Short-eared Owl	0	3	0	2	0	1	1	0	0	0	0

Species	MV	Mid-C	Millis	Nant	NB	Nbpt	Nhamp	N Berk	Ply	Quab	Quin
N. Saw-whet Owl	0	1	0	7	0	1	1	0	0	12	0
Belted Kingfisher	20	35	5	0	2	8	12	3	7	5	9
Red-head. Woodpker	0	0	0	0	0	0	0	0	0	0	0
Red-bel. Woodpker	33	14	9	3	6	12	48	3	4	6	7
Ylw-bel. Sapsucker	5	1	0	1	0	0	2	0	0	0	0
Downy Woodpecker	71	106	152	26	20	127	231	23	67	99	62
Hairy Woodpecker	7	22	9	1	5	22	77	11	3	27	0
Northern Flicker	74	76	27	129	22	49	58	3	48	7	34
Pileated Woodpecker	0	0	1	0	0	0	17	6	0	31	0
Eastern Phoebe	cw	2	0	0	0	0	0	0	0	0	0
Northern Shrike	2	0	6	2	0	2	9	1	0	10	0
Blue Jay	159	732	514	104	171	427	946	64	261	475	175
American Crow	3,200	1038	5,500	586	1,005	1,504	3,714	377	398	264	719
Fish Crow	0	0	0	0	0	2	2	0	0	0	21
Common Raven	0	0	1	0	0	0	6	9	0	10	0
Horned Lark	1	40	0	17	4	202	1,368	0	11	22	0
Tree Swallow	2	0	0	0	0	0	0	0	0	0	0
Bl.-cap. Chickadee	834	1254	848	506	160	1,088	1,783	282	584	1,218	366
Boreal Chickadee	0	0	0	0	0	1	0	0	0	0	0
Tufted Titmouse	0	292	512	0	140	301	476	37	330	221	192
Red-br. Nuthatch	53	55	22	79	4	25	25	3	26	42	7
White-br. Nuthatch	74	125	231	9	19	174	362	41	51	222	60
Brown Creeper	7	11	11	3	cw	6	24	7	5	26	3
Carolina Wren	183	185	43	120	19	8	9	0	91	1	46
House Wren	1	0	0	cw	1	0	0	0	0	0	1
Winter Wren	6	14	0	13	1	3	3	0	3	2	3
Marsh Wren	cw	2	0	16	0	0	0	0	0	0	0
Bl.-gray Gnatcatcher	0	0	0	0	0	0	0	0	0	0	0
Golden-cr. Kinglet	37	18	28	12	6	23	39	5	18	22	13
Ruby-cr. Kinglet	6	5	1	11	0	0	2	0	1	0	0
Eastern Bluebird	94	45	212	cw	21	110	264	32	2	39	7
Hermit Thrush	4	44	2	6	0	6	4	0	11	0	1
American Robin	472	1289	348	1,362	111	1,764	2,727	17	421	1,137	267
Gray Catbird	17	18	6	14	6	1	2	0	3	0	4
Northern Mockingbird	98	185	83	60	35	100	238	2	114	34	109
Brown Thrasher	1	1	0	1	0	0	0	0	1	0	0
European Starling	2,000	1774	1,439	2,782	924	10,983	9,398	1,088	943	1,690	41,620
American Pipit	0	1	0	1	0	0	0	0	0	0	0
Bohemian Waxwing	0	0	0	0	0	0	0	0	0	0	0
Cedar Waxwing	224	114	197	353	41	300	730	72	159	266	33
Orange-cr. Warbler	0	1	0	2	0	1	0	0	0	0	0
Nashville Warbler	3	0	0	2	0	0	0	0	0	0	0
Cape May Warbler	0	0	0	0	0	0	0	0	0	0	0
Black-th. Bl. Warbler	0	0	0	0	0	0	0	0	0	0	0
Ylw-rumped Warbler	1,160	265	3	1,400	17	59	3	0	529	0	162
Pine Warbler	6	8	1	5	2	0	0	0	4	0	0
Prairie Warbler	0	0	0	0	0	0	0	0	0	0	0
Palm Warbler	17	17	0	9	0	0	0	0	2	0	1
Blackpoll Warbler	0	0	0	0	0	0	0	0	0	0	0
N. Waterthrush	0	0	0	1	0	0	0	0	0	0	0
MacGillivray's Wbler	0	0	0	0	0	0	0	0	0	0	0
Common Ylwthroat	cw	0	0	0	0	0	0	0	0	0	0
Wilson's Warbler	0	0	0	cw	0	0	0	0	0	0	0
Yellow-breasted Chat	2	0	0	1	0	0	0	0	0	0	1
Eastern Towhee	27	9	2	4	5	0	0	0	3	2	0
Spotted Towhee	0	0	0	0	0	0	1	0	0	0	0
Am. Tree Sparrow	97	117	274	16	43	622	2,230	20	92	430	183
Chipping Sparrow	12	0	1	2	3	0	0	0	0	0	0
Clay-clrd. Sparrow	0	0	0	0	0	0	0	0	0	0	0
Field Sparrow	40	30	2	3	9	2	2	0	8	2	2

Species	MV	Mid-C	Millis	Nant	NB	Nbpt	Nhamp	N Berk	Ply	Quab	Quin
Vesper Sparrow	0	0	0	0	0	0	0	0	0	0	0
Savannah Sparrow	73	24	1	27	21	16	5	0	11	0	1
Ipswich Sparrow	1	2	0	3	0	0	0	0	0	0	0
Grasshopper Sparrow	1	0	0	1	0	0	0	0	0	0	0
sharp-tailed sparrow	0	7	0	1	0	0	0	0	0	0	0
Saltmarsh ST Sprw	0	0	0	0	0	0	0	0	0	0	0
Seaside Sparrow	0	0	0	0	0	3	0	0	0	0	0
Fox Sparrow	cw	5	1	0	3	1	3	0	0	0	0
Song Sparrow	234	436	70	412	37	97	228	4	217	19	173
Swamp Sparrow	31	75	6	30	0	3	11	0	34	1	12
White-thr. Sparrow	494	359	38	158	74	88	218	8	238	17	118
White-cr. Sparrow	0	0	0	3	1	0	9	0	0	0	0
Dark-eyed Junco	153	187	718	117	116	555	1,394	57	178	492	217
Oregon Junco	0	0	0	0	0	0	cw	0	0	0	0
Lapland Longspur	cw	0	0	0	0	58	0	0	0	0	0
Snow Bunting	80	80	0	63	0	28	7	0	110	0	20
Northern Cardinal	356	496	183	160	71	220	509	20	265	80	105
Dickcissel	0	0	0	0	0	0	1	0	0	0	0
Red-wgd Blackbird	7	80	19	163	1	58	28	1	3	0	7
Eastern Meadowlark	39	189	0	0	48	1	5	0	10	0	0
Rusty Blackbird	0	1	0	0	0	0	74	0	0	0	0
Common Grackle	1	1	1	5	150	8	4	2	2	1	0
Br.-headed Cowbird	cw	3	0	0	3	24	5	0	0	0	1
Baltimore Oriole	0	0	0	0	0	cw	0	0	0	0	0
Pine Grosbeak	0	0	0	0	0	0	0	5	0	0	0
Purple Finch	2	1	6	3	8	4	3	14	1	82	0
House Finch	320	583	395	237	61	356	857	60	258	164	209
Red Crossbill	0	40	22	48	0	cw	3	0	0	4	0
White-wing Crossbill	0	0	0	30	0	0	0	0	0	0	0
Common Redpoll	3	0	18	88	0	7	424	35	1	149	51
Pine Siskin	1	0	14	0	1	7	36	4	42	21	2
American Goldfinch	238	445	595	320	90	594	756	83	211	313	201
Evening Grosbeak	0	0	1	cw	0	0	5	cw	0	70	0
House Sparrow	366	1,405	750	550	218	1,314	1,282	88	679	703	910

Code	CBC Location	Date	Birds	Species	Compiler
MV	Martha's Vineyard	Dec 30, 1999	63739	127	Robert Culbert
Mid-C	Mid-Cape Cod	Dec 28, 1999	30396	129	Peter Trimble
Millis	Millis	Dec 18, 1999	17528	79	Elissa Landre
Nant	Nantucket	Jan 2, 2000	214503	124	Edith Andrews
NB	New Bedford	Dec 18, 1999	11357	91	Michael Boucher
Nbpt	Newburyport	Dec 26, 1999	36601	113	Tom Young
Nhamp	Northampton	Dec 19, 1999	46674	91	Janet Ortiz
N Berk	Northern Berkshire	Dec 18, 1999	3778	53	Pamela Weatherbee
Ply	Plymouth	Dec 29, 1999	22292	110	Trevor Lloyd-Evans
Quab	Quabbin	Jan 2, 2000	11577	71	Scott Sumner
Quin	Quincy	Dec 18, 1999	64415	99	Patty O'Neill

Species	S Berk	Spring	Stell	Sturb	T-M	Truro	Tuck	Uxbr	West	Worc	Newpt
Red-throated Loon	0	0	4	0	0	29	18	0	0	0	164
Pacific Loon	0	0	0	0	0	0	0	0	0	0	0
Common Loon	0	0	26	4	0	29	18	0	0	8	136
Pied-billed Grebe	0	0	0	0	3	1	0	0	0	0	10
Horned Grebe	0	0	0	1	0	3	3	0	0	12	228
Red-necked Grebe	0	0	11	0	0	5	0	0	0	0	3
Eared Grebe	0	0	0	0	0	0	0	0	0	0	0
Northern Fulmar	0	0	0	0	0	1	0	0	0	0	0
Greater Shearwater	0	0	5	0	0	0	0	0	0	0	0
Northern Gannet	0	0	2,003	0	0	2,125	145	0	0	0	142
Great Cormorant	0	0	105	0	1	1	5	0	0	0	144
Dble-cr. Cormorant	0	0	0	1	2	2	1	0	0	cw	12
American Bittern	0	0	0	0	0	0	1	0	0	0	0
Great Blue Heron	0	4	3	5	2	11	6	15	0	4	72
Bl-cr. Night-Heron	0	0	0	0	0	0	6	0	0	0	0
Black Vulture	0	0	0	0	0	0	0	0	0	0	1
Turkey Vulture	0	1	0	0	1	0	0	cw	0	0	43
G. White-fr. Goose	0	0	0	0	0	0	0	0	0	0	1
Snow Goose	2	0	0	0	0	0	0	0	0	0	15
Canada Goose	4,541	1,871	49	2,342	2,593	181	98	1,257	68	902	10,730
Brant	0	0	30	0	0	167	0	0	0	0	45
Mute Swan	0	7	0	0	14	0	0	2	0	6	108
Tundra Swan	0	0	0	0	0	6	0	0	0	0	0
Whooper Swan	0	0	0	0	0	0	0	0	0	0	0
Wood Duck	0	0	0	2	0	0	0	0	0	2	0
Gadwall	0	0	0	0	0	0	0	0	0	12	86
Eurasian Wigeon	0	0	0	0	0	0	0	0	0	0	1
American Wigeon	0	0	0	0	76	0	65	0	0	10	41
Am. Black Duck	23	57	442	82	283	425	112	99	68	179	2,434
Mallard	27	613	8	575	289	14	17	469	470	1,192	817
Blue-winged Teal	0	0	0	0	0	0	0	0	0	0	0
Northern Shoveler	0	0	0	1	0	0	0	1	0	1	17
Northern Pintail	0	3	0	0	0	0	0	0	1	0	160
Green-winged Teal	0	0	0	3	0	0	0	0	0	cw	157
Canvasback	0	0	0	3	9	0	0	0	0	0	4
Redhead	0	0	0	1	0	0	0	0	0	0	0
Ring-necked Duck	0	6	0	6	1	83	0	31	0	1	5
Tufted Duck	0	0	0	0	0	0	0	0	0	1	0
Greater Scaup	0	0	2	1	31	1	18	0	0	29	640
Lesser Scaup	0	0	0	1	0	0	150	0	0	5	37
scaup species	0	0	0	0	7	0	0	0	0	0	0
King Eider	0	0	0	0	0	0	0	0	0	0	0
Common Eider	0	0	242	0	0	54	5,300	0	0	0	6,932
Harlequin Duck	0	0	0	0	0	0	0	0	0	0	73
Surf Scoter	0	0	16	0	0	8	13	0	0	0	219
White-winged Scoter	0	0	392	0	0	136	46	0	0	0	155
Black Scoter	0	0	35	0	0	18	21	0	0	0	127
Oldsquaw	0	0	35	1	0	27250,001	0	0	0	0	3
Bufflehead	0	1	257	7	87	189	105	0	0	12	815
Common Goldeneye	0	107	106	34	180	74	493	2	0	92	510
Barrow's Goldeneye	0	0	0	0	0	0	1	0	0	0	0
Hooded Merganser	7	35	0	102	27	0	27	23	0	159	102
Red-br. Merganser	1	0	1,750	0	16	174	255	0	0	1	2,097
Common Merganser	29	222	24	429	76	35	1	63	27	178	235
Ruddy Duck	0	0	0	311	35	0	0	26	0	57	1,624
Bald Eagle	1	3	0	1	0	0	0	0	0	2	3
Northern Harrier	0	2	4	2	5	7	9	cw	0	0	23
Sharp-shinned Hawk	4	3	2	6	3	3	2	7	3	4	11
Cooper's Hawk	1	5	1	4	4	2	cw	2	1	2	10
Northern Goshawk	0	0	1	1	0	0	0	1	1	0	0

Species	S Berk	Spring	Stell	Sturb	T-M	Truro	Tuck	Uxbr	West	Worc	Newpt
Red-shoulder. Hawk	0	2	0	0	2	0	0	1	0	0	3
Red-tailed Hawk	25	57	0	36	16	8	3	33	9	36	43
Rough-legged Hawk	0	1	0	0	0	0	0	0	0	0	0
Golden Eagle	0	0	0	0	0	0	0	0	0	0	0
American Kestrel	0	3	2	3	3	1	0	2	0	3	9
Merlin	0	0	1	1	1	2	0	0	0	1	1
Peregrine Falcon	0	0	0	0	0	1	cw	0	0	1	3
Ring-neck. Pheasant	0	1	0	1	1	0	0	4	2	0	2
Ruffed Grouse	1	6	0	6	0	0	0	7	0	2	0
Wild Turkey	56	0	0	125	0	21	0	11	67	1	23
Northern Bobwhite	0	0	10	0	0	0	0	0	0	0	0
Clapper Rail	0	0	0	0	0	0	0	0	0	0	0
Virginia Rail	0	1	1	0	0	0	0	2	0	0	1
Sora	0	0	0	0	0	0	0	0	0	0	0
American Coot	0	0	0	0	0	3	0	1	0	2	418
Sandhill Crane	0	0	0	0	0	0	0	0	0	0	0
Black-bellied Plover	0	0	17	0	0	0	0	0	0	0	0
Semipalmated Plover	0	0	0	0	0	0	0	0	0	0	0
Killdeer	0	0	0	1	5	0	0	0	0	0	39
Greater Yellowlegs	0	0	3	0	0	0	0	0	0	0	8
Whimbrel	0	0	0	0	0	0	0	0	0	0	0
Ruddy Turnstone	0	0	0	0	0	0	0	0	0	0	0
Red Knot	0	0	0	0	0	0	0	0	0	0	0
Sanderling	0	0	520	0	0	17	46	0	0	0	61
Semipalm. Sandpiper	0	0	0	0	0	0	0	0	0	0	0
Western Sandpiper	0	0	0	0	0	0	0	0	0	0	0
Purple Sandpiper	0	0	0	0	0	0	0	0	0	0	221
Dunlin	0	0	130	0	0	4	0	0	0	0	605
Long-billed Dowitcher	0	0	0	0	0	0	0	0	0	0	0
Common Snipe	0	0	1	0	0	0	0	3	0	0	9
American Woodcock	0	0	0	2	0	0	0	1	0	1	3
Pomarine Jaeger	0	0	1	0	0	1	0	0	0	0	0
Parasitic Jaeger	0	0	0	0	0	1	0	0	0	0	0
Laughing Gull	0	0	0	0	0	0	0	0	0	0	1
Little Gull	0	0	0	0	0	0	0	0	0	0	0
Black-headed Gull	0	0	0	0	0	1	0	0	0	0	0
Bonaparte's Gull	0	0	2	0	0	0	0	0	0	0	182
Ring-billed Gull	38	754	29	753	487	77	3	104	16	759	1,341
Herring Gull	13	83	1,980	119	1,878	1,510	435	115	123	221	2,519
Iceland Gull	0	0	6	0	0	4	0	0	0	0	0
Lesser Bl.-back. Gull	0	0	0	1	0	0	0	0	0	0	0
Glaucous Gull	0	0	0	0	0	0	0	0	0	0	0
Great Bl.-back. Gull	0	11	1,360	37	150	420	620	33	44	27	306
Bl.-legged Kittiwake	0	0	2,106	0	0	663	135	0	0	0	0
Dovekie	0	0	0	0	0	6	0	0	0	0	2
Common Murre	0	0	7	0	0	0	0	0	0	0	0
Thick-billed Murre	0	0	2	0	0	0	0	0	0	0	0
Razorbill	0	0	560	0	0	453	14	0	0	0	0
Black Guillemot	0	0	1	0	0	17	0	0	0	0	0
Atlantic Puffin	0	0	1	0	0	1	0	0	0	0	0
alcid species	0	0	0	0	0	0	0	0	0	0	0
Rock Dove	213	923	560	1,343	159	81	0	1,539	743	1,029	234
Mourning Dove	327	435	14	606	497	145	0	929	229	320	837
Barn Owl	0	0	0	0	0	0	0	0	0	0	0
Eastern Screech-Owl	0	3	0	2	1	0	0	35	0	4	5
Great Horned Owl	0	3	3	12	3	3	0	18	2	6	14
Snowy Owl	0	0	0	0	0	0	0	0	0	0	0
Barred Owl	0	0	0	5	0	0	0	1	1	2	1
Long-eared Owl	0	0	0	0	0	0	0	1	0	0	0
Short-eared Owl	0	0	0	0	0	0	7	0	0	0	3

