BIRD OBSERVER



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BIRD OBSERVER

· a bimonthly journal ·

To enhance understanding, observation, and enjoyment of birds.

VOL. 22, NO. 6 DECEMBER 1994

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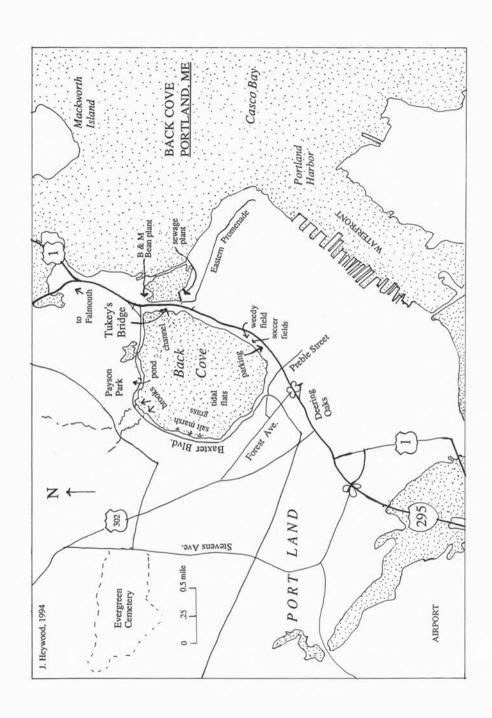
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BIRDING PORTLAND'S BACK COVE

by Richard R. Eakin

One of the most accessible and productive birding locations in southern Maine is Portland's popular Back Cove. Although traditionally a favorite spot for observing wintering waterfowl, migrating shorebirds, and other wetland species in the heart of the city, the area was largely untrammeled in the early 1970s, when I first took note of the birdlife there. Today, the well-worn path encircling the cove bears a steady procession of walkers, joggers, and cyclists. A shopping plaza, a housing development, and the recently completed expansion of Cheverus High School's athletic field have taken their toll on certain patches of land adjacent to the cove. Such inevitable human encroachment has affected the birds and their habitats, but, in general, birders can still find much of interest year-round in this urban wildlife oasis.

Established as a wild bird sanctuary in 1915 and administered by the Maine Department of Inland Fisheries and Wildlife, Back Cove is a shallow, roughly circular, and nearly mile-wide tidal basin bordered by various habitats, including salt marsh (Spartina), weedy and grassy (soccer) fields, and man-made rocky shore. Two brooks entering at the northwest corner of the cove and the outlet to Casco Bay (spanned by Tukey's Bridge) at the northeast corner provide corridors for both freshwater and marine organisms entering and leaving the cove. In addition, the daily tidal cycle, which alternately fills and drains the cove (except for a permanent channel along the east shore), ensures a constant flow of birds throughout the area. Gulls, in particular, follow their food sources, be they mudflats, wastewater, or fishing boats. For this reason, it is advisable to check the cove as often as possible, as well as other nearby spots, such as the wastewater treatment plant just outside the cove near the Eastern Promenade, the Portland waterfront, and the mouth of the Presumpscot River and Mackworth Island just to the north in Falmouth. Even the ponds in nearby Deering Oaks (a downtown park) and Evergreen Cemetery, where gulls and waterfowl concentrate and are used to being fed, can produce something of note. I have seen Common Black-headed Gull at these two locations each an easy flight from the species' usual Back Cove wintering ground.

Sightings included in this article have occurred generally within the boundaries delineated by Baxter Boulevard along the north and west shores, Interstate 295 along the east shore, and Preble Street Extension along the south shore. Adjacent areas covered include the mouths of the two brooks, the pond and playing fields in Payson Park along the north shore, and the area just across Tukey's Bridge near the Burnham and Morrill baked bean factory and the sewage plant. A fall hawkwatch site near the mouth of the more westerly of the two brooks (directly behind Cheverus High School), where there is a wastewater

pump station and a small parking area, has been productive and accounts for the majority of the cove's raptor records. While most hawks are distant and moving in a southerly direction to the west of the cove, some fly directly overhead, affording fine views. More observations are needed to assess the cove's value as a hawkwatch site.

One of the most consistently productive bird habitats is the weedy field adjacent to the soccer field along the south shore. This small patch (originally filled by the city for the construction of playing fields) has produced a sizable number of rarities and has long been a roosting area for gulls and shorebirds. Its future is uncertain, especially if the city expands the soccer field, but for now it continues to yield an impressive diversity of birds. Among the more notable finds are Rusty and Yellow-headed blackbirds; Vesper, "Ipswich," and Seaside sparrows; Upland, Buff-breasted, and Baird's sandpipers; American Bittern; Forster's and Caspian terns; and Short-eared and Snowy owls.

Considered as a microcosm of the southern Maine coast, Back Cove reflects the general patterns of species composition, seasonal fluctuations, and dates of arrival and departure of the region's birds. Birders planning to visit the area can get a good idea of what to expect and when by consulting the *Annotated Checklist of Maine Birds* by Peter Vickery (Maine Audubon Society 1978) and *A Birder's Guide to the Coast of Maine* by Elizabeth Cary Pierson and Jan Erik Pierson (Down East Books 1981). Although both are somewhat out of date and in need of revision (the latter is being updated and expanded), they serve well as general references. *Maine Bird Notes*, a publication of the University of Maine at Machias, details the most recent records of the state's avifauna.

To date, the Back Cove list boasts nearly 200 species, approximately onefourth of which are uncommon to rare in Maine. This number is about half the state total, attesting to the importance of the cove as a birding destination and, more important, as a feeding and resting area for many migrants. It further illustrates the importance of long-term coverage of a single location as a contribution to knowledge of local bird populations. Habitats change, and as they do, so do the birds dependent upon them. Such baseline data may serve to document the value of the habitat and ultimately to save it from development. See my "Annotated List of the Birds of Back Cove, Portland, Maine" (Maine Birdlife, August 1984, Volume 6, Number 3) for a detailed account of 150 species then recorded from the area. Some species, such as Common Eider and Sanderling, may be common along the Maine coast at certain seasons or in suitable habitat. But because Back Cove lacks deep water, extensive rocky shore, and sandy beaches, such species are decidedly uncommon there. The list is short on land birds, largely owing to the lack of trees and other extensive cover in the immediate vicinity of the cove.

Directions

From the south, take Exit 6A from the Maine Turnpike (Interstate 95) onto Interstate 295. Then take Exit 6B (Forest Avenue North) from Interstate 295, and turn right at the first light onto Route 1 (Baxter Boulevard). Turn right at the next light onto Preble Street Extension, and you will see the cove on your left beyond the parking area. Park and scan the cove, then walk through the fields to the right and along Baxter Boulevard to the left. I have seen Grasshopper Sparrow twice, and Lark Sparrow, American Avocet, and Monk Parakeet (!), all within the southwest corner near the parking lot. The flats in this part of the cove are the first to be exposed as the tide recedes, drawing in whatever shorebirds may be present from their roosting areas (which in Portland may include the flat-topped roofs of some of the city's buildings).

From the north, take the Baxter Boulevard exit from Interstate 295, and follow the boulevard along the cove, stopping at Payson Park (well-marked on the right) and, a bit farther along, the brook behind Cheverus High School, to check for ducks, herons, and shorebirds, especially at high tide, when they may roost and feed along the brook or in the small pond in the park. In the warmer months, check the large red oak trees along the brook for Snowy Egret and Black-crowned Night-Heron, which regularly roost there, and also for Great Egret, Little Blue Heron, and Yellow-crowned Night-Heron, all of which have occurred in the area. This brook is also a favorite haunt of Belted Kingfisher and sometimes Green Heron. Two of the most notorious rarities to have occurred at Back Cove chose Payson Park as their headquarters. A Northern Hawk Owl spent the winter of 1981-82 eating and caching Meadow Voles and the occasional pet-store rodent offered to it by admirers from as far away as Washington, D.C. One day the Brookline Bird Club showed up to see the owl. More recently, a Western Kingbird occupied one of the ballfields for three days during a hot spell in mid-September 1992. Then there was the Loggerhead Shrike across the boulevard in a thorn bush one April day in 1982. You just never know.

Seasons

Fall (mid-August into November). As might be expected, fall is the best time to bird Back Cove. This season accounts for the bulk of the rarities, and, with the migrations of herons, shorebirds, waterfowl, raptors, and passerines in full swing, something of interest is bound to turn up. Check the flocks of Savannah Sparrows that concentrate in the weedy field and along the edge of the parking lot at the south end. "Ipswich," Sharp-tailed, Swamp, Vesper, and Seaside sparrows are possible among them, as are other grassland species such as Eastern Meadowlark, Bobolink, Lapland Longspur, Snow Bunting, and American Pipit. An unusual record of a female Red Crossbill among Savannah Sparrows on rocks along the shore occurred in October 1994. Birds are attracted

to this area like a magnet, and every day during migration holds promise of something new. One late August day, I flushed a female Yellow-headed Blackbird that remained for a week and accommodated numerous admirers and photographers at point-blank range. Others have seen American Bittern here.

Autumn also signals post-breeding buildup of herons and egrets that have dispersed from their nesting areas, of which the northernmost for some species, such as Snowy Egret, are Wood Island off Biddeford Pool and Stratton Island off Prouts Neck in Scarborough, both to the south of Portland. Peregrines and Merlins chase shorebird flocks along the tideline. *Spartina* assumes its rich golden color in a thick arc along the boulevard. Diligent searching here might turn up a rail or two. Buffleheads arrive the third week of October.

Winter (November through March). Winter can be very rewarding for waterfowl, gulls, and raptors with the possibility of a lingering passerine. Grasshopper Sparrow and Yellow-breasted Chat in January are among my rewards of the "off season." The cove is one of the best spots in Maine (and perhaps second only to Boston's Logan Airport in New England) for Snowy Owl, usually in the weedy field. At least one Common Black-headed Gull is around somewhere along the Maine coast, and Back Cove is as good a place as any to look. Barrow's Goldeneye, the final member of the "special three," is not as frequent as in past years, but should always be looked for. This species is invariably in a tight flock somewhere in the middle of the cove, requiring a scope to locate the birds, but it is worth the effort.

Wintering Buffleheads and Red-breasted Mergansers share the cove with hundreds of Mallards (increasing) and American Black Ducks and lesser numbers of Common Goldeneyes (not so common in recent years). Loons, grebes, and sea ducks are decidedly uncommon to rare in this shallow bay, which they must desert at every low tide. Wintering Cooper's and Red-tailed hawks are sometimes seen in the vicinity, their presence usually announced by flocks of crows. An American Kestrel or two may be around as well.

Spring (March through May). Spring can be productive and accounts for an impressive list of unusual birds, including Glossy Ibis, American Oystercatcher, Caspian Tern, and Loggerhead Shrike, to name a few. American Wigeon, Gadwall, and Northern Shoveler also have been recorded only in spring.

Summer (June and July). Summer is a rather slow time for birding, because most species are nesting and away from the cove. Only Killdeer, Spotted Sandpiper, and Savannah Sparrow have been confirmed breeding within the boundaries of the cove, and I suspect Mallard and American Black Duck do also. Common Terns feed along the edge of the salt marsh at high tide, and an occasional Common Nighthawk, Chimney Swift, or swallow may be seen hawking insects over the water on a summer evening.

RICHARD R. EAKIN lives in Portland, Maine, where he is professor of

biology at Westbrook College. When not birding nearby Back Cove and Evergreen Cemetery, he conducts research on Antarctic fishes and enjoys painting and photographing birds and other natural history subjects. He has traveled widely from the Antarctic to the tropics and has led trips for both Maine and National Audubon Societies.

KEY TO BIRD LIST ACCOMPANYING THIS ARTICLE.

The bird list accompanying this article contains 197 species (including two not positively identified—Northern Wheatear and Tennessee Warbler). The list represents the observations of the author and others up to the time this article was written. "Ipswich" Savannah Sparrow is recognized here, but Clapper and King rails and Alder and Willow flycatchers are not identified by sight alone. An unsubstantiated report of Snow Goose in the 1980s is not included, but I have seen the species just north of the cove in Falmouth (11 birds on March 29, 1976). Two exotics, Ruddy Shelduck and Monk Parakeet, are surprising. The latter nested, probably unsuccessfully, in Cape Elizabeth in 1979 and was eradicated.

The numbers in parentheses in the bird list indicate the number of records, not the number of individuals. A record may include one or more birds seen at a time. Dates are given as ranges (early to late); noteworthy records include day and year. Species with no dates given are common seasonally in suitable habitat. Species considered unusual to rare in Maine are indicated by an asterisk (*). Accidentals are indicated by (A).

Other symbols included in the list are as follows:

- (f) female
- (m) male
- (i) immature
- (dm) dark morph
- (d) found dead.

Red-throated Loon Apr 9	(4)	Oct 6-Nov 14;	Cooper's Hawk Northern Goshawk	(4)	Oct 28-Jan 6 Oct 26-28
Common Loon		the Later and the	Red-shouldered Hawk	(5)	Sep 11-Nov 1
Pied-billed Grebe	(3)	Oct 6-Dec 18	Broad-winged Hawk		Sep 13, 1985—
Horned Grebe	(4)	Oct 16-Nov 5	825 in 2 hours		
Red-necked Grebe	(2)	Nov 7-Feb 22	Red-tailed Hawk		sometimes winters
Great Cormorant	(2)	Sep 17-23	Rough-legged Hawk	(1)	Dec 6, 1989 (dm)
Double-crested Cormoran	t	Apr 24-Nov 22	American Kestrel		
(1 on Jan 9, 1976?)			Merlin	May	4; Sep 11-Dec 19
American Bittern	(2)	Sep 23-Oct 21	Peregrine Falcon		29; Aug-Nov 23
Great Blue Heron	* *	May 4-Oct 16	(1 reported throughout	winter	1993-94)
*Great Egret	(3)	Jun 23-Oct 17	Ring-necked Pheasant	(1)	Oct 22, 1975 (m)
Snowy Egret		Apr 10-Oct 11	Clapper/King Rail	(2)	1 dead King Rail,
Little Blue Heron	(1)	Aug 20, 1975 (i)	winter 1971-1972; 1 "I	arge"	rail Nov 20, 1972
*Tricolored Heron	(1)	Oct 17, 1977	*American Coot	(1)	Feb 1, 1924
Green Heron	(-/		Black-bellied Plover		May 22-Dec 19
Black-crowned Night-Her	on	Apr 19-Nov 12	American Golden Plover		Aug 12-Nov 11
*Yellow-crowned Night-F (immatures)		. [] - [- [] -	Semipalmated Plover Killdeer		Oct 30 (late) Mar 14-Nov 12
Glossy Ibis	(1)	Apr 26, 1982	(pair with young June	15, 19	88)
*Tundra Swan	(1)	Apr 10, 1980	*American Oystercatcher		
Canada Goose	(.)	141 10, 1700	*American Avocet	(2)	Aug 10-22, 1979;
(A) Ruddy Shelduck	(1)	Jul 29, 1982 (f)	Oct 4-31, 1990	(-,	
Wood Duck	(5)	Aug 30-Jan 5	Greater Yellowlegs		Apr 6-Nov 23
	(3)	Mar 24-Nov 20	Lesser Yellowlegs		Apr 18-Dec 10
Green-winged Teal		Will 24-110V 20	Solitary Sandpiper	(3)	Aug 13-Oct 19
American Black Duck			*Willet	(7)	May 6-Sep 16
Mallard		C - 2 M - 20	(25 on May 21, 1982;		
Northern Pintail		Sep 3-Mar 28	Spotted Sandpiper	Diccu	May 23-Sep 16
(formerly regular in w	11000	1. 15 5 4	(2 downy young July 2	22 10	
Blue-winged Teal	(2)	Aug 15-Sep 4		2, 17	Apr 23-Sep 12
*Northern Shoveler	(4)	Apr 3-May 2	*Upland Sandpiper (formerly regular in 19	200- F	
*Gadwall	(1)	Mar 25, 1994 (m)	Whimbrel	(4)	Aug 5-Sep 9
American Wigeon	(3)	Mar 12-May 4		(4)	Aug 8-Nov 5
*Canvasback	(7)	Oct 21-Apr 11	Hudsonian Godwit	0 100	
*Redhead (1)		27, 1976 (3 m)	(high count 5 on Oct 3		
Ring-necked Duck	(4)	Oct 14-Mar 7	*Marbled Godwit	(2)	Oct 13-Nov 4,
Greater Scaup		Aug 18-May 24	1960; Jan 1, 1974		Man. 17 Nau 22
*Lesser Scaup	(3)	Feb 22-Mar 14	Ruddy Turnstone	(0)	May 17-Nov 23
Common Eider			Red Knot	(8)	May 23-Sep 28
Oldsquaw	(3)	Oct 30-Apr 13	Sanderling	(4)	Aug 26-Sep 22
Black Scoter	(1)	Oct 14, 1990 (m)	Semipalmated Sandpiper		Nov 23 (late)
Surf Scoter	(1)	Oct 13, 1977 (m)	Western Sandpiper		Aug 14-Oct 30
White-winged Scoter	(1)	Oct 16, 1975 (f)	Least Sandpiper		May 3-Oct 25
Common Goldeneye		Oct 24-Apr 10	White-rumped Sandpiper		Aug 24-Nov 30
*Barrow's Goldeneye		Nov 20-Jan 19	(high count 10 on Oct	11, 19	
(high count of 23-De	ec 23,	1979)	*Baird's Sandpiper	(5)	Sep 1-26
Bufflehead		Oct 12-May 13	Pectoral Sandpiper		Aug 24-Nov 6
(1 female July 25, 19:	58)		Purple Sandpiper	(2)	Oct 17-26
Hooded Merganser		Sep 11-Jan 4	Dunlin		Sep 3-May 31
Common Merganser	(4)	Jan 2-Apr 9	(has wintered)		
Red-breasted Merganser		Oct 11-Apr 26	*Stilt Sandpiper	(1)	Sep 11, 1983
*Ruddy Duck	(3)	Oct 27-Nov 12	*Buff-breasted Sandpiper	(10)	Aug 20-Sep 19
Turkey Vulture	(4)	Sep 1-Oct 22	(high count 6 on Aug		2000
Osprey	(.,)	Apr 18-Oct 18	Short-billed Dowitcher	m1036A	Apr 23-Oct 3
(nested on trestle near	sews		*Long-billed Dowitcher	(1)	Aug 31, 1980
Bald Eagle	(9)	Sep 11-Mar 5	Common Snipe		Mar 28-Nov 23
(formerly regular in w	ATT - 127 200		(high count 5)		
	, meer)	Sep 1-Oct 29	American Woodcock	(2)	Apr 5, 1975
Northern Harrier			(flying overhead); ren	377 1754	
Sharp-shinned Hawk		1 leucistic bird,		IRILIA II	ound Dec 17, 199

