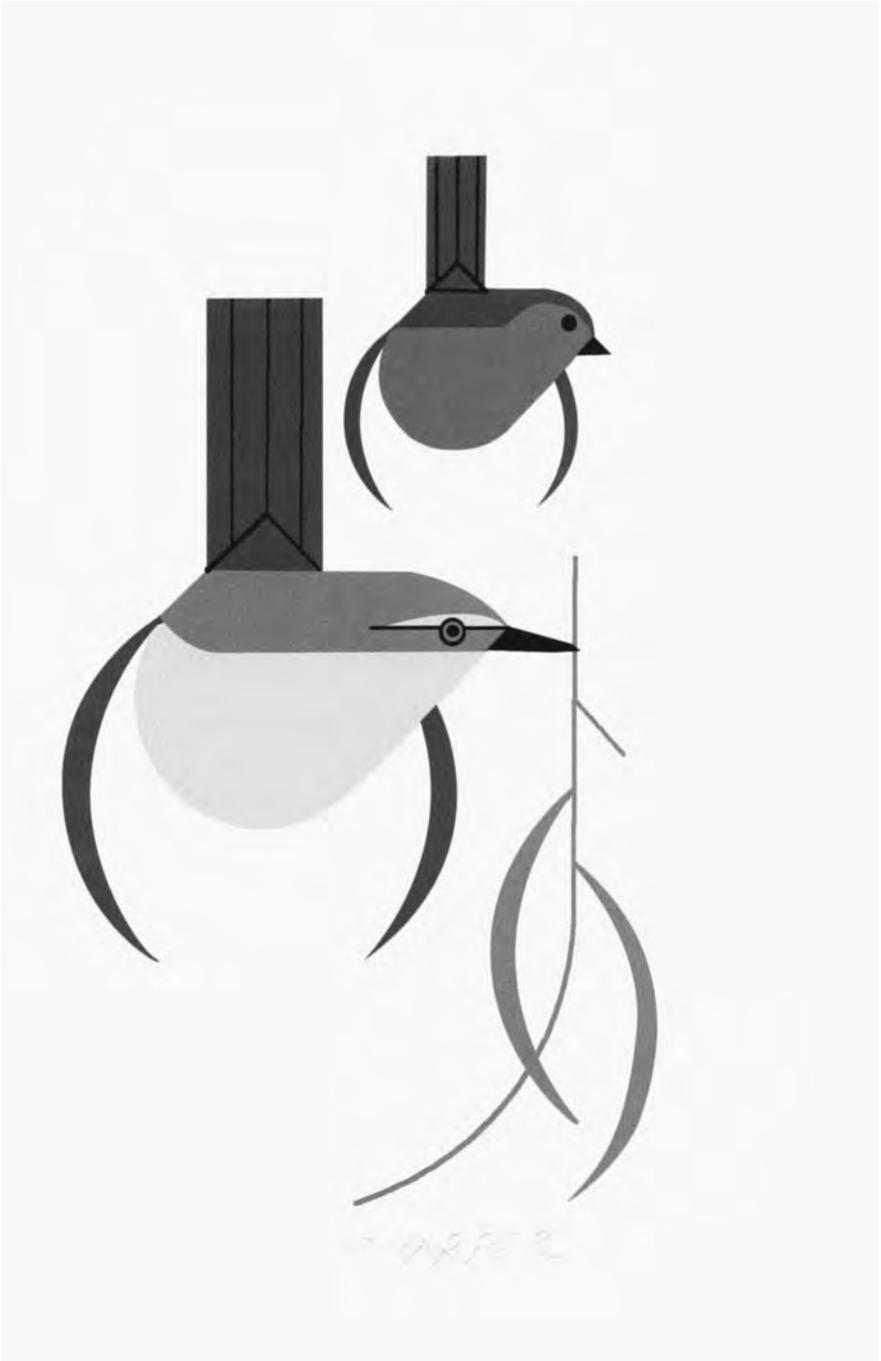


Bird Observer

VOLUME 37, NUMBER 3

JUNE 2009



HOT BIRDS



David Romps discovered a **Townsend's Warbler** (left) at Chestnut Hill Reservoir on April 17, 2009, and posted photos to prove it!

Sometime around April 15, 2009, Lori Snell noticed an unusual woodpecker ripping off large chunks of bark from some dead pines on Nantucket. Based on her bird book, she thought it looked like a **Black-backed Woodpecker** (right). On April 25, Edie Ray and Steve Langer confirmed her identification. On April 26, Jeremiah Trimble got this photograph.



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CONTENTS

THE MARCH OF ROSS'S GOOSE	<i>Paul Roberts</i>	137
HAMPSHIRE BIRD CLUB CELEBRATES TWENTY-FIVE YEARS	<i>Trudy Tynan</i>	147
INNOVATION OR REVIVAL: BALD EAGLES NESTING ON THE MERRIMACK IN HISTORICAL CONTEXT WITH AN UPDATE	<i>Ganson Purcell, Jr. and Sue McGrath</i>	152
CICADA SUMMER	<i>Mary Keleher</i>	159
CORNUCOPIA: BIRDS AND PERIODICAL CICADAS	<i>Kimberly G. Smith</i>	161
FIELD NOTES		
Confirming Ruby-throated Hummingbird	<i>Mark Taylor</i>	167
Breeding Bird Atlas Note: First Confirmation of Golden-crowned Kinglet in Middlesex County	<i>Sam Miller and Carla Dengler</i>	167
Unusual Great Blue Heron Feeding Behavior	<i>Richard Frechette</i>	168
Tree Swallows Feeding on Krill	<i>Maurice Montgomery</i>	169
ABOUT BOOKS		
A Time of Green Urgency	<i>Mark Lynch</i>	171
BIRD SIGHTINGS		
January/February 2009		176
ABOUT THE COVER:		
Part 1: The Follower: Red-eyed Vireo		188
Part 2: The Follower: Brown-headed Cowbird	<i>William E. Davis, Jr.</i>	189
ABOUT THE COVER ARTIST: Charley Harper		191
AT A GLANCE	<i>Wayne R. Petersen</i>	193



To find out what Jan, Shirley, and Sally (l-r) are celebrating, see page 147. Photo courtesy Trudy Tynan.

For online indices and more, visit the *Bird Observer* website at
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Bird Observer

A bimonthly journal — to enhance understanding, observation, and enjoyment of birds
VOL. 37, NO. 3 JUNE 2009

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The March of Ross's Goose

Paul M. Roberts

On the afternoon of March 15, 2009, Rick Heil found seven Ross's Geese (*Chen rossii*), four adults and three immatures, in Ipswich, Massachusetts (Figure 1), a sighting that caused widespread excitement in the birding community. This was the first time multiple Ross's Geese were confirmed on *terra firma* in Massachusetts. It



Figure 1. Ross's Geese in Ipswich, photographed by Phil Brown on March 15, 2009.

also appeared to be the all-time record for Ross's Goose in New England. (On March 17, Jim Berry reported having seen seven white geese in the same location in Ipswich on March 14. Assuming they were Snow Geese, he had not looked closely at them. It is likely these were the geese Rick identified on the 15th.)

Rick's record was short-lived because on Monday, March 16, Bob and Lura Bieda reported eight Ross's Geese at Arcadia Meadows in Easthampton, Massachusetts. On March 19 Steve Mirick discovered two Ross's Geese in Haverhill MA while the seven Ipswich birds continued to be seen. At dawn on March 22, Tom Wetmore discovered seven Ross's Geese at Stage Island Pool on Plum Island, Parker River National Wildlife Refuge (PRNWR), but they shortly flew toward Ipswich, strongly suggesting they were the "Ipswich 7." Nancy Landry discovered a single immature Ross's Goose on Cross Farm Hill on PRNWR later in the day, which was apparently an eighth individual.

An extensive but not exhaustive survey of birding listservs and online searches using multiple search engines revealed that March's Ross's Goose fallout was not limited to Massachusetts (see Table 1).

Only three Ross's Goose reports had been accepted previously in Massachusetts: individuals reported at Turner's Falls in October 2004, at Chilmark in October 2001, and at Sunderland in March 1997, the only spring report. The "Ipswich 7" apparently remained until March 24, and the "Arcadia 8" dwindled to five on March 20 and were

**TABLE 1. ROSS'S GOOSE SIGHTINGS IN EASTERN U.S.
AND SOUTHERN CANADA, FEBRUARY 27 – APRIL 3, 2009**

Feb 27	1 at Bombay Hook NWR in NJ
March 1	1 at Jacobsburg State Park, PA
March 5	2 in Monroe County, MI
March 9	Record 22 Ross's Geese in southern Ontario
March 12 (wk of)	1 at Raymond Pool, Delaware
March 14	1 in Jackson County MI
March 15	1 at Austin, MN
March 15	7 in Ipswich, MA (4 ad, 3 imm)
March 15	1 in Biddeford, ME
March 16	8 in Easthampton, MA (different from 7 in Ipswich)
March 17	10 in Dakota County, MN
March 19	15 at Spring Lake, MN
March 19	2 ad in Haverhill, MA
March 20	1 at Columbus, GA
March 20	3 in Pittsford, VT
March 21	1 in Kensington, MI
March 22	7 at Stage Island, Plum Island, PRNWR, MA (at 6:40 a.m. flew to Ipswich; assumed to be Ipswich birds; 1 lone imm seen later; likely 8 th bird)
March 22	1 at Tonawanda Wildlife Management Area in NY
March 23	8 seen at Stage Island, Plum Island (7 presumed to be Ipswich birds)
March 24	1 in Houston County, MN
March 26	3 at Maple River, near Mankato, MN
April 3	1 adult near Richmond, ON

At least 1 immature Ross's wintered in Merrick, NY and up to 3 adult Ross's and at least 2 possible Snow/Ross's hybrids were reported in eastern NY during the winter.

not reported after that. The two in Haverhill moved to West Newbury the next day and were not subsequently reported. Something was clearly happening with Ross's Goose.

Ross's Goose, and Greater and Lesser snow geese (*Chen caerulescens atlantica* and *Chen caerulescens caerulescens*, respectively) are collectively called "light geese" by wildlife managers because they can be very difficult to differentiate in aerial surveys. "Light" is generally preferred to "white" because many Snow and Ross's geese also occur in a blue, or dark, morph.

The United States and Canada track goose populations primarily in two ways. There are annual mid-winter surveys conducted by flyway: Atlantic, Mid-continent, Western Central, and Pacific (not to be confused with the four United States Fish and Wildlife Service administrative flyways: Atlantic, Mississippi, Central, and Pacific.) The surveys provide estimates to serve as population indices. Costly aerial breeding surveys (about every five years per site) are believed to be much more accurate because light geese are intensely philopatric colonial nesters. Breeding survey totals tend to be 1.6 times those of winter surveys. Because non-breeding birds are not included in these surveys, the total goose population is estimated to be 1.3 to 1.5 times greater than the breeding estimates.

The Light Goose Explosion

Government data indicate that populations of light geese have never been higher and are continuing to grow dramatically. The breeding population of Greater Snow Goose, which breeds in the eastern Arctic and winters along the mid-Atlantic coast

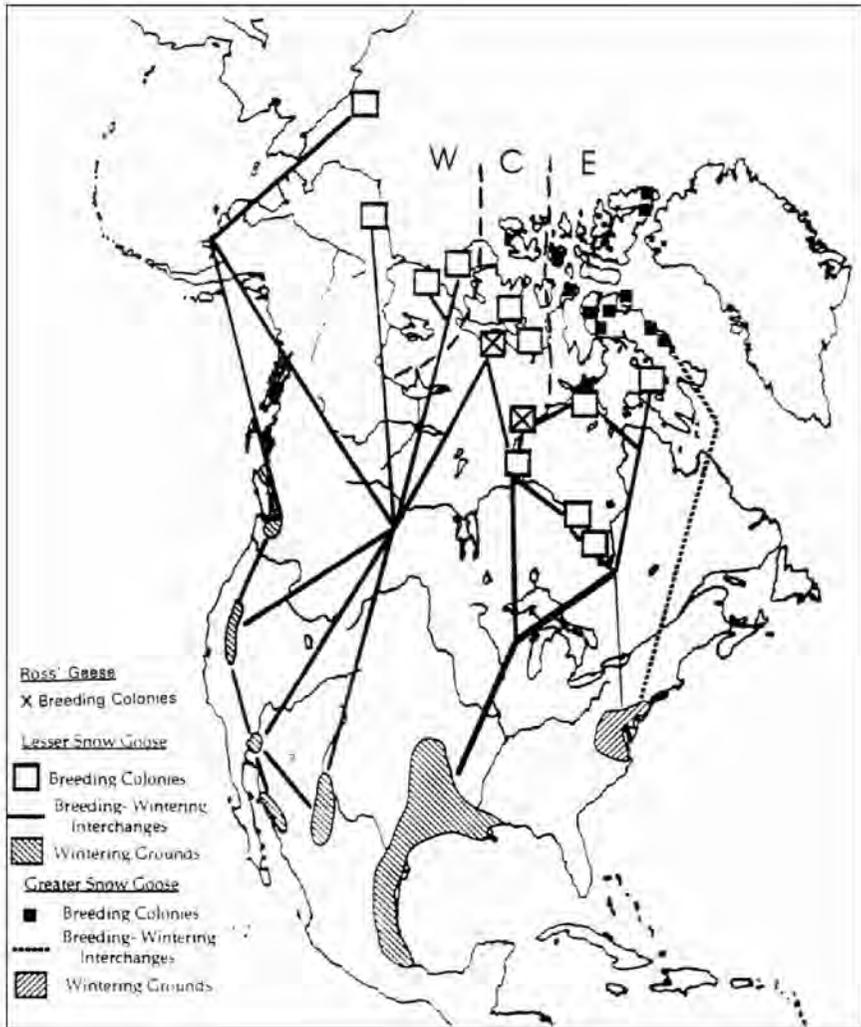


Figure 2. Locations of breeding colonies and linkages to wintering areas for lesser snow geese, greater snow geese, and Ross's geese in North America. Dashed lines separate western, central, and eastern Arctic areas (from Batt 1997).

(Figure 2), was estimated at 25,400 in 1965. In 2006, the estimate was 1,016,900, an annual growth rate of eight percent a year.

Lesser Snow Geese are more abundant and widespread (Figure 2). In the eastern Arctic approximately 1,057,400 Lesser Snow Geese were tallied in the 1973 breeding survey. Over 3,000,000 breeding adults were tallied in spring 1997, an annual growth rate of 4.7 percent. Adding in non-breeding birds, the minimum number of Lesser Snow Geese in the eastern Arctic was nearly four million in 1997. In the central Arctic, 44,300 breeding adult light geese were tallied in 1966. That climbed to

1,383,200 in 1998, an annual growth rate of eleven percent. Estimates were that fifty-nine percent of these birds were Lesser Snow Geese and forty-one percent were Ross's Goose. (See below.)

Approximately 169,000 Lesser Snow Geese were found in the western Arctic in 1976. That number increased at an annual rate of 5.2 percent to 579,000 birds in 1998. Only a small number of Ross's Geese breed in the western Arctic, on Banks Island.



Figure 3. Primary geographic range of the Ross's goose (from Moser 2001)

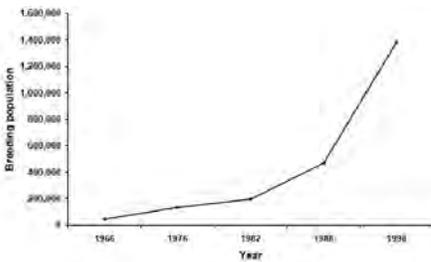


Figure 4. Light goose breeding population estimates in central Arctic, 1966-98, based on aerial surveys (from U.S. Fish and Wildlife Service 2007)

previous year and another consecutive record high total. (Only the Karrak Colony is surveyed annually and increased at the rate of nine percent per year from 1998 to 2007.) Sixty miles to the east, Colony 10 had grown to 800,000 or more breeding Ross's Geese!

Ross's Goose, like other light geese, is a colonial nester. At Karrak, the Lesser Snow Geese nest primarily in the uplands and the Ross's Geese in the wet lowlands. The breeding females are philopatric, returning to their natal area to breed. Dense concentrations in breeding colonies have led to severe habitat degradation. Snow

Ross's Goose has been an integral part of this explosion of light geese over the past half century (Figures 2, 3, and 4). Ross's Goose breeds primarily in the Queen Maud Migratory Bird Sanctuary (QMMBS) in the central Arctic, where ninety to ninety-five percent of the population was believed to have bred in 1998. They also breed in much smaller numbers on the southern coast of Southampton Island, on the west coast of Baffin Island, at McConnell River on the west coast of Hudson's Bay, and on Banks Island.

In 1931, virtually the entire known Ross's Goose population, 5-6000 individuals, wintered in the Sacramento and San Joaquin valleys in California. Their primary breeding ground in Queen Maud Gulf was not discovered until 1938. Photo inventories of Ross's Goose in 1988 estimated 188,000 breeding Ross's in the central Arctic and 2000 in the east Arctic. By 1998, the central Arctic breeding population had increased to 567,000 and to 52,000 in the east. In 2007, a survey of the single Karrak Lake colony in QMMBS estimated 801,000 adult Ross's Geese nested there, an increase of fifteen percent from the

Geese are well known for the damage they can cause with their foraging activities. With their long bills they often grub, i.e., dig, below ground for portions of plants, including roots and rhizomes. Ross's, with their shorter bills, are not able to grub effectively but can closely browse vegetation that has survived or is recovering from Snow Goose grubbing. The result is a substantial reduction in vegetation diversity and mass, with ominous long-term consequences for all light geese. (Visit <http://research.amnh.org/~rfr/hbp/images.html> for a graphic presentation of the damage.) Habitat degradation raises serious concerns about a devastating light goose population crash exacerbated by avian cholera: in other words, the fear that light geese could crash to century-old levels and take many other waterfowl with them.

At McConnell River, habitat degradation has caused mature geese to frequently produce smaller goslings, which become smaller adults. The gosling fledging rate has plummeted to about ten percent, and a successful family may have to move over thirty miles to find adequate forage. Nonetheless, the Ross's colony continues to grow, though the Lesser Snow Goose population in the colony has declined by more than half. The habitat degradation has had a significant detrimental impact on the breeding of many other bird species, including Hudsonian Godwit, Whimbrel, Stilt Sandpiper, Red-necked Phalarope, and dowitcher, as well as Yellow Rail, several duck species, and even Canada Goose.

Factors Driving Light Goose Population Growth

What has prompted such dramatic growth in the light goose population despite the foraging problems? Five factors are generally recognized.

- ♦ Increased availability of food on staging areas and wintering grounds
- ♦ Protection afforded by wildlife refuge systems
- ♦ "Harvest rates" that have not kept pace with population growth
- ♦ Climate change
- ♦ Decreased adult mortality

Probably the single biggest factor in the growth of Ross's and most light geese is increased food supplies on migration and wintering grounds. Through the 1960s, virtually the entire Ross's Goose population wintered in California. Over the past several decades, increasing numbers of these geese have been wintering and migrating farther east. Numbers of Ross's Geese have grown to constitute one third of the Western Central Flyway population, which winters in New Mexico, western Texas, and northern Mexico. In the mid-continent flyway, light geese historically wintered on the coastal marshes of eastern Texas and Louisiana, which Ross's tended to avoid. Over the past four decades the Lesser Snow Geese discovered the burgeoning rice fields of the coastal plain, dramatically expanding their food supply. At the same time, changing agricultural practices increased agricultural output. As geese increasingly wintered inland, populations increased up to four hundred percent in Texas alone. From 1998 Ross's grew from roughly six percent of the flight to about ten percent today. Over the past fifteen years prime agricultural foraging land in Texas (primarily

rice fields) has been reduced by seventy-five percent due to development and in Louisiana by hurricanes. Light geese adapted by wintering in similar agricultural fields in Arkansas and, most recently, Missouri, with flocks now seen as far north as Iowa! Thus, the total available winter food supply has increased dramatically, allowing more birds to survive the winter, make shorter migrations, and return to breeding grounds in generally excellent physical condition, primed to breed more successfully. Light geese have proven incredibly elastic in exploiting evolving opportunities, including environmental changes.

The wildlife refuge systems established in the United States and Canada primarily for waterfowl have been very successful and have provided additional forage and, more important, water-based sanctuary for waterfowl.

“Harvest rates” for light geese have not kept pace with population growth. First, the number of hunters has not grown commensurately with the prey populations. Also, adult light geese are savvy and notoriously challenging to hunt, and the proportion of adult birds has been increasing. A variety of changes in hunting regulations have been implemented over the past fifteen years to increase the harvest, which grew from one million (including Canada’s) in 1999 to 1.5 million in 2003, but the changes obviously had little short-term effect on the population. Recently, spring hunting seasons have been introduced to help reduce the total light goose population by at least fifty percent.

Climate is another significant factor. A warming trend in the Arctic beginning in the late 1960s and 1970s enabled higher reproduction than normal, creating a larger base population of more breeding adults. One can surmise that warmer winters with less snow cover in the wintering grounds and warmer springs with less snow cover on the breeding grounds will facilitate continuing growth.

