

# Bird Observer

---

VOLUME 30, NUMBER 1

FEBRUARY 2002



# HOT BIRDS

---



This **Ross's Goose** was photographed by Jeremiah Trimble on Martha's Vineyard on October 21, 2001. If accepted by the MARC, it will be only the second record of this species in the state.

This **Sage Thrasher** delighted many a visitor during November and December at Nubble Light in Cape Neddick, York, Maine. The rather rotund appearance of the bird may be due in part to the large number of mealworms supplied by local birders. Denny Abbott obtained this video still on November 19, 2001.



This **Gray Jay** was an irregular visitor to a feeding station on Windsor Bush Road in Windsor, MA, from early December into January. Phil Brown took this photograph on December 30, 2001.

During the Greater Boston Christmas Bird Count, Ronnie Donovan and party were returning from a visit to the Harbor Islands when they spotted a large, dark falcon on the Black Falcon Terminal. This **Gyrfalcon** stayed long enough for Don Crockett to capture this video still on the next day, December 17, 2001.



# CONTENTS

---

BIRDING IN NORTHFIELD	<i>Mark Taylor</i>	5
THE RISE AND DECLINE OF HOUSE FINCHES IN MASSACHUSETTS	<i>Thomas R. Hamilton</i>	13
UNEXPECTED CENTERS OF WINTER LANDBIRD DENSITY DURING THE 101 <sup>ST</sup> CBC	<i>S. S. Mitra</i>	20
FIRST DOCUMENTED NESTING OF WHITE-WINGED CROSSBILL ( <i>LOXIA LEUCOPTERA</i> ) IN MASSACHUSETTS: THE INVASION OF THE CONE SLASHERS	<i>Geoffrey S. LeBaron</i>	28
THE DYNAMICS OF BLACK-CAPPED CHICKADEES AT BIRD FEEDERS	<i>Herb Wilson</i>	33
SIBLEY BIRDING: HOW MUCH DOES YOUR BIG DAY WEIGH? OR, BIRDING WITH A CALCULATOR	<i>Bob Bushnell and Steve Davis</i>	39
POCKET PLACES The Grove at Salisbury	<i>Douglas Chickering</i>	41
ABOUT BOOKS Who Are Those Guys? A Conversation with Josep del Hoyo, the Creator of the <i>Handbook of the Birds of the World</i> Series	<i>Mark Lynch</i>	42
BIRD SIGHTINGS: September/October 2001 Summary		49
ABOUT THE COVER: Boreal Chickadee	<i>William E. Davis, Jr.</i>	71
ABOUT THE COVER ARTIST: Paul Donahue		72
AT A GLANCE	<i>Wayne R. Petersen</i>	73

Visit the *Bird Observer* website at  
<<http://massbird.org/birdobserver/>>



DAVID LARSON



# Bird Observer

A bimonthly journal — to enhance understanding, observation, and enjoyment of birds  
**VOL. 30, NO. 1 FEBRUARY 2002**

**Editor**

Brooke Stevens

**Production Editor**

David M. Larson

**Department Heads**

Cover Art

William E. Davis, Jr.

Where to Go Birding

Jim Berry

Feature Articles

Marta Hersek

Book Reviews

Mark Lynch

Bird Sightings

Robert H. Stymeist

Marjorie W. Rines

At a Glance

Wayne R. Petersen

**Managers**

Subscriptions

Carolyn B. Marsh

Advertisements

Robert H. Stymeist

**Corporate Officers**

President

Marjorie W. Rines

Treasurer

Sandon C. Shepard

Clerk

Barbara Lawless

Assistant Clerk

John A. Shetterly

**Board of Directors**

Dorothy R. Arvidson

Susan L. Carlson

William E. Davis, Jr.

H. Christian Floyd

Janet L. Heywood

Harriet E. Hoffman

David M. Larson

Carolyn B. Marsh

Wayne R. Petersen

Brooke Stevens

Robert H. Stymeist

Fay Vale

**Associate Staff**

Theodore Atkinson

Richard S. Heil

Seth Kellogg

René Laubach

Simon Perkins

SUBSCRIPTIONS: \$21 for 6 issues, \$40 for two years for U.S. addresses. Inquire about foreign subscriptions. Single copies \$4.00, see <<http://massbird.org/birdobserver/subform.htm>>.

CHANGES OF ADDRESS and subscription inquiries should be sent to: Bird Observer Subscriptions, P.O. Box 236, Arlington, MA 02476-0003, or E-mail to Carolyn Marsh at <[cmarsh@jocama.com](mailto:cmarsh@jocama.com)>.

ADVERTISING: full page, \$100; half page, \$55; quarter page, \$35. Send camera-ready copy to Bird Observer Advertising, P.O. Box 236, Arlington, MA 02476-0003.

MATERIAL FOR PUBLICATION: BIRD OBSERVER welcomes submissions of original articles, photographs, art work, field notes, and field studies. Please send submissions to the Editor: Brooke Stevens, 5 Hemlock Road, Cambridge, MA 02138; E-mail: <[Brookestev@aol.com](mailto:Brookestev@aol.com)>. If possible, please include a computer disk (Microsoft Word, txt, or rtf formats), or e-mail to the Editor as an attached file. Include author's or artist's name, address, and telephone number and information from which a brief biography can be prepared.

POSTMASTER: Send address changes to BIRD OBSERVER, P.O. Box 236, Arlington, MA 02476-0003. PERIODICALS CLASS POSTAGE PAID AT BOSTON, MA.

BIRD OBSERVER (USPS 369-850) is published bimonthly, COPYRIGHT © 2002 by Bird Observer of Eastern Massachusetts, Inc., 462 Trapelo Road, Belmont, MA 02478, a nonprofit, tax-exempt corporation under section 501 (c)(3) of the Internal Revenue Code. Gifts to Bird Observer will be greatly appreciated and are tax deductible. ISSN: 0893-463

# Birding in Northfield

*Mark Taylor*

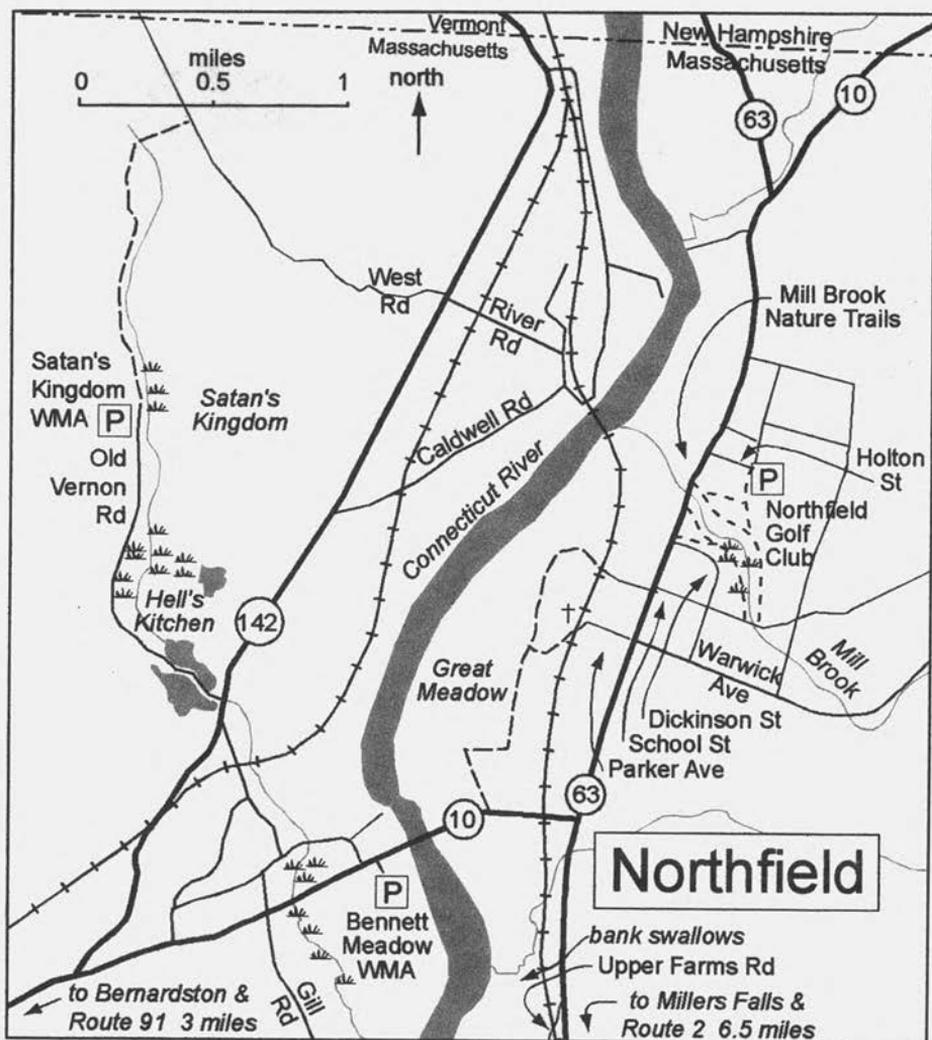
Northfield is a small town in western Massachusetts that borders both Vermont and New Hampshire. It is intersected by the Connecticut River, which makes it a prime flyway for a great variety of birds. The river valley consists of large but relatively narrow tracts of farmland, which are primarily for growing corn. From this agricultural land on the eastern side of the river, the terrain rises to a mountainous region along its eastern border. Main Street (Routes 10 and 63) in Northfield is a beautiful historical village with large colonial homes set back well off the road. It is also the primary access to some of the best birding locations that I will mention later. The western side of town, across the river, also consists of farmland, with deciduous forests and a large expanse of swampy woodlands known as Satan's Kingdom. This is a guide to some locations that many other birders and I are familiar with, but which are still unknown or unfamiliar to many. I hope you will come and explore this hidden corner of Massachusetts. Spring migration is, without question, the best time to bird Northfield, but summer breeding season and fall migration have their own unique attractions as well.



## **Hell's Kitchen and Vicinity**

From Interstate 91 take Northfield Exit 28, which is Route 10 North, 2.3 miles to Route 142 North, on your left. After 1.1 miles on Route 142 you will come to Old Vernon Road on the left, which is paved for 1 mile and clearly marked with a road sign. Take this road 0.7 mile, after checking the ponds on both sides and small swamp on the right, to a large swamp (Hell's Kitchen) on the right (east). At 1.2 miles there are a pulloff and places to park on the left (west), marked by a large brown wooden sign for Satan's Kingdom Wildlife Management Area. From here the road is unpaved, but good for another 0.4 mile. This is where the turnaround area is (parking is limited here with a private drive on the left), although the more primitive road continues. There is a good parking pulloff and turnaround 0.2 mile into this more primitive road. On this unpaved section it is just under 1 mile to the paved West Road intersection, and 1.4 miles to Route 142.

Hell's Kitchen is the largest tract of swampland, among several, that are interconnected along Old Vernon Road. This area on the western side of town is part of the larger Satan's Kingdom Wildlife Management Area and contains large sections of upland deciduous woodlands as well. Sheltered ponds on both sides of this road, at the start, abruptly turn into a chain of shallow swamps along the eastern side, with tall snags rising from the water. On the tops of these dead trees, I have reliably found Olive-sided (migration) and Great Crested flycatchers perched. As would be expected in this kind of habitat, Great Blue Herons nest in this region with several nests visible



BILL AND MARY ALICE WILSON

from the road. Broad-winged and Red-shouldered hawks favor this area and can be heard or seen regularly.

Hell's Kitchen is the next stop. This is always a productive spot for a variety of birds including Canada and Snow geese (migration), Belted Kingfishers, and swallows and waterfowl in general. Opposite Hell's Kitchen, a small hillside meadow with several overgrown apple trees offers a nice open area to observe passerines flying in and out of the canopy overhead. Baltimore Orioles, Blue-Gray Gnatcatchers, and Yellow-throated Vireos, among others, are found here every year. Continuing down this road another 0.5 mile, you will find similar habitat, with swampland to the right, woodland to the left. You should bird this area carefully, stopping often to look

and listen for the Yellow-bellied Sapsuckers that nest near the Satan's Kingdom W.M.A. sign in this section. At the end of the road (which would be the 1.6 mile marker), listen for a Louisiana Waterthrush that is often here in the spring. From here the primitive road continues for another mile.

*Note:* If you do continue down this road on foot or with an appropriate vehicle, you will find more of the same habitat, but it can be rewarding. This is great area for wood warblers (especially nesting Black-throated Blue and Black-throated Green), thrushes, and flycatchers (I've seen and heard Yellow-bellied on this stretch). The road passes through another large snag-filled swamp on the western side, 2.2 miles from the start of Old Vernon Road. It will then come to an intersection, where a right turn onto West Road will ultimately bring you back out to Route 142.

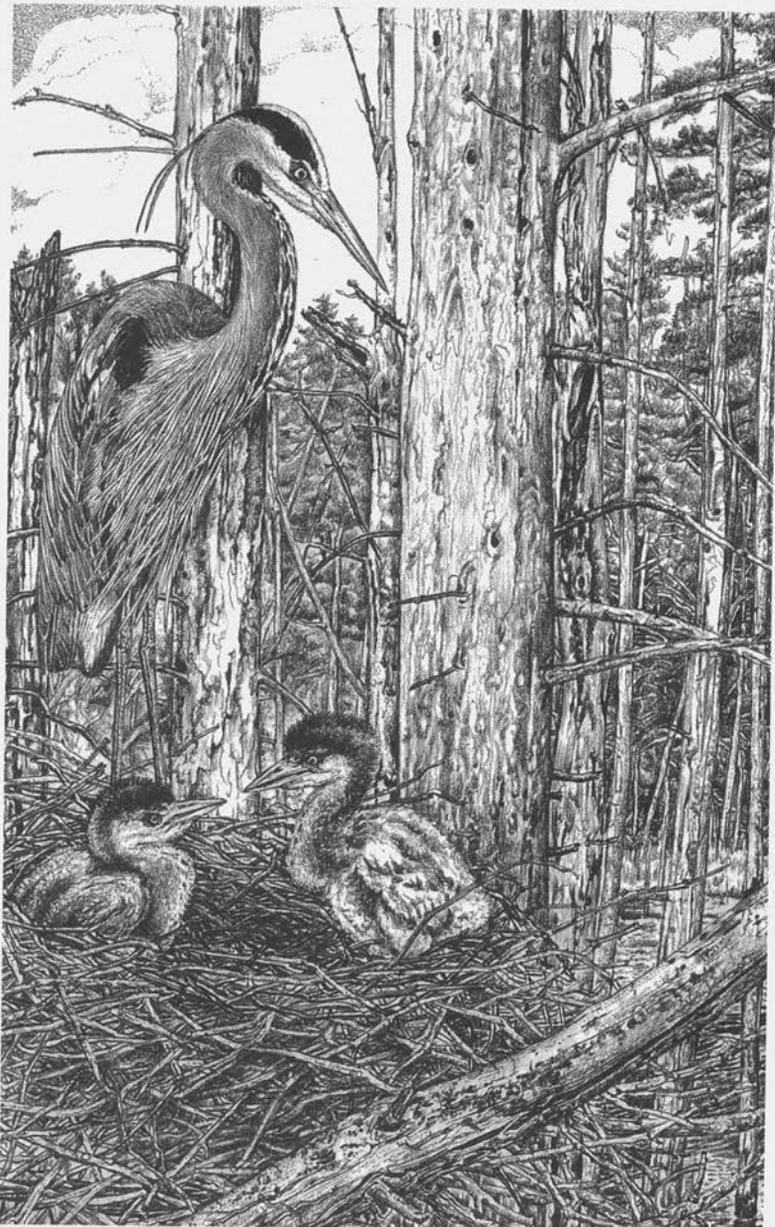
### **Birds You Can Expect to See**

Green and Great Blue herons; Black Duck; Hooded Merganser; Red-shouldered and Broad-winged hawks; Belted Kingfisher; Yellow-bellied Sapsucker; Downy, Hairy, and Pileated woodpeckers; Olive-sided, Least, and Great Crested flycatchers; Eastern Wood-Pewee; Eastern Phoebe; Eastern Kingbird; Tree, Bank, Rough-winged, and Barn swallows; Brown Creeper; Winter Wren; Golden and Ruby-crowned kinglets; Blue-gray Gnatcatcher; Veery, Hermit, and Wood thrushes; Blue-headed, Yellow-throated, Warbling, and Red-eyed vireos; most eastern wood warbler species; Northern and Louisiana waterthrushes; Scarlet Tanager; Baltimore Oriole; and Swamp Sparrow.

### **Caldwell Road/River Road**

From the point you entered Hell's Kitchen (Old Vernon Road), continue north on Route 142 for 0.7 mile to Caldwell Road on your right (east). Take Caldwell Road 0.9 mile, and bear right at the intersection of Caldwell and River Road, at the bottom of the hill. (This will now be River Road.) To get back to Route 142, either road will get you there from here without a long drive.

Caldwell Road takes you to a small area of open brushy wetland on River Road, close to the Connecticut River. Its proximity to Old Vernon Road makes it logical to bird this area next. First, the road takes you through a large expanse of cornfields where you can watch for Horned Larks and Water Pipits. Tree, Barn, Bank, and Cliff (rare) swallows are good possibilities here. As the road drops down away from the fields, it comes to the intersection with River Road. This is where I pull off the road and start to bird. The large willow trees in this section seem to be a magnet for warblers, gnatcatchers, Warbling Vireos, and Baltimore Orioles. I seem to always find my first Yellow Warbler of the year, loudly presenting itself for a mate, at this location. A raised railroad bed is the backdrop on the north side; a shallow wetland lies between it and the road. This wet area has held Green Herons and Northern Waterthrushes on occasion. I generally bird both sides on this short section of road to the railroad trestle and back. As the road continues along the river, the habitat on both sides is good and should be checked.



ANDREW MAGEE

### Birds You Can Expect to See

Yellow Warbler, Yellow-rumped Warbler, Warbling Vireo, Baltimore Oriole, Northern Waterthrush, Green Heron; Swamp, Lincoln's, and White-Crowned sparrows. (This is a short list, but anything is possible here in the spring.)

## **Bennett Meadow Wildlife Management Area**

Return south on Route 142 to Route 10, turn left on Route 10, and head east 1.1 miles. Bennett Meadow is on the right (south) just before the bridge that spans the Connecticut River (Bennett Meadow Bridge). The access entrance is marked by a brown wooden Bennett Meadow W.M.A. sign, which can be missed. There is a parking lot at the bottom of the access road.

Bennett Meadow is a large cornfield on the west side of the Connecticut River. It is bordered by wet areas with alders and large willows on the western edge, and a long line of locust trees along the riverbank to the east. This area is used for pheasant stocking and hunting in the fall, but in the spring and summer this is a great stop to look for birds on the way to town. Farm vehicle roads run on both sides of the main Bennett Meadow field, making it accessible for walking along the perimeters. From the parking area in mid-May through mid-summer, Yellow-throated Vireos can usually be heard, and this is one of the more reliable places in Northfield to see them. I have seen them on their nests here, built on one of the large willow tree branches. Willow Flycatchers are common and nest in the vicinity, as do Baltimore Orioles. Bank Swallows are a common sight over these fields and take advantage of the tall riverbanks and other areas for nests. There is a large nesting colony across the river from Bennett Meadow, built into a gravel/loam bank in a farm field. This is off of Route 63 (south) and Upper Farms Road, 0.7 mile from the intersection of Routes 10 and 63. Look for the bank in the north end of this field from here.

### **Birds You Can Expect to See**

Bald Eagle (perched along the riverbank), Red-tailed Hawk, Killdeer, Great Horned Owl (at dawn or dusk), Willow and maybe Alder flycatchers, Eastern Kingbird; Tree, Bank, and Barn swallows, Yellow-Throated Vireo, Yellow Warbler, Field and Savannah sparrows, Bobolink, Orchard (rare) and Baltimore orioles.

### **Northfield Center Cemetery and the Old Dump**

From the junction of Routes 10 and 63, drive north on Main Street for 0.6 mile toward the center of town. On the left, at a pedestrian crossing, is Parker Avenue, just before the IGA grocery store. Take this street a short distance to the cemetery and park either before the railroad tracks or in the cemetery itself. Walk down the road, which drops down past the cemetery entrance to the area known as the Old Dump and cattail wetland, which opens out to a large expanse of corn fields.

This area, just off the town center, is one of Northfield's best warbler traps in the spring. From the large locust, maple, white pine, hemlock, and arborvitae that surround the cemetery, to the vine- and bittersweet-covered area of the Old Dump, to the cattail wetland, alder swamps, then cornfields, you'll find no better all-around habitat for birds. The possibilities for a rarity or two are good here as well. A Common Moorhen was found in the pond at this location. Blossoming, overgrown apple trees along the wet edge of the cornfields have attracted occasional Orchard Orioles. The willow trees along this stretch invariably have Willow Flycatchers

offering their *fitz-bew!* song. This section is also a good place to observe a variety of sparrow species as they dart back and forth from field to brush, particularly in the fall.

Start by birding the cemetery loop to look for warblers in the tall mix of trees. Once back at the entrance to the cemetery, you can then follow the road down to the next level or the Old Dump, which really shows no resemblance to one now. The entrance to it is marked by piles of organic material (leaves, cut-up trees, etc.) deposited from town storm cleanup. Sumacs and alders are interspersed in this area with a somewhat crude path between them, and it is a good place to find Blue-winged Warblers. Approaching the edge of the dump, you can scan the cattail-lined wetland and thickets below. This embankment is a good place to look for the skulking bird species that stay low in the brush. I have seen Canada and Wilson's warblers here most years. Backing out to the point where you entered the dump, walk down the road past the cattail swamp on the left and alder swamp on the right. The sound of Red-winged Blackbirds will greet you here, and if you're lucky, the booming call of an American Bittern. This section has been great in the past for Virginia Rails and Common Snipe. Once out to the cornfields, a left or right turn will take you along more prime bird habitat. What really is the remnant of an old brook that has been blocked by agriculture is now wetland. This abuts the fields on the east side, and extends north and south in either direction for its entire length. You could really spend most of a morning birding this whole area.

### **Birds You Can Expect to See**

On a good warbler-push day in the spring you should see just about any of the eastern migratory warblers here around the cemetery. This is a good area to look for breeding Red-bellied Woodpeckers. Swainson's Thrush (migration) has been seen here occasionally along with more common local breeders like Scarlet Tanagers, Baltimore Orioles, and Rose-breasted Grosbeaks. The Old Dump section is good for pishing out Canada, Blue-Winged, and Wilson's warblers, Blue-Gray Gnatcatcher, and Wood and Hermit thrushes. At the cattail pond, Virginia and Sora rails have been heard and seen along with Wood Duck, Common Snipe, four swallow species (Tree, Rough-winged, Bank, and Cliff), Red-winged Blackbird, and Swamp, Lincoln's (migration), and White-Crowned sparrows (fall). In the cornfields look for Red-tailed Hawk, Cooper's and Sharp-shinned hawks, American Kestrel, Peregrine Falcon (rare), Killdeer, Horned Lark, American Pipit (migration), and Eastern Kingbird. Again, Willow Flycatchers can be heard singing from the trees along the edge of the fields.

### **Northfield Public Golf Course**

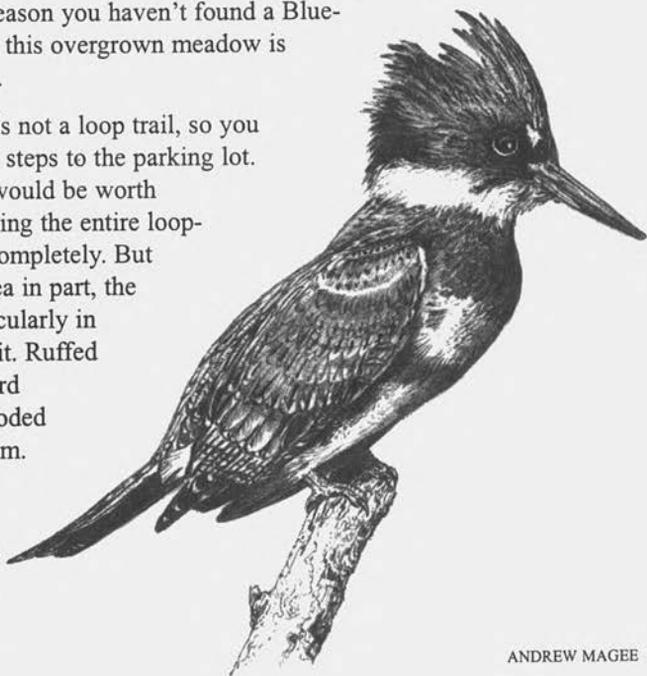
From the intersection of Routes 10 and 63, drive north on Main Street for 1.3 miles to Holton Street on the right, just after the church. A short drive down Holton Street will take you to the entrance to the golf course.

This location is another of Northfield's great birding places. Variety of habitats again makes this a must-bird spot in the spring. From the parking area at the golf course, which is under a canopy of large maple trees, the habitat (along the western edge of the parking lot) is composed of thick tangles of bittersweet, lilacs, and

sumacs. Here also is where the golf course dumps its leaves and other organic material, giving the birder good access to the middle of this area. From the perimeter here, the land drops off in to a dell-like brook area which, in turn, opens up into a wet meadow. This is perhaps the best location in Northfield to find Blue-winged Warblers, which nest here. The meadow and trees surrounding it have proved to be their favorite haunts over the years. A rare visitor, but becoming more frequent, is the Lawrence's Warbler. This hybrid between Blue-winged and Golden-winged warbler has been the subject of discussion among the experts as to its future status due to the decline of the Golden-wing.

From the southern end of the parking lot (near the putting green), an old cart road takes you down through vine thickets, which open up to a large wetland and brook known as the Millbrook Wetland Area. This area also has a marked trail system with a map box at the beginning of the road. It is on and around this trail system, which circumnavigates the wetland and brook, that most of the birding here can be easily done. The main cart path is perhaps the easiest walk, although all the trails are relatively flat. The area is mostly wooded, with the golf course visible on the left, wetland on the right. Wood and Hermit thrushes are easy to find here, and you should at least hear a pair of Pileated Woodpeckers that nest in this section. Marked trails branch off of this road, but if you are short on time, this abbreviated walk will still be rewarding. Warblers such as Pine (common), Black-throated Green, and Black-throated Blue (less common) are found on their breeding territory here. The road ultimately comes to a cornfield and overgrown meadow (less than a mile to this point) where you can check the thickets along the edges. I found a White-eyed Vireo in migration once in these thickets, which illustrates that surprises are always a possibility. If for some reason you haven't found a Blue-winged Warbler by now, this overgrown meadow is reliable for them as well.

The main cart path is not a loop trail, so you will have to retrace your steps to the parking lot. If you have the time, it would be worth spending a morning birding the entire loop-trail system to cover it completely. But even if you walk this area in part, the birds you can find, particularly in May, will still be worth it. Ruffed Grouse can often be heard drumming along the wooded section of this trail system. Solitary and Spotted Sandpipers are a good bet along the more open brook area. Chimney Swifts are a common sight overhead. Wood



ANDREW MAGEE

Ducks flush out of the stream every time I walk the trail, and mobbing American Crows signal the presence of a Great Horned Owl that is usually roosting in the tall white pines. If you enjoy the game of golf, after birding you can always put away the binoculars and pull out the clubs for an afternoon round.

### Birds You Can Expect to See

Green and Great Blue herons, Wood Duck, Ruffed Grouse, Solitary and Spotted sandpipers, American Woodcock, Great Horned Owl, Chimney Swift, Ruby-throated Hummingbird, Belted Kingfisher, Northern Flicker, Pileated Woodpecker, Eastern Wood-Pewee, Least Flycatcher, Blue-headed and Red-eyed vireos, Tree Swallow, Blue-gray Gnatcatcher, Wood and Hermit thrushes, Veery, Brown Thrasher; Blue-Winged, Nashville, Northern Parula, Chestnut-sided, Magnolia, Yellow-rumped, Black and White, Black-throated Blue, Blackburnian, Black-throated Green, Bay-breasted, Blackpoll, Pine, Palm, Yellow, Canada, and Wilson's warblers, Ovenbird, Louisiana Waterthrush, Common Yellowthroat, American Redstart, Swamp Sparrow, and Indigo Bunting. 

*Mark Taylor is an avid birdwatcher and field-trip leader who has lived in Northfield for the past fifteen years. He has been affiliated with and a member of the Athol Bird and Nature Club, Athol, Massachusetts, and has led field trips through Northfield for the Brookline Bird Club. Mark has written articles for the Athol Bird Club Newsletter and Bird Observer. He has traveled throughout the United States and Canada to pursue this interest and has more than 500 life birds to his credit.*

*Editor's note:* Mark Taylor's article and Andrew Magee's illustrations are part of an upcoming bird finding guide to western Massachusetts that will be published within the year. This comprehensive guide will cover birding sites from western Worcester County to the New York state line. Thirty-five illustrations and more than sixty-five maps will accompany the text. It will also discuss conservation and habitat protection issues in the western part of the state. To be notified when the guide becomes available, please send an e-mail to [books@umext.umass.edu](mailto:books@umext.umass.edu). If you do not have e-mail, call 877-UMASSXT (toll-free in Massachusetts) or 413-545-2717 and select option 3. Andrew Magee has been a field observer, drawing and sketching the natural world since childhood. He also illustrated *A Guide to Amphibians and Reptiles* by Thomas F. Tynning. He lives in Conway, Massachusetts.



# The Rise and Decline of House Finches in Massachusetts

Thomas R. Hamilton

House Finches (*Carpodacus mexicanus*) illegally released on Long Island, New York, in 1941 are believed to be the progenitors of the eastern population, and the subsequent rapid expansion of this population is well documented (Hill 1993). Although thousands of House Finches were shipped from the west coast to the east, Veit and Lewis (1996) estimate that the entire eastern population is descended from approximately eighty individuals. During the next fifty years, the eastern population relentlessly expanded to the north, south, and west while the western population expanded to the east more slowly (Hamilton 1992a), and by now the two populations have probably met. For a time it appeared to many birdwatchers in eastern North America as though House Finches would overwhelm other passerines, especially at winter feeding stations; however, in recent years many birdwatchers have observed a remarkable decline in the number of House Finches in the East.

In the winter of 1993-1994 House Finches began appearing at backyard feeding stations in the Washington D.C. area with one or both eyes swollen and covered with a crusty secretion (Kammermeier 1999). The disease, known as mycoplasmal conjunctivitis, is caused by a parasitic bacterium (*Mycoplasma gallisepticum*) that previously was thought to infect only poultry (Dhondt 1998). Because of an increasing number of diseased House Finches reported by participants in the Cornell University Laboratory of Ornithology's FeederWatch Program, it was apparent that a highly

infectious disease was spreading through the eastern House Finch population. This presented a unique opportunity to document the spread of an infectious disease through a wild bird population, and soon a group of FeederWatch volunteers and Lab members initiated the House Finch Disease Survey to track the appearance of conjunctivitis-afflicted birds visiting backyard feeding stations (Dhondt 1996). By November 1994 the disease had spread as far north as southern Ontario and along the east coast to New Hampshire. During the following year, diseased birds began appearing as far west as Illinois and as far south as Georgia. In 1996 the disease had crossed the Mississippi and was affecting House Finches in southern Wisconsin and eastern portions of Iowa and Missouri. During 1997 the disease continued its westward expansion, and affected birds were reported in North Dakota, Kansas, and eastern Nebraska (Dhondt 1998). It is possible that mycoplasmal conjunctivitis will



DAVID LARSON

spread to the western House Finch population, and there have been confirmed reports of afflicted birds as far west as Waco, Texas, and Lincoln, Nebraska (Hartup 1999).