Species	S Berk	Spring	Stell	Sturb	T-M	Truro	Tuck	Uxbr	West	Worc	Newpt
N. Saw-whet Owl	0	0	0	7	0	1	2	2	0	2	1
Belted Kingfisher	1	11	0	9	6	3	0	11	1	12	14
Red-head. Woodpker	0	0	0	1	0	0	0	0	0	1	0
Red-bel. Woodpker	11	26	0	17	1	1	0	26	cw	5	13
Ylw-bel. Sapsucker	0	0	0	0	0	0	0	0	0	0	2
Downy Woodpecker	37	136	8	183	47	46	8	152	43	71	88
Hairy Woodpecker	11	33	0	17	4	7	1	17	15	11	6
Northern Flicker	0	16	6	21	38	21	11	52	cw	7	69
Pileated Woodpecker	2	7	0	3	0	0	0	3	1	0	0
Eastern Phoebe	0	1	0	0	0	0	0	0	0	0	0
Northern Shrike	2	3	0	5	2	2	0	4	3	5	0
Blue Jay	86	317	79	625	235	149	5	1,163	163	272	273
American Crow	436	5,234	63	878	376	279	31	777	467	1,807	1,192
Fish Crow	0	0	0	0	0	0	0	0	0	0	0
Common Raven	8	2	0	1	0	0	0	0	6	3	0
Horned Lark	2	155	0	122	0	0	4	0	0	16	127
Tree Swallow	0	0	0	0	0	0	0	0	0	0	1
Bl.-cap. Chickadee	327	458	92	1,609	381	808	23	1,191	1,041	906	539
Boreal Chickadee	0	0	0	0	0	0	0	0	0	0	0
Tufted Titmouse	78	252	20	449	183	82	0	569	130	233	163
Red-br. Nuthatch	10	31	26	14	0	108	3	15	11	23	9
White-br. Nuthatch	53	130	7	262	31	56	1	284	73	167	46
Brown Creeper	3	11	2	14	4	13	0	14	7	8	2
Carolina Wren	2	23	6	4	99	18	1	53	2	8	191
House Wren	0	0	0	0	0	0	0	0	0	0	1
Winter Wren	0	3	1	1	0	0	0	1	0	1	5
Marsh Wren	0	0	1	0	3	0	2	0	0	0	1
Bl.-gray Gnatcatcher	0	0	0	0	0	0	0	0	0	0	0
Golden-cr. Kinglet	7	36	3	29	14	3	0	32	7	6	11
Ruby-cr. Kinglet	1	0	1	0	3	1	6	1	0	0	3
Eastern Bluebird	120	26	0	142	93	27	0	134	10	44	1
Hermit Thrush	0	5	0	0	1	3	0	2	0	2	22
American Robin	177	198	6	895	610	570	6	543	70	467	587
Gray Catbird	0	1	0	0	0	1	3	1	0	0	60
Northern Mockingbird	4	74	7	50	99	45	1	88	18	62	244
Brown Thrasher	0	0	0	0	0	0	1	0	cw	0	1
European Starling	1,177	4,175	148	4,626	2,423	258	100	3,856	1,502	19,069	9,235
American Pipit	0	0	0	0	0	0	0	0	1	0	0
Bohemian Waxwing	0	0	0	0	0	6	0	0	0	0	0
Cedar Waxwing	134	186	4	493	693	79	0	414	437	269	73
Orange-cr. Warbler	0	0	0	0	1	1	0	0	0	0	1
Nashville Warbler	0	0	0	0	0	0	0	0	0	0	0
Cape May Warbler	0	0	0	0	0	0	0	0	0	0	0
Black-th. Bl. Warbler	0	0	0	0	0	0	0	0	0	0	0
Ylw-rumped Warbler	0	1	18	cw	25	174	274	11	0	0	75
Pine Warbler	0	0	1	0	0	1	0	1	0	0	0
Prairie Warbler	0	0	0	0	0	0	0	0	0	0	0
Palm Warbler	0	0	0	0	1	3	0	0	0	0	12
Blackpoll Warbler	0	0	0	0	0	0	0	0	0	0	0
N. Waterthrush	0	0	0	0	0	0	0	0	0	0	0
MacGillivray's Wbler	0	0	0	0	0	0	0	0	0	0	0
Common Ylwthroat	0	0	0	0	1	0	0	0	0	0	4
Wilson's Warbler	0	0	0	0	0	0	0	0	0	0	1
Yellow-breasted Chat	0	0	0	0	0	1	0	0	0	0	1
Eastern Towhee	0	0	0	1	0	1	1	0	0	0	4
Spotted Towhee	0	0	0	0	0	0	0	0	0	0	0
Am. Tree Sparrow	72	160	15	388	321	63	4	370	87	252	211
Chipping Sparrow	0	0	0	0	0	0	0	0	0	0	1
Clay-clrd. Sparrow	0	0	0	0	0	0	0	0	0	0	0
Field Sparrow	0	0	1	4	18	16	0	27	0	1	16

Species	S Berk	Spring	Stell	Sturb	T-M	Truro	Tuck	Uxbr	West	Worc	Newpt
Vesper Sparrow	0	0	0	0	0	0	0	0	0	0	1
Savannah Sparrow	0	0	1	0	5	0	6	0	0	1	76
Ipswich Sparrow	0	0	0	0	0	0	0	0	0	0	0
Grasshopper Sparrow	0	0	0	1	0	0	0	0	0	0	0
sharp-tailed sparrow	0	0	0	0	0	0	0	0	0	0	0
Saltmarsh ST Sprw	0	0	0	0	0	0	0	0	0	0	0
Seaside Sparrow	0	0	0	0	0	0	0	0	0	0	0
Fox Sparrow	0	1	0	0	0	0	0	1	1	1	9
Song Sparrow	8	73	7	33	145	41	87	86	4	71	472
Swamp Sparrow	0	4	10	5	43	2	12	6	0	4	81
White-thr. Sparrow	10	43	23	27	153	81	14	54	3	11	662
White-cr. Sparrow	0	0	0	1	0	0	0	0	0	0	22
Dark-eyed Junco	77	534	43	805	372	162	1	1,109	214	449	286
Oregon Junco	0	0	0	0	0	0	0	0	0	0	0
Lapland Longspur	0	0	0	0	0	0	0	0	0	0	0
Snow Bunting	0	0	2	0	0	1	0	0	0	0	202
Northern Cardinal	21	179	6	131	183	86	5	210	43	99	309
Dickcissel	0	0	0	0	0	2	0	0	0	0	0
Red-wgd Blackbird	3	676	0	5	19	122	0	5	0	0	1,635
Eastern Meadowlark	0	0	2	0	2	0	1	0	0	0	36
Rusty Blackbird	0	cw	0	0	3	0	0	2	0	0	2
Common Grackle	0	550	0	1	0	0	0	2	0	0	622
Br.-headed Cowbird	0	100	0	1	0	1	0	4	0	12	367
Baltimore Oriole	0	0	0	0	0	0	0	0	0	0	1
Pine Grosbeak	0	0	0	0	0	0	0	0	0	0	0
Purple Finch	26	7	0	24	7	20	0	5	5	8	6
House Finch	125	274	4	536	230	127	0	526	220	247	321
Red Crossbill	0	0	4	0	0	3	0	0	0	0	0
White-wing Crossbill	2	0	6	0	0	5	0	0	0	0	0
Common Redpoll	36	142	126	225	37	0	0	3	114	193	2
Pine Siskin	21	0	0	121	0	2	0	116	6	6	0
American Goldfinch	129	341	37	795	280	422	1	383	150	344	158
Evening Grosbeak	0	0	0	0	0	0	0	0	35	0	0
House Sparrow	66	528	55	933	361	319	0	1,254	789	909	689

Code	CBC Location	Date	Birds	Species	Compiler
S Berk	Southern Berkshire	Jan 1, 2000	8594	53	Rene Laubach
Spring	Springfield	Dec 18, 1999	20386	73	Bruce Kindseth
Stell	Stellwagen Bank	Dec 18, 1999	13711	85	Simon Perkins
Stur	Sturbridge	Dec 16, 1999	21499	91	Mark Lynch
T-M	Taunton-Middleboro	Jan 2, 2000	14502	78	Russell Titus
Truro	Truro	Dec 27, 1999	11494	100	Thomas Lipsky
Tuck	Tuckernuck Island	Dec 31, 1999	258818	66	Richard R. Veit
Uxbr	Uxbridge	Jan 2, 2000	18444	79	Richard Hildreth
West	Westminster	Dec 26, 1999	7554	52	John Williams
Worc	Worcester	Dec 18, 1999	31371	82	Fran McMenemy
Newpt	Newport, RI-Westport, MA	Dec 18, 1999	55351	133	David Emerson

# BIRD SIGHTINGS

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NOVEMBER/DECEMBER 1999

*Jim Berry, Seth Kellogg, Simon A. Perkins, Marjorie W. Rines, and Robert H. Stymeist*

November and December, 1999, were dry, sunny, and very mild. In Boston the temperature averaged nearly three degrees above normal in November and almost four degrees above the average December temperatures. The high mark was 72 degrees on November 1, and the low was 12 degrees on Christmas Day in Boston. Rainfall totaled 2.14 inches in November, 2.08 inches under normal, and just 1.52 inches fell in Boston during December. The big news is that no snow fell in Boston during the period, and it is the first time in 109 years of records that not even a trace was recorded from Boston during December! The mild weather certainly contributed to the number of lingering passerines and their survival into late December. Strong winds brought an incredible fallout of migrants on the first weekend of November.

R.H.S.

## LOONS THROUGH ALCIDS

As usual, this summary does not include most Christmas Bird Count data; see the separate report in this issue for complete CBC results. Some of the rarest birds found on CBCs are included here for purposes of documentation and reader interest.

A **Pacific Loon** in Barnstable Harbor December 28 was the only one found during the period. Although Red-necked Grebes are never common inland, the total of 3 for western Massachusetts was the lowest since 1987. In contrast, 150 at Eastham was a large number; the big flocks are more often seen during the northbound migration. The **Eared Grebe** that has made Niles Beach in East Gloucester its winter home continued there for the fifth straight year.

This is a good time of year to look for Northern Fulmar from land, and 34 off Andrews Point in Rockport December 15 was a nice total. Four Cory's Shearwaters November 26 off Truro were unusually late. Other late shearwaters were two Sootys November 24 and a Manx November 25, also off Cape Cod. The tubenose bonanza came at Rockport November 3 when no fewer than 6150 Greater Shearwaters were observed flying southeast past Andrews Point. The previous night there had been a strong low through the interior of New England, with 30-50 mph SSE winds. Under such conditions birds often seek shelter in the lee of Cape Ann and depart to the SE, exiting Ipswich Bay past the point in the morning. By December, Greater Shearwater becomes extremely unusual, so reports from three locations on December 12 and 15 were noteworthy. Five Greaters were also seen on the Stellwagen CBC December 18 for a first count record. The November 2-3 weather system pushed at least 8600 Northern Gannets past Andrews Point, by far the largest count of the season.

The most significant of the late herons this fall was a Green Heron at Southwick November 3; the only later western Massachusetts record was November 6, 1988. Thirty-one Turkey Vultures in Dartmouth December 31 indicated a winter roost that, in fact, remained intact through the winter. Two of the three **Greater White-fronted Geese** reported were in western Massachusetts, where the only previous record was in 1996. Statewide, reports of this species have become more regular over the past decade or two, and most individuals described have apparently been of the Greenland race, *flavirostris*, with orange-yellow bills. Observers should always report bill color and other field marks on these birds so that their origin can be surmised, since the several subspecies have distinct ranges.

The Granville hawkwatch site is paying off in Snow Goose sightings; a good October flight was followed by four more southbound flocks November 8 totaling 380 birds. The most interesting of all the white geese found this fall was an apparent **Snow/Ross's hybrid** (Hot Birds p. 94) that grazed on Plum Island from at least November 9-27. Well documented with photographs, this intriguing bird showed features of both species, but was unfortunately always alone and could not be directly compared with other Snow Geese. Single Brant were notable inland at Gill and Westboro. Mute Swans in double figures have invaded the Connecticut valley, and five were as far west as Cheshire throughout the period.

Wood Ducks were late inland December 26 at Worcester and Westfield. Gadwalls were scarcer in western Massachusetts than in any year since 1982, and were lower than average on the annual Cape Cod Pond Survey. Nine **Eurasian Wigeons** were typical for the state, although four in one place (Carver) was a good aggregation for this species. This year's token late Blue-winged Teal was at Marstons Mills on Cape Cod December 23. Northern Shovelers showed a slight resurgence on Plum Island after years of low numbers, with as many as 10 in November, and 6 still there as late as December 22. Another dabbler in good numbers there was Northern Pintail, with an impressive total of 455 on November 5.

Among the diving ducks, four Redheads in Essex County were three or four more than average. Ring-necked Ducks maintained their huge fall numbers statewide; 200 in North Egremont was the first large flock seen in that location. The Worcester County drake **Tufted Duck** continued in Clinton and Sterling for the fifth consecutive winter. Nine Greater Scaup was the lowest total in western Massachusetts since 1981, while 92 Lesser Scaup was the highest western Massachusetts total on record; Lessers were also in good numbers at Cherry Hill Reservoir in West Newbury. A **King Eider** in Salisbury November 6 was early, and Harlequin Ducks kept up their steady increase at Rockport. Scoters, Oldsquaws, Red-breasted Mergansers, and Buffleheads were scarcer than usual in western Massachusetts.

Hooded Mergansers showed a greater affinity than usual for Cape Cod this fall, as reflected by over 1000 on the Cape Cod annual pond survey. Both Hooded and Common mergansers staged excellent flights in western Massachusetts, with Commons setting a new record for fall migration there. But the real story was the Ruddy Ducks, which flooded most of Massachusetts this fall in probably the greatest numbers on record. Triple-digit figures were routinely encountered, with tallies in three locations approaching a thousand birds. Even accounting for possible (but not certain) duplication where reports came from neighboring towns, it is fair to say that 6000-8000 Ruddys graced the state this fall. They were everywhere, and dozens were still around near the coast at the end of December.

In the raptor department, Ospreys were reported as late as December 21, spilling into Christmas count season. Species seen in better-than-usual numbers at the Granville hawkwatch site at Blueberry Hill were Northern Harrier, Red-shouldered Hawk, and Red-tailed Hawk. These numbers are relative; the four Red-shoulders at Granville were good for the site but lower than past counts at the nearby Mount Tekoa site in Russell. In contrast, 119 Red-tails at Granville broke the single-day record for western Massachusetts, and the seasonal total there was second only to that at Mount Tekoa in 1992. No such numbers of migrating Red-tails were recorded in the eastern half of the state, though it is likely that many coastal Red-tails do not migrate. American Kestrels apparently had a poor season statewide; both Merlins and Peregrine Falcons were reported in much larger numbers. Ten years ago this would have been unthinkable.

Wild Turkeys in Waltham and Brookline reflect that re-introduced species' continued expansion into the urban metroplex, rendering their official name somewhat outdated. A **Yellow Rail** flushed by a mowing tractor from a wet meadow in the Daniel Webster Wildlife Sanctuary in Marshfield November 1 was later than most; the vast majority of specimens in Massachusetts museums were taken in September and October. Additional birds shot (legally)

in northeastern Essex County in the 1970s and 1980s were also taken almost entirely in late September and early October. There are also several winter and spring records of this rare species. Only a single Sora was reported in the entire state, while a **Sandhill Crane** was seen in Mattapoisett on the late date of December 29.

Late shorebirds are always exciting, and this fall was no exception. Lingers included a Semipalmated Plover December 19 in Chatham, an American Oystercatcher December 4 on Nantucket, a **Whimbrel** December 28 in Yarmouth, a Hudsonian Godwit November 25 on Plum Island, a White-rumped Sandpiper November 21 at Quabbin (extending the late date for western Massachusetts by two days), 4 **Long-billed Dowitchers** December 28 in Hyannis, and, most remarkably, a **Semipalmated Sandpiper** and 4 **Western Sandpipers** December 19 in Chatham. All four of the boldfaced species were carefully studied on Christmas counts by experienced observers. A count of 400 Purple Sandpipers in Boston Harbor December 4 is one of the largest in recent memory.

Sixty-one Pomarine Jaegers seen from Rockport at the end of the November 2-3 storm may have been a record for the location, and one on the Stellwagen CBC December 18 was late, as were 35 unidentified jaegers at Eastham December 1. This was a large number of jaegers for December. A Laughing Gull was late at Eastham December 12, while 2100 Bonaparte's Gulls at Lynn Beach and 1600 at Rockport were gratifying totals for the North Shore. Three of the Bonaparte's parted from their brethren long enough to visit the Connecticut River valley in early November, where they are rare, as did at least two Lesser Black-backed Gulls and one or two Glaucous Gulls later in the period. The same November 2-3 storm that brought such large numbers of shearwaters and gannets to Andrews Point in Rockport also pushed in at least 4300 Black-legged Kittiwakes. The season's latest reported tern was, typically, a Forster's, seen at Dennis December 13.

Several **Common Murres** were documented from Rockport and Provincetown, but Thick-billed Murres and Dovekies were reported in low numbers to start the winter. A total of 2950 Razorbills reported from Rockport December 15 was a staggering number for the North Shore, although well below previous counts from Cape Cod and Nantucket. The only **Atlantic Puffins** reported were also from Rockport. J.B.