Longevity is the fifth major factor. The average light goose lives approximately eight years, with some living to twenty years and beyond. Since many do not breed until three or four years of age, the breeding population continues to increase, in part because of longer adult life spans caused primarily by abundant food on wintering and migration grounds.

The Relentless Ross’s

This extensive background helps put the Ross’s invasion of March 2009 in better perspective.

- ♦ For over 50 years, Ross’s Goose has been extending its wintering grounds and migration routes to the east.
- ♦ It has extended its breeding range to the east and established a sizeable new colony over four hundred miles to the southeast. The heart of the Ross’s breeding grounds in QMBS, where the population increased fifteen percent last year, may be approaching maximum carrying capacity, leading to increasing dispersal to Colony 10 and the relatively new McDonnell River Colony. The results are demonstrated in Figure 5.

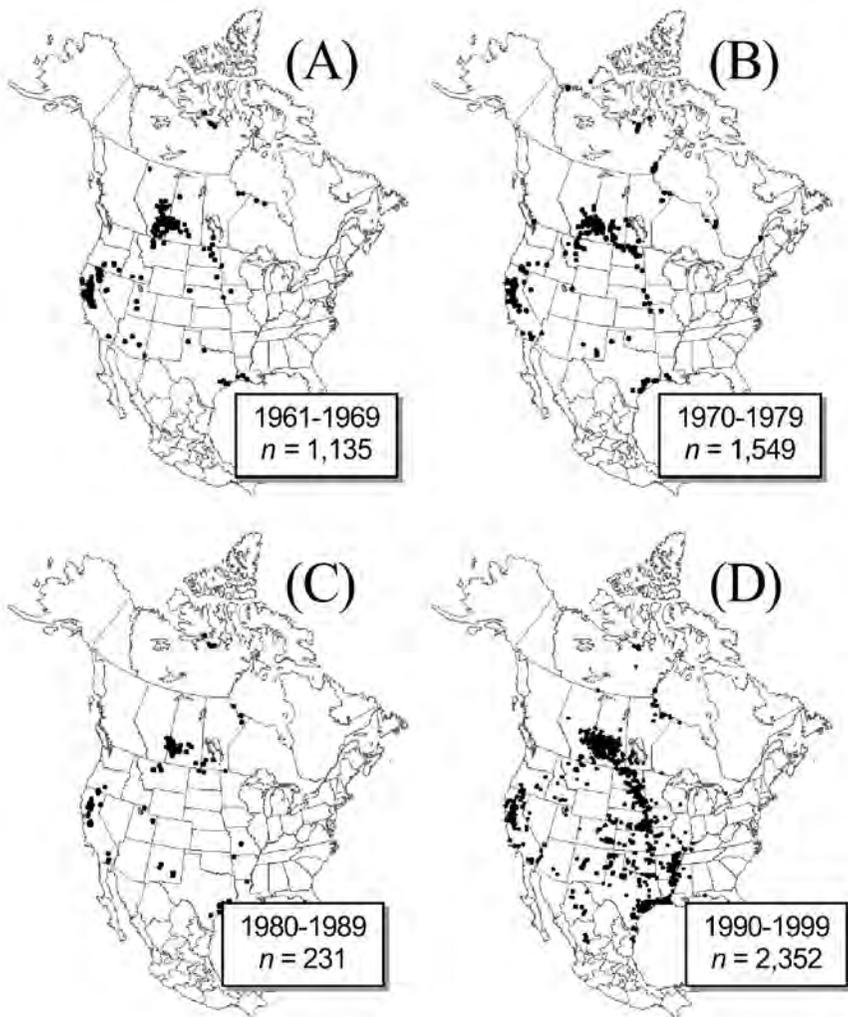


Figure 5. Distribution of Ross's goose band recoveries in North America, 1961-99 (from Moser 2001)

- ♦ Ross's Geese were first harvested in the Central Flyway in 1974, in the Mississippi Flyway in 1982, and in the Atlantic Flyway in 1996.
- ♦ While still an uncommon bird in Minnesota in fall migration, they are now seen widely in the spring.
- ♦ In Michigan, the nineteenth through twenty-ninth state records for Ross's Goose were recorded in 2005, including one report of eight birds.
- ♦ New York State had three accepted reports of Ross's Goose until 1990. Since then, they have had forty-two accepted reports, spring and fall, and the goose has been removed from the state rare bird list.

- ♦ On March 2, 2009, Squaw Creek National Wildlife Refuge in Missouri had five hundred “Snow Geese.” On March 11, Squaw reported six hundred thousand “Snow Geese.” On March 16, only forty thousand geese remained. Clearly, there was a major light goose flight between March 12 and March 15, which almost certainly included Ross’s.

What we saw in March 2009 were probably two or more small families of Ross’s Goose with recent young and some individual third- or fourth-year birds, migrating some distance east of traditional migration routes, seeking new solutions to the breeding and foraging issues discussed above. These birds foraged in Massachusetts for three to ten days before departing in pursuit of better staging areas for their continuing migration. Adult Ross’s Geese typically do not return to their breeding grounds before the last week of May or the first week of June. Conceivably, these were geese that had successfully colonized recently in the eastern Arctic and were seeking more direct routes to their new breeding grounds. Or they may have been part of a very small but growing population wintering with Greater Snow Geese in the mid-Atlantic states simply returning to their breeding grounds. Had that been the case, however, I might have expected them to be mixed with flocks of Snow Geese.

I doubt that weather systems were a significant factor in their appearance. Occasionally, strong fronts have brought as many as 3–4000 Greater Snow Geese to Plum Island in April, though rarely in recent decades. There was no dramatic influx of Greater, much less Lesser, Snow Geese this spring, as one would expect if unusual weather had driven these birds east and forced them down. (In the spring or fall, considerably more Snow Geese appear to fly over rather than sit down in Massachusetts to forage or rest.)

What seems certain, however, is that if you missed seeing Ross’s Goose in Massachusetts this year, you won’t have to wait long for another opportunity. 

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Paul M. Roberts was editor of *Bird Observer* in the early Archaic period, before personal computing. He has served in corporate and marketing communications management for companies such as Analogic, Honeywell, Harvard Community Health Plan, and Wang. An active birder for more than thirty years, geese were his first love as he began birding. He founded the Eastern Mass Hawk Watch in 1976. Paul has been chair and is currently a director of the Hawk Migration Association of North America (HMANA) and president of the NorthEast Hawk Watch (NEHW). He occasionally gives classes on hawks, shorebirds, and waterfowl for Mass Audubon's Habitat Sanctuary in Belmont.



LIGHT GEESSE (LESSER SNOWS AND ROSS'S) AT BOSQUE DEL APACHE NWR IN NEW MEXICO BY DAVID LARSON

Hampshire Bird Club Celebrates Twenty-five Years

Trudy Tynan

The Hampshire Bird Club (HBC) began with a bird, and what a bird! A Great Gray Owl swooped into Hadley around Valentine's Day 1984 and hung around for six weeks.

"Sally Venman and I are standing there (watching the owl) and people are just coming out of the woodwork," Scott Sumner recalled. "We were just chatting. Then we thought, 'Look at all these people. We should be able to start a bird club and have it be viable and last.'"

Within a few weeks, Scott and Sally had drawn up a flyer and were scouting for members in their natural habitat. Charter member David Spector said he was birding a very deserted roadside when, to his surprise, a car pulled up and Sally leaned out the window to reel him in with "We're starting a bird club ..."

For the record, University of Massachusetts graduate student Dave Nelson spoke on Quabbin Eagle Reintroduction at the initial meeting on April 9, 1984. Scott followed on May 14 with a presentation on his trip to Churchill, Manitoba, and five days later, he led the club's first field trip, an all-day excursion to Plum Island.

By August, the Hampshire Bird Club had seventy-five charter members; a logo featuring that western Massachusetts specialty, the Pileated Woodpecker; the first of Sally's witty newsletters; and a telephone hotline, the Hampshire Bird Voice. The club's first annual trip to Monhegan Island was October 6-8, 1984.

Scott was elected the club's first president, and Sally formally became secretary and newsletter editor. A quarter-century later, the membership has tripled and many other things have changed, but some important ones have not.

"We decided early on that our niche was going to be programs," said Scott, who was rewarded on the club's twenty-fifth anniversary by being returned to the presidency (prompting Newsletter Editor David Peake-Jones to observe, "Time for a change and the Sumner the better.").

After the September 1984 barbeque and party, birdsong expert and charter member Don Kroodsma of the University of Massachusetts and Black-capped Chickadee maven Susan Smith of Mount Holyoke College, both future winners of the American Birding Association's Ridgway Award for excellence in publications on field ornithology, kicked off the HBC's first full year of programs. They were followed by Jim Cardoza of MassWildlife on his almost single-handed restoration of the Wild Turkey to Massachusetts.

Over the next quarter-century, the club's speakers have been a Who's Who of birding, including: Jon Dunn, Pete Dunne, David Sibley, Victor Emanuel, Robert Ridgely, Charlie Duncan, Clay and Pat Sutton, Irene Pepperberg, Peter Alden, Al Hinde, Julio de la Torre, Frank Gill, Susan Roney Drennan, and Bruce Beehler.



The Hampshire Bird Club's seven presidents over the past 25 years celebrate. From left to right: Dave Gross, Jim Marcum, Shirley Hilborn, Jan Ortiz, Dennis McKenna, Mary Alice Wilson, and Scott Sumner, our first and current president. Photograph courtesy of the author.

This year's presenters, corralled by Vice President Geoff LeBaron, national editor of the Christmas Bird Count, included three winners of the ABA's Griscom Award for outstanding contributions to regional ornithology: Chan Robbins, Kenn Kaufman, and Wayne Petersen (with Wayne scheduled to lead an August shorebirding workshop), as well as return appearances by our two Ridgway winners.

Members also delighted in a talk by award-winning nature writer Scott Weidensaul and enjoyed John Van de Graff's photographs. David Spector of Central Connecticut State provided another of his ornithological readings of literary classics with an exposition on black writer Ralph Ellison. Norm Smith updated us on his Snowy and Northern Saw-Whet owl research. And Mark Lynch, declaring a "firm belief that we never get to talk about debauchery enough in bird club lectures," schooled us on those bawdy Dutch masters with his program on "Debauchery, Drunkenness, Owls and Bitterns: Bird Symbolism in Hondius' *Rest on the Hunt*."

In keeping with club tradition, all programs are free and open to the public. And the membership has responded both to enticing speakers and to a smorgasbord of homemade goodies. Regularly, nearly half the dues-paying members, which now total more than two-hundred, show up for monthly meetings.

We are not couch potatoes. We wrote the *Bird Finding Guide to Western Massachusetts*. We have field trips, conservation projects, Christmas Bird Counts, and Breeding Bird Atlas participation. We have enjoyed lots of good birds from Painted Buntings to White-tailed Hawks, Slaty-backed Gulls, and the first state record of a Eurasian Collared Dove. The latter was discovered May 28, 2005, on the HBC's annual "Poor Man's Monhegan" trip to Plum Island led by Bob Bieda.

Our trip leaders have persevered even as the post 9-11 world posed some challenges for birders. Witness this newsletter report and editor's note on a trek to the Connecticut marshes and Bradley International Airport:

We were still on the first leg of our slow trip around the airport when we were surrounded by state police. We managed to locate a small flock of turkeys while we were being escorted from the airport under police guard.

Editor's note: Experience suggests it is unwise to gesticulate and yell "Turkey" in the presence of Connecticut's finest.

"It's a class act," said Wayne Petersen. "With all the different bird clubs in Massachusetts, I've always been impressed with the numbers who turn out for the Hampshire Bird Club meetings for all the right reasons. Not many clubs are as vigorous and have the quality and quantity of speakers, field trips, and newsletter."

So much for the serious side. While among the younger of the state's regional clubs with open membership — the Allen Bird Club of Springfield founded in 1912, a year before the Brookline Bird Club, is the oldest — the HBC has contrived for twenty-five years to combine serious birding with good fun. The bylaws set the priorities: "The first purpose of the HBC is to help its members enjoy birding. The second purpose is to educate its members and others about birds and bird watching."

We even have a modest anthem. Here are a couple of stanzas, each worse than the last, composed on Monhegan Island by spirited members, some of whom were said to be more under the influence of spirits than others. It is sung, usually off-key, to the tune of *Kumbaya*:

HBC we are HBC
Where's a rarity — we shall be
Be it hawk or kite — ruff or reeve
We'll be there — HBC

We bring cowbirds — to their knees.
Vireos, to us — are a breeze.
From our spotting scopes — shorebirds flee.
We're stupendous — we're HBC.

The monthly newsletters, produced by Sally Venman and David Peake-Jones, have captured the spirit of good fellowship along with bad puns, doggerel verse, and some inspired nature writing.

Here's a random dip into the 1992 archives. Sally, who leavened her monthly notices with announcements of odd holidays and strange happenings, warned us to take special care because November is National UFO Abductions Month ("We would hate to lose you, even though we have your dues.") Then she wound us up with Wozzles when the Nashoba Valley Bird Club foolishly threw down the Gannet to challenge the HBC with plays on bird names:

Woody, would you peck her?

As a native of Bridgeport once said, there may be a sucker hatched every minute, but I'm no sap. So the Nebbish Valley folks have picid a fight? They don't have a flicker of a chance once we buckle downy. Hear ye! Hair ye!! Oh, members of the HBC don't let any undertones of humor in what you have read belie the seriousness of the situation, but pile at it. Whenever members of the Club, born and bred, head to battle, we never (though we may appear as rabble) lack backedbone, but we gain courage by singing songs of Woody Guthrie to educate ourselves.

It was a long winter.

After more than 165 newsletters over seventeen years, Sally passed the editorship to David in 2001. It soon became painfully clear that the membership could expect no respite from puns, and David added verse to the mix. It was catching. When he prodded trip leaders for reports with Gilbert and Sullivan, David Spector responded:

At sunset we waited a bit
In an Amherst preserve, Podick;
A woodcock flew low
And peented "hello"
To provide our lists a nice tick:

To bring in an owl we tried —
We hooted and whistled and cried;
But no bird was fooled
Silence then ruled —
The owls in no way complied.

But birders and bird clubs don't sprout without inspiration, and in 1996 the club honored Rudd Stone and Gerry Bozzo with life memberships for their role in introducing many young people to birdwatching.

Before there was a Hampshire Bird Club there was an Amherst Bird Club and a Holyoke Wildlife Club, and two men—Gerry Bozzo and Rudd Stone—with an interest in youngsters that was matched only by their interest in birds.

Born in Northampton, Gerry taught science at Amherst Regional Junior High School for thirty-two years, and birding was part of his science lessons. Among the youngsters who found a lifelong interest in those classes were Scott Sumner and a host of other HBC charter members. And Gerry didn't stop with students. "That's when I became very interested in birds," recalls Elissa Rubinstein, a fellow teacher, whose duties took her into Gerry's science class. Before long, she was heading out with the youngsters and Gerry, who often drove his good friend Samuel Eliot, a Smith College professor and coauthor of *Birds of the Connecticut Valley of Massachusetts*.

"He'd walk along identifying birds by their song with 20 kids, all with cheap binoculars, trailing after him," Elissa recalled. Gerry hardly fit the popular image of a

birder. “He was this roly-poly Italian guy, who always called Northampton ‘Hamp’ and whose other passion was gambling,” she said. “He loved the horses, but he had a way of getting kids to be passionate about birding.”

“We were lucky,” said Scott, pointing out that in addition to teaching an appreciation of nature, Gerry’s influence made it socially acceptable in the 1960s and 1970s for Amherst teens to be birders.

“He was very patient,” said Elissa, who still has some of the mimeographed sheets and hand-drawn maps that Gerry handed out with directions to hot spots such as the East Meadows, Barton’s Cove, and the Rail Trail—when it boasted tracks, not bicycles. And gracious. The elderly Eliot always insisted on paying for the gas. “No matter where they went Sam always gave him a \$1 bill,” Elissa said. “It probably had paid for the gas when he started driving Sam. By the 1970s it no longer did, but Gerry never said anything.” Gerry died in October 1996 at the age of 65.

At the same time, Rudd, equally renowned for his ability to identify bird song, his dreadful driving, and his inedible (to anyone else) concoctions, was inspiring youngsters at the Holyoke-Springfield end of the Valley. Rudd had his own priorities. When he flipped his car on River Road in South Hadley, he carefully passed a wood turtle he had in the wrecked vehicle to startled rescuers who had dashed to his aid. He would not allow himself to be extricated until he was assured of the turtle’s safety.

“Rudd Stone was a hoot, a kook, a fabulous birder-naturalist, and a joyful mentor,” wrote Andrew Magee in a tribute following Stone’s death in 2003. “He was also a truly erudite and liberally enthusiastic man.”

“By the time I was ten, in 1957, Rudd was already picking me up in the dark to go all-day birding, often with one or two other boys in tow,” he recalled. “We were often accompanied by a venerable doyen of Valley birding: the famous, and by then quite elderly, Professor Eliot . . . Eliot never did learn to drive, so we boys got the continuous benefit of his enthusiasm, knowledge, and eccentricity on top of Rudd’s. Further, we all benefited from Sam’s absolute need to get his bird, and Rudd’s (terrible) driving to get to it.”

And so, here’s to beginnings and many more years of good birds and good fellowship with the Hampshire Bird Club!

As David Peake-Jones wrote in the September 2005 newsletter:

With the years of patient peering the knowing gradually increases,
incorporated into the brain, and, in more important ways, into the soul.
Birding is a journey with no end point. It keeps us coming back year after
year.

For more information about the club, see <<http://www.hampshirebirdclub.org>>. 

Trudy Tynan represents western Massachusetts on the Bird Observer editorial staff. After twenty-nine years as a journalist with The Associated Press, she currently lives in South Hadley, Massachusetts, with two Maine Coon cats. Trudy tutors at the Writing Center at Holyoke Community College. She has been a member of the Hampshire Bird Club since 1989.

Innovation or Revival: Bald Eagles Nesting on the Merrimack in Historical Context with an Update

Ganson Purcell, Jr. and Sue McGrath

Background

April 2005 brought great joy to the Lower Merrimack River. A pair of Bald Eagles raised two female chicks in a near-shore nest in West Newbury, Massachusetts. The pair had established residence two to three years prior and attempted, unsuccessfully, to procreate in the two nests the pair had erected. The enthusiasm attendant to the successful hatch was sufficient that a regional newspaper with titular connection (*The Lawrence Eagle Tribune* — emphasis added) sponsored a naming contest by which the chicks were dubbed *Merrie* and *Mackie*. In mid-June the thriving offspring were evaluated and banded by MassWildlife biologists. (See Bob Pierce's article, "Eagles in the Back Yard," *Bird Observer* 34 (4): 234-38, August 2006.)

Excitement was such that the event was heralded as "the first successful nesting of Bald Eagles on the Merrimack River in at least 100 years." Such absolute declarations fairly invite verification — an undertaking which proved enlightening and interesting. In reviewing established authorities, Forbush (1927) notes: "The history of the Bald Eagle in New England is that of all our large birds. Formerly breeding in the primeval forest, this species has been greatly reduced in numbers, and in southern New England the breeding birds have been extirpated. Probably from fifty to one hundred pairs still nest and rear their young in the forests of Maine and along its coast." The author then gives historical anecdotal reports of nesting in the Connecticut River Valley and more numerous reports in Southeastern Massachusetts where the eagles were attracted by residual "wild country" and annual April alewife runs. The single report from the Merrimack is that of "Mr. F. B. Currier who has spent some time watching eagles in the winter near the mouth of the Merrimack River (who) says that the moment an eagle comes along, all the Black-backed Gulls, Herring Gulls and Crows leave the ice in a hurry."

A decade later, Bagg and Eliot (1937) weighed in. These authors confirm in some detail the sporadic nesting reports in the Connecticut Valley and west into the Berkshires. A single reference to northeastern Massachusetts states: "Eagles that winter at Newburyport, Mass., are believed by Ludlow Griscom to be 'Northern'."

In 1955, Griscom and Snyder, in an attempt at precision, may or may not have clarified the picture. They offered two Bald Eagle subspecies found in the Commonwealth: *Haliaeetus leucocephalus leucocephalus* — aka Southern Bald Eagle; and *Haliaeetus leucocephalus alascanus* — aka Northern Bald Eagle. The Southern Bald Eagle (the littler guy) was presented as "an irregular visitor throughout the state and regular transient in small numbers at Mt. Tom." It was additionally noted as "possibly nesting in the prehistorical [*emphasis added*] period (many traditions),

but most definitely reported on Mt. Tom and Mt. Tobey in the Connecticut Valley and at Cheshire in Berkshire County where the nest was found by T. Fisher.”

The Northern Bald Eagle (the larger race), dwelling in northern climes, was considered “an irregular visitor to coastal points, arriving in numbers on the Merrimack [*sic*] River and Newburyport Harbor (up to 6 in one day) after severe cold waves when harbors to the north freeze, departing after a heavy thaw.” This observation nicely reflects the bird’s annual seasonal visit to the Merrimack estuary before and after the near extirpation of the Bald Eagle in the Lower 48 from the mid-1940s to the mid-1980s attendant to DDT use nationally and the fouled status of the Merrimack River locally.