Red-necked Phalarope	(2)	Aug 25-30	Tufted Titmouse		
Laughing Gull	(20.00	Apr 13-Oct 16	Red-breasted Nuthatch		
*Little Gull	(4)	Aug 2-19	White-breasted Nuthatch		
(high count 3, spring,			Brown Creeper		
*Common Black-headed		Aug 19-Apr 21	*?Northern Wheatear	(1)	Sep 8, 1986
reg winter visitor; high	h coun		American Robin		40 00000000
Bonaparte's Gull		Jul 29-Dec 2	Gray Catbird		Dec 19, 1987 late
Ring-billed Gull			Northern Mockingbird		
Herring Gull			American Pipit		Sep 16-Oct 24
*Thayer's Gull	(1)	Dec 15, 1981 (a)	(high count 18—Oct 24		
*Lesser Black-backed Gu	ll (1)	Dec 28, 1988 (a)	*Bohemian Waxwing	20.55	Feb 10-14, 1982;
Iceland Gull		Dec 18-May 1	high of 70-80—Feb 14,	1982	
(summer records; Jun	22, Ju		Cedar Waxwing	194901	Apr 18-Sep 1
*Glaucous Gull	(7)	Dec 17-Mar 30	*Northern Shrike	(2)	Dec 7-24
Great Black-backed Gull			*Loggerhead Shrike	(1)	Apr 16, 1982
*Caspian Tern	(1)	May 24, 1986 (a)	European Starling		
Common Tern		May 22-Sep 27	?Tennessee Warbler	(1)	Nov 4, 1993
(high count 30-40 Aug	22, 1	984)	Yellow Warbler		
*Forster's Tern	(10)	Aug 8-Sep 28	Yellow-rumped Warbler		May 8-Jan 26
(high count 6 on Aug	21, 19	79)	Pine Warbler	(1)	Nov 15, 1975
*Black Tern	(2)	Aug 22, 1977;	Palm Warbler		Apr 26-Nov 7
Apr 28, 1984			Common Yellowthroat		
*Black Skimmer	(2)	Jul 27, 1973;	*Yellow-breasted Chat	(1)	Jan 3-4, 1989
1969 (date unknown)			Scarlet Tanager		
*Thick-billed Murre	(1)	Mar 16, 1988 (d)	Northern Cardinal		
Rock Dove			American Tree Sparrow		
Mourning Dove			Chipping Sparrow		
(A) Monk Parakeet	(1)	Oct 25, 1985	Vesper Sparrow	(2)	Oct 7, 1984;
*Yellow-billed Cuckoo	(1)	Oct 6, 1983	Apr 29, 1994		
Great Horned Owl	(1)	Dec 19, 1993	*Lark Sparrow	(1) 5	Sep 29-Oct 1, 1990
Snowy Owl		Oct 31-Apr 15	Savannah Sparrow		Apr 9-Nov 22
25 birds, 1974-1993; h	igh co	unt 4—Jan 8, 1988	(adults seen in field wit	h foo	d for young)
*Northern Hawk Owl	(1)	Dec 12, 1981-	"Ipswich" Savannah Sparr	wo	Oct 17-Mar 28
Mar 23, 1982			*Grasshopper Sparrow	(2)	Nov 25, 1989;
*Long-cared Owl	(1)	Jan 24, 1982	Jan 10, 1991		
*Short-eared Owl	(6)	Sep 27-Apr 3	Sharp-tailed Sparrow		May 16-Dec 10
(high count 3 winterin	g, 198	1-1982)	*Seaside Sparrow	(4)	Aug 21-Sep 26
Common Nighthawk		Oct 8, 1987 late	Song Sparrow		
Chimney Swift		Jul 17-Sep 1	Lincoln's Sparrow	(1)	Nov 6, 1975
Ruby-throated Hummingh	oird	Sep 17, 1984 late	Swamp Sparrow		Oct 7-Nov 5
Belted Kingfisher		May 4-Jan 9	White-throated Sparrow		
Yellow-bellied Sapsucker		Oct 6-10	White-crowned Sparrow		Oct 10-18
Downy Woodpecker			Dark-eyed Junco		
Northern Flicker		Apr 13-Jan 25	Lapland Longspur		Sep 29-Mar 25
Alder/Willow Flycatcher		Sep 9, 1984	Snow Bunting		Oct 12-Apr 8
Least Flycatcher			Bobolink		Aug 14-Oct 26
Eastern Phoebe			Red-winged Blackbird		
Great Crested Flycatcher			Eastern Meadowlark		Mar 28-Nov 4
*Western Kingbird	(1)	Sep 14-16, 1992	*Yellow-headed Blackbird	(1)	Aug 31-Sep 6,
Eastern Kingbird			1979 (f)		
Horned Lark		Apr 3-Dec 27	Rusty Blackbird	(3)	Oct 6-Nov 8
Tree Swallow		Mar 25-Sep 15	Common Grackle	3.5	
Northern Rough-winged	wallo		Brown-headed Cowbird		
1994 (2 with Tree and		500 050	House Finch		
Bank Swallow		May 13-Jul 7	Red Crossbill	(1)	Oct 12, 1994 (f)
TOTAL DESIGNATION OF THE PARTY		Aug 25-Sep 1	White-winged Crossbill (1)		
Cliff Swallow			Common Redpoll		Dec 17-29
Cliff Swallow Barn Swallow		Apr 27-Oct 10			
Barn Swallow		Apr 27-Oct 10		(2)	Dec 17-29
		Apr 27-Oct 10	American Goldfinch House Sparrow	(2)	Dec 17-29

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THE NEWPORT-WESTPORT CHRISTMAS BIRD COUNT

by Steve Davis

Inspired by Jim Berry's analysis of the Newburyport, Massachusetts, Christmas Bird Count (CBC) (Berry 1992), I undertook a similar selective analysis of the CBC data from the Newport (RI)-Westport (MA) count. The analysis was simplified immeasurably by the careful record of data that has been kept through the years initially by Severyn Dana and more recently by Dave Emerson. To make the data more accessible to statistical analysis, I transferred it to a StatView 512 statistical software program for the Macintosh (contact the author for a copy of the data on a 3.5" disk MAC-format).

The Newport-Westport CBC has been conducted annually since 1949. This analysis includes the 1993 count, for a total of forty-five counts. The highest species count occurred in 1953 with 130, although 1971, 1983, and 1984 were close with 127, 129, and 128 species, respectively. (The species totals in this article conform to what are considered species according to the 1973 AOU list.) The low year was 1949 (most likely affected by the newness of the count and relatively small number of observers), with 92 species, and 1960 was a close second with 93 species. The average number of species identified is 115 (with a standard deviation of 8.7). The average number of species identified per count by decade is 117.2 for 1950-1959, 107 for 1960-1969, 118.5 for 1970-1979, and 119 for 1980-1989. So far, the 1990s have averaged 117.5. The highest count for total number of individual birds was in 1984 with 87,666, and the lowest was in 1949 with 9,171. The average number of total birds is about 31,666 (standard deviation of 13,900).

The species counts for each year are not entirely consistent because five of the "species" became "forms" in the 1973 AOU listing: Ipswich Sparrow, Blue Goose, Common Teal, Bullock's Oriole, and Oregon Junco. Nevertheless, by today's AOU species list, the Newport-Westport CBC has identified 214 different species and seven forms (the five above plus a Blue x Snow Goose hybrid and an Acadian Sharp-tailed Sparrow). A murre and three other unidentified alcids also have been reported.

Fifty of the species have been seen on every count (Table 1). Another twenty-four species have been missed on five or fewer counts. These latter species are listed below, with the number in parentheses representing the number of years missed:

Pied-billed Grebe (5); Mute Swan (1); Green-winged Teal (1) American Wigeon (1); Canvasback (4); Common Eider (1); Hooded Merganser (2); Ring-necked Duck (5); Ring-necked Pheasant (1, 1993); American Coot (3); Sanderling (1); Common Snipe (3); Great

TABLE 1. SPECIES SEEN IN ALL NEWPORT-WESTPORT CBCs

Numbers are the lowest count for the species.

Red-throated Loon	1	Great Black-backed Gull	72
Common Loon	26	Rock Dove	304
Horned Grebe	20	Mourning Dove	2
Great Cormorant	50	Belted Kingfisher	1
Great Blue Heron	5	Downy Woodpecker	9
Canada Goose	99	Common Flicker (no Red- shafted)	15
American Black Duck	191	Horned Lark	45
Mallard	8	American Crow	114
Northern Pintail	1	Blue Jay	26
Greater Scaup	126	Black-capped Chickadee	128
Black Scoter	9	White-breasted Nuthatch	20
Surf Scoter	15	American Robin	2
White-winged Scoter	51	European Starling	1358
Common Goldeneye	317	Yellow-rumped Warbler	25
Bufflehead	82	American Tree Sparrow	43
Common Merganser	6	Field Sparrow	6
Red-breasted Merganser	124	Savannah Sparrow	5
Northern Harrier	1	Song Sparrow	48
Red-tailed Hawk	2	Swamp Sparrow	4
American Kestrel	11	White-throated Sparrow	56
Purple Sandpiper	3	Dark-eyed Junco	13
Dunlin	9	Eastern Meadowlark	4
Bonaparte's Gull	11	Brown-headed Cowbird	2
Ring-billed Gull	33	American Goldfinch	10
Herring Gull	1050	House Sparrow	210

Horned Owl (1); Hairy Woodpecker (3, 1991 and 1992); Brown Creeper (1); Carolina Wren (1); Golden-crowned Kinglet (1); Hermit Thrush (4); Gray Catbird (1); Northern Mockingbird (3); Rufous-sided Towhee (1); Purple Finch (4); Snow Bunting (1); Red-winged Blackbird (1).

The Common Eider, Ruddy Duck (Figure 1), and American Coot have had large fluctuations in their numbers from year to year. Thus, of the 214 species identified, seventy-four are usually seen. This is similar to the forty species that Jim Berry identified for Newburyport. At least two factors contribute to the higher number of usually seen species on the Newport-Westport count: the greater total number of species (214 versus 192) and the fewer count years (45 versus 56) which makes misses less likely. The number of party hours may also be a factor in the number of species usually seen, but I do not have the data for Newburyport. Thirty-seven of the forty Newburyport species are also on the Newport-Westport "reliable" list. The three that are not on the Newport-Westport list (with the number of years that they have been recorded for Newport-Westport) are Oldsquaw (34/45), Rough-legged Hawk (29/45), and Ruffed Grouse (15/45). The very common birds, then, are quite consistent between the two counts. On the other extreme, twenty-seven species have been identified only once on the Newport-Westport count, and fourteen species have been identified on two counts (Table 2). For these two categories (once or twice seen), the only species on both the Newburyport list and the Newport-Westport list are Arctic Loon (one Newburyport count; two Newport-Westport counts), Common Moorhen (one and one), and Osprey (two and one).

Trends

Although trends are difficult to quantify, a quick perusal of the data for each species suggests that about twenty-two species have had increasing count totals:

Great Cormorant, Mute Swan, Brant, Canada Goose, Mallard, Gadwall, Canvasback, Harlequin Duck, Common Merganser, Sanderling, Ringbilled Gull, Tufted Titmouse, Carolina Wren, American Robin, Northern Mockingbird, Cedar Waxwing, European Starling, Redwinged Blackbird, Common Grackle, Northern Cardinal, Whitecrowned Sparrow, House Finch.

Of these twenty-two species, eleven are included in Jim Berry's list of increasing trends for Newburyport. Counts for Brown Thrasher have generally been five or fewer birds throughout the 1949-1993 period, except during 1960-1970, when six counts had greater than 10 birds, with a maximum count of 39 Brown Thrashers in 1970.

In the Newburyport counts the American Black Ducks have declined as the

TABLE 2. SPECIES SEEN IN ONE OR TWO CBCs

Unusual totals are in parentheses.

One Count	Two Counts
Magnificent Frigatebird	Arctic Loon
Yellow-crowned Night Heron	Pacific Loon
Fulvous Whistling-Duck (30)	Least Bittern
Tundra Swan (14)	Turkey Vulture
Golden Eagle	Osprey
Black Rail	Semipalmated Plover
King Rail	Spotted Sandpiper
Common Moorhen	Red Knot
Sandhill Crane	Least Sandpiper
Spotted Sandpiper	Blue-Gray Gnatcatcher
Semipalmated Sandpiper	Wilson's Warbler
Little Stint	Clay-colored Sparrow
White-rumped Sandpiper	Yellow-headed Blackbird
Red-necked Phalarope (7)	Hoary Redpoll
Lesser Black-backed Gull	
Common Tern	
Ash-throated Flycatcher	
Boreal Chickadee	
White-eyed Vireo	
Cape May Warbler	
Prairie Warbler	
Ovenbird	
Northern Waterthrush	
Rose-breasted Grosbeak	
Pine Grosbeak (14)	
Lincoln's Sparrow	
Harris's Sparrow	

Mallards have increased. It is not as clear an inverse relationship for Newport-Westport, where the black ducks seem to be holding their own or even increasing slightly (Figure 2), as the Mallards have increased in number.

The Lesser Scaup numbers initially decreased but more recently have increased (Figure 3). The maximum count for Eastern Bluebird was 33 birds in 1953, with a subsequent decline to zero birds in 1960. Since 1960 only 6 counts have recorded Eastern Bluebirds, with the 1991 and 1992 counts recording 3 and 4 birds, respectively.

The Ring-necked Pheasant, Evening Grosbeak, and Common Grackle numbers initially rose but recently have fallen off. The Ring-necked Pheasant pattern is probably the most characteristic and symmetric of these (Figure 4). Several other species have recently had tenuous increases: these include Northern Gannet (Figure 5), Ring-necked Duck, Hooded Merganser, Sharpshinned Hawk, Red-bellied Woodpecker, Red-winged Blackbird, and Eastern Bluebird.

Several other species had counts that declined in the 1950s, but have been relatively stable since the early 1960s. These species are Horned Grebe (Figure 6), Surf Scoter, American Wigeon, and Red-shouldered Hawk.

Eight species have clearly had a decreasing trend: Redhead, Northern Bobwhite, Hairy Woodpecker, Fox Sparrow, Eastern Meadowlark, Purple Finch, Red-shouldered Hawk, and Loggerhead Shrike. Only Red-shouldered Hawk among this list occurs also on Jim Berry's Newburyport list of declining species. Interestingly, the Purple Finch has declined, but, judging by the CBC totals, it was not very common even before the House Finch invasion in the 1970s. Counts from the mid-1950s to the late 1960s were generally about 10 to 20 birds, with three counts in this time period between 40 and 60 birds. Then, from the late 1960s to the mid-1970s, Purple Finch counts were generally between 40 and 100 birds. Since the mid-1970s, counts have been less than 40 birds, and the last 9 counts have had either no Purple Finches or only 1 or 2 birds.

There are several species whose scatterplots suggest that either they have winter irruptions, in which some winters large numbers of them are driven into our region, or they are "flockers" (i.e., usually present in flocks), which are either seen or not seen during the CBC. Common Redpolls are an example of the former (46 birds in 1968; more than two-thirds of the counts had no Common Redpolls), and Cedar Waxwings the latter. Other species that seem to fit this pattern are Vesper Sparrow, Pine Siskin, Pine Grosbeak, and Red and White-winged crossbills, the latter three of which are known irrupter species.

Graphing and analyzing the data from CBCs can also suggest areas where research is needed. The graph of the counts for Redheads (Figure 7) suggests that in 1957-1958 a population crash occurred: did the birds simply go somewhere else? was it a response to overpopulation? was it a DDT effect from

FIGURE 1. RUDDY DUCKS PER PARTY HOUR

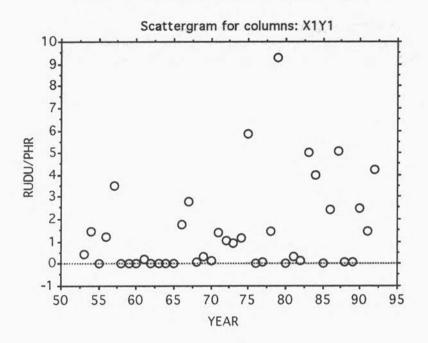
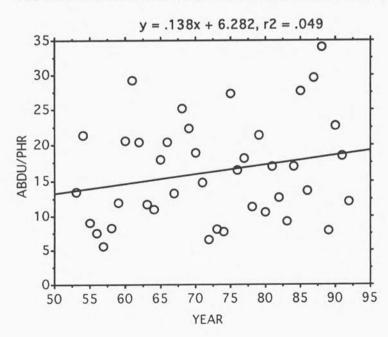


FIGURE 2. AMERICAN BLACK DUCKS PER PARTY HOUR



which the Redheads have not yet recovered? is this pattern for Redheads similar on other counts?

Other Graph Information

When comparing year-to-year CBC data, it is more accurate to use the raw totals divided by the party hours (Bock and Lepthien 1974; Kricher 1981). Because party hours may vary greatly, this adjustment helps to standardize comparisons between years and between different CBC areas. I also performed statistical analyses on the data. I derived Pearson's r correlation coefficients, which describe the relationship between two variables, and determined whether the relationship was significant (significance level 0.05). Negative correlation coefficients indicate that one variable increases while the other decreases. Positive correlation coefficients indicate that both variables either increase or decrease together. To achieve a significance level of p <0.05 for a sample size of 45 (years) with 43 degrees of freedom requires a correlation of <-0.294 or >+0.294; p<0.01 requires a correlation of <-0.380 or >+0.380.

The adjustment for party hours does not appear to be crucial for the Newport-Westport data. The average number of party hours from 1949-1993 has been 90, with a range of 68 to 123. When party hours were plotted for each year, there is a small, but statistically insignificant, decrease in party hours during the 45-year period.

Some believe that because winter can be very harsh on birds and hence reduce bird numbers either by death or emigration, CBCs that are conducted earlier in the count period have a better chance of recording more total birds and, presumably, more species. When the total number of birds counted and the number of species identified are graphed against the day of the count (all of these counts have been done in December; the counts were standardized by party hours), the data seem to provide some support for the theory (Figures 8 and 9). The statistics suggest that about 2160 fewer birds are seen and 0.8 fewer species are identified for every day later that the count occurs. The statistically significant correlations are -0.36 (p<0.05) and -0.62 (p<0.01), respectively, which suggest that these are moderately strong associations (Crow et al. 1960). It would be interesting to confirm these patterns in other count areas, to study the effect of latitude on this phenomenon, or to assess whether the slopes of the regression lines change for those counts that occur in January.

