BIRD OBSERVER



Yellowlegs

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CONTENTS

PRAIRIE BIRDING THROUGH NEW ENGLAND EYES	
	76
THE DOUBLE EDGE EFFECT John C. Kricher	80
DO VAGRANT BIRDS IN MASSACHUSETTS REFLECT POPULATION GROWTH AND DISPERSAL RATHER THAN WEATHER PATTERNS?	86
PEREGRINE DAY—CLOSE ENOUGH Peter Trull	93
HERRING GULLS NEST ON SLANTING ROOF	
	96
BOOK VIEWS Brian E. Cassie	100
ASH-THROATED FLYCATCHER: FIRST FOR THE VINEYARD	103
FIELD RECORDS: NOVEMBER/DECEMBER 1989	107
CHRISTMAS BIRD COUNT, 12/16/89-1/3/90 Robert H. Stymeist	121
ABOUT THE COVER: Middle Yellowlegs, Least Yellowlegs	
Ben L. Sill, Cathryn P. Sill, and John C. Sill	132
MEET OUR COVER ARTIST: John C. Sill Dorothy R. Arvidson	133
AT A GLANCE	134
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Glenn d'Entremont and Bob Campbell will coordinate a count of Whippoor-wills in the Myles Standish Forest in Plymouth during the month of June and are looking for volunteers. They are doing weekly counts along a sevenmile route. If you are interested, please contact Glenn at 617-961-2616 (Randolph) or Bob at 617-335-5709 (Weymouth).

PRAIRIE BIRDING THROUGH NEW ENGLAND EYES

by John C. Young

How I came to be estimating the size of longspur flocks out in the unrelenting wind and wide horizons of the South Dakota prairie is another story. But there I was, recording a narrow slice of the great midcontinental southbound bird migration. For two months, I was actually getting paid to sit in a box atop a pickup truck and watch one of North America's great spectacles.

Our crew of seven consisted of both birders and free-lance wildlife researchers. The afternoon following Labor Day 1989 we gathered at the Ramkota Inn in Aberdeen to begin our orientation and training. Aberdeen, South Dakota's third largest metropolis, is barely the size of Keene, New Hampshire.

Some sixty-odd miles from that hustle and bustle, and thirteen miles from any store, we set up housekeeping in an old farmhouse. Our adopted home was nestled between shelterbelts that were planted after the dust bowl of the 1930s. Also nearby were a woodlot, feedlots, and seedy, weedy places. Short strolls out the door sometimes turned up species atypical of the plains, such as Redbreasted Nuthatch, Brown Creeper, Varied Thrush, Ovenbird, and Mourning Warbler.

But that was not the birdwatching we had traveled west for. Out to the stations at first light, the morning-shift birders huddled alone against the chill wind, hoping that dawn would bring a ray of warmth. For hours at a stretch, every bird or flock seen passing within binocular range was recorded according to species or taxon, number or estimate, direction of flight, distance away, angle



Photo by John C. Young

above the horizon, and estimated altitude. That flock of unidentified longspurs might be recorded as numbering three hundred and fifty, flying southeasterly over a point three hundred meters west of the station, one degree above the horizon, and twenty feet above the ground. Height estimates would be checked later by triangulation.

The vast landscape was ideal for monitoring the overall directional movement of birds. Detecting bird movement in Massachusetts is often a matter of noting appearances and disappearances. In South Dakota skulking into the foliage is minimal. Movement of birds is visible—if you are watching.

I expected a continuous, if irregular, southbound flow of migrants. Often, this was not the case. On one heavily overcast September morning, some forty flocks of Barn Swallows, each with one-to-two hundred birds, passed high overhead northeast toward a promising sky, all within about an hour. On other days the southward progress was apparent; such was true on one November day, when skeins of Snow Geese were overtaking the white clouds below them, all heading south.



From Boston Aberdeen, South Dakota, was a long three-day drive. Bay State birders driving out only as far as the Mississippi River are not likely to see many new birds. Red-headed Woodpeckers become rather common in the upper midwest; migrant Tundra Swans and Sandhill Cranes are a possibility; Dickcissels and Clay-colored Sparrows are somewhere out there off the highway; a detour to north central Michigan could net Kirtland's Warbler. By and large, though, one travels through oak-hickory and northern hardwood forest, towns, farms, and marshes, each with birdlife to match similar places back home.

Beyond the old edge between forest and prairie, the mix of birds begins to change. If you are traveling along interstate highway 90, this happens near Minneapolis. The meadowlarks sing a different tune, the kingbirds come in two patterns, and the buteos are variable in shade and pattern—Red-tails and Swainson's in the summer. Most wondrous are the sloughs and lakeside marshes, which are inhabited by blackbirds with yellow heads, swarms of Franklin's Gulls, a scattering of Forster's and Black terns, flashy avocets, huge white pelicans, and a nice assortment of ducks.

The passing months bring new species. This birder added Sedge Wren, Lark Bunting, Harris' and LeConte's sparrows, and Chestnut-collared and Smith's longspurs to his life list of brown streaky species. Also of interest were the occasional Bald Eagle, Ferruginous Hawk, Peregrine, Prairie Falcon, Sharptailed Grouse, Short-eared Owl, and Baird's Sandpiper. In addition, there were excellent opportunities to become more familiar with species such as Lesser Golden-Plover, Eastern Bluebird, Vesper Sparrow, and Lapland Longspur. I did not track down a Greater Prairie Chicken; that will wait for another adventure.

One of the odd things about September 1989 in the area between the Hecla sandhills and a broad ridge called a *coteau de prairie* was the presence around many farmsteads of flocks of half-a-dozen yellow-green songbirds, decidedly larger than House Sparrows, each with a sharp, slightly decurved bill, wingbars, a medium build, and a call much like a Red-winged Blackbird's "chuck." I am apt to be hesitant in new country; with each passing day it seemed stranger that they could be Orchard Orioles, which are reliably scheduled to depart there in July, just as in New England. Finally, I got Bruce Harris, co-author of "The Birds of South Dakota" and member of the field team, to confirm my odd discovery. There were no adult or first-year males among dozens of these orioles. I am speculating that, whether there was widespread success or failure of a first brood, an entire population of birds somehow elected to raise a second brood that year in that place.

My other observation of general natural history interest was of a markedly sequential abundance of migrants. This was most apparent due to the continuity of our coverage and the emphasis on counting or estimating flock sizes. It may



Photo by John C. Young

or may not be characteristic of the prairie. In a more or less weekly sequence, we bird tallyers were overwhelmed trying to count Mourning Doves, then Barn Swallows, followed by mixed blackbird flocks, Franklin's Gulls, more blackbirds, hawks, larks with longspurs, and finally, tens of thousands of Mallards and Snow Geese. Actually, counting hawks was never a problem, not like estimating a maelstrom of blackbirds.

The rest of eastern South Dakota birding is better experienced than described: ululating Upland Sandpipers; singing Horned Larks holding their own, high against the wind; a small V of Tundra Swans flying across a spectacular sunset, whistling; the prehistoric calls of Western Grebes, American Coots, and Sandhill Cranes; and the distant clamor of Snow and "Blue" geese that sparkle in the bright blue sky.

Don't miss it, if you have a chance to go.

JOHN C. YOUNG discovered that watching the whole fall migration in the pothole country of Dakota was a far cry from his usual office-bound life, writing assessments of hazardous waste sites from a human health risk perspective for Metcalf and Eddy, Inc., of Wakefield. John has been birding various corners of Massachusetts since he was introduced to birds by Jeff Harris and Betty Anderson as a nine-year-old day camper at Wellfleet Bay Wildlife Sanctuary. His reputation among Massachusetts birders was made when he found a Swainson's Warbler in the Beech Forest in Provincetown in 1982. A resident of Jamaica Plain, John enjoys birding by subway and bicycle.

THE DOUBLE EDGE EFFECT

by John C. Kricher

Ecologists and birders alike have long known about a phenomenon called "edge effect." If you want to see a high number of bird species, just patrol along an edge, where one kind of habitat gives way to another. A walk along a New England forest-field border will yield Brown Thrashers, Gray Catbirds, Rufoussided Towhees, and Blue-winged Warblers along with brushy area species such as Field Sparrows and Common Yellowthroats and woodland species such as Ovenbirds, Scarlet Tanagers, and Northern Orioles. A few species, thrasher and towhees, for instance, are considered "edge specialists." Their highest abundances occur in such habitats. Moreover, many more species, each typically associated with either fields or forests, can nonetheless be encountered along an edge.

Edge effect is evident in the Neotropics as well. Forest borders are typically areas of bright sunlight, where many species of fruiting trees can be found as well as flowering vines and various epiphytes. Mixed species flocks of insectivorous birds such as greenlets and wood creepers, as well as fruit and nectar feeders including hummingbirds, tanagers, honeycreepers, and parrots, are characteristic of such areas. Edge specialists such as Great Antshrike and several saltator species skulk amid the dense junglelike vegetation of forest borders throughout Latin America.

Edge effect is currently increasing in both temperate and tropical latitudes. Any New England birder knows that throughout the region, from Connecticut to Vermont, forests and agricultural lands are being increasingly subdivided into house lots. Tracts of forest are being reduced to a scattering of "forest islands" dispersed within seas of housing developments and shopping malls. As forests become fragmented, edge increases. Likewise, in the tropics forests are being felled to create cattle pastures, plantations, and agricultural fields. Again, the result is a relative increase of forest edge and a decrease of forest interior. It is somewhat like cutting a block of ice into many small cubes. The net result is to greatly increase overall surface (edge) area relative to volume (interior forest). In the case of ice, the block melts sooner when subdivided. Though forests do not melt when cut into smaller fragments, the greater edge effect may exert a strong influence on bird species richness. The question is, is that influence for better or for worse?

Concern is becoming widespread over apparent recent declines among breeding populations of such species as Wood Thrush, Ovenbird, and Red-eyed Vireo. These species are long-distance migrants, each spending the winter months in some part or parts of the Neotropics. If their populations really are shrinking—it is devilishly difficult to pin down meaningful population trends for widespread species—is the problem on the breeding grounds, on the wintering grounds, or during migration? At least in some areas, Brown Thrashers and Rufous-sided Towhees also appear to be in decline. These species are short-distance migrants, suggesting that at least part of the problem of declining species—even edge specialists—occurs on the breeding grounds. That problem may be too much edge effect and not enough interior forest. But how does this factor affect breeding success?

One species that is most definitely not in decline is the Brown-headed Cowbird. Christmas Bird Count data make it apparent that cowbirds have increased quite dramatically in the past thirty years (Brittingham and Temple 1983, Root 1988). Since cowbirds are brood parasites, females need to locate nests to parasitize. Cowbirds typically inhabit edge areas, steering clear of interior forest. As forests are fragmented, cowbirds become more successful because their victims are essentially brought closer to them by reductions in interior forest, normally areas of refuge from cowbirds. Recent studies of such species as Hooded Warbler, Worm-eating Warbler, and Wood Thrush (cited in Terborgh 1989) have all demonstrated alarming levels of cowbird parasitism. Possible declines in short-distance migrants such as towhees and thrashers might also be attributable, at least in part, to increased cowbird pressure, even though Brown Thrashers are capable of recognizing and rejecting cowbird eggs (Rothstein 1971, 1975). Many wood warbler species readily accept cowbird eggs.

Another species on the increase in the Northeast is the Blue Jay (Bock and Lepthien 1976). Blue Jays are efficient nest predators and thrive along woodland edges. If a Wood Thrush somehow manages to avoid becoming part of the "cowbird factory," its eggs or nestlings may still fall prey to marauding Blue Jays. Blue Jays are aided by bird feeders, which enable them to gorge on fat-rich sunflower seed and thus enhance their winter survival rate (Root 1988). Among the host of new books that have flooded the market about how to attract and feed wild birds, I have yet to see one point out that bird feeding, by reducing the natural mortality of Blue Jays, may contribute directly toward nest predation and hence, population decline of Wood Thrushes and their kindred.

Other nest predators such as American Crows, Common Grackles, and raccoons also thrive along edge areas and almost certainly add to reduced probability of nest success for a wide array of species. Recent research has strengthened the long held notion that nest predation is a highly significant factor in avian ecology (Ricklefs 1989).

In summary, forest fragmentation, by concentrating increasing numbers of birds nearer an edge, may be the cause of unnaturally high rates of brood failure among many species. Though cowbirds, Blue Jays, and raccoons may hold the "smoking gun," we provided the ammunition-by shrinking the forests.

Now, what about the tropics? How does edge effect influence the ecology of migrants on their wintering grounds? One of the earliest generalizations about migrant passerines in the Neotropics was their apparent abundance in, if not outright preference for, forest borders and successional areas (Keast and Morton 1980, Rappole et al. 1983). Some researchers (Willis 1966, Leck 1972) suggested that the creation of disturbed habitats could augment survival on their wintering grounds for some species of migrants. In recent years that view has been increasingly challenged (Lynch 1989) as numerous censuses have revealed at least fifty-seven species of migrant landbirds that thrive in interior tropical moist forests (Wilcove and Terborgh 1984, Terborgh 1989). However, many, if not most, of these fifty-seven species are also found along edges and successional areas.

During January of 1982, 1983, and 1984 William E. (Ted) Davis and I, under grants from Earthwatch, studied migrant and resident bird distribution in three habitats in southern Belize. We compared the bird communities of an early old field, a young successional woodlot, and a mature moist forest. Both the early old field and woodlot were areas abandoned by the local Mopan Mayan farmers who practice slash-and-burn agriculture. They farm small plots, typically for as short as two to three years, and then abandon the plot, permitting it to undergo rapid ecological succession back to woodland.

I believe that slash-and-burn agriculture essentially mimics a pattern of natural disturbance that is normal for the American tropics (Kricher 1989). Wind-throw, mud slides, and other natural climate-induced disturbances have always been part of the tropics and thus have provided evolutionary selection pressures for uncounted generations of birds as well as other taxa. Mayan agricultural practices increase habitat patchiness, making the area a kind of ecological patchwork quilt of varying degrees of ecological succession. The Mayan farmers promote edge effect.

On our three study sites Ted and I identified 157 species, of which 31 were North American migrants. Interestingly, we sighted or netted slightly more species in each of the disturbed areas (102 and 98) than in the mature forest (87). Of the 157 species, 57 percent are described as forest border/edge species (Peterson and Chalif 1973, Ridgely 1976). The percentage of forest border/edge species was virtually the same in the three sites: 58, 56, and 57 percent. In total, only 42 species occurred on all three sites, and 65 species occurred on only one of the three sites. The distribution pattern between migrants and residents differed. The average migrant had a seventy percent chance of being encountered in more than one study site and thirty-two percent of the migrant species were found on all three sites. The average Neotropical resident species had but a fifty-five percent chance of occurring on more than one site. Thus migrants, on the average, had a wider habitat distribution than residents. Our banding efforts indicated that migrants exhibited strong winter-site fidelity in both successional and interior forest areas (Kricher and Davis 1986).

Our study suggests that disturbed edge-type habitats in the tropics do, indeed, host an impressive diversity of resident species and form a major complex of habitats for North American migrants. Edge could well be essential for maintaining high species richness in the tropics. Why? Because edge has been created repeatedly and naturally through the millenia, and the birds have adapted to exploit it, just as have the sun-loving, rapid-growing plants that comprise it. Edges and successional areas may provide relatively rich sources of food for migrants. North American migrants do not nest in the tropics, so threats of nest parasitism and nestling predation along forest borders are not factors that influence migrants on their wintering grounds.

I am most emphatically not arguing that it is fine to cut large tracts of tropical forest. What the Mayans do is small-scale, temporary forest disturbance. Such a practice is in most cases profoundly different from large-scale, permanent habitat conversion that is occurring in many areas within the tropics, where forests are felled to create thousands of acres of pasture or cropland. Some migrant species such as the Cerulean Warbler, as well as numerous resident species, are utterly confined to forest interiors and stand to suffer potential reductions if forest acreage is lost. Because many forest species also utilize edge and successional areas, much of the species richness of disturbed areas and forest borders is utterly dependent on the immediate presence of accessible forest! What I am asserting is that within the normal ecology of the Neotropics, forest borders and edges do attract North American migrants, perhaps even disproportionately to other habitats, including forest interiors.

I sense an urgency among tropical researchers to justify forest preservation. I think this desire, however admirable, has led to a recent tendency to minimize the ecological importance of successional areas and edge, and, in some cases, to argue that even birds that occur in such areas would "prefer" to be in interior forest. I do not think the data, at least not our data, support such a notion.

At this particular juncture in evolutionary time, some North American migrants may suffer from edge effect on their northern breeding grounds but generally prosper from it on their tropical wintering grounds. Like the proverbial sword, the edge is double, and it seems to cut both ways.

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BIRD OBSERVER

Vol. 18, No. 2, 1990

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DO VAGRANT BIRDS IN MASSACHUSETTS REFLECT POPULATION GROWTH AND DISPERSAL RATHER THAN WEATHER PATTERNS?

by Richard R. Veit

A popular belief articulated by Wilson (1988) is that birds that appear far outside their normal ranges (i.e., vagrants) have been passively transported by the wind. If this hypothesis were true, then we would expect certain years to be especially favorable for the transport of birds outside of their range because the weather conditions in that year were particularly appropriate for transporting them. For example, let us consider the dispersal of birds from western North America to Massachusetts. If Lark Sparrows or Western Kingbirds appear in Massachusetts because they are "drifted" to the east by the wind, then surely there will have been some years in which the weather patterns were more suited than others for transporting western birds east. In such "good" years, we would expect, in general, to see larger than normal numbers of western birds.

An alternative hypothesis is that variation in the number of vagrant birds reaching Massachusetts reflects between-year differences (1) in population growth, i.e., number of young produced, and (2) in the tendency of individual birds to disperse. This hypothesis predicts, for example, that the number of Western Kingbirds reaching Massachusetts in a given year depends uniquely on Western Kingbird behavior and population dynamics. Large numbers of Western Kingbirds would appear in Massachusetts when an especially large number of young were produced or when, due to environmental change within the normal range of Western Kingbirds, individual birds began dispersing farther than they regularly do, a different pattern of occurrence of vagrant birds in Massachusetts than one determined by weather conditions, which then play only a secondary role.

I addressed this question by examining the interannual variation in numbers of vagrant birds from western North America that have appeared in Massachusetts during the last thirty-five years. I have focused on those years in which peak numbers of each species occurred. If vagrancy is governed mainly by weather patterns, then I would expect all species from the same general summer range to occur in Massachusetts in maximum abundance in precisely the same years. That is, if weather patterns in a particular year are conducive to the transport of Western Kingbirds to Massachusetts, then they should transport Western Tanagers, Black-headed Grosbeaks, Lark Sparrows, and Yellowheaded Blackbirds during that year as well. If, however, vagrancy is governed by population dynamics and behavior, then there would not necessarily be any correspondence among species; there would be no reason to expect large numbers of Western Kingbirds and Lark Sparrows to appear in the same year. Therefore, the fluctuation in number of each western species occurring in Massachusetts should be independent of that of all other species.

Methods. I extracted records of Western Kingbirds, Western Tanagers, Black-headed Grosbeaks, Lark Sparrows, Clay-colored Sparrows, and Yellowheaded Blackbirds from *Records of New England Birds*, *Bird Observer*, and *Audubon Field Notes/American Birds* for the fall seasons of 1956-1988. I identified the fall season as July 1 to January 1, the last half of any year. I chose the six species above because they share essentially similar breeding ranges, and they occur in Massachusetts with sufficient frequency to permit analysis. If two individuals of the same species were reported at the same place less than four days apart, I considered them to be the same bird. I used *Systat* for all statistical analyses.