Indeed, it is interesting, if not instructive, to review Christmas Bird Count (CBC) data for the Bald Eagle in the Newburyport area. Conducted annually since 1900, the counts have accumulated 109 years of data. Yet Bald Eagle counts from the Lower Merrimack Estuary have been somewhat sporadic. The first report was in 1939, and eagles were seen for thirteen years thereafter (to 1952). Average numbers were 2.6/year, with a median of two birds per year and a range of one to ten. No data are recorded for the years 1953 through 1979, with four exceptions. Three birds were listed in 1955 and one bird per year in ’56, ’59 and ’64.

No Bald Eagles were seen again on the Newburyport CBC until 1980, and their presence has been constant through the present. Interesting findings include:

’80 – ’85 – no more than one eagle seen per year

’86 – ’96 – mean = 2/yr; range 1-5

’97 – ’08 – mean = 3.7/yr; range 1 – 9

Of course, census data may conflict wildly with local lore. Indeed, anecdotes from native residents further confuse the true prevalence picture. One of us (GP) picked up a “First Annual (2006) Eagle Festival” flyer at the Amesbury Stop & Shop check-out counter and was challenged by the mid-fortyish attendant: “What’s the big deal? I’ve lived by the Salisbury marsh all my life and eagles have been around forever.” An 88-year-old life-long resident, a recently retired local paper editor, who has been a steady observer and eloquent writer on the natural environment, vividly recalls that, while he was working pre-WWII at the present-day Shawmut facility, shore-side in Newburyport directly opposite the southeast-facing side of Carr Island (a favorite winter eagle roosting spot), “Bald Eagles were all over.” Yet no one has firmly established nesting of the Bald Eagle on the Merrimack prior to 2003.

What can we conclude from the CBCs, anecdotes, and other data?

1. CBCs are good indicators of a species’ winter presence, but inherently inaccurate, snap-shot estimates of actual numbers. One of us (GP) has lived the past six years shoreside on the Amesbury side of the Merrimack. Visual sightings from full-time observer residents on the river always exceed the official CBC numbers on Count Day.

2. There is reliable evidence that wintering Bald Eagles were not completely absent from the Merrimack during the mid-century near-extirpation, for there is reliable documentation that the Merrimack River's wintering eagles are open-water-seeking refugees from the frozen waters of far northern Maine and Canada. These areas escaped the widespread use of DDT which plagued the lower 48 from 1945-1972.
3. It appears clear that numbers of visitors declined from pre-DDT days (pre-1945) and subsequently rebounded following the DDT ban in 1972 and the mandated clean-up of the Merrimack (Clean Rivers Act of 1972) — a notable triumph of conservation efforts!
4. There appears to be no reliable evidence of Bald Eagle nesting (i.e., permanent residence) on the Merrimack since the European settlers arrived (*circa* 1635).

Present

The resurgence of winter eagles in the past twenty years has been celebrated locally, and the establishment of a nesting pair in the Haverhill-West Newbury area has caused profound delight. The lower Merrimack Estuary communities have even established a “worship” ceremony to welcome the Bald Eagle as an almost spiritual presence. Witness the Merrimack River Eagle Festival, a now-annual rite (four years running), co-sponsored by Mass Audubon's Joppa Flats Education Center and its collegial federal partner, the Parker River National Wildlife Refuge (PRNWR), with assorted community entities and a horde of enthusiasts, worshippers, and the curious.

In October 2004, three state Division of Fish and Wildlife biologists, Ralph Taylor, Dave Fuller, and Pat Huckery, quietly established an eagle nesting platform in a sequestered White Pine (*Pinus strobus*) on the northwest corner of DFW's Carr Island Sanctuary in the lower Merrimack. The nest was a long-held dream of DFW's former Bald Eagle project director, Bill Davis. Its existence and site were kept quiet in order to encourage eagle interest. But no interest was shown for the next three years.

However, the spring of 2008 presented a notable variation in Bald Eagle migration routine. Usually, the eagles begin their northern migration in mid-March and have evacuated the area by the latter third of the month. This time, several eagles (adult and immature) lingered at least three to four weeks in the lower estuary, as observed at Joppa Flats and the Refuge as birders' attention turned to those two ‘hotbeds’ of spring migration north. Through April and early May, one of us (GP) noted an occasional adult perched in a favorite winter pine several hundred yards west of the I-95 (Whittier) Bridge. Not much significance was given to this happenstance because the West Newbury adults occasionally venture the two to three miles downriver for foraging; although, in retrospect, not during early nesting season.

Mass Audubon's annual Birdathon took place the weekend of May 16-18, 2008. As usual, Joppa Flats was a happening place. The festivities were capped Saturday evening (17th) with a packed reception at which one of us (SM) reported (*sotto voce*)

to the other (GP) that her weekly census of birds in the area was highlighted by rather frequent sightings of an adult Bald Eagle at the well-established sun perch on the southeast side of Carr Island, readily visible from the Newburyport shore.

Synapses clicked simultaneously in both crania resulting in a synchronized: “Do you suppose?” By mutual agreement, GP vowed to spring-launch his riverboat, *Goshawk*, forthwith. *Goshawk* entered the water the next day (18th); the 1.5 mile cruise to the north side of Carr Island took place on the 20th.

(5/20, 1400-1430h)

Upon arriving waterside of the nest, fifty yards from shore in the tall pine, we noted that the nesting platform had been elaborated into a proper nest, and its creators were in residence: one adult Bald Eagle in the nest in brooding posture, the other posted on a snag nearby. The logical extrapolation was that the couple was incubating an egg(s).

(5/28, 1000-1130h)

To minimize disturbance, we kept this nest activity quiet except for an e-mail to Pat Huckery, Northeast District Manager of DFW, a member of the wishful trio who constructed the platform in the fall of 2004. The nest was monitored from the water every few days, and on May 28, Ms. Huckery and two DFW staff biologists were ferried downriver in *Goshawk* for a look. Again, one bird remained in the nest (in what we came to designate “incubating posture”), while the other, initially present, flew north, likely on a food run.

(6/1, 1100-1130h)

One of us (GP) boated to the nest site. One adult eagle was standing on the nest edge dipping its head in repeatedly in apparent feeding posture for twenty minutes before settling into the nest in its usual brooding posture. Interestingly, the adult’s back protruded about six inches above the nest edge, unlike previous brooding sightings. Telephoto digital shots of the adult on the nest were highly suggestive of food in its beak.

(6/20, 1200-1230h)

Other commitments precluded nest monitoring for the ensuing three weeks. However, on Friday June 20th, one of us (GP) boated downriver and initially found one adult perched on a limb some six feet from the nest. Some minutes later, the second adult was located well-hidden in a favorite pine-perch about 150 yards from the nest. After a 15-minute wait, a small gray head peered over the edge of the nest. Soon the chick rose, stretched, and settled down into the nest with its eight-inch downy back protruding above the nest brim.

The evidence was secure. We had at least one chick! Estimated date of hatch was between 5/29 and 5/31 [bracketed by the nest monitorings of 5/28 and 6/1].

By this time, we were familiar enough with our two adults to permit some interesting observations. We should point out that plumage assessments were significantly abetted by the excellent observational study of McCollough (1989.)

1. By frequently observing the parenting behavior of the two adults we were able to discern that the female was, indeed, the larger bird.
2. The female's head was distinguished by bilateral, symmetrical superciliary gray markings, joined by a gray bridge above the base of her beak. (*McCollough*: Adult eagle "individuals up to 8 1/2 years of age were observed with gray [*emphasis added*] or brown flecking in the head plumage.")
3. The male, who spent much time standing on the nest limb, six to seven feet east of the nest, exhibited distinctive white salting on his mantle and slight brown flecking on the rectrices. (*McCollough*: "Body plumage varies among individuals and was not a reliable aging characteristic.")

(6/25 1000-1400h, 3.5 weeks)

Based upon a presumed May 29-31 hatch date, a decision was made to attempt banding of the Carr Island chick(s) on June 25 (at an estimated age of three and a half weeks). We ferried to the nest site with DFW's Pat Huckery and a trained, designated climber, Bridgett McAlice, on board. We reached the nest-site shore at low tide and were joined by two DFW biologists who had set out from the public launch site at Cashman Park in Newburyport.

The adept Ms. McAlice roped up to the nest in short order and found a single chick and an unhatched egg. The egg was retrieved for toxicological analysis and the largely compliant chick was lowered in a bag to the ground team. In rapid fashion the chick was assessed and weighed (five pounds, four ounces); it then received a band on each leg. The distinctive marker was a right-leg orange band (orange = Massachusetts identifier in 2008) with the designation C8 (photo); the left leg received a USFWS stainless steel band with further identifying data.

Upon our arrival, the parents had circled overhead expressing their displeasure and alarm, and after about five minutes headed east downstream, disappearing from view. After our intrusion, we were anxious to document their return, which occurred about four hours after our departure.

Upon our return to the dock in Amesbury, there happened one of those almost magical coincidences that punctuate life and can cause goose bumps. As we arrived dockside, two handsome adult Bald Eagles approached from the west; almost wing-to-wing, they circled over us before departing northward. The most logical origin of these birds was the West Newbury nest where the two early spring-hatched chicks had been practicing their fledge in recent days and completed same on July 11. Make of it what you will, the banding team was deeply moved.

(7/13 1345-1400h, 6.5 weeks)

Following a brief summer vacation, GP and spouse, Nancy, boated to the nest. Initially, no eagles were evident. After ten minutes, an adult was spotted, perched in a pine some 150 yards southeast of the nest. Soon, the chick, now some six and a half weeks old, arose and stretched its wings. The dark bill seemed huge, and the down was almost completely replaced with dark brown juvenal plumage.

(8/03 thru 8/27, 9.2 – 12.6 wks – prep for fledge)

On August 3, the chick was noted to be standing, stretching, and spreading its wings, all in the nest. On August 6 (11+ weeks), it was flapping its wings while jumping up and down in the nest. On August 22 (12 weeks), the bird was observed, initially in the nest, in the shade of the tree trunk; soon, it walked out to the end of the nest limb to the shade afforded by needle foliage. On August 25 (12.4 weeks), the chick was found perched on the small stump of a broken limb that projected about nine feet above the nest. After forty-five minutes in this posture, the bird effortlessly floated down to the nest. On August 27 (12.6 weeks), the nest was empty: one adult was perched about 110 yards east of the nest; the other was perched on a favorite upstream white pine on the south shore opposite our home in Amesbury.

(Subsequent follow-up, September 2008 to January 2009)

On September 30, (SM) observed the two adults and “our” chick (now dubbed “C-8”) on the Salisbury Marsh. She also saw various gatherings of parts or all of our family on other occasions on the marsh during the fall.

In time, during a scheduled Joppa Flats birding outing in early February 2009, GP spotted two young eagles on the Salisbury marsh some 300 yards from the Salisbury Beach boat ramp. One of the two clearly had an orange band on its right leg.

Immediately upon returning home, GP e-mailed his excitement to Pat Huckery at DFW. Shortly thereafter came the “I didn’t want to have to tell you” deflation. The carcass of C8 had been retrieved from the Salisbury marsh by an environmental officer in December. Orange had been the distinctive color assigned to all Massachusetts chicks banded in 2008. Folks in the Merrimack estuary were heartbroken. Chick C-8 had taken on a special significance. Yet nature had simply imposed her immutable law. Ninety percent (90%!) of raptors do not reach adulthood. Forty percent of eaglets perish in their first year. Most victims of these harsh statistics starve, unable to find sufficient prey or unable to develop effective foraging skills.

However, documentation demonstrates that the census of nesting pairs of Bald Eagles in the lower forty-eight has surged from a nadir of 417 in 1947 to over 7000 currently. Such numbers are testimony to the reproductive tenacity of these birds virtually throughout their adult years (25 – 30), during which they persist in the energy-sapping challenge of procreation. The ability of animals to succeed in reproduction despite such striking attrition of offspring calls to mind Dr. Jared Diamond’s (1997) thesis that the biological *raison-d’etre* of life is simply the compelling drive to propagate one’s gene pool.

Meanwhile, we in the Lower Merrimack are optimistic that the Carr Island pair will succeed again, as have their West Newbury cousins. We await the spring launch of our boat to confirm that the species-sustaining cycle will begin anew. 🦅

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Ganson Purcell, Jr.: *Following a 40-year career in clinical, academic, and administrative medicine as an obstetrician/gynecologist, Dr. Purcell retired with a goal to assist the critical goal of natural resource preservation. Scene of effort has been the Joppa Flats Education Center, Newburyport, MA. At Joppa, it is impossible to escape the allure of birding, although a particular personal focus of interest is why birds do what they do and how they manage to do it. In that regard, following the activities of the first year of Bald Eagle nesting on Carr Island, Merrimack River, has been a fascination. Sue McGrath is a Newburyport resident and founder of Newburyport Birders, an organization that conducts environmental education programs. She has been observing birds for over thirty years and has great interest in bird behavior. Sue is President of the Essex County Ornithological Club. She is an environmental activist and was involved in designing the Essex County Birding Trail. Her weekly bird columns appear in three Essex County newspapers. Sue is a past contributor to Bird Observer Vol. 35 (2).*



WEST NEWBURY EAGLET ON BANDING DAY BY DAVID LARSON

Cicada Summer

Mary Keleher

It began during the month of May 2008. On a sunny warm day while I was cleaning up the yard, I turned over a rock and noticed an interesting honey-colored six legged creature. I'm used to finding things under the rocks in my yard, but this was one I had not seen before. As I continued to turn over rocks, I discovered more and more such creatures. Although I had heard about the phenomenon of the seventeen-year cicadas on Cape Cod, I knew nothing about them. I did some research, and it didn't take long to figure out that I had found the cicada nymphs. These nymphs spend most of their lives underground sucking sap from the roots of trees and plants. Then rising temperatures signal them to burrow upwards to live the last few weeks of their seventeen-year lives above ground.

As the temperature warms, holes appear in the ground. The nymphs emerge, climb upwards, and anchor themselves. When the adults emerge from their exoskeletons, their sole purpose is to reproduce. They find quiet places, their new and larger exoskeletons harden and darken, and their wings expand and stiffen. It takes about a week for adults to become active.

By mid-June cicadas were everywhere. They were in trees and plants. They were crawling across lawns and on the sides of houses and buildings. They were flying everywhere, too, making it impossible for drivers to avoid hitting them.

It is likely that cicadas survive by emerging from underground all at once, catching predators by surprise, and overwhelming their appetites with sheer numbers. Since millions of cicadas emerge at the same time, it is impossible for predators to make a dent in their population.

The male cicadas sing to attract females. Beginning early in the morning near sunrise, the humming sound begins and continues to grow louder as the day progresses. At times, the sound is so loud it is difficult to hear birds singing or calling.

It was interesting to observe how some species of birds reacted to the cicadas. Some of the smaller birds appeared to be confused by these large insects. Other birds such as Northern Cardinals and Gray Catbirds enjoyed eating them. American Robins scoured the branches of rhododendron bushes in search of this new tasty treat. I noticed that more birds ate the adult cicadas when they first emerged but lost interest once the adults' exoskeletons hardened.

Cicadas are awkward flyers, often colliding with objects during flight. These objects include people. When I was outside, many cicadas landed on me. Their awkward flight made them easy targets for predators. One day while I was walking through a power line cut I watched a Red-winged Blackbird fly from a perch to catch a cicada. Days later I saw a Baltimore Oriole and a Common Grackle snatch up

cicadas. Birds I never imagined could hover and catch insects in midair did so. House Sparrows joined the feast as well.

One day I noticed a recently fledged Red-tailed Hawk in a tree intently focused on something in the grass below. It flew down, landed, and walked across the grass. It grabbed a cicada with its talons and proceeded to eat it.

Squirrels enjoyed eating the cicadas too. I observed several squirrels searching tree branches for cicadas. They took them in their mouths and rearranged them with their paws, tearing off the wings before munching away.

A few days after mating, females begin to lay eggs. They make slits in branches and deposit their eggs inside. Using the blades of a sawlike egg-laying device at the end of the abdomen called an ovipositor, females puncture the bark of tree branches and make a pocket in the wood. They deposit eggs in two rows. They then move forward, cut another pocket, and lay more eggs.

During the month of July the cicadas began to diminish. I noticed more of them on the ground and spotted them quietly walking across my deck, no longer able to fly. They were dying, but they had accomplished their purpose of producing the next generation of seventeen-year cicadas. The cicada memory lived on for the next few months, with empty shells and decaying remains scattered about. The egg-laying process left behind treetops with brown, dangling limbs.

Although many consider cicadas a nuisance, some scientists believe the mass emergence aerates the soil, provides a feast for thousands of predators, prunes the treetops, and provides a pulse of nutrients into the environment. I didn't consider the cicadas a nuisance. To me they are another fascinating aspect of nature that I enjoy observing. 🐦

Mary Keleher grew up in Rockland, Massachusetts. She has always been fascinated with nature and animals. After marrying, she moved to San Diego, where her interest in birds began, and where she bought her first field guide. After living in San Diego for four years, Mary and her husband moved back to Massachusetts to start a family. They settled in Mashpee, where Mary works part-time as an Administrative Clerk and full-time raising her seven-year-old daughter. She is a past President of the Cape Cod Bird Club and a Regional Coordinator for Mass. Audubon's Breeding Bird Atlas 2.



Periodical Cicadas. Photo courtesy of U.S. Department of Agriculture.

Cornucopia: Birds and Periodical Cicadas

Kimberly G. Smith

One of the most predictable and spectacular events in nature is the emergence of periodical cicadas (Homoptera: Cicadidae: *Magicicada* spp.). Living underground on xylem rootlets for either thirteen or seventeen years, individuals of three species emerge synchronously within several weeks in May and early June in densities that can approach a million individuals per acre. Males form loud “chorus centers” which attract females, who mate, lay eggs in live small twigs and branches, and then die. A typical emergence lasts about six weeks, the eggs hatch in late summer, and the nymphs drop to the ground to start the cycle again.

Year-classes of 13- and 17-year periodical cicadas are referred to as broods, and originally C. L. Marlatt described the distribution of seventeen, 17-year broods (Broods I – Brood XVII) and thirteen, 13-year broods (Broods XVIII – XXX) in his classic monograph in 1907. Today, twelve of the 17-year broods are thought to be extant, and only three of the 13-year broods still emerge. Some broods have gone extinct, and others may not have actually existed in the years suggested by Marlatt. In general, 13-year emergences are in the southern part of the range in the eastern United States, and 17-year emergences are in the northern and western parts of the range.

Only 17-year periodical cicadas have occurred in New England, and nearly all reports are from Massachusetts and Connecticut, with a few reported emergences in Rhode Island at the end of the nineteenth century. Brood II occurs in western Connecticut and will emerge in 2013. Brood XIV occurs on western Cape Cod and Plymouth County and emerged this past summer in 2008. Brood VIII emerges in central Martha’s Vineyard, but numbers have been declining in 1985 and in 2002, suggesting that this population is doomed in 2019. Brood XI emerged in the Connecticut River Valley of Massachusetts and Connecticut, but it went extinct in 1954. As we shall see, predation, particularly by birds, is thought to be ultimately responsible for extinctions.

The earliest description of an emergence of periodical cicadas in the New World occurred after the establishment of the Plymouth Plantation in southeastern Massachusetts in William Bradford’s *Of Plimoth Plantation* (1630-47). Bradford must have been impressed since this is the only natural history reference in his book. Some have thought that Nathaniel Morton made the first reference in his *New-England’s Memorial*, published in 1669 (Cambridge). However, Morton’s account is identical to the passage from Bradford’s history and is an obvious plagiarism. Both authors refer to the emergence in 1633, which is problematic, since Brood XIV should have emerged in 1634. About all that can be concluded is that Bradford’s was the first description of the emergence of periodical cicadas.

Starting in the middle of the nineteenth century, people began to realize that the emergence of periodical cicadas represented an abundant food supply primarily for birds and mammals. In fact, so many periodical cicadas were observed being

consumed on the East Coast by the then recently introduced English Sparrow that the great entomologist C. V. Riley and others predicted predation would render many periodical cicada populations extinct by the end of the nineteenth century.

Emergences often caused notable changes in bird foraging behavior: E. H. Forbush published a note in *The Auk* on Laughing Gulls and Common and Roseate terns feeding on Brood XIV inland on Cape Cod in 1923. Some gulls were observed gleaning cicadas in the forest canopy, and one colony of gulls was reported to be feeding cicadas to young at least twenty-one miles from the closest emergence. Copperhead snakes, a cicada specialist in some parts of their range, are attracted to chorus centers, sometimes in large numbers. Periodical cicadas are also great fish bait at the start of an emergence, before fish become stuffed with cicadas.

Emergences of periodical cicadas are the classic example of predator satiation or predator swamping, whereby prey items appear in such great numbers that predators become satiated, and most prey survive. Periodical cicadas are a small cicada, about an inch long and less than a gram in weight, and contain no noxious compounds, making them a perfect food for birds and mammals, including humans.