Although *M. gallisepticum* appears to primarily affect House Finches in the wild, there have been confirmed reports of mycoplasmal conjunctivitis in American Goldfinches (*Carduelis tristis*), Purple Finches (*Carpodacus purpureus*), and House Sparrows (*Passer domesticus*) (Hartup et al. 1998; Fischer et al. 1997). In a recent study of how the disease may spread to other species, Hartup and his colleagues (2000) found that feeders with diseased House Finches present were more likely to have diseased Goldfinches, Purple Finches, and House Sparrows than feeders without diseased House Finches. In a field study of twenty-three species of songbirds in upstate New York, ten percent of the 196 House Finches examined showed signs of conjunctivitis (eyelid swelling or discharge), but only two percent (four of 169) of the Goldfinches and two percent (one of 45) of the Purple Finches appeared to be affected (Hartup et al. 2000). A more recent analysis of data from the House Finch Disease Survey of the Cornell Laboratory of Ornithology (Hartup et al. 2001) found reports of 675 cases of conjunctivitis in 31 species other than house finches, with seventy-five percent of these cases observed in Goldfinches, Purple Finches, and House Sparrows; however, these represent only two percent of the total number of diseased birds observed. Based on these findings, it appears that the prevalence of *M. gallisepticum* infections in hosts other than House Finches was very low. Some passerine species, however, appear to be nonsymptomatic carriers of *M. gallisepticum*, and there is growing evidence that the pathogen carried by wild birds may pose a threat to the poultry industry (Luttrell et al. 2001).

Mycoplasmal conjunctivitis is a highly contagious, debilitating, often lethal disease for a wild bird because of the serious handicap impaired vision creates for finding food and avoiding predation. Afflicted birds are often lethargic and stay around feeders, living off easily accessible food. My own experience has been that severely afflicted birds are so passive they can easily be approached and picked up. The highly contagious nature of this disease in House Finches was confirmed in a laboratory study using finches that had been infected with *M. gallisepticum*: all the birds developed conjunctivitis within 2-4 weeks, lost weight and usually died (Luttrell et al. 1998). However, in another study of captive House Finches that were known to be disease-free and subsequently exposed to infected birds, seventy-three percent of the birds developed conjunctivitis that resolved after a few weeks, while the other twenty-seven percent suffered for a more prolonged period (Roberts et al. 2001). Even if captive birds can survive infections of *M. gallisepticum*, it is not likely that wild birds could survive very long under more harsh natural environmental conditions — this must be especially true during winter months.

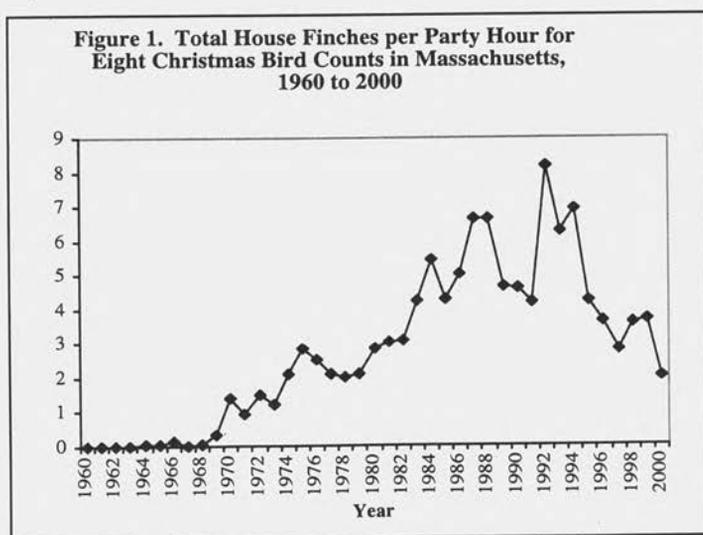
## Method

If mycoplasmal conjunctivitis is affecting songbird populations in Massachusetts, then it is likely that a decrease in numbers of birds recorded during annual Christmas Bird Counts (CBC) would correlate with the appearance of the disease. Christmas Bird Counts have been shown to be a reliable method for tracking long-term trends in

some bird populations; however, there are some inherent difficulties in using these data (Hamilton 2000). In order to document changes in the size of the populations of House Finches, American Goldfinches, and House Sparrows in Massachusetts, I researched CBCs for eight count circles — four inland and four coastal — that had been surveyed consistently (with few exceptions) since 1960. The CBC circles I used for this study were Cape Ann, Cape Cod, Marshfield, Quincy, Northampton, Springfield, Worcester, and Central Berkshires — the same areas I used in a previous study of frugivorous population trends in Massachusetts (Hamilton 1997). In order to allow year-to-year comparisons, I calculated total birds per party hour by dividing the total number of birds of each species counted in the eight count circles by the total number of party hours.

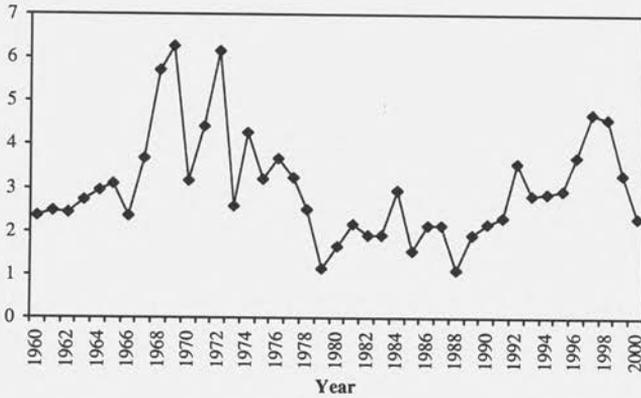
## Results

From the data illustrated in Figure 1, the phenomenal increase in the numbers of House Finches from when they were first included in a CBC in 1961 is obvious, as is the decline that occurred soon after the high point of 8.1 birds per party hour in 1992. The general decreasing trend after 1992 is dramatic and includes a decrease of seventy-one percent from the time mycoplasmal conjunctivitis first appeared in Massachusetts in 1994 to the present. To some extent, the curve in Figure 1 resembles an S-shaped growth curve, which is characteristic of an idealized population introduced into an area in which there is abundant food, high reproductive rate, and low predation, thus permitting increasingly rapid expansion until environmental constraints begin to suppress continued growth.



The data in Figure 2 suggest that, with the exception of a few episodic irruptions, the general trend since 1960 for winter populations of American Goldfinches is stable. The counts for 1999 and 2000 may appear to be the beginning of a downward trend,

**Figure 2. Total American Goldfinches per Party Hour for Eight Christmas Bird Counts in Massachusetts, 1960 to 2000**



but the number of birds per party hour is still close to the mean for the forty-year period used in this analysis.

Figure 3 suggests that House Sparrows have been in a general decline for about thirty years. The more recent decrease in House Sparrows is well within the range of fluctuations that have occurred over the last fifteen years. As is the case with Goldfinches, there does not appear to be a correlation between the appearance of mycoplasmal conjunctivitis and changes in the size of the winter House Sparrow population.

**Figure 3. Total House Sparrows per Party Hour for Eight Christmas Bird Counts in Massachusetts, 1960 to 2000**



## Discussion

The graph in Figure 1 indicates that the decline in House Finches started at about the time mycoplasmal conjunctivitis-afflicted birds began to appear at feeding stations. This bacterium is highly contagious and it is likely that the disease is transmitted to healthy birds when they come into contact with an infected bird or with an object touched by a diseased bird. Although *M. gallisepticum* can be transmitted from parent House Finches to their nestlings (Hartup 1999), it is probable that the disease is more widely spread when the birds congregate at feeding stations. It is possible that tube-type feeders are an important agent of transmission, because as a finch reaches into the feeder to extract a seed, it is likely to come into contact with the sides of the opening. This then affords the opportunity for some of the bacteria to be deposited in an area that is bound to be visited by an uninfected bird. If this is indeed the primary mode of transmission, then platform-like feeders would appear to reduce the possibility of transmission of *M. gallisepticum*. Hartup and his colleagues (1998) found an increase in the frequency of infection associated with cooler months from September through March, and with feeding stations that use tube-type feeders. They suggested that the use of raised platform-type feeders may have some protective value against spread of conjunctivitis. However, in poultry, *M. gallisepticum* is known to be spread by inhalation of contaminated airborne particles and by direct contact (Fisher et al. 1997), and it is quite possible that this mode of transmission may occur in House Finches. This may be especially significant during winter months when House Finches congregate in dense flocks on platform feeders that have been contaminated with feces and discarded seed coats.

Theoretically, when a contagious disease emerges in a dense population, it would be expected to disperse quickly through the population and subsequently affect large numbers of individuals. As the population becomes less dense, fewer healthy individuals will contract the disease, and the population will be established at a lower density. The pathogenic organism, *M. gallisepticum*, has indeed spread rapidly through the eastern House Finch population and can be transmitted by direct or indirect contact with other birds. However, in recent years, anecdotal observations suggest that the proportion of affected birds in Massachusetts has decreased as the population became less dense. These observations are supported by a study that showed that areas in which House Finch population densities were initially low failed to show significant declines when the disease appeared in the population (Hochachka and Dhondt 2000).

It is possible that in recent years House Finches have become less dependent on backyard feeding stations and are now more elusive during the winter, thus resulting in their being undercounted in Christmas Bird Counts, creating the illusion that the House Finch population is in decline. There is evidence that House Finches are developing a tendency to migrate to the south in the winter (Hamilton and Novis 1994; Hamilton 1992b), although in the past they have presumably been replaced by other finches from the north. If larger numbers of finches are indeed migrating out of Massachusetts in the winter and are not being replaced by birds from the north, then this could account for the reduced numbers seen during CBCs. However, it should be

noted that the decline of House Finches in Massachusetts has also been documented by summer Breeding Bird Surveys that show a dramatic decline in the number of breeding finches since 1996 (Sauer et al. 2001).

## Conclusions

The appearance of mycoplasmal conjunctivitis appears to be correlated with the decrease in the winter House Finch population in Massachusetts. It is likely that birdfeeders are an important mechanism by which the causative bacteria are transferred to uninfected birds. There is evidence that other songbirds are infected with the bacteria; however, they are either asymptomatic or they manifest the disease at a much lower rate than House Finches. Bird feeders should be cleaned and disinfected every time they are refilled in order to reduce the probability that feeders are the source of infection. If mycoplasmal conjunctivitis remains endemic in the House Finch population, it is likely that the size of the House Finch population will stabilize at a level that is significantly lower than the peak reached in 1992. 🐦

## References

- Dhondt, A.A. 1996. Finch disease update. *Birdscope* 10 (2): 4.
- Dhondt, A.A. 1998. House Finch eye disease heads steadily west. *Birdscope* 12 (1): 11-2.
- Fischer, J.R., D.E. Stallknecht, P. Lutrell, A.A. Dhondt and K.A. Converse. 1997. Mycoplasmal conjunctivitis in wild songbirds: the spread of a new contagious disease in a mobile host population. *Emerging Infectious Diseases* 3 (1): 69-72.
- Hamilton, T.R. 1992a. House Finch winter range expansion as documented by Christmas bird counts, 1950-1990. *Indiana Audubon Quarterly* 70: 147-53.
- Hamilton, T.R. 1992b. Turnover within a population of House Finches in the Midwest. *North American Bird Bander* 17: 116-8.
- Hamilton, T.R. 1997. Using Christmas bird counts to track population trends of four frugivorous passerines. *Bird Observer* 25 (2): 84-90.
- Hamilton, T.R. 2000. Winter population trends of six species of sparrows. *Bird Observer* 28 (3): 154-63.
- Hamilton, T.R. and E.M. Novis. 1994. The migratory pattern of House Finches in Eastern North America. *North American Bird Bander* 19: 45-8.
- Hartup, B.K. 1999. House Finch disease 1997-98. *Birdscope* 13 (1): 7-12.
- Hartup, B.K., H.O. Mohammed, G.V. Kollias, and A.A. Dhondt. 1998. Risk factors associated with mycoplasmal conjunctivitis in house finches. *Journal of Wildlife Diseases* 34 (2): 281-8.
- Hartup, B.K. and G.V. Kollias. 1999. Field investigation of *Mycoplasma gallisepticum* infections in House Finch (*Carpodacus mexicanus*) eggs and nestlings. *Avian Diseases* 43 (3): 572-6.
- Hartup, B.K., G.V. Kollias and D.H. Ley. 2000. Mycoplasmal conjunctivitis in songbirds from New York. *Journal of Wildlife Diseases* 36 (2): 257-64.
- Hartup, B.K., A.A. Dhondt, K.V. Sydenstricker, W.M. Hochachka and G.V. Kollias. 2001. Host range and dynamics of mycoplasmal conjunctivitis among birds in North America. *Journal of Wildlife Diseases* 37 (1): 72-81.

- Hill, G.E. 1993. House Finch (*Carpodacus mexicanus*). In *Birds of North America, No 45*, A. Poole and G. Gill, Eds. Philadelphia: The Academy of Natural Sciences, Washington, D.C. The American Ornithologists' Union.
- Hochachka, W.M. and A.A Dhondt. 2000. Density-dependent decline of host abundance resulting from a new infectious disease. *Proceedings of the National Academy of Science* 97 (10): 5303-6.
- Kammermeier, L. 1999. Population dynamics of the House Finch. *Birdscope* 13 (2): 15.
- Luttrell, M.P., D.E. Stallknecht, J.R. Fisher, C.T. Sewell, and S.H. Kleven. 1998. Natural *Mycoplasma gallisepticum* infection in a captive flock of House Finches. *Journal of Wildlife Diseases* 34 (2): 289-96.
- Luttrell, J.P., D.E. Stallknecht, S.H. Kleven, D.M. Kavanaugh, J.L. Corn and J.R. Fischer. 2001. *Mycoplasma gallisepticum* in House Finches (*Carpodacus mexicanus*) and other wild birds associated with poultry production facilities. *Avian Diseases* 45 (2): 321-9.
- Roberts, S.R., P.M. Nolan and G.E. Hill. 2001. Characterization of *Mycoplasma gallisepticum* infection in captive House Finches (*Carpodacus mexicanus*) in 1998. *Avian Diseases* 45 (1): 70-5.
- Sauer, J.R., J.E. Hines, and J. Fallon. 2001. *The North American Breeding Bird Survey Results and Analysis 1966 - 2000. Version 2001.2*. Patuxent Wildlife Research Center, Laurel, MD. <[www.mbr.nbs.gov/bbs/bbs.html](http://www.mbr.nbs.gov/bbs/bbs.html)>.
- Veit, R.R. and M.A. Lewis. 1996. Dispersal, population growth, and the Allee effect: dynamics of the House Finch invasion of eastern North America. *American Naturalist* 148:255-74.

*Thomas R. Hamilton teaches biology at Phillips Academy, Andover, MA, and is a member of the Merrimac Valley Bird Club. This study was supported, in part, by a summer grant from the Kenan Charitable Fund of Phillips Academy. He is thankful that the National Audubon Society and Cornell University Laboratory of Ornithology have made data from all Christmas Bird Counts available on the Internet <<http://birdsource.cornell.edu/cbc/index.html>>. He is appreciative of the assistance he received from the staff of the Oliver Wendell Holmes Library of Phillips Academy, and the Peabody Museum of Salem, MA. He is also grateful for suggestions from J.A. Hamilton.*

#### News from MassWildlife

**Quabbin Access** - Eagle-watchers are once again enjoying the view of Quabbin Reservoir and the Prescott Peninsula afforded by access to the Enfield Lookout. The Metropolitan District Commission (MDC) advises that sections of the Quabbin Reservation have been reopened to the public including the area between Gate 3A and Gate 5 in Belchertown, portions of the Quabbin Park in Ware and access to the MDC Administration Building and the Quabbin Visitor Center in Belchertown. The main and middle entrances to Quabbin Park off Route 9 are also open, although vehicle traffic is prohibited on the roadways across the Winsor Dam and Goodnough Dike. Pedestrian access on these roads is permitted. Still closed are areas between Gates 40 and 50 and the area in Quabbin Park south of the Administration Road between the main and middle entrances.

# Unexpected Centers of Winter Landbird Density During the 101<sup>st</sup> CBC

S. S. Mitra

## Introduction

What do Dismal Swamp, VA, Belleplain, NJ, and Block Island, RI have in common? Their CBC circles hosted the greatest densities (individuals/party-hour) of Hermit Thrushes (*Catharus guttatus*) in North America during the 101<sup>st</sup> Christmas Bird Count. Examination of the BirdSource database revealed that these three counts also ranked highly among all CBCs for several other eastern North American landbird species, including Gray Catbird (*Dumetella carolinensis*), Yellow-rumped (Myrtle) Warbler (*Dendroica c. coronata*), and White-throated Sparrow (*Zonotrichia albicollis*). Furthermore, several other count circles were conspicuous among the leaders for multiple species (e.g., Lake Village, AR and Tensas River N.W.R., LA). Given that all of the species named above are relatively widespread, and that 1,880 CBCs were conducted across the USA and Canada, it seemed noteworthy that a few count circles could produce the highest densities for multiple species.

Previous research has already demonstrated that Hermit Thrushes, Gray Catbirds, and several other species whose primary winter distributions lie well to the south of New England are capable of overwintering on Block Island with success comparable to that of the most numerous species wintering there (Mitra and Raithe1 2001). With that knowledge in mind, it struck me as significant that preliminary results from the 101<sup>st</sup> CBC seemed to imply that some of these species were present at unexpectedly high *absolute* winter densities there as well. These observations motivated the present study, in which I have attempted to identify general patterns in the distributions of landbirds wintering in the thickets of southeastern North America.

In general, one might expect that the highest densities of the most abundant and widespread species should be concentrated in the southernmost states, with some bias toward the Atlantic and Gulf coasts. Nevertheless, some exceptions leap to mind. For instance, it has become obvious in recent years that a number of Neotropical migrants whose “normal” winter distributions lie wholly south of the United States are encountered regularly on North American CBCs. Astonishingly, several of these CBC novelties (e.g., Yellow-breasted Chat [*Icteria virens*], Baltimore Oriole [*Icterus galbula*], and Dickcissel [*Spiza americana*]) are no more likely to be encountered in South Florida — or anywhere else in the southern USA — than in the coastal thickets of New England and the Canadian Maritimes.

To what extent are these well-known examples really exceptional? Is it possible that similar eccentric trends characterize populations of other, more numerous species wintering in eastern North American thickets? Here I describe an index that can be used to compare the densities of a set of selected species across all CBC circles. Using this index, which objectively quantifies differences among count circles, I have

attempted to identify composite centers of abundance for ten species wintering in eastern North American thickets, to interpret the spatial distribution of these hot spots, and to assess patterns of co-occurrence among species across southeastern North America.

## Methods

The analysis was based on ten thicket-dwelling landbird species with extensive winter distributions in southeastern North America: Carolina Wren (*Thryothorus ludovicianus*), Hermit Thrush, Gray Catbird, Northern Mockingbird (*Mimus polyglottos*), Myrtle Warbler, Eastern Towhee (*Pipilo erythrophthalmus*), Song Sparrow (*Melospiza melodia*), Swamp Sparrow (*M. georgiana*), White-throated Sparrow, and Northern Cardinal (*Cardinalis cardinalis*). For each species, I extracted from BirdSource the top 100 CBC densities for the 101<sup>st</sup> count period, and then compiled a matrix of count circles versus species, with density ranks as the cell values. A total of 492 CBCs appeared on at least one top-100 list. Wherever one of these CBCs ranked below the top-100 for a particular species, it was assigned a dummy rank of 101<sup>st</sup>. Thus I was able to compute an average rank for each CBC across the ten focal species.

Thus computed, the average ranks tended to be higher for counts with high ranks (e.g., 1-20) for a few species than for counts with lower ranks (e.g., 80-100) for many species—an unintended and undesirable consequence of choosing 101 as the dummy value. Substituting larger dummy ranks (e.g., 200 or 500, instead of 101) tended to relieve this bias, but left open the question of which arbitrary value to select. I settled on a more objective method of addressing the bias associated with the original raw averages—namely dividing each count's average rank by the square root of the number of species for which that count ranked in the top 100 (Figure 1). The resulting weighted index produced results very similar to those generated by the use of very large dummy ranks.

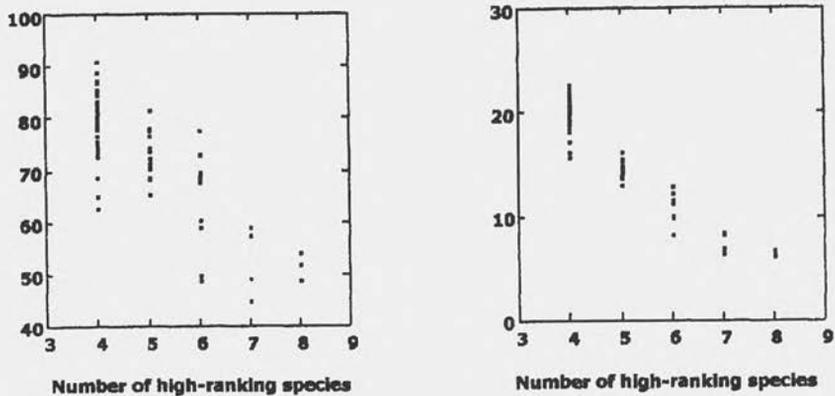


Figure 1. Unweighted average rank (left) and the weighted index (right) in relation to number of high-ranking focal species, across CBCs featuring at least four high-ranking species. Use of the weighted index tended to reduce instances in which counts featuring a few very high-ranking species outranked counts featuring many moderately high-ranking species (see text).

**Table 1.** Count circles with the highest density indices for ten species of birds wintering in eastern North American thickets, 101<sup>st</sup> CBC, Dec 2000-Jan 2001. Number of top-50 CBCs for each state in parentheses following the state's highest-ranking CBC.

	<b>CBC Circle</b>	<b>Index<sup>1</sup></b>	<b>Avrank<sup>2</sup></b>	<b>Spp<sup>3</sup></b>
1	Block Island, RI (2)	17.0	44.9	7
2	Lacassine N.W.R. - Thornwell, LA (5)	17.3	48.9	8
3	Wayne County, NC (6)	18.4	52.0	8
4	Lake Village, AR (5)	18.6	49.2	7
5	Crowley, LA	19.2	54.2	8
6	Dismal Swamp, VA (3)	20.0	48.9	6
7	Tensas River, N.W.R.	20.3	49.8	6
8	Chincoteague N.W.R., VA	21.7	57.4	7
9	Cape Charles, VA	22.4	59.2	7
10	Moon Lake (Lula), MS (4)	24.1	59.1	6
11	Southern Dorchester County, MD (2)	24.7	60.6	6
12	Macon, GA (3)	27.6	67.7	6
13	Southport-Bald Head-Oak Islands, NC	27.9	68.3	6
14	Tallahassee, FL (4)	28.2	69.1	6
15	Lafayette, LA	28.3	69.3	6
16	Mountain Home, AR	28.5	69.7	6
17	Buffalo National River (east), AR	29.3	65.6	5
18	McClellanville, SC (2)	29.9	73.2	6
19	Pee Dee N.W.R., NC	30.6	68.4	5
20	Wapanocca N.W.R., AR	30.7	68.7	5
21	Big Lake N.W.R., AR	31.5	62.9	4
22	Savannah River Site, SC	31.6	70.6	5
23	Columbia, TN (5)	31.8	71.0	5
24	Newport County-Westport, RI	31.8	77.9	6
25	Mingo N.W.R., MO (1)	31.9	71.3	5
26	Hiwassee, TN	32.0	71.5	5
27	Chapel Hill, NC	32.4	72.5	5
28	Tuckermuck Island, MA (1)	32.6	65.2	4
29	Memphis, TN	33.0	73.9	5
30	Eagle Lake, MS	33.3	74.4	5
31	Fayette County, TN	33.4	74.6	5
32	Lake Blackshear, GA	34.4	77.0	5
33	Horseshoe Lake, IL (2)	34.5	69.0	4
34	Arkabutia Lake, MS	34.8	77.9	5
35	Jackson County, IL (2)	34.9	78.0	5
36	Tenaha-Timpson, TX (2)	35.0	78.2	5
37	Piedmont N.W.R.-Rum Creek W.M.A., GA	36.5	73.0	4
38	Nashville, TN	36.5	81.7	5
39	Lake Placid, FL	36.8	73.5	4
40	Cedar Key, FL	36.8	73.6	4
41	Crisfield, MD	37.1	74.1	4
42	Ocracoke Island, NC	37.3	74.5	4
43	Raleigh, NC	37.4	74.7	4
44	Apalachicola Bay-St. Vincent N.W.R., FL	37.6	75.2	4
45	Brazos Bend, TX	37.7	75.3	4
46	Eufaula N.W.R., AL (1)	37.9	75.8	4
47	Southern Hancock County, MS	38.4	76.8	4
48	Reserve-Bonnet Carre Spillway, LA	39.0	78.0	4
49	Belleplain, NJ (1)	39.2	78.3	4
50	McDowell County, WV (1)	39.4	78.8	4

<sup>1</sup>Index computed as Avrank divided by square root of Spp

<sup>2</sup>Avrank computed as the average of the count's ranks for the ten focal species (all ranks below 100 treated as 101; see text)

<sup>3</sup>Spp computed as the number of the ten focal species for which the reported density (birds per party-hour) ranked among the top 100 of all CBCs

The selection of species obviously had critical implications for the results. I deliberately excluded several mobile, flocking species (e.g., American Robin [*Turdus migratorius*] and Cedar Waxwing [*Bombycilla cedrorum*]) and several species very rare in winter north of NJ (e.g., Ruby-crowned Kinglet [*Regulus calendula*] and Common Yellowthroat [*Geothlypis trichas*]). I also excluded Fox Sparrow (*Passerella iliaca*) because this species appears in the BirdSource Database under a bewildering array of partially overlapping taxonomic groupings. Many other species were excluded on the basis of their preference for relatively open (or conversely, relatively wooded) habitats in portions of their winter ranges (e.g., Palm Warbler [*Dendroica palmarum*], Chipping Sparrow [*Spizella passerina*], Slate-colored Junco [*Junco h. hyemalis*]). Several other species might easily have been included, notably Brown Thrasher (*Toxostoma rufum*), Winter Wren (*Troglodytes troglodytes*), and Orange-crowned Warbler (*Vermivora celata*). It should be noted that adding extra species imposes a computational burden, because each additional species adds not only its own values to the matrix, but requires inclusion of all the CBCs unique to its top-100 list. In light of these considerations, I argue that the ten species chosen provided the best compromise between convenience and rigor.

## Results

A total of 492 CBCs produced a high-ranking density (among the top 100 overall) for at least one of the ten species considered. Of these CBCs, 34 produced high-ranking densities for five or more species, and 255 produced such a density for just a single species. All of the 34 CBCs with high-ranking densities for five or more species, as well as the 39 CBCs with the highest unweighted average ranks, were among the 50 CBCs with the highest overall indexes (Table 1). The highest index was that of Block Island, RI (17.0), followed by Lacassine NWR-Thornwell, LA (17.3) and Wayne County, NC (18.4). The most striking feature of the highest-ranking CBCs is their geographic dispersion. Rather than clustering in the extreme southeastern USA or the lower Mississippi River Valley (MRV), the 50 highest-ranking circles were distributed among 18 states, extending as far north in the Mississippi and Ohio River valleys as Horseshoe Lake, IL, and McDowell Co., WV, and as far north on the Atlantic Ocean coast as Newport County-Westport, RI/MA, and Tuckernuck Island, MA — in other words, around much of the low-elevation periphery of the eastern USA (Table 1).

The ten species analyzed were all widespread, appearing on 335 (Gray Catbird) to 1464 (Song Sparrow) of 1880 CBCs conducted in the USA and Canada (Table 2). As might be expected, their absolute densities (over each species' top 100 CBCs) varied a great deal: 0.6 individuals per party-hour for Gray Catbird to 21.0 for Myrtle Warbler. The ten species also varied strikingly in their geographical associations with one another. For instance, among the top 100 Northern Cardinal CBC densities, 45 were recorded on counts lacking top 100 densities for any of the nine other species. This was largely a consequence of Northern Cardinal's unusual (among the species considered here) center of abundance around the southern Great Lakes and upper MRV (i.e., around the states of IA, WI, IL, IN, and OH). Similarly, Song Sparrow was the only high-ranking focal species on 39 of its 100 counts. In this case, the lack of

**Table 2.** Summary of CBC data for ten species of birds wintering in eastern North American thickets, 2000-2001

Species	CBCs reporting species	Approximate focus of CBCs with highest densities	Average density <sup>1</sup>	CBCs where <sup>2</sup>
Carolina Wren	823	None	1.7	17
Hermit Thrush	862	None	0.9	28
Gray Catbird	335	Florida	0.6	28
Northern Mockingbird	981	Texas/Lower MRV	2.5	36
Myrtle Warbler	810	Coastal, MA-LA	21.0	12
Eastern Towhee	564	None	1.1	15
Song Sparrow	1464	MRV <sup>3</sup>	6.9	39
Swamp Sparrow	738	MRV	3.0	7
White-throated Sparrow	1063	None	10.9	28
Northern Cardinal	1190	S. Great Lakes-MRV	9.7	45

<sup>1</sup>Average density (birds per party-hour) across each species' top 100 CBCs

<sup>2</sup>Number of CBCs for which this was the only top-100 ranking species

<sup>3</sup>Also Pacific coast, BC-CA

association with other species was a direct consequence of this species' abundance in other parts of North America — notably along the Pacific coast, from BC to CA. In contrast, all but seven of the top 100 Swamp Sparrow densities were recorded on counts featuring high densities for at least one other focal species, as were all but twelve of Myrtle Warbler's top 100 densities. These latter two species were obviously concentrated in regions featuring generally high densities of the other thicket-dwelling species — the lower MRV for Swamp Sparrow, and coastal thickets (albeit from MA to LA) for Myrtle Warbler. Overlap between pairs of species averaged 22.9 shared counts across the 45 pairwise comparisons and varied from just three counts shared between Gray Catbird and Northern Cardinal to 55 counts shared between Gray Catbird and Myrtle Warbler (Table 3).

**Table 3.** Number of CBCs in which both members of a pair of species appeared at high density (among the top 100 CBCs for each species) on the 101<sup>st</sup> CBC. See text for full species names.

	HETH	GRCA	NOMO	MYWA	EATO	SWSP	SOSP	WTSP	NOCA
CARW	35	11	22	18	40	34	22	38	26
HETH		16	14	24	27	40	24	31	18
GRCA			16	55	21	38	8	9	3
NOMO				18	18	16	6	15	25
MYWA					29	43	14	13	5
EATO						33	22	21	12
SWSP							38	29	18
SOSP								27	14
WTSP									26

Yellow-breasted Chats provided evidence that seasonal vagrancy does not always decrease in frequency as one moves away from a distributional center. This species, which typically winters deep in the Neotropics, exhibited a North American (USA and Canada) CBC locus in southern New England — appearing on eight counts in MA and three in RI. Indeed, more than half (23/40) of all USA and Canadian CBCs reporting Yellow-breasted Chats 2000-2001 were in the Northeast, between New Jersey and Newfoundland (Table 4).