Results. The six species I chose each appeared in Massachusetts in peak abundance during different years. See Figures 1a and 1b on the following pages. 1956 was a good year for Western Kingbirds and Western Tanagers, but not for any other species. Lark Sparrows were most numerous during the mid-1960s; Clay-colored Sparrows peaked in the mid-1970s; and Yellow-headed Blackbirds peaked recently in the late 1980s. Even though these birds dispersed to Massachusetts in maximum numbers during different years, there was some correlation in abundance between years. For example, Lark Sparrows and Western Kingbirds were both more common than average in 1979. Such correlation could result from a coordinated response to either weather patterns during migration or to variability in their shared nesting habitat. Both Claycolored Sparrows and Yellow-headed Blackbirds increased in frequency of occurrence in Massachusetts over the thirty-year period.

Discussion. The patterns of occurrence of western birds in Massachusetts strongly supports the hypothesis that vagrancy is an attribute of populations. In years when relatively large numbers of a particular species occur in Massachusetts, it is likely that that species has produced unusually many young or that the individuals in the population have acquired an exaggerated tendency to disperse. That is, intrusions into Massachusetts of western species such as Lark Sparrows during the mid-1960s or Clay-colored Sparrows during the years 1976-79 are irruptions in the same sense as are irruptions of Snowy Owls or Northern Shrikes. This idea implies that populations of birds ordinarily respond to changes in the environment by redistributing themselves and further implies that all birds are irruptive, not just a select few. The differences between the more obviously irruptive species and those I have analyzed are of degree, not quality.

That populations of birds appear to constantly redistribute themselves is important for environmental monitoring. It seems likely that major irruptions of crossbills (Benkman 1987) and Snowy Owls (Kerlinger and Lein 1988) are





BIRD OBSERVER

Vol. 18, No. 2, 1990





triggered by fast changes in food abundance. My point in this paper is that the same is true of the irruptions illustrated in Figures 1a and 1b, except that the changes in abundance of food probably are smaller or occur more slowly. Thus, vagrancy is not noise, but a signal. The appearance of vagrants is an inevitable consequence of the response by a population to changes in the environment.

It should be the goal of ecologists to learn how to interpret the signals provided by vagrant birds. For example, it may be that the major northward intrusion of herons to the Northeast during the late 1960s and early 1970s had something to do with habitat destruction in the south. The Everglades in Florida suffered catastrophic fires at about that time. Other less dramatic redistributions of birds may reveal changes more subtle than raging fires. Relatively minor changes at the periphery of the ranges of birds probably contain important information. We need to learn how to tap that information.

The patterns of occurrence of these six species in Massachusetts show that irruptions do not seem restricted to a single year. A few years during which a species occurs commonly may be followed by many years during which it is not reported. This means that records compilers and committees must be careful about discarding reports that appear to have no immediate precedent. Griscom and Snyder (1955) decided to ignore reports of Western Grebes in Massachusetts beginning in the late 1940s, because so many were being reported. Their rather feeble justification for this decision was that descriptions of the grebes did not eliminate the similar Great Crested Grebe of Eurasia. The consequence of their decision was that an irruption of Western Grebes into Massachusetts was obscured.

The legitimacy of the patterns evident in data from Massachusetts is supported by the occurrence of the same species in the New York City area. Bull (1964, 1974) showed that Western Tanagers occurred around New York in the late 1950s more frequently than they have since. The years in which Bull (1974) stated that maximum numbers of Western Kingbirds occurred in New York State were 1954 and 1956. The latter year corresponds to a significant peak in Massachusetts data. Thus, groups of years in which large numbers of a certain species appear in Massachusetts are also years when large numbers of that species appear in New York.

The problem with analyzing field records is that perceived changes in abundance may be a consequence of changes in effort. The increase in any species through time could be due to the increase in the number of people birding or to newly developed identification techniques. Western Kingbirds and Western Tanagers have both decreased over the time interval examined. Thus, the patterns I have described are certainly not the result of increased effort. With the exception of Black-headed Grosbeak and Clay-colored Sparrow, the species I have discussed are not difficult to identify, so variation in their abundances is unlikely to be due to their being overlooked in the past. The lack of a consistent trend in the abundance of these species is surprising given the dramatic increase in number of people birding since the 1950s. It suggests that Massachusetts is saturated with birders with respect to the detection of these particular species. Therefore, these patterns in the occurrences are real and not an artifact of the behavior of birders. This finding suggests the value of the coarse scale at which these data are collected; more detailed data from a smaller area might be more reliable, but less relevant.

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RICHARD R. VEIT received his Ph. D. at the University of California at Irvine for research on the spatial dispersion patterns of Antarctic seabirds. He is currently teaching at Irvine, where he lives with son Darren, born September 9, 1989, and wife Barbara Braun Veit, who has studied seabird ecology in the Pribilof Islands and currently teaches sixth grade science and math. Dick will join Peter Kareiva's laboratory at the University of Washington in Seattle this year, where he will use mathematical models to study dispersal of populations of marine and terrestrial birds. For his master's thesis at the University of Massachusetts, Boston, he completed the manuscript of *The Birds of Massachusetts*, which is awaiting publication. Dick Veit grew up in this state, is widely regarded as a shorebird and seabird authority, and is a former records compiler for *Bird Observer*. His work has been published in *Western Birds*, *American Birds*, and *Bird Observer*. Dick would like to acknowledge the Massachusetts Audubon Society for access to their records of birds and Dorothy Arvidson and Richard Forster for their comments and criticisms.



PEREGRINE DAY—CLOSE ENOUGH

by Peter Trull

Most birders have special days, whether it is the date of a predictable event like the return of a favorite species from wintering or breeding grounds or perhaps the anniversary of a life bird or a rarity. Each year I spend as much time as I can during the first week of October watching Peregrines as they migrate along Chatham's eastern shore. Inevitably these beautiful falcons stop at Monomoy Island where food abounds in the form of migrating shorebirds. Through the years October 8 stands out—Peregrine Day. In 1989, on October 7 (close enough), an event took place on the south tip of North Monomoy Island, Chatham, that I believe is worth sharing.

Friend Carol Dennis and I had been on the island for about an hour and had seen two Peregrines moving over the marsh and tidal flats, mildly terrorizing the Black-bellies and Sanderlings that feed by the hundreds out on "Godwit Bar." We decided to head for the flat open expanse of the south tip of the north island, where Peregrines habitually sit down on the white sand. Using my pal Blair Nikula's boat, we whisked down the east beach into the cut and threw out the anchor. Just as we stepped out on the sand, Carol yelled and pointed behind us in the cut. There, a hundred feet away, was a Red-breasted Merganser floating belly up, feet flailing, head submerged. Holding onto the breast of this fair-sized duck was a juvenile Peregrine Falcon, flapping furiously, leg outstretched, trying to lift the duck.

Repeatedly, the falcon would take off, make a tight circle around the still alive but drowning duck, swoop, grasp, jerk forward, and let go. I figured the falcon had broken the merg's neck; otherwise the fish-eating diver would have righted itself. Carol observed the initial flash and splash, but we never saw the contact until the duck was in the water. Finally, the young falcon landed just down the beach and watched the still kicking duck float by. My next move might annoy some Darwinists, but I could not resist. I yelled something to the waiting Peregrine and jumped in the boat. I grabbed the now dead duck and tossed it on the shore.

As we sat waiting for a response, a flock of shorebirds whistled by at Mach 10. "Another 'Grin," we said in unison. A second Peregrine was moving straight by, into the westerly breeze. I saw the bird look over its shoulder, drop a wing, fan its tail, and instantly, it was hanging on the breeze just over our heads and keying on the dead duck that lay on the beach slope sixty feet away. It seemed interested.

The first Peregrine began to walk in our direction, shuffling toward its prey. When it came to the shell of a horseshoe crab, the undignified youngster climbed on top of it, spread its wings, and started to feed. "Wrong bump, you turkey; the duck's over here," I whispered. Meanwhile, the second Peregrine was hanging above us, circling eight feet over our heads, drifting by—too close for binoculars. To these birds, which may have left Greenland a week or so earlier and may have had no experience with humans before this day, we were just figures on the landscape, the same as caribou or seals.

Finally, the first falcon had moved into position atop its prey and began to pluck feathers from the duck's breast—a steady stream of plumage was blown along the sand. It was not long before Peregrine Two landed within four feet of its feeding kin. Carol and I looked at each other. What now? We sat watching through knee-braced binoculars.

The feeding bird stood about twenty-five feet from our anchor, which was gradually disappearing beneath the incoming tide. Carol crouched low and moved slowly toward the anchor—and directly toward the birds. Both falcons eyed her every move. I yelled to her in a loud whisper, "Pull the anchor up and sit down; sit down!" The feeding Peregrine watched but never stopped gulping down beakfuls. I scooted over on my butt until we were too close to scope; we had to finish them off with binoculars.

By this time a third juvenile had landed a hundred feet down the beach and was just standing there, as Peregrines do. Peregrine Two now made a different approach. Instead of coming up the beach from below, it moved to the uphill side of the feeding bird and inched closer and closer. Its next move blew us away! Almost lying on its side, with outstretched wings nearly touching above its head, the challenger stretched out one long leg with its long Peregrine toes, grasped the merganser's side, and dragged the duck three feet up the beach while the feasting bird, Peregrine One, stood atop its booty, using its wings to balance against the jerking motion. This direct move netted the challenger nothing. So the determined bird resorted to another tactic. It let go of the duck, sidled up to the carcass, and began to feed on it. Bird One was unperturbed, at least for fifteen or twenty seconds. But then the raised-hackles-and-roll-downthe-beach routine was repeated once again. Nonetheless, for a brief time, there they were—two juvenile Peregrines feeding on the same kill! Were they



Juvenile Peregrine Falcon Feeding on Red-breasted Merganser. October 7, 1989. North Monomoy Island. Photo by David Houghton.

siblings? I have no answers, no explanations.

There were now four juvenile Peregrines in view at once. We had hardly moved for over two hours, awestruck by this once-in-a-lifetime experience. Ah, Monomoy....

As Carol and I sat watching Peregrine One finish off the duck, the U. S. Fish and Wildlife Service boat came into view, moving through the cut, heading toward us. In sign language I signaled for the captain, Dave Houghton, to approach slowly and feast his eyes. Dave and two companions landed, were soon beside us, and—as I pointed to four standing Peregrines—speechless. Luckily, Dave had his camera and was able to take some photos of the feeding bird, now completely at ease, finishing up, unchallenged, its midday meal of Red-breasted Merganser.

PETER TRULL is Director of Education at the Cape Cod Museum of Natural History. A veteran birder, naturalist, and teacher, Peter was for ten years tern warden for Massachusetts Audubon Society and has published articles in *Bird Observer* and *The Cape Naturalist*. Currently, he is completing a book, a general field guide to the one hundred and forty most common birds of Cape Cod and the Islands. Peter is also widely known to Cape Cod radio listeners for his program "The Birdwatcher's Report," a regular morning feature (8:45 A.M.) of station WFCC in Chatham.

HERRING GULLS NEST ON SLANTING ROOF

by William E. Davis, Jr.

On June 15, 1988, while walking back from the heron colony on Clark's Island, Plymouth Bay, Massachusetts, I noticed a Herring Gull sitting on a nest on a housetop, where two sections of the pitched roof joined. I was intrigued by the odd location of the nest and returned the following day to photograph the bird and nest. On June 18 as I was again preparing to photograph the nest, a chick, approximately three to five days old, stood up in the nest and looked around before settling back out of sight. I was unable to continue to monitor the success of this nesting attempt or to determine how many chicks were present. However, William Brittingham, a student in Manomet Bird Observatory's field biology training program (who was living in the house and studying the fledging success of ground-nesting gulls in the vicinity), later told me that the chicks



probably had not survived. Predation by Great Black-backed Gulls on the study nests in the yard around the house had been very severe, with a low fledging rate for even the more protected nests. I had observed Great Black-backed Gulls roosting on the roof peak within ten feet of the Herring Gull nest. Katharine Parsons reported that an active gull nest was on the same roof in 1987 and 1989.

I was aware that Herring Gulls occasionally nested above the ground. Katharine Parsons (paper in preparation) had documented that most of the approximately two thousand pairs of Herring Gulls at Clark's Island nest on the ground in a variety of habitats, but about one percent nest in cedar trees. Moreover, a literature search revealed that roof-nesting is widespread in Herring Gulls, other gull species, and many other bird species as well. This practice is rapidly increasing and causing nuisance problems in many urban areas.

Erma J. Fisk (1978) documented roof-nesting by twenty-two species of birds, including fulmars, Ospreys, oystercatchers, three plovers and sandpipers, five terns, and nine gulls. Herring Gulls were first reported nesting on roofs in 1894 at a Black Sea port (Cramp 1971). The practice was widespread in England by 1976 and rapidly expanding, with ninety-two colonies listed for the British Isles. Fifty of these were settled between 1969 and 1976, probably due to the saturation of normal nesting sites and an expanding gull population (Monaghan and Coulson 1977). Raymond A. Paynter, Jr. (1963) reported one hundred and fifty Herring Gull nests atop a large building on a Boston waterfront pier, the first North American record for roof-nesting gulls. Buckley and Buckley (1980) reported Herring Gulls nesting on rooftops on Long Island. Their report included a photograph of a Herring Gull nest at the juncture of two sections of a slanting roof, a site structurally similar to the nest site of the Clark's Island gull.

The nesting of Ring-billed Gulls on rooftops was documented by Blokpoel and Smith (1988) in Ontario, Canada. They also reported seven Herring Gull



Photos by William E. Davis, Jr.

nests atop one building in 1986 and forty-four on the roof of the Bruce Nuclear Power Development in Bruce, Ontario. The fouling and associated problems necessitated control measures. Several hundred pairs of Glaucous-winged Gulls have nested atop buildings in Vancouver, British Colombia (Vermeer et al. 1988). The authors included a photograph of a gull nesting on a shingle roof, wedged against a chimney, in Sidney, Canada.

It appears that the increase in population of many gull species, due in part to open dumps and other human-caused habitat changes, has expanded nest-site selection in these behaviorally plastic species to include man-made structures such as roofs. Nesting success, where it has been studied (Vermeer et al. 1988), has not been good due to lack of cover and gull predation. Many rooftop-nesting attempts have caused problems which led to the adoption of control measures, thus insuring nesting failure. Most roof-nesting gulls choose to nest near chimney or vent structures on flat roofs, presumably for support and shade, and use similar structures for support on slanting roofs. In the case of the Herring Gull nest at Clark's Island, the angle between two sections of the roof apparently provided more support than the pitched surface of the roof alone.

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WILLIAM E. DAVIS, JR., professor and chairman of the Division of Science at Boston University's College of Basic Studies, is also an author, lecturer, artist, naturalist, and birder, whose field work has taken him to five continents. In 1990 he will be doing research in New Guinea. Ted is active in many professional ornithological associations and is currently president of the Nuttall Ornithological Club and the Bird Observer corporation.

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BOOK VIEWS

THE BIRDS OF JAVA AND BALI by Derek Holmes. 1989. Singapore: Oxford University Press. 133 pages; 24 color plates, color frontispiece,

6 black-and-white drawings; \$19.95.

The title of this book is a bit misleading; perhaps it should have been titled *Some* of the Birds of Java and Bali. It is, indeed, little more than an introduction to the approximately 480 avian species in the region. Holmes's intent, it should be noted, was to produce a guide to "most of the birds that can be found readily in the various habitats of Java and Bali." Presumably, this has been accomplished. There are 112 birds illustrated and 120 others referenced in the text. The plates are only fair but do include figures of 34 birds not illustrated in Ben King's southeast Asia guide. Although it is not a serious ornithological work, this guide will nevertheless be of much use to visiting birdwatchers.

SAVE THE BIRDS by Rudolf L. Schreiber (Initiator and Creative Director),

Anthony W. Diamond (Principal Author), Roger Tory Peterson and Walter Cronkite (Authors). 1989. Boston: Houghton Mifflin Co. 384 pages; 600 color illustrations and photos; \$39.95.

"With the publication of this book, the International Council for Bird Preservation (ICBP) is launching a major worldwide campaign: SAVE THE BIRDS WORLD CAMPAIGN. *Save the Birds* was conceived by PRO NATURE, West Germany, and was implemented in close association with the ICBP, England. From every book sold, a contribution will be made to ICBP's SAVE THE BIRDS campaign account." Biologists say that we have now entered the last decade in which we can make much of a difference in determining the fate of our environment and, of course, the fate of all plants and animals. At a recent conference on migrant birds in the Neotropics, I learned that radar studies show the number of birds migrating across the Gulf of Mexico is now half what it was twenty years ago. That is fifty percent in twenty years! And that is one statistic from one small corner of the globe. Birds are getting it everywhere. *Save the Birds* is a call to action—an extremely well written, lavishly presented call to action. Individual species and enormous biological

communities are in danger of extinction. Before you write the next check to a tour agency for a tropical or Arctic bird adventure, contact the ICBP to find out what you can do to help save some of the birds you may be rushing off to see before they disappear forever.

A GUIDE TO THE BIRDS OF PANAMA with Costa Rica, Nicaragua, and Honduras by Robert S. Ridgely and John A. Gwynne, Jr., second edition. 1989. Princeton: Princeton University Press. 632 pages; 48 color plates, black-and-white illustrations; \$49.50.

There is so much new in the second edition of this guide, now covering over a thousand species, that one hardly knows where to begin. First, with the inclusion of John Gwynne, there are now two authors. Second, as the title implies, species found in Costa Rica, Nicaragua, and Honduras are included, in a separate fiftysix-page section. Each of these species is presented in a one-paragraph synopsis. The main portion of the book has much lengthier species accounts. Additionally, there is a greatly expanded chapter on bird finding in Panama and much useful introductory material, including a chapter titled "Recent Developments in Panama Ornithology and Conservation." Although the publisher promises only nineteen new color plates (of forty-eight total), I count twenty-three, including a few completely reworked from the original edition. Noteworthy in the illustrations is the inclusion of many more wintering migrants, including warblers, thrushes, shorebirds, and ducks. Nomenclature generally follows the 1983 A.O.U. Check-list with a few exceptions. Broad-billed Sapayoa and Grayheaded Piprites are new names given species long considered manakins; Brownish Twistwing is the authors' new (and I think unfortunate) name for Brownish Flycatcher. There are separate Latin and English indexes. Highly recommended.

A GUIDE TO THE BIRDS OF COSTA RICA by F. Gary Stiles and Alexander F. Skutch. 1989. Ithaca: Cornell University Press. 612 pages; 52 color plates by Dana Gardner; \$65 cloth, \$35 paperbound.

Until now birdwatchers traveling to Costa Rica have had to take along the Panama and Mexico field guides, as well as a comprehensive North American guide, to ensure coverage of most of the Costa Rican species. Thankfully, this situation has been remedied with the publication of this remarkably well-done field guide in which all of the country's birds, both resident and transient, are discussed and illustrated. In sixty-one pages of introduction, the authors focus on geography, development of the avifauna, conservation, and climate. There is an excellent, concise illustrated glossary of anatomical terms, with 118 terms illustrated in thirty-two figures. Accounts of approximately 830 species make up the bulk of the text. English, Latin, and Spanish names are listed for each species, and the species treatments include description, habits, voice, nest, status in Costa Rica, and range. The authors have spent over seventy years between them studying Costa Rican birds, and the species accounts, although necessarily short, reflect their tremendous knowledge of the avifauna.

