

Field Records

September 1983



by George W. Gove, Robert H. Stymeist

It was the hottest September in the Greater Boston area in 113 years of record-keeping, and one of the sunniest and driest as well. The average temperature was 70.6° , 6.0° above normal; the previous record for September was 69.4° back in 1930. Several temperature records were broken: 99° on the eleventh not only broke the old high for the date (95°) set in 1931, but also was a new high for so late in the year. The highest September reading is 102° in 1881. Other new high records include 94° on the sixth, 92° on the nineteenth, and 97° on the twentieth. Some nighttime lows were very high; the low of 76° on the sixth was in fact the highest minimum reading of the entire year and also a new record for the date, surpassing 72° set in 1898. The lowest temperature all month was just 51° on the twenty-fifth. The number of days with the thermometer reaching 90° or more was six, a new high; this brings the total number of days over 90° to thirty days, the old record, set in 1955, being twenty-eight days.

Rain, on the other hand, totaled only 1.06 inches, 2.35 inches less than normal. Although only the driest September since 1980, when 0.82 inch fell, this September was still the sixteenth driest September in 113 years! Measurable amounts of rain came only on three days. Sunshine on the other hand, totaled a new record - 86% of possible days. This, in fact, ties with June 1912 for the sunniest month back through 1893 in 91 years of record-keeping.

LOONS THROUGH HERONS

Pied-billed Grebes were recorded from a very wide selection of locations, with good counts on Monomoy and Plymouth. A Red-necked Grebe found off Eastham was in high breeding plumage according to the observers.

Shearwater reports were uneventful again this month with the maximum numbers being perhaps the lowest ever reported for September. Great Cormorants were reported moving during the third week of the month, with many noted among the larger migrations of the southward bound Double-crested.

The Western Reef-Heron, first noted on April 26, was last seen on the thirteenth. It moved out with the Snowy Egrets with which it had spent the evenings in the marshes of Quaise all summer. (See article elsewhere in this issue.)

A night-time roost of herons at Hellcat Marsh, Plum Island, included thirty-nine Great Egrets, 706 Snowy Egrets, two pied Little Blue Herons, all as late as September 26. A roost of Black-crowned Night-Herons at Eastham reached 130 individuals on September 7, with at least six immature Yellow-crowned Night-Herons noted among them. Other high counts included 213 Snowy Egrets at Belle Isle Marsh, East Boston; 130 Snowys at Third Cliff, Scituate, 51 Cattle Egrets in Ipswich, and 19 Green-backed Herons in Eastham.

R.H.S.

<u>SPECIES/SEPTEMBER</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>
Common Loon:			
30	Annisquam	3 calling	H.Wiggin
Pied-billed Grebe:			
11,11+18	MV,Lakeville	6, 1 + 5	R.Sargent,W.Petersen
11,13	Braintree,Winchester	3, 1	R.Campbell,G.Gove
20,24	Monomoy,Wellfleet	14, 3	T.Raymond,J.Barton#
24,25	Plymouth,Scituate	12, 4	G.Gove,H.Mallers
	Other reports of single individuals from various locations.		

