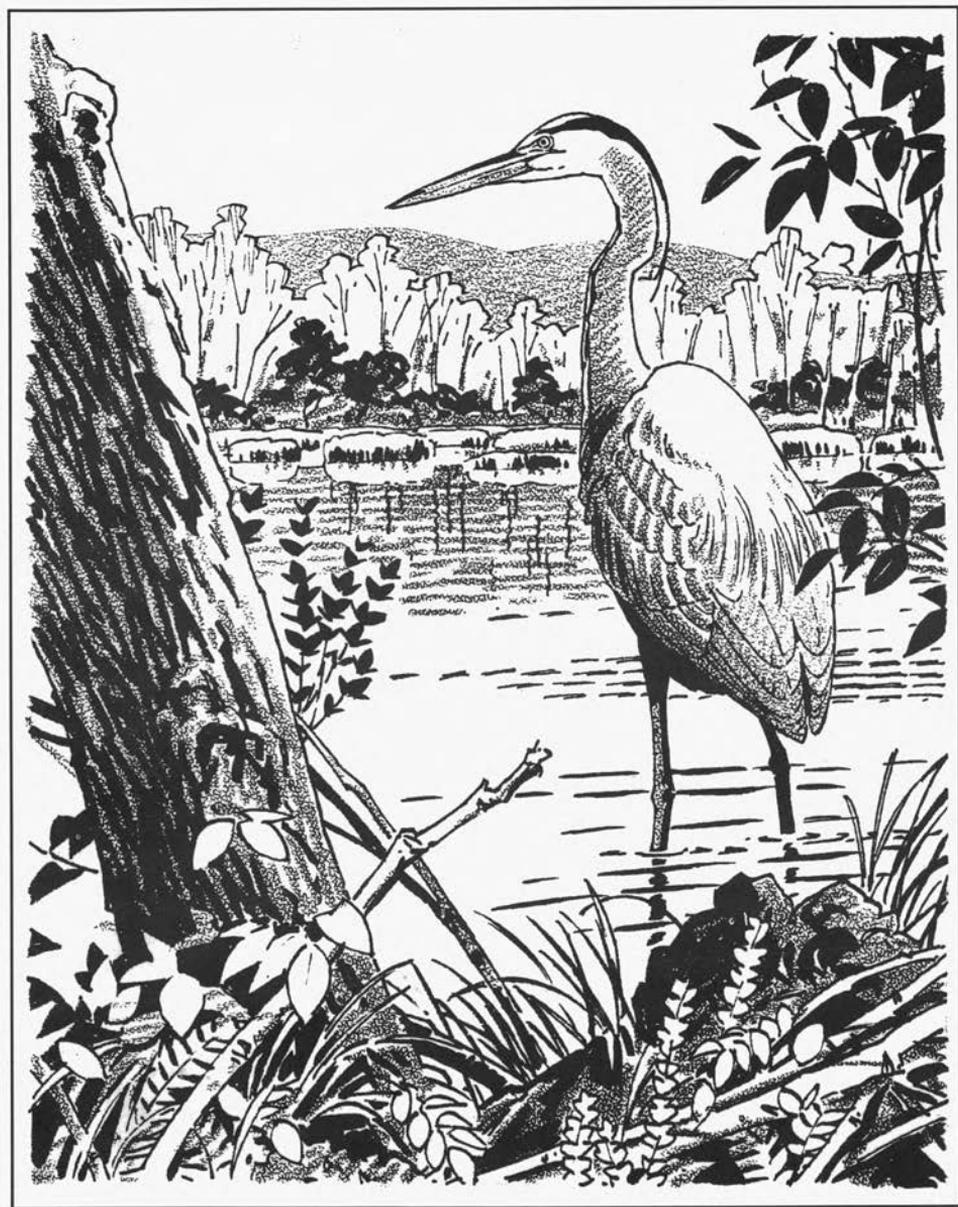


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CONTENTS

MODELING THE POTENTIAL IMPACTS OF CLIMATE CHANGE ON THE SUMMER DISTRIBUTIONS OF MASSACHUSETTS PASSERINES	<i>Jeff Price</i>	224
SUNBATHING BY BLACK AND TURKEY VULTURES AND A GREAT WHITE HERON	<i>William E. Davis, Jr. and Jerome A. Jackson</i>	231
SEARCHING FOR SEABIRDS IN ALL THE WRONG PLACES: THE JOY OF FINDING PELAGICS INLAND	<i>Mark Lynch</i>	237
YOUNG BIRDERS		
From Rhode Island	<i>Tom Seiter</i>	240
	<i>Peter Capobianco</i>	242
POCKET PLACES		
Wildwood Cemetery and Horn Pond Brook, Winchester	<i>Marjorie W. Rines</i>	244
HOT BIRDS		245
YARD BIRDS		246
FIELD NOTES		
The Subjective Effect of a Desirable Visual Stimulus on Exhaustion: Sighting of a Harris's Sparrow (<i>Zonotrichia querula</i>) in Amherst, Massachusetts 5/14/2000	<i>Mark Lynch</i>	248
A Tale of Urban Red-tails	<i>Lorraine Kaplan</i>	250
ABOUT BOOKS:		
Looking Back	<i>Wayne R. Petersen</i>	252
BIRD SIGHTINGS: March/April 2000 Summary		256
ABOUT THE COVER: Great Blue Heron	<i>William E. Davis, Jr.</i>	275
ABOUT THE COVER ARTIST: Barry Van Dusen		276
AT A GLANCE	<i>Wayne R. Petersen</i>	277
Cover Illustration: Great Blue Heron by Barry Van Dusen		

Corrigendum: In the article, Birding the Myles Standish State Forest in Plymouth, by Glenn d'Entremont (*Bird Observer*, June, 2000, p. 172) the sentence below should read: "Northern Harrier, . . . are birds that have *been encountered* on rare occasions over the past fifteen or so years."

Modeling the Potential Impacts of Climate Change on the Summer Distributions of Massachusetts Passerines

Jeff Price

Introduction

The Earth's climate is changing. According to the World Meteorological Organization (1999), the 1990s was the warmest decade, and the 1900s the warmest century of the last 1000 years. Of the more than 100 years for which instrumental records are available, 1998 was the warmest year on record, and seven of the top ten warmest years occurred in the 1990s. Even 1999, largely expected to be cooler than average due to the effects of La Niña, was the fifth warmest year on record and the twenty-first year in a row where the average global surface temperature was above normal. The annual global mean temperature is now 1.3°F (0.7°C) above that recorded at the beginning of the century. Limited data from other sources indicate that the global mean temperature for the twentieth century is at least as warm as any other period since approximately 1400 A.D. (Intergovernmental Panel on Climate Change [IPCC] 1996).

Water vapor, carbon dioxide (CO₂) and some trace gases in the Earth's atmosphere act much like the glass in a greenhouse, helping to retain heat by absorbing infrared radiation. This greenhouse effect acts to keep the Earth's surface temperature significantly warmer than it would otherwise be. Compared with preindustrial times, there have been significant increases in the amount of CO₂, methane (CH₄), and nitrous oxide (N₂O) in the atmosphere (IPCC 1996), leading to an enhancement of the natural greenhouse effect. Increases in these greenhouse gases can be attributed largely to human activities including the burning of fossil fuels and land use changes (such as deforestation). This information, in part, led to the IPCC (1996) statement that "the balance of evidence suggests that there is a discernable human influence on global climate." The increases in greenhouse gases (past and projected), coupled with the length of time these gases remain in the atmosphere, are expected to cause a continued increase in global temperatures. Models estimate that the average global temperature, relative to 1990 values, will rise by 3.6°F (range 1.8°F - 6.3°F; 2°C, range 1°C - 3.5°C) by the year 2100 (IPCC 1996).

Warming due to increases in greenhouse gases is expected to be even greater in some areas, especially land areas in the Northern Hemisphere. For the northeastern United States, models project an annual average temperature increase of between 5°F and 10°F (2.8°C - 5.6°C; Vegetation/Ecosystem Modeling and Analysis Project [VEMAP] 2000). Many climate models also project an increase in evaporation leading to some increases in precipitation but, when combined with temperature increases, to overall declines in soil moisture. This could lead to reductions in runoff and possibly lead to reduced river flows and lower lake levels (USEPA 1997). These changes could have an effect on Massachusetts vegetation as well. Some models estimate that thirty to sixty percent of the state's hardwood forests could ultimately be replaced by a mix of pines and hardwoods (*op. cit.*). Some of the species that may be

extirpated include Sugar Maple, Yellow Birch, hemlock and beech (Davis and Zabinski 1992).

The summer ranges of birds are often assumed to be tightly linked to particular habitats. This is only partially true. While certain species are usually only found in certain habitats (e.g., Kirtland's Warbler breeds in Jack Pines), others are more flexible in their habitat use. Species found in a particular habitat type throughout their summer range may not be found in apparently equivalent habitat north or south of their current distribution. Birds are also limited in their distributions by their physiology and the availability of food. The link between physiology and the winter distributions of many species is well known (Kendeigh 1934; Root 1988a, 1988b); recent research shows that physiology also plays a strong role in limiting summer distribution (Dawson 1992; T. Martin, *pers. comm.*). While habitat selection, food availability, and competition may all play a role in influencing the local distribution of a given bird species, looking at a species' overall distribution often yields different results. Building on earlier work that found that many winter bird distributions are associated with climate variables (Root 1988a, 1988b), this study examines the association between summer bird distributions and climate and how these distributions may change with climate change.

Ultimately, the greatest impact on wildlife and vegetation may not be from climate change itself, but rather from the rate of change. Given enough time, many species would likely be able to adapt to shifts in the climate. However, the current projected rate of warming is thought to be greater than has occurred at any time in the last 10,000 years (IPCC 1996). This rate could lead to alterations in Massachusetts avifauna.

Methods

To determine how the summer distributions of birds might change, it is first necessary to look at whether there is any association between bird distributions and climate. If an association exists, then an examination of projected future climates can be used to see how bird distributions might change. I used logistic regression to develop models of the association between bird distributions (from Breeding Bird Survey data) and eighteen climate variables. These climate variables included average seasonal temperature and precipitation, temperature and precipitation ranges, extreme values (e.g., temperature in the hottest and coldest months, precipitation in the wettest and driest months) and combinations (e.g., precipitation in the hottest month, temperature in the driest month). The climate variables used in these models act as surrogates for the many factors that may limit a species' distribution, including physiology, habitat, and food availability and are similar to those used in other bioclimatic studies. The models that were developed for this study were then checked to see how well they predicted the occurrence of a species at an independent location (statistically validated). The models were also checked to see how well the predicted species distribution map (Fig. 1B) matched a map of the actual distribution (Fig. 1A) based on similar bird data (Price et al. 1995). The results indicated that at least a portion of the summer distributions of many North American birds can be modeled quite well based on climate alone.

The next step was to examine how bird distributions might change in response to a changing climate. For this study I used the climate projections from the Canadian Climate Center's General Circulation Model (CCC-GCM2). This model projects what the average climate conditions may be once CO₂ has doubled from pre-industrial levels, sometime in the next 75 to 100 years, and is one of the standard models used in impact analyses. The differences between the modeled current climate and the modeled future 2xCO₂ climate, both derived from the CCC-GCM2, were then applied to the original climate variables used in developing the bird-climate models. This was done in order to correct for some of the potential errors in the climate change model itself and is a standard practice in climate change impact studies (versus simply using the model's projection of future climate). For example, for a given point, the difference in average summer temperature between the current and future (both model-derived) climate may be +2°C. This value is then added to the actual average summer temperature at that point to estimate what the climate at that point may be with a doubling of CO₂. All of the bird distribution models were run using the 2xCO₂-derived climate variables. The combined bird-2xCO₂ climate models were then used to create maps of the projected summer distributions of many North American birds (see Figure 1C for an example). A complete explanation of the methods used to develop the models and maps has been published elsewhere (Price 1995, Price in press).

Distributional models and maps have been developed for almost all passerine bird species. While the results of the models cannot be used to look at the fine points of how a given species' distribution might change, they can provide an impression of the direction and potential magnitude of the change. The following list of changes to Massachusetts avifauna was prepared by comparing the maps of projected summer bird ranges with the maps and information found in *Birds of Massachusetts* (Veit and Petersen 1993).

Results

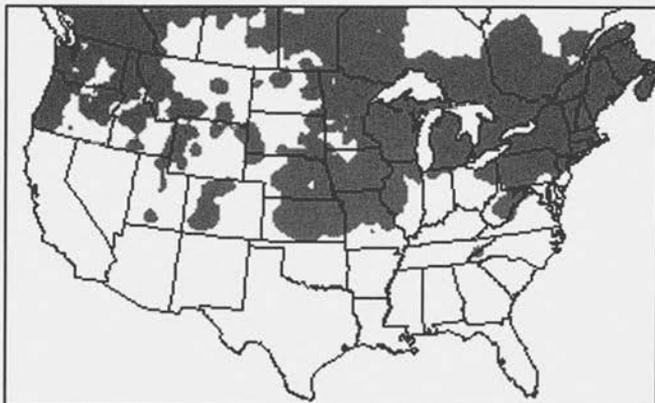
Species that may be extirpated as summer residents in Massachusetts

Olive-sided Flycatcher, Yellow-bellied Flycatcher, Alder Flycatcher, Willow Flycatcher, Least Flycatcher, Tree Swallow, Bank Swallow, Cliff Swallow, Red-breasted Nuthatch, Winter Wren, Blue-headed Vireo, Nashville Warbler, Chestnut-sided Warbler, Magnolia Warbler, Black-throated Blue Warbler, Yellow-rumped Warbler, Black-throated Green Warbler, Blackburnian Warbler, Northern Waterthrush, Mourning Warbler, Hooded Warbler, Canada Warbler, Vesper Sparrow, Savannah Sparrow, Swamp Sparrow, White-throated Sparrow, Dark-eyed Junco, Bobolink, Rusty Blackbird, Purple Finch, Pine Siskin, and Evening Grosbeak.

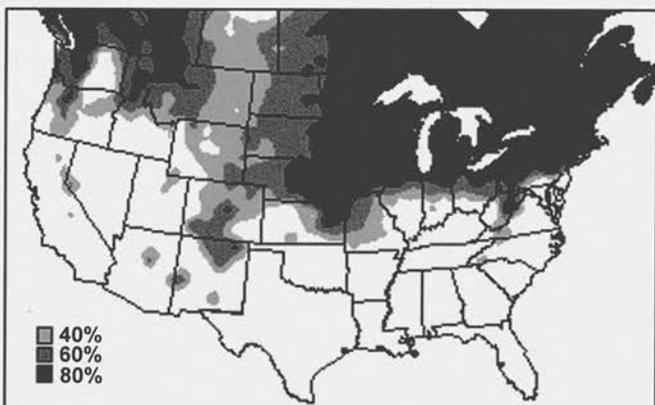
Facing: Figure 1. **A.** Map depicting the distribution of Black-capped Chickadee as detected by the Breeding Bird Survey. This map is based on the one found in Price et al. (1995). **B.** Map depicting a model of the current distribution of Black-capped Chickadee based solely upon the climate of 1985-1989. Scale represents the probability of the occurrence of the species; shaded areas depict the distribution of the species. **C.** Map depicting the possible distribution of Black-capped Chickadee under the doubled CO₂ climate conditions projected by the CCC-GCM2. Scale represents the probability of the species' occurrence; shaded areas depict the distribution of the species.

Black-capped Chickadee

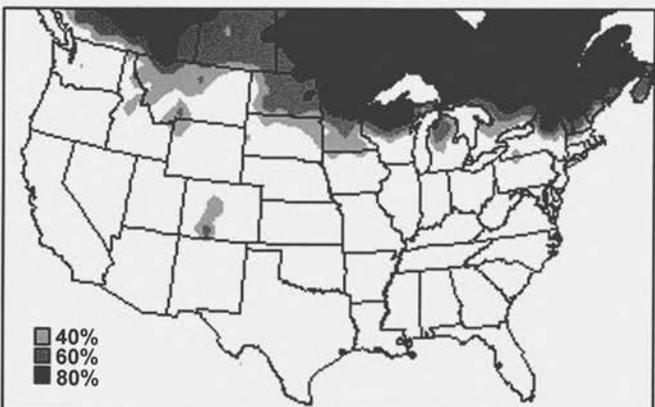
A. Actual Distribution (based on BBS data)



B. Model Distribution (1985 - 1989 climate)



C. Model Distribution (2xCO₂ climate)



Species whose summer range in Massachusetts may contract

Black-capped Chickadee, House Wren, Warbling Vireo, Blue-winged Warbler, Yellow Warbler, American Redstart, Rose-breasted Grosbeak, Song Sparrow, and House Finch.

Species whose summer range in Massachusetts may expand

Acadian Flycatcher, Horned Lark, Purple Martin, Carolina Wren, Northern Mockingbird, White-eyed Vireo, Yellow-throated Vireo, Pine Warbler, Prairie Warbler, Cerulean Warbler, Prothonotary Warbler, Louisiana Waterthrush, Yellow-breasted Chat, Grasshopper Sparrow, and Orchard Oriole.

Species whose future range may include Massachusetts

Carolina Chickadee, Loggerhead Shrike, Yellow-throated Warbler, Kentucky Warbler, Summer Tanager, Blue Grosbeak, and Dickcissel.

Discussion

These lists are not all-inclusive, since the results obtained from the models of some species were not adequate to assess how their ranges might change. Nor do the lists include those species whose ranges may undergo little change. Finally, these lists are based on the output from a single, commonly used climate model. There are many different models, and the results vary between them. While the magnitude of the temperature increase is somewhat similar between models, the projected precipitation changes are often different. The use of output from different climate models may therefore yield somewhat different results. In addition, the geographic scale of these models, like those of the underlying climate change model, is quite coarse. As such, the models are unable to take into account localized topographic changes and the possible existence of suitable microclimates — along rivers, for example. Therefore, some of the species projected to be extirpated from an area may be able to persist if a suitable microclimate is available, especially in higher montane areas, on north facing slopes, or in riparian areas.

Projected sea-level rise could also impact Massachusetts avifauna. In many areas of the state sea levels are already rising, mostly due to land subsidence. By the year 2100, models project the sea level at Cape Cod to have risen between ten and forty inches, with a fifty percent probability of a twenty inch rise (USEPA 1997). This could lead to increased erosion of migratory bird staging and breeding areas. Coastal wetlands could also be inundated leading to greater losses of this avian habitat. In some areas these wetlands might be able to shift inland, depending upon the rate of change and what barriers exist.

How quickly these distributional changes might occur is unknown. The rate of change will largely depend on whether the limits to a given species' distribution are more closely linked with climate, vegetation, or some other factor. The rate of change will also likely be tied to the rate of change of the climate itself. If the climate changes relatively slowly, then species may be able to adapt. However, changes could occur relatively quickly. In a pilot study I found that the average latitude of occurrence of forty-three percent of the warblers has already shifted significantly farther north in the last twenty years, by an average distance of greater than forty-

three miles (70 km). In contrast, only three species (6 percent) were found significantly farther south. In most of the remaining warbler species, the latitudinal change showed a northward trend, but not enough to be statistically significant (Price, unpublished data).

Shifts in the distributions of individual species are only part of the story. It is unlikely that the ranges of coexisting species will shift in concert. Bird communities, as we currently know them, will probably look quite different in the future. As species move, they most likely will face new prey, predators, and competitors. So-called optimal habitats may no longer exist, at least in the short term. The potential rates-of-change of birds and the plants that shape their habitats are often quite different. While most birds may be able to respond quickly to a changing climate, the ranges of plants may take from decades to centuries to move (Davis and Zabinski 1992).

Do changes in bird distributions even matter? Ignoring aesthetic and stewardship issues (both important), there are still cultural, economic and ecological reasons to be concerned about changes in bird distributions. For example, how will Massachusetts citizens react to the replacement of their Yankee state bird by a southern interloper? True, many people will not be able to tell the two species apart but they may notice the decidedly southern accent of the new species. Birdwatching also contributes to Massachusetts' economic health. Watching and feeding wildlife (primarily birds) contributed more than \$595 million to Massachusetts' economy in 1996 (US DOI 1997). Estimating how changes in bird distributions might affect the economics of watching and feeding birds is difficult. Although some birdwatchers might adjust to changes in distributions and diminished species richness, there could also be changes in the amount of money spent watching wildlife in Massachusetts as people travel elsewhere to see the birds.

Birds are critical components of their ecosystems. The ecological services provided by birds include, but are not limited to, seed dispersal, plant pollination, and pest control. Their role in the control of economically important insect pests should not be underestimated. Birds have been known to eat up to ninety-eight percent of the overwintering Codling Moth (*Cydia pomonella*) larvae in orchards (Kirk et al. 1996), and several species of warblers are thought to be largely responsible for holding down numbers of Spruce Budworm (*Choristoneura fumiferana*) larvae, eating up to eighty-four percent of the non-outbreak larvae (Crawford and Jennings 1989).

In summary, a high probability exists that climate change could cause changes in the distributions of birds. Even a relatively small change in average temperature could impact bird distributions within the state. These changes could occur (and probably are occurring) relatively quickly. While these changes may have some ecological and, possibly, economic effects, the magnitude of these effects is unknown. 🦋

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Sunbathing by Black and Turkey Vultures and a Great White Heron

William E. Davis, Jr. and Jerome A. Jackson

Sunbathing, or sunning, occurs commonly in a diversity of birds. Recognition of the sunbathing phenomenon dates back at least to Audubon (1831) who wrote: "The Heron when warming itself in the sun will sometimes drop its wings several inches as if they were dislocated." A list of birds observed sunbathing (Simmons 1986) includes more than 200 species from thirty-one nonpasserine and twenty-four passerine families. As might be expected from such an array of birds, sunning postures are diverse. Spread-wing postures are common among raptors. Delta-wing postures (where partially opened wings droop with wing tips touching, forming an inverted delta shape) are common among herons. Small songbirds often lie prostrate with wings spread and feathers ruffled, or may raise one or both wings, holding it or them extended like a flag. Simmons (1986) associates increasing intensity levels of sunning with several distinct postures: simple sunning, wings-down, lateral, raised-wing, and spread-wing — categories that only begin to suggest the continuum of postures adopted by sunning birds.