Red-throated Loon			11/4, 12/29	Arlington	4, 2	M. Rines	
11/3, 26	Rockport (A.P.)	32, 756	R. Heil	11/6	Worcester	12	M. Lynch#
11/13	S. Monomoy	45	B. Nikula	11/7	Southboro	4	M. Lynch#
11/19	Manomet	500+	G. Levandoski#	11/7	Lakeville	9	K. Anderson#
11/21	Long I.	42	D. + S. Larson	11/10	Westport	3	R. Heil
11/21	Barnstable (S.N.)	21	M. Lynch#	11/13	Braintree	4	G. d'Entremont
11/25	P.I.	65	R. Heil	11/13	Randolph	7	G. d'Entremont
11/27	Eastham	100+	P. + F. Vale	11/20	Plymouth	5	D. Furbish#
11/27	Salisbury	12	R. Lockwood#	11/28	Acoaxet	4	M. Lynch#
11/28	Revere-Winthrop	24	R. Stymeist#	12/4-5	Cape Cod	108	CCBC
12/15	Rockport (A.P.)	152	R. Heil	12/5	Wakefield	3	P. + F. Vale
<b>Pacific Loon</b> (no details) *				12/24	Watertown	1	R. Stymeist#
12/28	Barnstable H.	1	V. Laux, J. Trimble	12/31	Nantucket	6	G. d'Entremont#
Common Loon				Homed Grebe			
11/3, 12/15	Rockport (A.P.)	73, 118	R. Heil	11/3	Turners Falls	2	B. Lafley
11/12	Wachusett Res.	3	R. Lockwood	11/8	Falmouth	33	R. Farrell
11/14	Plymouth H.	58	M. Lynch#	11/12	New Salem	5	B. Lafley
11/14	Manomet	34	M. Lynch#	11/13	N. Quabbin	11	H. Allen
11/21	Barnstable (S.N.)	41	M. Lynch#	11/13	Waltham	3	D. Oliver
11/21	E. Quabbin	18	T. Gagnon	11/14	Plymouth H.	54	M. Lynch#
11/26	Wellfleet	20	P. + F. Vale	11/21	Falmouth	258	R. Farrell
11/26	Truro	30	P. + F. Vale	11/21	Barnstable (S.N.)	72	M. Lynch#
11/28	Acoaxet	23	M. Lynch#	11/21	Plymouth	4	E. Neumuth#
12/4	P.I.	17	P. + F. Vale	11/25	P.I.	38	R. Heil
12/10	Lanesville	19	J. Soucy	11/26	Wellfleet	30	P. + F. Vale
12/31	Nant. Sound	127	G. d'Entremont#	11/28	Acoaxet	35	M. Lynch#
Pied-billed Grebe				12/5	New Salem	1	B. Lafley
11/2	Ipswich	4	J. Berry	12/15	Lanesboro (Pont.)	1	E. Neumuth
11/3	E. Gloucester	3	J. Berry				

<b>Red-necked Grebe</b>				12/5	Randolph	5	G. d'Entremont
11/1	Stoneham	1	D. + I. Jewell	12/12	Worcester	7	M. Lynch#
11/3, 12/15	Rockport (A.P.)	19, 30	R. Heil	12/17	Weymouth	11	K. Vespaziani
11/4	Richmond	1	R. Packard	<b>Great Egret</b>			
11/4	Lanesboro (Pont.)	1	R. Packard	11/3	Essex	1	R. Heil
11/6	Gardner	1	T. Pirro	11/10	Westport	1	R. Heil
11/12	Nahant	7	R. Heil	11/21	Rowley	1	J. Berry
11/14	Plymouth H.	8	M. Lynch#	<b>Green Heron</b>			
11/14	Manomet	13	M. Lynch#	11/3	Southwick	1	J. Weeks
11/21	Marstable (S.N.)	18	M. Lynch#	<b>Black-crowned Night-Heron</b>			
11/25	P.I.	11	R. Heil	11/2	Winchester	1	M. Rines
11/26	Southwick	1	S. Kellogg	11/9	Ipswich	1 ad	R. Heil
11/27	Eastham	150	P. + F. Vale	11/10	Woburn	1	M. Rines
11/28	Revere-Winthrop	65	R. Stymeist#	11/26	Winthrop	4	B. Mahoney
<b>Eared Grebe * (no details)</b>				<b>Turkey Vulture</b>			
thr	Gloucester (E.P.)	1	J. Soucy + v.o.	11/2	W. Newbury	1	R. Heil
<b>Northern Fulmar</b>				11/6	Stow	1	R. Lockwood
11/3	Rockport (A.P.)	2 lt	R. Heil	11/10	Westport	10	R. Heil
12/15	Rockport (A.P.)	34	R. Heil	11/14	Wellfleet	1	B. Nikula
12/30	Gay Head (CBC)	3	J. Trimble	11/20	Littleton	2	R. Lockwood
<b>Cory's Shearwater</b>				11/20	Worcester	3	M. Lynch#
11/26	Truro	4+	P. + F. Vale	11/28	Bolton	1	R. Lockwood
<b>Greater Shearwater</b>				11/28	Acoaxet	10	M. Lynch#
11/3	Rockport (A.P.)	6150	R. Heil	11/30	Boxford	1	J. Brown
11/6	Orleans	2	P. Donahue	12/31	N. Dartmouth	31	M. Boucher
11/7	Truro	75	B. Nikula	<b>Greater White-fronted Goose</b>			
11/14	Eastham (C.G.B.)	150	B. Nikula	11/9	Turners Falls	1	H. Allen
11/14, 28, 12/12	P'town	450, 17, 1	B. Nikula	11/21-12/22	Gt Barrington	1	J. Johnson + v.o.
11/27	Rockport (A.P.)	2	R. Heil	12/23	Hamilton	1	I. Giriunas
12/12	Eastham (C.G.B.)	1	B. Nikula	<b>Snow Goose</b>			
12/15	Rockport (A.P.)	2	R. Heil	11/thr	P.I.	2 ad	R. Heil
<b>Sooty Shearwater</b>				11/7	Hancock	50	Allen. Club
11/24	P'town (R.P.)	2	W. Ellison	11/8	Granville	380	J. Weeks
<b>Manx Shearwater</b>				11/9	Richmond	1	B. Lafley
11/3	Rockport (A.P.)	2	R. Heil	11/10	Essex	4	D. Brown
11/25	N. Truro	1	W. Ellison	12/10-21	Melrose	1 imm	D. + I. Jewell
<b>large shearwater species</b>				12/19	Hatfield	1	S. Kellogg
11/21	P'town	50	B. Nikula	12/25	P.I.	3	P. + F. Vale
<b>Shearwater species</b>				12/30	Amherst	1	H. Allen
11/26	Truro	20	P. + F. Vale	<b>Snow/Ross's Goose hybrid</b>			
<b>Northern Gannet</b>				11/9-27	P.I.	1	D. + I. Jewell + v.o.
11/3, 12/15	Rockport (A.P.)	8600, 530	R. Heil	<b>Brant</b>			
11/4, 7	Eastham (F.E.)	1500, 2000	B. Nikula	11/5	Salisbury	4	J. Soucy#
11/14	P'town	2500	B. Nikula	11/9-13	Gill	1	H. Allen
11/15, 17	Orleans	2000, 1600	B. Nikula	11/10	Quincy	700	E. Taylor
11/25	P.I.	420	R. Heil	11/12	Nahant	90	R. Heil
11/26	Wellfleet	200+	P. + F. Vale	11/14	Westboro	1	A. Boover
11/27	P'town	1600	B. Nikula	11/14	Plymouth H.	189	M. Lynch#
11/27	Salisbury	200	S. Moore#	11/21	S. Boston	120+	B. Mayer
12/12	Nantucket	300	K. Blackshaw	11/21	Plymouth	250+	E. Neumuth#
12/18	P'town (R.P.)	1700	R. Heil	11/26	P'town	73	P. + F. Vale
<b>Great Cormorant</b>				11/28	Revere	240	R. Stymeist#
11/12, 12/9	Nahant	75, 135	R. Heil	<b>Mute Swan</b>			
12/18	P'town	105	R. Heil	thr	Northampton	4-13	H. Allen
<b>Double-crested Cormorant</b>				thr	Cheshire	5	T. Gagnon
11/10	Westport	37	R. Heil	thr	S. Hadley	2-5	H. Allen
11/12	Nahant	23	R. Heil	11/10	Westport	85	R. Heil
11/19	Turners Falls	1	R. Packard	11/14	Plymouth	25	M. Lynch#
11/28	Acoaxet	13	M. Lynch#	11/28	Carver	11	G. d'Entremont
12/26	Newbypt	2 imm	R. Heil	11/28	Westport	26	M. Lynch#
12/31	Cambridge	6	R. Stymeist	12/19	Easthampton	4	B. Bieda
<b>American Bittern</b>				12/25	Marlboro	5	E. Taylor
11/1	Nantucket	1	fide E. Ray	<b>Whooper Swan</b>			
11/6	Salisbury	1	S. Moore#	11/9	Ipswich	4	R. Heil
11/25	P.I.	4	R. Heil	<b>Wood Duck</b>			
<b>Great Blue Heron</b>				11/6, 12/26	Worcester	11, 2	M. Lynch#
11/10	Westport	11	R. Heil	11/18	Stoughton	2	R. Titus
11/14	Plymouth	8	M. Lynch#	12/4	Barnstable	8	S. Clifton#
11/20	Wakefield	4	P. + F. Vale	12/5	Dorchester	4	R. Stymeist#
11/21	S. Falmouth	8	M. Lynch#	12/21	Wayland	2	K. Hamilton
11/25	P.I.	7	R. Heil	12/26	Westfield	1	A. Richardson
11/27	Eastham (F.H.)	18	P. + F. Vale	<b>Gadwall</b>			
11/28	Acoaxet	8	M. Lynch#	11/1-30	Pittsfield (Onota)	1	v.o.

<b>Gadwall (continued)</b>			
11/2	GMNWR	13	S. Perkins#
11/4-22	Lanesboro (Pont.)	2-3	v.o.
11/9	Ipswich	25	R. Heil
11/13	S. Monomoy	10	B. Nikula
11/28	Marstons Mills	68	J. Liller
12/1	Gloucester (E.P.)	50MAS (B. Lawless#)	
12/4-5	Cape Cod	101	CCBC
12/6	S. Dartmouth	23	M. Boucher
12/9	S. Peabody	37	R. Heil
12/23	Newbypt	24	R. Heil
12/23	Marstons Mills	26	J. Liller#
12/29	Southwick	2	S. Kellogg
12/29	Arlington	25	K. Hartel
<b>Eurasian Wigeon</b>			
11/thr	Oak Bluffs	1 m	v.o.
11/7, 28	Marstons Mills	2 m, 1 m	J. Liller
11/28	Carver	4	G. d'Entremont
12/4-5	Barnstable	2	CCBC
<b>American Wigeon</b>			
11/6	Worcester	108	M. Lynch#
11/6	Marlboro	17	E. Taylor
11/6	S. Egremont	5	J. Johnson
11/6	Ipswich	188	BBC (J. Berry)
11/13	S. Monomoy	15	B. Nikula
11/13	Belmont	84	D. Oliver
11/28	Carver	76	G. d'Entremont
11/28	Marstons Mills	86	J. Liller
12/1-18	Lanesboro (Pont.)	2-6	v.o.
12/4-5	Cape Cod	253	CCBC
12/7	Ipswich	85	R. Heil
12/19	Easthampton	6	B. Bieda
12/19	Holyoke	2	D. McLain
12/29	Arlington	151	K. Hartel
<b>American Black Duck</b>			
11/10	Westport	310	R. Heil
11/21	Barnstable	1000+	M. Lynch#
11/25	Newbypt/P.I.	5100	R. Heil
11/28	Acoaxet	303	M. Lynch#
11/28	Plymouth H.	725	G. d'Entremont
12/4-5	Cape Cod	1929	CCBC
<b>Mallard</b>			
12/4-5	Cape Cod	2228	CCBC
<b>Blue-winged Teal</b>			
12/23	Marstons Mills	3	J. Liller#
<b>Northern Shoveler</b>			
11/1-12/5	GMNWR	1	S. Perkins#
11/11	Belmont	4	M. Rines
11/12	P.I.	10	J. Berry
11/13	S. Monomoy	25	B. Nikula
11/14	Eastham (C.G.B.)	8	B. Nikula
11/18	Boston	3	B. Mayer
11/21	Sharon	7	R. Titus
12/4-17	Worcester	1 imm m	M. Lynch#
12/9	S. Peabody	1 imm	R. Heil
12/18	Nantucket	2	fide E. Ray
12/22	P.I.	6	W. Drew#
<b>Northern Pintail</b>			
11/2, 12/2	GMNWR	57, 4	S. Perkins#
11/3-12/12	Amherst	1	R. Packard
11/5, 12/22	P.I.	455, 58	W. Drew#
11/7	Lanesboro (Pont.)	1	S. Kellogg
11/11	Belchertown	1	B. Lafley
11/13	S. Monomoy	15	B. Nikula
11/20	Clinton	4	R. Lockwood
11/21	Westport	35	E. Nielsen#
12/4-5	Cape Cod	16	CCBC
12/8	S. Egremont	2	J. Johnson
12/18	Longmeadow	3	J. Hutchison
12/23	Marstons Mills	2	J. Liller#
12/25	Marlboro	10	E. Taylor
12/27	S. Hadley	1	H. Allen
12/30	Amherst	2	H. Allen
<b>Green-winged Teal</b>			
11/2, 20	GMNWR	45, 65	S. Perkins#
11/5	P.I.	445	W. Drew#
11/6	Orleans	75	P. Donahue
11/7	Lanesboro (Pont.)	21	H. Allen
11/13	S. Monomoy	120	B. Nikula
11/13	Randolph	25	G. d'Entremont
12/4	Sandwich	207	D. Dyer
12/4-5	Cape Cod	298	CCBC
12/12	Harvard	5	R. Lockwood
12/25	Marlboro	2	E. Taylor
<b>Canvasback</b>			
11/5	Lakeville	1 f	K. Anderson#
11/5, 20	Cambr. (F.P.)	45, 74	J. Barton
11/13	Randolph	3	G. d'Entremont
11/13	S. Monomoy	40	B. Nikula
11/20	Nantucket	25	fide E. Ray
12/4-5	Cape Cod	57	CCBC
12/17, 31	Gloucester	3	B. Wicks#, J. Soucy#
12/18	Lanesboro (Pont.)	3	Hoffmann. Club
12/18	Randolph	28	G. d'Entremont#
12/19	Williamsburg	1	R. Packard
<b>Redhead</b>			
11/1, 12/23	W. Newbury	2, 1	R. Heil
11/6	Salisbury	1	S. Moore#
11/12-29	Rockport	1 m	P. Akers + v.o.
12/4	Plymouth	1	M. Faherty
12/13	Charlton	1 m	J. Liller
12/23	Marstons Mills	1	J. Liller#
12/31	Nantucket	9	G. d'Entremont#
<b>Ring-necked Duck</b>			
11/1	W. Newbury	580	R. Heil
11/5	Lakeville	450-500	K. Anderson#
11/6	Westminster	75	T. Piro
11/6	Ipswich	32	BBC (J. Berry)
11/7	Southboro	839	M. Lynch#
11/7, 28	Pittsfield	800, 450	S. Sumner, E. Neumuth
11/13	S. Monomoy	125	B. Nikula
11/13	Randolph	27	G. d'Entremont
11/14	M.V.	82	V. Laux
11/20, 12/11	Framingham	150, 50	E. Taylor
12/4	Marlboro	60	E. Taylor
12/4-5	Cape Cod	362	CCBC
12/8	N. Egremont	200	J. Johnson
12/31	Nantucket	30	G. d'Entremont#
<b>Tufted Duck</b>			
11/1-12/24	Sterling, Clinton	1	F. McMenemy + v.o.
<b>Greater Scaup</b>			
11/4	Lanesboro (Pont.)	2	R. Packard
11/5	Lakeville	24	K. Anderson#
11/6	N. Egremont	2	J. Johnson
11/7	Salisbury	20	J. Berry#
11/10	Westport	125	R. Heil
11/12, 12/11	Clinton	28, 34	R. Lockwood
11/13, 12/5	Randolph	64, 40	G. d'Entremont
11/20	Wakefield	4	P. + F. Vale
11/21	S. Falmouth	752+	M. Lynch#
11/25, 12/29	Southwick	4, 1	S. Kellogg
12/4-5	Cape Cod	1053	CCBC
12/5	Wakefield	20	P. + F. Vale
12/5	Westport	226	M. Boucher
12/9	Nahant	500	R. Heil
12/24	Wachusett Res.	24	S. Moore#
<b>Lesser Scaup</b>			
11/3	Montague	4	B. Lafley
11/4	Richmond	4	R. Packard
11/6	Lanesboro (Pont.)	40	H. Allen
11/6, 12/29	Southwick	4, 1	S. Kellogg
11/7	Cheshire	3	T. Gagnon
11/9	Andover	15	E. Stromsted
11/10	Westport	200	R. Heil
11/10	Acton	6	M. Resch
11/14, 12/7	W. Newbury	46, 30	R. Heil

