Bird Observer

VOLUME 38, NUMBER 1 FEBRUARY 2010

HOT BIRDS

Jim Malone was checking the ducks at Short Beach in Nahant on December 6, 2009, when he spotted a **Common Shelduck** (left). David Jones took some photographs the next day.

When Nancy Burkert discovered a **Painted Bunting** (right) at her feeder on December 8, 2009, she called Wellfleet Bay Wildlife Sanctuary. Mark Faherty responded and photographed the bird.

On December 14, 2009, Ian Lynch discovered a **White-winged Dove** (left) in Sturbridge. Bruce deGraaf arrived shortly thereafter to photograph it.

Lanny McDowell was walking the beach in Chilmark on January 1, 2010, and looked up to see two **Tundra Swans** (right) circle the pond and then fly off to the west.

Brian Parker discovered a **Sage Thrasher** (left) in Salisbury on January 11th and Jim Fenton took this great portrait of the bird on the 12th.

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HOW TO CONTRIBUTE BIRD SIGHTINGS TO *BIRD OBSERVER*

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Birding New Hampshire's Other Coast — Vernon Dam, Lake Wantastiquet, and the Hinsdale Setbacks

Eric Masterson

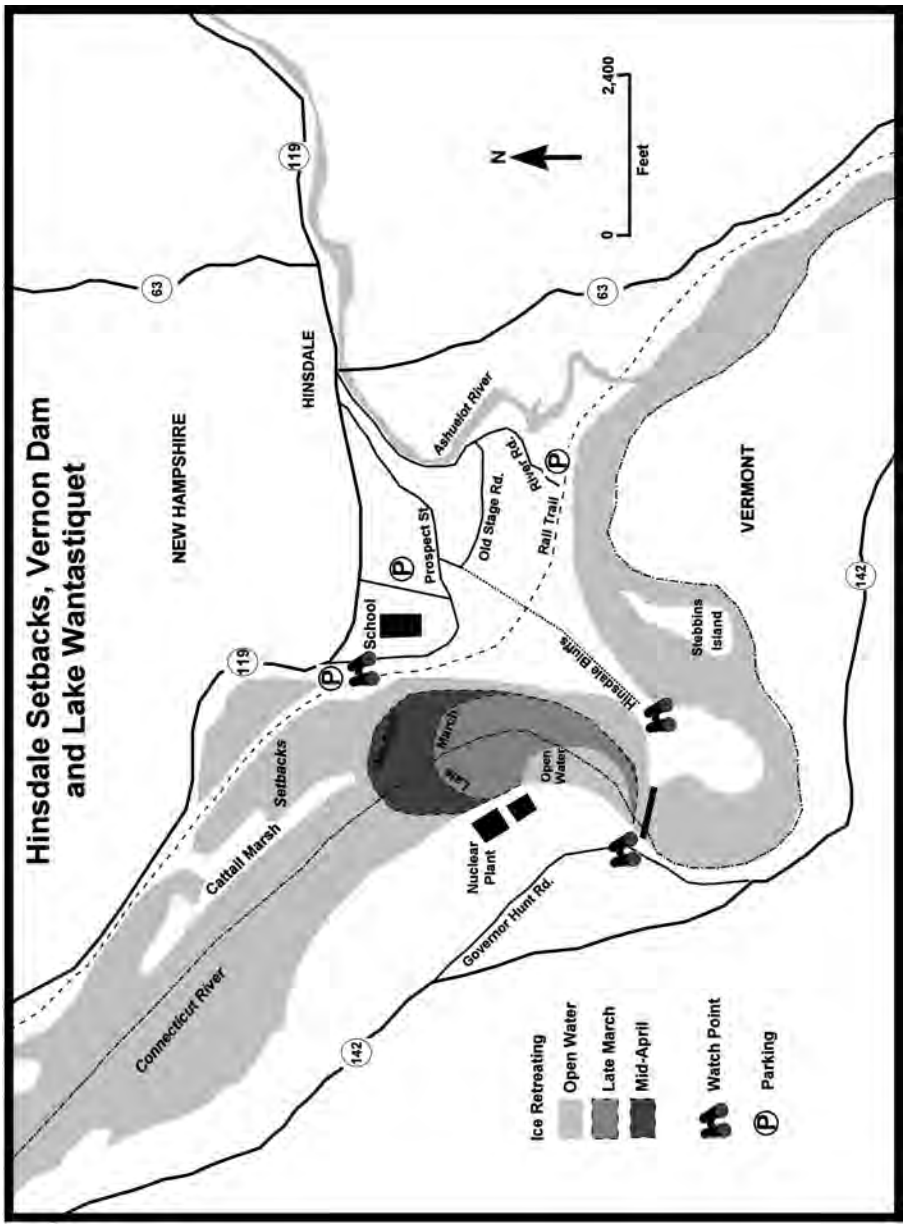
I have affectionately christened the state's western border as "New Hampshire's other coast," in recognition of its aqueous boundary and as a sop to my formative years spent birding the rocky Atlantic coastline of Ireland. It also happens to host with varying frequency several of the species that one normally associates with the coast. Arctic Tern, anyone? This article will feature a small piece of this "coast," which is one of the best birding locations in southern New Hampshire. It is a small piece of Connecticut River Valley real estate found in the town of Hinsdale not far from the Massachusetts border.

I first heard of Lake Wantastiquet and the Hinsdale setbacks anecdotally by browsing old copies of *New Hampshire Bird Records* and by speaking with local Keene birders. I visited the area a few times, often with good results, but I failed until relatively recently to fully realize its true potential as perhaps one of the best non-coastal birding sites in New Hampshire. The ABA location guide to the birds of New Hampshire further underlined the location's obscurity since it lacked mention of the site completely. Tudor Richards visited the site in the 1960s and 70s, and a J. Coleman recorded birds there in the 1980s. More recently, James Smith posted regularly from the area for a few years beginning in 2004 when he lived in Keene. But apart from intermittent and occasional coverage, attention to the site has been scant as measured by the number of submissions received by *New Hampshire Bird Records*. In 2007, I resolved to direct more attention to the stretch of the Connecticut River Valley from Hinsdale to Charlestown, especially the area above Vernon Dam. The stretch north to Charlestown will have to wait for another time.

"Lake" Wantastiquet is actually an impoundment on the Connecticut River created by Vernon Dam, and it remains open, at least partially, throughout the winter, courtesy of the warm water discharged by Vermont Nuclear Power Plant in Vernon, Vermont. The guarantee of permanent open water is a lure to waterfowl, and the site boasts significant numbers of waterfowl throughout the winter, and most especially in spring.

The "setbacks" refers to a series of sheltered coves on the eastern bank of the river above the dam, situated between a large cattail marsh and the bank. The Hinsdale rail trail runs along this portion of the bank, affording great access to the coves and the cattail marsh.

Although Lake Wantastiquet was known as a good site for waterfowl in general, less well known was the fact that the site is a major roost for waterfowl in winter and



Map by Dorothy Graaskamp

spring. During the last three years of observing the site at dusk, I have witnessed a regular evening ritual wherein waterfowl, foraging in nearby cornfields in Vermont or utilizing the open water below the dam, fly in at dusk to roost above the dam. The consistency of the numbers from year to year, especially during winter, indicates that

the location has developed a core returning population of waterfowl, including perhaps the largest known winter population of Hooded Mergansers in New Hampshire. The ideal station to witness the evening flight is from atop the berm that leads out to the dam from the NH side of the river. From an hour before dusk until the light fades, waterfowl stream overhead, sometimes at close approach, and land on the open water or ice just above the dam.

For purposes of this article, I will treat the area seasonally. Although spring is by far the best season, the site has much to offer year-round. Expect to spend a good five hours birding the site when it is at its peak in spring and early summer. This will allow the visitor to bird the area entirely on foot. Expect to walk about three miles at a leisurely pace, but there is room to vary the time commitment up or down and still have a good experience. All walking is on well-maintained trails. For the adventurous, a canoe offers an opportunity to explore the cattail marshes more thoroughly. Access to the marsh on foot is very limited.

Spring Birding

Although 220 species of birds have been recorded from Lake Wantastiquet and the Hinsdale setbacks, the area is perhaps best known for the waterfowl that accumulate there each spring. Late March through the first week of April is peak season, but the exact timing is a function of the prevailing ice conditions. The river above the dam must remain frozen until the third or fourth week of March to achieve the higher counts, since many birds seem hesitant to disperse northward until the ice breaks up, and migrants from farther south accumulate at the lake until ice-out.

Canvasbacks, Ring-necked Ducks, Lesser Scaup, and a Canada Goose on Lake Wantastiquet on March 11, 2008; all photographs by the author.

The following chart is an example of the numbers of waterfowl that might roost on the ice above the dam on a typical day in a good spring. It is important to note that the window of opportunity for this site passes quickly, and it typically is in its prime for only two to three days. Thirty-two species of waterfowl have been recorded from the site, and in addition to the species listed, smaller numbers of Snow Goose, Mute Swan, Gadwall, Blue-winged Teal (April migrant), Northern Shoveler, Lesser Scaup, and Bufflehead occur each spring. Greater White-fronted Goose, Cackling Goose, and Barrow's Goldeneye have been annual in recent years, the latter often present throughout the winter with the resident flock of Common Goldeneyes. The area is generally poor for waterfowl in the fall due to the presence of hunters.

Spring Waterfowl—peak numbers March 20–April 5 depending on conditions:

Canada Goose	4000 to 6000
Wood Duck	100
American Wigeon	40
Black Duck	300
Mallard	1000
Northern Pintail	40
Green-winged Teal	300
Ring-necked Duck	200
Common Goldeneye	200
Hooded Merganser	150
Common Merganser	100

The best locations from which to scan the waterfowl depend on the ice conditions. When the amount of open water is limited, the berm leading out to the dam is the best spot and also affords the observer a great view as birds fly in from the river to the south. When the ice retreats upstream, the best viewing is from the rail trail along the shore.

The hours spent waiting, watching, and counting waterfowl can be rewarding in other ways. Great Horned Owls are regular in spring, often finding voice just as the waterfowl flight tapers off. In addition to Barred Owls, the surrounding forests host one or two Eastern Screech-Owls, and Northern Saw-whet Owls are regular migrants. An *Asio* owl species cruised past in very dim light one evening as I was packing to leave my station atop the berm.

Gulls roost here in small numbers compared to Barton Cove farther downstream, but Glaucous and Iceland gulls have both been recorded.

The berm is also a good spot to witness passerines en route to roost, often including Snow Buntings, Horned Larks, and an occasional wintering blackbird, cowbird, or grackle.

The New Hampshire side of the river is bounded by a rail trail that runs from close to the Massachusetts border north for six miles, passing the Hinsdale setbacks on the way. It is a pleasant walk and offers excellent birding for spring migrants in late April and May. Twenty-eight species of warblers have been recorded, including Cerulean and Prothonotary warblers. Because the valley is a main artery for migration, it is one of the first locations to record returning migrants, especially swallows. Tree Swallows routinely show up above the dam by the third week of March.

The area can really produce during spring weather events. I never miss the opportunity to visit during or immediately after the passage of a low-pressure system during spring. Depending on the severity of the system and its path, a quality fallout can occur.

During one such event in the spring of 2009, I recorded an Arctic Tern, two Common Terns, and two Black Terns during a 24-hour stretch. These low-pressure

systems can also produce shorebird bonanzas, although suitable habitat is absent and the birds rarely linger. In the absence of mudflats, shorebirds can be found along the riverbanks or the edges of the cattail marsh, or standing on the permanent pieces of driftwood that are marooned in the middle of the river. The same system that produced the aforementioned terns also produced about 30 Short-billed Dowitchers (part of more than 200 birds recorded on the river that day) and good numbers of Least and Semipalmated sandpipers.

The Connecticut River Valley channels other birds during spring migration. Keep an eye on the sky for a Black Vulture from April through May, and the three grebes and Common Loons are regular in spring and fall. The first Fish Crow for the site was recorded in spring of 2009.

Summer birding

The focus during summer shifts to the cattail marsh and surrounding woods. Hector Galbraith discovered a small colony of Least Bitterns here in 2007. This was a major find for New Hampshire, and one or more has been recorded in the years since. The marsh also hosts Virginia Rail, Sora, and good numbers of Marsh Wrens (about 30 pairs) and Willow Flycatchers (about 10 pairs). Listen for Yellow-throated Vireos, which are not uncommon in the area. They often sing from perches high in the canopy of willow trees lining the riverbanks. The same is true of Orchard Orioles; a pair of these uncommon New Hampshire summer visitors has nested below the dam for the last several years. The forest type is more southern in flavor, and willows, silver maple, and cottonwoods provide great habitat for Red-bellied Woodpeckers and Blue-gray Gnatcatchers, both of which are present in high densities by New Hampshire standards.

The forested riverbanks near the dam also support a nesting pair of Bald Eagles, and Peregrine Falcons have been maintaining an intriguing presence in the area. Chris Martin of New Hampshire Audubon obtained permission from Vermont Yankee to install a Peregrine nest box on the smokestack of the power plant in 2008. Below the dam, the sandy riverbank falls away steeply and provides a home for a colony of Bank Swallows. Belted Kingfishers also nest every year.

Fall birding

Waterfowl are scarce in the fall due to the presence of hunters, but it is the best time to witness scoter migration, which is very rare in the valley during spring. Black scoters, especially, pass through rapidly in late October, usually after the passage of a cold front. They rarely linger and are usually a one-day wonder.

Northern Shrike perched on the berm on January 13, 2008

The cattail marsh hosts an Icterid roost that can build to 15,000 birds in late October. Red-winged Blackbirds and Common Grackles predominate, with lesser numbers of Brown-headed Cowbirds and a few Rusty Blackbirds. I have yet to see a Yellow-headed Blackbird.

Winter birding

The winter freeze pushes several birds of interest south through the valley. Bald Eagles, and I suspect modest numbers of Golden Eagles (although I have yet to see one), may be seen in the area as the ice advances. Midwinter eagle surveys from Hinsdale north to Walpole routinely record Bald Eagles in double digits. Other birds that follow open water also push south, and the aforementioned winter waterfowl roost usually includes one or two less common species of waterbirds forced south by the freeze, such as American Coot or Long-tailed Duck. The winter roost typically involves about 500-600 birds until the end of February, when the numbers begin to swell toward climax in late March.

Rarities and significant records

Thirty-two species of waterfowl, 28 species of warblers, and 11 species of gulls and terns have been recorded at Lake Wantastiquet. The following are some of the more notable occurrences. All records are courtesy of *New Hampshire Bird Records*.

Cackling Goose — 4 on March 30, 2008 (Byard Miller et al.)
Barnacle Goose — 1 on March 25, 2007, first state record (Terry Wright)
Greater White-fronted Goose — 5 on March 18, 2007 (Eric Masterson)
Tundra Swan — 5 on November 2, 2004 (James Smith et al.)
Canvasback — 32 on March 26, 1988 (J. Coleman)
Northern Pintail — 44 on March 27, 2007 (Steve Mirick)
Common Moorhen — 6 on October 3, 1987 (J. Coleman)
Black-bellied Plover — 16 on May 31, 1961 (Tudor Richards)
Semipalmated Plover — 32 on *June 10*, 1961 (Tudor Richards)
Sanderling — 1 on June 2, 1961 (Tudor Richards)
Dunlin — 28 on May 25, 1988 (J. Coleman)
Red Phalarope — 1 on October 1, 1987 (J. Coleman et al.)
Ruddy Turnstone — 2 on *June 10*, 1961 (Tudor Richards)
Sooty Tern — 4 on August 14, 1955 following a hurricane (Tudor Richards)
Least Bittern — 3 on July 6, 2007 (Hector Galbraith)
Prothonotary Warbler — 1 on May 5, 1989 (D. Touret)

Eric Masterson *became fascinated by birds on a particular day in the fall of 1978 when he was invited by a friend to go on a hike in the countryside of County Wicklow, Ireland, his country of origin. The duo saw a Pied Wagtail, a Brown Creeper, and a Fieldfare. Intrigued, Eric set about finding out as much as he could about these curious new creatures, and so began a life in thrall to the wonder of birds. Eric studied zoology at University College Dublin, followed by a yearlong bird quest in Africa. He relocated to New Hampshire in 2000, where he worked for New Hampshire*

Audubon as Vice President for Development and Director of Natural History Tours. He left Audubon in 2008 to become the Executive Director of the Piscataquog Land Conservancy, a regional land trust based out of New Boston, New Hampshire. He writes the bi-weekly "Beyond Birding" column for the Monadnock Shopper *and was voted Columnist of the Year in 2008. He is a sometime award-winning illustrator and photographer. His images have been reproduced in several publications, including* Yankee Magazine*. Eric now lives as a reformed twitcher in southwest New Hampshire, where he spends his time birding locally, mostly.*

From the Birding Community E-Bulletin

HOG ISLAND TO REOPEN

The natural history camp at Hog Island in Muscongus Bay, Maine, first opened in 1936, at which time Roger Tory Peterson was its first bird instructor, and Allan D. Cruickshank was his assistant. Hog Island was acquired the year before by the National Association of Audubon Societies, the predecessor of today's National Audubon. Hog Island became well known within America's conservation and birding communities as a distinguished and beautiful place for learning and enjoyment. The 330-acre spruce-covered island retained its respected status as a center for nature education for decades.

Known to thousands as the Audubon Camp in Maine, Hog Island was closed during the summer of 2009 in order to plan for the future. Fortunately, this summer legendary Hog Island will reopen. Directed by Steve Kress, National Audubon's VP for Bird Conservation and "Father of Project Puffin," Steve will be joined by some of the country's top bird instructors, including Greg Budney, Pete Dunne, Lang Elliott, Kenn Kaufman, Kim Kaufman, and Scott Weidensaul.

Five sessions are currently planned. More will surely follow. For details, see: <http://www.projectpuffin.org/OrnithCamps.html>.

You can access the Birding Community E-bulletins on the National Wildlife Refuge Association (NWRA) website: <http://www.refugenet.org/birding/birding5.html>.

HOG ISLAND SCENE BY DAVID LARSON

Spring and Fall Migrations of the Two Races of Palm Warbler Through New England

Hector Galbraith, Chris Rimmer, and Trevor Lloyd-Evans

Introduction

Two races of Palm Warbler, *Dendroica palmarum*, exist: the western nominate race, *D. p. palmarum*, and the eastern or yellow race, *D. p. hypochrysea* (Wilson 1996; Dunn and Garrett 1997). The former breeds from central Ontario west to Saskatchewan and Manitoba and south to the northern Great Lakes, Wisconsin, and Michigan. Wintering birds occur primarily in the Greater Antilles, Mexico's Yucatan Peninsula, and coastal Belize and Honduras (Curson, Quinn, and Beadle 1994; Wilson 1996). The Eastern Palm Warbler breeds from eastern Ontario east to Newfoundland and south to northern New England and winters farther north than the Western Palm Warbler — mainly in Florida and the U.S. Gulf States.

Both races are relatively easy to distinguish in the field, especially in breeding plumage. The plumage of the Western Palm Warbler is relatively dull, with gray and brown being the predominant colors of the underparts, though the undertail coverts are yellow. Eastern Palm Warblers have bright yellow underparts and rufous caps that contrast with yellow chins, throats, and eye stripes. In fall, the contrast between the two races is less marked, but most birds can be reliably distinguished.

Although both races of Palm Warbler occur in New England during the spring and fall migrations, they show marked differences in abundance and seasonal occurrence. Wilson (1996) reported that in spring the western race migrates north up the Mississippi Valley and is a rare transient east of the Appalachians, where most birds are of the eastern race. Veit and Petersen (1993) concurred for Massachusetts birds, in which the eastern race dominates among spring migrants and the western race is rare. Similarly, Dunn and Garrett (1997) stated that the Western Palm Warbler is "casual" in spring in New England. Among fall migrants, Veit and Petersen (1993) reported that western birds predominate in Massachusetts, at least on the coast. Wilson (1996) stated that the western form is common east of the Appalachians during fall, while the eastern race is sparsely distributed in coastal areas. Dunn and Garrett (1997) stated that Western Palm Warblers are the dominant race in coastal New England in the fall and that eastern birds occur farther inland.

Thus the prevailing view, based on qualitative rather than quantitative evidence, is that Western Palm Warblers are relatively rare spring migrants in New England, and that the vast majority of northbound birds are of the eastern race. During fall migration, however, Western Palm Warblers are the most numerous race on the coast, while eastern birds occur farther inland. To date, however, no published accounts have quantified patterns of distribution of the two races during their migrations through New England. We used observational and banding data from several New England sites to elucidate spatial and temporal variation of migrant Palm Warblers.

Methods

We compiled data on spring and fall migrant Palm Warblers of both races from two sources: (1) publicly available records that we and other volunteer birders collected in Vermont, western Massachusetts, and western New Hampshire between fall 2006 and fall 2008; and (2) records of banded individuals from one inland and three coastal banding stations. Banding data were collected at the inland site in Woodstock, Vermont, by the Vermont Institute of Natural Science during the autumns of 1981 through 2000. Coastal migrants were sampled during both migrations at the Manomet Center for Conservation Sciences banding station in Manomet, Massachusetts, between 1966 and 2007; at the Wing Island Banding Station, Cape Cod, Massachusetts, between 2001 and 2008; and at the Joppa Flats Bird Banding Station on Plum Island in the Parker River National Wildlife Refuge, Massachusetts, between 1998 and 2009. We used only those records (1521 birds) that were assigned to one or the other race.

Results

Spring migration

During the spring migrations of 2007 and 2008, 189 Palm Warblers were identified to race in inland areas of Vermont, New Hampshire, and Massachusetts (Table 1). Most of these birds were observed from the Lake Champlain Valley eastward across the Connecticut River Valley to central Massachusetts and New Hampshire. Overall, birds of the eastern race predominated at inland locations in early spring (prior to the second week in May), and western birds were rare, conforming to patterns of occurrence in the published literature. However, our results differed from published conclusions in that western birds became relatively common in the second half of the season. Between May 1 and May 22, 27% of 77 birds were of the western race.

Table 1. Races of Palm Warblers observed in inland New Hampshire, Massachusetts, and Vermont during the springs of 2007 and 2008.

Date	Eastern (%)	Western (%)	Total
April 8–14	1 (100)	0 (0)	1
April 15–22	58 (100)	0 (0)	58
April 23–30	52 (98)	1 (2)	53
May 1–7	49 (81)	11 (19)	60
May 8–14	2 (20)	8 (80)	10
May 15–22	5 (71)	2 (29)	7
All	167 (88)	22 (12)	189

In contrast, at the Manomet and Wing Island coastal sites, Western Palm Warblers were very rare in spring, accounting for only 1% of all banded birds (Table 2).

Table 2. Races of Palm Warblers netted at Manomet, Wing Island, and Joppa Flats banding stations in Massachusetts in spring and fall, 1966–2009.