<u>SPECIES/SEPTEMBER</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>
Red-necked Grebe: 17	Eastham	1	H.Coolidge,H.Wiggin
Northern Fulmar: 25	Stellwagen,off Monomoy	30, 10	P.Vickery#,BBC
Greater Shearwater: 25	off Monomoy	10	BBC
Sooty Shearwater: 25	off Monomoy	2	BBC
Manx Shearwater: 1,5	Stellwagen	2, 1	R.Forster,P.Roberts
11,25	Stellwagen,off Monomoy	2, 8	BBC
Gannet: 6	P'town	1 ad, 2 imm	W.Cornwell
Great Cormorant: 3,18	Monomoy,Newbypt	1 imm, 1	W.Petersen,BBC
24,28	N,Scituate,S.Peabody	22, 2	W.Petersen,R.Heil
Double-crested Cormorant: 3,24	PI	100, 536	BBC
24-25,25	E.Boston,Ipswich	645, 175+	S.Zendeh,J.Berry
28	Squantum	500 migrants	R.Abrams
American Bittern: 4,12-30	E.Boston,GMNWR	1, 4 reports	S.Zendeh,v.o.
13,17	MNWS,PI	1, 1	C.Blasczak,BBC
Great Blue Heron: thr,2	Saugus,GMNWR	max 13 9/29, 36	J.Berry,M.Baird
3,5;5	PI;Rowley	6, 9; 7	BBC
27	Eastham	70	R.Forster#
Great Egret: 3,5	Chatham,Rowley	4, 7	W.Petersen#,BBC
18,26	PI	20, 39	W.Petersen#,G+C.Gove
<u>Western Reef-Heron:</u> 1-13	Nantucket	1 from 4/26	E.Andrews#+v.o.
Snowy Egret: thr	E.Boston,Saugus	max 213 9/4, max 60 9/6	S.Zendeh#,J.Berry
3,5	PI,Rowley	80, 50+	BBC
11,12	MV,Scituate(3rd Cliff)	40, 130	R.Sargent,D.Clapp
26,27	PI,Scituate	706, 47	G+C.Gove,H.Mallers
Little Blue Heron: 3	PI,E.Orleans	1 imm, 1 imm	BBC,D.Williams
12,18	Scituate,Eastham	4 ad, 1 imm	C.d'Entremont,R.Stymeist#
26,27	PI,Scituate	2 pied, 1 imm	G+C.Gove,H.Mallers
Tricolored Heron: 2	Monomoy	1	B.Nikula#
Cattle Egret: 1-26	Ipswich	max 51 9/11	J.Berry
Green-backed Heron: 2	Eastham	19 (night roost)	R.Forster
25,28	E.Boston,Whitman	4, 1	S.Zendeh,W.Petersen
Black-crowned Night-Heron: 2,7,27	Eastham	73, 130, 14 at roost	v.o.
11,30	MV,Squantum	65, 75	R.Sargent,R.Abrams
Yellow-crowned Night-Heron; thr	Eastham	max 6 imm 9/2	R.Forster#+v.o.
1-26,11	Yarmouthport,Marshfield	1 ad, 1	J.Aylward#,D.Clapp
3,18	PI	1, 1	R+D,Hale#,A.Blaisdell#
Glossy Ibis: 1-24,27	PI,Scituate	max 5, 2	v.o.,H.Mallers

SWAN THROUGH BOBWHITE

A drake Redhead was early and unusual at Great Meadows N.W.R. where it behaved like a dabbling duck feeding on the surface accumulation. A male Tufted Duck was present throughout the month at the south end of Monomoy where it had been seen earlier in the summer and, as noted by one observer, it was very likely the Chatham bird from early spring (BOEM, 11 (3):153) also believed to be the same bird that had been in Acoaxet earlier. An immature male King Eider was noted at Monomoy and was probably the same bird seen in Chatham in August. No Common Eider are listed in the records although there are always some immature and nonbreeding birds present throughout the year.

September is the month of hawk migration, and this September produced the most spectacular southward migration, particularly of Broad-winged Hawks with twenty thousand passing over Mt. Wachusett in the span of a few hours on September 13, the same day that two hundred Osprey and a hundred Harriers were seen in migration there. This observer was not present to see this spectacle and has only heard rapturous accounts by some of the hawk migration observers who were present; an account of that unprecedented and memorable day will appear in BOEM in the future.

A banded, immature Bald Eagle was seen at Monomoy and Chatham on and off during the month, and two eagles were seen during the migration past Wachusett. Several Northern Goshawks were noted during the month including one near a nesting site in Halifax. Falcons are more generally coastal migrants, and a total of eleven Merlins and nine Peregrines was reported from Plum Island with the latter species being reported from eight coastal and island vantage points.

G.W.G.