Lesser Scaup (continued)			
11/21	S. Falmouth	32+	M. Lynch#
11/21	Westport	83	E. Nielsen#
11/28, 12/23	Marstons Mills	46, 24	J. Liller
11/28	Pittsfield	1	E. Neumuth
11/28	Acoaxet	34+	M. Lynch#
12/4-5	Cape Cod	49	CCBC
12/5	Pembroke	100	W. Petersen
scaup species			
11/10	Westport	225	R. Heil
King Eider			
11/6-12/8	Salisbury	1 m	R. Bielawski#
11/14	Gay Head	1	M. Pelikan
11/20	Rockport (H.P.)	1 m	B. Pfeiffer#
11/24-27	Rockport (A.P.)	1 imm	J. Soucy + v.o.
12/1-31	Gloucester	1 m	B. Lawless + v.o.
Common Eider			
11/3	Rockport	1000	J. Berry#
11/21	Sandwich	500+	M. Lynch#
11/28	Bourne	500+	P. + F. Vale
12/4	Boston H.	4500	W. Petersen#
12/4	Plymouth	3200	M. Faherty
12/15	Rockport (A.P.)	630	R. Heil
Harlequin Duck			
11/1-18	S. Boston	1 m	R. Donovan#
11/11	Dennis	3	B. Nikula
11/25, 12/11	Nantucket	23, 23	fide E. Ray
11/27, 12/14	Rockport (A.P.)	46, 67	R. Heil
12/1-31	Orleans	17 max	v. o.
12/16	Winthrop B.	1 f	G. Wood
Surf Scoter			
11/3	Rockport	175	J. Berry#
11/7	Salisbury	1000	J. Berry#
11/14	Plymouth H.	95	M. Lynch#
11/20	Nant. Sound	500	fide E. Ray
11/21	Barnstable (S.N.)	162	M. Lynch#
11/28	Westport	40	M. Lynch#
12/16	Rockport	24	J. Berry
White-winged Scoter			
11/3, 12/16	Rockport	75, 101	J. Berry#
11/8	Quabbin	3	E. Labato
11/11	Southboro	2	A. Boover
11/14	Plymouth H.	385	M. Lynch#
11/20	Nant. Sound	2000	fide E. Ray
11/21	Barnstable (S.N.)	522	M. Lynch#
11/27	Salisbury	2000	R. Lockwood#
11/28	Revere-Winthrop	95	R. Stymeist#
Black Scoter			
11/3	Rockport	16	J. Berry#
11/4-7	Richmond	1	v. o.
11/7	Dalton	2	H. Allen
11/8	Quabbin	3	E. Labato
11/14	Manomet	7	M. Lynch#
11/20	Nant. Sound	100	fide E. Ray
12/11	Holland	1 f	M. Lynch#
12/15	Rockport (A.P.)	95	R. Heil
Oldsquaw			
11/4	Southwick	2	S. Kellogg
11/5	Lakeville	1 f	K. Anderson#
11/6	Southboro	1 m	E. Taylor
11/6	Worcester	1	M. Lynch#
11/7	Salisbury	3 m	P. + F. Vale
11/8	Gill	1 m	M. Taylor
11/11	Dennis	600	B. Nikula
11/21	Barnstable (S.N.)	26	M. Lynch#
11/21	Falmouth	118	R. Farrell
12/4	Plymouth	215	M. Faherty
12/6	Nantucket	34,000	fide E. Ray
12/15	Rockport (A.P.)	590	R. Heil
Bufflehead			
11/4	Richmond	7	R. Packard
11/5	Lakeville	45	P. Donahue
11/6	Southwick	7	S. Kellogg
11/10	Westport	425	R. Heil
11/13, 12/5	Randolph	57, 58	G. d'Entremont
11/14	Plymouth H.	510	M. Lynch#
11/21	S. Falmouth	214	M. Lynch#
11/26	Wellfleet H.	40	P. + F. Vale
11/28	Revere-Winthrop	250	R. Stymeist#
11/28	Acoaxet	372	M. Lynch#
12/4-5	Cape Cod	2279	CCBC
12/5	Westport	132	M. Boucher
12/9	Nahant	885	R. Heil
Common Goldeneye			
11/5	Lakeville	3	K. Anderson#
11/7, 12/5	Richmond	22, 9	H. Allen
11/7	Southboro	25	M. Lynch#
11/8	Turners Falls	4	M. Taylor
11/13	Falmouth	43	R. Farrell
11/13, 12/5	Randolph	18, 20	G. d'Entremont
11/14	Plymouth H.	66	M. Lynch#
11/18	S. Hadley	24	H. Allen
11/21	S. Boston	50+	B. Mayer
11/28	Acoaxet	25+	M. Lynch#
12/3	Andover	60	E. Stromsted
12/4-5	Cape Cod	221	CCBC
12/15	Rockport (A.P.)	33	R. Heil
12/23	Marstons Mills	34	J. Liller#
12/26	Worcester	17	M. Lynch#
Barrow's Goldeneye			
11/1-15	S. Boston	1 m	R. Donovan#
12/12	Winthrop B.	2	P. + F. Vale
12/19	Salem	2	L. Healey
Hooded Merganser			
11/5	Lakeville	36	P. Donahue
11/6, 12/4	Marlboro	73, 22	E. Taylor
11/9	Ipswich	45	R. Heil
11/13, 12/5	Randolph	40, 41	G. d'Entremont
11/14	Lanesboro (Pont.)	134	T. Gagnon
11/18	Peabody	50	D. + I. Jewell
11/19	Turners Falls	43	R. Packard
11/20	Cambr. (F.P.)	59	J. Barton
11/21	S. Falmouth	53	M. Lynch#
11/21	Rochester	109	R. Titus
11/25	Worcester	171	M. Lynch#
11/28	Lynnfield	62	D. Williams
12/4-5	Cape Cod	1037	CCBC
12/5	Pembroke	70	W. Petersen
12/6	Andover	25	E. Stromsted
12/11	W. Brookfield	26	M. Lynch#
12/12	Harvard	26	R. Lockwood
12/24	Quabbin (G40)	82	R. Lockwood
12/26	Wachusett Res.	40	P. + F. Vale
12/29	Arlington	11	K. Hartel
Red-breasted Merganser			
11/9	Ipswich	350	R. Heil
11/13	Belmont	1	D. Oliver
11/14	Pittsfield (Onota)	1	T. Gagnon
11/14	Manomet	250+	M. Lynch#
11/14	Plymouth H.	270+	M. Lynch#
11/14	Wellfleet	600+	B. Nikula
11/21	Barnstable (S.N.)	120+	M. Lynch#
11/21	S. Falmouth	183	M. Lynch#
11/21	Quabbin (G37)	1	R. Lockwood#
11/21	P'town	500+	B. Nikula
11/28	Acoaxet	121	M. Lynch#
12/4	Boston H.	2500	W. Petersen#
12/15	Rockport (A.P.)	45	R. Heil
12/31	Hyannis H.	130	G. d'Entremont#
Common Merganser			
11/8	Turners Falls	15	M. Taylor
11/11	Agawam	55	S. Kellogg
11/12	Worcester	125	M. Lynch#
11/13, 12/5	Randolph	21, 54	G. d'Entremont
11/18	Peabody	48	D. + I. Jewell
11/28	Lynnfield	82	D. Williams

<b>Common Merganser (continued)</b>			
11/22	Wayland	88	G. Long
11/27	Southboro	230	E. Taylor
11/27	Northampton	56	S. Kellogg
12/3	Worcester	151	M. Lynch#
12/4-5	Cape Cod	246	CCBC
12/5	Lanesboro (Pont.)	693	R. Packard
12/11	Holland	145	M. Lynch#
12/11	W. Brookfield	331	M. Lynch#
12/15	Rockport (A.P.)	3	R. Heil
12/24	Quabbin (G40)	46	R. Lockwood
12/28	Arlington	125	R. LaFontaine
<b>Ruddy Duck</b>			
11/1, 12/7	W. Newbury	930, 152	R. Heil
11/6	Melrose	114	P. + F. Vale
11/7	Pittsfield (Mud Pd)	52	H. Allen
11/7	Southboro	466	M. Lynch#
11/7	Westboro	105	M. Lynch#
11/8, 12/1	Cambr. (F.P.)	368, 139	J. Barton
11/10	Acton	280	M. Resch
11/12	Marlboro	295	E. Salmela
11/13	Lakeville	363	E. Salmela
11/13	Randolph	519	G. d'Entremont
11/13	S. Monomoy	450	B. Nikula
11/13	Braintree	134	G. d'Entremont
11/14	Canon	308	D. + S. Larson
11/14	Eastham	130	B. Nikula
11/21	Westport	904	E. Nielsen#
11/21	Rochester	370	R. Titus
11/28	Acoaxet	976	M. Lynch#
12/4-5	Cape Cod	444	CCBC
12/11	Holland	293	M. Lynch#
12/17	Gloucester	70	B. Wicks#
12/21	Melrose	60	D. + I. Jewell
12/29	Arlington	35	K. Hartel
<b>Osprey</b>			
11/1-30	Reports of indiv. from 20 locations.		
12/03	W. Peabody	1	R. F. Donovan
12/10	Worcester	1	M. Lynch#
12/21	Wayland	1	K. Hamilton
<b>Bald Eagle</b>			
11/2	W. Newbury	1 imm	R. Heil
11/3	Acton	1 ad	M. Resch
11/5	Plymouth	1 imm	K. Vespaiziani
11/5	Lakeville	1	K. Anderson#
11/7	Gardner	1 imm	T. Pirro
11/8	Turners Falls	1 ad	M. Taylor
11/21	Barnstable	1 1st yr.	M. Lynch#
11/21	S. Quabbin	2	R. Lockwood#
11/29	Winchester	1 imm	R. LaFontaine
12/11	Wachusett Res.	1 ad	P. Meleski
12/23	W. Newbury	1 ad	R. Heil
12/23	Lincoln	1 ad	R. Lewis
12/24	Quabbin (G40)	2	R. Lockwood
12/26	Wachusett Res.	1 imm	P. + F. Vale
<b>Northern Harrier</b>			
11/5	P.I.	7	R. Heil
11/6	Ipswich	2	BBC (J. Berry)
11/6	Orleans	4	P. Donahue
11/6	Salisbury	4	R. Heil
11/8	Westport	2	M. Boucher
11/13	S. Monomoy	4+	B. Nikula
11/21	Barnstable	2	M. Lynch#
11/21	S. Falmouth	2	M. Lynch#
12/4	Salisbury	5	P. + F. Vale
12/5	GMNWR	2	S. Perkins
12/17	Wrentham	2	M. Grzenda
12/22	DWWS	19	N. Smith
thr	Reports of indiv. from 12 locations		
9/1-11/17	Granville	84	T. Swochak#
<b>Sharp-shinned Hawk</b>			
11/2	W. Newbury	3	R. Heil
11/6	Ipswich	2-3	BBC (J. Berry)
11/6, 7	Gardner	3	T. Pirro
11/10	Westport	3	R. Heil
11/20	Worcester	2	M. Lynch#
11/28	Boston	2	R. Stymeist#
12/6	Maynard	2	L. Nachtrab
thr	Reports of indiv. from 24 locations		
<b>Cooper's Hawk</b>			
11/1-30	N. Dartmouth	2 max	M. Boucher
11/3	Essex	2	R. Heil
11/6	Gardner	2	T. Pirro
11/9	Ipswich	2	R. Heil
12/1-31	N. Dartmouth	2	M. Boucher
thr	Reports of indiv. from 30 locations		
<b>Northern Goshawk</b>			
11/3, 15	Granville	1, 1	T. Swochak#
11/5	W. Newbury	1	S. Spangenberg#
11/6	Gardner	2 ad	T. Pirro
11/6	Salisbury	1 imm	R. Heil
11/8	Lynn	1 imm	R. Heil
11/20	Worcester	1	M. Lynch#
11/20	Upton	1 ad	P. DeBruyn
11/23	Mattapoisett	1	F. Smith
11/27	Acton	1	S. Moore#
11/30, 12/7	Groton	1 ad	T. Pirro
12/5	Windsor	1	R. Packard#
12/5	E. Bridgewater	1	E. Giles
12/9	Salem	1 ad	R. Heil
12/18	P'town	1 imm	R. Heil
<b>Red-shouldered Hawk</b>			
11/6, 7	Gardner	3	T. Pirro
11/7	Granville	4	T. Swochak#
11/20	Avon	1	R. Titus
11/22	Eastham (F.H.)	1	D. Peacock
11/27	Newton	1	T. Roberts
12/26	Southwick	1	S. Kellogg
12/26	Marshfield	2	G. d'Entremont#
12/31	Reading	2	D. Wilkinson#
<b>Red-tailed Hawk</b>			
11/7	Gardner	21	T. Pirro
11/7, 8, 15	Granville	119, 46, 37T.	Swochak#
11/7	GMNWR	7	S. Perkins
11/9	Essex/Ipswich	24	R. Heil
11/28	Boston	7	R. Stymeist#
11/28	Acoaxet	8	M. Lynch#
<b>Rough-legged Hawk</b>			
thr	DWWS	2-3	D. Furbish
thr	P.I.	1-3	v.o.
thr	Salisbury	2-3	E. Slattery#
11/3	W. Bridgewater	1 lt	S. Arena
11/23	Nantucket	1 dk	D. Sutherland
11/28	Boston (Logan)	1	R. Stymeist#
12/7	Newbury	1 lt	R. Heil
12/29	Cumb. Farms	1	M. Boucher
<b>Golden Eagle</b>			
11/7, 15	Granville	1, 1	T. Swochak#
<b>American Kestrel</b>			
11/7	Salisbury	1	P. + F. Vale
11/7	Rowley	1 m	J. Berry
11/11	N. Cambridge	1	M. Rines
11/13	Worcester	1	M. Lynch#
11/13	Lexington	1 m	M. Rines
11/28	Boston	5	R. Stymeist#
12/4	Newbury	1	P. + F. Vale
12/6	P.I.	2	J. Berry
12/7	Hadley	1	H. Allen
<b>Merlin</b>			
11/12	P.I.	2	J. Berry
11/13	Salisbury	2	P. + F. Vale
thr	Reports of indiv. from 25 locations		
<b>Peregrine Falcon</b>			
thr	Boston	1-2	K. Hudson
11/2	GMNWR	1 juv	S. Perkins
11/3	Granville	1	T. Swochak#

<b>Peregrine Falcon (continued)</b>			
11/5	P.I.	1	R. Heil
11/6	N. Monomoy	1	B. Nikula
11/8	Nahant	1	R. F. Donovan
11/13	S. Monomoy	2	B. Nikula
11/18	Bedford	1 juv	T. Roberts
11/21	Long I.	1	D. + S. Larson
11/21	Squantum	1	D. + S. Larson
12/4	Newbury	1	P. + F. Vale
12/5	Dorchester	1	R. Stymeist#
12/12	Northampton	1	S. Kellogg
12/13	Nantucket	1	S. Langer
12/17	Weymouth	2 ad	G. d'Entremont
12/19	Sunderland	1	A. Richards
12/19	Hadley	1	S. Sumner
12/19	Amherst	1	D. Ziomek
<b>Ruffed Grouse</b>			
11/11	Lancaster	3	R. Lockwood
11/12	Stow	3	R. Lockwood
11/21	Quabbin (G37)	4	R. Lockwood#
11/25	Worc. (BMB)	1	J. Liller
12/4	Holbrook	2	G. d'Entremont
12/7	Hingham	4	D. Peacock
12/11	E. Brookfield	1	M. Lynch#
12/24	Quabbin (G40)	4	R. Lockwood
12/25	Medford	2	L. Epstein#
<b>Wild Turkey</b>			
thr	W. Newbury	10	R. Heil
11/1	Scituate	14	L. Burbank
11/1	Upton	3	J. Moffett
11/8	Marshfield	19	D. Furbish#
11/16	Ipswich	3	J. Berry
11/21	Petersham	6	R. Lockwood#
11/21	Hardwick	8	G. d'Entremont#
11/25	S. Hadley	14	A. Hill
11/25	Wachusett Res.	3	S. Moore#
11/25	Williamsburg	35	T. Gagnon
11/25	Newbypt.	6	D. Chickering#
11/26	Waltham	6	D. Peebles
12/4	Brookline	5	S. Jackson
12/13, 20	Bedford	15	T. Roberts
12/28	Easton	15	G. d'Entremont
<b>Northern Bobwhite</b>			
11/10	Newton	1 f	I. Reid
11/22	Eastham (F.H.)	4	D. Peacock
12/12	Yarmouthport	15	K. Hamilton
12/18	P'town	10	R. Heil
12/28	Truro	9	J. Young
<b>Yellow Rail *</b>			
11/1	DWWS	1	D. Furbish
<b>Clapper Rail</b>			
11/24	Yarmouth	1	J. + P. Trimble
<b>Virginia Rail</b>			
11/21	S. Falmouth	1	M. Lynch#
11/22	Harwich Port	2+	B. Nikula
11/25	Newbypt	2	R. Heil
12/9	S. Peabody	1	R. Heil
12/11	Nantucket	2	fide E. Ray
12/18	Springfield	1	J. Cavanaugh
12/18	P'town	1	R. Heil
12/18	Braintree	1	G. d'Entremont#
<b>Sora</b>			
12/8	Chilmark	1	P. Harrington
<b>American Coot</b>			
11/2-12/5	Cheshire	20-50	B. Lafley
11/4, 16, 12/29	Arlington	110, 263, 224	M. Rines
11/4-9	Richmond	15-45	R. Packard
11/7	Westboro	33	M. Lynch#
11/10	Acton	30	M. Resch
11/12	Marlboro	50	E. Salmela
11/13	Randolph	94	G. d'Entremont
11/13	Braintree	64	G. d'Entremont
11/13	Waltham	36	D. Oliver
11/13	S. Monomoy	30	B. Nikula
11/13	Longmeadow	16	N. Eaton
11/14	Eastham	70	B. Nikula
11/14	Plymouth	178	M. Lynch#
11/22, 12/9	Andover	120, 20	E. Stromsted
12/1-31	Southwick	25-50	S. Kellogg
12/4-5	Cape Cod	340	CCBC
<b>Sandhill Crane</b>			
12/29	Mattapoisett	1	M. Sylvia
<b>Black-bellied Plover</b>			
11/3	Nantucket	11	A. Charder#
11/5	Eastham	20	P. Trull
11/6	N. Monomoy	400	B. Nikula
11/7	Westport	29	G. d'Entremont#
11/9	Ipswich	40	R. Heil
11/13	Rockport	1	J. Berry
11/13	P.I.	45	R. Heil
11/21	Plymouth	10	E. Neumuth#
11/27	Chatham	23	P. + F. Vale
12/18	P'town	17	R. Heil
<b>American Golden-Plover</b>			
11/3	Salisbury	2	G. Leet#
11/3	Nantucket	3	A. Charder#
11/7	P.I.	3	E. Salmela#
11/10	GMNWR	2 juv	M. Rines
11/12	Boston (Logan)	7	N. Smith
11/13	S. Monomoy	6	B. Nikula
<b>Semipalmated Plover</b>			
11/21	Plymouth	1	E. Neumuth#
11/29	Nantucket	1	E. Ray
12/19	Chatham (S.B.)	1V.	V. Laux, P. Trimble
<b>Killdeer</b>			
11/2, 20	GMNWR	28, 7	S. Perkins#
11/22	Lanesboro (Pont.)	1	E. Neumuth
11/23	Worcester	1	M. Lynch#
11/28	Plymouth H.	1	G. d'Entremont
12/2	GMNWR	14	S. Perkins
12/4	Plymouth	1	M. Faherty
12/5	GMNWR	10	S. Perkins
12/19	Northampton	7	T. Gagnon
<b>American Oystercatcher</b>			
11/3, 12/4	Nantucket	2, 1	A. Charder#
<b>Greater Yellowlegs</b>			
11/1, 14	Lanesboro (Pont.)	3, 1	B. Lafley, T. Gagnon
11/2, 20	GMNWR	3, 1	S. Perkins#
11/5	P.I.	40	R. Heil
11/6	Orleans	15	P. Donahue
11/6	Ipswich	4	BBC (J. Berry)
11/7, 21	Rowley	14, 5	J. Berry
11/8	Falmouth	6	R. Farrell
11/10	Westport	12	R. Heil
11/14	S. Dart. (A.Pd)	5	R. Lockwood#
11/21	Quabbin	3	T. Gagnon
11/22	Eastham (F.H.)	47	D. Peacock
11/24	Hyannis	18	J. Trimble
11/26	Truro	10	J. Young
12/7	Newbury	4	R. Heil
12/18	P'town	3	R. Heil
<b>Lesser Yellowlegs</b>			
11/2, 20	GMNWR	4, 1	S. Perkins#
11/13	Salisbury	1	P. + F. Vale
11/21	Quabbin	1	H. Allen
11/22	Eastham (F.H.)	1	D. Peacock
<b>Whimbrel</b>			
12/28	Yarmouth (CBC)	1	P. Trimble
<b>Hudsonian Godwit</b>			
11/5, 25	P.I.	3, 1	R. Heil
11/23	Salisbury	1	D. Chapman
<b>Marbled Godwit</b>			
11/5	Eastham (F.E.)	1	E. Winslow
11/6	N. Monomoy	4	B. Nikula
<b>Ruddy Turnstone</b>			
11/7	Westport	2	G. d'Entremont#