**Table 4.** North American CBCs (USA and Canada) Reporting Yellow-breasted Chat during the 101<sup>st</sup> CBC, by state or province.

State or Province	CBCs with YBCH	Total CBCs (100th CBC)
Newfoundland	1	10
Nova Scotia	2	14
Maine	2	23
Massachusetts	8	32
Rhode Island	3	3
New York	3	67
New Jersey	4	27
Delaware	2	6
Maryland	1	23
Virginia	3	39
North Carolina	3	42
South Carolina	1	16
Florida	3	60
Alabama	1	11
Texas	2	86
California	1	112
All CBCs (USA and Canada)	40	1880

## Discussion

The densities of thicket-dwelling landbirds might vary among CBC circles as a consequence of many factors: climate, food availability, habitat integrity, and nuances of count methodology. In view of these, Block Island might seem an unlikely focus of southeastern North American winter bird populations. After all, it is relatively far north (41° 14' N), exposed to winter storms, small (ca. 10 square miles), and experiencing rapid residential development. Range maps published in several popular North American field guides (Peterson 1980, National Geographic Society 1999, Sibley 2000) depict Block Island near or beyond the northern winter limits of six of the species considered here (Carolina Wren, Hermit Thrush, Gray Catbird, Myrtle Warbler, Eastern Towhee, and Swamp Sparrow), and they place the island well to the north of the centers of the winter distributions for the remaining four species (Northern Mockingbird, Song Sparrow, White-throated Sparrow, and Northern Cardinal).

Even so, its thickets yielded high-ranking densities for five of the six species ostensibly wintering entirely or almost entirely to its south, and for two of the other four species: Carolina Wren (1<sup>st</sup>), Hermit Thrush (3<sup>rd</sup>), Song Sparrow (12<sup>th</sup>), White-throated Sparrow (15<sup>th</sup>), Gray Catbird (17<sup>th</sup>), Myrtle Warbler (22<sup>nd</sup>), and Eastern Towhee (76<sup>th</sup>). Furthermore, the Block Island CBC's Yellow-breasted Chat was detected with just 37.5 party-hours of effort, producing a density value exceeded in the USA and Canada only by two Cape Cod CBCs.

The possibility exists that the high densities recorded on Block Island and other highly ranked CBCs might have been methodological artifacts. Individual results must certainly be affected by variation in weather conditions on count day, and by variation among individual participants, compilers, and editors in the techniques and priority accorded to the admittedly mundane species in question. It is almost certainly true that a combination of favorable conditions on count day, local concentrations of feeders,

use of screech-owl tapes, and other factors unrelated to broad-scale density helped to raise the landbird indexes of some of the count circles listed in Table 1. Nevertheless, the high-ranking counts collectively produced a well-defined — although unexpected — pattern, and it is difficult to conceive how this pattern, in a dataset comprising almost 2000 counts conducted throughout an entire continent over a three week period, could be wholly spurious.

A more general source of concern involves that chronic obstacle to CBC comparability — variation among CBCs in the overall amount of effort employed. The Block Island and Tuckernuck Island CBCs — and several other highly ranked counts, such as Wayne County, NC, Lake Village, AR, and Moon Lake-Lula, MS — employed relatively small numbers of observers. My own personal experience on the Block Island CBC involved covering a large amount of productive habitat relatively rapidly, thereby accumulating relatively high counts per unit time. Observers on CBCs with greater numbers of participants might have tended to work smaller areas at greater leisure, resulting in depressed counts per unit time. This sort of bias is the unavoidable trade-off that arises when CBC tallies are adjusted by dividing them by party-hours, and it undoubtedly influenced many of the results reported herein. Even so, most of the highest index values were produced by CBCs with >20 observers and >80 party-hours (e.g., Lacassine N.W.R.-Thornwell, LA, Crowley, LA, Dismal Swamp, VA, Chincoteague N.W.R., VA, Cape Charles, VA, and Southern Dorchester County, MD). Indeed, the most northerly of the top 50 CBCs was Newport County-Westport, RI/MA (ranked 24<sup>th</sup> overall) — a popular count which received 86.5 party-hours last year. Thus the overall pattern of geographic dispersion observed among the full set of CBCs was equally evident among counts featuring intense coverage. Thus it seems reasonable to conclude that the effort-corrected data employed herein represent the best single approach to the actual densities in question.

If one accepts these caveats, then one conclusion is inescapable: the Yellow-breasted Chat is not unique. The most interesting aspect of the present study is that neither the extralimital chat nor the core wintering species conform to the expectation that winter density should diminish in a regular manner as one moves farther from a distributional center. Even widespread North American winter species echo the chat's eccentric pattern by wintering at relatively high densities at sites distant from the geographical centers of their winter ranges. Collectively, the ten species considered here underscore this pattern: rather than clustering in one or two central areas, CBCs recording unusually high composite densities were distributed around much of the periphery of the ten species' collective winter range.

With respect to Block Island, it is worth noting that several of the species considered here (Carolina Wren, Northern Mockingbird, and Northern Cardinal) were virtually or entirely absent prior to the 1960s. Carolina Wren's rapid proliferation on Block Island, from its first CBC appearance in 1975 to its present abundance, is a striking demonstration of the mutability of the distribution of bird populations. This same process is currently unfolding on Nantucket Island where Carolina Wren was a boldfaced (i.e., very unusual) CBC species as recently as 1990. Similar, incipient expansions might be underway for Fish Crow (*Corvus ossifragus*, which has recently

colonized Block Island, appears to be rapidly increasing there, but has yet to be recorded on Nantucket), and Tufted Titmouse (*Baeolophus bicolor*, which has been recorded twice in recent years on Block Island).

Thus it appears that continent-scale range maps are not adequate to convey the details of many species' winter distributions. This may seem obvious, but the degree to which the centers of abundance reported here departed from expectations was striking and unexpected. Perhaps more significantly, these patterns imply that an overreliance on spatially central population centers in the course of conservation planning could potentially compromise major population foci far from such centers. Indeed, who could have foretold twenty-five years ago that southeastern New England's thickets would feature several of North America's densest concentrations of winter landbirds, or that Block Island would come to host the planet's highest density of Carolina Wrens? 

## References

- BirdSource. 2001. <<http://www.birdsource.org>> Christmas Bird Count Database. National Audubon Society.
- Mitra, S. and C. Raithel. 2001. Seasonal trends in species richness and density among landbirds wintering on Block Island, Rhode Island. *North American Birds* 55: 7-12.
- National Geographic Society. 1999. *Field Guide to the Birds of North America*. Washington, D.C.: National Geographic Society.
- Peterson, R.T. 1980. *A Field Guide to the Birds*. Boston: Houghton Mifflin.
- Sibley, D.A. 2000. *The Sibley Guide to Birds*. New York: Knopf.

*S. S. Mitra is a Postdoctoral Research Associate in the department of Natural Resources Science at the University of Rhode Island, Kingston. In addition to depending on the efforts of all those who participated in the 101<sup>st</sup> CBC, this study owes its conception and development to countless hours of thicket-birding and conversation with P. Lindsay and C. Raithel.*



GEORGE C. WEST

# First Documented Nesting of White-winged Crossbill (*Loxia leucoptera*) in Massachusetts: The Invasion of the Cone Slashers

Geoffrey S. LeBaron

It is fascinating how an innocent comment can set the wheels in motion leading to ornithological discoveries. In July of 2000 the members of the Hampshire Bird Club in Berkshire County received a tantalizing report from our President, Mary Alice Wilson. She suspected she had located a breeding locality for Swainson's Thrushes in the deep spruce/hemlock forests of Colrain State Forest in Colrain and the adjoining Cook State Forest in Heath. In the context of her description, she mentioned that White-winged Crossbills were also present at the same location. While the Swainson's Thrush report was of interest due to the species' status as a rare breeder in this state, the presence of White-winged Crossbills in July also seemed quite unusual — and the latter species remained absent from my year 2000 bird list, unlike the Swainson's Thrush! Thus I undertook a trip of two-pronged investigation to those lovely, deep forests. While I missed Swainson's Thrushes on subsequent visits, there were many White-winged Crossbills throughout the forest, mostly small groups of immature birds accompanied by one or two adults. These roving flocks of crossbills notably preferred the cones of native spruces to the intermixed stands of introduced Norway spruce, although cones were abundant on nearly all spruces. It seemed quite likely that they had bred somewhere nearby in the recent past, but this location is adjacent to the Vermont state line, and immediately to the north are the great expanses of the Green



DAVID SMALL

Mountain National Forest, a potential fertile breeding ground for crossbills. It seemed entirely possible — although not certain — that these birds could have moved a short distance southward from the Green Mountain State.

However, my interest was piqued. In early August I made a trip to Flintstone Road in Windsor, another area of deep native spruce forest, and also turned up flocks of mostly immature White-winged Crossbills. While Windsor is significantly farther from the Vermont and New York state lines, crossbills are propitious wanderers immediately after fledging, and the spruce forests of Windsor are certainly within the wandering reach of post-fledging birds. Anecdotally, there is a specimen of White-winged Crossbill in the bird collection of the Academy of Natural Sciences in Philadelphia with only a latitude and longitude as a locality. The lat/long on the label works out to a location *east* of the Sargasso Sea — in the middle of the Atlantic Ocean! The bird landed on a ship doing oceanographic research in the mid-Atlantic. This type of wandering behavior also explains a small breeding population of White-winged Crossbills in the coniferous forests of the highlands of Hispaniola in the Greater Antilles — far separated from the boreal forests of northern North America and Eurasia. “The resident status of the WWCR in the West Indies, a species typical of northern coniferous forest, supports the argument that the region was more temperate during the Pleistocene. As the West Indies warmed up during the past few thousand years, this species was ‘trapped’ in the last cool refugium on the islands, the high peaks of Hispaniola.” (Raffaele 1998)

Weather and other natural conditions in late 1999 through the summer of 2000 produced a bumper crop of all types of coniferous seeds throughout the Berkshires — as well as to the north in Vermont and New Hampshire. While human observers tend to think of crossbills, and especially White-winged, as “winter finches” that irrupt southward during the cold months in response to poor seed crops in the north, in fact those movements can occur in any month of the year. In addition, White-winged Crossbills breed readily year-round when ample seed crops are found, and they quickly vacate to more seed-laden coniferous forests once favored local crops are consumed. The ample bounty in the spruce forests of the Berkshires during the summer and fall of 2000 was apparently a magnet keeping White-winged Crossbills in the area, and I found this species on every subsequent visit to Flintstone Road, Moran Wildlife Management Area, and the surrounding areas of Windsor and Savoy during 2000.

In fact, the original direction of this particular flight of White-winged Crossbills is open to question. The winter of 1999-2000 had produced a good “winter finch” flight, and both crossbill species had moved through this area to points south during that season. It is not out of the question that the birds arrived in Massachusetts from the south, on their way back north to their usual coniferous breeding grounds of northern New England and across Canada.

New Year’s Day 2001 brought my traditional jaunt to areas of interest to find a good list of birds to start the year, and it seemed only natural to visit Flintstone Road in Windsor to view the White-winged Crossbills there. Harvey Allen, one of the deans

of the Hampshire Bird Club, had mentioned at our December meeting that the male crossbills were teed up singing in Windsor. On January 1 they were indeed perched atop spruces scattered all through the forest, twittering and trilling away, and performing their skylarking courtship display. Females were conspicuously absent, suggesting that they were busy with another activity, perhaps incubating clutches of eggs. It was a marvelous sight and sound to behold. In a conversation with Wayne Petersen, Field Ornithologist for the Massachusetts Audubon Society, shortly thereafter, I commented that "White-winged Crossbills were in the process of bringing off their second or third brood of young in western Massachusetts." "*Hold on!*" was Wayne's response. Much to my surprise, the species was undocumented as a breeding bird in well-studied and intensively birded Massachusetts. A rare opportunity had presented itself, and the gauntlet had been thrown down: locate either an active nest or barely fledged young somewhere in the deep spruce forests of western Massachusetts.

I made many visits to the central and northern Berkshires over the next six weeks in search of proof of nesting. I saw pairs of White-winged Crossbills engaging in courtship behavior in Ashfield, Dalton, and especially Windsor and Savoy. Singing and displaying males were plentiful in Dalton, Windsor, Savoy, Hawley, and Ashfield. White-winged Crossbill locations were continuously updated on Massbird, the on-line forum for bird sightings in Massachusetts, and many observers were able to take part in the event, and many interesting behaviors were observed and described. For example, a particularly aggressive male crossbill, singing from a treetop near two sets of well-stocked bird feeders, became especially agitated. He flew directly at me while I was standing by my vehicle on the roadside, passed immediately overhead, and then back to his treetop in a demonstration of territorial defense.

But the elusive goal of documenting nesting eluded me until mid-February. I seldom saw females on forays among the singing males. The nests of White-winged Crossbills are difficult to locate, usually hidden deep near the trunk of a dense conifer, high in the cone-laden treetops. And as January and February of 2001 progressed, repeated snowstorms blanketed the region, limiting access to areas where crossbill nests might be found.

I continued my visits to the crossbill-filled area, if for no other reason than to document the length of the invasion. On February 22, 2001, while traveling along the snowbanks of Route 9 in Windsor, a quick visit to Flintstone Road turned up fewer than usual singing males, but still no females or nests. Back on Route 9, near its intersection with North Street, I saw five birds flutter into the tops of a grove of small, bare tamaracks. One bird was bright pink, and the others, barely able to fly, were short-tailed and stripy brown. Persistence had finally paid off: I observed the male White-winged Crossbill feeding four begging, wing-quivering, barely fledged young. After three or four minutes, the family group dropped into a nearby stand of short spruces, lost to sight. Nesting was finally confirmed in Massachusetts! An adult male feeding fledged young is the norm in species like White-winged Crossbill, since females often immediately re-nest if a plentiful cone seed crop remains available.

Over the next three months many observers attempted to document the magnitude of the crossbills' nesting and continued to search for nests. More stands of spruces



DAVID LARSON

were documented as hosting singing male White-winged Crossbills in previously identified towns, but no nests were found. In large part due to the heavy snow cover, vast areas of spruce forest went uncensused, including most of the great sea of coniferous forest south of Route 2 in Adams and Florida. The frequency of singing males decreased in March and early April, and by May few crossbills were to be found in the now-silent forests of Windsor, Savoy, and Ashfield. A quick flurry of sightings came in late May, when Tom Gagnon and Mark Lynch both had adult male White-winged Crossbills feeding fledged young at the lofty top of Mount Greylock in far northwestern Massachusetts. But the incursion and breeding of White-winged Crossbills in Massachusetts was in decline by late spring of 2001, quite probably as a result of the consumption of the great seed crop of the summer of 2000: "Only 1 brood raised when foraging on tamarack, but often several on large spruce cone crops. Only males observed feeding fledglings during the first month after they appear; females presumably nest again (Benkman 1992)."

The fall season of 2001 has reminded us of the excitement of last winter — White-winged Crossbills have graced the pines in Salisbury Beach and along the coast of New Hampshire, Massachusetts, Rhode Island, and Connecticut in October and November. These enigmatic wanderers have again been present in the Berkshires, including a first-ever occurrence of a White-winged Crossbill at one of my feeders (providing a less-than-subtle prompting to write this promised article for *Bird Observer*). Perhaps the birds raised in Massachusetts earlier this year have come back in search of a coniferous seed crop, or more likely White-winged Crossbills raised in

eastern Canada are moving southward due to a drought-induced lack of cones to our north.

Once again, the unique convergence of professional ornithology with amateur birding has added to our documented knowledge of the avifauna of North America and the world. While many ornithologists contribute to the pool of bird sightings, many more amateur birders add to our ornithological database. Many birders make discoveries while enjoying their own experiences with the enigmatic creatures that ignite their personal passion. When those observations are documented and shared with the ornithological community, both ornithology and conservation are the richer. Perhaps no other branch of science regularly benefits as much from the efforts of "Citizen Science" as does ornithology, fuelled by the knowledge and personal experience of the growing cohort of birders. 

## Sources

- Benkman, C.W. 1992. White-winged Crossbill. In *The Birds of North America, No. 27* (A. Poole, P. Stettenheim, and F. Gill, Eds.). Philadelphia, PA: The Academy of Natural Sciences; Washington, DC: The American Ornithologists' Union.
- Clement, P., A. Harris, and J. Davis. 1993. *Finches and Sparrows: An Identification Guide*. Princeton, NJ: Princeton University Press.
- Raffaele, H., J. Wiley, O. Garrido, A. Keith, and J. Raffaele. 1998. *A Guide to the Birds of the West Indies*. Princeton, NJ: Princeton University Press.
- Veit, R. R., and W. R. Petersen. 1993. *Birds of Massachusetts*. Lincoln, MA: Massachusetts Audubon Society.

**Geoff LeBaron** is the Director of the Christmas Bird Count for the National Audubon Society, a position he has held for fourteen years. A birder since childhood and an ornithologist since graduate school, in other lives Geoff was a Loon Ranger for the Audubon Society of New Hampshire; conducted over-water aerial surveys for marine mammals, turtles, and seabirds; was Collection Manager at VIREO (VIsual REsources for Ornithology) at the Academy of Natural Sciences in Philadelphia; and has led natural history tours throughout the world. He thanks Mary Alice Wilson, Harvey Allen, Tom Gagnon, and Mark Lynch for their field observations; Wayne Petersen, Dave Larson, and Kathleen Anderson for their assistance in the field; and all of the above for their insight.



GEORGE C. WEST

# The Dynamics of Black-capped Chickadees at Bird Feeders

*Herb Wilson*

Bird feeders have become a predictable part of the landscape in populated portions of North America. Feeding stations obviously accomplish the intended purpose of bringing birds within our view. The food we provide has positive influences on birds (see Wilson 1996 for a review). The physiological status and survivorship of birds is improved by supplemental feeding (Brittingham and Temple 1988, 1992a,b, Desrochers et al. 1988, Szekeley et al. 1989, Grubb and Cimprich 1990, Egan and Brittingham 1994).

The Black-capped Chickadee (*Poecile atricapilla*) has been the best-studied species in relation to supplemental feeding. This species is widely distributed in North America and is mostly sedentary. We have ample evidence of increased winter survivorship of Black-capped Chickadees when they are given supplemental food. However, researchers presume that each chickadee uses the supplemental food to the same degree. In this paper, I will report on research I conducted to examine individual variability in feeder use.

The winter social structure of Black-capped Chickadees is well known (Odum 1941, 1942, Glase 1973, Smith 1976, 1991, 1994). A winter flock consists of a resident pair of birds, which extend their breeding territory of around five acres to a winter territory of around twenty-five acres. In the winter, the resident pair is joined by ten or more first-winter birds, none of which is the offspring of the resident pair. The flock defends its winter territory from incursions by neighboring flocks (Desrochers and Hannon 1989).

The large territory size of chickadee winter flocks poses problems for studies of food supplementation. In regions with even modest human population density, controlling the amount of supplemental food that chickadees get is difficult with so many people maintaining feeding stations of their own within a chickadee flock's territory.

To circumvent this problem, I chose a remote area of central Maine to conduct a food supplementation study. The study area was along Long Falls Dam Road on the eastern shore of Flagstaff Lake (45° 10' N, 70° 01' W) at an altitude of 1200 feet. Two feeding stations were established on Maine Reserved Land, protected second growth forest. There were no human dwellings along this portion of the road and the closest bird feeders were ten miles distant. The forest was dominated by conifers: red spruce (*Picea rubens*), balsam fir (*Abies balsamea*), eastern white cedar (*Thuja occidentalis*), eastern hemlock (*Tsuga canadensis*), and eastern white pine (*Pinus strobus*).

I established feeding stations in early October 1995 at two sites (called Site 1 and Site 12 to conform to the terminology used in Wilson [2001]). Two cylindrical

Magnum™ feeders were hung on cable strung between two trees at a height of six feet. The two feeders were located within fifteen feet of each other to facilitate simultaneous observation.

Between the middle of October and the middle of November, I captured Black-capped Chickadees at the feeders with mist-nets. Captured birds were aged (either adult or first-winter birds (Pyle 1997)) and fitted with unique combinations of color-bands along with a numbered aluminum band provided by the Bird Banding Laboratory. Twenty-three chickadees were color-banded at Site 1, all but one of which were seen on the last day of the study. Fourteen chickadees were color-banded at Site 12, nine of which were present at the end of the study.

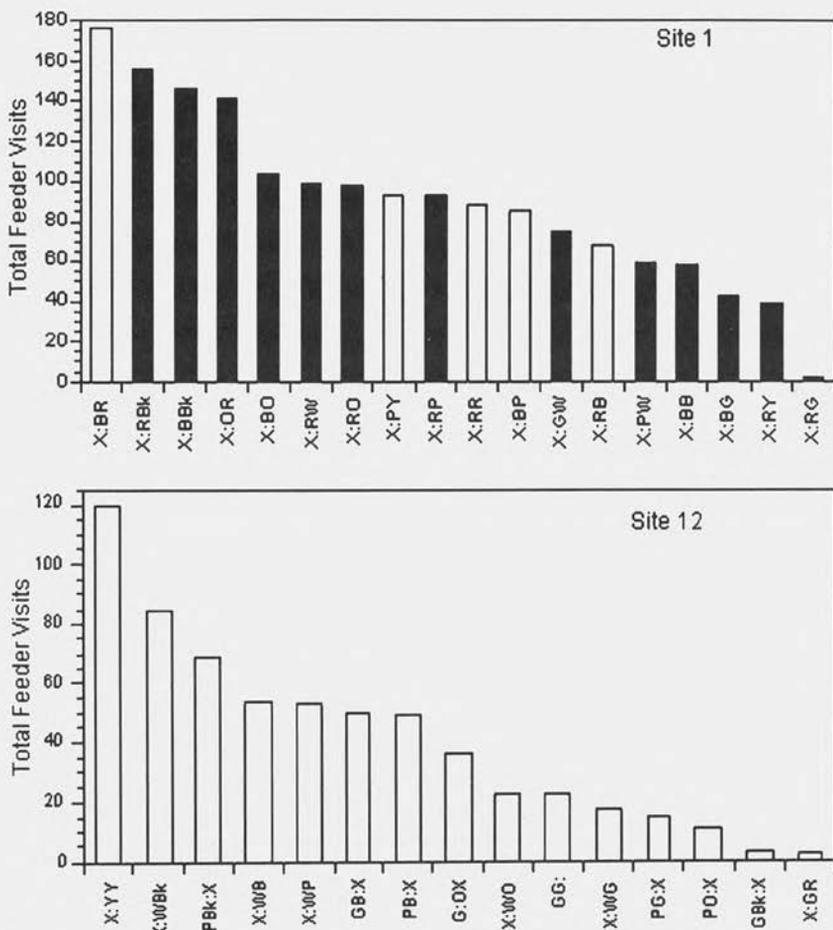
Beginning on November 29, 1995, I made weekly two-day visits to the area until the week of March 12, 1996, with the exception of a hiatus between December 19 and January 5. During each weekly visit, I made at least four thirty-minute observations at each site. I chose a vantage point about twenty feet away from each feeder. Using Zeiss 7x42 binoculars and a hand-held tape recorder, I recorded each visit (requiring the removal of a seed) of chickadees to the feeders. A bird frightened away or displaced before feeding was not counted as a visitor.

Individual Black-capped Chickadees were identified with various degrees of precision. Some birds that came to the feeders did not afford a sufficient view to determine whether bands were present; these chickadees were recorded as C (chickadee). I recorded unbanded birds that visited a feeder as uC (unbanded chickadee). Other birds were obviously banded, but viewing angles prevented me from seeing all three bands; these birds were recorded as bC (banded chickadee). Finally, some birds that came to the feeder could be identified by their unique combination of color bands.

Bird feeders were filled during each visit. Generally, half of the food in each feeder was removed each week. To ensure that neither site was ever without sunflower seed, I put up an additional feeder for the seventeen-day period in late December and early January when I was away. A modicum of food was still present at each site on January 5. The chickadees at both sites therefore always had access to sunflower seeds throughout the course of the study.

Figure 1 shows the total number of feeder visits by the color-banded chickadees at the two sites. The results show strikingly variable use of the bird feeders. At Site 1, the average number of feeder visits over the fifty-one hours of observation was 85.4 visits with one bird visiting 176 times and one only twice. At Site 12, the average number of feeder visits over the forty-six hours of observation was 38.6, with individual use ranging from 120 visits to two visits.

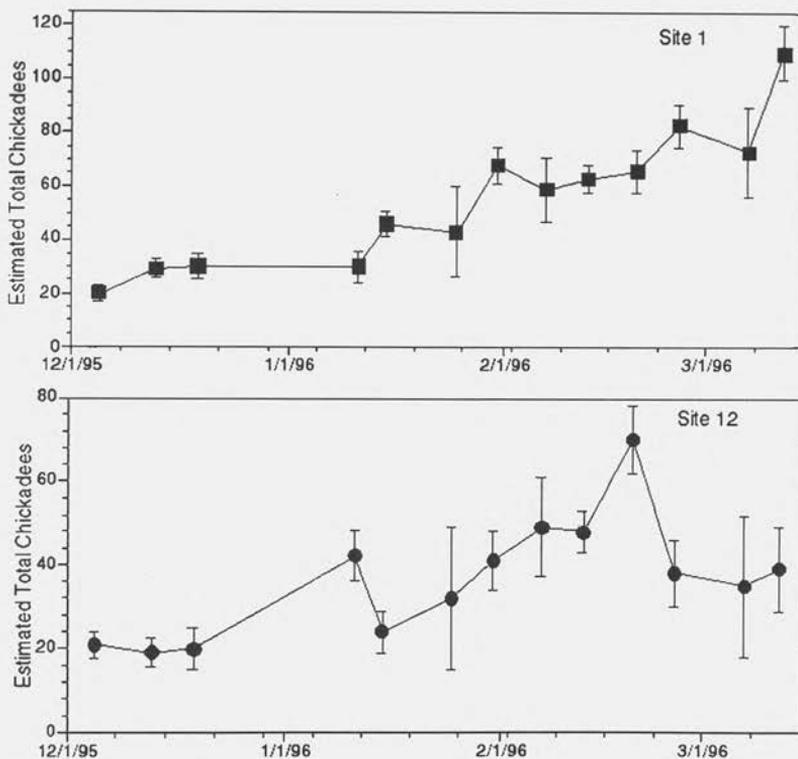
Should age of the birds influence the rate of feeder visitation? On the one hand, adult birds are the dominant birds in the flock (Smith 1976) and therefore should have access to the best foraging sites, including a perch at a bird feeder. On the other hand, adult birds have lived through at least one winter and may be more proficient at finding food than naïve first-winter birds. First-winter birds may therefore be more likely to rely on the dependable sunflower seeds. At Site 1, only five of the



**Figure 1.** Total number of feeder visitations by banded birds at Site 1 (total of 51 hours of observations) and Site 12 (46 hours of observations). The abbreviations give the color-band combination (left leg: right leg). Abbreviations: X – aluminum band; B – blue; Bk – black; G – green; O – orange; P – purple; R – red; W – white; Y – yellow.

chickadees banded were first-winter birds (indicated by light barring in Figure 1). Although the most frequent visitor was a first-winter bird, the other young birds visited the feeder at rates close to the average. I conclude therefore that age cannot be used to predict feeder use at Site 1. At Site 12, all fourteen birds banded were first-winter birds so no age comparison is possible.

By recording both the number of unbanded birds and banded birds coming to the feeder, I could perform a mark-recapture analysis to estimate the total population size. The principle of such analyses is straightforward. One captures and then marks a few individuals in a population (color-banding in this case). These individuals are released. Then the investigator captures additional animals, noting if they are marked or not. If a prevalence of unmarked animals is captured, then the population must be



**Figure 2.** NOREMARK estimates of total Black-capped Chickadees visiting each feeding station over a two-day period throughout the study. Error bars represent 95% confidence intervals. Figure first appeared in Wilson (2001).

significantly larger than the marked individuals initially captured. On the other hand, if the captured animals are mostly marked, then one must have already marked most of the population.

A number of mark-recapture algorithms are available to estimate total population sizes from resighting data. I chose the software NOREMARK (White 1996) for my analysis. This software is able to use counts of marked but imperfectly identified individuals (the bC chickadees in my case).

The results of the mark-recapture analysis are eye-popping (Figure 2). At Site 1, NOREMARK indicates that the number of chickadees visiting the feeder at the beginning of the study (November 29-30) was about 24. Early on, most of the visits to the feeders were made by banded birds. As the study proceeded, increasing numbers of unbanded birds visited the feeders. At the end of the study (March 11-12), NOREMARK estimates that 110 different chickadees ( $\pm 10$  chickadees) visited the feeders over the two-day period when I was making observations!

Similar results are seen at Site 12 (Figure 2). NOREMARK estimates that a maximum of seventy birds visited the feeder on February 26-27, declining over the next two weeks. However, the general pattern is for the total chickadees using the feeder to increase from the beginning of the study.

There seems to be a contradiction between the large number of chickadees using the feeders and the territorial social structure of Black-capped Chickadees. The flock in whose territory the feeder is located apparently fails to defend its territory. However, breakdown of territorial behavior is not surprising in the presence of an abundant resource, sunflower seeds in this case. Because the feeders never became empty, the chickadees achieve no benefit and significant cost by defending the bird feeding stations. As can be seen in Figure 1, such incursions by neighboring flocks were occurring early in the study. Thirteen of the birds banded were adult birds; only two would be expected from the flock whose territory included the feeding station.

Although Black-capped Chickadees are largely sedentary, occasional irruptions into New England occur (Palmer 1949). Susan Smith, my former colleague at Mount Holyoke College in South Hadley, Massachusetts, reported significant irruptive chickadees at her study site in western Massachusetts during the winter of 1995/1996. The large number of chickadees using the feeders at Flagstaff Lake might not be quite so large in other years.

These results have implications for anyone maintaining a feeding station. Although a surprisingly large number of chickadees used both of my feeding stations at Flagstaff Lake by the end of the study, I never saw more than a dozen chickadees near a feeding station at one time. The turnover of birds at a feeder is obviously high over the course of a day. The chickadees you see at your feeder at 9 a.m. are likely not the same ones you see later in the day. Without color-banding the birds, this turnover is not appreciated by most birders. 