Season	Eastern (%)	Western (%)	Total
Spring	622 (99)	4 (1)	626
Fall	150 (27)	400 (73)	550

Fall migration

At Manomet and Wing Island, Western Palm Warblers predominated in fall, although 27% of birds were of the eastern race (Table 2). The situation may have differed at the Joppa Flats Bird Banding Station, where only three of 28 birds caught between 1998 and 2009 were westerns. However, the sample size at this site was small enough to make extrapolation problematic. Inland, the situation was reversed, with only 15% being of the western race and 85% of the eastern race (Table 3).

Table 3. Races of fall migrant Palm Warblers observed in inland in New Hampshire, Massachusetts, and Vermont in 2006–2008, and netted at Woodstock, Vermont, in 1981–2000.

Year	Eastern (%)	Western (%)	Total
2006	44 (90)	5 (10)	49
2007	3 (43)	4 (57)	7
2008	18 (72)	7 (28)	25
VINS 1981–2000	68 (91)	7 (9)	75
Total	133 (85)	23 (15)	156

Discussion

Our results confirm that the races of Palm Warbler migrating through New England show marked differences in timing and spatial distribution in both spring and fall. However, our findings also suggest that patterns reported previously have been oversimplified.

In spring, the majority of birds moving north through New England are of the eastern race, as previously reported (Wilson 1996, Veit and Petersen 1993, Dunn and Garrett 1997). However, in contrast to published accounts, western birds are not absent during this season; they occur relatively commonly in western Massachusetts, western New Hampshire, and Vermont during the second half of the migration season, when they can comprise up to 27% of birds. This difference in timing may be due to the departure of Western Palm Warblers later in the spring from their wintering areas than the departure of the eastern birds (Wilson 1996). It is likely that, because of their location farther west, the interior study areas are grazed by the easternmost edge of the northward movement of Western Palm Warblers.

Our results indicate that, during fall migration, western birds do indeed predominate at coastal sites, with eastern birds being present in much smaller

numbers. However, the reverse occurs farther inland, where western birds are relatively uncommon and Eastern Palm Warblers make up the great majority of migrants. It is surprising that such marked differences exist between the inland sites and the coast, a relatively short distance away. Presumably, western birds begin their migration by flying east until they reach the coast, where they are forced to turn south. It is not known whether the relative scarcity of eastern birds on the coast is due simply to swamping by larger numbers of western birds or whether their southward movements have a more westerly component. A more exhaustive analysis of observational and banding records from multiple sites throughout the migratory range is needed to more fully document variations in migration patterns of Palm Warblers.

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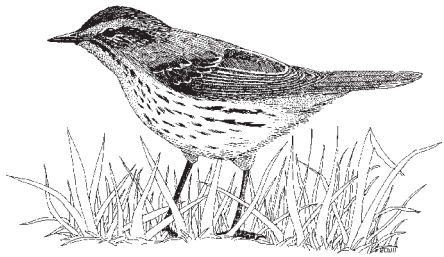
***Hector Galbraith**, Director of the Climate Change and Energy Initiative at Manomet Center for Conservation Sciences, is an avian ecologist with expertise in terrestrial ecosystems and the impact of human disturbance, including climate change, on natural populations and communities. **Chris Rimmer** is Director of the Vermont Center for Ecostudies, a nonprofit wildlife conservation group based in Norwich, Vermont. Prior to his graduate work in Ecology and Behavioral Biology at the University of Minnesota, Chris was an itinerant field biologist, with stints in Peru; Ellesmere Island, Canada; James Bay, Canada; coastal Massachusetts (Manomet Bird Observatory); and Antarctica. **Trevor Lloyd-Evans** is Avian Conservation Senior Scientist and Director of the Banding Program at the Manomet Center for Conservation Science in Plymouth Massachusetts. Trevor has dedicated a significant portion of his career to a 30-year study of bird populations based on the findings in his banding lab.*

The authors are grateful to the large number of dedicated birders and banders who contributed data to this project, including Don Clark, Pat Folsom, Doug Hardy, Pam Hunt, Dave Johnston, Byard Miller, Tom Pirro, Cliff Seifer, Taj Schottland, Mark Taylor, Julie Waters, and Terry Wright. They also thank the Joppa Flats and Wing Island banding stations for allowing us access to their data and Steve Faccio for summarizing banding data from the Vermont Institute of Natural Science.



WESTERN PALM WARBLER BY GEORGE WEST

How Many Chickadees Come to Your Winter Bird Feeders? Are They the Same Individuals You Saw Last Winter?

William E. Davis, Jr.

At different times of day, when you look at the birds at your winter bird feeders, are you seeing the same half-dozen chickadees or juncos, or are they different birds? How many individuals of each species are you actually feeding? Are they the same birds at the end of the winter as they were at the beginning, or do different groups of birds come and go? How many of the birds are the same ones that were at your feeders last winter? As part of a study of winter bird communities in my area, I trapped birds in four-cell Potter traps and marked them with USFWS numbered aluminum bands, so that I could visually identify what birds at my feeders had been banded, and when recaptured, establish when I had banded them. I banded sporadically from the winter of 1978–1979 through 1985–1986, and again from the winter of 1993–1994 through 1998–1999, covering a span of 20 years. Nearly all of the banding was done in the months of December through February, although some was done in March. From 1994 through 1998 on nearly a daily basis I censused birds at my feeders and for each species, recorded the number of individuals that had bands and the number that didn't. I banded more than a thousand birds and never retrapped a banded bird that did not have my band on it. I assume that all banded birds censused at my feeders were banded by me.

I am reporting here on an analysis of the banding data and how banding data help answer the questions posed above. For many species, the sample sizes were too small to constitute meaningful data, so I include here only the most common bird species. My banding effort was not uniform within years or between years (e.g., I did not band in the 1981–1982 winter season because I was away), so the data reported are sometimes for the "best" year, usually the years when my banding effort and results were maximal. *Recapture* refers to birds retrapped during the same winter season; *recovery* to birds retrapped in subsequent winters.

Black-capped Chickadee *Poecile atricapilla*—Black-capped Chickadees are quintessential feeder birds that show up in small flocks at any time of day. By fall, young birds have joined adults to form flocks that remain stable throughout the winter, usually six to eight birds (Smith 1993), and each flock has a definite home range (Butts 1931). Irruptions of mostly young birds occur every 2+ years and are apparently driven by food shortages (Smith 1993). So how many chickadees were actually visiting my feeders? My maximum numbers banded in a day and a season were 13 and 29, respectively (Table 1). This suggests that three or four groups visited the feeders during that winter. Were they the same birds throughout the season? During my best year, 1979–1980, I recaptured 75.9% of all birds that it was possible to recapture. I didn't include same-day recaptures in the data, and I could not recapture birds banded on my final day of banding in a winter season. Some birds

Table 1. Statistics on numbers of birds banded, recaptured (same season), and recovered (one or more years later). I have not included in Table 1 same-day recaptures, so "total possible recaptures" are less than "total banded" because I could not recapture birds banded on the last banding day of the season. "Total possible recoveries" are generally lower than "total banded" because of non-uniform banding effort. For example, I did not band birds in 1981-1982, and thus could not make a one-year recovery of a bird banded in 1980-1981. No data are presented for 2-year recoveries if no recoveries were made.

	total banded	max. banded /day	max. banded /year	total poss. recap.	num. recap.	% recap.	total poss. recov. 1 year	num. recov. 1 year	% recov. 1 year	total poss. recov.	num. recov. 2 years	% recov. 2 years	recovered subseq. years
Dark-eyed Junco	348	38	50	205	65	31.7%	271	17	6.3%	198	4	2.0%	
Blue Jay	246	29	42	133	26	19.6%	165	7	4.2%	196	3	1.5%	3y=5; 5y=2; 8y=1; 9y=1; 10y=1
House Sparrow	188	17	35	122	0	0.0%	125	0	0.0%				
Bl-c. Chickadee	176	13	29	160	67	41.9%	112	18	16.2%	79	5	6.3%	
European Starling	151	29	62	110	2	1.8%	87	2	2.3%	87	1	1.1%	
Mourning Dove	109	16	42	82	4	4.9%	109	3	2.8%				
Tree Sparrow	94	18	24	56	19	33.9%	75	3	4.0%	77	2	2.6%	
Tufted Titmouse	54	6	12	27	18	67.0%	40	6	15.0%	46	1	2.2%	3y=1
Northern Cardinal	34	4	6	17	1	0.0%	20	0	5.0%				

were retrapped many times throughout the season. For example, one "trap-happy" chickadee that I first banded on November 16, 1980, was recaptured nine times, the last on March 11, 1981. During the 1979–1980 winter I recaptured 22 individuals, one seven times, two six times, one five times, three four times, and four three times. Ten birds were recaptured in at least three months during that winter.

For the most part, then, the chickadees you see at your feeders in November are likely to be the same birds you see in January or February. But are the chickadees you see one winter the same birds you saw the winter before? In my best year 38.9% of the birds I banded I recovered the following winter. Estimates of chickadee survivorship in one study was 0.62 (62%; Loery et al. 1997), and for many small passerines the estimates run about 0.5, suggesting that about half the birds recorded one winter will still be alive the following winter. The difference between 0.6 or 0.5 and my 38.9% probably reflects mostly an infusion of young birds from the breeding season between the two winters. I also may not have retrapped all the banded birds that visited my feeders. The 38.9% figure does suggest that chickadees are generally winter-site faithful.

These results are consistent with winter recoveries reported in the literature (e.g., Ommanney 1950). The following winter I recovered 16.7% of the birds banded two years previously. I did not band birds in the winter of 1981–1982 or 1982–1983 because I was away, so did not recover any of my 1978–1979 birds a third time. Chickadees have a life expectancy of about 2 ½ years (Smith 1993) so it would be unlikely that any of my 1978–1979 birds would still be alive in 1983–1984 when I again banded. In my censuses of the feeders, most of the time chickadees were present in groups of two or three, with a maximum of five. From February 25, 1995, until March 23, 1995, I censused on nine days, and during that time I recorded only banded chickadees, suggesting that I had banded most of the resident chickadees.

Tufted Titmouse *Baeolophus bicolor* — The Tufted Titmouse follows a pattern similar to that of the chickadee. Titmouse flocks often consist of parents and their offspring (Grubb and Pravosudov 1994) and occupy well-defined home ranges (Condee 1970). I banded 54 titmice, with a maximum in one day of six and in one year of twelve (Table 1). The overall recapture rate was 67%. The recovery rate was not high, with six birds recovered the following winter (15%), and one bird recovered during the second winter after banding (2.2%), and one the third year (2.2%). All were different birds. The young of the first year may have dispersed after the first winter and thus were not available for recovery the second winter. Do titmice spend the entire winter visiting your feeders? The data indicate that many do. For example, one bird was banded on November 23, 1980, and recaptured five times, the last on March 3, 1981. One banded on December 24, 1980, was recaptured four times, the last on March 11, 1981. It appears that titmice are winter-site faithful and consistently exploit artificial food resources within their home ranges.

Blue Jay *Cyanocitta cristata* — The banding picture for the Blue Jay is very different from that of the chickadee. Blue Jays have long been known to be partially migratory (Smith 1929), and whether they migrate in a year probably depends on the

mast crop — when it fails they leave. Apparently some individuals are usually present year-round, and the birds that migrate may be replaced by migrating birds from farther north (Tarvin and Woolfenden 1999). The maximum number of Blue Jays banded in a day was 29, and the maximum number in a winter was 42. In 1978–1979 and 1979–1980, despite considerable banding effort, only six jays were banded during this period. Thus, these were years when most of the resident birds migrated and were not replaced by more northern birds. The following winter 30 jays were banded. Only 19.6% of the birds that could have been recaptured were recaptured over the years, a percentage that is much lower than for chickadees (41.9%). I suspect that this difference reflects a wary nature in Blue Jays and a larger number of transient Blue Jays than chickadees trapped. Only two birds were trapped three times in a season. This low number suggests that Blue Jays become wary of traps after their first capture. The censusing supports this. For example, on February 24, 1994, six of seven Blue Jays present at the feeders were banded, and on a number of occasions four of six were banded birds. The banded birds were there, but I did not catch them. The two birds trapped three times were all banded in November and trapped in January, suggesting that they were around for the winter.

The recovery pattern for Blue Jays was remarkable, not because of a high percentage of recovery (only 4.2% the first winter after banding and 1.5% for the second), but because of the recoveries in subsequent years. Five returned three years after banding, two after five years, one after eight years, and a single jay was recovered during two winters, nine and ten years after banding. That one bird was not recaptured the year of banding, nor in the eight winters subsequent to banding. Either this bird was very trap-wary or spent the winters somewhere else during those eight years. It has been previously reported that jays are winter-site faithful for at least five years (Ommanney 1950). It appears that Blue Jays are present in substantial numbers some years and not in others, depending usually on whether they migrate or not. After capture, they are trap-shy and not easily retrapped. The available data indicate that many remain in the area for the winter, and that they have some degree of site-faithfulness.

Dark-eyed Junco *Junco hyemalis* — Dark-eyed Juncos were common, easy to trap, and easy to retrap, with a total of 348 banded. The maximum in one day was 38, and 50 in one year. This is consistent with the comments of Strabala (1931), who mentions juncos remaining all winter and becoming troublesome because they were so frequently retrapped. However, recapture patterns are erratic, with high percentages of recaptures in some batches banded and very low percentages in others. This discrepancy suggests that some flocks remain in the same area throughout the winter, while others are transient. For example, of the 17 birds banded on six days between November 26 and December 2, 1978, 13 were recaptured (76%), all in December. Three more were recaptured again in February, as late as February 4, 1979. Of 30 birds banded between December 2 and February 19, 1979, only two were recaptured (6.7%). Two more, however, though not recaptured, were recovered the subsequent winter. This finding suggests that most of the group of 30 birds was in a flock or flocks that were not resident at my feeders for the winter.

Nolan et al. (2002) suggest that junco flocks do not defend territories, and that groups stay in the same general area in winter, but that individuals readily change flocks. Junco flocks sometimes have distinct home ranges of up to 82 acres (in one instance adopting a new home range following a heavy snowfall), and junco home ranges may overlap, leading to mingling of flocks (Gottfried and Franks 1975). These observations appear to represent the junco flocks as relatively fluid and mobile within large areas. This is consistent with my banding data. The presence of some birds from December through February is consistent with data in a Norristown, Pennsylvania, study in which 19 juncos were present for more than one hundred days (Middleton 1944) and with a study in Bridgetown, New Jersey, where juncos were present from December through March (Bender 1949).

It has long been known that juncos may be winter-site faithful (e.g., Higgins 1926). I recovered 17 of 271 juncos (6.3%) in the first winter after banding, and four birds (2.0%) in the second winter. The first-year recovery is lower than the 11.6% reported by Bender, but higher than the 2.3% by Wharton (Bender 1949). The survival rate for juncos is about 0.5 (Nolan et al. 2002), indicating that my percentage of returns is small and suggesting that many of the flocks from which birds were banded were transient and did not return subsequent years. This finding is consistent with the recapture data discussed above and also with the study of Ketterson and Nolan (1982), in which 35% of juncos banded one winter were recovered in another winter in a ten-minute latitude and longitude block different from the one in which they were originally banded. Thus, they were some distance from the original banding site.

House Sparrow *Passer domesticus* — The House Sparrow was an enigma at my feeders. Although common and present in substantial flocks and relatively easy to trap a first time, these birds proved extremely difficult to retrap, and many of my comments rely on census data rather than retrap data. I was able to band 17 House Sparrows in a day and 35 in a winter season, and although I banded a total of 188, I never retrapped a sparrow I had banded (Table 1). That they are trap-shy has been long known (Nichols 1935). During the nine censuses from February 19 through February 24, 1994, banded birds were recorded on eight, and on one census four of 14 birds were banded. In eight censuses between November 8 and 22, 1994, and before my first banding of the winter, six of the censuses recorded banded birds, two birds in each of the last three, indicating the presence of birds banded in previous years. In seven censuses in November 1995 before I had done my first banding of the season, banded birds were recorded in five of seven flocks, again indicating the presence of birds banded in previous years. Hence it appears that House Sparrows show a limited winter-site fidelity. The fact that more than four banded birds were never present at the feeders, and that there were usually only one or two, suggests that the banded birds were spending their winters mostly somewhere else. House Sparrows tend to share winter roosts and disperse to feeding areas in the daytime (Anderson 2006). One of my banded birds was killed in winter by a cat about a mile from my house. I suspect that House Sparrow flocks forage over wide areas and, once trapped, have a tendency to shift to other feeder locations.

European Starling *Sturnus vulgaris* — The pattern in recaptures and recoveries is similar to that of the House Sparrow. Of 151 banded birds, only two were recaptured in the winter of their banding, two were recovered the following winter (2.8%), and one the winter after that (1.8%). This one was a different bird from the previous recoveries (Table 1). It has long been known that starlings are trap-shy (Gill 1931), and that flocks roost together in winter and may change roosts frequently to exploit ephemeral food resources (Cabe 1993). I banded starlings on January 1 and 2, 1994, and between February 27 and March 3, 1994, a single banded bird was recorded in six of nine censuses. This suggests that at least one banded bird visited feeders for the remainder of the winter. I banded in the winter of 1994–1995, but the following winter, between November 23 and December 28, 1995 (before I had banded that winter), no banded birds were recorded in ten censuses. Between January 3 and February 7, 1996, one banded bird was recorded on four of six censuses. Thus, it appears that an occasional starling may be winter-site faithful. One bird that was banded on May 21, 1979, during breeding season was recovered on March 3, 1981. It may be that this local bird was sedentary, and that the few banded starlings at my winter feeders were part of a local breeding population.

Mourning Dove *Zenaida macroura* — The Mourning Dove follows the patterns of the House Sparrow and starling, with only 4.9% recaptured the same winter and only 2.8% recovered the winter following banding. None were recovered subsequently (Table 1). A total of 109 doves were banded, with a maximum of 16 in one day and 42 in a year. No dove was recaptured more than once, but the recaptures suggest that the birds were present for much of the winter. For example, three birds that were banded on November 16, 1980, were recaptured on December 23. A fourth bird banded on November 29, 1980, was recaptured on March 3, 1981. Three doves were banded on November 23 and 24, 1994, and one subsequently on December 20. Banded Mourning Doves were recorded in 17 of 52 censuses between December 8, 1994, and February 22, 1995. Most of these were single birds, but occasionally there were two. This pattern differs from the data at a banding station at what is now the Massachusetts Audubon Society's Wellfleet Bay Wildlife Sanctuary. Oliver Austin, Jr. concluded that all the Mourning Doves of Cape Cod were migratory and that the doves at his traps (feeders) were transient, never remaining more than one or two weeks (Austin 1951). It seems likely that the trend toward milder winters in recent years has resulted in some doves remaining throughout the winter. Another account suggests that pockets of Mourning Doves overwinter as far north as southern Canada if food is available (Mirarchi and Baskett 1994). It may be that the increasing presence of bird feeders in Massachusetts has resulted in some doves remaining in their breeding areas over the winter. In general, however, dove flocks may move through different areas as food resources are depleted, and they search for new ones.

American Tree Sparrow *Spizella arborea* — Tree Sparrows have long been acknowledged as a typical winter-site faithful species. Numerous papers dating back to the 1920s report recovery statistics for the species (e.g., Knox 1927). I banded 94 Tree Sparrows, with a maximum of 18 in one day and 24 in a winter season. My recapture percentage was 33.9% overall, with 60% in the best year, although the sample size of five was low. The recovery rate was 4.0% for the first winter after

banding and 6.8% for the best year. Recoveries for a second winter were 2.6% overall and 4.5% for the best year. These rates are low compared with recovery data published previously. For example, Mason reported a 21% recovery rate for the first year after banding (Mason 1952); Knox had a 77% recovery rate (Knox 1927), although his sample size was only 13 birds). Heydweiller (1935) had 34% recoveries, and Dowling (1956) had 32%. I suspect that the sporadic nature of my banding effort may be partially responsible for my low percentage. Had I banded more frequently, I may have recovered more of my birds. The Dowling note also mentions that the recovered birds were present throughout the winter from November 10, 1954, to March 30, 1955. I banded four birds on February 12, 1994 (my only banding effort that winter), and in 19 censuses from February 26 through March 4, 1994, I recorded only banded birds. In four instances, three of three birds were banded. This strongly suggests that the banded birds completed the winter season in my area.

Northern Cardinal *Cardinalis cardinalis* — The cardinal banding data are problematic because of the ability of cardinals to remove aluminum bands (Lovell 1948). Thus, unless birds are doubly marked (e.g., by clipping tail feathers), recapture data and recovery data are somewhat unreliable. I banded 34 cardinals, with a maximum of four in one day and six in a year. I had a single recapture in 1994 of a bird banded on November 23 and recaptured on December 20. I had no recoveries. In 1993–1994 I banded as late as February 12, and from February 19 to March 10 banded cardinals were recorded on nine of 43 censuses. I banded six cardinals on December 29, 1995, and from January 2 to March 16, 1996, one and sometimes two banded cardinals were reported from 28 of 56 censuses. These data suggest that at least some cardinals remained throughout the winter. From November 23, 1994, through February 2, 1995, I banded six cardinals — three males and three females. From November 11, 1995 (the following winter), until December 29, when I first banded that winter, banded cardinals were recorded on three of 65 censuses. At least one female bird banded the previous winter appeared at the feeders.

Cardinals form flocks in fall that may include their young of the year. These flocks may number from four to more than 100, but usually less than 15. The flocks are fluid, with birds moving from one flock to another, and at feeding stations regular visitors and new birds arrive throughout the winter. Marked birds may disappear and reappear in the same or succeeding winters (Halkin and Linville 1999). These reports are consistent with my banding data.

Summary

Different bird species have widely differing degrees of winter-site fidelity, which often reflect differences in their basic social structure. Birds that form flocks with family members and have limited home ranges appear to be more likely to be found at feeders throughout the winter season and return in subsequent years. Some species are trap-shy and others are “trap-happy.” Thus, banding data alone are suspect when making comparisons among species and need to be supplemented with census data. Some species are partially migratory, which makes between-year comparisons problematic. Most small passerine birds have annual survival rates of about 0.5, and thus should not be expected to reappear at feeders for many years. Other species, such

as the Blue Jay, are long-lived and can surprise you by showing up at your feeders a decade after you first see them.

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Results of the Superbowl of Birding VII - January 30, 2010

The Joppa Flats Education Center's Superbowl VII was conducted under very cold, windy conditions in northeastern Massachusetts and southeastern New Hampshire. Eighty-seven participants in 17 teams fanned out across Essex County, Massachusetts, and Rockingham County, New Hampshire, to tally birds and have fun. A total of 112 species was recorded this year.