Why do birds sunbathe and perform the often elaborate contortions involved? The answers to this question are nearly as diverse as the birds that perform them. Some birds, such as cormorants and anhingas, may sunbathe to dry wet feathers. Both New World vultures (now known to be related to storks) and Old World vultures (related to hawks and eagles) often expose spread wings to the morning sun. Some have suggested that this warms the bird after a cold night, but we suggest that it may also serve to dry the dew-dampened feathers of the birds. These birds typically roost in the open, and even a thin layer of moisture on the feathers would increase wing loading and hence decrease the bird's flight efficiency.

Other, sometimes more complicated reasons for sunning have been proposed. It has been suggested that sunning may facilitate the bird's production of vitamin D, which is needed for calcium metabolism. Precursor molecules of vitamin D originate in the preen gland, and are spread onto feathers during preening. The evidence against this mechanism for producing vitamin D appears to be greater than the evidence in its favor (Kennedy 1968), but the case is still open. In a review of the literature, Kennedy (1969) enumerated other possible reasons. Is there pleasure associated with sunbathing? Does the sunlight increase the activity of ectoparasites and thus make it easier for the bird to find and remove them? Does sunbathing increase preen gland secretion and thus aid in feather care? What is the possible connection between molting and sunning?

There is strong evidence that in some situations the sunning posture may result in heat loss — a rather counterintuitive suggestion — but a plausible one for birds that typically live in open habitats. Extension of the wings results in increasing surface area through which excess body heat can be lost by convection (Arad et al. 1989,

Eliassen 1963). Hauser (1957) classified this as compulsory sunbathing to contrast it to the voluntary sunbathing associated with sunning for warming or other reasons. Large raptors and other large birds often assume a spread-wing posture facing the sun when they are experiencing heat stress and are panting to aid in cooling (Cade 1973).



Figure 1. Immature Turkey Vulture, photograph by WED

Clearly, sunbathing is performed by birds under a wide variety of circumstances and stimuli, and hence is a complex phenomenon that may have a variety of functions. What follows is a description of four instances of sunbathing by birds — two that William Davis (WED) recorded in Florida, one that Jerome Jackson (JAJ) recorded in Mississippi, and another that he recorded in Florida. Three involved warming, and the other probable heat loss.

Turkey Vulture (*Cathartes aura*). In March 1996, near Monroe Station in the Florida everglades, WED photographed a Turkey Vulture in full spread-wing posture, including a fully fanned tail (Figure 1). It was midmorning, and the sun was full on the vulture's back. In March 1998, JAJ observed an adult Turkey Vulture from 8:00 a.m. to 10:00 a.m. as it sunned atop a dead stub in Everglades National Park, Florida. During this time the bird held the full spread-wing posture with its back to the sun, but gradually rotated its body to follow the rising sun, maximizing the exposure of back and wings to the sun.

Black Vulture (*Coragyps atratus*). In April 1978, at Noxubee National Wildlife Refuge in east Mississippi, JAJ photographed several Black Vultures that were sunning and preening as they faced into the early morning sun. The bird shown in Figure 2 displays a typical partially opened wing posture with neck, back, and wing covert feathers raised as the bird preens scapular feathers. Some individuals drop their wings even more, such that they approach the delta wing posture.

Typically, Black and Turkey vultures roost until midmorning, when the thermals provide better lift, and sunbathe for several minutes before departing (Rabenold 1983). Full spread-wing and delta-wing postures for the Black Vulture have been previously reported (Kushlan 1973), although it was not specified whether the vultures were facing or presenting their backs to the sun. Kushlan stated that the sunning postures were assumed soon after the sun first shone on the birds in early morning, and suggested that the function of the sunning was heat acquisition. Heath (1962) reported that for fifteen to thirty minutes prior to morning flight a Turkey Vulture typically perches with its back to the sun, with back feathers raised. He also suggested that such behavior may supplement metabolic heat to raise the bird's body

temperature from its nocturnal low.

Houston (1980) suggested that in large, soaring birds sunning might function to hasten feather recovery after deformation caused by flight. The Old World vultures he observed in Africa did not sunbathe in early morning, but rather sunbathed during periods of full sun following their arrival at a food source. He experimentally showed that deformed feathers recovered more rapidly in sun than in shade. Our observations reported here, and those of Kushlan, were made in the morning before extensive soaring had occurred; thus Houston's explanation seems unlikely in these particular cases.

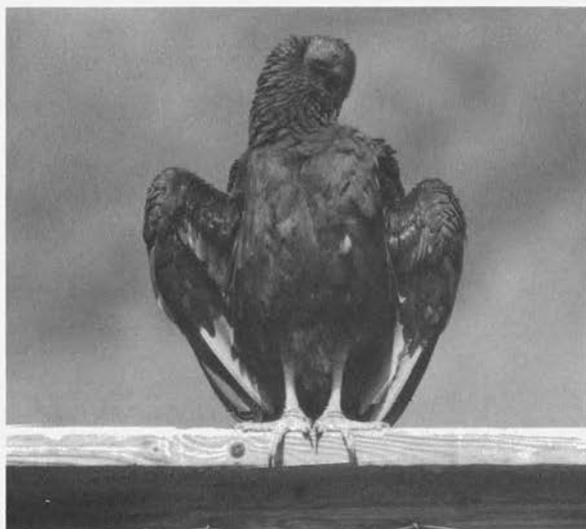


Figure 2. Black Vulture, photograph by JAJ

Black and Turkey vultures often face the sun in delta-wing postures, but the thermal impact of this behavior on a bird is not certain. The Black Vultures in Mississippi were not under thermal stress. It was early and the morning was cool. Thus the function of the behavior was not likely to cool off, and might have been to warm up. Under different circumstances such a posture could serve to dissipate excess body heat or to raise body temperature (Kirk and Mossman 1998), but as discussed below, other functions may be involved. The time of day and back-to-sun posture suggest that the Turkey Vulture WED observed was sunbathing to gain heat from the morning sun.

Great White Heron (*Ardea herodias occidentalis*). In June 1998, WED photographed a Great White Heron sunbathing on Key Largo, Florida (Figures 3 and 4). The bird was facing the sun and was in a typical delta-wing posture, with the ventral surfaces of the wings held approximately perpendicular to the sun. Delta-wing sunning has been frequently reported in the blue-morph Great Blue Heron (e.g., Butler 1992), and several photographs of birds in this posture are printed in Allen (1991), although the sunning behavior is not identified in the photograph captions. We have found no reference to sunning by Great White Herons (white-morph Great Blue Herons). A chick of the closely related Grey Heron (*A. cinerea*) of Europe sunning with a delta-wing posture is illustrated by Milstein et al. (1970), suggesting that the behavior is innate or develops early in life. Milstein et al. also report that gular-fluttering, a cooling mechanism, is sometimes associated with sunbathing in both chicks and adults, suggesting that the sunbathing might lead to heat stress or be a cooling mechanism associated with heat stress as previously described. Butler (1992)



Figure 3. Great White Heron, photograph by WED

suggests that the birds hold the back to the sun and often pant (a cooling mechanism). Further, when storks face the sun in delta-wing posture, it is generally early morning or late afternoon, and he concludes that they are *warming* in the sun.

So why was this Great White Heron sunbathing? It was late morning, hot and humid, and under full sun. The bird was preening and it was not panting. We do not believe the delta posture of herons is purely a response to thermal stress. If this heron had been truly under thermal stress, it could have stood in water or sought shade. It did not; it stood in the morning sun, preening its feathers (Figure 3). Postures and behaviors of birds change with increasing thermal stress (e.g., Schardien and Jackson 1979) from a normal posture to partially extended extremities, to extended extremities with raised contour feathers, to extended extremities with raised contour feathers and panting or urihidration

sums up our knowledge of sunning in the Great Blue Heron: "Droops and exposes inside of wings on sunny days [delta-wing posture], perhaps to radiate body heat on warm days and absorb solar radiation on cool days."

Kahl (1971) reports wing-spreading in thirteen species of storks, many of which adopt the delta-wing posture. Kahl further suggests that wing-spreading helps to reduce hyperthermia by exposing the thinly feathered underwings to convection cooling when air temperature is below body temperature. However, in these cases he



Figure 4. Great White Heron, photograph by WED

(excreting on the legs as in storks and New World vultures). By dropping its wings, the bird increased its exposed surface area and thus probably increased loss of body heat through convective cooling. Furthermore, the white color of the wing linings would reflect rather than absorb heat. The underwing coverts of this bird were not raised, however, but rather were flat against the skin, which should retard heat loss. Thus, we conclude that the bird, although probably losing heat, was not under thermal stress, and the sunning behavior may have had other functions.

To understand why any of these birds were sunning, or why they display the delta or any other sunning posture, we may need to look beyond thermal relationships. Others (e.g., Hauser 1957) have suggested that exposure of ectoparasites to the sun might increase their activity and hence the ability of the bird to detect and remove them. We suggest that exposure of the underside of the wings to full sun would also change the microclimate provided by the feathers of the underwing for ectoparasites. Feather moisture would likely be decreased, and feather surface temperatures increased. Adult ectoparasites might easily evade such a change by moving, but eggs of ectoparasites laid in such a previously protective environment might be killed. Studies of the behavioral ecology, habitat preferences, and physiological limits of avian ectoparasites might provide answers to the more enigmatic aspects of sunning behavior. Clearly, the evidence in storks, herons, and in vultures and raptors suggests that sunning postures may have multiple functions depending on environmental conditions and the physiological state of the bird. 

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U.S. Fish and Wildlife Service Names New Manager for Parker River National Wildlife Refuge . . .

Janet Kennedy, an outdoor recreation planner and refuge manager with eleven years of experience on national wildlife refuges in Massachusetts, has been named manager for the Parker River National Wildlife Refuge at Newburyport, Massachusetts, according to Ronald E. Lambertson, Northeast Regional Director for the U.S. Fish and Wildlife Service. For the past year, Kennedy has directed the planning and design for a new visitor center at the Parker River refuge. The new center, expected to open in late 2002, will house administrative offices, maintenance operations, and a visitor center. The visitor center will include educational and interpretive displays, an auditorium, and a multipurpose room suitable for environmental education activities. Office space for staff of Sandy Point State Reservation is also planned.

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Searching for Seabirds in All the Wrong Places: The Joy of Finding Pelagics Inland

Mark Lynch

“How can the mountain finch know the wild swan’s aspiring?” (Zen phrase)

There is indeed something akin to imagining the sound of one hand clapping in looking well inland for birds normally associated with the high seas. It seems positively oxymoronic. But unlike the famous Zen koan, enlightenment is much easier to come by. My article will focus mostly on Worcester County and nearby areas because that is where I live and the area with which I am most familiar.

I admit to still getting a thrill from finding species like Oldsquaw and scoters on bodies of water like Lake Quaboag, and Wachusett and Quabbin Reservoirs. Despite the fact that these species are found yearly in interior lakes in the state (although uncommon at these locations), in Massachusetts we usually associate these ducks with the late fall and winter oceans. Consequently, finding one on a pond or lake well inland has a special kick to it. Traditionally coastal shorebirds like Red Knot or a godwit are extremely exciting finds from Worcester County west. Even better of course, is finding a truly oceanic species well inland.

Now, I have done my share of hurricane chasing on the coast. Sheila and I have driven through many a gale, through horizontal rain while dodging flying tree branches and swerving around downed power lines. Sometimes, when the path of the hurricane is right, it is quite a spectacle. But it is a long and very scary drive from here to Cape Cod. How much more satisfying and convenient then to find a pelagic in one’s own backyard.

Most pelagics in the county are seen after major weather events, usually strong hurricanes. For best results, the eye of the hurricane should pass well inland and over or even to the west of Worcester. My first successful inland pelagic hunt came on August 20, 1991, the day after Hurricane Bob. On the day of the hurricane itself, a rather large linden tree fell clear across our street and smack into our front door announcing that this hurricane was something special. When we opened our front door, we were “in” the tree among impenetrable branches, and I will never forget the smell of the wet foliage or the alarming number of yellow jackets. Amazingly, our driveway remained open, and in the middle of the storm we headed out to Wachusett Reservoir. The number of trees down across the roads made the trip difficult, and when we arrived at the Mile Hill Road overlook in Boylston, the winds were still blowing so hard as to make a scope useless. We could find no interesting birds to speak of in all the turmoil. We did, however, pick out Fran McMenemy across the water huddled behind a maintenance building.

The next morning, we were up at dawn and walking out on the Sterling Dike. Sheila spotted what she first thought was a nighthawk fluttering far out on the water. The only problem was this nighthawk kept landing on the water and taking off again. After we got a scope on the bird, it turned out to be a Leach’s Storm-Petrel. Granted,

we had seen plenty of Leach's during coastal storms and on pelagic trips, but there is something very special about finding one so far inland that made this my most satisfying sighting. Later that day, with Bob Bradbury, we spotted several Common Terns and even a Gull-billed Tern. Common Terns are much more regular, although still pretty uncommon, along the Connecticut River Valley than they are in Worcester County. The Gull-billed Tern was a county record, and I was hooked on inland pelagic birding.

Sometimes it can be something less than a hurricane that can bring coastal waifs well inland. Nor'easters, tropical storms, and sometimes just a good, strong wind from the right direction usually combined with rain can bring coastal birds to the county. On November 2, 1997, we found a Roseate Tern on Indian Lake in the city of Worcester. This was a day after just a decent rain and windstorm. Weeks later, on November 23 at the same spot, a second winter King Eider was found among a flock of Common Mergansers. Another nonhurricane pelagic was found on November 2, 1986, when Fran McMenemy and the Forbush Club had a Northern Gannet on Wachusett Reservoir.

Although it would seem that Quabbin Reservoir would make the best spot to head for when the weather conditions are right, this may not be the case. Though Quabbin is undoubtedly the largest body of water in the state, your access by car is limited to the Quabbin Park off Route 9. Even here at the southern terminus of the reservoir, in a hurricane the State Police and MDC could close the access roads beyond the Winsor Dam because of the possibility of tree damage. The advantage to Wachusett Reservoir is that it is surrounded by public roads which allow an almost complete check of the water without having to hike far at all. Indeed, over the last two decades, Wachusett Reservoir has hosted several Leach's, numbers of jaegers, and even a Northern Fulmar (September 27, 1985, seen by Fran McMenemy). Last year, after the passing of Hurricane Floyd on September 17, Sheila and I found a small flock of Common Terns, a Forster's Tern, and a first winter Laughing Gull.

Of course, any large body of water can host a storm-driven bird, as Indian Lake illustrates. On September 6, 1979, during Hurricane David, a jaeger species, likely a Pomarine was found pursuing a Sooty Tern at Lake Quaboag in Brookfield. Sometimes the birds do not even make it to any body of water at all. When Worcester County experienced the monumental hurricane-like blizzard on March 13, 1993, an exhausted Black Skimmer was found in a snowbank in Auburn. This bird, banded in 1989 in Maryland, later expired at the Tufts Wildlife Clinic. Sometimes coastal or pelagic birds appear inland for no apparent reason, like the Marbled Godwit at Quinapoxet Reservoir or the Arctic Tern that spent some time one summer along the Connecticut River.

One last tip. If the weather conditions are right and the hurricane has passed well inland, be sure to look at your chosen body of water throughout the next day. It often seems that interesting birds can drop in anytime during the day. This is especially true of terns. It seems as if the birds, initially blown well inland, are making their way back to the coast after the storm abates somewhat but may drop in on any large body of water en route to rest and feed. Watch especially any sandbars or jetties in large ponds and reservoirs which may appeal to exhausted birds.

Realistically, your chances of finding pelagics inland are slim, but that is what makes those sightings all the more memorable.

Mark Lynch is an instructor and docent at the Worcester Art Museum, a teacher and trip leader for Broad Meadow Brook, Massachusetts Audubon Society, and host of *Inquiry* on WICN, an interview show of the arts and sciences. 

Osprey Update:

MassWildlife's successful Osprey Recovery Project has been redirected in response to the tremendous comeback of the birds. When begun in 1981, only 41 pairs of ospreys were known to nest in Massachusetts, the majority of which were confined to the Westport River estuary under the watchful eye of Gil Fernandez of Dartmouth. By enlisting the support of ComElectric, Mass Electric, Eastern Utilities, environmental groups and the public, MassWildlife led a campaign to provide artificial nesting poles across southeastern Massachusetts for the fish-eating hawks. By 1990 the osprey population had soared to 200 nesting pairs and reached 300 pairs just a few years later. Range expansion occurred as well with ospreys establishing territories across Bristol, Plymouth, and Barnstable Counties, then jumping north to Essex County and inland to Worcester County. With the population secure, MassWildlife and the utility companies can no longer justify prospecting for new nest pole sites. Rather, biologists are providing the public with information and plans to enable them to erect nest poles themselves. This frees up limited state resources that are devoted to other, more urgent conservation needs. For their part, the utility companies are now graciously dealing with "nuisance" ospreys, as the opportunistic birds can easily build their huge stick nests on active transmission poles and towers. MassWildlife continues to provide technical assistance in dealing with these conflicts and also works with cooperators to monitor a sample of the nesting population to determine productivity.

Eagle Cam:

Two bald eagle chicks are growing rapidly in a wild nest located on an island in the Connecticut River in western Massachusetts. What makes this nest unique is the placement of a video camera above the nest which transmits images to a nearby mainland receiver. Residents in the immediate area have access to the video signal via their local cable TV network, while folks around the world have been checking the eagles' progress via the internet. Single video frames are captured by computer at the Silvio Conte National Wildlife Refuge office and transmitted to offices of Northeast Utilities where they are posted on the company's web page and refreshed every five minutes during daylight hours. The web site is now receiving thousands of visits per day. Check out this fascinating wildlife success story by logging on to www.MassWildlife.org and clicking on the "eagle cam 2000" box or go directly to www.nu.com and click on "Eagles Raising Two Chicks."

MassWildlife News (6/9/00, #5)

Bill Davis: bill.davis@state.ma.us

YOUNG BIRDERS

From Rhode Island

Tom Seiter

Hello, my name is Tom Seiter, and I am a fifteen-year-old birder. I was asked to write for *Bird Observer* so that others could know where I stand, being so young. Many other birders I have met in the past year have told me that their one regret is that they didn't start birding earlier. They have said to me that I am lucky to have started so early, and become addicted. My friend Peter Capobianco was the one who interested me in this hobby, and when he did, he had already been birding for six months. One of the things that annoyed us both in the beginning is that whenever we would call a bird, not many people would listen to us; we had to pay our dues. Then suddenly, during one birding trip, everybody began to take an interest in the birds we called out. It's been like that ever since. Now other birders even look up to us because of our vision and hearing.

I currently have 346 birds on my life list. I am keeping eleven state lists. I've been birding for about thirteen months, and just recently came back from a trip to Texas, exclusively for the purpose of birding and butterflying. That trip was like Christmas; it seemed as if I saw a life bird every ten minutes. In that six-day period, I accumulated 85 lifers and 204 trip birds. Although rain was predicted for the first two days, there wasn't a cloud in the sky; the conditions were perfect.

In addition to Texas, I've also been on trips to Oregon and California, where I birded a little, but not much. On those trips I added 40 of my 346 birds. I'm also hoping to go to southeast Arizona next year with Peter and Hugh Willoughby, our mentor. Mr. Willoughby is the one who takes us everywhere, and brought us to Texas. He's been really great to us. I am hooked on this hobby, and would like to make a living doing something like leading tours or being an environmentalist.

In the year that I have been birding, I have seen three rare birds. In Texas, I recently got my life Gray-crowned Yellowthroat at the Santa Ana National Wildlife Refuge. We got great looks, while Peter photographed it as it posed and sang for us. I also have an adult Black-tailed Gull which was seen from the John H. Ferry traveling from Connecticut to Long Island, New York. There apparently is not an official New York record for this bird yet, but Peter, Mr. Willoughby, and I all have it written down as a New York state bird. I also have Garganey, which happens to have been only my second life duck, my first being Mallard. It was my thirty-fifth life bird (which several birders who don't yet have it on their life lists told me is not fair). The rare birds are the most fun to get, and especially to find.

My favorite birds so far include Pileated Woodpecker, Greater Roadrunner, Elf Owl, Northern Shrike, Scissor-tailed Flycatcher, Painted Bunting, and Hooded Warbler. I have not yet seen King Eider or Swallow-tailed Kite, but they both look like really cool birds. I also love hummingbirds, owls, and especially warblers.

Peter and I have not yet done any Big Days, but I'm hoping to do so, and break a couple of records when we learn to drive. The day we got Black-tailed Gull in New York, we sighted sixty-two day birds, and we didn't have half the land birds possible in the month of February. The American Birding Association Big Day record in that month for New York is sixty-four, which easily could have been broken if we had known about it. Besides breaking Big Day records, I have a goal this year to break 400 year birds, and get listed in that category for the year 2000. I also want to be listed in the states of Rhode Island and Massachusetts as having seen fifty percent of all the species that have ever been seen in each state.

It is not always easy for me to go out and bird because of school. I always have too much homework, and also I have to stay after school for band, after-school labs, and baseball. Because of these things, I have missed a couple of good birds that Mr. Willoughby and Peter got without me. I've missed California Gull and Sandhill Crane in Massachusetts, and have missed many in Rhode Island. I also lost out on seeing a Mongolian Plover, because I was out of state then. It is always irritating to miss out on a good bird, but no one can go out all the time for everything.

One thing I have learned while birding is that there are some pretty funny characters out there; every birder I have met has a different personality. We once asked a fellow birder if he had seen any Snowy Owls around Plum Island the day we were there. He said, "No, but I did see a Short-eared Owl last year at Salisbury Beach." Meeting these characters is one thing that makes a stinky birding day good.

Birding is my favorite hobby, and whenever I get a chance I love to go out looking for the good ones. Thanks to people like Mr. Willoughby and my mom, I can go out fairly often, which is really fun. I looked forward to this spring's warbler season, and can't wait to go out next spring! 

Tom Seiter lives in Riverside, Rhode Island. His first birding experience came when he was fourteen, walking through private woods with his friend, Peter Capobianco. Peter told him the names of many birds, most of which he had never heard of in his life. He has been an avid birder ever since. Tom is a member of his school's band program, first chair trombone, a Rhode Island Hospital volunteer, and part-time employee of a printing company.