## References

- Brittingham, M.C. and S.A. Temple. 1988. Impacts of supplemental feeding on survival rates of Black-capped Chickadees. *Ecology* 69: 581-89.
- Brittingham, M.C. and S.A. Temple. 1992a. Does winter bird feeding promote dependency? *Journal of Field Ornithology* 63: 190-94.
- Brittingham, M.C. and S.A. Temple. 1992b. Use of winter bird feeders by black-capped chickadees. *Journal of Wildlife Management* 56: 103-10.
- Desrochers, A., S.J. Hannon and K.E. Nordin. 1988. Winter survival and territory acquisition in a northern population of Black-capped Chickadees. *Auk* 105: 727-36.
- Desrochers, A. and S.J. Hannon. 1989. Site-related dominance and spacing among winter flocks of Black-capped Chickadees. *Condor* 91: 317-23.
- Egan, E.S. and M.C. Brittingham. 1994. Winter survival rates of a southern population of Black-capped Chickadees. *Wilson Bulletin* 106: 514-21.
- Glase, J.C. 1973. Ecology of social organization in the Black-capped Chickadee. *Living Bird* 12: 235-67.
- Grubb, Jr., T.C.. and D. A. Cimprich. 1990. Supplementary food improves the nutritional

- condition of wintering woodland birds: evidence from ptilochronology. *Ornis Scandinavica*. 21: 277-81.
- Odum, E.P. 1941. Annual cycle of the Black-capped Chickadee. *Auk* 58: 518-35.
- Odum, E.P. 1942. Annual cycle of the Black-capped Chickadee. *Auk* 59: 499-531.
- Palmer, R.S. 1949 *Maine Birds*. Cambridge, Massachusetts: Museum of Comparative Zoology, Harvard University.
- Pyle, P. 1997. *Identification Guide to North American Birds. Part I. Columbidae to Ploceidae*. Bolinas, California: Slate Creek Press.
- Smith, S.M. 1976. Ecological aspects of dominance hierarchies in Black-capped Chickadees. *Auk* 93: 95-107.
- Smith, S.M. 1991. *The Black-capped Chickadee: Behavioral Ecology and Natural History*. Ithaca, New York: Comstock Publishing Associates.
- Smith, S.M. 1994. Social influences on the dynamics of a northeastern Black-capped Chickadee population. *Ecology* 75: 2043-51.
- Szekeley, T, T. Tzep, and T. Juhasz. 1989. Mixed species flocking of tits (*Parus* spp.): a field experiment. *Oecologia* 78: 490-95.
- White, G.C. 1996. NOREMARK: population estimation from mark-resighting surveys. *Wildlife Society Bulletin*. 24: 50-52.
- Wilson, Jr., W.H. 1996. The impact of bird feeding on wintering birds. *Bird Observer* 24: 17-22.
- Wilson, Jr., W.H. 2001. The effects of supplemental feeding on wintering Black-capped Chickadees (*Poecile atricapilla*) in central Maine: population and individual responses. *Wilson Bulletin* 113: 65-72.

**Herb Wilson** is the J. Warren Merrill Associate Professor of Biology at Colby College. In addition to his research on Black-capped Chickadees, he has studied the foraging behavior of Semipalmated Sandpipers in the Bay of Fundy and Western Sandpipers along the Washington coast, the winter ecology of Red-breasted Nuthatches in Maine, and the breeding biology of Palm Warblers in Maine.



DAVID LARSON

# Sibley Birding: How Much Does Your Big Day Weigh? Or, Birding With a Calculator

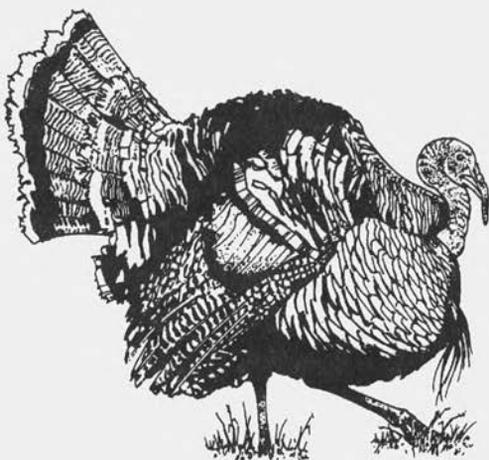
*Bob Bushnell and Steve Davis*

With the publication of *The Sibley Guide to Birds* and its rapid ascendancy to status as the premiere birding book, we figured that its new approach — its concern with the weight of birds or avimass — would set a standard for whole new variations on the hobby of listing and add nuances never before entertained. For example, spring migration may not be the best time to do your listing. In southern New England, November might be prime birding season, just as it is deer-hunting season, and for the same reason: that's when the species' masses are at their greatest. Also, with the arrival of the larger winter birds — ducks and geese and even the winter cormorants (Greats), there is a distinct increase in average mass-per-bird seen. You can forget about your warblers (10-20 grams), kinglets (6 grams), and other miniscule songbirds; give us a Canada Goose (4500 g), or Mute Swan (10,000 g), or even a Common Eider (2150 g).

Avimass birding also is a great leveler for beginning birders: obviously, larger birds in general are easier to find and to identify than are smaller birds. Even a novice is unlikely to miss or misidentify an Andean Condor (if in the right habitat; yes, avimassing can be done outside the ABA area) or White Pelican (7500 g). One good Wild Turkey (7400 g) easily spotted by a beginner will more than make up for dozens of songbird species carefully located and identified by expert birders.

Listing birds in order by weight will benefit beginning birders as well, as species are much easier to find than when the A.O.U. taxonomic order is used. The latter is relatively incomprehensible for a beginner; the former, common sense.

Early mornings are not particularly necessary for finding heavy birds, unless you are going for Great Horned Owls (1400 g), so beginning birders, especially children, do not have to get out of bed before the crack of dawn to be competitive. Even so, an extra Canada Goose will compensate for three Great Horneds, more than which you are not likely to find anyway. However, as the new jargon for avimass birding develops, time may become a factor: "A Ton by Ten" we realized was much too generous,



as we identified more than a ton of Mute Swans at our second stop on our annual November Big Day. We could easily visualize "A Ton by Sun (set/rise)" becoming catchwords.

Avimass birding adds a new parameter that amateur birders can use to contribute to the ornithological literature. The Christmas Bird Count effort that has defined so well for so long the status of resident and winter birds in North America and elsewhere can now have a new dimension. The avimass of each count can be calculated retrospectively as well (*Swansea Journal* 2001). There may be significant ecological and environmental insights and knowledge to be gained by considering where the bird mass is and how it is changing. In the southeastern Rhode Island area, for example, the avimass has become dominated over the past decade by Canada Geese and Mute Swans.

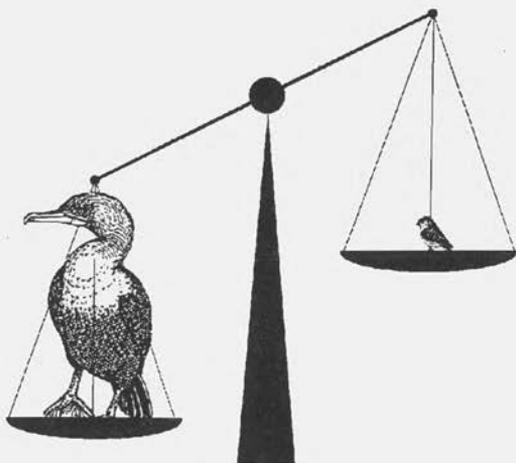
Consequently, as we conducted our Big Day, we not only counted species and number of each species, but we also calculated the mass of the avifauna identified. Although our 2001 count was abbreviated and did not approach the species count for the RI November record of 85, it clearly established a new standard for November avimass, coincidentally at almost exactly 10,000 kilograms, with Canada Geese accounting for 54 percent of the total. 

## References

Sibley, D.A. 2000. *The Sibley Guide to Birds*. New York: Alfred A. Knopf.

How Much Does Your Christmas Bird Count Weigh? *Swansea Journal of Art, Science, and Imagination*, No. 13, Autumn, 2001, pp. 103-105.

*Bob Bushnell has been a birder for three decades and has served the Rhode Island Audubon Society as volunteer, board member, and president. Following a career in business, he is now a first-year public school teacher. Steve Davis is a family doctor who works with the Brown University School of Medicine residency in Family Medicine. He lives in Swansea, Massachusetts.*



WILLIAM E. DAVIS, JR. (WITH INTERVENTION BY DAVID LARSON)

# POCKET PLACES

---

## The Grove at Salisbury

*Douglas Chickering*

It is not that the Grove at Salisbury is unknown so much as it is underappreciated. It is generally considered a pretty good place to get owls in the winter. Actually, it can be one of the most productive small places in the Commonwealth. On the right day it is unmatched for birding, for it is a perfect migratory trap. Located at a distance of about 500 yards from the open ocean, it is surrounded by a sparse open campground on one side and a wide salt marsh on the other. For birds coming off the ocean it is the first good place to stop, rest, and eat. Kind of a miniature High Island.

To find the Grove, just follow Route 1A north from Salisbury center, toward Salisbury beach. Look for the prominent sign for the Salisbury State Reservation on the right, and take that right and then drive past the gatehouse. Note that between Memorial Day and Labor Day there is an entry fee. The salt marshes will be on your right, and the cottages at the beach on your left. Follow the road to the campgrounds, which will be the first turn on the right. When you make that turn you will be basically facing the grove. On the immediate right will be a paved turnout where trailers empty their waste tanks. Just beyond, on the right side of the road, there is the Grove, which consists of a thicket and a mixed grove of pines, cedars, birches, sumacs, and generally heavy underbrush. The area is only about 500 to 600 feet long and less than 100 feet wide. There are trails that wind through the Grove, kept open by kids in the campgrounds who like to ride their bicycles through it. In the middle is a small rise with pines at the top. To the east of the rise is a brushy area with a few small birches and bordered by some cedars on the north. To the west of the rise the area is more open.

The Grove is a peculiar place and there are times when it is not a good idea to bird there, just as there are times when it holds the potential of being the best birding spot in the state. If it's a May morning and places like Marblehead Neck and Plum Island are active, it would be a good idea to try to fit the Grove into your birding schedule. With the potential for owls and winter finches, winter is always a good time to check it out. In fact, the only time when it is definitely inadvisable to bird the Grove is in the summer when the campground is full and school is out.

The Grove is a place that has the potential of giving you some of the most memorable birding moments of your life, as it has mine. A Scarlet Tanager so close that I could have reached out and touched it, a pair of Yellow-bellied Sapsuckers, in full breeding array, at just above eye level, dancing around the trunk of a tree, while they quietly clucked and murmured at one another, a Worm-eating Warbler at my feet, turning over a piece of thatch and hungrily gobbling down some luckless grub. My life Long-eared Owl in a pine tree at the road's edge in typical Long-eared style — simultaneously right in front of me and nearly invisible. And a Connecticut Warbler deliberately and delicately walking along a low branch and then dropping down in the thicket to vanish. 

## ABOUT BOOKS

### Who Are Those Guys?

A Conversation with Josep del Hoyo, the Creator of the *Handbook of the Birds of the World* Series

Mark Lynch



The year 1992 saw the start of what has become the most ambitious project in natural history publishing to date, the *Handbook of the Birds of the World*, a series of hefty volumes intending to illustrate and describe in depth every bird species of the world and most of the visually distinct subspecies. Although the thought of that was surprising enough, this ground-breaking series was to be published by Lynx Edicions of Barcelona, Spain. This was a publishing outfit most people at the time had never heard of, led by a group of editors most people did not know. Nine years and six volumes later, the handbook has more than lived up to its goals and is halfway through the projected series. With its state-of-the-art illustrations, sumptuous color photography, and writing by the world's leading ornithologists, the handbook is now lauded as a landmark series in ornithology books. Furthermore, the name Lynx Edicions is now recognized around the world as a leader in conservation and ornithology publishing. But how did this series come about? How do you get an international project like this off the ground?

On August 17, 2001, I had the pleasure of interviewing Josep del Hoyo, the mastermind behind the handbook series, for my radio show *Inquiry* on WICN. I do not exaggerate when I say that this was my most eagerly anticipated interview of the year. Josep was in America flying from one city and museum collection to another, gathering information for the next volume of the series. I found him a genuine pleasure to talk with, funny, modest to a fault, and always superbly enthusiastic about his project. He is Catalan, a resident of that large and independent-minded area of northeast Spain called Catalonia of which Barcelona is the capital. The following is excerpted from the thirty-minute interview. Throughout our talk, I was fascinated to learn how much this series was the vision of just a very small group of people, and Josep in particular. Often, in the interview, the *Handbook of the Birds of the World* is simply referred to as "the project" or "the handbook."

*M: My first experience with your writing and Lynx Edicions was years ago (1990) when I bought Where to Watch Birds in Catalonia, a small where-to-watch guide. I was so impressed by the book, I went to Catalonia. I followed the directions of the entire book and had one of my best birding vacations ever. Regarding the Handbook of the Birds of the World, I have to ask you: whose idea was this project? This has to be the most mind-boggling project I have ever seen in my life.*

J: (laughing) The crazy person was me!

M: *Tell me how you pitched this idea. You went to Lynx Edicions....*

J: No. Lynx Edicions was created to do the handbook project and the book you mentioned and a few others were a kind of "practicing" before starting the big project of the *Handbook of the Birds of the World*. This was the reason to create Lynx Edicions. We did not want to have a project that we had been dreaming of for so long then put under restrictive commercial conditions. We decided to start our own company so we could have the freedom to do the books as we wanted.

M: *Here are a series of volumes of the highest quality with the best, most exquisite photographs, beautiful illustrations and attempting to cover all the bird species of the world. When you think about this project, it just seems so mind-boggling. Were people at first a bit nervous trying to do this project?*

(both laugh)

J: I was! I was really, really nervous. I started even seven years before officially beginning this project. I was collecting information and buying all sorts of books. Compiling all the information in computers. I reached a point in which it was like we had ninety percent of what we needed and the rest of the information about the other species we thought would be possible to look for in museums. At that point, we decided to go ahead. But after we really began the project, we realized we needed much more information because we had to illustrate the many races. So, probably, if we had realized the truth at the beginning, we would have given up!

M: *Thank God you didn't! It is one of the great projects in natural history publishing. We are already up to the sixth volume now, and you have always met your deadlines.*

J: It's a matter of survival. We realized this at the beginning when we started the series. In the beginning, the series was not successful, but now sales have grown a lot. We can say the series is consolidated. But at the beginning, people were prudent...kind of waiting. Many people who were interested were not buying the series. We asked people why. One of the most repeated answers by people, say fifty years old, was "Oh...I'm too old. The series will finish after I'm dead." So, we understood that publishing the series with relatively short intervals between volumes was really important for our viability.

M: *Was part of the problem also that people were so used to either British or American companies publishing large bird books? That there was a prejudice against the series because it was being published by a Catalan company who nobody had heard of before?*

J: (laughing) This was a big surprise!

M: *Nobody had heard of Lynx Edicions before! I can remember the reaction of the birding community here: "who are these people?"*

J: Yes! (laughs) "Who the hell are you?" I have heard it many times from very important people, especially in the beginning. But now, the project is being done by such a large number of people. We have more than 100 authors, and it's a growing number. Authors from the States, from Britain, and more than twenty countries. So it has become really an international project. The only unique thing was that the idea came from a person from Catalonia. Then I had to look for partners who were also Catalan. Other people from the rest of Spain also helped a lot. But almost immediately, we had to ask for help in Germany, France, and many other places.

M: *One of the partners in this project is the ICPB, the International Council for Bird Preservation. Have they been with you since the beginning?*

J: Yes. Their organization, that is now known as Bird Life International, is very important in terms of conservation. Although they concentrate on birds, they are also concerned with all other kinds of animals and habitats. Perhaps because of what you mentioned before, being from Spain and not a well-known place, we were looking for some kind of support or a kind of relationship with a well-known organization. So we prepared a kind of sample dummy book with all blank pages except for sixteen more or less "real" pages and we went there (to Bird Life International). We did not know the people. We talked with them, showed them what we had and explained the idea of the project, and they were very enthusiastic. We agreed immediately to make a kind of association for these books, use their logo, and this relationship is still alive, and Lynx Edicions has now published *Threatened Birds of the World* (note: for Bird Life International), a big volume.

M: *I want to talk to you about the plan for the Handbook of the Birds of the World. You must have had to lay out the basic format of the book from beginning to end at the very start of the project. You made a decision to use the taxonomy of the time and stick with it throughout the series?*

J: No. Let's say the layout in terms of format is the same from volume to volume, but new taxonomic decisions are being adopted all along. When we are working on a bird family, if a new species has been discovered, or a species split into two species. And there is a general agreement on that split, because some of these decisions are very controversial. So, if these taxonomic decisions are reasonably accepted, we update every volume before publication. So we are not following an old system of taxonomy at all, we are following the current one. But there are many trends. There are people who want to split everything. There are people who want to lump everything. We try to be reasonable. Not especially revolutionary, but not old fashioned either.

M: *But tell the truth. Taxonomy must drive you crazy.*

J: Well...it also interests me a lot (laughs).

M: *I'm fascinated by the taxonomic revolution too, but if I was involved in a project attempting to describe all the species of the world, it would drive me crazy.*

J: Yeah...it really is a problem, because there is fighting, even some political fighting (laughs). Every species account starts with a section on taxonomy. In that we can explain all the alternatives. So it is not so important whether you adopt a new split or not because we are always going to comment on the taxonomic alternatives that someone is proposing. So all the taxonomic problems or alternatives are always explained, and this is quite positive. It is more interesting to know about all the alternatives rather than to decide which is the good one because many times it is a matter of opinion on where you want to draw the line.

M: *How did you deal with the fact that there may be new species described after a volume is published? It isn't going to happen a lot, but it is going to happen..*

J: If it is after a volume is published, of course there is nothing we can do with that volume. But we are planning a system of update volumes. Once we have finished the nonpasserines three or four years later, we plan on publishing a volume updating all the nonpasserines. We will do the same when the series is finished with the passerines. So the newer species will be included in these volumes. With all the new technologies, the Internet and so forth, we want to believe that the handbook is a work, that when finished, won't just rest on library shelves getting old. We would like to have it kind of a life project that we will be able to keep updating using several systems like the Internet or whatever is available at that moment.

But sometimes a new species is discovered a few months before a volume is published. This is a nightmare for us! (both laugh). But, so far, we have always been able to include that new species. We have to make new illustrations, realign the plates because there is no room for the new illustration et cetera, et cetera. In the end, you will see the new species in the volume and not notice all the work we had to do.

M: *Who does the illustrations? How are they done?*

J: The illustrations are one of the main points of the series because it is the first time that *all* the distinct subspecies are being illustrated. For this we have a team of specialist artists, people whose professional lives are spent painting birds. Most of them are from Britain, but there are some in America, some in Spain, and one in Holland. It is an international team of eighteen artists, but the majority are British artists. Not only are there many good (bird) artists in Britain, but the British Museum serves as a kind of base.

Whatever is lacking in (the collections of) the British Museum, I find here (referring to collections in America). I come here every year, sometimes even more, to look for additional materials.

*M: Two of the earlier Lynx Edicions books, guides to National Parks in Catalonia had illustrations done by Francesc Jutglar, and he is one of the artists still working on the project.*

J: He is the artist who paints the big bird heads on the front covers that are very characteristic of our series. He is now a staff member of the team, and he coordinates other artists.

*M: It must be very challenging for these artists to paint some of these birds because some of these species are very little known. I think particularly of rails, like the Invisible Rail. People have rarely seen these birds. How do the artists get hold of enough material to be able to illustrate them?*

J: We have put together a very large collection of images from other sources. But the basis (of the illustrations) are the specimens that are in the museums. Even the Invisible Rail has some specimens in museums which are visible (laughs).

*M: (referring to the Invisible Rail) It is a great name!*

J: Yeah! We plan a kind of humorous volume at the end of the series, and we want to paint the Invisible Rail with just background, that's all. (both laugh)

*M: Are there birds for which there are no specimens? Or do all bird species have type specimens?*

J: There was one exception in which the type specimen is free (i.e., released and in the wild). It was netted, not killed. But they took a lot of photographs. This is an exception. I think there was another exception in which the only specimen was burned in a museum, destroyed or something like that. But in general there is at least one museum specimen. There are a good number of species for which only the one type specimen is known. These are the specimens I have to look for in places like Petersburg or Lima and other places.

*M: Let's talk about the photographs.*

J: Because we have the illustrated plates to show how the birds look, we use the photographs to show aspects of behavior, feeding, breeding, and many other things. It is not always possible, but we try to include photographs that show those behavioral aspects that we talk about in the general family accounts. It is interesting. We are now seeing bird photographers taking pictures in what they explain is "the handbook style." We are happy to see that we have prompted some photographers to take photos in that way, looking for rare species, looking for unusual behavior.

*M: Do you get people swamping you with photographs?*

J: We accept everything. So everybody is welcome to send photographs. For the last volume we received 17,000 photographs.

*(Mark laughs)*

J: But this is nice! Perhaps one of the best parts of my work. During a month or month and a half, I spent all my time looking at the best photographs of the birds we were working on at the moment. So that really is a privilege. To reduce the 17,000 to 2000 is quite easy. But then when you have to reduce the number of photographs to the 300 or 400 you want to include in the volume; that sometimes is *very* difficult.

M: *How hard is it to edit and coordinate all the written material? It must be very tough.*

J: Very tough!! All the authors are great, but working with them can sometimes be difficult because they are world experts, very important people who have lots of things to do, and you have to be prodding them...

M: *Are deadlines a problem?*

J: Yeah, deadlines are always a problem. But now that six volumes have already been published, the ornithological community, the potential authors, already know what our deadlines are. In the beginning though, we would say: "Please keep in mind the deadlines!" And the authors would say "yes...yes...we have heard about that...don't worry." Then there were always some problems. But we haven't had a really big problem so far.

M: *What have been the real challenges of putting out the series?*

J: Probably getting started. Especially during the years when I was the only person. I tried to convince some of my friends to help me, and it was very difficult. I did convince one of the (now) coeditors, Jordi Sargatal, a good friend of mine. We went on a trip in winter to Holland to look at geese wintering there, and I took advantage of the fact that we were together twenty-four hours a day. In the end he said: "ok!"

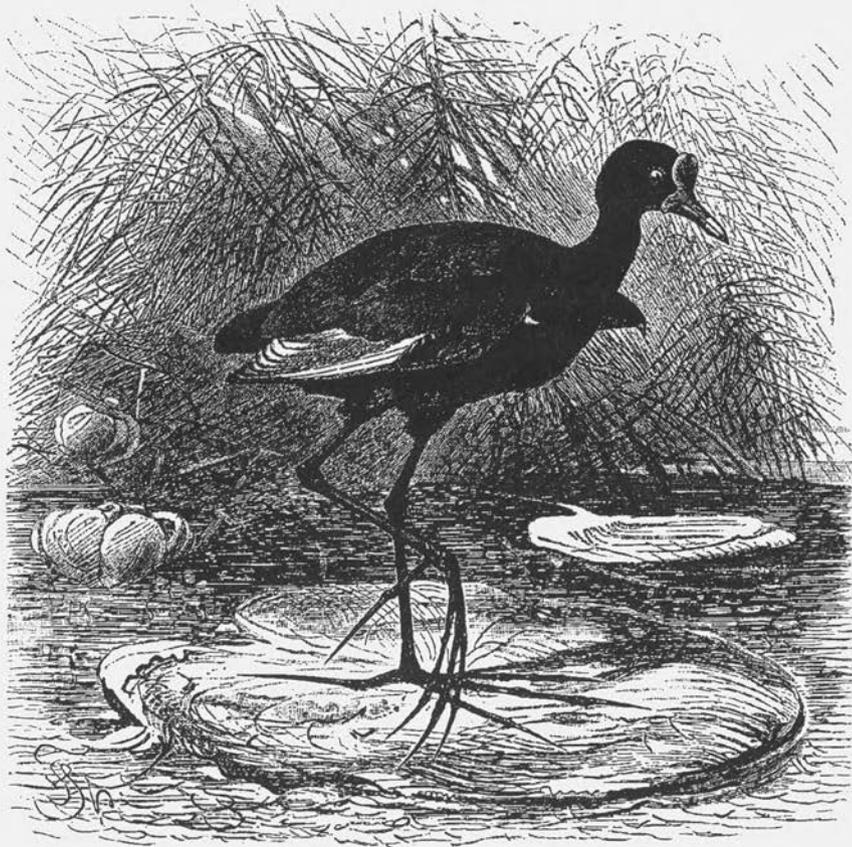
Later in the interview, when I asked Josep about the ultimate success of the *Handbook of the Birds of the World*, he finished by saying:

J: I think there is a reason. We, the partners of Lynx, are really interested in conservation, in ornithology, in taxonomy, and not in the business aspect of this. Of course, we need to take care and keep the project viable. But as long as it is viable, we are happy. I think this project is starting to be appreciated by many conservation organizations, and they are offering Lynx Edicions other similar big projects. In the future it looks like we will be publishing even more big conservation books, not just about birds, but about mammals and other animals.     ↗

## References

- del Hoyo, J. and J. Sargatal, eds. 1989. *Where To Watch Birds In Catalonia*. Barcelona, Spain: Lynx Edicions.
- del Hoyo, J., A. Elliott, and J. Sargatal, eds. 1992 to present. *Handbook of the Birds of the World V. 1-6*. Barcelona, Spain: Lynx Edicions..
- Martinez-Vilalta, A., A. Motis, dibuxoes (illustrations) by F. Jutglar. 1989. *Els Ocells del Delta de L'Ebre*. Barcelona, Spain: Lynx Edicions..
- Sargatal, J., J. del Hoyo, dibuxoes (illustrations) by F. Jutglar. 1989. *Els Ocells del Parc Natural Dels Aiguamolls De L'Emporda*. Barcelona, Spain: Lynx Edicions..
- Stattersfield, A.J. and D.R. Capper, project managers and senior editors. 2000. *Threatened Birds of the World*. Bird Life International. Cambridge U.K. Barcelona, Spain: Lynx Edicions..

**Mark Lynch** is a teacher, trip leader, and ecological monitor at the Broad Meadow Brook Massachusetts Audubon Society Sanctuary in Worcester. He is also a teacher and docent at the Worcester Art Museum and hosts a talk show about arts and sciences on WICN (90.5 FM). He would like to thank Kyle Warren, his chief engineer at WICN, and Teresa Bassas and Nicole Wirtz at Lynx Edicions for making the interview possible.



# BIRD SIGHTINGS

---

## SEPTEMBER/OCTOBER 2001

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

The weather for the period was warm, dry, and sunny; ideal for birders. There were no temperature records broken throughout the period. In Boston, the temperature averaged 65.3° in September and 56.2° in October. During September the mercury reached into the 80s on eight days, with a high of 87° noted in Boston on the 9th. In October the temperature rose to near record levels early in the month, with a reading of 83° in Boston on both the 4th and 5th. Rainfall for the period totaled a paltry 3.26 inches in Boston, three inches less than normal. The totals, however, were quite variable in the state during September. Boston recorded the eleventh driest October in 131 years of record, with no trace of rain for fourteen days, the longest dry stretch since June 1999. The season's first snow in the Greater Boston area came on October 8, 31 days before average and the earliest since October 8, 1988. The only earlier recorded snow was on October 2, 1899. Thunderstorms were noted on five days in September and there was a minor thunderstorm reported in October. Hurricanes Erin, Gabrielle, and Humberto passed well to the southeast of New England, bringing heavy swells to some coastal areas, especially from Erin, September 10-11. Winds were out of the northwest on September 1, October 27, 28, and 30. Hawkwatchers are particularly interested in wind direction and September 15 may have been the best day of the fall. The winds were out of the southeast, but more important were the high cirrus clouds that helped with visibility. A total of 18,115 migrating Broad-winged Hawks were tallied from just four sites: Mount Watatic (7714), Mount Wachusett (5027), Mount Tom (2922), and Blueberry Hill in Granville (2452). *R. Stymeist*

### LOONS THROUGH ALCIDS

Loon numbers in this early fall migration season were unimpressive except for a Red-throated in Ludlow, 204 Commons one day off Plum Island, and a well-described **Pacific Loon** in the water off Plum Island with both other species October 31. Horned and Red-necked grebe numbers were in single digits, with more Horneds reported from western Massachusetts than from the coast! The famous **Eared Grebe** had returned to East Gloucester by October 11 for the seventh consecutive year, as did the drake **Tufted Duck** in Sterling by September 30. There's something to be said for consistency: these two birds are vying for the longest-running vagrant individuals in recent Massachusetts history.

A storm on September 29 blew in six Red Phalaropes and, the next day, 57 Leach's Storm-Petrels to Andrews Point in Rockport and 174 to Sandy Neck in Barnstable. The huge numbers of Wilson's Storm-Petrels in July and August had, as usual, diminished to single digits after the first week of September. The tubenose of the month was an unmistakable **White-faced Storm-Petrel** seen by two veteran observers from a tuna boat near Atlantis Canyon on a September 7-9 trip. This was less than two weeks after two were seen at Hydrographer Canyon (*Bird Observer* 29 (6): 465). Almost as exciting, and described from the same trip, were a juvenile **Long-tailed Jaeger** and a leucistic Cory's Shearwater with white wings, tan mottling on an otherwise whitish back, dark eyes, and a dark-yellow bill. How many birders have seen a single aberrantly colored shearwater?

Rick Heil took advantage of an opportunity to count migrating Double-crested Cormorants this year as they flew south over Plum Island, and came up with over 20,000 in the periods September 4-20 and October 9-15. By October 23 he had counted over 28,000 since August 6.

Jim Barber counted over 4000 in Gloucester on October 13 alone, and single-day counts in the thousands were also made from Chatham in September. This is not an uncommon occurrence, but it would be good if more birders made such counts so we would have a better picture of total cormorant numbers in migration.

In the heron department, the pair of Least Bitterns that nested in Rockport in a seaside pond devoid of cattails but rich in *phragmites* and purple loosestrife (see last issue) proved sensational in ways other than their odd choice of nesting habitat. They were eminently watchable, and at least one of the three fledglings proved its nascent fishing skill to this writer by catching minnows on ten of eleven strikes observed in a half-hour period. The birds were also late to migrate, being seen as late as October 7. Elsewhere, the numbers of roosting herons in the Plum Island area have not been impressive in recent years because of their abandonment of the fresh-water impoundments in favor of open salt marsh more distant from any viewing points, where they are much harder to count. Great Egrets wandered in some numbers to the western part of the state, where thirteen in Lee were a record for Berkshire County. A Cattle Egret in Amherst (one of only five reported statewide) was one of five ever in the western counties for the period, perhaps ironic for a species that occurs over much of the United States.

The biggest flocks of Snow Geese were seen from inland hawkwatch spots. A **Ross's Goose** on Martha's Vineyard October 14-22 was photographed (see Hot Birds on the inside front cover of this issue) and submitted to the MARC and will be the state's second record if accepted, the first having been of two birds in Sunderland in March 1997. (Another likely Ross's, in Peabody in October 1996, was not accepted by the MARC because it was a flyover and could not be studied.) Also impressive were three "Richardson's" Canada Geese well described from Northampton. Brant were seen at many western locations, topped by thirty-five at Granville October 27. Perhaps Ed Neumuth could have seen some by staying home in Berkshire County, but by traveling to Plymouth he came up with the season's largest flock of over 500.

The season's only **Eurasian Wigeons** were two at Rockport September 14. Ipswich has long been a stronghold in fall for American Wigeons and Gadwalls, and may have become their state capital: counts of 202 of the former and 178 of the latter, both on October 20, dwarfed all other reports. The Plum Island area usually has the biggest numbers of Green-winged Teal, but this year inland counts at Great Meadows in Concord came in a strong second. Farther west, dabblers as a whole were on the low side and Northern Shovelers, atypically, went unreported. Diving ducks were also scarce in western counties, but one notable exception was a significant fallout of Black Scoters October 28-29, when sightings were made of from one to eighty individuals in twelve central and western locations. The largest scaup flock of the period was in Lakeville, where Lessers outnumbered Greater's by over four to one. Two Harlequin Ducks were exceptionally early in Rockport September 30.