In our study of 13-year periodical cicadas in Arkansas in 1985 (Brood XVIII), all forest birds ate periodical cicadas, with the exception of Blue-gray Gnatcatchers, and many species not associated with forests, such as Indigo Buntings, Red-winged Blackbirds, and Field Sparrows foraged in the canopy during the emergence. Common Grackles came from about a half-mile away to catch cicadas and take them back to their colony. In a study in Tennessee, gray foxes ate almost only periodical cicadas for about four weeks during an emergence.

Native Americans considered them to be a delicacy, and there are many recipes for preparing periodical cicadas (e.g., <<http://www.newsdesk.umd.edu/pdf/cicada%20recipes.PDF>>). Cicadas are best eaten after they have emerged from the ground but before their exoskeleton has hardened, a process that takes about four hours. During this process, cicadas hang motionless from vegetation or any other structure. Since they are vulnerable to predators at this time, periodical cicadas emerge from the ground at night.

The world authority on periodical cicadas, Monte Lloyd, deemed periodical cicadas “predator-foolhardy,” stating that they appeared to have no anti-predator behaviors. They are conspicuously colored orange and black with big red eyes, and they are slow and clumsy fliers.

We tested this idea in 1985 by acting as predators ourselves and by watching the foraging behavior of female Red-winged Blackbirds preying on periodical cicadas. (Red-winged Blackbirds are colonial and polygamous, and males rarely help raise young.) Luckily, there was a farm pond with cattails adjacent to the forest where cicadas emerged, and there were twenty-nine blackbird nests in summer of 1985.

We approached cicadas slowly with a finger in the understory (3826 cicadas) and in the canopy (3596 cicadas), using a twenty-foot fruit-picking ladder. We recorded eight behaviors for males: inactive, move to opposite side of the twig, fall, fall-fly, fly,

fly-squawk, fall-squawk, and no movement-squawk. Females lack the sound-producing membrane, and thus cannot produce a squawk. Early in the emergence, females were motionless and males were not squawking, but as the emergence progressed, females flew more often when approached, and males made more squawk-associated behaviors.

Female Red-winged Blackbirds became better at catching cicadas as the emergence progressed, from about 50 percent success at the start to nearly 75 percent success near the end. The search time also decreased from about fifteen seconds to eleven seconds over the course of the emergence, but handling time increased from twenty-seven seconds to forty-seven seconds.

Why would the handling time increase dramatically when the search time was decreasing? As it turns out, females were learning to discriminate between male and female cicadas and learning how to eat a female cicada. In the beginning, females attacked both males and females, ripped off the wings, and swallowed the cicada whole. Male cicadas are a chunk of chitin, whose abdomens are empty and act as a resonator for sound production, whereas female abdomens are full of rich eggs. Red-wings quickly learned that if the cicada made a squawk, it should be ignored, but if it was inactive and silent, it should be attacked.

In our observations, Red-wings attacked 100 percent of inactive cicadas, but only 5 percent of those making a squawk. If the cicada flew or fell, Red-wings were only about 50 percent successful at catching them. As the emergence progressed, Red-wings were now catching primarily female cicadas, and they learned to slit open the abdomen, eat the eggs, and discard the exoskeleton. Thus, periodical cicadas do possess subtle anti-predator behaviors: males that squawk escape almost every time from birds, and females escape 50 percent of the time if they fly or fall.

We also tested the notion that emergence of periodical cicadas is indeed a classical case of predator swamping. First, we captured emerging cicadas in traps every night during the emergence to estimate emergence rates of males and females. Next, we counted emergence holes on plots on the forest floor to estimate densities, since each hole represents the emergence of one cicada. Then we captured wings and dead adults in funnel-shaped traps as a measure of bird predation pressure and adult mortality, respectively. As mentioned, birds remove the wings of cicadas prior to eating them, so that over the course of the emergence, the forest floor becomes a carpet of cicada wings.

As seen from Figure 1, the emergence was strongly protandrous, meaning that males preceded females. Based on hole counts, we estimated that just over a million cicadas emerged on our sixteen-

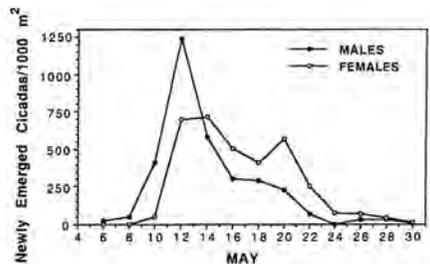


Figure 1. Emergence rates of male and female periodical cicadas from the ground in northwestern Arkansas based on collections of adults from emergence traps at two-day intervals, and calculated as daily emergence per 1000 m², by sex.

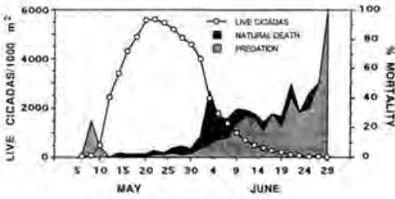


Figure 2. Percentage of adult periodical cicadas alive at each time period that were either consumed by birds or died from natural causes, estimated from collections of cicada wings and dead cicadas, respectively, from mortality traps and surface plots at two-day intervals. The estimated abundance of live adult cicadas per day, calculated as the daily number alive per 1000 m², also is shown.

hectare study site. Nearly 50 percent of them emerged in a four-day period, and 68 percent of the males emerged in a six-day period. Birds ate the first few cicadas that emerged in early May, but birds became satiated quickly after that and remained so into early June (Figure 2). By the time most breeding birds had young in the nest in mid-June, the periodical cicada emergence was almost over, with birds consuming 100 percent of the last living cicadas. As the cicadas disappeared, interspecific flocks of birds searched madly through the forest, looking for the last few cicadas. In summer of 1986, about a dozen cicadas emerged one year late and were promptly eaten by birds, demonstrating the strong selection for coming out in the right year.

At low densities, birds consumed between 15–40 percent of the standing crop, but very little of the standing crop was consumed when cicada densities reached more than 24,000 individuals/hectare (Figure 3). Prior to peak abundance (open circles), birds were eating fewer cicadas than they were after peak abundance (dark circles). At the end of the emergence, bird predation accounted for 100 percent of cicada mortality (Figure 2). Overall, we estimated that birds consumed about 15 percent of the emergence, demonstrating that the synchronized, explosive emergences of periodical cicadas do swamp avian predators.

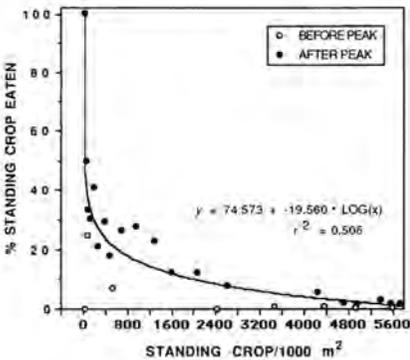


Figure 3. Percentage of available periodical cicadas (standing crop) eaten by birds in relation to total number of cicadas available. Open circles are estimates prior to peak cicada abundance and closed circles are estimates after peak cicada abundance.

But what if emergence densities fall below this threshold value where predators become satiated? Once that happens, the population is doomed to extinction from predation, particularly from birds. Habitat destruction and fragmentation can contribute to decreases in population sizes, but, ultimately, it is usually bird predation that causes extinction. This is what happened to Brood XI in the Connecticut River Valley and probably what will happen to Brood VIII on Martha’s Vineyard in 2019. Contributing to this is a weak capacity for periodical cicadas to disperse and strong site tenacity. For example, the sites mentioned by Forbush

in 1923 on Cape Cod that had the highest emergences were the same places with highest densities in 2008.

If too many females oviposit on the same small branch, it can cause the branch to snap, resulting in the death of the branch. Termed “flagging,” this natural pruning of vegetation is typically not a problem. However, if you drove Route 28 from Bourne to Falmouth in late June or early July this past summer, the amount of flagging on oak trees was unbelievable, with mile after mile of dead branches on both sides of the road. Unfortunately, the cicada eggs in those dead branches died of desiccation. That potentially is going to have a huge impact on the emergence of adults in 2025, particularly if it reduces the brood below the threshold level of satiation.

So how do periodical cicadas count to thirteen or seventeen years, and how do they synchronize the emergence so that millions emerge together? There are two schools of thought on counting: endogenous factors within the cicadas or exogenous factors in the environment. The first would suggest an internal “clock” of some kind, while the second would suggest some annual event, such as changes in the composition of xylem on which they feed, to which the cicadas react. Knowing that our cicadas in Arkansas would emerge in 1998, we dug up some nymphs in May of 1997 and put them in the soil of potted plants in a greenhouse under constant conditions. Those that survived emerged in the greenhouse the day after adults emerged in the wild in May of 1998, showing that at least one year in advance, the cicadas are hardwired to emerge.

And, of course, why do they emerge in thirteen and seventeen years, which are both prime numbers? There are numerous hypotheses concerning the evolution of prime numbers, but Lloyd (1966) was the first to suggest that it was so that shorter-lived predators could not evolve cycles that match the cicadas. If, for example, the cicadas were on a 12-year cycle, predators could be on a 3-year cycle and match the cicadas every four cycles, or on a 4-year cycle, matching the cicadas every three cycles, or on a 6-year cycle, matching the cicadas every other cycle. That begs the question why not eleven or nineteen years, but Chris Simon, a leading authority on periodical cicadas at the University of Connecticut, and her colleagues have discovered a four-year shift in either decelerating thirteen to seventeen years or accelerating seventeen to thirteen years. In fact, over evolutionary time, some populations have switched back and forth between emerging every thirteen and every seventeen years.

One would suspect that emergence of periodical cicadas would lead to increased adult survivorship of birds, increased nesting success, and possibly increased recruitment into the breeding population the following year(s), but there are few studies that have examined this. In our study, we monitored the nests of the Red-winged Blackbirds at the farm pond in 1984, the year before emergence, 1985, the year of emergence, and 1986, the year after emergence. Red-wing Blackbird eggs hatch asynchronously, so that nestlings are of different ages and there is typically a runt in the nest.

In 1984 and 1986, most runts died before fledging, but in 1985 we have 100 percent fledging success of nests that fledged young and no starvation. In another instance, we had a male Eastern Bluebird who became a single parent with six nestlings when the female disappeared in 1985. He had no trouble fledging all six young by feeding them almost exclusively periodical cicadas.

One other interesting aspect of the emergence is that periodical cicadas emerge in late spring or early summer, long before other cicadas emerge, such as the dog-day cicadas (*Tibicen*). They thus avoid predators that are cicada specialists, like cicada killer wasps (*Sphecius speciosus*). In Arkansas, one of the last birds to start nesting is the Yellow-billed Cuckoo, also a cicada eater. During a periodical cicada emergence in Indiana, Yellow-billed Cuckoos became parasitic, laying eggs in the nests of Black-billed Cuckoos. The authors suggested that the sight of the periodical cicadas, a superabundant food source, caused the females to start ovulating before they could build nests. 

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Kimberly (Kim) Smith grew up in New England and attended Tufts University. During that time, he lead bird tours on Cape Cod for Wallace Bailey and was the first college student at Manomet Bird Observatory in 1969. His received an MS in Zoology at the University of Arkansas, a Ph.D. in Biology-Ecology at Utah State University, and did postdoctoral work at University of California, Berkeley. Since 1981, he has been at the University of Arkansas (Department of Biological Sciences, Fayetteville, AR 72701), where he now holds the title of University Professor of Biological Sciences. A community ecologist, he has conducted research on birds, mammals (particularly black bears), and forest insects throughout North and South America and Korea. He recently completed a five-year term as Editor-in-Chief of *The Auk*.

FIELD NOTES

Confirming Ruby-throated Hummingbird

Mark Taylor

On the morning of July 7, 2008, my wife and I kayaked around Hell's Kitchen Swamp in Northfield to cover a section of one of my blocks (Northfield-02) for the Breeding Bird Atlas (BBA). It was a hot, humid day, and paddling through water choked with lily pads was not easy as we looked for the deepest channel through the weeds. The swamp eventually broke out into deeper water without weeds, which made for easier travel. On a kayak trip here earlier in the season, I had found a pair of Blue-gray Gnatcatchers nest building, a Hairy Woodpecker feeding young, and an Eastern Kingbird on a nest. During the spring and summer there were many more confirmed breeders. On this hot midsummer morning things were fairly quiet, though, with the songs of a Yellow-throated Vireo and Scarlet Tanager occasionally breaking the silence. As the sun started to head above the tree line, we kayaked along the edges of the swamp to stay in the shade as much as possible. We found a nice cool area at the beaver-dammed outlet on the south side of the swamp, where we rested and looked around from our seats. I was tracking a Scarlet Tanager in the canopy when a female Ruby-throated Hummingbird darted through my view to land on a branch of a large red oak, fifty feet up. On closer inspection, I saw that the bird had landed on a *nest*! I cannot tell you how many times I've tried to track these birds to their nests, failing every time. This female would remain on the nest for a minute or two, then take off and disappear for a short time before returning to the nest. When I think of the discomforts of birding swamps and deep woods during spring and summer for the BBA, all disappears after discovering and confirming a species as tough as Ruby-throated Hummingbird. 

Breeding Bird Atlas Note: First Confirmation of Golden-crowned Kinglet in Middlesex County

Sam Miller and Carla Dengler

In 2007, our block for the Massachusetts Audubon Breeding Bird Atlas 2 was Framingham 10. Western Waltham occupies about a third of Framingham 10; the remaining two thirds of this block are in central and eastern Weston. Most of the protected habitat is in Weston. We concentrated our survey efforts on birds in conservation land.

One of the larger conservation parcels in Weston is the land surrounding the Weston Reservoir. The reservoir was completed in 1903, and the land around it was protected beginning in the 1950s. There are extensive areas of old White Pine and

mixed hardwoods. There are also some smaller patches of old hemlock and spruce. It is likely that most of these woods have not been logged for over a century.

We were searching one of the hemlock and spruce groves for Barred Owl (no luck) when we heard the high-pitched notes of Golden-crowned Kinglet. Because the trees were dense, we could catch only fleeting glimpses of two or more kinglets. We resolved to return a week later to see if we could hear the birds again and record them at least as “probable” breeding birds.

At home that evening, I skimmed through the breeding bird “short list” that was used in 2007. I didn’t find Golden-crowned Kinglet and skimmed through the list again. I went through the list methodically a third time and still did not find it. “Hey,” I said to Carla, “the kinglets aren’t on the short list. They look like a good atlas bird!”

We recorded it on the “long list” and checked the Golden-crowned Kinglet account in the *Massachusetts Breeding Bird Atlas*, which contains the results of the first state breeding-bird survey, done during the 1970s. There were no breeding records at all for Middlesex, Suffolk, or Norfolk counties and only half a dozen confirmations east of the Berkshires.

A couple of days later we again saw and heard the kinglets. The following weekend, we arrived early, and allowing sufficient time to do a thorough search, we located an adult male being followed by multiple fledglings. The fledglings lacked yellow or orange on the crown, but we eventually saw the adult feed at least one fledgling. To date, this is the only Breeding Bird Atlas confirmation of breeding Golden-crowned Kinglets in Middlesex County. 🐦

Unusual Great Blue Heron Feeding Behavior

Richard Frechette

On January 3, 2009, Scott Spangenberg and I observed what we believe to be unusual feeding behavior in a Great Blue Heron. The heron was standing on a small ice floe in the Merrimack River below the Chain Bridge in Newburyport, Massachusetts. Several Common Mergansers were diving and feeding in the river around the ice floe. The heron stood quite erect and seemed to be closely watching the ducks.

On four occasions the heron flew directly at a surfacing merganser and appeared to jab at the duck’s beak. We surmised that the heron was attempting to force the duck to drop its prey. While approaching the merganser, the heron first flew with strong wing beats, but as it neared its target, it seemed to try to hover, flapping its wings in a somewhat awkward manner and pumping its legs forwards and back.

If this was an attempt to pirate food, it was unsuccessful. On three of the attempts, the merganser dove under the water. On the fourth approach, the duck



The Merrimack River Great Blue Heron by Scott Spangenberg

simply turned its back on the heron and swam away. Each time the heron returned to the ice floe and continued its close observation of the mergansers.

We could find no references to Great Blue Herons attempting to pirate food from diving ducks. However, A.C. Bent, in his classic *Life Histories of North American Birds*, reports that John J. Audubon observed Great Blue Herons forcing flying Ospreys to drop fish they were carrying in their talons. This was accomplished by overtaking the Osprey in flight and jabbing at it with its bill.

At the time of our observation, the marsh was totally covered with thick ice, which presumably would have prevented foraging in the marsh. The tide was quite high, leaving no exposed edge for a hungry heron to hunt in its usual manner. With its common feeding places unavailable, this heron seems to have devised a unique behavior. 🦅

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Tree Swallows Feeding on Krill

Maurice Montgomery

The Elizabeth Islands, part of Dukes County, Massachusetts, extend roughly seventeen miles southwest from Falmouth, Massachusetts, forming the southern edge of Buzzard's Bay. This chain of islands is a pathway for coastal fall migrants, fish and

birds alike. My fellow Christmas Bird-counter, Rick Wise, and I were fishing for striped bass on October 8, 2008, with Captain Russell Wright of Cuttyhunk, the southernmost island of the Elizabeths. We were fishing in the gut south of Naushon Island, midway along this archipelago, when we noticed a large, dark cloud of birds swirling down the Elizabeths in our direction. They turned out to be Tree Swallows, too numerous to even estimate their numbers. As the swallows streamed by, on their way toward Nashaweena and Cuttyhunk (their last landfall before crossing at least thirty miles of open water to Long Island, New York or perhaps, Point Judith, Rhode Island), many of them dropped down to sea level between the islands and began picking something off the surface. Some came close enough to our boat that we could be positive they were snapping up krill, the tiny shrimp-like food of fish, whales, and apparently Tree Swallows. Krill are abundant in the fall, and perhaps because of the cooling weather, they are often found on the surface at that time. When washed ashore, they provide food for migratory shorebirds.

We were casting and retrieving surface lures for striped bass and, on every cast, we could see Tree Swallows move toward the splashing lures, often following them closely for several yards. I have seen various swallows, particularly bridge-nesting Barn Swallows, working close to freshwater surfaces, taking aquatic flies as they hatched. Occasionally, they will snatch the insects right from the surface, competing with rising trout. We speculated that swallows might associate the swirls made by fish rising to a hatch of flies with the presence of food. It does not seem likely to me that they followed our splashing surface lures out of mere curiosity. 🐦



PIPING PLOVER CHICK BY SANDY SELESKY

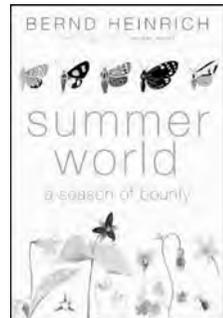
ABOUT BOOKS

A Time of Green Urgency

Mark Lynch

Summer World: A Season of Bounty. Bernd Heinrich. 2009. HarperCollins. New York, New York.

Summer is a time of green urgency, and lots of love lost and found. It is the most intense time of the year, when the natural world of the northern hemisphere is almost suddenly populated with billions of animals awakening from dormancy and billions more arriving from the tropics. (p. 6)



I have met only a few great “classic” natural historians in my time. These are people as comfortable talking about birds as they are chatting about wildflowers, geology, and butterflies. These people are also passionate ecologists who understand the dynamic connections between disparate parts of the environment. I wonder how these people get anywhere, because every step across a field, every turn of a trail holds something new to behold, causing them to stop, stare, and pose questions. This constant questioning, wondering why a certain fungus is purple or why a chickadee calls in a certain way, is one of the most important field marks of all the great natural historians. This is the natural historian’s *raison d’être*: that although much is known about how the natural world operates, there is so much more to be uncovered by careful and repeated observations.

Bernd Heinrich is one of the most influential of a select band of writers best described as scientist/natural historians. Many people have read his books on raven behavior and how animals survive harsh winters. His autobiography, *The Snoring Bird: My Family’s Journey through a Century of Biology*, is a revealing and intimate look at Professor Heinrich’s relationship with his stern and old-fashioned natural historian father, Gerd. This harrowing story ranges from his earliest years living in Poland during World War II to eking out an existence in the forests of western Germany at the end of the war and ends with his family’s emigration to the United States. *The Snoring Bird* is an amazing story of determination in the face of adversity and how these conditions developed Heinrich’s deep interest and love for the natural world. Perhaps because of an extraordinary family history in which the forest was literally his family’s savior, Bernd Heinrich has developed not only a passion for the biological sciences, but also a unique talent to communicate the findings of science to a lay public.

I once read somewhere that the findings of biology put a “barrier between humanity and nature.” Perhaps, the author felt, like many of us do, that science implies detachment. It does to me, but only as a filter that sifts out the splendid nuggets from chaos and those that are revealed from those

merely imagined. Far from being a distancing, the science of biology is the opposite. It comes from an intense desire to get to know something intimately: you can't hope to get closeness with the real thing unless you know its contours. (p. vi, *Winter World*)

Professor Heinrich's latest effort is a riotous and lively look at what the natural world is up to in summer and is a companion volume to his popular *Winter World*. But whereas *Winter World* focused on animals struggling to survive the bleakest season, *Summer World* is a veritable celebration of the natural world during a time of breeding and plenty. This book is based on two summers of what Heinrich terms being "actively observant" around his log cabin in the Maine woods. *Summer World* reads like a well-written field notebook, complete with the author's numerous lively illustrations, a number of which are in full color. When I talked with the good Professor recently, I asked him jokingly if there is ever a time when he is NOT "actively observant." Of course, Heinrich laughed, because he is always searching, always finding something of interest when out and about. It would be no exaggeration to call Heinrich an unstoppable force of field observation.