<u>SPECIES/SEPTEMBER</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>
Mute Swan: 5,11	Ipswich,MV	9 (family), 400	BBC,R.Sargent#
Canada Goose: 10	Ipswich	270	J.Berry
Wood Duck: 24	Hingham	110	SSBC
Green-winged Teal: 24	Scituate	11	W.Petersen
Blue-winged Teal: 2,11	Eastham,MV	54, 65	R.Forster,R.Sargent#
Northern Shoveler: 4,18 24	Monomoy,PI GMNWR	8, 10 6	W.Petersen,BBC R.Walton
Gadwall: 3,18 23,24	PI GMNWR,Scituate	2, 6 4, 1	BBC R.Walton,SSBC
American Wigeon: 11,13	MV,Lakeville	20, 6	R.Sargent#,D.Briggs
Redhead: 24-30	GMNWR	1 m	G.Gove#
Ring-necked Duck: 4;11,18	Monomoy;Lakeville	1; 19, 125	W.Petersen#
<u>Tufted Duck:</u> thr	Monomoy	1 m	W.Petersen#+v.o.
Greater Scaup: 18	PI	1	BBC
Lesser Scaup: 4,13	Monomoy,Lakeville	1, 60	W.Petersen,D.Briggs
<u>King Eider:</u> 11	Monomoy	1 imm m	W.Harrington#
White-winged Scoter: 3	Monomoy	18	W.Petersen#
Hooded Merganser: 18	PI	7	BBC
Red-breasted Merganser: 10	PI	10	BBC
Turkey Vulture: 6-30 5	Mt.Wachusett Ipswich	total 101 2	EMHW(fide P.Roberts) BBC
Osprey: thr 11,18 24,29	Mt.Wachusett MV,W.Newbury E.Boston,Woburn	total 332 max 70 (9/13) 5, 33 4, 1	EMHW(fide P.Roberts) R.Sargent#,P.Roberts S.Zendeh,G.Gove
Bald Eagle: thr 12,13,16	Monomoy Mt.Wachusett	1 imm b 1 ad., 1, 1	v.o. EMHW(fide P.Roberts)
Northern Harrier: 3-30 thr	Mt.Wachusett PI	total 108 max. 50 (9/13) max 5	EMHW(fide P.Roberts) v.o.
Sharp-shinned Hawk: thr.	Mt.Wachusett	total 739 max.126(9/14)	EMHW(fide P.Roberts)
Cooper's Hawk: 3,15 13,16,18	Mt.Wachusett Lynn,Lincoln,PI	1, 1, 1 1 imm, 1, 1	EMHW(fide P.Roberts) R.Heil,J.Baird,G.d'Entremont

<u>SPECIES/SEPTEMBER</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>
Northern Goshawk:			
14-30	Mt. Wachusett	6	EMHW (fide P. Roberts)
14, 18	GMNWR, Halifax	1 imm, 1	G. Gove, K. Holmes#
24	Marshfield	1	SSBC
Red-shouldered Hawk:			
10-24	Mt. Wachusett	11	EMHW (fide P. Roberts)
10	E. Middleboro	1	K. Anderson
Broad-winged Hawk:			
1-28	Mt. Wachusett	total 26,898 max. 19,912 (9/13)	EMHW (fide P. Roberts)
14, 25	Mt. Wachusett	1516, 325	EMHW (fide P. Roberts)
Red-tailed Hawk:			
thr.	Mt. Wachusett	total 50	EMHW (fide P. Roberts)
American Kestrel:			
thr	Ipswich	max 6 (9/1)	J. Berry
3-29	Mt. Wachusett	total 149 max. 25 (9/14)	EMHW (fide P. Roberts)
Merlin:			
15-24	PI	max 4, total 11	v.o.
8, 18	GMNWR, SRV	1, 2	R. Walton
18, 20	Eastham, Monomoy	1, 1	R. Stymeist#, T. Raymond
24	Outer Cape	6	BBC
Peregrine Falcon:			
3, 8, 19	Mt. Wachusett	1, 1, 1	EMHW (fide P. Roberts)
15-27	PI	max 6, total 9	v.o.
4; 8, 25	Nantucket; Monomoy	1 m; 1, 1	J. Grugan#; v.o.
8, 17	Orleans, N. Scituate	1 ad, 1 ad	
24	E. Boston, Duxbury, Truro	1, 1, 2	S. Zende, SSBC, BBC
Ruffed Grouse:			
18	E. Middleboro	2	K. Anderson
Northern Bobwhite:			
24	Sudbury, Hingham	1 ad + 3 imm, 16	R. Walton, SSBC

RAILS THROUGH PHALAROPES

Two of the Soras reported this month were unlucky birds; one was a road kill in Halifax and the other was found injured on a lawn in Marshfield.