Rare raptors for the period were a **Mississippi Kite** over Mount Wachusett, a **Swainson's Hawk** at Plum Island, and a dark **Gyr Falcon** reported over a ten-day period, also at Plum Island. While details of the latter two were posted on Massbird, only the first was reported to the MARC. A **dark-morph** Red-tailed Hawk documented from Barnstable was a genuine rarity for the eastern United States. The largest *Accipiter* counts were from the Granville and Mount Watatic hawkwatches, where Sharp-shins outnumbered Cooper's 13:1 and 17:1 respectively during the period; that ratio was 13:1 at Chatham for the period and 6:1 at Gay Head on the Vineyard October 9, when a major flight was observed. Three **Golden Eagles** were seen from inland hawk watch overlooks.

The second **Yellow Rail** in three autumns appeared at Daniel Webster Sanctuary in Marshfield, though details were not submitted to the MARC. A **Common Moorhen** at

Cumberland Farms was unique statewide, while single **Sandhill Cranes** were found in Concord and Essex. South Beach in Chatham seems to be the place to be if you're a migrating Black-bellied Plover; identical counts of 3300 were made there seven weeks apart. Five American Golden-Plovers checked in at Great Meadows, with singles at three other places in central and western Massachusetts. Five Semipalmated Plovers likewise made news at Agawam.

The outstanding shorebirds of the period were two **American Avocets**, virtually annual in the state now, seen for two days on Plum Island. A single Upland Sandpiper on the Vineyard was hardly encouraging, and Hudsonian Godwit numbers continue to wallow in single digits, barely exceeding those of Marbled Godwits (see *Bird Observer* 29 (6): 467 for comparative numbers since 1988). Sandpipers "lost" in the interior wilds included a Sanderling in Paxton and two Baird's in Agawam, the latter holdovers from August. Such reports might not generate so much interest west of the Hudson, but those in western New England are intriguing given the abundant nearby shorebird habitat along the coasts of the region. Fifteen Western Sandpipers was an excellent count on Plum Island, while White-rumps had one of their best years here: 230 on Plum Island September 6 and fully 700 a few days earlier on South Beach in Chatham. Late shorebirds were single Baird's and Stilt Sandpipers, one of each in Newbury October 17 and one of each on Plum Island three days later. (There are, however, several November records of each species.)

Laughing Gulls were abundant during the period, with the North Shore reporting almost as many as Cape Cod. Counts of 200 at the south end of Plum Island (almost all juveniles), 300 off Rockport, and 470 at Nahant Beach were much higher than usual. One of them wandered off course as far west as Hadley, where they are very unusual. Bonaparte's Gulls went unreported from the Cape but kept up their high numbers on the North Shore, with over 400 at the mouth of the Merrimack and over 1000 at Lynn-Nahant beaches. A few veered off to large lakes in Worcester County. Lesser Black-backed Gulls continued to be reported mainly from Boston south, including one inland at Sharon and the tame, anomalous *L. f. graellsii* bird in downtown Boston, apparently headed into its fourth winter but with much black still on the basal portion of the bill and its legs not yet yellow. Two **Sabine's Gulls**, rare but almost annual offshore, were found on trips to Stellwagen Bank and Atlantis Canyon in early September.

Cape Cod rules when it comes to terns; compared to the thousands there in late summer and early fall, the rest of the Massachusetts coast is hit or miss. But post-breeding concentrations do occur on the North Shore: 1100 Common Terns at the south end of Plum Island September 13 and 1740 flying past nearby Rockport the next day were big numbers for the location. One was seen in Newburyport as late as October 24, and several Forster's were there at the end of the period as usual. Arctic Terns, of course, take off for the old world from the Maine coast or farther north, and only a single bird was reported from Massachusetts. Caspian was the only southern species reported, with at least two as far north as Newburyport through much of the period. An **Atlantic Puffin** flew by Rockport September 29 and the first Black Guillemot was reported from there October 1.

J. Berry

Red-throated Loon			10/13	Barnstable (S.N.)	29	M. Lynch#
9/29 Chatham (S.B.)	1	P. Flood#	10/22	Plymouth	20	E. Neumuth
9/30 Rockport (A.P.)	4	E. Nielsen	10/28	Stoughton	5	R. Titus
10/22 Plymouth	35	E. Neumuth	10/28	Wachusett Res.	10	M. Lynch#
10/29 Ludlow	1	H. Allen	10/31	Westminster	2	C. Caron
10/31 P.I.	55+	R. Heil	Pied-billed Grebe			
<b>Pacific Loon</b> (details submitted) *			9/2	Longmeadow	1	G. Kingston#
10/31 P.I.	1	R. Heil	9/3, 29	Wakefield	2	P. + F. Vale
Common Loon			9/15-30	Randolph	11 max	G. d'Entremont
9/15, 10/23 P.I.	31, 204	R. Heil	10/9	P.I.	4	R. Heil
9/15 Squantum	5	G. d'Entremont#	10/14	Lakeville	9	SSBC (T. O'Neil)
9/28, 29 Rockport (A.P.)	38, 27	R. Heil	10/16	Harwich	6	M. Dettrev#
9/29 Gardner	9	T. Pirro	10/20	Arlington	5	K. Hartel

Pied-billed Grebe (continued)				10/14	Dorchester	2	BBC (R. Stymey)
10/21	W. Newbury	6	D. Chickering	10/22	Plymouth	8	E. Neumuth
10/23	Gill	6	M. Taylor	10/28	Stoughton	5	R. Titus
<b>Horned Grebe</b>				<b>Double-crested Cormorant</b>			
10/19	Richmond	2	D. St James	9/4-20	P.I.	10,980	migr R. Heil
10/23	Dennis	1	D. Silverstein	9/5	Chatham	3000+	P. Flood
10/28	Wachusett Res.	2	M. Lynch#	9/13	DWWS	640	D. Furbish
10/29	Nahant	2	D. Saffarewich	9/20	Chatham (S.B.)	2500+	P. Flood
10/31	Southwick	1	S. Kellogg	10/9-15	P.I.	9340	R. Heil
10/31	Hubbardston	1	C. Caron	10/13	Gloucester	4000+	J. Barber
<b>Red-necked Grebe</b>				10/22	Plymouth	350+	E. Neumuth
9/27	P'town	1	R. Heil	10/25, 27	Newbypt/P.I.	650, 1100	J. Berry
9/29	Woburn	1	P. + F. Vale	10/27-29	Stoughton	639	R. Titus
10/1	Southwick	2	S. Kellogg	<b>American Bittern</b>			
10/22	Plymouth	1	E. Neumuth	9/3	HRWMA	4	T. Pirro
10/28	Sharon	4	R. Titus	9/18, 10/23	P.I.	1, 3	R. Heil
10/28	Rockport (A.P.)	2	R. Heil	9/20-23	Winchester	2	A. Golden + v.o.
10/31	P.I.	5	R. Heil	10/6	Eastham	1	C. Floyd#
<b>Eared Grebe</b>				10/7	Nantucket	1	N. Slevitts
10/11-31	Gloucester (E.P.)	1	D. Sandee + v.o.	10/13	Worc. (BMB)	1	J. Liller#
<b>Northern Fulmar</b>				10/13	N. Monomoy	1	B. Nikula
9/29	Rockport (A.P.)	3	lt R. Heil	10/20	Eastham (F.H.)	1	imm SSBC (R. Fox)
<b>Cory's Shearwater</b>				10/20	Chilmark	1	A. Keith
9/2	Stellwagen	2	S. Moore#	10/20	Ipswich	1	R. Heil
9/7-9	Atlantis Canyon	15	W. Zuzevitch#	10/20, 27	Dorchester	1, 1	R. Donovan
9/16	off Noman's Land	5+	A. Keith	<b>Least Bittern</b>			
9/18, 10/2	P'town (R.P.)	1, 4	R. Titus	9/2-10/7	Rockport	1-3	J. Soucy + v.o.
9/23	Stellwagen	2	S. Hedman#	10/4	Chappaquiddick	1	A. Keith
9/29	Rockport (A.P.)	3	R. Heil	<b>Great Blue Heron</b>			
<b>Greater Shearwater</b>				9/8	Nauset	35	M. Lynch#
9/7-9	Atlantis Canyon	30	W. Zuzevitch#	9/11, 30	GMNWR	42, 15	S. Perkins
9/8, 10/21	Stellwagen	40, 1	fide B. Nikula	10/21	Eastham	65	D. Larson#
9/16	off M.V.	35+	A. Keith	10/21	Dorchester	17	R. Donovan
9/29	Rockport (A.P.)	20	R. Heil	<b>Great Egret</b>			
10/2	Stellwagen	69	O. Spalding	9/2	Chatham	15+	T. Raymond#
10/2	P'town (R.P.)	91	R. Titus	9/2, 23	Agawam	2, 1	S. Kellogg
10/23	Chappaquiddick	1	A. Keith#	9/2	S. Monomoy	10+	B. Nikula#
10/24	Salisbury	1MAS	(B. Stevens#)	9/4, 26	GMNWR	4, 4	S. Perkins
<b>Sooty Shearwater</b>				9/5	Lee	13	R. Laubach
9/8	Stellwagen	20	fide B. Nikula	9/7	Sudbury	7	E. Taylor
9/22	P'town	1	B. Nikula	9/15, 10/20	P.I.	70, 35	R. Heil
9/23	Stellwagen	5	S. Hedman#	9/28	Sunderland	3	M. Williams
<b>Manx Shearwater</b>				9/30	Newbury	7	P. + F. Vale
9/3	Stellwagen	2	B. Nikula#	10/19	Ipswich	18	J. Berry#
9/22	P'town	45+	B. Nikula	10/27	Marshfield	6	G. d'Entremont#
9/23	Stellwagen	4	S. Hedman#	<b>Snowy Egret</b>			
9/30	Rockport (A.P.)	1	E. Nielsen	9/1	Newbypt.	6	M. Lynch#
10/2	P'town (R.P.)	35	R. Titus	9/14	Gloucester	104	J. Soucy#
<b>Wilson's Storm-Petrel</b>				9/16, 30	GMNWR	2, 1	S. Perkins
9/3	Stellwagen	300+	B. Nikula#	9/24, 10/4	P.I.	130, 45	R. Heil
9/3	Chatham (S.B.)	250+	P. Flood	10/13	Barnstable	2	M. Lynch#
9/7-9	Atlantis Canyon	40	W. Zuzevitch#	10/20	Ipswich	2	R. Heil
9/29	Barnstable (S.N.)	4	G. Hirth	10/24	P.I.	1	R. Heil
9/30	P.I.	2	S. Sauter#	<b>Little Blue Heron</b>			
9/30	Nantucket	5	B. Kennedy	9/2	S. Monomoy	1	imm. T. Raymond#
10/1	Eastham (F.E.)	3	B. Nikula	9/4-26	GMNWR	1	imm S. Perkins
<b>White-faced Storm-Petrel *</b>				10/2	P.I.	1	imm J. Berry
9/7-9	Atlantis Canyon	1	W. Zuzevitch#	10/6	Essex	1	D. Brown#
<b>Leach's Storm-Petrel</b>				<b>Tricolored Heron</b>			
9/8	Stellwagen	1	M. Lynch#	9/1	Newbury	1	F. Vale
9/30	Nantucket	4	J. Hoye#	9/7-10	P.I.	2	R. Heil
9/30	Barnstable (S.N.)	174	G. d'Entremont#	<b>Cattle Egret</b>			
9/30	Rockport (A.P.)	57	E. Nielsen	9/20	Manchester	1	J. Soucy#
10/1	Eastham (F.E.)	1	B. Nikula	10/17-22	Edgartown	1	J. Norton
<b>Northern Gannet</b>				10/18-22	Amherst	1	E. Labato v.o.
9/2	Chatham (S.B.)	1	R. Lockwood#	10/20	Eastham	1	juv SSBC (R. Fox)
9/18, 10/2	P'town (R.P.)	18, 95	R. Titus	10/26	Essex	1	P. Brown
9/30	Barnstable (S.N.)	226	G. d'Entremont#	<b>Green Heron</b>			
10/1	Rockport	600	J. Berry	9/1	Newbypt.	4	M. Lynch#
10/21	Eastham	130+	D. Larson#	9/11, 26	GMNWR	3, 4	S. Perkins
10/27	Marshfield	35	G. d'Entremont#	9/21	Plymouth	1	R. Titus
10/28	P'town	135	S. Moore#	9/25	Taunton	1	G. d'Entremont
10/28	Eastham (F.E.)	500	S. Moore#	9/29	Wakefield	1	P. + F. Vale
<b>Great Cormorant</b>				10/5	Lakeville	1	K. Anderson
9/5, 19	P.I.	6, 7	migr R. Heil	<b>Black-crowned Night-Heron</b>			
9/20	Chatham (S.B.)	1	ad P. Flood	9/5	P.I.	8	J. Berry
9/28	Rockport (A.P.)	7	R. Heil	9/9	Chatham	5	M. Faherty
10/13	Barnstable (S.N.)	3	M. Lynch#	10/14	Ipswich	17	R. Heil

Black-crowned Night-Heron (continued)				<b>Eurasian Wigeon</b>			
10/15	DWWS	24	D. Clapp	9/14	Rockport (A.P.)	2	R. Heil
Yellow-crowned Night-Heron				American Wigeon			
9/2, 15-29	MNWS	1 juv	R. Heil + v.o.	9/2	S. Monomoy	20	T. Raymond#
9/3	Marion	1 juv	R. Harlow	9/6	P.I.	4	J. Berry#
10/2	WBWS	1	R. Titus	9/12	Worcester	2	M. Lynch#
Glossy Ibis				9/29	Eastham	7	G. d'Entremont#
9/2	S. Monomoy	4	T. Raymond#	10/20	Ipswich	202	R. Heil
9/6	N. Monomoy	3	B. Nikula	10/21	Marstons Mills	99	D. Larson#
9/9	P.I.	2	D. + S. Larson	10/26	Stoughton	10	D. Larson
Black Vulture				10/29	Lakeville	23	A. Brissette#
9/5	Vineyard Haven	1	A. Keith	American Black Duck			
9/10, 26	Chilmark	1	A. Keith	9/29	WBWS	173	G. d'Entremont#
9/13, 10/28	Granville	1, 1	T. Swochak	10/4	P.I.	670	R. Heil
9/15, 10/21	Sheffield	2, 1	M. Lynch#	10/18	Plymouth	125	D. Clapp
Turkey Vulture				Blue-winged Teal			
9/2-15	Mt. Watic	74	EMHW	9/2	S. Monomoy	95	T. Raymond#
9/15	GMNWR	14	S. Perkins	9/4	Longmeadow	35	S. Kellogg
9/15	Mt. Wachusett	25	E. Taylor	9/4, 30	GMNWR	50, 1	S. Perkins
9/15	Sheffield	36	M. Lynch#	9/10	Brookfield	4	W. Laflay
9/26-30	Mt. Watic	48	EMHW	9/15	Randolph	17	G. d'Entremont#
10/14	Amherst	20	D. Norton	9/21-26	Granville	10	S. Kellogg
10/15	Groton	11	T. Pirro	9/26	S. Egremont	6	D. St James
10/22	Tyngsboro	13	M. Amrich	10/4, 24	P.I.	8, 1	R. Heil
10/24	Granville	61	T. Swochak#	10/12	Gill	4	W. Laflay
10/28-29	Mt. Watic	27	T. McCullough#	10/19	Dorchester	5	R. Donovan
Snow Goose				10/21	Marstons Mills	8	D. Larson#
9/30	Nantucket	2	J. Stewart	Northern Shoveler			
10/2, 20	P.I.	2, 75	J. Berry	9/2	S. Monomoy	12	T. Raymond#
10/4	Lee	50	L. Thorne	9/24, 10/10	P.I.	2, 2	R. Heil
10/7	DWWS	130	D. Larson#	9/29	Arlington Res.	1	R. Stymeist
10/8	Mattapoisett	130+	M. LaBossiere	10/20	Ipswich	3	R. Heil
10/8	Mt. Watic	201	T. McCullough#	10/21	GMNWR	1	BBC (B. Volkle)
10/8	Worc. (BMB)	4	J. Liller#	10/29	Boston	2	J. Offermann
10/8-22	Chilmark	12-27	A. Keith#	Northern Pintail			
10/15	Granville	300	S. Kellogg	9/2	S. Monomoy	15	T. Raymond#
10/19	Amherst	5	R. Ranney	9/11	GMNWR	3	S. Perkins
10/23	Buckland	60	R. Packard	9/15	Randolph	6	G. d'Entremont#
Ross's Goose (details submitted) *				10/20	P.I.	60	W. Petersen
10/14-22	Chilmark	1 ph	T. Rivers + v.o.	10/23	Gill	15	M. Taylor
Richardson's Canada Goose				10/25	GMNWR	14	J. Miller
10/25	Northampton	3	E. Labato	10/29	S. Egremont	3	J. Johnson
Brant				Green-winged Teal			
9/2	Marblehead Neck	1	R. Heil	9/2	S. Monomoy	60	T. Raymond#
9/9	Plymouth B.	1	J. Sweeney#	9/4, 30	GMNWR	200, 75	S. Perkins
9/29	WBWS	40	G. d'Entremont#	9/10, 24	Lexington	20, 35	M. Rines
10/7	Nahant	80+	L. Pivacek	9/15	Randolph	86	G. d'Entremont#
10/19	Northampton	1	E. Labato	9/18	Wayland	75	G. Long
10/19	Turners Falls	3	M. Fairbrother	9/24, 10/24	P.I.	275, 680	R. Heil
10/19	Southwick	1	S. Kellogg	10/8	Longmeadow	16	R. Packard
10/21	Cheshire	1	T. Gagnon	10/25	GMNWR	635	J. Miller
10/21-22	Arlington Res.	1	A. LeRoy#	10/27	Plymouth	20	G. d'Entremont#
10/22	Whately	1	R. Ranney	Canvasback			
10/22	Plymouth	500+	E. Neumuth	10/22	Camb. (F.P.)	4	M. Rines
10/25	Newbypt./P.I.	120	J. Berry	10/29	Lakeville	1	A. Brissette#
10/27	Granville	35	J. Weeks	Redhead			
10/28	Eastham (F.E.)	36	S. Moore#	10/10-30	Boston	1 m	G. Tepke
Wood Duck				10/27	Pembroke	3	W. Petersen
9/3	Longmeadow	50	S. Kellogg	10/28	Sharon	1 m	R. Titus
9/7	Sudbury	100+	E. Taylor	Ring-necked Duck			
9/8	Agawam	25	S. Kellogg	9/2	S. Monomoy	1	T. Raymond#
9/8	Northfield	25	M. Taylor	9/15, 10/13	Southboro	30, 50	E. Taylor
9/15	S. Egremont	41	M. Lynch#	9/22, 10/7	W. Newbury (C.H.)	19, 240	R. Heil
9/17	IRWS	30	J. Berry	10/2	Cheshire	131	E. Neumuth
9/17	Granville	30	S. Kellogg	10/14, 28	Stoughton	34, 111	R. Titus
9/23	Bolton Flats	42	M. Lynch#	10/20	Northbridge	43	M. Lynch#
9/25, 10/15	Winchester	46, 84	R. LaFontaine	10/20	Ipswich	69	R. Heil
10/14	Stoughton	21	R. Titus	10/21	Lakeville	315	K. Anderson#
10/14, 29	Tyngsboro	30, 74	M. Amrich	10/22	Camb. (F.P.)	170	M. Rines
10/25	Gr. Barrington	20	C. Barrett	10/31	Framingham	85	K. Hamilton
10/28	Lakeville	42	J. Sweeney#	Tufted Duck			
Gadwall				9/30-10/31	Sterling	1 m	F. McMenemy + v.o.
9/2	S. Monomoy	35	T. Raymond#	Greater Scaup			
9/9	P.I.	15	K. Anderson#	9/30	W. Newbury	14	P. + F. Vale
9/30	Marstons Mills	2	G. d'Entremont#	10/17	Braintree	21	D. Larson
10/6	Woburn	3	M. Rines	10/28	Sterling	17	M. Lynch#
10/20	Ipswich	178	R. Heil	10/28	Winthrop	20	J. Young
10/25	Marblehead	21	K. Haley	10/29	Lakeville	50	A. Brissette#



Cooper's Hawk (continued)				9/15-29 Gardner	64	T. Pirro
9/19, 27 Barre	4, 3	EMHW	9/15 Mt. Tom	15	T. Gagnon#	
9/23 Blueberry Hill	3	J. Weeks#	9/15, 16 GMNWR	8, 5	S. Perkins	
9/29, 10/27 Gardner	9, 3	T. Pirro	9/23 Blueberry Hill	29	J. Weeks#	
10/6 Boston (A.A.)	4	J. Sweeney	10/7 M.V.	7	SSBC (D. Clapp)	
10/9 Gay Head	40+	V. Laux	Merlin			
Northern Goshawk				9/7-10/31 Granville	17	T. Swochak#
9/2-10-28 Mt. Watatic	14	EMHW	9/8-30 Mt. Watatic	31	EMHW	
9/2 Lexington	1	P. + F. Vale	9/8 Cuttyhunk	4	BBC (R. Stymeist)	
9/15, 10/18 Northampton	1, 1	T. Gagnon	9/9, 12 Edgartown	1, 3	A. Keith	
9/15-10/24 Granville	5	T. Swochak#	9/11-23 Mt. Wachusett	6	EMHW	
9/15 Belchertown	1	M. Faherty	9/15, 10/15 P.I.	7, 4	R. Heil	
9/17 Mt. Tom	1	T. Gagnon	9/15, 26 Gardner	2, 6	T. Pirro	
9/29 Concord (NAC)	1	R. Lockwood#	9/18 Chilmark	3	A. Keith	
9/29 Gardner	2	T. Pirro	9/29 Chatham (S.B.)	2	P. Flood#	
9/30 Westboro	1 imm	M. Lynch#	10/5 Essex	2	D. Brown	
10/7 Stoughton	1	R. Titus	10/7 M.V.	2	SSBC (D. Clapp)	
10/13 HRWMA	2	J. Stein#	10/14 Orange	2	D. Small#	
10/13 Millis	1	E. Taylor	10/15 Groton	2	T. Pirro	
10/20 Westminster	1	C. Caron	10/20 Eastham	2	SSBC (R. Fox)	
10/21 Windsor	1 ad	M. Lynch#	10/26 Rockport (A.P.)	2	R. Heil	
10/22 Belmont	1 imm	M. Rines	Peregrine Falcon			
10/25 Athol	1	B. Coyle	9/2-10/28 Mt. Watatic	12	T. McCullough#	
10/26 P.I.	1 imm	R. Stymeist#	9/4-10/4 P.I.	23	R. Heil	
10/29 Hinsdale	1	L. Robertson	9/15-23 Mt. Wachusett	4	EMHW	
10/31 Salisbury	1 imm	MAS (N. Soulette#)	9/18-10/19 Chatham	40	EMHW	
Red-shouldered Hawk				9/19-10/31 Granville	5	T. Swochak#
9/2, 13 Mt. Wachusett	1, 1	EMHW	9/29, 10/6 Gardner	2, 3	T. Pirro	
9/3 HRWMA	1 ad	T. Pirro	10/6, 19 Edgartown	3, 4	A. Keith	
9/8 Northfield	3	M. Taylor	10/7 M.V.	3	SSBC (D. Clapp)	
9/11-10/29 Mt. Watatic	70	EMHW	10/15 P.I.	4	R. Heil	
9/21 DWWS	2 imm	R. Titus#	thr Reports of 1-2 indiv. from 33 locations			
9/24 P.I.	1	N. Paulson	<b>Gyr Falcon</b> (no details) *			
9/29 Gardner	1	T. Pirro	10/16-25 P.I.	1 dk	C. Leahy + v.o.	
9/30 Bolton	1	J. Liller#	Ring-necked Pheasant			
10/7-31 Granville	24	T. Swochak#	10/9 Boston (BNC)	6	A. Joslin	
10/12 Marshfield	1 ad	D. Furbish	10/14 Cumb. Farms	2	SSBC (T. O'Neil)	
10/13 Northampton	1	R. Packard	Ruffed Grouse			
10/14 Lakeville	1	SSBC (T. O'Neil)	9/2 Holden	8	M. Lynch#	
10/24 Westminster	2	C. Caron	9/4 Westminster	1 f, 2 yg	C. Caron	
10/28 Rochester	1 ad	J. Sweeney#	9/9 ONWR	12+	BBC (J. Center)	
Broad-winged Hawk				9/19 Hardwick	2	C. Buelow
9/2-29 Mt. Watatic	14567	T. McCullough#	9/23 Quabbin (G12)	5	M. Faherty	
9/2-26 Mt. Wachusett	7420	T. Carrolan	10/3 Milton	2	M. Kanaracus	
9/11-9/27 Barre	528	EMHW	10/4 Hyannis	1	C. Buelow	
9/12-19 Granville	5348	T. Swochak#	10/7 Georgetown	1	R. Stymeist	
9/15 Mt. Holyoke	2163	H. Lappen	10/24 Royalston	1	M. Taylor#	
9/15 Gardner	2383	T. Pirro	Wild Turkey			
9/15 Belchertown	133	M. Faherty	9/8 Hingham	14	C. Nims#	
9/15, 17 Mt. Tom	2922, 320	T. Gagnon#	9/16 New Salem	28	W. Lafley	
9/15 Maynard	14	J. Michaels#	9/21 Plymouth	22	R. Titus	
9/15 Sheffield	311	M. Lynch#	9/23 DWWS	20	D. + S. Larson	
9/23 Blueberry Hill	140	J. Weeks#	10/2 Lincoln	20	D. Peebles	
9/27 Groton	49	T. Pirro	10/7 Stow	17	J. Michaels	
9/28 Sunderland	3	M. Williams	10/8 Washington	25	E. Neumuth	
10/15 Granville	1	T. Swochak#	10/20 Blandford	20	K. + M. Conway	
Swainson's Hawk (no details) *				10/22 Marshfield	18	E. Neumuth
9/16 P.I.	1 juv	S. Mirick#	10/24 Shirley	13	R. Stymeist#	
Red-tailed Hawk				10/30 Templeton	92	C. Caron
9/8-10/31 Granville	274	T. Swochak#	Northern Bobwhite			
9/15 Stow	8	R. Lockwood	9/18 Eastham (F.H.)	4	R. Titus	
9/29, 10/27 Gardner	8, 20	T. Pirro	9/19 Lexington	1 f, 6-8 juv	C. Floyd	
9/29-10/29 Mt. Watatic	283	T. McCullough#	<b>Yellow Rail</b> (no details) *			
10/6 Newbury	15	D. Brown#	10/26 DWWS	1	D. Furbish	
10/13 Barnstable	1 dk	M. Lynch#	Clapper Rail			
10/27 Gardner	25	T. Pirro	9/6 Chappaquidick	1	M. Pelikan#	
Golden Eagle				9/9 Morris Island	1	M. Lynch#
9/11 Granville	2	J. Weeks	Virginia Rail			
9/26 Mt. Watatic	1 ad	T. McCullough	9/1 GMNWR	ad + 2 yg	G. d'Entremont#	
American Kestrel				9/13 DWWS	2 ad	D. Furbish
9/1-10/33 Granville	486	T. Swochak#	9/15 S. Egremont	2	M. Lynch#	
9/2-23 Mt. Wachusett	94	T. Carrolan	9/23 Bolton Flats	3	M. Lynch#	
9/3-30 Mt. Watatic	180	EMHW	9/23 Chelmsford	1 T. + D.	Brownrigg	
9/3 Lancaster	6	R. Lockwood	10/2 Eastham (F.H.)	1	R. Titus	
9/10-13 Nashawena I.	5	A. Lapey	10/8-21 Dorchester	1+	R. Donovan	
9/13, 14 Groton	7, 3	T. Pirro	Sora			
9/13-27 Barre	95	EMHW (B. Kamp#)	9/2 Cumb. Farms	1	J. Sweeney	
9/15 Sheffield	8	M. Lynch#	9/3 Rockport	1	P. Brown	