The artist, Dana Gardner, a gifted illustrator, is at his best painting the gaudy assemblage of Costa Rican tanagers, finches, orioles, cotingas, manakins, etc. His shorebirds and seabirds, on the other hand, are quite unremarkable. Birders will appreciate the variety of plumages and the number of birds depicted in flight in the five plates of diurnal birds of prey. My only real gripe with the plates is that eleven of them have birds that are cut off at the edge of the picture,

leaving off a foot or end of a tail.

For those of you keeping a Central American bird list, here are some new names incorporated by Skutch and Stiles (previous common name in parentheses): Mistletoe Tyrannulet (Paltry Tyrannulet), Zeledon's Tyrannulet (White-fronted Tyrannulet), Beryl-crowned Hummingbird (Charming Hummingbird), Red-footed Plumeleteer (Bronze-tailed Plumeleteer), Zeledonia (Wrenthrush), and Whistling Wren (Southern Nightingale Wren). Also, Graytailed Mountain-Gem (a hummingbird) is given species status, while the Mangrove Black-Hawk is not recognized as such.

The index is a hopeless jumble of languages and typefaces, an unfortunate end to an otherwise historic work. Highly recommended.

A GUIDE TO THE BIRDS OF PUERTO RICO AND THE VIRGIN ISLANDS by

Herbert A. Raffaele, revised edition. Princeton: Princeton University

Press. x + 342 pages; 42 plates, 24 in color; \$15.95 paperbound.

This revised edition reflects changes in the islands' birdlife in the last eight years, including accounts of eleven new species (total 284). I note eight changes in common names, mostly involving introduced species but notably including Antillean Euphonia, changed from Blue-hooded Euphonia (with no explanation). There are two additional color plates. The first edition of this guide was available for a short time only (and not at all in Puerto Rico!). Let us hope that the new publisher will keep this edition in print for some time to come.

BRIAN E. CASSIE, naturalist, lepidopterist, birdwatcher, and bird tour leader, lives in Foxboro, where he operates a mail-order book business. His lucid and direct comments on books are always welcome in these pages.

ASH-THROATED FLYCATCHER: FIRST FOR THE VINEYARD

by George Daniels

Editor's Note: The following letter to the editor is dated November 14, 1989, and is quoted (with modest editing) to demonstrate another excellent format for reporting a rarity. Just be sure to include, as this letter does, all the pertinent facts. According to Richard Forster, the record reported here is more likely the seventh, not the third, sighting for the state. But there's no question that it's a first for the Vineyard. D.R.A.

"Though I have been reading your esteemed publication for several years, I have not attempted to contribute until now. Don't ask me why; a combination of being at once too busy and too lazy may be as good a reason as any. At any rate, we've just had a first for the Vineyard (wasn't it Dick Forster who penned the line, "the oft-blessed Vineyard?") and, I understand, only the third record for Massachusetts. The bird was Ash-throated Flycatcher. And the circumstances bring tears to the eyes of Vern Laux and the rest of the island birding community. It happened like this.

"On Sunday morning, November 5, I was birding with Allan Keith and his wife Winkie and daughter Lucy. The Keiths were making a quick weekend of it from New Jersey, and we were grabbing a couple of early morning hours around Gay Head. The day was fine; the winds had been light from the north the night before, and we had hopes. The area around the lighthouse was surprisingly slow, so at 7:45 A.M. we made our way to the Gay Head dump, which can be very interesting. But it was quiet also, with only a few White-throats, Song Sparrows, goldfinches, chickadees, cardinals, and such filtering through the brush and oaks along the western edge of the dump. We were chuckling over a gang of waxwings working hard to get plastered on grapes, when we noticed an odd-looking bird high in an oak about fifty yards away.

"I say odd-looking because all we could see of it at first was the side and back, facing away right. And that part was grayish-brown with a highly noticeable reddish streak, or rectangle, in the general area of the inner primaries. You may hoot if I say that we had our suspicions, but we did.

"Then the bird flew back left and down towards us, at which point we lost it behind the near shrubbery. We were spishing—as in prayer. And bingo! In it zipped, smack in front of us, into some grape at a range of no more than ten yards—regarding us coolly with a beady black eye.

"Ash-throated Fly (*Myiarchus cinerascens*). Every feather. A little smaller than Great Crested—big, bushy, darkish gray head with a relatively small black bill. The throat and breast were palest, whitish gray and blended smoothly into a very light, but distinctly yellow belly. Allan Keith pronounced it "a bright one." And so it was. Yet there was none of the strong yellow of a crested. And none of

the contrasting dark gray throat and breast that distinguishes crested. The tail was rufous, but we did not dwell on it. In fact, we did not dwell on much of anything. Lucy Keith eased forward and took a couple of pictures (in black-andwhite, which was what she had in her camera) while the bird posed elegantly, after which we raced for the phone.

"Sadly, the bird did not tarry. Vern arrived within twenty minutes and beat the bushes, but to no avail.

"Could it have been something else? Not in our view. Not Great Crested for size, bill, back and the above-mentioned characteristics. Not Brown-crested on bill and size alone, never mind that there's no sure eastern record that I'm aware of. (Wasn't it Griscom who observed, "Birds have wings and sometimes they use them?") Certainly not Western Kingbird for numerous reasons, including shape, bill, wing bars, tail, flight, and perch. We agreed that the bird was not Dusky-capped (Olivaceous) Fly. Size, bill, wing bars, throat/chest/belly definition, etc. Not to mention range.

"The light was perfect—sun at our backs. The glasses were Zeiss 10x40Bs. The record, as we all know, is not off-the-wall. The bird is in fact to be looked for at this time of year. Ash-throated Fly is an enthusiastic fall wanderer, having been recorded from most eastern seaboard states. Vern has a Cape Cod record, and I was among the m.o.b. that viewed one on the Cape Charles, Virginia, Christmas Count some years back.

"But it's nice enough and adds luster to the Vineyard's already gleaming reputation as a flycatcher catcher. You will remember that last fall we had a Gray Kingbird at Squibnocket and this spring hosted a Scissor-tailed Flycatcher at Chappaquiddick. The Scissor-tail was our third or fourth record. The island also has logged two Fork-tails and that stunning Sulphur-bellied/Streaked at Squibby perhaps five years ago. Western Kingbird is a regular; last year Vern and I had three in one day, with two in the glasses at once.

"Both Allan Keith and I are familiar with Ash-throated from many trips west. You undoubtedly know Keith's credentials: President of the American Birding Association, winner of the NJ World Series of Birding, among the top twenty world listers, etc., etc. Mine are more modest, though I've been an avid birder for forty-odd years starting at Harvard in 1946 reporting to Ruth Emery.

"Regards,

George (Gus) Daniels"

GUS DANIELS is the retired Executive Editor of Time Life Books and now writes and edits from the Vineyard. "Hallelujah!" says Gus. A past board member of the American Birding Association, he serves at present as Sanctuary Committee Chairman/President of the Felix Neck Sanctuary Wildlife Trust. His most cherished bird list is 321 for the Vineyard. His best bird(s) "ever, ever" were two Eskimo Curlews at Black Point Pond on August 6, 1972, published in *American Birds*.

MBO HOSTS PROGRAM ON SHOREBIRD RESERVE NETWORK

The Western Hemisphere Shorebird Reserve Network (WHSRN) has been described as a model for innovation and international cooperation in conservation programs. Led by the Manomet Bird Observatory (MBO) and the National Audubon Society, WHSRN unites wildlife agencies and conservation groups in a effort to identify and protect critical wetland sites from Canada to Argentina. More than ten sites of hemispheric importance are now recognized, each harboring more than half a million shorebirds in migration, and hundreds of additional sites are being evaluated.

WHSRN will be the focus of slide/talk presentations by scientists from MBO and other agencies involved in shorebird research from 6:00 to 8:30 P.M. at the New England Aquarium on Tuesday, May 22, 1990. There will be a cocktail buffet and an opportunity to visit the Aquarium's exhibits before the program. The cost for the evening is \$15. Please reserve your seats by May 16 by calling MBO at 508-224-6521.



VOLUNTEERS NEEDED FOR A SURVEY OF THE GREAT MEADOWS WETLAND IN ARLINGTON AND LEXINGTON

The Mystic River Watershed Association is sponsoring a survey of the flora and fauna of the Great Meadows wetland in Arlington and Lexington. This survey will include a bird census, conducted over a one-year period, to determine the species and number of birds using the area and to document how it is being used. Volunteers are needed to help conduct this census. Those interested in participating should contact Barbara Przybylska, 10 Governor Road, Arlington, MA 02174, telephone: 617-646-1852. This is a great opportunity to observe the habits and haunts of some of our more common species.

BIRD CARVING EXHIBITION: JUNE 2 AND 3, 1990

The Massachusetts Audubon Society's eighth annual bird carving exhibition will be held at the South Shore Regional Office on Saturday, June 2 (10 A.M.-5 P.M.) and Sunday, June 3 (10 A.M.-4 P.M.). An array of decoys, shore birds, song birds, and birds of prey, both life-size and miniature, will be on display. Carving tools and natural history books will be on sale. Admission is \$2 for MAS members and \$3 for nonmembers. The South Shore Regional Office is located at the North River Wildlife Sanctuary located off Route 3A (Main Street) in Marshfield. For more information, contact Ellyn Einhorn at 617-837-9400.



Ash-throated Flycatcher Martha's Vineyard, MA November 5, 1989 Photo by Lucy Keith

FIELD RECORDS NOVEMBER/ DECEMBER 1989



by Glenn d'Entremont, Richard A. Forster, George W. Gove, and Robert H. Stymeist

Midwinter weather came early this year with cold temperatures predominating. In November the average temperature was 42.8 degrees, 2.4 degrees less than normal. December 1989 was the coldest December in 119 years of records. The temperature averaged 21.7 degrees, 12.0 degrees below normal. The previous coldest December average temperature was 22.2 degrees in 1876. The deep freeze began with 4.4 inches of snow on Thanksgiving Day and continued as the temperatures plummeted to an average of 10 degrees colder than normal until December 31, the first day with above normal temperatures, when the mercury reached a high of 53 degrees. Precipitation totaled 4.13 inches in November but in December was only 0.81 inch, 3.67 inches less than average. December 1989 ranked as the third driest in 119 years and the driest since 1935. Snowfall totaled 10.7 inches for the period, just about 2 inches above normal. The first snowflake was seen on November 18, and the first measurable snow fell on November 20. The total of 4.4 inches of snow in Boston on Thanksgiving Day was a new record for the holiday. R.H.S.

LOONS THROUGH WATERFOWL

Winds during November were from the northeast on only one day, and as a consequence there was no major passage of waterbirds at coastal vantages. During December the plethora of Christmas Bird Counts, reported elsewhere in this issue, left little time for leisurely birdwatching and resulted in minimal reports for that month. In addition the cold weather and rapid freeze-up beginning Thanksgiving Day drove most waterbirds to seek open water and a more hospitable climate elsewhere. Pied-billed Grebes were well reported during November, and a carefully scrutinized Western Grebe, now annual, was seen at Plum Island. Late lingering herons included a Great Egret and two Snowy Egrets. Reverse migrant Cattle Egrets totaled five in November. Typically these remained only briefly. An immature Greater White-fronted Goose appeared in Marshfield for three days, then moved to Plymouth. The Norfolk Wood Duck nightly roost maintained incredible numbers into early November. Two drake Mandarin Ducks (escaped exotics) were found in Ipswich in the company of a male Wood Duck. Dabbling duck numbers were about normal, but the flock of Harlequin Ducks in Rockport was larger than recent winter counts in that area. The extreme cold caused even some salt water to freeze resulting in an unusual concentration of scoters in Nantucket Sound late in December.

The Cape Cod Bird Club's (CCBC) seventh annual Lake and Pond Waterfowl Survey was conducted the weekend of December 2 and 3 and recorded 12,384 individuals of 25 species. Thirty-five observers censused 285 ponds, and for the first time the count experienced considerable icing with nearly half (141) of the ponds completely frozen. These conditions obviously had an impact on total duck numbers that can best be assessed with more years of data under varying weather conditions. Eleven species were recorded in record high numbers, among them Wood Duck, American Black Duck, Gadwall, American Wigeon, Ring-necked Duck, and Common Merganser. Only three species were recorded in record low numbers—Green-winged Teal, Canvasback, and Ruddy Duck (only two).

DATE	LOCATION	NUMBER	OBSERVERS	NOV./DEC. 1989
Red-throated Loo	n			
11/1-30	P.I.	35 max 11/18	BBC (R. McHale	e) + v. o.
11/12, 11/26, 12/11 Minot, Salisbury, P.I.		12, 10+, 5+	M. Lynch#, J. Berry, M. Lynch#	
Common Loon				
11/1-30	P.I. (4 dates)	12 max 11/18	BBC (R. McHale	e) + v. o.
11/2, 11/5	Wachusett Reservoir	5,15	D. Donovan	
11/5, 11/20; 11	/12, 11/26 Hull; Lakeville, Sali	P. Thayer; BBC	(D. Davis), J. Berry	
12/10	Ipswich, Quabbin (G35)	7,1	J. Brown, M. Lyr	nch#
12/10, 12/11	Middleboro, P.I.	1, 15+	K. Holmes, M. L	ynch#

Pied-billed Grebe 11/6, 11/10Arlington (Spy Pd) Lakeville, Braintree 8, 5G max 11/25 K. Ryan 11/1, 11/2L. Taylor K. Ryan BEC (D. Davis), T. Aversa BEC (D. Davis), T. Aversa 11/1, 11/2, 11/1511/11, 11/2, 11/15Lakeville, Plymouth Lakeville, Plymouth (Billington Sca) 2, 2R. Abrams#, J. Berry CCBC Lake and Pond Survey CCBC Lake and Pond Survey 2, 212/26Canton, W. Newbury Lyan (Ela Pd), Lakeville (Lyan (Flax Pd), Lakeville Plymouth (Billington Sca) 11/2, 11/5T. Aversa Lyan (Flax Pd), Lakeville 2, 1, Aversa 11/2, 11/5Homed Grebe 11/2, 11/5Umantum (Billington Sca) Plymouth (Billington Sca) 2, 1, Aversa 11/2, 11/5T. Aversa Lyan (Flax Pd), Lakeville 2, 1/2, 11/5Homed Grebe 11/5, 11/12Wachuseth Res., Lakeville 2, 25Domovan, BBC (D. Davis) 12/5, 11/12Red-necked Grebe 11/5P.I. P.I. 11/1, 11/18N. Drewk, I. Giriunas, W. Drew 11/2, 11/2Red-necked Grebe 11/2I. Cape Ann 2, 12/2ScituateS. I. Giriunas, BBC (R. McHale) 11/1, 11/18Northem Gannet 11/2, 11/12Newbyrp, Cambridge (F.P.) 11/11, 11/18S. I. Giriunas, BBC (R. McHale) 11/12, 11/12Northem Gannet 11/12, 11/12ScituateS. I. Giriunas, BBC (M. McHale) 11/11, 11/1411/4, 11/7 11/12Newbyrp, Cambridge (F.P.) 11/12, 11/12S. Rozsa 1. Giriunas, M. Lynch#11/14, 11/14 11/11, 11/14Nathore, Sharon 2, 1R. Rozsa, L. Taylor R. Korster, R. Froster 11/12, 11/1211/14, 11/14 11/14Nathore, Sharon 2, 1S. L. Taylor, R. Forster 4, Holmes					
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Vol. 18, No. 2, 1990
DATE	LOCATION	NUMBER	OBSERVERS	NOV /DEC 1090
	LOCATION	NUMBER	OBSERVERS	NOV./DEC. 1989
Canada Goose 11/29	S. Dart. (Allens Pd)	1279	LCES (J. Hill)	
12/2-3	Cape Cod	1696	CCBC Lake and P	ond Survey
12/3, 12/17	Waltham, Hamilton/Wenham	375, 1011	L. Taylor, J. Brow	
Wood Duck				
11/1, 11/2	Norfolk, Lynn	714, 14	B. Cassie, R. Heil	10
12/2-3 12/12-31	Cape Cod Reports of 1 or 2 (total 7) from	20 6 locations	CCBC Lake and P	ond Survey
Mandarin Duck (es		o locations.		
23	Ipswich	2 m	J. Berry + v. o.	
Green-winged Tea				6
11/4-21, 11/5	P.I., S. Monomoy		70+ (low) W. Drews	
11/18, 11/19 12/2-3	Arlington Res., Ipswich Cape Cod	33, 16 15	L. Taylor, J. Berry CCBC Lake and P	and Survey
12/6, 12/29	W. Roxbury, Plymouth	45, 1	T. Aversa, R. Fors	
American Black D	uck			0183
11/1-30	P.I.	855 max 11/24		
11/1-30	S. Dart. (Allens Pd)	592 max 11/10 250	LCES (J. Hill)	
11/5 12/1-31	S. Monomoy P.I.	325 max 12/11	B. Nikula W. Drew# + v. o.	
12/1-31	S. Dart. (Allens Pd)	196 max 12/28		
12/2-3	Cape Cod	1461	CCBC Lake and P	ond Survey
Mallard				
12/1-31, 12/31 12/2-3	Stoneham, Brockton		386 T. Aversa, R. 7	
Northern Pintail	Cape Cod	1901	CCBC Lake and P	ond Survey
11/8-11/21	P.I.	17 max 11/21	T. Aversa + v. o.	
11/5, 11/10	S. Monomoy, Ipswich	40+,8	B. Nikula, J. Berry	· · · · · · · · · · · · · · · · · · ·
	/29 S. Dart. (Allens Pd)	10, 4, 5	LCES (J. Hill)	
12/1-31 12/2-3	Reports of single birds from 41		CODOL	10
Blue-winged Teal	Cape Cod	25	CCBC Lake and Po	ond Survey
11/5	P.I.	1 m	R. Heil	
Northern Shoveler				
11/4-18	P.I.	12 max 11/18	BBC (R. McHale)	+ v. o.
11/4, 11/5 12/2-3	GMNWR, S. Monomoy Cape Cod	4,45+ 1	BBC (R. Vernon),	
Gadwall	Cape Cou	1	CCBC Lake and Po	Shu Survey
11/4	GMNWR	12	BBC (R. Vernon)	
11/5, 11/18	Ipswich	12,40+	BBC (J. Berry), J. 1	Berry
11/5 11/10	Plymouth (Billington Sea), S. N.	Aonomoy 16, 40+	W. Petersen, B. Nil	kula
12/2-3	M. V. (Squibnocket) Cape Cod	27 95	V. Laux# CCBC Lake and Po	and Survey
12/6	Plymouth (Billington Sea)	14	T. Aversa	hid Survey
12/10-25, 12/31		1,2	K. Hamilton#, R. T	itus
Eurasian Wigeon	Chatham Desistant			
11/1, 11/1-16 11/12	Chatham, Braintree Nantucket	1 m, 1 m 3	T. Aversa, v. o. C. Floyd#	
12/3-17, 12/6	Chatham, Plymouth (Billington		v. o., T. Aversa	
American Wigeon	· · · · · · · · · · · · · · · · · · ·			
11/1, 11/4	Chatham, GMNWR	30, 50	T. Aversa, BBC (R	. Vernon)
11/5-19	Ipswich Plymouth (Billington Sea)	80+ max 11/19	J. Berry $+ v. o.$	
11/5, 11/15 11/5	S. Monomoy	28, 50 45	W. Petersen, T. Ave B. Nikula	ersa
11/16, 11/18	Braintree, Arlington Res.	33, 12	R. Forster, L. Taylo	ρr
11/18-25	Arlington (Spy Pd)	48 max 11/24	L. Taylor	5
11/19	Eastham	24	A. + É. Williams	0212
12/2-3 12/5, 12/6	Cape Cod New Bedford, Plymouth (Billin	159 (top See) 28 58	CCBC Lake and Po	ond Survey
Canvasback	New Dealord, I lymouth (Binni,	gion Sea) 20, 30	1. Aveisa	
11/18, 11/25	W. Newbury (Cherry Hill), Har	wich 2,9	BBC (R. McHale),	R. Rozsa
12/2-3	Cape Cod	486	CCBC Lake and Po	nd Survey
12/7, 12/21	Falmouth, Dighton	40, 14	R. Forster, R. Titus	
Redhead $11/5 + 15$	Plymouth (Billington Sea)	2	W. Petersen#, T. Av	10750
11/12	Nantucket	7	S. Perkins#	versa
12/2-3	Cape Cod	17	CCBC Lake and Po	nd Survey
12/7	Falmouth	1	R. Forster	
Ring-necked Duck 11/1-26	W Newbury (Charry Hill)	600 max 11/15	P Hail	
11/1-20	W. Newbury (Cherry Hill)	000 max 11/15	R. Heil	

