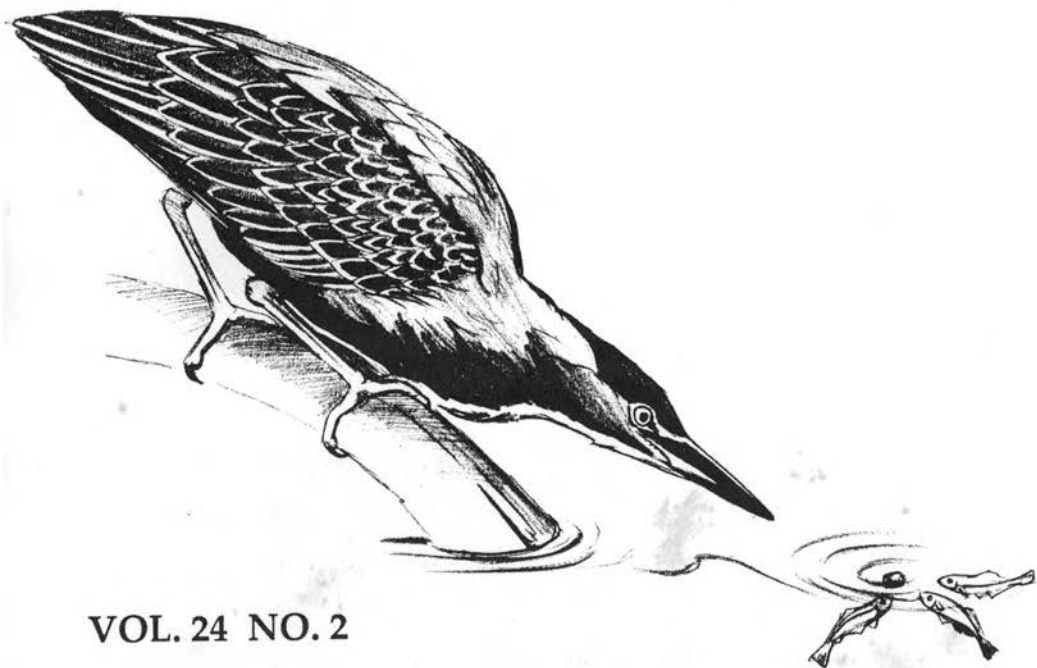
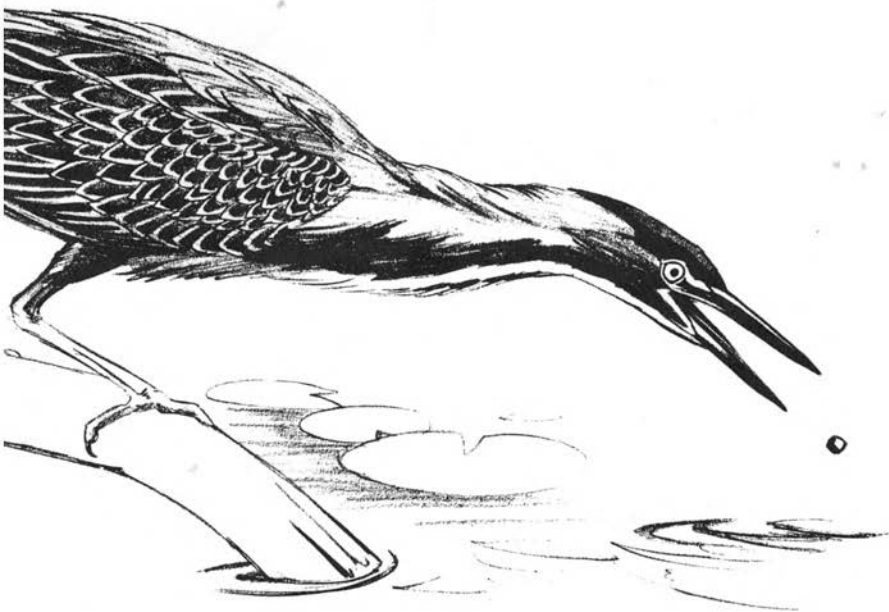


# BIRD OBSERVER



VOL. 24 NO. 2

APRIL 1996



# BIRD OBSERVER

• a bimonthly journal •

To enhance understanding, observation,  
and enjoyment of birds.

VOL. 24, NO. 2 APRIL 1996

## Editor in Chief

Martha Steele

## Associate Editor

Janet L. Heywood

## Department Heads

### Cover Art

William E. Davis, Jr.

### Where to Go Birding

Jim Berry

### Feature Articles and

### Field Notes

John C. Kricher

### Book Reviews

Alden G. Clayton

### Bird Sightings

Robert H. Stymeist

### At a Glance

Wayne R. Petersen

## Board of Directors

Dorothy R. Arvidson

Alden G. Clayton

Herman H. D'Entremont

H. Christian Floyd

Richard A. Forster

Janet L. Heywood

Harriet E. Hoffman

John C. Kricher

Matthew L. Pelikan

Wayne R. Petersen

Marjorie W. Rines

John A. Shetterly

Martha Steele

Robert H. Stymeist

## Corporate Officers

### President

William E. Davis, Jr.

### Treasurer & Clerk

Glenn d'Entremont

### Assistant Clerk

John A. Shetterly

## Subscription Manager

Matthew L. Pelikan

## Recording Secretary

Steven M. Arena

## Advertisements

Robert H. Stymeist

## Associate Staff

Theodore Atkinson

Simon Perkins

*BIRD OBSERVER* (USPS 369-850) is published bimonthly, COPYRIGHT © 1996 by Bird Observer of Eastern Massachusetts, Inc., 462 Trapelo Road, Belmont, MA 02178, a nonprofit, tax-exempt corporation under section 501 (c)(3) of the Internal Revenue Code. Gifts to Bird Observer will be greatly appreciated and are tax deductible.

POSTMASTER: Send address changes to *BIRD OBSERVER*, 462 Trapelo Road, Belmont, MA 02178. SECOND CLASS POSTAGE PAID AT BOSTON, MA.

SUBSCRIPTIONS: \$21 for 6 issues, \$40 for two years in the U. S. Add \$2.50 per year for Canada and foreign. Single copies \$5.00. An Index to Volumes 1-11 is \$3. Back issues: inquire as to price and availability.

CHANGES OF ADDRESS and subscription inquiries should be sent to Bird Observer Subscriptions, P. O. Box 236, Arlington, MA 02174.

ADVERTISING: full page, \$100; half page, \$55; quarter page, \$35. Send camera-ready copy to Bird Observer Advertising, P. O. Box 236, Arlington, MA 02174.

BIRD SIGHTINGS: Send reports of any given month in writing by the eighth of the next month to

Bird Sightings, Robert H. Stymeist, 94 Grove Street, Watertown, MA 02172.

MATERIAL FOR PUBLICATION: *BIRD OBSERVER* welcomes for publication contributions of original articles, photographs, art work, field notes, and field studies. Please send these or other suggestions to the editor in chief:

Martha J. Steele, P. O. Box 236, Arlington, MA 02174.

Manuscripts should be typed double-spaced on one side only of 8.5-by-11-inch paper. Manuscripts longer than 15 typed pages (about 4500 words) may be shortened when edited. Use the current A.O.U. Check-List for bird names and sequence. Type tables on separate pages. Black-and-white photographs and graphics are best. Include author's or artist's name, address, and telephone number and information from which a brief biography can be prepared. Indicate whether an IBM-compatible 5.25-inch diskette containing the article in ASCII or Microsoft Word can be supplied. Scientific and technical articles are peer reviewed. Views expressed in *BIRD OBSERVER* are those of the authors and do not necessarily reflect an official position of Bird Observer of Eastern Massachusetts, Inc.

ISSN: 0893-4630

# CONTENTS

---

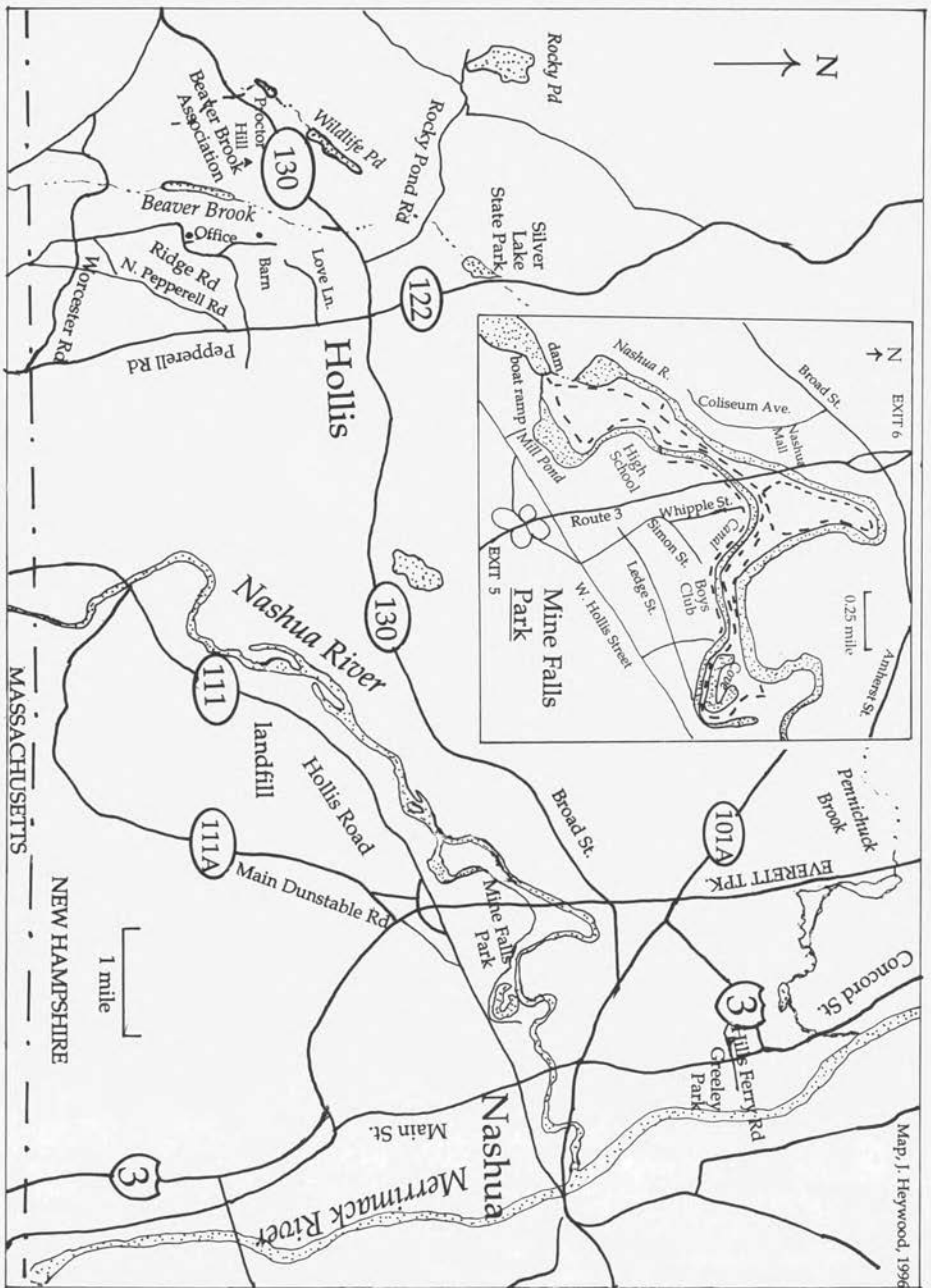
BIRDING THE NASHUA, NEW HAMPSHIRE, AREA .....	Ralph Andrews	72
PARTNERS IN FLIGHT: PROACTIVE CONSERVATION FOR NEOTROPICAL MIGRATORY BIRDS AND THEIR HABITATS .....	Peter W. Stangel	79
MASSACHUSETTS PARTNERS IN FLIGHT WORKING GROUP .....	Bradford G. Blodget	86
NOTES ON 1995 NESTING ATTEMPT OF GREEN HERON PAIR AT MOUNT AUBURN CEMETERY . . .	William E. Davis, Jr.	90
SUMMARY OF 1995 NORTH AMERICAN MIGRATION COUNT IN NEW ENGLAND . . . . .	Michael Resch	95
BIRD SIGHTINGS: NOV./DEC. 1995 SUMMARY . . . . .		102
CHRISTMAS BIRD COUNTS, 12/16/95 - 12/31/95 . . . . .	Compiled by Marjorie W. Rines and Robert H. Stymeist	116
BOOK REVIEW: Monographs About Birds: A Bewildering Assortment .....	William E. Davis, Jr.	127
ABOUT THE COVER: Green Heron . . . . .	W. E. Davis, Jr.	131
ABOUT THE COVER ARTIST: Julie Zickefoose . . . . .	M. Steele	133
AT A GLANCE . . . . .	Wayne R. Petersen	134
Cover Illustration: Green Heron by Julie Zickefoose		

---

## INTERESTED IN JOINING *BIRD OBSERVER'S* STAFF?

*Bird Observer*, staffed entirely by volunteers, is looking for anyone who may be interested in joining the staff and helping with various aspects of the organization and publication. Assistance with editorial work, subscriptions, production, and other organizational tasks would be appreciated. If interested, please contact:

Martha Steele  
36 Lewis Avenue  
Arlington, MA 02174.



## BIRDING THE NASHUA, NEW HAMPSHIRE, AREA

by Ralph Andrews

Nashua, New Hampshire, is not known as a hot spot for finding birds. In fact, for most Massachusetts birders it is more acclaimed as one of those Merrimack River mill towns that impede travel to the really exciting places in central and northern New Hampshire. However, for those of us who live along the state line, there are some interesting places to find birds at all seasons. These places are only an hour from Boston and provide some interesting bits of history as well as new landscapes to explore—all before the first tollgate.

Once a part of Dunstable, in the Massachusetts Bay Colony, Nashua is located where the Nashua River, flowing northeast from central Massachusetts, joins the Merrimack River on its way south from the White Mountains. Much of its human history, as well as its current birding interest, is focused along those rivers. Various tribes of Penacook Indians traveled along the rivers and settled where the fishing and hunting were good. With gradual expansion of European settlements, the rich floodplains were cleared for farming. The rivers became early transportation corridors, and the smaller tributaries supplied power for businesses such as sawmills and gristmills. Eventually, the Industrial Revolution brought dams, industries, railroads, and pollution. Finally, highways became the favored route of transportation and reduced the riverfront activity. Vegetation returned to vacated lands—and so did the birds. Great strides in cleaning up the polluted rivers have again made them attractive for people as well as for birds.

Although the Nashua area does not offer the rich variety of birdlife found on the coast or some of the specialties found to the north, its habitat diversity permits respectable lists of birds at all seasons. Christmas Bird Counts (CBC) have been conducted for thirty years, and species totals have been in the low sixties in recent years. Some open water on the rivers allows a surprising variety of waterbirds to linger, and the resident flocks of urban Mallards and Canada Geese often include species such as Hooded Merganser, Wood Duck, Northern Pintail, Gadwall, and Green-winged Teal. Spring migration provides the best birding, reaching a peak about the third week of May, when a daily list of 100 species is quite attainable. Breeding birds include several northern species that are scarce or absent south of the border.

As in most urban areas, good birding spots are often small, and access may be difficult. Two excellent places are Greeley Park and Mine Falls Park. Greeley Park was a family farm donated to the city of Nashua in 1881 for recreational use. It lies on both sides of Concord Street, the northward extension of Main Street. Typical of parks, it has expansive lawns, ball fields, woods dominated by large white pines, and few interesting birds. However, about 0.3 mile north of the park, a right turn onto Hills Ferry Road leads to the Boston and Maine

railroad tracks and a portion of the park bordering the Merrimack River. Just across the tracks, a dirt road leads through a stand of large pines to a boat ramp—one of very few along the river. This dirt road is not maintained in winter, but in other seasons a canoe trip on the river can provide delightfully peaceful birding.

A foot trail leads along the crest of the steep riverbank, where one can look down into the large trees arching out over the river. Spotted Sandpipers and Green Herons frequent the shores in summer, and Bald Eagles cruise the river in winter. Pine Warblers and Red-breasted Nuthatches are breeding species in the pine forest. The path now ends at a fenced area enclosing a water-treatment plant and several wells. This is the site of a former creosoting yard. Unfortunately, much of the creosote soaked into the ground and eventually to the river. For several years it has been a Superfund (hazardous waste) site where groundwater is pumped and cleaned. Meanwhile, the once-open field between river and railroad has been growing back to forbs, shrubs, and thickets of gray birch that attract many birds, including Vesper Sparrow, Field Sparrow, Indigo Bunting, Prairie Warbler, and Brown Thrasher. Walk back along the fence to the railroad tracks, and follow them north for about one mile to a scenic wooded site where Pennichuck Brook enters the Merrimack River. Trains are infrequent along this line.

Mine Falls Park is located along the Nashua River close to the heart of the city. The 325-acre area was acquired in 1969 and has become popular for many kinds of outdoor recreation. The name derives from early lead mines located near the falls at the west end of the park. In the early 1800s a dam above the falls diverted water to a three-mile long canal to provide power for the mill yard via a thirty-six-foot drop. Most of the park lies between the canal and the river and is served by a seven-mile network of trails, which pass under busy Route 3. Despite being bisected by the highway, with a small hydroelectric plant at one end and a historic mill yard at the other, and bordered by a high school, a mall, and ball fields, the park has a diversity of habitats and often provides excellent birding. Because of competing uses, birding is best early in the day.

There are several access points with adequate parking space (except during ball games). The main entrance is at the end of Whipple Street. Take Exit 5E-A from Route 3 northbound, go east one block on West Hollis Street, turn north (left) onto Simon Street, then left again on Whipple Street (no street sign). Coming southbound on Route 3 is trickier because the intersection is complicated. You may have to maneuver so as to be westbound on Hollis Street.

Once you have parked at the main entrance to the park at the end of Whipple Street, cross the canal on the footbridge, and turn right onto the canal levee. This provides good viewing of the shrubs along the canal and the trees along the slope toward the river. Eventually, there is an excellent view of the Cove, an old oxbow lake bordered by marshes, which are inhabited by beaver,

muskrat, otter, and mink. It is a great place to see waterfowl, including Ring-necked Ducks in April, when the ice melts. Ospreys and herons are regular visitors. The trail follows a narrow border between the wetlands and the mill buildings to the river. Northern Rough-winged Swallows nest in cracks of the old buildings, and Yellow Warblers and Warbling Vireos nest in the riverside trees. Follow the river, including the loop around the soccer fields, back to your car.

Another good access point is Lincoln Park, at the end of Coliseum Avenue, which is just 0.3 mile west of Exit 6 of Route 3, a left turn off Broad Street. Park, cross the river on the footbridge, and proceed to the canal through towering pines where Pine Warblers and Black-throated Green Warblers nest. From here a loop trail to the left enables you to cover the area downstream to Whipple Street, while a loop to the right takes you upstream as far as the dam, where the canal begins with a larger body of water known as the Mill Pond, which has a boat ramp and commuter parking lot.

Another boat ramp behind the Public Works garage off Route 111 (Hollis Street) 0.2 mile west of Route 3 and immediately above the dam, is another point of access and a good place to launch a canoe. Above the falls and dam, the river is wide and bordered by skeleton forests of dead trees. These were killed when the dam was elevated about a decade ago. They are extensively used by flickers and other woodpeckers as well as by Tree Swallows and other cavity-nesters. They also provide exposed perches for a variety of hawks, herons, and flycatchers. You can paddle upstream among the trees and stumps to Runnell's Bridge on Route 111, where rapids maintain open water for ducks in winter. Absent a canoe, you can drive west on Route 111 about 3.5 miles southwest from Exit 5 to this bridge. Cross the bridge, and then turn right onto Depot Road and almost immediately right again to a small parking area overlooking the rapids.

Also just off Route 111, about 1.8 miles southwest of Exit 5 on Route 3, is the Nashua landfill. Look for the sign on the left as you drive west on Route 111. In winter a few Iceland and even Glaucous gulls can be found among the large flocks of Herring and Great Black-backed gulls. Red-tailed Hawks are regular, and other raptors, including Bald Eagle and Snowy Owl have been seen. Turkey Vultures can be found most of the year, and a Black Vulture was present for the 1994 CBC. Flocks of Horned Larks and Snow Buntings often use the cleared ground in periods of deep snowfall. Although birding is discouraged in the work area, it is possible to drive to the recycling bins and scan the birds with binoculars or scope. However, the landfill is closed from Saturday noon through Sunday.

A few miles west of Nashua on Route 130 is the rural town of Hollis. Although now changing to suburban housing, much of it remains as farmland and woods. Two special areas for seeking birds are Beaver Brook Association

and Silver Lake State Park. Beaver Brook is a private conservation organization with about 1700 acres of lands in southwestern Hollis and adjacent Brookline. Established in 1964, its educational activities emphasize nature study and demonstration of forestry and wildlife management practices. Nearly thirty miles of trails and forest roads access a variety of habitats, including headwater streams with beaver ponds, vernal wetlands, rocky outcrops and woods, and laurel-covered hillsides. Birding is good at all seasons, but best during May. Nesting box programs attract about thirty pairs of Wood Ducks and Hooded Mergansers, as well as many pairs of Eastern Bluebirds.

Several access points have trailhead parking. Some of the favored birding trails can be reached by Ridge Road. Go west on Route 130 for 5.5 miles to Route 122. Take a left on Route 122, and go about 0.9 mile south to Ridge Road. About one-half mile down Ridge Road, turn right and follow the signs about 0.5 mile down a dirt road to the Brown Lane Barn, which is surrounded by a variety of habitats and is therefore a great place to compile a list of migrants. It is a good place to watch American Woodcock perform on April evenings, and Ruffed Grouse and Barred Owls are often heard. Broad-winged Hawks, Rose-breasted Grosbeaks, Wood Thrushes, and American Redstarts are among the summer residents. A short walk leads down to Beaver Brook, where Swamp Sparrows, Alder Flycatchers, and Blue-gray Gnatcatchers are found.

Returning to Ridge Road, a half-mile down Ridge Road is Maple Hill Farm ("Office" on the map), which serves as headquarters for the Beaver Brook Association and the site of attractively maintained gardens. Birds that have nested nearby include Red-bellied Woodpeckers, Yellow-throated Vireos, Blue-winged Warblers, and Indigo Buntings. Winter Wrens and Louisiana Waterthrushes are regularly heard along the road leading down to Beaver Brook.

Continue south on Ridge Road past fields, where meadowlarks and Bobolinks still breed, to Worcester Road (0.7 mile), and follow it around an extensive beaver-created swamp to the junction with West Hollis Road (1.3 miles) at the Nissitissit River, a delightful pristine stream in a largely protected greenway. Park here, and walk along an old railroad bed that follows the river from its source at Potanipo Lake to its junction with the Nashua River in Pepperell. The railroad functioned primarily to bring ice to Boston prior to refrigeration early in this century. A short walk along the rail trail leads between the beaver pond and the river. The pond is an excellent place to see Wood Ducks and Hooded Mergansers, and Ring-necked Ducks have lingered through May. Pied-billed Grebes and American Bitterns nest in the bordering marshes but are more likely to be heard than seen. The trail continues into woods dominated by large white pines. Although birds are not abundant, Pileated Woodpeckers, Hermit Thrushes, Yellow-rumped Warblers, and Pine Warblers can be found during nesting season.

Other good access points to Beaver Brook lands are along Route 130,



locally known as Proctor Hill Road. About 0.7 miles west of the Route 122 junction, on the south side of the highway, just before the Diamond Casting Company, is a small drive-in parking area. Trails lead along the brook and are popular for winter skiing. The Northern Saw-whet Owl has been found there, and it is a good area for Scarlet Tanagers, Black-throated Green Warblers, and Least Flycatchers in summer.

Nearly a mile farther west, there is a parking area along the north side of the highway. From here, a trail leads to the Wildlife Pond, a managed impoundment where waterbirds can be found. Beyond the pond, trails lead through some rugged terrain, where mountain laurel makes impenetrable thickets on rocky outcrops. Northern Ravens, Turkey Vultures, and Red-shouldered Hawks have been found there and summer warblers include both waterthrushes and Black-throated Blue, Canada, and Blackburnian warblers. A few Great Blue Herons nest on one of the beaver ponds-

Another Hollis area with woodland trails and some good birding potential is Silver Lake State Park, on Route 122 about 1.2 miles north of the Route 130 junction. The lake has a sandy beach and is a popular bathing and picnicking place in summer but is generally poor for birding. However, from the southeast corner of the parking lot, across the highway from the lake, a footpath connects to roads that traverse the adjacent Town Forest. Although the little-used area supports a diversity of woodland birds, it is even more distinguished for some of its interesting postglacial landscapes. These include Dunklee Pond and neighboring kettle ponds, a superb esker, and a bog with small black spruce trees. White-throated Sparrows and Dark-eyed Juncos have been seen here in summer.

An alternate access point to Town Forest can be reached by driving 0.7 mile north of Silver Lake State Park on Route 122, bearing right on South Merrimack Road (no street sign) for another half-mile to the intersection of Farley Road, and immediately parking on the right at the entrance to a gated woods road that is a short walk to the east end of Dunklee Pond.