Photograph by Megan Seiter



Young Birders from Rhode Island

Peter Capobianco

I have been birding for about a year and a half now, and so far I have 361 life birds. I was asked to write this article so that people could see a “teenage birder’s perspective,” but I do not think that my perspective would be that much different from that of any other birder. Like other birders, I have had many memorable experiences, but the most memorable would probably be the time I saw my life Mongolian Plover and my life Gray-crowned Yellowthroat.

It was July 24, 1999, when I got my life Mongolian Plover. Like most summer days, it was way too hot and humid. I was with my good friend and birding mentor, Hugh Willoughby. Pat Ryan, another one of my good friends, was also with us. It was just like any other birding day: we were trying to get a good day list. So, we arrived at the Quonochontaug Marshes to look for shorebirds and other waterbirds. When we got there, several other people were looking for the same birds that we were, including a group from Massachusetts. We asked them if they had had any good birds in the area, and Dan Furbish told us that they had heard that a Mongolian Plover was at Charlestown Breachway!

Well, you can guess that we got to Charlestown Breachway fairly quickly. But people on the nearby beaches had taken all the spots in the parking lot for the Breachway, and we ended up having to walk about two miles. We finally got to the Breachway area about forty-five minutes later. We looked all over for the bird, and of course were not able to find it. However, most of the people looking for the plover were on the opposite side of the five-foot-deep channel, which meant that they had to walk across it. I remember thinking “What kind of crazy people would walk across that channel with their regular street-clothes on?”

Well, we had just about given up and were getting ready to start the long hike back to the car. Lucky thing we procrastinated, because just as we were leaving, this very nice lady, Marcia West, came running toward us saying, “It’s back! It’s back! We’ve got it! We’ve got it!”

We ended up being just as crazy as the rest of them and waded across that channel. We got great looks at the bird, and I was able to take some decent photographs of it through Mr. Willoughby’s Swarovski telescope. Linda Ferrareso, codiscoverer of the rare plover, said that she was glad that somebody had a camera, just in case the bird disappeared again. She also had a cell phone with her, and the word went out to birders everywhere, right from the middle of the Ninigret sandflats. One thing is for sure: wading across that channel was worth it!



Gray-crowned Yellowthroat
Photograph by the author

Another memorable birding experience occurred on a recent trip to south Texas with Hugh Willoughby and Tom Seiter. While I had many experiences on that trip that I will remember for the rest of my life, probably the best one was getting my life Gray-crowned Yellowthroat at Santa Ana National Wildlife Refuge. We never expected to see anything as rare as a Gray-crowned Yellowthroat. After all, it is always hard for Mr. Willoughby to get a life bird because he now has 703 life birds! We all had good looks at this bird, and I was able to get pictures. Fortunately, they came out pretty well!

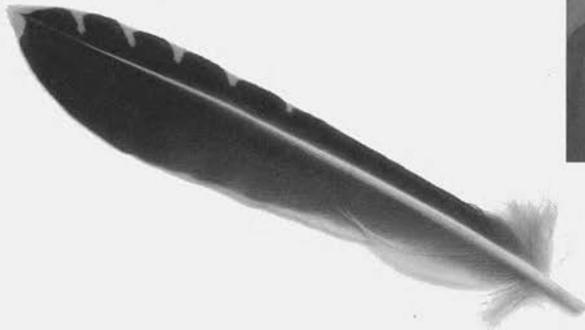
Tom Seiter ended up getting eighty-five new birds on the trip, and I left Texas with seventy-six lifers. This was a very successful trip, and I had some of the most fun birding that I have ever had. Now we are trying to talk Mr. Willoughby into taking us to Arizona!

Over the last eighteen months, in addition to the Mongolian Plover and Gray-crowned Yellowthroat, other pretty good birds that I have seen include Long-billed Murrelet, Pink-footed Goose, and Garganey.

I have also become very much interested in photographing the birds that I see. I now have pictures of 136 species. I have been able to take pictures of several rarities, such as Black-headed Gull, Audubon's Oriole, and Green Jay. But I don't have pictures of some of the more common species yet. Hopefully, one day I will be able to photograph a Rock Dove.

I am glad that I started birding because it has been loads of fun. But I do regret one thing. I regret that I wasn't born about thirty years earlier, so that I could have seen the time "when there were still birds," as many older birders have said to me. Overall, though, I have had a good time birding, and I have Hugh Willoughby to thank for getting me started. 

Peter Capobianco, age fifteen, lives in Riverside, Rhode Island. He just finished his freshman year at East Providence High School, where he played at the number three spot on the varsity tennis team. He has also played baseball since he was five, and made all-star baseball teams for the past seven years.



POCKET PLACES

Wildwood Cemetery and Horn Pond Brook, Winchester

Marjorie W. Rines

The Stop & Shop in downtown Winchester is my grocery store of preference. I can't get there without passing Wildwood Cemetery — and I usually don't. Driving clockwise around the perimeter, the cemetery borders first a residential neighborhood with a tangled gully in between, followed by a small pond, then the dirt and compost area, and finally a woody edge. In the center, a hill overlooks a canopy of oak trees.

In spring migration there is nearly always a good flock of warblers somewhere in the cemetery, but the birding is terrific if they have concentrated in the oaks on the hill. Standing at the highest point, you get to enjoy the birds at eye level or below. For some reason, this is where I often get my first Tennessee Warbler of the year. I have had Cape May Warbler and Yellow-throated Vireo here in the spring.

In summer Orchard Orioles and Indigo Buntings regularly breed, and in 2000 a pair of Red-bellied Woodpeckers were seen regularly. In fall the compost area can offer nice sparrows (including a Blue Grosbeak one year). In winter the resident

Eastern Screech-Owl is a usually a shoe-in for the Christmas Bird Count.

In 2000 a family of foxes entertained many people throughout the late spring, with young that were remarkably approachable.

Leaving the cemetery, heading once again to the Stop & Shop, I am often diverted to Horn Pond Brook Bikeway just next door. It's funny, but this is just a dinky little path that only goes a few hundred yards, but it can be incredibly productive. Two years running I have found Connecticut Warbler in fall migration, and in spring migration there's

always a nice collection of warblers. On the Christmas Bird Count I always count on this location producing something special, and the highlight was an Indigo Bunting on the 1998 CBC. My favorite spot (known as a Fairy Meadow by the local preschool group that gathers there occasionally) is halfway down the path on the right, where a path goes down into a small open area.

Directions: Take Route 3 from Arlington into Winchester, and turn right at the light at Church Street. Turn left at the light at Fletcher Street, and then through the four-way stop sign at Wildwood Street. The entrance to Wildwood Cemetery is immediately after this intersection on the left. For Horn Pond Brook Bikeway, pass by the entrance to Wildwood, take your next left on Middlesex Street, and drive roughly .3 mile (go past Fairfield Place). Take a hard right on Horn Pond Brook Road (unmarked on any atlas I have), and park at the end. 🐾



Photograph by the author

HOT BIRDS

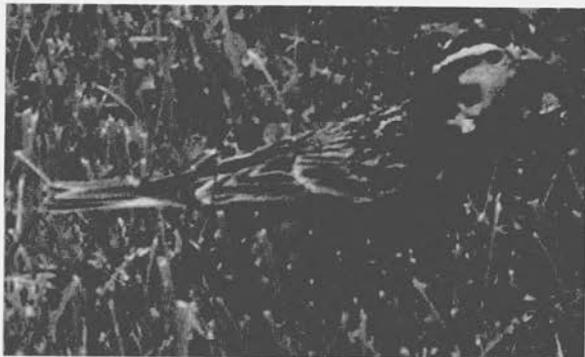
A **Wilson's Plover** was found in a Least Tern colony on Katema Beach in Edgartown on Martha's Vineyard on May 24, 2000. Matt Pelikan took this photograph of the bird. Wilson's Plovers are very rare but almost annual in Massachusetts, with most recent records from late May and early June (Veit and Petersen 1993, *Birds of Massachusetts*, MAS).



This spring an errant **Willow Ptarmigan** spent some weeks obligingly consuming blueberries by the side of the road on Chebeague Island in Casco Bay, Maine. Steve Mirick of Newmarket, NH, shot this image on May 28. Rumor has it that a fox dispatched the ptarmigan on June 4. This was the fourth report of this species in Maine, and the first since 1977, according to

<http://www.chebeague.org/bird/ptarmigan.html>.

Finally, from the playing fields of the Haddam-Killingworth High School in Connecticut, came word of another out of place bird, a male **Chestnut-collared Longspur** in bright alternate plumage. Peter Capobianco (see *Young Birders*, page 241) captured this very cooperative bird on film. Apparently, some birders were forced to step away in order to focus their binoculars on this bird. 🦋



YARD BIRDS

O.K. I've been dying to tell someone. I'm a beginning birder (this is about my third season of seriously trying to learn songs) and these are the feathered things that have visited our feeder, yard, and edges this spring:

Feeder:

House Finch	Rose-breasted Grosbeak
Black-capped Chickadee	American Goldfinch
Tufted Titmouse	Downy or Hairy Woodpecker (not sure)
Nuthatch	

Yard:

Eastern Phoebe	Song Sparrow
Tree Swallow (using nest box)	White-throated Sparrow
Eastern Bluebird (being chased away from nest box by swallows)	Northern Cardinal
Yellow Warbler	Baltimore Oriole

Trees and field edges (our yard merges into a 3-acre field surrounded by woods):

Great Horned Owl	Black-throated Green Warbler (song)
Red-tailed Hawk	American Crow
Red-bellied Woodpecker	Ruffed Grouse (heard, and found dead beside the road near our house, wah!)
Blue Jay	Wild Turkey
Wood Thrush (song)	
Black-and-White Warbler	

That's all I can remember for now. It's been a fabulous spring!

Sally Shaw

Gill, MA 

Lois Cooper of Groveland has been feeding birds in her back yard since she moved into her new house in 1979. Lois is a serious birder and designed her home so that it literally opened up into the spacious back yard. About fifty foot square, the yard is mostly grass with a few low juniper bushes. There is a small deciduous tree in the center and a few other trees at the periphery. A low wooden fence edges the west side of the yard. Lois feeds every winter with a variety of feeders. In the summer she maintains two bird baths. Her yard is in close proximity to a state wildlife management area, and she still has forest that borders the back of her yard.

Lois Cooper's life yard list now stands exactly at 100. She counts flyovers, and she has had an impressive list of flyovers including Bald Eagle, Peregrine Falcon and, every late August, Common Nighthawks. The number 100 is probably unremarkable,

but the quality of the birds is first rate. Picking a top ten is difficult. To start at the top, the most exciting bird to visit her yard is uncontested. On the afternoon of November 8, 1993, Lois looked out in her yard to discover a Brambling pecking at her bird feed. (See *Bird Observer*, April 1994, Vol.22 No.2, p. 94). She has also had: Clay-colored Sparrow, Dickcissel, Cape May Warbler, Ovenbird, Wild Turkey, Northern Goshawk, Indigo Bunting, Canada Warbler, Wilson's Warbler, Barred Owl, and Orchard Oriole.

Doug Chickering

Newbury, MA 

My property (about an acre) is sandwiched between Route 20 and the Massachusetts Turnpike. This is rather deceiving, however, since most of the area in which I live is wooded. My feeders are located at the back of my house about ten feet from the building. I have about a quarter acre of open space (grass) which is surrounded by trees. There is also a stream that runs at the boundary of grass and woods at the back of the property. The distance from the stream to the turnpike is about 200 yards and is all woods. The woods continue and are extensive on the other side of the Pike. The nearest buildings on either side of me are about 100 yards away. The woods are mostly deciduous but there are also quite a few pine and spruce trees.

This spring birds visiting my yard included: Northern Cardinal, Blue Jay, Black-capped Chickadee, Tufted Titmouse, Gray Catbird, Brown-headed Cowbird, American Crow, Red-winged Blackbird, Rose-breasted Grosbeak, Evening Grosbeak, Indigo Bunting, House Finch, Purple Finch, Dark-eyed Junco, Mourning Dove, Chipping Sparrow, Ruby-throated Hummingbird, Baltimore Oriole, and American Goldfinch.

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FIELD NOTES

The Subjective Effect of a Desirable Visual Stimulus on Exhaustion: Sighting of a Harris's Sparrow (*Zonotrichia querula*) in Amherst, Massachusetts 5/14/2000

Mark Lynch

On Birdathon Saturday, May 13, Sheila Carroll and I returned from one *long* day of birding the Berkshires for the Broad Meadow Brook Sanctuary of the Massachusetts Audubon Society. We had been up since 4 a.m., and it was now 7 p.m. I also organize our sanctuary's Birdathon efforts, which is not unlike planning the D-Day assault. We phoned in our birds to Deb Carey, and I asked if anything unusual had been seen. Some good birds certainly had been tallied, but nothing too outre. Sheila and I then immediately hit the sack because I had to lead a class field trip the next day to south Quabbin that met at 7 a.m. This has become a tradition of sorts, as many of the people in the class also participate in Birdathon. We all show up tired and bleary-eyed to trade stories and look at migrants.

We had a great class trip on Sunday, getting good views of lots of birds, including a pair of Cerulean Warblers. By noon we had hit the wall, and headed back home totally exhausted. Dragging ourselves in the door, I noticed a folder in the slot. This was the Birdathon species list totals for our sanctuary as compiled by Deb. We had seen an impressive 227 species.* I glanced down the list to make sure no bizarre birds had been reported. At Broad Meadow Brook we are sticklers that even during Birdathon, a species reported has to be identified carefully and correctly or not reported at all. One species leapt off the page. The Wild Bird Crossing Team had reported seeing a Harris's Sparrow. My reaction was "What?!!!" with some deleted expletives thrown in. I immediately called Bill Cormier, head of the Wild Bird Crossing Team. He said that team member Bill Lafleche on a scouting mission had found the bird. They had faxed their team's species list into the sanctuary, and so the list had not been seen until after I went to bed. I quickly called Bill Lafleche, a good, careful birder who birds south Worcester County extensively. He was on his way to a wedding, but gave me a long list of details of his sighting.

On Saturday Bill had hiked into Lawrence Swamp in Amherst in the hopes of seeing some cuckoos. All he got for his efforts were several thousand black flies and mosquitoes. He returned to his car which was parked a little way down busy Station Road in a small dirt pulloff. He heard what he thought was a Rose-Breasted Grosbeak in a nearby bush. Checking it out, he spotted a strikingly plumaged bird that was unfamiliar to him. At first he thought it was an aberrant House Sparrow, but quickly realized it was an unusual sparrow. Fortunately, he had James D. Rising's guide, *The Sparrows of the United States and Canada*, and realized he was looking at an adult summer Harris's Sparrow, a species he had never seen before. He used his car phone to call other team members while he was watching the sparrow feed on the ground

right in front of his car. The details sounded convincing, but Bill had no previous experience with this species.

I was now faced with a tough decision. A bird of this rarity in the state needed confirmation and documentation. It was 2 p.m., and Sheila and I were exhausted from Birdathon and from leading a full morning trip. The idea of driving west yet again on Route 9, beyond where we had just met the class that morning was tough to contemplate. After some deliberation, Sheila grabbed her camera, I grabbed our binoculars, and we went for it.

It was a long drive out to Amherst, with two tired and cranky birders sitting in silence for most of the trip. Bill's directions were good, and we soon found the dirt pulloff on Station Road. This was along a small stream and across the street from a horse farm. The immediate area had lots of dense low shrubbery and willows with taller trees further back. Cars sped along the road, which had no other nearby pulloffs or sidewalks, making birding along the edge all but impossible. It was also hot, humid, and dense with biting flying insects. It is at times like this when you realize that there is a thin line between birding and standing on the side of the road looking like an idiot.

Sheila and I started to systematically check the area. After about half an hour of no results, we were standing in the small parking area feeling even more tired and cranky when Sheila loudly whispered to me, "It's right next to you!" Sure enough, an adult Harris's Sparrow was sitting quietly in a bush below eye-level not three feet from me. It then hopped down to the ground where it proceeded to feed quietly on dandelion seeds. I slowly backed off, and Sheila grabbed her camera and began shooting. Suddenly, I was no longer tired.

The bird seemed oblivious to our presence. It would often disappear in the taller grass at the edge of the pulloff, but would soon wander out into



Photographs by Sheila Carroll

plain view. It hopped behind our car, feeding right next to it. Sheila slid into the passenger side and called Scott Sumner, asking him to alert Valley birders. Scott lives in Belchertown just minutes from where we were. Scott was mowing the lawn at the time, and I can only imagine his reaction to getting a phone call from two birders from Worcester reporting a Harris's Sparrow virtually in his backyard. Minutes later, a grass-covered Scott showed up with daughter Samantha. The sparrow was still there behind our car at the time, and Samantha started taking photographs of the bird while Scott watched it from inside his car. We all remained as quiet as possible. The bird was still there when we left to return home and notify other birders. Interestingly, the ride back was much more pleasant than the ride out.

Unfortunately, the sparrow was not seen after this, but that did not come as a surprise. The parking area could hold at the most four cars. As birders were notified of the sighting and piled into the area, there was literally nowhere for the bird to go. If the road had other pulloffs, or if birders could have watched from across the street, the bird might possibly have been seen later. This was an unusual case of a rarity showing up in a spot where you had to stand in the only place where the bird wanted to be.

An interesting coda to this report is that birders looking for the sparrow that night had a Sandhill Crane put down at the horse farm. Also, I heard a report that another birder had possibly seen the Harris's Sparrow on the Friday before it was officially found, but had dismissed it as an aberrant House Sparrow as they drove by the area. 

**Editor's note: Broad Meadow Brook Sanctuary placed first out of fourteen sanctuaries participating in Massachusetts Audubon's Birdathon 2000.*

A Tale of Urban Red-tails

Lorraine Kaplan

It is not unusual to see Red-tailed Hawks around Boston — a walk through Boston Common or the Fenway will almost always produce one. Similarly, at Boston University we typically would have an immature Red-tail spend the winter hunting around central campus.

About three years ago, however, I noticed that our wintering immature Red-tail had been displaced by an adult. This hawk was shortly joined by another and I could see them sitting together, sharing prey, and soaring together — often the male would fly above the female with his talons down. We had become host to a mated pair of hawks. I watched the birds repeatedly flying off to a particular area, and within a few weeks I located the nest in a woodlot on Amory Street close to Hall's Pond. The following year, the hawks nested in the same woodlot.

This year I again saw the birds together frequently (the male hunts on campus year-round) and witnessed a lot of courtship behavior, but there was a difference — the birds were clearly not in the Amory Street woodlot. I suspect that some major construction a block away may have scared the hawks from the site. So where was

this year's nest? I could not see the hawks flying off to any particular location, and I eventually became resigned to not knowing where to find the nest, assuming there was one.

On May 17, I was working late and at about 7:00 p.m. walked over to Burger King on Commonwealth Avenue, just outside of Kenmore Square, for a quick dinner. As I approached Burger King, movement caught my eye and I thought it was one of the adult hawks on one of BU's buildings. A closer look left me awestruck — I was looking at a baby hawk walking around on its nest — on a fire escape at the back of one of BU's four-story brownstone residences! Over the following days I was able to see that there were three young hawks in the nest. In the weeks since May 26, when I shot the accompanying photo, I have watched the birds, now fledglings, on nearby buildings and surrounding trees, learning to be hawks. But that is another story — I can't wait to see how it unfolds. 🦅



Photograph by the author

New Voice in Western Massachusetts . . .

Jan Ortiz has replaced Scott Sumner, the Voice of Audubon for Western Massachusetts for the past sixteen years. Jan is only the fourth Western Massachusetts Voice of Audubon in its history, following Scott, Helen Bates, and Seth Kellogg. Jan has an extensive knowledge of bird distribution throughout western Massachusetts as well as New England.

All Massachusetts Voice of Audubon recordings are now available by calling the toll-free number 1-888-224-6444.

ABOUT BOOKS:

(Editor's note: This is the last of the Looking Back series that has been a feature of Bird Observer for the past year. With its publication, Alden Clayton is retiring as Book Review Editor. His successor as editor will be Mark Lynch. Mark has been a frequent contributor to Bird Observer and we welcome him to the staff.)

Looking Back

Wayne R. Petersen

When first invited to write about "books that have inspired, delighted, or enlightened" me, I reckoned that the task would be straightforward and the choices instantaneous. How wrong I was! As I began to recall the myriad titles that have given me pleasure and enlightened me through the years, my list seemed to grow endlessly. As a natural history bibliophile with a passion, practically since toddler days, for all things alive the assignment suddenly seemed daunting.

Thinking about the request in earnest, I found myself transported in thought back almost half a century to a time when, as a child of five, I was confined to bed with an acute childhood illness. One day a family friend named Polly came to visit. During that visit, Polly gave me two sets of National Audubon Society flash cards of birds — fifty cards per box — one featuring summer birds and one depicting winter birds. To this day my family tells me that this was the beginning!

Those National Audubon flash cards, eventually four seasonal sets in all, were my first introduction to birds. I was fascinated by the paintings, most done by the preeminent Canadian bird painter, Major Allan Brooks. The paintings gave me the visual stimulus that birds provide even today, but they also offered insight into the habits, behavior, nest type, and diet of each species pictured on the cards. Within a very short time I learned the name of every species depicted on the flash cards.

In grades four through six, my interest in natural history blossomed. First I was captivated by insects, then reptiles and amphibians, fish, mammals, flowers, and always by birds. A trip to a local bookshop introduced me to the Golden Nature Guide Series (Simon and Schuster, New York). I soon began acquiring the entire series: *Birds, Reptiles and Amphibians, Mammals, Flowers, Trees*, etc. Not only did I read these modest volumes, I also memorized the position of the organisms illustrated on each page. I actually have recollections of first encountering new bird species and announcing out loud what position it was in on a particular page! These Golden Nature Guides, along with the National Audubon Society flash cards, were probably for me the most influential publications in my earliest formative years.