DATE	LOCATION	NUMBER	OBSERVERS	NOV./DEC. 1989
Ring-necked Duck	(continued)		annen ann a	
11/2, 11/5	Stoughton, Framingham	20, 198	R. Titus, E. Taylo	
11/12, 11/13	Nantucket, Marlboro	260, 105	S. Perkins#, R. G	
11/16, 11/19	Braintree, Eastham	49,22	R. Forster, A. + E	. Williams
12/2-3	Cape Cod	310	CCBC Lake and I T. Aversa	Pond Survey
12/6 Creater Scoup	Plymouth	6	1. Aversa	
Greater Scaup	Nantucket, Revere	500, 350	S. Perkins#, R. Fo	orster
12/2-3	Cape Cod	322	CCBC Lake and	Pond Survey
Lesser Scaup	cupe cou			
11/5	Plymouth (Billington Sea), Lak	eville 3, 150+	W. Petersen#	
11/5	S. Monomoy	60	B. Nikula	
11/12, 11/15	Nantucket, W. Newbury (Chern		S. Perkins#, R. H	eil
12/7, 12/29	Falmouth, Plymouth	2, 1	R. Forster	
scaup species	Capa Cod	3021	CCBC Lake and	Pond Survey
12/2-3 Common Eider	Cape Cod	3021	CCDC Lake and	ond Survey
11/2, 11/7	S. Monomoy, Hull	5000+, 250	B. Nikula, P. Tha	ver
12/2	Cape Ann, Hull	375+, 2000+	BBC (D. William	
12/10	Rockport; S. Monomoy	330+; 100,000	J. Berry; B. Nikul	
King Eider		2000 E		
11/4-30	N. Scituate	1 ad m	E. Nielsen $+ v. o.$	
11/21, 11/25	P.I., Scusset	1 f, 1 f	T. Aversa, W. Pe	tersen
11/25-12/31	Rockport	$2 \operatorname{imm} m + 1 f$	R. Heil + v. o. R. Stymeist	
12/2 12/25-31, 12/29	Nahant E. Orleans, Nantucket	1 imm m + 1 f 1 ad m, 1 f	J. Talin, S. Perkir	s#
Harlequin Duck	E. Offeans, Nandeket	1 au m, 1 1	J. Tunn, D. TOIRI	1011
11/5-14, 11/11	Winthrop, Nantucket	1 m, 4	S. Zendeh#, S. Pe	rkins#
11/12-30	Minot	2 (pair)	W. Petersen#	
11/11-12/31	Rockport	5-8	R. Heil $+ v. o.$	
Oldsquaw		10.05	DDC CD Mattala	W Darry H
11/18, 11/24	P.I.	42,95	BBC (R. McHale), W. Drew#
12/11, 12/13	Hull	162, 213	P. Thayer	
Black Scoter 11/4	P.I.	16	BBC (J. Center)	
12/3, 12/31	Rockport, Nantucket Sound	15, 500+	I. Giriunas, R. He	il
Surf Scoter	About or a state of the state o			
11/18	P.I.	45	BBC (R. McHale)
12/31	Nantucket Sound	7000+	R. Heil	
White-winged Scot		1 000	D Deseure D T	hower
11/5, 11/7	Wachusett Res., Hull	1,200 250,200	D. Donovan, P. T W. Drew#	nayer
11/8 + 18 12/10, 12/11	P.I. N. Monomoy, P.I.	500, 300	B. Nikula#, W. D	rew#
12/31	Nantucket Sound	15,000+	R. Heil	10mm
scoter species			and free and	
11/20	Hull	800	P. Thayer	
Common Goldeney				
11/5, 11/12	Wachusett Res., Lakeville	15,4	D. Donovan, BB	
11/24, 11/26	P.I., Harwich	52,20	W. Drew#, R. Ro	
12/2, 12/30	Hull, Amesbury	40, 100 241	P. Thayer, A. + E CCBC Lake and	
12/2-3 12/11, 12/28	Cape Cod P.I.	75,60	W. Drew#	i ond out toy
Barrow's Goldeney		15,00		
11/26	Brant Rock	1 m	R. Abrams#	
Bufflehead				
11/1-30	S. Dart. (Allens Pd)	53 max 11/10	LCES (J. Hill)	
11/2, 11/5	Salem, Quincy Bay	60,700	I. Lynch, R. Abra	
11/5	Hull, S. Monomoy Wachusett Res., Lakeville	800, 200+ 8, 50	P. Thayer, B. Nik D. Donovan, K. I	
11/5, 11/6 11/14, 11/26	Nahant, Newbypt	400, 100+	R. Forster, J. Ber	
12/2-3	Cape Cod	1362	CCBC Lake and	
Hooded Merganser				
11/5	Braintree (Great Pd)	48	J. + T. Cameron	
11/19, 11/23	Ipswich, Cambridge Res.	21, 13	J. Berry, R. Forst	er
11/24, 11/25	Arlington (Spy Pd)	52, 38	L. Taylor	
11/5-26	Reports of 1-10 (total 34) from	310	CCBC Lake and	Pond Survey
12/2-3 12/2, 12/3	Cape Cod Arlington (Spy Pd)	57,75	L. Taylor	i ond our rey
12/10, 12/12	Quabbin (G35), S. Peabody	14,5	M. Lynch#, R. H	eil
	······································	1	5 S	

DATE	LOCATION	NUMBER	OBSERVERS	NOV./DEC. 1989
Common Merganse	r			
11/2, 11/5	Wachusett Res.	67,75	D. Donovan	
11/11-12, 11/13	Nantucket, Lakeville	2,35	S. Perkins#, K. R	yan
11/18, 11/19	Stoneham, Wakefield	12,68	T. Aversa, BBC	(D. Williams)
11/26	W. Newbury, Harwich	35,250	J. Berry, R. Rozs	
12/2-3	Cape Cod	470	CCBC Lake and	Pond Survey
12/2, 12/3, 12/17	Arlington (Spy Pd)	59, 53, 7	L. Taylor	
12/20	Amesbury	20	A. + B. Delorey	
Red-breasted Merga	anser			
11/4, 11/11	Quincy, Chatham	50, 1000	L. Taylor, B. Nik	ula
11/26	Salisbury	75+	J. Berry	
12/2-3	Cape Cod	191	CCBC Lake and	Pond Survey
Ruddy Duck				
11/4, 11/5	Waltham, Southboro	20, 50	E. Taylor	
11/5	Plymouth (Billington Sea), S.		40 W. Petersen#, H	 Nikula
	8 Arlington Res.			
11/15	W. Newbury (Cherry Hill), Ply			
11/16, 11/19	Braintree (Sunset L.), Braintre	e (Great Pd) 46,	100 R. Forster, R. A	Abrams
12/2-3	Cape Cod	2	CCBC Lake and 1	Pond Survey
12/6	Plymouth (Billington Sea)	8	T. Aversa	

RAPTORS

Turkey Vultures continue to stay longer in our area, with reports from many locations, especially south of Boston. Ospreys also were well represented during the period, with the last bird noted on December 6 in Harwich, nearly a full month beyond the normal departure date.

Bald Eagles were noted from many areas, with as many as 7 birds observed along the Merrimack River in late December. One observer in Lakeville watched an adult Bald Eagle soar over the lake, dive, catch a Herring Gull, land on the water, struggle to submerge the gull for two to three minutes, then fly to a nearby boulder and eat the gull. Fewer eagles were reported from Quabbin than during the same period last year. The suggestion has been made that the early freeze-up may have led to the birds moving elsewhere. An immature Golden Eagle was present in the Gate 35-Gate 40 area during the period. An adult bird had been noted in the same spot last year.

Accipiter reports were numerous with at least 12 sightings of Cooper's Hawks and 5 reports of Northern Goshawks, including two migrating in Ashburnham. Noteworthy was the Red-tailed Hawk flight observed in Ashburnham, with 72 Redtails tallied during three days of coverage in early November. A pair of Peregrines continued throughout the period in Boston. R.H.S.

Stoughton, Halifax			
	1, 1	R. Titus, K. Anderson	
Ipswich	1,1 J. Berry, J. Brown		
S. Dart., N. Dart.		LCES (J. Hill), M. Boucher	
		R. Titus, BBC (D. Davis)	
		K. Ryan, D. Donovan	
	1	T. Aversa	
Ashburnham, Arlington	1.2	EMHW, L. Taylor	
		M. Boucher, R. Titus	
		W. Petersen#, E. Taylor	
		T. Aversa, M. Murphy	
		H. Pratt, R. Forster	
	1	J. Welch	
The men (Timente) of dy		s. working	
Ouabbin (G40)	2 ad + 3 imm 1	imm M. Lynch#	
		SSBC (W. Petersen), M. Lynch#	
		R. Heil	
		LCES (J. Hill)	
energies, ranceeury	1 1111, 2 44 1 2	initia Dynem, rt. + D. Delotey	
P.I., DWWS	11 max 11/18 6	max v.o.	
	3	B. Nikula	
		LCES (J. Hill)	
	1	R. Forster	
c	-		
	2.2	M. Lynch#	
		EMHW	
	Braintree, Middleboro Easton, Berlin S. Dartmouth Ashburnham, Arlington Lakeville, Westwood Manomet, Natick GMNWR, Weston Cambridge, Lexington Harwich (Hinckleys Pd) Quabbin (G40) Lakeville Truro, Quabbin (G37) IRWS, Beverly S. Dart. (Allens Pd) Chelmsford, Amesbury P.I., DWWS S. Monomoy S. Dart. (Allens Pd) W. Concord	Braintree, Middleboro3, 2Easton, Berlin1, 1S. Dartmouth1Ashburnham, Arlington1, 2Lakeville, Westwood1, 2Manomet, Natick1, 2GMNWR, Weston2, 1Cambridge, Lexington1, 1Harwich (Hinckleys Pd)1Quabbin (G40)2 ad + 3 imm, 1Lakeville2 ad + 1 subad +Turco, Quabbin (G37)1 imm, 2 ad + 2 immIRWS, Beverly1 imm, 2 ad + 5P.I., DWWS11 max 11/18, 6S. Dart. (Allens Pd)5 max 12/18W. Concord1Quabbin (G40)2, 2	

DATE	LOCATION	NUMBER	OBSERVERS	NOV./DEC. 1989
Sharp-shinned Hawl	k (continued)			
11/10, 11/11	Forestdale, Rockport	2,4	P. Trimble, R. He	il
11/18	IRWS		R. Stymeist	
11/1-30	Reports of single birds from 6 lo	cations.		
12/1-31	Reports of 1 or 2 (total 10) from	9 locations.		
Cooper's Hawk				
11/4	Ashburnham	1	EMHW	
11/4, 11/5-6	GMNWR, P.I.	1,1	BBC (R. Vernon)	, R. Heil + v. o.
11/10, 11/14: 11/	11 Forestdale; Newburyport	1;1	P. Trimble; BBC	(S. Charette)
11/25, 11/27	Medfield, S. Dart.	1,1	T. Aversa, M. Bo	ucher
12/2-3, 12/10	Concord, Holliston	1 imm, 1 imm	R. Forster, G. Go	ve#
12/12	Boston (Franklin Park), Mansfie	ld 1,1	T. Aversa	
12/25	P.I.	1	J. Brown	
Northern Goshawk				
11/4	Quabbin (G40), Ashburnham	1,2	G. Gove, EMHW	
12/25, 12/26	Brookline, Bedford	1,1	E. Taylor, T. Ave	
12/30	Lakeville	1	K. Holmes	
Red-shouldered Hay	vk	1.2		
11/2, 11/25	E. Middleboro, Rowley	1,1	K. Anderson, M.	Argue#
11/4, 11/5	Ashburnham	2,2	EMHW	0
12/2, 12/5	Rockport, E. Middleboro	1,1	I. Giriunas, K. Ar	nderson
12/6, 12/10	DWWS, Falmouth	1 ad, 1 imm	T. Aversa, R. For	
12/11, 12/30	Easton, Amesbury	1, 1 ad	K. Ryan, A. + B.	
Red-tailed Hawk	2.1.5.0.1, 7.1.1.000-1.7			
11/1-30	Ipswich	11 total	J. Berry	
11/4, 11/5, 11/11		25, 33, 14	EMHŴ	
11/11, 11/18	Quabbin (G40), Newbypt	7,6	M. Lynch#, BBC	(R. McHale)
12/6, 12/12	Boston (Franklin Park), DWWS		T. Aversa	· · · · · · · · · · · · · · · · · · ·
12/17, 12/23	N. Middleboro, Belmont	2,3	K. Holmes, L. Ta	vlor
Rough-legged Hawl		-,-		v
11/1-12/31	P.I.	$9 \max{(2, dk + 7)}$	lt) 12/15 R. Heil -	+ V. O.
12/1-31	Cape Cod	6+ total	v. o.	
12/14	W. Bridgewater, Forestdale	1,2	K. Anderson, P. 7	Frimble
12/14	S. Dart. (Allens Pd)	1	LCES (J. Hill)	
Golden Eagle	5. Date (riteris r d)		Debe (r. ma)	
11/4, 11/11	Quabbin (G40), Ashburnham	1 imm, 1	M. Lynch#, EMH	IW
12/10	Quabbin (G35)	1 imm	M. Lynch#	
Merlin	Quation (055)	1 111111	III. Dynomi	
	S. Monomoy; N. Monomoy	1;1	B. Nikula	
11/10, 11/17	Quincy, Sandwich	1 ad, 1	K. Ryan, P. Trim	ble
11/24	P.I.	1	W. Drew#	U.U.
12/5, 12/9	Concord, Norton	1.1	R. Forster	
	Concord, Norton	1, 1	IX. I UISIOI	
Peregrine Falcon 11/1-12/31	Boston	1 or 2	v. o.	
	P.I.; Nantucket	1, 1; 1	W. Drew#; F. Bo	uchard
	Quabbin (G40), S. Monomoy	1, 1, 1 1, 1 ad	M. Lynch#, B. N	
11/4, 11/5 11/25	Chatham	1 ad	B. Nikula	in unu
11/25	Chandin		AP, I TINUIU	

GROUSE THROUGH ALCIDS

The report of a Common Moorhen on November 7, a relatively scarce bird this year, would seem to constitute a late record for this species. In November there were seven reports of coots, with 200 counted in the Billington Sea in Plymouth. A Piping Plover was photographed in Eastham on the Cape Cod CBC, a very late date for this species. Perhaps equally unusual was a Semipalmated Plover seen on the Plymouth CBC. Among other late shorebirds were a Spotted Sandpiper on November 24 and Hudsonian Godwits last reported on November 15 from two locations. Other shorebirds seen in November included American Oystercatchers, a Willet in Chatham, and Western Sandpipers from three locations.

A Mew Gull was well described from Ipswich on November 6, and one returned to Quincy in mid-December where it has spent previous winters. Lesser Black-backed Gulls were seen at four locations, including one inland near a dump. Up to 5900 Ring-billed Gulls were counted in the Middleboro-Bridgewater area in mid-November. Common Terns were noted in Wellfleet on November 11 and in Provincetown on December 2, and a Forster's Tern was seen in Plymouth on November 5. G.W.G.

Ruffed Grouse
11/5, 11/26W. Newbury, S. Middleboro1, 3I. Giriunas, K. Holmes11/14, 11/25Groveland, Medfield2, 1T. Aversa12/2, 12/10S. Middleboro, E. Middleboro1, 2K. Holmes, K. Anderson

DATE	LOCATION	NUMBER	OBSERVERS NOV./DEC. 19
Northern Bobwhite		TOMDER	OBSERVERS NOV./DEC. 19
11/7, 11/27, 11/2 12/9-31	 Middleboro area N. Middleboro 	1, 20, 12 20	K. Holmes K. Holmes
Virginia Rail	2010	2 8 17 8 65	2011 Ta
11/2, 11/18	Stoneham	2, 1 (voice)	T. Aversa
12/23	IRWS	1	J. Brown
Sora			
12/24	Ipswich	1	J. Berry
Common Moorhen	•		1.000
11/7	GMNWR	1	M. Argue
merican Coot			
11/5-25	Arlington	38 max 11/25	L. Taylor
11/4, 11/5	GMNWR, S. Monomoy	15,45	BBC (R. Vernon), B. Nikula
11/11-12, 11/18	Nantucket, W. Newbury	32, 50	S. Perkins#, BBC (R. McHale)
11/15, 11/18	Plymouth, Ipswich	200, 35	T. Aversa, A. + B. Delorey
12/2-3	Cape Cod	45	CCBC Lake and Pond Survey
12/3, 12/6	Arlington, Plymouth	41, 50	L. Taylor, T. Aversa
lack-bellied Plover			D. rujioi, minoisu
11/1-14, 11/4	Hull, N. Monomoy	14 max 11/10 2	50 P. Thayer, B. Nikula
11/5, 11/10, 11/1		75, 31, 3	J. Berry
	24 Quincy, Winthrop, N. Scitu		
esser Golden-Plove		ato 55, 14, 1	K. Ryan, R. Forster, D. Clapp
11/4, 11/6	Halifax, Newbury	7,3	K. Anderson, R. Heil
emipalmated Plove		1,5	K. Anderson, K. Hen
11/1, 12/27	P.I., Plymouth	1.1	W Drawth CDC (D Forstorth)
	F.I., Flymouul	1, 1	W. Drew#, CBC (R. Forster#)
iping Plover	Easthom	1	CDC (IV Determine)
12/17	Eastham	1 ph	CBC (W. Petersen#)
illdeer	Insuish C. Manager	10 4	T.D. D. MILL
11/4, 11/5	Ipswich, S. Monomoy	12,4	J. Berry, B. Nikula
11/6, 11/7	Rowley, Easton	40, 35	R. Heil, K. Ryan
	P. I., S. Middleboro	10, 1	BBC (R. McHale), K. Holmes
12/23-27	E. Harwich	1	B. Nikula#
merican Oystercat		338	
11/4	N. Monomoy	16	B. Nikula
reater Yellowlegs			
11/1-15, 11/4-10	PRNWR, Ipswich	30 max 11/1, 2 c	or 3 W. Drew#, J. Berry
11/11	Newburyport, Harwich	25,6	I. Giriunas, R. Rozsa
11/10, 11/13	S. Dart. (Allens Pd)	7,5	LCES (J. Hill)
12/27	Centerville	5	R. Jenkins#
esser Yellowlegs			
11/4-10, 11/15	Ipswich	1,4	J. Berry, R. Heil
illet (western race))		
11/4	Chatham	1	B. Nikula
potted Sandpiper			
11/24	Dennis	1	L. Sager fide S. Perkins
/himbrel			
11/4, 11/8	P.I.	1,1	BBC (J. Center), W. Drew#
11/7, 11/8	Nantucket	1,1	J. + E. Andrews
udsonian Godwit		-, -	Brinderig
11/4, 11/18	P.I.	2,2	BBC (J. Center), BBC(R. McHale)
11/4, 11/5, 11/10	Inswich	3, 3, 6	J. Berry
11/7 11/15 11/14	5 Ipswich; Newbury	7, 1; 3	R. Heil
uddy Turnstone	, iponicii, i te nourj	1, 1, 5	R. Hen
	Quincy, N. Scituate	1 46 max 11/24	K. Ryan, D. Clapp + v. o.
	Winthrop, N. Scituate	8,2	
ed Knot	Windhop, 14. Seituate	0, 2	R. Poistei
11/26	P.I.	4	PPC (I Nova)
inderling	1.1.	4	BBC (J. Nove)
	Hull	30-60	P. Thaver
		30-60	P. Thayer
	P. I., N. Monomoy	140,600	W. Drew#, B. Nikula
	Nahant, Salisbury	200, 20	R. Forster, J. Berry
mipalmated Sandp		<i>(</i>)	PROVIDENT A
	P. I., S. Monomoy	6, 1	BBC (J. Center), B. Nikula
		7,3	B. Nikula
11/4, 11/5	N. Monomoy, S. Monomoy		
11/4, 11/5 11/6, 12/17	P.I., Eastham	1 juv, 1	R. Heil, CBC (W. Petersen#)
11/4, 11/5 11/6, 12/17 hite-rumped Sandr	P.I., Eastham		
11/4, 11/5 11/6, 12/17 hite-rumped Sandr	P.I., Eastham		
11/6, 12/17 /hite-rumped Sandr 11/4, 11/5 11/4, 11/5, 11/10;	P.I., Eastham biper N. Monomoy, S. Monomoy	1 juv, 1	R. Heil, CBC (W. Petersen#)