At times the tone of *Summer World* is almost giddy, as when Heinrich quotes Nat King Cole singing about those "lazy, hazy, crazy days of summer." The print in the book is even green! Like a kid on Christmas Eve, Heinrich can hardly wait for spring to start in earnest so he can get outside and start looking and questioning. The book starts in very early spring with Heinrich staring out his window at the local beaver pond, yearning for the first Red-winged Blackbirds to appear and last fall's buds to begin to produce leaves. From that point onward, *Summer World* chronologically follows events that Heinrich notices in his small but productive neck of the woods. The focus of each chapter is often on the small and easily overlooked. There are long sections on different wasps, bees, butterflies, moths, and flies. During the June 2007 summer solstice, Heinrich decides to celebrate by enjoying a dance performance. But it's not the kind of dance most readers would have in mind:

As chance would have it, I find one. It's right here at my camp in the Maine woods. The dance is in the outhouse, presented by a special troupe of untiring performers. I'm just a spectator today, and viewing conditions are perfect. It's a pleasant 70 degrees F—too cool for horse and deer flies and too dry for blackflies and the god-awful midges, the scourge from hell. (p. 131)

It is only after Heinrich informs the thoroughly puzzled reader that these dancers have very long spindly legs, that they have been doing this dance since the Triassic, and that some of them are actually attached by [at?] their genitals, that he reveals that the dancers are, in fact, crane flies.

A chapter on the habits of the different long-horned beetles will be of special interest to readers in central Massachusetts, where the infestation of the invasive Asian long-horned beetle (*Anoplophora glabripennis*) is proving to be particularly devastating.

Heinrich is also passionate about birds, and *Summer World* gives him the opportunity to write about Red-winged Blackbird migration, the nesting habits of Eastern Phoebes, and the “sky dance” of the woodcock. “The woodcock’s sky dance dazzles because it is both spectacular and subtle. I cannot imagine a summer beginning without it. The sky dance evokes memories of fishing trips to Enchanted Pond with my friend and mentor in Maine, Phil Potter.” (p. 49)

Many times the writing in *Summer World* seamlessly connects the impersonal world of scientific research with the very personal experiences of the author. *Summer World* is also a Dionysian celebration of life in all its complexity, urging the reader to get outside as often as possible in summer and to enjoy the natural spectacle that is all around us while it lasts.

Heinrich’s chapter on the unique ecology of sapsucker “wells” will prove to contain much information that will be new to most birders. *Summer World* is at its best when Heinrich notices something that most others seem to have overlooked, and he begins to ask questions. Why do wood frog tadpoles cannibalize fellow dead tadpoles in rapidly shrinking pools? Why are so many Red-eyed Vireo nests made with swatches of white-faced hornets nests? There may not be scientific answers forthcoming, but Heinrich postulates and wonders. *Summer World* contains the seeds of hundreds of future biology graduate theses.

All parties, no matter how well attended or how riotous, eventually have to come to an end. So it is with the season of abundance. Finally, as fall draws nigh, *Summer World* grows suddenly serious and pensive. Heinrich dutifully notes the fall migration of the Redwings, the last blooms of fall, and the frogs heading to the bottom of his pond. But even at this wistful moment, when the gray skies portend another cold and vicious winter, Heinrich finds signs of the next spring. Contemplating the frogs of his pond in winter, Heinrich muses, “to a cold and frozen frog under the leaves and snow and ice, a time of death when a minute is an eternity and an eternity a minute. The end of summer is also the beginning.” (p. 230) 

Other Literature Cited:

Heinrich, B. 2008. *The Snoring Bird: My Family’s Journey through a Century of Biology*. New York: Harper Perennial.

Heinrich, B. 2009. *Winter World: The Ingenuity of Animal Survival*. New York: Harper Perennial Edition.



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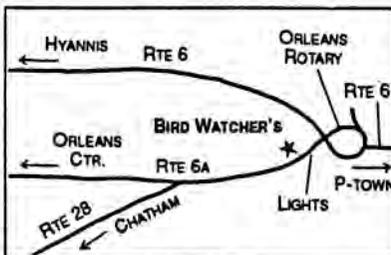
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BIRD SIGHTINGS

January/February 2009

Seth Kellogg, Marjorie W. Rines, Robert H. Stymeist, and Jeremiah R. Trimble

New Year's Day was exceptionally cold with numbing winds, not a comfortable start for a new year of birding. The day, however, was bright, and the weather did not deter the legions of birders who had avoided parties the night before to get out early. The temperature was in the single digits, with a northwest wind that gusted to 40 mph. The entire month was cold and snowy, with an average temperature of 24.9°. There was no January thaw; Boston recorded a reading of 32° or below every day. Rainfall totaled 3.35 inches, and snowfall measured 23.7 inches in Boston, 11.2 inches above average and 15.4 inches more than in January 2008. The biggest snowfall was 12.4 inches on January 18–19. The seasonal total (December 2008–January 2009) was 49.1 inches, 27.4 inches over the average and already greater than the average for an entire Boston winter, which is 42.5 inches.

February was a fine month — mild, dry, and sunny. The temperature remained above normal for much of the month with a warm surge during the second week, when a high of 58° was recorded on February 11. The temperature averaged 32.9°, the second warmest of this decade. Rainfall totaled 1.94 inches, six inches less than last year and 1.36 inches below the average. Only 6.2 inches of snow was recorded in Boston, 5.1 inches under the average.

R.H. Stymeist

WATERFOWL THROUGH ALCIDS

A **Pink-footed Goose** was discovered and photographed at Sider's Pond in Falmouth on January 12; it lingered for three days to be seen by several lucky observers. This is only the second occurrence of this species in the state. Because the first had not been accepted by the Massachusetts Avian Records Committee (MARC) due to questionable origin, if accepted, this sighting would represent a first state record. The goose was associating with an interesting group of "white-cheeked" geese, containing at least two **Cackling Geese** and Canada Geese in a wide range of sizes. Cackling Geese are rare on Cape Cod, and these birds probably represent only the third record for that region. Two **Greenland White-fronted Geese** were reported during the period on Nantucket and in Sharon. In western Massachusetts three Snow Geese in Northampton were unusual for February.

Four different Eurasian Wigeon reports included two in Falmouth throughout January. Twenty-four Northern Shovelers in Salisbury represented an exceptional winter count. A single "Eurasian" Green-winged Teal was spotted in Newton on January 9. Redheads were reported from several locations, including one in Salisbury, a rather northerly location for winter. Observers counted 45,000 Common Eider at Tuckernuck on New Year's Day, by far the highest count for the period. Barrow's Goldeneyes were very well reported, including an unusual number from inland locations.

Northern Bobwhite reports continue to decline, with recent sightings coming only from Cape Cod. Reports of **Pacific Loons** came in from two locations: one at Wellfleet and one at Race Point in Provincetown. The **Eared Grebe** found in Falmouth on the Christmas Bird Count was well photographed during its stay through January 16. A fishing boat returning to port at

Eastern Point in Gloucester was followed by nine Northern Fulmars, and a boat trip in February had a total of forty-two Northern Fulmars at Jeffrey's Ledge. While a report of a single Black Vulture at Hyannis was significant for its easterly location, the sighting of thirty-one Black Vultures at Sheffield was significant for its number. This latter record ties the highest total for a single location ever in the state! The previous high count was from the same location in 2005.

Like last winter, much of the excitement in the Massachusetts birding world came from gull watching. The most exciting news began on January 17 when an immaculate adult **Ivory Gull** was discovered at Eastern Point in Gloucester. This is the first occurrence of this rare northern vagrant since 1985 and only the second adult occurrence. During its stay through January 22 it was seen and photographed by hundreds of people from all over the eastern United States. Amazingly, a second adult Ivory Gull was found just a few days later at Plymouth; possibly this was seen by even more people during its visit through January 30.

Larid excitement continued with the discovery of a 2nd-3rd winter **Slaty-backed Gull** at Turners Falls on February 20. The first occurrence of this species was during the winter of 2007-2008, when three individuals were seen by many, but this represents the first inland record. Careful observation and good photographs proved that this was the same bird seen earlier down river in Connecticut! Turners Falls may be the best inland location in Massachusetts for gull watching, and a first-winter **Great Black-backed X Glaucous Gull** seen there is probably the only record of this hybrid in the state. Several **Lesser Black-backed Gulls** were also found at Turners Falls.

Although overshadowed by the two aforementioned species, the sightings of up to three different **Thayer's Gulls** in Gloucester were very significant and should not be overlooked. An adult Pomarine Jaeger at Andrew's Point on January 7 was worth noting, but observations over the last several years indicate that the sighting was not unusual. *J. R. Trimble*

Pink-footed Goose (details submitted) *	1/2	Salisbury	6	S. Grinley#
1/12-15 Falmouth 1 ph G. Hirth + v.o.	1/26, 2/15	Barnstable	7	M. Keleher
Greenland Greater White-fronted Goose	2/22	Westport	10	J. Hoye#
1/18 Nantucket 1 K. Blackshaw#	2/22	Yarmouth	108	D. Clapp#
2/21-28 Sharon 1 J. Bauer + v.o.				
Snow Goose		Eurasian Wigeon		
1/2 Pepperell 12 B. Hill	1/2-10	Eastham	1	B. Nikula + v.o.
1/2 Concord 16 T. Atkinson	1/thr	Falmouth	2	M. Keleher + v.o.
1/3 Acton 14 J. Forbes	1/16	Plymouth	1	MAS (Galluzzo)
1/3 Edgartown 7 J. M. Nelson	thr	Falmouth	88 max	v.o.
1/31, 2/31 Chatham 6 B. Nikula	1/26	Barnstable	9	CCBC (Keleher)
2/24 Northampton 3 T. Gagnon	2/1	Nantucket	10	K. Blackshaw
2/24 Ipswich 25 D. + D. Marchant	2/21	Swansea	12	R. Stymeist
2/27 Duxbury 3 E. Dalton	2/22	Yarmouth	14	D. Clapp#
Brant	2/28	Plymouth	14	R. Stymeist#
1/23 Plymouth 151 I. Davies#		American Black Duck		
1/25, 2/8 Boston H. 254, 809 TASL (M. Hall)	1/5	Plymouth	800+	R. Bowes
2/15 P'town H. 140 B. Nikula	1/13	Saugus	360	T. Factor
2/15 Fairhaven 138 M. Lynch#	1/13	Essex	920	R. Heil
2/22 Duxbury B. 145 R. Bowes	1/19	W. Gloucester	350+	J. Nelson
Cackling Goose	1/25	Chatham	500+	M. Malin#
1/15 Falmouth 2 ph J. Trimble#	1/25, 2/8	Boston H.497, 720		TASL (M. Hall)
2/1 Acoaxet 1 M. Lynch#	2/1	Acoaxet	406	M. Lynch#
Wood Duck		Northern Shoveler		
thr Cambridge 1 v.o.	1/10	Eastham	2	SSBC (Petersen)
1/1 Worcester 5 M. Lynch#	1/12	Salisbury	24	S. McGrath
1/2 Groveland 1 m D. Chickering#	1/16-24	Plymouth	1 f	MAS (Galluzzo)
1/4 Boston 2 BBC (R. Stymeist)		Northern Pintail		
2/5 Hadley 2 H. Allen	1/3	Northampton	2	F. Bowrys
2/10 Northboro 2 S. Moore	1/16	Plymouth	5	MAS (Galluzzo)
2/22 Wayland 2 G. Long	2/11	P.I.	15	MAS (B. Gette)
Gadwall	2/15	Yarmouth	13	M. Keleher
thr Gloucester (E.P.) 28 max v.o.	2/16	Ipswich	13	BBC (J. Berry)
thr Plymouth 27 max v.o.	2/21	Westport	117	R. Stymeist

Northern Pintail (continued)				2/15	Sandwich	3	M. Keleher
2/28	W. Harwich	10	B. Nikula	Surf Scoter			
Green-winged Teal				1/2	Hull	250	G. d'Entremont
1/3	Marstons Mills	7	M. Keleher	1/17, 2/7	Duxbury B. 180,	176	R. Bowes
1/11	Edgartown	9	J. M. Nelson	1/23	Plymouth	488	I. Davies#
1/12, 2/19	Salisbury	5, 5	S. McGrath	1/25, 2/8	Boston H. 502,	587	TASL (M. Hall)
2/18	Plymouth	46	P. O'Neill#	2/5	Nant. Sound	400	K. Blackshaw
2/21	S. Dartmouth	9	S. Grinley#	White-winged Scoter			
2/28	W. Harwich	20	B. Nikula	1/4	Ipswich	250+	J. Berry
Common Teal				1/11, 2/15	P'town 2000,	2000	B. Nikula
1/9	Newton	1	P. Gilmore	1/17, 2/7	Duxbury B. 218,	198	R. Bowes
Canvasback				1/19	W. Gloucester	180	J. Nelson
thr	Falmouth	10 max	v.o.	1/24	P'town	700+	P. Flood
1/1	Wachusett Res.	1 f	M. Lynch#	1/25, 2/8	Boston H. 1043,	1048	TASL (M. Hall)
1/3	Brewster	14	B. Nikula	2/5	Nant. Sound	300	K. Blackshaw
2/1	Nantucket	2	K. Blackshaw	Black Scoter			
2/18	Nantucket	25	K. Blackshaw	1/4	Ipswich	50+	J. Berry
2/22	Westport	7	J. Hoye#	1/9-10	Wellfleet	300	M. Faherty
Redhead				1/10	Orleans	75	SSBC (Petersen)
thr	Falmouth	2-3	v.o.	1/11	Wachusett Res.	1 f	M. Lynch#
1/5-12	Salisbury	1 m	S. McGrath	1/22	P.I.	130	D. Chickering
1/9, 2/28	Plymouth	1, 2	Galluzzo, Stymeist	1/25, 2/8	Boston H.	13, 17	TASL (M. Hall)
1/18, 2/22	Nantucket	2, 8	K. Blackshaw#	2/5	Nant. Sound	40	K. Blackshaw
2/1	Bourne	2 pr	M. Keleher	Long-tailed Duck			
Ring-necked Duck				1/1	Worcester	2	M. Lynch#
1/8	Eastham	90	P. Trull#	1/1	Tuckernuck	15450	CBC (R. Veit)
1/10	Bourne	300	G. d'Entremont	1/17, 2/16	Duxbury B. 58,	173	R. Bowes
2/15	Burrage Pd WMA	56	J. Sweeney#	2/1	Cape Ann	20	J. Berry#
2/16	Marstons Mills	109	M. Keleher	2/5	Nant. Sound	75	K. Blackshaw
2/21	Westport	38	R. Stymeist	2/7	P.I.	100	S. Grinley#
2/21	Springfield	13	C. Suprenant	2/8	Boston H.	33	TASL (M. Hall)
2/28	Plymouth	24	R. Stymeist#	Bufflehead			
Greater Scaup				1/14	Nantucket	245	K. Blackshaw
thr	Falmouth	1250 max	v.o.	1/25, 2/8	Boston H. 1513,	1103	TASL (M. Hall)
1/10	Edgartown	143	J. M. Nelson	1/26	Barnstable	845	CCBC (Keleher)
1/25, 2/8	Boston H.	384, 1759	TASL (M. Hall)	1/31	Falmouth	305	G. d'Entremont
2/1	Mattapoisett	146	J. Sweeney#	2/1	Acoaxet	424	M. Lynch#
2/15	Fairhaven	164	M. Lynch#	2/8	Newbypt H.	155	B. Zajda
2/22	N. Truro	150	M. Faherty	2/15	Fairhaven	213	M. Lynch#
2/23	Somerset	331	J. Sweeney	2/27	Gloucester	135	P. + F. Vale
Lesser Scaup				Common Goldeneye			
1/1	Nahant	48	L. Pivacek	1/8	Turners Falls	75	H. Allen
1/10	Bourne	150	G. d'Entremont	1/25	Nantucket	75	K. Blackshaw
1/31	Falmouth	50	G. d'Entremont	1/25, 2/8	Boston H. 419,	429	TASL (M. Hall)
2/22	Yarmouth	21	D. Clapp#	1/26	Barnstable	65	CCBC (Keleher)
2/22	Nantucket	24	K. Blackshaw#	2/1	Cape Ann	100+	J. Berry#
King Eider				2/7	Duxbury B.	95	R. Bowes
1/1-2/16	Gloucester	1	v.o.	2/8	Newbypt H.	125	B. Zajda
1/17-2/21	Duxbury B.	1 m	R. Bowes + v.o.	2/15	Fairhaven	353	M. Lynch#
1/23	Rockport	1 m imm	ph R. Heil	Barrow's Goldeneye			
2/22	P'town	1	B. Nikula	1/1	Worcester	1 f	M. Lynch#
2/28	Nant. Sound	1 m	BBC (E. Giles)	1/2-6	Waltham	1 f	J. Forbes + v.o.
Common Eider				1/3-25	Falmouth	1 m	v.o.
thr	Bourne	1200 max	v.o.	1/4-2/2	Boston	1 f	v.o.
1/1	Tuckernuck	45000	CBC (R. Veit)	1/4-2/15	Fairhaven	1-2 m	v.o.
1/17, 31	Chatham 2500,	3000	B. Nikula	1/9	Plymouth	1	MAS (Galluzzo)
1/23	Cape Ann	425	R. Heil	1/18	N. Truro	1	G. Gove#
1/23	Plymouth	945	I. Davies#	1/25-2/8	Nantucket	1	K. Blackshaw
1/25, 2/8	Boston H. 3119,	2949	TASL (M. Hall)	1/30	Scituate	1	MAS (Galluzzo)
2/1	Acoaxet	557	M. Lynch#	2/1-22	Wellfleet	1 m	B. Cassie
2/21	Duxbury	445	R. Bowes	2/7	Duxbury B.	1 f	R. Bowes
2/22	P'town	1100	B. Nikula	2/8	Newbypt H.	2 m	B. Zajda
Harlequin Duck				2/11	P'town	1 m	G. d'Entremont#
thr	Rockport	60 max	v.o.	2/23	Dighton	2	J. Sweeney
thr	Falmouth	1 m	M. Maurer	Hooded Merganser			
1/3	Nantucket	12	R. Veit	1/1	Worcester	18	M. Lynch#
1/10	Nauset B.	4	SSBC (Petersen)	1/8	Eastham	52	P. Trull#
1/10	Orleans	8	SSBC (Petersen)	1/10	Plymouth	50	G. d'Entremont
1/13-18	Mashpee	1 m imm	M. Malin	1/17	Falmouth	209	G. d'Entremont
1/17	Gloucester	5	P. + F. Vale	1/26	Newbury	54	J. Berry#
1/30	Scituate	12	MAS (Galluzzo)	2/15	Sandwich	34	M. Keleher
1/31	Manomet	5	H. Batcheller	Common Merganser			
2/14	M.V.	3	J. Liller#	thr	Mashpee	87 max	M. Keleher