As I grew older, I only wanted bird books and other natural history titles for birthdays, Christmas, and any other occasion that was appropriate for gift giving. My first major ornithological acquisition — as defined in my youth by weight and number of pages — was T. Gilbert Pearson's *Birds of America* (1936, Garden City Pub. Co.,

Garden City, New York). Lavishly illustrated with color paintings by none other than the great Louis Agassiz Fuertes and studded with black-and-white photos by Arthur A. Allen, W. L. Finley, and H. T. Bohlman, this tome soon became my bible as my thirst for bird knowledge increased. Eventually, I could almost imagine myself looking at the birds in the habitats that were so skillfully captured by Fuertes' brush. With the aid of this fine old reference book, facts about the lives of birds, the places they lived, and how they behaved were becoming galvanized in my mind. At this point, I knew that someday I wanted to see all those birds in real life.

As time went on, I eventually made friends with the legendary Ruth P. Emery, the original Voice of Audubon and bird statistician for the Massachusetts Audubon Society's publication, *Records of New England Birds* (1945-1968). Ruth became my mentor in a variety of ways, but particularly when it came to buying bird books. She always seemed to know just what bird book I needed for whatever it was I wanted to know at the time. Through nearly forty years of enduring friendship, Ruth Emery undoubtedly cost my family and me many thousands of dollars in natural history titles! Among the first titles that Ruth encouraged me to obtain were *A Guide to Bird Watching* by Joseph Hickey (1943, Oxford University Press, New York) and *A Guide to Bird Finding East of the Mississippi* by Olin Sewall Pettingill, Jr. (1951, Oxford University Press, New York). The volume by Hickey helped bring structure and order to my growing passion for birds and birding. Hickey's emphasis on the value of note taking and what to put in a field notebook served me well, even to this day. Likewise, his chapters on "Adventures in Bird Counting" and "Explorations in Bird Distribution" are as valuable today as they were the day they were written. *A Guide to Bird Watching*, along with Roger Tory Peterson's *A Field Guide to the Birds* (1947, Houghton Mifflin Company, Boston), probably received as much use as any title in my library during my high school birding days.

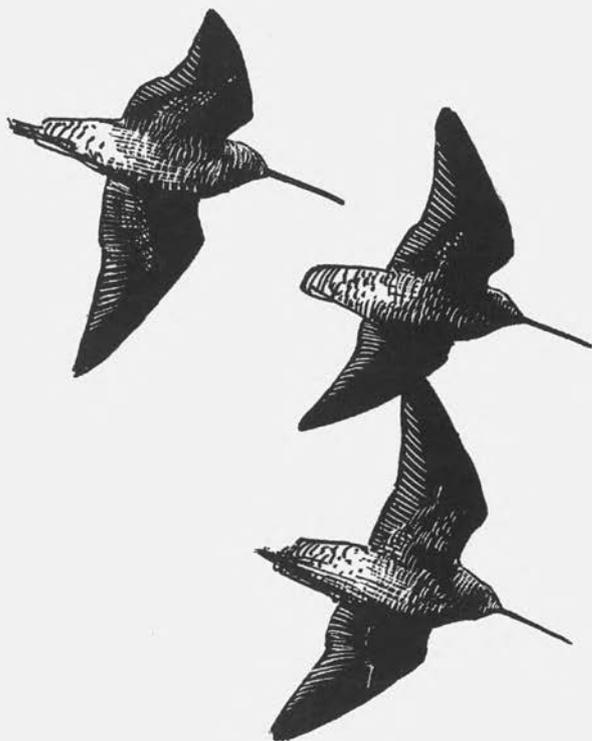
Pettingill's bird-finding guide became of increasing importance after I began to drive, as well as on family camping trips. I discovered that one could go birding beyond the range of a day's bicycle ride and that there was actually a book that would tell you where to go birding when you got there! In addition, I found that a dedicated birder could learn much about other geographical areas simply by reading the introductory sections for each state in Pettingill's compendium. Only in retrospect could I appreciate what a pioneer Sewall Pettingill was for the likes of Jim Lane, Peter Alden, and all of today's modern bird-finding guide authors.

Needless to say, as I got older my favorite bird book list continued to grow; however, I will refrain from taking the reader much further in this reminiscence. There are, nonetheless, three additional titles that influenced my early thinking about birds and birding to the extent that they warrant mention. The first is Edwin Way Teale's *North With the Spring* (1951, Dodd, Mead and Co., New York). This classic seasonal travel account by one of North America's great naturalists was such an inspiration to Connecticut naturalist Noble Proctor and me that we undertook a two-month journey of our own that took us from New England to Key West during the spring of 1966. From a different perspective, *A Manual for the Identification of the Birds of Minnesota and Neighboring States* by Thomas S. Roberts (1955, University

of Minnesota Press, Minneapolis) provided detailed descriptions of plumage and molt sequence that brought new meaning to the seasonal changes I had observed in the field. Indeed, Roberts fostered an understanding that was to last me a lifetime.

The final title that was to profoundly influence my later thinking about birds, especially birds in Massachusetts, was *Birds of Concord* by Ludlow Griscom (1949, Harvard University Press, Cambridge). In this classic regional study, Griscom described Massachusetts bird life in ways akin to how my earlier readings in Hickey had encouraged me to think about birds in general — in ecological terms, with an emphasis on population ecology and population trends. After reading *Birds of Concord*, I never looked at birds in the same way again. For me, *Birds of Concord* was a watershed volume. Although it would be possible to go on and on, this sampler highlights at least some of the titles that were especially important to me as a young man with a passion for birds. 

Wayne R. Petersen is a member of the *Bird Observer* editorial board, Vice President of the American Birding Association, and staff ornithologist at the Massachusetts Audubon Society.



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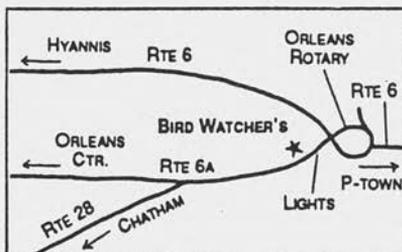
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BIRD SIGHTINGS

MARCH/APRIL 2000

Seth Kellogg, Marjorie Rines, and Robert Stymeist

March was warmer than normal, especially during the first ten days of the month, when temperatures averaged 10 degrees above normal. The mercury hit 74 degrees on March 9, beating the previous record of 68 degrees set in 1921. Rainfall totaled 3.59 inches in Boston, with measurable amounts falling on eight days. Snowfall was meager, with a total of only two inches, 6.1 inches less than average. The ground was bare most of the month in Boston. Southwest winds occurred on March 14, 15 and 25.

April 1 began with a mild day in Boston, with the temperature reaching into the sixties, a sharp contrast to the April Fool's Day blizzard of 1997. The first eight days averaged 8 degrees above normal, then the month turned cold, wet, and cloudy. Precipitation totaled 5.03 inches in Boston during April, 1.42 inches above average. Measurable amounts fell on 15 days, while birders waited patiently for the first wave of the season. There was only a trace of snowfall late on April 26. Total snowfall for the season in Boston was 24.9 inches, 16.7 inches less than average. Southwest winds occurred on April 2, 4, 10 and 15.

R.H.S.

LOONS THROUGH GROSBEAKS

There were excellent numbers of loons and grebes reported from inland locations during this period, especially at Turner's Falls, where the Connecticut River widens to form a lake. There were an impressive 22 Common Loons there on April 22, and 21 Red-necked Grebes on April 9. The **Eared Grebe** that has spent the past five winters in Gloucester made an apparent farewell appearance on March 16. A Sooty Shearwater seen from Andrew's Point in Rockport on April 26 was exceptionally early. Birders rarely venture offshore this early in the season, and these sightings, plus sporadic reports in past years (particularly on Cape Cod), suggest this species may regularly arrive in late April in some years, at least in the warmer Cape Cod waters.

A one-eyed **American White Pelican** showed up at a pond in Tyngsboro, stayed for over two weeks, disappeared for two weeks, then reappeared for a few days. Perhaps most intriguing is that a one-eyed White Pelican spent several months on Plum Island in the summer and fall of 1997. There was also a one-eyed White Pelican that spent two weeks in Ellenville, New York this year, leaving around April 8.

A Great Egret in Edgartown on March 12 was exceptionally early, as was a Little Blue Heron at Oaks Bluff on March 30 and 31. Glossy Ibises rarely reach Essex County before April, so March sightings in Rowley and Ipswich were noteworthy. Inland reports of normally-coastal herons were good, particularly in the western part of the state where birders were treated to Great and Snowy egrets, Little Blue Heron, and Glossy Ibis. A total of eight **Black Vultures** was reported, reflecting a statewide increase in the occurrence of this species. If the trend continues, these birds will soon no longer merit a bold-face note.

Greater White-fronted Goose is nearly an annual spring visitor to the state, but a total of seven individuals was very unusual. Three of these showed up at flooded fields in Hadley. These fields played host to an exceptional array of gulls and waterfowl, including a highly unusual inland sighting of a Brant on March 24. Ironically, the Snow Goose migration, which can be spectacular in the Connecticut River Valley, was poor.

Probably the most intriguing waterfowl sighting of the period was a **Cinnamon Teal**, seen in Gloucester on March 18 and 19. There are only two records of this species in Massachusetts, both in mid-May, and because they are often kept in captivity, the Massachusetts Avian Records Committee says of the species “. . . wild individuals of these species may have occurred in the state. However, a captive origin cannot be discounted.”

The **Tufted Duck** in Clinton was the same individual that has been present all winter, but a female Tufted in Westport was an apparent new arrival. A female Tufted Duck was also reported in March of 1999, and is likely to be the same individual. Ring-necked Ducks and Common Mergansers were reported in impressive numbers statewide. Ruddy Ducks had a weak spring migration in the eastern part of the state, and better than average in the west, where they are less common in spring. Only a single inland report of scoters, a pair in Uxbridge, was received at this time of year when they are moving. Oldsquaw was more cooperative, and there were a number of reports from the western part of the state.

A hybrid Common x Barrow's Goldeneye afforded an excellent view to one observer who commented: “In all respects intermediate between the two species in regard to head shape, white loreal patch (an ‘oval-crescent’ which extended to just barely above eye), and amount of black on upperparts. A short black patch extended slightly onto the sides of the breast. Scapulars appeared as possessing a long narrow white ‘window’ entirely encircled in black. Bill was judged intermediate in size. . . I have seen such hybrids twice before in Massachusetts, both also adult males. (Care should be taken not to confuse first-winter males of either species with rare hybrids.)”

It was a nice weekend for kites on outer Cape Cod in late March, with single Swallow-tailed and Mississippi kites reported within two days of each other. Broad-winged Hawk migration was slow to get going, but rewarded hawkwatchers in Barre and Granville with over 700 birds each on April 27. An impressive 197 American Kestrels were logged on Plum Island on April 5, and a tally of 25 Merlins from the same location on April 30 was also noteworthy.

A Virginia Rail in Newburyport on March 16 was early, and a Sora at Oak Bluffs on March 30 was exceptionally so. A group of three **Sandhill Cranes** in Fairhaven lingered from their winter stay.

American Golden-Plovers are unusual in spring migration, rarer still before April, so the observation of two individuals flying over a field in West Bridgewater on March 25 was noteworthy. Least Sandpipers' earliest arrivals are typically in late April, and the earliest previous spring migrant was on April 11, 1981; but this year a Least Sandpiper, carefully observed for 30 minutes on April 2 in Ipswich, beat this early date by over a week. An April 10 individual in West Bridgewater was also very early.

Common Snipe peaked in Essex county in late March, with a count of over 300 birds between Topsfield and Newburyport. This is at least one to two weeks earlier than the traditional period for peak counts in the state which usually occur between April 5 and 20. A Red Phalarope at Arlington Reservoir on April 23 was a highly unusual inland sighting for this normally pelagic species.

Lynn Beach has been a traditional location for Little Gull, but a total of five individuals between April 10 and 20 was high. Impressive numbers of Bonaparte's Gulls showed up at inland locations in western Massachusetts, with a total of thirteen on April 4 in Turner's Falls being the highest daily count. **Mew Gull** has been a regular winter visitor to the Boston area over the past few years, but sightings in Newburyport and Brewster were unusual.

The place to be for gulls in this period was at the flooded fields in Hadley mentioned above.

Multiple Iceland, Lesser Black-backed, and Glaucous gulls mixed with hundreds of the more common species were a magnet for gull-lovers. Unusually high numbers of Caspian Terns were reported, including two reports from inland locations, and a Royal Tern in Edgartown was exceptionally early, the first Massachusetts record for April.

Monk Parakeets have sporadically attempted to breed in southern Massachusetts, where they probably represent an expansion of an established breeding population in Rhode Island, but sightings in Milton and Roslindale could be escapes. Good numbers of Barred Owls were reported, left over from a fairly impressive winter invasion of this species.

Eastern Phoebe typically arrive in the last week of March, but this year a surprising number were reported earlier than this, including eight individuals in Newburyport on March 15. Good numbers of Northern Shrikes continued from the winter's invasion. A shrike seen migrating through Sterling on April 2 would have been written off as another Northern except that it dropped down close to the observers, who carefully described a Loggerhead Shrike. White-eyed Vireos are normally not reported until late April, so three individuals seen in the first half of the month were noteworthy.

Single Tufted Titmice are normally not noteworthy, but this species is sedentary and extremely averse to crossing open expanses such as marshes or water, so sightings on Plum Island were interesting. Carolina Wrens continue to thrive and expand their range in the state, and Winter Wrens were well reported during this period. A House Wren in Winchester on April 8 was in the same location as one reported last winter; this species rarely overwinters, but the evidence is suggestive that this individual did so. A Marsh Wren at the Daniel Webster Wildlife Sanctuary (DWWS) in Marshfield on April 9 was either very early or successfully overwintered.

Bohemian Waxwings continued in a number of locations in the western part of the state, but gradually dispersed by the beginning of April, so a sighting of 80 in Truro on April 30 was unexpected.

Warbler migration begins in earnest in April, and this year there were an exceptional number of unusually early arrivals. A Tennessee Warbler which arrived at Marblehead Neck on April 10, however, was the earliest on record for this species. It was carefully scrutinized and described by the observer who commented that "the unseasonably strong and prolonged southerly airflow emanating all the way from the Gulf of Mexico in the days preceding the sighting no doubt played a role in the premature arrival of this individual."

Two Northern Parula sightings on April 7 and 8 on Cape Cod were early, as was a Yellow Warbler on the 16th in Royalston, and a Black-and-white Warbler on Plum Island on the 8th. Prairie Warblers recorded on March 20 and April 3 were unprecedented. A Common Yellowthroat in West Bridgewater on April 10 could have been an overwintering bird, but one in Northampton on April 14 was almost surely a new arrival, and exceptionally early. Although Louisiana Waterthrushes are one of the first warblers to arrive, an April 3 bird in Holyoke tied the earliest previous date in the western part of the state. **Prothonotary** and **Hooded** warblers are somewhat regular in April, but always noteworthy.

The **Spotted Towhee** which overwintered in Hadley frustrated many birders by making only sporadic (and short) appearances. Many had assumed the bird was gone for weeks, when it was rediscovered on April 7. A Clay-colored Sparrow which overwintered at DWWS was often in the company of a White-crowned Sparrow of the *gambelii* subspecies (an uncommon western visitor to Massachusetts). **Lark Bunting** is a rare spring visitor to the state, and a male visiting a feeder in Truro in late April was enjoyed by many birders.

Yellow-headed Blackbirds are almost annual visitors to Massachusetts, but almost always in

the southeastern part of the state, and almost always in fall, so a March 16 sighting in Northampton was exceptional. A good selection of winter finches continued to be seen, including a **Hoary Redpoll** that spent the winter at the Arcadia sanctuary in Easthampton.

M.W.R.

Red-throated Loon			3/31	Marblehead-Nahant	125+	R. Heil
3/10	Nantucket	182	4/1	Lakeville	8	W. Petersen
3/11	P'town	5		Double-crested Cormorant		
3/25	Westport	15	4/20	W. Bridgewater	425	G. d'Entremont
4/7, 15	Duxbury B.	8, 18	4/22	Turners Falls	66	H. Allen
4/22	Gill	1	4/23	Northampton	107	T. Gagnon
Common Loon			4/24	Nahant	3500 migr	R. Heil
3/5	Westport	12	4/24	P.I.	467	T. Carrolan
3/7	N. Scituate	8	4/29	Merrimac R.	304	M. Lynch#
3/30	E. Quabbin	3	American Bittern			
3/31	Marblehead-Nahant	59	3/thr	DWWS	1	D. Furbish
4/7, 15	Duxbury B.	25, 30	4/4	Salisbury	1	J. Soucy#
4/8	Gardner	1	4/5	Hawley	1	R. Packard
4/9	Holyoke	6	4/7	Rowley	1	J. Berry
4/22	Turners Falls	22	4/7-24	Pittsfield	1	G Shampang
4/23	S. Quabbin	1	4/25	N. Quincy	1	R. Min
4/23	Lakeville	2	4/29	Hatfield	1	R. Packard
Pied-billed Grebe			4/29	Merrimac R.	2	M. Lynch#
3/17	Springfield	2	Great Blue Heron			
3/26	W. Brookfield	2	3/5	Westport	12	M. Lynch#
4/3	Holyoke	3	3/9	W. Boxford	8-10	J. Holt
4/10	W. Bridgewater	2	3/19	DWMA	19	S. + L. Hennis
4/11	Turners Falls	2	3/26	Boxboro	26	R. Lockwood
4/23	Longmeadow	2	3/27	Townsend	7	M. Ryder
thr	Reports of indiv. from 23 locations		4/2	SRV	7	SSBC (B. Howell)
Horned Grebe			4/13	Petersham	3	M. Lynch#
3/1	Cheshire	1	4/24	P.I.	12	T. Carrolan
3/4, 4/1	Squantum	15, 17	Great Egret			
3/10	Turners Falls	5	3/12	Edgartown	1	J. Ben David
3/21, 4/23	Southwick	1, 5	3/21	Essex	1	R. + S. Young
3/24	Falmouth	9	3/23	Ipswich	1	J. Soucy#
3/25	Westport	48	3/24	Westport	1	C. Dalton
3/31	Marblehead-Nahant	230	3/27	Manchester	2	R. Heil
3/31	Wollaston B.	60	3/29, 30	Hingham	1, 4	N. Swirka
4/7, 29	Rockport	30, 6	3/31	P.I.	12	W. Drew#
4/7	Duxbury B.	24	4/2	S. Amherst	1	H. Allen
4/9, 23	Holyoke	3, 2	4/8	Ipswich	6	P. + F. Vale
4/9	Northampton	1	4/9	Millbury	1 ad br	M. Lynch#
4/21	Woburn	1 br pl	4/9	Rowley	12	S. Moore#
4/28	Pittsfield	9	4/15	Manchester	20	M. Lynch#
Red-necked Grebe			Snowy Egret			
3/1	Gloucester	25-30	3/27	Newbypt	1	D. Chickering#
3/7	N. Scituate	79	3/29	Gloucester	1	J. Soucy#
3/11	Nantucket	10	3/31	Salem	1	R. Heil
3/31	Marblehead-Nahant	99	3/31	Hingham	3	N. Swirka
4/9	Southwick	5	4/7	Essex	10	J. Soucy
4/9	Turners Falls	21	4/8	Sheffield	1	D. St James
4/9	Waltham	2	4/8	Ipswich	8	P. + F. Vale
4/10	Holyoke	3	4/9	Scituate	5	SSBC (N. Swirka)
4/19	Orange	1	4/10	W. Bridgewater	7	S. Arena
Eared Grebe			4/11	Marshfield	9	D. Furbish
3/16	E. Gloucester	1	4/15	Manchester	35 n	M. Lynch#
Northern Fulmar			4/26-28	Lenox	1	J. Cullen
4/22	Rockport (A.P.)	3 lt	Little Blue Heron			
Sooty Shearwater			3/30-31	Oak Bluffs	1	M. Pelikan#
4/26	Rockport (A.P.)	1	4/6	Manchester	1	S. Hedman
Northern Gannet			4/7	DWWS	2	D. Furbish
3/12, 4/26	Rockport (A.P.)	44, 124	4/17	Essex	4	D. + S. Larson
3/24	Bourne	24	4/27	Manchester	5	S. Hedman
3/30	Nantucket	90	4/28	Hardwick	1	W. Laflay
4/2	P'town	900	Tricolored Heron			
4/7	Duxbury B.	7	4/11	Essex	1	P. Brown
4/9	Scituate	5	4/12	Nantucket	1	E. Ray
American White Pelican			4/19	Essex	1	J. Soucy#
4/18-5/3, 5/16-25	Tyngsboro	1	Cattle Egret			
Great Cormorant			4/9	W. Tisbury	1	T. Rivers
3/3	Haverhill	25	4/9	Chappaquiddick	2	M. + S. Baron
3/5	P'town	65	4/24	Beverly	3	S. Hedman
3/7	N. Scituate	152	Green Heron			
3/15	Lakeville	15	4/21	Mt.A.	1	BBC (L. Ferrareso)