Minox Joppa Cup (most points overall)
Team: Granite State Bird Watch (164 points), Captain Lauren Kras

Director's Award (most species overall)
Team: Burger Kinglets (75 species), Captain Paul Meleski

Essex County Excels Award (most points Essex County only)
Team: Bloggerhead Kingbirds (127 points), Captain Christopher Ciccone

Rockingham County Rocks Award (most points in Rockingham County only)
Team: Saw-What Owls (138 points), Captain Jim Hully

Sitting Duck Award (most points earned from a fixed location)
Team: Joppa Sitting Ducks (32 points), Captain Barbara Lawless

Seekers Award (most species recorded on the Seekers checklist, 30 species)
Team: On Shrike (29 of 30), Captain Bob Lawson

NewBies Award (most points or a team with at least 2 members under 18)
Team: NYSYBC Ninja Nighthawks (101 points), Captain Hope Batcheller

Lifer Award (most life birds seen by a participant) TIE
Individual: Aiden Parvo (16 lifers) from Fly By Nights
Individual: Emily Malachowski (16 lifers) from Fly by Nights

Superbowl of Birding VII sponsors include: Minox, Lead Corporate Sponsor; Leica, Lead Product Sponsor; Wild Birds Unlimited; Brown Bag Productions; Houghton-Mifflin; Jim Fenton; Strickland Wheelock; and Mass Audubon's Joppa Flats Education Center.

Nest Stories from Essex County, 2007–2009

Jim Berry

The year 2007 signaled the start of field work for the second Massachusetts Breeding Bird Atlas and a consequent shift in my birding habits. For many years my field work has centered on nesting birds, but with a new Atlas project that effort became a rigorous daily routine in late spring and early summer. My work also expanded from areas in and around Ipswich to many towns around Essex County, where I have coordinated Atlas assignments and come to learn many new territories as I scouted Atlas blocks with other volunteers. I also took on some blocks of my own in more distant towns. Following are some of my favorite nest-finding experiences over the last three years. Not all of these nests were successful, since a large percentage of bird nests fail, but all were significant for one reason or another. They are given in taxonomic order, for want of anything better.

COMMON EIDER, *Somateria mollissima*

I have previously written in this journal about the history of Common Eiders as breeding birds in New England and the first Common Eider nests found in Essex County (Berry 2002, 2005a, 2006). Since two friends and I found 19 nests on Ten Pound Island in Gloucester Harbor in 2005, nests have been found on several other vegetated islands along the county's coastline. The most recent was Eagle Island in Salem Sound, which hosts one of the two mixed-species heron colonies in Essex County. Over the last half-dozen years I have often assisted Simon Perkins of Mass Audubon in counting the heron nests at the Eagle and Kettle Island colonies. Prior to 2009, we had never found eiders nesting on Eagle Island, but on May 19 of that year, while making our way through thick undergrowth to count the heron nests, we flushed sitting eiders off nine nests, signifying the continued growth of the local breeding population.

Herring and Great Black-backed gulls also nest on the island, as they do on almost all the county's islands. One of the eider nests contained two eider eggs and a gull egg, by size most likely that of a Herring Gull. We were surprised to find this, especially since the eider nests were in thick cover. The gulls generally build their nests on bare rock or on the grassy fringes of the vegetated areas, although some Herring Gulls build in the edges of the thicker cover on the various islands (pers. obs.). The eider nest with the gull egg was not far from the edge of the thickets on this small island and thus reachable by the gull.

Common Eider creche photographed by Bob Mayer on June 30, 2003, at Georges Island in Boston Harbor.

In researching this phenomenon, I discovered that egg-dumping between

large gulls and Common Eiders has ample precedent, at least in terms of eiders laying eggs in gull nests. A. O. Gross (1944), in his years of censusing gull, cormorant, and eider nests on the many islands along the Maine coast, often found nests with mixed sets of eggs, though they were gull nests containing eider eggs. Of one island he wrote:

> We found two gull nests which contained Eider eggs. One contained three gull eggs and one Eider egg, and the other, two gull eggs and two Eider eggs. The eggs in the two gull nests were being incubated by Eider females. The occurrence of Eider eggs in gull nests is not rare and may be expected on any island where the two species are nesting in proximity. Often it is the Eider that takes possession of the nest and incubates the eggs, though on Kent Island, New Brunswick, there were cases in which the gull retained possession of the nest after the Eider eggs were deposited.

Although I had assumed that a Herring Gull had laid an egg in an eider's nest, Gross's findings indicate that we may have discovered a gull nest in which an eider began to lay and ended up taking over the nest. *The Birds of North America* account of the Common Eider (Goudie et al. 2000) supports this interpretation, saying that "Eiders will also incubate eggs and use nests of other species, including Brant (*Branta bernicla*), Canada Geese (*B. canadensis*), Snow Geese (*Chen caerulescens*), American Black Ducks (*Anas rubripes*), and Herring (*Larus argentatus*) and Lesser Black-backed (*L. fuscus*) gulls." (The authors unfortunately do not go into detail on this point, nor do they cite Gross's specific findings.) In contrast, the Herring Gull account (Pierotti and Good 1994) states that no nest parasitism, in the form of egg-laying in other birds' nests, has been observed in that species.

TURKEY VULTURE, *Cathartes aura*

Turkey vultures have become rather common breeding birds in southern New England since about 1980, but their nests are seldom found because the birds hide them well in dark, secluded, undisturbed places like caves, crevices, or hollow logs or stumps; on the ground in thick cover; or in abandoned buildings (Baicich and Harrison 1997). To my knowledge, until 2008 only one nest had ever been found in Essex County, by Russ Hopping in Boxford in July 1993. The nest was in a small cave "between some very large rocks that were part of a larger rock outcrop." On July 10 it contained two downy white chicks that were "not close to fledging" (Russ Hopping, pers. comm.). In fact, young Turkey Vultures take about eleven weeks to fly (Baicich and Harrison 1997) and have about the longest nestling period of any New England species.

On May 28, 2008, while covering an Atlas block in a different part of Boxford, I was standing at the top of a similar rock outcropping when I noticed the shadow of a large bird that appeared to be circling me. I looked up to see a Turkey Vulture doing just that. The first thing that crossed my mind was that the vulture had a nest in those rocks and was waiting for me to go away before going to it. My cover was blown, so to speak, so I decided to go ahead and look for the nest. I descended to the bottom of the rocks and started making my way across the base of what amounted to a small

cliff. I looked into the crevices in hopes of finding one with a level floor that could serve as a nesting platform. The vultures do not construct a formal nest and need a suitably flat place on which to lay the usual two eggs.

Before I had proceeded very far, a second vulture broke out of the rocks and flew off. This was virtual proof of a nest, and though it took me half an hour of searching, I finally found the right crevice and observed two large speckled eggs on the bare dirt floor. That floor was about a square yard in area, just big enough for an incubating vulture. I marked the general nest area with a subtle trail of surveyor's tape so I could find it again and returned two weeks later on June 12. The tape enabled me to reach the nest from above, and of course I hoped to find chicks. Looking down into the crevice I saw not chicks but the tail end of a sitting adult, facing away from the entrance. The bird must have heard me but could not see me, and I backed off immediately without flushing it. I stayed away until June 27, when I found only crushed eggshells in the nest. There was no sign of either young or adults; the nest had failed from either predation or something else that caused the eggs to be broken.

Since the adults would have had to hop down into the crevice, I could imagine that in doing so one of them could have accidentally landed on the eggs, however remote the chance. But a predator would be the prime suspect. As Dick Forster wrote in his species account in Atlas 1 (Petersen and Meservey 2003), "Predators are often attracted to the malodorous nest site; hence the need for inaccessible and remote locations because the adults are virtually helpless in defending the eggs or young." He added that of eight nests found by Norman Smith in the 1980s in the Blue Hills, "one was abandoned and four were lost to predators, probably Raccoons. The other three nests fledged one young each."

I could do nothing but collect the broken shell fragments and match them against the photo in Baicich and Harrison (1997) to verify their identity. The nest had failed, but it would live in history as the first (and perhaps the only) nesting confirmation for Atlas 2 in Essex County. But some of us will be trying hard to find other nests in the two remaining years of field work.

SPOTTED SANDPIPER, *Actitis macularius*

The most widely distributed breeding sandpiper in North America, the Spotted Sandpiper is generally considered a fairly common breeding bird, but it's another whose nest is quite hard to find. Breeding confirmations are almost always made on the basis of sightings of precocial young rather than nests—and, of course, the young leave the nest soon after hatching, meaning that there is no nestling stage in the cycle. There are occasional reports of Essex County nests in the published record, but though Spotted Sandpipers were confirmed in 87 Massachusetts blocks in Atlas 1, the species account mentions no nests found during the six years of field work. The New Hampshire Atlas (Foss 1994) is more helpful in listing how the confirmations were made; of 32 in the state, only five were based on finding a nest. Until Atlas 2 began, I had found only one nest in my life, in the Machias Seal Island Arctic Tern colony in New Brunswick.

That changed on June 3, 2007, when I flushed a presumed male bird off a nest with four eggs, the usual number for shorebirds, in an abandoned gravelly area of an otherwise commercially active sand and gravel pit in Ipswich. The nest was nothing more than a slight depression in the pebbly ground with a few grass stems for lining; the low vegetation around it was meager and thinly distributed. Camouflage was more important than cover in concealing this nest. Not surprisingly, it was empty when I returned two weeks later, the young having hatched and walked if they made it that far. There was no eggshell evidence, so I would never know.

I used the term "presumed male" because Spotted Sandpipers are often polyandrous. The larger, more aggressive females arrive on territory first, court the males, mate with up to four of them, lay as many clutches, and leave each male the task of incubating the eggs and caring for the young. They may, however, help the last mate incubate the last clutch and care for that brood, which they also do whenever they breed monogamously (Oring et al. 1997). In their tendency to polyandry, the species is the most similar to the phalaropes of any other North American shorebird. It is also one of few shorebirds to nest in temperate latitudes. The birds often place the nest near water since they make their living on the banks of ponds and streams, at the edge of salt marshes, around settling ponds, and in similar habitats. But not always; the Ipswich nest was in a dry area far from any body of water. The precocial young can easily be led to water; the important thing is a safe nest site.

NORTHERN SAW-WHET OWL, *Aegolius acadicus*

On May 18, 2009, following a report of some baby owls in West Gloucester, Phil Brown of Essex found and photographed three nestling Northern Saw-whet Owls looking out of a nest cavity in a large dead white pine. In fact, the cavity had been used the previous year by nesting Pileated Woodpeckers, *Dryocopus pileatus*. Phil sent me photos, and since the young were fully feathered and ready to fledge, I headed over the next morning. I saw two of them that morning, and though Phil saw three later that day, there was only one looking out the hole by the following day, May 20. Fledging was clearly going on, and Essex County had hosted one of its few known successful Saw-whet Owl nests.

Northern Saw-whet Owl babies about to fledge, Gloucester, Mass., May 18, 2009. Photo by Phil Brown.

In reviewing the published records on this species in the *Records of New England Birds* (RNEB), *Bird Observer*, Griscom and Snyder (1955), Veit and Petersen (1993), and Atlas 1 (Petersen and Meservey 2003), plus the banding records of Jack Holt and Mike Olmstead, I arrived at a total of at least 19 reported nesting events in Essex County. Townsend (1920) knew of no breeding records in his lifetime or earlier, but seven nesting events were known by 1955: three mentioned in Griscom and

Snyder (1955) without specifics, two others in RNEB that they either missed or ignored, and two more reported to me by Jack Holt. Some of these nests were at the Ipswich River Wildlife Sanctuary (IRWS) in nest boxes installed by Torrey Jackson of Marblehead in the early 1950s (*fide* Jack Holt). Veit and Petersen (1993) add post-1955 breeding confirmations from several Essex County towns, though some of these involved fledged young rather than nests. Jack Holt banded young in boxes at IRWS three times in the 1990s and banded six young in a box in Bradley Palmer State Park in Hamilton in 1994. Mike Olmstead banded two young in an Andover box in 1995.

So most of the known nests in the county have been in man-made boxes rather than woodpecker holes or natural cavities. Only one other nest in a woodpecker hole is known, and that was an assumed nest. On March 17, 1990, I spotted a Saw-whet Owl looking out a large woodpecker hole in a snag along the Ipswich River in Bradley Palmer State Park in Hamilton. I saw it again April 14, April 28, and May 6. This almost certain nest had been raided by May 13 when I next returned, the bottom of the cavity having been enlarged by pulling away the rotting wood. Jim MacDougall (pers. comm.) was convinced it had been done by a mammal such as a raccoon, presumably to get at the eggs or young. This presumed nest and the 2009 nest in Gloucester are thus the only Saw-whet Owl nests I am aware of in the county's history that were not in nest boxes.

RUBY-THROATED HUMMINGBIRD, *Archilochus colubris*

Ruby-throated Hummingbird nests are often found, but this is the story of one of the most remarkable nesting events I have ever known, and please forgive any anthropomorphizing that may creep into this account. A female hummer built a nest in the yard of Brian O'Neill in Ipswich in mid-June 2008, about fifteen feet up on a branch of an American beech that sloped down over the bank of the Ipswich River. Brian estimated that her eggs were laid the last week of June; incubation is sixteen days (Baicich and Harrison 1997). By mid-July he could see the female feeding two young, whose bills were just visible over the edge of the nest. But July had many thunderstorms, and one night in the third week a storm hit overnight.

The next morning Brian noticed that the nest had been knocked sideways about 100 degrees from the vertical so that the top was aimed horizontally and the side wall of the nest was now on top. How the nest did not fall off in those circumstances is beyond me, but it must have been due to tight construction with spider silk and similar materials. He found one of the chicks floating dead in shallow water at the edge of the river. Incredibly, the other chick, still very small, had managed to crawl over the lip of the nest with its tiny feet and onto the

Nestling Ruby-throated Hummingbirds, June 25, 2006. Photo by Phil Brown.

side that was now the top. The female hummer continued feeding it there for almost two more weeks. Fledging takes place at about nineteen days (ibid.), which means the baby bird was less than a week old when it made its life-saving climb to (relative) safety. Brian showed me the altered nest on July 31, when the chick was feathering out and getting close to fledging.

But time and the weather were against this family. The storms had continued, surely making it hard for the mother to find enough food for her nestling. On August 1 Brian saw the chick with its bill in the air, but it was motionless with ants and a wasp crawling on it. The mother bird chased the wasp away and hovered near her baby, but it was too late. It had perished overnight. This tiny creature that had survived against all odds almost to fledging deserved its place in the gene pool, but it was not to be.

COMMON RAVEN, *Corvus corax*

Since the first documented Common Raven nest for Essex County, found by Rick Heil in a Manchester quarry in 2004 (Berry 2005b), raven sightings have steadily increased as the birds continue to re-colonize eastern Massachusetts. No more nests were found, however, until 2009, when breeding confirmations were obtained in two Atlas blocks. One came in Ipswich when Jay Frontierro (pers. comm.) saw a raven carrying a stick on the early date of February 16. The bird was heading toward an active sand and gravel operation on Route 1, where Jim MacDougall and I had suspected nesting since 2007. Jim had seen one carrying food in that area (not considered proof of nesting for crows and ravens), and I had watched a pair scavenging roadkill along the highway in late May 2007, well into their nesting season. Following Jay's report, I inquired about raven activity at the gravel pit and learned that the birds had been seen there regularly for several years. They had even tried to build a nest in some of the machinery, which of course was interrupted by the employees. I didn't learn where the eventual 2009 nest had been built, but as ravens often nest in large white pines, it could well have been in one of the tall pines near the pit.

Meanwhile, as has been widely observed, ravens have taken to nesting in cell-phone towers, which offer nesting sites akin (in height, at least) to the cliffs the birds prefer in so many parts of their range. Tom French (2006) reported this phenomenon, though at the time only five of 76 known nest sites in Massachusetts were on such towers. More have been reported since, and I have seen several raven nests in towers recently while driving along Route 95 in Maine. Essex County had its first in 2009. The nest was about a hundred feet off the ground in a tower beside Route 95

Common Ravens at nest with young, Georgetown, Mass., May 11, 2009. Photo by Phil Brown.

in an industrial section of Georgetown and was first noticed March 30 by Phil Brown as he was driving along the interstate. He exited, found a place to observe the nest, and photographed the incubating bird. Many of us saw the nest on subsequent dates, and on May 11 Phil took photos of the adults and three large young on the nest. I could see two of the young the next day. They apparently fledged before May 29, when the nest was empty.

I now look at every cell-phone tower I see for a raven nest, since they are huge stick structures and easy to spot. This technique has paid off in several Massachusetts Atlas blocks and will probably do so more and more as the years go on.

BLUE-GRAY GNATCATCHER, *Polioptila caerulea*

The Blue-gray Gnatcatcher is one of perhaps a dozen southern species that have extended their ranges north into New England in the last half-century and become part of the county's nesting avifauna (see Berry 2003 for examples of local nests). Gnatcatcher nests are no longer news, but double-brooding in species in which it is seldom observed is always news. In 2009 I was lucky enough to witness double-brooding in this species, the first time I have personally seen it.

The finding took place in a large expanse of beaver swamp along a power line in North Andover in one of my Atlas blocks, a site that has yielded nesting evidence for many species. On June 28 I observed a pair of gnatcatchers lining a nearly complete nest about 25 feet up in a red maple sapling. The tree was in a part of the swamp with abundant standing dead timber at the edge of the power line. At this late date I thought it might be a second nest, since the species is often double-brooded (Baicich and Harrison 1997; Ellison 1992). Then I noticed three more gnatcatchers preening in shrubs within fifty yards of the nest site. They were obvious fledglings, and their presence was clearly tolerated by the busy adults gathering nest material around them. The only reasonable conclusion was that the juveniles were the pair's first brood, recently fledged.

I did not return to the site until it was too late to learn the results of the pair's second nesting attempt, but I was satisfied to have found solid evidence for double-brooding. It seemed to me at the time that the birds were collecting nest materials from multiple spots, but if I had watched more carefully I might have seen the first nest. This is because Blue-gray Gnatcatchers that nest a second time do not use the same nest again, but rebuild, starting very soon after the first young fledge if not earlier. In doing this, they often take some or even all the material from the first nest to build the second unless the old nest is infested with ectoparasites (Ellison 1992). I have seen songbirds of several species take material

Blue-gray Gnatcatcher fledglings being fed, Manchester, Mass., June 22, 2008. Photo by Phil Brown.

from old nests, but in each case it was from the nest of another species. Gnatcatchers seem to favor recycling their own first nest.

BROWN THRASHER, *Toxostoma rufum*

Brown Thrasher nests are always well-concealed, and I have found only two in over 40 years of birding. Both were in the same place in Rowley and were probably made by the same pair of birds, or their successors, two years apart. I found the first on May 27, 2007, when I stopped along a fence separating the dirt road I was driving on from a hayfield. A thrasher was staying near the shrub-lined fence despite my presence as if it did not want to leave, so I sat in the car and watched. The bird gave me no further clue and flew off a short distance, so I got out and searched along the base of the fence, knowing these birds nest on or close to the ground. Specifically, the nest is "very low in a shrub or bush, near the ground, or on the ground under a bush, shrub, or small tree. Rarely more than 7 feet up, usually under 3 feet" (Baicich and Harrison 1997). Bent (1948) reported that Midwestern nests were rarely on the ground, but that his experience in eastern Massachusetts was different, with fully half the nests he recorded being on the ground. "The others were in bushes, small trees, or brush heaps; the highest nest . . . was only 4 feet from the ground in an arborvitae." Ten of 23 nests found around Boston by his colleague Frederic Kennard were on the ground.

My search along that chain-link fence began at a large barberry (*Berberis* sp.), whose many stems arched up and outward from the ground forming a tight circle at the base. Within that circle I found the nest, only six inches above the ground. The bush had grown up right beside the fence on the side away from the road, so it was extremely well-protected. It contained four eggs, which I photographed through the fence. I was able to see one of the adults on the nest June 5 and again June 13, each time without flushing it. After that, the nest was so concealed by the surrounding poison ivy that I could not determine the outcome.

I returned to the site two years later on June 9, 2009, in hopes of gaining nesting evidence for additional species. Brown Thrashers were again present and anxious, so I repeated my search along the fence for a nest. The barberry had the remains of the old nest but not a new one, so I examined the adjacent shrubs including a stand of Japanese knotweed (*Polygonum cuspidatum*). The nest was in it, three feet above the ground, and had been built right against the fence, again on the side away from the road. It contained two eggs, indicating an incomplete clutch not yet being incubated. I did not revisit that nest until July. By then the nesting would have been over and, not surprisingly, no birds were in evidence. But I was pleased to have found two thrasher nests, possibly made by the same two birds, in very different types of shrubs and at different heights.

BLUE-WINGED WARBLER, *Vermivora pinus*

From an accidental species a century ago (Townsend 1920), the Blue-winged Warbler became a regular part of the county's avifauna by the 1970s. By 1980 it was already outnumbering its close relative the Golden-winged Warbler, *V. chrysoptera*, in

various locations (*Bird Observer*, passim; Veit and Petersen 1993). From a comparison of Atlas data, the Blue-wing has become more widespread in Essex County over the last three decades, found in only seven county blocks in Atlas 1 in the 1970s versus 29 in the first three years of Atlas 2—significant for a species near the northeastern terminus of its breeding range and still expanding (Veit and Petersen 1993; Petersen and Meservey 2003; Foss 1994).

On the other hand, Gill et al. (2001) caution that, "In recent years . . . Blue-wing populations have declined in the northeastern United States, along with other shrubland birds, due to regrowth of forests and loss of habitat to urban sprawl." It appears, then, that the factors favoring the range expansion of this species, which are barely touched upon here, are being countered by the critical factor of habitat loss. My own limited experience has been similar; I have heard fewer of these birds in recent years than I did in the 1970s and 1980s, even with the disappearance of their Golden-winged competitors.

Whether Blue-winged Warblers are increasing or declining, this is another species whose nests are found only with patience and perseverance. They are well hidden on the ground in low vegetation, often beside a path in an area of second growth or on the edge between an overgrown field and a forest. I have found only four Blue-wing nests in the county, in Hamilton (2), Ipswich, and West Newbury. Whereas the first three were in overgrown, semi-open areas, the most recent was in a mature forest in Bradley Palmer State Park in Hamilton. Only the horse trail passing by the nest made the habitat even close to what the species is known to tolerate, because the trail, which was at least twenty feet wide, served as a linear clearing.

I found the nest on May 31, 2009, when I saw one, then both adults carrying food to the same area on the ground beside the trail. The male bird did not sing, but both were Blue-wings by appearance and not hybrids. There was little hope of finding the nest without retreating 30 or 40 yards and just watching because of the extremely thick ground cover of incipient goldenrod (*Solidago* sp.) and Oriental bittersweet (*Celastrus orbiculata*). The birds did not bring food often, so it was close to an hour before I had a good lead on the nest location. I was able to find it when the female bird remained on the nest after a feeding; she flushed when I drew near and gave a distraction display. I ignored the display and quickly found the nest. It contained four newborn young, all apparently warblers (i.e., no cowbirds). I retreated quickly and let them get on with their business. Confirmation for the Atlas block had been my goal, and I did not revisit the nest.

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Jim Berry *is one of the editors of* Bird Observer *and a Regional Coordinator for the second Massachusetts Breeding Bird Atlas. This is another in a series of nesting articles that he is writing in advance of his forthcoming book on the birds of Essex County.*

ABOUT BOOKS

Titanic Tomes and Prodigious Publications

Mark Lynch

> You can never get a cup of tea large enough or a book long enough to suit me. C.S. Lewis

100 Birds to See Before You Die. The Ultimate Wish-List for Birders Everywhere. David Chandler and Dominic Couzens. 2008. Carlton Publishing Group. London, Britain.