Common Merganser (continued)				2/21	Swansea	36	R. Stymeist
1/10, 2/1	Plymouth	15, 21	G. d'Entremont	2/28	Falmouth	9	B. Zajda#
1/24	Lee	30	R. Laubach	Red-necked Grebe			
2/13	Mashpee	61	M. Keleher	1/10	P'town (R.P.)	4	SSBC (Petersen)
2/15	Brewster	54	M. Keleher	1/25	Plymouth	4	J. Sweeney#
2/21	Swansea	46	R. Stymeist	2/1	N. Scituate	8	G. d'Entremont
2/26	Turners Falls	22	H. Allen	2/2	P.I.	7	I. Davies#
Red-breasted Merganser				2/8	Boston H.	16	TASL (M. Hall)
thr	P.I.	50 max	v.o.	2/8	N. Truro	3	B. Nikula
1/4	Falmouth	57	M. Lynch#	2/11	Gloucester	15	J. Hoye#
1/9	Wellfleet	200	M. Faherty	Eared Grebe (no details) *			
1/23	Plymouth	85	I. Davies#	1/1-16	Falmouth	1 ph	P. Trimble + v.o.
1/23	Cape Ann	100	R. Heil	Northern Fulmar			
2/1	P'town	250	B. Nikula	1/19	Gloucester (E.P.)	8 lt, 1 dk	R. Heil
2/8	Boston H.	441	TASL (M. Hall)	2/6	Jeffrey's L.	42	S. + J. Mirick#
2/14	Turners Falls	1	S. Kellogg	Northern Gannet			
2/27	Gloucester	72	P. + F. Vale	1/7	Rockport (A.P.)	605	R. Heil
Ruddy Duck				1/9-10	Wellfleet	1000	M. Faherty
1/1	Medford	1	S. Miller#	1/10	P'town (R.P.)	275	B. Nikula
1/2	Eastham	2	B. Nikula	1/18	Nantucket	12	K. Blackshaw#
1/3	Falmouth	8	M. Keleher	1/18, 2/22	N. Truro	185, 190	B. Nikula
1/4	Cotuit	1	M. Keleher	Double-crested Cormorant			
1/10	Bourne	3	G. d'Entremont	1/4	Boston	2	BBC (R. Stymeist)
2/1	Nantucket	3	K. Blackshaw	1/9	Plymouth	3	MAS (Galluzzo)
Ring-necked Pheasant				1/10	P.I.	3	N. Landry
1/2-9	Saugus	1 m	P. Peterson + v.o.	1/25	Rockport	2	P. Peterson
1/10	Petersham	2	M. Lynch#	Great Cormorant			
1/13	Salisbury	1 m	M. Taylor#	1/2	Hull	22	G. d'Entremont
Ruffed Grouse				1/19	Cape Ann	55	R. Heil
1/2	Hardwick	1	C. Buelow	1/23	Plymouth	66	I. Davies#
2/15	Sandwich	1 dead	J. Hoye#	2/15	N. Scituate	68	SSBC (G. d'E)
Wild Turkey				2/22	P'town H.	155	B. Nikula
1/2	Duxbury	24	MAS (Galluzzo)	2/22	Duxbury B.	27	R. Bowes
1/10	Petersham	28	M. Lynch#	Great Blue Heron			
1/17	Brookfields	22	M. Lynch#	1/2	Medford	4	O. Plimpton
1/18	Salisbury	28	S. Grinley#	1/4	Falmouth	5	M. Lynch#
2/7	P'town Airport	13	B. Nikula	1/16	Plymouth	5	MAS (Galluzzo)
2/18	Plymouth	69	K. Anderson	Black-crowned Night-Heron			
2/22	Templeton	128	T. Pirro	1/3	Falmouth	1	M. Keleher
Northern Bobwhite				1/9	Plymouth	1	MAS (Galluzzo)
1/3	WBWS	12	M. Faherty	1/17	Nahant	1 imm	P. Peterson
1/8, 2/12	Cotuit	8, 7	B. Babcock	Black Vulture			
Red-throated Loon				2/3	Hyannis	1	A. Curtis
1/2	P.I.	8	W. Sweet	2/15	Beverly	1	J. Hills#
1/7	Rockport (A.P.)	8	R. Heil	2/27	Sheffield	31	R. Laubach
1/9-10	Wellfleet	75	M. Faherty	2/27	Deerfield	1	R. Ranney-Blake
1/10	P'town (R.P.)	150	SSBC (Petersen)	Turkey Vulture			
1/25	Boston H.	11	TASL (M. Hall)	1/4	Ipswich	4	J. Berry
2/7, 22	N. Truro	25, 53	B. Nikula	2/1	Acoaxet	5	M. Lynch#
Pacific Loon (no details) *				2/8	Bourne	8	J. Hoye#
1/3	Wellfleet	1	M. Faherty	2/8	Wakefield	3	P. + F. Vale
2/7	P'town (R.P.)	1	P. Flood, B. Nikula	2/15	Framingham	3	R. Crissman
Common Loon				2/15	S. Dart. (A.Pd)	7	E. Nielsen
1/2	Hull	14	G. d'Entremont	2/19	Easton	3	K. Ryan
1/2	P.I.	13	W. Sweet	2/28	Hardwick	3	M. Lynch#
1/4	Sandwich	14	SSBC (Anderson)	Bald Eagle			
1/17	Duxbury B.	10	R. Bowes	1/13	Essex	3	R. Heil
1/23	Plymouth	15	I. Davies#	1/22	Plymouth	3	I. Davies#
2/2	Gloucester	35	P. + F. Vale	2/13	Lakeville	11	N. Yeatts
2/5	Nant. Sound	15	K. Blackshaw	2/16	Groton	3	B. Hill
Pied-billed Grebe				2/16	Newbypt	6	S. McGrath
1/3	Lynn	2	P. Brown	2/21	Quabbin	11	J. Hoye#
1/3, 2/23	Falmouth	1, 2	M. Keleher	2/22	Turners Falls	3	M. Lynch#
1/24	Plymouth	1	I. Davies#	Northern Harrier			
2/22	Nantucket	3	K. Blackshaw#	thr	P.I.	4 max	v.o.
2/28	Cheshire	1	N. Purdy	thr	Saugus	2	v.o.
Horned Grebe				1/2	Salisbury	3	S. Grinley#
1/11	Fairhaven	300	T. Collins#	1/3	DWWS	4	M. Emmons
1/24	Plymouth	6	M. Lynch#	1/3	Fairhaven	3	G. d'Entremont
1/25, 2/8	Boston H.	8, 79	TASL (M. Hall)	1/18	Mashpee	3	M. Malin
2/1	Rockport (A.P.)	9	E. Nielsen	1/26	Cumb. Farms	3	J. Sweeney
2/2	P.I.	27	D. Chickering#	2/22	Nantucket	3	K. Blackshaw#
2/2	Gloucester (B.R.)	11	P. + F. Vale	2/27	N. Truro	5	D. Manchester

Sharp-shinned Hawk				2/1	Fairhaven	16	J. Sweeney#
thr	Reports of indiv. from 26 locations			2/15	Wollaston B.	18	J. Baur
Cooper's Hawk				Sanderling			
1/4	Sandwich	2	SSBC (Anderson)	1/18	Nantucket	30	K. Blackshaw#
1/4	Boston	2	BBC (R. Stymeist)	1/19	W. Gloucester	20	J. Nelson
1/16	Falmouth	2	imm P. + F. Vale#	1/26	Osterville	125	CCBC (Keleher)
1/21	W. Barnstable	5	C. Walz#	2/1	Plymouth	50	G. d'Entremont
1/23	Plymouth	3	I. Davies#	2/1	Wellfleet	100	B. Cassie
2/16	Gloucester (E.P.)	2	J. Trimble	2/8	Brewster	175	B. Nikula
2/17	Westport	2	G. d'Entremont#	2/17	Westport	20	G. d'Entremont#
Northern Goshawk				2/25	P.I.	58	D. Chickering
1/18	Gloucester	1	imm S. Perkins#	Purple Sandpiper			
1/31	Mashpee	1	imm M. Keleher	thr	Gloucester	70 max	v.o.
2/4-22	Wellfleet	1	imm M. Faherty	1/3	Bourne	22	M. Keleher
Red-shouldered Hawk				1/25	Nantucket	18	K. Blackshaw
2/11-28	E. Middleboro	pr	K. Anderson	2/1	N. Scituate	30	G. d'Entremont
2/15	Fairhaven	2	M. Lynch#	2/1	Rockport (A.P.)	150	J. Center
Red-tailed Hawk				2/14	M.V.	12	J. Liller#
1/4	Boston	9	BBC (R. Stymeist)	2/15	Manomet	12	M. Faherty
1/13	Essex	10	R. Heil	2/16	Marshfield	26	J. Center
1/31	Sheffield	8	M. Lynch#	Dunlin			
Rough-legged Hawk				1/2	Plymouth	650	MAS (Galluzzo)
thr	DWWS	9	max v.o.	2/1	Wellfleet	100	B. Cassie
thr	P.I.	1-2	v.o.	2/8	Brewster	200	B. Nikula
thr	Cumb. Farms	7	max v.o.	2/13	Duxbury B.	1480	R. Bowes
thr	Saugus	1-2	v.o.	Wilson's Snipe			
thr	Essex	1-2	v.o.	1/3	Sandwich	1	M. Keleher
1/22-31	Chatham	2	max B. Nikula	American Woodcock			
Golden Eagle				2/9	W. Barnstable	1	C. Walz
2/14	W. Barnstable	1	C. Walz	2/20	E. Middleboro	1	K. Anderson
2/28	S. Quabbin	1	ad M. Lynch#	2/26	Falmouth	4+	E. Dalton
American Kestrel				2/28	Edgartown	5	BBC (E. Giles)
1/2-5	Saugus	2	P. Peterson	Pomarine Jaeger			
2/11	Cambridge	2	J. Crystal	1/7	Rockport (A.P.)	1	ad R. Heil
2/16	Boston (Logan)	3	N. Smith	Black-legged Kittiwake			
Merlin				1/3	Wellfleet	15	M. Faherty
thr	Reports of indiv. from 34 locations			1/7	Rockport (A.P.)	2093	R. Heil
1/15	P.I.	2	J. Offermann#	1/18, 2/8	N. Truro	125, 100	B. Nikula
1/23	Plymouth	3	I. Davies#	1/19	Gloucester (E.P.)	10	ad R. Heil
Peregrine Falcon				2/1, 28	P'town	120, 30	B. Nikula
1/3	Gloucester	2	J. Barber	2/2	P.I.	15	I. Davies#
1/4	Lawrence	2	R. Heil	Ivory Gull (details submitted) *			
1/11	Medford	2	D. + I. Goodine#	1/17-22	Gloucester (E.P.)	1	ad ph J. Trimble + v.o.
1/31	Worcester	2	M. Lynch#	1/20-30	Plymouth H.	1	ad ph B. Burden + v.o.
2/8	Winthrop	3	P. + F. Vale	Bonaparte's Gull			
2/12	Cambridge	2	A. Joslin	1/3	Falmouth	2	M. Keleher
2/22	Duxbury B.	2	R. Bowes	1/18	Nantucket	400	K. Blackshaw#
Virginia Rail				1/26	Osterville	4	CCBC (Keleher)
1/4	Cotuit	1	M. Keleher	Black-headed Gull			
1/7	Osterville	1	A. Curtis	1/3	Falmouth	1	B. Nikula
1/14	Penikese I.	1	C. Buelow	1/3-19	Gloucester	1	R. Lockwood + v.o.
American Coot				1/14-2/27	Nantucket	2	K. Blackshaw
thr	Woburn (HP)	21	max M. Rines#	1/23-2/2	Newbpyt	1	J. Nelson + v.o.
1/2	Eastham	23	B. Nikula	1/26, 2/16	Osterville	1	CCBC (Keleher)
1/4	Boston	39	BBC (R. Stymeist)	Thayer's Gull *			
1/10	Mashpee	22	J. Griener	1/3-2/16	Gloucester (E.P.)	1-3	1w ph R. Heil + v.o.
1/18	Nantucket	12	K. Blackshaw#	Iceland Gull			
Black-bellied Plover				thr	Gloucester	64	max v.o.
1/10	P'town (R.P.)	2	SSBC (Petersen)	thr	Turners Falls	3	max v.o.
1/14, 2/11	Nantucket	6, 7	K. Blackshaw	1/3	Nantucket	75	R. Veit
2/28	Plymouth	4	R. Stymeist#	1/3	Wellfleet	2	1W M. Faherty
Killdeer				1/18, 2/22	N. Truro	6, 12	B. Nikula
1/3	Fairhaven	1	G. d'Entremont	1/18, 2/22	P'town	4, 12	B. Nikula
1/4	Gloucester	1	S. Hedman	2/9	Agawam	3	F. Bowrys
1/17	Plymouth	1	I. Davies#	Lesser Black-backed Gull			
2/18	Salisbury	1	G. d'Entremont#	thr	Boston	1-2	v.o.
2/21	Cumb. Farms	4	SSBC (Petersen)	thr	Plymouth	1-2	v.o.
Greater Yellowlegs				1/3	Nantucket	150	R. Veit
2/28	W. Harwich	2	B. Nikula	1/3-2/15	Turners Falls	1-2	v.o.
Ruddy Turnstone				1/11, 2/16	N. Truro	1	2W, 1 ad B. Nikula
thr	Osterville	66	max v.o.	1/18-2/16	Gloucester (E.P.)	1-2	v.o.
1/5	Beverly	12	R. Buchsbaum	1/31	Chatham	2	ad B. Nikula
1/25	Boston H.	6	TASL (M. Hall)	2/8	Brewster	2	B. Nikula

Lesser Black-backed Gull (continued)				Common Murre			
2/25	Turners Falls	2 adW	M. Lynch#	1/7, 24	Rockport (A.P.)	19, 1	R. Heil
2/25-28	Waltham	1	J. Forbes#	1/25	Boston H.	1	TASL (M. Hall)
Herring x Lesser Black-backed Gull				2/6	Jeffrey's L.	1	S. + J. Mirick#
1/2	Gloucester (E.P.)	1 ad ph	R. Heil	Thick-billed Murre			
2/16	N. Truro	1	B. Nikula	1/7, 24	Rockport (A.P.)	10, 2	R. Heil
Slaty-backed Gull (no details) *				1/11	P'town	3	B. Nikula
2/20-27	Turners Falls	1 2-3W ph	J. Smith, vo	1/18, 2/22	N. Truro	3, 1	B. Nikula
Glaucous Gull				Razorbill			
thr	Gloucester (E.P.)	9 max	v.o.	1/3	Wellfleet	100	J. Hoye#
1/2, 2/1	Salisbury	1	Nelson, Chickering	1/7, 24	Rockport (A.P.)	898, 165	R. Heil
1/18, 2/16	N. Truro	1 1W, 3 1W	B. Nikula	1/10	P'town (R.P.)	2500	SSBC (Petersen)
1/18	Nantucket	1	K. Blackshaw#	1/10, 18	N. Truro	220, 50	B. Nikula
1/30	Agawam	1	S. Kellogg	1/31	Wellfleet	200	M. Faherty
2/6	Turners Falls	1	H. Allen	2/2	P.I.	98	I. Davies#
2/6	Hull	1 imm	MAS (Galluzzo)	2/8, 22	N. Truro	195, 70	B. Nikula
Nelson's Gull				2/14	M.V.	200	J. Liller#
1/1	Lunenberg	1 ph	T. Pirro	Black Guillemot			
1/15-2/16	Gloucester (E.P.)	1-3	v.o.	1/3	Scituate	1	M. Emmons
Dovekie				1/7	Rockport (A.P.)	2	R. Heil
1/1	Eastham (F.E.)	4	B. Nikula	1/17, 2/2	Gloucester	8, 9	P + F. Vale
1/3	Wellfleet	15	J. Hoye#	2/1	Rockport (A.P.)	4	E. Nielsen
1/10	Orleans	3	SSBC (Petersen)	2/21	Duxbury	1	R. Bowes
1/10	Nauset B.	2	SSBC (Petersen)	2/22	N. Truro	1	B. Nikula
1/18, 2/22	Nantucket	80, 5	K. Blackshaw#	Atlantic Puffin			
1/24	Rockport (A.P.)	6	R. Heil	1/3	Wellfleet	1	J. Hoye#
2/6	Jeffrey's L.	194	S. + J. Mirick#	2/1	Gloucester	1	M. Goetschkes#
2/7	P'town	2	B. Nikula	2/6	Jeffrey's L.	1	S. + J. Mirick#

OWLS THROUGH FINCHES

The Islands are now the only reliable places to see Barn Owls in the state, and birds were reported from two locations on Martha's Vineyard. The first breeding record in the state occurred in 1928 on the Vineyard, and the population has fluctuated each year with winter mortality. It will be interesting to see how the record snowfall in January affects this year's population. Great Horned Owls were reported from many areas, with an increase in hooting noted as their breeding season began. Twenty-one Snowy Owls were banded during this period at Logan Airport compared with three last year. Good numbers of Snowy Owls were also noted from Plum Island, Duxbury, and Nantucket. A Long-eared Owl delighted many birders and photographers in Salisbury, and another was noted in Adams, a rare find in western Massachusetts.

Sapsuckers were reported in at least twenty-four locations. Red-headed Woodpeckers were found in Middleboro and Carlisle. Northern Shrikes were reported in twelve locations, a lot fewer than were seen during the big flight last year. It is encouraging to see how well Eastern Bluebirds are doing in the state, especially during a cold and snowy January. There was a nice influx of Bohemian Waxwings, the fourth since 2000. They were noted in at least fourteen locations, with the largest groups in western Massachusetts. Winter roosts of American Crows can be impressive, and on January 4 Rick Heil made a conservative estimate of 11,500 flying to an evening roost in Lawrence, perhaps the largest crow roost in Massachusetts. At the very least, thirty-five Fish Crows took part in this spectacle.

This winter was especially good for White-winged Crossbills. This nomadic species invaded our area, with many areas reporting groups of over twenty individuals. The high count was over 150 on Plum Island. The Salisbury campground was a photographer's dream as flocks totaling close to 100 remained throughout the period, apparently totally unafraid of people. Among the flocks of White-wings, one to three Red Crossbills were seen in Salisbury, the only ones reported during the period. This season boasted one of the largest invasions of Pine Siskins in recent memory, and by the end of February birders were noting courtship behavior. Common Redpolls were a bit less in evidence, although they increased in number and locations

by the end of February. It was an off year for Evening Grosbeaks, with reports from just two locations.

There were not many rare birds this period. A **Summer Tanager** continued from December until mid-January at a feeder in Orleans, and a **Yellow-headed Blackbird** was present most of this period at a feeder in Salisbury. Reports of other notable birds included six Dickcissels, an **Oregon Junco** in Yarmouth, a Vesper Sparrow in Falmouth, and Orange-crowned Warblers visiting feeders in Mashpee, Brewster, Orleans, and Hamilton. The first migrating blackbirds appeared by the third week of February, including a nice flock of twenty-three Rusty Blackbirds in Newton and another twelve in Stoughton. R.H. Stymeist

Barn Owl				Yellow-bellied Sapsucker			
1/10	Chappaquidick	1	J. M. Nelson	thr	Reports of indiv. from 20 locations		
2/28	Edgartown	1	BBC (E. Giles)	thr	Medford	2	R. LaFontaine
Eastern Screech-Owl				1/1-28	Ipswich	2	J. Berry
1/24	Plymouth	2	I. Davies#	1/2	Mt.A.	3	R. Stymeist
2/13	Winchester	2	P. Devaney	1/25	Nantucket	2	K. Blackshaw
2/15	W. Barnstable	2	M. Keleher	Hairy Woodpecker			
Great Horned Owl				1/2	Hardwick	7	C. Buelow
1/10	Eastham	2	SSBC (Petersen)	1/13	Essex	4	R. Heil
1/10	Concord	2	M. Small	1/25	Mid-Berkshires	7	M. Lynch#
1/22	Stoughton	2	G. d'Entremont	2/13	Mashpee	6	M. Keleher
2/thr	Mt.A.	2	v.o.	Northern Flicker			
2/11	Newton	2	M. Iliff	1/4	Scusset B.	6	SSBC (Anderson)
2/27	Woburn (HP)	pr	P. Ippolito	1/13	Essex	5	R. Heil
2/28	Gloucester	2	D. Marchant	2/10	Easton	5	K. Ryan
Snowy Owl				2/15	Marshfield	6	SSBC (GdE)
thr	Boston (Logan)	21 b	N. Smith	Pileated Woodpecker			
thr	P.I.	1-3	v.o.	1/2	Hardwick	1	C. Buelow
thr	Salisbury	1	v.o.	1/20	Ipswich	1	J. Berry
thr	Duxbury B.	1-4	R. Bowes	2/1	Wayland	1	B. Harris
1/14	Nantucket	4	K. Blackshaw	2/2	Quabbin Pk	3	C. Carpiest
2/26	Nantucket	2	D. Jones	2/22	Royalston	2	T. Pirro
Barred Owl				Eastern Phoebe			
1/10	Ware R. IBA	2	M. Lynch#	1/23	Falmouth	1	M. Malin
1/12	Salisbury	2	P. Brown	Northern Shrike			
2/7	Hamilton	1	J. Berry#	thr	Cumb. Farms	1 ad	v.o.
2/8	E. Middleboro	1	K. Anderson	thr	P.I.	2	v.o.
2/14	M.V.	1	J. Liller#	1/2	Pittsfield	1	T. Collins
Long-eared Owl				1/4	W. Boxford	1 1W	R. Heil
1/13	Adams	1	J. Morris-Siegel	1/12, 2/21	DWWS	1	Gilmore, Giles
1/25-27	Salisbury	1 ph	D. + D. Skillman	1/17	P'town	1	D. Mako
Short-eared Owl				2/9	Concord	1	L. Hale
1/4	Cumb. Farms	2	K. Anderson	2/11	Amesbury	1	S. McGrath
1/10	Salisbury	2 ph	J. Lambert	2/15	Essex	1	P. Brown
1/11	Burrage Pond	2	J. Sweeney	2/17	Ipswich	1 ad	J. Berry
1/13-17	Saugus	2	T. Factor + v.o.	2/17	Amherst	1	H. Allen
Northern Saw-whet Owl				2/26	Carlisle	1 ad	T. Brownrigg
1/7	Hubbardston	1	W. Howes	Gray Jay (details submitted) *			
2/10	Burlington	1	M. Rines	1/4	Moran WMA	1	J. Bishop
2/14	Assonett	1	S. + J. Mirick	American Crow			
2/16	Brewster	1	J. Hoye#	1/4	Lawrence	11,500+	R. Heil
2/28	Burlington	1	M. Rines#	Fish Crow			
Belted Kingfisher				1/4	Lawrence	35	R. Heil
1/23	Plymouth	2	I. Davies#	2/8	Northampton	2	F. Bowrys
1/30	Mashpee	4	M. Keleher	2/13	Mashpee	19	M. Keleher
2/15	Sandwich	2	M. Keleher	2/21	Seekonk	9	R. Stymeist
Red-headed Woodpecker				2/22	Sharon	10	G. d'Entremont
1/21	Middleboro	1 imm	K. Anderson	2/28	Falmouth	21	M. Keleher
1/23	Carlisle	1	J. Hoye#	Common Raven			
Red-bellied Woodpecker				1/25	Athol	7	SSBC (E. LeBlanc)
1/2	Hingham	4	G. d'Entremont	1/27	Rowley	2	P. Brown
1/2	Hardwick	4	C. Buelow	1/31	Sheffield	6	M. Lynch#
1/13	Essex	17	R. Heil	2/10	Fairhaven	2	M. LaBossiere
1/23-24	Plymouth	6	I. Davies#	2/14	Newbypt	2	W. Tatro
1/27	W. Newbury	7	R. Heil	2/16	Gloucester (E.P.)	4	J. Trimble
2/1	Bourne	3	M. Keleher	2/24	S. Quabbin	15	L. Therrien
2/1	Marshfield	9	G. d'Entremont	2/24	W. Roxbury	2	G. Long