Sora (continued)				10/1	Nantucket	5	J. Hoye#
9/3-30	Dorchester	3	R. Donovan	10/5	N. Monomoy	80	B. Nikula
9/6	GMNWR	2	J. Young	10/7	M.V.	7	SSBC (D. Clapp)
9/7	P.I.	1 ad	R. Heil	<b>American Avocet</b>			
9/18	Eastham (F.H.)	1	R. Titus	10/10-11	P.I.	2	R. Heil
9/23	Bolton Flats	2	M. Lynch#	<b>Greater Yellowlegs</b>			
10/10	Noman's Land	1	A. Keith	9/6, 10/13	N. Monomoy	180, 70	B. Nikula
10/20	DWWS	1	W. Childs#	9/8	Nauset	150+	M. Lynch#
<b>Common Moorhen</b>				9/18	Eastham (F.H.)	90	R. Titus
10/21	Cumb. Farms	1 imm	K. Anderson#	9/21	Edgartown	250+	V. Laux
<b>American Coot</b>				9/22	Salisbury	100+	D. Chickering
9/20	Woburn	1	M. Rines	9/30	Barnstable	50	G. d'Entremont#
10/1	Pittsfield	1	E. Neumuth	10/7	Squantum	41	G. d'Entremont
10/8	Gill	7	M. Taylor	10/10, 24	P.I.	320, 175	R. Heil
10/9	Jamaica Plain	3	J. Young#	10/20	Eastham (F.E.)	60	SSBC (R. Fox)
10/19	Richmond	3	D. St. James	10/27	Marshfield	6	G. d'Entremont#
10/20	Northbridge	1	M. Lynch#	10/31	Wayland	6	K. Hamilton
10/21	Newbypt.	2	D. Chickering	10/31	Northampton	2	B. Bieda
10/21	Cheshire	6	T. Gagnon	<b>Lesser Yellowlegs</b>			
10/24	Longmeadow	2	S. Kellogg	9/8	WBWS	27	M. Lynch#
10/28	Sharon	17	R. Titus	9/15	Newbypt./P.I.	220	R. Heil
10/31	Framingham	9	K. Hamilton	9/21	Edgartown	50+	V. Laux
<b>Sandhill Crane</b>				9/24	Arlington Res.	4	M. Rines
9/1-3	GMNWR	1	v.o.	10/25	Newbypt./P.I.	3	J. Berry
9/5	Essex	1 imm	D. Brown	<b>Solitary Sandpiper</b>			
<b>Black-bellied Plover</b>				9/1	HRWMA	4	S. Smolen-Morton
9/1, 10/20	Chatham (S.B.)	3300, 3300	B. Nikula	9/1	GMNWR	5	G. d'Entremont#
9/8	Duxbury B.	51	D. Clapp	9/2	Northbridge	3	M. Lynch#
9/21	Edgartown	500+	V. Laux	9/8	Chilmark	4	A. Keith
9/29	WBWS	200	G. d'Entremont#	9/11	W. Townsend	8	T. Pirro
9/30	Boston	48	BBC (R. Stymeister)	9/20	Lenox	2	R. Laubach
10/20	Eastham (F.E.)	50	SSBC (R. Fox)	9/23, 27	Granville	3, 1	J. Weeks
10/22	Plymouth	65	E. Neumuth	9/24	Arlington Res.	5	M. Rines
10/24	P.I.	110	R. Heil	<b>Willet</b>			
10/28	Ipswich	350+	BBC (J. Nove)	9/1	Chatham (S.B.)	40	B. Nikula
<b>American Golden-Plover</b>				9/2-23	Edgartown	3	A. Keith#
9/thr	P.I.	1-4	v.o.	9/15	Newbypt.	3	R. Heil
9/1-10/9	Chatham (S.B.)	2	B. Nikula	9/22	Salisbury	2	D. Chickering
9/2, 6	Edgartown	1, 2	A. Keith#	10/5	N. Monomoy	7	B. Nikula
9/8	HRWMA	1 ad	T. Pirro	<b>Western Willet</b>			
9/11, 26	GMNWR	5	S. Perkins	9/2	Chatham (S.B.)	2	R. Lockwood#
9/16-17	Westport	1	K. Preston	<b>Spotted Sandpiper</b>			
9/30	Boston	17	BBC (R. Stymeister)	9/1	P.I.	2	M. Lynch#
10/5	Essex	1	D. Brown	9/2	Holden	4	M. Lynch#
10/5	Northampton	1	C. Gentes	9/3	GMNWR	2	D. Chickering
10/7	Duxbury B.	1	D. Larson#	9/15	Randolph	4	G. d'Entremont#
10/16	Newbury	7 juv	R. Heil	9/16	Paxton	3	M. Lynch#
10/17	Groton	1	T. Pirro	9/24	Dennis (Corp. B.)	3	P. Flood
10/20	Truro	1	B. Nikula	9/30	Boston	2	BBC (R. Stymeister)
10/27	Newbypt.	20	J. Hoye#	10/14	W. Newbury (C.H.)	2	R. Heil
<b>Semipalmated Plover</b>				<b>Upland Sandpiper</b>			
9/1, 10/9	Chatham (S.B.)	900, 160	B. Nikula	9/23	Katama	1	A. Keith
9/7, 16	Agawam	4, 1	S. Kellogg	<b>Whimbrel</b>			
9/8	Duxbury B.	32	D. Clapp	9/2	GMNWR	1	J. Liller
9/15	Squantum	54	G. d'Entremont#	9/2	Chatham (S.B.)	4	R. Lockwood#
9/15	Randolph	6	G. d'Entremont#	9/6	P.I.	4	J. Berry#
9/15	Newbypt./P.I.	320	R. Heil	9/15	Wellfleet	15	BBC (R. Stymeister)
9/16	Ipswich (C.B.)	85	J. Berry	9/30	Dennis (Corp. B.)	1	G. d'Entremont#
10/1, 24	P.I.	165, 27	R. Heil	10/26	P.I.	1	R. Stymeister#
10/6	Essex	120	D. Brown#	<b>Hudsonian Godwit</b>			
10/13	Barnstable (S.N.)	10	M. Lynch#	9/2	Edgartown	1	M. Pelikan
10/22	Plymouth	25	E. Neumuth	9/7, 22	Chatham (S.B.)	5, 1	B. Nikula
<b>Piping Plover</b>				9/12	P.I.	2	S. Hedman
9/1, 10/9	Chatham (S.B.)	34, 1	B. Nikula	9/22	Salisbury	1	D. Chickering
9/23	P.I./Newbypt.	1	BBC (S. Moore)	10/20	P.I.	4	W. Petersen
<b>Killdeer</b>				<b>Marbled Godwit</b>			
9/2	Holden	41	M. Lynch#	9/1-22	Chatham (S.B.)	4 max	B. Nikula
9/11, 26	GMNWR	55, 85	S. Perkins	10/13, 27	N. Monomoy	3, 1	B. Nikula
9/12	Ipswich	27	J. Berry	<b>Ruddy Turnstone</b>			
9/24	Northampton	65	W. Lafley	9/1	P.I.	8	M. Lynch#
10/4	Orange	35	M. Taylor	9/2	Chatham (S.B.)	26	R. Lockwood#
10/7	Hanson	25	D. Larson#	9/8	Duxbury B.	7	D. Clapp
10/21	S. Lancaster	20	S. Sutton#	9/12	WBWS	1	M. Detrey
10/21	Bolton Flats	25	E. Morrier#	10/1	Nantucket	25	J. Hoye#
10/21	Arlington Res.	20	K. Hartel	10/22	Plymouth	6	E. Neumuth
<b>American Oystercatcher</b>				<b>Red Knot</b>			
9/7, 10/20	Chatham (S.B.)	160, 68	B. Nikula	9/1-22	Chatham (S.B.)	400 max	B. Nikula
9/8	WBWS	1	M. Lynch#	9/3	Dorchester	1	R. Donovan

Red Knot (continued)									
9/8	Duxbury B.	82		D. Clapp	9/9	P.I.	30		K. Anderson#
9/16	Westport	4		K. Preston	10/17	Newbury	1		R. Heil
9/24, 10/24	P.I.	40, 8		R. Heil	10/20	P.I.	1		R. Heil
10/20	Chatham (S.B.)	220		B. Nikula	Buff-breasted Sandpiper				
Sanderling					9/1	P.I.	2		P. + F. Vale
9/1, 10/20	Chatham (S.B.)	2800, 1000		B. Nikula	9/6	Chatham (S.B.)	1		R. Clem
9/12-16	Paxton	1 juv		M. Lynch#	9/23	GMNWR	1		SSBC (B. Howell)
9/20-23	Edgartown	450+		A. Keith	9/28	Chatham (S.B.)	1		R. Donovan#
9/24	P.I.	200+		A. Strauss	10/17	Newbury	1 juv		R. Heil
9/26	Nahant	450		R. Heil	Short-billed Dowitcher				
9/29	P'town	100		G. d'Entremont	9/1	P.I.	70+		M. Lynch#
10/5	Essex	200		D. Brown	9/1	Newbypt.	9		M. Lynch#
10/20	Eastham (F.E.)	600		SSBC (R. Fox)	9/1, 10/9	Chatham (S.B.)	70, 8		B. Nikula
10/22	Plymouth	600+		E. Neumuth	9/8	WBWS	13		M. Lynch#
Semipalmated Sandpiper					9/29	Eastham (F.E.)	14		G. d'Entremont#
9/1, 10/20	Chatham (S.B.)	800, 95		B. Nikula	9/30	Barnstable	8		G. d'Entremont#
9/8	Duxbury B.	14		D. Clapp	10/4	P.I.	4 juv		R. Heil
9/8	Agawam	1		S. Kellogg	Long-billed Dowitcher				
9/9	Chatham	200+		M. Lynch#	9/1	Chatham (S.B.)	1		B. Nikula
9/15	Newbypt./P.I.	800		R. Heil	9/19, 10/20	P.I.	67, 72		R. Heil
9/16	Ipswich (C.B.)	50		J. Berry	Common Snipe				
9/23	Marshfield	35		G. d'Entremont	9/2	S. Monomoy	5		T. Raymond#
9/24	Arlington Res.	3		M. Rines	9/11, 27	GMNWR	24, 4		S. Perkins
10/1, 24	P.I.	230, 5		R. Heil	9/13	Maynard	3		L. Nachtrab
10/5	Essex	45		D. Brown	10/13	Truro	2		M. Lynch#
Western Sandpiper					10/19	Dorchester	3		R. Donovan
9/1-22	Chatham (S.B.)	10 ad max		B. Nikula	10/21	Wayland	1		BBC (B. Howell)
9/9	P.I.	15		C. Buelow	10/24	Ashfield	1		R. Ranney
9/15	Squantum	1		G. d'Entremont#	10/28	W. Groton	1		J. Hoye#
10/7	Nantucket	2		E. Ray	American Woodcock				
10/10	P.I.	1		R. Heil	9/19	Ashfield	3		S. Sauter
10/28	Chatham (S.B.)	3		R. Donovan#	9/23	Bolton Flats	10		M. Lynch#
Least Sandpiper					9/26	Littleton	2		C. Caron
9/1	P.I.	280+		M. Lynch#	10/9	Hardwick	2		C. Buelow
9/2	Cumb. Farms	13		J. Sweeney	10/26	Dorchester	1		R. Donovan
9/2	Northbridge	15		M. Lynch#	10/30	Becket	1		R. Laubach
9/2	HRWMA	8		T. Pirro	Wilson's Phalarope				
9/9	Agawam	6		S. Kellogg	9/10	P.I.	1 juv		R. Heil
10/9	Chatham (S.B.)	4		B. Nikula	Red-necked Phalarope				
10/16, 20	P.I.	2, 1		R. Heil	9/7-9	Atlantis Canyon	2		W. Zuzevitch#
10/17	Newbury	2		R. Heil	9/8	Stellwagen	12+		v.o.
White-rumped Sandpiper					Red Phalarope				
9/1	Chatham (S.B.)	700		B. Nikula	9/29	Rockport (A.P.)	6		R. Heil
9/1	HRWMA	3		S. Smolen-Morton	9/30	P.I.	1		J. Morris-Siegel#
9/6, 10/24	P.I.	230 ad, 26		R. Heil	10/15	Gay Head	1		R. Iwaskiewicz
9/27	GMNWR	1 ad		S. Perkins	Pomarine Jaeger				
10/9, 28	Chatham (S.B.)	80, 20		B. Nikula	9/7-9	Atlantis Canyon	1		W. Zuzevitch#
10/17	Newbury	35		R. Heil	9/16	off M.V.	1		A. Keith
Baird's Sandpiper					Parasitic Jaeger				
9/2, 9	Edgartown	1, 7		A. Keith#	9/11, 16	Chatham (S.B.)	12, 15		B. Nikula
9/4, 19-24	P.I.	1 juv, 3 juv		R. Heil	9/13	P.I.	2		R. Heil
9/10	Agawam	2		S. Kellogg	9/14, 29	Rockport (A.P.)	4, 1		R. Heil
10/17	Newbury	1 juv		R. Heil	9/18, 10/2	P'town (R.P.)	5, 2		R. Titus
10/20	P.I.	1 juv		W. Petersen#	9/27	Chatham	25		R. Heil
Pectoral Sandpiper					9/30	Barnstable (S.N.)	1		G. d'Entremont#
9/4, 26	GMNWR	2, 12		S. Perkins	10/1	Eastham (F.E.)	7		B. Nikula
9/10, 10/23	P.I.	22, 42		R. Heil	10/4	Chatham Light	10+		B. Nikula
9/22	Chatham (S.B.)	10		B. Nikula	10/13	N. Monomoy	4+		B. Nikula
9/30	Cumb. Farms	2		G. d'Entremont#	Long-tailed Jaeger				
10/10	GMNWR	16		D. Furbish	9/7-9	Atlantis Canyon	1 juv		W. Zuzevitch#
10/16	Newbury	31		R. Heil	9/18	P'town (R.P.)	1 ad		R. Titus
10/18	Marstons Mills	7		S. Miller	Laughing Gull				
10/20	Wellesley	14		K. Winkler	9/5, 10/13	Chatham Light	150 juv, 150		B. Nikula
Purple Sandpiper					9/8	WBWS	125+		M. Lynch#
10/14	Gloucester (E.P.)	1		J. Barber	9/11	Chatham (S.B.)	200+		B. Nikula
Dunlin					9/13	P.I.	200		J. Berry#
9/9	Newbypt.	1 juv		D. + S. Larson	9/15	Wellfleet	500+		BBC (R. Stymeist)
9/22, 10/20	Chatham (S.B.)	450, 2600		B. Nikula	9/21	Rockport	300		J. Soucy#
10/5	Essex	118		D. Brown	9/24	Dennis (Corp. B.)	220		P. Flood
10/20	Eastham	300		SSBC (R. Fox)	9/26	Nahant	470		R. Heil
10/22	Plymouth	1500+		E. Neumuth	9/27	P'town	700		R. Heil
10/24	P.I.	700		R. Heil	10/8	Hadley	1		P. Yeskie
10/27	Marshfield	200		G. d'Entremont#	10/20	Eastham	26		SSBC (R. Fox)
10/28	Eastham (F.E.)	150		S. Moore#	10/27	Plymouth	25		G. d'Entremont#
Stilt Sandpiper					Little Gull				
9/2	S. Monomoy	7		T. Raymond#	9/26	Nahant	1 ad, 1 1W		R. Heil
9/8	WBWS	1		M. Lynch#	Black-headed Gull				
					9/28	Dennis (Corp. B.)	1		G. Hirth

Black-headed Gull (continued)				10/1	Nantucket	26	E. Ray
10/13	Chatham Light	1 ad	B. Nikula	10/2	P'town (R.P.)	4	R. Titus
Bonaparte's Gull				Common Tern			
9/4	Lynn	500+	J. Quigley	9/8	Duxbury B.	230	D. Clapp
9/7	Newbypt.	430	R. Heil	9/8	Nauset	5000	M. Lynch#
9/14	Wayland	2	K. Hamilton	9/9	Edgartown	250+	A. Keith
9/22	Salisbury	417	D. Chickering	9/13	P.I.	1100	J. Berry#
9/26	Lynn/Nahant	980	R. Heil	9/14	Rockport (A.P.)	1740	R. Heil
10/7, 28	Wachusett Res.	1 1W, 2	M. Lynch#	9/26	Nahant	310	R. Heil
10/18	Lynn	1000+	J. Quigley	9/27	Chatham	10,000	R. Heil
10/27	Marshfield	45	G. d'Entremont#	9/27	P'town	900	R. Heil
10/27	S. Boston	80	R. Donovan	10/13	Truro	80	M. Lynch#
10/28	Sterling	2 1W	M. Lynch#	10/17	Nantucket	1	E. Ray
Lesser Black-backed Gull				10/24	Newbypt.	1	R. Heil
9/thr	Boston	1	S. Moore + v.o.	Arctic Tern			
9/1, 11	Chatham (S.B.)	5, 7	B. Nikula	9/16	off Noman's Land	1 S	A. Keith
9/2	S. Monomoy	3	S. Perkins#	Forster's Tern			
9/13	Lynn	1	J. Quigley	9/1	Chatham (S.B.)	50+	B. Nikula
9/25	P'town H.	1 ad	D. Buri	9/8	Stellwagen	25	M. Lynch#
9/27	Chatham Light	5	R. Heil	9/18	Eastham (F.H.)	15	R. Titus
9/30	Rockport (A.P.)	1	E. Nielsen	9/18	Duxbury	130	G. Levandoski
10/5	N. Monomoy	2 ad	B. Nikula	9/24	Dennis (Corp. B.)	40	P. Flood
10/9	Noman's Land	1	A. Keith#	9/26	Nahant	16	R. Heil
10/10	Nantucket	1	E. Ray	9/27	P'town	37	R. Heil
10/20	Chatham (S.B.)	4	B. Nikula	10/5	N. Monomoy	26+	B. Nikula
10/21	Stellwagen	1	B. Nikula#	10/18	Plymouth	44	D. Clapp
10/23	Chatham Light	3	B. Nikula	10/24	P.I.	5	R. Heil
10/28	Sharon	1 1W	R. Titus	10/27	Marshfield	10	G. d'Entremont#
10/27	S. Boston	14	R. Donovan	10/28	Plymouth H.	2	K. Anderson
10/31	Newbypt.	7	R. Heil	10/31	Newbypt.	7	R. Heil
Glaucous Gull				Least Tern			
10/22	Chilmark	1 ad	A. Keith#	9/1	P.I.	3	P. + F. Vale
Black-legged Kittiwake				9/18	P'town (R.P.)	4	R. Titus
9/14, 29	Rockport (A.P.)	1 juv, 12	R. Heil	10/20	Eastham	1	J. Hoye#
9/29	Barnstable (S.N.)	10	G. Hirth	Black Tern			
9/30	Dennis (Corp. B.)	1 imm	G. d'Entremont#	9/8	Duxbury B.	1	D. Clapp
10/21	Stellwagen	8+	B. Nikula#	9/9	Chatham (S.B.)	2	M. Faherty
10/28	P'town	33	S. Moore#	9/23	Stellwagen	1	S. Hedman#
10/28	Chatham (S.B.)	1 ad	R. Donovan#	Black Skimmer			
Sabine's Gull				9/2	Chatham (S.B.)	1	T. Raymond#
9/7	Stellwagen	1	G. Williams	9/13	Naushon I.	1	A. Lapey
9/7-9	Atlantis Canyon	1 ad	W. Zuzevitch#	Razorbill			
Caspian Tern				10/26, 28	Rockport (A.P.)	3, 5	R. Heil
9/3, 27	P.I.	2, 1	D. Chickering#	Black Guillemot			
9/15	Edgartown	2	A. Keith#	10/1	Rockport	1	J. Berry
9/29	Barnstable (S.N.)	1	G. Hirth	10/27	Marshfield	1	G. d'Entremont#
10/14	P.I.	2	S. Haydock	10/28	Rockport (A.P.)	7	R. Heil
Roseate Tern				Atlantic Puffin			
9/2	Chatham (S.B.)	500	R. Lockwood#	9/29	Rockport (A.P.)	1	R. Heil
9/24	Dennis (Corp. B.)	58	P. Flood				
9/27	P'town	200+	R. Heil				
9/27	Chatham	50+	R. Heil				

## PARROTS THROUGH GROSBEAKS

The passerine migration was well underway in September and birders were out in force during the wonderful fall weather in search of a vagrant or two, with some success. On Friday, September 7, a **Couch's Kingbird**, a first state record if accepted by the MARC, was discovered on Plum Island by Rick Heil. This comes just after the first state record of the very similar Tropical Kingbird last year at World's End in Hingham. In Rick's own words, this bird "performed superbly from 1215 to at least 1845 hours in the open, fly-catching from a group of dead trees, on the left (south) side of the dike to the Hellcat tower, behind the Bill Forward Pool. Initially identified as Tropical/Couch's, diagnostic calls were eventually given by the bird when a Peregrine zipped low through the area: a sharp, brief *kip* or *pik*, repeated several times, heard by all present at the time, somewhat reminiscent of the alarm call of a Long-billed Dowitcher. Description in brief: very bright yellow underparts extending up to the whitish throat, including breast, which also had a very slight greenish tone; darkish lores and considerably paler dusky mask; gray crown and nape; rather bright greenish back; brown (even slightly rufous) tail, slightly notched, with no pale fringe or terminus; brownish wings and coverts, the latter along with the tertials with paler grayish fringes; bill black, thick and stout,

yet fairly long, with a gently curved culmen and a hook at the tip of the upper mandible; head bulky. The bird was an adult and at close range could be seen to have quite worn flight feathers." This bird was not found after Friday despite the hordes of birders who converged the next two days in search of this remarkable discovery.

On the same day, another very unusual fall vagrant, a **Northern Wheatear**, was discovered on Plum Island by Rick Heil. (He sure got out on the right side of bed that morning!) This represents the first sighting of this species on Plum Island. This bird was a bit more cooperative than the kingbird and remained in the area for four days and was last reported on September 10. The female **Rufous Hummingbird** arrived back at the same feeder in Agawam on September 16 for the fifth year in a row. Another *Selasphorus* hummingbird visited a Worcester feeder starting on October 9 and through the end of the month. Two *Petrochelidon* swallows were noted flying past Race Point in Provincetown on September 27. Very brief views of these birds allowed the observer to notice a pale throat and face suggesting a possible Cave Swallow. This species has occurred recently in Maine and in Connecticut and should be looked for.

Perhaps the most interesting reports during the period were of the "invasion" of Boreal Chickadees into our area on the earliest dates ever reported for this species. The first noted were on Mount Watatic on September 15, when at least two individuals were located on the trail to the summit. The previous early report was on September 18, 1975, in Lanesboro. Other Boreal Chickadees were found on Mount Tom and in Windsor. There were reports of this species in southern New Hampshire as well. Past records indicate that when there is an influx of Boreal Chickadees, there is also a major flight of Black-capped Chickadees, suggesting that both species depend on good seed production in the boreal forests to the north. Interesting also is the appearance of Siberian Tits (*Parus cinctus*) in southern Scandinavia. Barbara Przybylska, a long-time subscriber to *Bird Observer*, writes from Poland that this species has been reported well south of its normal range. While these are two different species, they live in the same type of habitat and look remarkably similar. Perhaps the same conditions of seed production in the boreal forests are forcing the species to move further south.

Migration was otherwise generally normal: thirty-two species of warblers were noted during the period, down two from last year. Of note were a Golden-winged, 26 Orange-crowned, a Yellow-throated, a Prothonotary, over 20 Connecticut, and three Hooded warblers. Red-breasted Nuthatches were far more obvious than during the same period last year, and Carolina Wrens and Red-bellied Woodpeckers continued to expand their range throughout the state.

Sparrow migration peaks in October and this year were exceptional, notably the number of Clay-colored, Vesper, Lark (seven locations), and Grasshopper sparrows. Many observers were especially impressed with the numbers of Swamp Sparrows: they were noted in good numbers in many locations. There were also good numbers of Lincoln's Sparrows and Dark-eyed Juncos.

Indications of a good winter finch flight was in evidence with the reports of Purple Finch (with over 250 passing by Gay Head), both crossbills, Pine Siskins, Evening Grosbeaks, and a vanguard of Common Redpolls.

*R. Stymeist*

Monk Parakeet			9/23	Pepperell	1	M. Resch
thr Concord	2	K. + R. Howard #	9/27	Truro	1	R. Heil
Black-billed Cuckoo			9/27	Eastham	1	R. Heil
9/15 Belchertown	1	M. Faherty	10/2	WBWS	1	R. Titus
9/19 P.I.	2	J. Offermann	10/13	Squantum	1	J. Young
9/28 Wakefield	1	F. Vale	Barn Owl			
10/26 Hingham	1	R. Titus	9/thr	Nantucket	5 juv	G. Frost
Yellow-billed Cuckoo			Eastern Screech-Owl			
9/5 Hingham	2	C. Dalton	thr	Reports of indiv. from 20 locations		
9/15 Belchertown	1	M. Faherty	Great Horned Owl			
9/15 P.I.	1	R. Heil	9/11	Hardwick	3	C. Buelow

Great Horned Owl (continued)									
thr	Reports of 1-2 indiv. from 17 locations								
Barred Owl									
9/14	Hardwick	2		C. Buelow					
9/15	Carlisle	2		G. Staller					
9/19	Colrain	2		B. Bieda#					
10/30	Ipswich	2		J. Berry					
thr	Reports of indiv. from 13 locations								
Long-eared Owl									
10/28-30	DWWS	1-3		N. Swirka					
Short-eared Owl									
10/2	P.I.	1		R. Heil					
10/20	Salisbury	1		S. Mirick#					
Northern Saw-whet Owl									
10/3	Hadley	2		C. Gentes					
10/16	Boston	1 ph		K. Ryan#					
10/19	Lexington	1 ph		J. Lawrence#					
10/23	Mt.A.	1 ph		R. Stymeist#					
10/26	Salisbury	2		J. Cullen#					
10/28	Essex	1		J. Berry#					
10/31	Bolton	1		R. Lockwood					
Common Nighthawk									
9/2	Amherst	3		D. Norton					
9/6	Pittsfield	19		R. Laubach					
9/13	Maynard	3		L. Nachtrab					
9/13	Oak Bluffs	1		V. Laux					
9/16	Boston NC	1		A. Joslin					
9/17	Mattapan	1		A. Joslin					
9/19	Sunderland	1		M. Williams					
9/23	Randolph	1		G. d'Entremont#					
9/23	Truro	1		A. Joslin					
9/23	Worcester	3		M. Lynch#					
Whip-poor-will									
9/8	Sharon	2		R. Titus					
Chimney Swift									
9/2	Uxbridge	30+		M. Lynch#					
9/3	Melrose	40+		D. + I. Jewell					
9/4, 26	GMNWR	150, 30		S. Perkins					
9/24, 10/3	Maynard	56, 2		L. Nachtrab					
9/30	Stow	4		S. Moore#					
10/4	Amherst	4		M. Faherty					
10/10	Concord (NAC)	40		S. Perkins					
Ruby-throated Hummingbird									
9/2	Bolton Flats	3		S. Sutton#					
9/2	Mt. Wachusett	5		T. Carrolan					
9/3	Lenox	5		T. Collins					
9/5	Hingham	3		C. Dalton					
9/5	Mt. Watatic	4		T. McCullough#					
9/15	Gardner	2		T. Pirro					
9/15	MNWS	2		BBC (L. delaFlor)					
9/15	Newbury	2		R. Heil					
9/20	Lenox	1		R. Laubach					
9/23	Bolton Flats	1		R. Lockwood					
9/27	Chilmark	1		A. Keith					
Rufous Hummingbird									
9/16-10/30	Agawam	1 f		T. Gagnon					
Selasphorus species									
10/9-30	Worcester	1		A. Pax					
Belted Kingfisher									
9/2	Longmeadow	5		G. Kingston#					
9/23	Bolton Flats	3		M. Lynch#					
10/20	outer Cape Cod	3		SSBC (R. Fox)					
Red-headed Woodpecker									
10/8	Marstons Mills	1 ad		J. Trimble					
10/9	Gay Head	1 imm		V. Laux					
10/11	Chatham	1		D. Manchester					
10/25	Brookline	1		H. Wiggin					
10/29	Weymouth	1 ad + 1 juv.		Smith					
Red-bellied Woodpecker									
9/8	Stow	3		R. Lockwood					
9/29	Concord	7		R. Lockwood					
10/5	Belchertown	2		M. Faherty					
10/14	Boston	4		BBC (R. Stymeist)					
10/16	Wayland	4		G. Long					
10/22	Naushon I.	4		T. Maloney					
10/25	Northampton	3		E. Labato					
10/27	Wenham	2		R. Stymeist					
Yellow-bellied Sapsucker									
9/15	Mt. Washington	3		M. Lynch#					
9/15	Gt. Barrington	3		M. Lynch#					
9/15, 10/7	P.I.	4, 3		R. Heil					
9/19	Colrain	2		B. Bieda#					
9/22	MNWS	2		J. Hoye#					
10/3	Winchester	2 imm		M. Rines					
10/3	Chilmark	2		A. Keith					
10/7	Salisbury	2		D. Chickering					
10/9	Gay Head	3		V. Laux					
10/13	Truro	2		M. Lynch#					
Hairy Woodpecker									
9/3	Lancaster	4		R. Lockwood					
9/23	Quabbin (G12)	7		M. Faherty					
9/23	Bolton Flats	2		M. Lynch#					
10/5	Worc. (BMB)	2		M. Lynch#					
10/21	Wayland	2		BBC (B. Howell)					
Northern Flicker									
9/9	ONWR	13		BBC (J. Center)					
9/13	Wakefield	15		F. Vale					
9/15	Randolph	11		G. d'Entremont#					
9/16, 29	Mt.A.	16, 24		R. Stymeist#					
9/19	Worc. (BMB)	18		M. Lynch#					
9/23	DWWS	12		G. d'Entremont					
9/26	Hadley	10+		M. Williams					
9/29	Gardner	93		T. Pirro					
10/14	Boston	14		BBC (R. Stymeist)					
Pileated Woodpecker									
9/2	Amherst	2		D. Norton					
9/4	GMNWR	2		S. Perkins					
9/9	Quabbin (G37)	4		R. Lockwood					
10/16	Wayland	2		G. Long					
thr	Reports of indiv. from 10 locations								
Olive-sided Flycatcher									
9/1	HRWMA	2		S. Smolen-Morton					
9/6	P.I.	1		R. Heil					
9/8	Northfield	1		M. Taylor					
9/16	Granville	1		S. Kellogg					
9/18	Southwick	1		S. Kellogg					
9/21	Plymouth	1		R. Titus					
Eastern Wood-Pewee									
9/2	Holden	12		M. Lynch#					
9/3	Lancaster	11		R. Lockwood					
9/9	Quabbin (G37)	7		R. Lockwood					
9/16	Medford	3		R. LaFontaine#					
9/22	MNWS	1		J. Hoye#					
9/29	Boston	1		G. Tepke					
10/7	M.V.	1		SSBC (D. Clapp)					
10/10	Stow	1		S. Sutton#					
Yellow-bellied Flycatcher									
9/5	Belmont	1		M. Rines					
9/8	Cuttihunk	1		BBC (R. Stymeist)					
Willow Flycatcher									
9/7	P.I.	1		R. Heil					
9/11	Longmeadow	1		S. Kellogg					
Traill's Flycatcher									
9/3	Lancaster	1		R. Lockwood					
9/23	Bolton Flats	1		R. Lockwood					
Least Flycatcher									
9/9	Lexington	1		T. Roberts					
9/9	Lynnfield	1		P. + F. Vale					
9/11	P.I.	1		R. Titus					
9/12	Chilmark	1		A. Keith					
9/26	Northampton	1		M. Williams					
Empidonax species									
10/13	Northampton	1		G. LeBaron					
Eastern Phoebe									
9/3	Lancaster	16		R. Lockwood					
9/16	Stow	13		R. Lockwood					
9/16	WMWS	12		S. Moore#					
9/23	Bolton Flats	28		M. Lynch#					
10/7	P.I.	26		R. Heil					
10/9	Gay Head	20		V. Laux					
10/9	Noman's Land	35+		A. Keith#					
10/14	Bolton Flats	3		R. Lockwood					
10/22	Arlington	1		M. Rines					
10/27	DWWS	1		G. d'Entremont#					
10/28	Ipswich	1		BBC (J. Nove)					