Ruddy Turnstone (continued)								
11/18	Rockport	1	J. Berry#	11/7	Newburyport	2	R. Lockwood	
11/21	S. Boston	1	B. Mayer	11/28	Cumb. Farms	1	G. d'Entremont	
12/31	Nantucket	2	G. d'Entremont	12/25	Carlisle	1	T. + D. Brownrigg	
Red Knot				12/26	Newbypt	6	R. Heil	
11/6	N. Monomoy	100	B. Nikula	American Woodcock				
11/21	Plymouth	2	E. Neumuth#	11/2	Concord	1	R. Lockwood	
Sanderling				11/11	Lancaster	2	R. Lockwood	
11/5	P.I.	400	S. Haydock	11/13	Hadley	1	S. Sumer	
11/6	N. Monomoy	900	B. Nikula	11/18	Avon	1	R. Titus	
11/21	Plymouth	135	E. Neumuth#	11/27	Westborough	1	M. Faherty	
11/21	Salisbury	120	S. Spangenberg#	Pomarine Jaeger				
11/28	Lynn	180	R. Stymeist#	11/3, 27	Rockport (A.P.)	61, 3	R. Heil	
12/18	P'town	520	R. Heil	11/17	Orleans	2	B. Nikula	
12/19	Iswich	220	J. Berry#	11/24	N. Truro	1	W. Ellison	
12/30	E. Dennis	200	J. O'Neil	11/28	P'town	2	B. Nikula	
12/31	Hyannis	275	G. d'Entremont#	11/28, 12/2	Eastham (F.E.)	1, 18	B. Nikula	
Semipalmated Sandpiper				12/1, 15	Rockport (A.P.)	2, 1 lt	R. Heil	
12/19	Chatham (S.B.)	1V.	Laux, P. Trimble	12/3	off Edgartown	2	V. Laux#	
Western Sandpiper				12/5	P'town	1	R. Graham	
12/19	Chatham (S.B.)	4V.	Laux, P. Trimble	Parasitic Jaeger				
White-rumped Sandpiper				11/3	Rockport	1	J. Berry#	
11/5	P.I.	8	R. Heil	11/27	P'town	1	B. Nikula	
11/13	S. Monomoy	7	B. Nikula	jaeger species				
11/21	Quabbin	1	T. Gagnon	11/13	S. Monomoy	1	B. Nikula	
Pectoral Sandpiper				11/14, 28	P'town	1, 4	B. Nikula	
11/2, 20	GMNWR	115, 10	S. Perkins#	12/1	Eastham (F.E.)	35	B. Nikula	
11/3	W. Bridgewater	7	S. Arena	Laughing Gull				
11/6	N. Monomoy	3	B. Nikula	11/3	Rockport	2	R. Heil	
11/13	P.I.	1	R. Heil	11/7	Nantucket	41	E. Ray	
11/13	S. Monomoy	1	B. Nikula	11/10	Westport	5 ad	R. Heil	
11/14	Quabbin (G43)	2	C. Buelow	11/19	Oak Bluffs	60	V. Laux	
11/14	Bolton Flats	1	G. d'Entremont	11/21	Sandwich	7 adW	M. Lynch#	
11/14	S. Dart. (A. Pd)	6	R. Lockwood#	11/24	P'town (R.P.)	6	W. Ellison	
Purple Sandpiper				11/27	Truro	3	B. Nikula	
11/3	Rockport	2	J. Berry#	11/27	Rockport (A.P.)	1 ad	R. Heil	
11/14	Westport	12	R. Lockwood#	11/28	Plymouth	1	G. d'Entremont	
11/14	Manomet	9	M. Lynch#	11/28	Acoaxet	1	M. Lynch#	
11/20	Rockport	28	B. Pfeiffer#	12/12	Eastham (C.G.B.)	1	B. Nikula	
11/20	Nantucket	50	fide E. Ray	Little Gull				
11/21, 12/24	Winthrop B.	19, 3	P. + F. Vale	11/3	Newbypt.	1 MAS	(B. Stevens#)	
11/24	Salisbury	150+	M. Resch#	11/19	M.V.	1	M. Pelican	
11/28	Acoaxet	2	M. Lynch#	11/20	Nauset Bch.	1 ad	B. Nikula	
11/28	Lynn	24	R. Stymeist#	Black-headed Gull				
12/3	P.I.	18	W. Drew#	11/17	Newbypt.	1 MAS	(N. Soulette#)	
12/4	E. Gloucester	27	J. Young	11/19, 12/30	Lynn	1 ad	J. Quigley	
12/4	Boston H.	400	W. Petersen#	11/21	Boston H.	2	R. Donovan	
12/7	Marshfield	7	R. Titus	11/27	Truro	1 imm	J. Young	
12/9	Nahant	30	R. Heil	12/4	Gloucester	1	D. Jacques	
12/15	Rockport (A.P.)	130	R. Heil	12/11	Nantucket	2	fide E. Ray	
Dunlin				12/21	Winthrop	1 ad	J. Young	
11/2, 7	GMNWR	4, 6	S. Perkins#	12/23	E. Dennis	1	J. Askildsen	
11/5	Eastham	2000	P. Trull	12/28	Centerville	1 ad, 1 imm	B. Nikula#	
11/5	P.I.	160	W. Drew#	12/31	Marion	1 ad	D. Larson	
11/6, 12/19	Ipswich	60, 340	BBC (J. Berry)	Bonaparte's Gull				
11/6	N. Monomoy	800	B. Nikula	11/3	Hadley	1	R. Packard	
11/7	Westport	125	G. d'Entremont#	11/3	Amherst	1	B. Packard	
11/10	Essex	90	D. Brown	11/4	Northfield	1	B. Lafley	
11/14	S. Dartmouth	250	R. Lockwood#	11/9	Essex/Ipswich	425	R. Heil	
11/14	Eastham (C.G.B.)	2500+	B. Nikula	11/20	N. Monomoy	100	B. Nikula	
11/21	Plymouth	1150	E. Neumuth#	11/21	Plymouth	75+	E. Neumuth#	
11/25	Newbypt/P.I.	510	R. Heil	11/21	S. Boston	50+	B. Mayer	
11/28	Lynn	57	R. Stymeist#	11/25	Newbypt	360	R. Heil	
11/28	Acoaxet	80+	M. Lynch#	11/26	Rockport (A.P.)	340	R. Heil	
11/28	Duxbury B.	50	L. Cleveland	11/28	Lynn	2100+	R. Stymeist#	
12/30	E. Dennis	500	J. O'Neil	12/4	Duxbury B.	160	L. Cleveland	
Long-billed Dowitcher				12/11	Nantucket	500	fide E. Ray	
12/28	Hyannisport (CBC)	4	N. Soulette, B. Nikula	12/13	Dennis	35	K. Hamilton	
dowitcher species				12/15	Rockport (A.P.)	1630	R. Heil	
11/24	Hyannis	3	J. Trimble	12/19	Ipswich	85	J. Berry#	
Common Snipe				Iceland Gull				
11/1	Hadley	4	H. Allen	11/3, 12/15	Rockport	1 1W, 1 J	Berry#, R. Heil	
11/2	GMNWR	2	S. Perkins#	11/26	Wellfleet H.	1 ad	P. + F. Vale	
				11/27	Salisbury	2 ad	S. Mirick	

Iceland Gull (continued)				11/26	Rockport (A.P.)	2	R. Heil
11/28	Rockport	1	J. Soucy	12/3	M.V.	1 (dead)	A. Brown
11/30	Oak Bluffs	1 ad	A. Goldman	12/13	P'town H.	1	M. Halloran
12/3	Newbypt.	1 ad	T. Pirro	<b>Common Murre</b>			
12/12	Nantucket	30	K. Blackshaw	11/13	Rockport (H.P.)	2	H. Miller
12/12	Hadley	2	S. Kellogg	11/26	P'town (R.P.)	1	F. Vale
12/18	P'town	5	R. Heil	12/14, 15	Rockport (A.P.)	1, 3	R. Heil
12/26	Newbypt	4	R. Heil	<b>Thick-billed Murre</b>			
12/31	Gloucester	1	J. Soucy#	11/20	Chappaquiddick	1	A. Keith#
Lesser Black-backed Gull				11/26, 12/15	Rockport (A.P.)	3, 4	R. Heil
11/5	Nantucket	3	E. Ray	11/27, 12/4	P'town H.	2, 2	J. Young, B. Nikula
11/11	Acton	1 ad	M. Resch	11/27	Eastham	2	P. + F. Vale
11/15	Orleans	1 ad	B. Nikula	12/4	Salisbury	1	BBC (W. Drummond)
11/24	Lynn	2 ad	J. Quigley	12/7	Marshfield	1	R. Titus
11/26	P'town	2 ad	W. Ellison	<b>Razorbill</b>			
11/29-12/21	Amherst	1-2	B. Packard + v.o.	11/3, 11/26	Rockport (A.P.)	94, 146	R. Heil
11/29-12/12	Hadley	1	R. Packard + v.o.	11/14	Manomet	11	M. Lynch#
12/11	Nantucket	6	fide E. Ray	11/21	Plymouth	4	E. Neumuth#
Glaucous Gull				11/21	Sandwich	6	M. Lynch#
12/12	Hadley	1	S. Kellogg	11/21	Barnstable (S.N.)	6	M. Lynch#
12/12-21	Amherst	1 1 W	P. Champlain + v.o.	11/25	N. Truro	160	W. Ellison
12/14	Rockport (A.P.)	1	J. Soucy	11/27	Salisbury	9	S. Moore#
12/16	Burlington	1 2W	C. Leahy	11/27, 28	P'town	35, 960	B. Nikula
12/16	Rockport	1 1W	J. Berry	11/27, 12/15	Rockport (A.P.)	157, 2920	R. Heil
Black-legged Kittiwake				11/28	P'town	960	B. Nikula
11/3, 12/15	Rockport (A.P.)	4300, 685	R. Heil	12/31	Nant. Sound	4	G. d'Entremont#
11/14	P'town	800+	B. Nikula	<b>Black Guillemot</b>			
11/15	Orleans	350	B. Nikula	11/3, 12/15	Rockport (A.P.)	24, 9	R. Heil
11/25, 28	P'town	150, 250	B. Nikula	11/21	Plymouth	1	E. Neumuth#
12/18	P'town (R.P.)	1250	R. Heil	11/26	P'town	1	W. Ellison
Common Tern				11/28	Marshfield	42	G. d'Entremont
11/14, 27	Wellfleet H.	20, 2	B. Nikula	11/29	Gloucester (B.R.)	4	T. + D. Brownrigg
Forster's Tern				12/4	Boston H.	22	W. Petersen#
11/14	Plymouth H.	1 basic	M. Lynch#	12/7	Marshfield	2	R. Titus
11/21	Westport	13	E. Nielsen#	<b>Atlantic Puffin</b>			
11/26	Wellfleet H.	1 imm	P. + F. Vale	11/3, 27, 12/15	Rockport (A.P.)	1, 1, 3	R. Heil
11/28	Acoaxet	4	M. Lynch#	large alcid species			
12/13	Dennis	1	K. Hamilton	11/28	Marshfield	7	G. d'Entremont
Dovekie				12/1	Eastham (F.E.)	100+	B. Nikula
11/26	Truro	1	P. + F. Vale				
11/26	P'town (R.P.)	20	P. + F. Vale				

## DOVES THROUGH GROSBEAKS

Perhaps the big avian news during this period was that Massachusetts birders *did not* find any Cave Swallows on the first weekend of November, while observers just to our south had more than their share! The weather shifted from a warm Friday and Saturday, November 5-6, with southwest winds, to much cooler and fairly strong northwest winds on Sunday, November 7. These conditions resulted in a substantial fallout of birds, both of "blow-backs" and southward bound migrants. Two Northern Rough-winged Swallows were carefully identified and represent the first November reports for this species in the state. A Chimney Swift reported from Nahant is one of the under 10 individuals recorded in November. There was a good flight of Red-breasted Nuthatches that weekend. The first **Bohemian Waxwings** were reported, and there were sightings of what proved to be the start of an onslaught of siskins and redpolls.

It was good to have Snowy Owls around again this year after 1998, which produced a 25-year low of just one individual! Barred Owls were everywhere; at least 13 individuals were tallied, including a very cooperative bird that took up residence in the Boston Public Garden and Common and could be seen hunting squirrels during the day. The only thing that sent him to quieter quarters was the fireworks display early New Year's Eve. The famous Long-eared Owls returned to their not-so-Secret Trail roost at the Daniel Webster Wildlife Sanctuary in Marshfield. Seven Long-ears and two Short-ears delighted birders with their nightly performance over the fields of the Sanctuary. A huge movement of Northern Saw-whet Owls

went largely undetected by diurnal birders, but was documented by Norm Smith's banding project in four southeastern Massachusetts locations.

Western Massachusetts birders reported the most sapsuckers in December since 1985, and at Mount Auburn Cemetery as many as four different individuals were observed through December, feeding mostly in nikko fir trees. On Nantucket, three Hairy Woodpeckers tied the all time high count for the island, the most recorded there since November 1980! The warm weather accounted for the more than normal reports of Eastern Phoebe during the period, with a report from Deerfield making the third December in a row that this species has been tallied in western Massachusetts. **Ash-throated Flycatchers** seem to be almost routine in the fall as of late, and an individual reported from Westport may have arrived with that big southwest airflow in early November. A **Western Kingbird** at Daniel Webster Wildlife Sanctuary was only the fourth bird found in the state this fall. It was a really big year for Northern Shrikes, the second biggest year of record for the state with at least 73 individuals noted during the period. A Common Raven, first noted in September, was reported off and on during the period from Halibut Point in Rockport, but of more interest is the continued increase of ravens in western Massachusetts, with 53 individuals tallied in Becket on December 15.

For the fourth fall in a row, birders in western Massachusetts recorded a poor flight of Red-breasted Nuthatches. Counts of these birds were spotty in eastern sections, with a few high counts in coastal locations. It was also the poorest fall showing of Brown Creeper in western sections, but on the bright side Carolina Wren numbers in the west were the best since 1992. Winter Wrens were well reported in the east while just nine birds in the west represented the lowest count since 1985. A Blue-gray Gnatcatcher, originally found on the Boston CBC, was still present Christmas Eve and constitutes the latest report for this species in the state. It was another big fall for Eastern Bluebirds and American Robins; and the warm weather certainly was responsible for the numbers of Hermit Thrushes reported. The weather effect also added to the number of warbler reports! Eighteen species were reported during the period; unusually late species included Nashville, Yellow, Magnolia, Cape May, Black-throated Blue, Black-throated Green, Prairie, Ovenbird, Northern Waterthrush, and Wilson's. The open fields without the white stuff made sparrows linger as well as the Horned Larks, Eastern Meadowlarks, and Snow Buntings.