**RALPH ANDREWS**, who lives in Nashua, has been an active birder since his youth in Ithaca, New York. He retired from a forty-year career as a wildlife biologist for the U.S. Fish and Wildlife Service in 1992. The last seventeen years were with the regional office in Boston. He has been active with the Audubon Society of New Hampshire, for which he now serves as a trustee. He has also been a long-time coordinator of birding projects, such as the local CBC and the New Hampshire Breeding Bird Atlas in the Nashua area. He is the current president of the Beaver Brook Association.

# Bird Watcher's General Store

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

Come see this exceptional birdfeeder in action.



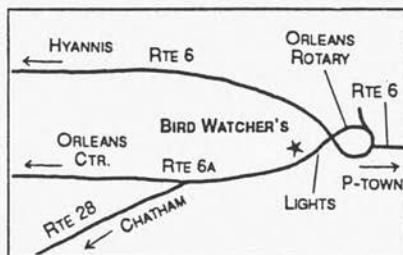
## OTHER BIRD-LOVER ITEMS INCLUDE:

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

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

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

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



## Bird Watcher's General Store

36 Route 6A • Orleans, MA 02653

**(508) 255-6974**

or

**1-800-562-1512**

**PARTNERS IN FLIGHT**  
**PROACTIVE CONSERVATION FOR NEOTROPICAL**  
**MIGRATORY BIRDS AND THEIR HABITATS**

by Peter W. Stangel

Let's say you had the option to buy stock in one of two groups of companies. Group A companies have been hit hard by the recession, and have so declined in value that they may disappear from the Dow Jones. Some were blue chips, but through mismanagement now verge on bankruptcy. To recover, these companies would require a massive injection of capital and intensive new management. Even then, most will likely never reach their former stature.

Group B companies have also been hit hard by the sagging economy, but alert managers recognized the warning signs and took quick action to adapt. New management strategies focused on infrastructure investment, consolidation, and partnerships to improve competitiveness. Although some companies declined, most avoided a crash and were able to stabilize and eventually start to grow again.

Unless Evel Knievel is your investment advisor, group B companies are the obvious choice. They may be a little shaky, but managers anticipated the changing economic environment, acted quickly, and avoided catastrophic losses.

But do we make this obvious choice when investing in wildlife resources? Or is our "portfolio" dominated by high-risk endangered species, at the expense of better values in the not-so-threatened? Is too much spent bailing out bankruptcies, rather than investing in the habitat infrastructure that simultaneously benefits hundreds of more common species?

The comparison between stocks and species is not completely valid, because investment in wildlife entails unique social and moral considerations. We cannot abandon endangered species, but their swelling ranks make it increasingly difficult to direct limited resources into better investments, such as common species and ecosystem conservation. More endangered species mean less money for common species and habitats. Less investment in common species and habitats means more endangered species. It is a vicious cycle that threatens our ability to do conservation when it should be done—when species and ecosystems are still common.

Breaking the cycle challenges the conservation establishment. Charismatic endangered species justifiably elicit great emotion and are profitable causes for fund-raising campaigns. Endangered species have also become convenient legal tools to force conservation actions. Conversely, common species and their habitats are less likely to send one running for the checkbook. Check your mail—when was the last time you received an appeal for Red-eyed Vireos and their deciduous forest habitat? It was the Red-eyed Vireo and other neotropical

migratory birds, however, that provided the key to breaking the endangered species cycle and opened a new way of thinking about conservation of birds and their habitats.

Neotropical migrants are those species that nest in the United States and Canada and whose populations winter wholly or partially in the neotropical faunal zone, which includes the tropical regions of Mexico, Central and South America, and the Caribbean. Neotropical migrants span the taxonomic scale and include many waterfowl, waders, raptors, and nonpasserine and passerine land birds (Rappole et al. 1983). Just over fifty percent of the species nesting in the United States are considered neotropical migrants, and in many northern forests they represent up to ninety percent of the breeding bird species.

Birders have long lamented the loss of neotropical migrants from traditional nesting areas. It was not until just recently, however, that the spate of evidence forced reassessment of conservation programs for neotropical migrants and their habitats. In 1989 an international symposium at the Manomet Bird Observatory (now Manomet Observatory for Conservation Sciences) (Hagan and Johnston 1992), the book *Where Have All the Birds Gone?* (Terborgh 1989), and a scientific paper reporting twenty years of bird population trends (Robbins et al. 1989) all focused on the same fact—populations of many neotropical migrants were declining.

The extent, duration, and severity of the decline startled even pessimists. Population trends calculated from the Breeding Bird Survey (BBS) (Robbins et al. 1989) indicated that in the eastern United States, where the most extensive data were available, over seventy percent of neotropical migratory bird species monitored had declined over the last decade. Some, like the Cerulean Warbler, had been declining an average of about three percent per year for two and a half decades. More recent declines in other species, including Wood Thrush (four percent per year) and Olive-sided Flycatcher (5.7 percent per year), were equally sobering.

Although additional data revealed that some declines were reversing, and the BBS trends presented a confusing challenge of declining, stable, and increasing population trends, considerable evidence pointed to long-term declines in many species, particularly forest-dependent neotropical migrants.

Declines in neotropical migratory birds focused attention not just on the birds and their habitats, but also on the effectiveness of our conservation programs. In North America, with our rich ornithological history and legions of birdwatchers, it seemed implausible that declines in some of our favorite birds could occur "right under our noses."

An assessment by the National Fish and Wildlife Foundation in 1990 revealed some gaping holes in our bird conservation efforts. Although many private organizations and state and federal agencies had impressive and effective bird conservation programs, little communication and coordination occurred

among these groups. Conservation projects were often focused on single species, rather than habitats, and discrete geographic areas, rather than entire ranges. There was a dearth of information on neotropical migrants during migration and on the nonbreeding grounds. No strategic plans for migratory birds existed, and no long-term funding sources had been identified.

Despite the popularity of birding and the obvious success of many conservation organizations and agencies, comprehensive programs for conservation of neotropical migratory birds and their habitats were lacking. That such an effort did not exist is not surprising—conservation of neotropical migrants is a daunting challenge. Over 350 species, each with its own conservation priorities, politics, and problems, breed in, migrate through, or spend the nonbreeding season in many states and countries.

Although the reported declines in neotropical migrants were threatening, most species were still common. The early warning provided by the BBS and other survey programs offered an excellent opportunity to invest in conservation when birds needed it most, when populations were beginning to decline, but while species and their habitats were still common.

The National Fish and Wildlife Foundation made the investment in 1990 by launching the Partners in Flight-Aves de las Americas Neotropical Migratory Bird Conservation Program. Developed by representatives from federal and state agencies, private conservation groups, the research community, and the forest products industry, Partners in Flight promotes better understanding of bird and habitat population trends, a halt to declines, and maintenance of stable populations of neotropical migratory birds.

Best viewed as a framework within which an international bird conservation program can be coordinated, Partners in Flight builds on the strengths of existing conservation efforts and fills the gaps where new projects are required.

In addition to promoting conservation while species are still common, Partners in Flight also focuses on the following:

- habitat, rather than single species, conservation
- simultaneous conservation on the breeding, nonbreeding, and migration areas
- cooperation among federal, state, corporate, and private sectors.

Partners in Flight is centered on habitat conservation. By focusing on habitats, entire suites of species and the ecosystems in which they function benefit. Acquisition to preserve natural habitats is one strategy, but Partners in Flight also highlights improving habitat quality on managed lands—those used for timber production, grazing, military maneuvers, even urban landscapes. These areas offer nesting, migration, and nonbreeding habitat to many species of neotropical migrants and are an important complement to costly acquisition programs.



Such an approach is particularly important in areas such as New England, where the vast majority of land is in private hands. Land and wildlife managers are adept at their jobs—witness the tremendous productivity of our industrial forests and the resurgence of white-tailed deer and Wild Turkey. Once managers are provided the necessary information on habitat requirements of neotropical migrants, we should anticipate similar successes.

Although much remains to be learned about neotropical migrants and their management on the North American breeding grounds, the extent of our breeding range knowledge dwarfs what we know about these species during migration and on the nonbreeding grounds. In some cases, even basic distributional data are lacking for many migrants (resident species as well) in the neotropics.

A primary goal of Partners in Flight, therefore, is to accelerate conservation efforts on the migration routes and nonbreeding areas. A key to this focus has been increasing the awareness of conservation groups and birdwatchers of the importance of nonbreeding areas to neotropical migrants.

The primary limiting factors in making conservation more comprehensive have been recognition of need and, of course, funding. Neotropical migrants are a superb vehicle for helping North American conservationists identify with and feel ownership for neotropical conservation issues. Once New Englanders realize that Black-throated Blue Warblers nesting in Vermont's Green Mountains depend on the Caribbean for wintering habitat, it becomes much easier to take a hemispheric view of conservation. Likewise, once legislators recognize that conservation efforts in the United States will be unsuccessful without parallel efforts in the tropics, prospects for funding increase.

This realization made possible recent funding opportunities for neotropical migrant conservation through the Agency for International Development, the U.S. Forest Service's International Forestry program, and the Western Hemisphere program of the U.S. Fish and Wildlife Service.

The sheer enormity of the challenge posed by neotropical migrants dictated that a successful conservation program would have to be highly cooperative. There is simply no conservation organization, or country, with enough resources to do it all alone. Cooperation, especially from the start of new programs, can also help overcome the political polarization that characterizes conservation for species such as the Spotted Owl and Red-cockaded Woodpecker. Bringing

together potential players early in the planning process increases each individual group's stake in the program and reduces misunderstandings that often lead to political stalemates.

In order to facilitate communication and cooperation, the National Fish and Wildlife Foundation organized technical and regional working groups. Working groups comprise experts who gather in open meetings to identify priority conservation actions for neotropical migratory birds and their habitats. Recently, regional working groups have formed for boreal regions of Alaska and Canada, and for the Caribbean. Many states also established working groups to encourage cooperation and focus on local issues. Recommendations from working groups provided the vision for preliminary but comprehensive conservation programs for neotropical migrants. Although the working group system is still crystallizing, there have been many accomplishments already.

For example, the Monitoring Working Group Needs Assessment established guidelines for new programs to track bird and habitat population trends (Butcher 1992). Their recommendations can be customized by individual agencies or organizations, but encourage standardized techniques that permit data to be pooled and analyzed across broad geographic regions.

Recommendations for an intensive point-count program to monitor bird population responses to habitat management have already been adopted by several federal agencies. These intensive monitoring programs will allow land managers to track bird population changes on the local level and help identify factors contributing to population trends. Other recommendations include expanding the BBS, monitoring programs for roadless areas, migration monitoring, and programs for marsh birds and other species not adequately assessed by current programs. Clearly, the continued efforts of amateur birdwatchers will play an important role in Partners in Flight monitoring efforts.

The International Working Group has emphasized the need to strengthen the infrastructure of conservation organizations in the neotropics, along with training for protected area managers, and integrating programs for endemic species with those for neotropical migrants.

Enhancing the capabilities of neotropical conservation groups will empower local people to design and implement sustainable natural resource management programs. For example, a recent National Fish and Wildlife Foundation grant to the Pro Iguana Verde Foundation in Costa Rica will support workshops to train biologists in bird research and monitoring techniques. The first workshop, held in February 1994, brought together Latin American biologists to formulate coordinated bird monitoring needs and conservation strategies for the neotropics.

Similarly, advanced training for protected-area managers is a critical, but often neglected, need in the neotropics. Many protected areas are "paper parks," meaning boundaries appear on maps, but there is little on-the-ground protection

and management. To help meet this need, the U.S. Fish and Wildlife Service and Ducks Unlimited/Mexico teamed up to provide advanced training through the RESERVA program. This intensive twelve-week course teaches skills including mapmaking, trail construction, wildlife and fisheries management, enhancing cultural values, managing ecotourists, and community outreach.

The U.S. Forest Service recently internationalized its bird conservation efforts with the "Sibling Forest Program," linking national forests with neotropical protected areas. Pairings are determined in part by the extent of bird migrations between sites. This program emphasizes technology transfer and training for managers at both ends of the spectrum. North Carolina's national forests and the Blue Mountain/John Crowe National Park in Jamaica is one such pairing.

### **Footing the Bill**

Launching international conservation programs is an expensive undertaking, and declines in neotropical migrants were revealed at a time of both public and private belt-tightening. Although a federal pot-of-gold would certainly have been welcomed, its absence stimulated innovative funding strategies and an increased reliance on the private sector. Over time, this balanced strategy may provide more sustainable funding and also increase ownership of Partners in Flight and its goals.

Support from the corporate sector has energized the conservation programs of many organizations within Partners in Flight. For example, contributions from Exxon, Chevron, Weyerheuser, and other forest products companies to the National Fish and Wildlife Foundation provided support needed to help organize and launch Partners in Flight. Similar support came as a grant to National Fish and Wildlife Foundation from the Pew Charitable Trust. A grant from the MacArthur Foundation helped launch Partners in Flight in the Caribbean, and Phillips Petroleum has underwritten public awareness events such as International Migratory Bird Day.

Despite federal cost-cutting, additional funding has been secured within key agencies. For example, in 1990 the U.S. Forest Service, which manages over 191 million acres of habitat, received its first-ever appropriation specifically for conservation of neotropical migratory birds. Funding for neotropical migratory bird conservation within the U.S. Forest Service and the U.S. Fish and Wildlife Service continues to inch upward, helping balance the emphasis on nongame species such as neotropical migrants and better funded programs for game species.

Surging interest in neotropical migrants has brought some nontraditional federal agency partners into bird conservation efforts. The U.S. Department of Defense, which manages over twenty-five million acres, has actively promoted conservation efforts on many facilities. The U.S. Bureau of Reclamation has



provided funding to restore degraded riparian habitats heavily used by neotropical migrants in the western United States. The Agency for International Development, through a cooperative agreement with the National Fish and Wildlife Foundation, has provided the bulk of the funding for implementation of Partners in Flight in the neotropics.

State fish and wildlife agencies have used public concern for neotropical migrants to implement new conservation efforts and bolster traditionally small nongame initiatives (in comparison to game programs). For example, New Hampshire Game and Fish Department developed a touring art exhibit on neotropical migrants to raise public awareness and funding for conservation programs. Each of the northeastern states also has active Partners in Flight working groups, all of which are closely tied to state wildlife agencies.

It is too early to see positive changes in populations of neotropical migrants that are declining, except perhaps on a very local scale. Partners in Flight has, however, established the framework necessary for conservation of neotropical migrants. Awareness of neotropical migrants and their predicament is at an all-time high, and still increasing. Communication among federal, state, private, and corporate groups has dramatically increased, and many productive new partnerships have been formed. Scientists are racing to better understand the ecological needs of neotropical migrants, and land managers are implementing new recommendations as quickly as is feasible.

Partners in Flight has just introduced the North American Bird Conservation Program, a comprehensive habitat conservation effort that will benefit all birds. This program will be the first phase in a grander scheme that will eventually lead to coordinated bird conservation throughout the Americas.

**PETER W. STANGEL** is the director of the Neotropical Migratory Bird Conservation Initiative of the National Fish and Wildlife Foundation (NFWF). Chartered by Congress in 1984, NFWF is a private, nonprofit organization established to complement the programs of the U.S. Fish and Wildlife Service and build public and private partnerships for conservation. The federal funds are distributed as grants to priority fish, wildlife, and plant conservation projects. Each federal dollar awarded by NFWF must be matched with at least one dollar from the private sector. That is, NFWF, or more commonly NFWF grantees, must secure the private funds needed to match the federal funds. Since initiating the Partners in Flight program, NFWF has funded over 200 grants specifically to benefit neotropical migratory birds and their habitats, awarding \$5.2 million in federal funds, matched by \$11 million in private funds. To subscribe to the free Partners in Flight Newsletter, write: PIF, National Fish and Wildlife Foundation, 1120 Connecticut Avenue, NW, Suite 900, Washington, D.C. 20036. The author would like to thank Ken Rosenberg and Amos Eno for comments on the manuscript.

## MASSACHUSETTS PARTNERS IN FLIGHT WORKING GROUP

by Bradford G. Blodget

While Peter Stangel discusses the national and international scope of the Partners in Flight program, this article focuses on the Massachusetts Partners in Flight Working Group, which is a subset of the thirteen-state Northeast Regional Working Group comprising the six New England states, Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, and West Virginia. Most of these states have also established their own state-level working groups.

Partners in Flight is a panhemispheric umbrella organization that was launched by the National Fish and Wildlife Foundation in 1990. It is literally built on partnerships and networking to address the conservation and management issues involving the neotropical migratory bird resource. The Massachusetts Working Group started meeting in February 1993. Chaired by the state ornithologist, the group includes foresters, ornithologists, researchers, managers, and representatives from some of the large landholding organizations in the state such as the Massachusetts Department of Environmental Management, the Metropolitan District Commission, the Massachusetts Division of Fisheries and Wildlife, U.S. Fish and Wildlife Service, Harvard Forest, and the Massachusetts Audubon Society. Participation in the group is open to anyone interested in neotropical migrants.

It is estimated that 106 species of neotropical migratory birds are regular breeders in Massachusetts. The Massachusetts Working Group has identified numerous monitoring activities that are already being conducted by various partner organizations here in Massachusetts to determine population abundance and distribution and trends. For example, twenty-seven U.S. Fish and Wildlife Service Breeding Bird Survey routes are currently operated in Massachusetts. Many of these have now been run for thirty years. Another particularly long-running monitoring project is the Forbush Bird Club's Wachusett Meadow Wildlife Sanctuary Breeding Season Census that began in 1964.

The Massachusetts Audubon Society initiated point-count monitoring programs at several of its properties in 1988 and established a Grassland Bird Program that conducted thorough inventories of grassland birds in Massachusetts from 1993 through 1995. Expansion of the latter program regionally in 1996 promises to yield a better understanding of the relative importance of Massachusetts populations of grassland birds. The Massachusetts Division of Fisheries and Wildlife, in hopes of developing trend data of forest passerines in unfragmented forest, established a long-term point-count study at its Hiram Fox Wildlife Management Area on the heavily-forested Berkshire escarpment in Chester in 1986. The Massachusetts Department of Environmental Management and the Metropolitan District Commission are

initiating point counts on several of their properties. Manomet Observatory for Conservation Sciences has expanded its southeastern Massachusetts pine barrens study, which began in 1973. Such point counts complement BBS route data.

The U.S. Fish and Wildlife Service contributes strongly at the regional, interstate level through its new Connecticut River/Long Island Sound Ecosystem Team. Within this watershed, the new interstate Silvio Conte National Wildlife Refuge has very high on its agenda programs to address neotropical migrants. In the spring of 1996 a monitoring program will begin to identify habitat in the Connecticut River Valley important to migrating passerines. Work is currently underway to identify priority Connecticut River Valley habitat for breeding neotropical migratory birds. We are indeed fortunate that our state is included in these sweeping efforts that should help us to secure our population of neotropical migrants in the Connecticut River Valley.

The Massachusetts Working Group's broadest goal is to hold together our diverse populations of neotropical migrants in Massachusetts by encouraging and facilitating sound research and monitoring programs to better understand conservation needs and to identify priority areas and habitats for conservation.

As one can imagine, crafting management activities to benefit neotropical migrants is an extremely challenging task, given the highly fragmented ownership patterns of habitat in Massachusetts. The fine mosaic of ownership patterns in the northeastern states contrasts sharply with western states where land ownership of many significant habitats is highly concentrated in the hands of a small number of large land-holding agencies of the federal government. To a large extent, in the absence of any type of coordinated plan, this highly fragmented ownership pattern has precluded any one landowner, acting alone, from having much overall effect on any one species or species group. The most specific management actions implemented to date have been directed toward conservation and stabilization of the grassland species at the large air bases in Massachusetts.

The Massachusetts Working Group has developed point-count standards for technical guidance for those interested in long-term monitoring of forest bird populations in Massachusetts. The group is working along with the Northeast Working Group to develop criteria for generating lists of priority species for management purposes; studying ways to interact and manage priority species at an interstate or physiographic regional level; and preparing a draft state action plan. A strong Massachusetts delegation was present at the international Partners in Flight workshop in Cape May, New Jersey, on October 1-5, 1995. The theme of this meeting was "Building consensus for action—developing a strategy for a national conservation plan."

As a result of this meeting and after further discussions at a subsequent meeting of the Steering Committee of the Northeast Working Group in Newark,

New Jersey, on January 24-25, 1996, ten broad objectives were outlined to work toward. These included increasing public awareness of Partners in Flight; ensuring stakeholder representation in the development of conservation initiatives; expansion of the program to encompass all landbirds (except game species); partnering with neighboring Canadian provinces; promoting research on the demographics of common species; developing standard monitoring techniques for priority species not adequately sampled by BBS routes; ensuring the continuation of existing long-term monitoring programs; further developing interstate initiatives directed at grassland birds, boreal/mountaintop forest bird communities, and important migrant stopover sites; and encouraging new interstate cooperation among states where this will meet regional needs or objectives.

The Massachusetts Partners in Flight Working Group feels strongly that public input into the state's action plan will be very valuable and is looking forward to eventual informational meetings to solicit comments and suggestions. In the interim, questions or inquiries may be directed to the chair, Brad Blodget, Massachusetts Division of Fisheries and Wildlife, Route 135, Westborough, MA 01581-3337, telephone 508-792-7270, extension 152.

**Massachusetts Partners in Flight Working Group: Bradford Blodget** (Chairman), Massachusetts Division of Fisheries and Wildlife, Westborough, MA; **Richard DeGraaf**, U.S. Forest Service, Amherst, MA; **Jenny Dixon**, Session's Woods Wildlife Management Area, Furlington, CT; **Rebecca Field**, Holdsworth Natural Resource Center, Massachusetts Cooperative Research Unit, Amherst, MA; **Beth Goettel**, Conte National Wildlife Refuge, Turners Falls, MA; **Curtice Griffin**, University of Massachusetts, Department of Forestry and Wildlife Management, Amherst, MA; **Andrea Jones**, Massachusetts Audubon Society, Lincoln, MA; **Kyle Jones**, Cape Cod National Seashore, Wellfleet, MA; **Heather Lanza**, Holdsworth Natural Resources Center, University of Massachusetts, Amherst, MA; **Marion Larson**, Massachusetts Division of Fisheries and Wildlife, Westborough, MA; **Jack Lash**, Massachusetts Department of Environmental Management, Boston, MA; **Goeff LeBaron**, Williamsburg, MA; **Richard Lent**, Harvard Forest, Petersham, MA; **Trevor Lloyd-Evans**, Manomet Observatory for Conservation Sciences, Manomet, MA; **Paul Lyons**, Metropolitan District Commission, Belchertown, MA; **Scott Melvin**, Massachusetts Division of Fisheries and Wildlife, Westboro, MA; **Dale Monette**, New Salem, MA; **Diane Pence**, U.S. Fish and Wildlife Service, Hadley, MA; **Wayne Petersen**, Massachusetts Audubon Society, Lincoln, MA; **Chris Raithel**, Rhode Island Fish & Wildlife, West Kingston, MA; **Bill Rivers**, Massachusetts Department of Environmental Management, Amherst, MA; **John Scanlon**, Massachusetts Division of Fisheries and Wildlife, Westborough, MA; **Dave Small**, Athol, MA; **Don and**

Lillian Stokes, Carlisle, MA; Peter Vickery, **Peter Vickery**, Richmond, ME.

**BRADFORD G. BLODGET** is the state ornithologist with the Massachusetts Division of Fisheries and Wildlife in Westborough, Massachusetts.

---

### **ABA YOUTH TEAM AT THE 1996 WORLD SERIES OF BIRDING**

Please join *Bird Observer* in pledging your support for the American Birding Association's youth team in the 1996 World Series of Birding. The Pentax-sponsored ABA Tropicbirds, all eighteen years of age or younger, return for the fourth time to the twenty-four-hour New Jersey birdathon on May 11. The team expects to tally between 170 and 200 species.

Flat-rate or per-species pledges will boost the flourishing ABA youth program, which supports birding camps and courses, offers birding scholarships, and publishes *A Bird's-Eye View*, a quarterly newsletter by and for young birders.

The Massachusetts birding community has always had strong ties to the ABA, but we have special links to this year's ABA team. Mashpee's talented Jeremiah Trimble will be one of the Tropicbirds' five members, and Arlington resident Matt Pelikan (*Bird Observer's* subscription manager) is organizing the team and will serve as one of the drivers.

To register your pledge or for information about the ABA youth program, call the American Birding Association at 800-850-2473.

---

## NOTES ON 1995 NESTING ATTEMPT OF GREEN HERON PAIR AT MOUNT AUBURN CEMETERY

by William E. Davis, Jr.

The Green Heron (*Butorides virescens*) is a cryptic breeder, usually nesting in protected sites within trees or shrubs. Hence, although it is a common, widespread species, many aspects of its natural history are poorly known (Davis and Kushlan 1994). Even though its breeding biology has been carefully studied in the northeast (Meyerriecks 1960) and in Mexico (Dickerman and Gavino 1969; Gavino and Dickerman 1982), surprising gaps remain in our knowledge of Green Heron nesting behavior.

On Wednesday, May 24, 1995, I was shown a pair of Green Herons nest building in full view at Auburn Lake in Mount Auburn Cemetery in Cambridge, Massachusetts. Using binoculars and a 20x telescope, I monitored this nesting attempt until June 12 from the ridge that overlooks the pond. I spent a total of 12.5 hours from May 26 through June 1 observing the nest and an additional two hours through June 12. The nesting attempt failed on June 14 with the eggs (or possibly young) missing. The nest with an incubating bird was observed on the evening of June 13 (J. Heywood, personal communication), but had been subjected to predation by the morning of June 14, when both birds were observed near the severely damaged nest (R. Kelley, personal communication).