The correlations between the species totals and the numbers of birds versus party hours are also informative. I found no correlation between party hours and species total. The regression line begins at 115 species, has a slope of 0.001, and ends at 115 species. Such a lack of correlation is expected given the relatively little variation in party hours and number of species in the Newport-Westport count. Nonetheless, standardizing for party hours is important when comparing counts between CBC areas. The scatterplot of party hours and total birds also shows an insignificant relationship between the two variables.

FIGURE 3. LESSER SCAUP PER PARTY HOUR

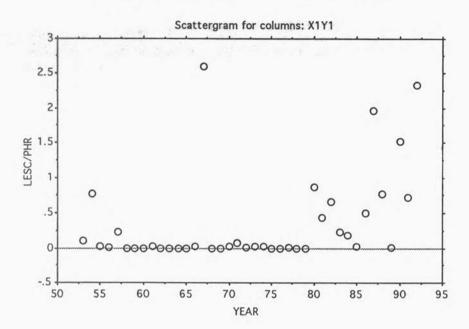


FIGURE 4. RINGED-NECKED PHEASANTS PER PARTY HOUR

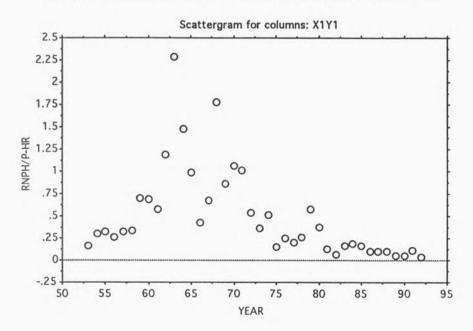


FIGURE 5. NORTHERN GANNETS PER PARTY HOUR

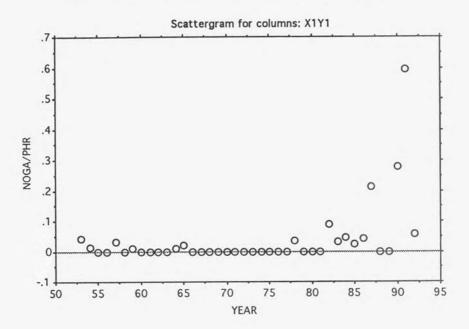


FIGURE 6. HORNED GREBES PER PARTY HOUR

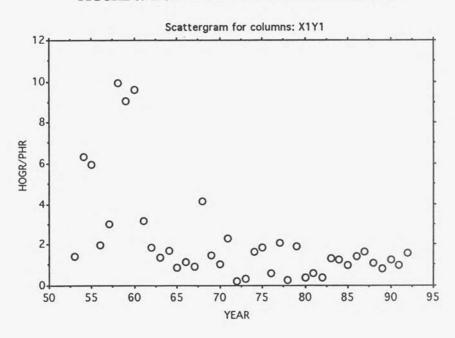


FIGURE 7. REDHEADS PER PARTY HOUR

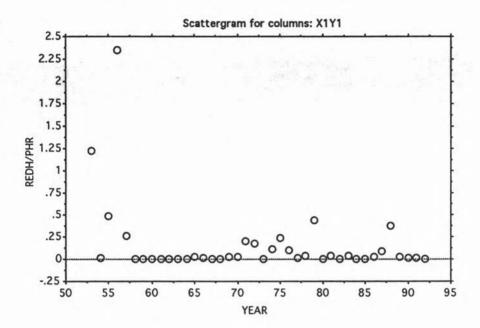


FIGURE 8. SPECIES PER PARTY HOUR BY DECEMBER DATE

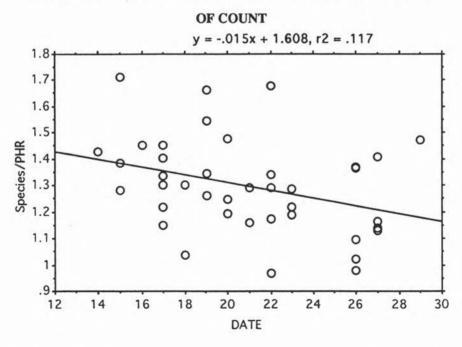


FIGURE 9. TOTAL BIRDS PER PARTY HOUR BY DECEMBER DATE OF COUNT

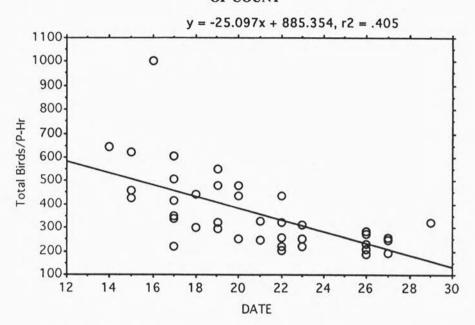
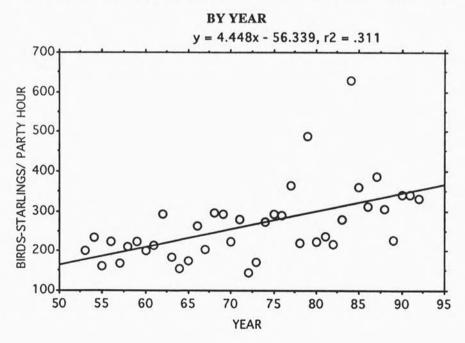


FIGURE 10. TOTAL BIRDS MINUS STARLINGS PER PARTY HOUR



Starlings and Total Numbers

I also examined the influence of the number of European Starlings on the total individual bird count (Figure 10). The total number of birds counted on the Newport-Westport CBC has increased steadily during the 45-year period reviewed in this article. There is a strong and statistically significant relationship between the total number of starlings and the total number of birds on a count. When starlings are subtracted from the total count, however, we still see an increasing and statistically significant (p<0.05) trend in the total number of birds (counts are standardized by party hours). Are there really more birds? Are we seeing a higher percentage of the birds in our circles? Are our estimates getting more generous?

When I plotted party hours against the total number of birds counted, minus the starlings, I found a statistically insignificant relationship between the two variables, suggesting that the variation in the number of party hours in our CBC area did not significantly affect the count of total number of individual birds.

Conclusions

This article summarizes trends of species seen during the 1949-1993 period of Newport-Westport CBCs. Although the number of party hours is important to standardize count totals for comparison between years and between count areas, party hours did not generally influence trends seen within the Newport-Westport counts, perhaps because the number of party hours did not vary much throughout the period.

I agree completely with Jim Berry about how American Birds (now National Audubon Society Field Notes) reports the CBCs: the tabular format is much more convenient in making comparisons between counts, in seeing where a particular species occurs, and in making comparisons from year to year.

References

- Berry, J. 1992. A Selective Analysis of Data from the Newburyport Christmas Bird Count, *Bird Observer* 20(6): 314-322.
- Bock, C.E., and L.W. Lepthien. 1974. Winter Patterns of Bird Species Diversity and Abundance in the United States and Southern Canada, American Birds, 28:556-562.
- Crow, E.L., F.A. Davis, M.W. Maxfield. 1960. Statistics Manual. New York: Dover Publications.
- Kricher, J.C. 1981. Range expansion of the Tufted Titmouse, *Parus bicolor*, in Massachusetts, *American Birds* 35(4):950-953.

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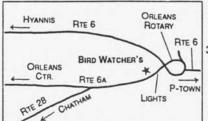
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USING CHRISTMAS BIRD COUNT DATA TO DETERMINE POPULATION TRENDS OF FIVE BIRD SPECIES

by Thomas R. Hamilton

The annual Christmas Bird Count (CBC) of the National Audubon Society represents a wealth of data. Formerly published annually in American Birds and now published in the National Audubon Society Field Notes, CBC data provide a useful way to measure long-term avian population trends (Butcher et al. 1990). During each CBC, participants fan out over an area within a radius of 7.5 miles from a central point (458 square kilometers) and record the number of birds of each species seen and the time spent seeking birds in the field or at feeders. Because the areas in which each count occurs are clearly defined, the same areas can be monitored each year. Although many variables such as weather conditions and participant numbers and enthusiasm may affect count totals, long-term population trends can be detected if short-term factors are ignored and the data are treated in a way which allows year-to-year comparisons.

The effect of inconsistencies in the way CBCs are conducted on the reliability of CBC data has been the focus of much analysis. Arbib (1981) analyzed the data from eighty-three counts in California and found that an increase in the number of observers and parties correlated with an increase in the number of species observed. He also found evidence that compilers, who are responsible for reporting CBC findings to the editors of American Birds, tend to underestimate total party hours and the number of participants. Root (1988) found that CBC data could yield a good estimate of population densities of passerines. More recently Butcher et al. (1990) compared population trends for seven species (including House Finches) based on CBCs with population trends based on the North American Breeding Bird Survey (BBS). They concluded that most of the population trends estimated from CBC data correlate with trends from BBS data. The study by Butcher et al. (1990) is an important validation of CBC data because it showed that the rather informal CBC survey technique was generally as reliable as the more rigorous and highly structured BBS. If the CBC data are reasonably well standardized and include an area that is representative of the region, then it is a reliable method of estimating long-term population trends.

Methods

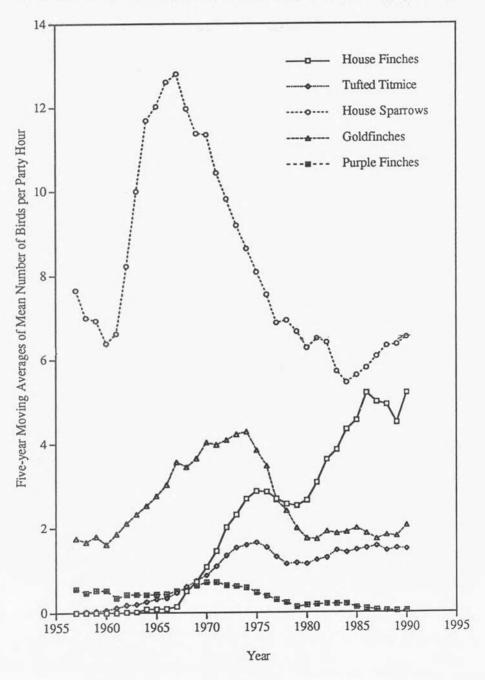
In order to look at changes in winter populations of Tufted Titmice, Purple Finches, House Finches, American Goldfinches, and House Sparrows, I analyzed data from six CBC locations in Massachusetts: Springfield, Cape Cod, Cape Ann, Marshfield, Quincy, and Worcester. I chose these areas because they had been surveyed consistently (with very few exceptions) since 1955. I chose

TABLE 1. CHRISTMAS BIRD COUNTS 1955-1992

Numbers are mean numbers of birds per party hour for six CBC sites in Massachusetts.

	House	Tufted	House	American	Purple
	Finch	Titmouse	Sparrow	Goldfinch	Finch
1955	_	_	9.57	2.33	0.82
1956			5.29	0.87	0.08
1957	-	0.01	10.86	3.09	0.43
1958	-		8.87	1.54	1.33
1959			3.66	0.92	0.13
1960		0.12	6.32	1.91	0.36
1961		0.06	4.95	1.51	0.37
1962		0.12	8.14	2.17	0.40
1963		0.29	10.03	2.76	0.46
1964	0.05	0.30	11.68	2.20	0.51
1965	0.05	0.22	15.20	2.99	0.38
1966	0.33	0.37	13.38	2.51	0.32
1967	0.01	0.41	9.81	3.32	0.48
1968	0.03	0.41	12.95	4.09	0.48
1969	0.29	0.92	12.64	4.87	0.89
1970	1.86	0.94	11.04	2.43	0.55
1971	1.44	1.03	10.43	3.51	0.77
1972	1.76	1.08	9.67	5.24	0.88
1973	1.89	1.48	8.38	3.81	0.49
1974	3.11	2.20	9.55	5.42	0.52
1975	3.37	1.86	7.92	3.12	0.44
1976	3.30	1.36	7.65	3.82	0.60
1977	2.67	1.36	6.87	2.99	0.28
1978	1.82	0.89	5.70	1.96	0.10
1979	2.26	1.06	6.20	1.39	0.08
1980	2.75	1.02	8.21	1.85	0.11
1981	3.10	1.47	6.29	1.76	0.08
1982	3.30	1.24	4.93	1.76	0.47
1983	3.94	1.36	6.82	1.87	0.17
1984	4.99	1.34	5.74	2.30	0.19
1985	3.91	1.9	4.76	1.63	0.08
1986	5.54	1.22	4.95	1.89	0.11
1987	4.36	1.55	5.79	2.24	0.05
1988	7.16	1.56	7.72	1.27	0.03
1989	3.95	1.62	7.12	1.62	0.03
1990	3.59	1.34	6.02	2.09	0.02
1991	3.43	1.49	5.11	1.77	0.05
1992	7.85	1.47	6.66	3.52	0.09

Figure 1. Mean number of birds per party hour for House Finches, Tufted Titmice, House Sparrows, American Goldfinches, and Purple Finches for six CBC sites in Massachusetts, 1955 to 1992. Five-year moving averages.



these species because they had been the focus of a study that I conducted while a graduate student in Indiana (e.g., Hamilton and Wise 1991). I am not aware of recent population studies of these species in Massachusetts. Because the number of participants and the total number of hours spent searching for birds varied from year to year and site to site, it was important that the data be standardized to enable year-to-year comparisons. Bock and Lepthien (1974) found that CBC data could be standardized to a constant reference value by dividing the total number of birds counted in a CBC area by the total number of party hours spent searching for birds. This produced a unit called birds per party hour for each species in each CBC site. I calculated the mean number of birds per party hour for all six sites for the years 1955 through 1991. I then calculated five-year moving averages for each species by averaging the counts from five years around each date (i.e., the two years before, two years after, and the count on that date). Five-year moving averages smooth the lines illustrated in the graph in Figure 1, thus making it easier to illustrate general trends.

Results and Discussion

The introduction and subsequent expansion of House Finches in eastern North America have been well documented (Hill 1993; Hamilton 1992). The first Massachusetts CBC to include House Finches was Quincy in 1959. After a few years the population of House Finches in eastern Massachusetts went through a rapid expansion (Figure 1), reaching an average of 7.16 birds per party hour in 1988; however, between 1989 and 1991 the counts were approximately half that value. The 1992 count, however, was at a record high of 7.85 House Finches per party hour for the six CBC sites in this study (Table 1). The type of growth curve generated by the House Finch data is characteristic of a species that is introduced into an environment in which there are few initial restraints on population growth. It is not yet clear how much more the House Finch population in Massachusetts will continue to grow.

Another species that has expanded into New England over the last few decades is the Tufted Titmouse. This species was first included in a Massachusetts CBC in 1955, and the northerly expansion of its winter range was clearly documented by subsequent CBCs (Kricher 1981). The graph shows that the expansion of the Tufted Titmouse population has not been as dramatic as the expansion of the House Finch population; however, they are now a well-established component of the New England avifauna.

The data illustrated in the graph show that the House Sparrow population increased during the 1960s, but since 1970 the population has returned to its pre1960 levels. Future trends with House Sparrows bear watching because studies have shown that the House Sparrow population decline is correlated with the dramatic increase in House Finches (Kricher 1983) and House Finches are dominant to House Sparrows at winter feeding stations (Hamilton 1993).

Although Purple Finches do not appear to have been very common in eastern Massachusetts before the arrival of House Finches, the species may be in a long-term decline. Prior to 1978 most counts for the six CBCs were between 0.4-0.8 birds per party hour; since 1978, most counts have been less than 0.1 birds per party hour. Shedd (1990), in a study of House Finch-Purple Finch interactions at winter feeding stations in Virginia, suggested that Purple Finches are poor competitors with House Finches and are therefore under serious pressure during severe winters. The correlation between the dramatic increase in House Finches and the decline in the number of Purple Finches adds some credence to this theory.

The data illustrated in Figure 1 show that American Goldfinches went through a population expansion during the period between 1962 and 1974; however, the population returned to pre-1962 levels after 1974 at about the time that the House Finch population was rapidly increasing. The trend for goldfinches is very similar to the trend for House Sparrows discussed above. It is not clear whether House Finches have had an effect on goldfinches in Massachusetts, although the data suggest that the population has remained fairly constant since 1974. In a similar study of goldfinches in the Midwest, these birds experienced a gradual increase during the period of time when House Finches were rapidly expanding (Hamilton and Wise 1991). Perhaps the reason goldfinches in the Midwest increased in population can be attributed to the increasing popularity of backyard bird feeders.

Conclusions

This study of CBC data shows that over the last thirty-five years the winter avifauna of eastern Massachusetts has experienced several changes. House Finches and Tufted Titmice are now ubiquitous species, especially at winter feeding stations. Purple Finches, already uncommon, appear to have declined since the late 1970s. House Sparrows and American Goldfinches showed similar population trends, with population expansion in the 1960s, followed by a decrease in population to pre-1960 levels.

References

- Arbib, R.S. 1981. The Christmas Bird Count: Constructing an "Ideal Model." Pages 30-33 in C.J. Ralph and J.M. Scott (eds.) Estimating Numbers of Birds: Studies in Avian Biology, Number 6. Lawrence, Kansas: The Cooper Ornithological Society.
- Bock, C.E., and L.W. Lepthien. 1974. Winter Patterns of Bird Species Diversity and Abundance in the United States and Southern Canada, American Birds 28:556-562.
- Butcher, G.S., M.R. Fuller, L.S. McAllister, and P.H. Geissler. 1990. An Evaluation of the Christmas Bird Count for Monitoring Population Trends of Selected Species, Wildlife Society Bulletin 18:129-134.
- Hamilton, T.R. 1992. House Finch Winter Range Expansion as Documented by

Christmas Bird Counts, 1950-1990, Indiana Audubon Quarterly, 70:147-150.

- Hamilton, T.R. 1993. House Finch Dominance at a winter feeding station in Indiana, Indiana Audubon Quarterly 71:21-24.
- Hamilton, T.R., and C.D. Wise. 1991. The Effect of the Increasing House Finch Population on House Sparrows, American Goldfinches, and Purple Finches in Indiana Audubon Quarterly 69:251-254.
- Hill, G.E. 1993. House Finch (Carpodacus mexicanus). In The Birds of North America, Number 46 (A. Poole and F. Gill, eds.). Philadelphia: The Academy of Nature Sciences. Washington, DC: The American Ornithologists' Union.
- Kricher, J.C. 1981. Range Expansion of the Tufted Titmouse (Parus bicolor) in Massachusetts, American Birds 35:750-753.
- Kricher, J.C. 1983. Correlation between House Finch Increase and House Sparrow Decline, American Birds 37:358-360.
- Root, T. 1988. Atlas of Wintering North American Birds: An Analysis of Christmas Bird Count Data, Chicago: University of Chicago Press.
- Shedd, D.H. 1990. Aggressive Interactions in Wintering House Finches and Purple Finches, *The Wilson Bulletin* 102:174-178.