The winter finches did not disappoint birders, with the best flight of Pine Siskins in western Massachusetts since 1993, and a great showing of Common Redpolls, although not as many as 1993 or 1997. The numbers of Evening Grosbeaks in western sections were an improvement over 1998 when there were no reports, but still were below average. Both species of crossbills were reported in nearly equal numbers, and Salisbury was a wonderful place to see and study them up close. Bohemian Waxwings started appearing in a number of locations with promises of more to come! A few **Hoary Redpolls** were noted especially early; the November sighting in West Springfield is the first report ever in western Massachusetts before February.

Rare finds included a **Northern Wheatear** from Northampton, and a most cooperative **MacGillivray's Warbler** (Hot Birds, page 94) from the Fenway section of Boston which delighted scores of birders for nearly a month and had the decency to hang around for the Boston CBC! A **Spotted Towhee** was the first regional sighting for Western Massachusetts and again this bird lingered, exciting birders who were thrilled to add this recently-split species to their Massachusetts list. A **Henslow's Sparrow** was also reported. The **Boreal Chickadee** continued at a feeder in West Newbury throughout the period.

R.H.S.

Mourning Dove							
11/10	Dartmouth	485		R. Heil			
11/20	DWWS	180		D. Furbish			
Barn Owl							
11/12	DWWS	1		D. Furbish			
12/31	Nantucket	1		G. d'Entremont#			
Eastern Screech-Owl							
12/18	Braintree	4		R. Campbell			
12/18	Holliston	2		J. Hoye#			
thr	Reports of indiv from 11 locations						
Great Horned Owl							
thr	Reports of indiv. from 12 locations						
Snowy Owl							
11/5	Salisbury	1		S. Spangenberg#			
11/5, 20, 29	Boston (Logan)	1, 1, 3		N. Smith			
11/20-29	P.I.	1		D. Chickering			
11/22	S. Boston	1		T. O'Neil			
11/24	Salisbury	2		MAS (N. Soulette#)			
12/5, 16	P.I.	1		T. French, S. McGrath			
12/17	Rockport (H.P.)	1		B. Wicks#			
Barred Owl							
11/2	Needham	1		B. Chiasson			
11/6	Salisbury	1		R. Heil			
11/18	Rockport	1		J. Berry#			
11/19-20	Mt. A.	1		R. Stymeist#			
11/24	IRWS	1		D. + I. Jewell			
11/26-12/31	Boston (Pub. G.)	1		K. Hudson			
11/27	Newbury	1		B. Murphy			
11/29	Lanesboro	2		T. Collins			
12/3	DWWS	1		K. Vespaziani			
12/5	Boston	1		R. Stymeist#			
12/9	Salem	2		R. Heil			
12/15	Boston	1		K. Hudson			
12/19	Marblehead	1		D. Curtin			
12/31	Boston	1		R. Stymeist			
Long-eared Owl							
11/thr	DWWS	7 max		D. Furbish			
11/7	S. Boston	1		R. Donovan#			
12/13	Rowley	3-4		J. Berry, L. Cook			
Short-eared Owl							
11/3, 11/13	DWWS	1, 2		D. Furbish			
11/4	Salisbury	1		E. Salmela#			
11/5, 12/3	Boston (Logan)	2, 2		N. Smith			
11/6	Orleans	1		P. Donahue			
11/7	Westport	2		M. Sylvia			
11/8	Nahant	1		R.F. Donovan			
11/9	Mashpee	1		S. + E. Miller			
11/23	Nantucket	1		D. Sutherland			
11/25	Newbypt	1		R. Heil			
11/27	Gloucester	1		J. Soucy			
12/18	P.I.	1		P. + F. Vale			
12/19	Holyoke	1		D. McLain			
Northern Saw-whet Owl							
11/thr	Blue Hills	17 b		N. Smith			
11/thr	DWWS	125 b		N. Smith			
11/thr	E. Bridgewater	34 b		N. Smith			
11/thr	Whitman	1 b		N. Smith			
11/1	Nantucket	10		fide E. Ray			
11/5	P.I.	1		R. Heil			
11/7	E. Orleans	1		B. Nikula			
11/11-12	Lexington	1		C. Floyd + v.o.			
12/thr	DWWS	18 b		N. Smith			
12/thr	E. Bridgewater	67 b		N. Smith			
12/thr	Whitman	35 b		N. Smith			
12/4	Falmouth	1		R. Vander Pyl			
12/11	Nantucket	4		fide E. Ray			
12/19	Amherst	1		D. Ziomek			
12/26	Worc. (BMB)	1		M. Lynch#			
12/26	Gill	1		B. Lafley			
Chimney Swift							
11/8	Nahant	1		R.F. Donovan			
Belted Kingfisher							
11/21	S. Falmouth	3		M. Lynch#			
12/5	Bourne	3		R. Lockwood			
Red-headed Woodpecker							
11/7	Nantucket	1 imm		E. Andrews			
11/17-12/31	Natick	1		L. Long			
11/22	Marlboro	1 ad		S. Hennin			
12/18-24	W. Boylston	1 imm		F. McMenemy			
Red-bellied Woodpecker							
11/1	S. Dartmouth	4		M. Boucher			
11/6	Stow	2		R. Lockwood			
11/10	Dartmouth	2		R. Heil			
11/12	Hadley	7		B. Lafley			
12/5	Bourne	4		R. Lockwood			
12/18	S. Dartmouth	2		M. Boucher			
12/24	Mendon	pr		J. + D. Moffett			
Yellow-bellied Sapsucker							
11/6	Cummaquid	1		S. + E. Miller			
11/19, 12/12	Mt. A.	3, 3		R. Stymeist			
11/28	Truro	1		J. Young			
12/3	Nantucket	1		E. Ray			
12/19	Amherst	1		C. Read			
12/19	Northampton	1		T. Gagnon			
12/26	Southwick	1		R. Packard			
12/28	Truro	1 ad		J. Young			
Hairy Woodpecker							
11/20	Nantucket	3		fide E. Ray			
12/24	Quabbin (G40)	4		R. Lockwood			
Northern Flicker							
11/10	Westport	17		R. Heil			
11/16	W. Newbury	7		R. Heil			
11/19	Mt. A.	7		R. Stymeist			
11/21	S. Falmouth	7		M. Lynch#			
12/12	Mt. A.	5		R. Stymeist			
12/21	Ipswich	6		J. Berry			
Pileated Woodpecker							
thr	Pepperell	1		E. Stromsted			
11/6, 12/26	Gardner	1		T. Pirro			
11/12	Acton	2		G. Clark			
11/14	Oakham	1 f		G. d'Entremont			
12/4	Marlboro	1		D. Mello			
12/5	E. Boxford	2		J. Brown#			
12/20	Weston	1 pr		K. Agee			
12/21-22	Maynard	1		L. Nachtrab			
Eastern Phoebe							
11/thr	Chilmark	1		A. Keith			
11/10	Westport	1		R. Heil			
12/3	Deerfield	1		S. Smolen-Morton			
12/27	Tisbury	1		S. Hickman			
12/28	Sandwich (CBC)	1 v.		Laux, J. Trimble			
Ash-throated Flycatcher * (no details)							
11/5-7	Westport	1		D. Hildreth + v.o.			
Western Kingbird							
11/22	DWWS	1		D. Zurif			
Northern Shrike							
11/14	New Braintree	2		C. Buelow			
11/17	GMNWR	2		C. Swanson			
11/20	Concord	2		S. Perkins			
11/21	Quabbin	2		T. Gagnon			
11/25	Easthampton	3		T. Maloney#			
11/25	P.I.	3		R. Heil			
11/25	DWWS	1 ad, 1 imm		P. + F. Vale			
12/19	Hadley	2		P. Champlin			
12/19	Ipswich	2		J. Berry#			
12/26	Southwick	2		S. Kellogg			
thr	Reports of indiv. from 54 locations						
Blue-headed Vireo							
11/1	Stoneham	1		D. + I. Jewell			
11/5	Northampton	1		H. Allen			
11/7	Boston (A. A.)	1		J. Young			
11/10	Dartmouth	1		R. Heil			
American Crow							
11/13	Braintree	300		G. d'Entremont			
11/20	Worcester	800+		M. Lynch#			
11/24	W. Springfield	6000		J. Gawienowski			



<b>Ruby-crowned Kinglet (continued)</b>			
12/5	Bourne	2	R. Lockwood
12/5	Mattapan	5	R. Stymeist#
12/11	Nantucket	1	fide E. Ray
12/12	Mt. A.	1	R. Stymeist
12/19	Hadley	1	P. Champlin
12/19	Whately	1	A. Magee
12/27	Truro	1	J. Young
<b>Northern Wheatear * (no details)</b>			
12/29-30	Northampton	1	D. McLain + v.o.
<b>Eastern Bluebird</b>			
11/2, 12/7	Groton	6, 12	T. Pirro
11/2, 20	GMNWR	26, 6	S. Perkins
11/5	Mattapoisett	6	F. Smith
11/7	Worc. (BMB)	10	M. Lynch#
11/7	Northboro	8	M. Lynch#
11/10	Granville	14	J. Weeks
11/14	Oxford	11	P. Meleski
11/15	Lincoln	6	M. Rines
11/16	W. Newbury	6	R. Heil
11/23	Hamilton	4	J. Berry
11/24	Medfield	12	G. Long
11/25	Hanson	8	M. Wyman
11/26	Wellfleet	20+	P. + F. Vale
12/2	Quabbin	20	N. Eaton
12/5	Carlisle	6	T. + D. Brownrigg
12/12	Nantucket	12	K. Blackshaw
12/12	Upton	17	N. Paulson
12/18	Holliston	17	J. Hoye#
12/27	Groveland	10	R. Heil
<b>Hermit Thrush</b>			
11/1	Melrose	2	D. + I. Jewell
11/2	Medford	4	M. Rines
11/7	Saugus	4	D. + I. Jewell
11/8	Nahant	4	R. Heil
11/11	Mt. A.	3	S. King
11/20	Acoaxet	5	E. Salmela#
12/5	Boston	2	R. Stymeist#
12/6	Nahant	2	R. F. Donovan
12/7	Hingham	11	D. Peacock
12/18	Nantucket	2	fide E. Ray
12/19	Westfield	1	D. McLain
<b>American Robin</b>			
11/7	Worc. (BMB)	250+	M. Lynch#
11/7	Windsor	400	T. Gagnon
11/8, 12/3	Boston (Fens)	625, 730	K. Hudson
11/10	Westport	335	R. Heil
11/19	Mt. A.	250	R. Stymeist
11/20	Mattapan	125	G. d'Entremont
11/21	Quabbin	350	T. Gagnon
11/21	S. Falmouth	237	M. Lynch#
12/5	Pembroke	900	W. Petersen
12/6	Wayland	200+	G. Long
12/23	Maynard	300+	L. Nachtrab
12/26	Boston	5000	K. Hudson
12/28	Worcester	100+	M. Lynch#
12/31	P.I.	150	J. Berry
<b>Gray Catbird</b>			
11/8, 12/6	Nahant	3, 1	R.F. Donovan
11/10	Westport	23	R. Heil
11/20	Acoaxet	15	E. Salmela#
11/21	S. Falmouth	2	M. Lynch#
12/7	Ipswich	1	R. Heil
12/9	Salem	1	R. Heil
12/12	P.I.	2	J. Hoye#
12/19	Amherst	1	C. Read
12/19	Easthampton	1	B. Bieda
12/21	Arlington	1	K. Dorsey
<b>Brown Thrasher</b>			
11/10	Westport	2	R. Heil
11/23	W. Barnstable	1	S. + E. Miller
12/18	Nantucket	1	fide E. Ray
12/18	Medford	1	R. LaFontaine#
<b>American Pipit</b>			
11/1	Amherst	90	H. Allen
11/2	Groton	15	T. Pirro
11/2, 20	GMNWR	15, 15	S. Perkins#
11/3	W. Bridgewater	25	S. Arena
11/7	Truro	8+	B. Nikula
11/10	Granville	8	J. Weeks
11/10	Northampton	75	B. Laflay
11/11	Hadley	100+	D. Chapman
11/11	Lincoln	90	N. Soulette
11/12	Newbury	3	J. Berry
11/14	Oxford	4	P. Meleski
11/21	Plymouth	2	E. Neumuth#
11/28	Cumb. Farms	10	G. d'Entremont
12/8	Templeton	1	D. Small#
<b>Bohemian Waxwing</b>			
11/9, 12/10	P.I.	2, 1	D. + I. Jewell
11/12	S. Wellfleet	10	D. Murley#
11/14	Truro	1	G. Martin
11/25-27	Easthampton	1	S. Perkins
12/13	Yarmouthport	2	K. Hamilton
12/15	Adams	1	R. Rancatti
12/27	Truro	6	J. Young
12/29	Lancaster	1	T. Pirro
<b>Cedar Waxwing</b>			
11/10	W. Springfield	150	J. Zepko
11/14	Boxford	180	D. + I. Jewell
11/16	W. Newbury	275	R. Heil
11/19	Lexington	154	M. Rines
11/21	S. Quabbin	50	R. Lockwood#
11/21	S. Falmouth	281	M. Lynch#
11/28	Acoaxet	48	M. Lynch#
12/5	HRWMA	60	T. Pirro
12/7	Groton	50	T. Pirro
12/23	Maynard	42	L. Nachtrab
12/23	W. Newbury	175	R. Heil
12/28	Worcester	200+	M. Lynch#
12/30	Lancaster	62	R. Lockwood
<b>Orange-crowned Warbler</b>			
11/7	Dorchester	1	R. Donovan
11/10	Hadley	1	C. Holzapfel
11/10	Westport	1	R. Heil
11/12	Nahant	1	R. Heil
11/21, 27	Chilmark	1	A. Keith
11/22-25	S. Boston	1	R. Donovan#
11/27	Eastham (F.H.)	1	P. + F. Vale
11/30	Melrose	1	D. + I. Jewell
12/12	DWWS	1	L. Ferraresso
12/24	W. Newbury	1	I. Giriunas
<b>Nashville Warbler</b>			
12/5	Mattapan	1	R. Stymeist#
12/13	S. Dartmouth	1	M. Boucher
12/19	Tisbury	1	S. Whiting
<b>Yellow Warbler</b>			
11/11	Belmont	1	M. Rines
<b>Magnolia Warbler</b>			
11/1	Nantucket	1	fide E. Ray
<b>Cape May Warbler</b>			
12/18-29	W. Andover	1 m	M. Timko
<b>Black-throated Blue Warbler</b>			
11/1	Amherst	1	H. Allen
11/3	Harwich Port	1	B. Nikula
11/9	Nahant	1	R.F. Donovan
11/20-24	Falmouth	1 m	D. McDermott
<b>Yellow-rumped Warbler</b>			
11/1	Amherst	3	H. Allen
11/2	GMNWR	10	S. Perkins
11/5	P.I.	50	R. Heil
11/6	Worc. (BMB)	13	J. Liller
11/6	Concord	25	M. Rines
11/6	Granville	3	J. Weeks
11/10	Westport	27	R. Heil
11/16	W. Newbury	17	R. Heil