Green Heron (continued)			4/7	Duxbury B.	800	D. Furbish
4/12	Nantucket	1		Winthrop	300+	P. + F. Vale
4/27	Gloucester	1	E. Ray	4/23	E. Boston (B.I.)	A. Joslin
			J. Soucy#	4/24	Merrimac R.	M. Lynch#
Black-crowned Night-Heron				4/29		
3/6	Saugus	1	J. Nicholson	Mute Swan		
3/11	Harwich	1	H. Allen	3/1	Hadley	1
3/15	Medford	1	A. Joslin	3/2-19	Turners Falls	1
3/31	Boston	1	B. Mayer	3/4	Needham	8
4/3	Nantucket	37	<i>fide</i> E. Ray	3/5	Winchendon	1
4/4	Beverly	2	G. Leet	3/5	Westport	59
4/10	Milton	3	U. Nania	3/7	Southwick	1
4/14	Arlington	2	M. Rines	3/9	Wilbraham	1
4/15	Manchester	3	M. Lynch#	3/13	Gill	1
4/28	W. Harwich	25+	B. Nikula	3/15	Chicopee	2
Glossy Ibis				3/17-4/28	Northampton	1-6
3/19	Rowley	1	T. Mongeon	4/14	P.I.	8
3/20	Ipswich	2	L. Jensen	Whooper Swan		
4/6	Essex	18	J. Soucy#	thr	P.I.	1
4/8	Newbury	25	G. Wood	Wood Duck		
4/9	Hingham	3	S. Carey	3/2	DWWS	2
4/9-10	Northampton	1	T. Gagnon + v.o.	3/7	Bolton Flats	2
4/11	Duxbury	1	C. Fiorini	3/7, 4/26	Pepperell	3, 32
4/13	Lynn	8	J. Quigley	3/9	Plymouth	8
4/15	Ipswich	54	L. Ferrareso	3/10	Worcester	18
4/27	Manchester	70+	S. Hedman	3/11, 4/29	GMNWR	16, 18
4/28	W. Bridgewater	27	S. Arena	3/14	Turners Falls	32
Black Vulture				3/19	Boxford (C.P.)	4-6
3/5	Lexington	1	G. Marley	3/19	Grafton	15
3/5	Westport	1	M. Lynch#	4/8	Worcester	19
3/6, 7	Ipswich	1	M. Flor, J. Berry	4/8	Hadley	40
3/18	Provincetown	1	J. Gordon#	4/16	IRWS	15
3/20	Sheffield	3	P. Lehman	4/29	Oxford	12
3/26	Westport	1	M. Halloran	4/30	HRWMA	15
Turkey Vulture				Gadwall		
3/1-31	N. Dartmouth	11 max	M. Boucher	3/1	Newbypt.	29
3/4	Uxbridge	17	L. Bridenthal	3/5, 4/1	Westport	30, 34
3/5	Westport	14	M. Lynch#	3/8, 4/9	P.I.	6, 18
3/9	Randolph	17	N. Smith	3/8	DWWS	10
3/13	Braintree	9	S. Donovan	3/9	Plymouth	5
3/13	Whately	7	B. Packard	3/14	Montague	3
3/20	Greenfield	26	L. Therrien	3/17	Pittsfield	3
3/20	Sheffield	40	P. Lehman	3/18	Gill	10
3/25	Wachusett	10	J. Bartos	4/4	Washington	10
3/26	Truro	12	J. Young	4/9	DWWS	7
4/1	Milton (Blue Hills)	9	BBC (S. Olanoff)	4/21	Muskeget	4
4/4	Georgetown	9	R. Heil	4/22	Turners Falls	6
4/8, 10	N. Truro	5, 8	EMHW (E. Cestaro)	Eurasian Wigeon		
4/12-15	N. Truro	58	EMHW (E. Cestaro)	3/1-18	Newbypt.	2 max
4/18	W. Townsend	17	T. Pirro	3/4, 25	W. Bridgewater	1 m
4/18	Adams	30	R. Rancatti	3/5	Fairhaven	1 m
4/25-29	N. Truro	29	EMHW (E. Cestaro)	3/20	MNWS	1 m
4/30	Worc. (BMB)	10	J. Liller#	4/14	Oak Bluffs	1 m
4/30	N. Truro	14	EMHW (E. Cestaro)	American Oakeon		
Greater White-fronted Goose				3/5	Fairhaven	5
3/1	Cheshire	1	T. Collins	3/5	Carver	12
3/3-10	Hadley	1-3	J. Trimble + v.o.	3/18	Norfolk	6
3/4	Fairhaven	1	E. Salmela	3/21	Turners Falls	8
3/5	Mt.A.	1	R. Stymeist	3/29-30	Hadley	4
3/9	Sudbury	1	J. Hoye#	3/31	Hatfield	7
3/10-4/29	Concord (NAC)	1	S. Perkins + v.o.	4/7-11	Northampton	1-4
Snow Goose				4/27	Bolton Flats	6
3/1	Harwich	1 bl	J. Chisholm	American Black Duck		
3/1-4	W. Harwich	1	v.o.	3/5, 3/25	Westport	490, 497
3/2	Salisbury	1	MAS (N. Soulette)	3/8, 16	P.I.	220, 217
3/5	Rehoboth	2	M. Lynch#	3/19	Grafton	122
3/8	P.I.	7	D. Chickering#	4/1	Newbypt.	690+
3/11	Hadley	8	B. Kane#	4/14	P.I.	122
3/15	Florida	30	L. Therrien	Blue-winged Teal		
3/15-19	Ipswich	4	J. Soucy#, v.o.	3/16	Ipswich	1 m
3/20	Essex	4	J. Paluzzi	3/25	Bolton Flats	1
3/25	Windsor	100	R. Rancatti	3/25	Cumb. Farms	2
Brant				3/30	E. Quabbin	1
3/4	Revere	1200+	L. Pivacek	3/31	Newbury	1
3/5	Fairhaven	225	G. d'Entremont#	4/4-15	DWWS	2
3/17	Nantucket	138	E. Ray	4/6	Pittsfield	3
3/18	Salisbury	500	P. + J. Roberts	4/6	Belchertown	2
3/18	Quincy	1300	E. Taylor	4/6-11	Hatfield	6-8
3/24	Hadley	1	H. Allen	4/6-12	Hadley	4-6
						R. Heil
						R. Lockwood
						D. Furbish#
						H. Allen
						D. + I. Jewell
						D. Furbish
						G. Shampang
						H. Allen
						v.o.
						v.o.

Blue-winged Teal (continued)									
4/7	P.I.	4		D. + I. Jewell	3/11	Brookfield	82		M. Lynch#
4/11	Winchester	2		R. LaFontaine#	3/15	Chicopee	50		H. Allen
4/11	Northampton	4		H. Allen	3/18	4/5W. Peabody	35, 30		R. Heil
4/14	Bolton Flats	6		M. Lynch#	3/18	Northboro	139		M. Lynch#
4/16	Topsfield	pr		P. + F. Vale	3/18	Turners Falls	80		v.o.
4/20	GMNWR	2		D. Larson	3/18	Southboro	76		M. Lynch#
4/21	Manchester	1		S. Hedman	3/19	DWMA	490		S. + L. Hennin
4/22	W. Bridgewater	6		S. Arena	3/19	Stow	190		R. Lockwood
4/24	Quincy	2		D. Larson	3/21	Southwick	117		S. Kellogg
4/24	Concord (NAC)	3		S. Perkins	3/24	Stoughton	34		D. Larson
4/27	Newbury	4		J. Mittermeier	3/25	Maynard	36		R. Lockwood
Cinnamon Teal					3/27	Petersham	45		B. Coyle
3/18-19	Gloucester	1 m		T. Raymond + v.o.	4/2	Sterling	481		M. Lynch#
Northern Shoveler					4/3	IRWS	25		J. Berry
3/3	Sudbury	1		W. Petersen	4/5	Groveland	42		R. Heil
3/4	Plymouth	3 m, 1 f		E. Salmela	4/10	W. Bridgewater	33		S. Arena
3/15	Brookline	1 m		A. Joslin	Tufted Duck				
3/15	Newbypt.	pr.		R. Heil	3/14-18	Clinton	1 m		T. Pirro
3/17	GMNWR	2 m		S. Perkins	3/25	Westport	1 f		E. Nielsen
3/22	Longmeadow	3		N. Eaton	Greater Scaup				
3/25	E. Boston (B.I.)	1 m		D. Larson	3/5, 25	Westport	81, 71		M. Lynch#
4/4	DWWS	1 m		D. Furbish	3/18	Clinton	16		M. Lynch#
4/11	Ipswich	2 pr		J. Soucy#	3/25	Randolph	48		G. d'Entremont
4/24	E. Boston (B.I.)	pr		A. Joslin	3/25	Squantum	41		G. d'Entremont
Northern Pintail					4/1	Newbypt.	39		M. Lynch#
3/4	Sheffield	5		T. Collins	4/9	Turners Falls	4		T. Gagnon
3/4, 3/23	W. Bridgewater	35, 28		S. Arena	4/9	Northampton	2		T. Gagnon
3/5	Westport	69		M. Lynch#	4/14	Palmer	1		W. Laflay
3/6	Longmeadow	2		N. Eaton	4/15	Lynn	2		J. Quigley
3/7	Arlington Res.	2		M. Rines	4/17	Fairhaven	26		M. Boucher
3/8, 4/7	GMNWR	18, 16		S. Perkins	4/23	Lakeville	84		D. + S. Larson
3/9	Wilbraham	3		W. Laflay	4/29	Cambridge Res.	2		J. Forbes
3/11	Northampton	3		T. Gagnon	Lesser Scaup				
3/12	Cumb. Farms	4		W. Petersen	3/4	Melrose	1		D. + I. Jewell
3/14	Turners Falls	14		H. Allen	3/5	Westport	8		M. Lynch#
3/16	P.I.	12		W. Drew#	3/7	Newbypt.	22		R. Heil
3/24	Rowley	22		R. Heil	3/8, 16	P.I.	1, 11		W. Drew#
3/25	Bolton Flats	4		R. Lockwood	3/8	Lynn	45		R. Heil
3/25	Westport	110		M. Lynch#	3/8	Peabody	44		R. Heil
4/6	Pittsfield	2		G. Shampang	3/12	Pembroke	20		W. Petersen
4/7	Hadley	1 pr		E. Labato	3/23	Cambridge Res.	2		M. Rines
4/17	DWWS	2		D. Furbish	3/25	Randolph	1 pr		G. d'Entremont
Green-winged Teal					3/25	Wakefield	21		P. + F. Vale
3/4, 25	W. Bridgewater	45, 225		S. Arena	4/1	Lakeville	70		W. Petersen
3/8	GMNWR	35		S. Perkins	4/6	Gloucester	2		J. Gawienowski
3/10, 22	Topsfield	85, 103		R. Heil	4/13	Frammingham	3		L. Nachtrab
3/15	Newbypt. Area	267		R. Heil	4/16	W. Newbury (C.H.)	9		R. Heil
3/25	Cumb. Farms	120+		D. Furbish#	4/16	Amherst	1		H. Allen
3/27	Ipswich	75		R. Heil	4/20	Onota	2		E. Neumuth
3/30	Pontoosuc	50		R. Ferren	4/24	Pittsfield	1		P. Shoots
3/31	S. Hadley	100		P. Champlin	4/27	Turners Falls	2		M. Taylor
3/31	Hatfield	100		P. Champlin	4/30	W. Newbury	1		R. Heil
4/1-30	W. Harwich	50 max		B. Nikula	King Eider				
4/7	Dedham	100+		A. Joslin	3/9	Gloucester	1 m		J. Soucy
4/10, 28	W. Bridgewater	70, 168		S. Arena	3/14	Gay Head	1 m		M. Pelikan
4/14	P.I.	115		W. Drew#	3/17	Rockport (A.P.)	1 sub ad		B. Kane
4/22	Northampton	47		R. Packard	4/7	N. Scituate	1 sub ad m		R. Titus
4/27	Bolton Flats	42		E. Stromsted	Common Eider				
"Eurasian" Green-winged Teal					3/5	Westport	514		M. Lynch#
3/5	Eastham	1		B. Nikula	3/26	Marshfield	2000		D. Furbish
4/1-28	W. Harwich	1		v.o.	Harlequin Duck				
4/11	Hatfield	1		P. Champlin	3/20	Nantucket	12		E. Ray
Canvasback					3/25	Orleans	10		A. Williams
3/2, 9	Arlington Res.	3, 4		M. Rines	4/3	Rockport	75		J. Center
3/2	Turners Falls	1		H. Allen	4/7	N. Scituate	18		R. Titus
3/5	Braintree	5		S. Carey	4/25	M.V.	11		G. Levandoski
3/5	Westport	95		M. Lynch#	4/27	Rockport	32		P. Akers
3/19	DWMA	1 m		S. + L. Hennin	Surf Scoter				
3/19	Stow	1		R. Lockwood	3/4	S. Boston	50		G. d'Entremont
3/25	Randolph	1 imm m		G. d'Entremont	3/25	Westport	140		M. Lynch#
Redhead					4/7, 15	Duxbury B.	140, 150		D. Furbish
3/1-4/18	Charlton	1		D. Blain	4/9	Uxbridge	2		J. + D. Moffett
3/12-13	Braintree	1 m, 1 f		B. Zuzevich	4/26	Rockport (A.P.)	232		R. Heil
3/25	Randolph	1 pr		G. d'Entremont	White-winged Scoter				
Ring-necked Duck					3/25	Westport	11		M. Lynch#
3/3, 16	Arlington Res.	57, 143		M. Rines	4/7, 15	Duxbury B.	60, 80		D. Furbish
3/8	Duxbury	40		C. Fiorini	4/13	Lynn B.	92		G. Leet#
					4/29	Nantucket	500		E. Ray

Black Scoter									
3/29	Orleans	100	J. Barthel	3/30	Petersham	1		H. Allen	
3/30	Wasque Point	10,000+	A. Keith#	3/30	New Salem	1		W. Lafley	
4/26	Rockport (A.P)	130	R. Heil	3/31	Wollaston B.	900		R. Min	
Oldsquaw				3/31	Hatfield	1		P. Champlin	
3/23	Wasque Point	30,000+	A. Keith#	4/3	Gloucester (E.P.)	200+		J. Center	
3/28	Turners Falls	1	H. Allen	4/7	Rowley	33		J. Berry	
4/3	N. Egremont	1	J. Johnson	4/7, 15	Duxbury B.	150, 250		D. Furbish	
4/7, 15	Duxbury B.	12, 35	D. Furbish	4/8	P'town (R.P.)	2400+		D. Peacock	
4/19	New Salem	2	J. Johnstone	Common Merganser					
4/21	Muskeget	50,000	S. Zende#	3/1, 21	Belmont	250, 40		E. Stromsted	
4/22	Rockport (A.P.)	375	J. Soucy	3/2	Belmont	136		S. Simpson	
4/22	Northampton	1	B. Bieda	3/7, 14	Medford	410, 97		M. Rines	
4/28	Pittsfield	3	R. Laubach	3/8, 4/29	Stoneham	64, 19		D. + I. Jewell	
4/30	P.I.	850+	R. Heil	3/11	Brookfield	102		M. Lynch#	
Bufflehead				3/12	Worcester	104		M. Lynch#	
3/5	Newbypt.	100	J. Berry	3/12	Pembroke	115		W. Petersen	
3/5	Carver	25	G. d'Entremont#	3/13	Turners Falls	127		B. Packard	
3/5	Braintree	30+	S. Carey	3/15	Acton	50		M. Resch	
3/5	Westport	495	M. Lynch#	3/18	Northampton	200		T. Gagnon	
3/7	N. Scituate	142	R. Titus	3/18	Southboro	124		M. Lynch#	
3/12	Wakefield	68	D. Williams	3/20	Holland	45		W. Lafley	
3/13	Halifax	32	K. Anderson	3/23-24	Southwick	100		S. Kellogg	
3/25	Randolph	102	G. d'Entremont	3/25	Randolph	33		G. d'Entremont	
3/30	Rowley	27	J. Berry	4/5	Plainfield	31		R. Packard	
3/31	Nahant	415	R. Heil	4/10	Northampton	42		E. Labato	
4/1	Newbypt.	460+	M. Lynch#	4/27	Turners Falls	20		M. Taylor	
4/1	Squantum	117	G. d'Entremont	Ruddy Duck					
4/14	Ipswich (C.B.)	33	J. Barber	3/5	Braintree	20+		S. Carey	
4/17	Fairhaven	22	M. Boucher	3/7, 28	W. Newbury	11, 15		D. Chickering#	
Common Goldeneye				3/8	Lynn	10		R. Heil	
3/4	Squantum	75	G. d'Entremont	3/12	Gloucester	8		S. Leonard	
3/4	Stow	27	R. Lockwood	3/14, 4/11	Arlington	16, 16		R. LaFontaine	
3/5	Westport	92	M. Lynch#	3/18	Southboro	19		M. Lynch#	
3/7	N. Scituate	25	R. Titus	3/25	Westport	12		M. Lynch#	
3/13, 4/4	Turners Falls	13, 4	R. Packard	3/25	Randolph	18		G. d'Entremont	
3/14, 4/11	New Salem	28, 3	W. Lafley	3/29, 4/10	Melrose	20, 27		D. + I. Jewell	
3/17	Nantucket	55	E. Ray	4/2	Brockton	14		D. Larson	
3/19	DWMA	20	S. + L. Hennin	4/8	Randolph	10+		S. Carey	
3/23	Pepperell	25	E. Stromsted	4/12	Southwick	5		S. Kellogg	
3/24	Newbypt.	425	R. Heil	4/29	Cambridge Res.	22		J. Forbes	
3/27	Petersham	15	B. Coyle	Osprey					
3/31	New Salem	10	W. Lafley	3/20	Naushon I.	pr		J. Chisholm	
4/1	Newbypt.	210+	M. Lynch#	3/25	Westport	36		M. Lynch#	
4/7, 15	Duxbury B.	14, 20	D. Furbish	4/3	Revere	pr		G. Wood	
Barrow's Goldeneye				4/7	Duxbury B.	3		D. Furbish	
3/1,7	Newbypt.	2 m + 1 f	R. Heil	4/7	Barre Falls	6		EMHW (B. Kamp)	
3/7	N. Scituate	1 m	R. Titus	4/7	Rowley	3		J. Berry	
3/8	Salisbury	2 m	J. Berry#	4/7	Groton	2		T. Pirro	
3/10	Winthrop B.	1 m	J. Barton	4/9	Pepperell	2		E. Stromsted	
3/10	Nantucket	2	fide E. Ray	4/9	Weymouth	pr		S. Carey	
3/16	E. Gloucester	2 m	J. Berry	4/9-17	DWWS	3		D. Furbish	
3/31	P.I.	1 m	M. Taylor	4/10	N. Truro	2		EMHW (E. Cestaro)	
3/31	Nahant	1 f	R. Heil	4/14	Northampton	3		R. Packard	
Common x Barrow's Goldeneye				4/16	Essex	4		P. + F. Vale	
3/7	Newburyport	1 ad m	R. Heil	4/22	Gardner	2		T. Pirro	
Hooded Merganser				4/24, 28	P.I.	11, 10		T. Carrolan	
3/1, 13	Pepperell	30, 50	E. Stromsted	4/24	Granville	16		J. Zepko	
3/4	Arlington	6	P. Roberts	4/24	Quincy	2		D. Larson	
3/4	Stow	16	R. Lockwood	4/25	Granville	29		J. Weeks#	
3/9	Plymouth	20+	J. Chisholm#	4/25, 27	Barre	15, 10		EMHW (B. Kamp)	
3/10	Worcester	14	M. Lynch#	4/28-30	N. Truro	13		EMHW (E. Cestaro)	
3/11	Melrose	9	P. + F. Vale	4/30	Chesterfield	3		R. Packard	
3/12	P.I.	7	S. Haydock	Swallow-tailed Kite					
3/13	Halifax	4	K. Anderson	3/27	Hyannis	1		S. Clifton#	
3/14	Southwick	34	S. Kellogg	Mississippi Kite					
3/18	Turners Falls	80	Allen Club	3/29	Eastham	1 sub ad		A. Thomas	
3/19	DWMA	10	S. + L. Hennin	Bald Eagle					
3/22	HRWMA	4	T. Pirro	3/2	Newbypt.	2		MAS (N. Soulette)	
3/24	Middleboro	16	R. Turner	3/4	Uxbridge	1 imm		L. Bridenthal	
4/7	Beverly	7	J. Brown#	3/5	Westport	2 imm.		M. Lynch#	
4/8	Reading	5 f	D. Williams	3/5	Rowley	1		D. + S. Larson	
4/28	Easthampton	8	M. Taylor	3/7	Gay Head	1 imm		A. Fischer III	
Red-breasted Merganser				3/8	Petersham	1 2 yr		D. Chapman	
3/5	Westport	531	M. Lynch#	3/8	Mt. Tom	1 ad		T. Gagnon	
3/5	P'town	1100	B. Nikula	3/8	GMNWR	1 1W		S. Perkins	
3/18	Northampton	6	T. Gagnon	3/11	S. Quabbin	9		M. Lynch#	
3/19-4/22	Turners Falls	1-9	v.o.	3/13	Turners Falls	2		B. Packard	
				3/18	Northampton	1 imm		T. Gagnon	