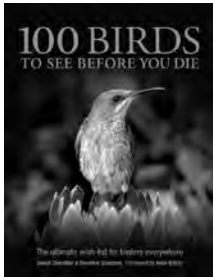
Extreme Birds: The World's Most Extraordinary and Bizarre Birds. Dominic Couzens. 2008. Firefly Books. Buffalo, New York.

The Princeton Encyclopedia of Birds. Christopher Perrins, Editor. 2009. Princeton University Press. Princeton, New Jersey.

The Migration Ecology of Birds. Ian Newton. 2008. Academic Press. London, Britain.

We love BIG things. Why dodge chipmunks while driving a Mini Cooper when you could plow through a cow tooling around in a Hummer? Why build just a house when you could erect a McMansion that dominates the landscape and enrages the puny neighbors? Ever since the pyramids, humanity has been enthralled by the monumental and colossal; if big is good, then the biggest is the best of all.

Books about birds provide no exception to our cyclopean cravings, and there are quite a number of recent titles that could double as doorstops, ox stunners, or at least give you a decent workout after that supersized meal.



My first reaction on reading just the title of *100 Birds to See Before You Die* was a sarcastic "or what will happen?" I tried imagining myself on my deathbed, surrounded by emotional family and friends. I open my eyes slowly, my loved ones crowd in to hear my last words and I utter: "But I never saw a Wallcreeper!" Then with a long strangled moan I pass on to some birder's hell in which I eternally miss the "tick."

My second reaction was to make a list of my personal "most wanted" birds and then check the book to find if they were included. I was amazed to find that most of the birds on my list are also in this book.

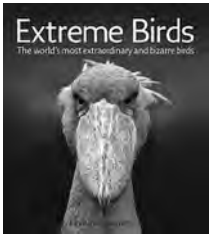
David Chandler has worked for the RSPB (Royal Society for the Protection of Birds) and BirdLife International and is now a freelance educator and writer. His co-author Dominic Couzens contributes to a number of magazines, including *Bird Watching*, *BBC Wildlife,* and the RSPB's *Birds* magazine. Together they bring a more ethological and conservation approach to what could have easily been another dull

British twitcher's list. Some species were chosen not just because they are endemic or rare, but instead for some unusual behavior. Relatively common species like Common Cuckoo and Common Nightingale surprisingly make this "must see" list. The nightingale rates obviously because of its legendary, ethereal song. Cuckoos make the cut due to their odd parasitic behavior and because they are far more often heard than seen. It is therefore a species "most birdwatchers like to see." (p. 36) In view of the book's inherent British perspective, North American birders will be interested to see which of "our" species are on the list. These include Scissor-tailed Flycatcher, Harlequin Duck, Arctic Tern, and Roseate Spoonbill. Other species are circumpolar but just as tough to see in Britain as they are here. These include Snowy Owl and Gyrfalcon. (I was surprised how many of the birds on this list I had seen in Massachusetts over the years.) Of course, as the list progresses, the species get less familiar to beginning birders. More of them are endangered and endemic to remote locations. So we find the Helmeted Vanga of Northeast Madagascar clocking in at number sixteen and the endangered Kakapo of New Zealand at number four.

Other birds are listed among the 100 because they are what can only be called "birder's birds": species that may appear unspectacular but would make your year if you found one. The Siberian Rubythroat really isn't really rare, it's just that most European and North American birders don't bump into them very often, and when we do, it is a tough bird to see; the rubythroat is a notorious skulker.

> Never write off small brown birds: a little modesty of plumage can hide bundles of charisma, and this is certainly true for one of the jewels of the Eurasian taiga, the Siberian Rubythroat. With the male's startling appearance, a fine song, and intriguing tendency to wander off its normal migratory route, the Rubythroat is the sort of bird to thrill any birder with a soft spot for traveling waifs. (p. 20)

100 Birds to See Before You Die is a modestly handsome book. Each species account is opposite a full-color photograph of that bird. A small range map is included with basic details of the bird's range, status, and habits. But it is the author's descriptions that make this book both fun to read and a point of departure in creating your own "must-see" list. The book counts down from 100 to that coveted Number One bird to see before you die. I am not going to play the role of the spoiler and give away what Chandler and Couzens chose for their bird-plus-ultra, but I will say I was surprised, and it is North American! *100 Birds to See Before You Die* is a coffee table book but an enjoyable one, if only for all the heated discussions it will engender about what should and shouldn't have been on the list.



Extreme Birds, also by Couzens, seems to be part of a natural history programming trend you see on channels like Animal Planet, Discovery, and even National Geographic. In order to appeal to a younger demographic, the formerly sedate nature show is now pumped up and given an "extreme" edge. There are programs like "Shark Week," "The World's Most Dangerous Snakes," "Untamed and Uncut," and "The Most Extreme." These

shows have flashy graphics, over-the-top narration, and show lots of odd and violent behavior, often aiming for the gross-out. It's a view of nature inspired by the X-Games and Red Bull.

Extreme Birds is divided into four categories: "Extreme Form," "Extreme Ability," "Extreme Behavior," and "Extreme Families." Each two-page spread features a large color photograph, a title, and a few paragraphs of description. Some of the categories are simple, straightforward, and a matter of record: "Widest wingspan" (Wandering Albatross, p. 10), "Longest Legs (proportionately)" (Lesser Flamingo, p. 12), or "Biggest Eyes" (Ostrich, p. 14). But these mundane categories lack the zip needed for a book called *Extreme Birds*, so we soon come across "The Snuggest Underwear" (Pallas's Sandgrouse, p. 38), "Heaviest Testes" (Alpine Accentor, p. 59), "Longest Penis (proportionately)" (Lake Duck, p. 60), and "Sexiest Tail" (Barn Swallow, p. 63). By the time I got to "Funniest Forager" I was looking to see if Beavis and Butthead were among the authors.

> The first sign that something strange happens came when observers noticed that, more often than usual in other birds, these thrushes regularly placed their vents close to the ground while feeding, as if squatting to defecate. Furthermore, while this happened the researchers began frequently to pick up a quiet sound like an outward rush of air.
>
> Yes, you've read it correctly. It seems as though Bassian Thrushes intentionally fart while they are feeding. (p. 161)

I don't even know if this is true. It reads like a joke perpetrated by Australian ornithologists who have had one Dog Bolter Lager too many. Most of the categories are completely subjective, like "Classiest Colors" (p. 67), or "Craziest Suitor" (p. 177), or even "Best Karaoke" (p. 189). It's not like there is a committee of leading ornithologists convening every year like the Academy of Motion Picture Arts and Sciences to vote on which bird species has the "Coziest Nest" (p. 239).

Extreme Birds is very light entertainment in a hefty package. Sure, it's worth a glance, but I wouldn't shell out the bucks for a brand new copy. Instead, read a friend's copy or look for it on sale wherever elephantine amusements are remaindered.

The focus of *The Princeton Encyclopedia of Birds* is not entertainment but education, and it accomplishes this with style and economy. After brief chapters on avian evolution, morphology, biology, and ethology, the bulk of the book is dedicated to the description of all the families of birds in taxonomic order. Each family listing has a number of color photographs or drawings. Each section begins with brief details of plumage, voice, eggs, diet, conservation status, and a range map in an easy-to-find inset. The conservation categories used are those defined by the World Conservation Union (IUCN). There are also a number of short essays with themes that are repeated in other family accounts. Under Cassowaries/Casuraidae (p. 44-5) for example, the essays include "Casques and Wattles (theme:

Form and Function)," "Fallen Fruit (theme: Diet)," and "Sharing the Fate of the Forest (theme: Conservation and Environment)." Family accounts can range from just one or two pages to sixteen or more.

The illustrations and photographs are typically of high quality. These include a small number of photographic essays, such as "A Cuckoo In the Nest" (p. 316-17), which features five photos spread over two pages of cuckoos in various stages of parasitizing nests. There's a wonderfully bizarre shot of a reed warbler confronting a gargantuan young cuckoo, mouth agape, squatting on the nest.

The writing is terse but informative. This is, after all, an encyclopedia. Christopher Perrins is a professor of ornithology and a Fellow of the Royal Society. For this book, he has edited the contributions of 145 ornithologists and bird experts from around the world. A five-paragraph insert on "Antbirds and Army-Ant Swarms" (p. 449) includes the following:

> About 50 typical antbird species — the so-called "professional" ant followers — are regular attendants on ant swarms, but many other species will occasionally join in. Large colonies of regularly nomadic ants can attract up to 25 birds of one or two species at a time, plus scattered individuals of up to 30 other species. The professional ant followers may obtain up to 50 percent of their food from ant swarms, keeping a regular eye on the colonies to take advantage when the swarm starts to move.

This is followed by a brief but interesting description of the hierarchal behavior of antbird species at swarms. The prose may not be "extreme," but the topics chosen are those aspects of a bird's life that the average birder would find most interesting. Every page holds new discoveries for the reader.

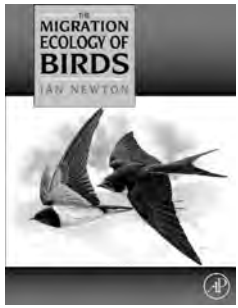
The Princeton Encyclopedia of Birds is a wonderfully executed, basic reference book that most birders will find useful. It fills a niche between the extreme brevity of field guides and detailed academic books dedicated to a single species or family. This encyclopedia is a perfect home reference guide, especially if you have children or if you are an armchair birder interested in the exotic bird families of faraway lands.

Our final colossal compendium is also the biggest, clocking in at a whopping 976 pages. It is also the best of the four books reviewed here. *The Migration Ecology of Birds* by Ian Newton aspires to be the complete survey of everything that is known about avian migration, with an emphasis on the latest findings. It is a stunning achievement.

Introductory chapters deal with adaptations of birds for migration, the diverse types of migrations, and a nice review of what the author calls "difficult journeys," examples of extreme migration. In addition, there is a complete review of the methodologies of studying bird migration, from basic visual observation to the use of radar, ringing, radio tracking, isotopes, and laboratory studies.

This introduction is followed by five thematic sections that each deal with broad aspects of migration. Every sub-chapter in each Part contains a useful summary section, making it easier for the reader to grasp the crucial points.

Part One is titled "The Migratory Process." This section is about the dynamics of migratory flight, the effects of weather, how birds fuel their flights, the speed with which the birds make the journey, and how they navigate these long distances. A final chapter on "Vagrancy" (p. 267-99) will be of special interest to any birder who has wondered how a Brown-chested Martin could have gotten to Massachusetts.



Part Two describes the timing of migration, annual cycles, and what mechanisms determine the onset of migratory behavior.

Part Three details what we know about large-scale patterns of migration. This includes geographical patterns, sex and age differences within the migration patterns of a species, and site fidelity at either end of the migration. Finally, there are two very interesting chapters on irruptions, looking specifically at species of owls, raptors, waterfowl and boreal seed-eaters.

Part Four is about the evolution of migration and also describes some interesting recent changes in avian migratory routes.

Part Five is concerned with what Newton calls "large migratory systems," meaning the Palaearctic-Afrotropical and the Nearctic-Neotropical flyways. It is in this section that he also details the variables that limit migratory populations on the breeding, wintering, and stopover locations, and also describes instances of mass mortality of migrants.

The last sections of *The Migration Ecology of Birds* contain a lengthy glossary and an even longer list of references. Whew!

Make no mistake: this is not a book for a general audience with little knowledge of birds or basic biology. It is not profusely illustrated, although it does contain some fine small black-and-white drawings by Keith Brockie. This certainly is not a populist glossy and splashy treatment of migration. The sheer size and weight of this book may mislead some people into believing this to be nothing more than a dry textbook. This would be unfortunate because any serious birder will find a wealth of interesting information throughout this book, both general and specific.

Under the section on "Migration By Walking or Swimming" (p. 64) you find the following odd account:

> Prill (1931) described a pedestrian migration of American Coots *Fulica americana* in the Warner Valley of Oregon during May 1929. At least 10,000 individuals were seen walking northwards over a period of four days. They did not swim or fly (unless alarmed), but followed the shore 6-25 abreast. They may have been engaged in a moult migration, and some may have not flown because their flight feathers were loosened or already shed.

The Migration Ecology of Birds is a book worthy of its prodigious size. You will not sit down and read it straight through. But the next time you hear a flock of Red

Crossbills call overhead, witness a nice passage of shearwaters at the shore, marvel at a kettle of Broad-winged Hawks, or tick a Rufous-necked Stint on South Beach, you will enjoy reading large sections of this book to better understand what those birds are doing and how they are doing it.

This Whip-poor-will was captured and banded at the Joppa Flats Bird Banding Station on the Parker River National Wildlife Refuge on Plum Island in 2009. This photograph by Marci Smith Driscoll affords a good look at this cryptic bird and clearly shows the rictal bristles around the mouth and the tubular nares. Note also the crease in the facial feathering that extends to below the eye and hints at the extent of the gape.

BIRD SIGHTINGS

September/October 2009

Marjorie Rines, Seth Kellogg, and Robert Stymeist

In September the average temperature in Boston was 63.2˚, 1.5˚ below normal, and the coldest since 63.1˚ in 1995. The high mark was 81˚ on September 23, and the coolest day was 46˚, just three days later. Rainfall totaled 3.09 inches, just under the average for September.

The average temperature in October was 51.9˚, 2.2˚ below normal. The highest reading occurred on Halloween when Boston recorded 73˚, a nice treat for all the goblins roaming the streets. Many suburbs dropped below 32˚ on October 11 and 12, but there was no frost in Boston during the month. Rain totaled 5.17 inches in Boston, 1.38 inches above normal and 3.76 inches more than last October. Measurable rain fell on all four weekends, not exactly a birders dream for October. Snow is rare in October, but many suburbs recorded measurable amounts on October 16 and 18. Blue Hill Observatory had 3.0 inches on October 18, and many of you will remember the New England Patriots victory on a snowy Foxboro field. *R. Stymeist*

WATERFOWL TO ALCIDS

Cackling Goose has become regular in the western part of the state, but during this period individuals were also reported from three eastern Massachusetts locations. Plum Island and Mill Pond in Marstons Mills are the best places in the state to look for **Eurasian Wigeon** in fall, but a male in Plymouth was unusual. Good numbers of Northern Shovelers were reported, including an impressive thirty on Plum Island. The single report of Canvasback was from Fresh Pond in Cambridge, apparently now the only reliable place in the state to see this species. Excellent numbers of scoters, particularly Black Scoter, were reported from inland locations in the last two weeks of October.

A single observer was lucky enough to see three **Pacific Loons** off Cape Cod in October, and a fourth bird was reported off Marblehead. Although this species has become more common in the past decade, four individuals in a single month is exceptional.

Once again, an "Extreme Pelagic" trip run by the Brookline Bird Club September 3–4 scored the highlights among sea birds. Although **Audubon's Shearwater** is to be expected on these trips, a total of twenty-eight exceeded previous state highs. A total of six **White-faced Storm-Petrels** was an unprecedented bonanza; the previous high number for a single trip was three at Hydrographer Canyon in August of 2006. Eight **Band-rumped Storm-Petrels** was an equally unprecedented number, the previous high being five at Atlantis Canyon in July 2008. Five **Bridled Terns** greatly exceeded the previous high of only two individuals (seen on several dates). A total of seven **Long-tailed Jaegers** was icing on the cake.

A Broad-winged Hawk on October 25 was unusually late. A total of four **Golden Eagles** migrating over the Blueberry Hill hawkwatch site in Granville was impressive. A **Common Moorhen** reported from Great Meadows NWR continued on from the summer.

A group of four **Sandhill Cranes** were seen in New Marlboro, the only known breeding site in the state. A group five of cranes in Wareham lingered for a month and a half; the day they disappeared from Wareham, five cranes were spotted flying over Portsmouth, Rhode Island, and five were seen flying over a hawkwatch site in Greenwich, Connecticut. The

following day, five were seen in New Jersey. Although this species is becoming more regular in the Northeast, it seems likely that these sightings were of the same group.

On October 11, an **American Avocet** was an exciting one-day wonder on Plum Island. Hudsonian Godwits are often seen in good numbers in the Chatham area, but in Essex County they haven't hit double digits since September 2004. So a one-day sighting of 32 individuals on Plum Island was noteworthy. A flock of 62 Hudsonian Godwits was seen on the "Extreme Pelagic" trip. Leader Rick Heil described this as "a remarkable and amazing observation!; a single flock observed migrating south low over the water beyond the shelf edge nearly 100 miles SE of Nantucket on 9/4! Next stop South America in a couple of days of non-stop flight?"

Sightings of **Black-headed Gull** and **Little Gull** in two locations each were noteworthy. A count of 31 Dovekies in Provincetown would have been a good total at any time but was exceptional for October 29. *M. Rines*

Snow Goose			
10/11	Granville	1	J. Weeks
10/25	Pittsfield (Onota)	7	M. Lynch#
10/31	Ipswich	5	J. Berry
Brant			
10/1	Granville	13	J. Weeks
10/11	Duxbury B.	87	R. Bowes
10/13	P.I.	215	R. Heil
10/14	WBWS	240	M. Faherty
10/17	Northampton	2	F. Bowrys
10/25	Plymouth H.	609	G. d'Entremont
Cackling Goose			
10/5	Northampton	1	F. Bowrys
10/18, 31	Concord	1, 1	J. Trimble + v.o.
10/27	Turners Falls	1	F. Bowrys
10/29	Hadley	2	J. Smith
10/31	Ipswich	1	J. Berry
10/31	P.I.	1	T. Wetmore
Mute Swan			
10/12	Acoaxet	68	M. Lynch#
10/24	Plymouth	21	I. Davies#
10/25	Ipswich	17	R. Heil
10/28	Nantucket	110	V. Laux
Wood Duck			
thr	GMNWR	290 max	v.o.
9/17	Burrage Pond	100+	J. Sweeney
9/30	Waltham	40	J. Forbes
10/13	W. Roxbury (MP)	89	M. Iliff
10/17	Sterling	49	M. Lynch#
Gadwall			
thr	P.I.	90 max	v.o.
9/6	Chatham (S.B.)	17	M. Faherty#
10/12	Acoaxet	14	M. Lynch#
10/20	Longmeadow	3	T. Alicea
10/24	Plymouth	29	I. Davies#
10/25	Ipswich	62	R. Heil
10/30	Pittsfield (Onota)	2	T. Collins
Eurasian Wigeon			
thr	Marstons Mills	1	M. Keleher
10/4	P.I.	1 ad	T. Wetmore#
10/16, 24	Plymouth	1 m	I. Davies
American Wigeon			
9/4	GMNWR	1	M. Iliff
9/7	S. Monomoy	3	B. Nikula
9/11	Waltham	3	J. Forbes
9/16-10/31	P.I.	108 max	v.o.
10/11-31	Arlington Res.	19 max	v.o.
10/24	Marstons Mills	87	M. Keleher
10/24	Plymouth	16	I. Davies#
10/26	Amherst	2	J. Smith
American Black Duck			
10/12	Westport	134	M. Lynch#
10/18	P.I.	500	S. Grinley
10/24	Plymouth	146	I. Davies#
10/28	GMNWR	31	USFWS (JSS)
10/31	Ipswich	138	J. Berry
Blue-winged Teal			
9/7	S. Monomoy	15	B. Nikula
9/8	P.I.	23	R. Heil
9/9, 10/8	GMNWR	34, 4	USFWS (JSS)
9/20	W. Newbury	10	I. Davies#
10/2	Chicopee	3	F. Bowrys
10/8	Marstons Mills	6	M. Keleher
10/10	W. Roxbury	4	P. Peterson
10/28	Nantucket	2	V. Laux
Northern Shoveler			
9/4	GMNWR	1	M. Iliff
9/4	Melrose	3	D. + I. Jewell
9/6	Chatham (S.B.)	6	M. Faherty#
9/20-10/31	P.I.	30 max	v.o.
10/8, 20	Longmeadow	3, 3	S. Kellogg
10/12	E. Boston	9	R.Stymeist
10/25	Arlington Res.	5	P. Devaney
Northern Pintail			
thr	P.I.	80 max	v.o.
9/7	S. Monomoy	10	B. Nikula
9/27, 10/17	Manomet	3, 3	I. Davies
10/8	Eastham (F.E.)	7	B. Nikula
10/12	Acoaxet	3	M. Lynch#
10/28	GMNWR	19	USFWS (JSS)
Green-winged Teal			
thr	GMNWR	81 max	v.o.
thr	P.I.	560 max	v.o.
9/7	S. Monomoy	20	B. Nikula
10/23	New Salem	21	S. Perkins#
10/28	Nantucket	68	V. Laux
10/30	Ipswich	34	J. Berry
Canvasback			
10/17-30	Cambr. (F.P)	1-3	B. Miller
Redhead			
10/5	P.I.	1 m	T. Wetmore#
10/19	New Marlboro	1	N. Kotovich
10/24	Falmouth	1 m	G. Hirth
10/24-25	Plymouth	1 m	R. Bowes + v.o.
10/25	Turners Falls	1	M. Fairbrother
Ring-necked Duck			
9/19-10/31	W. Newbury	681 max	v.o.
9/19-10/31	Randolph	390 max	v.o.
10/13	Cambr. (F.P.)	74	M. Rines
10/26	Marstons Mills	101	M. Keleher
10/31	Northbridge	179	M. Lynch#