The following notes include the more interesting aspects of this nesting attempt.

### Nest Building and Courtship

**Nest Location.** The nest location was typical in that it was located over water but atypical in that it lacked the heavy overhanging branches that provide a cryptic setting and protection from the sun. This nest was about sixteen feet above the water surface in a forty-five-foot-high bald cypress (*Taxodium distichum*), which was sparsely foliated throughout the nesting period.

**Nest Building.** On the morning of Saturday, May 20, people first noticed the birds breaking off sticks and the rudimentary beginnings of a nest platform (R. Stymeist, personal communication). By the following Wednesday morning, May 24, when I made my first observations, the nest was nearly complete, although the male was bringing sticks to the female, which worked them into the nest, at a rate of about one per minute. The first egg was laid that morning. Green Herons typically continue to add sticks to their nests throughout the nesting period, but if we define the nest-building period as ending with the first egg, then the nest-building phase was four days in length. Building time for Green Heron nests has not been previously reported for North American birds (Davis and Kushlan 1994).

The male and female continued to break off six-to-seven inch sticks and bring them to their incubating partner, which would then work the sticks into the nest by "tremble-shoving" (where the bird grasps the twig in its beak and works it into the nest by pushing while vibrating its head), even after egg-laying ceased.

**Courtship and copulation.** The pair formation and courtship phase of nesting was not observed for this pair. Typically Green Heron courtship involves a variety of display flights and vocalizations, interspersed with "stretch displays" where the displaying bird points its bill straight up with neck extended and plumes erect and fanned. The head and neck are then bent backward until they almost touch the back. Typically, stretch displays are continued through nest building and at nest relief, but I did not see any performed by this pair. There was little or no nest relief ceremony other than bill-clapping and tail-flicking by the female (tail-flicking often occurs in conflict situations), and the male raising its wings slightly before leaving the nest. For descriptions of Green Heron displays, see Davis and Kushlan (1994) or Meyerriecks (1960).

One courtship aspect was well pronounced. Both birds underwent marked soft-part color changes. Initially (May 24), the male (determined by position during copulation) had bright pink-orange legs and solid black lores, while the female had yellow-orange legs and dark lores with light flecks. The male plumage was generally brighter than the female's, and his back and crown were glossier. The pink coloration of the male's legs was distinctive, but pink has not been reported as characteristic for male leg color during courtship for Green Herons, although Pough (1951) described the color as orange-red. The pink color gradually changed to the yellow color characteristic of Green Herons in the nonbreeding season. The female's leg color also faded, and by June 2 I could not identify the herons by leg color with confidence. The lores color differences persisted, however.

Copulation was witnessed on May 26 immediately after the male returned for nest relief (7:20 AM), and on May 30 following nest relief by the female (10:30 AM). There were no ceremonies associated with the copulations other than the male arriving at the nest carrying a twig.

### **Egg Laying, Incubation, and Related Activities**

**Egg laying and clutch size.** The first egg was laid between 8:30 and 9:30 AM on May 24 (R. Kelley, personal communication). The following morning there was still a single egg, but on the morning of May 26, two eggs were present. By the afternoon of May 30 I counted four eggs, and by June 1 a fifth egg was present. The normal clutch size for Green Heron is three to five (Davis and Kushlan 1994).

**Incubation.** The pattern of incubation for this pair was consistent with that generally reported for Green Herons. Incubation was intermittent until the third



egg was laid. The male has been reported to incubate mostly in the middle of the day and night, with the female mostly in the early morning and early evening. Since my observation at this nest was intermittent I could not discern any diurnal pattern. However, in the one day when observation began before dawn, the female was on nest at 4:33 AM but was relieved by the male at 5:50 AM. On the only day that observation continued until after sunset, the male was on nest at dark.

**Related activities.** While incubating, both birds frequently rearranged sticks by tremble-shoving. On several occasions the incubating bird would stand and "foot paddle," shifting its weight from one foot to the other on the nest platform. The function of this behavior is unknown, but is also practiced by the Black-crowned Night-Heron (personal observation). Egg rolling was a frequent incubation activity. On May 30 I recorded five egg rolling bouts in about three and a half hours, and on June 1 five bouts in two and a half hours.

The nest-sitting position of the birds varied considerably with time of day, but it was my impression that the birds positioned themselves primarily to allow them to observe the road near the nest along which foot traffic and automobile traffic were considerable, and secondarily to avoid looking directly into the sun.

On June 1 it was about eighty degrees in the afternoon, and the birds were clearly stressed by the heat and direct sunlight (there was virtually no protection by foliage). Both birds performed "gular flutter" (used as a cooling mechanism by many avian species), where they held their beaks slightly open and rapidly vibrated the thin floor of their mouth and upper throat. This behavior is common in the Black-crowned Night-Heron (Davis 1993) and is probably common in the Green Heron, although strangely, it has not been previously reported in the literature. The male also rose to a half-crouch with wings dropping suggesting that he was shading the eggs rather than incubating them.

### **Response to Potential Nest Predators and Human Disturbance**

**Reaction to birds in the nest tree.** When nesting in aggregations, Green Herons generally defend a territory that gradually shrinks during the breeding season until it may encompass only the nest and immediately surrounding area.



They may defend a larger territory when nesting solitarily, but data are not available (Davis and Kushlan 1994). In this instance, sixteen species of birds were recorded perching in the nest tree, and ducks and Canada Geese occasionally swam directly under the nest. The herons' response to birds lighting in the nest tree depended largely on the distance the intruder was from the nest. For example the male heron raised its head and pointed its bill at an oriole that lit four-to-five feet from the nest, but a grackle, a potential nest predator, drew no response when fifteen feet away. The heron watched grackles at distances of seven and ten feet, but stood, turned around, and bristled at a grackle that landed 1.5 feet away. The heron pointed its bill at a goldfinch four-to-five feet away, and my notes read: "clearly doesn't like anything getting within that range." The reactions were somewhat variable, however, as the heron turned its head around and then shifted its sitting position to face a grackle about ten feet away, and on another occasion raised its scapular plumes in an aggressive display when a grackle approached to within seven feet. A Red-winged Blackbird lit within a foot of the nest, and the heron stood up and faced it with feathers erect in a clearly aggressive display. Head movements suggest that the herons usually watched crows that flew over.

**Reaction to humans.** On May 24 the two Green Herons were heavily involved in nest-building activities despite the fact that dozens of birdwatchers were watching them while others were walking by within thirty feet of the nest under construction. This suggests that these birds were atypical in their response to the presence of humans and may have been habituated to their presence. When incubation began, however, both birds usually indicated that they were aware of human presence by raising their heads and following people with their eyes. There was no noticeable difference in their response to humans on foot, in cars, or trucks, or to lawn mowers. At least in the first week of incubation, it was my impression that the herons were not significantly affected by human activity.

**Response to squirrels.** Gray squirrels were frequent visitors to the nest tree, and on May 24 one squirrel approached to within ten feet of the nest without any response from the incubating heron. On May 30, however, the male bird was incubating when on two occasions a squirrel approached to within several feet of the nest. The male put on a spectacular aggressive display on both occasions. At 7:48 AM the heron stood up in the nest and while crouched, threw out its wings perpendicular to its body with primary tips pointing skyward and the bend in the wing down so that the fully extended wings faced the squirrel. On the first occasion the heron held this pose for about twenty seconds (I recorded the sequence on videotape) after which the squirrel turned and left the tree. At 8:59 AM a squirrel again approached the nest. This time the male stood in the nest and gave a "full forward display" with its head and neck fully extended forward, crouched, and feathers fully erect, bill open, and eyes bulging. It then lunged at the squirrel with its bill with wings fully extended as

in the first encounter, causing the retreat of the squirrel. At this point a grackle landed near the back of the nest, and the heron turned around, walked back about a foot to the nest, and attacked the grackle. The wing-out aggressive displays in defense of the nest have not been previously described in the literature.

### Final Notes

The incubation period for the Green Heron is generally considered to be about 19-21 days from the laying of the last egg, although there is one report of hatching after seventeen days (Burns 1917) and many reports do not specify with which egg the incubation period starts. It is possible, therefore, that the predation of the nest followed or coincided with the hatching of one or more eggs. The first egg was laid on May 24 and the fifth probably on May 31, and it was about twenty-one days from the laying of the first egg to the time of predation. It is possible that the hatching drew the attention of mammalian (e.g., raccoons) or avian (e.g., crows) predators, and the predation of this atypically unconcealed nest occurred at this time. The atypical nest site selection suggests that one or both of the birds may have been naive or first-time breeders.

Neither bird was observed feeding at Auburn Lake, but there were numerous reports of the birds feeding at Willow Pond. Whether this behavior was related to differences in foraging opportunities or nest-vicinity avoidance is problematical.

### References

- Burns, F.L. 1917. Comparative Periods of Deposition and Incubation of Some North American Birds. *Wilson Bulletin* 27:275-286.
- Davis, W.E., Jr. 1993. Black-crowned Night Heron (*Nycticorax nycticorax*). In *The Birds of North America, No. 74* (A. Poole and F. Gill, editors). Philadelphia: The Academy of Natural Sciences; Washington, DC: The American Ornithologists' Union.
- Davis, W.E., Jr., and J.A. Kushlan. 1994. Green Heron (*Butorides virescens*). In *The Birds of North America, No. 129* (A. Poole and F. Gill, editors). Philadelphia: The Academy of Natural Sciences; Washington, DC: The American Ornithologists' Union.
- Dickerman, R.W., and G. Gavino T. 1969. Studies of a Nesting Colony of Green Herons at San Blas, Nayarit, Mexico. *Living Bird* 8:95-111.
- Gavino, T., G., and R.W. Dickerman. 1977. Nestling Development of Green Herons at San Blas, Nayarit, Mexico. *Condor* 74:72-79.
- Meyerriecks, A.J. 1960. *Comparative Breeding Behavior of Four Species of North American Herons*. Cambridge, Massachusetts: Publications of the Nuttall Ornithological Club, No.2
- Pough, R.H. 1951. *Audubon Water Bird Guide*. Garden City, New Jersey: Doubleday and Company.

**WILLIAM E. DAVIS, JR.**, teaches at Boston University. Ted would like to thank Janet Heywood, Robert Stymeist, and Robert Kelley for reading earlier drafts of this manuscript.

## SUMMARY OF 1995 NORTH AMERICAN MIGRATION COUNT IN NEW ENGLAND

by Michael Resch

The North American Migration Count (NAMC) is a nationwide census held annually the second Saturday in May, with results compiled by county and state. The NAMC is the brainchild of Jim Stasz of North Beach, Maryland, who has combined facets of the Christmas Bird Count with Maryland's "May Count." The objectives of the NAMC include the following:

- obtain a snapshot of the progress of spring migration
- obtain information on the abundance and distribution of each species
- create challenges and goals among birders while collecting useful information
- establish the second Saturday in May as "National Birding Day"
- have fun.

To quote Mr. Stasz, "The North American Migration Count is a grassroots project instituted by independent birders to gather information about the distribution and abundance of all birds." No fees or donations are used to organize the program, compile the results, and report the data. The count has grown since its inception in 1992 to more than six thousand participants nationwide for the fourth annual NAMC on May 13, 1995, with reports from each of the lower forty-eight states, Alaska, and several Canadian provinces.

### New England Summary

May 13, 1995, was a difficult day weather-wise throughout much of New England. Precipitation was reported from the vast majority of the region, ranging from a "miserable gale" along portions of the Massachusetts coast and the islands to "incessant drizzle" throughout much of the inland area. In conjunction with a reasonably cold spring and a somewhat later-than-normal arrival of spring migrants, it would be easy to predict a limited response for the count with few birds observed. On the contrary, more than four hundred birders participated in the NAMC in New England with 234 species and 115,000 individuals reported across the region. Table 1 shows a breakdown by state of key New England statistics.

**Rarities and Notable Birds.** One of the most exciting features of any birding event is the possibility of finding a rarity or other notable sighting. With nearly two thousand party-hours logged across New England, the 1995 NAMC was no exception. Rarities and other notable sightings on the count included one Red-necked Grebe in Nantucket County, Massachusetts; one Eurasian Wigeon (drake) in Essex County, Massachusetts; three Cattle Egrets in York County, Maine; one Black-headed Gull in Waldo County, Maine; one Harris' Sparrow in

**Table 1. Key Statistics**  
**1995 North American Migration Count in New England**

	CT	RI	MA	VT	NH	ME	Total
Parties	15	5	76	10	35	30	171
Observers	34	9	190	39	96	44	412
Counties Reporting	4	3	12	5	9	10	43
Number of Species	141	137	209	135	143	165	234
Number of Individuals	8,563	4,464	70,768	6,930	11,586	12,546	115,989

Nantucket County, Massachusetts; and White-winged Crossbills in Hampden County, Maine, three New Hampshire counties, and Essex County, Vermont.

**Analysis of the Progress of Migration.** One of the principal purposes of the NAMC is to track the progress of migration. In other words, the NAMC data, when normalized on a party-hour basis, can be used to determine how far spring migrants have progressed into the country from their wintering grounds and to what extent wintering species have exited the country for their breeding areas. Table 2 shows the relative degree of arrival and departure of several key groups of species for each of the six New England states.

The values in Table 2 were calculated by dividing the NAMC totals for each state by the total number of party-hours on foot for that state. Foot-hours were used rather than total party-hours in normalizing the totals because few of the small passerines analyzed in Table 2 are observed while driving.

The results for all warblers and vireos would suggest that by May 13, 1995, these migrants had rather uniformly arrived throughout all of New England except for New Hampshire and Maine. However, the calculated values for all warblers and vireos may be skewed by the warblers and vireos that arrive rather early in spring or that may have overwintered during warmer winters (particularly in southern portions of New England). The "early arrivers" addressed in Table 2 are Solitary Vireo, and Yellow-rumped, Pine, Palm, and Black-and-White warblers. As shown in the second row of Table 2, the numbers of early arrivers per foot party-hour indicate the abundance of these species was similar in all New England states. In comparison, the "late arrivers," defined as Blackburnian, Prairie, Blackpoll, Mourning, Wilson's, and Canada warblers, were most common in Connecticut, with smaller numbers in Rhode Island and Massachusetts, and even smaller numbers in the three northern New England states. Despite the unique results for the early and later arrivers, the pattern for "all other warblers/vireos" (i.e., all warblers/vireos except the early and late arrivers) is similar to the pattern for all warblers/vireos.

A similar analysis was performed for the migrant thrushes (Veery and Gray-cheeked, Swainson's, and Wood thrushes). Hermit Thrush was not included to eliminate any effects overwintering Hermits may have on the data. The values in the next to last row in Table 2 indicate the thrushes had arrived in the greatest numbers in Connecticut, with smaller numbers in Rhode Island, Massachusetts, and Vermont, and even smaller numbers in New Hampshire and Maine.

Finally, the NAMC results can also be used to investigate how wintering species are migrating away from the region. The "winterers" in Table 2 were Red-breasted Nuthatch, Golden-crowned Kinglet, junco, Purple Finch, both crossbills, Pine Siskin, and Evening Grosbeak. Of course the sightings of some of these species may have represented individuals already on breeding territory rather than true migrants. The numbers per foot party-hour indicate that these

Table 2. Progress of Migration  
1995 North American Migration Count in New England

	Birds Per Foot Party-Hour						
	CT	RI	MA	VT	NH	ME	
All Warblers & Vireos	19	18	20	23	13	11	
Early Arrivers	4.7	3.7	5.2	4.7	5.5	4.6	
Late Arrivers	0.75	0.48	0.58	0.09	0.15	0.11	
All Other Warblers/Vireos	14	14	14	18	7.5	6.6	
Thrushes	3.5	2.2	2.2	2.2	0.78	0.40	
Winterers	0.04	0.57	0.33	5.68	3.55	2.82	

species had all but left Connecticut, were present in very low numbers in Rhode Island and Massachusetts, and were present in considerable numbers in the northern tier states. Is the value from Vermont skewed by a disproportionate number of party-hours from the northern portion of the state, or were Vermonters better at finding these species?

**Counts of Expanding Species and Species in Trouble.** A regionwide count such as the NAMC also provides an opportunity to track the expansion of the ranges of applicable species and to track species whose numbers and ranges may be on the decline. Brief analyses of NAMC data for expanding and declining species are provided below.

Three examples of expanding species are Black Vulture, Red-bellied Woodpecker, and Fish Crow. One Black Vulture was reported in Litchfield County, Connecticut, where this species is now almost considered a regular bird along the Housatonic River Valley. Is an unexpected sighting of one from Worcester County, Massachusetts, suggestive of a sole wanderer or the beginning of a new outpost? The Red-bellied Woodpecker appears to be expanding northeasterly from strongholds in central and western Connecticut, potentially along major river valleys. The NAMC reported 0.41 birds per party-hour in Connecticut, 0.19 birds per party-hour in Hampden, Massachusetts (along the Connecticut border including the Connecticut River Valley), 0.13 birds per party-hour in Rhode Island, 0.003 per party-hour in Worcester County, Massachusetts, and single birds from Nantucket and Norfolk counties, Massachusetts.

The range expansion of the Fish Crow is generally following the coastlines and river valleys and is enhanced near inland landfills. Coastal sightings included three birds in Fairfield County, Connecticut, two in Washington County, Rhode Island, three in Suffolk County, Massachusetts, and one in Cumberland County, Maine. Inland sightings included one each in Hampden and Hampshire counties, Massachusetts (along the Connecticut River Valley), three in Middlesex County, Massachusetts, and one in Worcester County, Massachusetts.

Data from four declining species (i.e., American Bittern, Common Moorhen, Upland Sandpiper, and Eastern Meadowlark) were also examined. The American Bittern was not reported from Connecticut or Rhode Island and was only reported from one county (Worcester) in Massachusetts. Reports of only seven or eight birds were received from each of the three northern states. For the Common Moorhen, only one bird was reported (Rockingham County, New Hampshire) for the entire region. Was this species overlooked, or is it in more trouble than we may think?

Only six Upland Sandpipers were reported throughout the region: four in Hartford County, Connecticut, and one each in Plymouth and Essex counties, Massachusetts. Finally, the Eastern Meadowlark was reported from each state,

but only eighty-six individuals were found across the region. This equates to 0.046 birds per party-hour, or one bird for every twenty-three hours in the field.

### **Future of the NAMC in New England**

Coverage in the 1995 NAMC in New England was significantly improved over the previous two years. While a total of seventy-nine parties covered only nine of sixty-five New England counties in 1993, these totals increased to 171 parties covering forty-three counties in 1995. Hopefully this trend will continue for the 1996 NAMC on May 11. However, still roughly one-third of the counties were unrepresented, and coverage in some other counties was spotty at best. Coverage was best in states and counties with compilers who organized their portion of the count and who applied just the right amount of torque to the arms of those who counted. The future of the NAMC in New England will be brightest if many state and county coordinators are added to the existing list provided in the next paragraph. Please contact me if you would like to volunteer to be a coordinator. As coverage improves, some of the above analyses could be performed by county or region (for instance up the Connecticut River valley) rather than on a state-by-state basis. Population trends over time will also be completed in future NAMC summaries. Perhaps five years from now, the NAMC article will summarize the colonization of Red-bellied Woodpeckers throughout the entire region and may even discuss the expansion of Little Egrets in New England.

**New England Coordinators, North American Migration Count.** *New England Coordinator:* Mike Resch, 508-433-8896, mresch8702@aol.com; *New Hampshire:* Alan and Barbara Delorey, 603-887-4681, afd@zk3.dec.com; *Maine:* Maurice Mills, 207-726-4494; *Rhode Island:* David Emerson, 508-822-7430; *Massachusetts:* Richard Hildreth (Worcester County), 508-429-5085; Rob Lewis (Essex County), 617-266-6031; Robert Stymeist (Suffolk County), 617-926-3603; Edith Andrews (Nantucket County), 508-228-9529; Seth Kellogg (Hampden County), 413-569-3335; Anne Lombard (Hampshire County), 413-586-7509; *Connecticut:* Chris Wood (Litchfield County), 203-355-3716; Jay Kaplan (Hartford County), 203-693-0157; Frank Mantlik (Fairfield County), 203-846-8601; Wilford Schultz (Middlesex County), 203-265-6398, wschultz@connix.com; *Vermont:* Bonnie Dundas (Bennington County), 802-447-7433.

**MICHAEL RESCH** lives in Pepperell, Massachusetts, and is the New England compiler for the NAMC.



NH

# A Birder's Guide to New Hampshire

by Alan Delorey

Look no further! *A Birder's Guide to New Hampshire* is the first comprehensive birdfinding guide to "The Granite State."

From wintering waterfowl along the seacoast and raptors at Great Bay, to boreal species nesting in the northern spruce/fir forests, this book will provide birders with all the information they need to experience the avian wonders of New Hampshire.

Author Alan Delorey, a native of New Hampshire, divides the state into four geographic regions and outlines 21 loop trips to be taken by car. Each of these routes has an introductory section to familiarize birders with the area and provide valuable information on all traveler services. To help in planning each birding trip, suggested season and length of time for the trip are given for each route. The useful bar-graphs show seasonal abundance for 342 species of birds that regularly occur in the state.

### **Available now!**

224 pages; wire-O binding  
ABA Item #267 \$16.95 plus shipping



*Spruce Grouse* by George Dremeaux

Also available:

### **Birdfinder: A Birder's Guide to Planning North American Trips**

by Jerry A. Cooper

19 birding trips designed to see and enjoy more  
than 650 species in North America  
Item #333 \$17.95 plus shipping

### **A Birder's Guide to Eastern Massachusetts**

by Bird Observer

Written, mapped, and field-checked  
by the locals—guiding you to the  
very best spots in the area  
Item #266 \$16.95 plus shipping

## **American Birding Association Sales**

P.O. Box 6599 Colorado Springs, CO 80934  
USA and Canada Phone 800 634-7736 Fax 800 590-2473  
International: Phone 719 578-0607 Fax 719 578-9705

Call for a free catalog of bird books, field guides, optics, tripods,  
bird song tapes & CDs, videos & more

# BIRD SIGHTINGS

NOV. / DEC. 1995

## SUMMARY

*Red-bellied Woodpecker*

Photo by Judi Gendreau



by Richard A. Forster, Marjorie W. Rines, and Robert H. Stymeist

November and December were both very cold and exceptionally stormy. With a mean temperature of 41.9° in November and December combined, Boston experienced its coldest November in 15 years and the coldest December since 1989. The high was 65° on November 28, and the low was 17° on December 12. The season's first freeze was recorded on November 9, while inland locations had earlier frosts. Rainfall totals were well above average in November, continuing to offset the deficits of the spring and summer. In December the total rainfall was 3.2 inches, 0.81 inch below normal. The big story was the snowfall, 4.1 inches in November, 2.8 inches over the norm. In December Boston recorded 24.1 inches, more than triple the past average of 7.4 inches. This was the fifth snowiest December on record and the most snowfall since the record amount of 27.9 inches in 1970. The season total is now at 28.2 inches, the second highest in the records. Measurable snow fell on 11 days, and traces on 3 more days, leaving only 17 snowless days. There was a white Christmas.

R. H. S.

### LOONS THROUGH WOODPECKERS

Loon numbers were average with the notable exception of a well-documented movement of Red-throated Loons in Duxbury on November 19. Pied-billed Grebe numbers were strong through November and culminated with the highest total ever on the Cape Cod waterfowl survey in early December. An **Eared Grebe** graced the Gloucester shore briefly in late December. A remarkable concentration of Northern Fulmars and Greater Shearwaters was reported off Nantucket in mid-November. Nearly as remarkable was a movement of Greater Shearwaters numbering in excess of 500 individuals at Rockport on November 12. Shearwaters are seldom recorded in these numbers from land north of Boston. The count was all the more remarkable because it occurred on southerly winds. Other reports of shearwaters and storm-petrels were minimal. Reports of herons and allies were routine and included single reports of three egret species.

The thirteenth annual Cape Code Lake and Pond Waterfowl Survey was conducted on the weekend of December 2-3. This survey provides valuable baseline data on waterfowl distribution in early winter on Cape Cod, an area notably rich in species and numbers of waterfowl at this season. In addition to Pied-billed Grebe, species reported in record numbers included Northern Shoveler, Gadwall, American Wigeon, Ring-Necked Duck, Bufflehead, Hooded Merganser, Red-breasted Merganser, and American Coot with both Green-winged Teal and Ruddy Duck approaching the record tally of the previous year. On the down side were Canvasback and scaup. Other reports included the now-expected **Greater White-fronted Goose** from three locations, two of which likely represented the same individual. Two **Tufted Duck** reports were a drake in Sterling in the vicinity of where one was present last winter, and a brown individual with a partial tuft where it was originally observed in late October. Also reported were several immature Tufted Ducks, both male and female, which purportedly lacked tufts. Observers are cautioned to accurately report the details of such sightings and are encouraged to promptly notify additional observers for corroboration. Green-winged Teal continued at Plum Island in excellent numbers. Among the more unusual ducks, Harlequin Duck was found in decent numbers, Redhead and Barrow's Goldeneye reports were scanty, and no King Eiders were found.