Great Crested Flycatcher				10/20	P.I.	1	J. Berry#
9/3 Lynnfield	2	P. + F. Vale		10/20	Rockport (H.P.)	2	BBC (J. Nove)
9/8 WBWS	2	M. Lynch#					
9/9 Quabbin (G37)	1	R. Lockwood		9/23, 29	Gardner	293, 865	T. Pirro
9/9 Bolton Flats	1	S. Sutton#		9/26, 29	Mt. Watatic	173, 217	T. McCullough
9/14 Hardwick	1	C. Buelow		9/30	Mt. Tom	104	R. Packard
9/16 Ipswich (C.B.)	1	J. Berry			American Crow		
9/19 Longmeadow	1	Allen BC		9/30	Mattapan	1000	A. Joslin
10/11 Northampton	1	E. Labato		10/28	Mt. Watatic	3500+	T. McCullough#
10/14 Uxbridge	1	J. Liller#			Fish Crow		
<i>Myiarchus</i> species				9/12	WBWS	1	M. Dettrey
9/23 Newton	1	P. + F. Vale		9/15	Randolph	1	G. d'Entremont#
<b>Couch's Kingbird</b> (details submitted) *				9/15	Wellfleet	7	BBC (R. Stymeist)
9/7 P.I.	1 ad ph	R. Heil + v.o.		9/26	Northampton	1	M. Williams
Western Kingbird				10/9	Marshfield	2	D. Furbish
9/10 Newbypt.	1	R. Heil		10/14	Boston	68	BBC (R. Stymeist)
10/12 Nantucket	1	B. Vigneau		10/20	Eastham (F.E.)	2	SSBC (R. Fox)
10/12-15 Northampton	1	R. Bieda + v.o.		10/29	Watertown	15+	R. Stymeist
10/26 P.I.	1	L. Cooper#			Common Raven		
10/27-31 W. Newbury	1	E. Fisher		9/3	Lenox	1	T. Collins
10/31 WBWS	1	M. Dettrey		9/3-10/22	Mt. Watatic	87	EMHW (P. Staub#)
Eastern Kingbird				9/15, 10/5	Belchertown	2, 2	M. Faherty
9/3 Lancaster	2	R. Lockwood		9/15	Sheffield	4	M. Lynch#
9/10, 10/7 P.I.	6, 1	R. Heil		9/16	Paxton	1	M. Lynch#
9/12 Longmeadow	1	S. Kellogg		9/17	Sunderland	1	M. Williams
White-eyed Vireo				9/19	Ashfield	1	S. Sauter
9/12 WBWS	1	M. Dettrey		9/24	Deerfield	4	M. Williams
9/20 MNWS	1 ad	K. Hale		9/30	Mt. Tom	3	R. Packard
9/28 Scituate	1	D. Clapp		10/15	Groton	2	T. Pirro
9/28 Rockport (H.P.)	1 ad.	R. Heil		10/21	Windsor	3	M. Lynch#
10/7 P.I.	1 juv	R. Heil			Horned Lark		
Blue-headed Vireo				10/10	P.I.	35	G. Leet#
9/6 Quabbin (G34)	5	C. Buelow		10/20	Eastham (F.E.)	10	SSBC (R. Fox)
9/15 MNWS	5	BBC (L. delaFlor)		10/31	Salisbury	5	MAS (N. Soulette#)
9/15 Belchertown	3	M. Faherty			Purple Martin		
9/15 P.I.	3	J. Hoye#		9/2	P.I./Newbypt.	4	BBC (W. Drummond)
9/29 Concord	3	R. Lockwood			Tree Swallow		
10/4 Athol	3	M. Taylor		9/5, 20	P.I.	10,000, 1800	R. Heil
10/9 Gay Head	4	V. Laux		9/8	P'town	10,000	M. Lynch#
10/14 HRWMA	2	T. Pirro		9/15	Chappaquiddick	5000+	A. Keith
10/28 Lexington	1	M. Rines		9/22	Northampton	8000	T. Gagnon
10/28 Gloucester (E.P.)	1	S. Hedman		9/24	Dennis (Corp. B.)	4000+	P. Flood
Yellow-throated Vireo				10/7	Sunderland	100	M. Williams
9/6 ONWR	1	C. Caron		10/7-8	Chatham	1500	B. Nikula
9/8 Westminster	1	C. Caron		10/8	Hyannis	130	C. Buelow
9/11 Gardner	1	T. Pirro		10/10	Northampton	200	E. Labato
9/23 Quabbin (G12)	1	M. Faherty		10/10	Nantucket	2500	E. Andrews
9/26 Amherst	1	I. Dukovski		10/14	Marshfield	30	BBC (E. Giles)
9/29 Nantucket	1	J. Hoye#		10/15	P.I.	7	R. Heil
Warbling Vireo				10/19	Granville	8	S. Kellogg
9/2 Belmont	6	M. Rines		10/20	Truro	300	B. Nikula
9/3 Wakefield	4	P. + F. Vale		10/21	Cumb. Farms	150+	K. Anderson#
9/7 DWWS	5	D. Peacock			Northern Rough-winged Swallow		
9/16 Burlington	4	M. Rines		9/2	Lynn	5	R. Heil
9/18 Springfield	4	R. Stymeist		9/2	S. Peabody	7	R. Heil
9/26 Amherst	1	I. Dukovski		9/11	Wakefield		F. Vale
10/14 Bolton Flats	1	R. Lockwood		9/23, 10/8	Melrose	16, 8	D. + I. Jewell
Philadelphia Vireo				10/7	Middleton	2	R. Stymeist
9/thr Reports of indiv. from 16 locations				10/7	GMNWR	10	S. Mirick#
9/2 Chatham	2	R. Lockwood#		10/9	Lexington	2	M. Rines
9/5 P.I.	2	J. Berry#		10/9, 20	Arlington Res.	40, 1	M. Rines
9/7 MNWS	3	J. Berry		10/10	Concord (NAC)	1	S. Perkins
9/15 M.V.	4	V. Laux#			Bank Swallow		
9/26 Lexington	2	M. Rines		9/16	Ipswich (C.B.)	3-4	J. Berry
10/2 DWWS	1	D. Furbish		9/19	P.I.	7	R. Heil
10/6 Westminster	1	C. Caron		9/26	GMNWR	3	S. Perkins
10/19 Belmont	1	C. Floyd			Barn Swallow		
Red-eyed Vireo				9/2	Northbridge	7	M. Lynch#
9/2 Holden	16	M. Lynch#		9/2	Cumb. Farms	22	J. Sweeney
9/5 Quabbin (G37)	13	C. Buelow		9/2	Uxbridge	20+	M. Lynch#
9/14 Hardwick	16	C. Buelow		9/4, 27	GMNWR	250, 8	S. Perkins
9/15 Wellfleet	12	BBC (R. Stymeist)		9/12, 10/10	P.I.	50, 2	R. Heil
9/23 P.I.	6	J. Hoye#		9/23	Northampton	3	T. Gagnon
9/25 Burlington	4	M. Rines		10/6	Eastham (F.E.)	1	W. Petersen#
9/28 Boston (F.Pk.)	5	J. Young		10/7	Hanson	2	D. Larson#
10/9 Lexington	1	M. Rines		10/9	Groton	1	T. Pirro
10/13 Squantum	1	J. Young		10/30	Chilmark	1	A. Keith
10/14 Newbury	1	R. Heil					

Cliff Swallow				Golden-crowned Kinglet			
9/4, 26	GMNWR	2, 2	S. Perkins	9/16	Bourne	2	P. + F. Vale
9/6, 10/10	P.I.	5, 1	R. Heil	9/22	Salisbury	6	D. Chickering
9/26	Needham	1	W. Petersen#	9/29	Concord	9	R. Lockwood
Petrochelidon species				10/6	Hingham	8	G. d'Entremont
9/27	P'town	2	R. Heil	10/13	Northampton	12	R. Packard
Boreal Chickadee				10/13	Wellfleet	11	M. Lynch#
9/15-10/27	Mt. Watatic	2	C. Floyd + v.o.	10/15	P.I.	11	R. Heil
9/17	Mt. Tom	1	B. Bieda	10/21	Gr Barrington	12	K. + M. Conway
10/21-30	Windsor	2	M. Lynch + v.o.	10/22	Hardwick	30	C. Buelow
Red-breasted Nuthatch				Ruby-crowned Kinglet			
9/4	Gardner	4	T. Pirro	9/13	Belmont	2	M. Rines
9/9	Quabbin (G37)	5	R. Lockwood	9/15	MNWS	7	BBC (L. delaFlor)
9/15	Wellfleet	36	BBC (R. Stymeist)	9/16	Paxton	8	M. Lynch#
9/16	Paxton	6	M. Lynch#	9/16	Winchester	6	R. LaFontaine
9/16	Ipswich (C.B.)	14	J. Berry	9/17	Mt. Watatic	10	C. Buelow
9/24	P.I.	7	N. Paulson	9/29	Lynnfield	6	P. + F. Vale
10/9	Gay Head	45	V. Laux	10/5	Worc. (BMB)	38	M. Lynch#
10/20	Eastham	12	SSBC (R. Fox)	10/5	Westminster	11	C. Caron
10/21	Windsor	5	M. Lynch#	10/5	Belchertown	10	M. Faherty
10/28	Wachusett Res.	7	M. Lynch#	10/13	Northampton	8	R. Packard
10/29	Salisbury	6	P. Brown	10/15	P.I.	17	R. Heil
White-breasted Nuthatch				10/21	Lexington	15	M. Rines
10/4	P.I.	1 b	fide R. Heil	Northern Wheatear			
Brown Creeper				9/7-10	P.I.	1 ph	R. Heil + v.o.
9/2	Holden	3	M. Lynch#	Eastern Bluebird			
9/9	Quabbin (G37)	4	R. Lockwood	9/16	Uxbridge	14	J. Liller#
9/15	Stow	5	R. Lockwood	10/4	Acton	30	K. O'Neill
9/15	N. Hadley	4	C. Gentes	10/5	Worc. (BMB)	12	M. Lynch#
9/30	P.I.	6	BBC (W. Drummond)	10/6	N. Truro	15	W. Petersen#
10/1	Wakefield	3	F. Vale	10/12	Maynard	14	L. Nachtrab
10/20	Eastham	2	SSBC (R. Fox)	10/14	Carlisle	10	T. + D. Brownrigg
Carolina Wren				10/21	Marstons Mills	12	J. Liller
9/8	Cuttyhunk	15	BBC (R. Stymeist)	10/22	Granville	18	J. Weeks
9/15	Wellfleet	11	BBC (R. Stymeist)	10/24	Hardwick	13	R. Stymeist#
9/15	Braintree	16	G. d'Entremont#	10/28	Bolton Flats	21	R. Lockwood
9/15	Squantum	9	G. d'Entremont#	Veery			
9/18	Holyoke	2	R. Stymeist	9/1	Bolton Flats	1	R. Lockwood
9/22	Mt.A.	2	R. Stymeist	9/3	Lenox	1	T. Collins
9/23	DWWS	13	G. d'Entremont#	9/9	Quabbin (G37)	1	R. Lockwood
10/5	Belchertown	2	M. Faherty	9/11	Sunderland	1	M. Williams
10/19	Northampton	3	E. Labato	9/15	Nahant	1	S. Hedman
10/21	Lexington	10	M. Rines	9/23	Belchertown	1	S. Kellogg
10/26	Hatfield	2	R. Packard	Gray-cheeked/Bicknell's Thrush			
House Wren				9/12	Hingham	1	G. Levandoski
9/3, 29	Lynnfield	8, 3	P. + F. Vale	9/12	Sunderland	1	M. Williams
9/22	Framingham	6	J. Hoye#	9/29	Carlisle	1	J. Keskulla
9/26	Lexington	12	M. Rines	9/29	Lincoln	40	S. Perkins
9/29	Burlington	5	M. Rines	9/29	Concord	1	R. Lockwood
9/29	Concord (NAC)	3	R. Lockwood#	10/2	P.I.	1	D. + I. Jewell
10/11	Belmont	3	M. Rines	10/2	Stoughton	1	R. Titus
10/13	Longmeadow	1	S. Kellogg	10/13	Williamsburg	1	G. LeBaron
10/28	Medford	1	R. LaFontaine#	Swainson's Thrush			
Winter Wren				9/12	Hingham	2	G. Levandoski
9/17	Sunderland	2	M. Williams	9/27	Wakefield	2	F. Vale
9/19	Ashfield	2	S. Sauter	9/29	Lincoln	200	migr S. Perkins
10/17	P.I.	2	S. Perkins#	10/2	Amesbury	2	G. Keller
10/19	Hardwick	2	C. Buelow	10/2	Stoughton	12	R. Titus
10/21	Windsor	2	T. Gagnon	10/11	Boston	1	G. Tepke
thr	Reports of indiv. from	16	locations	10/13	Northampton	1	R. Packard
Sedge Wren				9/7-10/7	Reports of indiv. from	13	locations
9/21	DWWS	1	R. Titus	Hermit Thrush			
Marsh Wren				9/2	Holden	9	M. Lynch#
9/2	GMNWR	7	J. Liller	10/9, 21	Lexington	5, 12	M. Rines
9/21	DWWS	2	R. Titus	10/13	Williamsburg	8	G. LeBaron
10/2	Brookline	2	M. Kanaracus	10/15	Hardwick	5	C. Buelow
10/2	Eastham (F.H.)	4	R. Titus	10/18	Charlestown	6	B. Miller
10/10	GMNWR	1	D. Furbish	10/20	Worc. (BMB)	6	J. Liller#
10/13	Northampton	1	R. Packard	10/23	Mt.A.	6	R. Stymeist
10/19	Dorchester	3	R. Donovan	10/23	Boston (PG)	6	D. Wilkinson
Blue-gray Gnatcatcher				10/26	Boxford	9	R. Stymeist#
9/1	Bolton Flats	1	R. Lockwood	10/26	Middleton	13	R. Stymeist#
9/6	ONWR	1	C. Caron	10/27	Wenham	11	R. Stymeist#
9/9	Marblehead	3	K. Haley	Wood Thrush			
9/15	Gay Head	1	V. Laux	9/7	DWWS	1	D. Peacock
9/16	Uxbridge	2	J. Liller#	9/15	Worc. (BMB)	1	J. Liller#
10/27	P.I.	1	D. + I. Jewell	9/15	Braintree	1	G. d'Entremont
				9/17	Sunderland	1	M. Williams

Wood Thrush (continued)				10/20	Gay Head	1	V. Laux
9/22 Nahant	1	V. Zollo		Orange-crowned Warbler			
9/23 Lexington	2	M. Rines#		9/23 Lexington	2	M. Rines#	
9/23 Mt. Wachusett	1	S. Sutton#		10/5 Worc. (BMB)	2	M. Lynch#	
9/23 Quabbin (G12)	1	M. Faherty		10/8 Nahant	2	L. Pivacek	
9/25 Maynard	1	L. Nachtrab		10/18 Edgartown	2	V. Laux	
9/26 Hadley	2	M. Williams		9/13-10/21	Reports of indiv. from 18 locations		
10/13 Williamsburg	1	G. LeBaron		Nashville Warbler			
American Robin				9/7 Westminster	6	C. Caron	
9/2 W. Dennis	200+	P. Flood		9/9, 26 Lexington	5, 2	M. Rines#	
9/23 Bolton Flats	2011	M. Lynch#		9/15, 10/15 P.I.	5, 1	R. Heil	
10/20 Ipswich	500	R. Heil		9/15 Wellfleet	7	BBC (R. Stymeist)	
10/21 Needham	750+	A. Joslin		9/17 Mt. Watatic	5	C. Buelow	
10/28 Mt. Watatic	1800+	T. McCullough#		9/23 Worc. (BMB)	5	J. Liller#	
Gray Catbird				9/29 Burlington	3	M. Rines	
9/8 Cuttyhunk	32	BBC (R. Stymeist)		10/4, 14 Lincoln	2, 1	M. Rines	
9/9 Worc. (BMB)	32	J. Liller#		10/13 Mt. A.	1	R. Stymeist#	
9/13 Stoughton	39	R. Titus		10/13 Squantum	1	J. Young	
9/15 P.I.	93	R. Heil		10/29 W. Boylston	1	B. Volkle	
9/15 Burlington	51	M. Rines		10/29 Boston (A.A.)	2	A. Joslin	
9/23 DWWS	39	G. d'Entremont		Northern Parula			
10/3 Mattapan	12	A. Joslin		9/8 P.I.	5	P. Vale	
10/8 Longmeadow	6	R. Packard		9/14 Hardwick	6	C. Buelow	
10/9 Gay Head	250+	V. Laux		9/16 Paxton	11	M. Lynch#	
10/13 Newton	3	G. d'Entremont#		9/16 Medford		R. LaFontaine#	
10/21 Windsor	2	M. Lynch#		9/16, 29 Mt. A.	1, 3	R. Stymeist#	
10/26 E. Middleboro	1	K. Anderson		9/19 MNWS	4	K. Haley	
10/28 Lexington	1	M. Rines		9/22 Worc. (BMB)	15	J. Liller	
Brown Thrasher				9/26 Lexington	4	M. Rines	
9/15 P.I.	14	R. Heil		9/28 Boston (F.Pk.)	8	J. Young	
9/16, 29 Burlington	3, 1	M. Rines		10/14 Uxbridge	1	J. Liller#	
9/16 Mt. A.	1	R. Stymeist		10/20 Arlington Res.	1	K. Hartel#	
9/19 Ashfield	1	S. Sauter		10/22 DWWS	1	E. Neumuth	
9/22 Chelsea	1	J. Young		Yellow Warbler			
9/26 Wakefield	3	F. Vale		9/12 Hingham	1	G. Levandoski	
10/9 Arlington Res.	1	M. Rines		9/16 Bolton Flats	1	S. Sutton#	
10/14 Granville	1	S. Kellogg		9/22 Chelsea	1	J. Young	
10/14 Marshfield	1	BBC (E. Giles)		9/22 Worc. (BMB)	1	J. Liller	
American Pipit				9/23 P.I.	1	J. Hoyer#	
9/5-20 P.I.	64 migr	R. Heil		9/23 Northampton	1	T. Gagnon	
9/11, 30 GMNWR	16, 120	S. Perkins		9/23, 10/1 Lexington	2, 1	M. Rines#	
9/24, 10/10 P.I.	38, 18	R. Heil		9/25 Burlington	1	M. Rines	
9/27 Groton	20	T. Pirro		9/27 Chilmark	2	A. Keith	
10/5, 27 Lincoln	17, 35	M. Rines		Chestnut-sided Warbler			
10/7 Hatfield	25	C. Gentes		9/2 Belmont	2	M. Rines	
10/14 Newbury	130+	R. Heil		9/11 Gardner	2	T. Pirro	
10/14 Rowley	30	R. Heil		9/12 MNWS	3	imm K. Haley	
10/14 Bolton Flats	300	R. Lockwood		9/15 Belchertown	2	M. Faherty	
10/14 Hadley	80	E. Labato		9/23 Worc. (BMB)	3	J. Liller#	
10/21 Cumb. Farms	150	K. Anderson#		9/29 Burlington	1	M. Rines	
10/24 Northampton	43	R. Stymeist#		Magnolia Warbler			
Cedar Waxwing				9/4 Gardner	6	T. Pirro	
9/8 Cuttyhunk	90	BBC (R. Stymeist)		9/7 Westminster	6	C. Caron	
9/9 Lynnfield	30+	P. + F. Vale		9/11, 23 Worc. (BMB)	3, 4	J. Liller#	
9/13 P.I.	400+	R. Heil		9/13 P.I.	4	J. Berry#	
9/15 Wellfleet	90	BBC (R. Stymeist)		9/14 Hardwick	10	C. Buelow	
9/29 Truro	55	G. d'Entremont#		9/15 Wellfleet	9	BBC (R. Stymeist)	
10/21 Wayland	30	BBC (B. Howell)		9/15 Belchertown	3	M. Faherty	
10/28 Wachusett Res.	30	M. Lynch#		9/19 Ashfield	2	S. Sauter	
Blue-winged Warbler				9/22 Medford	4	M. Rines	
9/7 Northfield	1	M. Taylor		9/29 Burlington	1	M. Rines	
9/9, 23 Lexington	2, 1	M. Rines#		10/4 Stoneham	1	D. + I. Jewell	
9/11 Westboro	1	S. Sutton#		Cape May Warbler			
9/16 Burlington	1	M. Rines		9/12 Petersham	1	J. Baird	
9/16 MNWS	1	J. Hoyer#		9/15 Wellfleet	1	BBC (R. Stymeist)	
9/26 Nahant	1	R. Heil		9/16 Paxton	1	M. Lynch#	
Golden-winged Warbler				9/23 Westminster	1	C. Caron	
9/27 Marblehead	1	m ad K. Haley		9/23 Belchertown	1	S. Kellogg	
Brewster's Warbler				9/30 P.I.	1	J. Morris-Siegel#	
9/19 Mt. A.	1	A. Little		10/8 P'town	1	J. Young#	
Tennessee Warbler				10/9 Marshfield	1	imm D. Furbish	
9/3 HRWMA	2	T. Pirro		10/13 Northampton	1	R. Packard	
9/7 Stoneham	2	D. + I. Jewell		10/14 Stoughton	1	R. Titus	
9/15 MNWS	2	S. Hedman		Black-throated Blue Warbler			
9/18 Gardner	2	T. Pirro		9/3 Lynnfield	4	P. + F. Vale	
9/22 Westfield	2	S. Kellogg		9/9 Quabbin (G37)	4	R. Lockwood	
9/27 Carlisle	1	J. Staller		9/30 P.I.	6	P. + F. Vale	
10/5 Northampton	1	E. Labato		10/2 MNWS	4	S. Hedman	

Black-throated Blue Warbler (continued)			
10/2	Newbypt.	10	S. Perkins
10/5	Worc. (BMB)	4	M. Lynch#
10/9	Lexington	3	M. Rines
10/25	P.I.	2	S. Haydock
10/28	Medford	1	R. LaFontaine#
10/31	Salisbury	1 f	M. Taylor#
Yellow-rumped Warbler			
9/2	HRWMA	6	T. Pirro
9/5	Quabbin (G37)	30	C. Buelow
9/27	Woburn	66	M. Rines
9/29	Burlington	107	M. Rines
9/30	Bolton	75	J. Liller#
10/2	Scusset B.	130	R. Titus
10/5	Worc. (BMB)	97	M. Lynch#
10/7	P.I.	130+	R. Heil
10/7	DWWS	200+	D. Larson#
10/9	Gay Head	200+	V. Laux
10/9	Noman's Land	750+	A. Keith#
10/13	Truro	560	M. Lynch#
10/14	Stoughton	86	R. Titus
Black-throated Green Warbler			
9/2	Holden	9	M. Lynch#
9/7	Westminster	7	C. Caron
9/9	Quabbin (G37)	9	R. Lockwood
9/14	Hardwick	15	C. Buelow
9/15	Belchertown	5	M. Faherty
9/16, 29	Burlington	6, 3	M. Rines
9/16	Paxton	10	M. Lynch#
9/17	Sunderland	5	M. Williams
9/19, 10/28	Lexington	5, 1	M. Rines
9/22, 10/20	Worc. (BMB)	9, 1	J. Liller
9/23	Quabbin (G12)	6	M. Faherty
9/28	Boston (F.Pk.)	8	J. Young
10/14	Boston (A.A.)	1	J. Young
10/25	Stoneham	1	D. + I. Jewell
Blackburnian Warbler			
9/2	Holden	2	M. Lynch#
9/6	Quabbin (G34)	2	C. Buelow
9/7	Southwick	2	S. Kellogg
9/9	Quabbin (G37)	2	R. Lockwood
9/14	Hardwick	2	C. Buelow
9/19	Ashfield	2	S. Sauter
9/27	Winchester	1	R. LaFontaine
Yellow-throated Warbler			
9/28-10/2	Gloucester	1	R. Heil + v.o.
Pine Warbler			
9/2	Holden	23	M. Lynch#
9/6	Quabbin (G34)	10	C. Buelow
9/15	Wellfleet	27	BBC (R. Stymeist)
9/16	Paxton	17	M. Lynch#
10/1	Nantucket	5	J. Hoye#
10/4	Maynard	2	L. Nachtrab
10/20	Worc. (BMB)	2	J. Liller#
Prairie Warbler			
9/1-31	Reports of indiv. from 10 locations		
9/3	Lancaster	4	R. Lockwood
10/2	DWWS	2	D. Furbish
10/1-4	Mt.A.	1	R. Stymeist
10/6	Newton	1	L. Ferrarosso#
10/21	Bolton Flats	1	S. Sutton#
Palm Warbler			
9/2	Cumb. Farms	1	J. Sweeney
9/5	Hingham	2	C. Dalton
9/13, 10/11	Belmont	1, 12	M. Rines
9/23	DWWS	15	G. d'Entremont
9/23	Bolton Flats	19	M. Lynch#
9/29	Burlington	52	M. Rines
9/30	Northampton	30	S. Kellogg
10/5	Worc. (BMB)	34	M. Lynch#
10/7	Winchester	17	M. Rines
10/9	Gay Head	40	V. Laux
10/14	Gloucester	17	J. Barber
10/14	HRWMA	15	T. Pirro
10/27	Lincoln	1	M. Rines#
10/30	Templeton	1	C. Caron
Yellow Palm Warbler			
10/4	Lincoln	15	M. Rines
10/7	Lancaster	6	R. Lockwood
10/14	Newbury	5	R. Heil
10/15	P.I.	2	R. Heil
Bay-breasted Warbler			
9/3	P.I.	1 f	J. Berry#
9/7	MNWS	2	J. Berry#
9/14	Hardwick	2	C. Buelow
9/19	Worc. (BMB)	1	M. Lynch#
9/20	Lexington	1	M. Rines
9/23	Quabbin (G12)	1	M. Faherty
10/3	Chilmark	2	A. Keith
Blackpoll Warbler			
9/2	Holden	10	M. Lynch#
9/9	Quabbin (G37)	24	R. Lockwood
9/12	Petersham	20	J. Baird
9/14	Hardwick	65	C. Buelow
9/16	Paxton	35	M. Lynch#
9/22	Worc. (BMB)	82	J. Liller
9/22, 23	Mt.A.	18, 32	R. Stymeist#
9/27	Woburn	16	M. Rines
9/29	Concord	48	R. Lockwood
9/29	Burlington	23	M. Rines
9/30	Boston	38	BBC (R. Stymeist)
10/9	Gay Head	35+	V. Laux
10/18	Edgartown	14	V. Laux
10/30	Chilmark	4	A. Keith
Black-and-white Warbler			
9/2	Holden	11	M. Lynch#
9/6	Quabbin (G34)	6	C. Buelow
9/9, 20	Lexington	6, 9	M. Rines#
9/15	MNWS	7	BBC (L. delaFlor)
9/21	Medford	5	R. LaFontaine
9/22	Worc. (BMB)	9	J. Liller
9/27	Woburn	3	M. Rines
9/28	Wakefield	3	F. Vale
10/7	Boston	1	G. d'Entremont#
10/7	Georgetown	1	R. Stymeist
10/14	Newbury	1	R. Heil
American Redstart			
9/7	Stoneham	5	D. + I. Jewell
9/8	P.I.	5	P. + F. Vale
9/9	Lynnfield	5	P. + F. Vale
9/9	Lexington	14	M. Rines#
9/10, 22	Medford	16, 6	M. Rines
9/11	Westboro	5+	S. Sutton#
9/14	Hardwick	10	C. Buelow
9/15	Wellfleet	11	BBC (R. Stymeist)
9/19	Worc. (BMB)	6	M. Lynch#
9/28	Wakefield	7	F. Vale
10/25	Boston	1	G. Tepke
Prothonotary Warbler			
9/29	P.I.	1	D. Chickering
Ovenbird			
9/2	Holden	3	M. Lynch#
9/12	MNWS	4	K. Haley
9/19	Worc. (BMB)	1	M. Lynch#
9/22	Medford	1	M. Rines
9/30	Maynard	1	L. Nachtrab
10/4	Agawam	1	J. LaPointe
10/4	Boston (PG)	2	D. Wilkerson
Northern Waterthrush			
9/1-10/10	Reports of indiv. from 18 locations		
9/9	Worc. (BMB)	3	J. Liller#
9/12	MNWS	2	K. Haley
9/15	Wellfleet	3	BBC (R. Stymeist)
10/6	Boston (BNC)	2	R. Stymeist
Connecticut Warbler			
9/6-10/6	Reports of indiv. from 20 locations		
9/12	Granville	2	J. Weeks
9/19	Worc. (BMB)	2	imm M. Lynch#
Mourning Warbler			
9/2	Belmont	1	M. Rines
9/3	Boxford	1	W. Drummond#
9/12	Petersham	1	J. Baird
9/12	Hingham	1	G. Levandoski
9/12	WBWS	1	M. Dettrey
9/15	P.I.	1	R. Heil
9/15	Nahant	1	K. Haley#

Mourning Warbler (continued)			9/28	Wakefield	45	F. Vale
9/16 WMWS	1	S. Moore#	9/29	Truro	60	G. d'Entremont#
9/16 MNWS	1	J. Hoye#	10/15	P.I.	60	R. Heil
9/26 Lexington	1	M. Rines	10/28	Northampton	3	K. + M. Conway
Common Yellowthroat			Clay-colored Sparrow			
9/8 Cuttyhunk	22	BBC (R. Stymeist)	9/14	P.I.	2	D. Chickering
9/14 Hardwick	33	C. Buelow	9/15, 10/3	Newbury	2, 2	R. Heil
9/19 Worc. (BMB)	23	M. Lynch#	10/9	Gay Head	2	V. Laux
9/23 Bolton Flats	38	M. Lynch#	10/28	Truro	2	S. Moore#
9/29 Burlington	17	M. Rines	9/13-10/20	Reports of invid. from 19 locations		
10/14 HRWMA	4	T. Pirro	Field Sparrow			
10/21 Lexington	2	M. Rines	9/3	Lancaster	7	R. Lockwood
10/27 Marshfield	2	G. d'Entremont#	9/23	MBWMA	32	D. Chickering
10/29 Boston	1	G. Tepke	10/13	Wellfleet	18	M. Lynch#
Hooded Warbler			10/13	Salem	8	BBC (I. Lynch)
9/10 Stoneham	1 f	D. + I. Jewell	10/22	P.I.	8	P. Brown
9/19 Nahant	1 ad	T. Martin	10/26	Boston	4	S. Fostello
9/22 Mt. A.	1	R. Stymeist#	Vesper Sparrow			
Wilson's Warbler			9/15	Wellfleet	6	BBC (R. Stymeist)
9/1 Lexington	2	M. Rines	10/7-25	Northampton	1	E. Labato#
9/3 Lynnfield	2	P. + F. Vale	10/14	Orange	4	ABNC (D. Small#)
9/5 Hingham	3	C. Dalton	10/14	Carlisle	2	T. + D. Brownrigg
9/7 Westminster	4	C. Caron	10/18	Granville	1	J. Weeks
9/7 DWWS	3	D. Peacock	10/20	Wayland	1	S. Moore#
9/7 Stoneham	2	D. + I. Jewell	10/20	Truro	1	SSBC (R. Fox)
9/12 MNWS	2	K. Haley	10/21	Lexington	1	M. Rines
9/12 WBWS	2	M. Dettrey	10/29	P.I.	1	R. Heil
9/15 Wellfleet	2	BBC (R. Stymeist)	Lark Sparrow			
9/27 Chilmark	2	A. Keith	9/3	E. Sandwich	1	ph D. Manchester#
10/14 Lincoln	1	M. Rines	9/15	Wellfleet	1	BBC (R. Stymeist)
10/27 Worcester	1 m	M. Lynch#	10/6	P'town	1	W. Petersen#
Canada Warbler			10/7	Cumb. Farms	1	B. Zuzevich
9/7 Stoneham	2	D. + I. Jewell	10/8	Truro	1	J. Young#
9/7 DWWS	2	D. Peacock	10/17	P.I.	1	M. Halloran#
9/8 HRWMA	1	T. Pirro	10/thr	Chilmark	1	A. Keith#
9/8 P.I.	1	P. + F. Vale	Savannah Sparrow			
9/12 Chilmark	2	A. Keith	9/9, 10/9	Lexington	3, 50	M. Rines#
9/17 MNWS	1	K. Haley	9/15, 10/14	Newbury	150, 200	R. Heil
Yellow-breasted Chat			9/18	GMNWR	80	S. Perkins
9/15-17 MNWS	1	K. Haley# + v.o.	9/23	Bolton Flats	78	M. Lynch#
9/27 Chilmark	1	A. Keith	9/27	Northampton	40	B. Bieda
10/1 Nantucket	1	J. Hoye#	9/30	Arlington Res.	45	M. Rines
10/4 DWWS	1	D. Furbish	10/8	Concord	40	M. Rines
10/4 Woods Hole	1	G. Hirth	10/9	Marshfield	40	D. Furbish
10/7 M.V.	2	SSBC (D. Clapp)	10/15	P.I.	80	R. Heil
10/7 Framingham	1	J. Hoye#	10/21	Wayland	50	BBC (B. Howell)
10/8 Northampton	1	P. Yeskie	10/27	Lincoln	20	M. Rines#
10/9 Gay Head	2	V. Laux	Ipswich Sparrow			
10/13 Truro	1	M. Lynch#	10/2	Scusset B.	1	R. Titus
10/16 Newton	1	H. Miller	10/10	P.I.	1	MAS (B. Stevens#)
Scarlet Tanager			10/22	Plymouth	5	E. Neumuth
9/2 Holden	3	M. Lynch#	10/27	Newbypt.	1	R. Lockwood#
9/6 Quabbin (G34)	3	C. Buelow	10/28	Bolton Flats	1	S. Sutton#
9/15 Stow	4	R. Lockwood	10/28	Chatham (S.B.)	5	R. Donovan#
9/23 Quabbin (G12)	3	M. Faherty	10/29	Salisbury	2	O. Spalding
9/29 Mt. A.	4	R. Stymeist#	Grasshopper Sparrow			
9/30 Northampton	1	S. Kellogg	9/3	Lancaster	1	R. Lockwood
10/7 Nantucket	2	E. Andrews	10/5	Northampton	1	E. Labato
Eastern Towhee			10/20	Naushon I.	3	A. Jones
9/8 Cuttyhunk	77	BBC (R. Stymeist)	Sharp-tailed Sparrow species			
9/15 Wellfleet	38	BBC (R. Stymeist)	9/6	N. Monomoy	10+	B. Nikula
9/16 Ipswich (C.B.)	17	J. Berry	Saltmarsh Sharp-tailed Sparrow			
9/23 Worc. (BMB)	18	J. Liller#	9/2	Chatham (S.B.)	2	R. Lockwood#
10/7 P.I.	17	R. Heil	9/12	WBWS	5	M. Dettrey
10/13 Truro	16	M. Lynch#	9/24	P.I.	11	N. Paulson
10/13 Salem	4	BBC (I. Lynch)	10/7	Duxbury B.	3	D. Larson#
10/26 Middleton	4	R. Stymeist#	10/9	Dorchester	4	R. Donovan
American Tree Sparrow			10/13	Barnstable	17	M. Lynch#
10/8 Northampton	3	P. Yeskie	10/13	Newbypt.	11	R. Lockwood
10/14 Bolton Flats	1	R. Lockwood	10/20	Eastham (F.H.)	4	SSBC (R. Fox)
10/28 Sterling Peat	2	M. Lynch#	Nelson's Sharp-tailed Sparrow			
10/28 Chatham (S.B.)	1	R. Donovan#	10/2	Eastham (F.H.)	1	R. Titus
10/29 Newton	1	P. Chasan	10/7	Lexington	1	J. Forbes#
Chipping Sparrow			10/13	Newbypt.	10	R. Lockwood
9/14 Marshfield	40	D. Clapp	10/19	Dorchester	3	R. Donovan
9/15 Wellfleet	55	BBC (R. Stymeist)	10/20	P.I.	5	J. Berry#
9/22 Chilmark	45	A. Keith	Seaside Sparrow			
9/28 Newton	30	H. Miller	9/24	P.I.	3	R. Heil