Ring-necked Duck (continued)
10/31 Pittsfield 605 C. Blagdon
Greater Scaup
9/23-10/21 P.I. 12 max v.o.
10/16 Rockport (A.P.) 4 R. Heil
10/17 Clinton 16 M. Lynch#
10/24 Falmouth 60 G. Hirth
10/24 Brookfield 3 M. Lynch#
10/25 Pittsfield (Onota) 1 M. Lynch#
10/31 Ipswich 5 J. Berry
Lesser Scaup
9/27 P.I. 1 m T. Wetmore
10/11 Acoaxet 60 J. Hoye#
10/25 Pembroke 27 J. Sweeney#
10/28 Nantucket 45 V. Laux
King Eider
10/7 Rockport (A.P.) 1 m imm L. Miller
Common Eider
10/16 Rockport (A.P.) 4370 R. Heil
10/17 Manomet 5362 I. Davies
10/19 Dennis 3000 P. Bono
10/19 Eastham (F.E.) 2700 B. Nikula
Harlequin Duck
10/16 Rockport (A.P.) 3 R. Heil
10/17 Manomet 1 m I. Davies
10/30 Orleans 2 P. Brown#
Surf Scoter
9/27, 10/17 Manomet 207, 5152 I. Davies
9/27, 10/16 Rockport (A.P.) 39, 7100 R. Heil
10/14 Pittsfield (Onota) 9 G. Hurley
10/14 Wayland 9 J. Forbes#
10/14 Cheshire 7 G. Hurley
10/16 Dennis (C.B.) 19500 B. Nikula
10/18 Barnst. (S.N.) 1170 J. Sweeney#
White-winged Scoter
9/27, 10/17 Manomet 622, 1203 I. Davies
9/27, 10/16 Rockport (A.P.) 87, 3263 R. Heil
10/4 Lynn B. 300+ L. Ferraresso
10/14 Pittsfield (Onota) 2 G. Hurley
10/16 Dennis (C.B.) 1330 B. Nikula
10/17 Wachusett Res. 2 m M. Lynch#
10/24 S. Quabbin 17 L. Therrien
Black Scoter
9/27, 10/17 Manomet 82, 927 I. Davies
9/27, 10/16 Rockport (A.P.) 11, 2500 R. Heil
10/14-26 Reports of 1-37 indiv. from 11 inland loc.
10/16 Dennis (C.B.) 2400 B. Nikula
Long-tailed Duck
10/15-31 P.I. 115 max v.o.
10/16 Dennis (C.B.) 355 B. Nikula
10/16 Rockport (A.P.) 205 R. Heil
10/24 W. Quabbin 3 L. Therrien
10/30 Richmond 2 T. Collins
Bufflehead
10/9 W. Newbury 1 S. McGrath#
10/16 Winchester 1 m C. Gibson
10/19 E. Boston (B.I.) 1 P. Peterson
10/28 Nantucket 25 V. Laux
Common Goldeneye
10/16 Rockport (A.P.) 2 m R. Heil
10/17 Manomet 3 I. Davies
10/23 W. Brewster 1 f P. Trull
10/27 Randolph 2 P. Peterson
Hooded Merganser
10/1 S. Egremont 5 yg M. Lynch#
10/25 Ipswich 11 R. Heil
10/29 Winchester 14 M. Rines
10/29 Braintree 20 P. Peterson
Common Merganser
9/13 S. Quabbin 8 M. Lynch#
9/16 P.I. 2 T. Spahr
10/25 Wakefield 6 f P. + F. Vale
10/29 Cumb. Farms 5 M. Iliff
Red-breasted Merganser
9/27 Nantucket 6 K. Blackshaw
10/11 Cheshire 1 M. + K. Conway
10/15 Duxbury B. 110 R. Bowes
10/16 Dennis (C.B.) 370 B. Nikula
10/16 Rockport (A.P.) 460 R. Heil
10/17 Manomet 502 I. Davies
10/31 Pittsfield (Mud Pd) 1 C. Blagdon
Ruddy Duck
10/thr W. Newbury 75 max v.o.
10/thr Melrose 19 max D. + I. Jewell
10/17 Cambr. (F.P.) 12 B. Miller
10/21 Woburn (HP) 12 M. Rines
10/27 Randolph 64 P. Peterson
Northern Bobwhite
9/15 Chatham (MI) 2 ad, 4 yg Manchester
10/21 WBWS 8 M. Faherty
Ring-necked Pheasant
9/20 DFWS 1 J. Hoye#
10/24 Cumb. Farms 3 I. Davies#
10/25 Saugus 1 m T. Factor#
10/27 W. Bridgewater 1 J. Sweeney
10/28 Nantucket 1 V. Laux
Ruffed Grouse
10/10 Whately 1 M. Lynch#
Wild Turkey
10/7 Woburn 10 M. Rines
10/11 Quabbin Pk 16 J. Rose
10/20 Mashpee 10 M. Keleher
10/24 Gloucester 12 S. Hedman
10/thr E. Middleboro 17 K. Anderson
Red-throated Loon
9/27, 10/28 Rockport (A.P.) 2, 38 R. Heil
10/thr P.I. 150 max v.o.
10/14 Granville 3 J. Weeks
10/16 Rockport (A.P.) 49 R. Heil
10/17 Manomet 72 I. Davies
10/19 Dennis 35 P. Bono
10/23 Duxbury 40+ R. Bowes
Pacific Loon (no details) *
10/3 P'town 1 br pl B. Nikula
10/10 N. Truro 1 br pl B. Nikula
10/13-15 Marblehead 1 br pl D. Noble#
10/16 Dennis (C.B.) 1 br pl B. Nikula
Common Loon
10/16 Rockport (A.P.) 77 D. Ely
10/16 Dennis (C.B.) 70 B. Nikula
10/17 Manomet 235 I. Davies
10/19 Eastham (F.E.) 19 B. Nikula
10/21 Fairhaven 19 C. Longworth
10/28 Duxbury B. 23 R. Bowes
10/29 Cumb. Farms 65 M. Iliff
10/30 P.I. 30+ T. Wetmore
Pied-billed Grebe
9/29 Brookfield 3 M. Lynch#
10/thr Melrose 4 max D. + I. Jewell
10/12 Randolph 8 B. Larson
10/13 Winchester 7 R. LaFontaine
10/30 Cheshire 5 H. Allen
10/31 Groveland 9 D. Chickering#
10/31 Pittsfield (Mud Pd) 5 C. Blagdon
10/31 Westport 8 G. d'Entremont
Horned Grebe
10/13 Turners Falls 2 H. Allen
10/19 S. Quabbin 5 H. Allen
10/25 Plymouth B. 8 G. d'Entremont
10/28 Duxbury B. 2 R. Bowes
10/31 P.I. 3 S. Grinley#
Red-necked Grebe
9/27, 10/16 Rockport (A.P.) 1, 5 R. Heil
10/19 Sharon 5 V. Zollo
10/19 Belchertown 1 L. Therrien
10/31 P.I. 2 S. Grinley#

Red-necked Grebe (continued)
10/31 P'town 4 B. Nikula
Northern Fulmar
9/26, 10/29 P'town 2, 380 B. Nikula
9/27, 10/28 Rockport (A.P.) 2, 222 R. Heil
10/19 Eastham (F.E.) 2 B. Nikula
Cory's Shearwater
thr P'town 185 max 10/17 B. Nikula
9/3 Nant. Shoals 395 BBC (R. Heil)
9/19, 10/8 Eastham (F.E.) 150, 40 B. Nikula
9/27, 10/16 Rockport (A.P.) 21, 20 R. Heil
9/27 Nahant 20 L. Pivacek
10/10 N. Truro 39 B. Nikula
10/23 Dennis (C.B.) 21 B. Nikula
Greater Shearwater
thr P'town 1650 max 10/29 B. Nikula
9/3 Nant. Shoals 1320 BBC (R. Heil)
9/6 Jeffries Ledge 80 BBC (I. Giriunas)
9/13 Stellwagen 20 P. Peterson
9/27, 10/28 Rockport (A.P.) 2, 625 R. Heil
10/10, 24 N. Truro 2100, 600 B. Nikula
10/29 Eastham (F.E.) 100+ P. Brown#
Sooty Shearwater
thr P'town 63 max B. Nikula
9/3 Nant. Shoals 15 BBC (R. Heil)
9/6 Jeffries Ledge 10 BBC (I. Giriunas)
9/13 Stellwagen 8 P. Peterson
10/10, 24 N. Truro 32, 5 B. Nikula
10/16, 28 Rockport (A.P.) 7, 2 R. Heil
Manx Shearwater
thr P'town 67 max 10/17 B. Nikula
9/3 Nant. Shoals 20 BBC (R. Heil)
9/6 Jeffries Ledge 2 BBC (I. Giriunas)
9/13 Stellwagen 6 P. Peterson
10/10, 24 N. Truro 78, 7 B. Nikula
Audubon's Shearwater
9/3 Hydrographer 25 BBC (R. Heil)
9/4 Veatch Canyon 3 BBC (R. Heil)
Wilson's Storm-Petrel
9/3 Nant. Shoals 137 BBC (R. Heil)
9/4 Veatch Canyon 290 BBC (R. Heil)
9/6 Jeffries Ledge 75 BBC (I. Giriunas)
9/12, 10/17 P'town 115, 1 B. Nikula
9/13 Stellwagen 20 P. Peterson
10/19 Eastham (F.E.) 1 B. Nikula
White-faced Storm-Petrel *
9/3 Hydrographer 3 ph BBC (R. Heil)
9/4 Veatch Canyon 3 ph BBC (R. Heil)
Leach's Storm-Petrel
9/3 Hydrographer 46 BBC (R. Heil)
10/16 Rockport (A.P.) 8 R. Heil
10/17 P'town 3 B. Nikula
10/18 Barnstable (S.N.) 3 J. Sweeney#
10/19 Dennis 2 P. Bono
Band-rumped Storm-Petrel *
9/3 Hydrographer 4 ph BBC (R. Heil)
9/4 Veatch Canyon 4 ph BBC (R. Heil)
Northern Gannet
thr P'town 4750 max 10/28 B. Nikula
9/9, 10/16 Duxbury B. 24, 2000 R. Bowes
9/19, 10/19 Eastham (F.E.) 48, 7100 B. Nikula
9/27 Nahant 20+ L. Pivacek
9/27, 10/17 Manomet 908, 1350 I. Davies
9/27, 10/28 Rockport (A.P.) 48, 890 R. Heil
10/16, 23 Dennis (C.B.) 8470, 1300 B. Nikula
Double-crested Cormorant
9/5 Westport 394 M. Lynch#
9/26 Melrose (PR) 700+ C. Jackson
9/26 Woburn (HP) 454 BBC (P. Ippolito#)
9/27 Peddock's I. 1500 R. Stymeist
9/29 Chatham (MI) 1000 D. Manchester
10/6 P.I. 900+ T. Wetmore
10/10 P'town 800 B. Nikula
10/16 Rockport (A.P.) 2580 R. Heil
Great Cormorant
9/8 P.I. 1 R. Heil
9/27 Rockport (A.P.) 5 R. Heil
10/17 Manomet 23 I. Davies
10/18 Dennis 5 P. Flood
10/30 Salisbury 3 J. Berry#
American Bittern
9/thr P.I. 1 v.o.
9/1-10/11 GMNWR 4 max v.o.
9/2 Longmeadow 1 J. Wojtanowski
9/13 Moran WMA 1 B. Zajda
9/26 N. Monomoy 1 B. Nikula
10/8 Nahant 1 L. Pivacek
10/12 E. Boston (B.I.) 1 R.Stymeist
10/20 Eastham (F.H.) 2 M. Faherty
10/25 Manomet 1 I. Davies
Least Bittern
9/17 GMNWR 1 S. Perkins#
Great Blue Heron
9/9 GMNWR 37 USFWS (JSS)
10/10 Eastham (F.H.) 57 SSBC (GdE)
10/13 P.I. 14 R. Heil
10/20 Eastham (F.H.) 15 M. Faherty
10/25 Nantucket 7 K. Blackshaw#
Great White Heron
9/2-9 Fairhaven 1 C. Longworth + v.o.
Great Egret
thr P.I. 70 max v.o.
9/1 Chatham (MI) 18 D. Manchester
9/2, 10/17 E. Boston (B.I.) 15, 7 Stymeist, Peterson
9/3, 17 GMNWR 9, 6 S. Perkins#
9/5, 10/12 Westport 164, 7 M. Lynch#
9/6 S. Amherst 4 B. Zajda
9/7 S. Dart. (A.Pd) 190 E. Nielsen
9/24 Gloucester H. 42 S. Hedman
10/25 Ipswich 6 R. Heil
10/31 Duxbury B. 3 R. Bowes
Snowy Egret
thr P.I. 125 max v.o.
9/2 Chatham 23 B. Nikula
9/5 Westport 98 M. Lynch#
9/6 Chatham (S.B.) 65 M. Faherty#
9/7 S. Dart. (A.Pd) 155 E. Nielsen
9/18 Gloucester H. 114 S. Hedman
9/26 Falmouth 12 G. Hirth#
10/13 E. Boston (B.I.) 1 P. Peterson
Little Blue Heron
9/2 Sterling 1 imm K. Bourinot
9/4-14 GMNWR 1 imm M. Iliff
9/5 Westport 2 M. Lynch#
9/18 Gloucester H. 7 S. Hedman
Tricolored Heron
9/2-9 Fairhaven 1 juv C. Longworth#
Cattle Egret
9/14-15 W. Boxford 1 T. Walker
Green Heron
9/5 WBWS 4 B. Zajda#
9/8 Amherst 8 H. Allen
9/9 GMNWR 4 USFWS (JSS)
9/12 S. Quabbin 3 M. Lynch#
9/13 Truro 4 BBC (R. Stymeist)
10/7 Yarmouth 1 E. Hoopes
10/9 W. Newbury 1 S. McGrath#
Black-crowned Night-Heron
9/3 GMNWR 8 S. Perkins#
9/9, 10/20 Eastham 52, 4 Nikula, Fahety
10/5 Ipswich 44 J. Berry
10/11 Gloucester (E.P.) 5 S. Hedman
10/25 Plymouth 4 G. d'Entremont#
10/28 Nantucket 4 V. Laux
Yellow-crowned Night-Heron
9/4 Marshfield 1 MAS (J. Galluzzo)

Yellow-crowned Night-Heron (continued)

9/7	S. Monomoy	1	B. Nikula
9/9, 10/4	Eastham	20, 5	Nikula, Heil
9/12	Wellfleet	1	BBC (R. Stymeist)
10/4	P'town	5 imm	R. Heil

Glossy Ibis

9/5	Westport	2	M. Lynch#
9/14-10/8	GMNWR	1	v.o.
10/27	Stellwagen	1 ph	S. Landry#

Black Vulture

9/18	Becket	3	R. Laubach
9/19, 10/20	Granville	4, 4	Hawkcount (JW)
10/11	Southwick	1	S. Kellogg
10/12	Sheffield	15	J. Drucker

Turkey Vulture

9/thr	Chatham (MI)	17	D. Manchester
9/4	N. Carver	23	R. Conway
9/6	Ware	21	M. Lynch#
9/6	Barre Falls	12	B. Kamp
9/7	S. Dart. (A.Pd)	12	E. Nielsen
9/14	Mt. Wachusett	36	S. Olson#
9/23	P.I.	33	R. Heil
10/1	Cheshire	21	M. Lynch#
10/thr	Barre Falls	351	Hawkcount (BK)
10/thr	Granville	424	Hawkcount (JW)
10/11	Granville	82	Hawkcount (JW)
10/12	Barre Falls	95	Hawkcount (BK)

Osprey

9/thr	Granville	113	Hawkcount (JW)
9/thr	Mt. Wachusett	166	Hawkcount (SO)
9/thr	Barre Falls	95	Hawkcount (BK)
9/thr	Mt. Watatic	85	Hawkcount (TP)
9/5	Westport	23	M. Lynch#
10/thr	Barre Falls	51	Hawkcount (BK)
10/10	Barre Falls	21	Hawkcount (BK)
10/31	S. Dartmouth	2	G. d'Entremont#

Bald Eagle

9/thr	Granville	32	Hawkcount (JW)
9/thr	Mt. Watatic	18	Hawkcount (TP)
9/thr	Barre Falls	34	Hawkcount (BK)
9/thr	Mt. Wachusett	47	Hawkcount (SO)
9/13	Mt. Tom	5	BBC (T. Gagnon)
9/15	Barre Falls	5	Hawkcount (BK)
9/19	Mt. Wachusett	8	Hawkcount (RC)
10/1-23	Barre Falls	37	Hawkcount (BK)
10/11	Quabbin Pk	9	J. Rose
10/11	Barre Falls	9	Hawkcount (BK)

Northern Harrier

9/thr	Granville	28	Hawkcount (JW)
9/6-28	Mt. Wachusett	8	Hawkcount (SO)
9/6-29	Barre Falls	11	Hawkcount (BK)
9/7	S. Dart. (A.Pd)	3	E. Nielsen
9/7	S. Monomoy	3	B. Nikula#
9/8, 10/1	P.I.	9, 8	R. Heil
9/13-20	Mt. Watatic	11	Hawkcount (TP)
10/thr	Granville	27	Hawkcount (JW)
10/6-29	Barre Falls	22	Hawkcount (BK)
10/10	Melrose (PR)	4	Hawkcount (CJ)
10/25	Cumb. Farms	8	I. Davies#

Sharp-shinned Hawk

9/thr	Chatham (MI)	113	D. Manchester
9/thr	Mt. Wachusett	327	Hawkcount (SO)
9/thr	Granville	303	Hawkcount (JW)
9/thr	Barre Falls	416	Hawkcount (BK)
9/thr	Mt. Watatic	286	Hawkcount (TP)
9/12-26	Melrose (PR)	49	Hawkcount (CJ)
9/13, 16	Mt. Watatic	59, 48	Hawkcount (TP)
9/15, 21	Mt. Wachusett	44, 40	Hawkcount (SO)
9/15, 19	Barre Falls	44, 66	Hawkcount (BK)
9/19	Melrose (PR)	31	Hawkcount (CJ)
10/thr	Granville	438	Hawkcount (JW)
10/thr	Barre Falls	813	Hawkcount (BK)
10/8, 10	Barre Falls	103, 180	Hawkcount (BK)
10/14, 19	Granville	73, 38	Hawkcount (JW)

Cooper's Hawk

9/thr	Chatham (MI)	18	D. Manchester
9/thr	Mt. Wachusett	61	Hawkcount (SO)
9/thr	Barre Falls	36	Hawkcount (BK)
9/thr	Granville	21	Hawkcount (JW)
9/13-26	Mt. Watatic	21	Hawkcount (TP)
9/19	Melrose (PR)	8	Hawkcount (CJ)
9/24, 25	Mt. Wachusett	14, 12	Hawkcount (SO)
10/thr	Granville	74	Hawkcount (JW)
10/thr	Barre Falls	113	Hawkcount (BK)
10/12, 14	Barre Falls	14, 17	Hawkcount (BK)
10/13	Cumb. Farms	6	T. Johnson#

Northern Goshawk

9/9, 10/2	Barre Falls	2, 2	B. Kamp
9/20	W. Boylston	1 ad	M. Lynch#
9/26	Mt. Wachusett	1	Hawkcount (RC)
9/30	S. Quabbin	1	M. Lynch#
10/11	Granville	4	Hawkcount (JW)
10/31	Malden (PR)	1	Hawkcount (CJ)

Red-shouldered Hawk

9/7	Cumb. Farms	3	G. d'Entremont
9/13	Lincoln	3	J. Forbes
9/18	Sandwich	2	M. Keleher
9/20	Medford	3	M. Rines#
10/5	W. Roxbury (MP)	2 imm	M. Iliff
10/11	Stoughton	2	G. d'Entremont
10/12-29	Barre Falls	27	Hawkcount (BK)
10/thr	E. Middleboro	2	K. Anderson

Broad-winged Hawk

9/thr	Granville	4491	Hawkcount (JW)
9/thr	Mt. Wachusett	4462	Hawkcount (SO)
9/thr	Barre Falls	2659	Hawkcount (BK)
9/thr	Mt. Watatic	3234	Hawkcount (TP)
9/13	Mt. Watatic	136	Hawkcount (TP)
9/13	Russell	609	T. Swochak
9/14, 15	Wachusett	1231, 2260	Hawkcount (SO)
9/15, 16	Mt. Watatic	774, 821	Hawkcount (TP)
9/15, 21	Barre Falls	1263, 478	Hawkcount (BK)
9/17	Russell	741	T. Swochak
9/17, 19	Granville	1444, 735	Hawkcount (JW)
9/20	W. Boylston	94	M. Lynch#
10/1-12	Barre Falls	21	Hawkcount (BK)
10/25	New Salem	1	B. Lafley

Red-tailed Hawk

10/thr	Granville	162	Hawkcount (JW)
10/thr	Barre Falls	205	Hawkcount (BK)
10/13	Cumb. Farms	12	T. Johnson#
10/17, 29	Barre Falls	42, 32	Hawkcount (BK)
10/25	Ipswich	10	R. Heil
10/26	Granville	37	Hawkcount (JW)
10/31	Malden (PR)	12	Hawkcount (CJ)

Rough-legged Hawk

10/20-29	Cumb. Farms	1 juv lt	J. Trimble#

Golden Eagle

10/17, 19	Granville	1, 1	Hawkcount (JW)
10/17	Barre Falls	1 ad	Hawkcount (BK)
10/22, 29	Granville	1, 1	Hawkcount (JW)

American Kestrel

9/thr	Granville	127	Hawkcount (JW)
9/thr	Mt. Wachusett	74	Hawkcount (SO)
9/thr	Barre Falls	59	Hawkcount (BK)
9/thr	Mt. Watatic	51	Hawkcount (TP)
9/13	Mt. Tom	10	BBC (T. Gagnon)
9/16, 17	Mt. Watatic	19, 14	Hawkcount (TP)
9/24, 25	Mt. Wachusett	12, 12	Hawkcount (SO)
10/thr	Granville	107	Hawkcount (JW)
10/thr	Barre Falls	166	Hawkcount (BK)
10/8, 10	Barre Falls	23, 61	Hawkcount (BK)
10/25	Barre Falls	4	Hawkcount (DS)

Merlin

9/thr	Barre Falls	14	Hawkcount (BK)
9/thr	Mt. Wachusett	11	Hawkcount (SO)

Merlin (continued)

9/thr	Mt. Watatic	7	Hawkcount (TP)
9/thr	Chatham (MI)	5	D. Manchester
9/13	P.I.	4	T. Wetmore
9/19	Melrose (PR)	4	Hawkcount (CJ)
10/thr	Granville	23	Hawkcount (JW)
10/10	Melrose (PR)	6	Hawkcount (CJ)

Peregrine Falcon

9/thr	Chatham (MI)	17	D. Manchester
9/7	S. Monomoy	3	B. Nikula#
9/10-25	Mt. Wachusett	7	Hawkcount (SO)
9/20	P.I.	9	B. Cassie
9/26	Duxbury B.	4	R. Bowes
9/27	Rockport (A.P.)	3	R. Heil
10/4	Chatham (S.B.)	6	B. Nikula
10/10	Melrose (PR)	4	Hawkcount (CJ)

Virginia Rail

9/6	S. Amherst	1	B. Zajda
9/7	S. Quabbin	1	L. Therrien
9/18	GMNWR	2	S. Perkins#
10/20	Eastham (F.H.)	1	M. Faherty
10/31	Wayland	1	B. Harris

Sora

9/8	P.I.	2	R. Heil
10/4	Truro	4	R. Heil
10/9	W. Newbury	1	J. MacDougall#
10/12	GMNWR	1	W. Hutcheson

Common Moorhen

9/9	GMNWR	1	USFWS (JSS)

American Coot

10/4	IRWS	1	MAS (W. Tatro)
10/9	Woburn (HP)	1	C. Ciccone
10/9-31	GMNWR	2-4	USFWS (JSS)
10/12	Acoaxet	4	M. Lynch#
10/20	Jamaica Plain	8	B. Mayer
10/31	Groveland	7	D. Chickering#

Sandhill Crane

9/9	New Marlboro	4	E. Sattler
9/15-10/29	E. Wareham	5	R. Conway

Black-bellied Plover

thr	P.I.	200 max	v.o.
10/4	Chatham (S.B.)	1400	B. Nikula
10/thr	Duxbury B.	284 max	R. Bowes
10/13, 29	Cumb. Farms	5, 4	Johnson, Iliff
10/25	Ipswich	183	R. Heil
10/28	Nantucket	110	V. Laux