THOMAS R. HAMILTON is an instructor at Phillips Academy in Andover, Massachusetts. This study was supported by a summer grant from the Kenan Charitable Trust Fund of Phillips Academy. Appreciation is extended to the staff of The Peabody Museum of Salem, Massachusetts, who made available their complete collection of *American Birds*. The author is also grateful to J.A. Hamilton who made many helpful suggestions about this study.



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BOOK REVIEW: Dean of Birdwatchers: A Biography of Ludlow Griscom

by Richard K. Walton

Dean of Birdwatchers: A Biography of Ludlow Griscom by William E. Davis, Jr. 1994. Smithsonian Institution Press: Washington and London. \$29.95 (cloth).

In baseball there's the Babe, among philosophers Kant, in software Bill Gates, and in the world of birding Ludlow Griscom. Ludlow who? It is a sad matter of fact that among the large and ever-growing group of birders in the late twentieth century there are many who are unacquainted with Ludlow Griscom.

Fortunately, there is now a remedy to this unhappy situation. Ted Davis' new biography lavishly details the life of Ludlow Griscom, a man who profoundly influenced the sport of birding. While it may be hyperbole to say that Ludlow Griscom (or anyone else) *invented* birding, he as much as anyone influenced how we play the game. From the binoculars slung around our necks to the field guides stuffed under the seat, from daily lists to "Big Days," and from Christmas Bird Counts to life lists—in each of these aspects of modernday birding we find the hand of Ludlow Griscom. Davis' account gives each of us an opportunity to rediscover our roots. In the life of Ludlow Griscom we find many, if not all, of the forces that define our pastime. But be forewarned, this Griscom is no Prince Charming.

Davis' book is divided into five parts: The Early Years, Ornithology, In the Field, Conservation, and the Final Years. The author draws on a wealth of letters, journals, and other published materials. More significantly, Davis' personal interviews with dozens of Griscom's colleagues, companions, and family members present his readers with a fascinating and instructive array of anecdotes, insights, and reminiscences. It is this collection of first-person accounts that are the strength of this work.

Ludlow Griscom seems to have spent most of his life in a vortex—not as a hapless victim of circumstances but rather as a prime mover of the maelstrom. At home Griscom rejects his parents' desires for a law career and passionately embraces his interest in birding and ornithology. In *amor*, Ludlow chooses a woman whose initial impressions of her suitor are of a man given to chauvinism and woman-hating. In the bosom of his family Griscom fosters intense competition with his children over the attentions of Edith Griscom. At the office he displays a knack for polarizing fellow staffers, usually into pro- and anti-Griscom camps. In the field Ludlow's "in your face" brand of quick-draw, self-assured identification does little to attract admirers. One of his contemporaries described Griscom as "the only man he had ever seen who could strut sitting down."

But there is another side to Ludlow Griscom. Picture the perfect host entertaining house guests with an after-dinner concert of Chopin and Liszt. Consider the ever enthusiastic mentor willing, indeed eager, to take time with a rank amateur. This too is Ludlow Griscom. Indeed, among a select group of followers, going afield with Ludlow was very special. One devotee, Juliet Richardson, put it this way: ". . . if you were included in the charmed circle—I can't tell you what it meant, my life was transformed—I didn't care how early I got up in the morning, and I'd often wait if I was invited to something else to see if I was going to be invited on a field trip . . ." Never mind that Griscom might send you off to flush birds out of the poison ivy or invariably need another hand to extricate his vehicle from the sand. For the chosen few Griscom was god-like, and even now those golden days in the field with Ludlow are cherished memories. One can even find a touch of droll humor about Griscom as he describes eating giant-swift (not crow!) pie in the mountains of Panama and retrieving herons in the mangrove swamps of Belize.

Griscom's considerable organizational efforts are also covered in detail by Davis. While his work as a professional ornithologist at the American Museum of Natural History and the Museum of Comparative Zoology is of some interest, Griscom's contributions to conservation and education are perhaps more notable. In particular, Griscom's important role in the creation of the Boston Museum of Science will be a revelation to most. I assume that those with an interest in professional ornithology will mine these sections of the book, while those interested in organizational history will dwell on Davis' treatment of Griscom and the National Audubon Society, the Massachusetts Audubon Society, and the American Ornithologists' Union.

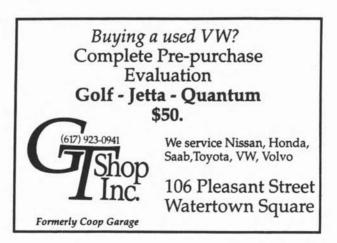
All in all, the general reader may, like the reviewer, be more inclined to linger over the personal portrait of Ludlow Griscom and his passion for birds in the field. This is the man who personified the shift away from shot-gun ornithology to the present wave of avocational birding. Davis' book gives each of us the opportunity to experience these beginnings—in the company of one of birding's most controversial characters.

I never met Ludlow Griscom. Over the last two decades, however, I have heard numerous "Griscom stories" and gradually developed a nagging question about just what kind of man he really was. As I turned the last page in Ted Davis' biography, I had made up my mind. Dean of Birdwatchers: A Biography of Ludlow Griscom will give you the opportunity to do the same.

RICHARD K. WALTON has coauthored with Robert W. Lawson several Birding By Ear guides: Birding By Ear: Eastern (1989); Birding By Ear: Western (1990); and More Birding By Ear: Eastern and Central (1994). Dick is also the author of Birds of the Sudbury River Valley (1984), published by the Massachusetts Audubon Society.

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BIRD SIGHTINGS JULY 1994 SUMMARY

Snowy Plover June 23, 1994 Yarmouth, MA Photo by Robert Stymeist



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

July was very hot, with an average temperature of 77.5° in Boston, tying 1952 as the second hottest July in 124 years. The temperature reached 97° on July 21 during an eight-day heat wave (July 19-26), which also tied for the second longest heat wave on record. The first was July 3-11 1912. The 90° mark was reached or exceeded on 15 days, a new record for any month. Rainfall totaled 1.80 inches in Boston, 1.04 inches less than average. The dry weather of June continued through most of July. Some local areas did have heavier rain. For example, in northern Middlesex County, Townsend reported 5.34 inches of rain. R. H. S.

LOONS THROUGH WOODPECKERS

July represents one of the low points of the birding year, at least in terms of birder activity. Passerines are for the most part quiet and busily flitting about trying to satisfy the constant demands for food of nestlings and fledglings. However, the southward shorebird migration begins in earnest shortly after the beginning of the month, and by the end of the month some species are at or near their peak numbers. Although coverage diminishes from the frenzy of May migration, there is still enough interest and birds to amply fill these pages.

A Red-throated Loon in Provincetown was an uncommon summer sight. The Pied-billed Grebes referred to last month produced at least one young in Brookline. For the third consecutive summer, a Red-necked Grebe was observed, this time in East Gloucester. Prior to 1990 there were only four reports of individuals during the summer months. This year's increase in pelagic sightings is mainly due to an extended trip to the continental slopes of Georges Bank. The usual complement of shearwaters from that area included two Audubon's, which have proven to be regular in limited numbers during the appropriate season. Very good numbers of storm-petrels were also reported well offshore, including 55 Leach's Storm-Petrels which is probably typical of that area in midsummer. Also reported from the area was a White-faced Storm-Petrel. which, like Audubon's Shearwater, is probably annual in small numbers along the continental slope. What is most interesting about this report is that it occurred in early July. Most sightings have been in late August or early September, which, not coincidentally, is when the relatively few trips to this area have been undertaken. The precise status and annual variations of the avifauna of this region is still in its infancy. Rounding out the list of birds recorded on this trip is an adult Long-tailed Jaeger. Awaiting further details from this venture are sightings of two to four Band-rumped Storm-Petrels and 12 Parasitic Jaegers, which may actually have been Long-tailed Jaegers because Parasitics are extremely rare if not unrecorded from this area.

An intriguing and detailed report of an **Anhinga** was received from Stow and awaits determination by the Massachusetts Avian Records Committee. Heron reports were sparse, although the elusive Least Bittern was fairly well reported. A count of 150 Black-crowned Night-Herons in Sudbury was very high for the location as were 104 Glossy Ibis at Plum Island, presumably at a night roost. There were fewer than the usual scattered reports of summering waterfowl. Most unusual among the raptors was a Merlin observed at Plum Island. Midsummer reports for this species are very scarce and should be carefully documented. A pair of Common Moorhens and 4 downy young were observed at Plum Island. This is the first proven nesting at that location since 1986. A **Sandhill Crane** seen at the Barnstable Airport was a rare midsummer sighting.

The shorebird migration proceeded apace in a timely fashion. The only outstanding rarity was the Snowy Plover that continued from June at Seagull Beach in West Yarmouth until at least July 11th. Rarities of annual occurrence included an American Avocet at South Beach/North Monomoy and a Curlew Sandpiper at Plymouth Beach. Species reported in good numbers included Black-bellied and Semipalmated plovers, Greater and Lesser yellowlegs, Whimbrel, Sanderling, Semipalmated Sandpiper, and Short-billed Dowitcher. Four reports of Ruff may actually have been only three individuals. Hudsonian Godwit, Stilt

Sandpiper, and Long-billed Dowitcher numbers were respectable, but numbers should increase in August. White-rumped and Pectoral sandpipers were slow to arrive. An adult Baird's Sandpiper late in the month inland at Holden was very unusual. Adults of this species are seldom encountered in Massachusetts and are as likely inland as along the coast. The same location in Holden hosted a rare inland Wilson's Phalarope.

A Laughing Gull found inland at the Wachusett Reservoir in Clinton may represent a first record for Worcester County. Reports of two Little Gulls and three Common Black-headed Gulls were about average for summer. A Caspian Tern at Nauset was unusual for midsummer, and up to three Royal Terns at Lynn were unusual for the location. A small influx of both Forster's and Black terns late in the month were vanguards of the southbound migration.

Both cuckoo species continued to be well reported albeit in lesser numbers than the previous month. Vying for top honors in the *rara avis* category was an adult male **Rufous Hummingbird** present in South Acton from July 26 through the end of the month. The bird was seen feeding on bee balm and was seen in direct comparison with a male Ruby-throated Hummingbird. Rufous Hummingbird is a very early migrant in its normal range and the timing of the report is consistent with other scarce reports of adult males seen in the northeast. The Red-headed Woodpeckers nesting in Sherborn successfully reared one young.

R. A. F.

Date	Location	Number	Observers	Date	Location	Number	Observers
Red-throa	ited Loon			16	Lynnfield	1	J. Hoye#
31	P'town (R.P.)	1	M. Pelikan	25	Wayland	2	R. Forster#
Common				Great Bl	ue Heron		
11	Arlington	1	L. Taylor	2	Sudbury	15	R. Forster
17	P.I.	6	W. Petersen	24	GMNWR	26	J. Center
19	Wareham	22	M. LaBossiere	Great Eg			
27			ide W. Petersen		Arlington	1	M. Rines
30	Plymouth B.	12	R. Stymeist#	24	GMNWR	2	S. Perkins
Pied-bille		12	ic. Stylicistii	28	P.I.	50+	M. Pelikan
thr		1 ad + 1 yg	E. Crowlev#	29	Holden	1	B. Blodet
Red-neck		1 au + 1 yg	E. Clowicy#	Snowy E			D. Diodet
		1	E. Randall	28	P.I.	200	M. Pelikan
11	E. Gloucester	1	E. Randan		ue Heron	200	IVI. I CIIKAII
	nearwater	2.1	M. Caalan	11	P.I.	6 PI	BC (B. Howell)
5-8	Hydrog. Cany		M. Gooley		5 3 5 5 5 5 5 5	ОВ	BC (B. Howell)
28	Nantucket	120+	B. Perkins		ed Heron	1-3	V 0
	hearwater	10	1 0' '	thr	P.I.		V. 0.
2	Jeffrey's L.	10	I. Giriunas	5	WBWS	1	S. Geary
5-8	Hydrog. Cany	on 600	M. Gooley	Cattle E		10	f D
31	Stellwagen	50	B. Volkle	thr	Ipswich	10 ma	x J. Berry
Sooty Sho				Green H			
2	Jeffrey's L.	3	I. Giriunas	16	GMNWR	11	M. Lynch#
5-8	Hydrog.	25	M. Gooley	23	P.I.	6	M. Lynch#
3	P.I.	3 (3. d'Entremont#	24	Stow	12	M. Lynch#
Manx Sh	earwater			Black-cr	owned Night-He		
17	Rockport (H.I	P.) 2	M. Lynch#	1	Watertown	66	R. Stymeist
31	Stellwagen	1	B. Volkle	2	W. Newton	25	M. Murphy
Audubon	's Shearwater			4	Sudbury	150	E. Taylor
5-8	Hydrog. Cany		M. Gooley	9	Boston H.	16	J. Hoye#
Wilson's	Storm-Petrel			24	GMNWR	18	S. Perkins
5-8	Hydrog.	1100	M. Gooley	30	Lawrence	32	J. Hogan
17	Rockport (H.)		M. Lynch#	Yellow-	crowned Night-H	eron	
	Nant, Sound	1000+	B. Perkins	3	Gallops I. (B.I		R. Stymeist#
24	Jeffrey's L.	254	D. Chickering	3-21	P.I.	2-4	V. O.
27	Stellwagen	2400+	P. Trimble	13	Wareham	2 ad	M. LaBossiere
	ced Storm-Pet			18	Lakeville	1 ad	K. Rodman
5-8	Oceanog. Car		M. Gooley	30	Newburyport	1	M. Lynch#
	Storm Petrel	ilyon 1	iii. Gooley	Glossy I		- 2	
5-8	Hydrog. Cany	von 55	M. Gooley	thr	N. Monomov	14 ma	x B. Nikula#
Northern		yon 55	IVI. Gooley	2	Ipswich	14	J. Berry
3	Jeffrev's L.	1	I. Giriunas	11	P.I.		BC (B. Howell)
					9 Revere	11.3	J. Berry
17	Rockport (H.)		M. Lynch#	19	N. Dartmouth		T. Aversa
	(details submit	1	B. Parker		r Swan (probable		1. Aveisa
4	Stow	1	b. Parker		1 P.I.		V. O.
American			0.0.1		I P.I.	2, 1	V. O.
9	Stow	1	C. Cook	Brant	Lavalle L /D L	1) 1	p vall
17	GMNWR	1	C. Cook	3	Lovells I. (B.F	ł.) l	R. Kelly
17	P.I.	2	W. Petersen#	Wood D		10	1.0
Least Bit				2	Ipswich	15	J. Berry
4	Salem	3	J. Hoye#	9	Wakefield	38	P. + F. Vale
	P.I.	2-4	V. O.	16	GMNWR	150+	M. Lynch#

	ick (continued)	- 1.32		3		f + 8 yg	G. LaCroix
24	Stow	45	M. Lynch#		Bobwhite		
28	P.I.	12	J. Hoye#	1	Sherborn	1	
	inged Teal	-		10	W. Bridgewater	r I G.	d'Entremont#
17	P.I.	10	W. Petersen#	Virginia	and the second s		
Mallard	12210202000	2225		3	Salem Lynnfield	1	J. Hoye# J. Hoye# M. Lynch#
16		120+	M. Lynch#	16	Lynnfield	_2	J. Hoye#
Northern		22	2002	24			144, 25, 11011
15	P.I.	1	R. Forster	28	P.I.	or + 6 yg	K. Hamilton
Gadwall	12.12	32 22	224 22 70	Sora			0.00
7, 20		63, 55	W. Drew#	4	Salem	1	J. Hoye#
	n Wigcon				Moorhen		
7	P.I.	4	W. Drew#	3	Wakefield	. 1	P. + F. Vale
Common		_				ad + 4 yg	
17	Rockport (H.P).) 7	M. Lynch#	31	Stow	2	R. Bradbury
	inged Scoter			Sandhill			
22	P.I.	1	R. Forster	. 7	Barnstable	1	A. Jones
	Merganser				llied Plover		
10	Quabbin (G45		M. Lynch#	26	Duxbury B.	55	K. Anderson#
	sted Merganser			30	Chatham (S.B.)		B. Nikula#
3	P.I.	1 (G. d'Entremont#	31	N. Monomoy	1200+	M. Lynch#
Turkey V			rae raeramon	Snowy P		4.	
19	Sharon	4	K. Holmes	1-11	Yarmouth	1	V. 0.
30	Haverhill	14	J. Hogan		nated Plover		Name and American
Osprey				24	GMNWR	5	S. Perkins
3	S. Carver	1	K. Anderson	26	Duxbury B.	325	MBO
7	S. Dart. (A.Pd	1) 8	LCES (J. Hill)	27	Plymouth Beac	h 157	MBO
10	Lakeville	2 ad + 3 y	yg R. Turner	30	Holden	1	R. Bradbury B. Nikula#
21	P.I.	2	J. Hoye#	30	Chatham (S.B.)	400	B. Nikula#
24	Arlington	1	M. Rines#	31	N. Monomoy	1500+	M. Lynch#
Bald Eag	gle			Piping P	lover		
3	Holden	1 ad	M. Lynch#	7, 28	S. Dart. (A.Pd)	2. 13	LCES (J. Hill)
19	Plymouth	1	S. Cloutier	23	PI	9	J. Center
21	Nantucket	1 imm	E. Ray	26	Duxbury B.	8	MBO
25	GMNWR		M. McLaughlin	27	Duxbury B. Plymouth B.	1	MBO
Northern				30	Chatham (S.B.)	35	J. Center MBO MBO B. Nikula#
15	Cumb. Farms	1 m	T. Aversa	Killdeer		0.000000	200 A. C.
17	P.I.	1 f		9	Halifax	10	K. Anderson
23	N. Monomoy			16		135	M. Lynch#
Cooper's			0.110,0	26	Duxbury B.	12	MBO
4	Easton	1	K. Ryan		n Oystercatcher	1.2	
15	Cumb. Farms		K. Anderson	thr	N. Monomoy	37 max	v. o.
22	Rowley	i	R. Forster#	3	Lovells I. 4		R. Stymeist#
	Goshawk	•	It. I distern		n Avocet	aa . 1 , 5	ic. Otymoista
3	Rutland	1 ad	M. Lynch#	27	S.B./N. Monon	nov I	R. Prescott#
15	Lakeville	1	T. Aversa		Yellowlegs	109 1	ic. i lescotti
	ildered Hawk	-1	1. Aveisa	2, 23	P.I.	7, 60+	M. Lynch#
thr	Boxford	1-2	J. Brown#	26	Durbun P	7, 60+ 22	MBO
thr		5	E. Taylor		Duxbury B. ellowlegs	22	MIDO
	Sherborn	1-2	K. Anderson		CHOWICES		D Foretor#
thr	Middleboro			22 Salitamu	Newbypt H.	700	R. Forster#
19	Fall River	1 ac	f T. Aversa		Sandpiper		D. Diadast
	inged Hawk	1 - 4	1 D	6	Holden	1	B. Blodget
4	Assonet	1 ad	J. Berry		Wellesley	2, 4	R. Forster
19	Fall River	3	1. Aversa		Cumb. Farms		K. Anderson
21	Avon	1	G. d'Entremont	17	P.I.	1	W. Petersen#
26	Easton	pr	T. Aversa	24, 31	GMNWR	2, 2	J. Center
27	Sharon	2 n	K. Holmes	Willet			
Red-taile				thr	N. Monomoy	200 ma	
thr	Sherborn	6	E. Taylor	2	Rowley	6	J. Berry
30	Ipswich	4	J. Berry	7, 28	S. Dart. (A.Pd)		LCES (J. Hill)
	n Kestrel			18	P.I.	42	P. + F. Vale
1	Taunton	1	G. d'Entremont	Spotted S	Sandpiper		
	Millis	2	E. Taylor	3	Lovells I. (B.H.		R. Stymeist#
6	W. Roxbury	4	T. Aversa	26	Cumb. Farms	5	K. Anderson
		1)		26	Duxbury B.	7	MBO
6 29	details submitted		R. Forster	27	Plymouth B.	8	MBO
6 29	details submitted P.I.	1	R. POISICI				
6 29 Merlin (6 22	P.I.	1	R. Poisici				ocations
6 29 Merlin (c 22 Peregrine	P.I. e Falcon			thr	Reports of indiv		ocations
6 29 Merlin (c 22 Peregrine 3	P.I. e Falcon Boston	1	R. Stymeist#	thr Upland S	Reports of individual andpiper	r. from 5 l	
6 29 Merlin (c 22 Peregrine	P.I. e Falcon Boston			thr	Reports of indiv		R. Forster# T. Aversa