Fox Sparrow				10/29	P.I./Salisbury	125+	J. Trimble#
10/7	Northampton	1	E. Labato	Snow Bunting			
10/10	Hadley	1	E. Labato	10/2	Scusset B.	1	R. Titus
10/13, 31	Lexington	1, 2	M. Rines	10/20	P'town	1	SSBC (R. Fox)
10/14	Lincoln	2	M. Rines	10/28	Hinsdale	12	R. Packard
10/21	Windsor	3	M. Lynch#	10/28	Mt. Watatic	10	T. McCullough#
10/25	Groton	3	T. Pirro	10/28	Worthington	12	R. Packard
10/28	Bolton Flats	1 fuliginosa	S. Sutton#	10/28	P.I.	200	P. Roberts
10/28	W. Groton	2	J. Hoye#	10/28	Edgartown	5+	V. Laux
10/29	Newton	2	P. Chasan	10/31	Salisbury	26	M. Taylor#
10/31	Maynard	4	L. Nachtrab	Rose-breasted Grosbeak			
Lincoln's Sparrow				9/3	Lenox	6	T. Collins
9/5	Hingham	1	C. Dalton	9/11	Hardwick	7	C. Buelow
9/8	Medford	1	R. LaFontaine	9/19	Worc. (BMB)	10	M. Lynch#
9/14	Lexington	7	M. Rines	9/22	Mt.A.	3	R. Stymeist#
9/14	Hardwick	15	C. Buelow	9/26	Lexington	1	M. Rines
9/21, 10/27	Lincoln	5, 1	M. Rines	9/28	Carlisle	1	J. + G. Staller
9/23	Bolton Flats	24	M. Lynch#	10/4	Mattapan	1	A. Joslin
9/23	Northampton	12	T. Gagnon	10/11	Northampton	1	E. Labato
9/23	Cumb. Farms	5	R. Finch	10/21	Wayland	1	BBC (B. Howell)
9/27	Truro	6	R. Heil	Blue Grosbeak			
10/5	Worc. (BMB)	5	M. Lynch#	9/25	Hadley	1	P. Yeskie
10/16	Newton	5	H. Miller	9/29	Nantucket	2	J. Hoye#
10/28	Woburn	1	F. Vale	9/30	Boston	1	BBC (R. Stymeist)
Swamp Sparrow				10/3	Mt.A.	1	R. Stymeist
9/30	Westboro	88	M. Lynch#	10/5	Marshfield	1	K. Anderson
10/5	Worc. (BMB)	55	M. Lynch#	10/6	Truro	2	W. Petersen#
10/9	Gay Head	200+	V. Laux	10/9	Gay Head	1	V. Laux
10/13	Gardner	50+	T. Pirro	10/9-14	Newton	1	H. Miller + v.o.
10/13	Truro	64	M. Lynch#	10/20	Wellfleet	2	B. Nikula
10/14	Marshfield	100	BBC (E. Giles)	10/20	Edgartown	1	M. Pelikan
10/14	Bolton Flats	202	R. Lockwood	10/20-22	Northampton	1	R. Bieda + v.o.
10/14	Newbury	55	R. Heil	10/21	Harwich	2	D. Larson#
10/21	Wayland	50	BBC (B. Howell)	Indigo Bunting			
White-throated Sparrow				9/20, 10/13	Lexington	14, 2	M. Rines
9/1	N. Andover	2	W. Drummond#	9/27	Truro	7	R. Heil
9/12	MNWS	6	K. Haley	9/29	Concord (NAC)	4	R. Lockwood#
9/12	Hingham	6	G. Levandoski	10/11	Marshfield	3	D. Furbish
9/28	Rockport	180	R. Heil	Dickcissel			
10/3	Boston	100	G. Tepke	9/7, 10/16	P.I.	2, 2	R. Heil
10/7	P.I.	150	R. Heil	9/13, 26	Gay Head	2, 1	M. Pelikan#
10/13	Gardner	100	T. Pirro	10/7	Middleton	2	R. Stymeist
10/13	Truro	108	M. Lynch#	9/18-10/30	Reports of indiv. from 18 locations		
10/14	Marshfield	106	BBC (E. Giles)	Bobolink			
10/14	Bolton Flats	74	R. Lockwood	9/3, 30	Bolton Flats	50, 1	S. Sutton#
10/22	Ipswich	50	J. Berry	9/5, 20	Lexington	60, 6	M. Rines
10/23	Newton	50	H. Miller	9/11, 26	GMNWR	30, 53	S. Perkins
White-crowned Sparrow				9/22	Framingham	25	J. Hoye#
9/15	N. Hadley	3	C. Gentes	9/29	Truro	20	G. d'Entremont#
9/30	Ipswich	8	P. Brown	10/7	Cumb. Farms	11	B. Zuzevich
10/7	Framingham	6	J. Hoye#	10/27	Marshfield	25	G. d'Entremont#
10/9	DWWS	5	D. Furbish	Red-winged Blackbird			
10/9	Gay Head	12	V. Laux	9/23	Bolton Flats	800+	S. Sutton#
10/13	Truro	18	M. Lynch#	10/2	Attleboro	1000+	J. Sweeny
10/13, 21	Lexington	5, 3	M. Rines	10/22	Ipswich	1400+	J. Berry
10/14	Northampton	15	E. Labato	10/25	Lancaster	3000+	C. Caron
10/14	Marshfield	5	BBC (E. Giles)	Eastern Meadowlark			
10/14	HRWMA	4	T. Pirro	10/13	Barnstable	4	M. Lynch#
10/14	Cumb. Farms	9	K. Anderson	10/13	Gardner	2	T. Pirro
10/21	Windsor	8	M. Lynch#	10/20	Rowley	3	J. Berry
Gambell's White-crowned Sparrow				10/23	P.I.	10	R. Heil
10/27	Marshfield	1 imm	G. d'Entremont#	10/23	DWWS	8	D. Furbish
10/29	P.I.	1	J. Trimble#	10/27	Chatham	5	B. Nikula
Dark-eyed Junco				Yellow-headed Blackbird			
9/5	Wakefield	3	F. Vale	9/5	Lexington	1 f	M. Rines
9/7, 19	P.I.	1, 110	R. Heil	9/27	Truro	1 imm m	R. Heil
9/15	Mt. Washington	30+	M. Lynch#	10/25-26	Groton	1 m	T. Pirro + v.o.
9/16	Paxton	10	M. Lynch#	Rusty Blackbird			
10/4	Stoneham	60+	D. + I. Jewell	9/26	Needham	15	W. Petersen#
10/15	P.I.	325	R. Heil	9/30	GMNWR	17 migr	S. Perkins
10/23	Newton	100	H. Miller	9/30	Bolton	21	J. Liller#
10/23	Mt.A.	75	R. Stymeist	10/9	Gay Head	26	V. Laux
Lapland Longspur				10/9	Sudbury	55+	G. Long
10/4, 24	P.I.	1, 75	R. Heil	10/10	Groton	12	T. Pirro
10/7	Nantucket	2	E. Ray	10/13	Gardner	20	T. Pirro
10/20	Eastham (F.E.)	1	SSBC (R. Fox)	10/14	Lincoln	20	M. Rines
10/22	Plymouth	1	E. Neumuth	10/14	Orange	18	J. Johnstone#
10/27	Chatham (S.B.)	5	B. Nikula	10/21	Pittsfield (Pont.)	24	T. Gagnon

Rusty Blackbird (continued)			10/28	Mt. Watatic	3	T. McCullough#
10/23 Southwick	15	S. Kellogg	10/29	P.I.	17	J. Trimble#
10/27 Longmeadow	150	J. Gawienowski	10/29	Salisbury	30	J. Trimble#
Common Grackle			10/30	Windsor	1	D. St James
9/8 Orleans	3000 migr	M. Lynch#	10/30	Pittsfield	3	G. Shampang
10/20 W. Northfield	2000	M. Taylor	10/30-31	W. Boxford	1 imm	T. + N. Walker
10/22 Ipswich	3500+	J. Berry	Common Redpoll			
10/23 Hardwick	5000+	C. Buelow	10/28	Marshfield	1	W. Petersen
10/24 Boxboro	2000+	R. Stymeist#	10/28	Newbypt.	4	G. Wood
10/25 Lancaster	2000+	C. Caron	10/31	P.I.	4	R. Heil
10/28 Hadley	2500	K. + M. Conway	10/31	Lexington	1	M. Rines
10/28 Sterling Peat	2500	M. Lynch#	Pine Siskin			
10/28 Bolton Flats	2800	R. Lockwood	9/18, 10/31	P.I.	1, 8	R. Heil
Brown-headed Cowbird			10/8	Deerfield	2	R. Ranney
9/27 Wellfleet	320	R. Heil	10/9	Gay Head	6	V. Laux
10/8 Hadley	150+	P. Yeskie	10/20	Westminster	2	C. Caron
10/14 Cumb. Farms	500+ SSBC	(T. O'Neil)	10/21	Melrose	2	D. + I. Jewell
Baltimore Oriole			10/21	Williamsburg	25+	G. LeBaron
9/19, 10/29 P.I.	5, 1	R. Heil	10/21	Windsor	6	M. Lynch#
9/27 Truro	6	R. Heil	10/27	Northampton	5	E. Labato
10/2 DWWS	1	D. Furbish	10/27	Medford	2	R. LaFontaine
10/2 Wayland	1	A. McCarthy#	10/27-31	Natick	4	R. Naticchioni
10/17 Nantucket	1	E. Ray	10/28	Ashfield	4	S. Sauter
Purple Finch			10/29	Rockport	2	J. Soucy#
9/23 Gardner	10	T. Pirro	10/29	Northfield	36	M. Taylor
9/26 Northampton	10	M. Williams	10/29	Pittsfield	30	G. Shampang
9/26, 10/21 Lexington	22, 9	M. Rines	10/30	Washington	30	E. Neumuth
10/1-4 Amherst	32	H. Allen	Evening Grosbeak			
10/8 Haydenville	11	R. Packard	9/9	Ashburnham	1	B. Nikula
10/9 Gay Head	250+	V. Laux	9/15	New Salem	2	W. Laflay
10/11 Belmont	14	M. Rines	10/13	Truro	1	M. Lynch#
10/14 HRWMA	20	T. Pirro	10/20	N. Beverly	3	W. Taitrow
10/15 P.I.	28	R. Heil	10/21	Gardner	20	T. Pirro
10/15 Northboro	20	B. Volkle	10/21	Easton	6	K. Ryan
10/20 Ipswich	20	R. Heil	10/21	Savoy	25	S. LaRock
Red Crossbill			10/21	Windsor	9	M. Lynch#
10/25 Hadley	1	H. Allen	10/23	Groton	4	T. Pirro
10/29 Salisbury	6	J. Berry	10/24	Haverhill	6	S. Mirick
White-winged Crossbill			10/27	Granville	12	J. Weeks
10/28 Granville	1	S. Kellogg	10/30	Pittsfield	15	G. Shampang
10/28 E. Gloucester	1	S. Perkins	10/30	Stoughton	3	R. Titus
10/28 Wasque Point	2	V. Laux	10/31	Lincoln	2	N. Soulette
10/28 Boston (BNC)	2	G. Tepke#				

Species on the Review List of the Massachusetts Avian Records Committee (indicated by an asterisk [\*] in the Bird Reports), as well as species unusual as to place, time, or known nesting status in Massachusetts, should be reported promptly to the Massachusetts Avian Records Committee, c/o Marjorie Rines, Massachusetts Audubon Society, South Great Road, Lincoln, MA 01773, or by e-mail to <marj@mrines.com>.

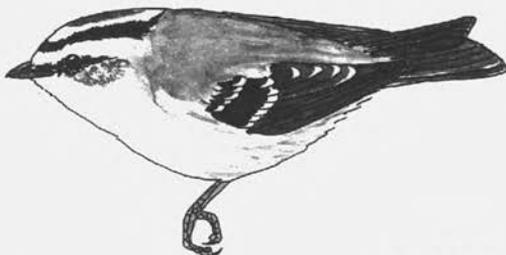
#### HOW TO CONTRIBUTE BIRD SIGHTINGS TO BIRD OBSERVER

Bird Observer prints compilations of birds reported in Massachusetts and offshore waters. Our compilers select and summarize for publication reports that provide a snapshot of bird life during the reporting period.

Sightings for any given month must be reported in writing by the eighth of the following month, and may be submitted by postal mail or e-mail. Send written reports to Bird Sightings, Robert H. Stymeist, 94 Grove Street, Watertown, MA 02172. Include name and phone number of observer, common name of species, date of sighting, location, number of birds, other observer(s), and information on age, sex, and morph (where relevant). For instructions on e-mail submission, visit: <<http://massbird.org/birdobserver/submitrec.html>>.

## LIST OF ABBREVIATIONS

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



GEORGE C. WEST

# Bird Watcher's General Store

Featuring: The Amazing AVIARIUM In-House Window Birdfeeder. One-way mirrored plexiglass allows you to watch the birds for hours but they can't see you!  
Come see this exceptional birdfeeder in action.



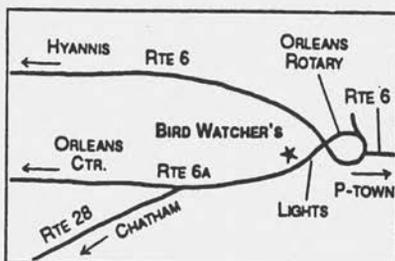
## OTHER BIRD-LOVER ITEMS INCLUDE:

- Bird Mugs
- Bird Note Cards
- Bird Carvings
- Bird Field Guides
- Bird Books
- Bird Key Chains
- Bird Jewelry
- Bird Door Knockers
- Bird Telephone
- Bird Houses
- Bird Baths
- Bird Gift Wrap
- Bird T-Shirts
- Bird Photos
- Bird Prints
- Bird Calls
- Bird Recordings
- Bird Potholders
- Bird Towels
- Bird Carving Kits
- Bird Welcome Mats
- Bird Thermometers
- Bird Sun Catchers
- Bird Calendars
- Bird Pillows
- Bird Place Mats
- Bird Mobiles
- Bird Fountains
- Bird Bath Heaters
- Bird Switch Plates
- Bird Puzzles
- Bird Bookmarks

- A complete line of Binoculars, Spotting Scopes and Tripods
- A children's section with birdhouse kits, beginner books, and other fun and educational items

PLUS over 100 different types of bird feeders including Bluejay and Squirrel-proof feeders that work, GUARANTEED, plus ten different types of Bird Seed

GIFT CERTIFICATES & U.P.S. SHIPPING • OPEN YEAR ROUND



## Bird Watcher's General Store

36 Route 6A • Orleans, MA 02653

(508) 255-6974

or

1-800-562-1512

[www.BirdWatchersGeneralStore.com](http://www.BirdWatchersGeneralStore.com)

## “Wet their whistles”™ with animal water products



Look over our environmentally sound selection of baths, founts, drinkers, tanks, drippers, misters, faucets, waterers, water nipples, canteens.

**Free Puddles Water Shop catalog.**

**Free Puddles Water Newsletter.**

Web site at <http://petsforum.com/happybird/>

SOLAR SIPPERS cover water; insulated for cool summer water, solar heated against winter ice.

**HAPPY BIRD, P.O. 86, Weston, MA 02193 . 781-899-7804**

### News from MassWildlife

**Peregrine Falcons** - Massachusetts' peregrine falcons enjoyed a productive nesting season, with 4 pairs producing a total of 13 chicks, all of which were banded by MassWildlife biologists. Two additional nesting territories were occupied, but the pairs did not bring off any young. New England states hosted 54 occupied nesting territories which fledged a total of 94 chicks. Vermont leads the six-state region with 25 pairs, followed by New Hampshire 12, Maine 7, Massachusetts 6, Connecticut 3 and Rhode Island 1.

**Common Loons** - Twenty-three territorial pairs of common loons were reported on 9 waterbodies in 2001, according to MassWildlife State Ornithologist Brad Blodget, the highest number of territorial loons recorded since the birds first recolonized the state in 1975. Eleven of the pairs were known to lay eggs hatching 13 chicks, 8 of which are presumed to have survived to fledge. Quabbin Reservoir hosted 12 pairs of loons, Wachusett Reservoir had 4 pairs, and single pairs were noted on 7 lakes in northern Worcester County and northwestern Middlesex County. . . . It is believed that a lack of suitable natural nesting sites, lack of artificial nesting rafts, nest flooding, aggression by other loons, predation, and human disturbance contributed to limited nesting success in 2001.

**BioMap**, a new conservation planning tool, has been released by the Executive Office of Environmental Affairs (EOEA) to promote biodiversity conservation in Massachusetts. Funded by EOEA and developed by MassWildlife's Natural Heritage and Endangered Species Program, BioMap identifies areas important to preserving the Commonwealth's diverse array of wild plants, animals, and habitats. Specifically, BioMap looks at conservation planning on a statewide, landscape scale, highlighting 2 million acres of both protected and unprotected open space which are important to maintain viable wildlife populations and habitat resources now and into the future . . . . The yearlong project produced an attractive, full-color report: "BioMap: Guiding Land Conservation for Biodiversity in Massachusetts," as well as a companion poster. Both illustrate the areas of the Commonwealth crucial to conserving the state's biodiversity and are available for free from the Natural Heritage Program. . . . To learn more about BioMap, visit [www.MassWildlife.org](http://www.MassWildlife.org) and click on the Endangered Species box. For a free copy of the BioMap report and poster contact Jessica Patalano at 508-792-7270 x300.

# ABOUT THE COVER

---

## Boreal Chickadee

Boreal Chickadees (*Parus hudsonicus*) are denizens of the boreal forests of Canada and northernmost United States that occasionally descend to our latitude in winter. They are easily distinguished from Black-capped Chickadees by their brown cap and back, rufous flanks, and overall brownish appearance. The Boreal Chickadee is most closely related to the two other brown-capped chickadees, the Siberian Tit (*P. cinctus*) and the Chestnut-backed Chickadee (*P. rufescens*), the three forming a superspecies. The taxonomic status of the Boreal Chickadee is uncertain, with 3-5 subspecies recognized by some workers and a complete reevaluation with fresh specimens recommended by others.

The breeding range of the Boreal Chickadee extends from the boreal forests of Alaska across Canada to Newfoundland, dipping south in suitable habitat into New England, the Great Lakes states, and the Pacific northwest. The species is generally sedentary, but local migrations and periodic irruptions southwards occur during winter. Irruptions typically occur from October to May, and in Massachusetts six major irruptions have occurred since the mid-1950s. Although during irruptions Boreal Chickadees tend to stay in coniferous woodlands and forests, many invade different habitats, and it is not unusual for these tame little chickadees to show up at bird feeders, some staying for the entire winter. Irruption years correlate with major southern movements of Black-capped Chickadees and irruptions of other seed-eating species. Hence irruptions may result from poor pine-seed crops in their boreal lands.

Boreal Chickadees are monogamous and may mate for life. Their favorite habitat is boreal forest dominated by spruce or balsam fir, but they do utilize mixed deciduous/coniferous forest. The song is highly varied, with various *chit*, *seep*, *see-see-see-see*, *dit dit dit*, and *chirp* notes and musical trills, but they do utter the typical *chick-a-dee*. Males have an aggression and courtship "gargle" call, and there are *zee* alarm calls, hiss notes, and squeals. Courtship displays feature chases, sometimes with a male spiraling down and around a tree after the female. Females exhibit a wing-fluttering food-begging display. Most nests are cavities in a stump or branch, usually with side entrances. They are excavated mostly by the female, who lines them with moss, fur, or feathers. The clutch is typically a half dozen white eggs, spotted red-brown. The female alone develops a brood patch and she does all the incubation, with the male providing her with food. The eggs hatch in about two weeks, with the altricial young naked, eyes closed and helpless. Adults may mob predators such as owls and have been observed giving spectacular distraction displays — hanging upside-down from a branch or falling into the snow and fluttering as if injured. Fledging takes about eighteen days, after which the young remain with the parents for about two weeks before dispersing. Both parents feed the young and have been recorded making as many as two dozen feeding trips per hour during a fifteen-hour day. Birds join single- or mixed-species foraging flocks following fledging until the next breeding season.

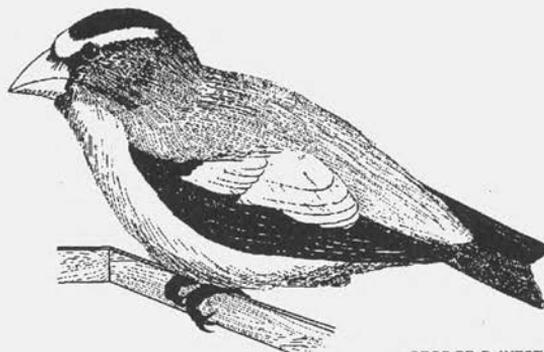
Boreal Chickadees are versatile foragers, hovering, gleaning, or hang-gleaning foliage, or probing bark. They are opportunistic and may experience a seasonal diet shift—a common occurrence for birds that overwinter in the north. They eat seeds of conifers and birches, some fruit, and a wide variety of insects and spiders, particularly in breeding season. They frequently cache food — a winter survival strategy — usually in bark crevices or under lichens, often cementing the food in place with saliva or spider web. Their favored location is in dead branches near the trunk where snow is not likely to accumulate. Studies suggest that foraging activities can be influenced by competition between species. When Boreal and Black-capped chickadees are sympatric (overlap in distribution), they may segregate by habitat, with Black-capped Chickadees utilizing more the deciduous forest. Where both occur in the same habitat, they may partition the food resources, with Boreal Chickadees foraging higher in the trees. This is supported by studies that indicate that, when Boreal Chickadees occur alone, they use all parts of the tree about equally.

Boreal Chickadees are not abundant in any of their broad geographic range, and populations have year-to-year fluctuations in numbers that suggest that winter mortality may be a major factor in limiting population levels. Their broad geographic range, however, together with their preference for boreal forests that are sparsely inhabited by humans, make their conservation status favorable. There is some question, however, about a possible future negative impact on northern coniferous forests from global warming. But for the present, birders can look forward to seeking out these nifty little birds in their boreal forest homes, or await the occasional irruption that brings them to us in winter.

*William E. Davis, Jr.*

## About the Cover Artist

The work of noted wildlife artist Paul Donahue has appeared many times on the cover of *Bird Observer*. Some of our readers may also have enjoyed the experience of visiting the rain forest canopy walkway at the Amazon Center for Environmental Education and Research off the Rio Napo in the Department of Loreto in northeastern Peru. This canopy walkway, the world's longest, is the creation of Paul Donahue and Teresa Wood. Paul can be reached at PO Box 554, Machias, Maine. 🦜



GEORGE C. WEST

# AT A GLANCE

---

December 2001



DAVID LARSON

It's a brisk November morning and you are carefully walking through a dew-laden weedy field in search of sparrows, an activity that many birders engage in each autumn. As you proceed through the weed lot, numerous, small brown forms jump from the tangle before you, some immediately disappearing into nearby shrubby vegetation, while others pause briefly to provide a momentary opportunity to observe critical field marks. Such is the way of sparrows in migration.

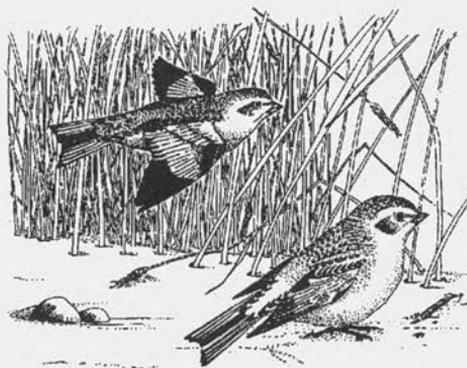
With this description in mind, it should be obvious that this month's mystery species is a sparrow. Because sparrows often represent the quintessential field identification nightmare, the bird in the photograph needs to be thoughtfully examined in order to make a proper identification. Although sparrow identification has been extensively discussed in previous issues of *Bird Observer*, a few simple reminders are still in order. First, sparrows can generally be divided into groups, based upon whether they have conspicuous wing bars or not, and also whether their breasts are prominently streaked or are devoid of streaks. This process of dividing sparrows into one or the other of these broad groups substantially eliminates many of the identification options that would otherwise be possible if the observer thinks of the identification challenge as simply "some type of sparrow."

A close look at the mystery sparrow clearly indicates that it lacks both conspicuous wing bars and prominent breast streaks. The pictured bird is also

relatively short-tailed, unlike species such as the Field Sparrow or Song Sparrow, for example. Likewise, it fails to show a strongly patterned crown and the long-necked appearance that are typical of a White-crowned Sparrow. Especially noteworthy is the fact that the wings, especially the primaries, appear to be uniformly dark, lacking the pale fringes to the feathers that are typical of a species such as the American Tree Sparrow. With these negative pieces of information in mind, the door is open for making a reasonably straightforward identification.

Features conspicuously present on the sparrow in the photograph include a broad, gray nuchal collar (i.e., nape) at the sides of the neck, a small but distinct whitish throat, a dark line behind the eye, and what appears to be a solid crown without an obvious median stripe. This combination of no wing bars, a virtually unstreaked breast, short tail, dark wings, whitish throat, dusky flanks, and dark cap all point to only one Massachusetts sparrow species — Swamp Sparrow (*Melospiza georgiana*). It is difficult to be certain from the published image whether the pictured individual is an adult in winter plumage or a first winter immature, a determination that might be more clearly ascertained in a colored image. David M. Larson captured the image of the Swamp Sparrow in eastern Massachusetts, during the month of November

Wayne R. Petersen



GEORGE C. WEST

### News from MassWildlife

**Bowhunters** also appreciate a quality and traditional outdoor experience, observing the rhythms of Nature at dawn and dusk and using the renewable deer resource for meat and leather. “My greatest memories from this bow season didn’t include a deer,” observes one veteran bowhunter. I watched a black-capped chickadee land on my bow and inspect the camouflage pattern for seeds or insects. Then it hopped over to my fanny pack and continued its search. Golden-crowned kinglets and tufted titmice landed within an arms-length, totally unaware of my presence. I was really part of the forest for a few brief hours that morning, rather than an intruder. Another day it was the flash of an immature goshawk gliding through the oaks and pines just three feet off the ground. You don’t have those opportunities in our busy, day-to-day world.”

## AT A GLANCE

---



ROGER S. EVERETT

Can you identify this bird?

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

---

### Hawk Migration Conference March 9

Anyone with an interest in hawks is cordially invited to attend the NorthEast Hawk Watch's seventh regional hawk migration conference in Holyoke, Massachusetts, on Saturday, March 9, 2002. Entitled "Hawk Watching in the New Millennium," the conference will include presentations on such topics as population trends for Osprey, Cooper's Hawk, and American Kestrel; analyzing site data; the future of hawkwatching and the Internet; habitat management; advanced hawk identification; and more, including live birds of prey. There will also be a special showing of the spectacular, expanded length, locally produced video, "Looking Skyward: A Passion for Hawkwatching."

The conference will run from 9 a.m. to 5 p.m. Registration is \$30 (including coffee breaks), with an optional luncheon buffet for \$7.25. The conference is geared for *anyone* with an interest in learning more about our spectacular birds of prey. Register early; seating is limited. The conference is held every four years, so don't miss this one!

For complete program information and a registration form, visit: <<http://www.battaly.com/nehw/conference>>, or contact Paul Roberts, 254 Arlington Street, Medford, MA 02155, call 781-483-4263, or e-mail [phawk@world.std.com](mailto:phawk@world.std.com)



BIRD OBSERVER (USPS 369-850)  
P.O. BOX 236  
ARLINGTON, MA 02476-0003

SECOND CLASS  
POSTAGE PAID  
AT  
BOSTON, MA

Dec 03

Barbara Floyer  
2 Orchard Lane  
Wayland, MA 01778-1906

## CONTENTS

BIRDING IN NORTHFIELD	<i>Mark Taylor</i>	5
THE RISE AND DECLINE OF HOUSE FINCHES IN MASSACHUSETTS	<i>Thomas R. Hamilton</i>	13
UNEXPECTED CENTERS OF WINTER LANDBIRD DENSITY DURING THE 101 <sup>ST</sup> CBC	<i>S. S. Mitra</i>	20
FIRST DOCUMENTED NESTING OF WHITE-WINGED CROSSBILL ( <i>LOXIA LEUCOPTERA</i> ) IN MASSACHUSETTS: THE INVASION OF THE CONE SLASHERS	<i>Geoffrey S. LeBaron</i>	28
THE DYNAMICS OF BLACK-CAPPED CHICKADEES AT BIRD FEEDERS	<i>Herb Wilson</i>	33
SIBLEY BIRDING: HOW MUCH DOES YOUR BIG DAY WEIGH? OR, BIRDING WITH A CALCULATOR	<i>Bob Bushnell and Steve Davis</i>	39
POCKET PLACES The Grove at Salisbury	<i>Douglas Chickering</i>	41
ABOUT BOOKS Who Are Those Guys? A Conversation with Josep del Hoyo, the Creator of the <i>Handbook of the Birds of the World</i> Series	<i>Mark Lynch</i>	42
BIRD SIGHTINGS: September/October 2001 Summary		49
ABOUT THE COVER: Boreal Chickadee	<i>William E. Davis, Jr.</i>	71
ABOUT THE COVER ARTIST: Paul Donahue		72
AT A GLANCE	<i>Wayne R. Petersen</i>	73