Horned Lark				2/2	Medford	2	R. LaFontaine
thr	Cumb. Farms	150 max	J. Sweeney	2/15	W. Barnstable	2	M. Keleher
1/1	Northampton	200	H. Allen	2/15	Dartmouth	2	E. Nielsen
1/2, 2/4	Saugus	60, 60	P. Peterson		American Robin		
1/3	Fairhaven	250	G. d'Entremont	1/4	Falmouth	535	M. Lynch#
1/9	Eastham (F.E.)	50	F. Caruso	1/21	W. Barnstable	1000+	C. Walz#
1/10	Hadley	200	H. Allen	1/24	Plymouth	230	I. Davies#
1/26	Salisbury	45+	P. + F. Vale		Gray Catbird		
2/1	Rockport	40	E. Nielsen	1/3	Scusset	2	M. Keleher
2/13	Northfield	75	M. Taylor	1/4	Stow	2	CBC (T. Murray#)
2/26	Sharon	50	P. Peterson	1/4	Wayland	1	B. Harris
Red-breasted Nuthatch				1/8	Salisbury	1	S. Grinley
1/13	Essex	6	R. Heil	1/17	Falmouth	4	G. d'Entremont
1/25	Mid-Berkshires	4	M. Lynch#	1/27	W. Newbury	1	R. Heil
1/25	Nantucket	10	K. Blackshaw	2/1	Mattapoisett	2	J. Sweeney#
1/30	Mashpee	14	M. Keleher	2/17	S. Dartmouth	3	G. d'Entremont#
2/15	Brewster	3	M. Keleher		Brown Thrasher		
2/18	P.I.	6	G. d'Entremont#	1/9	Plymouth	1	MAS (Galluzzo)
2/21	Boston (A.A.)	3	B. Mayer	1/17	Osterville	1	F. Caruso #
2/21	Monroe	7	M. Lynch#	2/7	Mattapoisett	1	M. Malin
Brown Creeper				2/24	DWWS	1 ph	E. Dalton
1/2	Hardwick	2	C. Buelow		American Pipit		
1/2	Waltham	2	J. Forbes	1/2	Saugus	5	P. Peterson
2/2	Bourne	2	M. Keleher	1/3	Fairhaven	28	M. Maurer
2/20	Royalston	2	G. d'Entremont#	1/5-9	Saugus	6	P. Peterson
2/21	Monroe	2	M. Lynch#	1/10	P.I.	8	P. Roberts
2/22	Wayland	3	G. Long	1/10	Salisbury	5	P. Roberts
Carolina Wren				2/16	Lancaster	1	D. Wait
1/3	Fairhaven	11	G. d'Entremont		Bohemian Waxwing		
1/13	Essex	10	R. Heil	1/16-2/8	Rockport	8 max	v.o.
1/17	Falmouth	9	G. d'Entremont	1/17	P'town	18	D. Mako
2/1	Marshfield	8	G. d'Entremont	1/17	Plymouth	4	M. Faherty
2/1	Bourne	18	M. Keleher	1/17	Osterville	1	F. Caruso #
2/11	Rockport	8	P. Peterson	1/17	Newbypt	7	MAS (J. Hully)
2/15	Dartmouth	7	E. Nielsen	1/23	Truro	89	C. Goodrich
Winter Wren				1/26	Salisbury	4	J. Berry#
1/4	Wayland	3	B. Harris	2/1	Truro	40	J. Young
1/24	Plymouth	2	I. Davies#	2/7	Turners Falls	2	B. Zajda
2/1	Bourne	3	M. Keleher	2/8	Clarksburg	40	J. Flynt
2/7	Woburn (HP)	2	M. Rines#	2/9	Dalton	70	J. Morris-Siegel
Golden-crowned Kinglet				2/12	Wellfleet	9	M. Faherty
1/2	Hingham	4	G. d'Entremont	2/16	WBWS	70	C. Franklin
1/2	Hardwick	4	C. Buelow	2/26	New Salem	14	R. Stymeist
1/16	Southwick WMA	6	C. Buelow	2/28	Northampton	4	T. Gagnon
1/22	Woburn (HP)	6	M. Rines	2/28	WBWS	30 ph	M. Faherty
1/30	Mashpee	3	M. Keleher		Cedar Waxwing		
2/11	Belchertown	3	L. Therrien	1/19	Rockport	50	R. Heil
2/13	Marshfield	3	MAS (Galluzzo)	1/22	Arlington	20	A. Haggerty
Ruby-crowned Kinglet				1/25	Orange	125	SSBC (E. LeBlanc)
1/1	Natick	1	G. Long	2/2	Gloucester	30+	P. + F. Vale
1/4	Bourne	2	K. Anderson	2/7	Turners Falls	52	B. Zajda
1/13	Essex	1	R. Heil	2/12	Amherst	150	H. Allen
1/16	Lincoln	1	M. Rines	2/19	Arlington	24	K. Brandin
1/25	Nantucket	1	K. Blackshaw	2/28	Waltham	20	J. Forbes#
1/31	W. Springfield	1	J. Simpson	2/28	Turners Falls	200	S. Moore
2/11	Mt.A.	1	A. Haggerty		Orange-crowned Warbler		
Eastern Bluebird				1/1	Mashpee	1	M. Keleher
1/3	Pepperell	10	C. Sheridan	1/17	Brewster	1	G. Martin
1/3	Falmouth	33	M. Keleher	1/28	Hamilton	1	A. Peck-Richardson
1/10	Middleboro	10	K. Doyon#	2/10	Orleans	1	C. Kennedy
1/13	Essex	11	R. Heil		Yellow-rumped Warbler		
1/31	S. Easton	10	J. Mitchell	thr	Nantucket	85 max	K. Blackshaw
2/1	Nantucket	37	K. Blackshaw	thr	P.I.	15 max	v.o.
2/16	Montague	18	H. Allen	1/4	Scusset B.	27	SSBC (Anderson)
2/20	Southwick	11	S. Kellogg	1/4	Falmouth	16	M. Lynch#
2/20	Plymouth	12	MAS (Galluzzo)	1/13	Essex	7	R. Heil
Hermit Thrush				1/17	Truro	100	D. Mako
thr	Reports of indiv.	from 22 locations		1/24	Plymouth	13	I. Davies#
1/3	Fairhaven	3	G. d'Entremont	1/27	Newbypt	4	S. McGrath#
1/13	Essex	5	R. Heil	2/15	S. Dart. (A.Pd)	6	E. Nielsen
1/17	Falmouth	3	G. d'Entremont	2/25	N. Truro	44	D. Manchester
1/27	W. Newbury	3	R. Heil		Pine Warbler		
2/1	Mattapoisett	2	J. Sweeney#	1/1, 2/13	Mashpee	2, 1	M. Keleher

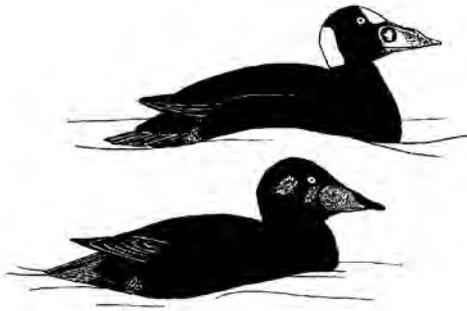
Pine Warbler (continued)				White-crowned Sparrow			
1/10	Middleboro	4	K. Doyon#	1/10	Cumb. Farms	1	M. Maurer
1/27	W. Newbury	1	R. Heil	1/13	Essex	2 1W ph	R. Heil
2/27	Duxbury	1	E. Dalton	2/9	Concord	2	L. Hale
Yellow-breasted Chat				Dark-eyed Junco			
1/1	Gloucester (E.P.)	1	B.	1/10	Petersham	60+	M. Lynch#
1/2	Chatham	2 (1 dead)	R. Clem	1/13	Essex	103	R. Heil
1/4	Falmouth	2	M. Lynch#	1/27	W. Newbury	97	R. Heil
1/6	MNWS	1	D. Ely#	1/31	Sheffield	101	M. Lynch#
1/9	Plymouth	1	MAS (Galluzzo)	"Oregon" Junco			
Summer Tanager				1/18	S. Yarmouth	1 ph	A. Middleton
1/1-13	Orleans	1 ph	A. Hultin#	Lapland Longspur			
Eastern Towhee				1/1-2/8	Salisbury	27 max	v.o.
1/6	Salisbury	1 m	B. Harris	1/2	P.I.	4	W. Sweet
1/11	N. Easton	1 m	K. Ryan	1/3	Chappaquidick	3	J. M. Nelson
1/14	Byfield	1	S. McGrath	1/8	Saugus	1	T. Factor
1/15	Rockport (H.P.)	2	R. Heil	1/9	Amherst	1	H. Allen
1/17	Newbypt	1 m	MAS (J. Hully)	1/24	Plymouth	2	I. Davies#
2/1	E. Sandwich	5	D. Manchester	2/9	Hadley	2	H. Allen
2/15	Dartmouth	4	E. Nielsen	2/14	Northampton	3	S. Kellogg
2/22	Rockport	1	F. Bouchard	Snow Bunting			
American Tree Sparrow				thr	Salisbury	33 max	v.o.
1/1	Clinton	20+	M. Lynch#	thr	P.I.	30 max	v.o.
1/2	Saugus	25	P. Peterson	1/2	Eastham (F.E.)	40	B. Nikula
1/4	Cumb. Farms	54	J. Sweeney	1/2	N. Carver	80	B. Conway
1/5	Saugus	50	P. Peterson	1/2	Montague	80	H. Allen
1/13	Essex	27	R. Heil	1/3	Chappaquidick	38	J. M. Nelson
Chipping Sparrow				1/10	P'town (R.P.)	60	SSBC (Petersen)
1/thr	E. Sandwich	1	D. Manchester	1/11	Hadley	400	H. Allen
Field Sparrow				1/25	Orange	35	SSBC (E. LeBlanc)
1/4	Sandwich	2	K. Anderson	1/26	Cumb. Farms	100	J. Sweeney
1/5	Belchertown	1	S. Surner	2/14	Northampton	120	S. Kellogg
1/16	Southwick	1	S. Kellogg	2/21	S. Quabbin	70	R. Laubach
1/17	WBWS	4	D. Mako	2/22	Templeton	35	T. Pirro
2/1	Wakefield	3	D. + I. Jewell	Northern Cardinal			
2/2	Bourne	9	M. Keleher	1/4	Falmouth	61	M. Lynch#
2/18	Foxboro	1	B. Cassie	1/13	Essex	111	R. Heil
Vesper Sparrow				1/27	W. Newbury	66	R. Heil
1/16	Falmouth	1 ph	M. Malin#	2/1	Bourne	56	M. Keleher
Savannah Sparrow				Dickcissel			
1/2	Northampton	9	T. Gagnon	1/1-10	Mt.A.	1 f ph	T. Murray
1/5	Salisbury	2	D. Ely	1/2	Wakefield	1	D. + I. Jewell
1/11	Hadley	3	H. Allen	1/5-2/28	Deerfield	2	D. Mako
1/19	Duxbury B.	2	R. Bowes	1/13	Essex	1 f 1W ph	R. Heil
2/15	Fairhaven	8	M. Lynch#	1/24-2/28	Salisbury	1	v.o.
Ipswich Sparrow				Red-winged Blackbird			
1/4	Scusset B.	1	SSBC (Anderson)	thr	Saugus	240 max	P. Peterson
1/17	Salisbury	1	MAS (J. Hully)	1/8	W. Bridgewater	450	K. Ryan
2/1	Wellfleet	1	B. Cassie	1/14	Cumb. Farms	400	J. Sweeney
Fox Sparrow				1/18	Salisbury	160	S. Grinley#
1/2	Hingham	1	G. d'Entremont	1/26	W. Bridgewater	300+	J. Sweeney
1/6	Pittsfield	1	N. Mole	2/18	Harwichport	200	B. Nikula
1/11	Newbury	1	L. Leka	Eastern Meadowlark			
1/22	Bourne	2	M. Malin	1/4	Essex	7	P. Brown
1/26	Boston (A.A.)	2	M. Kaufman	1/9	Eastham (F.H.)	12	F. Caruso
2/15	S. Dart. (A.Pd)	3	E. Nielsen	1/17	Plymouth	1	I. Davies#
Song Sparrow				1/23	Duxbury B.	1	MAS (Galluzzo)
1/4	Boston	34	BBC (R. Stymeist)	2/8	P.I.	1	K. Bourinot
1/4	Falmouth	39	M. Lynch#	2/15	S. Dart. (A.Pd)	1	E. Nielsen
2/2	Bourne	44	M. Keleher	Yellow-headed Blackbird			
Swamp Sparrow				1/5-2/28	Salisbury	1 f ad ph	P. Brown + v.o.
1/2	Hardwick	1	C. Buelow	Rusty Blackbird			
1/3	Fairhaven	6	G. d'Entremont	1/6	Newbypt	2	B. Harris
1/10	Boston (A.A.)	4	N. Hayward	1/14	Natick	1	D. Gibson
1/23	Plymouth	7	I. Davies#	1/15	Falmouth	1	J. Trimble#
1/30	Mashpee	2	M. Keleher	2/11	Newton	23	M. Iliff
2/7	Woburn (HP)	2	M. Rines#	2/14-24	Stoughton	12	G. d'Entremont
White-throated Sparrow				2/19	Framingham	2	C. Jeffery
1/3	Fairhaven	37	G. d'Entremont	2/22	Wayland	1	B. Harris
1/13	Essex	66	R. Heil	Common Grackle			
1/27	W. Newbury	59	R. Heil	1/14	Natick	12	D. Gibson
2/1	Marshfield	35	G. d'Entremont	2/15	Woburn	35	M. Rines
				2/15	Hamilton	36	P. Brown

Common Grackle (continued)			thr	Boston (A.A.)	21 max	v.o.
2/18	Salisbury	30+	P. + F. Vale	thr	Mt.A.	62 max R. Stymeist
2/19	Harwichport	40	B. Nikula	1/1	Northfield	20 M. Taylor
2/19	Lexington	100	M. Rines	1/3	Medford	25 R. LaFontaine
Brown-headed Cowbird				1/7	M.V.	35 L. Johnson#
1/2	Salisbury	39	S. Grinley#	2/25	Newbypt	25 L. Southworth
1/5	Mashpee	22	M. Keleher	Common Redpoll		
1/28	Southwick	60	S. Kellogg	thr	Reports of 1-19 indiv. from 40 locations	
2/15	Fairhaven	250	M. Lynch#	thr	P.I.	64 max v.o.
2/19	Littleton	17	G. Marley	thr	Salisbury	40 max v.o.
Baltimore Oriole				1/10	Wakefield	20+ P. + F. Vale
1/1	S. Easton	1 imm ph	K. Mitchell	1/13	Essex	47 R. Heil
1/1-10	Uxbridge	1 imm	B. Milke	1/24	Royalston	50+ P. Gilmore
1/10	Middleboro	1	K. Doyon#	1/30	DWWS	50 MAS (Galluzzo)
Pine Grosbeak				2/8	Williamstown	50 C. Jones
1/31	Salisbury	1	B. Thomas	2/15	Woburn (HP)	55 M. Rines
2/1	Braintree	5	J. Galluzzo	2/17	Saugus	60 P. Peterson
2/1	Salisbury	1 f	T. Spahr	Pine Siskin		
2/2	P.I.	1 f	J. Carroll	thr	Reports of 1-99 indiv. from 79 locations	
2/16	Lancaster	13	D. Wait	1/6	Pittsfield	100 N. Mole
Purple Finch				1/11	N. Easton	100 K. Ryan
1/1	Monterey	6	R. Laubach	1/24	S. Middleboro	200 J. Mason
1/2	Hingham	3	G. d'Entremont	1/28	Sheffield	200 S. MacDonald
1/5	Granby	7	L. Hoffmann	2/6	Marlboro	100+ T. Spahr
1/13	Essex	23	R. Heil	2/10	Williamsburg	275 A. Mueller
2/23	Becket	10	R. Laubach	2/19	Sharon	100 W. Sweet
Red Crossbill				2/19	Southwick	200 S. Kellogg
1/4-25	Salisbury	1-3	v.o.	2/25	Royalston	200+ P. + F. Vale
White-winged Crossbill				2/26	Amherst	250 J. Marcum
thr	Reports of 1-18 indiv. from 38 locations			Evening Grosbeak		
thr	Salisbury	80 max	v.o.	1/25-2/28	Royalston	20 max v.o.
thr	P.I.	150 max	v.o.	2/28	New Salem	15 M. Lynch

HOW TO CONTRIBUTE BIRD SIGHTINGS TO *BIRD OBSERVER*

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, 36 Lewis Avenue, Arlington, MA 02474-3206. 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/sightings/>>.

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>.



SURF SCOTERS BY GEORGE C. WEST

ABBREVIATIONS FOR BIRD SIGHTINGS

Taxonomic order is based on AOU checklist, Seventh edition, 42nd through 49th Supplements, as published in *The Auk* 117: 847-58 (2000); 119:897-906 (2002); 120:923-32 (2003); 121:985-95 (2004); 122:1026-31 (2005); 123:926-936 (2006); 124(3):1109-1115, 2007; 125(3):758-768, 2008 (see <<http://www.aou.org/checklist/north/index.php>>).

Location-#	MAS Breeding Bird Atlas Block	NAC	Nine Acre Corner, Concord
ABC	Allen Bird Club	Newbypt	Newburyport
A.P.	Andrews Point, Rockport	ONWR	Oxbow National Wildlife Refuge
A.Pd	Allens Pond, S. Dartmouth	P.I.	Plum Island
B.	Beach	Pd	Pond
B.I.	Belle Isle, E. Boston	P'town	Provincetown
B.R.	Bass Rocks, Gloucester	Pont.	Pontoosuc Lake, Lanesboro
BBC	Brookline Bird Club	R.P.	Race Point, Provincetown
BMB	Broad Meadow Brook, Worcester	Res.	Reservoir
C.B.	Crane Beach, Ipswich	S.B.	South Beach, Chatham
CGB	Coast Guard Beach, Eastham	S.N.	Sandy Neck, Barnstable
C.P.	Crooked Pond, Boxford	SRV	Sudbury River Valley
Cambr.	Cambridge	SSBC	South Shore Bird Club
CCBC	Cape Cod Bird Club	TASL	Take A Second Look
Corp. B.	Corporation Beach, Dennis	WBWS	Boston Harbor Census
Cumb. Farms	Cumberland Farms, Middleboro	WMWS	Wellfleet Bay WS
DFWS	Drumlin Farm Wildlife Sanctuary	Wompatuck SP	Wachusett Meadow WS
DWMA	Delaney WMA	Worc.	Hingham, Cohasset, Scituate, and Norwell Worcester
DWWS	Stow, Bolton, Harvard Daniel Webster WS	Other Abbreviations	
E.P.	Eastern Point, Gloucester	ad	adult
F.E.	First Encounter Beach, Eastham	b	banded
F.P.	Fresh Pond, Cambridge	br	breeding
F.Pk	Franklin Park, Boston	dk	dark (morph)
G40	Gate 40, Quabbin Res.	f	female
GMNWR	Great Meadows NWR	fl	fledgling
H.	Harbor	imm	immature
H.P.	Halibut Point, Rockport	juv	juvenile
HRWMA	High Ridge WMA, Gardner	lt	light (morph)
I.	Island	m	male
IRWS	Ipswich River WS	max	maximum
L.	Ledge	migr	migrating
MAS	Mass Audubon	n	nesting
M.P.	Millennium Park, W. Roxbury	ph	photographed
M.V.	Martha's Vineyard	pl	plumage
MAS	Mass. Audubon Society	pr	pair
MBWMA	Martin Burns WMA, Newbury	S	summer (1S = 1st summer)
MNWS	Marblehead Neck WS	v.o.	various observers
MSSF	Myles Standish State Forest, Plymouth	W	winter (2W = second winter)
Mt.A.	Mt. Auburn Cemetery, Cambr.	yg	young
		#	additional observers



SAVANNAH SPARROW BY DAVID LARSON

Thirty Years Ago in *Bird Observer* (Volume 7, No. 3)

EDITOR'S PAGE

TEN GALLONS TO THE PARASITIC JAEGER

Are you now calculating how many gallons of gas will be required to get you to a favorite bird or birding site and back? Last April BIRD OBSERVER offered to publish a car-pooling reference list for interested birders. At the time, gas was "only" 74¢-86¢ per gallon and in abundant supply, which might explain the very limited response to our offer. Gasoline is now 86¢-99¢ per gallon (and rising), if you can find an open gas station. Will you be out of gas when the Noddy Tern is discovered on Plum Island? Or will you be sitting in a gasoline line for three hours while the Mississippi Kite is perched in Wellfleet?