Bald Eagle (continued)			4/20	Reading	1	D. Williams#
3/19 Sudbury R.	1 ad	K. Reiner	4/29	Leominster	1	L. Clark#
3/19, 22 Plymouth	1 ad, 2	J. Chisholm	Red-shouldered Hawk			
3/22 Wayland	1	M. Smith	3/thr	E. Middleboro	pr	K. Anderson
3/23 Winchendon	1	W. Baldani	3/5, 4/8	Randolph	1, 2	S. Carey
3/25 Quabbin (G37)	10	J. Hoye#	3/5	Westport	2	G. d'Entremont#
3/30 Turners Falls	2 ad	M. Taylor	3/5	Hanson	1	W. Petersen
3/30 Quabbin (G35)	1 ad	B. Lafley	3/5	Rehoboth	1	M. Lynch#
4/14 Bolton Flats	1 imm	M. Lynch#	3/6	Maynard	1	L. Nachtrab
4/15 Quabbin (G11)	2 ad	B. Kane	3/7	W. Newbury	3	R. Heil
4/27 N. Truro	1	EMHW (E. Cestaro)	3/8	Groton	2	T. Pirro
4/30 P.I.	2 imm	R. Heil	3/9	Granville	10	S. Kellogg
Northern Harrier			3/14	Plympton	1	K. Anderson
3/thr DWWS	9 max	D. Furbish + vo	3/25	Easton	1	S. Arena
3/1 Southwick	1	S. Kellogg	3/26, 4/10	Pepperell	2	E. Stromsted
3/4 W. Bridgewater	2	S. Arena	3/26	Lincoln	pr n	M. Rines
3/7 Windsor	1 f	B. Lafley	3/27	Quabbin (G33)	1 pr	C. Buelow
3/11 Wakefield	1	P. + F. Vale	3/28	Hingham	2 pr	D. Peacock
3/12 Cumb. Farms	3	W. Petersen	4/2	WMWS	1	F. + M. Howes#
3/19 Salisbury	2	P. + F. Vale	4/4	Wakefield	1	F. Vale
3/19 Wayland	1	R. Lockwood	4/5	Hawley	1	R. Packard
3/21 W. Boxford	1 m	T. Walker	4/8	Pembroke	2	D. Furbish
4/1 Milton (Blue Hills)	2	BBC (S. Olanoff)	4/8	New Salem	2	B. Lafley
4/7 Beverly	1	J. Brown#	4/8	Boxford (C.P.)	2	P. + F. Vale
4/7, 28 P.I.	12, 12	T. Carrolan	4/13	DWWS	2	D. Furbish
4/11, 30 N. Truro	3, 5	EMHW (E. Cestaro)	4/14	Northampton	2	R. Packard
4/14 Bolton Flats	2m	M. Lynch#	4/25	Whately	1	G. LeBaron
4/14 Concord	1 m	M. Rines	4/25	Stow	1	R. Lockwood
4/16 IRWS	2	BBC (F. + P. Vale)	4/29	Lexington	2	J. Forbes
4/29 Merrimac R.	3	M. Lynch#	4/30	Worc. (BMB)	1	J. Liller#
4/30 Dedham	2	A. Joslin	4/30	N. Dartmouth	2	M. Boucher
Sharp-shinned Hawk			4/30	Chesterfield	2 imm	R. Packard
3/26 Lynnfield	2	D. + I. Jewell	Broad-winged Hawk			
4/7 Barre Falls	5	EMHW (B. Kamp)	4/7	Barre Falls	1	EMHW (B. Kamp)
4/7, 11, 15 P.I.	2, 2, 11	EMHW (J. Barton)	4/10	Northfield	1	M. Taylor
4/7 Groton	5	T. Pirro	4/14	Bolton Flats	1	M. Lynch#
4/8, 11, 14 N. Truro	10, 14	EMHW (E. Cestaro)	4/20	Reading	1	D. Williams#
4/15, 24, 25 N. Truro	2, 9, 8	EMHW (E. Cestaro)	4/24	Granville	103	J. Zepko
4/25 Whitman	2	K. Holmes	4/25	Barre	709	EMHW (B. Kamp)
4/25 Granville	22	T. Swochak, J. Weeks	4/25	Granville	720	J. Weeks#
4/25, 27 Barre	15, 16	EMHW (B. Kamp)	4/27	Barre	278	EMHW (B. Kamp)
4/28, 29, 30 N. Truro	26, 5, 14	EMHW (E. Cestaro)	4/28	Mt Tom	32	B. Bieda
4/28, 29, 30 P.I.	90, 38, 10	T. Carrolan	4/28, 29	N. Truro	6, 2	EMHW (E. Cestaro)
4/29 Merrimac R.	3	M. Lynch#	4/29	Mt. Wachusett	15	P. Roberts
4/29 Mt. Wachusett	5	P. Roberts	4/29	Gardner	30	T. Pirro
4/29 Gardner	2	T. Pirro	4/30	Barre	31	M. Lynch#
4/29 Lexington	2	J. Forbes	4/30	Stow	3	R. Lockwood + v. o.
4/30 Stow	2	R. Lockwood	4/30	HRWMA	6	T. Pirro
thr Reports of indiv. from 34 locations			4/30	Sharon	4	R. Titus
Cooper's Hawk			Red-tailed Hawk			
3/7 W. Newbury	3	R. Heil	3/1	Newbypt. Area	24	R. Heil
3/9 N. Andover	5	R. Heil	3/8	GMNWR	10	S. Perkins
3/17 GMNWR	3	S. Perkins	3/8	Groton	6	T. Pirro
3/25 Easton	pr	S. Arena	3/14	Ipswich	13	R. Heil
3/27 Orleans	2	A. Williams	4/11	DWWS	9 ad, 2 imm	D. Furbish
4/7 Maynard	3	L. Nachtrab	4/11, 14	N. Truro	5, 4	EMHW (E. Cestaro)
4/8, 10, 11 N. Truro	5, 3, 2	EMHW (E. Cestaro)	4/14	Bolton Flats	6	M. Lynch#
4/14, 15, 27 N. Truro	6, 1, 2	EMHW (E. Cestaro)	Rough-legged Hawk			
4/22 Lincoln	2	B. McHugh	3/thr	DWWS	7 max	D. Furbish + vo
4/28, 29, 30 N. Truro	3, 2, 1	EMHW (E. Cestaro)	3/1	Newbypt./P.I.	2 lt, 2 dk	R. Heil
4/30 Sharon	5	R. Titus	3/1	Manchester	1	G. Leet#
thr Reports of indiv. from 29 locations.			3/1	Windsor	1	L. Therrien
Northern Goshawk			3/2	Northampton	1	B. Bieda
3/2, 26 Pepperell	1, 2	M. Resch	3/3	Sudbury	1	W. Petersen
3/4 Pittsfield	1	T. Collins	3/4	W. Bridgewater	2 lt	S. Arena
3/5 Edgartown	1	M. Pelikan	3/5	Cumb. Farms	1	W. Petersen
3/8 Monroe	1	R. Rancatti	3/7	Wachusett Res.	1 dk	M. Lynch#
3/8 N. Dartmouth	2	M. Boucher	3/8	Wayland	1	P. Vale
3/9 Windsor	1	L. Therrien	3/12	Needham	1 lt	A. Joslin
3/24 Bourne	1	A. Williams	3/19	Lexington	1 lt	M. Rines
3/25 Quabbin (G37)	1	J. Hoye#	3/20	Ipswich	1 lt	J. Berry
3/26-27 Williamstown	1	R. Packard	3/22	P.I.	2	MAS (N. Soulette)
3/27 Haydenville	1	B. Packard	3/27	Petersham	1	B. Coyle
4/7 Boxford	1	D. + I. Jewell	4/4	DWWS	1	D. Furbish
4/7 Maynard	1 imm	L. Nachtrab	4/7	Rowley	1 lt	J. Berry
4/8 IRWS	1	P. + F. Vale	Golden Eagle			
4/12 Hadley	1	W. Lafley	3/11	S. Quabbin	1 ad	M. Lynch#
4/16 Royalston	1	J. Morris-Siegel	3/25	Quabbin (G37)	1 ad	J. Hoye#

American Kestrel			3/5	Templeton	60	T. Pirro
3/4 Boston (Logan)	8	N. Smith	3/12	S. Dartmouth	13	M. Boucher
3/31 P.I.	10	D. + I. Jewell	3/13	Byfield	13	S. Haydock
4/1, 16 Bedford	26, 39	M. Rines	3/18	Cumb. Farms	53	MAS (D. Furbish)
4/2 ONWR	2	R. Lockwood	3/19	Dedham	5	A. Joslin
4/4 DWWS	6	D. Furbish	3/21	Windsor	5	B. Lafley
4/5, 7, 8 P.I.	197, 93, 29	T. Carrolan	3/22	Hamilton	6	J. Berry
4/7 Barre Falls	7	EMHW (B. Kamp)	3/22	Plymouth	12	J. Chisholm
4/7 Hingham	7 m, 7 f	D. Peacock	4/15	Worc. (BMB)	1	J. Liller#
4/8, 12, 14 N. Truro	9, 2, 3	EMHW (E. Cestaro)	4/21	Holliston	1 m	J. Moffett
4/11, 15 P.I.	70, 35	T. Carrolan	4/24	Whitman	1	K. Holmes
4/12 Ipswich/Essex	3-4	J. Berry	4/25	Stow	1	R. Lockwood
4/12 Hadley	14	H. Allen	Northern Bobwhite			
4/15 Hyannis	17	S. Clifton#	3/5	Westport	1	M. Lynch#
4/24, 27 N. Truro	4, 4	EMHW (E. Cestaro)	4/16	Cumb. Farms	1 m	D. Furbish
4/25 Granville	11	T. Swochak, J. Weeks	4/29	N. Middleboro	1	K. Holmes
4/25, 27 Barre	5, 6	EMHW (B. Kamp)	Virginia Rail			
4/28, 29, 30 N. Truro	5, 6, 8	EMHW (E. Cestaro)	3/16	Newbypt.	1	J. Soucy#
4/28, 30 P.I.	57, 85	T. Carrolan	4/2	GMNWR	1	G. Marley
Merlin			4/12	Hadley	2	B. Bieda
3/9 Pepperell	2	E. Stromsted	4/16	W. Newbury	5	R. Heil
3/26 N. Scituate	2	D. Furbish	4/20, 23	DWWS	1	D. Furbish
4/11 Katama	2	V. Laux	4/22	W. Bridgewater	1	S. Arena
4/11, 25, 29N. Truro	1, 6, 3	EMHW (E. Cestaro)	4/30	Worcester	3	M. Lynch#
4/24, 25, 30 P.I.	13, 9, 25	T. Carrolan	Sora			
4/25, 27 Barre	1, 2	EMHW (B. Kamp)	3/30	Oak Bluffs	1	A. Keith
thr Reports of indiv. from 21 locations			4/23	DWWS	1	D. Furbish
Peregrine Falcon			American Coot			
3/1 Newbypt.	1	R. Heil	3/1	Manchester	7	G. Leet#
3/4 Boston (Logan)	3	N. Smith	3/2	Easthampton	1	B. Bieda
3/7 Wachusett Res.	1 ad	M. Lynch#	3/7-4/18	Southwick	2	S. Kellogg
3/11 Northampton	1	T. Gagnon	3/9	Plymouth	5	J. Chisholm#
3/16 Turners Falls	1	G. LeBaron	3/14	New Bedford	7	M. Boucher
3/21 Worcester	pr	M. Lynch#	3/17	Boston	13	A. Joslin
3/26 Fall River	pr	M. Halloran	3/27	Arlington	127	K. Hartel
3/30 Maynard	1	L. Nachtrab	4/6	Southampton	1	B. Bieda
4/7, 11, 15 P.I.	1, 1, 1	T. Carrolan	4/22	W. Bridgewater	2	S. Arena
4/7 Needham	1	H. Raymond	4/29	P.I.	1	M. Lynch#
4/12 Randolph	1	D. Larson	Sandhill Crane			
4/13 N. Truro	1	EMHW (E. Cestaro)	3/4	Fairhaven	3	E. Salmela + v.o.
4/14 Waltham	1	R. Lewis	Black-bellied Plover			
4/21 Muskeget	2	S. Zende#	4/7, 15	Duxbury B.	40, 20	D. Furbish
4/24, 28, 30 P.I.	3, 2, 3	T. Carrolan	4/9, 17	Plymouth	8, 12	E. Neumuth
4/29 P'town	1 ad	B. Nikula	4/16	P.I.	12	R. Heil
4/29 Hatfield	1	R. Packard	4/16	Winthrop	75	P. + F. Vale
4/29 Blandford	1	S. Kellogg#	4/30	Gloucester	6	J. Barber
Ring-necked Pheasant			American Golden-Plover			
3/5 Salisbury	1	D. + S. Larson	3/25	W. Bridgewater	2	S. Arena
3/12 Needham	1	A. Joslin	Piping Plover			
3/13 Lexington	1	M. Taylor#	3/5	Acoaxet	1	P. Sheehan
4/2 Melrose	2	P. + F. Vale	3/10	Rockport	1	P. Akers
4/7 Dedham	1	A. Joslin	3/12	Gloucester	1	J. Berry
4/13 W. Newbury	2	S. Grinley	3/18	P.I.	2	R. Gough
4/24 Bedford	1	R. Lockwood	3/19	Duxbury B.	4	D. Morimoto
4/thr Nahant	3 m	R. Heil	3/24	Bourne	1	C. Dalton
Ruffed Grouse			3/24	Centerville	1	N. Soulette
3/5 Templeton	1	T. Pirro	3/30	Nantucket	2	vide E. Ray
3/18 Westboro	1	M. Lynch#	3/30	Fairhaven	2	M. LaBossiere
3/25 Wachusett	1	J. Bartos	4/9	Plymouth	2	E. Neumuth
3/25 Maynard	2	R. Lockwood	4/14	Ipswich (C.B.)	19	J. Barber
3/28 Hingham	4	D. Peacock	4/15	P'town (R.P.)	2	C. Holzapfel
3/29 Boxford (C.P.)	2	MAS (N. Soulette)	4/21	Muskeget	6	S. Zende#
4/8-30 Worc. (BMB)	1	J. Liller	Killdeer			
4/14 W. Newbury	1	S. Grinley	3/1	Newbury	19	R. Heil
4/14 Northampton	1	R. Packard	3/11	Amherst	25	B. Kane#
4/15 Wales	1	D. Blain	3/15	Newbypt. Area	74	R. Heil
4/16 Agawam	1	J. LaPointe	3/18	Concord	15	M. Rines
4/17 Quabbin (G6)	1	B. Kane	3/20	Nantucket	23	E. Ray
4/23 Oxford	1	P. Meleski	3/25	Bolton Flats	14	R. Lockwood
4/25 Ipswich	1	J. Bery	3/25	Easton	45	S. Arena
4/27 Southbridge	1	D. Blain	3/27	Ipswich	45	R. Heil
4/29 ONWR	3	R. Lockwood	4/10	W. Bridgewater	25	S. Arena
4/29 N. Middleboro	1	K. Holmes	American Oystercatcher			
4/30 Stow	5	R. Lockwood	3/10	Nantucket	11	vide E. Ray
Wild Turkey			3/25	Westport	3	M. Lynch#
3/1 W. Newbury	3	D. Chickering#	3/20	Fairhaven	2	M. LaBossiere
3/2 Orange	45	W. Lafley	4/thr	Squantum	2	G. d'Entremont + v. o.
3/2, 3 Sherborn	30, 6	J. Hoye	4/16	Muskeget	10	S. Zende#

American Oystercatcher (continued)			4/30	Newbypt.	11	R. Heil	
4/23	Winthrop	2	P. + F. Vale	Purple Sandpiper			
Greater Yellowlegs			3/4	Rockport (H.P.)	2	BBC (J. Nove)	
3/12	W. Bridgewater	1	W. Petersen	3/5	Westport	35	M. Lynch#
3/24	Rowley	2	R. Heil	3/12	Scituate	12	MAS (D. Furbish)
3/27	Newbypt.	2	J. Berry	3/23	E. Gloucester	27	J. Bery#
3/30	Fairhaven	1	M. LaBossiere	3/26	Marshfield	65	D. Furbish
3/31, 4/21	Essex	2, 6	S. Hedman	4/1	Salisbury	55	M. Lynch#
4/5	S. Dartmouth	13	M. Boucher	4/7	N. Scituate	340	R. Titus
4/7	Duxbury B.	6	D. Furbish	4/10	Lynn	30	R. Heil
4/8	Newbypt.	40	R. Heil	4/17	Fairhaven	8	M. Boucher
4/8	Hatfield	1	S. Smolen-Morton	4/25	M.V.	5	G. Levandoski
4/17	DWWS	23	D. Furbish	Dunlin			
4/22	Northampton	8	R. Packard	3/16	P.I.	72	W. Drew#
4/28	Easthampton	8	M. Taylor#	3/30	Fairhaven	45	M. LaBossiere
4/28	W. Bridgewater	35	S. Arena	3/31	Nahant	90	R. Heil
4/30	Newbypt./P.I.	363	R. Heil	4/7, 15	Duxbury B.	4, 500	D. Furbish
4/30	Gloucester	20	J. Barber	4/9, 17	Plymouth	250+	E. Neumuth
Lesser Yellowlegs				4/16	Winthrop	75	P. + F. Vale
3/10	Hadley	1	C. Holzapfel	4/16	Cumb. Farms	1	D. Furbish
3/13	Scituate	1	B. Kane	Short-billed Dowitcher			
3/24	Newbury	1	R. Heil	4/30	Newbypt.	1	R. Heil
3/25, 4/28	W. Bridgewater	2, 25	S. Arena	Dowitcher species			
3/26	Duxbury	1	L. Cleveland	4/12	Lynn B.	1	T. Roberts
4/2	Ipswich	4	R. Heil	4/28	W. Harwich	1	P. O'Neill#
4/11	Easthampton	3	H. Allen	Common Snipe			
4/16	Winthrop	5	P. + F. Vale	3/17, 25	W. Bridgewater	3, 45	S. Arena
4/17	DWWS	3	D. Furbish	3/18	P.I.	14	S. Hedman#
4/21	Muskeget	2	S. Zende#	3/27	Topsfield-Newbypt	304	R. Heil
4/24	Quincy	1	D. Larson	4/1	Bolton Flats	89	R. Lockwood
4/29	Merrimac R.	9	M. Lynch#	4/1	Halifax	65	W. Petersen
4/30	Gloucester	8	J. Barber	4/2	Topsfield	35	R. Heil
4/30	Newbypt.	6	R. Heil	4/2	Ipswich	65	R. Heil
Solitary Sandpiper				4/2	Arlington Res.	7	M. Rines
4/14	Bolton Flats	3	M. Lynch#	4/7	Granby	8	B. Bieda
4/16	Newbury	1	R. Finch#	4/8	Hatfield	10	S. Smolen-Morton
4/16	Barre	2	M. Lynch#	4/9	Northampton	13	H. Allen
4/16	Chilmark	1	A. Keith	4/10, 22	W. Bridgewater	225, 275+	S. Arena
4/30	W. Newbury	1	R. Heil	4/12	Hadley	7	H. Allen
Willet				4/14	Concord	22	M. Rines
4/16	P.I.	1	R. Heil	4/17	DWWS	20	D. Furbish
4/30	Newbypt.	5	R. Heil	4/26	Concord (NAC)	45	S. Perkins
4/25	Muskeget I.	1	S. Zende#	4/27	Easthampton	5	E. Labato
4/29	Nantucket	4	E. Ray	American Woodcock			
Spotted Sandpiper				3/7	Marlboro	6	S. Moore
4/27	Braintree	1	K. Vespaziani	3/8	Burlington	16	M. Rines
4/28	Easthampton	1	M. Taylor#	3/8	DWWS	26	D. Furbish
4/29	Merrimac R.	1	M. Lynch#	3/8	Boxboro	5	J. Bartos
4/29	Hatfield	1	R. Packard	3/8, 9	Belchertown	6, 10	B. Kane
4/30	Arlington Res.	1	M. Rines	3/12	Needham	10	A. Joslin
Upland Sandpiper				3/14	S. Dartmouth	6	M. Boucher
4/25	Katama	1	V. Laux#	3/21	Cambridge	7	M. Rines
4/29	Bedford	2	D. + S. Larson	3/23	DWWS	22	D. Furbish
4/30	P.I.	1	R. Heil	3/26	Williamsburg	6	B. Packard
Ruddy Turnstone				4/2	Concord	5	L. Nachtrab
3/5	Fairhaven	17	G. d'Entremont#	4/14	Northampton	10	R. Packard
3/6	Winthrop B.	3	K. Downing	4/16	Agawam	6	J. LaPointe
4/7, 15	Duxbury B.	4, 2	D. Furbish	Wilson's Phalarope			
4/16	Winthrop	15	P. + F. Vale	4/29	P.I.	1 f	W. Drew
Red Knot				Red Phalarope			
4/13	Duxbury B.	1	D. Furbish	4/23	Arlington Res.	1	M. Rines#
Sanderling				Laughing Gull			
3/4	Nahant B.	800	L. Pivacek	3/11	Plymouth	1	H. Allen
3/19	P'town (R.P.)	250	J. Hoye#	3/27	Orleans	1	A. Williams
4/12	Lynn B.	250	T. Roberts	3/29	Plymouth	6	K. Anderson
4/14	Ipswich (C.B.)	300+	J. Barber	4/15	P'town (R.P.)	50	C. Holzapfel
4/23	Revere B.	430	P. + F. Vale	4/22, 23	W. Bridgewater	1, 2	S. Arena
Least Sandpiper				4/26	Rockport (A.P.)	2 ad	R. Heil
4/2	Ipswich	1	R. Heil	4/27	Squantum	1	D. Larson
4/10	W. Bridgewater	1	S. Arena	4/30	Hingham	1	D. + S. Larson
Pectoral Sandpiper				Little Gull			
3/25	W. Bridgewater	2	S. Arena	4/9, 30	Newbypt.	3, 1	R. Heil
4/7	Duxbury B.	1	D. Furbish	4/10-20	Lynn B.	5 total	R. Heil
4/9	Northampton	15	T. Gagnon	Black-headed Gull			
4/12	Hadley	3	H. Allen	3/10	Nantucket	1	fide E. Ray
4/16	Cumb. Farms	5	D. Furbish	3/11	Plymouth	2	H. Allen
4/21	Muskeget	1	S. Zende#	3/11	S. Boston	1	R. Donovan
4/22	W. Bridgewater	2	S. Arena	3/24-27	Lynn	1 ad	J. Quigley