	Sandpiper (conti	nucd)	R. Forster#	26 27	Duxbury B. N. Monomov	76 1500	MBO B. Nikula#
28 Whimbre	P.I. el	1		27	Plymouth B.	6	MBO
5 21	Yarmouth Nantucket	1 15	T. Aversa# E. Ray		lled Dowitcher 8 P.I.	4, 20+	R. Forster#
24	P.I.	8	P. + F. Vale	Common		3.34 -5.2.0.	
26	Duxbury B.	6	M. Kasprzyk	15	Cumb. Farms	2	T. Aversa
30	N. Monomov		V. Harrington#	28	P.I.	1	R. Forster#
100000000000000000000000000000000000000	an Godwit	020			n Woodcock		
9, 31		25 R For	ster, M. Lynch	8	Lexington	1	M. Pelikan
24	Chatham (S.B		B. Nikula#	18	N. Middleboro	1	K. Holmes
Marbled			510 -1-1	30	lpswich	1	J. Berry
3-31	N. Monomov	3 mas	V. O.	ANTE (55.5)	Phalarope		
	Plymouth B.	2	MBO	3, 30		1	V. 0.
	urnstone			22	Holden	1	B. Blodget
26	Duxbury B.	3.3	MBO	Pomarin	e Jaeger		
27	Plymouth B.	22	MBO	18	P'town (R.P.)	1	P. Trimble
30	Newburyport	2	M. Lynch#	Parasitio			
30	Marblehead	3	N. Nash	2	7 mi. N. of R.P.	1	P. Trimble
31	N. Monomov	140+	M. Lynch#		iled Jaeger		
Red Kno				5-8	Hydrog. Canyor	n I ad	M. Gooley
17	P.I.	6	W. Petersen#	Laughin			0.73 (************************************
	Chatham (S.B		0 B. Nikula#	12		(details)	R. Bradbury
26	Duxbury B.	400	MBO	17	Rockport	1	M. Lynch#
Sanderli				23	P.I.	6	M. Argue#
23	Revere, Lynn	300 700	P. + F. Valc	Little G			
26	Duxbury B.	125	MBO	1-19	N. Monomov	118	B. Nikula#
27	Plymouth B.	1000	MBO	21	P.I.	118	J. Hove#
30	Chatham (S.B		B. Nikula#		n Black-headed Gr		
	mated Sandpiper		Lo. 1 million	1	N. Monomoy	118	B. Nikula#
17	Newburyport	3000	W. Petersen#	19	Nauset	118	S. Geary
19	Lynn B.	800	R. Forster	30	Newburyport	1 ad	J. Berry
24	GMNWR	15	S. Perkins		te's Gull		
26	Duxbury B.	2400	MBO	1-24	N. Monomoy	12 max	B. Nikula#
27	Plymouth B.	5000	MBO	17	Newbypt/P.I.	75	W. Petersen#
31	N. Monomoy	3500+	M. Lynch#	23	Lynn	104	P. + F. Vale
	Sandpiper	5500	ivi. Lynein	Ring-bil			
1	N. Monomov	1	B. Nikula#	15	P.I.	2 juv	R. Forster
24	Chatham (S.B	5.0	B. Nikula#	19	Lynn	200	R. Forster
Least Sa		.,	D. Ivikulus	Caspian			
thr	N. Monomoy	400 ma	x B. Nikula#	13	Nauset	1	S. Geary
9, 15			K. Anderson	21	Eastham	2	R. Blake
24	GMNWR	125	S. Perkins	Royal To		-	
and the second s	imped Sandpiper		S. I CIKIIIS		Lynn	1-3 I (Quigley + v. o.
1, 19		2, 2	B. Nikula#	21	Eastham	1	Ř. Blake
28	P.I.	1	J. Hoye#	22	N. Monomov	i	B. Nikula#
	Sandpiper		J. Hoyen	Roseate			D. Fillian
	Holden	1 ad	B. Blodget	24	Chatham (S.B.)	700+	B. Nikula#
	Sandpiper	r au	D. Diouget	Commo		700	D. THRUIU
17	Squantum	1+ (G. d'Entremont		Arlington	2	T. LaCroix#
26	Duxbury B.	4	MBO	Forster's		2	1. Ducton
27	Plymouth B.	1	MBO	24	S.B., N. Monon	nov 4 3	B. Nikula#
28	Newburyport	5	R. Forster#	Least Te		110y 4. 3	D. IVIKUIA
30	GMNWR	2	E. Taylor	3	Lovells I. (B.H.) 45+	R. Stymeist#
Dunlin	GIVINWK	2	L. Taylor		S. Carver	2	K. Anderson
thr	N. Monomov	5 ma	x B. Nikula#	30	Wellfleet	45	M. Pelikan
	Sandpiper	J IIIa	A D. INIKUIA#	Black To		45	IVI. I CIINGI
29		1 ad	MBO	24	Chatham (S.B.)	7	B. Nikula#
Stilt San	Plymouth B.	1 au	IVIDO	29	Plymouth B.	4	MBO
		2, 24	R. Forster#	29	S. Monomov	8	T. Raymond
28 29	Newbypt, P.I.	17		Black SI		0	1. Kaymond
	S. Monomoy	17	T. Raymond	24	Chatham (S.B.)	2	V. Laux#
Ruff	Manufacture	Las	D. Hail		illed Cuckoo	2	v. Laux
2	Newburyport	1 m	R. Heil	3		2	M. Lynchi
5	Penikese I.	-	T. French		Rutland		M. Lynch#
14	Newburyport	1 m	M. Pelikan	10 12	W. Bridgewater Freetown	4 G.	d'Entremont# T. Aversa
23 Short bi	P.I.	1	D. Chickering			3	T. Aversa
	lled Dowitcher	2	V Andaman	16	W. Roxbury	2	
9	Cumb. Farms	3	K. Anderson	29 thr	Medfield Penarts of india		T. Aversa
15	S. Dartmouth	19	T. Aversa	thr	Reports of indiv	. Hom / R	Addons
19	Fall River	500	T. Aversa		billed Cuckoo	1.0	d'Entremont#
22	Newburyport	500	R. Forster	2	GMNWR	1 0.	a Emilemont#

Yellow-	pilled Cuckoo (cont.	inued)		thr	E. Middleboro	2+	K. Anderson
3	Rutland	1	M. Lynch#	thr	Easton	1	K. Ryan
4	ONWR	1	M. Pelikan	26-31	S. Acton	1 m	M. Blackshaw
10	Ravnham	3 G.	d'Entremont#	Rufous H	lummingbird		
10	Quabbin (G45)	1	M. Lynch#	26-31	S. Acton	1 m	M. Blackshaw
21	N. Middleboro	2	K. Holmes	Belted Ki	ngfisher		
	Screech-Owl			17	ONWR	3-4	M. Pelikan
20	E. Middleboro	1	K. Anderson	Red-head	ed Woodpecker		
27	Boston (F.Pk)	1 juv	T. Aversa	thr	Sherborn 2	ad + 1 im	m E. Taylor
Great Ho	orned Owl			Red-belli	ed Woodpecker		
3	Lovells I. (B.H.)	1	D. Oliver#	thr	Medford	pr n	M. Rines
Barred (17	Lincoln	1	K. Anderson#
3	Rutland	1	M. Lynch#	22	Falmouth	pr w vi	A. Pelegrini
4	Royalston	1	M. Lvnch#	Yellow-b	ellied Sapsucker	20	
Whip-po	or-will		100 m	4	Royalston	1	M. Lynch#
21	Mansfield	2	K. Ryan	Pileated V	Woodpecker		
Commo	n Nighthawk		100 A 10	4	Royalston	2	M. Lynch#
thr	Salem	2	I. Lynch	9	Hardwick	1	M. Lynch#
	roated Hummingbir	d	150 (10 m 10 00 00 00 00 00 00 00 00 00 00 00 00	10	Quabbin (G45)	1	M. Lynch#
thr	Boxford	1-3	J. Brown#	19	Lincoln	1	R. Forster

FLYCATCHERS THROUGH FINCHES

Breeding birds continued to be found in July, and some noteworthy species included **Sedge Wrens** in Wayland, more reports of Acadian Flycatchers from Bristol County, and 7 Worm-eating Warblers in the Freetown State Forest. The most exciting find was a pair of **Henslow's Sparrows** in Lincoln. One sparrow was originally heard on June 28, intermittently singing a 3-syllable song. It continued to sing intermittently until July 11, when it began to sing incessantly, mixing in the more typical 2-syllable song. It remained invisible, however, until July 11, when it finally perched up long enough to be photographed. On July 12, a second bird was seen by several observers. On July 24, one or more birds were observed carrying nesting material, making numerous flights to the spot in the grass where the male had been particularly territorial.

A special thank you to Steve Ells of Lincoln who found these birds and who, together with the Lincoln Conservation Commission and the Massachusetts Audubon Society, was able to halt the cutting of the field and establish a great viewing area for birders who could see this rare visitor without disturbing it. R. H. S.

Eastern	Wood-Pewee			29	P.1.	80+	M. Lynch#
4	Royalston	12	M. Lynch#	Tree Sw	allow		
9	Hardwick	13	M. Lynch#	12	Halifax	100	K. Anderson
10	Ouabbin (G45)	15	M. Lynch#	29	P.I.	150+	M. Lynch#
31	Medford	5	M. Rines	N. Roug	h-winged Swallow		
	Flycatcher			2	Arlington	19	M. Rines
10	Quabbin (G45)	2	M. Lynch#	4	Royalston	34	M. Lynch#
12	Freetown	1 m	T. Áversa	17	Rockport (H.P.)	7	M. Lynch#
19	Fall River	3	T. Aversa	23	Chatham	5	J. Hove#
	Flycatcher	**		Bank Sy	vallow		
16	W. Roxbury	4	T. Aversa	3	Salem	2	J. Hove#
16	GMNWR	4	M. Lynch#	14	P.1.	2 2	J. Hove#
24	Lexington	5	M. Pelikan	16	Stow	2	J. Hove#
29	Medfield	1	T. Aversa	Cliff Sw			
Least Fh				9	Brookfield	4+	M. Lynch#
3	Rutland	12	M. Lynch#	10	Winchendon	5 pr	B. Blodget
4	Royalston	9	M. Lynch#	30	Plymouth	6	M. Rines#
9	Hardwick	5	M. Lynch#	Barn Sw			
10	Quabbin (G45)	4	M. Lynch#	17	Lexington	30	M. Pelikan
Eastern				28	S. Dart. (A.Pd)	28	LCES (J. Hill)
thr	Sherborn	5	E. Taylor	Fish Cro			
4	Royalston	12	M. Lynch#	thr	Mt.A.	8-10	R. Stymeist#
18	N. Middleboro	6	K. Holmes	27	Waltham	1	R. Forster
	rested Flycatcher			Commo	n Raven		
10	Ipswich	7	J. Berry	4	Royalston	2	M. Lynch#
31	Medford	6	M. Rines	30	Wachusett Res.	1	M. Lynch#
	Kingbird	-		Black-ca	apped Chickadee		
thr	Sherborn	15	E. Taylor	4	Royalston	64	M. Lynch#
2	Mt.A.	7	R. Stymeist	9	Hardwick	67	M. Lynch#
24	Stow	20	M. Lynch#	Red-bre	asted Nuthatch		
29	P.I.	29	M. Lynch#	4	Royalston	16	M. Lynch#
Horned			23,11011	10	lpswich	3	J. Berry
5	Yarmouth	3	T. Aversa#	15	P.1.	3	R. Forster
Purple N				27	Sharon	4	K. Holmes

Brown C	reeper			9	Hardwick	5	M. Lynch#
10	Ravnham	2	G. d'Entremont#	31	E. Bridgewater		Entremont#
Carolina				31	Medford	1	M. Rines
10	N. Middleboro	10	K. Holmes	Solitary			
15	Worcester	1	M. Lvnch#	4	Royalston	11	M. Lynch#
16	GMNWR	1	M. Lynch#	12	N. Middleboro	1	K. Holmes
25	Wayland	2	R. Forster	12	Frectown	pr n	T. Aversa
27	Lexington	1	L. Taylor	19	Fall River	pr	T. Aversa
30	Provincetown	2	M. Pelikan		throated Virco		
House W		12.2	222	4	ONWR	3	M. Pelikan
9	Hardwick	15	M. Lynch#	10	Quabbin (G45)	2	M. Lynch#
10	Medford	4	M. Rines	24	Stow	3	M. Lynch#
Winter V		- 7	M 1 1.11	29	Medfield	pr	T. Aversa
3	Rutland	3	M. Lynch#	Warblin 2	GMNWR	2 G. c	l'Entremont#
9	Royalston Hardwick	2	M. Lynch#	7	Boston (F.Pk)	5	T. Aversa
10	Ravnham	1	G. d'Entremont#	24	Stow	5	M. Lynch#
Sedge W			G. d Entremont	29	Medfield	4	T. Aversa
25	Wayland	3	N. Patterson	Red-eve			1. 2116130
Marsh W				3	Rutland	96	M. Lynch#
16	GMNWR	24	M. Lynch#	4	Royalston	177	M. Lynch#
23	P.I.	34	M. Lynch#	9	Hardwick	120	M. Lynch#
Golden-	crowned Kinglet			10	Quabbin (G45)	52	M. Lynch#
3	Mt. Watatic	1-2	L. Taylor#	10	Ipswich	8	J. Berry
	y Gnatcatcher				nged Warbler		
4	Natick		BBC (E. Taylor)	4		ad + 3 yg	M. Pelikan
8		pr + 2		5	Sharon	2	T. Aversa
10	Quabbin (G45)	3	M. Lynch#	9	Hardwick	5	M. Lynch#
16	GMNWR	4	M. Lynch#	29	Medfield	3	T. Aversa
19	Fall River Medfield	3	T. Aversa vg T. Aversa	4	ee Warbler (details Rovalston	submitted,	
Eastern		pr + 2	yg 1. Aversa		le Warbler	-1	M. Lynch#
thr	Sherborn	20	E. Taylor	3	Mt. Watatic	2	L. Taylor#
thr		ad + 5		4	Royalston	ĩ	M. Lynch#
10	N. Middleboro			9	Hardwick	î	M. Lynch#
10	lpswich	5	J. Berry	10	Ravnham		l'Entremont#
31	Andover	5	D. Chickering	Yellow	Warbler	3 533	
Veery				3	Rutland	18	M. Lynch#
thr	Dover/Sherborn	14	E. Taylor	28	P.I.	25	R. Forster#
3	Rutland	41	M. Lynch#		t-sided Warbler		
4	Royalston	36	M. Lynch#	3	Rutland	30	M. Lynch#
9	Hardwick	49	M. Lynch#	4 9	Royalston	18	M. Lynch#
10 10	Quabbin (G45)	22 15	M. Lynch#	10	Hardwick	12 1 m	M. Lynch# J. Berry
12	Ipswich Freetown	21	J. Berry T. Aversa	19	Ipswich Fall River	1	T. Aversa
19	Fall River	29	T. Aversa		ia Warbler		1. Aversa
Hermit 7		2,	1. Aversa	3	Rutland	3	M. Lynch#
3	Mt. Watatic	5	L. Taylor#	4	Royalston	2	M. Lynch#
3	Rutland	34	M. Lynch#		roated Blue Warbl		
4	Royalston	25	M. Lynch#	3	Mt. Watatic	5	L. Taylor
9	Hardwick	22	M. Lynch#	3	Rutland	5	M. Lynch#
10	Quabbin (G45)	17	M. Lynch#	4	Royalston	22	M. Lynch#
Wood T	nrush				rumped Warbler		
9	Hardwick	36	M. Lynch#	3	Mt. Watatic	8	L. Taylor#
10	Quabbin (G45)	16	M. Lynch#	3	Rutland	11	M. Lynch#
10	N. Middleboro	3	K. Holmes	4	Royalston	16	M. Lynch#
10	W. Bridgewater	3+	G. d'Entremont#	10	Quabbin (G45)		M. Lynch#
10 10	Ipswich	5	J. Berry	10 19	Ipswich Fall River	5	J. Berry
America	Medford n Robin	+	M. Rines		roated Green War		T. Aversa
4	Royalston	62	M. Lvnch#	3	Mt. Watatic	6	L. Taylor#
9	Hardwick	91	M. Lynch#	3	Rutland	29	M. Lynch#
Gray Ca			III. Dynomi	4	Royalston	34	M. Lynch#
2	Mt.A.	30	R. Stymeist	8	Boxford	12	T. Aversa
2	P.I.	48	M. Lynch#	9	Hardwick	4	M. Lynch#
3	Rutland	63	M. Lynch#	10	Ipswich	10 m	J. Berry
9	Hardwick	79	M. Lynch#	10	Quabbin (G45)	8	M. Lynch#
Brown T	'hrasher			12	Freetown	4	T. Aversa
	D.I	4	M. Lynch#	Blackhu	rnian Warbler		
2	P.I.						2 200
	Rutland Salem	6	M. Lynch# J. Hoye#	3	Mt. Watatic Rutland	4 2	L. Taylor# M. Lynch#