<b>Yellow-rumped Warbler (continued)</b>			
11/21	S. Falmouth	53	M. Lynch#
11/21	Plymouth	15	E. Neumuth#
11/21	Medford	2	R. LaFontaine
11/25	Bourne	50+	P. + F. Vale
11/26	Wellfleet	10	P. + F. Vale
12/6	P.I.	20	J. Berry
12/16	Rockport	15+	J. Berry
12/19	Amherst	3	D. McKenna
<b>Black-throated Green Warbler</b>			
11/23	Gloucester	1	N. Mann
<b>Pine Warbler</b>			
11/14	DWWS	1 imm	D. Furbish
11/17	Watertown	1	R. Stymeist
11/21	S. Falmouth	1	M. Lynch#
11/26	Wellfleet	2	P. + F. Vale
11/26	Nahant	1	R.F. Donovan
11/28	Carver	2	G. d'Entremont
12/17	Newbypt	1	R. Heil
12/18	P'town	1 m	R. Heil
<b>Prairie Warbler</b>			
11/8-11	Salisbury	1 T. + D.	Brownrigg
11/28, 12/5	Boston	1	R. Stymeist#
12/19	Arlington	1	Sa. Miller#
<b>Palm Warbler</b>			
11/3	DWWS	3	D. Furbish#
11/5	Southwick	2	S. Kellogg
11/7	S. Dart. (A.Pd.)	3	G. d'Entremont#
11/20	Truro	2	J. Paluzzi#
11/21	Lexington	1	M. Rines
11/21	Medford	1	R. LaFontaine
11/22	Eastham (F.H.)	1	D. Peacock
11/25	W. Newbury	1	R. Heil
11/27	Westborough	1	M. Faherty
12/1-16	Boston	1	R. Min, v.o.
12/18	Nantucket	1	fide E. Ray
12/24	Watertown	1	M. Rines#
<b>Blackpoll Warbler</b>			
11/1-9	Nahant	3 max	R. Heil
11/2-4	Harwich Port	1	B. Nikula
11/5	Ipswich	2	J. Berry
11/5	E. Sandwich	1	S. + E. Miller
11/5	W. Newbury	1	R. Heil
11/7	Pittsfield	1	S. Sumner
11/7	Dorchester	1	R. Donovan
11/7	E. Orleans	1	B. Nikula
11/10	Westport	1	R. Heil
11/11	Mt.A.	1	S. King
11/22	Arlington	1	S. Dombeck#
11/24-25	Watertown	1	R. Stymeist
12/19	Eastham (CBC)	1	C. Neill, M. Faherty#
<b>Ovenbird</b>			
12/6	Nahant	1	R. F. Donovan
<b>Northern Waterthrush</b>			
11/28	Arlington Res.	1	M. Rines
<b>MacGillivray's Warbler *</b>			
11/28-12/20	Boston	1 ph	R. Stymeist + v.o.
<b>Common Yellowthroat</b>			
11/6, 20, 25	Worc. (BMB)	1	J. Liller
11/28-12/16	Boston (Fenway)	1	R. Stymeist#
12/18	Nantucket	1	fide E. Ray
<b>Wilson's Warbler</b>			
11/8-12/31	S. Boston	1 m	R. Donovan
11/18-19	S. Boston	1 f	R. Donovan
<b>Yellow-breasted Chat</b>			
11/10	Westport	1	R. Heil
11/11-12	Mt.A.	1	S. King
11/12	Nahant	1	R. Heil
11/20	Acoaxet	1	E. Salmela#
11/28-12/31	Boston	1-2	R. Stymeist# + v.o.
12/5	Westport	1	M. Boucher
12/6	Nahant	1	R. F. Donovan
12/13	S. Dartmouth	1	M. Boucher
<b>Eastern Towhee</b>			
11/1	S. Dartmouth	2	M. Boucher
11/8	Nahant	1	R.F. Donovan
11/10	Westport	8	R. Heil
11/21	S. Falmouth	1	M. Lynch#
12/5	Stoneham	1	D. + I. Jewell
12/5	Bourne	1	R. Lockwood
12/5	N. Pepperell	2	G. Coffey
12/18	S. Dartmouth	3	M. Boucher
12/26	Westfield	1	D. McLain
12/26	Southwick	1	S. Kellogg
<b>Spotted Towhee * (no details)</b>			
12/29-31	N. Hadley	1	S. Sumner + v.o.
<b>American Tree Sparrow</b>			
11/11	Bolton Flats	68	R. Lockwood
11/15	Newton	50	H. Miller
11/19	Marshfield	200	G. Levandoski#
11/20	Oxford	60	P. Meleski
11/20	Worcester	60+	M. Lynch#
12/3	Concord	38	R. Lockwood
12/4	Randolph	35	G. d'Entremont
12/4	Worcester	40+	M. Lynch#
12/5	Dorchester	40	R. Stymeist#
12/11	DWWS	40	SSBC (D. Furbish)
12/14	ONWR	38	R. Lockwood
12/25	W. Newbury	35	P. + F. Vale
<b>Chipping Sparrow</b>			
11/6	Randolph	2	G. d'Entremont
11/21	Mattapoisett	1	F. Smith
12/13	Malden	1	D. + I. Jewell
<b>Clay-colored Sparrow</b>			
11/7	Westport	1	M. Sylvia
11/10-18	S. Boston	1	R. Donovan#
<b>Field Sparrow</b>			
11/1	Lexington	1	M. Rines
11/5	Melrose	2	D. + I. Jewell
11/6	Stow	4	R. Lockwood
11/7	P.I.	1	R. Lockwood
11/8	Medford	1	M. Rines
11/10	Hadley	30	C. Holzapfel
11/15	Salem	1	I. Lynch
11/26	Wellfleet	5	P. + F. Vale
12/7	Hingham	12	D. Peacock
12/12	Winchester	2	M. Rines#
12/14	ONWR	1	R. Lockwood
12/24	Quabbin (G40)	1	R. Lockwood
12/27	Truro	7	J. Young
<b>Savannah Sparrow</b>			
11/6	Concord	1	M. Rines
11/6	Ipswich	10	BBC (J. Berry)
11/7	S. Dart. (A.Pd.)	4	G. d'Entremont#
11/7	Westport	3	G. d'Entremont#
11/20	GMNWR	6	S. Perkins#
12/5	Bourne	24	R. Lockwood
12/18	S. Dartmouth	3	M. Boucher
<b>Ipswich Sparrow</b>			
11/6	N. Monomoy	6+	B. Nikula
11/7	Newburyport	1	R. Lockwood
11/13	Dorchester	1	R. Donovan#
11/14	S. Dart. (A. Pd)	1	R. Lockwood#
<b>Henslow's Sparrow * (details submitted)</b>			
12/31	GMNWR	1	G. Gorton
<b>Seaside Sparrow</b>			
11/5	P.I.	1	R. Heil
11/22	Eastham (F.H.)	4	D. Peacock
11/26	Plymouth	1	M. Faherty
12/26	Newbypt	3	R. Heil
<b>Fox Sparrow</b>			
11/1-12/15	Reports of 1-2 indiv. from 29 locations		
11/2, 10	Groton	6, 1	T. Pirro
11/3	Haydenville	3	B. Packard
11/5, 10	Lexington	1, 8	M. Rines
11/6	Worcester	4	M. Lynch#

Fox Sparrow (continued)			
11/6	Stow	4	R. Lockwood
11/8,16	Melrose	1, 5	D. + I. Jewell
11/8	Wayland	5	G. Long
11/10	Hadley	20	C. Holzapfel
11/10	Lexington	8	M. Rines
11/11	Bolton Flats	7	R. Lockwood
11/15	Lincoln	4	M. Rines
11/16	W. Newbury	3	R. Heil
11/17	Wakefield	3	D. + I. Jewell
11/18	Hardwick	5	C. Buelow
11/21	Everett	5	R. Stymeist
12/26	Westfield	1	T. Swochak
12/26	Lexington	1	R. LaFontaine
12/28	Shutesbury	2	B. Bieda
12/28	Shirley	1	T. Pirro
Lincoln's Sparrow			
11/10	Hadley	2	C. Holzapfel
11/13	Salisbury	1	P. + F. Vale#
Swamp Sparrow			
11/2	Groton	3	T. Pirro
11/7	GMNWR	12	S. Perkins
11/10	Westport	22	R. Heil
11/14	Plymouth	4	M. Lynch#
11/23	Worcester	1	M. Lynch#
11/25	Harvard	1	R. Lockwood
11/25	Newbypt	5	R. Heil
11/28	Bolton Flats	1	R. Lockwood
11/28	Northampton	1	B. Packard
12/5	Bourne	7	R. Lockwood
12/5	HRWMA	2	T. Pirro
12/9	Worcester	1	J. Liller#
White-throated Sparrow			
11/1	Wayland	40	G. Long
11/10	Westport	165	R. Heil
11/16	W. Newbury	35	R. Heil
11/21	S. Falmouth	36	M. Lynch#
12/5	Bourne	64	R. Lockwood
12/14	Boston	50	J. Berry
White-crowned Sparrow			
11/7	Dorchester	1	R. Donovan#
11/10	Hadley	1 imm	C. Holzapfel
11/10	Westport	1 imm	R. Heil
11/13	Northampton	1	S. Sumner
11/28-12/31	Boston	2 imm	R. Stymeist#
12/13-18	N. Dartmouth	1	M. Boucher
"Oregon" Dark-eyed Junco			
11/27-12/31	Easthampton	1	D. McLain + v.o.
Lapland Longspur			
11/2	GMNWR	1	S. Perkins#
11/5	Worcester	1	M. Lynch#
11/5, 11	P.I.	10, 7	S. Haydock
11/8	Westport	1	M. Boucher
11/10	Northampton	10	B. Lafley
11/13	Salisbury	1	P. + F. Vale
11/15	P'town	4	P. Trull
11/21	Brewster	10	S. + E. Miller
11/25	Newbury	33	R. Heil
11/28	Cumb. Farms	3	G. d'Entremont
12/26	Newbury	58	R. Heil
12/28	Edgartown	1	A. Keith#
Snow Bunting			
11/2, 20	GMNWR	21, 4	S. Perkins#
11/3	Rockport	70	R. Heil
11/3	Nantucket	75	A. Charder#
11/5	Granville	52	J. Weeks
11/5, 12	Boston (Logan)	2000, 3000	N. Smith
11/6	N. Monomoy	200	B. Nikula
11/7	Rowley	100	J. Berry
11/7	Concord	60	S. Perkins#
11/8	Lynn	30	R. Heil
11/8	Westport	96	M. Boucher
11/8-22	Bedford	173 max	R. Lockwood
11/9	Salisbury	500+	D. + I. Jewell
11/9	Ipswich	70	R. Heil
11/10	P.I.	200	M. Emmons
11/10	Northampton	200	H. Allen
11/10	Melrose	37	D. + I. Jewell
11/12	Newbury	400	J. Berry
11/13, 12/5	Worcester	60, 8	M. Lynch#
11/15	P'town	20	P. Trull
11/16	Groton	30	T. Pirro
11/20	Halifax	90	R. Titus
11/21	Quabbin	54	T. Gagnon
11/28	Duxbury B.	100	L. Cleveland
11/28	Acoaxet	78	M. Lynch#
12/4	Plymouth	55	M. Faherty
12/28	Truro	18+	J. Young
Dickcissel			
11/10	Westport	1	R. Heil
11/10	Hadley	1 f	C. Holzapfel
11/17-12/31	S. Boston	1	R. Donovan#
12/17	Newton	1	B. Chiasson#
12/19	Northampton	1	D. Schell
Red-winged Blackbird			
11/5	Worcester	58	M. Lynch#
11/6	Stow	12	R. Lockwood
11/7	Rowley	1 m	J. Berry
11/7	Southboro	100+	M. Lynch#
11/10	IRWS	10-12	J. Berry
11/14	Lancaster	300	G. d'Entremont
11/16	Groton	20	T. Pirro
11/19	DWWS	39	D. Furbish
11/21	Lexington	3	D. + D. Oliver
11/23	Wakefield	3	F. Vale
11/25	Easthampton	55	S. Perkins#
11/28	Acoaxet	30+	M. Lynch#
12/2	GMNWR	2	S. Perkins
12/7	Groton	25	T. Pirro
12/12	Mt. A.	1	R. Stymeist
12/15-16	Pepperell	75	M. Resch
12/18	Agawam	600	S. Kellogg
12/31	Arcadia	56	M. Lynch#
Eastern Meadowlark			
11/1	Marston's Mills	15	S. + E. Miller
11/2	GMNWR	1	S. Perkins#
11/3	DWWS	10	D. Furbish
11/7	Rowley	5	J. Berry
11/21	Barnstable	5	M. Lynch#
11/22	Eastham (F.H.)	15	D. Peacock
11/22	DWWS	35	D. Furbish
11/25	Newbury	5	R. Heil
11/25	Worcester	1	M. Lynch#
12/11	DWWS	3 SSBC	(D. Furbish)
12/18	Nantucket	4	fide E. Ray
12/18	N. Dartmouth	14	M. Boucher
12/19	Hadley	5	P. Champlin
Rusty Blackbird			
11/1	Wayland	3	G. Long
11/2	GMNWR	8	S. Perkins#
11/4	Windsor	1	R. Packard
11/6	Stow	2	R. Lockwood
11/7	Pepperell	2	M. Resch
11/9, 10	Groton	12, 2	T. Pirro
11/11	Woburn	1	M. Rines
11/11	Bolton Flats	43	R. Lockwood
11/14	Lexington	1	M. Rines
11/16	W. Newbury	1	R. Heil
11/19	Natick	18	G. Long
11/20	Mattapan	5	G. d'Entremont
11/21	Gardner	4	T. Pirro
11/25	DWWS	3	P. + F. Vale
11/27	Hadley	1	H. Allen
11/28	Bolton Flats	5	R. Lockwood
11/28	Athol	1	B. Coyle
11/28	Pittsfield (Mud Pd)	65	E. Neumuth

Rusty Blackbird (continued)			
12/6	Wayland	1	G. Long
Common Grackle			
11/2	Wakefield	175+	F. Vale
11/5	Worcester	142	M. Lynch#
11/7	Southboro	510+	M. Lynch#
11/8	Halifax	1000+	K. Anderson
11/14	Lancaster	700	G. d'Entremont
12/18	Agawam	500	S. Kellogg
Brown-headed Cowbird			
11/6	Concord	35	E. Taylor
11/14	Lancaster	100	G. d'Entremont
11/19	DWWS	1	D. Furbish
12/31	Newbypt	10	J. Berry
Baltimore Oriole			
11/12	DWWS	1	K. Vespaziani
11/13	Woburn	1	T. Mosher
11/21	Plymouth	1	E. Neumuth#
11/21	Chilmark	1	A. Keith
11/24	IRWS	1	D. + I. Jewell
11/30	Nantucket	1	E. Ray
12/5	Vineyard Haven	1	S. Saltonstall
12/19	Cambridge	1	C. Golden
Pine Grosbeak			
11/6	Worcester	1	M. Lynch#
11/13	Framingham	3	E. Taylor
12/8	Phillipston	2 m	imm D. Small#
12/23	Savoy	1	R. Rancatti
12/26	Royalston	1 m	P. + F. Vale
Purple Finch			
11/1, 22	Wayland	1, 5	G. Long
11/4	Concord	4	R. Lockwood
11/5	Worcester	8	M. Lynch#
11/6	Worc. (BMB)	2	J. Liller
11/11	Woburn	1	M. Rines
11/13	P.I.	1	P. + F. Vale
11/13	Quabbin (G40)	1	R. Lockwood
11/13-12/31	Mendon	2	D. Moffett
11/16	W. Newbury	18	R. Heil
11/16	Ipswich	3+	J. Berry
11/21	Gardner	1	T. Pirro
11/27	Worcester	1	M. Lynch#
11/28	Acoaxet	1	M. Lynch#
12/2	E. Boxford	1	J. Brown#
12/17	Newton	1 f	B. Chiasson#
12/20	Berlin	1	M. + F. Howes
Red Crossbill			
11/1, 12/3	Nantucket	47, 35	fide E. Ray
11/1	Salisbury	3	J. Soucy
11/2	Newbypt	1	R. Heil
11/5	Eastham	1	J. Sones#
11/5	P.I.	12	R. Heil
11/5-12/25	Harwich	24 max	B. Nikula + v.o.
11/6	Orleans	1	P. Donahue
11/8	Nahant	3	R. Heil
11/13	Salisbury	17	P. + F. Vale
11/13, 20	Worcester	8, 2	M. Lynch#
11/14, 12/4	P'town	1, 22	B. Nikula
11/16	Marston's Mills	3	S. + E. Miller
11/21, 12/5	Chilmark	15, 35	S. Whiting + v.o.
11/22	Ipswich	6	J. Berry
11/27	Salisbury	26	R. Lockwood#
11/28	Truro	5	J. Young
11/30	Quabbin (G39)	20	D. Small
11/30	Chatham	15	R. Clem
12/4	Brewster	8+	R. Comeau#
12/19	Williamsburg	3	G. LeBaron
12/23	E. Dennis	12	J. Askildsen
12/24	Salisbury	18	J. Berry
White-winged Crossbill			
11/1-22	Salisbury	13 max	J. Soucy + v.o.
11/3, 12/15	Yarmouth	15, 25	K. Hamilton
11/8	New Salem	1	B. Lafley
11/9	Sharon	1	R. Titus
11/14	W. Boylston	10	G. d'Entremont
11/16	W. Newbury	13	R. Heil
11/18	Rockport	5	J. Berry#
11/19	P.I.	5	S. Haydock
11/22	Pepperell	1	M. Resch
11/23	Gloucester	1	N. Mann
11/29	Lanesboro	10+	T. Collins
12/3	Hopkinton	1	S. Ranney
12/5	M.V.	45	S. Yurkus#
12/15	S. Dennis	25	G. Ralston
Common Redpoll			
11/5	Washington	30	E. Neumuth
11/6, 12/26	Gardner	8, 47	T. Pirro
11/12-13	Nantucket	200+	E. Ray
11/13, 12/7	Lexington	30, 18	M. Rines
11/13	Royalston	100	B. Coyle
11/14	P'town	85	B. Nikula
11/14	DWWS	80	D. + S. Larson
11/14	New Braintree	25	C. Below
11/15	Cambridge	20	B. Stevens
11/21	Quabbin (G37)	75	R. Lockwood#
11/21, 27	Truro	55, 17	B. Nikula
11/23	Topsfield	20	J. Berry
11/25, 12/4	Worcester	15, 50	M. Lynch#
11/27	Athol	40	D. Small
11/27	S. Athol	25	D. Small
11/28	Westport	30	M. Lynch#
11/29	Lanesboro	25	T. Collins
12/3	Concord	28	R. Lockwood
12/4	Rockport (H.P.)	21	J. Young
12/4	Plymouth	23	M. Faherty
12/5	HRWMA	50-60	T. Pirro
12/5	Worthington	23	R. Packard#
12/5	Boston	20	E. Crowley
12/5	Windsor	25	R. Packard#
12/8	W. Roxbury	30	J. Young
12/8	Templeton	50	D. Small#
12/10	P.I.	60+	D. + I. Jewell
12/19	Ipswich	117	J. Berry#
12/23	Salisbury	21	R. Heil
Hoary Redpoll * (no details)			
11/11	W. Springfield	2	T. + J. Zepko
11/12	Nahant	1 f	R. Heil
11/12	Nantucket	1	E. Ray
12/19	W. Springfield	1	J. Weeks
Pine Siskin			
thr	Mendon	50 max	D. Moffett
11/1, 12/12	Worcester	6, 3	M. Lynch#
11/1, 12/6	Natick	6, 1	G. Long
11/1-7	W. Newbury	7	R. Heil
11/2	Scituate	7	L. Burbank
11/4-05	Newton	13	B. Chiasson
11/5, 19	Wakefield	10, 6	F. Vale
11/6	Agawam	6	J. LaPointe
11/6	Mattapoisett	9	M. LaBossiere
11/7	Westwood	15	B. Wicks
11/7	Pepperell	12	M. Resch
11/7	Uxbridge	7	J. + D. Moffett
11/8	Westport	22	M. Boucher
11/11-13	New Salem	40	B. Lafley
11/12	Middlefield	19	B. Packard
11/16, 12/3	Winchester	7, 2	M. Rines
11/21	Westborough	12	M. Faherty
11/29, 12/12	Upton	9, 20	P. DeBruyn, R. Brill
12/thr	E. Boxford	6-11	J. Brown#
12/3	Hopkinton	14	S. Ranney
12/5	Chilmark	35	S. Yurkus#
12/11	Duxbury	8	C. Ladd
12/26	Royalston	75+	P. + F. Vale
American Goldfinch			
11/7	Westport	100	G. d'Entremont#
11/13	Chatham	100	B. Nikula