Black-headed Gull (continued)			4/29 Gloucester	3	C. Leahy
3/25 Falmouth	1 ad	D. Furbish#	Royal Tern		
3/28 Hingham	1	D. Peacock	4/24 Edgartown	1	A. Keith#
3/31 Nahant	1 1W	R. Heil	Common Tern		
4/1 Newbypt.	1 ad	M. Lynch#	4/25 Muskeget I.	15	S. Zende#
Bonaparte's Gull			4/29 Merrimac R.	23	M. Lynch#
3/4 Easton	4 ad	S. Arena	4/30 Hingham H.	2	D. + S. Larson
3/17 Nantucket	75	E. Ray	Least Tern		
3/25 Newbypt.	3	D. Crockett	4/24 Edgartown	1	V. Laux
3/25 Plymouth	2	D. Furbish#	4/25 Muskeget I.	2	S. Zende#
3/28, 4/4, 9 Turners Falls	1, 13, 10	H. Allen + v.o.	Dovekie		
3/31 Nahant/Lynn	290	R. Heil	3/17 Nantucket	1	E. Ray
4/8 Southwick	4	S. Kellogg	Common Murre (no details)		
4/9 Newbypt.	500	R. Heil	3/14 P'town (R.P.)	1	J. Hoye#
4/10 Northampton	1	E. Labato	Thick-billed Murre		
4/10 Lynn B.	2200	R. Heil	3/12 Rockport (A.P.)	14	R. Heil
4/29 Merrimac R.	61	M. Lynch#	4/15 Nantucket	1	S. Clifton#
Mew Gull (no details)			Murre species		
3/11 S. Boston	1 2W	R. Donovan	4/24 Nahant	1	R. Heil
3/25 Brewster	1 ad	R. Clem	Razorbill		
Mew Gull (details submitted)			3/8 off Gay Head	200+	V. Laux#
3/15-24 Newbypt.	1 2W	R. Heil	3/12 Rockport (A.P.)	337	R. Heil
Ring-billed Gull			3/14 P'town (R.P.)	50	J. Hoye#
3/15 Newbypt.	950+	R. Heil	3/20 Nantucket	22	E. Ray
Herring Gull			4/15 P'town (R.P.)	50	C. Holzapfel
3/15 Newbypt.	7500+	R. Heil	4/18 Rockport (A.P.)	1	J. Soucy
Iceland Gull			4/25 off M.V.	1	A. Goldman
3/1 Newbypt.	14	R. Heil	Black Guillemot		
3/3 Hadley	2	J. Trimble	3/5 P'town	2	B. Nikula
3/4 Wachusett Res.	1 1W	M. Lynch#	3/12 Scituate	2	MAS (D. Furbish)
3/8 Fitchburg	1 1yr	T. Pirro	3/12 Rockport (A.P.)	7	R. Heil
3/11 P'town	15	D. Comeau#	3/13 Marshfield	8	B. Kane
3/11 Nantucket	15	fide E. Ray	3/20 Nantucket	4	E. Ray
3/12 W. Bridgewater	1	W. Petersen	3/23 E. Gloucester	9	J. Berry#
3/14 P'town	8+	D. Comeau#	3/31 Marblehead	26	R. Heil
3/17 Oak Bluffs	10	M. Pelikan	4/17 Plymouth	1	E. Neumuth
4/6 Gloucester	1	J. Gawienowski	4/22 Rockport (A.P.)	2 br pl	J. Soucy
4/15 P'town (R.P.)	15	C. Holzapfel	4/24 Nahant	1 br pl	R. Heil
Lesser Black-backed Gull			Large Alcid species		
3/3 Hadley	3	J. Trimble	3/12, 4/26 Rockport (A.P.)	23, 15	R. Heil
3/4 Wachusett Res.	1 1W	M. Lynch#	3/13, 25 Truro	550, 510	J. Sones
3/5 Plymouth	2	H. Allen	4/15, 29 P'town	90, 8	B. Nikula
3/11 P'town	1 ad	D. Comeau#	Monk Parakeet		
3/12 Bridgewater	1	W. Petersen	3/6 Roslindale	1	J. Battenfeld
3/15 Boston	1 imm	B. Guenther	4/1 Milton	1	BBC (S. Olanoff)
3/17 Edgartown	1 1W	M. Pelikan	Eastern Screech-Owl		
3/17 Nantucket	4	E. Ray	thr	Reports of indiv. from 6 locations	
3/28 Katama	1 ad	M. Pelikan	Great Horned Owl		
4/1 Newbypt.	1 1W	M. Lynch#	3/1 Wayland	1 pr	D. Peebles
4/2, 15 Brewster	5, 2	B. Nikula	3/4 Westboro	1 n	M. Lynch#
4/21 Northampton	1	B. Bieda	3/9 Plymouth	2	J. Chisholm#
Lesser Black-backed Gull (graellsii)			3/24 Essex	pr n	J. Berry#
3/1-24 Newbypt.	1	R. Heil	3/thr DWWS	4 max	D. Furbish
Glaucous Gull			thr	Reports of indiv. from 12 locations	
3/1 Hadley	2 1W	M. Taylor	Snowy Owl		
3/1 Westminster	1 1yr	T. Pirro	3/5 Duxbury B.	2	N. Smith
3/1, 4/2 Newbypt.	2, 1	R. Heil	3/7-23 P.I.	1	L. Ferrarresso
3/4 Southboro	1 1W	M. Lynch#	3/18 Salisbury	1	D. + A. Bandes
3/10 Nantucket	1	fide E. Ray	3/24 Boston	1	D. Larson
3/11 Plymouth	1	H. Allen	3/24 Newbypt.	1	R. Heil
3/11 P'town	2	D. Comeau#	4/1 P.I.	1	M. Lynch#
3/25 Plymouth	1 2S	D. Furbish#	Barred Owl		
4/6 Gloucester	1	J. Gawienowski	3/30 Boxford	2	J. Berry
4/18 W. Townsend	1 imm	T. Pirro	4/22 Lincoln	2	B. McHugh
4/25 Edgartown	1	A. Keith	4/24 Wenham	2	J. Berry
Black-legged Kittiwake			4/28 Ipswich	2	J. Berry
3/11 P'town	3	D. Comeau#	thr	Reports of indiv. from 12 locations	
3/11 Nantucket	10	fide E. Ray	Long-eared Owl		
3/12 Rockport (A.P.)	48	R. Heil	thr	DWWS	13 max
3/13 Truro	50+	J. Sones	3/5 Westwood	1	B. Wicks
3/14 P'town (R.P.)	30	J. Hoye#	3/11-4/1 Woburn	1	M. Rines
4/22 Rockport (A.P.)	425	J. Soucy	3/19 Wayland	1	R. Lockwood
Caspian Tern			3/27 Belmont	1	K. Hartel
4/23 Northampton	1	T. Gagnon	4/20 N. Middleboro	1	K. Holmes
4/24-25 Onota	4	R. Ferren	Short-eared Owl		
4/26 Brewster	1	G. Martin	3/4 Rowley	3	G. Wood
4/26 DWWS	1	D. Ludlow#	3/4 Truro	1	fide J. Sones
4/27 Mashpee	1	S. Clifton	3/5 Duxbury B.	1	N. Smith

Short-eared Owl (continued)			4/30 Barre	4	M. Lynch#
3/8 DWWS	3	D. Furbish	Pileated Woodpecker		
3/12 Cumb. Farms	2	W. Petersen	thr Pepperell	2	E. Stromsted
3/14 Salisbury	1	B. Kane	3/4 Milton	pr	G. d'Entremont
3/15, 24 P.I.	2, 1	R. Heil	3/11 S. Quabbin	2	M. Lynch#
3/18 Cumb. Farms	2	MAS (D. Furbish)	3/16 GMNWR	2	S. Perkins
3/20 Rowley	1	J. Berry	3/26 W. Brookfield	3	M. Lynch#
4/11 Katama	1	V. Laux	4/4, 29 Stoneham	1, 4	D. + I. Jewell
4/27 N. Truro	1	EMHW (E. Cestaro)	4/15 Quabbin (G11)	2	B. Kane
4/29 Nantucket	1	E. Ray	thr Reports of indiv. from 31 locations		
Northern Saw-whet Owl			Least Flycatcher		
3/1-23 Lexington	1	M. Rines + v.o.	4/30 GMNWR	1	G. Clarke
3/4 Stow	1	R. Lockwood	Eastern Phoebe		
3/10 Essex	1	J. Berry	3/9 Amherst	1	J. Chapman
3/11 Nantucket	2	<i>fide</i> E. Ray	3/10 E. Middleboro	1	K. Anderson
3/14 Salisbury	1	B. Kane	3/11 GMNWR	1	S. Perkins
3/20 Wayland	1	D. Peebles#	3/11 Mt.A.	1	J. Heywood
3/27 Wendell	1	W. Lafley	3/12 S. Hadley	1	A. Hill
4/30 P.I.	1	R. Heil	3/13 Southwick	1	J. Weeks
Whip-poor-will			3/14 Topsfield	1	R. Heil
4/15 Mattapoisett	1	M. Sylvia	3/15 Newbypt.	8	R. Heil
4/24 Lancaster	1	T. Poole	3/19 Amherst	4	B. Kane
Chimney Swift			3/25 Wachusett	11	J. Bartos
4/13 Fairhaven	1	M. LaBossiere	3/25 Stow	12	R. Lockwood
4/27 Winchester	2	M. Rines	3/26 W. Brookfield	29	M. Lynch#
4/27 Peabody	2	R. Heil	4/2 Barre	24	M. Lynch#
4/29 GMNWR	3	D. + S. Larson	4/2 ONWR	11	R. Lockwood
4/30 P.I.	5	R. Heil	4/2 Topsfield-Newbury	22	R. Heil
4/30 Norfolk	3	R. Emerson	4/6 Gloucester	10	J. Gawienowski
4/30 Arlington Res.	4	M. Rines	4/15 Wales	12	D. Blain
4/30 N. Adams	12	L. Therrien	Great Crested Flycatcher		
4/30 Newbury	44	R. Heil	4/30 N. Dartmouth	1	M. Boucher
Ruby-throated Hummingbird			Eastern Kingbird		
4/12 Tisbury	1	P. Uhlendorf	4/30 Melrose	1	P. + F. Vale
4/29 Windsor	1	L. Therrien	Northern Shrike		
Belted Kingfisher			3/thr Reports of indiv. from 24 locations		
3/19 Grafton	3	M. Lynch#	3/thr Lexington	1-3	M. Rines
4/8 Holland	2	D. Blain#	3/11 DWWS	3 ad	D. Furbish#
4/16 Bolton Flats	2	R. Lockwood	4/1 Newbypt.	1	P. + F. Vale
4/21 Manchester	2	S. Hedman	4/1 Bedford	1	M. Rines
Red-headed Woodpecker			4/1 GMNWR	1	J. Forbes#
3/2 Chicopee	1	T. McCarthy	4/2 Barre	1	M. Lynch#
4/13 Newton	1	A. Montague	4/4 W. Peabody	1	R. Heil
Red-bellied Woodpecker			4/6 Pittsfield	1	R. Ferren
3/4 Westboro	1	M. Lynch#	4/7 Dedham	1 ad	A. Joslin
3/19 Turners Falls	1	B. Kane	4/8 Nantucket	1	R. Bowen
3/21 Easthampton	1	B. Lafley	4/9 Templeton	1 ad	T. Pirro
3/25 Milton	2	G. d'Entremont	4/10 Nahant	1	R. Heil
3/25 Oxford	2	P. Meleski	4/10 Templeton	1	T. Pirro
3/25 Wakefield	3	P. + F. Vale	4/11 Orange	1 ad	M. Taylor
3/26 Hingham	2	K. Vespaziani	4/15 Tyringham	1	S. Kellogg#
3/26 W. Brookfield	4	M. Lynch#	Loggerhead Shrike		
3/28 Hingham	3	D. Peacock	4/2 Sterling	1	M. Lynch#
4/thr Bolton	2	R. Lockwood	White-eyed Vireo		
4/thr Maynard	2	L. Nachtrab	4/8 Eastham	1	B. Nikula
4/thr Pepperell	7	E. Stromsted#	4/10-11 Cummaquid	1	St. Miller
4/2 Mendon	2	J. Moffett	4/15 S. Boston	1	R. Donovan
4/3 Boxford	2	J. Berry	Blue-headed Vireo		
4/14 Northampton	2	R. Packard	4/10 Northampton	1	E. Labato
4/30 Medford	3	M. Rines#	4/16 Pepperell	1	M. Resch
Yellow-bellied Sapsucker			4/16, 30 Barre	2, 17	M. Lynch#
3/9 Stoneham	1	D. + I. Jewell	4/17 Boxford	1	J. Center
3/25 Truro	1	J. Young	4/20 Reading	3	D. Williams#
3/30 Nantucket	1	<i>fide</i> E. Ray	4/23 S. Quabbin	4	M. Lynch#
3/30 Adams	1	R. Rancatti	4/30 Hingham	3	D. + S. Larson
4/thr Reports of indiv. from 16 locations			4/30 Mt.A.	4	BBC (L. Ferraresso)
4/2 Salisbury	2	S. Moore	4/30 P.I.	10	R. Heil
4/6, 28 Boston	3	J. Dekker#	4/30 HRWMA	3	T. Pirro
4/13 Wayland	2	G. Long	4/30 Carlisle	3	T. + D. Brownrigg
4/14 Northampton	3	R. Packard	4/30 MNWS	8-10	J. Berry#
4/15 Quabbin (G11)	20	B. Kane	4/30 Boxford (C.P.)	5	S. Perkins#
4/16 Royalston	3	J. Morris-Siegel	Warbling Vireo		
4/16 Mt.A.	2	BBC (I. Girunas)	4/29 Nantucket	1	E. Ray
4/29 ONWR	2	R. Lockwood	4/30 N. Cambridge	1	M. Rines
Hairy Woodpecker			4/30 Westfield	1	S. Kellogg
3/11 Maynard	3	L. Nachtrab	Fish Crow		
3/19 Boxford (C.P.)	4	P. + F. Vale	thr Dedham	1-4	A. Joslin
4/2 ONWR	3	R. Lockwood	3/9 W. Peabody	6	R. Heil

Carolina Wren (continued)			Eastern Bluebird				
4/13	Pittsfield	2	G. Shampang	3/8	DWWS	6	D. Furbish
4/14-16	Amherst	2	H. Allen	3/9	Plymouth	6	J. Chisholm#
4/20	Pepperell	1	L. Levi	3/15	Sudbury	3	E. Salmela
House Wren							
4/8	Winchester	1	M. Rines	3/19	Turners Falls	3	B. Kane
4/29	Lexington	1	M. Rines#	3/25	Wachusett	3	J. Bartos
4/30	Northampton	1	T. Gagnon	3/25	S. Natick	5	D. + S. Larson
4/30	Mt.A.	1	BBC (L. Ferrarosso)	3/25	Newton	3	T. Skillin
Winter Wren							
thr	Lexington	1-3 m	M. Rines	3/25	Harvard	3	J. Bartos
3/15	Wakefield	2	D. + I. Jewell	3/26	Hingham	6	K. Vespaziani
3/15	Melrose	2	D. + I. Jewell	3/26	W. Brookfield	12	M. Lynch#
3/19	Boxford (C.P.)	5+	P. + F. Vale	4/2	Pepperell	10	E. Stromsted
3/28	Hingham	2	D. Peacock	4/8	Hadley	4	B. Kane
3/31	MNWS	3	R. Heil	4/9	Weston	4	M. Rines
4/15	Woburn	2	M. Rines	4/14	Westford	5	nestlings
4/16	Barre	2	M. Lynch#	4/15	Wales	4	D. Blain
4/30	Hingham	8-10	C. Nims	4/16	IRWS	4-6	BBC (P. + F. Vale)
4/30	Carlisle	2	T. + D. Brownrigg	4/23, 29	Oxford	3, 5	P. Meleski
thr	Reports of indiv. from 16 locations			4/29	Newbury	5	P. + F. Vale
Marsh Wren							
4/9	DWWS	1	SSBC (N. Swirka)	4/29	Mt. Wachusett	3 m	P. Roberts
Blue-gray Gnatcatcher							
4/7	Worcester	1 m	M. Lynch#	4/30	Lincoln	1	S. Perkins
4/8	Holland	1	D. Blain#	Hermit Thrush			
4/9	P.I.	2	S. Moore#	3/1	Mattapoisett	3	F. Smith
4/9	Warwick	1	M. Taylor#	3/4-4/2	Reports of indiv. from 9 locations		
4/11	Hingham	3	D. Peacock	4/10	Hadley	4	E. Labato
4/11	Oak Bluffs	1	G. Daniels	4/11	Westfield	10	J. Weeks
4/12	Boxford (C.P.)	3	S. Leonard	4/15	Quabbin (G11)	10	B. Kane
4/13	Wayland	2	G. Long	4/15	Rockport (H.P.)	5	BBC (P. Ackers)
4/15	Rockport (H.P.)	4	BBC (P. Ackers)	4/16	Mt.A.	7	M. Rines
4/16	Mt.A.	1	M. Rines	4/20	Pembroke	4	D. Furbish
4/18	MNWS	2	K. Haley	4/28	Boston	11	J. Dekker
4/20	DWWS	1	D. Furbish	4/28	Nahant	10	R. Heil
4/22	Arlington Res.	1	M. Rines	4/30	Barre	13	M. Lynch#
4/25	Manchester	1	S. Hedman	4/30	MNWS	20	J. Berry#
4/29	Lexington	1	M. Rines#	4/30	Hingham	4	C. Nims
4/30	HRWMA	1	T. Pirro	Wood Thrush			
Golden-crowned Kinglet							
3/7	Wachusett Res.	6	M. Lynch#	4/29	Sheffield	1	D. St James
3/18	Southboro	5	M. Lynch#	4/30	Squantum	1	G. d'Entremont
3/24	Essex	6	J. Berry#	4/30	MNWS	1	J. Berry#
4/1	Lancaster	4	R. Lockwood	American Robin			
4/2	ONWR	8	R. Lockwood	3/1, 16	Boston	900, 450	K. Hudson
4/3	Holyoke	8	T. Gagnon	3/8	Boxboro	200	J. Bartos
4/3	MNWS	25	R. Heil	3/10	Concord (NAC)	300	S. Perkins
4/3	Boston	20+	J. Dekker	3/12	Malden	150+	P. + F. Vale
4/5	Hawley	10	R. Packard	3/26	W. Brookfield	500	M. Lynch#
4/6	Rockport (H.P.)	10	J. Gawienowski	3/26	Mt.A.	170	R. Stymeist
4/9	Warwick	8	M. Taylor#	Gray Catbird			
4/14	Northampton	4	R. Packard	3/2	Marblehead	1	K. Haley
4/15	P.I.	13	M. Lynch#	3/4	Southboro	1	M. Lynch#
4/15	Stow	4	R. Lockwood	4/11	Westfield	1	J. Weeks
4/16	Barre	8	M. Lynch#	4/14	Jamaica Plain	1	A. Joslin
4/25	Florida	10	L. Therrien	4/30	P.I.	1	R. Heil
4/27	Southbridge	5	E. D. Blain	4/30	Hingham	1	D. + S. Larson
4/30	P'town	5	D. Salmela	4/30	N. Dartmouth	2	M. Boucher
Ruby-crowned Kinglet							
3/2	MNWS	1	K. Haley	Brown Thrasher			
4/3	Holyoke	1	T. Gagnon	3/5	Lexington	1	M. Rines
4/7	Hingham	2	K. Vespaziani	4/11	Bedford	1	R. Lockwood
4/7	S. Natick	2	M. Daley	4/13	Ipswich	1	S. Leonard
4/7	Belchertown	2	B. Bieda	4/15	Rockport (H.P.)	1	BBC (P. Ackers)
4/8	Pittsfield	5	D. St James	4/16	Agawam	2	J. LaPointe
4/13	Petersham	10	M. Lynch#	4/23	Pepperell	1	E. Stromsted
4/14	Northampton	10	R. Packard	4/25	Wakefield	1	F. Vale
4/15	Wales	9	D. Blain	4/25	Worc. (BMB)	1	J. Lillier
4/16	Mt.A.	8	M. Rines	4/29	Hatfield	1	R. Packard
4/28	Nahant	11	R. Heil	4/29	P.I.	1	P. + F. Vale
4/29	ONWR	6	R. Lockwood	4/29	Oxford	1	P. Meleski
4/29	Lexington	8	M. Rines#	4/30	Northampton	4	T. Gagnon
4/30	P.I.	19	R. Heil	American Pipit			
4/30	Stow	6	R. Lockwood	3/18	Northampton	1	T. Gagnon
4/30	P'town	30	B. Nikula	3/29	Concord	2	M. Rines
4/30	Agawam	15	S. Kellogg	4/9	Turners Falls	4	P. Champlin
4/30	MNWS	50	J. Berry#	4/23	Cumb. Farms	5	D. + S. Larson
				4/25	Hadley	1	W. Lafley
				4/29	Hatfield	57	R. Packard
				4/30	Sharon	1	R. Titus
				4/30	P.I.	3	R. Heil