Dlackh	ırnian Warbler (cont	inuad)		9	Hardwick	6	M. Lumah#
4	Royalston	6	M. Lynch#	10	lpswich	6	M. Lynch#
8	Boxford	4	T. Aversa	Indigo B			J. Berry
9	Hardwick	3	M. Lynch#	9	Hardwick	6	M. Lynch#
10	Quabbin (G45)	3	M. Lynch#	15	Cumb. Farms	8	T. Aversa
Pine Wa			IVI. Lynch	29	Medfield	15	
3	Rutland	21	M. Lynch#		ided Towhee	15	T. Aversa
4	Royalston	7	M. Lynch#	9	Hardwick	19	M. Lunch#
7	Boston (F.Pk)	pr	T. Aversa	10	Medford	35	M. Lynch#
10	Ipswich	4 m	J. Berry	12		71	M. Rines
12	Freetown	19	T. Aversa	19	Freetown	74	T. Aversa
15	P.I.	19	R. Forster		Fall River	/4	T. Aversa
19					Sparrow	0	D C+
	Fall River	38	T. Aversa	2	Mt.A.	8	R. Stymeist
Prairie		-	N. 1	3	Rutland	25	M. Lynch#
3	Rutland	7	M. Lynch#	4	Royalston	40	M. Lynch#
9	Hardwick	5	M. Lynch#	9	Hardwick	34	M. Lynch#
10	Quabbin (G45)	3	M. Lynch#	10	Ipswich	9	J. Berry
	nd-white Warbler	-	22.0	19	Fall River	49	T. Aversa
3	Rutland	6	M. Lynch#	Field Spa			
4	Royalston	14	M. Lynch#	3	Rutland	3	M. Lynch#
8	Boxford	9	T. Aversa	9	Hardwick	8	M. Lynch#
9	Hardwick	12	M. Lynch#	10	Medford	5	M. Rines
10	Ipswich	2 m	J. Berry	Vesper S	parrow		
12	Freetown	10	T. Aversa	30	Wellfleet	1	M. Pelikan
26	Easton/Raynham	21	T. Aversa	Savannal	Sparrow		
America	an Redstart				Worcester	10, 17	C. Phillips
2	P.I.	5	M. Lynch#	15	Cumb. Farms	56	T. Aversa
3	Rutland	34	M. Lynch#		per Sparrow		1, 11, 0130
4	Royalston	15	M. Lynch#		Worcester	1.9	C. Phillips
9	Hardwick	14	M. Lynch#	9	Stow	2	C. Cook
10	Quabbin (G45)	11	M. Lynch#		's Sparrow	2	C. COOK
	eating Warbler	1.1	IVI. Lyncii	thr	Lincoln	2	S. Ells + v. o.
12	Freetown	7	T Avorce			2	5. Ells + v. 0.
		1:	T. Aversa		led Sparrow	10	LOTE ALTERN
Ovenbir		£ 1	M. Lamab#	thr	S. Dart. (A.Pd)		LCES (J. Hill)
3	Rutland	51	M. Lynch#	23	N. Monomoy	10	J. Hoye#
4	Royalston	56	M. Lynch#	23	P.I.	30+	M. Lynch#
8	Boxford	26	T. Aversa	Seaside S			
9	Hardwick	37	M. Lynch#	thr			LCES (J. Hill)
10	Quabbin (G45)	16	M. Lynch#	3	P.I.	1	M. Pelikan
10	lpswich	7 m	J. Berry	Song Spa	rrow		
11	Boston (F.Pk)	pr + yg	T. Aversa	3	Rutland	21	M. Lynch#
12	Freetown	35	T. Aversa	9	Hardwick	73	M. Lynch#
Norther	n Waterthrush			23	Stow	24	M. Lynch#
4	Royalston	1	M. Lynch#	Swamp S	parrow		
10	Raynham		d'Entremont#	16	GMNWR	27	M. Lynch#
15	Lakeville	3	T. Aversa	White-thr	roated Sparrow		
19	Fall River	2	T. Aversa	3	Rutland	7	M. Lynch#
27	Boston (F.Pk).	1	T. Aversa	4	Royalston	7	M. Lynch#
30	Harwich	2	B. Nikula	16	Sudbury	1	R. Forster#
Louisian	a Waterthrush			Dark-eye		^	10.10101010
7	Boxford	1	J. Brown#	3	Mt. Watatic	6+	L. Taylor
27	Boston	1	T. Aversa	4	Royalston	i	M. Lynch#
	n Yellowthroat		1.1110134	Bobolink	Royalston		W. Lyncin
2	P.I.	18	M. Lynch#	3	Rutland	22	M. Lynch#
3	Rutland	91	M. Lynch#	17	Lincoln	19	
4		45		23		12	M. Lynch#
9	Royalston	145	M. Lynch#	Dod mina	P.I. ed Blackbird	12	M. Lynch#
			M. Lynch#			00.1	N / T 1. #
10	Quabbin (G45)	20	M. Lynch#	24	Stow	90+	M. Lynch#
10	Ipswich	9 m	J. Berry	30	GMNWR	200+	E. Taylor
Canada					leadowlark		
9	Hardwick	1	M. Lynch#	thr	Sherborn	6	E. Taylor
26	Raynham	7	T. Aversa	9	Beverly	2	J. Brown#
Scarlet T			2.25	10	Newburyport	2 G	. d'Entremont#
3	Rutland	22	M. Lynch#		Worcester	10, 7	C. Phillips
9	Hardwick	34	M. Lynch#	15	Cumb. Farms	15	T. Aversa
10	Quabbin (G45)	22	M. Lynch#	29	Medfield	4	T. Aversa
10	Ipswich	10	J. Berry	Orchard C			
29	Medfield	5	T. Aversa	6	Hingham	3	K. Godfrey
	asted Grosbeak			12	Wellesley	1	R. Forster
2	Sudbury	5	R. Forster	20	Lexington	1 m	M. Pelikan
3	Rutland	8	M. Lynch#	29	W. Roxbury	i f	T. Aversa
				-			1. 1110134

Norther	n Oriole			9	Hardwick	4	M. Lynch#
17	Medford	12	M. Rines	14	P.I.	1	J. Hoye#
17	Rockport	6	M. Lynch#	Evening	g Grosbeak		
Purple l	Finch			3	Rutland	2	M. Lynch#
3	Rutland	4	M. Lynch#	4	Royalston	9	M. Lynch#
4	Royalston	5	M. Lynch#				

BIRD SIGHTINGS AUGUST 1994 SUMMARY



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

August was very wet, cloudy, and warm. The temperature averaged 72.4°, just 0.5° above normal. The high was 92° on the 4th, and the low was 56° on the very next day. Rain totaled 7.03 inches, 3.79 inches above average. The most in any day was 2.37 inches on August 18. Thunder was heard on two days, with hail noted on the 13th, and heavy wind caused tree damage in many areas around Boston.

R. H. S.

LOONS THROUGH WOODPECKERS

Reports of summering pelagics received mixed reviews. The annual trip to Cashes Ledge recorded good numbers of Greater Shearwaters and Wilson's Storm-Petrels, and modest counts of Cory's and Manx shearwaters, and Leach's Storm Petrels. Other pelagic bird reports include an excellent count of 225 Cory's Shearwaters on August 11 on Stellwagen Bank, and 6000 Wilson's Storm-Petrels 20 miles east of Race Point on August 25. Heron counts were modest at best with the usual late summer assemblages of egrets and Glossy Ibis appearing at Plum Island. Little Blue Heron reports were very low; thus an inland report in Lexington is even more noteworthy. The only Tricolored Herons were on Cape Cod. The number of Cattle Egrets in Ipswich in early August indicates a successful breeding season. The vanguard of southward migrating freshwater ducks was small but noticeable.

Cooper's Hawks, apparently post-breeding wanderers, continue to be well reported. Three reports of a Merlin at Plum Island may well have been the same individual observed there in late July. A few obvious migrant Sharp-shinned Hawks and Merlins were reported during the latter half of the month. The numerous Peregrine Falcons are hard to categorize as post-breeding wanderers or early migrants, but the number of observations is encouraging. Only a handful of rails were reported, but the pair of Common Moorhens with young at Plum Island was a welcome sight.

In terms of sheer volume, August is the month for shorebirds, with many species attaining peak abundance at this time. Well-reported species included Black-bellied and Semipalmated plovers, Whimbrel, Hudsonian Godwit, Red Knot, Sanderling, and Semipalmated Sandpiper. No exciting vagrants were found. An American Avocet, a carryover from July, and a Ruff at Nantucket, an unusual location, were rather typical August rarities. The western shorebird contingent provided a mixed bag. Marbled Godwits were seen at several atypical locations, and Buff-breasted Sandpipers put in a good showing late in the month. There was a scattering of Western Sandpipers, while Baird's Sandpiper was recorded only inland with an impressive three birds in Holden. Wilson's Phalaropes were also quite scarce. Numbers of both Stilt Sandpipers and Long-billed Dowitchers at their Plum Island stronghold were well below peak numbers of a decade or more ago. Perhaps water levels or environmental conditions are less suitable or attractive. Pectoral Sandpipers were widely reported although in small numbers. White-rumped Sandpipers put in a fairly good showing, although the flight suffers in comparison to last year's impressive showing. There was only one report of Red-necked Phalarope in offshore waters.

Only two Pomarine Jaegers were seen, despite a trip to Cashes Ledge where they can be seen routinely in small numbers at this time of year. The rather sparse showing for Parasitic Jaeger was equally separated into land-based and at-sea sightings. There were only single observations of Little and Lesser Black-backed gulls. Sabine's Gull can be anticipated in offshore waters in late August. Nonetheless one at Cashes Ledge on August 22 surely delighted observers. A single Caspian Tern was a slight surprise as was no reports for Royal Tern. Single reports of Sandwich Terns from Chatham and Nantucket, the latter sporting a band,

were unexpected. Forster's Terns were slow to appear with the notable exception of South Dartmouth. A widespread movement of Black Terns was obvious during the latter portion of the month, with the best count coming from Sandy Neck in Barnstable, where they may be more common than the infrequent reports would indicate.

Both cuckoo species were very scarce. A Short-eared Owl at South Monomoy was unseasonal because they no longer breed there. The Common Nighthawk migration proceeded on schedule but no major movement was apparent by month's end. Very good numbers of Chimney Swifts were reported. The male **Rufous Hummingbird** previously found in Acton remained until August 1. The only pair of Red-headed Woodpeckers known to be nesting in the state successfully raised two broods.

R. A. F.

Date	Location	Number	Observers	Date	Location	Number	Observers
Common				12	S. Peabody	15	T. Aversa J. Berry M. Lynch#
13	P.I.	3	R. Forster	13	Ipswich	39	J Berry
20	S. Carver	1	J. Ebert	19	P.I.	500	M Lynch#
20	N. Monomoy Wachusett Res	7	W. Petersen#	21	N. Scituate	125 G	d'Entremont#
27	Wachusett Res	. 8	M. Lynch#	23	S. Dart. (A.Po	1) 62	LCES (J. Hill)
Pied-bill	ed Grebe				ue Heron	., 02	ECES (J. Tilli)
27	P.I.	2	W. Petersen#	7	Gloucester	1 ad	M. Lynch#
Cory's SI	nearwater			11	S. Dart. (A.Po	1) 1	LCES (J. Hill)
Í1	Stellwagen	225	P. Trull	28	P.I.	Lad	R. Stymeist#
22	Cashes L.		. d'Entremont)	28	Lexington	1 au	m R. Forster#
	Shearwater	o bbcto	. a Entremont		ed Heron	1 1111	iii R. Foisiei#
2	Stellwagen	2	N. Nash	thr	S. Monomoy	2 ma	
14	Nantucket	ĩ	E. Ray	30	Yarmouth	2 ma	
22	Cashes L. 10	0 BBC(G	d'Entremont)	Cattle E		1	K. Hamilton
242	earwater	o bbc(o	. d Littlemont)	2		21	I D #
10		1	K. Hamilton	13	W. Newbury Wenham	31 ma	
				18	W. Newbury	1	T. Maloney
9	S. Monomoy Stellwagen	1	D Nill.#		wennam	8	N. Nash J. Berry P. + F. Vale
	Stellwagen	2.6	D. INIKUIA#	20	Manchester	2	J. Berry
22		2, 0 PDC/C	B. Nikula# P. Trull	28	Newburyport	2	P. + F. Vale
	Cashes L.	BBC(G	. d'Entremont)	Green He	eron		
	Storm-Petrel	100	14 D 121	thr	Mt.A. Millbury	5	V. 0.
3	Stellwagen	100	M. Pelikan	12	Millbury	5	V. o. M. Lynch#
22	Cashes L. 600	0 BRC(Q	. d'Entremont)		owned Night-He	ron	
24	Jeffrey's L. 20 mi. east of F	2	S. Charette	6	Chatham 10		W. Harrington)
25		C.P. 6000	P. Trull	7	P.I.	8	J. Berry
	Storm-Petrel		224-22700-000000	12	Wakefield	13	P. + F. Vale
20	Chatham Cashes L. 7	1	W. Petersen#	12	S. Peabody	14	T. Aversa
22	Cashes L. 7.	5 BBC(G	. d'Entremont)	28	Lexington	6	T. Aversa R. Forster
Northern				Yellow-c	rowned Night-H	leron	
23	Eastham	10	W. Petersen#	6	Chatham 2	BBC (\	W. Harrington)
Great Co	rmorant			10, 19	P.I.	1 ad	v o
24	Newburyport	l imn	n S. Perkins	30	Newburyport	1 imr	n N. Nash
20	Princeton	1 imn	n R. Bradbury	23-24	Nantucket	1 imr	n E. Ray#
Double-c	rested Cormoran	t		Glossy Ib	ois		
6	Chatham 50		V. Harrington)	7, 20	P.I. Revere Swan (probable	85, 10	J. Berry
27	Wachusett Res.	78	M. Lynch#	13	Revere	2	P + F Vale
31	S. Dart. (A.Pd)	175	LCES (J. Hill)	Whooper	Swan (probable	escape)	
American	Bittern			thr	P.I.	1	V. O.
29	GMNWR	2	S. Carey	Brant			v. o.
Least Bit	tern			19	Scituate	1	C. Cook
thr	P.I.	3 max	v. o.	21	Boston H.		J. Nove + v. o.
Great Blu	ie Heron			Canada C		-	3. 11010 - 1. 0.
12	Wakefield	15	P. + F. Vale	thr	Sherborn	400	E. Taylor
14	GMNWR	12	S. Charette	thr	Mt.A.	90 may	J. Heywood#
Great Eg			o. charette	6	GMNWR	150	M. Pelikan
1-23	Holden	1	R. Bradbury	23	W. Boxford		+ N. Walker#
2	Milford	i	R. Bradbury	Wood Du		100 1.	T N. Walker#
9	S. Monomoy	4	B. Nikula#	12	Wakefield	71	D + F Wele
10-11	Wellesley	i	R. Walton#	27	GMNWR	123	P. + F. Vale
13-28		2	R. Forster			123	M. Lynch#
16	Wakefield	4		Green-wi	nged Teal	- 4	D MILL
19	P.I.	30+	P. + F. Vale		S. Monomoy	4	B. Nikula#
21			M. Lynch#	19	P.I.	60+	M. Lynch#
23	N. Scituate		d'Entremont#	24	Newburyport	100	S. Perkins
	S. Dart. (A.Pd)	71 I	LCES (J. Hill)	28	GMNWR	30	M. Pelikan
Snowy Eg		22 40			Black Duck		
thr 6	Salem, Saugus Chatham 100		nax J. Berry /. Harrington)	19	P.I.	80+	M. Lynch#