September is the month of the "grasspipers" and this September was no exception with many reports of Lesser Golden-Plover and Baird's, Pectoral, and Buff-breasted sandpipers. A total of nineteen Lesser Golden Plover was reported from Plum Island and eleven from Monomoy. Maximum flock sizes of thirty-four were seen in Bridgewater and forty in West Bridgewater. Baird's Sandpipers were present in average numbers, with one report of this species in Westboro, an inland location. Pectoral Sandpipers were reported in average to good numbers with a flock of eighty on Monomoy. Buff-breasted were actually rather scarce although two were found at inland locations.

A high count for September of twenty-nine Willets was reported from Monomoy; these were probably the western race as that is the race usually present here in late summer and fall. Solitary Sandpiper sightings or reports were rather low. High numbers of Whimbrel were present on Monomoy on three occasions over the month, and one Marbled Godwit spent ten days at Third Cliff in Scituate where good numbers of Red Knot were present. Both Western and White-rumped sandpiper were seen at Orleans in sizable flocks. Purple Sandpipers were noted late in the month indicating that winter is on the way. G.W.G.

Virginia Rail:			
2, 4	PI, Nantucket	1 imm, 2	D. Briggs#, J. Grugan#
27, 30	Eastham, GMNWR	1, 1 imm	R. Forster#, C. Floyd#
Sora:			
thr	GMNWR	max 10	v.o.
11, 14	Halifax, Marshfield	1, 1	W. Petersen, A. Hall#
24, 27	PI, Truro	2, 1	BBC, R. Forster#
Common Moorhen:			
3, 20	PI, GMNWR	2, 9	BBC, A. Williams
American Coot:			
18, 23	Ipswich, GMNWR	1, 2	W. Petersen, R. Walton
Black-bellied Plover:			
thr	Monomoy	max 1800 (9/18)	v.o.
3, 5	PI, Squantum	300, 250	BBC, R. Abrams
11, 22	MV, GMNWR	105, 3	R. Sargent#, R. Walton

<u>SPECIES/SEPTEMBER</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>
Lesser Golden-Plover:			
10-24,3-20	PI,Monomoy	max 6, total 19, max 8, total 11	v.o.
5-12,15	Scituate,Bridgewater	max 5, 34	D.Clapp#
8,9	MV,Dorchester	27, 6	R.Sargent#,J.Carter
11,17	Halifax,W.Bridgewater	5 ad, 40	W.Petersen#
5,12	Ipswich,Marshfield	5 ad, 5	BBC,D.Clapp
thr	1 to 3 birds reported from 7 locations		
Semipalmated Plover:			
3,4	PI,Monomoy	100, 350	BBC
5,22	Squantum,Lynn	15, 30	R.Abrams,C.Blaszczak
Piping Plover:			
4,11	Monomoy,MV	20, 2	BBC,R.Sargent#
12,17	Scituate	max 4	v.o.
Killdeer:			
5,24	Newton	24, 29	F.Bouchard,R.Stymeist#
9,24	Harwich,E.Boston	20, 15	H.Stabins,S.Zendeh#
15,24	Bridgewater	55, 54	R.Forster#,W.Petersen
American Oystercatcher:			
1, 1-17	Chatham,Monomoy	17, max 35	R.Walton,v.o.
3-5	Nantucket	19	R.Stymeist
Greater Yellowlegs:			
thr,4	E.Boston,Monomoy	max 200 (9/24) 120	S.Zendeh#,BBC
Lesser Yellowlegs:			
3,5	PI,Rowley	60, 30	BBC
11	Halifax,MV	60, 12	W.Petersen,R.Sargent#
Solitary Sandpiper:			
1,2	Brookline,Newton	1, 1	J.Paputseanos,O.Komar
3,24	PI,Bridgewater	1, 3	BBC,W.Petersen
Willet:			
4	Monomoy,Squantum	29, 1	BBC,J.Paputseanos
12,17	Scituate	1, 1	D.Clapp,W.Petersen
Spotted Sandpiper:			
3,10;11	PI;MV	3, 1; 2	BBC;R.Sargent#
13,24	Lakeville,Bridgewater	1, 1	D.Briggs,W.Petersen
Upland Sandpiper:			
8,11	MV	4, 4	P.Smith#,R.Sargent#
1-15	4 individuals from 4 locations		
Whimbrel:			
2,15,27	Monomoy	60, 50, 30	B.Nikula#
thr	PI	max 4 (9/16)	v.o.
2,5	Eastham,Scituate	16, 16	R.Forster,D.Clapp
18,24	Yarmouth,Duxbury	12, 8	H.Coolidge#,SSBC
Hudsonian Godwit:			
thr	PI	max 12 (9/3)	v.o.
3,4	Monomoy-south, north	3, 5	W.Bailey#,BBC
Marbled Godwit:			
9-18	Scituate	1	D.Clapp+v.o.
Ruddy Turnstone:			
3,4	PI,Monomoy	3, 20	BBC
10,11	PI,MV	1, 2	BBC,R.Sargent#
Red Knot:			
thr	PI	max 14 (9/26)	v.o.
4,24	Monomoy,Scituate	1000, 200	BBC,SSBC
Sanderling:			
4,6	Monomoy,Nahant	200, 185	BBC,F.Bouchard
8,11	Revere,MV	100, 80	C.Jackson,R.Sargent
22	Lynn	260	C.Blaszczak
Semipalmated Sandpiper:			
4,5	Monomoy,Rowley	750, 15	BBC
6,10	Lynn,PI	75, 6	F.Bouchard,BBC
Western Sandpiper:			
thr	PI	max 6 (9/26) total 18	v.o.
5;8,10	Monomoy;Orleans	12; 20, 30	W.Petersen;B.Nikula
10,24	Scituate	12, 5	W.Petersen
10,12	Manchester,Marshfield	1, 2	BBC,D.Clapp
Least Sandpiper:			
4,11	Monomoy,MV	400, 15	BBC,R.Sargent#
5,10	Rowley,PI	3, 20	BBC
White-rumped Sandpiper:			
thr	PI	max 4 (9/10) total 12	v.o.