Reports of raptors were typical for the season and included some rather late lingering Ospreys and wandering early winter Bald Eagles. Exciting finds were two **Golden Eagles** migrating at Mt. Wachusett and another consorting with Bald Eagles in Lakeville for several weeks, an adult light-phase Swainson's Hawk that persisted at the Cumberland Farms field until November 12, and three **Gyrfalcons**, one of which was trapped, banded, and photographed at Quincy. Cooper's Hawk continued their very fine showing, but Rough-legged Hawk reports were sparse indicating it may be a "down" winter for them. Rails were sparsely

reported and included three reports of Common Moorhens. American Coots were widespread and numerous. Three reports of Sandhill Crane were on par for this now annual species.

Shorebird reports were fairly standard and produced relatively few reports of which might be considered typically late migrants. Included in this category are American Golden-Plover, Hudsonian Godwit, White-rumped and Pectoral sandpipers, and Long-billed Dowitcher. This was more than offset by the stunning presence of a **Long-billed Curlew** at Plum Island for two days in early December. This species is exceedingly rare in the state with most recent records occurring during late spring or early summer. Also of interest was a very late and well-described Upland Sandpiper at the Cumberland Farms fields on November 17. The species is very seldom recorded after mid-September and has never been observed previously in November. Noteworthy among late-appearing shorebirds was an American Oystercatcher at Hyannisport. The species has only been reported once previously on a CBC.

The number of Pomarine Jaegers reported during December is in stark contrast to a very poor fall season for any jaeger species. A skua seen in Eastham could not be conclusively identified to species. There was only a scattering of both Little and Common Black-headed gulls, while Bonaparte's Gulls were locally abundant. There were the usual scattered reports of Iceland, Glaucous, and Lesser Black-backed gulls. Only one significant count of Black-legged Kittiwake and alcids in general was reported. Only rarely have both cuckoo species lingered into November.

Because of their nocturnal habits and low profile during the daylight hours, it is usually difficult to determine the general distribution and abundance of owls. The 17 Northern Saw-whet Owls banded in a single night at Marshfield bears ample testimony to how little we know. How many of these owls would have been found if nets were run in ten suitable locations for the entire month? The Barred Owl reports are similarly intriguing. Almost all the reports of Barred Owl for the entire season were away from places where they are known to be resident, and nearly half of these were reported within a ten-mile radius from downtown Boston. Although Barred Owls are not known to be as migratory as Northern Saw-whet Owls, they have been documented making periodic fall movements. One wonders how extensive a movement occurred this year. Long-eared Owls appeared to be very scarce, and, with the exception of the Cumberland Farm fields, Short-eared Owls fared little better. A single report of Snowy Owl represents one of the poorest season totals for this much sought species. Red-bellied Woodpeckers were numerous and widespread. The species is now an established, albeit difficult-to-see, resident that continues signs of increasing. R. A. F.

Date	Location	Number	Observers	Date	Location	Number	Observers
<b>Red-throated Loon</b>				<b>Horned Grebe</b>			
11/1	Plymouth	25	M. LaBossiere	11/4	Waltham	8	R. Forster#
11/5	Lakeville	1	W. Petersen	11/5	Lincoln	2	M. Pelikan
11/11	P.I.	26	S. Arena	11/19	Rockport H.	189	TASL (M. Hall)
11/14	Marshfield	150+	D. Clapp	11/13	Lakeville	19	F. Bouchard
11/14	Barnstable (S.N.)	40	T. Aversa	11/23	P.I.	10	D. Chickering
11/15	Eastham (F.E.)	14	M. Lynch#	11/25	Truro	12	W. Ellison#
11/15	Provincetown	15	M. Lynch#	11/26	Quincy Bay	156	G. d'Entremont#
11/15	M.V.	200	G. Daniels#	12/3	Sandwich	17	M. Lynch#
11/19	Gurnet	1007	R. Ferren	12/30	Nantucket	8	S. Perkins#
11/19	Boston H.	71	TASL (M. Hall)	<b>Red-necked Grebe</b>			
11/23	Lincoln	1	M. Pelikan	11/4	Waltham	1	R. Forster#
12/30	Nantucket	60	S. Perkins#	11/19	Boston H.	20	TASL (M. Hall)
<b>Common Loon</b>				11/24	Provincetown	20	P. Roberts
11/16	N. Attleboro	1	G. Valade	11/23	M.V.	12	G. Daniels
11/19	Gurnet	53	R. Ferren	11/25	Rockport	19	M. Lynch#
11/19	Boston H.	36	TASL (M. Hall)	11/25	Lakeville	1	F. Bouchard
11/20	M.V.	150	A. Keith#	12/3	Winthrop	33BBC	(R. Stymeist)
11/25	Rockport	31	M. Lynch#	12/25	Rockport (A.P.)	6	T. Young#
12/3	Ipswich	20	J. Berry	<b>Eared Grebe (details submitted)</b>			
12/3	Sandwich	22	M. Lynch#	12/23	Gloucester	1	M. Lynch#
<b>Pied-billed Grebe</b>				<b>Northern Fulmar</b>			
11/5	Worcester	8	WPLS (M. Lynch)	11/15	40 mi SE of Nant.	150	V. Laux
11/5	W. Newbury	17	J. Berry	<b>Greater Shearwater</b>			
11/7	Braintree	25	S. Carey	11/4	Eastham (F.E.)	18	B. Nikula
11/13	Lakeville	22	F. Bouchard	11/12	Rockport	500+	J. Berry#
11/19	Northboro	5	M. Lynch#	11/15	P'town (R.P.)	8	M. Lynch#
11/26, 12/10	Arlington	14, 5	K. Hartel	11/15	40 mi SE of Nant.	5000+	V. Laux
12/2-3	Cape Cod	179	CCBC	<b>Large shearwater species</b>			
12/3	Westport	2	M. Boucher	11/4	Eastham (F.E.)	26	B. Nikula
12/10	Camb. (F.P.)	3	P. Roberts	11/8	Eastham (F.E.)	12	J. Sones
12/30	Nantucket	3	S. Perkins#				

Leach's Storm-Petrel				11/5	P.I.	35	T. Maloney#
11/15 Eastham (F.E.)	1	M. Lynch#		11/29	Rochester	12	M. LaBossiere
Storm-Petrel species				12/2	P.I.	19	J. Berry
11/4 Eastham (F.E.)	2	B. Nikula		12/10	Groton	120	C. Canner
Northern Gannet				12/13	Edgartown	34	V. Laux
11/4 Eastham (F.E.)	1500+	B. Nikula		12/31	Newburyport	5	D. Chickering
11/12 Marshfield	100+	D. Clapp		Brant			
11/12 Rockport	200+	J. Berry		11/5	Revere B.	150	P. + F. Vale
11/15 Provincetown	200	M. Lynch#		11/10	Plymouth	90	D. Clapp
11/20 M.V.	125	G. Daniels		11/19	Boston H.	1476	TASL (M. Hall)
11/12 Eastham (F.E.)	600+	F. Pratt		11/24	Eastham	5	S. Thompson
12/3 Rockport	30+	R. Lockwood		11/23	Truro	10	W. Ellison#
12/3 Barnstable (S.N.)	50+	M. Lynch#		12/10	New Bedford	27	M. Boucher
12/6 Salisbury	30	C. Ralph		Canada Goose			
12/10 Eastham (F.E.)	300	B. Nikula		11/5	Worcester	130	WPLS (M. Lynch)
12/30 Nantucket	4000+	S. Perkins#		12/2-3	Cape Cod	1005	CCBC
Great Cormorant				Wood Duck			
11/19 Boston H.	10	TASL (M. Hall)		11/2	Boston	12	T. Aversa
11/23 Lexington	3	R. Forster		11/5	Worcester	5	WPLS (M. Lynch)
11/25 Truro	26	W. Ellison#		11/19, 12/10	Groton	13, 9	C. Canner
12/8 Acton	2 imm	M. Resch		12/2-3	Cape Cod	3	CCBC
12/26 Gloucester	14	J. Berry		12/28	Leicester	1 f	M. Lynch#
Double-crested Cormorant				Green-winged Teal			
thr Cambridge	11 max	v.o.		thr Arlington Res.	30 max		M. Pelikan
11/5 Worcester	5	WPLS (M. Lynch)		thr P.I.	2060 max 11/26		W. Drew#
11/5 P.I.	600	T. Maloney#		11/4	Randolph	63	G. d'Entremont
11/12 Lakeville	7	G. d'Entremont#		11/5	E. Boston	60	P. + F. Vale
11/19 Boston H.	188	TASL (M. Hall)		11/5	Worcester	12	WPLS (M. Lynch)
12/3 P.I.	1	R. Lockwood		11/22	Seekonk	14	M. Boucher
12/5 Falmouth	5	T. Aversa		11/25	S. Monomoy	60	B. Nikula#
12/8 Dorchester	1	T. Aversa		11/30	M.V.	52	G. Daniels
12/30 Nantucket	10	S. Perkins#		12/2-3	Cape Cod	55	CCBC
American Bittern				12/12	Roslindale	3	T. Aversa
11/1, 11/27	Dorchester	1	R. Donovan	12/31	W. Roxbury	2	T. Aversa
11/10 Rowley	1	J. Berry		American Black Duck			
11/14 S. Dart. (A.Pd)	1	LCES (J. Hill)		thr S. Dart. (A.Pd)	396 max		LCES (J. Hill)
11/20 Eastham (F.E.)	4	J. Sones		thr P.I.	3235 max 11/24		W. Drew#
11/22 Chatham	1	D. Scott		11/5	Worcester	20	WPLS (M. Lynch)
11/24 P.I.	2	W. Drew#		11/10	Plymouth	350	D. Clapp
12/27 Nantucket	1	S. Arena#		11/19	Boston H.	1316	TASL (M. Hall)
Great Blue Heron				11/25	S. Monomoy	350	B. Nikula
11/5 P.I.	10	T. Maloney#		12/2-3	Cape Cod	1067	CCBC
11/5 Worcester	5	WPLS (M. Lynch)		12/3	Westport	289	M. Boucher
11/7, 12/3	S. Dart. (A.Pd)	8, 7	LCES (J. Hill)	Mallard			
11/8 Saugus	7	J. Berry		11/5	Worcester	240	WPLS (M. Lynch)
11/10 Eastham (F.H.)	9	K. Weinheimer#		11/19	Boston H.	248	TASL (M. Hall)
11/26 Rowley	4	J. Berry		12/2-3	Cape Cod	1619	CCBC
11/28 M.V.	5	G. Daniels		Northern Pintail			
12/3 Pembroke	2	W. Petersen		11/4	Westport	18	R. Stymeist#
12/3 Westport	9	M. Boucher		11/5	Worcester	1	WPLS (M. Lynch)
Great Egret				11/5, 11/24	P.I.	120, 6	W. Drew#
11/25 Gloucester	1	H. Allen		11/11	GMNWR	20	R. Lockwood
Snowy Egret				11/12	Lexington	2	M. Pelikan
12/8 Scituate	1	D. Clapp		11/19	Ipswich	2	BBC (I. Giriunas)
Cattle Egret				11/25	S. Monomoy	150	B. Nikula#
11/4 Waltham	1	W. Petersen#		11/26	Seekonk	8	D. Zimmerlin
Black-crowned Night-Heron				12/3	Westport	103	M. Boucher
11/5 P.I.	1	T. Maloney#		12/9	P.I.	80	V. Laux#
12/2 Yarmouthport	3	S. + E. Miller		12/22	Sandwich	2	T. Aversa
12/3 Boston	1 ad	T. Aversa		Blue-winged Teal			
Mute Swan				11/5	Worcester	2	WPLS (M. Lynch)
11/4 Westport	111	R. Stymeist#		12/2-3	Cape Cod	1	CCBC
11/19 Ipswich	18	BBC (I. Giriunas)		Northern Shoveler			
11/30 M.V.	88	G. Daniels		11/1-12/4	Arlington Res.	3 max	C. Floyd
12/2-3	Cape Cod	193	CCBC	11/2	E. Boston	1 m	T. Aversa
12/3 Westport	103	M. Boucher		11/5	Worcester	1	WPLS (M. Lynch)
Greater White-fronted Goose				11/10	Rochester	1 f	M. LaBossiere
11/24 Katama, M.V.	1 ad	A. Keith#		11/11	Seekonk	2	J. Young
12/3 Revere	1	BBC (R. Stymeist)		11/15, 12/3	Marstons Mills	1	M. Lynch#
12/5-12 Lynn	1	J. Quigley		11/25	S. Monomoy	40	B. Nikula#
Snow Goose				11/28	M.V.	1	G. Daniels

12/2-3 Cape Cod	5		CCBC	12/2-3 Cape Cod	1682		CCBC
12/2 Worcester	1 f		M. Lynch#	Common Eider			
12/2-17 Orleans	3		K. McGinley#	11/15 Gay Head	12,000		A. Keith#
<b>Gadwall</b>				11/15 Eastham (F.E.)	830		M. Lynch#
11/4 Arlington Res.	5		M. Pelikan	11/19 Boston H.	5431		TASL (M. Hall)
11/4 DWWS	22		K. Weinheimer#	11/25 Rockport	1575		M. Lynch#
11/15 Rochester	4		M. LaBossiere	11/25 S. Monomoy	5000		B. Nikula#
11/14 Marstons Mills	64		T. Aversa	12/28 Hyannis	2500		S. Perkins#
11/22 Seekonk	51		M. Boucher	12/30 Nantucket	1200		S. Perkins#
11/24 P.I.	8		W. Drew#	<b>Harlequin Duck</b>			
11/25 S. Monomoy	30		B. Nikula#	11/6 Dennis	4		M. Tuttle
12/1 P.I.	98		D. Chickering	11/16 M.V.	28		G. Daniels
12/2 Pembroke	5		W. Petersen	11/26 Rockport (H.P.)	22		R. Lockwood
12/2-3 Cape Cod	261		CCBC	12/7 Wellfleet H.	2		W. Bailey#
12/31 Gloucester	23		D. Chickering	12/23 Provincetown H.	5		J. Young
<b>Eurasian Wigeon</b>				12/25 Rockport	15		P. + F. Vale
11/14 W. Barnstable	1 m		T. Aversa	12/30-31 E. Orleans	5		R. Prescott#
11/15 Marstons Mills	1		M. Lynch#	<b>Oldsquaw</b>			
11/16-17 Chatham	2 m		J. Sones#	11/4 Waltham	1 f		R. Forster#
12/1-31 Chatham/E. Harwich	3 max		v.o.	11/12 Marshfield	200		D. Clapp
12/16-31 Quincy	1 f		D. Brown + v.o.	11/12 Lakeville	14		W. Petersen
12/31 Nantucket	1 m		G. d'Entremont#	11/16 Wellfleet H.	200		D. Sandee
<b>American Wigeon</b>				11/19 Duxbury	437		R. Ferren
11/5 Worcester	37		WPLS (M. Lynch)	11/19 Boston H.	16		TASL (M. Hall)
11/14 W. Barnstable	115		T. Aversa	11/19 W. Newbury	10		BBC (I. Giriunas)
11/15, 12/3 Marstons Mills	29, 18		M. Lynch#	11/25 Rockport	90		M. Lynch#
11/23 P.I.	10		R. Lockwood	<b>Black Scoter</b>			
11/25 S. Monomoy	40		B. Nikula#	11/1 Lakeville	1		C. Ralph
11/26, 12/10 Arlington	30, 50		K. Hartel	11/4 Rockport	15		BBC (J. Nove)
12/2 Pembroke	11		W. Petersen	11/15 Eastham (F.E.)	120		M. Lynch#
12/2-3 Cape Cod	176		CCBC	11/25 Rockport (A.P.)	54		M. Lynch#
<b>Canvasback</b>				12/2 P.I.	52		J. Berry
11/15 W. Newbury	1		R. Lockwood	12/3 Westport	76		M. Boucher
11/23 P.I.	9		P. + F. Vale	<b>Surf Scoter</b>			
11/25 S. Monomoy	170		B. Nikula#	11/1 Plymouth	150+		M. LaBossiere
11/26, 12/17 Camb. (F.P.)	200, 87		P. Roberts	11/15 Eastham (F.E.)	1200		M. Lynch#
11/26 Braintree	15		G. d'Entremont#	11/19 Boston H.	301		TASL (M. Hall)
12/2-3 Cape Cod	175		CCBC	11/15 Rockport	65+		J. Berry
12/16 S. Dartmouth	1		M. Boucher	12/3 Sandwich	45		M. Lynch#
<b>Redhead</b>				<b>White-winged Scoter</b>			
11/4 Lakeville	1		S. Arena#	11/15 Eastham (F.E.)	650		M. Lynch#
11/11-19 W. Newbury	1		H. Miller	11/19 Boston H.	945		TASL (M. Hall)
11/13 Camb. (F.P.)	2		C. Floyd	12/2 P.I.	175		J. Berry
11/25 P.I.	1 f		H. Wiggin#	<b>scoter species</b>			
12/2-3 Cape Cod	1		CCBC	11/15 M.V.	8000		G. Daniels
<b>Ring-necked Duck</b>				11/19 Boston H.	1020		TASL (M. Hall)
thr Arlington Res.	109 max		M. Pelikan	<b>Common Goldeneye</b>			
11/5 W. Newbury	300		J. Berry	11/1 S. Boston	80		R. Donovan
11/12 Northboro	119		M. Lynch#	11/19 Southboro	22		M. Lynch#
11/19 Southboro	538		M. Lynch#	11/19 Boston H.	263		TASL (M. Hall)
12/2-3 Cape Cod	358		CCBC	12/10 New Bedford	53		M. Boucher
12/10 Brighton	5		N. Komar	12/30 Nantucket	700		S. Perkins#
12/23 Framingham	20		E. Taylor	12/31 Newburyport	310		D. Chickering
<b>Tufted Duck</b>				<b>Barrow's Goldeneye</b>			
11/1-26 Sterling	1 m		B. Volkle + v.o.	11/26 Quincy	1 m		G. d'Entremont#
11/1-5 Lakeville	1		v.o.	11/26 Winthrop	1 m		M. Pelikan
<b>Greater Scaup</b>				11/26 Ipswich	1		D. + I. Jewell
11/4 Lakeville	75		S. Arena#	11/27 S. Boston	1		R. Donovan
11/5 P.I.	18		T. Maloney#	12/3 Ipswich	1 m		J. Berry
11/11 Sterling	37		G. d'Entremont#	12/8 New Bedford	1		G. Mock
11/19 Boston H.	54		TASL (M. Hall)	12/30 Winthrop	1 m		M. Rines
12/2-3 Cape Cod	438		CCBC	<b>Bufflehead</b>			
<b>Lesser Scaup</b>				11/5 Lakeville	147		G. d'Entremont#
11/4 Lakeville	60		S. Arena#	11/5 Quincy	400		E. Taylor
11/5 Worcester	18		WPLS (M. Lynch)	11/19 Boston H.	1836		TASL (M. Hall)
11/5 P.I.	1		T. Maloney#	12/2-3 Cape Cod	2784		CCBC
11/10-17 Arlington Res.	1		C. Floyd	<b>Hooded Merganser</b>			
11/26 Braintree	2		G. d'Entremont#	11/4 Lincoln	70		R. Forster#
12/2 Pembroke	60		W. Petersen	11/5 Worcester	73		WPLS (M. Lynch)
12/2-3 Cape Cod	24		CCBC	11/12 Eastham	37		W. Petersen
<b>scaup species</b>				11/13 Lakeville	70		W. Petersen#

<b>Hooded Merganser (continued)</b>			
11/24	M.V.	60	A. Keith
11/24	Braintree	36	J. Cameron#
11/25	Wareham	46	D. Clapp
11/26, 12/10	Arlington	41, 128	K. Hartel
12/2	Eastham	105	R. Clem
12/2	Worcester	50	M. Lynch#
12/2-3	Cape Cod	867	CCBC
12/3	Pembroke	45	W. Petersen
12/10	Brighton	20	N. Komar
12/29	Boston	8	T. Aversa
12/31	Medford	4	M. Rines
<b>Common Merganser</b>			
11/5	Worcester	8	WPLS (M. Lynch)
11/13, 11/19	Lakeville	150, 250	W. Petersen#
11/18	Wakefield	150	P. + F. Vale
11/23	Lincoln	83	M. Pelikan
11/26	Spencer	160	M. Lynch#
12/2	Worcester	26	M. Lynch#
12/2-3	Cape Cod	285	CCBC
12/10	Arlington	66	K. Hartel
12/10	Brighton	25	N. Komar
<b>Red-breasted Merganser</b>			
11/7	S. Dart. (A.Pd)	133	LCES (J. Hill)
11/14	Barnstable (S.N.)	470	T. Aversa
11/19	Boston H.	1899	TASL (M. Hall)
11/25	Truro	300	W. Ellison#
<b>Ruddy Duck</b>			
thr	W. Newbury	500	maxD. Chickering
11/5	Worcester	5	WPLS (M. Lynch)
11/7	Braintree	400	S. Carey
11/12, 11/19	Southboro	63, 215	M. Lynch#
11/14	W. Newbury	82	F. Pratt
11/17	M.V.	165	A. Fischer
11/18	Melrose	76	I. + D. Jewell
11/19	W. Newbury	300	BBC (I. Giriunas)
11/25	S. Monomoy	130	B. Nikula#
12/2-3	Cape Cod	47	CCBC
12/3	Pembroke	80	W. Petersen
12/7	Attleboro	47	G. Valade
12/15	Brookline	16	B. Malcolm
12/29	Boston	4	T. Aversa
12/31	Medford	77	M. Rines#
<b>Turkey Vulture</b>			
11/4	Westport	11	M. Rines#
thr	Reports of 1-2 indiv. from 8 locations		
<b>Osprey</b>			
11/1-30	Wayland	1-2	K. Hamilton#
11/4	DWWS	1	K. Weinheimer#
11/5	W. Newbury	1	J. Berry
11/5	Worcester	1	WPLS (M. Lynch)
11/13, 11/19	Lakeville	4, 2	W. Petersen#
11/16	Cambridge	1	L. Liu
11/22	Lincoln	1	R. Wolanin
11/23	Arlington	1	M. Pelikan
11/26	Auburn	1	C. Ralph
11/26	S. Quabbin	1	R. Forster#
12/1	Camb. (F.P.)	1	M. Rines
12/2	Wayland	1	G. Long
<b>Bald Eagle</b>			
11/19	Lakeville	5	W. Petersen#
12/27	W. Newbury	3	C. Ralph
12/28	Lawrence	2	J. Center
12/30	Lakeville	7	K. Holmes
thr	Reports of indiv. from 15 locations		
<b>Northern Harrier</b>			
11/4	Cumb. Farms	9	S. Arena#
11/4	Westport	5	M. Rines#
11/5	Salisbury	2	D. Chickering
11/24	P.I.	3	W. Drew#
11/25	S. Monomoy	4+	B. Nikula#
11/25	M.V.	3	G. Daniels
12/22	Sandwich	3	T. Aversa
12/30	Nantucket	4	S. Perkins#
12/30	Cumb. Farms	2	BBC (K. Holmes)
<b>Sharp-shinned Hawk</b>			
11/4	Cumb. Farms	3	M. Lynch#
11/19	Boston H.	2	TASL (M. Hall)
11/24	Braintree	2	J. Cameron#
12/30	Nantucket	2	S. Perkins#
<b>Cooper's Hawk</b>			
11/18	M.V.	2	G. Daniels
thr	Reports of indiv. from 31 locations		
<b>Northern Goshawk</b>			
11/19	Lakeville	2 ad	W. Petersen#
11/21	Groton	1	T. Pirrou
11/26	Annisquam	1	H. Allen
11/30	Pepperell	1	E. Stromsted
12/4	Wayland	1 ad	H. Parker
12/18	Maynard	1 ad	L. Nachtrab
12/24	Mt.A.	1	R. Stymeist
<b>Red-shouldered Hawk</b>			
thr	Sherborn	2	E. Taylor
11/3	W. Roxbury	1 imm	T. Aversa
11/4-5	Mt. Wachusett	9	P. Roberts
11/24	Pepperell	1	E. Stromsted
11/17	Holliston	1	J. Howe
12/13	DWWS	1	D. Ludlow
12/15	W. Roxbury	1	T. Aversa
12/16	S. Dartmouth	1	M. Boucher
12/16	Freetown	1	R. Shore#
12/7, 12/29	Middleboro	1, 2	R. Shore#
<b>Swainson's Hawk</b>			
11/1-12	Middleboro	1	v.o.
<b>Red-tailed Hawk</b>			
11/4-5	Mt. Wachusett	28	P. Roberts
11/4	Westport	7	M. Rines#
11/5	Cumb. Farms	6	M. Lynch#
12/15	W. Roxbury	6	T. Aversa
12/30	Nantucket	8	S. Perkins#
<b>Rough-legged Hawk</b>			
11/4-5	Mt. Wachusett	1	P. Roberts
11/5	Cumb. Farms	2	C. Ralph
11/9	P.I.	1	S. Haydock
12/3	Rowley	1 lt	J. Berry
12/9	P.I.	2	V. Laux#
12/10	Plympton	1 lt	W. Petersen#
12/10, 12/31	Ipswich	1 lt, 1 lt	J. Berry
12/10	Cumb. Farms	1 dk	W. Petersen#
12/13	Boston (Logan)	1	N. Smith
12/13	P.I.	2	C. Ralph
12/13	DWWS	1	D. Ludlow
<b>Golden Eagle</b>			
11/4-5	Mt. Wachusett	2	P. Roberts
11/5-12/16	Lakeville	1	C. Ralph + v.o.
<b>American Kestrel</b>			
11/4	Westport	4	R. Stymeist#
11/4	Cumb. Farms	3	R. Lockwood
11/5	P.I.	2	R. Lockwood
12/13	Boston (Logan)	3	N. Smith
12/30	Nantucket	2	G. d'Entremont#
<b>Merlin</b>			
11/4	Westport	1	R. Stymeist#
11/10	Rowley	1-2	J. Berry
11/11	Salisbury	1	H. Miller
11/13	Cumb. Farms	1	F. Pratt
11/19	Squantum	1	TASL (M. Hall)
11/24	P.I.	1	W. Drew#
11/24	Braintree	1	J. Cameron
11/27	S. Boston	1	R. Donovan
12/12	Wellesley	1	R. Forster
12/13	Boston (Logan)	1	N. Smith