American Golden-Plover

thr	P.I.	4 max	v.o.
9/5	Chatham (S.B.)	3	B. Nikula#
9/6	Northampton	1	S. Surner
9/18	GMNWR	3 juv	S. Perkins#
9/19	Duxbury B.	4 juv	I. Davies#
10/thr	Cumb. Farms	4 max	v.o.
10/25	Hadley	1	J. Smith
10/28	Nantucket	15	K. Blackshaw

Semipalmated Plover

thr	P.I.	200 max	v.o.
9/1-10/19	Revere	280 max	v.o.
9/6	Eastham	200	B. Nikula
9/23	Nahant	125	L. Pivacek
10/thr	Duxbury B.	55 max	R. Bowes
10/4	Chatham (S.B.)	180	B. Nikula

Piping Plover

9/2	Fairhaven	4	C. Longworth
9/5	Chatham (S.B.)	6	S. Zendeh#
10/4	P.I.	1	T. Wetmore

Killdeer

9/13	Hatfield	77	S. Surner
10/3	Cumb. Farms	55	I. Davies#
10/12	Westport	162	M. Lynch#
10/24	Hadley	167	S. Surner
10/28	Nantucket	45	V. Laux
10/31	Concord	45	J. Trimble

American Oystercatcher

9/12	Wellfleet	2	BBC (R. Stymeist)
9/26	Falmouth	4	CCBC (G. Hirth)
10/14	Chatham	16	M. Faherty
10/21	Fairhaven	2	C. Longworth
10/31	M.V.	2	P. Brown#

American Avocet

10/11	P.I.	1	T. Wetmore#

Spotted Sandpiper

9/7	Westport	28	E. Nielsen
9/16	GMNWR	11	A. Bragg#
10/17	Winchester	1	R. LaFontaine
10/17	Holyoke	2	S. Svec
10/20	Jamaica Plain	1	B. Mayer

Solitary Sandpiper

9/3	GMNWR	4	S. Perkins#
9/6	S. Amherst	4	B. Zajda
9/13	P'town	2	BBC (R. Stymeist)
10/12	Cumb. Farms	5 juv	J. Trimble
10/20	Rowley	1	S. McGrath

Greater Yellowlegs

thr	P.I.	79 max	v.o.
9/1-10/8	GMNWR	23 max	v.o.
9/6	Eastham	70	B. Nikula
9/18	Chatham	225	B. Nikula
10/18	Squantum	25	J. Hoye#

Western Willet

9/7	S. Monomoy	6	B. Nikula#
9/19	Duxbury B.	2	I. Davies#
10/4	Wellfleet H.	7	R. Heil

Lesser Yellowlegs

thr	GMNWR	21 max	v.o.
9/6	Chatham (S.B.)	11	M. Faherty#
9/7	S. Dart. (A.Pd)	8	E. Nielsen
10/14	P.I.	14	MAS (D. Weaver)
10/28	Arlington Res.	1	M. Rines
10/29	Cumb. Farms	2	M. Iliff

Whimbrel

9/thr	Duxbury B.	7 max	v.o.
9/thr	P.I.	10 max	v.o.
9/2	Westport	4	R. Couse#
9/3	Hydrographer	2	BBC (R. Heil)
9/5	Chatham (S.B.)	7	S. Zendeh#
9/6	DWWS	3	SSBC (V. Zollo)
10/14	WBWS	1	M. Faherty

Hudsonian Godwit

9/1-10/21	P.I.	32 max 9/12	v.o.
9/4	100 SE Nant.	62 ph	BBC (R. Heil)
9/5, 10/4	Chatham (S.B.)	8, 1	B. Nikula
9/7	S. Monomoy	2	B. Nikula#
10/31	Ipswich	1 ad	J. Berry

Marbled Godwit

9/4	Duxbury B.	1	MAS (J. Galluzzo)
9/6	E. Gloucester	1	C. Leahy
9/18-23	P.I.	1	T. Wetmore

Ruddy Turnstone

9/4	P.I.	1	T. Wetmore
9/5	Chatham (S.B.)	50	S. Zendeh#
9/7	Westport	17	E. Nielsen
9/16	Duxbury B.	20	R. Bowes
9/30	Winthrop B.	6	P. Peterson
10/18	Wollaston B.	4	J. Hoye#

Red Knot

9/7	S. Monomoy	22	B. Nikula#
9/8	P.I.	12	R. Heil
9/30	Duxbury B.	23	R. Bowes
10/4	Chatham (S.B.)	225	B. Nikula

Sanderling

thr	P.I.	200 max	v.o.
9/5	Chatham (S.B.)	375	S. Zendeh#
9/8, 10/14	Nahant	500, 350	L. Pivacek
9/26-10/31	Duxbury B.	1530 max	R. Bowes
10/4	Chatham (S.B.)	1000	B. Nikula

Semipalmated Sandpiper
thr P.I. 230 max v.o.
9/2 Revere 800 R. Stymeist
9/6 Eastham 300 B. Nikula
9/7 S. Monomoy 400 B. Nikula
9/8 Nahant 300 L. Pivacek
Western Sandpiper
9/1-10/10 P.I. 4 max v.o.
9/5 Chatham (S.B.) 15 B. Nikula
9/6 E. Gloucester 2 C. Leahy
9/8 Nahant 3 juv L. Pivacek
10/4 Eastham (F.E.) 3 G. d'Entremont
Least Sandpiper
thr Cumb. Farms 32 max v.o.
9/7 S. Monomoy 250 B. Nikula
9/7 S. Dart. (A.Pd) 130 E. Nielsen
9/8 P.I. 60 R. Heil
10/4 Chatham (S.B.) 65 B. Nikula
White-rumped Sandpiper
thr P.I. 230 max v.o.
9/5, 10/4 Chatham (S.B.) 50, 6 B. Nikula
9/7 S. Monomoy 30 B. Nikula
9/16, 10/17 Duxbury B. 20, 13 R. Bowes
10/20 Cumb. Farms 32 J. Trimble#
10/31 Ipswich 21 J. Berry
Baird's Sandpiper
9/1-10/23 P.I. 4 max v.o.
9/7 S. Monomoy 1 V. Laux #
10/17 Duxbury B. 1 ph R. Bowes
Pectoral Sandpiper
9/1-10/17 P.I. 22 max v.o.
10/5 Concord 34 W. Hutcheson
10/17 S. Dart. (A.Pd) 25 P. Champlin#
10/25 Cumb. Farms 15 I. Davies#
10/28 Nantucket 18 V. Laux
Purple Sandpiper
10/16 Rockport (A.P.) 1 D. Ely
10/17 Manomet 5 I. Davies
Dunlin
9/16-10/31 P.I. 1050 max v.o.
9/16-10/31 Duxbury B. 1095 max R. Bowes
10/4 Chatham (S.B.) 1600 B. Nikula
10/17 S. Dart. (A.Pd) 400 P. Champlin#
10/25 Ipswich 220 R. Heil
Stilt Sandpiper
9/12, 10/6 P.I. 5, 1 Young, Wetmore
Buff-breasted Sandpiper
thr P.I. 3 max v.o.
9/6 E. Gloucester 1 C. Leahy
9/6 Chatham (S.B.) 2 M. Faherty#
9/7 S. Monomoy 4 V. Laux #
9/13 Wenham 1 R. Buchsbaum
9/16 Duxbury B. 2 R. Bowes
9/19 Hatfield 1 M. Fairbrother
Short-billed Dowitcher
9/4 GMNWR 2 juv M. Iliff
9/5 Chatham (S.B.) 40 S. Zendeh#
9/6 Eastham 40 B. Nikula
9/9 Duxbury B. 12 R. Bowes
9/20 P.I. 39 F. Vale#
10/25 Ipswich 2 juv R. Heil
Long-billed Dowitcher
9/1-10/8 P.I. 6 max v.o.
9/19 Duxbury B. 2 juv I. Davies#
10/4 Chatham (S.B.) 1 B. Nikula
10/12 Cumb. Farms 1 juv ph J. Trimble
10/12 E. Boston (B.I.) 1 R.Stymeist
10/28 Nantucket 1 V. Laux
10/30 Orleans 1 P. Brown
10/31 S. Dart. (A.Pd) 2 P. Champlin
Wilson's Snipe
9/4 GMNWR 7 M. Iliff
9/12 Halifax 12 J. Sweeney
10/1 S. Egremont 8 M. Lynch#
10/20 Cumb. Farms 53 J. Trimble#
10/31 Ipswich 5 J. Berry
American Woodcock
10/10 P.I. 3 S. McGrath
10/25 Saugus 1 T. Factor#
10/29 Braintree 1 P. Peterson
10/30 Stoneham 1 D. + I. Jewell
Wilson's Phalarope
9/6 Chatham (S.B.) 1 M. Faherty#
Red-necked Phalarope
9/3 Nant. Shoals 16 BBC (R. Heil)
9/6 Jeffries Ledge 15 BBC (I. Giriunas)
9/19 Eastham (F.E.) 2 B. Nikula
10/4 P'town (R.P.) 1 R. Heil
10/19 Eastham (F.E.) 1 B. Nikula
Red Phalarope
9/6 Jeffries Ledge 5 BBC (I. Giriunas)
Black-legged Kittiwake
9/25-10/31 P'town 1000 max 10/29 B. Nikula
10/16, 28 Rockport (A.P.) 33, 75 R. Heil
10/18 Barnstable (S.N.) 4 J. Sweeney#
10/24 N. Truro 45 B. Nikula
10/29 Eastham (F.E.) 100+ P. Brown#
Bonaparte's Gull
9/2 Revere 450 R. Stymeist
10/2 Newbypt 550 J. Berry
10/7 Nahant 2000 L. Pivacek
10/11 Quabbin Pk 1 J. Rose
10/14 Newbypt H. 150 MAS (D. Weaver)
10/17 Wachusett Res. 1 M. Lynch#
10/31 P'town 400 B. Nikula
Black-headed Gull
9/19 Lynn B. 1 J. Quigley
10/31 P.I. 1 S. Grinley#
Little Gull
10/17, 31 P'town 1 ad, 1 1W B. Nikula
10/31 Salisbury 1 1W M. Goetschkes#
Laughing Gull
thr P'town 1400 max B. Nikula
9/4 Muskeget Ch. 360 BBC (R. Heil)
9/6 Nahant 108 L. Pivacek
9/25, 10/28 Duxbury 275, 2 R. Bowes
9/29 Cape Ann 104 R. Heil
10/17 Manomet 150 I. Davies
10/25 Nantucket 75 K. Blackshaw#
10/28 Rockport (A.P.) 11 ad R. Heil
Iceland Gull
10/24 P'town 1 imm B. Nikula
10/24 Plymouth 1 ad I. Davies#
10/25 P.I. 1 2W T. Wetmore#
Lesser Black-backed Gull
9/5, 10/4 P.I. 1 ad Spahr, Wetmore
9/6 Chatham (S.B.) 13 M. Faherty#
9/7 S. Monomoy 2 B. Nikula
9/9-16 Lynn 1 J. Quigley
9/13-27 Nantucket 2 K. Blackshaw#
9/26 N. Monomoy 6 B. Nikula
9/29 Gloucester (E.P.) 1 ad R. Heil
10/21 Plymouth 1 K. Doyon
Bridled Tern (no details) *
9/4 SW Atlantic Can. 5 ph BBC (R. Heil)
Least Tern
9/3 Hyannis 1 BBC (R. Heil)
9/4 Muskeget Ch. 1 BBC (R. Heil)
9/6 Chatham (S.B.) 8 M. Faherty#
Caspian Tern
9/5 Westport 2 M. Lynch#
9/7, 10/4 P.I. 1, 6 Secatore, Wetmore
9/13 S. Quabbin 1 M. Lynch#
Black Tern
9/3 Nant. Sound 93 BBC (R. Heil)
9/6 Chatham (S.B.) 38 M. Faherty#

Black Tern (continued)			
9/7	S. Monomoy	8	B. Nikula#
9/9	P'town	4	B. Nikula
9/13	Stellwagen	2	P. Peterson
Roseate Tern			
9/3	Nant. Shoals	15+	BBC (R. Heil)
9/5	Chatham (S.B.)	150	B. Nikula
9/11	P'town	75	B. Nikula
9/15	Duxbury B.	1	R. Bowes
Common Tern			
thr	P.I.	46 max	v.o.
9/3	Nant. Shoals	2300+	BBC (R. Heil)
9/5	Chatham (S.B.)	2000	B. Nikula
9/11, 10/31	P'town	2700, 150	B. Nikula
10/16	Rockport (A.P.)	6	R. Heil
10/25	Manomet	22	I. Davies
10/28	Duxbury B.	1	R. Bowes
Forster's Tern			
9/5	WBWS	2	B. Zajda#
9/6	Chatham (S.B.)	3	M. Faherty#
9/6, 10/27	P.I.	4, 1	Giriunas, Chickering
9/19, 10/29	Eastham (F.E.)	10, 2	Nikula, Brown
9/27	Barnstable	3	G. d'Entremont#
10/17	P'town	3	B. Nikula
10/25	Manomet	2	I. Davies
10/28	Duxbury B.	2	R. Bowes
Pomarine Jaeger			
9/3	Nant. Shoals	5	BBC (R. Heil)
9/3	Hydrographer	1	BBC (R. Heil)
9/4	Muskeget Ch.	1	BBC (R. Heil)
10/17, 25	P'town	1, 2	B. Nikula
10/28	Rockport (A.P.)	1 imm	R. Heil
10/29, 31	P'town	7, 1	B. Nikula
Parasitic Jaeger			
thr	P'town	30 max 10/3	B. Nikula
9/3	Nant. Shoals	3	BBC (R. Heil)
9/4	Duxbury B.	1	MAS (J. Galluzzo)
9/4	Muskeget Ch.	2	BBC (R. Heil)
9/13	Stellwagen	2	P. Peterson
9/27	Rockport (A.P.)	3 ad	R. Heil
10/16	Manomet	1	W. Petersen
10/18	Barnstable (S.N.)	2	J. Sweeney#
Long-tailed Jaeger			
9/3	Hydrographer	1 juv	BBC (R. Heil)
9/3	Nant. Shoals	6	BBC (R. Heil)
9/9, 12	P'town	2, 1	B. Nikula
9/19	Eastham (F.E.)	1	B. Nikula
9/27, 10/10	P'town	4, 1	B. Nikula
Dovekie			
10/25, 29	P'town	1, 31	B. Nikula
Common Murre			
10/16	Rockport (A.P.)	2	R. Heil
Razorbill			
10/11, 29	P'town	1, 4	B. Nikula
10/16, 28	Rockport (A.P.)	15, 21	R. Heil
Black Guillemot			
10/4	P.I.	1	T. Wetmore
10/28	Rockport (A.P.)	2	R. Heil
Atlantic Puffin			
10/16	Rockport (A.P.)	3	R. Heil
10/17, 18	P'town	1, 2	B. Nikula

DOVES THROUGH FINCHES

Although early fall always has the potential for rarities, this period exceeded expectations with two second state records. An **Allen's Hummingbird** coming to a feeder in Scituate was caught, banded, and positively identified as an adult female Allen's. The first record of this species was from Nantucket, caught in a mist net on August 26, 1988. Female and immature *Selasphorus* hummingbirds are very difficult to identify in the field, and inspection in the hand is usually the only way to accurately differentiate between Rufous and Allen's. Of course, some of the many birds reported only as "*Selasphorus* sp." over the last 20 years might have been Allen's.

The discovery on October 12 of a **Brown-chested Martin** in the Cumberland Farm Fields, the second state record, should rate Bird of the Month. This sighting was only the sixth record for North America. The very first record of this species in North America was on Monomoy Island on June 12, 1983. The *fusca* race of the Brown-chested Martin is an austral migrant that breeds in South America and migrates north during the austral winter. The bird landed in Massachusetts instead of northern South America. The bird was seen by many happy observers from October 12–14. Another austral migrant, a **Fork-tailed Flycatcher,** was discovered in Wellfleet on September 29 and remained in the area until October 5. This species has now occurred in the state on over 15 occasions.

White-winged Doves are being recorded more often in the state, and during this period a bird was photographed at the Eastham stump dump. Two exceptionally late Ruby-throated Hummingbirds were also recorded, the latest in West Tisbury on October 22, and another in Whately was last seen on October 10. A **Scissor-tailed Flycatcher** was present for two days at the Orange Airport in October. Another vagrant flycatcher, a **Say's Phoebe**, was found and photographed in Chilmark in mid September; this bird has been reported in the state at least 30 times.

Rounding out the rarities this period, a **LeConte's Sparrow,** discovered in an isolated patch of phragmites at Cumberland Farms in Halifax, was seen and photographed by many birders. This usually secretive small sparrow delighted everyone that tramped through the mud to find it. Cumberland Farms was a magnet for sparrows—not only the LeConte's but a Lark, a Grasshopper, as many as 14 Lincoln's, and twelve White-crowned sparrows. There was an adult **Summer Tanager** coming to a feeder in North Falmouth, a **Yellow-headed Blackbird** on Nantucket, and a **Sedge Wren** at Bolton Flats.

Among the expected fall migrants, Common Nighthawks reached their peak numbers in early September, with high counts over 800 in Northampton, Pittsfield, and Leicester; there were two exceptionally late reports from West Roxbury in October. Common Ravens in the eastern part of the state have become more regular. Late Northern Rough-winged Swallows included a group of 70 in Wayland on October 17. A vanguard of Northern Shrikes included a particularly early one at Quabbin on October 17. Red-breasted Nuthatches were low in numbers again this period, for the third year in a row. Thirty-one species of warblers were reported, including nearly 40 Orange-crowned, a Cerulean, a Kentucky, 12 Connecticut, and four Hooded warblers, and 13 chats. A Canada Warbler lingered in Medford until October 30, likely the latest date for this species.

October is sparrow month, with 19 species plus Ipswich Sparrow recorded. The first American Tree Sparrows were noted on October 10, and the first Fox Sparrow a day earlier on October 9. There were at least fifteen Clay-colored Sparrows reported, eight Lark Sparrows, three Grasshoppers, nine Nelson's, and just one Seaside. There were over 25 Dickcissels and 16 Blue Grosbeaks. A late Orchard Oriole was noted from Westfield on September 3. Prospects for a winter finch flight looked poor, with only a single Red Crossbill, three Pine Siskins, and a single Evening Grosbeak reported. *R. Stymeist*

White-winged Dove (no details) *			
9/25-26	Eastham	1 ph	M. Faherty + v.o.
Black-billed Cuckoo			
9/6	W. Quabbin	1	L. Therrien
Eastern Screech-Owl			
9/3	Woburn	3	M. Rines
9/13	Mashpee	2	M. Keleher
10/11	Wayland	3	B. Harris
10/25	Cumb. Farms	2	I. Davies#
Great Horned Owl			
9/26	Wareham	3	B. Conway
10/8	P.I.	pr	S. Grinley
10/20	Eastham (F.H.)	2	M. Faherty
10/25	Mashpee	2	M. Keleher
10/25	Halifax	3	I. Davies#
10/25	Cumb. Farms	2	I. Davies#
Barred Owl			
9/5	Lexington	1	M. Rines#
10/5	Plympton	1	K. Smith
10/19	P.I.	1	P. Brown
10/21	Salisbury	1	D. Chickering#
10/21	MNWS	1	S. McGrath
10/22	Waltham	1	J. Forbes#
10/24	Boston (BNC)	1	BBC (L. Ferraresso)
10/30	Lincoln	1	M. Rines
Long-eared Owl			
9/14	Otis	1	W. Rogers
Short-eared Owl			
10/14	WBWS	1	M. Faherty
10/25	Hadley	1	J. Smith
10/25	Cumb. Farms	1	J. Sweeney#
Northern Saw-whet Owl			
10/9	Hatfield	1	F. Bowrys
10/19-21	Northbridge	15 b	B. Milke#
10/23-26	Northbridge	19b	B. Milke#
10/25	Halifax	1	I. Davies#
Common Nighthawk			
9/1	Mt.A.	92	R. Stymeist#
9/2, 4	Worcester	89, 39	M. Lynch#
9/2, 4	Northampton	889, 368	T. Gagnon
9/3	Pittsfield	896	J. Robinson
9/3, 4	Leicester	973, 117	M. Lynch#
9/12	Boston	176	B. Balashak
9/20	Pittsfield	1	T. Collins
10/13, 22	W. Roxbury (MP)	1, 1	M. Iliff
Whip-poor-will			
9/5	P.I.	1	N. Landry
Chimney Swift			
9/1	Mt.A.	35	R. Stymeist#
9/3	GMNWR	200	S. Perkins#
9/14	Mashpee	3	M. Keleher
9/19	Melrose (PR)	2	C. Jackson
9/24	Mt. Wachusett	4	S. Olson
10/13	Cumb. Farms	2	T. Johnson#
Ruby-throated Hummingbird			
9/5	Westport	7	M. Lynch#
9/11	Falmouth	6	BBC (R.Stymeist)
9/13	Barre Falls	6	D. Schilling
10/4, 10	Whately	2, 1	B. Benner
10/20-22	W. Tisbury	1	L. McDowell
Allen's Hummingbird (details submitted) *			
10/23-31	Scituate	1 ad f b ph	S. Finnegan#
Red-headed Woodpecker			
9/20	Gloucester	1 imm	D. Sandee
10/10-31	Dracut	1 ph	A. Gaudet
10/11	S. Quabbin	1 imm	M. Lynch#
Red-bellied Woodpecker			
9/22	Belmont	8	R. Stymeist#
9/26	Eastham	4	G. d'Entremont#
9/27	Medford	4	M. Rines

Red-bellied Woodpecker (continued)

10/1	Woburn	5	M. Rines
10/4	Brookfield	4	M. Lynch#
10/22	Woburn	4	M. Rines#

Yellow-bellied Sapsucker

9/26	Tyringham	10	M. Lynch#
9/29	Nahant	3	P. + F. Vale
10/4	Lowell	3	M. Baird
10/11	Gloucester (E.P.)	4	S. Hedman
10/13	P.I.	6	R. Heil

Hairy Woodpecker

9/30	Sturbridge	6	M. Lynch#
10/25	Mashpee	6	M. Keleher
10/31	Lexington	5	M. Rines#

Northern Flicker

9/19	Squantum	15	G. d'Entremont
9/22	Melrose	12	P. + F. Vale
9/26	Tyringham	16	M. Lynch#
10/11	S. Quabbin	18	M. Lynch#
10/13	P.I.	20	R. Heil

Pileated Woodpecker

9/20	C. Quabbin	6	L. Therrien
9/29	Gloucester	2	R. Heil
9/29	Barre Falls	2	B. Kamp
10/2	Tyringham	4	M. Lynch#
10/11	Quabbin Pk	2	J. Rose

Olive-sided Flycatcher

9/1-3	Amherst	1	L. Therrien
9/6	P.I.	1	T. + J. Leverich
9/13	Pittsfield	1	N. Mole

Eastern Wood-Pewee

9/1	Ipswich	9 m	J. Berry
9/13	S. Quabbin	2	M. Lynch#
10/1	Brewster	1 b	S. Finnegan
10/6	Cambridge	1	T. Spahr
10/19	Waltham	1	J. Forbes#

Yellow-bellied Flycatcher

9/1-20	P.I.	5 b	Joppa Banding
9/13	Amherst	3	H. Allen

Least Flycatcher

9/1	Waltham	1	J. Forbes
9/4	Lexington	1	J. Forbes
9/5	Westport	2	M. Lynch#
9/8	P.I.	6	R. Heil
9/18	Sandwich	1	M. Keleher
10/20	Manomet	1 b	T. Lloyd-Evans

Eastern Phoebe

9/6	S. Amherst	16	B. Zajda
9/26	Lincoln	12	M. Rines#
9/29	Belmont	15	R. Stymeist#
10/1, 24	Woburn	10, 2	M. Rines
10/20	P.I.	7	D. Chickering
10/26	Burlington	1	M. Rines

Say's Phoebe *

9/13-14	Chilmark	1 ph	A. Keith + v.o.
10/4	W. Tisbury	1	W. Manter

Great Crested Flycatcher

9/5	Pembroke	2	SSBC (S. Avery)
9/11	Barnstable	1	BBC (R. Stymeist)
9/14	Mashpee	2	M. Keleher
9/19	Cumb. Farms	1	L. Ferraresso#
9/20	Nahant	1	L. Pivacek

Eastern Kingbird

9/1	DFWS	2	P. Sowizral
9/6	DWWS	2	SSBC (V. Zollo)
9/8	P.I.	2+	T. Wetmore
9/19	ONWR	1	BBC (J. Center)

Scissor-tailed Flycatcher

10/21-22	Orange	1	J. Johnstone + v.o.