				America	n Kostrol		
Mallard 19	Marlboro	250	E. Taylor	21	Boston (Logan)	5 TASI	(S. Zendeh)
Northern		250	L. raylor	28	Newbury	3	P. + F. Vale
9	S. Monomoy	8	B. Nikula#	Merlin			
Blue-wing			2		27 P.I.	1	V. O.
19	P.I.	3()+	M. Lynch#	20	Holden	1	R. Bradbury
20	S. Monomoy	15	W. Petersen#	24	Newburyport	11	K. Ryan
31	Easton	4	K. Ryan	Peregrine	e Falcon		
Northern	Shoveler			7	Lawrence	1	S. Charette
9	S. Monomoy	4	B. Nikula#	7	Rowley	1	P. + F. Vale
27	P.I.	1	W. Petersen	8	Ipswich (C.B.)	1	D. Rimmer
Gadwall			D 4111 1 11	17	P.I.	2	W. Drew# P. Trull
9	S. Monomoy	12	B. Nikula#	18	Provincetown	1	K. Ryan
19	P.I.	10+	M. Lynch#	24	Newburyport	2	
American			D. Frantsi	25 30	GMNWR	1 imm	H. Wiggin# T. Aversa
28	Lexington	1	R. Forster	31	Lynn B. Barnstable (S.N.)		G. Ferguson
Lesser Sc		1	C Deniels		cked Pheasant	-	G. 1 erguson
7	Chilmark	l m	G. Daniels	20	Revere	6	R. Stymeist#
Common		40	I Hovo#	Ruffed C		U	ic. Styllielstii
14	Duxbury	+0	J. Hoye#	2	Freetown	2	T. Aversa
Black Sco		6 m	M. Lynch#	5	Quabbin (G45)	7	T. Aversa
7 Surf Scot	Rockport (H.P.)	O III	M. Lynch#	7	E. Boxford	3	J. Brown#
20	Chatham	1	W. Petersen#	Wild Tu			15.5 (10.5 (1
	nged Scoter		W. I CICISCIII	5		+ 32 yg	T. Aversa
6-20	P.I.	1-2	R. Forster	Virginia			
18	Duxbury Beach	3	V. O.	6	P.I. 2 a	d + 5 yg	M. Lynch#
20	S. Monomov	1	W. Petersen#	14	Wayland	1	S. Charette
23	Eastham	3	W. Petersen#	Sora			
-	sted Merganser	*		19	P.I.	1	M. Lynch#
7	Rockport	6	M. Lynch#	Commo	n Moorhen		100 miles
Ruddy Di			(T) (T) (T) (T) (T) (T) (T)	4	P.I. 2	ad + 3 yg	J. Hoye#
6	W. Newbury	1	M. Argue#	Black-bo	ellied Plover		
Turkey V				thr	Chatham (S.B.)	2000 max	B. Nikula#
6	Topsfield	2	J. Berry	18	Duxbury B.	666	M. Kasprzyk
7	Lawrence	3	S. Charette	19	Newburyport	250+	M. Lynch#
20	Randolph	16	G. d'Entremont	21			(S. Zendeh)
25	Haverhill	2	S. Charette	21	N. Scituate	150 G.	d'Entremont#
Osprey					in Golden-Plover	10	
14	P.I.	1	J. Berry	27	Newbury	2	R. Forster
20	S. Carver	1	J. Ebert		mated Plover		
20	Rowley	1	J. Berry	thr	Chatham (S.B.)		
21	Squantum	2	M. Lynch#	thr	Ipswich (C.B.)	1602 max	D. Rimmer
25	Mt.A.	1	R. Stymcist#			290, 28	W. Drew#
Bald Eag		4 4		8		1080	MBO M Voorsenk
	Truro	1 im	m J. Young#	19	Duxbury B.	634	M. Kasprzyk
Northern			W D #	19	Holden	800+	R. Bradbury
17	P.I.	5	W. Drew#	19	Newburyport		M. Lynch# L (S. Zendeh)
20	Rowley	2	J. Berry	21 29		1200+	B. Nikula#
20	GMNWR	2	E. Taylor			1200	D. Ivikulan
31	S. Dart. (A.Pd)	2	LCES (J. Hill)	Piping F thr	Chatham (S.B.)	15 max	B. Nikula#
	inned Hawk		P. + F. Vale	5	Provincetown	14	M. Pelikan
27	Marblehead	1	B. Rasku	11	S. Dart. (A.Pd)		CES (J. Hill)
28	Worc. (BMB)	1	D. Nasku	12	P.I.	6	W. Drew#
Cooper's		2 ju	T. Aversa	Killdeer			1000
5	Quabbin (G45)	2	T. Aversa	6	GMNWR	30	M. Pelikan
9 23	Quabbin (G40) W. Barnstable	2 imm		28	Newbury		O. Chickering
thr	Reports of indiv				an Oystercatcher	ACC 17	•
	Goshawk	. Hom o	iocations	thr	N. Monomoy	30 max	B. Nikula#
14	Lincoln	1	M. Murphy	thr	Boston H.	3 R.	Kelley + v. o.
	ildered Hawk		July		an Avocet		2/1855
thr	E. Boxford	1-2	J. Brown#	2-6	N. Monomoy	1 B. N	likula# + v. o.
7	Easton	4	K. Ryan		Yellowlegs		
10	E. Middleboro	pr	K. Anderson	thr	N. Monomoy	220 max	B. Nikula#
20	Worc. (BMB)	1	C. Phillips	4	Duxbury B.	57	MBO
26	Hingham	î	I. Lynch	21		88 TAS	L (S. Zendeh)
	inged Hawk	3.0	-0.350	Lesser Y	Yellowlegs		
16	Andover	1	I. Lynch	thr	P.I.	29 max	
21	N. Scituate	2 (G. d'Entremont#	6	Newbypt H.	350	R. Forster
26	Hingham	1	I. Lynch	30	Squantum	3	K. Ryan
200 Tr. C.			000 TO FOR 18 100				

Solitary S		1 E	. + S. Miller#	Western S 10-31	Sandpiper Princeton	1	R. Bradbury
4	E. Sandwich	10	5.5L	12	Squantum	3 juv	C. Cook#
11	Princeton		R. Bradbury	13	P.I.	1	H. Wiggin#
12	Holden	6	M. Lynch#	21	Nauset	i	K. Hamilton
22	Wellfleet	1	W. Petersen#			1	K. Hailillon
24-31	Mt.A.	4-5	R. Stymeist	Least San		12	D. Dandhum
27	Belmont	2	L. Taylor	12	Princeton	42	R. Bradbury
27	P.I.	1	W. Petersen#	14	Cumb. Farms	12	K. Anderson
Willet				16	Wakefield	30	P. + F. Vale
thr	N. Monomoy	150 max	B. Nikula#	27	GMNWR	140	M. Lynch#
11, 31	S. Dart. (A.Pd)	10, 3 L	CES (J. Hill)	28	P.I.	200	M. Pelikan
Willet (co	ontinued)			White-rui	nped Sandpiper		
13	P.I.	12 BE	BC (J. Center)	14	Ipswich (C.B.)	9	D. Rimmer
Spotted S		12 12		15-31	Chatham (S.B.)	15 max	B. Nikula#
3	Lexington	3	M. Rines	17	P.I.	79	W. Drew#
12	P.I.	3	W. Drew#	19	Duxbury B.	18	V. O.
12	Holden	12	M. Lynch#	24	Eastham		W. Petersen#
16	Wakefield	3	P. + F. Vale	21	Boston H.	The state of the s	L (S. Zendeh)
			d'Entremont#	30	Squantum	4	K. Ryan
21	N. Scituate	3 U.	d Entremont*	Baird's S		-	ic. Ryan
Upland S			M. Maah			1 br of	D Drodbury
16	P.I.	I	N. Nash	1-5	Holden	l br pl	R. Bradbury
17	Framingham	1	K. Hamilton		Princeton	3 imm	R. Bradbury
21	Nauset	3	K. Hamilton		GMNWR	I E. N	Nielsen + v. o.
21	Boston (Logan)		L (S. Zendeh)	Pectoral S			
23	Cumb. Farms	2	T. Aversa	4	E. Sandwich		S. + E. Miller
24	Newburyport	3	K. Ryan	4	Duxbury B.	3	MBO
Whimbro	d ·			5	Cumb. Farms	3	K. Anderson
1	Wellfleet	24	M. Pelikan	12	S. Peabody	4	T. Aversa
1	Newburyport	24	M. Rines	24	Newburyport	9	S. Perkins
3	N. Monomoy	420	B. Nikula#	27	GMNWR	5	M. Lynch#
6	Chatham 285		/. Harrington)	Stilt Sand	Iniper		
	S. Dart. (A.Pd)		CES (J. Hill)	4	Rowley	2	N. Nash
17	Nantucket	50	N. Brooks	7, 20	P.I.	14, 1	J. Berry
		2		21	N. Scituate		d'Entremont#
18	Duxbury B.		V. O.	23	WBWS	2	W. Petersen#
23	Eastham (F.E.)	35	W. Petersen#			2	W. Petersen
	an Godwit				sted Sandpiper	-	MDO
thr	Chatham (S.B.)			19	Duxbury B.	3	MBO
6, 20	Newburyport 2	21, 37	R. Forster	21-27	Carlotte and the second		Nielsen + v. o.
18	Duxbury B.	1	V. O.	21	Boston (Logan)		L (S. Zendeh)
20	Chatham (S.B.)	105	W. Petersen#	27	P.I.	2	V. O.
21	Boston H. 1	2 TAS	L (S. Zendeh)	27	Newburyport	1	W. Petersen#
Marbled	Godwit			Ruff			
thr	N. Monomoy	2 max	B. Nikula#	17	Nantucket	1	N. Brooks
5	Duxbury B.	2	M. Kasprzyk	Short-bill	ed Dowitcher		
6	Revere	1	P. + F. Vale	thr	N. Monomoy	700 max	B. Nikula#
11-27		1	V. O.	3	Squantum	7	K. Ryan
Ruddy T			11.51	7, 20		0, 25	J. Berry
		98	MBO	19	Duxbury B.	297	M. Kasprzyk
4	Duxbury B.		D. Rimmer	28	GMNWR	4	S. Perkins
4	Ipswich (C.B.)	27				-	o. i cikilis
6	N. Monomoy	40	J. Hoye#		ed Dowitcher	41	R. Forster
14	P.I.	3-4	J. Berry	20	P.I.		W. Petersen#
21		41 TAS	L (S. Zendeh)	21	Chatham (S.B.)	3 (3 (3 (3 (3 (3 (3 (3 (3 (3 (3 (3 (3 (3	
Red Kno			D 1111 1 11	26	Nantucket	2	N. Brooks
thr	Chatham (S.B.)			28	Orleans	2	S. Shapiro
4	Duxbury B.	645	MBO	dowitche			-
5	Ipswich (C.B.)	126	D. Rimmer	25	Mt.A.	1	R. Stymeist#
5	Provincetown	40	M. Pelikan	American	n Woodcock		
8	Scituate	850	MBO	23	Brookline	1	H. Wiggin#
Sanderli		100.5	7 - 10 - 10		Phalarope		-
thr	Chatham (S.B.)	2300 may	B. Nikula#	2	N. Monomoy	1	J. Sones#
thr	Ipswich (C.B.)	789 max		6	P.I.	1 juv	R. Forster#
		1043	MBO	9	S. Monomov	1	J. Sones#
4	Duxbury B.		W. Drew#	27	Nauset	1	R. Hall#
24	P.I.	92					iv. Hall#
28	S. Dart. (A.Pd)	476	M. Boucher		ed Phalarope	26	p. Tevill
	mated Sandpiper	1.500	D MI 1 //	29	Stellwagen	26	P. Trull
thr	N. Monomoy	1500 max		Pomarino		DDC (C	JIT2
thr	Ipswich (C.B.)		D. Rimmer	22			d'Entremont)
5	Duxbury B.	3150	M. Kasprzyk	24	Jeffrey's L.	1	S. Charette
7	Newbypt H.	2000+	J. Berry	Parasitic			10-3-10-3
		2400	MBÓ	1	Cape Cod Bay	1	P. Trull
8	Scituate	2400	IVIDO				

	Jaeger (continued)		W D#	24	Eastham	5	W. Petersen#
23	Eastham	1	W. Petersen#	44.000.000.000.000	lled Cuckoo		-
22			. d'Entremont)	5	Quabbin (G45)	1	T. Aversa
28	Jeffries L.	1	P. Roberts	22	Yarmouthport	1	S. + E. Miller
29	Nauset	2	S. Highley#		oilled Cuckoo		
Laughing			vic 2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2	W. Barnstable	1	S. + E. Miller
7. 27	P.I. 1 ad, 5 ju		rry. R. Forster	9	Quabbin (G40)	3	T. Aversa
11	Ipswich (C.B.)	2	D. Rimmer		Screech-Owl		
Little Gu	11			9	Middleboro	1	K. Anderson
21	Lynn	1	J. Quigley	16	Waltham	2	L. Taylor
Common	Black-headed Gu	ll		23	Wayland	1	J. Hoye#
7, 28	Newbypt 1 ad	J. Be	rry, M. Pelikan	23	Wellesley	1	R. Forster
	Black-headed Gu			31	Mt.A.	5	R. Stymeist#
12	N. Monomoy	2	B. Nikula#	Great Ho	orned Owl		
Bonapart		-57	75-3-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	14	Boston H.	1 BF	BC (P. Stevens)
thr	N. Monomov	10 ma	x B. Nikula#	20	Yarmouthport	3	S. + E. Miller
	Newburyport	350, 400		Barred C		35	O. L. D. Miller
30	Lynn B.	350	T. Aversa	14	Topsfield	1-2	J. Berry
	ack-backed Gull	330	1. Aveisa	Short-ca		1-2	J. Delly
		1 20	B. Nikula			1	R. Hall#
12	N. Monomoy	1 3S	D. NIKUIA	29	S. Monomoy	1	к. пап#
Sabine's		DDG (0	1177		n Nighthawk	15 10	D F.
22		BBC (C	d'Entremont)		5 Wellesley	15, 12	R. Forster
	ged Kittiwake			20	Worcester	153	M. Lynch#
28	Jeffries L.	2	P. Roberts				R. Stymeist#
Caspian '	Tern			24	Wakefield	50	J. Young
25	Lynn	1	J. Quigley	25	Hudson	30+	B. Volkel
Sandwic	h Tern			27	GMNWR	53	M. Lynch#
6	Chatham 1	BBC (G	d'Entremont)	27	W. Newton	70 N	1. + G. Murphy
21	Nantucket	1	E. Ray#	Chimner	v Swift		
Roseate 7	l'ern .		783	20	Worcester	80+	M. Lynch#
thr	Chatham (S.B.)	1000+ m	ax B Nikula	23	Bridgewater	50+	K. Ryan
Common		2000		23	Cumb. Farms	225	T. Aversa
5	Provincetown	500±	M. Pelikan	24	Dover	30	E. Taylor
14	Nantucket	350+	E. Ray	-		, 60, 260	
17	Ipswich (C.B.)	84	D. Rimmer	27	Medford	32	P. Roberts
	Arlington	2	T. LaCroix#	27	Concord	300+	M. Lynch#
		4	1. LaCloix#	5 (22) 2 (24) (4) (4) (4)			Wi. Lynchin
Forster's		1	N. Nash	thr	roated Hummingbi Boxford	2 ad + 3	vg J. Brown#
4	Newburyport					2 au + 5	
20	Duxbury B.	2	J. Hoye#	8	E. Middleboro		K. Anderson
23	WBWS	1	W. Petersen#	11	N. Dartmouth	1	M. Boucher
28	S. Dart. (A.Pd)	18	M. Boucher	14	Carlisle	2	T. Brownrigg#
Least Ter				19	Easton	2	K. Ryan
5	Provincetown	30	M. Pelikan	29	Stellwagen	1	P. Trull
6	N. Monomoy	6	J. Hoye#	Rufous	Hummingbird		
20	Duxbury B.	30	J. Hoye#	1	Acton	1	T. Blackshaw
21	Boston H.	29 TA	SL (S. Zendeh)	Belted K	ingfisher		
28	S. Dart. (A.Pd)	11	M. Boucher	20	Randolph	3 G	. d'Entremont#
Black Te				Red-hea	ded Woodpecker		
13	Princeton	1	B. Kamp	thr		d + 2 imr	n E. Taylor
14	Nantucket	3	E. Ray	Red-bell	ied Woodpecker		
19	Stellwagen	2	J. Young	thr	Medford	pr	M. Rines
20	Duxbury B.	4	J. Hove#	3	Worc. (BMB)	ì	C. Phillips
20	Chatham/S. Mor		W. Petersen#	25	S. Dartmouth	1	M. Boucher
21			SL (S. Zendeh)	-	n Flicker		ivi. Doucher
21	Boston (Logan)	1 1 A	K. Hamilton	28	Worc. (BMB)	16	J. Goodchild
	Nauset	4+				10	J. Goodeliid
25	N. Monomoy		B. Nikula#		Woodpecker	1	M. Lamak#
27	Newbypt H.	1	R. Forster	12 23	Holden	1	M. Lynch# J. Brown#
				7.2	Boxford		1 Hrown#
31 Black Sk	Barnstable (S.N.	.) 24	G. Ferguson	23	DOMOIG		J. DIOWII#

FLYCATCHERS THROUGH FINCHES

Migration was well underway by midmonth. Six Olive-sided Flycatchers were reported during the month, compared with just one last August. Empidonax flycatchers were noted in coastal locations. The first Philadelphia Vireo for the fall was noted at Marblehead Neck, where many warblers were also found. Other interesting reports included a Kentucky Warbler on Nantucket, 5 Yellow-breasted Chats, a Dickcissel in Chatham, and a Yellow-headed Blackbird on Nantucket.

The Henslow's Sparrows continued in Lincoln, and on August 11 there was a burst of flight activity to and from the probable nest site. On August 14, a Henslow's Sparrow was observed leaving that same area carrying a fecal sac.

R. H. S.

Olive-sid	led Flycatcher			Brown (Creeper		
20	Carlisle	1	T. Brownrigg#	11	Bourne	1	S. + E. Miller
† 20	Marblehead	1	P. + F. Vale	17	Andover	1	I. Lynch#
20, 27		1, 1	H. Wiggin#	26	Hingham	2	I. Lynch
23	Wellfleet	Ï	W. Petersen#	Carolina			100 to \$100 to 100 to 1
24	Worc. (BMB)	1	F. McMenemy	3	Worc. (BMB)	1	C. Phillips
	Wood-Pewee		7.3.71070107715711 4 1.	20	Revere	1	R. Stymeist#
13	Medford	4	M. Rines	14	Carlisle	1	T. Brownrigg#
	Wood-Pewee (con			27	Medford	1	M. Rines
14	Topsfield	4 m	J. Berry	House V		10.57	
28	Worc. (BMB)	8-9	B. Raske#	10	Medford	13	M. Rines
	ellied Flycatcher			24	MNWS	7	M. Rines
16	MNWS	1	T. Aversa	28	Worc. (BMB)	8	B. Rasku
28	Princeton	2	R. Bradbury	Winter '			D. Rusku
20	Lynn, MNWS	1, 1	M. Rines#	2	Freetown	1	T. Aversa
30	Nahant	1	T. Aversa	Marsh V			1. Piversa
	Flycatcher	1	1. Aveisa	6	P.I.	11	M. Lynch#
	•	5	T. Aversa	27	GMNWR	3	
2	Freetown					3	M. Lynch#
5	Quabbin (G45)	1	T. Aversa		ny Gnatcatcher	1.1	M Dines
Alder Fly		- 1	T 4		8 Medford	1. 4	M. Rines
9	Quabbin (G40)	1	T. Aversa	17	Boston (F.Pk)	1	T. Aversa
	lycatcher	- 2		20	Carlisle		T. Brownrigg#
13	W. Newbury	2	T. Aversa	24	Hingham	1	I. Lynch
	" Flycatcher	1.0	2 2 722 (42	24	MNWS	2	N. Nash
24	MNWS	1	S. Perkins#	30	Chatham	2	B. Nikula#
Least Fly	catcher				Bluebird		25 25 25
5	Quabbin (G45)	8	T. Aversa	thr	Sherborn	35	E. Taylor
20	P.I.	1	R. Forster	thr	Boxford 4 a	ad + 7 juv	J.Brown#
Great Cr	ested Flycatcher			7	Easton	5	K. Ryan
2	Freetown	7	T. Aversa	Veery			
14	E. Middleboro	2	K. Anderson	22	Medford	1	M. Rines
31	Boston (F.Pk)	1	T. Aversa	31	Boston (F.Pk)	1	T. Aversa
Eastern I				Hermit '	Thrush		
19	P.I.	29	M. Lynch#	2	Freetown	1 ad	n T. Aversa
Horned I				10	E. Middleboro	1 m	K. Anderson
1	Wellfleet	4	M. Pelikan	28			T. Brownrigg#
21	Boston (Logan)	00 100000000000000000000000000000000000	ASL (S. Zendeh)	Wood T			00
Purple M			100 (0. 00000)	2	Freetown	4	T. Aversa
6	P.I.	15	M. Lynch#	5	Quabbin (G45)	3	T. Aversa
16	MBWMA	3	T. Aversa	27	P.I.	1	R. Forster#
21	Nantucket	ĩ	E. Ray	Gray Ca			10.1000
Tree Swa		*	L. ray	6	P.I.	37	M. Lynch#
13	P.I.	5000	M. Argue#	7	Rockport (H.P.)	24	M. Lynch#
25	Westport	5000	M. Boucher		Thrasher	~ '	IVI. Dyllellii
			IVI. DOUCHCI	10	Medford	7	M. Rines
12	h-winged Swallov	3	T. Aversa	13	W. Newbury	í	
28	S. Peabody	8	R. Forster		Vaxwing		M. Argue#
	Wellesley	2	T. Aversa	30		64	J. Liller
30)	S. Peabody	2	1. Aversa		Worc. (BMB)	04	J. Liller
Bank Sw		2	II Window		yed Vireo	2	D . F Wale
13	Newbury	3	H. Wiggin#	28	P.I.	3	P. + F. Vale
Cliff Swa			** ***	Solitary		10	T .
13	Newbury	1	H. Wiggin#	9	Quabbin (G40)	10	T. Aversa
29	Stellwagen	1	P. Trull	27	Provincetown	2	S. + E. Miller
Barn Sw		2.0			throated Vireo		
20	Sudbury	50	E. Taylor	9	Quabbin (G40)	4	T. Aversa
21	Squantum	25	G. d'Entremont	20	P.I.	1	R. Forster
19	P.I.	100+	M. Lynch#	Warblin			THE WELLTON BUILDING
Fish Cro				thr	Boston (F.Pk)	10 ma	
10	Tewksbury	2	J. Young	28	P.I.	3	P. + F. Vale
16	Andover	5	I. Lynch	28	Wellesley	5	R. Forster
Common	Raven			30	S. Peabody	1	T. Aversa
12	Holden	3	M. Lynch#	Philadel	phia Vireo		
21	Sutton	4	J. Huntington	24	MNWS	1	S. Perkins#
23	Mt. Wachusett	i	E. Taylor	Red-eye		1978	
	sted Nuthatch	-		9	Quabbin (G40)	55	T. Aversa
		8	S. Charette				M. Rines
7	Andover	8	S. Charette	13	Medford	6	M. Rino