DATE	LOCATION	NUMBER	OBSERVERS	NOV./DEC. 1989
	Doomin			
Pectoral Sandpiper	Holifor Arlington	3,1	K. Anderson, L. Ta	avlor
11/4, 11/5	Halifax, Arlington	1,5	J. Berry	iyioi
11/4, 11/10	Ipswich		R. Heil, H. Wiggin	#
11/6, 11/18	Newbury	10, 1	K. Hen, H. Wiggin	111
Purple Sandpiper	N. C. h	100 11/04	D Clann L H A	
11/12-24	N. Scituate	400 max 11/24	D. Clapp $+ v. o.$	2
11/22, 11/26	Winthrop, Salisbury	11,5	T. Aversa, J. Berry	
11/26, 12/3	Rockport	150, 17	G. Gove, I. Giriuna	as
Dunlin		150		
11/1-26	P.I.	450 max 11/15	W. Drew $\#$ + v. o.	
11/4, 11/19	N. Monomoy, Ipswich	1200, 350	B. Nikula, J. Berry	
11/24, 11/26	N. Scituate, Salisbury	80, 19	D. Clapp, J. Berry	
Long-billed Dowitc	cher		15	
11/18	P.I.	2	BBC (R. McHale)	
Common Snipe				
11/7, 11/10	Essex, Ipswich	30, 5	R. Heil, J. Berry	
11/15: 11/22, 11	/25 Easton; E. Boston, Medfield	6; 6, 2	K. Ryan; T. Avers	a
American Woodcoo		142.00	1. A	
11/11, 11/25	Newbury, N. Monomoy	1, 1	T. Aversa, B. Niku	ila
11/12, 11/19	Petersham, Brookline	1, 1	R. Stymeist#	
12/3, 12/5	Manchester, E. Middleboro	1,1	G. Loring, K. And	erson
12/18-29	Chatham	1	B. Nikula	
	Chaulan	^	D. Thight	
Laughing Gull 11/12, 11/14	Nantuckat Winthron	15,28	S. Perkins#, R. For	rster
	Nantucket, Winthrop	15, 20	5.1 CIKIII3", IV. 1 O	5001
Little Gull	Vincound House	1 (130)	V. Laux	
11/15 Diale has	Vineyard Haven	1 (1W)	v. Laux	
Common Black-hea		1.2.4	I Vouna DDC (D	Ctumpint)
12/3, 12/9	Winthrop	1, 3 ad	J. Young, BBC (R.	. Stymeist)
Bonaparte's Gull	I WING	250 11/6 0		D Milmle
11/6-14, 11/11	Lynn, Wellfleet		50 J. Quigley + v.c	
11/20, 11/26	Hull, Harwich	75,10	P. Thayer, R. Rozs	
12/6, 12/9	Gloucester, Newburyport	3,7	J. Quigley, J. Brow	'n
Mew Gull (details				
11/6	Ipswich	1 ad	R. Heil	
mid-Dec12/31	Quincy	1 ad	v. o.	
Ring-billed Gull		05 263	And the among	
11/7, 11/15	Lynn, Ipswich	186,800	J. Quigley, R. Heil	
11/12	Middleboro-Bridgewater area	5900	BBC (D. Davis)	
11/16, 11/25	Braintree, Arlington	400, 102	R. Forster, L. Tayl	or#
12/3, 12/6	Arlington, Lynn	150, 165	L. Taylor, J. Quigl	ey
12/19	Brockton	365	R. Titus#	
Iceland Gull				
11/11, 11/12	Nantucket, N. Scituate	3 ad, 1	S. Perkins#, W. Pe	tersen
12/6, 12/8-31	Gloucester, Brockton	2, 1 (1W)	J. Quigley, R. Titu	
Lesser Black-backe				
12/3	Barre, Rockport	1 ad, 1	M. Lynch#, E. Nie	lsen#
12/6, 12/17	Lynn, Chatham	1 ad, 1 (1W)	J. Quigley, CBC(B	
Glaucous Gull	Lynn, chudian	, . ()	v. Quigitoj, Obo(b	(in the data in)
12/6, 12/26	Gloucester, Lynn	1, 1 ad	J. Quigley	
12/13	Rockport	1 ad	J. Brown	
Black-legged Kittiv		1 uu	5. Dio 111	
12/11	P.I.	5	W. Petersen#	
	F.1.	5	W. I Cloi Sciim	
Common Tern	Wallfloot Ptown	12 1 inn	B. Nikula	
11/11, 12/2	Wellfleet, P'town	12, 1 juv	D. INIKUIA	
Forster's Tern	Diverset	1	W. Petersen#	
11/5 Disch Cuillemet	Plymouth	1	W. Fetersen#	
Black Guillemot	NI Columna	,	W Dataman#	
11/26	N. Scituate	1	W. Petersen#	
12/10, 12/27	Rockport	4-5, 1	J. Berry#, T. Avers	Rd.
large alcid species	D	10 15	D Milal T V	20
12/2, 12/25	Provincetown, Truro	18, 15	B. Nikula, J. Youn	g

OWLS THROUGH SHRIKES

Both Long-eared and Short-eared owls were seen at several locations in November and December. On November 25 an injured Long-eared Owl was picked up in Mashpee and taken to a rehabilitation center. Yellow-bellied Sapsuckers were seen at four locations on Cape Cod early in December. Western Kingbirds were present at two locations in November. An Ash-throated Flycatcher was well documented from Martha's Vineyard on November 5. A Tree Swallow was found in Wellfleet on December 3, a late but not

unprecedented date for the species. A late Barn Swallow was seen in Rockport on November 11.

The numbers of crows at the crow roost in Framingham built up to many thousands of birds in December. A Boreal Chickadee was found in West Boylston in a spruce grove where it continued through December. In November Carolina Wrens were reported from fourteen locations, and Winter Wrens were seen at six locations. A House Wren found in South Peabody on December 12 and a Blue-gray Gnatcatcher found dead in Lincoln on November 27 were both rather late. Eastern Bluebirds were present in good numbers, especially considering how cold the weather was in December. A Varied Thrush was found near the Locust Grove/Seaside Cemetery in Gloucester on November 19 and continued at the cemetery through December. Migrating American Pipits were counted at six locations in November.

DATE	LOCATION	NUMBER	OBSERVERS NOV./DEC. 1989
Barn Owl			
11/12	Dorchester (near gas tanks)	1	R. Campbell
Eastern Screech-Ov			
11/6	Stoughton	2	R. Titus
12/10, 12/29	Bourne, Wellesley	1 (dead), 1 (red)	W. Petersen, M. Lynch#
12/23	Lakeville-Middleboro-Bridgew	ater 10	K. Holmes
Great Horned Owl			
11/1-30	Ipswich, P.I.	4 max 11/27, 1	J. Berry, v. o.
11/7, 11/27	N. Middleboro, E. Middleboro		K. Holmes, K. Anderson
11/29, 12/1-31	Brookline, Ipswich	1,2	H. Wiggin, J. Berry
Snowy Owl		-,-	
12/1	Ipswich (Crane Beach)	1	D. Rimmer
Barred Owl	-pennen (enne - enny		
12/10, 12/19-24	Middleboro, IRWS	1,1	W. Petersen, F. Morris + v. o.
Long-eared Owl	Mildaeoono, Actio	.,.	W. Townson, T. Montis F T. O.
11/5, 11/21	P.I.	1, 1	R. Heil#, T. Aversa
11/25	Mashpee	1 (injured)	M. LeBaron
12/0 12/12	Lincoln, Weston	1, 1	S. Perkins, N. Muller
12/9, 12/12		1,1	
12/13, 12/19	P.I.	1, 2 1, 2 or 3	T. Aversa
12/27, 12/29	Lexington (2 locations)	1,2015	M. Haskell, B. Sends
Short-eared Owl	0 C Dest (Allers D.D.	1 2 1	LOEG (LIEII)
11/10-29, 12/5-1	8 S. Dart. (Allens Pd)	1 or 2, 1	LCES (J. Hill)
11/15	Newburyport	1	R. Heil
12/10, 12/28	Middleboro, Salisbury	1, 1	W. Petersen, J. Brown
12/28, 12/30	P.I.	1, 2	W. Drew#, A. + B. Delorey
Northern Saw-whet		S	
11/27	Wenham	1	K. Noonan fide W. Petersen
12/2, 12/9-10	IRWS, N. Eastham	1, 1	R. Stymeist#, M. O'Connor
Belted Kingfisher			
	Salem; Beverly	2, 1; 1	I. Lynch
12/15	Newburyport	3	R. Heil
Red-bellied Woodp	ecker		
11/23-30	S. Dartmouth	1 f	LCES (J. Hill)
12/1-31	Ipswich	2 (pair)	B. Collins fide J. Berry
12/2-10	Gloucester	1	BBC (D. Williams) + v. o.
Yellow-bellied Saps			
11/12	Nantucket	1 imm	S. Perkins
12/9, 12/10; early	y Dec. Yarmouth, Harwich; Orle	eans 1, 1; 1	R. Comeau; fide S. Perkins
12/17	Chatham	1	CBC (H. Stabins#)
Northern Flicker			
12/3, 12/10	Ipswich, Rockport	2,2	J. Berry
Pileated Woodpecke	er		
11/4, 11/19	Quabbin (G40), Wachusett Res.	1,2	J. Gordon#, D. Donovan
12/2	Quabbin (G40)	2	S. Selesky#
Western Kingbird			
	0 Eastham; M. V.	1, 1; 1	T. Aversa, D. Reid; V. Laux
Ash-throated Flyca	atcher (details and photo submitte		
11/5	M.V. (Gay Head)	1	G. Daniels#
Horned Lark			
11/1-18	P.I.	175 max 11/6	R. Heil $+ v. o.$
11/11, 11/26	Ipswich, Salisbury	30, 12	J. Berry
12/5, 12/13	S. Dartmouth, Newbury	110, 220	T. Aversa
12/9, 12/11	Salisbury, P.I.	16,7	BBC (W. Drummond), M. Lynch#
Tree Swallow	,_		,,,,,
12/3	Wellfleet	3	D. Reynolds, R. Prescott
Barn Swallow			2110,1010,111100004
11/11	Rockport	1	R. Heil + J. Smith
	roompore	С	an and a promine

DATE	LOCATION	NUMBER	OBSERVERS NOV./DEC. 1989
American Crow			
11/5-30	Framingham	600-3000	E. Taylor
12/1-31	Framingham	10000 max 12/23	
12/1-31	S. Dart. (Allens Pd)	132 max	LCES (J. Hill)
Fish Crow	5. Dat. (Allelis I d)	152 max	Lelle (J. IIII)
11/25, 12/1-31	Framingham	2,40	E. Taylor
Common Raven	Trainingnam	2,40	L. Tuylor
12/2	Quabbin (G40)	1	S. Selesky
Boreal Chickadee		•	5. Selesky
		1	B. Kamp + v. o.
11/19-12/31 Red-breasted Nutha	W. Boylston		D. Kamp + 1. 0.
11/1-30	Brookline	2	H. Wiggin
		4,2	
11/4, 11/6	Mt. Watatic, Lakeville	3	D. Donovan, K. Ryan J. Berry
11/25	Ipswich Realmost W Boulston	2,5	I. Giriunas
12/2, 12/10	Rockport, W. Boylston		K. Holmes, T. Aversa
12/9, 12/13	N. Middleboro, P.I.	1,6	K. Hollies, I. Aversa
Brown Creeper	O this (CAO) Middleberry	2.4	L Condont BBC (D. Douis)
11/4, 11/19	Quabbin (G40), Middleboro	3,4	J. Gordon#, BBC (D. Davis)
Carolina Wren			V Andress I Denne
11/1-30	E. Middleboro, Ipswich	2,1	K. Anderson, J. Berry
11/1-8, 11/12	Hopkinton, Nantucket	1,2	J. Gordon, S. Perkins#
11/12, 11/25	Bridgewater, W. Bridgewater	4,4	BBC (D. Davis), T. Aversa
11/11	Rockport	3	R. Heil
11/4-30	Reports of 1 or 2 from 7 locatio		
12/1-31	N. Middleboro, Wellesley	4,2	K. Holmes#, K. Winkler
12/5-30, 12/12	Easton, Mansfield	2 or 3, 3	K. Ryan, T. Aversa
12/24, 12/28	Ipswich, Hopkinton	1,1	J. Berry, G. Gove
House Wren			
12/12	S. Peabody	1	R. Heil
Winter Wren			
11/2-5, 11/5	Wachusett Res., Stoneham	1,1	D. Donovan, T. Aversa
11/15	Nahant, MNWS	3,3	R. Heil
11/12, 11/19	Nantucket, Brookline	2,2	S. Perkins#, R. Stymeist#
12/1, 12/5	Salem, Lakeville	2,1	R. Heil, T. Aversa
Marsh Wren	Butoni, Buite Mile	-, -	
11/4, 11/15	GMNWR, DWWS	1, 1 or 2	BBC (R. Vernon), T. Aversa
Golden-crowned K		1, 1 01 2	bbe (in remon), introdu
11/5, 11/12	Wachusett Res., Middleboro	4,9	D. Donovan, BBC (D. Davis)
	W. Boylston	4	I. Giriunas
12/10 Puby growped Kin		7	1. Ontunas
Ruby-crowned Kin 11/1, 11/14	Wayland, Wellesley	1,1	R. Forster
	Middleboro, N. Scituate	1, 1	BBC (D. Davis), W. Petersen
11/12		1, 1	I. Giriunas, S. Perkins#
11/15, 12/20 Plue grou Constants	Reading, Cambridge	1, 1	1. Onitunas, 5. 1 cikins#
Blue-gray Gnatcatc		1 (dood)	R. Forster
11/27	Lincoln	1 (dead)	R. POISICI
Eastern Bluebird	Quebbie (C40) E Middlebore	6.1	G Govett K Anderson
11/4, 11/5	Quabbin (G40), E. Middleboro		G. Gove#, K. Anderson
11/12	Middleboro	4	BBC (D. Davis)
12/10	Holliston, Milton	9,7	I. Giriunas#, J. Young
12/21, 12/24	Dighton, Lakeville	5,5	R. Titus
12/28	Georgetown	5 or 6	J. Brown
Hermit Thrush		2.2	
11/5	Dover, Wachusett Res.	1,1	R. Titus, D. Donovan
11/12, 11/19	N. Scituate, Barnstable (S.N.)	1, 2	W. Petersen, B. Nikula#
11/23, 12/8-29	S. Dartmouth, Reading	1,1	LCES (J. Hill), I. Giriunas
American Robin		51.725	
12/1; 12/10, 12/1	14 Salem; Osterville, Wellesley	50; 20, 8	R. Heil; R. Forster
Varied Thrush			
11/19-12/31	Gloucester	1	C. Leahy $+ v. o.$
Gray Catbird			
11/11, 11/12	Rockport, Nantucket	4,9	R. Heil, S. Perkins#
11/19, 11/25	Brookline, W. Bridgewater	2,2	R. Stymeist#, T. Aversa
12/1, 12/5	Salem, Lakeville	2,1	R. Heil, T. Aversa
12/10, 12/24	Falmouth, Wellesley	2, 1	W. Petersen#, K. Winkler
Northern Mockingh			
11/5, 11/14	Ipswich, Squantum	10, 8	BBC (J. Berry), R. Abrams
Brown Thrasher			A CONTRACTOR OF
11/1	MNWS	1	R. Heil
American Pipit		-	
11/4-10	Ipswich	110 max 11/6	R. Heil + v. o.
14/1 10			

DATE	LOCATION	NUMBER	OBSERVERS	NOV./DEC. 1989
American Pipit (c	ontinued)			
11/6-21	Newbury	75 max 11/21	T. Aversa + v. o.	
11/6, 11/13	P.I., Bridgewater	30, 70	R. Heil, K. Ryan	
11/12	Halifax, Rochester	100,200	BBC (D. Davis),	
12/10	Salisbury	1	R. Heil	
Bohemian Waxw				
12/10	Holliston	1	W. Drummond	
Cedar Waxwing				
11/6, 11/10	Norton, Waltham	120, 33	K. Ryan, L. Tayl	or
11/2, 11/25	Sharon	18, 14	R. Titus	
11/11, 11/19	Newbury, Lexington	15, 11	T. Aversa	
12/7, 12/9	Marshfield, Bourne	25,45	R. Forster	
12/12, 12/19	Holliston, Weston	200, 70	T. Aversa	
Northern Shrike				
11/4-6, 11/5	P.I., M. V.	1, 1 imm	BBC (J. Center)	+ v. o., A. Keith
12/10; 12/11, 1	2/28 Chatham; P.I.	1; 1 ad, 2		tersen#, W. Drew#

VIREOS THROUGH FINCHES

A strong southwesterly flow beginning November 9 and culminating November 14 with the temperature reaching 71 degrees produced an apparent "blow-back" effect. At Rockport a White-eyed Vireo was found on November 11, and at Marblehead Neck a Solitary Vireo was recorded on November 15. These dates are a good month or better beyond normal departure times for both species. Other "blow-back" candidates included Cape May, Black-throated Blue, Magnolia, Blackpoll, and Wilson's warblers. Yellow-throated Warblers were found in two locations, and both were photographed or videotaped.

The Blue Grosbeak found in Lakeville during the Taunton-Middleboro CBC on December 23 represents only the second winter record for the state. As many as 7 Dickcissels were noted during the period compared with just one individual last year. Chipping Sparrows lingered into December, a Grasshopper Sparrow was found in Randolph, and a Henslow's Sparrow was found on Plum Island. A Brewer's Blackbird put in a brief appearance at Nine Acre Corner in Concord, and the roost of Common Grackles in Methuen still numbered over 200,000 birds on November 1.