<u>SPECIES/SEPTEMBER</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>
White-rumped Sandpiper (continued)			
4;8,10	Monomoy,Orleans	2; 20, 30	BBC;B.Nikula
8	MV	8	R.Sargent#
Baird's Sandpiper:			
4,17	Monomoy	2, 2	B.Nikula#,H.Wiggin#
14,17	Westboro,PI	1, 1	B.Blodget
24,26	PI	3, 1	D.Stemple#,N.Clayton#
Pectoral Sandpiper:			
thr	PI,Lexington	max 30 (9/26), max 11 (9/25)	v.o.,J.Andrews
8,11	MV,Halifax	6, 20	R.Sargent#,W.Petersen
20	Monomoy	80	T.Raymond
Purple Sandpiper:			
24	Hingham	3	SSBC
Dunlin:			
16,26	PI	20, 120	G.Gove
Stilt Sandpiper:			
3,16	PI	1, 8	BBC,H.Parker#
4,18	Monomoy,Ipswich	3, 6	BBC,W.Petersen
Buff-breasted Sandpiper:			
1,1-2	Newton,Marblehead	1, 1	O.Komar#,J.Smith
1-20	Monomoy	max 3 (9/20)	v.o.
1-12;8,11	PI;MV	1; 1	v.o;R.Sargent#
11,17;16	Scituate;Lexington	1, 1; 1	W.Harrington#,W.Petersen#;J.Andrews
Short-billed Dowitcher:			
thr	PI	max 24 (9/3)	BBC
4,11	Monomoy,MV	12, 25	BBC,R.Sargent#
11,30	Lexington	1, 1	J.Andrews
Long-billed Dowitcher:			
thr	PI	max 150 (9/23)	v.o.
20,27	Monomoy,Eastham	4, 7	T.Raymond,R.Forster
Common Snipe:			
11,27	Halifax,GMNWR	4, 8	W.Petersen,G.Gove
American Woodcock:			
24	South Shore	3	SSBC
Wilson's Phalarope:			
1-23	PI	max 2 (9/10)	v.o.
8	MV,Monomoy	1, 2	R.Sargent#,J.Lortie#
21-23	Lexington	1	J.Andrews
Red-necked Phalarope:			
4,5	Monomoy	1, 1	W.Petersen#(different birds)
11,17-18	Stellwagen,Duxbury	3, 1	BBC,M.Sears#