Red-eyed		2	I Porm	14 Commo	Nantucket n Yellowthroat	1 m	E. Andrews
14 30	Topsfield Nahant	2	J. Berry T. Aversa	31	Medford	11	M. Rines
Blue-win	ged Warbler				s Warbler		
2	Freetown	2	T. Aversa	22, 3	0 Medford	1, 2	M. Rines
16	MNWS	6	T. Aversa	30	MNWS	3	T. Aversa
16	Chatham	3	J. Sones#	Canada	Warbler		
17	Boston (F.Pk)	2	T. Aversa	2	Freetown	3	T. Aversa
22	Medford	4	M. Rines	9	Quabbin (G40)	5	T. Aversa
Tennesse	e Warbler			16	Waltham	3	L. Taylor
24	Worc. (BMB)	1	F. McMenemy	19	Worc. (BMB)	3	F. McMenemy
	Warbler			20	P.I.	3	R. Forster#
28	Boston (F.Pk)	1	T. Aversa	24	MNWS	4	M. Rines
30	Medford	1	M. Rines		breasted Chat		
Northern		*	IVI. I CINOS	6	P.I.	1	R. Forster
24	MNWS	1	M. Rines	21	Nahant	i	M. Rines#
Yellow V		,	IVI. IXIIICS	30	MNWS	1	N. Nash
		16, 6	M. Lynch#	31	ONWR	2	
6, 19	P.I.					2	L. High
24	Hingham	6	I. Lynch#	Scarlet '			T 4
	-sided Warbler		D F	2	Freetown	14	T. Aversa
20	Wellesley	1	R. Forster	_ 14	Topsfield	3	J. Berry
22	Mcdford	5	M. Rines		easted Grosbeak		2020
24	MNWS	4	M. Rines#	20	Sherborn	1	E. Taylor
Magnolia	a Warbler			Indigo E			
30	Nahant	1	T. Aversa	27	Medford	1	M. Rines
Yellow-r	umped Warbler			Dickciss	sel		
2	Frectown	1	T. Aversa	24	Chatham	1	W. Petersen#
5	Quabbin (G45)	5	T. Aversa	Chippin	g Sparrow		
	nian Warbler			7	Åndover	25	S. Charette
16	Barnstable	1	S. + E. Miller	Field Sp			
20	Boxford	1	J. Brown#	6	P.I.	2	R. Forster
31	Boston (F. Pk)	i	T. Aversa	16	MBWMA	22	T. Aversa
Pine War		*	1.1110150		pper Sparrow		1.11,0150
thr	Boxford	12 m	ax J. Brown#	2	Clinton	3	E. Salmela
Prairie W		12 110	ax J. Diowiii		v's Sparrow	- 2	L. Samera
2	Freetown	6	T. Aversa	thr	Lincoln	2	S. Ells + v. o.
		2	T. Aversa#			2	5. Ells + V. O.
6	MNWS	2	1. Aversa#		ailed Sparrow	151	M. Lamab#
	l Warbler		D F	6	P.I.	15+	M. Lynch#
6	P.I.	1	R. Forster#	13	E. Boston (B.I.)	10	J. Young
31	Medford	1	M. Rines	21	Nantucket	11 b	E. Andrews#
	d-white Warbler	2.2	200	24	Newburyport	12	S. Perkins
2	Freetown	15	T. Aversa	31	S. Dart. (A.Pd)	19	LCES (J. Hill)
6, 20	P.I.	1, 5	R. Forster#	Seaside	Sparrow		
12	MNWS	7	T. Aversa	13	P.I.	1	R. Forster
30	Ipswich	1 m	J. Berry	Dark-ey	ed Junco		
American	n Redstart			23	Mt. Wachusett	1	E. Taylor
6, 20	P.I.	12.8	R. Forster	Bobolin	k		
13, 31	Medford	3, 31	M. Rines	14	P.I.	10	P. + F. Vale
26	Worc. (BMB)	9	F. McMenemy	20	Lincoln	200	E. Taylor
Worm-ea	ting Warbler		SHIP TO TO SEPTEMBER 1	21	Truro	1	J. Young
2	Freetown	1	T. Aversa	Fastern	Meadowlark		
Ovenbird			1.1110100	23	Cumb. Farms	18	T. Aversa
2	Freetown	14	T. Aversa		headed Blackbird	10	1. /11/0130
12	Nahant	1	T. Aversa	17	Nantucket	1	N. Brooks
18	Medford	1	M. Rines	and the second second second second	n Grackle	1	IV. DIOOKS
		1	IVI. KINGS			400+	M Lunch#
	Waterthrush	2	Т А	20 Orchard	Worcester	400T	M. Lynch#
2	Freetown	3	T. Aversa				CIENCE
12	Nahant	5	T. Aversa	11	E. Sandwich	1	S. + E. Miller
20	P.I.	4	R. Forster	21	Truro	1 ad	m J. Young
22	Arlington	3	M. Rines	Northern			
27	MNWS	2	J. Hoyc#	20	S. Quabbin	12	M. Lynch#
Louisiana	a Waterthrush			28	Worc. (BMB)	10	B. Rasku
	W. Boxford	2	T. + N. Walker	Purple F	inch		
11	W. Doxioid	-	***************************************	16	W. Barnstable	1	S. + E. Miller

LIST OF ABBREVIATIONS

ad	adult	#	additional observers
alt	alternate	A.A.	Arnold Arboretum
b	banded	A.P.	Andrews Point, Rockport
br	breeding	A.Pd	Allens Pond, S. Dartmouth
dk	dark (phase)	Arl.	Arlington
f	female	B.	Beach
fl	fL.d	B.H.	Boston Harbor
imm	immature	B.I.	Belle Isle, E. Boston
ind	individuals	B.R.	Bass Rocks, Gloucester
juv	juvenile	Buzz.	Buzzards Bay
loc	location	Cambr.	Cambridge
lt	light (phase)	C.B.	Crane Beach, Ipswich
m	male		Corporation Beach, Dennis
max	maximum	C.P.	Crooked Pond, Boxford
mi	mile	Cumb. F	farms Cumberland Farms,
migr	migrating		Middleboro-Halifax
n	nesting	E.P.	Eastern Point, Gloucester
ph	photographed	F.E.	First Encounter Beach, Eastham
pl	plumage	F.H.	Fort Hill, Eastham
pr	pair	F.M.	Fowl Meadow
S	summer (1S = first summer)	F.P.	Fresh Pond, Cambridge
thr	throughout	F.Pk	Franklin Park, Boston
V.0.	various observers	G40	Gate 40, Quabbin
W	winter (2W = second winter)	G45	Gate 45, Quabbin
w/	with	H.	Harbor
yg	young		
Hydrog.	Hydrographer Canyon	DWWS	Daniel Webster Wildlife Sanctuary
I.	Island	EMHW	
L.	L.		R Great Meadows National Wildlife Refuge
M.V.	Martha's Vineyard	HRWM	A High Ridge Wildlife Management Area.
Mt.A.	Mount Auburn Cemetery. Cambridge		Gardner-Westminster
Nant.	Nantucket	IRWS	Ipswich River Wildlife Sanctuary
Newbypt		LCES	Lloyd Center for Environmental Studies
Oceanog		MARC	Massachusetts Avian Records Committee
P.I.	Plum Island	MAS	Massachusetts Audubon Society
Pd	Pond	MBO	Manomet Observatory
P'town	Provincetown	MBWM	A Martin Burns Wildlife Management Area,
Quab.	Quabbin		Newbury
Res.	Reservoir	MDFW	
R.P.	Race Point, Provincetown	MNWS	Marblehead Neck Wildlife Sanctuary
S.B.	South Beach, Chatham	MSSF	Myles Standish State Forest
S. Dart.	South Dartmouth	NAC	Nine Acre Corner, Concord
S.F.	State Forest	NBC	Needham Bird Club
S.N.	Sandy Neck, Barnstable	NEHW	New England Hawk Watch
S.P.	State Park	ONWR	Oxbow National Wildlife Refuge
Stellw.	Stellwagen Bank	SRV	Sudbury River Valley
Worc.	Worcester	SSBC	South Shore Bird Club
BBC	Brookline Bird Club	TASL	Take A Second Look Harbor Census
BMB	Broad Meadow Brook, Worcester	USFWS	
CBC	Christmas Bird Count	WBWS	Wellfleet Bay Wildlife Sanctuary
CCBC	Cape Cod Bird Club	WMWS	Wachusett Meadow Wildlife Sanctuary
DFWS	Drumlin Farm Wildlife Sanctuary	***************************************	Wallasett Wedaow Whalle Salietaary

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ABOUT THE COVER: NORTHERN SAW-WHET OWL

The smallest owl in the east, the Northern Saw-whet Owl (Aegolius acadicus) is a charming, tame, little bird, which wins the hearts of all who encounter it. Shy and retiring, its natural history is poorly known. These tiny owls rely heavily on cryptic behavior for protection, but when found they can often be closely approached. Tape recordings or mimics of its call sometimes can produce close encounters; they are aggressive and fearless when defending their territories. Most reports attribute their name to their uncommon "contact call," variously reported as Screee-awe, SWEEE-awww, or skreight-aw, which presumably resembles the sound of a file sharpening a saw blade, as suggested by Audubon. A simpler and more convincing explanation presumes that sawwhet is a mispronunciation of the french word chouette (as pronounced by French Canadians), which is widely used in Canada to describe any small owl. Its name is as enigmatic as the bird itself.

The Northern Saw-whet Owl is "earless" and round-headed, with blotchy streaks of brown in the front. Its small size and lack of feather tuft "ears" separates it from all eastern owls except the Boreal Owl, from which it can be distinguished by its black bill and short white stripes, rather than spots, on its forehead. Its facial disk is browner than in the Boreal Owl and lacks the black edging. Immature birds are chocolate-brown with ocher bellies. They lack the ventral striping of adults, and have a pronounced white "V" above the bill. The sexes are similar in appearance, but females average larger than males.

Saw-whet owls are widely distributed in North America, from southeastern Alaska across southern Canada through Nova Scotia. They breed across much of the northern United States except for the Great Plains, and in the western mountains locally into Mexico. In the east they breed locally in the Appalachians south through West Virginia. In Massachusetts they breed on Cape Cod, Martha's Vineyard, and Nantucket, which is the southern limit on the Atlantic Coast for regular breeding, and more than a dozen scattered localities inland. There is a partial, diffuse migration south, with owls wintering across the midwest and erratically to Tennessee and Virginia in the east. At times their movements can be described as irruptive. Individuals may use the same roost sites all winter, and accumulations of 100 pellets or more, and significant accumulations of "whitewash" are reported.

In Massachusetts saw-whets are considered rare spring migrants, but during the breeding season of April through June as many as twenty-five owls have been reported calling in West Newbury, and fall migration counts, which peak in October, included thirty-nine owls in one survey. There is substantial variation from year to year in numbers of both breeding pairs and migrants.

Northern Saw-whet Owls are probably monogamous and usually produce a single brood. Their preferred habitat includes dense coniferous forest, which in

Massachusetts often consists of white or pitch pines, cedar swamps, bogs, and cedar and tamarack thickets. They have a wide variety of calls and whistles, but the most familiar is their territorial song—the incessantly whistled *Toot-toot-toot-toot*, about two notes per second, heard most frequently in winter and early spring. Courtship displays include circling flights by males, complex bobbings and shufflings, and courtship feeding by the male.

The nest is usually an abandoned woodpecker hole, but the birds occasionally nest in natural cavities or nest boxes. The nest is usually without lining except for scattered feathers. A nesting bird will usually pop into view in the nest hole if the nest tree is tapped. The usual clutch is five or six oval to nearly round white eggs. Both birds incubate and brood, but the female apparently does most of these duties. Incubation lasts about four weeks, and the young birds fledge in four to five weeks. Incubation begins with the first egg; thus, hatching is asynchronous, producing a brood in which the young may be of very different sizes. This may have evolved as a reproductive strategy that facilitates raising large numbers of young in years of high food supply and reducing the brood size by starvation in lean years.

Saw-whets are largely nocturnal foragers, with most activity in the early evening and before dawn, although they have been reported foraging on cloudy days. They have the usual owl adaptation of serrated first primary wing feathers, which disrupt smooth air flow and thus reduce vortex noise. These silent predators also possess very differently shaped ears that allow them to pinpoint the location of prey by sound. Their chief prey items are mice, voles, and shrews, but they occasionally take bats, frogs, birds, and insects. They may hunt over a territory of nearly half a square mile. They eject pellets of fur or feathers and bone, usually one per prey item.

Northern Saw-whet Owls have a long history of showing up in unexpected places, such as people's houses, walking or flying into tents, or landing on people's hats or shoulders. These and other rather bizarre behaviors only add to their reputation as irresistibly charming little owls.

W.E. Davis, Jr.

ABOUT THE COVER ARTIST

Julie Zickefoose is a freelance artist, writer, and naturalist who is devoted to the study, conservation, and appreciation of birds. She worked as a field biologist for The Nature Conservancy for six years before turning to art as a full-time career. Julie's drawings have been published in *The New Yorker*, and she has painted, drawn, and written for *Bird Watcher's Digest*, *American Birds*, *Bird Observer*, *Ladybug Magazine*, and numerous publications of the U.S. Fish and Wildlife Service. Exhibitions include one-woman shows at Harvard University's Museum of Comparative Zoology, the Cornell Laboratory of

Ornithology, the Memorial University of Newfoundland, and the XIX International Ornithological Congress in Ottawa. Awards include a Radcliffe Traveling Fellowship to paint birds of Amazonian Brazil, and International Council for Bird Preservation and Sigma Xi stipends. Julie can be reached at Indigo Hill, Route 1, Box 270, Whipple, OH 45788.

ATA GLANCE October 1994 ______ Wayne R. Petersen

The mystery photo for October actually includes several birds. However, the largest of the several pictured birds is the intended mystery bird; the smaller, streaked individuals are Purple Finches. This knowledge provides a clue because it gives the reader a size comparison, seldom enjoyed on this page, of characteristically ambiguous photographs.

The mystery bird's obviously robust size and its thick, conical, seed-cracking bill suggest that it is probably a member of either the Subfamily Cardinalinae or the Family Fringillidae. The first of these two groups includes cardinals, grosbeaks, and allies, while the other comprises finches and allies. Knowing that many of the Fringillids are typically small and short-tailed (e.g., redpolls and siskins) or lack an obvious eyebrow stripe (e.g., Pine Grosbeak), the only possible candidate in this group is the Evening Grosbeak. Although the male Evening Grosbeak has a yellow eyebrow stripe and forehead, it also has an extensive white wing patch, not white wing bars, and does not have a streaked back.

By elimination, it would appear that the hefty seed-eater in the photograph must be a member of the Cardinalinae. Because the bird does not have a crest and possesses wing bars, it cannot be a Northern Cardinal, while its large size compared with that of the adjacent Purple Finches removes the Dickcissel and all of the buntings as possibilities. This leaves only the three species of grosbeaks that have occurred in Massachusetts.

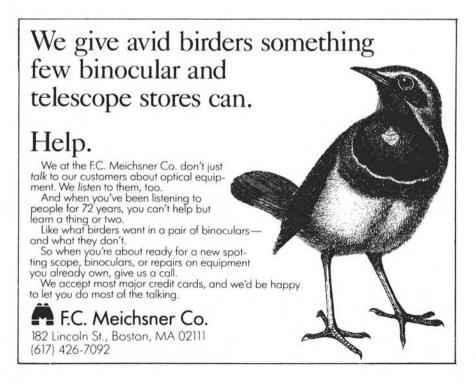
The prominent white wing bars and the bold eyebrow stripe at once leave the Blue Grosbeak out of the running. Because the bird does not show a solid black head and upper chest, it cannot be an adult male Rose-breasted Grosbeak, while a female of that species would be heavily streaked on the breast and flanks. Instead, the relatively unstreaked underparts, especially across the midbreast, and the blackness of the primaries all clearly indicate that the pictured bird is an immature male Black-headed Grosbeak (Pheucticus melanocephalus) in its first autumn plumage.

In Massachusetts the Black-headed Grosbeak is a rare visitor from the West that most often appears in fall and winter and occasionally visits feeding stations, such as the bird pictured in the October issue is doing.



Can you identify this bird?

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



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