Encouraging winter finch reports included a Pine Grosbeak, both species of crossbills, a Common Redpoll, and fair numbers of both Pine Siskins and Evening Grosbeaks. R.H.S./G.d'E.

White-eyed Vireo			
11/11	Rockport	1	R. Heil + J. Smith
Solitary Vireo	nomport		ici non + 5. Simur
11/15	MNWS	1	R. Heil
Orange-crowned V	Warbler	5	
11/5, 11/12	Ipswich, N. Scituate	1,1	BBC (J. Berry), W. Petersen
11/19, 12/15	Brookline, Brewster	1,1	R. Stymeist#, S. Highley
Magnolia Warbler			
Ĭ1/4	E. Orleans	1	A. + E. Williams
Cape May Warble	r		
11/26	Chatham	1	B. Nikula
Black-throated Blu	ue Warbler		
11/18	Nantucket	1 m	E. + C. Andrews
Yellow-rumped W	arbler		
11/1, 11/5	Wayland, Ipswich	6,8-10	R. Forster, BBC (J. Berry)
11/5-19, 11/7	Wachusett Res., Cambridge	7 max, 12	D. Donovan, D. Flood
12/1-31	S. Dart. (Allens Pd)	23 max 12/28	LCES (J. Hill)
Yellow-throated	Warbler		
11/11-12/14	Marblehead	1 ph	R. Heil $+ v. o.$
11/25-28	Essex	1 videotape	M. Jordan $+ v. o.$
Pine Warbler			
11/2, 11/4	Lynn, Quabbin (G40)	4,1	R. Heil, G. Gove#
11/12, 11/17	E. Middleboro, Sharon	1,1	K. Anderson, R. Titus
12/5	E. Middleboro	2	K. Anderson
Palm Warbler			
11/1, 11/4-18	Truro, P.I.	10, 1	T. Aversa, v. o.
11/11, 11/19	Middleboro, Barnstable	2,6+	J. + T. Cameron, B. Nikula#
12/2-10, 12/3	Rockport, Winthrop	1, 2	v. o., J. Young
Blackpoll Warbler			
11/2	Lynn	1	R. Heil
Common Yellowth			
11/15	DWWS	1	T. Aversa
Wilson's Warbler	The second s		
11/14	Cambridge	1 m	D. Flood
BIRD OBSERVER	ł	117	Vol. 18, No. 2, 1990

DATE	LOCATION	NUMBER	OBSERVERS	NOV./DEC. 1989
vantor o manag		HOMBER	ODGERVERG	11014020.1909
	at 0 Nantucket, Winthrop, Falmo	uth 1, 1, 1	C. Floyd#, BBC (R. Stymeist), v. o.
tanager species 11/15	Reading	1	I. Giriunas	
Northern Cardinal 11/1-30	Brookline, Ipswich	14 max, 8 max	H. Wiggin#, J. Be	TTV
11/2	S. Monomoy	1	B. Nikula#	
12/1-31	Hopkinton	7 m + 6 f	J. Gordon	
Rose-breasted Gros			CPC (D Close#)	CPC (I Callett)
12/17, 12/31 Blue Grosbeak	Orleans, Nantucket	1,1	CBC (D. Clapp#)	, CBC (J. Gallo#)
12/23 Dickcissel	Lakeville	1	CBC(J. Kricher, I	3. Cassie)
	Westwood, Ipswich	1,1	B. Wicks, BBC (J	. Berry)
11/13, 11/19	Easton, Brookline	1,1	K. Ryan, R. Stym	eist
	12/29 Ipswich; Nantucket	1; 1, 2	J. Berry; B. Vigne	eau, G. d'Entremont
Rufous-sided Towh		1 - 16	D Anderson T A	10000
11/24, 11/25	E. Middleboro, Medfield	1 m, 1 f 1 m	P. Anderson, T. A J. Gordon	iversa
11/27-28 12/1, 12/4	Hopkinton Salem, N. Middleboro	2m + 1f 1m +	1 f R. Heil, K. H	lolmes
12/7, 12/15: 12/2	21 Milton; Taunton	1, 2; 2	R. Abrams; R. Ti	
American Tree Spa				
11/2, 11/4-26	Wayland, P.I.		6 R. Forster, v. o.	
11/5, 11/20	Ipswich, Marlboro	50,9	BBC (J. Berry), F	
11/25, 12/10	Concord, Easton	50, 25	R. Forster, K. Ry	an
Chipping Sparrow 11/7, 11/26	Cambridge, Randolph	4, 2 imm	D. Flood, D. Lud	low#
11/24-25	Nantucket	1	E. Andrews	iown
12/4, 12/10	N. Middleboro, Wellesley	1 imm, 1	K. Holmes, I. Nis	bet
Clay-colored Sparro	ow			
11/10	M. V.	1	V. Laux#	P
12/2, 12/27-28	Randolph, Yarmouthport	1, 1	R. Abrams#, M.	luttle#
Field Sparrow 11/4, 11/23	Stoughton, N. Middleboro	03	R. Titus, K. Holn	nes
12/2, 12/18-31	Rockport, N. Middleboro	9,3 4,2	I. Giriunas, K. Ho	
12/10, 12/21	Holliston, Easton	2,1	I. Giriunas, K. Ry	
Vesper Sparrow				
11/5, 11/11-12	Randolph, Middleboro	1,1	J. Cameron#, v. c).
12/12 Sourcept Sporrow	S. Peabody	1	R. Heil	
Savannah Sparrow 11/5, 12/5	Ipswich, S. Dartmouth	20, 7	BBC (J. Berry), 7	Γ Aversa
"Ipswich" Savanna	ah Sparrow	20, /	220 (0.200.)//	
12/11, 12/28	S. Dart. (Allens Pd)	2,1	LCES (J. Hill)	
Grasshopper Sparro		121	-	
12/2-3	Randolph	1	R. Abrams#	
Henslow's Sparro 11/11-14	P.I.	1	R. Stymeist# + v.	0
Sharp-tailed Sparro		. *	R. otymosta + v.	. 0.
11/10-12/5	S. Dart. (Allens Pd)	1	v. o.	
Fox Sparrow				
11/23-30	S. Dartmouth	5 max	LCES (J. Hill)	
11/1-12/31 Lincoln's Sparrow	Reports of 1 or 2 birds from 1	o locations.		
Lincoln's Sparrow 11/12, 11/23	Nantucket, Quabbin (G41)	1,1	S. Perkins#, J. Jo	hnstone
Swamp Sparrow		2005.000		
11/5, 12/12	Ipswich, S. Peabody	4 or 5, 6	BBC (J. Berry), I	R. Heil
White-throated Spa				
11/5	Ipswich	20 8,6	BBC (J. Berry)	lor
12/1-31, 12/2 White-crowned Spa	Hopkinton, Arlington	0,0	J. Gordon, L. Tay	TOL
11/1-7, 11/10	Hopkinton, Belmont	1, 1 imm	J. Gordon, L. Tay	/lor
11/12, 11/27-28		6, 1 ad	S. Perkins#, H. P	ratt
12/3-25	Wellesley	1	K. Winkler	
Dark-eyed Junco				
11/1-31, 11/11	Ipswich, Concord	20 max, 25	J. Berry, E. Taylo	
11/19, 11/23 Lopland Longspur	Manchester, Brookline	30, 17	BBC (G. Hotz), I	a. wiggin
Lapland Longspur 11/6, 11/8	Newbury, P.I.	90,75	R. Heil, W. Drew	/#
11/10, 11/18	Quincy, Newbury	1,60	K. Ryan, BBC (F	R. McHale)
12/9, 12/11	Newbury, P.I.	45, 5	BBC (W. Drumn	nond), W. Petersen#
				sent the survey are sent

Vol. 18, No. 2, 1990

DATE	LOCATION	NUMBER	OBSERVERS	NOV./DEC. 1989
Snow Bunting				
11/4, 11/10	P.I., Quincy	150, 57	BBC (J. Center),	K. Ryan
11/23, 11/24	Concord, Salisbury	65, 16	R. Forster, A. + H	 Delorey
11/25, 12/1-31	N. Monomoy, Ipswich	400, 10-50	B. Nikula, D. Rin	nmer
12/6, 12/28	W. Roxbury, P.I.	3, 30	T. Aversa, W. Dr	ew#
Red-winged Black				
11/12, 11/22	Middleboro area, Concord	1200, 15	BBC (D. Davis),	R. Forster
Eastern Meadowlar				
11/10-29, 11/11		5 max, 50	LCES (J. Hill), W	
12/5, 12/11	E. Middleboro, Holliston	5, 1	T. Aversa, R. For	ster
Rusty Blackbird				
11/1, 11/22	Wayland, Concord	50, 2	R. Forster	
11/25	Medfield	10	T. Aversa	
12/6, 12/21	W. Roxbury, Medford	1,2	T. Aversa	
Common Grackle				
11/1, 11/3	Methuen, Canton	200,000, 500	J. Hogan#, R. Tit	
11/12, 11/15-16		1400, 450+	BBC (D. Davis),	I. Giriunas
11/22	Concord	30-35	R. Forster	
12/5, 12/12	N. Middleboro, Whitman	12, 7	K. Holmes, W. Pe	etersen
12/21	Medford	11	T. Aversa	
Brewer's Blackbir	ď			
11/22	Concord	1 ad m	R. Forster	
Brown-headed Cow	vbird			
11/5, 11/22	Ipswich, Concord	20, 15	BBC (J. Berry), F	t. Forster
12/6	DWWS	2	T. Aversa	
Northern Oriole				
11/1-18 (from O	ct.) IRWS	1	R. Heil	
11/12	Nantucket	1	S. Perkins#	
12/9-20, 12/23	Barnstable, Ipswich	2, 1	C. Bergfors, J. Be	rry#
Pine Grosbeak				
11/19	Marblehead	1	J. Smith	
Purple Finch				
11/1, 11/5	Truro, Ipswich	1,2f	T. Aversa, BBC (J. Berry)
11/10, 11/23	E. Middleboro	1 m, 4	K. Holmes	
12/6, 12/25	N. Middleboro, Easton	2,1	K. Holmes, K. Ry	an
Red Crossbill				
11/18	P.I.	1	BBC (R. McHale)
White-winged Cros	sbill			
11/24	IRWS	10	R. Heil	
Common Redpoll				
11/11	Rockport	1	R. Heil	
Pine Siskin				
11/11, 11/12	Rockport, E. Middleboro	40, 8	R. Heil, K. Ander	son
11/19	Manchester, Ipswich	30, 7	BBC (G. Hotz), I.	Giriunas
11/26, 12/10	Newbypt, W. Boylston	40, 3	J. Berry, W. Drun	nmond
American Goldfinch	h			
11/1-30, 11/11	Ipswich, Rockport	15 max, 35	J. Berry, R. Heil	
11/25, 12/2	Concord, Essex	50, 29	R. Forster, I. Girin	inas
Evening Grosbeak		a second a s		
11/19, 11/24	Marblehead, Sherborn	2, 12	J. Smith, E. Taylo	r
11/24, 11/26	E. Middleboro, Ipswich	4, 19	K. Anderson, I. G	
11/29, 12/10	Quabbin (G40), IRWS	3, 1-4	T. Aversa, J. Brov	
12/20, 12/22	W. Roxbury, Hopkinton	6,6	T. Aversa, J. Gord	
	,, .,			
an indu	ADDENDA TO JULY 1989	FIELD RECORD	S (VOL. 17, NO. 6)	
Virginia Rail (page		2010	1000 000 0000	
4	Lynnfield	1 juv	P. + F. Vale	
Sora	V	1000	12 1221201	
4	Lynnfield	1 juv	P. + F. Vale	
Common Moorhen				
24	Lynnfield	2 ad + 3 imm	P. + F. Vale	

CORRIGENDUM TO AUGUST 1989 FIELD RECORDS (VOL. 17, NO. 6)

Indigo Bunting	(page 340)		
15, 27 should read	W. Newbury, Quabbin (G40)	5,6	T. Aversa, M. Lynch#
15, 27	W. Roxbury, Quabbin (G40)	5,6	T. Aversa, M. Lynch#

BIRD OBSERVER FIELD RECORDS

Bird Observer monthly field records represent observations from the ten counties of eastern Massachusetts (Essex, Middlesex, Worcester, Suffolk, Norfolk, Plymouth, Bristol, Barnstable, Duke, and Nantucket). Although space does not permit the inclusion of all sightings submitted, the compilers attempt to present sufficient data to document early and late dates for migratory species, maximum counts for migrants, and high or low numbers for the more common species and to note species outside of their normal ranges.

Please send eastern Massachusetts field records of any given month, no later than the 8th of the subsequent month, to Robert H. Stymeist, 98 Boylston Street, Watertown, MA 02172. The basic information that should be submitted is species name, date and place of observation, an accurate count or careful estimate, sex (if determinable), immature or adult plumage, vocalizations (if any), and observers. Species should be arranged in the current A.O.U. (American Ornithologists' Union) checklist order. Reports of species that can be difficult to identify should include details of the diagnostic characteristics observed or heard that led to the identification.

All field records received by Bird Observer are archived at the Massachusetts Audubon Society.

ad	adult	F.P.	Fresh Pond, Cambridge
b	banded	F.S.F.	Federation State Forest
br	breeding	G37 or 40	Gate 37 or 40, Quabbin
dk	dark (phase)	H.	Harbor
f	female	I.	Island
imm	immature	M.V.	Martha's Vineyard
ind	individuals	Mt.A.	Mount Auburn Cemetery, Cambridge
juv	juvenile	Nant.	Nantucket
loc	location	Newbypt	Newburyport
lt	light (phase)	P.I.	Plum Island
m	male	Pd	Pond
max	maximum	P'town	Provincetown
mi	mile	Quab.	Quabbin
migr	migrating	Res.	Reservoir
n	nesting	R.P.	Race Point, Provincetown
ph	photographed	S. Dart.	South Dartmouth
pl	plumage	S.N.	Sandy Neck, Barnstable
pr	pair	Stellw.	Stellwagen (Bank)
S	summer (1S = first summer)	BBC	Brookline Bird Club
thr	throughout	BOEM	Bird Observer of Eastern Massachusetts
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	FCBC	Felix Cutler Bird Club
A.P.	Andrews Point, Rockport	GMNWR	Great Meadows National Wildlife Refuge
В.	Beach	IRWS	Ipswich River Wildlife Sanctuary
B.I.	Belle Isle, E. Boston	LCES	Lloyd Center for Environmental Studies
B.R.	Bass Rocks, Gloucester	MAS	Massachusetts Audubon Society
Buzz.	Buzzards Bay	MBO	Manomet Bird Observatory
C.	cape as in Cape Cod	MNWS	Marblehead Neck Wildlife Sanctuary
Cambr.	Cambridge	NEHW	New England Hawk Watch
Corp. B	. Corporation Beach, Dennis	ONWR	Oxbow National Wildlife Refuge
C.P.	Crooked Pond, Boxford	PRNWR	Parker River National Wildlife Refuge
E.P.	Eastern Point, Gloucester	SRV	Sudbury River Valley
F.E.	First Encounter Beach, Eastham	SSBC	South Shore Bird Club
F.H.	Fort Hill, Eastham	WBWS	Wellfleet Bay Wildlife Sanctuary
F.M.	Fowl Meadow	WMWS	Wachusett Meadow Wildlife Sanctuary

LIST OF ABBREVIATIONS

by Robert H. Stymeist Data processing by Janet L. Heywood

The Ninetieth Annual Christmas Bird Count (CBC) sponsored by the National Audubon Society was held from December 16, 1989, to January 3, 1990. In eastern Massachusetts and a portion of Rhode Island, there are twenty-three count areas (see map). A total of 178 species, plus Snow Goose (blue phase) and "Ipswich" Savannah Sparrow, was recorded on these twenty-three counts during the nineteen-day period. This was just one species less than total the previous year. The Martha's Vineyard CBC led the counts with 124 species, followed by the Cape Cod CBC with 119.

December 1989 was bitterly cold; in fact it was the coldest December on record. It was also one of the driest Decembers ever recorded. Ponds froze early, and duck numbers were low on most counts. Bay ducks, such as Canvasbacks, Redheads, and Ring-necked Ducks, were down an average of twenty-five percent compared with the last Christmas Bird Count, and Ruddy Ducks were off eighty-five percent from the 1988-89 figures. Wood Ducks, however, increased from 27 individuals last year to 46 this year on the counts tabulated here. On Nantucket dense fog developed during the day, and observers were able to count only a paltry 994 Oldsquaws. Two years ago under better conditions 178,958 were recorded on their evening flight to roost.

The cold weather moved late-lingering loons southward; hence, the total for both species (221) was the lowest in this area in the last decade. Great Cormorants, unusual away from the coast in midwinter, appeared on the Uxbridge, Worcester, and Quabbin counts.

Raptors included 9 Turkey Vultures and 20 Bald Eagles, both figures lower than last season's. Sharp-shinned and Cooper's hawk numbers, however, were up considerably. A Merlin found on the Concord count was only the second recorded in that count's long history. Four Snowy Owls were seen, but an astonishing number of Short-eared Owls was reported, 33 compared with 10 last year.

Thirteen species of shorebirds were represented in these count areas, compared with eleven last year. Only 52 Razorbills were recorded, 49 of them on the Nantucket count, in contrast to last year's total of 2613, possibly reflecting a changing food resource.

Carolina Wrens continued to increase this year; a total of 485 individuals was tallied on seventeen counts, up from the totals of 366, 314, 353, and 234 from the previous four years. Eastern Bluebirds numbered 141, compared with just 29 last time. This year's count of 3785 American Robins fell far short of last



year's record high of 9239 birds. A total of ten Yellow-breasted Chats was seen on three counts.

A Blue Grosbeak found in Lakeville on the Taunton-Middleboro count was the first record ever for a Massachusetts Christmas Bird Count and only a second winter record for the state. Rose-breasted Grosbeaks were found on the Cape Cod and Nantucket counts.

Although all species of winter finches were recorded, the low numbers indicate that no widespread flight was apparent for any species. A total of 179 Purple Finches was tabulated compared with just 77 tallied last year. Evening Grosbeaks were noted on thirteen counts this year, compared with just four counts last time. There were reports of both species of crossbills, and Common Redpolls were noted on two counts.

Other unusual species recorded this year included a single Tundra Swan on Martha's Vineyard, a Piping Plover and a Western Sandpiper on Cape Cod, a Semipalmated Plover in Plymouth, a Thayer's Gull on Tuckernuck Island, a Varied Thrush on Cape Ann, a Clay-colored Sparrow on the Mid Cape Cod count, and Grasshopper Sparrows on the Concord and Nantucket counts.

We wish to thank all of the compilers who contributed their time to prepare the results for this summary. They are as follows: Robert Coyle, Athol (December 17); Richard Harlow, Buzzards Bay (December 16); John Nove, Cape Ann (December 17); Blair Nikula, Cape Cod (December 17); Richard Walton, Concord (December 31); Robert Stymeist, Greater Boston (December 17); Warren Harrington, Marshfield (December 31); Sue Whiting, Martha's Vineyard (December 22): Peter Trimble, Mid Cape Cod (December 28); Donna Munafo, Millis (December 17); Edith Andrews, Nantucket (December 31); Hope Atkinson, New Bedford (December 30); Jim Berry, Newburyport (December 23); Trevor Lloyd-Evans, Plymouth (December 27); Scott Surner, Quabbin (December 30); Sibley Higginbotham and Bob Abrams, Quincy (December 16); Simon Perkins, Stellwagen (December 16); John Kricher, Taunton-Middleboro (December 23); Marcia Litchfield, Tuckernuck (December 30); Richard Hildreth, Uxbridge, MA/RI (December 30); John Williams, Westminster (December 23); Fran McMenemy, Worcester (December 17); Dave Emerson, Newport County, RI/Westport, MA (December 17).