JAEGER THROUGH OWL

Four Parasitic Jaegers were seen on a BBC pelagic trip, and on the trip to Stellwagen Bank, those on board were treated to close views of two adult Sabine's Gulls, one in basic (winter) plumage and the other in alternate (breeding) plumage. Little Gulls were present in Newburyport Harbor and a Common Black-headed Gull was seen at Belle Isle Marsh in East Boston. A Bonaparte's Gull was seen at Great Meadows; inland records of this species in Massachusetts are unusual. An adult Lesser Black-backed Gull was seen for over a week's time on Monomoy, and the first Glaucous Gull of the season appeared there on the fourth. Caspian Terns were noted at Scituate and Plum Island; in the latter case, the observer noted that the juvenile of this species has the darkest cap of any juvenile or first winter Sterna tern - a complete black cap with a few whitish streaks on the forehead. Royal Terns were also noted and an adult Sandwich Tern was seen at Monomoy where fifteen thousand Common Terns were counted going to roost at dusk. Forster's Terns spent the month in the marsh at Fort Hill with a maximum of seventy present there on September 27. A total of seven Black Skimmers was noted at three locations.

A Black-billed Cuckoo was banded at Nantucket, and a total of twelve Yellow-billed Cuckoos was reported. Two Barn Owls raised three young in a church steeple in Sandwich under trying conditions. Read "The Great Barn Owl Caper" elsewhere in this issue for a report of this bizarre incident. G.W.G.

Parasitic Jaeger:			
5,11	Gloucester,Stellwagen	1, 4 imm.	P.Roberts,BBC
Laughing Gull:			
thr	E.Boston	max 80 (9/24)	S.Zendeh#

<u>SPECIES/SEPTEMBER</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>
Laughing Gull (continued):			
7,11	P'town,MV	200, 200	W.Cornwell#,R.Sargent#
4,13,24	Monomoy,Lynn,PI	24, 38, 1	BBC,R.Heil,J.Grugan
Little Gull:			
18;20	Newbypt	1 juv, 1 ad; 3 ad	W.Petersen#,G.d'Entremont;R.Forster
Common Black-headed Gull:			
4;17,18	E.Boston	1; 1, 1	S.Zendeh#;C.Jackson
Bonaparte's Gull:			
6,13	Nahant,Lynn	78, 170	F.Bouchard,C.Blaszczak
16,17	Newbypt,GMNWR	340, 1 imm	G.Gove,R.Walton
Ring-billed Gull:			
3,4	Newbypt,Monomoy	250, 100	BBC
Lesser Black-backed Gull:			
5,11	Monomoy	1 ad	W.Petersen#,W.Harrington#
Glaucous Gull:			
4	Monomoy	1	R.Prescott#
Black-legged Kittiwake:			
5	Monomoy	1 juv	W.Petersen#
<u>Sabine's Gull:</u>			
11	Stellwagen	2 ad	BBC
Caspian Tern:			
16,24	PI,Scituate	2 (1 ad, 1 juv), 2 (1 ad, 1 imm)	R.Heil,W.Petersen
Royal Tern:			
5,8	Nantucket,MV	4, 1	J.Grugan,R.Sargent#
<u>Sandwich Tern:</u>			
4	Monomoy	1 ad	BBC (W.Drummond)
Roseate Tern:			
4,11	Monomoy,MV	1000, 2	BBC,R.Sargent#
Common Tern:			
3,15	Monomoy	15,000, 8,000	B.Nikula#(roosting at dusk)
17	PI	250	BBC
Forster's Tern:			
thr	Eastham	max 70 (9/27)	v.o.
1-5	Monomoy,PI	max 20, 1	v.o.
17-25	E.Boston	2	C.Jackson#
Least Tern:			
11	MV	2	R.Sargent#
Black Tern:			
3,4	PI,Monomoy	1, 16	BBC
12,18	Scituate,Eastham	1, 1	G.d'Entremont,R.Emery#
Black Skimmer:			
1-18,2	Monomoy,Plymouth	max 4, 1 imm	v.o.,MBO staff
18	Barnstable	2	F.Bouchard
Black-billed Cuckoo:			
11,15	MV,Nantucket	1, 1 b	R.Sargent#,E.Fisk
18,20	Salisbury,MNWS	1, 1	G.d'Entremont,J.Smith
Yellow-billed Cuckoo:			
2-5,14	E.Middleboro,Lincoln	1, 1	K.Anderson,R.Forster
25,30	Newton,PI	2, 1	O.Komar,BBC
1-24	7 individuals		
Barn Owl (see note in this issue):			
17-20	Sandwich	4	R.Pease#,D.Clapp
Eastern Screech Owl:			
8,11	Annisquam,MV	2, 4	H.Wiggin,R.Sargent#
18	E.Middleboro	1	K.Anderson
Great Horned Owl:			
18	Halifax,E.Middleboro	2, 3	K.Holmes,K.Anderson
26	PI	1	G.Gove
Barred Owl:			
18	Halifax	1	W.Petersen
Short-eared Owl:			
4,20	Monomoy	1, 2	BBC,T.Raymond