Peregrine Falcon				11/5, 11/19	Salisbury	8, 2	D. Chickering
11/5	Eastham	1	B. Nikula#	11/19	Boston H.	58	TASL (M. Hall)
11/9, 11/24	P.I.	1, 1	S. Haydock	11/19	Bridgewater	5	M. Resch
11/19	Boston H.	2	TASL (M. Hall)	11/24	Wellfleet	45	J. Young
11/25	P.I.	2	T. Maloney	11/24	M.V.	200	G. Daniels
11/25	S. Monomoy	1	B. Nikula#	12/2	Quincy	2	SSBC (P. Kelly)
11/26	Ipswich	1	D. + I. Jewell	12/23	Newburyport	1	V. Laux#
12/13	P.I.	1 imm	C. Ralph	12/23	Gloucester	1	M. Lynch#
12/25	Westborough	1 ad	M. Lynch#	American Golden-Plover			
12/30	Nantucket	1 ad	S. Perkins#	11/2	Boston (Logan)	1	N. Smith
<b>Gyrfalcon</b>				11/11	Ipswich	1	H. Miller
11/5	Quincy	1 b	N. Smith#	11/25	Truro	1	J. Young
12/11	P.I.	1 dk	A. Knue	Semipalmated Plover			
12/12	N. Falmouth	1 dk	I. Nisbet	11/4	Duxbury	8	K. Weinheimer#
<b>Ruffed Grouse</b>				Killdeer			
11/5	Bolton	1	S. + L. Hennin	12/1	Fairhaven	7	T. Aversa
11/6	E. Middleboro	1	K. Anderson	12/3	P.I.	1	C. Ralph
11/19	Pepperell	1	E. Stromsted	American Oystercatcher			
11/24	Hardwick	1	M. Lynch#	11/26	M.V.	1	G. Daniels
12/2	Groton	1	E. Stromsted	12/26	Hyannisport	1	J. Sones#
12/5	Wayland	1	N. Patterson	Greater Yellowlegs			
12/8	N. Middleboro	3	K. Holmes	11/2	E. Boston	60	T. Aversa
12/24	W. Boylston	2	S. + L. Hennin	11/4	Westport	6	M. Rines#
<b>Wild Turkey</b>				11/4	Lincoln	4	R. Forster#
11/9	Braintree	1	B. Campbell	11/4	Lakeville	5	S. Arena#
11/11	Charlton	11	R. Stymeist#	11/5	Salisbury	12	D. Chickering
11/11	Orange	16	R. Stymeist#	11/6, 11/24	P.I.	17, 1	W. Drew#
11/11	Pepperell	2	C. Eisenberg	11/14, 11/30	S. Dart. (A.Pd)	5, 1	LCES (J. Hill)
11/24	Barre	15	M. Lynch#	11/15	M.V.	2	G. Daniels
11/24	Middleboro	60+	R. Shore	11/19	Boston H.	21	TASL (M. Hall)
12/24	Barre	91	M. Lynch#	11/22	Lexington	3	R. Forster
12/24	Worc. (airport)	12	M. Lynch#	11/25	Eastham	4	W. Nichols
<b>Northern Bobwhite</b>				12/5	Falmouth	1	T. Aversa
11/25	Truro	12	W. Ellison#	12/10	P.I.	1	M. Lynch#
11/25	Middleboro	1	R. Shore	Lesser Yellowlegs			
12/31	W. Roxbury	20	T. Aversa	11/2	E. Boston	1	T. Aversa
<b>Clapper Rail</b>				11/4	Duxbury	2	K. Weinheimer#
11/5	P.I.	1	F. Bouchard	11/6	Westport	1	M. Boucher
11/23	Provincetown	1	W. Nichols	Upland Sandpiper (details submitted)			
<b>Virginia Rail</b>				11/17	Cumb. Farms	1	E. Weinheimer#
11/25	Eastham (F.H.)	2	S. Arena#	<b>Long-billed Curlew</b>			
12/2	Cotuit	2	S. Arena#	12/6-7	P.I.	1	C. Ralph, L. Nachtrab#
12/28	E. Middleboro	1	K. Holmes	Hudsonian Godwit			
<b>Common Moorhen</b>				11/6	P.I.	2	W. Drew#
11/23	Waltham	1	M. Pelikan	11/10	Eastham (F.H.)	1	K. Weinheimer#
11/25	S. Monomoy	1	J. Trimble	Ruddy Turnstone			
12/31	Nantucket	1	G. d'Entremont	11/12	Rockport	1	J. Berry
<b>American Coot</b>				11/19	Winthrop	5	TASL (M. Hall)
thr	Arlington	130 max	K. Hartel	12/30	Nantucket	10	G. d'Entremont#
11/4	Westport	170	R. Stymeist#	Red Knot			
11/5	W. Newbury	100	J. Berry	11/9	P.I.	30	S. Haydock
11/5	Worcester	12	WPLS (M. Lynch)	11/10	WBWS	13	K. Weinheimer#
11/7	Braintree	100	S. Carey	11/24	M.V.	1	A. Keith#
11/10	Lakeville	445	S. Arena	12/3	P.I.	1	R. Lockwood
11/18	Peabody	71	P. + F. Vale	Sanderling			
12/3	Mashpee	58	F. Caruso	11/19	Boston H.	525	TASL (M. Hall)
12/3	Westport	81	M. Boucher	12/27	Salisbury	20	J. Berry
12/3	Pembroke	75+	W. Petersen	White-rumped Sandpiper			
12/2-3	Cape Cod	296	CCBC	11/25	P.I.	1	T. Maloney
12/7	Attleboro	51	G. Valade	11/25	S. Monomoy	1	B. Nikula#
12/10	Brighton	100	N. Komar	11/26	Rowley	5	J. Berry
12/10	Arlington	158	K. Hartel	Pectoral Sandpiper			
12/31	Medford	77	M. Rines	11/4	Newburyport	1	D. Chickering
<b>Sandhill Crane</b>				11/5	Plympton	5	W. Petersen
11/8-12/2	Spencer	2	D. LaCroix + v.o.	Purple Sandpiper			
11/20-23	Newbury	1	D. + I. Jewell + v.o.	11/7	Rockport (H.P.)	12	L. Liu
12/20-31	Nantucket	1	N. Brooks + v.o.	11/19	Nahant	29	TASL (M. Hall)
<b>Black-bellied Plover</b>				11/19	Marblehead	2	D. Chickering
thr	S. Dart. (A.Pd)	2	LCES (J. Hill)	11/20	M.V.	8	G. Daniels
11/4	Westport	7	M. Rines#	11/25	Gloucester	20	M. Lynch#
11/5	P.I.	8	T. Maloney#	11/26	P.I.	12	R. Lockwood

Purple Sandpiper (continued)				12/3 Ipswich	30	J. Berry
12/27	Rockport (A.P.)	8	I. Lynch	12/13 S. Carver	1	J. Shaw
12/30	Nantucket	25	G. d'Entremont#	12/30 Nantucket	800	S. Perkins#
Dunlin				Ring-billed Gull		
11/5	Revere B.	300	P. + F. Vale	12/1-30 Lynn	1000	J. Quigley
11/10	WBWS	300	K. Weinheimer#	Herring x Great Black-backed Gull		
11/14	S. Dart. (A.Pd)	124	LCES (J. Hill)	11/1 Lynn	1 ad	J. Quigley
11/19	Nahant	200	TASL (M. Hall)	Iceland Gull		
11/25	Eastham	1200	W. Nichols	12/9 Acton	1	R. Lockwood
12/13	P.I.	40	C. Ralph	12/19 Lynn	1 1W	J. Quigley
12/27	Salisbury	30	J. Berry	12/26 Rockport (A.P.)	1	K. Hartel
Long-billed Dowitcher				12/30 Nantucket	20	S. Perkins#
11/2	E. Boston	5	T. Aversa	Lesser Black-backed Gull		
11/19	Boston H.	1	TASL (M. Hall)	11/19 Acton	1 ad	M. Resch
11/25	Eastham	1	W. Nichols	11/19 Gardner	1	T. Pirrou
11/26	P.I.	1	R. Lockwood	12/4 Lynn	1 ad	J. Quigley
12/26	Hyannisport	2	J. Sones#	12/8 Acton	1 1W	M. Resch
Common Snipe				12/3-5 Gardner	1 ad	T. Pirrou
11/5	E. Boston	1	P. + F. Vale	Glaucous Gull		
11/10	N. Attleboro	2	G. Valade	12/17 Hull	1	N. Swirka
11/19	Cumb. Farms	4	W. Petersen	12/23 Newburyport	1 1W	V. Laux#
11/22	Newbury	1	T. Aversa#	12/25 Rockport (A.P.)	1 1W	T. Young#
12/7	N. Attleboro	2	G. Valade	Black-legged Kittiwake		
12/9	Ipswich	1	J. Berry	11/4 Eastham (F.E.)	800	B. Nikula
12/12	P.I.	1	T. Aversa	11/8 Eastham (F.E.)	150	J. Sones
12/26	Newburyport	2	T. Young	11/15 P'town (R.P.)	30	M. Lynch#
American Woodcock				11/15 Rockport (H.P.)	20	R. Lockwood
11/1	Boston (F.Pk)	1	T. Aversa	11/28 M.V.	5	G. Daniels
11/4	Arlington Res.	1	M. Pelikan	12/15 Rockport (A.P.)	6	J. Soucy
11/17	Wayland	1	N. Patterson	12/23 P.I.	8	S. Perkins#
11/10	DWWS	2	F. Garretson	12/30 Nantucket	30	S. Perkins#
phalarope species				Common Tern		
12/10	Eastham (F.E.)	13	B. Nikula	11/14 Salisbury	1	F. Pratt
Pomarine Jaeger				11/14 Barnstable (S.N.)	3	T. Aversa
11/4	Eastham (F.E.)	4	B. Nikula	11/25 Wellfleet H.	2	S. Thompson
11/12	Eastham (F.E.)	4	F. Pratt	11/26 P.I.	1	R. Lockwood
11/15	P'town (R.P.)	3	M. Lynch#	Forster's Tern		
11/15	40 mi SE of Nant.	20	V. Laux	11/4 Eastham (F.E.)	1	B. Nikula#
11/25	Rockport (H.P.)	1	T. Burke#	11/5 Truro	2	B. Nikula#
12/2	Orleans	20+	B. Nikula	11/5 Salisbury	1	R. Lockwood
12/15	Dennis	1 sub ad.	R. Forster	11/10 Wellfleet H.	5	K. Weinheimer#
12/21	Eastham (F.E.)	10	B. Nikula	12/3 S. Dart. (A. Pd)	1	LCES (J. Hill)
jaeger species				tern species		
11/4	Eastham (F.E.)	9	B. Nikula	12/2 Wellfleet H.	2	B. Nikula#
11/8	Eastham (F.E.)	4	J. Sones	Dovekie		
skua species				11/16 Wellfleet H.	4	D. Sandee
11/8	Eastham (F.E.)	1	J. Sones	11/25 Provincetown	1	W. Nichols
Laughing Gull				12/2 Rockport	1	T. Young
11/7	S. Dart. (A.Pd)	2	LCES (J. Hill)	12/27 Rockport (A.P.)	2	I. Lynch
11/7	Lynn	1	J. Quigley	Thick-billed Murre		
11/15	Barnstable (S.N.)	100	H. Ferguson	11/15 F.E., P'town	1, 1	M. Lynch#
11/19	Winthrop	12	TASL (M. Hall)	11/25 Rockport (H.P.)	1	T. Burke#
11/20	M.V.	1	G. Daniels	12/4 Provincetown	1	L. High
11/23	Provincetown	4	W. Nichols	12/9 Rockport (H.P.)	3	S. + L. Hennin
11/23	Truro	1 ad	W. Ellison	Razorbill		
Little Gull				11/15 Provincetown	20	M. Lynch#
11/23-24	Wellfleet H.	1 imm	G. Martin + v.o.	11/15 Rockport (H.P.)	15	C. Cook
12/30	Nantucket	2 ad	T. Maloney#	11/16 Wellfleet H.	15	D. Sandee
Common Black-headed Gull				11/23 Truro	20	W. Ellison
11/10-12/5	Lynn	1-2	J. Quigley	11/25 Rockport (H.P.)	30	T. Burke#
11/14	N. Dartmouth	1	M. Boucher	12/3 Sandwich	10	M. Lynch#
11/17	M.V.	1 imm	V. Laux	12/13 Scusset B.	2	M. LaBossiere
11/19	Winthrop	5	TASL (M. Hall)	12/15 Rockport (A.P.)	30	J. Soucy
11/25	Wellfleet H.	1	R. Comeau#	large alcid species		
12/2-7	Orleans	1 1W	P. Trimble#	11/15 F.E., P'town	20, 40	M. Lynch#
12/30	Nantucket	2	S. Perkins#	12/10 Eastham (F.E.)	35	B. Nikula
Bonaparte's Gull				Black Guillemot		
11/7	Lakeville	2	K. Anderson	11/4 Rockport	2	BBC (J. Nove)
11/10	Lynn	1000	J. Quigley	11/16 Wellfleet H.	2	D. Sandee
11/15	Barnstable (S.N.)	500	H. Ferguson	11/25 Cape Ann	14	M. Lynch#
11/19	Boston H.	1084	TASL (M. Hall)	12/9 Rockport	3	S. + L. Hennin



<b>Atlantic Puffin</b>				11/24	Eastham	2	S. Thompson
11/15	40 mi SE of Nant.	1	V. Laux	11/24	M.V.	2	T. Rivers
<b>Black-billed Cuckoo</b>				11/26	E. Orleans	1	M. Taylor#
11/1	Wareham	1	M. LaBossiere	11/30	S. Dart. (A.Pd)	1	LCES (J. Hill)
11/5	Eastham (F.H.)	1	B. Tirrell#	12/4	Orleans	1	S. + E. Miller
<b>Yellow-billed Cuckoo</b>				12/10	Cumb. Farms	7	W. Petersen#
11/4	Osterville	1	T. Noonan#	12/13	Edgartown	4	V. Laux
<b>Eastern Screech-Owl</b>				12/31	S. Dart. (A. Pd)	2	T. Raymond
thr Mt. A.		3+	J. Heywood#	<b>Northern Saw-whet Owl</b>			
12/30	E. Middleboro	2	K. Holmes	11/2	Concord	1	J. Christian
<b>Great Horned Owl</b>				11/5	Salisbury	1	D. Chickering
11/10	Bolton	2	S. + L. Hennin	11/26	Brookline	1	R. Graff
11/25	S. Monomoy	2	B. Nikula#	11/28	Boston	1	R. Lewis
11/30-12/31	Mt. A.	2	M. Rines#	11/28	DWWS	17 b	N. Smith
12/1-30	Bolton	2	S. + L. Hennin	12/2	Wayland	1	G. Long
12/1-30	Ipswich	pr	J. Berry	12/14	Boston	1	K. Hudson
12/13	W. Gloucester	2	R. Medico#	12/23	Topsfield	1	J. Brown#
12/30	E. Middleboro	2	K. Holmes	12/30	Nantucket	2	S. Perkins#
<b>Snowy Owl</b>				<b>Belted Kingfisher</b>			
12/15	Boston (Logan)	1	N. Smith	12/2	Barnstable	8	T. Aversa#
<b>Barred Owl</b>				<b>Red-headed Woodpecker</b>			
11/3	Brookline	2	T. Aversa	11/9	Pocasset	1 imm	L. Mills
11/13	Boston (Common)	1	E. Einhorn	11/14	Athol	1	D. Small
11/21-12/30	Camb. (F.P.)	1	M. Rines#	11/17	Woburn	1 imm	J. Farr
11/24	Royalston	1	M. Lynch#	<b>Red-bellied Woodpecker</b>			
11/25	Boston (B.U.)	1	J. Martinez	thr Ipswich		pr	J. Berry
11/26	Rockport (H.P.)	1	R. Lockwood	thr Sherborn		2	E. Taylor
11/26-12/31	Roslindale	1	T. Aversa	4 Woods Hole		3	T. Aversa
11/27	Danvers	1	J. Gordon	11/10-11/16	E. Boxford	pr	J. Brown#
11/27	Wayland	1	N. Patterson	11/23-25	Truro	2	J. Young
11/29	Boston (Pub.Gard.)	1	K. Hudson	12/1-31	Boxford	pr	J. Brown#
12/1	Acushnet	1	dead R. Stymeist#	12/1-31	Pepperell	2	S. Maynes#
12/5	Belmont	1	C. Kopkowski	12/5	Falmouth	3	T. Aversa
12/9	Stoneham	1	S. Perkins#	12/31	Nantucket	2	G. d'Entremont#
12/9	Lynnfield	1	V. Laux#	11/1-30	Reports of indiv. from 31 locations		
12/12	Natick	1	L. Breen	12/1-31	Reports of indiv. from 22 locations		
12/12	Boston (Beacon Hill)	1	K. Hudson	<b>Yellow-bellied Sapsucker</b>			
12/18	S. Boston	1	S. Devou	11/21	Boston	1	J. Adamson
12/19	W. Roxbury	1	T. Aversa	<b>Hairy Woodpecker</b>			
12/25	Sudbury	1	B. Barren	thr E. Boxford		2-3	J. Brown#
12/28	Arlington	1	K. Hartel	11/5	Malden	3	P. + F. Vale
12/28	Lynn	1	J. Quigley	<b>Northern Flicker</b>			
<b>Long-eared Owl</b>				12/30	Nantucket	35	S. Perkins#
11/22	Gay Head	2	A. Fischer	<b>Pileated Woodpecker</b>			
11/25	Chilmark	1	A. Keith	11/30	Wayland	1	N. Patterson
12/22	Sandwich	4	T. Aversa	12/5	Westford	2	A. Havelaris
<b>Short-eared Owl</b>				12/19	Weston	1	K. Wolfchal
11/4	Rockport	2	J. Berry	12/29	Wayland	1	N. Patterson
11/18	Cumb. Farms	8	C. Ralph	12/31	Petersham	1	M. Lynch#

#### FLYCATCHERS THROUGH GROSBEAKS

A single Western Kingbird was found in Chilmark on November 11, only the third of the season. The previous season low was four individuals in 1976 and 1978. The **Scissor-tailed Flycatcher** originally found on October 29 was still delighting birders at the Cumberland Farms fields in Halifax through November 7. A **Gray Jay** was found in the Quabbin area of Petersham on November 9, and perhaps a second individual on December 30. The Gray Jay is a very rare winter visitor which historically seems to prefer the remote forested areas around Quabbin where many of the reports occur.

The unseasonably cold weather and near record snowfall in November and December was reflected in the number of northern species that were found. **Bohemian Waxwings** were noted from 14 locations, with the largest flock of 20 individuals in Wellfleet. They arrived early, with the first being seen at Halibut Point in Rockport on October 22.

The real show-stopper for numbers was the Northern Shrike invasions. According to Veit and Petersen in *Birds of Massachusetts*, "The extent and magnitude of the bird's southward migrations appear to be determined by the availability of rodents and small birds on their boreal breeding grounds." Well, there must have been a crash. We were invaded by Northern Shrikes. The first shrike reported this season was on October 13, and by the end of the year shrikes were being seen in almost every community. On the eastern Massachusetts Christmas Bird Counts, it was one of only 16 species that were seen on every count!

Winter finches were also moving, unlike last November and December, when not a single siskin, redpoll, crossbill or Pine Grosbeak was seen. Purple Finches also appeared in many locations. Royalston played host to as many as 25 Pine Grosbeaks, and nearby Athol recorded 12. Athol also reported over 350 Pine Siskins. It was an exciting time for birders.

Other rarities this season included a two-day visit of a **Townsend's Warbler** in South Boston, only the fourth report for Massachusetts. And certainly the most bizarre report was the appearance of a **Eurasian Tree Sparrow** at a feeder in the Brighton section of Boston on November 6, where it remained through the end of the year. Access to see this bird was extremely difficult due in part to a delicate situation among neighbors. How this bird arrived here is a mystery, since it is not known to be kept in captivity and its occurrence in the United States is limited to an introduced colony in the St. Louis area. The bird was videotaped and photographed, and its status has yet to be decided by the Massachusetts Avian Records Committee. Stay tuned.

R. H. S.

<b>Eastern Phoebe</b>			11/5	Worcester	2	M. Lynch#
11/3	W. Roxbury	1	11/6	Brookline	2	H. Wiggin#
11/5	Cumb. Farms	1	11/9	Lexington	1	M. Rines
11/6	Boston (F.Pk)	1	11/10	Belmont	3	M. Rines
11/11	Seekonk	1	11/11	Arlington	1	K. Hartel
11/12	Gay Head	1	11/12	Rockport	1 m	J. Berry
11/23	Acushnet	1	11/19	Southboro	1	M. Lynch#
11/24	Katama	1	11/22	Bolton	2	S. + L. Hennin
11/26	Brookline	1	12/1-31	E. Middleboro	pr	K. Anderson
<b>Western Kingbird</b>			12/3	Falmouth	13	M. Lynch#
11/11	Chilmark	1	12/12	Bolton	2	S. + L. Hennin
<b>Scissor-tailed Flycatcher</b>			12/20	Brighton	1	R. Hastie
11/1-7	Cumb. Farms	1	12/28	Clinton	1	S. + L. Hennin
<b>Horned Lark</b>			12/30	Nantucket	5	S. Perkins#
11/9	Spencer	15	<b>House Wren</b>			
11/10	Wayland	10	11/3	W. Roxbury	1	T. Aversa
11/19	Middleboro	200	11/11	Gay Head	1	A. Keith
11/23	Salisbury	17	11/22	N. Dartmouth	1	M. Boucher
12/21	N. Attleboro	45	11/27	Roslindale	1	T. Aversa
12/22	Sandwich	120	12/15	N. Attleboro	1	G. Valade
12/27	Salisbury	50	<b>Winter Wren</b>			
<b>Tree Swallow</b>			11/7	Nahant	2	T. Aversa
11/10	P.I.	1	11/11	Arlington Res.	2	M. Pelikan
11/14	S. Dart. (A.Pd)	4	11/14	Woods Hole	2	T. Aversa
11/15	M.V.	100	11/19	Westboro	2	M. Lynch#
11/25	S. Monomoy	100	12/8	Nahant	2	T. Aversa
<b>Gray Jay</b>			thr Reports of indiv. from 10 locations			
11/9	Petersham	1	<b>Marsh Wren</b>			
12/30	Petersham	1	11/19	Westboro	1	M. Lynch#
<b>American Crow</b>			11/21	Cumb. Farms	3	T. Aversa
11/10, 11/30	Framingham	400, 4500+	11/27	Dorchester	3	R. Donovan
12/1-31	Framingham	5000+	12/5	Falmouth	1	T. Aversa
<b>Fish Crow</b>			12/23	Newburyport	1	S. Perkins#
11/20	Roslindale	6	12/31	Nantucket	1	G. d'Entremont
11/28	W. Roxbury	20+	<b>Golden-crowned Kinglet</b>			
12/1-16	Braintree	20 max	11/11	Petersham	6	S. + L. Hennin
12/31	W. Roxbury	5	11/12	Concord	10	M. Pelikan
<b>Common Raven</b>			11/19	Southboro	17	M. Lynch#
11/11	Athol	1	<b>Ruby-crowned Kinglet</b>			
11/11	Petersham	1	11/7	Brookline	7	T. Aversa
11/16	Quabbin (G40)	1	11/11	Arlington	6	K. Hartel
11/24	Royalston	2	11/19	Northboro	2	M. Lynch#
12/31	Petersham	1	11/26, 12/1	Roslindale	4, 1	T. Aversa
<b>Red-breasted Nuthatch</b>			12/1	Fairhaven	2	T. Aversa
11/19	Southboro	12	12/2	P.I.	1	J. Berry
12/24	W. Boylston	3	<b>Blue-gray Gnatcatcher</b>			
12/30	Nantucket	7	11/21	Chatham	1	R. Clem
<b>Brown Creeper</b>			<b>Eastern Bluebird</b>			
11/11	Arlington	6	thr	E. Boxford	1-6	J. Brown#
11/12	Wayland	5	thr	Mattapoisett	3-5	F. Smith
12/10	Harvard	3	11/1	Cumb. Farms	6	C. Ralph
<b>Carolina Wren</b>			11/5	W. Newbury	8	J. Berry
11/3	Stow	1	11/5	Middleboro	16	G. d'Entremont#
11/4	Westport	8	11/10	WBWS	5	K. Weinheimer#
11/5	Wayland	1	11/14	Woods Hole	4	T. Aversa