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), and Quabbin (28).

		5001			0000		000 11010				
species	Athol	B. B.	C. Ann	C. Cod	Conc.	Gr. Bos.	Marsh.	M. V.	Mid C.	Millis	Nant.
Red-throated Loon	0	0	0	14	0	0	0	6	1	0	2
Common Loon	0	7	17	10	0	2	3	45	2	0	10
Pied-billed Grebe	0	5	0	4	0	0	0	2	3	0	2
Horned Grebe	0	36	17	5	0	6	2	7	5	0	6
Red-necked Grebe	0	0	4	2	0	0	1	3	1	0	5
Northern Gannet	0	0	4	354	0	0	1	18	0	0	1
Great Cormorant	0	2	116	425	0	76	83	316	156	0	20
Double-cr. Cormoral	nt O	0	0	7	0	58	0	0	0	0	4
American Bittern	0	0	0	0	0	1	0	0	0	0	1
Great Blue Heron	0	23	0	135	7	15	46	81	26	5	15
Black-cr. Night-Hero	n 0	3	0	2	0	1	2	26	2	0	4
Tundra Swan	0	0	0	0	0	0	0	1	0	0	0
Mute Swan	0	79	17	7	0	3	0	95	33	0	10
Snow Goose (blue)	0	0	0	0	0	0	0	1	0	0	0
Snow Goose	0	1	1	0	0	0	0	1	0	0	0
Brant	0	117	0	595	0	369	4	147	43	0	2
Canada Goose	0	1355	1844	2230	2193	2511	76	2403	698	3286	343
Wood Duck	ō	4	0	3	2	12	0	13	0	1	2
Green-winged Teal	0	0	4	22	1	25	0	24	5	0	1
American Black Duc	k 6	1761	1035	1916	158	2269	732	2206	1722	95	459
Mallard	0	693	943	312	844	2584	225	815	852	472	601
Northern Pintail	0	0	3	2	0	3	0	12	18	1	0
Northern Shoveler	Ő	Ő	0	0	0	0	0	1	0	0	0
Gadwall	ŏ	1	8	õ	1	0	1	21	6	0	0
Eurasian Wigeon	0	0	0	1	0	0	0	1	0	0	1
American Wigeon	0	10	7	25	0	31	0	32	3	0	8
Canvasback	Ő	123	0	23	0	0	õ	6	130	0	49
Redhead	0	0	0	0	õ	0	0	9	0	0	30
Ring-necked Duck	0	17	0	18	2	1	0	3	61	0	39
Greater Scaup	0	2325	5	466	0	152	72	1806	0	0	441
Lesser Scaup	0	1	0	4	0	0	0	0	2	0	13
Common Eider	Ő	512	142	2098	Ő	274	11977	1826	652	0	622
King Eider	0	0	1	0	0	0	0	0	0	0	0
	0	0	7	0	0	0	0	12	0	0	0
Harlequin Duck		76	34	170	0	1	20	29	38	0	994
Oldsquaw Black Scoter	0	15	17	22	0	0	20	528	9	0	65
Surf Scoter	0	704	29	135	0	0	0	157	3	0	28
White-winged Scote	-	166	101	949	0	165	146	9617	47	0	300
		480	485	352	11	455	162	1121	567	16	1002
Common Goldeneye		480			0	455	162	1121	0	0	8
Barrow's Goldeneye			1	1	1.56			1147	1124	0	507
Bufflehead	0	1432	473	1483	1	1059 28	166 1	84	31	7	40
Hooded Merganser	0	162	0	66	0			27.53			32
Common Merganse		56	1	248	80	73	6	156	38	7	798
Red-br. Merganser	0	302	228	1763	0	964	163	1442	137	0	0
Ruddy Duck	0	0	0	0	0	1	0	5	0	0	0
Turkey Vulture	0	0	0	0	0	0	0	0	0	0	0
Bald Eagle	0	0	1	0	0	0	0	1	0		23
Northern Harrier	0	8	9	21	0	7	16	18	15	0	
Sharp-shinned Haw		8	6	16	7	8	3	11	10	4	9 0
Coopor's Hould	0	1	2	3	1	4	1	2	0	0	
Cooper's Hawk Northern Goshawk	1	0	0	0	o	0	0	0	0	1	0

species	N. B.	Newbpt.	Ply.	Quab.	Quin.	Stell. T	au-Mb.	Tuck.	Uxbr.	Wstm.	Worc.	Nwp.RI
RTLO	0	4	0	0	0	3	0	0	0	0	0	7/3
COLO	1	22	10	0	7	7	0	10	0	0	2	
PBGR	0	0	2	0	0	0	0	0	0	0	0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
HOGR	3	22	6	0	27	1	0	3	0	0	0	
RNGR	0	2	0	0	0	2	o	0	0	0	0	1.
NOGA	0	0	1	0	0	310	0	0	0	0	0	
GRCO	2	41	17	1	23	39	2	9	0	0	2	
DCCO	0	0	0	0	0	0	ō	0	1	o	0	
AMBI	0	1	0	0	õ	õ	õ	õ	0	0	0	
GBHE	6	0	7	õ	12	õ	1	2	2	ő	1	
BCNH	0	0	4	o	0	õ	o	0	0	õ	0	
TUSW	0	0	0	Ō	0	õ	0	0	0	0	0	
MUSW	27	4	119	0	1	0	0	5	0	0	0	10/86
SNGO (bl)	0	0	0	0	0	õ	0	0	0	0	0	
SNGO	0	17	0	0	1	õ	0	0	1	0	0	
BRAN	24	0	60	0	682	õ	õ	30	0	0	0	0.000.000
CAGO	298	1665	1068	2	801	ŏ	1477	191	526	13	835	
WODU	0	2	3	0	0	0	4	0	0	0	0	
GWTE	0	0	0	0	0	3	1	0	0	0	0	4/0
ABDU	544	3724	1169	40	1483	450	163	63	100	37		509 / 167
MALL	340	832	774	21	379	15	586	5	136	176	952	
NOPI	0	0	5	0	0	0	0	1	0	0	1	5/6
NOSH	0	0	0	0	0	0	0	0	0	0	0	0/0
GADW	0	0	14	0	0	0	0	0	0	0	0	
EUWI	0	0	0	0	0	0	0	0	0	0	0	0/0
AMWI	1	0	12	0	0	0	0	3	0	0	0	0/5
CANV	0	0	0	0	6	0	0	0	0	0	0	6/200
REDH	0	0	1	0	0	0	0	0	0	0	0	0/2
RNDU	0	1	32	0	0	0	0	0	0	0	0	2/0
GRSC	428	3	2	0	363	10	0	156	0	0	1	907/227
LESC	0	0	0	0	0	0	0	0	0	0	0	1/0
COEI	4	215	988	0	2475	400	0	1158	0	0	0	3/23
KIEI	0	0	1	0	0	1	0	0	0	0	0	0/0
HADU	0	0	0	0	0	0	0	6	0	0	0	30/0
OLDS	20	173	8	0	141	19	0	77	0	0	0	0/1
BLSC	0	36	15	0	7	1	0	10	0	0	0	189 / 15
SUSC	1	26	13	0	2	2	0	14	0	0	0	51/1
WWSC	0	289	92	0	1335	350	0	838	0	0	0	53/23
COGO	475	672	159	0	410	35	26	477	0	0	4	629 / 126
BAGO	1	2	0	0	2	0	0	0	0	0	0	0/0
BUFF	781	282	178	0	724	20	0	289	0	0	0	288 / 155
HOME	1	0	23	1	1	0	4	0	0	0	7	3/2
COME	9	255	97	3	10	9	280	12	76	13	112	69 / 57
RBME	104	411	507	0	513	700	0	278	1	0	1	100/60
RUDU	0	0	1	0	0	0	0	0	1	0	0	0/5
TUVU	7	0	0	0	1	0	0	0	0	0	0	1/0
BAEA	0	5	0	12	0	0	0	0	0	0	0	1/0
NOHA	9	10	4	0	1	4	3	8	0	0	0	21/9
SSHA	7	5	7	1	3	3	9	1	2	3	1	11/3
COHA	2	0	0	0	0	1	6	0	0	0	0	0/0
NOGO	0	0	0	2	0	0	2	0	1	2	2	1/0

* Figures shown in Newport County, RI/Westport, MA CBC column are broken down by state: RI / MA.

		90th (CHRIST	AS DIN	DCOOK	11, 12/10	0/09-1/3/3	90			
species	Athol	B. B.	C. Ann	C. Cod	Conc.	Gr. Bos.	Marsh.	M. V.	Mid C.	Millis	Nant.
accipiter species	0	0	0	0	0	0	0	0	0	0	0
Red-shouldered Hav	vk 0	0	0	0	0	0	0	0	0	1	0
Red-tailed Hawk	1	5	32	22	27	64	11	41	15	39	19
Rough-legged Hawk	0	4	7	4	0	4	4	3	2	0	6
American Kestrel	0	3	1	8	2	9	2	1	3	6	6
Merlin	0	1	0	2	1	0	1	3	0	0	1
Peregrine Falcon	0	0	0	1	0	1	0	- 4	0	0	1
falcon species	0	0	0	0	0	0	0	0	0	0	0
Ring-necked Pheasa	ant 3	4	6	1	29	32	4	6	2	9	48
Ruffed Grouse	3	3	1	0	10	0	1	2	4	9	0
Wild Turkey	51	0	0	0	0	0	0	0	0	0	0
Northern Bobwhite	0	14	0	48	1	1	9	54	74	0	1
Virginia Rail	0	0	0	1	0	0	0	1	1	0	0
Sora	0	0	0	0	0	0	0	0	0	0	0
American Coot	0	7	0	0	0	14	0	0	1	1	2
Piping Plover	0	0	0	1	0	0	0	0	0	0	0
Black-bellied Plover	0	1	0	1	0	1	0	5	0	0	4
Semipalmated Plove	er O	0	0	0	0	0	0	0	0	0	0
Killdeer	0	0	1	4	0	0	0	2	0	0	0
Greater Yellowlegs	0	0	0	0	0	0	0	0	5	0	0
Ruddy Turnstone	0	0	1	0	0	0	0	0	0	0	15
Red Knot	0	0	0	0	0	0	0	2	0	0	0
Sanderling	0	0	12	70	0	72	0	102	106	0	154
Western Sandpiper	0	0	0	1	0	0	0	0	0	0	0
Purple Sandpiper	0	0	91	0	0	29	0	7	0	0	0
Dunlin	0	1	10	1556	0	49	56	34	2	0	0
Common Snipe	0	6	3	15	0	2	1	21	5	0	1
American Woodcock		2	0	5	0	1	0	7	2	0	0
Laughing Gull	0	0	0	1	0	0	0	0	0	0	0
Little Gull	0	0	0	0	0	1	0	0	0	0	0
Common Blahea. (3	1	0	0	5	0	0	0	0	0
Bonaparte's Gull	0	129	35	7	0	639	2	147	0	0	73
Ring-billed Gull	0	413	79	205	1	3234	303	331	263	216	28
Herring Gull	150	1473	8374	6955	638	6440	3730	7822	4972	568	5497
Thayer's Gull	0	0	0	0	0	0	0	0	0	0	0
Iceland Gull	1	0	3	2	0	1	0	1	0	0	28
Lesser Blabac. Gu	0 11	0	0	1	0	0	0	0	0	0	1
Glaucous Gull	1	0	1	0	0	0	0	0	1	0	2
Great Blabac. Gull	65	224	1990	1413	46	401	1033	1815	1595	46	1531
Black-legged Kittiwa	ke 0	35	7	524	0	0	0	250	30	0	22
gull species	0	0	0	0	0	0	0	0	0	0	0
Razorbill	0	0	0	2	0	0	0	0	0	0	49
Black Guillemot	0	0	10	2	0	0	0	0	0	0	0
Rock Dove	307	247	477	71	807	3353	350	140	502	619	103
Mourning Dove	242	240	292	200	1370	505	223	593	342	582	345
Barn Owl	0	0	0	0	0	1	0	9	0	0	1
Eastern Screech-Ow	0 1/	0	19	1	14	16	8	2	9	6	0
Great Horned Owl	0	1	3	9	9	2	3	0	3	0	0
Snowy Owl	0	0	1	0	0	0	1	0	0	0	0
Barred Owl	0	0	0	0	з	0	0	0	0	0	0
Long-eared Owl	0	0	1	0	0	0	0	0	0	0	3

BIRD OBSERVER

Vol. 18, No. 2, 1990

species	N. B.	Newbpt.	Ply.	Quab.	Quin.	Stell. 7	au-Mb.	Tuck.	Uxbr.	Wstm.	Worc.	Nwp.R
ac.sp.	0	0	0	2	0	0	0	0	0	0	0	0/0
RSHA	1	0	1	0	0	0	2	0	0	0	2	0/0
RTHA	5	50	12	14	26			2				
RLHA	0	1017				1	22		8	3	22	17/5
AMKE	4	14	2	0	0	0	3	1	0	0	0	4/1
MERL	4	11	5 1	1 0	4	1	5 1	0	2	0	2	12/4
					0			0	0	0	0	0/0
PEFA fa. sp.	0	0	0	0	0	0	0	2	0	0	0	0/0
	0	0	0	0	0	1	0	0	0	0	0	0/0
RNPH	0	20	8	3	0	0	0	0	2	3	2	3/1
RUGR	0	5	0	23	4	0	6	0	18	11	3	0/0
WITU	0	0	0	48	0	0	0	0	0	10	0	0/0
NOBO	0	0	0	0	0	0	8	0	0	0	0	0/0
VIRA	0	3	1	0	0	0	0	0	0	0	0	2/0
SORA	0	1	0	0	0	0	0	0	0	0	0	0/0
AMCO	0	0	249	0	0	0	0	0	0	0	0	0/4
PIPL	0	0	0	0	0	0	0	0	Ő	0	0	0/0
BBPL	2	0	o	Ő	6	0	0	0	0	0	0	0/0
SEPL	0	0	1	0	0	0	0	0	0	0	0	0/0
KILL	0	0	0	0	0	0	0	0	0	0		
GRYE	0	0	0	0	0	0	0	0	0	0	0	3/0
RUTU	õ	0	0	0	29	0	0	2	0	0	0	0/0
REKN	õ	0	0	0	0	0	0	0	0			0.010
SAND	0									0	0	0/0
WESA	0	4	8 0	0	22 0	20 0	0	41 0	0	0	0	33 / 10 0 / 0
PUSA												
DUNL	3	3	0	0	3	0	0	0	0	0	0	55 / 47
COSN	46	0	117	0	76	3	0	8	0	0	0	492 / 65
AMWO	0	2	2	0	4	0	2	0	0	0	1	11/0
	0	0	0	0	1	0	0	0	0	0	0	2/0
LAGU	0	0	0	0	0	0	0	0	0	0	0	0/0
LIGU	0	0	0	0	0	0	0	0	0	0	0	0/0
CBHG	0	0	0	0	1	1	0	0	0	0	0	1/0
BOGU	1	0	0	0	360	30	0	0	0	0	0	221/2
RBGU	542	43	444	0	879	150	159	0	46	2	95	249/83
HEGU	3774	4562	2774	8	5374	2750	3783	496	94	365	883	1284 / 279
THGU	0	0	0	0	0	0	0	1	0	0	0	0/0
ICGU	0	3	0	0	2	8	0	0	0	1	0	0/0
LBBG	0	0	0	0	0	0	0	0	0	0	0	0/0
GLGU	0	0	õ	õ	õ	2	õ	0	Ő	0	õ	0/0
GBBG	470	170	386	0	526	1350	163	141	38	73	454	135/41
BLKI	0	2	0	o	3	210	0	2	0	0	0	0/0
gull sp.	0	0	0	2	0	0	0	0	1	0	0	0/0
RAZO	0	0	0	0	0	1	0	0	0	0	0	0/0
BLGU RODO	0	0	0	0	1	7	0	0	0	0	0	0/0
	234	809	387	76	490	200	412	0	573	272	311	675/16
MODO	280	736	169	146	35	2	325	0	412	192	310	272/25
BROW	0	0	0	0	0	0	0	0	0	0	0	2/0
EASO	2	18	1	4	3	0	6	0	7	0	1	2/1
GHOW	0	19	0	5	2	0	1	0	2	1	0	3/0
SNOW	0	1	0	0	1	0	0	0	0	0	0	0/0
BAOW	0	1	0	9	0	0	0	0	0	0	0	0/0
LEOW	0	0	0	0	0	0	0	0	0	0	0	1/0

* Figures shown in Newport County, RI/Westport, MA CBC column are broken down by state: RI / MA.