Fork-tailed Flycatcher (no details) *

9/29-10/5	WBWS	1 ph	M. Faherty + v.o.

Northern Shrike

10/17	Quabbin (G22)	1 imm	B. Lafley
10/28	P.I.	2	MAS (B. Gette)
10/30	Windsor	1	H. Allen
10/31	DWWS	1 juv	I. Davies#

White-eyed Vireo

9/7	S. Dart. (A.Pd)	1	E. Nielsen
10/4	Ipswich	1	BBC (T. Young)
10/6	Manomet	2 b	T. Lloyd-Evans#

Yellow-throated Vireo

9/3	Woburn	1	M. Rines
9/4	Topsfield	1	J. Nelson
9/20	C. Quabbin	1	L. Therrien

Blue-headed Vireo

9/19	Westboro	3	T. Spahr
9/25	MNWS	3	T. Factor
9/26	Tyringham	17	M. Lynch#
10/3	Westminster	29	T. Pirro
10/4	Brookfield	8	M. Lynch#
10/11	Gloucester (E.P.)	5	S. Hedman
10/23	Winchester	1	R. LaFontaine
10/29	P.I.	1 b	MAS (B. Flemer)

Warbling Vireo

9/3, 21	Woburn	10, 2	M. Rines
9/6, 20	Medford	5, 1	M. Rines
10/1	Amherst	1	H. Allen
10/12	Brewster	1 b	S. Finnegan

Philadelphia Vireo

9/5	MNWS	1	J. Hoye#
9/6	Gloucester (E.P)	3	S. Hedman#
9/8	P.I.	6	R. Heil
9/13	Rockport	3	T. Spahr#
9/20	C. Quabbin	2	L. Therrien
9/29	Nahant	1	P. + F. Vale#

Red-eyed Vireo

9/1	Ipswich	7	J. Berry
9/7	Monroe	14	M. Lynch#
9/25	MNWS	7	T. Factor
9/26	Gloucester (E.P.)	8	S. Hedman
10/9	Brewster	6 b	S. Finnegan
10/10	Salem	5	BBC (L. delaFlor)
10/22	Manomet	1 b	T. Lloyd-Evans#
10/25	P.I.	1	T. Wetmore#

Fish Crow

9/5	Southwick	2	S. Kellogg
10/10	Bourne	2	SSBC (GdE)
10/17	Wayland	1	G. Long
10/23	Sharon	3	W. Sweet
10/24	Boston (BNC)	5	BBC (L. Ferraresso)

Common Raven

9/7	Melrose (PR)	2	C. Jackson
9/8	Mt. Wachusett	12	S. Olson
9/11	Salem	2	J. Paluzzi
9/13	Mt. Tom	2	BBC (T. Gagnon)
9/19	Mt. Watatic	24	T. Pirro
10/1	Cheshire	8	M. Lynch#
10/11	Stoughton	2	G. d'Entremont
10/11	Quabbin Pk	3	J. Rose

Horned Lark

10/15	Duxbury B.	9	R. Bowes
10/19	Sandwich	6	M. Keleher
10/24	Concord	30	G. d'Entremont
10/29	P.I.	15	T. Wetmore
10/31	Ipswich	50	J. Berry
10/31	Northampton	100	F. Bowrys

Brown-chested Martin (details submitted) *

10/12-14	Cumb. Farms	1 ph	Iliff, Trimble#

Tree Swallow

9/6, 10/25	P.I.	2000, 1	BBC, Wetmore
9/6	DWWS	300	SSBC (V. Zollo)
9/7	S. Monomoy	5000	B. Nikula#
9/9, 10/25	Nantucket	10000, 50	Ray, Blackshaw
9/12	Brookfield	250	M. Lynch#
9/27	Barnstable	5000	G. d'Entremont#
10/11	P'town	2500	B. Nikula

Tree Swallow (continued)

10/18	Southwick	80	S. Kellogg
10/20	Cumb. Farms	3750	J. Trimble#

Northern Rough-winged Swallow

9/17	GMNWR	3	S. Perkins#
9/22, 10/13	W. Roxbury (MP)	250, 45	M. Iliff
9/30	Waltham	4	J. Forbes
10/17	Wayland	70	G. Long
10/22	Cumb. Farms	1	J. Hoye

Bank Swallow

9/2	Westport	2	R. Couse#
9/4	GMNWR	4	M. Iliff
9/5	Chatham (S.B.)	2	S. Zendeh#
9/5	P.I.	10	T. Spahr#
9/22	W. Roxbury (MP)	1	M. Iliff
10/13	Cumb. Farms	2	T. Johnson#

Cliff Swallow

9/5	P.I.	3	T. Spahr#
9/12	P.I.	1	N. Landry
9/14	Mt. Watatic	1	T. Pirro
9/20	Granville	6	J. Weeks
10/12, 20	Cumb. Farms	4, 1	J. Trimble

Barn Swallow

9/3	GMNWR	150	S. Perkins#
9/5	Westport	60	M. Lynch#
9/6	DWWS	50	SSBC (V. Zollo)
9/8	P.I.	30	R. Heil
9/12	Halifax	25	J. Sweeney
10/14	Wayland	1	J. Forbes#
10/20	Cumb. Farms	3	J. Trimble#

Red-breasted Nuthatch

9/13	Nantucket	3	K. Blackshaw#
9/14	Mashpee	14	M. Keleher
9/18	W. Quabbin	17	L. Therrien
9/23	P.I.	2	R. Heil
9/26	WBWS	2	G. d'Entremont#
10/2	Tyringham Valley	2	M. Lynch#

Brown Creeper

9/20	P.I.	3	I. Davies#
9/21	Manomet	2	I. Davies
10/11	S. Quabbin	11	M. Lynch#
10/12	Woburn	3	M. Rines
10/17	Boylston	6	M. Lynch#
10/23	Stoneham	3	D. + I. Jewell

Carolina Wren

9/11	Falmouth	5	BBC (R.Stymeist)
9/26	Lincoln	5	M. Rines#
9/29	Belmont	8	R. Stymeist#
9/30	Lexington	10	P. + F. Vale
10/2	Nahant	8	P. + F. Vale
10/10	Eastham	6	SSBC (GdE)
10/22	Woburn	9	M. Rines#

House Wren

9/1, 10/22	Woburn	10, 1	M. Rines
9/2	Lexington	23	M. Rines
9/22	Burlington	10	M. Rines
9/22	Belmont	9	R. Stymeist#
10/2	Sandwich	7	M. Keleher
10/4	Brookfield	6	M. Lynch#
10/25	Plymouth	1	P. + F. Vale

Winter Wren

thr	Reports of indiv. from 17 locations		
9/29	Belmont	2	R. Stymeist#
10/23	Medford	2	R. LaFontaine

Sedge Wren

9/26	Bolton Flats	1 ad	B. Zajda#

Marsh Wren

9/4	GMNWR	6	M. Iliff
9/8	P.I.	9	R. Heil
9/26	Neponset River	6	M. Garvey
10/31	Wayland	5	B. Harris

Golden-crowned Kinglet

9/7	Monroe	3	M. Lynch#
9/16-10/31	P.I.	36 max	v.o.
9/30	Sturbridge	14	M. Lynch#
10/11	Gloucester (E.P.)	8	S. Hedman
10/15	Duxbury B.	20	R. Bowes
10/17	Boston (F.Pk)	10	P. Peterson
10/23	Sharon	15	W. Sweet
10/23	Milton	13	P. O'Neill
10/25	Nantucket	8	K. Blackshaw#
10/25	Mashpee	16	M. Keleher

Ruby-crowned Kinglet

9/6	W. Quabbin	2	L. Therrien
9/17-10/31	P.I.	20 max	v.o.
9/23-10/31	Lexington	14 max	M. Rines
9/26	Tyringham	39	M. Lynch#
10/10	S. Quabbin	53	L. Therrien
10/11	Gloucester (E.P.)	14	S. Hedman
10/12	Boston (Fens)	10	P. Peterson
10/15	Duxbury B.	10	R. Bowes

Blue-gray Gnatcatcher

9/7	S. Quabbin	5	L. Therrien
9/15	Duxbury B.	2 imm	R. Bowes
9/23	Nahant	2	J. Offermann
10/10	P.I.	1	T. Wetmore
10/12	N. Truro	1	J. Young#

Eastern Bluebird

9/19	Northampton	24	T. Gagnon
9/26	Tyringham	66	M. Lynch#
10/15	Southboro	26	G. Gove#
10/20	Lincoln	15	M. Rines
10/21	DFWS	17	P. Sowizral

Veery

9/6	Lexington	1	M. Rines
9/21	Manomet	1	I. Davies
10/11	Brewster	1 b	S. Finnegan
10/11	Ware	1 imm	M. Martin

Gray-cheeked Thrush

9/22	P.I.	1	Joppa Banding
10/5	Manomet	1 b	T. Lloyd-Evans#
10/9	Brewster	1 b	S. Finnegan

Gray-cheeked/Bicknell's Thrush

9/13	Rockport (H.P.)	1	T. Spahr#
9/21	Manomet	1 ph	I. Davies
10/7	Northampton	1	F. Bowrys

Swainson's Thrush

9/6	Belchertown	2	L. Therrien
9/7	Monroe	2	M. Lynch#
9/26	Eastham	2	G. d'Entremont
9/28	Boston (Fens)	2	P. Peterson
10/6	Stoneham	2	D. + I. Jewell
10/11	Arlington Res.	2	K. Hartel
10/26	Manomet	1 b	T. Lloyd-Evans#

Hermit Thrush

10/10	S. Quabbin	16	L. Therrien
10/13	P.I.	18	R. Heil
10/14	Woburn	5	M. Rines#
10/23	Boston (PG)	9	T. Factor
10/23	Medford	15	R. LaFontaine
10/23	New Salem	7	D. Small#

Wood Thrush

9/8	Waltham	1	J. Forbes
9/13	Mt. Tom	1	BBC (T. Gagnon)
9/28	S. Quabbin	2	L. Therrien

American Robin

9/19	Holbrook	1500	G. d'Entremont
10/13	Cumb. Farms	800	T. Johnson#
10/25	Ipswich	245	R. Heil
10/31	Wakefield	650	F. Vale

Gray Catbird

thr	P.I.	83 max	v.o.
9/13	Mashpee	35	M. Keleher
9/21	Manomet	45	I. Davies
9/30	Lexington	26	R. Stymeist#
10/4	Brookfield	38	M. Lynch#

Gray Catbird (continued)

10/12	Westport	36	M. Lynch#

Brown Thrasher

thr	P.I.	13 max	v.o.
9/5	Saugus	2	D. + I. Jewell
9/7	Gloucester (E.P.)	2	J. Hoye#
10/12	Westport	2	M. Lynch#
10/27	Lexington	1	J. Hoye#

American Pipit

9/21-10/31	Cumb. Farms	250 max	v.o.
9/26	P.I.	35	J. Hoye#
10/1	Cheshire	129	M. Lynch#
10/3	GMNWR	30	BBC (B. Volkle)
10/11	Quabbin Pk	51	J. Rose
10/12	Bolton Flats	30	S. Perkins#
10/20	Longmeadow	90	T. Alicea
10/25	Ipswich	50	R. Heil
10/31	Northampton	100	F. Bowrys

Cedar Waxwing

9/13	Moran WMA	120	B. Zajda
9/20	P.I.	160	I. Davies#
9/26	Tyringham	135	M. Lynch#
10/25	Ipswich	145	R. Heil

Blue-winged Warbler

9/11	Barnstable	1	M. Keleher
9/14	Mashpee	1	M. Keleher
9/16	Lexington	1	M. Rines
9/20	Stoughton	1	G. d'Entremont

Tennessee Warbler

9/6	W. Quabbin	1	L. Therrien
9/8	P.I.	1	R. Heil
9/25	Duxbury B.	1	MAS (J. Galluzzo)
9/25	Waltham	1	J. Forbes
9/25	Wayland	1	J. Hoye#
9/29	Nahant	1	P. + F. Vale
10/4	Lexington	1	J. Restivo
10/10	P'town	1	SSBC (GdE)
10/16	Longmeadow	1	B. Tynan
10/26	Amherst	1	J. Smith

Orange-crowned Warbler

9/25-10/30	Reports of indiv. from 17 locations		
10/11, 26	Burlington	2, 1	M. Rines#
10/11	Brewster	3 b	S. Finnegan
10/11	Squantum	2	R. Stymeist
10/14, 20	Nahant	1, 2	L. Pivacek
10/14, 22	Woburn	2, 1	M. Rines#
10/20	P.I.	4	T. Wetmore
10/24	Boston (BNC)	3	BBC (L. Ferraresso)

Nashville Warbler

9/6	Gloucester (E.P)	3	S. Hedman#
9/26	P.I.	3	P. + F. Vale
10/1	Woburn	4	M. Rines
10/3	Westminster	9	T. Pirro
10/25	Waltham	1	C. Cook

Northern Parula

9/7	Monroe	3	M. Lynch#
9/25	MNWS	3	T. Factor
10/3	Westminster	12	T. Pirro
10/20	P.I.	2	T. Wetmore

Yellow Warbler

9/5	Westport	9	M. Lynch#
9/8	P.I.	11	R. Heil
9/30	Cambr. (Danehy)	1	R. Stymeist#
10/1	Brewster	1 b	S. Finnegan
10/5	W. Roxbury (MP)	1	M. Iliff
10/12	Cumb. Farms	1	M. Iliff

Chestnut-sided Warbler

9/7	Monroe	4	M. Lynch#
9/8	P.I.	2	R. Heil
9/27	Boston (PG)	1	R. Stymeist

Magnolia Warbler

9/7	Monroe	7	M. Lynch#
9/8	P.I.	6	R. Heil
9/26	Tyringham	3	M. Lynch#
9/27	Peddock's I.	5	R. Stymeist
10/3	Westminster	4	T. Pirro
10/23	Milton	1 m	P. O'Neill

Cape May Warbler

9/5	P.I.	2	T. Spahr#
9/25	Duxbury B.	1	MAS (J. Galluzzo)
9/28	N. Andover	1	B. Drummond
10/1	Waltham	1	J. Forbes

Black-throated Blue Warbler

9/7	Monroe	5	M. Lynch#
9/25	Rockport	2	T. Factor
9/25	MNWS	4	T. Factor
9/26	P.I.	3	J. Hoye#
9/29	Nahant	2	P. + F. Vale
10/10	Truro	2	SSBC (GdE)
10/23	Medford	1 m	R. LaFontaine

Yellow-rumped Warbler

thr	P.I.	450 max	v.o.
9/26	Tyringham	320	M. Lynch#
10/11	Saugus	65	S. Zendeh#
10/11	S. Quabbin	165	M. Lynch#
10/11	Brewster	162 b	S. Finnegan
10/11	Belmont	75	P. + F. Vale#
10/11	Squantum	90	R. Stymeist
10/12	Westport	422	M. Lynch#
10/14	Woburn	167	M. Rines#

Black-throated Green Warbler

9/7	Monroe	10	M. Lynch#
9/20	C. Quabbin	34	L. Therrien
9/26, 10/22	P.I.	8, 1	Hoye, Wetmore
9/27, 10/23	Medford	6, 1	Rines, LaFontaine
10/1	Woburn	7	M. Rines
10/3	Westminster	12	T. Pirro

Blackburnian Warbler

9/7	Monroe	7	M. Lynch#
9/26	Tyringham	2	M. Lynch#
10/3	Westminster	2	T. Pirro
10/23	Hadley	1	J. Smith

Pine Warbler

9/11	Chatham	15	BBC (R. Stymeist)
9/12	Wellfleet	43	BBC (R. Stymeist)
9/20	DFWS	13	J. Hoye#
9/20	Boston (A.A.)	11	BBC (R. Stymeist)
10/12	Cumb. Farms	2	J. Trimble

Prairie Warbler

9/5	Westport	4	M. Lynch#
9/6	S. Quabbin	3	M. Lynch#
9/11	Chatham	4	BBC (R. Stymeist)
9/12	Wellfleet	5	BBC (R. Stymeist)
9/15	Duxbury B.	2 imm	R. Bowes
9/25	P.I.	2	D. Chickering#
10/5-14	Nahant	1	L. Pivacek

Palm Warbler

9/1	Amherst	1	L. Therrien
9/19	Medford	4	P. Devaney
9/20, 10/14	Woburn	3, 22	M. Rines
9/22-10/26	Burlington	24 max	M. Rines
9/26	Tyringham	59	M. Lynch#
10/3	Westminster	18	T. Pirro
10/8	Lincoln	36	M. Rines
10/31	S. Dartmouth	3	G. d'Entremont#

Bay-breasted Warbler

9/15	S. Quabbin	1	L. Therrien
9/19	Mt. Tom	1	T. Gagnon
9/26	Wayland	1	B. Harris#
9/26	Tyringham	1	M. Lynch#
9/29	Nahant	1	P. + F. Vale
10/6	P.I.	1	D. Chickering

Blackpoll Warbler

9/8	P.I.	7	R. Heil
9/19	Gloucester (E.P)	12	S. Hedman
9/24	Cambridge	15	T. Spahr

Blackpoll Warbler (continued)

9/25	Burlington	22	M. Rines
9/26	Lincoln	19	M. Rines#
9/30	Sturbridge	41	M. Lynch#
10/3	Westminster	22	T. Pirro
10/5	Marlboro	50	T. Spahr
10/17	Boston (F.Pk)	2	P. Peterson
10/26	P.I.	1 b	MAS (J. Standley)

Cerulean Warbler

9/29	Cambridge	1 f imm	J. Trimble#

Black-and-white Warbler

9/6, 26	Gloucester (E.P)	20, 2	S. Hedman#
9/7, 10/2	Lexington	2, 3	M. Rines
9/7	Monroe	5	M. Lynch#
9/8	P.I.	7	R. Heil
9/15	Belmont	5	R. Stymeist#
9/25	MNWS	11	T. Factor
9/26	Tyringham	7	M. Lynch#
10/31	Brewster	1	B. Porter

American Redstart

9/7	Monroe	10	M. Lynch#
9/8, 10/14	P.I.	14, 1	Heil, Wetmore
9/10, 10/19	Medford	4, 1	Rines, LaFontaine
9/15	Belmont	4	R. Stymeist#
9/21	Manomet	12	I. Davies
9/27	Peddock's I.	9	R. Stymeist
10/15	Duxbury B.	1	R. Bowes

Ovenbird

9/7	Monroe	1	M. Lynch#
9/17	Burlington	1	M. Rines
9/18	Sandwich	1	M. Keleher
9/25	MNWS	2	T. Factor
10/10	Spencer	1	M. Lynch#
10/22	Boston	1	J. Taylor#

Northern Waterthrush

9/1-25	P.I.	8 b	Joppa Banding
9/6	Gloucester (E.P)	2	S. Hedman#
9/7	Nahant	2	L. Pivacek
9/20	Stoughton	2	G. d'Entremont
9/26	Duxbury B.	2	R. Bowes
10/1	Medford	1	P. Devaney
10/11	Squantum	1	R. Stymeist

Kentucky Warbler

9/6	Gloucester (E.P.)	1	S. Hedman#

Connecticut Warbler

9/13	Northampton	1	B. Zajda
9/14, 21	W. Quabbin	1, 1	L. Therrien
9/15	P.I.	2 b	MAS (B. Flemer)
9/21	Cumb. Farms	1	J. Sweeney
9/22	Framingham	2 imm	J. Hoye#
9/26	Tyringham	1 imm	M. Lynch#
9/28	Nahant	1	L. Pivacek
9/30	Cambr. (Danehy)	1	J.Trimble#
10/4-5	P.I.	1 imm	B. Harris#

Mourning Warbler

9/1	Woburn	1	M. Rines
9/6	Gloucester (E.P.)	2	S. Hedman#
9/7	Monroe	1 m	M. Lynch#
9/8	P.I.	3	R. Heil
9/13	Moran WMA	1	B. Zajda
10/9	Brewster	1 b	S. Finnegan

Common Yellowthroat

9/2, 10/6	Lexington	24, 10	M. Rines
9/7	Monroe	35	M. Lynch#
9/8	P.I.	31	R. Heil
9/19	Westboro	14	T. Spahr
10/3	Westminster	12	T. Pirro
10/11	Burlington	8	M. Rines#
10/28	Duxbury B.	2	R. Bowes

Hooded Warbler

9/2-3	Hadley	1	P. Yeskie
9/5	Westport	1m	M. Lynch#
10/5	Manomet	1 f b	I. Davies#
10/7-11	Boston (Fens)	1	P. Peterson#

Wilson's Warbler

9/8	P.I.	6	R. Heil
9/15	Duxbury B.	3	R. Bowes
9/21	Manomet	3	I. Davies
9/27	Cumb. Farms	4	M. Maurer
9/29	Cambridge	8	J. Trimble
10/12	P.I.	1	J. Smith#

Canada Warbler

9/13	MNWS	1	M. Emmons
9/20	Hadley	1	S. Surner
9/25	P.I.	1 b	Joppa Banding
10/19-30	Medford	1	R. LaFontaine

Yellow-breasted Chat

9/13	Rockport	1	T. Spahr#
9/15, 10/1	Brewster	1 b, 1 b	S. Finnegan
9/21, 10/5	Manomet	1 b, 2 b	Lloyd-Evans#
9/22	Nahant	1	L. Pivacek
9/26	Boston (PG)	1	T. Factor
10/4	Dorchester	1	P. Peterson
10/11	Squantum	1	R. Stymeist
10/12	Westport	1	M. Lynch#
10/14	P.I.	1	F. Vale
10/24	Cambr. (Alewife)	1	I. Parsons

Eastern Towhee

9/8, 10/1	P.I.	23, 15	R. Heil
9/12	Wellfleet	16	BBC (R. Stymeist)
9/13	Truro	15	BBC (R. Stymeist)
9/17	Burrage Pd WMA	6	J. Sweeney
9/20	Medford	4	M. Rines#
10/10	Salem	4	BBC (L. delaFlor)
10/11	S. Quabbin	9	M. Lynch#
10/23	MSSF	2	B. Conway

American Tree Sparrow

10/10	Cambridge	1	W. Freedberg
10/23	P.I.	1	P. + F. Vale
10/27	GMNWR	1	B. Stevens

Chipping Sparrow

9/6	Warren	53	M. Lynch#
9/21	Mt.A.	39	R. Stymeist
9/26	Wayland	50	B. Harris#
10/3	Westminster	30	T. Pirro
10/4	Brookfield	129	M. Lynch#
10/10	Eastham	100	SSBC (GdE)
10/17	Sterling	60+	M. Lynch#
10/21	Concord	26	W. Hutcheson

Clay-colored Sparrow

9/20-10/25	Reports of indiv. from 15 locations		

Field Sparrow

9/6	Warren	6	M. Lynch#
9/12	Wellfleet	11	BBC (R. Stymeist)
9/26	Woburn (HP)	27	P. Ippolito#
10/17	Eastham	9	J. Hoye#
10/25	Manomet	5	I. Davies
10/31	Wayland	3	B. Harris

Vesper Sparrow

10/4	Hadley	1	F. Bowrys
10/10	Sheffield	1	J. Drucker
10/17	Lexington	1	J. Forbes#
10/27	W. Bridgewater	1	J. Sweeney

Lark Sparrow

9/6	Cumb. Farms	1 imm	J. Sweeney
9/25	P.I.	2	J. Waters
9/26	N. Truro	1	CCBC (G. Page)
10/5	Nahant	1	T. Martin#
10/9-13	Cambr. (Danehy)	1	K. Hartel + v.o.
10/11	Essex	1 imm	J. Berry

Savannah Sparrow

9/21-10/31	Cumb. Farms	135 max	v.o.
9/26	Tyringham	64	M. Lynch#
10/1	Newbury	70	R. Heil
10/5	W. Roxbury (MP)	55	M. Iliff
10/8	Acton	200	S. Perkins#

Savannah Sparrow (continued)

10/10	Sheffield	50	J. Drucker
10/17	Wayland	55	G. Long
10/20	Lincoln	65	M. Rines
10/25	Hadley	300	J. Smith

Ipswich Sparrow

10/11-29	P.I.	1	T. Wetmore
10/22	Gloucester (E.P.)	1	S. Hedman

Grasshopper Sparrow

9/22	Framingham	1	J. Hoye#
10/12-13	Cumb. Farms	1 ph	M. Iliff
10/19-23	Hadley	1	J. Smith

Le Conte's Sparrow (no details) *

10/20-29	Cumb. Farms	1 juv ph	M. Iliff + v.o.