Common Yellowthroat (continued)			4/29	Waltham	4	J. Forbes
4/29 Marblehead	1	K. Haley	4/29	Hatfield	4	R. Packard
4/30 P.I.	1 m	R. Heil	4/30	P.I.	36	R. Heil
Hooded Warbler			"Ipswich" Sparrow			
4/5 MNWS	1 m	J. Lawrence + v.o.	3/20	Nantucket	2	E. Ray
4/16 Muskeget	1	S. Zende#	4/15	Duxbury B.	1	D. Furbish#
Scarlet Tanager			Fox Sparrow			
4/19 Nantucket	1	<i>vide</i> E. Ray	3/5, 17	Lexington	1, 9	M. Rines
4/25 Chilmark	1	E. Cornwall	3/9, 30	Southwick	1, 5	S. Kellogg
4/25, 27 Manchester	1 m	S. Hedman	3/13, 23	Melrose	3, 4	D. + I. Jewell
Eastern Towhee			3/16	Boston	3	K. Hudson
3/15, 4/23 Lincoln	1, 2	M. Rines	3/17	W. Bridgewater	7	S. Arena
3/31 N. Dartmouth	1	M. Boucher	3/19	Turners Falls	4	B. Kane
4/6 Rockport (H.P.)	1	J. Gawienowski	3/20	Newbury	7	D. + I. Jewell
4/7 Weymouth	1	K. Vespaziani	3/23	Cambridge	4	N. Dane
4/12 N. Truro	1	EMHW (E. Cestaro)	3/24	W. Newbury	4	R. Heil
4/15, 30 Stow	2, 18	R. Lockwood	3/25	Pepperell	3	M. Resch
4/15 Marshfield	2	D. Furbish#	3/26	W. Brookfield	5	M. Lynch#
4/15 Wales	1	D. Blain	3/28	P.I.	3	D. Chickering#
4/15, 30 Worc. (BMB)	2, 8	J. Liller#	4/3	Easthampton	5	B. Bieda
4/16, 30 Barre	2, 6	M. Lynch#	4/9	Gr. Barrington	3	C. Blake
4/30 P.I.	16	R. Heil	4/12	Lenox	1	R. Laubach
4/30 Hingham	2	C. Nims	4/22	Maynard	1	L. Nachtrab
Spotted Towhee			4/29	Gardner	1	T. Pirro
4/7 Hadley	1 f	E. Labato	Swamp Sparrow			
American Tree Sparrow			3/14	Pepperell	5	E. Stromsted
3/11 Sudbury	50	E. Taylor	3/16	Boston	3	J. Dekker
3/12 DWWS	27	SSBC (T. O'Neil)	4/8	Hadley	5	B. Kane
4/23, 30 Lincoln	4, 1	S. Perkins	4/14	Northampton	7	R. Packard
4/29 Lexington	2	M. Rines#	4/14	Bolton Flats	12	M. Lynch#
4/30 Lincoln	1	S. Perkins	4/15, 25	Stow	9, 15	R. Lockwood
Chipping Sparrow			4/29	ONWR	44	R. Lockwood
3/1 E. Middleboro	2	K. Anderson	4/29	Oxford	9	P. Meleski
3/24 Wakefield	1	F. Vale	4/30	Barre	19	M. Lynch#
3/26 W. Brookfield	1	M. Lynch#	White-crowned Sparrow			
4/8 Hadley	1	B. Kane	3/8-4/20	DWWS	1 imm	D. Furbish
4/8 Holland	1	D. Blain#	4/5	Cambridge	1	A. Merriman
4/10 S. Dartmouth	4	M. Boucher	4/27	Nantucket	1	P. Gardner
4/23 S. Quabbin	19	M. Lynch#	White-crowned Sparrow (<i>gambelii</i>)			
4/30 Barre	27	M. Lynch#	3/8-4/20	DWWS	1 imm	D. Furbish
4/30 Mt.A.	20	R. Stymeist	"Oregon" Junco			
4/30 P.I.	12	R. Heil	3/3	Easthampton	1	J. Trimble
Clay-colored Sparrow			Lapland Longspur			
3/1-23 DWWS	1	D. Furbish#	3/11	GMNWR	4	S. Perkins
Field Sparrow			3/11	Cumb. Farms	10	G. d'Entremont
3/11 S. Boston	1	R. Donovan	3/21	Salisbury	3	E. Nelson-Melby
3/11 Cumb. Farms	2	G. d'Entremont#	Snow Bunting			
3/24 Burlington	2	M. Rines	3/8	Salisbury	20	J. Berry#
3/26 W. Brookfield	8	M. Lynch#	3/9	Plymouth	50+	J. Chisholm#
3/26, 4/15 Oxford	1, 5	P. Meleski#	3/10	Nantucket	18	<i>vide</i> E. Ray
4/15, 30 Worc. (BMB)	5, 4	J. Liller#	3/19	Arlington	1	K. Hartel
4/30 Stow	5	R. Lockwood	3/26	GMNWR	1	S. Shepard#
4/30 Barre	6	M. Lynch#	Rose-breasted Grosbeak			
Vesper Sparrow			4/25	Lanesboro	1	B. Hendricks
3/4 Cumb. Farms	3	L. Pivacek	4/26	Hyannis	1	S. Clifton
4/8 Hatfield	2	S. Smolen-Morton	4/29	Nantucket	2	E. Ray
4/9 Gr. Barrington	1	C. Blake	4/30	Beverly	1	G. Leet
4/9 Pittsfield	1	T. Collins	Blue Grosbeak			
4/12 Hadley	1	B. Bieda	4/16	Muskeget	1	S. Zende#
4/14 Hatfield	2	B. Bieda	4/27	Nantucket	1	L. Ryder
4/14 Bolton Flats	1 m	M. Lynch#	Indigo Bunting			
4/15 Tyringham	2	S. Kellogg#	4/1-3	W. Tisbury	2	M. Keefe
4/22 Sunderland	1	H. Allen	4/29	Nantucket	10	E. Ray
4/23 S. Quabbin	1	M. Lynch#	4/30	Wellfleet	2	E. Salmela
4/28 Rockport	1	M. Flor	Dickcissel			
4/28 Newton	1	B. Chiasson	3/1-4/15	S. Boston	1	R. Donovan
4/29 Hatfield	3	R. Packard	Bobolink			
4/29 P.I.	1	M. Lynch#	4/24	N. Truro	40	EMHW (E. Cestaro)
Lark Bunting			4/29	Sheffield	3	D St James
4/25-30 Truro	1 m	J. Sones + v.o.	Eastern Meadowlark			
Savannah Sparrow			3/5	Fairhaven	25	G. d'Entremont#
3/18 Lincoln	1	M. Rines	3/8	DWWS	25+	D. Furbish
3/25 Cumb. Farms	2	D. Furbish#	3/10	Amherst	1	C. Holzapfel
4/1 Longmeadow	4	J. LaPointe	3/11	Wayland	1	J. Meyers
4/7, 29 Lexington	2, 92	M. Rines	3/14	Ipswich	7	R. Heil
4/21 Arlington Res.	3	M. Rines	3/15	W. Newbury	2	R. Heil
4/21 Harvard	20	M. Lynch#	3/17	Pepperell	2	E. Stromsted
4/22 Northampton	4	R. Packard	3/19	P.I.	2	P. + F. Vale

Eastern Meadowlark (continued)				White-winged Crossbill			
3/23 Hingham	2		N. Swirka	4/16 Nantucket	10		K. Blackshaw
3/25 Newton	2		T. Skillin	4/20 Brewster	8		<i>fide J. Sones</i>
4/2, 16 Bedford	3, 10		M. Rines	Common Redpoll			
4/8 Hadley	4		B. Kane	3/1, 20 S. Peabody	11, 8		R. Heil
4/15 Essex/Ipswich	8		M. Lynch#	3/1-30 Blandford	20		M + K Conway
Yellow-headed Blackbird				3/1 Uxbridge	1		J. Barthel
3/16 Northampton	1m ad		B. Bieda#	3/1-28 Rockport	40 max		J. Soucy#
Rusty Blackbird				3/3 Easthampton	125		J. Trimble
3/8 GMNWR	16		R. Lockwood	3/5 Wakefield	9		D. Williams
3/14 Ipswich	5		R. Heil	3/10-14 Topsfield	20		R. Heil
3/15 Sudbury	8		E. Salmela	3/11 Shutesbury	1		M. Williams
3/15 W. Newbury	7		R. Heil	3/11 Washington	200		E. Neumuth
3/19 Wayland	7		R. Lockwood	3/14 Northfield	50+		M. Taylor
3/26 W. Brookfield	18		M. Lynch#	3/17 S. Wellfleet	30		J. Sones
4/thr Lexington	6 max		M. Rines	3/23 Melrose	2		D. + I. Jewell
4/2, 23 Longmeadow	15, 6		J. LaPointe#	3/25 Mt.A.	48		R. Stymeist
4/9 Templeton	20+		T. Pirro	3/25 Bolton	1		R. Lockwood
4/10 Northampton	50		E. Labato	3/27 Pepperell	1		M. Resch
4/11 Hatfield	50		P. Champlin	4/30 Westfield	8		J. Weeks
4/22 Gardner	14		T. Pirro	Hoary Redpoll			
4/23 Oxford	7		P. Meleski	3/1-21 Easthampton	1		v.o.
4/29 Newton	15		G. d'Entremont	Pine Siskin			
Common Grackle				thr Mendon	2-8		J. Moffett
3/19 Methuen	50,000+		J. Hogan#	3/thr E. Middleboro	2-15		K. Anderson
Brown-headed Cowbird				3/1 Clarksburg	10		L. Therrien
3/4 Bolton Flats	500		R. Lockwood	3/11 Shutesbury	7		M. Williams
Baltimore Oriole				3/12 Lynnfield	8		D. Williams
4/16 Nantucket	1		B. Andrews	3/24 Maynard	3		L. Nachtrab
4/30 N. Cambridge	1		M. Rines	3/25 Pepperell	3		M. Resch
4/30 Melrose	1 m		D. + I. Jewell	3/25, 4/29 Oxford	5, 2		P. Meleski
Purple Finch				3/25 Wachusett	3		J. Bartos
3/1 Mattapoisett	2		F. Smith	3/28, 4/7Hingham	2, 8		D. Peacock
3/14 W. Newbury	2		D. Chickering#	4/6 Upton	3		P. DeBruyn
3/30 Nantucket	2		<i>fide E. Ray</i>	4/8 Boxford (C.P.)	4		G. Wood
4/2, 30 Barre	7, 8		M. Lynch#	4/13 Weston	6		G. Ferguson
4/2 Weston	5		G. Ferguson	4/15-30 E. Boxford	2-12		J. Brown#
4/14-30 Maynard	4		L. Nachtrab	4/21 Haydenville	3		R. Packard
4/16 Lenox	18		R. Ferren	4/22 Lincoln	4		B. McHugh
4/16, 30 P.I.	18, 33		R. Heil	4/30 P.I.	22 migr		R. Heil
4/21-22 Lincoln	7		B. McHugh	4/30 Mt.A.	7		R. Stymeist
4/22 Erving	8		M. Taylor	4/30 Barre	4		M. Lynch
4/24 Becket	14		R. Laubach	American Goldfinch			
4/27 Southbridge	4		D. Blain	4/30 P.I.	130 migr		R. Heil
4/30 Carlisle	5		T. + D. Brownrigg	Evening Grosbeak			
4/30 P'town	10		B. Nikula	3/2 Royalston	8		D. Wilkinson
Red Crossbill				3/5 Templeton	6		T. Pirro
3/12 E. Falmouth	12		W. Davis	3/14 Northfield	15+		M. Taylor
3/17 Nantucket	10		E. Ray	3/22, 4/30 HRWMA	12, 3		T. Pirro
4/2 P'town	9		B. Nikula	4/1-23 Washington	35-48		E. Neumuth
4/17 Quabbin (G6)	4		B. Kane	4/2 Williamsburg	3		G. LeBaron
4/18 Truro	2		<i>fide J. Sones</i>	4/22 Chilmark	1		T. Rich
4/20 P.I.	9		H. D'Entremont	4/22 Northfield	10		M. Taylor
				4/30 P'town	1		B. Nikula

HOW TO CONTRIBUTE BIRD SIGHTINGS TO *BIRD OBSERVER*

This publication prints monthly compilations of reports of birds seen in Massachusetts and offshore waters. Space does not permit the inclusion of all material submitted. However, bird sightings sent to *Bird Observer* are archived in our database and 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	L.	Ledge
alt	alternate	M.V.	Martha's Vineyard
b	banded	Mt.A.	Mount Auburn Cemetery, Cambridge
br	breeding	Nant.	Nantucket
dk	dark (phase)	Newbyp	Newburyport
f	female	P.I.	Plum Island
fl	fledged	Pd	Pond
imm	immature	P'town	Provincetown
ind	individual	Quab.	Quabbin Reservoir
juv	juvenile	Res.	Reservoir
loc	location	R.P.	Race Point, Provincetown
lt	light (phase)	S.B.	South Beach, Chatham
m	male	S. Dart.	South Dartmouth
max	maximum	S.N.	Sandy Neck, Barnstable
migr	migrating	Stellw.	Stellwagen Bank
n	nesting	Worc.	Worcester
ph	photographed	Barre F.D.	Barre Falls Dam, Barre, Rutland, Oakham
pl	plumage	ABC	Allen Bird Club
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
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
I.	Island		

* 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.



NUTTALL ORNITHOLOGICAL CLUB

2000 Request for Proposals - Charles Blake Fund Grants

The Nuttall Ornithological Club is soliciting proposals for bird-related projects to be conducted in 2000-2001 under the direction of organizations meeting certain qualifications (see below). The Fund will support grants for research, publication, conservation, education, and other worthy ornithology-related efforts, with particular emphasis on the birds of New England and the Northeast. The postmark-date deadline for applications is September 15, 2000. Awards will be announced by October 15, 2000. All funds will be distributed by November 31, 2000.

Application Guidelines:

1. Applying organizations must be tax-exempt under section 501(c)(3) of the Internal Revenue Code and must not be private foundations under section 509(a). In contrast with previous years, applications from individuals will not be considered.
2. Three typed copies of a brief proposal must be submitted in the following format:
 - a) Title page: project title and brief abstract; name, address and phone number; proposed starting and completion dates; total amount requested from the Charles Blake Fund.
 - b) Narrative of up to 5 pages including (1) objectives, (2) brief review of what is already known or has already been done, (3) methods, (4) value of the project to ornithology, (5) project timetable, including a submission date for the final report, (6) detailed budget, including funds applied for or expected from other sources.
 - c) Brief statement of investigator qualifications and a resume.
 - d) Documentary evidence of section 501(c)(3) tax-exempt status must be provided with each proposal.
3. Grants will generally be awarded on an annual basis from total available funds of at least \$15,000 per year. Proposals may request up to that entire amount. Applications for projects expected to last more than one year will be considered, but no commitment beyond the funds available in the present year will be made.
4. Proposals will be reviewed by the Blake Fund Committee and will be selected for awards based on the following merits:
 - a) Contribution to the goals of the Nuttall Ornithological Club.
 - b) Conservation, management, or educational applications.
 - c) Scientific merit.
 - d) Feasibility.
 - e) Qualifications of investigator(s).
5. Grant payments will be made directly to the winning applicant organizations, and the Nuttall Ornithological Club will retain no authority over use of paid grant funds. However, the Nuttall Ornithological Club requires that recipients prepare a report on their work and use of grant money within twelve months of receiving the grant.

Proposals should be addressed to: David E. Clapp, Nuttall Ornithological Club, Blake Fund Committee, 2090 Main Street, Marshfield, MA 02050, declapp@ma.ultranet.com

ABOUT THE COVER

Great Blue Heron

The Great Blue Heron (*Ardea herodias*) is the largest and one of the most widespread and conspicuous of North American herons. Adult Great Blue Herons are unmistakable: blue-gray upper parts, reddish-gray neck streaked with black and white, bold black-and-white head and face stripes, and black shoulders. They are typical herons with short tails, long legs, and necks that are retracted into an S-shape during flight. Immature birds have more streaking on their necks, and solid dark crowns, lacking the bold patterning of adults. Great Blue Herons are closely related to the Grey Heron (*A. cinerea*) of Europe and the Cooi Heron (*A. cooi*) of South America. The Great Blue Heron is polymorphic with four to seven subspecies recognized by various taxonomists. Controversy still rages over *A. herodias occidentalis*, the all-white subspecies of Florida, Cuba, and scattered Caribbean islands. Some consider this a white morph, others a subspecies, and yet others, on the basis of perceived behavioral differences, as a full species.

Great Blue Herons are year-round residents throughout much of their range, although postbreeding dispersal occurs. They range from Alaska south to southern Mexico, across much of southern Canada and the United States, and in the east from Nova Scotia to Yucatan. The prairie populations of the western United States and most inland Canadian herons are migratory. Great Blues winter as far south as northern South America. They migrate alone or in groups of 100 or more, day or night.

Many Great Blue Herons overwinter in Massachusetts, and migrants appear from mid-March to mid-April. Fall migrants congregate in salt marshes in October and November. They are seasonally monogamous and usually breed in colonies that may contain 100 pairs or more. Breeding colonies are typically in swamps or on islands, presumably to reduce nest predation and disturbance by mammalian predators. In Massachusetts most Great Blue Herons nest in stands of dead trees in beaver-flooded swamps, with the largest concentration of heronries in the central portion of the state. They are silent most of the year except for an occasional squawk when disturbed or in territorial disputes, but at the heronry there is a din of *frawnk*, squawks, clucks, *roh-roh-rohs*, bill snapping, and bill clapping, that accompany courtship displays or serve as territorial advertisement. Elaborate courtship displays include circle flights with neck extended; snap displays with legs flexed, plumes erect, bill pointing upwards; and stretch displays with bill pointing to the sky. Territorial disputes are settled by full-forward displays with plumes erect, neck extended up and bill pointing at the adversary, or by bill duels. Great Blues defend an area of six-foot radius around their nests. Foraging disputes may be resolved through spectacular interactions between herons with necks extended, plumes erect, wings drooping, showing their black shoulder patches to maximum advantage, and dashing at adversaries.

Males returning to the breeding colony usually choose an old nest, if available, but not usually the one they occupied the year before. The nests are bulky platforms

of sticks up to a yard across with the central depression lined with pine needles or other soft plant materials. Great Blues may build nests up to 100 feet above the ground, or if no trees are available, they will nest on the ground or on artificial platforms. The clutch is usually three to six dull pale blue eggs laid at two-day intervals. Both parents incubate with eggs hatching in about four weeks. Both parents brood and bring food for the chicks. Unlike many heron and egret species, the young do not show much aggression toward siblings, and siblicide is not a brood-reduction strategy. The young can fly in seven to nine weeks, but return to the nest to be fed for an additional three weeks. The Great Blue Heron diet consists mostly of fish, but Great Blues will opportunistically take almost any small vertebrate including birds — they have even been reported eating Black Rails! They forage by walking slowly or by standing and waiting, spearing or grasping prey with lightning-fast jabs.

As with most birds, mortality during the first year of life is high — about seventy percent — with thirty-six percent during the second year, and twenty-two percent thereafter. In northern parts of their range severe winters pose a threat, and in the southeast, hurricanes can devastate a population. Traditionally, Great Blue Herons were hunted for food, and birds are occasionally shot while marauding at fish hatcheries or fish farms. Some eggshell thinning occurred during the DDT era, and limited mortality has been reported from agricultural pesticides such as dieldrin. Early in the nesting season, disturbance can cause nest or colony abandonment. Probably the greatest anthropogenic problem is draining wetlands for development and agriculture.

On the whole, however, Great Blue Herons have learned to get along well with people and most populations are stable. In the Florida Keys Great Blue Herons, especially the white morph, have become panhandlers, perching or walking along docks to beg for handouts from passing fishermen. Inland, one bird repeatedly tried to fly off with a trout still attached to a startled fisherman's line. Great Blue Herons can become habituated to human presence, and are a favored photographic subject in Everglades National Park. In Massachusetts a heronry located along a busy stretch of Route 2 became a traffic hazard as the birds nested close enough to attract passing drivers' attention. If we can protect the Great Blue Heron's wetland foraging and breeding habitat, we may continue to happily coexist with these magnificent birds. 

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*. 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).

AT A GLANCE

June 2000



Photograph by Wayne R. Petersen

Our June photo quiz maintains the recent trend of depicting seemingly headless birds. This month, however, we have added a twist to make the identification problem even more challenging — the mystery bird is depicted upside down! Although there are various species of birds that occasionally initiate full barrel rolls during mid-air flight (e.g., certain waterfowl and raptors, such as Bald Eagles and Bateleur Eagles in Africa), sustained flying in an inverted position is decidedly unusual! Indeed, it is so unusual that in the interests of fairness, it is suggested that the reader turn the magazine upside down before attempting to identify this month's identification challenge. *Bird Observer* apologizes for any inconvenience created by this unusual photo representation.

With this photo orientation disclaimer in mind, let us focus on the image at hand. Several features are at once obvious in the picture: a rounded white tail with a narrow terminal band, a distinct dark band on the trailing edge of the wing that begins at the inner primaries and extends all the way to the point where the wing joins the body, and a head appearing to have a dark hood. These features alone, combined with the fact that the bird is over water, make it pretty obvious that the bird is a gull of some species or another. The fact that the gull appears to have a distinctly black head at

once removes the larger gull species from consideration and leaves only the Little, Black-headed, and Bonaparte's Gull as viable candidates. The larger Laughing Gull and Franklin's Gull, although they have black hoods, can be eliminated by, among other features, the presence of wider, black tail bands and an absence of extensive white in their outer primaries. In like manner the Little Gull can be eliminated because immature Little Gulls exhibit a strong, black, inverted W pattern on the upper wing surface and they do not display a dark trailing edge to the upper wing. This reduces the choice to either Black-headed Gull or Bonaparte's Gull.

Both Black-headed Gull and Bonaparte's Gull require two years to achieve adult plumage. Since the gull in the photo has a complete tail band, it obviously is not an adult, despite the suggestion of a black head. A close look at the bird's back, however, reveals an even light gray color, in marked contrast to the dusky wing coverts and dark trailing band on the wing. The combination of adult-colored back coloration, complete tail band, and the suggestion of a complete or nearly complete dark hood indicate that the pictured gull is either in first-winter or second-summer plumage, rather than juvenal or adult plumage.

With this information in mind, a careful look at the upper wing pattern reveals a fairly indistinct, dusky (rather than blackish) carpal bar, a somewhat reduced amount of white in the outer primaries, an absence of white spots at the tips of the inner primaries, and the suggestion of dusky coloration on the underside of the bird's left wing. If the bird had a more prominent carpal bar, a more pronounced and extensive wedge of white in the outer primaries, white-tips to the inner primaries, an overall paler or "cleaner" look to the upper wing surface, and a translucent quality to the underside of the left wing, then it would be possible to identify the photograph as a Bonaparte's Gull. As it is, however, the mystery gull is a Black-headed Gull (*Larus ridibundus*) changing from first-winter to first-summer plumage. The suggestion of a dark hood is entirely appropriate for Black-headed Gulls at this age, though very often the hood is less complete than in full-plumaged adults. If the photo were in color, it might be possible to detect the brownish, not blackish, color of the hood — a hallmark of the Black-headed Gull.

Black-headed Gulls are uncommon and local coastal visitors during spring, fall, and winter. In Massachusetts the species is rare in summer and anywhere away from the coast; there is one attempted breeding record for Monomoy National Wildlife Refuge. The Black-headed Gull in the picture was photographed in Iceland. 

Wayne R. Petersen



AT A GLANCE

Photograph by Wayne R. Petersen



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CONTENTS

MODELING THE POTENTIAL IMPACTS OF CLIMATE CHANGE ON THE SUMMER DISTRIBUTIONS OF MASSACHUSETTS PASSERINES	<i>Jeff Price</i>	224
SUNBATHING BY BLACK AND TURKEY VULTURES AND A GREAT WHITE HERON	<i>William E. Davis, Jr. and Jerome A. Jackson</i>	231
SEARCHING FOR SEABIRDS IN ALL THE WRONG PLACES: THE JOY OF FINDING PELAGICS INLAND	<i>Mark Lynch</i>	237
YOUNG BIRDERS From Rhode Island	<i>Tom Seiter</i>	240
	<i>Peter Capobianco</i>	242
POCKET PLACES Wildwood Cemetery and Horn Pond Brook, Winchester	<i>Marjorie W. Rines</i>	244
HOT BIRDS		245
YARD BIRDS		246
FIELD NOTES The Subjective Effect of a Desirable Visual Stimulus on Exhaustion: Sighting of a Harris's Sparrow (<i>Zonotrichia querula</i>) in Amherst, Massachusetts 5/14/2000	<i>Mark Lynch</i>	248
A Tale of Urban Red-tails	<i>Lorraine Kaplan</i>	250
ABOUT BOOKS: Looking Back	<i>Wayne R. Petersen</i>	252
BIRD SIGHTINGS: March/April 2000 Summary		256
ABOUT THE COVER: Great Blue Heron	<i>William E. Davis, Jr.</i>	275
ABOUT THE COVER ARTIST: Barry Van Dusen		276
AT A GLANCE	<i>Wayne R. Petersen</i>	277
Cover Illustration: Great Blue Heron by Barry Van Dusen		