You can save gasoline, money, and perhaps see more birds if you car-pool on many of your birding trips. If you regularly bird one of the following areas (in season) and would be interested in car-pooling, please send us your name, address and telephone number on a postcard, noting which of the following areas you like to bird with some regularity: the Outer Cape, Monomoy, Westport-Dartmouth, Cape Ann, Newburyport-Plum Island, the Sudbury Valley, Mt. Wachusett, and Quabbin. We will publish this information in a forthcoming issue if the response warrants. Car-poolers will be clustered by general region of residence, so you can make your own arrangements with someone in your area.

Send your postcards to: Bird Observer, 462 Trapelo Road., Belmont, Massachusetts 02178.

SUMMER AND FALL PELAGIC TRIPS

The Brookline Bird Club is sponsoring the following pelagic birding trips this year.

On August 26, a boat will depart from Lynn for the fishing grounds of Provincetown. For details, contact William Drummond, 375-0292 (Haverhill) or Herman Weissberg, 526-4020 (Manchester). Reservations can be made by sending a non-refundable prepayment of \$12.50 to Mr. Herman Weissberg, P.O. Box 23, Manchester, Massachusetts 01944.

On September 30, a boat will leave Harwichport for Pollock Rip. For a reservation, send a non-refundable deposit of \$8 (by check) to Mr. Herman D'Entremont, P.O. Box 207, Newton Center, Massachusetts 02159. (For further information, call Mr. D'Entremont at 734-1289.)

The final trip of the season will leave from Plymouth on October 26. Send a non-refundable deposit of \$8 to Mr. D'Entremont at the address given above.

ABOUT THE COVER

The cover of this issue of *Bird Observer* depicts a Red-eyed Vireo (*Vireo olivaceus*) carrying nesting material and being followed by a Brown-headed Cowbird (*Molothrus ater*).

Part 1: The Followed: Red-eyed Vireo

Although this vireo species is one of the most frequent hosts of cowbird brood parasitism, it remains one of our most common and widespread species. This relatively large, large-billed vireo has a distinctive head pattern with a blue-gray cap edged in black which, together with a black line on either side of the eye, accentuates a light eye-stripe. The upper part of the body is olive green with white or light gray below, tinged with yellow on the flanks and lower belly. The Red-eyed Vireo is polytypic, with two groups of subspecies. In North America most taxonomists recognize two subspecies in the first group, with *V. o. olivaceus* found in all but the far northwestern United States. In the second group, *V.o. chivi*, up to nine subspecies are recognized in the extensive breeding populations, which extend across South America as far south as Argentina and Bolivia. Our North American birds are thought to have originated in the tropics and form a superspecies with the Black-whiskered, Yellow-green, and Yucatán vireos of that region.

Red-eyed Vireos breed in a broad swath from east of southern Alaska across Canada south of Hudson Bay to Newfoundland and through the eastern half of the United States and northern parts of the West to Washington. Scattered reports also come from the southwestern part of the U.S. These vireos are long-distance and nocturnal migrants, wintering in northern South America, primarily in the Amazon Basin. In Massachusetts the species is considered a common breeder and migrant, arriving in mid-May and leaving in September or early October.

Red-eyed Vireos are monogamous, generally producing a single brood. They are most abundant in eastern deciduous forests and less common breeders in mixed forest. The male's song is a seemingly endless and repetitive series of songs consisting of short phrases and slurs followed by pauses. They can sing up to eighty-five songs per minute. These birds give a *myaah* call in aggressive encounters or in the presence of predators. To advertise his territory, a male typically sings from a half hour before dawn to late afternoon. He defends his territory by chasing and supplanting attacks, and fights may occur with grappling and bill jabbing. Aggressive displays include a posture with crown feathers erected, head held forward, tail lowered and fanned, and bill opened. When approaching his mate, the male may display by head swaying with tail fanned and depressed.

Females select the nest site, usually a branch fork, from which they suspend the nest, an open, deep cup of bark, grass, and other plant fibers held together with spiderweb. Other elements may include wasp-nest paper, pine needles, and spider egg cases. The usual clutch is three to five white eggs spotted brown. Incubation is by the female alone for the nearly two weeks until hatching. The young are altricial (i.e., helpless), with eyes closed and sparse down. Brooding is done by the female alone for

the ten to twelve days until fledging; however, both parents feed the young. The parents may stay together as a family group, feeding the young regularly for several weeks followed by less feeding for another two weeks.

Red-eyed Vireos forage primarily by hopping along branches and gleaning leaves, branches, and twigs, then flying to another branch and repeating the procedure. They also occasionally hawk insects. They are primarily insectivorous on the breeding grounds, where they take caterpillars and a broad range of other invertebrates. During migration and on the wintering grounds they are largely frugivorous.

Although Red-eyed Vireos are subject to the usual suite of nest predators, including crows, jays, grackles, and red squirrels, their biggest problem is brood parasitism from Brown-headed Cowbirds, particularly along woodland and forest edges (forest interior nests often go un-parasitized). Studies have reported that twenty-four to seventy-two percent of vireo nests may get parasitized. Red-eyed Vireos may attack cowbirds near their nest, and sometimes they may abandon parasitized nests. However, many tolerate cowbird eggs and raise the cowbird young. Studies show that fifty to eighty-seven percent of parasitized nests successfully fledge cowbird chicks. Despite this, Breeding Bird Survey (BBS) data suggest that, in many areas, Red-eyed Vireo populations are increasing. The future looks good, therefore, for this abundant and widespread species.

Part 2: The Follower: Brown-headed Cowbird

The Brown-headed Cowbird (*Molothrus ater*) is unpopular with many people. The species' habit of avoiding normal parental duties by laying its eggs in other species' nests tends to elicit anthropomorphic responses: cowbirds are "lazy," "mean," "irresponsible," or "nasty." Even the genus name, *Molothrus*, comes from the Greek *molobros*, meaning parasite or tramp. Their brood parasitism, however, is a highly successful reproductive strategy — the species is both abundant and widespread geographically. Evolution is amoral: what works, works.

Adult males are distinctive: black body with a glossy-green sheen, dark brown head, and a conical bill. Females are light brown with whitish throat and a hint of striping below. Juveniles are also light brown, but distinctly streaked below with scalloping on their back feathers. The species is polytypic, with three subspecies generally recognized, the eastern subspecies being *M. a. ater*.

The breeding range of Brown-headed Cowbirds is British Columbia and southeastern Alaska across Canada just north of the Great Lakes to Newfoundland; the entire continental United States except for south Florida; and south to central Mexico — a truly vast area. Northern and western populations, except along the Pacific Coast, are migratory, although most are short-range migrants. In winter they range as far south as southern Florida and southern Mexico. They are diurnal migrants, often joining mixed species blackbird flocks and roosts. In Massachusetts cowbirds are considered common and widespread breeders and abundant migrants,

arriving in March and April. Migrant flocks begin to build in September and peak in October. Many cowbirds overwinter in Massachusetts, especially in the Connecticut River Valley.

The breeding system of Brown-headed Cowbirds is very flexible, with different studies suggesting monogamous, polygynous, polyandrous, or promiscuous relationships. The pair bond may be very brief (promiscuous) or seasonal. Cowbirds prefer open habitats, woodlands, fields, pastures, and especially edges. Nationally, forest fragmentation has radically increased the habitat preferred by cowbirds and has thus made dozens of songbird species vulnerable to cowbird brood parasitism.

Cowbird song consists of gurgling notes followed by high-frequency whistles. They also have a flight whistle described as *tseeeee-teea* or *whssss*. Song functions both in courtship and in agonistic interactions. Females may give chattering calls in response to male song, and males often counter-sing with competing males. Males sing with heads hunched forward, wings drooping, feathers elevated, and tail spread, a so-called Bow Display, and groups of males may display together. Cowbirds also have a Bill-Tilt Display, given by both sexes to their own sex, with head back and bill pointed upward.

Brown-headed Cowbirds do not construct nests and lay their eggs only in the nests of other birds. More than 220 species have been reported as parasitized, and at least 144 have raised cowbird chicks to fledging. The parasitized species vary in size from kinglets to meadowlarks. Female cowbirds find nests to parasitize by perching or walking on the ground and watching, or flapping noisily about, presumably to flush nesting birds. Birds carrying nesting material are a dead giveaway, as with the Red-eyed Vireo on this issue's cover. Female cowbirds may lay forty eggs per season, usually one per nest. Their eggs are laid during the host's nest building, egg laying, or incubation. The parasitized birds, however, are not without defenses. Some species (e.g., Gray Catbird) eject cowbird eggs from their nests, while others build nest platforms over the eggs and lay new eggs (e.g., Yellow Warbler). The Red-eyed Vireo is the third most parasitized bird species, behind Yellow Warbler and Song Sparrow, all common, widespread species. A more profound problem occurs when a species has low population numbers and a high frequency of parasitism; for example the Kirtland's Warbler, which was subject to such high rates of cowbird parasitism that extinction was probable until local cowbird control measures were instituted.

The incubation period is from ten to twelve days, and the cowbird chicks are altricial, hatched with little down, eyes closed, and helpless. They fledge in eight to thirteen days, depending on the host parents, who are responsible for feeding chicks that are often larger than the host.

Brown-headed Cowbirds are mostly ground feeders and often associate with horses and cattle, which they use as "beaters" to stir up insects. Up to three-quarters of their food is weed and grass seed, but the remaining quarter consists of invertebrates, especially beetles and grasshoppers. Females eat mollusk shells, a source of calcium for their prodigious egg-production.

Cowbirds have benefited enormously from European settlement. Prior to this, their distribution was restricted to the grasslands of the North American interior (it appears that the proliferation of this “nasty” bird has been our own fault). Population estimates are from 20 to 40 million birds, and Breeding Bird Survey data suggest increases in many areas, although the New England population has decreased due to reforestation. Like it or not, the Brown-headed Cowbird is a highly successful species with a secure future. 

William E. Davis, Jr.

About the Cover Artist: Charley Harper

Charley Harper (1922-2007) illustrated our world for six decades. Best known for delightfully graphic and often humorous images of wildlife, his hand is unmistakable. In a style he called “minimal realism,” Charley created stylized drawings and paintings that captured the essence of his subjects using the fewest possible elements. He explained, “I don’t count the feathers, I just count the wings.”

Early in his career in 1954, Charley told the art director of *Ford Times* that he didn’t know what a feeding station was. The man gently informed him that it was a device for feeding birds outdoors and promised to mail him one. The rest is bird illustration history.

Later, Charley was asked if he was constantly doing fieldwork. “No,” he replied, “I just refer to the bird guides of Roger Tory Peterson and Don Eckelberry. The beauty of it is that you stay warm and the birds don’t move.”

Charley never separated realism and representational art. “You have to master it before you can alter and manipulate it,” he told students. Because of his meticulous research, every creature he drew or painted could be readily recognized.

Most recently, in 2005, Charley designed and painted a poster for the Cornell Lab of Ornithology titled *We Think the World of Birds*. One of his last works was the *Migration Mainline* poster for Cape May Bird Observatory (2006), which required an understudy artist to crisp up the edges of painted shapes due to the arthritis in Charley’s fingers.

A Cincinnati-based artist who studied at the Art Academy of Cincinnati, Charley created thousands of bold, highly stylized, stunningly colorful images in his prolific sixty-year career as a designer, painter and illustrator. He is well known for his illustrative work in the *Ford Times* magazine (1948-1985), *Betty Crocker’s Dinner for Two Cook Book* (1958), *The Giant Golden Book of Biology* (1961), and *The Animal Kingdom* (1968). He produced two books of prints and paintings: *Charley Harper’s Birds & Words* (1974, reprinted 2008) and *Beguiled by the Wild: The Art of Charley Harper* (1994). A recent compendium of his work, *Charley Harper: An Illustrated Life* by Todd Oldham, featuring hundreds of Harper illustrations collected from magazines, books, promotions, paintings, silk-screen prints, huge public tile murals, and posters, was published in 2007.

Charley’s unique, simplified, almost geometric views of the natural world have delighted many and continue to speak to a growing audience. Today, a cult-like

following continues to grow as Charley's works appeal to a new generation of art collectors, fashion designers, and nature enthusiasts who find his images are perfect with decors from traditional to the most contemporary.

Charley is survived by his wife Edie and son Brett, who with his staff continue to run the Charley Harper Art Studio at 699 Reynard Drive, Cincinnati, Ohio 45231. Their website is <<http://www.CharleyHarperArtStudio.com>>, or they can be contacted by email at CharleyHarperArtStudio@gmail.com. 

From the Birding Community E-Bulletin

NWRA PHOTO CONTEST

The National Wildlife Refuge Association (NWRA) has announced its 4th annual digital photo contest, which will once again showcase America's National Wildlife Refuges. Entries can be submitted until July 15, 2009, with results to be announced in October 2009 during National Refuge Week. Images submitted for the photo contest may be of birds, mammals, insects, fish, other animals, plants, people, or scenery; however, all must be on Refuge System lands.

For 2009 Refuge Photo Contest details, requirements, procedures, and prizes see: <<http://www.refugeassociation.org/contest/ContestHome.html>>.

BRAZEN SELF-PROMOTION

As the Birding Community E-bulletin enters its sixth year, we are sharing a few comments from a selection of our readers. We will perhaps include a couple of comments each month this year. We are placing these comments at the very end of the E-bulletin so you can simply stop reading here if you so wish!

"It's always a welcome sight to see the Birding Community E-bulletin in my email queue. I subscribe to several bird-related listservs but this one document not only pulls together the most current conservation news on issues I work on but it also covers other issues that are of great interest. The information is always detailed, substantive, and easy to read. I don't hesitate to immediately forward to Defenders' internal bird listserv since I know my colleagues will find it interesting and helpful as well."

- Caroline Kennedy, Senior Director of Field Conservation, Defenders of Wildlife

"THE most valuable and eagerly-awaited communication in birding, the Birding Community E-Bulletin always provides up-to-date, novel, insightful, comprehensive and indispensable news on birds and their protection."

- James A. Kushlan, Past President, AOU (2004-2006)

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

AT A GLANCE

April 2009



WAYNE R. PETERSEN

Hmmm . . . what have we here? A flight of black-and-white birds with black heads; could they be Laughing Gulls stroking their way back to the colony at Monomoy National Wildlife Refuge? Well, perhaps. But what about those prominent feet obviously trailing behind on several of the birds? Not a good fit for any species of gull. Similarly, waterfowl seldom display their feet beyond their tail in flight unless they are loons or long-legged and gangly species such as whistling-ducks. Also, the pictured birds' wings are much too narrow to suggest those of a duck.

So what are we left to work with here? What are the identification possibilities when thinking about black-and-white, dark-headed, and webbed-footed birds flying relatively high overhead? Fortunately, there are very few. Since we are able to eliminate all gull species on the basis of overall shape and the prominent extension of webbed feet beyond the tail, we are left only with a loon or some species of alcid as viable choices. A Common Loon or a Red-throated Loon in breeding plumage would display a dark head in contrast with snowy white underparts. However, in flight the feet of loons would appear much larger in proportion to their body, and they would exhibit relatively long necks and much larger and longer bills than an alcid. Loons, therefore, can be eliminated at once as an identification possibility.

With these points in mind, the mystery birds have to be alcids. However, how often does a birder see a flock of alcids flying over their head? This is not the view one ordinarily sees of these penguin-like seabirds. A more typical view is a distant glimpse of a black-and-white football-shaped bird tipping and rocking from side to

side in rapid flight far out over an often stormy ocean. Furthermore, a review of field guide illustrations reminds us that most alcids have white throats in winter; the pictured birds are clearly black on the throat. Taking this information into consideration, we are left with only Common Murre, Thick-billed Murre, and Razorbill as identification possibilities. Dovekie can be eliminated by its tiny size, stubby bill, and lack of obvious foot extension in flight. Atlantic Puffin is not an option either, since puffins have stubbier, more rounded wings, a nearly neck-less appearance, and possess either a white or dusky-gray face at all seasons of the year.

A careful look at the birds in the photograph suggests that they have pointed bills rather than large, laterally compressed bills. Likewise, since the alcids in the picture have conspicuous feet, it is apparent that they also have very short tails, which make their feet even more obvious. These two characteristics, along with their overall somewhat streamlined appearance—not the bull-necked and longer-tailed appearance of a Razorbill—suggest that the birds are murrelets, not Razorbills. At this point the identification becomes more challenging. Distinguishing between murrelets in flight even when seen in profile in non-breeding plumage is one thing, but looking at them flying directly overhead in breeding plumage (obvious here because of the birds' completely black heads and throats) is a different matter entirely. The very compact appearance of the pictured birds, along with their short necks, relatively short pointed bills, and the absence of obvious streaking along the flanks all point to Thick-billed Murre (*Uria lomvia*). Even so, a view such as this makes a flash identification especially dicey. Unfortunately, the intrusion of acutely pointed white feathering into the black upper chest feathers (rounded in Common Murre), visible in this species when it is sitting on a cliff, is not a useful indicator for birds in flight.

While not obviously discernable in a black-and-white photograph, Common Murrelets typically appear more brownish above and less strikingly black-and-white than Thick-billed Murrelets. In terms of geographical location, Thick-billed Murrelets in this plumage are more likely to be present in greater numbers in high Arctic locations than the somewhat more southerly distributed Common Murre.

Thick-billed Murrelets are uncommon winter visitors in Massachusetts waters; they appear most often in mid to late winter in such locations as Cape Ann or outer Cape Cod. Occasionally, large numbers appear concurrent with severe nor'easters, and significant winter irruptions of this species may occur as far south as Massachusetts. In such cases, dozens or hundreds sometimes appear at various locations along the coast. The author photographed these Thick-billed Murrelets returning to a breeding colony at Svalbard (arctic Norway) in June 2008. 

Wayne R. Petersen

AT A GLANCE



WAYNE R. PETERSEN

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

IF YOU CARE, LEAVE THEM THERE!

LATE SPRING TO SUMMER IS BABY BIRD TIME.

REMEMBER:

- Only people who are licensed rehabilitators, or veterinarians who occasionally treat wildlife on an emergency basis, may legally care for wildlife.
- Many backyard birds leave their nests days before they can fly. The parent birds will continue to care for their young, even away from the nest, so leave the young birds alone.
- If you find a bird and have already handled it, place the bird back in the nest or in a tree or shrub close by. Birds lack a sense of smell and will not reject a youngster placed back in the nest.
- To protect the young birds, keep cats and dogs away or move the chick to the nearest shrub or natural cover. Then leave the area and allow the parent birds to respond to the food-begging calls of their young.

FOR MORE INFORMATION, SEE:

<http://www.mass.gov/dfwele/dfw/wildlife/rehab/wildlife_rehab.htm> and
<<http://www.massaudubon.org/printwildlife.php?id=42>>

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THE MARCH OF ROSS'S GOOSE	<i>Paul Roberts</i>	137
HAMPSHIRE BIRD CLUB CELEBRATES TWENTY-FIVE YEARS	<i>Trudy Tynan</i>	147
INNOVATION OR REVIVAL: BALD EAGLES NESTING ON THE MERRIMACK IN HISTORICAL CONTEXT WITH AN UPDATE	<i>Ganson Purcell, Jr. and Sue McGrath</i>	152
CICADA SUMMER	<i>Mary Keleher</i>	159
CORNUCOPIA: BIRDS AND PERIODICAL CICADAS	<i>Kimberly G. Smith</i>	161
FIELD NOTES		
Confirming Ruby-throated Hummingbird	<i>Mark Taylor</i>	167
Breeding Bird Atlas Note: First Confirmation of Golden-crowned Kinglet in Middlesex County	<i>Sam Miller and Carla Dengler</i>	167
Unusual Great Blue Heron Feeding Behavior	<i>Richard Frechette</i>	168
Tree Swallows Feeding on Krill	<i>Maurice Montgomery</i>	169
ABOUT BOOKS		
A Time of Green Urgency	<i>Mark Lynch</i>	171
BIRD SIGHTINGS		
January/February 2009		176
ABOUT THE COVER:		
Part 1: The Follower: Red-eyed Vireo		188
Part 2: The Follower: Brown-headed Cowbird	<i>William E. Davis, Jr.</i>	189
ABOUT THE COVER ARTIST: Charley Harper		191
AT A GLANCE	<i>Wayne R. Petersen</i>	193