American Goldfinch (continued)				11/13, 21	Quabbin	15, 6	R. Lockwood
11/16	W. Newbury	115	R. Heil	11/14	Easton	9	S. Arena
Evening Grosbeak				11/14	Windsor	12	T. Gagnon
11/1	Nantucket	3	fide E. Ray	11/21	Petersham	6	G. d'Entremont#
11/4, 19	Lexington	1, 12	M. Rines	11/22	Winchester	3	M. Rines
11/4, 29	Lanesboro	2, 50	R. Packard, T. Collins	11/28	Lexington	12	M. Rines#
11/7, 12/26	Gardner	22, 22	T. Pirro	11/29	Lanesboro	50+	T. Collins
11/7	W. Newbury	8	R. Heil	12/5	HRWMA	15-20	T. Pirro
11/9	Washington	13	E. Neumuth	12/7	Athol	15	B. Coyle
11/12	Chester	12	B. Packard	12/8, 26	Royalston	50, 40	D. Small, F. Vale
11/12	Cheshire	12	R. Packard				

## Corrections to September/October Records

### Addenda

The following were omitted from Sept/Oct records:

Leach's Storm-Petrel			
9/17	Stoneham (Spot Pond)	1	R. F. Donovan
<b>Richardson's Canada Goose</b>			
10/19-24	W. Newbury	1	R. Heil
Spotted Sandpiper			
10/11-21	W. Newbury	1	R. Heil
Forster's Tern			
9/17	Chatham	27	R. Heil
Sharp-tailed Sparrow species			
10/3	Newbypt	20	R. Heil

### Corrigenda

The following records were incorrectly reported:

Osprey			
10/6	W. Newbury	13	R. Heil
Northern Harrier			
10/6	W. Newbury	5 imm	R. Heil
Sharp-shinned Hawk			
10/6	W. Newbury	51	R. Heil
Cooper's Hawk			
10/6	W. Newbury	2	R. Heil
Red-tailed Hawk			
10/6	W. Newbury	23	R. Heil
American Kestrel			
10/6	W. Newbury	31	R. Heil
Merlin			
10/6	W. Newbury	3	R. Heil
Peregrine Falcon			
10/3, 7	P.I-Newbypt.	8, 8	R. Heil

### Black-legged Kittiwake

10/4, 18	Rockport (A.P.)	200, 127	R. Heil
Pine Grosbeak			
10/6	W. Newbury	4	R. Heil
10/7	Amesbury	5	R. Heil

The corrected records are as follows:

Pied-billed Grebe			
10/6	W. Newbury	4	R. Heil
10/7	Amesbury	5	R. Heil
Osprey			
10/11	W. Newbury	13	R. Heil
Northern Harrier			
10/11	W. Newbury	5 imm	R. Heil
Sharp-shinned Hawk			
10/11	W. Newbury	51	R. Heil
Cooper's Hawk			
10/11	W. Newbury	2	R. Heil
Red-tailed Hawk			
10/11	W. Newbury	23	R. Heil
American Kestrel			
10/11	W. Newbury	31	R. Heil
Merlin			
10/11	W. Newbury	3	R. Heil
Peregrine Falcon			
10/3	P.I-Newbypt.	8	R. Heil
Black-legged Kittiwake			
10/4, 18	Rockport (A.P.)	20, 127	R. Heil

The following was reported in error

<b>Le Conte's Sparrow *</b>			
10/22	W. Bridgewater	1	W. Petersen

## HOW TO CONTRIBUTE BIRD SIGHTINGS TO BIRD OBSERVER

This publication prints monthly compilations of reports of birds seen in Massachusetts and offshore waters. Space does not permit the inclusion of all material submitted. However, bird sightings sent to Bird Observer are archived 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, 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.

LIST OF ABBREVIATIONS

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

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

# ABOUT THE COVER

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## Wood Duck

Arguably the most beautiful of all North American ducks, the Wood Duck *Aix sponsa* has recovered from near extinction at the beginning of the twentieth century to become one of our most abundant ducks. About half the size of a Mallard, and about the size of the Hooded Merganser with which it competes for nesting cavities, the male Wood Duck is unmistakable. His pronounced crest and glossy green head slashed with white, contrasting with a white throat and face pattern, buffy flanks, reddish-purple breast delicately spotted buff, and shining green back and rump, are all punctuated with a red bill and large, gaudy, bright red eye — a truly awesome sight. The female is drab gray and brown but has a pronounced crest and white teardrop-shaped patch around her eye. The male in eclipse plumage resembles the female but lacks the pronounced eye patch. In flight Wood Ducks are distinctive. They have long tails and proportionally broad wings, both presumably adaptations for flight among trees, and appear large-headed.

Our knowledge about Wood Ducks dates back to Catesby's 1731 *Natural History of Carolina, Florida and the Bahama Islands*; earlier, American Indians featured Wood Duck motifs on pottery and ceremonial pipes. Originally designated *Anas sponsa* by Linnaeus in 1758, the Wood duck has since been placed in seven genera at one time or another, and has acquired 23 common names, including "Summer Duck" and "Carolina Duck." Its sole congener is the Mandarin Duck *A. galericulata*.

Wood Ducks breed throughout the territorial USA and southern Canada and along the west coast. In the East they breed as far north as Newfoundland, and most of the population north of the Carolinas is migratory, wintering as far south as Mexico. However, a few birds winter along the immediate coast as far north as Cape Cod. In Massachusetts, Wood Ducks are considered a common resident and migrant that arrive in early March, and depart in October and November.

Wood Ducks are seasonally monogamous and in the southern USA routinely produce two broods. They usually breed first at one year of age. They live primarily in deciduous forest ecosystems, and are found predominantly in areas heavily populated with humans. They nest in more wetland habitats than any other North American duck, e.g., creeks, rivers, ponds, lakes, swamps, and marshes. They have benefited from the recovery of beavers in North America, and will utilize farm ponds and ditches. In winter they prefer to roost in shallow water with low cover. Males molt into eclipse plumage (basic plumage) earlier than any other North American duck, and molt again into nuptial plumage (alternate plumage) in the fall, six or seven months before nesting. Courtship and pairing begin in the fall and continue until spring. Females give courtship calls that attract groups of males and ritualized displays of amazing variety follow. Males whistle and give *ji-ihb* calls and up to 21 identifiable displays, the female responding with up to 11. On the water displays include bill-jerks, bill-jabs, chin-lifting, wing and tail flashing, rushing, and turn-the-back-of-the-head accompanied by

*jib...jib...jib* calls. Males utter *pet peet* calls, and have alarm calls described as *hoo eeh* or *cr-r-e-ek*. The female flight call has been described as *oo-eeek*.

Wood Ducks nest in natural cavities or in nest boxes. They prefer nesting in live trees and enclosed cavities with side entrances. Their small size may be an adaptation for nesting in Pileated Woodpecker holes. The nest cavity is often lined with wood chips and down. In eastern Massachusetts Wood Ducks nest mostly in nest boxes, but in the western sections of the state mostly in natural cavities in swamps. The usual clutch size is 10-15 dull white eggs, with clutches of up to 50 eggs resulting from the common Wood Duck practice of "egg-dumping," where several (or many) females may lay eggs in nests that are not their own. The incubation period is four to five weeks with the female doing all the incubation. The young remain in the nest for about a day and then use their sharp claws to climb out of the cavity. The female calls the young from the nest with notes of increasing frequency. The young routinely drop and flutter to the ground without injury from heights of up to 50 feet, and have been reported to fall over 250 feet! Females have been reported to carry chicks from the nest to water on their backs or in their beaks, but this is very rare or apocryphal. The female stays with the young and may give wildly splashing distraction displays to lead potential predators from her chicks. The young can fly in about two months.

Wood Ducks dabble on the water surface, tip up, and may dive, propelling themselves under water by flapping partially open wings. They can swim underwater at speeds of more than two miles per hour, and can run on land at speeds up to seven miles per hour, making them the fastest of all North American ducks. They tend to feed in small flocks of up to a dozen, and seldom join flocks with other duck species. However, outside the breeding season they may congregate at communal roosts with up to 5000 birds. They eat a wide variety of plant and animal food, including acorns, seeds, berries, grain, rice, and aquatic and terrestrial insects.

Wood Ducks face many perils. They must compete for nesting cavities with, or are vulnerable to nest predation from, squirrels (including flying squirrels), raccoons, opossums, snakes, owls, flickers, and honeybees. They often must contest nest boxes with starlings. They historically have nested in areas with high human populations, and have suffered from habitat loss due to swamp drainage for agriculture or construction, deforestation that reduces the number of natural cavities, and hunting pressure. At the turn of the nineteenth century, Wood Ducks had been pushed to the threshold of extinction, largely from year-round and market hunting, exacerbated by habitat destruction. By 1912 all of the New England states had a closed season on Wood Ducks, and hunting was closed federally from 1918-1941. They responded with a remarkable comeback to the point where today they are the third most harvested duck in the USA after the Mallard and Green-winged Teal. Their comeback has suffered setbacks, however. The hurricane of 1938 reduced the breeding population in some areas of the east by an estimated 50 percent, due largely to the reduction in the number of available cavity trees. Wood Ducks are slow to reinvade areas from which they were extirpated because their site-faithful tendency makes them poor pioneers. Despite these heavy hunting pressures, nest-site competition and predation, and habitat destruction, Wood Ducks have recovered to become one of our most common ducks. They are the

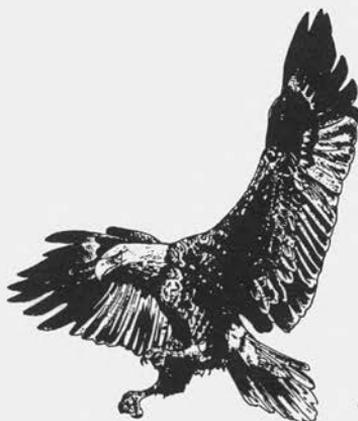
supreme generalist — highly adaptable to the vagaries imposed by human pressures. This adaptability has been the key to their recovery in the past and presumably the hope for this magnificent duck in the future.  *William E. Davis, Jr.*

## About the Cover Artist

Barry Van Dusen, a wildlife artist and illustrator based in Princeton, Massachusetts, frequently contributes his insightful bird drawings to *Bird Observer*. Some of Barry's art will be appearing in "A Passion for Birds, The Art of James Coe and Barry Van Dusen," May 5-27, at Massachusetts Audubon's South Shore Regional Center in Marshfield, Massachusetts. For more information, call the Center at (781) 837-9400. Barry also manages production of the North American Birds Calendar 2001 for the Massachusetts Audubon Society. He is working on the cover for a forthcoming issue of *Birdwatcher's Digest*, and is contributing plates to *Birds of Peru* (Princeton University Press 2003).

## Midwinter Eagle Survey

State Ornithologist Brad Blodget has released final figures for the 2000 Midwinter Bald Eagle survey. A total of 60 Bald Eagles and 1 Golden Eagle were recorded in the Bay State on or about the survey target date of January 7. Forty-seven adult and 13 immature Bald Eagles comprised the total. The birds were distributed across the state with 26 eagles reported at Quabbin Reservoir, 11 on the Connecticut River, 5 on the Merrimack River, 4 at Assawompsett Pond in Lakeville, 3 at Silver Lake in Pembroke, two on the Housatonic River in Sheffield and 1 at Wachusett Reservoir in Boylston. Two eagles were counted near Great Herring and White Island Ponds in Plymouth, 2 at Webster Lake, 2 at the Parker River National Wildlife Refuge in Newbury and single birds at Winnecunnet Pond in Norton and Cobble Mountain Reservoir in Blandford. The 60-bird figure compares favorably with the previous 10-year average of 62 eagles censused during the count period. A record 76 Bald Eagles were recorded during the 1998 survey. The year 2000 Midwinter Bald Eagle Survey marks *MassWildlife's* twenty-second year of coordinating the effort in the Commonwealth. During that time wintering eagle numbers have more than doubled in Massachusetts. Nationwide the eagle population has enjoyed a similar recovery with more than sixteen thousand eagles documented in the lower forty-eight states in January of 1999.



(Reprinted with permission of Bill Davis, *MassWildlife News* 2/25/00, #2)

# AT A GLANCE

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February 2000



*Digital image by David M. Larson*

A quick glance at the first photo quiz bird of the new millennium at once suggests a hawk of some sort. The apparent size (relative to what appears to be a telephone pole), bulk, tail shape, and “fingered” primaries of the bird reinforce the impression of a hawk, along with the fact that certain hawks often perch on utility poles!

Proceeding on the assumption that the bird is indeed a hawk, the next task is to place the bird in one of the genera of diurnal raptors commonly found in Massachusetts. To assist in this process, some fundamental distinctions between these genera will be reviewed, since most of the hawks in the Commonwealth (in fact in North America) belong in the genus *Buteo*, *Accipiter*, or *Falco*.

Buteos (e.g., Red-shouldered, Broad-winged, Red-tailed, and Rough-legged hawk) are generally large, chunky, broad-winged species with relatively short, fan-shaped tails. They are often seen soaring in lazy circles in the sky or sitting quietly on exposed perches at field edges or along roadsides while looking for small rodents. Red-shouldered and Broad-winged hawks also regularly forage under the forest canopy. Accipiters (e.g., Sharp-shinned, Cooper’s, and Northern Goshawks) are characterized by having long, maneuverable tails, relatively short, rounded wings, small heads, and a flap-and-glide flight style. When perched, accipiters often sit in the middle of a tree rather than in the open, and ordinarily they rely on stealth and surprise when hunting birds (their preferred prey), instead of rapid aerial pursuit like falcons. Falcons (e.g., American Kestrel, Merlin, Gyrfalcon, and Peregrine Falcon) are more streamlined than either buteos or accipiters and have rather long, pointed wings (usually with a distinct bend at the “elbow”) and fairly long, slender tails. With the exception of the little

American Kestrel, falcons typically rely on their strong, open-air flying ability to pursue and strike down their prey while on the wing.

The Northern Harrier, which is not in one of these genera, is also a common Massachusetts raptor; however, it can be eliminated from consideration because the mystery bird lacks the conspicuous white rump patch of a harrier. Similarly, the finely banded tail of the pictured bird serves to remove both Golden and Bald Eagle from consideration. Eliminating the Osprey is slightly more difficult, yet a discerning look at the portion of the bird's head just visible above the right wing reveals a uniformly dark nape and top to the head – areas that would be whitish in an Osprey. Also, the bird fails to give the very dark appearance typical of an adult Osprey, or the spangled look of a juvenile, with its prominently fringed wing coverts, scapulars, and back feathers. By process of elimination the bird has to be a *buteo*, *accipiter*, or falcon.

Keeping the features summarized above in mind, the pictured bird appears most like a *buteo* for several reasons. First, it was perched on a pole. Second, it has a rather short, fan-shaped tail which shows well as the bird takes flight. And third, the wings are quite broad (best judged by the bird's left wing) and are distinctly patterned on the under-primary coverts (in the "wrist" area). Clearly, the wings and tail are too broad and the wings are not pointed enough to be those of a falcon. Similarly, the length and shape of the tail are wrong for an *accipiter*; also, an *accipiter* would not have the strongly marked greater primary coverts on the underwing shown by the bird in the picture. The hawk has to be a *buteo*.

Fortunately the picture provides a clear view of the upper tail — a critical feature in correctly aging the bird. If the bird were in adult plumage the distinctive, alternating black-and-white tail bands of a Red-shouldered or Broad-winged Hawk would be obvious. Likewise, the base of the tail would be more extensively white if the bird was a light morph Rough-legged Hawk of any age; a dark Rough-leg would show solidly dark underwing linings. Since the bird shows a uniformly, finely barred tail, it is safe to assume that the hawk in the photograph is a juvenile *buteo*.

At this point, identification becomes more straightforward. The combination of a fairly prominent "wrist mark" created by the dark underprimary coverts, the *hint* of a dark patagial mark visible on the leading edge of the left wing, and the contrasting, pale outer portion of the right upperwing all suggest Red-tailed Hawk. When these features are combined with the apparent bulk of the bird, the width of its wings, amplitude of its tail, and the fact that it was sitting on a pole, identification of the *buteo* as a Red-tailed Hawk (*Buteo jamaicensis*) can be assured.

Red-tailed Hawks are common, year-round residents throughout Massachusetts, including urban city parks, wherever there are open areas for them to hunt small rodents. Red-tails are particularly numerous during spring and fall migration. The juvenile Red-tailed Hawk in the picture was photographed at the Daniel Webster Wildlife Sanctuary in Marshfield, MA. 

Wayne R. Petersen

## AT A GLANCE

Photograph by Carole D'Angelo



Can you identify this bird?

Identification will be discussed in next issue's AT A GLANCE.

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