<b>Eastern Bluebird (continued)</b>			
11/23	Framingham	5	R. Forster
11/23	Acushnet	12	M. LaBossiere
11/25	Lakeville	10	R. Shore#
11/26	Wayland	5	N. Patterson
12/13	Edgartown	10	V. Laux
12/21	N. Attleboro	7	G. Valade
12/23	Truro	5	J. Young
12/24	Sterling	12	B. Volkle
12/25	Acushnet	4	M. LaBossiere
12/30	Middleboro	10+	R. Shore#
<b>Hermit Thrush</b>			
11/1	Boston (F.Pk)	16	T. Aversa
11/5	W. Newbury	2	J. Berry
11/5	Melrose	3	P. + F. Vale
11/10	Wenham	2	N. Nash
11/12	Wayland	2	G. Long
12/5	Falmouth	4	T. Aversa
thr Reports of indiv. from 11 locations			
<b>American Robin</b>			
11/11	Beverly	110	J. Brown#
11/13	Ipswich	150	I. + D. Jewell
12/9	Halifax	450+	W. Petersen
12/20	N. Dartmouth	125	M. Boucher
<b>Gray Catbird</b>			
thr	Wellesley	1	R. Forster
11/11	Somerset	2	J. Young
12/5	Falmouth	7	T. Aversa
12/23	Newton	1	N. Komar
12/28	Wareham	2	M. LaBossiere
12/30	Nantucket	4	B. Malcolm#
<b>Brown Thrasher</b>			
11/23	Acushnet	1	M. LaBossiere
12/3	Falmouth	1	M. Lynch#
12/21	Ashland	1	M. Lorezzola
12/23	Newbury	1	P. Trimble#
<b>American Pipit</b>			
11/4	Cumb. Farms	100	S. Arena#
11/5	W. Newbury	8	J. Berry
11/5, 11/26	P.I.	5, 6	R. Lockwood
11/11	Danvers	4	J. Brown#
11/21	Groton	4	T. Pirrou
11/26	P.I.	6	R. Lockwood
11/26	Katama	20	A. Keith#
11/28	W. Roxbury	7	T. Aversa
12/3	Falmouth	1	M. Lynch#
<b>Bohemian Waxwing</b>			
11/5	Cumb. Farms	4	G. d'Entremont#
11/6	P.I.	2	D. + I. Jewell
11/9	Marshfield	1	D. Furbish
11/13	P.I.	1-2	C. Cook
11/11	E. Boxford	1	K. Disney
11/21-12/30	Royalston	60max	v.o.
11/25	Lakeville	2	R. Shore#
12/7	Rockport (H.P.)	1	H. D'Entremont
12/9	Wellfleet	20	G. Martin
12/21	Wenham	1	C. Leahy
12/23	N. Truro	18	J. Young
12/24	Sterling	1	B. Volkle
12/23	W. Newbury	1	R. Stymeist#
12/28	Nantucket	5	S. Arena#
<b>Cedar Waxwing</b>			
11/4	DWWS	30	K. Weinheimer#
11/11	Worcester	100	G. d'Entremont#
11/25	Lakeville	60+	R. Shore#
12/6	Essex	90+	T. Young
12/9	Lakeville	60	R. Shore
12/9	Halifax	100+	W. Petersen
12/9	Bridgewater	20	W. Petersen
12/23	Wenham	20	S. + L. Hennin
12/27	Pepperell	32	E. Stromsted
<b>Northern Shrike</b>			
11/1-30	Cape Cod	12+	v.o.
thr	P.I.	3 max	v.o.
thr	Wayland	2 max	G. Long
11/7	Braintree	2	S. Carey
11/10	Petersham	2	C. Cook
11/11	Spencer	3	B. Volkle
11/21	Cumb. Farms	3	T. Aversa
11/25-28	M.V.	3	v.o.
11/25	Milton	2	T. Cameron
12/3-5	Gardner	2	T. Pirrou
12/4	M.V.	5	fide G. Daniels
12/15	W. Roxbury	3	T. Aversa
12/23	Truro	3	J. Young
11/1-30 Reports of indiv. from 35 locations			
12/1-31 Reports of indiv. from 29 locations			
<b>White-eyed Vireo</b>			
11/25	P.I.	1	T. Burke#
<b>Solitary Vireo</b>			
11/3	Newton	1	H. Miller
11/3	W. Roxbury	1	T. Aversa
11/5	Lakeville	1	W. Petersen
<b>Red-eyed Vireo</b>			
11/4	Falmouth	2	T. Aversa#
11/7	Brookline	1	T. Aversa
<b>Tennessee Warbler</b>			
11/13	Middleboro	1	W. Petersen#
11/18	Arlington	1	K. Hartel
<b>Orange-crowned Warbler</b>			
11/4	Woods Hole	1	T. Aversa#
11/12	Marshfield	1	D. Clapp
11/10	Dorchester	1	R. Donovan
<b>Yellow-rumped Warbler</b>			
11/1-25	Wayland	50 max	11/11 N. Patterson
11/4	Rockport	15	BBC (J. Nove)
11/4	Westport	25	M. Rines#
11/4	Rockport	15	BBC (J. Nove)
11/5	Middleboro	25	G. d'Entremont#
11/11	Arlington	60	K. Hartel
11/12	GMNWR	9	M. Pelikan
11/15	Provincetown	15+	M. Lynch#
12/3	Falmouth	13	M. Lynch#
12/9	P.I.	2	S. Perkins#
<b>Townsend's Warbler</b>			
12/4-5	S. Boston	1	R. Donovan
<b>Black-throated Green Warbler</b>			
11/1	Boston (F.P.)	1	T. Aversa
<b>Pine Warbler</b>			
11/23	Quabbin (G40)	1	S. + L. Hennin
11/25	Lakeville	1	J. Cameron#
12/7	Cotuit	1	S. + E. Miller
12/25	Mattapoisett	1	F. Smith
12/31	Nantucket	2	G. d'Entremont#
<b>Palm Warbler</b>			
11/5	Wayland	3	M. Pelikan
11/10	M.V.	1	A. Keith#
11/11	Worcester	1	G. d'Entremont#
11/16	Cumb. Farms	7	M. Rines
11/26	Eastham	6	J. Young
<b>Blackpoll Warbler</b>			
11/1	Boston (F.Pk)	1	T. Aversa
11/13	Cumb. Farms	1	W. Petersen#
11/26	Roslindale	1	T. Aversa
<b>Black-and-white Warbler</b>			
11/3	Reading	1	L. Beattie
<b>American Redstart</b>			
11/2	MNWS	1	T. Aversa
11/11	Arlington	1	K. Hartel
11/20	Roslindale	1	T. Aversa
<b>Ovenbird</b>			
12/19-20	Newton	1	M. Linshaw

Common Yellowthroat			11/10 DWWS	1	F. Garretson
11/5 Worcester	1	BBS (M. Lynch)	11/17 Chatham	1	R. Clem
11/25 P.I.	1	T. Burke#	11/27 Dorchester	1	R. Donovan
11/27, 12/4 Boston	1	T. Aversa	Sharp-tailed Sparrow		
12/1 Fairhaven	1	T. Aversa	11/3 N. Attleboro	1	G. Valade
12/3 W. Barnstable	1	S. + E. Miller	11/7 S. Dart. (A.Pd)	1	LCES (J. Hill)
12/31 Nantucket	1	G. d'Entremont	11/25 Eastham (F.H.)	8	S. Arena#
Wilson's Warbler			Seaside Sparrow		
11/7 Nahant	1 m	T. Aversa	11/22 P.I.	2	T. Aversa#
Yellow-breasted Chat			11/25 Eastham (F.H.)	5	S. Arena#
11/4 Falmouth	1	T. Aversa	Fox Sparrow		
12/9 MNWS	1	J. Smith	11/1-23 Concord	7 total	R. Lockwood
12/12 Marshfield	1	D. Clapp	11/5 W. Newbury	4	J. Berry
Dickcissel			11/9 Spencer	5	M. Lynch#
11/3 W. Roxbury	1	T. Aversa	11/9 Arlington	5	M. Rines
11/4-16 Framingham	1 f	K. Hamilton	11/12 Boston	5	T. Aversa
11/16-19 Framingham	1 m	K. Hamilton	11/12 Concord	5	M. Pelikan
11/5 Truro	1	B. Nikula#	11/12, 11/27 Wayland	4, 1	G. Long
Rufous-sided Towhee			11/13 Wellesley	4	R. Forster
11/19 Ipswich	1	J. Berry	11/13 Lexington	4	C. Floyd
11/25 Truro	1	J. Young	12/1 Mt. A.	1	M. Rines
12/5 Falmouth	3	T. Aversa	12/7 Boston (F.Pk)	1	T. Aversa
12/18 Westwood	1	C. Bean	12/20 Gardner	1	L. Long
12/26 Ipswich	1	S. Carver	11/1-11/27 Reports of 1-3 indiv. from 8 loc.		
12/30 Nantucket	1	S. Perkins#	Lincoln's Sparrow		
American Tree Sparrow			11/1 Dorchester	1	R. Donovan
11/1 W. Acton	10+	A. Sgroi	11/3 Wayland	1	N. Patterson
11/11 Wayland	30	M. Pelikan	11/5 Southboro	1	R. Forster
11/13 Middleboro	50+	W. Petersen#	12/16 Provincetown	1	J. Smith
11/17 Bolton	15	S. + L. Hennin	12/30 Nantucket	1	S. Perkins#
11/26 Rowley	15	J. Berry	Swamp Sparrow		
11/27 Wayland	75	G. Long	11/5 Wayland	20	M. Pelikan
12/16 S. Dartmouth	60	M. Boucher	11/9 Lexington	10	M. Rines
Chipping Sparrow			11/12 GMNWR	10	M. Pelikan
11/2 E. Boxford	1	J. Brown#	12/5 Falmouth	12	T. Aversa
11/4 Cambridge	4	G. d'Entremont#	White-crowned Sparrow		
11/11 Worcester	1	G. d'Entremont#	11/3 Northboro	1	B. Volkle
11/11 Wayland	1	M. Pelikan	11/5 P.I.	1	R. Lockwood
11/26 Lakeville	1	R. Shore#	11/5-18 Worcester	1	M. Lynch#
12/2 Marstons Mills	1	T. Aversa	11/10 Medford	1	M. Rines
12/5 Bourne	4	T. Aversa	11/10 Dorchester	1	R. Donovan
12/7 Cotuit	1	S. + E. Miller	11/13 Cumb. Farms	6	F. Pratt
12/12-17 Lincoln	1	S. Perkins	11/14 N. Attleboro	1	G. Valade
12/16 S. Dartmouth	1	M. Boucher	11/25 Wellfleet	1 ad	W. Nichols
Clay-colored Sparrow			12/5 Falmouth	1 ad	T. Aversa
11/9 Reading	1	L. Beattie	12/22 Sandwich	5 imm	T. Aversa
11/11 Dorchester	1	R. Donovan	Dark-eyed Junco		
Field Sparrow			11/4 Southboro	50	E. Taylor
11/4 Westport	5	M. Rines#	11/9 Spencer	40+	M. Lynch#
11/11 Seekonk	6	J. Young	11/11 Worcester	25	G. d'Entremont#
11/15 Provincetown	2	M. Lynch#	"Oregon" Dark-eyed Junco		
12/1 Fairhaven	14	T. Aversa	11/22 Provincetown	1	W. Nichols
12/23 Freetown	32	T. Aversa	12/9-12 Essex	1 m	T. Young
Vesper Sparrow			Lapland Longspur		
11/9 Cumb. Farms	1	K. Weinheimer#	11/9 Spencer	5	M. Lynch#
12/22 Sandwich	1	T. Aversa	11/24 Middleboro	2	D. Zimmerlin
Lark Sparrow			11/25 Salisbury	11	T. Burke#
11/1-12 Cumb. Farms	1	D. Brown#	12/3 P.I.	2	R. Lockwood
12/13 Truro	1	H. D'Entremont	12/22 Salisbury	5	D. Chickering
Savannah Sparrow			Snow Bunting		
11/7 Lexington	15	M. Rines	11/2 Boston (Logan)	2000	N. Smith
11/13 Middleboro	35	W. Petersen#	11/3 P.I.	500	S. Haydock
12/5 Bourne	25	T. Aversa	11/4 Duxbury B.	30	K. Weinheimer#
12/9 Cumb. Farms	10	W. Petersen	11/4 Westport	138	M. Rines#
12/22 Sandwich	35	T. Aversa	11/4 W. Roxbury	44	F. Bouchard
"Ipswich" Savannah Sparrow			11/5 W. Newbury	50	J. Berry
11/10 P.I.	1	D. + I. Jewell	11/7 Lexington	40	M. Rines
11/23 Squantum	2	S. Arena	11/9 Spencer	60+	M. Lynch#
Grasshopper Sparrow			11/10 Dorchester	60	R. Donovan
11/4 Woods Hole	1	T. Aversa#	11/12 Sudbury	35	K. Hamilton
11/5, 11/11 Wayland	1	M. Pelikan	11/12 Ipswich	100	J. Berry

Snow Bunting (continued)			12/10	Rochester	4	M. LaBossiere
11/15	Provincetown	66	12/13	E. Middleboro	1	K. Anderson
11/22	Westport	89	12/21	Barnstable	1	S. + E. Miller
11/23	Truro	30	Red Crossbill			
12/3	Falmouth	37	11/4	Princeton	2	B. Van Dusen
12/16	S. Dartmouth	24	11/16	Quabbin (G40)	1	S. + L. Hennin
12/27	P.I.	100	11/25	S. Monomoy	2	B. Nikula#
12/28	Middleboro	23	12/24	Athol	2	B. Volkle
12/29	Petersham	30	Common Redpoll			
12/31	Groton	30	11/4, 11/23	Waltham	2, 2	R. Forster#
Bobolink			11/10	Pepperell	6	M. Resch
11/3	Brookline	1	11/17	Lexington	1	C. Floyd
Red-winged Blackbird			11/20	Athol	2	D. Small
11/6	N. Dartmouth	250	11/23	P.I.	8	P. + F. Vale
12/22	Sandwich	23	11/23	Truro	1	W. Ellison
12/22	N. Dartmouth	3	11/25	Worcester	25	B. Vasque
Eastern Meadowlark			12/2	Cumb. Farms	3	M. Rines#
11/4	Cumb. Farms	30	12/7	P.I.	40	B. Chiasson
11/26	DWWS	16	12/15	Quincy	20	N. Smith
12/1	Fairhaven	16	12/22	Sandwich	80	T. Aversa
12/2	Cumb. Farms	20+	12/23	Saugus	1	P. Duffy
12/13	DWWS	18	12/28	Dedham	1	N. Komar
12/23	Newbury	3	12/30	Nantucket	11	S. Perkins#
12/23	Truro	2	Pine Siskin			
12/25	Acushnet	6	11/4	W. Gloucester	2	H. D'Entremont
Rusty Blackbird			11/5	Southboro	1	R. Forster#
11/2, 11/30	Wayland	2, 1	11/5	E. Bridgewater	2	R. Fisher
11/4	Falmouth	3	11/7-12	Melrose	4	D. + I. Jewell
11/9	Peabody	4	11/9	Gloucester	1	C. Cook
11/14	Marstons Mills	1	11/16	Quabbin (G40)	1	S. + L. Hennin
11/17	Cumb. Farms	1	11/20	Athol	350+	D. Small
12/24	Wayland	2	11/21	Taunton	4	D. Cabral
Common Grackle			11/22	Gay Head	6	A. Fischer
11/4	Cumb. Farms	3000	11/25-30	Natick	3	E. Taylor
11/22	N. Dartmouth	500	11/26	Truro	2	J. Young
12/5	Woods Hole	12	12/1	Groveland	6	D. Chickering
12/14	Bolton	1	12/1-14	Rockport	25	J. Soucy
12/19	Wakefield	1	12/3	N. Andover	9	L. Wagner
12/25	S. Dartmouth	1	12/14	Ipswich	1	T. Young
Brown-headed Cowbird			12/15-31	Pepperell	2-6	B. Taus
11/6	N. Dartmouth	750	12/17	N. Attleboro	20	G. Valade
12/13	N. Dartmouth	1	12/31	Bolton	3	S. + L. Hennin
12/21	Wakefield	1	American Goldfinch			
Northern Oriole			11/4	DWWS	100	K. Weinheimer#
11/4, 11/14	Woods Hole	6, 3	11/13	Cumb. Farms	135	W. Petersen#
11/12	Chilmark	2	12/22	Sandwich	500	T. Aversa
11/16	Gay Head	1	Evening Grosbeak			
11/16, 11/23	Lexington	1, 2	11/1	Rockport (H.P.)	9	G. Ferguson
11/19	Needham	1	11/3	Marshfield	6	D. Clapp
11/20-22	Haverhill	1 f	11/4	Woods Hole	5	T. Aversa
11/21	Cumb. Farms	1	11/5	Truro	15	B. Nikula#
11/25	Watertown	1	11/5	Wenham	12	N. Nash
11/30	Natick	1	11/5	W. Newbury	20	J. Berry
12/3	New Bedford	1	11/6	Natick	38	B. Boyd
12/10	Falmouth	1	11/8	E. Bridgewater	6	R. Finch
12/13	Centerville	1	11/8	Waltham	3	C. Ralph
12/1-19	Lexington	1	11/13-14	Athol	20	D. Small
Pine Grosbeak			11/23	Petersham	8	S. + L. Hennin
11/4-5	Mt. Wachusett	2	11/22	Middleboro	8	M. Boucher
11/24-12/31	Royalston	25 max	11/24	Hardwick	36	M. Lynch#
12/3, 12/26	Gardner	19, 23	11/25	Royalston	40	R. Lockwood
12/30	Petersham	9	12/3-5	Gardner	10	T. Pirrou
12/30	Athol	12	12/10-24	Pepperell	10-20	B. Taus
Purple Finch			12/18	Maynard	3	L. Nachtrab
11/2	Natick	3	12/30	Nantucket	2	S. Perkins#
11/3	W. Roxbury	8	12/31	Carver	4	E. Rehbein
11/4	Wenham	3	Eurasian Tree Sparrow			
11/7	N. Attleboro	3	11/6-12/31	Brighton	1 ph	R. Hastie + v.o.
11/27	Wayland	4				

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

This publication prints monthly compilations of reports of birds seen in the ten counties of eastern Massachusetts (Worcester County and east) and offshore waters. Space does not permit the inclusion of all material submitted. However, bird sightings sent to *Bird Observer* are archived at the Massachusetts Audubon Society. Our compilers select and summarize for publication sightings that provide a snapshot of birdlife during the reporting period. These sightings include early and late dates for migratory species, maximum counts of migrants and some common birds, and species found beyond their normal ranges.

Sightings for any given month must be reported in writing by the eighth of the following month. Send to Bird Sightings, Robert H. Stymeist, 94 Grove Street, Watertown, MA 02172. Please organize reports by month and by species in current A.O.U. checklist order. Include name and phone number of observer, common name of species, date of sighting, location, number of birds, number of observers, and information relevant to age, sex, morph, etc.

Reports of difficult identifications, vagrants, rarities, or species unusual as to place, time, or prior nesting activity in Massachusetts also should be reported promptly to the Massachusetts Avian Records Committee, c/o Wayne Petersen, Massachusetts Audubon Society, South Great Road, Lincoln, MA 01773. Include, in addition to the above information, time of day and light available, weather conditions, the optics used and approximate distance from the bird, length of observation, observer's prior experience with the species, and field guide or other references used. Provide a description of the bird based solely on personal observation. Comment on the distinguishing field marks (observed and unobserved), vocalizations, activity, general behavior, habitat, and other birds present. Include with your report copies of any field notes and sketches.



### Bird Watcher's Supply & Gift

Steve & Staci Grinley, Proprietors

Route 1 Traffic Circle, Newburyport



Your birding stop in Newburyport for:

Swift® Binoculars and Spotting Scopes - Field Guides, ABA Guides and Bird Books  
Bird Feeders - Seed - Houses - Baths and Fountains  
Audio/Video Tapes - Computer Software - Art - Craftings - Unique Gift Items

### Local Bird News & Information Center

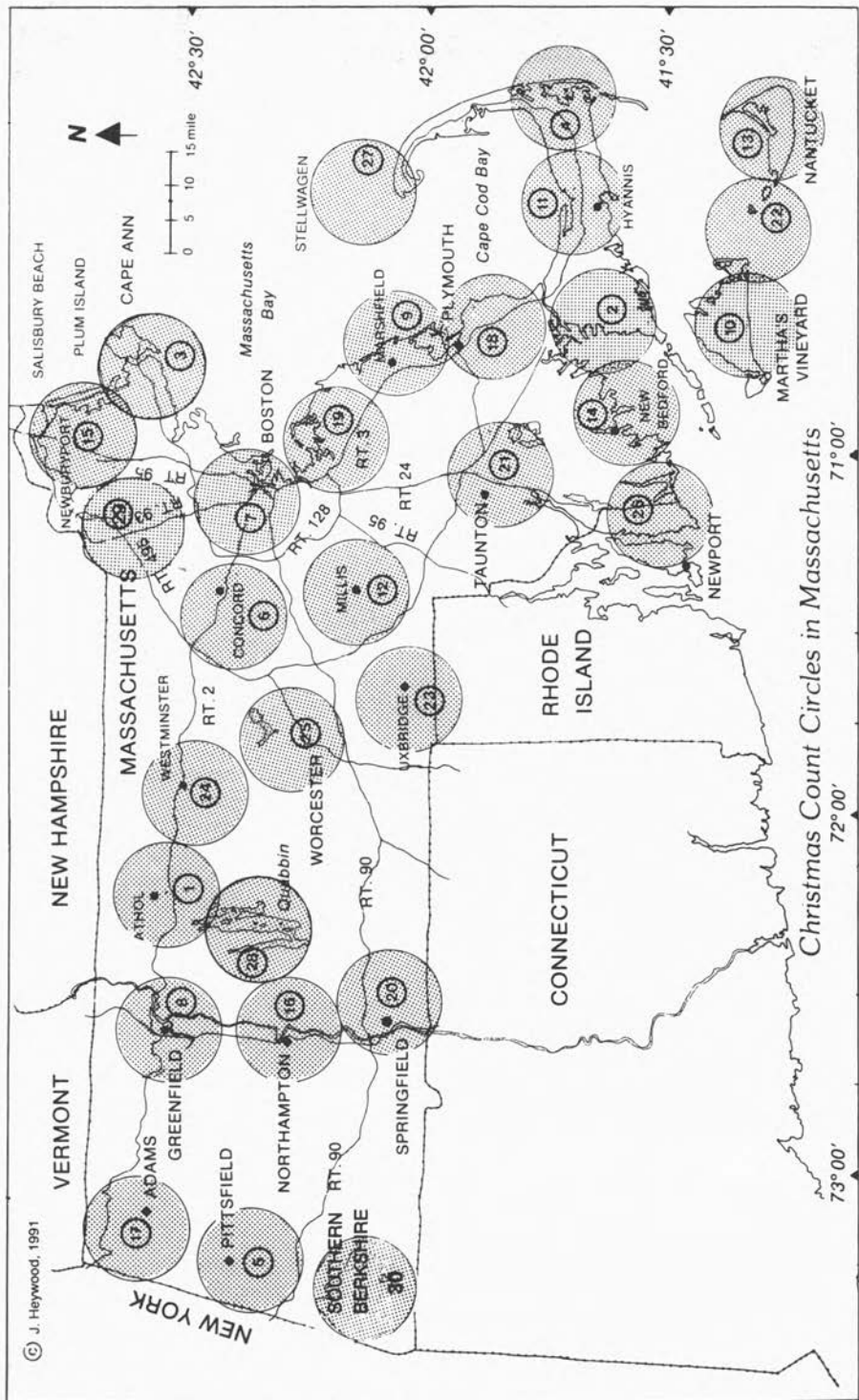
Rest room available - stop in just to catch up on the latest birds,  
to browse or to "chat"

Open 7 Days

508-462-0775

## LIST OF ABBREVIATIONS

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



© J. Heywood, 1991



## CHRISTMAS BIRD COUNT, December 16-31, 1995

Compiled by Marjorie W. Rines and Robert H. Stymeist

The Ninety-sixth annual Christmas Bird Count (CBC), sponsored by the National Audubon Society, was held from December 16 to December 31, 1995. Eastern Massachusetts and a portion of Rhode Island contain twenty-four count areas (see map). Results from these counts are summarized in the following pages. The count totaled 181 species plus two subspecies, "Ipswich" Sparrow and "Oregon" Junco. Two additional species were found during the CBC period but were not included on the count day: an Ovenbird in Greater Boston and a Little Gull on Nantucket. Nantucket led the area counts with 129 species, followed by Martha's Vineyard with 126 species.

Several rarities were reported including Tufted Duck, King Eider, Sandhill Crane, Thayer's Gull, Bohemian Waxwing, and Clay-colored Sparrow. Seasonally unusual birds included Common Moorhen, Nashville Warbler, Dickcissel, Vesper Sparrow, and Grasshopper Sparrow. Three species not accepted by the Massachusetts Avian Records Committee were also reported: Monk Parakeet, Whooper Swan, and Eurasian Tree Sparrow.

An unprecedented invasion of Northern Shrikes shattered all previous records with a total of 180 individuals. It was one of only 17 species reported on every count. Red-bellied Woodpecker continued its growth in eastern Massachusetts, with 125 individuals this year compared with 70 in 1994 and 46 in 1993.