BIRD OBSERVER

Vol. 18, No. 2, 1990

		9000 0	UNHIS IN	INS DIN	0000	111, 12/10	0/09-1/0/3	90			
species	Athol	B. B.	C. Ann	C. Cod	Conc	Gr. Bos.	Marsh.	M. V.	Mid C.	Millis	Nant.
Short-eared Owl	0	0	0	2	0	7	4	1	0	0	2
Northern Saw-whet	Owl 0	0	0	0	0	0	0	0	0	0	4
owl species	0	0	0	0	0	0	0	0	0	0	0
Belted Kingfisher	0	12	6	24	2	3	4	13	17	2	0
Red-bel. Woodpeck	er 0	0	1	0	5	1	0	13	0	0	0
Yellow-bel. Sapsuch	ker 0	0	0	1	0	1	1	0	0	0	0
Downy Woodpecke	r 42	22	69	38	479	128	53	52	61	176	14
Hairy Woodpecker	19	2	5	4	111	15	7	12	7	32	0
Northern Flicker	1	38	10	69	10	31	36	166	61	17	88
Pileated Woodpeck	er O	0	0	0	5	0	0	0	0	0	0
Eastern Phoebe	0	1	0	0	0	0	0	1	0	0	0
Horned Lark	0	107	52	98	1	132	14	25	40	0	25
Blue Jay	507	273	457	224	1764	402	463	441	373	990	230
American Crow	113	507	625	365	1603	1589	347	1610	581	7630	430
Fish Crow	0	0	0	0	20	2	1	0	1	6	0
Common Raven	0	0	0	0	0	0	0	0	0	0	0
Black-cap. Chickad	121-2273	525	880	842	2538	1011	590	768	662	1377	372
Boreal Chickadee	0	0	0	0	0	0	0	0	0	0	0
Tufted Titmouse	87	103	164	48	970	260	166	0	161	521	0
Red-br. Nuthatch	52	19	22	16	6	25	77	31	27	5	116
White-br. Nuthatch	90	30	72	18	413	116	68	86	41	186	1
Brown Creeper	2	0	12	3	43	9	10	4	9	41	3
Carolina Wren	0	80	2	24	6	6	21	52	42	5	0
Winter Wren	0	2	1	0	2	5	0	3	4	1	0
Marsh Wren	0	0	0	1	0	0	0	0	0	0	2
Golden-cr. Kinglet	14	33	9	39	24	19	23	8	29	57	11
Ruby-crowned King	let 0	2	0	1	0	0	0	1	0	1	0
Eastern Bluebird	0	6	0	0	0	0	0	40	3	39	0
Hermit Thrush	0	17	1	7	1	6	1	16	11	0	6
Varied Thrush	0	0	1	0	0	0	0	0	0	0	0
American Robin	3	175	150	139	100	436	309	74	713	29	190
Gray Catbird	0	15	0	4	1	2	0	57	19	0	7
Northern Mockingbi	rd 9	73	90	88	220	192	75	60	110	101	30
Brown Thrasher	0	1	1	2	0	0	0	2	3	0	0
American Pipit	0	0	0	0	0	0	0	4	0	0	0
Cedar Waxwing	40	127	30	6	277	137	409	41	89	155	0
Northern Shrike	0	0	0	0	2	0	0	0	0	1	0
European Starling	531	446	11299	816	1093	125853	1070	1938	786	5890	645
Yellow-rumped War	bler 0	70	52	350	1	54	72	740	140	4	916
Pine Warbler	0	0	0	1	0	1	2	4	0	0	7
Palm Warbler	0	0	0	0	0	2	0	1	0	0	0
Common Yellowthro	bat 0	0	0	1	0	0	0	0	0	0	0
Yellow-breasted Ch	at 0	4	0	5	0	0	0	0	0	0	0
Northern Cardinal	30	211	183	156	431	197	81	176	240	217	86
Rose-bre. Grosbeak	c 0	0	0	1	0	0	0	0	0	0	1
Blue Grosbeak	0	0	0	0	0	0	0	0	0	0	0
Dickcissel	0	0	1	2	0	0	0	1	0	0	1
Rufous-sided Towh	ee O	14	1	4	1	1	4	24	13	1	6
Amer. Tree Sparrow	/ 107	50	142	26	617	268	64	94	48	349	15
Chipping Sparrow	0	0	0	2	0	2	1	0	0	0	0
Clay-colored Sparro	w O	0	0	0	0	0	0	0	1	0	0

species	N. B.	Newbpt.	Ply.	Quab.	Quin.		au-Mb.	Tuck.	Uxbr.	Wstm.	Worc.	Nwp.RI
							0	3	0	0		
SEOW	0	7	5	0	1	0	0	0	0	1	0	1/1
NSWO	0	1	0	2	0	0	0	0	0	0	0	0/1
owl sp.	0	0	0	1	0	0	0	0	0	2		0/0
BEKI	0	2	6	2	1	1		0	0	0	4	5/2
RBWO YBSA	0	1	0	0	0	0	2	0	0	0	0	0/0
						1.50	ALC .	1.52				
DOWO HAWO	42 4	200	47	132 51	35 2	1	88 12	0	119 25	98 26	80 8	33/4
NOFL		23 20	46	3	19	5	35	15	21	0	1	48 / 12
PIWO	16 0	20	40	10	0	0	0	0	0	0	0	40/12
EAPH	0	0	0	0	0	0	0	0	0	0	0	1/0
HOLA	0	367	16	1	2	38	150	0	153	0	1	125 / 18
BLJA	183	1417	489	612	171	4	490	11	1068	1163	548	104/50
AMCR	318	904	164	107	386	9	1512	20	354	207	542	
FICR	0	0	1	0	0	0	0	0	0	0	0	0/0
CORA	0	0	0	28	Ő	0	0	0	0	0	0	0/0
BCCH	214	1788	594	1193	258	10	573	10	1234	1650	825	217/92
BOCH	0	0	0	0	0	0	0	0	0	0	1	0/0
TUTI	116	458	142	123	49	1	340	0	338	165	220	40 / 12
RBNU	9	25	55	227	1	3	59	0	9	18	19	3/0
WBNU	45	220	48	178	16	0	82	0	174	179	118	17/7
BRCR	5	16	10	65	3	0	20	0	21	18	15	3/0
CAWR	27	1	29	0	2	0	112	0	4	0	2	57 / 13
WIWR	0	1	2	1	2	0	1	0	0	0	1	2/1
MAWR	0	0	1	0	0	0	0	0	0	0	0	2/0
GCKI	2	14	42	221	6	0	50	0	31	14	13	7/3
RCKI	0	0	0	0	1	0	0	0	0	0	0	1/1
EABL	7	6	6	8	0	0	10	0	16	0	0	0/0
HETH	0	4	7	0	2	0	1	0	2	0	1	7/7
VATH	0	0	0	0	0	0	0	0	0	0	0	C
AMRO	400	214	106	3	64	4	400	0	38	5	9	84 / 140
GRCA	13	1	10	0	2	0	1	0	0	0	0	39/13
NOMO	32	163	78	17	50	2	76	0	64	27	38	125/14
BRTH	6	0	1	0	0	0	0	0	0	1	1	2/1
AMPI CEWA	0 224	0 85	0 112	0	0 40	0	0 226	1	0 21	0 15	0 25	10/0 0/8
				1	0	0	0	1	0	0	1	0
NOSH STAR	0 1862	2 5243	2 984		51100	300	3096	18	1604	699		8411 / 1961
YRWA	30	29	245	000	88	27	54	38	7	0	1	198 / 46
PIWA	0	29	245	0	0	0	0	0	1	ő	0	0/0
PAWA	0	0	1	0	0	õ	o	o	o	0	0	0/0
COYE	0	Ő	Ó	Ő	Ő	õ	Ő	0	0	õ	0	0/0
YBCH	0	0	0	0	0	0	0	0	0	0	0	1/0
NOCA	143	232	122	46	59	1	146	0	174	47	64	135/31
RBGR	0	0	0	0	0	0	0	0	0	0	0	0/0
BLGR	0	Ő	õ	õ	Ő	0	1	0	0	0	0	0/0
DICK	0	õ	Ő	0	0	0	0	0	0	0	0	0/0
RSTO	26	0	15	0	1	1	8	0	1	0	0	9/1
ATSP	61	618	65	194	67	7	219	0	384	139	394	122/11
CHSP	0	0	0	0	0	0	1	0	1	0	0	2/1
CCSP	0	0	0	0	0	0	0	0	0	0	0	0/0

* Figures shown in Newport County, RI/Westport, MA CBC column are broken down by state: RI / MA.

	Athol		C App	C Cod	Conc	Gr. Bos.	March	M. V.	Mid C.	Millis	Nant.
total birds	5077	18094	34298	30030	22194	160184	24955	44642	20688	26627	19206
number of species	43	97+	99	119+	76	110	88	124	97	64	106
House Sparrow	483	647	1252	421	1640	1051	438	393	986	741	388
Evening Grosbeak	365	1	1	0	35	3	0	0	0	10	0
American Goldfinch	149	77	275	124	773	266	98	148	171	367	133
Pine Siskin	52	0	0	0	18	1	0	2	0	0	0
White-win. Crossbill	0	0	0	0	0	0	0	0	0	0	0
Red Crossbill	0	0	0	0	0	0	0	0	0	0	0
Common Redpoll	13	0	0	0	0	2	0	0	0	0	0
House Finch	74	334	640	322	532	540	196	260	166	292	203
Purple Finch	1	0	10	0	43	9	1	3	1	36	1
Pine Grosbeak	8	0	0	0	0	1	0	0	0	0	0
Northern Oriole	0	0	2	0	0	1	0	0	0	0	5
blackbird species	0	0	0	0	0	0	30	0	0	0	0
Brown-headed Cowl	o brid	0	0	0	2	7	2	25	0	1	C
Common Grackle	0	1	1	41	4	9	0	604	3	0	13
Brewer's Blackbird	0	0	0	0	0	0	0	1	0	0	C
Rusty Blackbird	0	0	0	0	6			1	0	0	0
Eastern Meadowlark		0	0		0			54	18	1	6
Red-winged Blackbi		1	0	116	16			34	0	0	303
Snow Bunting	0	4	148	16	47	8	47	63	7	4	124
Lapland Longspur	0	0	3	8	3	3	0	0	0	0	
Dark-eyed Junco	655	158	331	133	1340	667	240	269	112	1069	92
White-cr. Sparrow	0	0	0	0	0	1.1.1.1		0	0	0	0.00
White-thr. Sparrow	8	286	184	103	390	256	114	227	215	113	
Swamp Sparrow	0	22	2	46	27	27	9	24	63	7	
Song Sparrow	2	209	82	155	269	333	121	226	240	125	255
Fox Sparrow	0	4	5	6	10	6	2	12	8	13	1
Sharp-tailed Sparrov	v 0	0	0	2	0	0	1	0	0	0	0
Grasshopper Sparro	w 0	0	0	0	1	0	0	0	0	0	1
"lpswich" Sparrow	0	2	0	2	0	0	1	0	0	0	
Savannah Sparrow	1	38	4	19	11	8	0	64	5	10	18
Vesper Sparrow	0	5	0	0	0	0	0	0	0	0	0
Field Sparrow	0	39	0	36	15	15	0	10	22	8	3

Athol =	Athol CBC	December 17, 1989
B. B. =	Buzzards Bay CBC	December 16, 1989
C. Ann =	Cape Ann CBC	December 17, 1989
C. Cod =	Cape Cod CBC	December 17, 1989
Conc. =	Concord CBC	December 31, 1989
Gr. Bos. =	Greater Boston CBC	December 17, 1989
Marsh. =	Marshfield CBC	December 31, 1989
M. V. =	Martha's Vineyard CBC	December 22, 1989
Mid C. =	Mid Cape Cod CBC	December 28, 1989
Millis =	Millis CBC	December 17, 1989
Nant. =	Nantucket CBC	December 31, 1989

species	N. B	. Newbp	t. Ply.	Quab	. Quin	Stell	.Tau-Mb.	Tuck	. Uxbr	Wstm	. Worc	. Nwp.R
FISP	11	1	4 17		2 17	3	3 39	0) 25	14	1 4	1 39/
VESP	()	0 0	(0 0	C	0 0	C) (
SASP	18	3	7 2) 2	0) 15	45		S	S - 53	
"IPSP"	0) (0 0	(0 0	0) 0	1	C			
GRSP	C) (0 0	0) 0	0) 0	0	0		i i i i i i i i i i i i i i i i i i i	
STSP	C)	1 0	C	0 0	0	0 0	0	0	C	0	0/
FOSP	14		2 1) 0	0	5	0	0	0	1	2/
SOSP	50		7 158	36	5 108	1	141	20	232	23	76	257/4
SWSP	5		0 30			2	16	1	52	1	0	79/0
WTSP	305	201	1 141	22	116	10	115	0	192	36	70	381/8
WCSP	0	(0 0	0	0 0	0	1	0	0	0	0	7/
DEJU	273	496	382	572	233	8	481	0	1392	467	354	169 / 57
LALO	0	1		0	0	0	1	2		0	0	
SNBU	2		S	0	54	6	3	7	263	26	9	2/0
RWBL	0			0	15	0	8	0	3	0	0	19/0
EAME	21	7		0	0	1	2	24	0	0	0	45/0
RUBL	0	C) 1	0	0	0	0	0	9	0	0	0/0
BRBL	0	C	0 0	0	0	0	0	0	0	0	0	0/0
COGR	0	0		1	0	0	2	0	3	1	2	107/0
BHCO	1	22		5	3	0	12	0	0	0	0	77 / 55
bl. sp.	0	0		0	0	0	0	0	0	0	0	0/0
NOOR	1	1	0	0	0	0	0	0	0	0	0	0/0
PIGR	0	0	0	2	0	0	0	0	0	1	0	0/0
PUFI	19	14	0	16	0	0	8	0	5	2	8	2/0
HOFI	271	462	387	127	110	1	183	0	348	175	416	271/74
CORE	0	0	0	0	0	0	0	0	0	0	0	0/0
RECR	0	0	0	27	0	0	0	0	0	0	0	0/0
WWCR	0	0		7	0	0	0	0	25	0	0	0/0
PISI	8	2	1	76	0	1	2	0	2	0	39	0/0
AMGO	155	441	81	103	75	1	99	0	248	60	125	20/10
EVGR	12	17	0	413	0	0	10	0	181	525	53	0/0
HOSP	262	1851	566	467	271	45	414	0	1084	896	696	122 / 166
# of specie	es 79	97	98	61	89	67	77	49+	64	49	66	115
total birds	13672	31123	15213	6220	70699	7615	16784	4559	11979	7866	10391	30113
	N. B.	Newbpt.	Ply. (Quab.	Quin.	Stell. T	au-Mb.	Tuck.	Uxbr.	Wstm.	Worc.	Nwp.RI

* Figures shown in Newport County, RI/Westport, MA CBC column are broken down by state: RI / MA.

N. B. =	New Bedford CBC	December 30, 1989	
Newbpt. =	Newburyport CBC	December 23, 1989	
Ply. =	Plymouth CBC	December 27, 1989	
Quab. =	Quabbin CBC	December 30, 1989	
Quin. =	Quincy CBC	December 16, 1989	
Stell. =	Stellwagen CBC	December 16, 1989	
Tau-Mb. =	Taunton-Middleboro CBC	December 23, 1989	
Tuck. =	Tuckernuck CBC	December 30, 1989	
Uxbr. =	Uxbridge, MA/RI CBC	December 30, 1989	
Wstm. =	Westminster CBC	December 23, 1989	
Worc. =	Worcester CBC	December 17, 1989	
Nwp. RI =	Newport County, RI/Westport,	MA CBC Decen	nber 17, 1989

BIRD OBSERVER

Vol. 18, No. 2, 1990

MIDDLE YELLOWLEGS Tringa Intermedius

LEAST YELLOWLEGS Tringa Minor

Existence of these two new species was substantiated only shortly before this manuscript went to press. Both are similar to the Lesser and Greater Yellowlegs; however, they are readily identified by the fact that the Middle Yellowlegs is smaller than the Greater Yellowlegs and larger than both the Lesser and Least Yellowlegs, while the Least Yellowlegs is smaller than the Greater, Middle, and Lesser Yellowlegs, but is larger than some smaller birds. Many ornithologists believe that a Slightly Lesser Yellowlegs, which is ..., Oh, nevermind.

OBSERVATION HINT Yellowlegs flock together.

SPECIALIZED EQUIPMENT In order to estimate sizes, it is helpful to insert a number of yardsticks in mudflats where Yellowlegs feed.

Reprinted from A Field Guide to Little-Known & Seldom-Seen Birds of North America, 1988, with permission.



Ben Sill



Cathryn Sill



John Sill

MEET BEN, CATHY, AND JOHN SILL

Our readers are familiar with bird artist John Sill's exquisite watercolors, which have for years been the feature of the *Bird Identification Calendar*, and several—Chimney Swift, Eastern Kingbird, Evening Grosbeak, and White-breasted Nuthatch—have appeared in black-and-white on *Bird Observer* covers. Now we wish to acquaint you with other facets of Sill family creativity.

In 1988 three Sill family birders coauthored A Field Guide to Little-Known & Seldom-Seen Birds of North America (Peachtree Publishers, Ltd.), a hilarious and imaginative spoof of birding that described some extraordinary avian rarities. Bird Observer's current cover and the text on the facing page are excerpted, by permission of the Peachtree Publishers, the authors, and the artist, from that book, briefly reviewed in the December 1989 issue (p. 345). On March 15, 1990, Another Field Guide to Little-Known & Seldom-Seen Birds of North America was issued. The text is by Ben L. Sill, aerospace engineer and Clemson University professor, and Cathryn P. Sill, schoolteacher in Franklin, North Carolina, and the illustrations are by artist John C. Sill. Space here permits only brief mention of some of the giddy exotics to be found in Another Field Guide.

The High Diving Heron (Kamakaze icthygrabbus) (pp. 2-3) spears bottom dwelling species by plummeting into shallow ponds "with total disregard for its own safety" and often disastrous results. The Mangrove Penguin (Tuxedo verdantus) (pp. 4-5) is a southern hemisphere bird now adapted to Florida swamps, but "occasionally a homesick bird will be seen in iceberg lettuce fields." The Duffer Shank (Birdie impossibilus) (pp. 14-15) frequents golf links, where it occasionally attempts to brood golf balls. The authors aver that the mortality rate is quite high. The Nearsighted Bat Owl (Invertus myopius) (pp. 24-25) roosts, batlike, upside down. Its nests are securely attached, but incubation success is low: "Every time the owl leaves the nest, the eggs fall out." The sensitive females of the Double-crested Impulse Layer (Albuminus ejectus) (pp. 42-43) react to environmental stress by depositing their eggs "rapidly and anywhere." This titlike bird is painted in the act of oviposition, eyeing with concern its fallen eggs, which lie broken on the ground or are draped surreally, like Dali watches, over the bare branches beneath her. The Greater Wandering Vagrant (Casualus wanderii) in the 1988 guide (pp. 58-59) was reputed to migrate with its nest looped over its bill. In Another Field Guide (pp. 46-47), we find that the name has been changed to Marsupialus wanderii. The bird is now thought to carry its young in a belly pouch!

No serious birder should be without these two unusual guides, guaranteed to enlarge one's birding horizons and to have a salubrious effect on the birding outlook. Dorothy R. Arvidson

AT A GLANCE February 1990 Simon Perkins

As plain as February's bird appears, it does offer a clue or two to its identity. Structurally, the relatively short legs and tail, stocky build, and fairly heavy bill are all features typical of various finches and sparrows. Most of these birds possess considerable streaking or striping about the head, and since this individual does not, we can immediately narrow the field of suitable candidates. Among the plain-headed members of this group, a grosbeak would possess a larger bill, and a bunting, junco, or goldfinch would have a smaller bill.

If not a finch, then it must be a finchlike bird, and this leads us to consider the Bobolink and the Brown-headed Cowbird. Apart from the fact that Bobolinks seldom perch on wooden structures and usually are sleek rather than scruffy as this bird certainly is, Bobolink can be discounted because the bird shown does not have pointed tail feathers; and an immature or a female cowbird does not have markings on the back and does not show nearly so much pale emargination on the secondaries or greater coverts.

The only remaining candidates are House Sparrow or Dickcissel. At this point, we again need only look at the rounded ends of the tail feathers. In the Dickcissel, as in the Bobolink, these are pointed. Additionally, the large pale bill provides us with further evidence that the mystery bird is a House Sparrow since Dickcissels possess a dark bill.

Often the best way to identify a bird at a glance is by what the Brits call "jizz"-the intangible aspects of a bird that, when taken as a whole, infuse a species with personality. Perhaps the most useful of such features in House Sparrows is a beady-eyed look that imparts to them a characteristic expression. This young bird was photographed in Lincoln, Massachusetts.



House Sparrow Photo by Simon Perkins

AT A GLANCE



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



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CONTENTS_

PRAIRIE BIRDING THROUGH NEW ENGLAND EYES	1.44
	76
THE DOUBLE EDGE EFFECT John C. Kricher	80
DO VAGRANT BIRDS IN MASSACHUSETTS REFLECT POPULATION GROWTH AND DISPERSAL RATHER THAN WEATHER PATTERNS? Richard R. Veit	86
PEREGRINE DAY-CLOSE ENOUGH Peter Trull	93
HERRING GULLS NEST ON SLANTING ROOF	
	96
BOOK VIEWS	100
ASH-THROATED FLYCATCHER: FIRST FOR THE VINEYARD	103
FIELD RECORDS: NOVEMBER/DECEMBER 1989	107
CHRISTMAS BIRD COUNT, 12/16/89-1/3/90 Robert H. Stymeist Data processing by Janet L. Heywood	121
ABOUT THE COVER: Middle Yellowlegs, Least Yellowlegs Ben L. Sill, Cathryn P. Sill, and John C. Sill	132
MEET OUR COVER ARTIST: John C. Sill Dorothy R. Arvidson	133
AT A GLANCE	134
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