Nelson's Sparrow

9/26	Tyringham	1	M. Lynch#
10/2	Nahant	1	L. Pivacek#
10/11	Wayland	1	B. Harris
10/13	P.I.	1	R. Heil
10/19	Hadley	1 *subvirgatus*	J. Smith
10/20	Eastham (F.H.)	4	M. Faherty

Saltmarsh Sparrow

thr	P.I.	4 max	v.o.
9/2	Fairhaven	4	C. Longworth
9/5	Chatham (S.B.)	8	S. Zendeh#
10/20	Eastham (F.H.)	2	M. Faherty
10/21	Fairhaven	40	C. Longworth

Seaside Sparrow

10/20	Eastham (F.H.)	1	M. Faherty

Fox Sparrow

10/9	Pittsfield	1	N. Mole
10/16	Medford	1	R. LaFontaine
10/29	Boston (PG)	2	T. Factor
10/30	Lincoln	2	M. Rines

Song Sparrow

9/26	Tyringham	79	M. Lynch#
10/17	Wayland	100	G. Long
10/25	Cumb. Farms	110	J. Sweeney#

Lincoln's Sparrow

9/6	P.I.	1	D. + I. Jewell
9/13	Northampton	4	B. Zajda
9/19-10/24	Cumb. Farms	14 max	v.o.
9/20-10/21	Lexington	4 max	M. Rines
9/26	Woburn (HP)	4	P. Ippolito#
9/29	Burlington	4	M. Rines
10/3	Sheffield	12	J. Drucker
10/4, 17	Wayland	8, 5	G. Long

Swamp Sparrow

9/26-10/31	Cumb. Farms	85 max	v.o.
9/29	Brookfield	51	M. Lynch#
10/11	Burlington	77	M. Rines#
10/20	Lincoln	52	M. Rines
10/24	Brookfield	40+	M. Lynch#

White-throated Sparrow

9/7	Monroe	8	M. Lynch#
9/8	P.I.	1	R. Heil
9/15	Belmont	9	R. Stymeist#
9/16	Lexington	18	M. Rines
9/26	Tyringham	130	M. Lynch#
10/14	P.I.	200+	T. Wetmore
10/20	Melrose	80	D. + I. Jewell

White-crowned Sparrow

9/22	Belmont	1	R. Stymeist#
10/6	Lexington	2	M. Rines
10/10	W. Roxbury (MP)	4	P. Peterson
10/13	Cumb. Farms	12	T. Johnson#
10/14	P.I.	10	F. Vale
10/14	Northampton	16	T. Gagnon
10/25	Ipswich	8	R. Heil
10/25	Nantucket	8	K. Blackshaw#

Dark-eyed Junco

9/14	Waltham	1	J. Forbes
9/19	Lexington	1	M. Rines
10/14	P.I.	125	F. Vale
10/17	Boston (F.Pk)	35	P. Peterson
10/20	Melrose	32	D. + I. Jewell
10/23	P.I.	90	P. + F. Vale

Lapland Longspur

9/22	Edgartown	1	L. McDowell
10/2	Duxbury B.	1 imm ph	R. Bowes
10/4	Chatham (S.B.)	2	B. Nikula
10/11, 31	P.I.	9, 1	T. Wetmore
10/15	Northampton	1	B. Lafley
10/23	Granville	1	J. Weeks
10/24	Gloucester	2	S. Hedman
10/25	Hadley	2	J. Smith

Snow Bunting

10/24	Woburn (HP)	2	A. Jennings#
10/29	Falmouth	24	P. Brown#
10/29	Fairhaven	10	C. Longworth
10/29	Eastham (F.E.)	24	P. Brown#
10/30	P.I.	170	T. Wetmore
10/31	Duxbury B.	40	R. Bowes

Summer Tanager

10/27-31	N. Falmouth	1 m ad ph	A. Pellegrini

Scarlet Tanager

9/13	Mt. Tom	3	BBC (T. Gagnon)
10/20	P.I.	1 f	D. Chickering
10/20	Cambridge	1	B. Stevens
10/21	Stoneham	1	D. + I. Jewell

Rose-breasted Grosbeak

9/2, 19	Lexington	5, 2	M. Rines
9/9	Mattapan (BNC)	5	A. Morgan
10/17	Eastham	1	J. Hoye#
10/24	Medford	1 f	R. LaFontaine

Blue Grosbeak

thr	Reports of indvid. from 14 locations		
9/26	Cumb. Farms	2	M. Maurer

Indigo Bunting

9/1-10/20	Cumb. Farms	7 max	v.o.
9/2	Lexington	19	M. Rines
9/22	Framingham	8	J. Hoye#
9/26	Lincoln	8	M. Rines#
10/4	Wayland	5	G. Long
10/4	Brookfield	6	M. Lynch#
10/10	W. Roxbury (MP)	5	P. Peterson
10/12	Arlington Res.	4	M. Rines
10/23	Boston (PG)	1	T. Factor

Dickcissel

thr	Reports of indiv. from 18 locations		
9/27, 10/13	Cumb. Farms	4, 4	Maurer, Johnson

Bobolink

9/1-11/22	Cumb. Farms	316 max	v.o.
9/2, 10/22	Lexington	62, 8	M. Rines
9/7	Northampton	252	T. Gagnon
9/15	Dedham	20	P. Peterson
10/1	Newbury	40	R. Heil
10/25	Manomet	1	I. Davies

Red-winged Blackbird

9/19	Holbrook	800	G. d'Entremont
9/21	Cumb. Farms	250	J. Sweeney
10/11	S. Quabbin	147	M. Lynch#
10/24	Brookfield	110	M. Lynch#
10/24	Concord (NAC)	100	J. Forbes

Eastern Meadowlark

10/11	Saugus	2	S. Zendeh#
10/13	Cumb. Farms	3	T. Johnson#
10/20	P.I.	2	T. Wetmore
10/21	Eastham	4	M. Faherty
10/25	Plympton	5	J. Sweeney#

Yellow-headed Blackbird

9/30	Nantucket	1 m	E. Andrews#

Rusty Blackbird

9/25	Bradford	2	D. Larson
10/4	IRWS	5	MAS (W. Tatro)
10/17	Burlington	10	M. Rines

Rusty Blackbird (continued)			
10/17	Wayland	41	G. Long
10/17	Pittsfield	30	N. Mole
10/24	Wakefield	11	P. + F. Vale
Common Grackle			
9/15	Halifax	1500	J. Sweeney
9/19	Holbrook	2000	G. d'Entremont
10/23	Falmouth	225	M. Keleher
10/31	Northbridge	600	M. Lynch#
10/31	DWWS	370	I. Davies#
Brown-headed Cowbird			
9/13	Marshfield	125	G. d'Entremont#
10/17	Billerica	250+	S. Perkins#
Orchard Oriole			
9/3	Westfield	1	J. Hutchison
Baltimore Oriole			
9/4	Lexington	3	J. Forbes
9/5	P.I.	3	T. Spahr#
10/7	Boston (Fens)	2	P. Peterson
10/26	Rockport (H.P.)	3	B. Harris
Purple Finch			
9/20	Boston (A.A.)	1	BBC (R. Stymeist)
9/23	Nahant	1	J. Offermann
10/6	P.I.	6	T. Wetmore
10/11	S. Quabbin	3	M. Lynch#
10/26	Rockport	2	B. Harris
10/26	Harwich	2	B. Nikula
Red Crossbill			
9/20	C. Quabbin	2	L. Therrien
Pine Siskin			
9/1	Sheffield	1	S. MacDonald
9/6	P.I.	1	T. Wetmore
10/29	Cumb. Farms	1	M. Iliff
American Goldfinch			
9/15	Chatham (MI)	92	D. Manchester
10/24	Boston (BNC)	150	BBC (L. Ferraresso)
10/29	Burlington	40	M. Rines
Evening Grosbeak			
9/11	Lenox	1	R. Laubach

ABBREVIATIONS FOR BIRD SIGHTINGS

Taxonomic order is based on AOU checklist, Seventh edition, 42nd through 50th Supplements , as published in *The Auk* 117: 847-58 (2000); 119:897-906 (2002); 120:923-32 (2003); 121:985-95 (2004); 122:1026-31 (2005); 123:926-936 (2006); 124(3):1109–1115, 2007; 125(3):758–768, 2008; 126(3):705-714, 2009 (see <http://www.aou.org/checklist/north/index.php>).

Location-#	MAS Breeding Bird Atlas Block
ABC	Allen Bird Club
A.P.	Andrews Point, Rockport
A.Pd	Allens Pond, S. Dartmouth
B.	Beach
B.I.	Belle Isle, E. Boston
B.R.	Bass Rocks, Gloucester
BBC	Brookline Bird Club
BMB	Broad Meadow Brook, Worcester
C.B.	Crane Beach, Ipswich
CGB	Coast Guard Beach, Eastham
C.P.	Crooked Pond, Boxford
Cambr.	Cambridge
CCBC	Cape Cod Bird Club
Corp. B.	Corporation Beach, Dennis
Cumb. Farms	Cumberland Farms, Middleboro
DFWS	Drumlin Farm Wildlife Sanctuary
DWMA	Delaney WMA Stow, Bolton, Harvard
DWWS	Daniel Webster WS
E.P.	Eastern Point, Gloucester
F.E.	First Encounter Beach, Eastham
F.P.	Fresh Pond, Cambridge
F.Pk	Franklin Park, Boston
G40	Gate 40, Quabbin Res.
GMNWR	Great Meadows NWR
H.	Harbor
H.P.	Halibut Point, Rockport
HRWMA	High Ridge WMA, Gardner
I.	Island
IRWS	Ipswich River WS
L.	Ledge
MAS	Mass Audubon
M.P.	Millennium Park, W. Roxbury
M.V.	Martha's Vineyard
MAS	Mass. Audubon Society
MBWMA	Martin Burns WMA, Newbury
MNWS	Marblehead Neck WS
MSSF	Myles Standish State Forest, Plymouth
Mt.A.	Mt. Auburn Cemetery, Cambr.
NAC	Nine Acre Corner, Concord
Newbypt	Newburyport
ONWR	Oxbow National Wildlife Refuge
P.I.	Plum Island
Pd	Pond
P'town	Provincetown
Pont.	Pontoosuc Lake, Lanesboro
R.P.	Race Point, Provincetown
Res.	Reservoir
S.B.	South Beach, Chatham
S.N.	Sandy Neck, Barnstable
SRV	Sudbury River Valley
SSBC	South Shore Bird Club
TASL	Take A Second Look Boston Harbor Census
WBWS	Wellfleet Bay WS
WMWS	Wachusett Meadow WS
Wompatuck SP	Hingham, Cohassett, Scituate, and Norwell
Worc.	Worcester

Other Abbreviations	
ad	adult
b	banded
br	breeding
dk	dark (morph)
f	female
fl	fledgling
imm	immature
juv	juvenile
lt	light (morph)
m	male
max	maximum
migr	migrating
n	nesting
ph	photographed
pl	plumage
pr	pair
S	summer (1S = 1st summer)
v.o.	various observers
W	winter (2W = second winter)
yg	young
#	additional observers

ABOUT THE COVER

Savannah Sparrow

The widely distributed grassland-dwelling Savannah Sparrow (*Passerculus sandwichensis*) was first described and named by Alexander Wilson, the "father of American ornithology," for Savannah, Georgia, where the type specimen was collected. This small, heavily streaked gray and brown sparrow is distinguished from similar sparrows such as the Song Sparrow by its notched, relatively short plain brown tail and yellow over the eye. Young birds tend to be buffier than adults. Savannah Sparrows tend to be faithful to their natal and breeding sites. This lack of movement to other breeding areas has resulted in the development of extensive geographic variation over its wide range and the evolution of at least 17 recognized subspecies. Perhaps the most interesting, and certainly the most distinct, is the "Ipswich" Sparrow, subspecies *P. s. princeps*, which is larger and paler than other Savannah Sparrows. The Ipswich Sparrow was originally described as a full species until the American Ornithologists' Union downgraded it to a subspecies in its 1957 *Check-List*. Ipswich Sparrows breed only on Sable Island, Nova Scotia, and they winter along the East Coast from Massachusetts to southern Georgia.

Savannah Sparrows breed from arctic Alaska across most of Canada to Newfoundland and Labrador, and south to southern California and Arizona in the west and New Jersey in the east. They also breed in the Appalachians as far south as northern Georgia. A resident population is found in central Mexico. Most populations are migratory, wintering from southern California across the United States through Oklahoma to the East Coast, where they winter from Massachusetts south through Mexico, and Central America as far south as Honduras. Savannah Sparrows are mostly nocturnal migrants, using magnetic, stellar, and solar compasses to guide their flight. In Massachusetts they are considered locally common breeders and very common to abundant migrants, arriving in April. They migrate south in late September and October and are uncommon but regular in winter, with a maximum of more than 200 reported on the Buzzard's Bay Christmas Bird Count in 1991. The "Ipswich" Savannah Sparrow can be a locally common winter resident.

In many Savannah Sparrow populations the breeding system is polygynous, with males having more than one mate. In others it is monogamous. The breeding habitat is mainly grassy meadows, fields, sedges, and salt marshes. The male sings a high-pitched, buzzy song, punctuated by sharp beginning and ending notes, from perches in grass, shrubs, or small trees. Song functions as both a territorial advertisement and a mate attractant. Both sexes have a flutter flight and vocalization with which they mark their territorial boundaries or threaten conspecific intruders. Aerial chases are common, and males may walk parallel to each other at territorial boundaries. Fights may involve beating each other with their wings during vertical flight or tussling on the ground. Males "mate-guard" females during their fertile period, following them closely wherever they go.

The female selects the nest site and builds the nest, typically well hidden on the ground in clumps of grass, often at the base of a shrub. The nest is a grass cup, usually concealed by a canopy of grass. The usual clutch of four pastel green or blue eggs, marked with brown, is incubated by the female alone for the 10-12 days until hatching. The young hatch helpless and naked, with eyes closed. The female does most of the brooding. If the nest is approached, she may give a distraction display consisting of a "rodent-run" that mimics a fleeing mouse, or a zig-zag run with wings raised. Both parents remove fecal sacs from the nest. The young fledge in about two weeks, and both parents continue to feed them invertebrates for several weeks until independence.

Savannah Sparrows forage mostly on the ground while walking but may glean invertebrates from grass, shrubs, or beach wrack. They also occasionally hawk insects from the ground and may scratch soil to uncover seeds or invertebrates. During migration and in winter they take mostly seeds and fruit, with insects taken opportunistically. During breeding season they take a broad spectrum of invertebrates, including insect pupae and larvae, isopods, amphipods, and small mollusks.

Savannah Sparrows are predated in winter by hawks and owls, and in breeding season by snakes; by mammalian nest predators, including cats, foxes, skunks, weasels; and by avian predators, including Clapper Rails, corvids, gulls, and grackles. Reproductive success is higher on islands, presumably because of reduced mammalian nest predators. Populations are probably regulated by migration and winter mortality. Savannah Sparrows have benefited from European-introduced agriculture, which has created more open environments. The species' extensive range and genetically diverse populations bode well for the future of this elegant little sparrow.

William E. Davis, Jr.

KING EIDER WITH A CRAB BY SANDY SELESKY

About the Cover Artist: Barry Van Dusen

Once again, we have a cover by Barry Van Dusen, whose work our readers will certainly recognize. Barry is well known in the birding world, especially in Massachusetts, where he lives in the central Massachusetts town of Princeton. In the spring of 2009 Barry had an exhibition at Massachusetts Audubon's Joppa Flats Education Center in Newburyport, MA. Starting in mid-April 2010 his work will be shown at the Fruitlands Museum in Harvard, MA, an exhibition of watercolors that will continue through the summer. In addition, there will be an accompanying educational exhibit entitled *Bird Artist at Work,* which describes the methods and techniques of contemporary nature artists. Barry will be presenting several gallery talks, an evening reception, and a workshop through the summer. For details see <http://www.fruitlands.org>.

Barry has illustrated several nature books and pocket guides, and his articles and paintings have been featured in *Birder's World, Birding,* and *Bird Watcher's Digest,* as well as *Bird Observer*. Barry was one of thirteen artists to contribute to *Birds of Peru,* published by Princeton University Press in 2007.

An association with the Massachusetts Audubon Society, which began in 1982, caused Barry to become attracted to nature subjects. He has been influenced by the work of European wildlife artists and has adopted their methodology of direct field sketching. His skill as a field artist has enabled Barry to participate in projects abroad sponsored by the Netherlands-based Artists for Nature Foundation. With this organization he has traveled to India, Peru, England, Ireland, Spain, and, most recently, to Israel to raise funds for conservation of threatened habitats. In 2007 he became the first U.S. artist to be commissioned by the Wildlife Habitat Trust of Wexham, England, to design the 2007 UK Habitat Conservation Stamp, which is modeled after the U.S Duck Stamp.

For more information about Barry's many achievements and activities, see <http://www.barryvandusen.com>.

HERRING GULL C71, BANDED BY JULIE ELLIS IN THE ISLES OF SHOALS, HANGING OUT IN A PARKING LOT IN SALISBURY. PHOTOGRAPH BY DAVID LARSON.

AT A GLANCE

December 2009

WAYNE R. PETERSEN

As the final identification puzzle of 2009, your "At a Glance" editor is pleased to offer a New Year's present that he hopes will be a straightforward identification challenge. The mystery bird is unequivocally a shorebird — obviously a sandpiper, since the pictured species does not possess the short, blunt bill characteristic of all the plovers. Nor does it have the dark breast rings shown by many of the small plovers or the upright posture characteristic of the larger plovers such as Black-bellied and American Golden-Plover.

So far, so good, right? We have narrowed the field to approximately 30 species of sandpipers (i.e., members of the family *Scolopacidae*). Don't forget that shorebirds such as yellowlegs, godwits, turnstones, knots, Dunlins, dowitchers, phalaropes, etc. are all technically sandpipers, even though they don't bear that name. With this in mind, we can readily exclude a number of sandpipers as identification possibilities. Yellowlegs and their close allies are long-legged, long-billed, and not scaly-looking on the back like the pictured sandpiper; Godwits and Whimbrels have very long bills, recurved and decurved, respectively; Ruddy Turnstones are distinctively patterned at all times of the year; dowitchers have very long, straight bills; and phalaropes in breeding plumage are distinctively patterned, or else they show a distinct dark eye

patch when in other plumages. There are a few other outliers that need to be considered, as well as the species that are actually called sandpipers. Among these are Red Knot, Sanderling, and Dunlin.

A Red Knot in nonbreeding or juvenal plumage would appear chunkier (i.e., less attenuated), shorter-legged, and more uniformly gray in color on the back than the pictured sandpiper and would never exhibit the brightly scalloped back shown here. Similarly, a Sanderling or Dunlin in any plumage would never have the prominent scalloping or striped appearance on the back of the mystery species; a Dunlin would also have a noticeable droop at the tip of a relatively longer bill.

With so many species eliminated, the identification choices are now reduced to one of the small sandpipers that are collectively called peep (i.e., Baird's, White-rumped, Western, Semipalmated, and Least). Of these five small species, the Baird's Sandpiper and the White-rumped Sandpiper are unique in possessing extremely long wings — so long that, when folded, they exceed the length of the tail. Even a superficial look at the pictured peep reveals an extremely long-winged appearance. When these long primaries are combined with the well-defined necklace of crisp breast streaks, prominent white supercilium, and slightly decurved bill, the mystery sandpiper can only be a White-rumped Sandpiper (*Calidris fuscicollis*). Although somewhat similar in shape, Baird's Sandpiper can be eliminated because it seldom exhibits such a bold supercilium. It also has a straighter bill and never shows such crisply defined breast streaks. The pale edging on the back, wing coverts, and tertials is distinctive of a juvenile White-rumped Sandpiper.

White-rumped Sandpipers are uncommon spring and very common fall coastal migrants in Massachusetts. A scattering of individuals also appears inland in fall wherever appropriate habitat conditions exist. The author photographed this juvenile White-rumped Sandpiper on North Beach in Orleans in November 2009.

Wayne R. Petersen

SHOREBIRDING BY DAVID LARSON

AT A GLANCE

WAYNE R. PETERSEN

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

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