In the following table birds identified only by species type, such as "scaup species," are not shown. Therefore the totals of individuals supplied by the compilers may not add up with the numbers on the charts.

We wish to thank all of the compilers who contributed their time to prepare the results for this summary. They are as follows: **Louis Wagner**, Andover; **Dave Small**, Athol; **Richard Harlow**, Buzzards Bay; **John Nove**, Cape Ann; **Blair Nikula**, Cape Cod; **Richard Walton**, Concord; **Robert Stymeist**, Greater Boston; **Warren Harrington**, Marshfield; **Robert Culbert**, Martha's Vineyard; **Peter Trimble**, Mid-Cape Cod; **Elissa Landre**, Millis; **Edith Andrews**, Nantucket; **Michael Boucher**, New Bedford; **Jim Berry**, Newburyport; **Trevor Lloyd-Evans**, Plymouth; **Scott Surner**, Quabbin; **Glenn d'Entremont**, Quincy; **Simon Perkins**, Stellwagen; **Steve Arena**, Taunton-Middleboro; **Simon Perkins**, Tuckernuck; **Richard Hildreth**, Uxbridge; **John Williams**, Westminster; **Fran McMenemy**, Worcester; **Dave Emerson**, Newport, RI/Westport, MA.

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

20th CHRISTMAS BIRD COUNT, December 16-31, 1996

species	And.	Athol	B. B.	C. Ann	C. Cod	Conc.	Gr. Bos.	Marsh.	M. V.	Mid-C.	Millis
Red-throated Loon	0	0	1	17	18	0	3	8	20	2	0
Common Loon	0	0	45	126	65	0	5	25	320	46	0
Pied-billed Grebe	0	0	30	0	22	0	2	3	16	6	1
Horned Grebe	0	0	65	80	20	0	15	10	131	75	0
Red-necked Grebe	0	0	0	56	3	0	31	31	32	1	0
Northern Gannet	0	0	0	205	1606	0	0	7	7	2	0
Great Cormorant	6	0	20	172	369	0	15	0	104	14	0
Double-cr. Cormorant	0	0	3	4	7	0	21	0	2	0	0
American Bittern	0	0	0	0	0	0	0	0	c.w.	2	0
Great Blue Heron	6	0	31	5	103	6	17	10	37	34	13
Black-cr. Night-Heron	0	0	0	0	2	0	1	0	22	1	0
Whooper Swan	0	0	0	0	0	0	0	0	0	0	0
Mute Swan	0	0	34	25	9	0	15	10	150	34	0
Snow Goose	0	0	0	2	0	0	0	0	34	0	0
Brant	0	0	151	2	679	0	1139	233	9	164	0
Canada Goose	1567	1	1266	2143	2776	1150	3256	660	1074	781	2670
Wood Duck	0	0	0	0	0	2	0	0	13	2	1
Green-winged Teal	0	0	0	1	14	5	9	4	43	33	0
American Black Duck	26	30	915	926	3076	150	2527	2060	1502	1938	131
Mallard	310	4	537	730	370	1303	3044	178	799	856	826
Northern Pintail	0	0	5	7	0	4	0	0	25	19	0
Northern Shoveler	0	0	0	0	3	3	0	0	13	1	0
Gadwall	0	0	3	11	1	0	2	0	13	80	0
Eurasian Wigeon	0	0	0	0	3	0	c.w.	0	1	1	0
American Wigeon	0	0	1	6	123	0	19	6	35	27	0
Canvasback	0	0	14	0	73	0	10	0	1	58	0
Redhead	0	0	0	0	0	0	0	0	5	2	0
Ring-necked Duck	0	0	35	0	121	1	37	0	4	166	28
Tufted Duck	0	0	0	0	0	0	0	0	0	0	0
Greater Scaup	0	0	886	4	46	0	67	7	334	30	0
Lesser Scaup	0	0	10	1	0	0	1	0	c.w.	0	0
Common Eider	0	0	1297	1394	17646	0	6396	5737	2437	5346	0
King Eider	0	0	0	0	0	0	0	0	0	0	0
Harlequin Duck	0	0	0	22	0	0	0	1	101	0	0
Oldsquaw	0	0	135	263	128	0	2	64	77	254	0
Black Scoter	0	0	38	204	145	0	20	68	602	13	0
Surf Scoter	0	0	350	44	43	0	13	38	190	77	0
White-winged Scoter	0	0	533	590	334	0	326	787	466	127	0
Common Goldeneye	81	2	1246	532	432	2	397	200	1398	543	6
Barrow's Goldeneye	0	0	1	1	0	0	3	0	2	3	0
Bufflehead	0	0	2286	352	1237	0	583	411	1501	943	0
Hooded Merganser	1	3	278	7	138	16	86	6	106	91	0
Common Merganser	112	18	162	1	276	28	183	14	35	116	19
Red-br. Merganser	0	0	672	345	1798	0	1026	247	1345	479	3
Ruddy Duck	0	0	4	1	34	0	16	4	62	0	0
Turkey Vulture	0	0	0	0	0	0	0	0	c.w.	0	0
Bald Eagle	2	2	0	0	1	0	2	0	c.w.	0	0
Northern Harrier	0	0	8	4	17	0	3	6	27	31	0
Sharp-shinned Hawk	2	1	4	8	9	14	8	4	21	17	2
Cooper's Hawk	2	4	7	3	5	8	3	4	13	8	3
Northern Goshawk	0	0	1	0	1	1	0	2	0	0	0
Red-shouldered Hawk	0	0	2	0	0	7	1	1	0	1	1

## 96th CHRISTMAS BIRD COUNT, December 16-31, 1995

species	Nant.	N.B.	Nbpt.	Ply.	Quab.	Quin.	Stell.	Tau/Mb.	Tuck	Uxbr.	Wstrn.	Worc.	Nwp,RI
RTLO	133	3	6	0	0	1	5	0	3	0	0	0	19
COLO	74	19	64	50	0	23	58	0	9	0	0	1	64
PBGR	10	0	0	2	0	1	0	9	0	0	0	0	2
HOGR	40	20	38	18	13	32	c.w.	0	3	0	0	1	147
RNGR	6	0	8	3	2	3	34	0	0	0	0	0	13
NOGA	1825	0	1	5	0	0	48	0	6	0	0	0	1
GRCO	93	33	16	22	0	12	4	0	8	0	0	0	412
DCCO	3	1	0	2	0	0	1	0	0	0	0	1	5
AMBI	c.w.	1	0	0	0	0	0	0	0	0	0	0	1
GBHE	37	11	3	10	1	6	4	9	3	5	0	4	18
BCNH	26	0	0	1	0	3	0	0	0	0	0	0	1
WHSW	0	0	1	0	0	0	0	0	0	0	0	0	0
MUSW	21	70	14	135	0	14	0	25	0	0	0	0	377
SNGO	0	0	2	0	0	1	0	1	0	0	0	0	3
BRAN	183	168	0	27	0	289	6	0	4	0	0	0	251
CAGO	679	437	1652	423	51	1357	126	3914	18	677	14	1403	6508
WODU	1	0	0	0	0	0	0	0	0	5	0	3	3
GWTE	24	0	1	1	0	2	0	0	2	0	0	2	63
ABDU	483	454	2987	938	17	1343	646	429	38	78	41	141	1377
MALL	785	356	981	379	247	602	47	850	0	291	297	623	640
NOPI	2	0	3	1	0	1	0	0	0	0	0	0	22
NOSH	2	0	0	0	0	0	0	0	0	0	0	0	0
GADW	1	34	2	3	0	0	0	0	0	0	0	0	2
EUWI	1	0	0	0	0	1	0	0	0	0	0	0	0
AMWI	40	7	0	0	0	8	1	0	17	0	0	0	7
CANV	170	1	0	0	0	0	0	48	0	0	0	0	32
REDH	51	0	0	0	0	0	0	0	0	0	0	0	2
RNDU	71	1	1	6	7	0	0	3	0	1	0	281	11
TUDU	0	0	0	1	0	0	0	0	0	0	0	1	0
GRSC	255	1030	4	23	0	131	1	20	76	0	0	16	313
LESC	25	16	0	2	0	1	0	0	0	0	0	0	0
COEI	3794	420	808	3802	0	3581	573	0	1750	0	0	0	7046
KIEI	3	0	0	0	0	1	0	0	0	0	0	0	0
HADU	13	0	0	3	0	0	0	0	2	0	0	0	85
OLDS	251754	22	59	30	2	265	29	0	7500	0	0	0	3
BLSC	87	1	3	58	0	126	c.w.	0	140	0	0	0	177
SUSC	28	21	4	104	0	179	4	0	11	0	0	0	69
WWSC	995	112	103	174	0	224	111	0	17	0	0	0	87
COGO	1922	629	775	183	3	280	23	465	234	2	0	68	656
BAGO	6	1	1	0	0	0	0	0	0	0	0	0	0
BUFF	918	544	125	106	0	507	87	32	45	0	0	1	549
HOME	109	12	13	37	4	9	0	10	14	22	0	25	13
COME	50	0	118	46	300	49	12	103	0	93	1	24	37
RBME	1399	173	316	243	0	359	140	1	377	0	0	0	233
RUDU	0	0	0	0	0	0	0	0	0	0	0	0	169
TUVU	0	0	0	0	0	0	0	0	0	1	0	0	20
BAEA	0	0	2	1	34	0	0	6	0	0	0	0	0
NOHA	32	10	6	6	0	3	4	8	6	0	0	0	19
SSHA	13	2	8	6	5	4	1	10	1	5	2	2	15
COHA	1	3	6	3	1	2	0	3	0	4	0	0	2
NOGO	1	0	0	0	1	0	1	0	1	2	c.w.	0	1
RSHA	0	1	0	0	0	0	0	6	0	0	0	1	1

## 96th CHRISTMAS BIRD COUNT, December 16-31, 1995

species	And.	Athol	B. B.	C. Ann	C. Cod	Conc.	Gr. Bos.	Marsh.	M. V.	Mid-C.	Millis
Red-tailed Hawk	13	6	9	19	14	89	88	29	71	31	19
Rough-legged Hawk	0	0	0	2	0	2	1	5	0	3	0
American Kestrel	0	0	0	2	2	1	14	0	4	0	2
Merlin	1	0	1	1	12	0	4	0	4	5	0
Peregrine Falcon	1	0	0	0	2	0	5	0	2	1	0
Ring-necked Pheasant	2	4	5	4	0	55	43	1	4	0	6
Ruffed Grouse	0	9	0	0	1	9	0	4	0	1	6
Wild Turkey	0	143	0	0	0	0	0	5	0	0	10
Northern Bobwhite	0	0	4	0	35	0	2	0	10	18	4
Virginia Rail	0	0	0	0	12	0	0	1	4	10	0
Common Moorhen	0	0	0	0	0	0	0	0	0	0	0
American Coot	0	0	84	0	77	0	164	0	0	8	10
Sandhill Crane	0	0	0	0	0	0	0	0	0	0	0
American Oystercatcher	0	0	0	0	0	0	0	0	0	1	0
Black-bellied Plover	0	0	6	1	26	0	4	1	84	0	0
Killdeer	0	0	2	0	0	0	0	0	1	0	0
Greater Yellowlegs	0	0	4	0	1	0	1	0	4	3	0
Ruddy Turnstone	0	0	1	0	0	0	2	0	0	0	0
Red Knot	0	0	0	0	6	0	0	105	1	0	0
Sanderling	0	0	33	25	361	0	415	35	436	315	0
Purple Sandpiper	0	0	1	21	0	0	0	100	13	0	0
Dunlin	0	0	28	51	1171	0	119	858	166	799	0
Long-billed Dowitcher	0	0	0	0	0	0	0	0	0	2	0
Common Snipe	0	0	4	0	0	0	1	1	1	5	0
American Woodcock	0	0	1	0	0	0	0	0	1	0	0
Little Gull	0	0	0	0	0	0	0	0	0	0	0
Common Bla.-hea. Gull	0	0	0	0	0	0	5	0	0	0	0
Bonaparte's Gull	0	0	18	74	170	0	98	0	17	2	0
Ring-billed Gull	399	0	475	157	340	104	5430	728	177	413	167
Herring Gull	1164	18	1749	5333	2824	1656	7554	4468	1541	2661	300
Iceland Gull	0	0	0	6	3	0	2	0	0	1	0
Thayer's Gull	0	0	0	0	0	0	0	0	1	0	0
Lesser Bla.-bac. Gull	0	0	0	2	0	0	1	0	0	0	0
Glaucous Gull	0	0	0	1	1	0	0	0	3	0	0
Great Bla.-bac. Gull	111	4	462	2810	870	91	1006	378	468	762	37
Black-legged Kittiwake	0	0	0	3	88	0	0	0	2	6	0
Dovekie	0	0	0	4	0	0	0	0	0	0	0
Razorbill	0	0	0	8	182	0	0	0	81	1	0
Black Guillemot	0	0	0	15	3	0	0	0	0	0	0
Rock Dove	2731	669	346	1087	90	735	3930	489	436	318	1092
Mourning Dove	151	542	353	484	333	1547	433	373	673	211	408
Monk Parakeet	0	0	0	0	0	0	0	0	0	0	0
Barn Owl	0	0	0	0	0	0	0	0	9	0	0
Eastern Screech-Owl	0	0	4	18	5	37	10	47	12	6	10
Great Horned Owl	0	2	2	2	11	23	6	21	0	6	1
Snowy Owl	0	0	0	0	0	0	2	0	0	0	0
Barred Owl	0	1	0	1	0	8	4	0	0	0	1
Long-eared Owl	0	0	2	0	0	0	0	0	0	0	0
Short-eared Owl	0	0	1	1	1	0	0	3	6	2	0
North. Saw-whet Owl	0	1	1	0	2	c.w.	0	1	1	1	0
Belted Kingfisher	3	1	23	5	29	9	3	6	14	18	0
Red-hea. Woodpecker	0	0	0	0	0	0	0	0	1	0	0

## 96th CHRISTMAS BIRD COUNT, December 16-31, 1995

species	Nant.	N.B.	Nbpt.	Ply.	Quab.	Quin.	Stell.	Tau/Mb.	Tuck	Uxbr.	Wstrn.	Worc.	Nwp,RI
RTHA	44	6	58	13	19	16	0	31	3	30	14	22	31
RLHA	3	0	3	0	0	0	0	0	2	0	0	0	0
AMKE	5	0	2	5	1	2	0	4	0	3	0	0	12
MERL	11	0	2	3	0	1	1	3	0	1	0	0	1
PEFA	c.w.	0	0	0	0	0	c.w.	0	0	0	0	0	2
RNPH	26	0	30	2	2	0	0	1	0	3	3	1	0
RUGR	0	0	1	4	34	1	0	1	0	15	11	5	0
WITU	0	0	31	0	81	1	0	0	0	14	27	39	0
NOBO	c.w.	0	0	4	0	0	0	0	0	0	0	0	0
VIRA	4	0	0	3	0	0	1	0	1	0	0	0	3
COMO	1	0	0	0	0	0	0	0	0	0	0	0	0
AMCO	46	7	0	20	0	2	0	8	0	0	0	0	18
SACR	1	0	0	0	0	0	0	0	0	0	0	0	0
AMOY	0	0	0	0	0	0	0	0	0	0	0	0	0
BBPL	6	2	1	5	0	6	0	0	0	0	0	0	0
KILL	12	1	0	1	0	0	0	0	0	0	0	0	6
GRYE	0	5	0	0	0	0	0	0	1	0	0	0	0
RUTU	15	1	0	0	0	0	0	0	0	0	0	0	46
REKN	0	0	0	11	0	0	0	0	0	0	0	0	0
SAND	355	12	13	36	0	98	19	0	181	0	0	0	279
PUSA	30	3	25	3	0	33	0	0	0	0	0	0	42
DUNL	14	25	144	0	0	2	2	0	0	0	0	0	62
LBDO	0	0	0	0	0	0	0	0	0	0	0	0	0
COSN	2	0	c.w.	1	0	0	1	0	0	0	0	0	19
AMWO	1	0	0	0	0	0	0	0	0	0	0	0	0
LIGU	c.w.	0	0	0	0	0	0	0	0	0	0	0	0
CBHG	2	0	1	0	0	0	0	0	0	0	0	0	1
BOGU	701	26	8	0	0	68	17	0	8	0	0	0	33
RBGU	58	1119	234	547	5	1964	35	262	1	90	3	598	481
HEGU	6266	1398	1906	1320	44	3859	757	5180	1100	274	616	316	1603
ICGU	47	1	4	0	0	1	8	1	0	0	0	0	0
THGU	0	0	0	0	0	0	0	0	0	0	0	0	0
LBBG	2	0	0	0	0	0	0	1	0	0	0	0	0
GLGU	1	0	1	0	0	0	1	1	0	0	0	0	0
GBBG	1871	279	506	289	8	1158	823	729	700	107	458	237	197
BLKI	55	0	8	0	0	0	98	0	130	0	0	0	0
DOVE	0	0	0	1	0	0	0	0	0	0	0	0	0
RAZO	44	0	0	0	0	0	123	0	12	0	0	0	2
BLGU	0	0	0	0	0	0	9	0	0	0	0	0	0
RODO	228	457	548	239	246	732	274	397	0	899	625	642	293
MOD0	788	144	819	431	230	113	34	532	2	414	316	473	473
MOPA	0	0	0	0	0	0	0	3	0	0	0	0	0
BROW	4	0	0	0	0	0	0	0	0	0	0	0	0
EASO	0	0	18	3	3	10	1	11	0	37	0	11	2
GHOW	0	0	12	0	8	6	1	10	0	28	3	2	7
SNOW	0	0	0	0	0	0	0	0	0	0	0	0	0
BAOW	0	0	4	0	5	0	0	2	0	1	1	0	0
LEOW	0	0	0	0	0	0	0	0	0	1	0	0	3
SEOW	6	0	0	1	5	1	0	1	13	0	0	0	2
NSWO	10	0	1	1	0	0	0	0	0	0	1	0	0
BEKI	0	2	5	12	4	3	0	9	0	8	2	4	3
RHWO	0	0	0	0	0	0	0	0	0	0	0	0	0

## 96th CHRISTMAS BIRD COUNT, December 16-31, 1995

species	And.	Athol	B. B.	C. Ann	C. Cod	Conc.	Gr. Bos.	Marsh.	M. V.	Mid-C.	Millis
Red-bel. Woodpecker	2	0	4	7	4	15	3	1	42	7	0
Yellow-bel. Sapsucker	0	0	0	0	0	0	0	0	2	2	0
Downy Woodpecker	71	70	48	62	75	344	170	55	104	94	98
Hairy Woodpecker	11	23	9	15	17	76	17	10	25	15	13
Northern Flicker	3	0	38	17	94	20	27	40	197	84	4
Pileated Woodpecker	0	1	0	5	0	6	0	0	0	0	2
Eastern Phoebe	0	0	1	0	0	0	0	0	1	1	0
Horned Lark	54	0	69	78	52	23	126	135	23	121	0
Tree Swallow	0	0	0	0	9	0	0	0	80	0	0
Blue Jay	281	1148	598	178	488	1208	477	272	447	580	193
American Crow	6216	258	717	725	734	2937	4489	518	2041	634	816
Fish Crow	2	0	0	0	0	0	8	0	0	0	0
Common Raven	0	11	0	0	0	0	0	0	0	0	0
Black-cap. Chickadee	281	1855	886	562	1075	3084	1015	487	866	864	722
Tufted Titmouse	85	161	182	150	135	832	231	149	0	132	208
Red-br. Nuthatch	8	66	11	22	31	44	11	23	77	20	4
White-br. Nuthatch	40	140	57	103	56	540	153	49	170	50	105
Brown Creeper	2	3	7	3	4	36	12	4	14	6	7
Carolina Wren	1	0	179	3	103	32	7	33	114	118	12
Winter Wren	0	0	5	1	4	2	0	1	4	8	0
Marsh Wren	0	0	1	0	1	0	0	0	0	2	0
Golden-cr. Kinglet	3	17	71	12	68	21	29	6	49	41	17
Ruby-crowned Kinglet	0	0	3	0	1	0	0	0	6	2	0
Eastern Bluebird	0	0	29	9	8	44	0	24	92	12	32
Hermit Thrush	0	0	21	0	26	2	5	3	55	41	0
American Robin	2	c.w.	756	283	920	204	371	419	1086	2648	4
Gray Catbird	0	0	11	1	24	1	4	1	67	28	0
Northern Mockingbird	21	8	179	121	131	275	314	99	151	158	75
Brown Thrasher	0	0	0	0	1	1	1	0	5	0	0
American Pipit	0	0	10	0	0	0	0	0	1	0	0
Bohemian Waxwing	0	0	0	1	0	0	0	0	0	0	0
Cedar Waxwing	37	53	248	258	204	688	59	76	325	59	56
Northern Shrike	1	3	3	4	9	19	19	10	6	5	2
European Starling	5994	969	1494	6290	578	2845	38730	2240	1870	1167	2453
Orange-cro. Warbler	0	0	0	0	1	0	1	0	0	0	0
Nashville Warbler	0	0	0	0	1	0	0	0	0	0	0
Yellow-rumped Warbler	0	0	65	25	511	0	40	160	620	207	0
Pine Warbler	0	0	0	2	0	0	0	1	0	0	0
Palm Warbler	0	0	8	0	3	0	2	0	c.w.	0	0
Ovenbird	0	0	0	0	0	0	c.w.	0	0	0	0
Common Yellowthroat	0	0	1	0	0	0	0	0	0	2	0
Yellow-breasted Chat	0	0	1	0	1	0	0	0	0	c.w.	0
Northern Cardinal	85	63	325	131	369	471	207	149	253	378	102
Dickcissel	0	0	0	0	0	1	0	1	c.w.	0	0
Rufous-sided Towhee	0	0	10	0	2	1	0	0	46	10	2
Amer. Tree Sparrow	44	89	163	123	32	627	271	78	62	48	282
Chipping Sparrow	1	0	6	0	0	0	0	0	10	0	0
Clay-colored Sparrow	0	0	0	0	0	0	0	0	0	0	0
Field Sparrow	0	0	42	1	55	16	0	6	30	32	15
Vesper Sparrow	0	0	4	0	0	0	0	0	0	0	0
Savannah Sparrow	0	0	223	3	13	0	6	2	50	19	0
"Ipswich" Sparrow	0	0	3	2	5	0	2	0	0	6	0

## 96th CHRISTMAS BIRD COUNT, December 16-31, 1995

species	Nant.	N.B.	Nbpt.	Ply.	Quab.	Quin.	Stell.	Tau/Mb.	Tuck	Uxbr.	Wstrn.	Worc.	Nwp,RI
RBWO	4	3	6	1	1	1	2	4	0	6	1	0	11
YBSA	1	0	0	0	0	0	0	1	0	0	0	0	2
DOWO	54	29	188	61	58	61	6	74	4	87	59	87	53
HAWO	6	2	26	9	19	7	1	16	0	19	23	20	4
NOFL	262	17	21	26	1	34	36	58	12	9	1	6	71
PIWO	0	0	1	0	11	0	0	0	0	0	5	2	0
EAPH	c.w.	0	0	0	0	0	0	2	0	0	0	0	5
HOLA	34	1	156	9	0	2	1	106	1	1	0	7	213
TRSW	0	0	0	0	0	0	0	0	0	0	0	0	0
BLJA	174	393	853	287	458	319	255	479	2	446	410	255	314
AMCR	794	275	1032	304	395	677	22	528	39	583	402	867	653
FICR	0	0	0	0	0	37	0	2	0	0	0	0	0
CORA	0	0	0	0	32	0	0	0	0	0	5	0	0
BCCH	385	151	1776	557	1013	417	115	525	21	1011	1009	684	306
TUTI	0	120	348	106	142	130	17	221	0	246	95	172	74
RBNU	177	3	20	17	29	5	36	14	6	4	10	13	2
WBNU	27	19	251	49	113	51	3	54	1	143	94	103	25
BRCR	8	0	20	3	13	1	0	9	0	8	11	11	6
CAWR	37	9	1	36	1	12	5	53	0	9	1	6	93
WIWR	1	1	2	1	0	1	0	0	0	0	0	0	4
MAWR	9	0	1	1	0	0	0	1	0	0	0	0	1
GCKI	41	11	26	48	52	9	3	16	2	28	12	11	25
RCKI	c.w.	0	0	0	0	1	0	0	0	0	0	0	4
EABL	15	11	15	16	12	3	0	52	0	31	0	13	30
HETH	11	2	3	19	0	4	1	3	1	1	0	2	23
AMRO	441	679	156	200	2	901	224	418	25	8	2	8	2107
GRCA	55	2	0	5	0	2	0	1	2	0	0	0	38
NOMO	98	41	172	93	28	134	22	150	4	96	24	56	162
BRTH	1	0	1	0	0	0	0	0	0	0	0	0	1
AMPI	9	0	0	0	0	0	0	0	0	0	0	0	17
BOWA	c.w.	0	1	0	0	0	0	0	0	0	17	0	0
CEWA	63	250	278	21	43	134	7	110	0	27	12	156	258
NOSH	25	1	19	2	10	9	2	5	2	8	4	8	4
STAR	2583	2189	4781	1016	1185	30000	390	3445	70	2999	1521	2351	25857
OCWA	0	0	0	0	0	0	0	0	0	0	0	0	0
NAWA	0	0	0	0	0	0	0	0	0	0	0	0	0
YRWA	3436	1	16	302	0	96	404	48	97	0	0	0	146
PIWA	5	0	1	1	0	1	0	1	0	1	0	0	0
PAWA	4	0	0	0	0	1	0	0	0	0	0	0	2
OVEN	0	0	0	0	0	0	0	0	0	0	0	0	0
COYE	1	0	0	0	0	0	0	0	0	0	0	0	0
YBCH	0	0	0	0	0	0	0	0	0	0	0	0	2
NOCA	213	103	248	154	48	100	13	121	2	111	36	74	235
DICK	0	0	0	0	0	0	0	0	0	0	0	0	0
RSTO	8	6	1	4	0	2	0	0	1	0	0	1	17
ATSP	13	89	346	66	217	374	47	235	0	92	63	209	154
CHSP	0	3	0	8	0	0	0	2	0	0	0	0	0
CCSP	0	0	0	1	0	0	0	0	0	0	0	0	0
FISP	2	5	4	17	0	6	0	49	0	13	0	1	15
VESP	0	0	0	0	0	0	0	0	0	0	0	0	0
SASP	41	37	3	5	0	25	1	6	10	0	0	0	147
"IP" SP	2	0	3	1	0	0	0	0	1	0	0	0	1

## 96th CHRISTMAS BIRD COUNT, December 16-31, 1995

species	And.	Athol	B. B.	C. Ann	C. Cod	Conc.	Gr. Bos.	Marsh.	M. V.	Mid-C.	Millis
Grasshopper Sparrow	0	0	1	0	0	0	0	0	0	0	0
Sharp-tailed Sparrow	0	0	0	0	2	0	0	0	0	8	0
Seaside Sparrow	0	0	1	0	1	0	0	0	0	0	0
Fox Sparrow	0	0	0	0	0	1	0	0	2	5	1
Song Sparrow	18	5	536	67	297	63	262	137	201	253	53
Lincoln's Sparrow	0	0	0	0	1	0	0	0	0	0	0
Swamp Sparrow	0	0	58	8	56	2	28	10	44	97	5
White-thr. Sparrow	19	0	347	18	366	62	91	201	541	333	27
White-cr. Sparrow	0	0	24	0	0	0	0	0	0	1	0
Dark-eyed Junco	171	207	398	258	105	834	458	274	348	154	465
"Oregon" Junco	0	0	0	1	0	0	0	0	0	0	0
Lapland Longspur	0	0	0	4	0	0	0	0	0	84	0
Snow Bunting	0	18	102	83	8	24	378	157	172	0	0
Red-winged Blackbird	0	0	41	0	30	0	2	75	c.w.	11	2
Eastern Meadowlark	0	0	1	14	4	0	1	5	50	86	0
Rusty Blackbird	0	0	0	0	0	0	0	18	1	2	0
Common Grackle	0	1	0	1	1	18	3	0	14	2	0
Br.-headed Cowbird	20	0	4	0	5	0	0	28	0	25	1
Northern Oriole	0	0	1	0	3	1	0	0	3	0	0
Pine Grosbeak	0	40	0	0	0	0	0	0	0	0	0
Purple Finch	12	1	0	3	0	1	0	0	7	2	0
House Finch	143	321	241	386	669	1008	376	263	293	346	143
Red Crossbill	0	0	0	0	0	0	0	0	0	0	0
Common Redpoll	0	37	15	0	1	0	93	0	1	0	14
Pine Siskin	2	1024	1	39	0	20	0	0	32	2	0
American Goldfinch	127	184	1376	226	458	1076	396	349	166	306	189
Evening Grosbeak	5	188	4	2	1	1	10	0	12	0	0
House Sparrow	981	651	733	1277	446	1567	2597	798	513	915	466
Eurasian Tree Sparrow	0	0	0	0	0	0	1	0	0	0	0
number of species	54	51	118	106	123	74	109	96	126	121	64
total birds	21434	9080	25268	30015	47724	26159	89704	25877	28767	28282	12373

And. = Andover CBC	December 16, 1995	c.w. = count week
Athol = Athol CBC	December 16, 1995	
B. B. = Buzzards Bay CBC	December 16, 1995	
C. Ann = Cape Ann CBC	December 17, 1995	
C. Cod = Cape Cod CBC	December 17, 1995	
Conc. = Concord CBC	December 28, 1995	
Gr. Bos. = Greater Boston CBC	December 17, 1995	
Marsh. = Marshfield CBC	December 31, 1995	
M. V. = Martha's Vineyard CBC	December 30, 1995	
Mid-C. = Mid-Cape Cod CBC	December 26, 1995	
Millis = Millis CBC	December 29, 1995	



96th CHRISTMAS BIRD COUNT, December 16-31, 1995

species	Nant.	N.B.	Nbpt.	Ply.	Quab.	Quin.	Stell.	Tau/Mb.	Tuck	Uxbr.	Wstm.	Worc.	Nwp,RI
GRSP	0	0	0	0	0	0	0	0	0	0	0	0	0
STSP	1	0	0	0	0	0	0	0	0	0	0	0	0
SESP	0	0	1	0	0	0	0	0	0	0	0	0	0
FOSP	0	0	0	0	0	0	0	1	0	0	0	0	1
SOSP	366	65	107	173	7	173	9	159	17	47	2	37	414
LISP	1	0	0	0	0	0	0	0	0	0	0	0	0
SWSP	44	26	3	29	0	9	6	16	1	3	0	0	86
WTSP	202	104	50	163	4	67	2	72	6	16	1	23	472
WCSP	2	0	0	0	0	1	1	0	0	0	0	0	17
DEJU	119	187	282	272	109	332	59	457	0	551	111	1190	457
"OR" JU	0	0	0	1	0	0	0	0	0	0	0	0	0
LALO	0	0	6	0	0	0	0	0	0	0	0	0	0
SNBU	56	89	124	18	30	52	5	13	26	2	7	0	4
RWBL	196	9	12	1	0	0	0	18	0	0	0	0	20
EAME	4	32	7	2	0	13	11	29	7	0	0	0	18
RUBL	0	0	0	0	0	0	0	1	0	0	0	0	0
COGR	1	0	1	0	0	0	0	0	0	0	0	1	798
BHCO	0	0	8	2	1	0	0	21	0	19	0	10	592
NOOR	3	0	2	0	0	0	0	0	0	0	0	0	0
PIGR	0	0	0	0	0	0	0	0	0	0	12	1	0
PUFI	1	8	1	6	1	0	0	7	0	2	0	0	2
HOFI	359	85	450	178	247	247	31	343	0	199	226	195	327
RECR	0	0	0	0	15	0	0	0	0	0	0	0	0
CORE	4	0	37	0	287	137	3	0	0	8	3	44	0
PISI	c.w.	0	43	6	62	0	0	0	0	2	0	4	0
AMGO	199	51	558	161	125	83	12	215	0	152	118	203	166
EVGR	8	0	11	4	81	0	13	7	0	0	119	0	0
HOSP	386	169	2283	739	944	761	160	882	0	1027	883	859	591
ETSP	0	0	0	0	0	0	0	0	0	0	0	0	0
# species	129	89	110	108	66	99	77	88	63	66	51	66	123
# birds	287817	13461	27267	15014	7179	52929	6166	22190	12799	11142	7734	11638	58172

Nant. = Nantucket CBC  
 N. B. = New Bedford CBC  
 Nbpt. = Newburyport CBC  
 Ply. = Plymouth CBC  
 Quab. = Quabbin CBC  
 Quin. = Quincy CBC  
 Stell. = Stellwagen CBC  
 Tau/Mb. = Taunton-Middleboro CBC  
 Tuck. = Tuckertuck CBC  
 Uxbr. = Uxbridge, MA/RI CBC  
 Wstm. = Westminster CBC  
 Worc. = Worcester CBC  
 Nwp,RI = Newport, RI/Westport, MA CBC

December 31, 1995  
 December 16, 1995  
 December 23, 1995  
 December 27, 1995  
 December 30, 1995  
 December 16, 1995  
 December 17, 1995  
 December 23, 1995  
 December 29, 1995  
 December 30, 1995  
 December 23, 1995  
 December 16, 1995  
 December 16, 1995

---

# BIRD NANTUCKET

Study fall migration on the beautiful island of Nantucket.

**Sept. 7 - Oct. 5, 1996**

**Banding Workshops    Field Trips**

Sponsored by Maria Mitchell Association.

*Write:*

Edith Andrews, P. O. Box 1182  
Nantucket, MA 02554

---

## **"Wet their whistles"<sup>tm</sup>**

**with animal water products**

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



**Free Puddles Water Shop catalog**  
**Free Puddles water newsletter**

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



WEB site at <http://petsforum.com/happybird/>  
online animal water information conferences

HAPPY BIRD, PO 86, WESTON, MA 02193 6178997804

## BOOK REVIEW: Monographs About Birds: A Bewildering Assortment

by William E. Davis, Jr.

The number of bird books available today is truly overwhelming. If you pick up an American Birding Association sales catalog, you will be confronted by so many book selections that the inside front cover has a subject index. The subjects cover a plethora of regional bird-finding guides, field guides, state bird books and associated checklists, cassette tapes, videos, items for the computer, and last but not least, monographs. What should you buy with your limited supply of dollars?

The focus of this review is the ornithological monograph, a class of bird books that are currently being published in increasingly large numbers. This review is not exhaustive, but it is aimed at providing some historical perspective on bird monographs and examples of some of the more important and interesting currently available monograph series. This type of publication has long been central to the scientific ornithological literature, but many monographs should be of interest to the amateur birding public as well.

*The Random House Dictionary* defines a monograph as "a treatise on a particular subject . . . an account of a single thing or class of things, as of a species or animals . . . a highly detailed and thoroughly documented study or paper written about a limited area of a subject or field of inquiry." Broadly interpreted, monographs would include almost any book that treats a limited subject in depth but is generally restricted in ornithological usage to the treatment of a particular species or family of birds, or to the birds of a particular region. Like many category definitions, monograph boundaries are somewhat flexible, particularly for regional bird books. In general, identification as a monograph is strongly associated with the degree to which a book is considered "scientific."

The writing of monographs about birds has been a standard approach for biologists for more than a century. Perhaps the most famous nineteenth century bird monographs were by John Gould, whose lavish lithograph illustrations (done by other people) were complemented by thorough scientific text. His *Monograph of the Trochilidae* (hummingbirds) and *Birds of Australia*, for example, are paragons of nineteenth century ornithological publication and bring vast sums at auction houses around the world. These were always aimed at a wealthy and elitist market and graced the libraries of kings. More recently, the New Naturalist series from Great Britain has set the tone for monographs that were aimed at the serious amateur as well as professional ornithologists, and increasingly appeal to the casual birder. Established in 1942, the stated aim of the series is to interest the general reader in the wildlife of Great Britain, although many titles in the series are more broadly based and deal with birds

that are found in North America as well as Europe (e.g., gulls, puffins, fulmars). The series has two parts. The main series deals with broader groups of animals and plants, but the New Naturalist Monographs (or Special Volumes) usually deal with a single species, many of them birds. They include real classics of behavioral ecology such as Niko Tinbergen's *Herring Gull's World*. My collection begins with number 2, *The Redstart*, published in 1950, and my most recent acquisition is number 71, *British Warblers* (1985). They are all designed to be very readable, but they contain an enormous wealth of natural history information and references, which would be of interest to the more serious bird student and to the professional ornithologist.

Great Britain continues to dominate much of the bird monograph production. Academic Press, for example, publishes a number of bird monographs aimed at the professional ornithologist (e.g., *Storks, Ibises, and Spoonbills of the World* and *Sperm Competition in Birds*, both published in 1992). They also publish the United States editions of the T&AD Poyser monographs, which are of particular importance because they have recently included monographs on North American birds. For example, the recent titles of *The Ancient Murrelet* (1992), *The Magpies* (1991), and *The Pinyon Jay* (1992) all cover North American birds, and *Great Auk Islands* (1993) deals mostly with arctic Canada. These are all high quality and readable books. There may be a little bit more information about a bird species than you really want to know, but they are great reference books, look great on the shelf, and make your friends think you know a lot. The only drawback is the price—Academic Press books tend to be very expensive, but the above listed monographs go for \$35-40, not that bad for an excellent hard-backed book these days.

Oxford University Press also produces fine monographs on birds (e.g., most recently, *The Starling* and *Feral Pigeons*) and has recently begun publishing a series of monographs on bird families of the world. The first three, published in 1995, deal, respectively, with the hornbills, penguins, and megapodes (the fascinating mound-building "incubator" birds of the Australasian region). These are really for the hard-core ornithologist and are expensive at \$60, but they are excellent reference monographs. Cambridge University Press has also produced some excellent monographs, including Alan Poole's *Ospreys: A Natural and Unnatural History* (1989).

Among North American presses, Princeton University Press published *Kingfishers, Bee-eaters, and Rollers* in 1992 and *Finches and Sparrows* in 1993. The former is subtitled a handbook and the latter an identification guide, but both are similar in structure and style to the Houghton Mifflin Helm Series guides, reviewed by Mark Lynch in the February 1996 issue of *Bird Observer*. All of these titles qualify as monographs. Smithsonian Institution Press has produced such bird monographs as Robert Nero's *The Great Gray Owl*, Keith Bildstein's *White Ibis* (1993), and a number of Paul Johnsgard's seemingly

endless series of monographs, including *Cormorants, Darters, and Pelicans of the World*. In addition, Smithsonian Institution Press now handles books published by the International Council for Bird Preservation (now American Bird Conservancy in the United States) (e.g., *Status and Conservation of the World's Seabirds* [1984]) and copublished with them *Threatened Birds in the Americas* (1992). These books should interest those people with a particular interest in conservation.

Dozens of other bird monographs have been published over the last several decades by American publishing companies and university presses. In general, the monographs from these publishers are not as technical as the European-produced books and hence may make for easier reading for most amateurs. More technical books include the forty-seven *Ornithological Monographs* thus far published by the American Ornithologists' Union and the sixteen titles in the *Studies in Avian Biology* series published by the Cooper Ornithological Society.

Closer to home, the Nuttall Ornithological Club of Cambridge has published two monograph series, *Memoirs* and *Publications*. The former dates back to 1886, when William Brewster's monograph *Bird Migration* was published, and was replaced by the *Publications* series in 1957. Recently, however, *Memoirs* has been reestablished as a series primarily concerned with the history of ornithology. Both series are primarily scientific in focus but the most recent monographs in each, *Contributions to the History of North American Ornithology* (Davis and Jackson, editors, 1995) and *Nearctic Passerine Migrants in South America* (Paynter 1995) are less technical and of more general interest.

The supply of monographs for the average reader is abundant. The variety of birds covered and the broad spectrum of scope, technical level, and cost boggles the mind. But with so much available it is worth it to take the time to browse through a few bookstores and libraries for monographs that would further stimulate your interest and pleasure derived from birds.

**WILLIAM E. DAVIS, JR.**, president of Bird Observer, prepares "About the Cover" for each issue and has contributed to *Bird Observer* articles and book reviews on a variety of topics.

*Rip Ryder*  
**MONOMOY ISLAND  
FERRY**

**North & South**

U.S. Coast Guard Licensed

*Captain:* KEITH LINCOLN

— Daily Trips — Sight Seeing

— BIRDWATCHING

(508) 587-4540 • (508) 945-5450

*Buying a used VW?*  
Complete Pre-purchase  
Evaluation

**Golf - Jetta - Quantum**

**\$50.**

**GT** Shop  
Inc.  
(617) 923-0941

We service Nissan, Honda,  
Saab, Toyota, VW, Volvo

106 Pleasant Street  
Watertown Square

*Formerly Coop Garage*

## ABOUT THE COVER: GREEN HERON

The Green Heron (*Butorides virescens*) is a relatively small, dark, compact bird. It is generally shy, but its *skeow* flight call when disturbed is familiar to anyone who has flushed one, and its habit, when flushed, of producing a stream of white defecation has produced some interesting monikers including "shite-polk" and "chalk-line."

Adult Green Herons are readily distinguished by their greenish-black cap and back, buff-tipped blackish wing feathers, and rufous necks. Females are generally duller in plumage than males, but this is not a reliable field character. Young birds are striped with brown on neck and underparts and have a brownish, buff-spotted back. Green Herons fly with neck and head retracted with slow steady wingbeats.

The shifting tides of lumping and splitting species and subspecies are well illustrated by the ongoing debate over the taxonomic status of the Green Heron. Long considered a separate species, the Green Heron was lumped with the Green-backed Heron, to become *B. striatus virescens*, one of 30 subspecies with worldwide distribution. In 1993 based on much the same evidence that had produced the lumping, the tide of analysis shifted once again, and we got our Green Heron back as a full species. Four subspecies of the Green Heron are currently recognized (as many as eighteen were recognized early in this century!).

The breeding range of the Green Heron extends from southern Canada south over the eastern half of the United States down through coastal Mexico and Central America wherever there is suitable wet habitat. A western population breeds from California south through Panama. Green Herons are fairly common spring migrants in Massachusetts, arriving in late April and May. They are most common in August during the post-breeding dispersal (as many as sixty-four were reported from a Westborough swamp), and they depart Massachusetts by early October.

Green Herons are monogamous breeders, either as solitary pairs or in loose colonial aggregations. They prefer swampy thickets, stream edges, and sloughs, but also nest in salt-marsh thickets, often on islands. They are not rigid in their nesting habitat requirements and may nest in dry woods or orchards if suitable foraging habitat is nearby. They utter a wide variety of calls during the breeding season: harsh hostile *raah-raah* calls, a series of *ku-ku-ku* calls when disturbed, a *show-ch* advertising call, and a *sheow* alarm call. Skowing calls may accompany pursuit and circle display flights during courtship. Some of the display flights involve exaggerated crook-necked and flapping flights with legs dangling. A wide assortment of hostile and nuptial displays featuring bulging eyes, erect plumes, and exaggerated postures accompany the various aspects of the breeding cycle.



*Green Heron*

*Illustration by Julie Zickefoose*

In Massachusetts nesting occurs during May and June. Nests are usually placed over water in a wide variety of trees and shrubs, usually with the nest hidden and shaded by dense foliage. The nest site is highly variable, however, and nests may be placed on the ground. The nest usually is a platform of sticks without lining. Males select the nest site and gather sticks for the female to work into the nest. They may reuse old nests of their own or other species. The clutch is three to five pale blue-green eggs. The parents share incubation duties for the three weeks until hatching. The young can fly after about three weeks, and are probably independent by four to five weeks of age. Both parents feed the young which may be left unattended after about ten days. When unattended, the young may adopt the bill-pointing-to-the-sky bittern stance, and utter an incessant *tik-tik-tik-tik-tik* food begging call when a parent bird returns.

Green Herons forage mostly from a crouched posture with head and neck retracted, darting the head forward and grasping or spearing fish, which are their main food item. They are cryptic feeders, standing or walking slowly in shallow water, although they have been reported to use fifteen of the thirty-six described heron foraging behaviors including plunging into water, and may fish from



perches on low limbs or rocks. Although they usually prefer secluded foraging spots, they will forage on mud flats and may forage at any time during the day or night. They have relatively large bills and hence may take larger prey items such as frogs.

Their most interesting foraging behavior is bait fishing, which makes them one of the few tool-using birds. They have been observed dropping crusts of bread, mayflies, feathers, twigs, leaves, berries, insects, and plastic foam bits into the water and catching the fish that rise to the bait. The cover drawings illustrate a Green Heron baiting fish, and the drawing on the previous page shows the culmination of this effort with the heron and its captured fish. Like human fisherman, they generally have the best results using live bait! Green Herons are largely fish eaters (piscivorous) but will take a wide spectrum of small vertebrates and invertebrates when opportunities arise.

Population changes over time are difficult to assess because of the cryptic behavior of the species, but habitat destruction (e.g., draining swamps for agriculture) has probably reduced local populations. Increased recreational use of river channels, ponds, and lakes may also have a negative impact on local populations, and Green Herons may still be subject to predator control at some fish hatcheries. At the present time, however, Green Herons are increasing their range in many parts of North America and have largely escaped the depredations caused by DDT and other persistent pesticides in some heron species. Despite their generally cryptic behavior, Green Herons seem to tolerate human disturbance reasonably well and sometimes nest in urban areas. Good luck to the Mount Auburn Cemetery pair this spring!

W. E. Davis, Jr.

### ABOUT THE COVER ARTIST

Julie Zickefoose is an artist, writer, and naturalist who is devoted to the study, conservation, and appreciation of nature. Educated at Harvard University in biology and art, Julie worked six years as a field biologist for The Nature Conservancy before turning to full-time freelance art. She contributes regularly to magazines from *Ladybug* to *Bird Watcher's Digest*, for which she is a contributing editor. Book illustration credits include the Academy of Natural Sciences, for which she is contributing illustrations to the multi-volume work *The Birds of North America*.

Julie has shown her work at Harvard University, the National Zoo, the Leigh Yawkey Woodson Art Museum, and the XIX International Ornithological Congress. She also sings and plays in a band, The Swinging Orangutangs, whose members include her husband, Bill Thompson III, editor of *Bird Watcher's Digest*. Julie can be reached at Indigo Hill Arts, Route 1, Box 270, Whipple, Ohio 45788.

M. Steele

The prominent black cap, sharp pointed bill, slender pointed wings, and forked tail at once mark this month's puzzler as a tern. Four species of medium-sized, black-capped terns regularly occur in Massachusetts: Roseate, Common, Arctic, and Forster's. Three other superficially similar tern species (Caspian, Royal, and Least terns) need not be considered because of the larger size, broader wings, much heavier bill, and less deeply forked tail of the Caspian and Royal terns, and the conspicuous white forehead of the tiny Least Tern.

Distinguishing between Roseate, Common, Arctic, and Forster's terns is more challenging. The pictured tern has a complete black cap and hence has to be an adult in breeding plumage. Also, because the bill shows a distinct dark tip, the primaries do not have a neat, thin dark line on the trailing edge, and the outer edges of the outer tail feathers are white, the mystery tern cannot be an Arctic Tern, which has a blood-red bill and a different under-primary and tail pattern.

The Roseate Tern in breeding plumage can similarly be eliminated because it is a strikingly pale species with a bill that is usually mostly dark, an underwing pattern that usually shows only a thin dark line on the leading edge of the wing (created by dusky webs on the first two or three primaries), and exceptionally long, pure white tail streamers.

Common and Forster's terns remain. Both species have bicolored bills in breeding plumage and are overall quite similar in shape and proportions. Although Forster's Terns have a frostier look to their primaries and do not show the intrusion of a dusky wedge into the outer primaries, a characteristic of Common Terns in flight, these features are not able to be reliably assessed in the tern depicted. However, the fact that the mystery tern clearly has white outer edges to the outer tail streamers at once confirms the identity of the unidentified sternid as a Forster's Tern (*Sterna forsteri*). In Common Terns these feather edges are gray.



The Forster's Tern occurs in Massachusetts as a regular late summer and fall visitor in varying numbers, and since at least 1990, one to two pairs have nested at Parker River National Wildlife Refuge. The pictured bird was photographed in the Mid-Atlantic states by Simon Perkins.

## AT A GLANCE

---

Photo by Hugo H. Schroder. Courtesy of MAS.



Can you identify this bird?

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

We give avid birders something few binocular and telescope stores can.

### Help.

We at the F.C. Meichsner Co. don't just talk to our customers about optical equipment. We listen to them, too.

And when you've been listening to people for 72 years, you can't help but learn a thing or two.

Like what birders want in a pair of binoculars—and what they don't.

So when you're about ready for a new spotting scope, binoculars, or repairs on equipment you already own, give us a call.

We accept most major credit cards, and we'd be happy to let you do most of the talking.

 **F.C. Meichsner Co.**

182 Lincoln St., Boston, MA 02111  
(617) 426-7092



**BIRD OBSERVER (USPS 369-850)  
462 TRAPELO ROAD  
BELMONT, MA 02178**

**SECOND CLASS  
POSTAGE PAID  
AT  
BOSTON, MA**

Dec 97

VOL. 24, NO. 2, APRIL 1996



## *CONTENTS*

---

BIRDING THE NASHUA, NEW HAMPSHIRE, AREA .....	Ralph Andrews	72
PARTNERS IN FLIGHT: PROACTIVE CONSERVATION FOR NEOTROPICAL MIGRATORY BIRDS AND THEIR HABITATS .....	Peter W. Stangel	79
MASSACHUSETTS PARTNERS IN FLIGHT WORKING GROUP .....	Bradford G. Blodget	86
NOTES ON 1995 NESTING ATTEMPT OF GREEN HERON PAIR AT MOUNT AUBURN CEMETERY . . .	William E. Davis, Jr.	90
SUMMARY OF 1995 NORTH AMERICAN MIGRATION COUNT IN NEW ENGLAND . . . . .	Michael Resch	95
BIRD SIGHTINGS: NOV./DEC. 1995 SUMMARY . . . . .		102
CHRISTMAS BIRD COUNTS, 12/16/95 - 12/31/95 . . . . .	Compiled by Marjorie W. Rines and Robert H. Stymeist	116
BOOK REVIEW: Monographs About Birds: A Bewildering Assortment .....	William E. Davis, Jr.	127
ABOUT THE COVER: Green Heron . . . . .	W. E. Davis, Jr.	131
ABOUT THE COVER ARTIST: Julie Zickefoose . . . . .	M. Steele	133
AT A GLANCE . . . . .	Wayne R. Petersen	134
Cover Illustration: Green Heron by Julie Zickefoose		

---