NIGHTHAWKS THROUGH VIREOS

The Common Nighthawk migration continued during the first week of the month with good numbers reported from the Greater Boston area. Nighthawks are more unusual south of Boston and on the islands, so the reports from Nantucket and Cape Cod are noteworthy.

Red-bellied Woodpeckers totaled seven individuals on their stronghold of Martha's Vineyard, and an immature of this species was found in Newton.

Empidonax flycatchers were moving in good numbers through midmonth as especially noted from the banding results on Nantucket. Only two Western Kingbirds were recorded, both from outer Cape Cod.

Tree Swallows were concentrated on Plum Island later than usual, probably due to the warm weather, and in extraordinary numbers. Last year the maximum count there was 600+ individuals.

Near month's end Gray Catbirds and American Robins were conspicuously migrating in large numbers. There was in addition a good flight, especially offshore, of Red-breasted Nuthatches, with sixty-three banded on Nantucket. At Marblehead Neck at least fourteen Winter Wrens were noted, and fifteen Veeries were also found. Nineteen Gray-cheeked and twenty-six Swainson's thrushes were banded at Nantucket during the month. A Loggerhead Shrike at Plum Island was the only one reported during the month.

On Nantucket, forty Red-eyed, seven Philadelphia, two Warbling, one Yellow-throated, three Solitary, and one White-eyed vireo were banded during the month. Other Philadelphia Vireo reports came from six additional locations with fifteen individuals noted on Martha's Vineyard. R.H.S.

<u>SPECIES/SEPTEMBER</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>
Common Raven:			
thr	Mt. Wachusett	1-2	P. Roberts#+v.o.
Red-breasted Nuthatch:			
1-30, 15-30	Nantucket (2 locations)	55 b, 8 b	E. Andrews, E. Fisk
1-21, 11	Annisquam, MV	18, 15	H. Wiggin, R. Sargent
24	South Shore, Chatham	12, 12	SSBC, BBC
Brown Creeper:			
14-30, 28	Nantucket (2 locations)	15 b, 5 b	E. Andrews, E. Fisk
Carolina Wren:			
10	Braintree	1	R. Campbell
House Wren:			
13, 18	Braintree, Newton	3, 3	R. Campbell, O. Komar
23-24, 25	Nantucket, Newton	4 b, 3	E. Andrews, O. Komar
Winter Wren:			
18-28	MNWS	14 ⁺	J. Smith+v.o.
24, 28; 24	Nantucket; Hingham	2 b; 1	E. Andrews; SSBC
25, 30	PI	1, 2	J. Crugan, W. Drummond
Marsh Wren:			
24	Hingham, Marshfield	1, 3	SSBC
Ruby-crowned Kinglet:			
8, 29	Framingham, Annisquam	2, 10	R. Forster, H. Wiggin
Blue-gray Gnatcatcher:			
17, 24	Chatham, N. Scituate	1, 1	H. Wiggin#, W. Petersen
Veery:			
2-23, 9	Nantucket, MNWS	6 b, 15+	E. Andrews, R. Heil
11, 24	MV, Middleboro	8, 5	R. Sargent#, W. Petersen
Gray-cheeked Thrush:			
9-28, 27	Nantucket (2 locations)	17 b, 2 b	E. Andrews, E. Fisk
9, 10	MNWS, Braintree	1, 1	C. Blaszczak, R. Campbell
10, 24	E. Orleans, Quincy	1, 1	R. Moore#, SSBC
Swainson's Thrush:			
9-30, 13-25	Nantucket (2 locations)	20 b, 6 b	E. Andrews, E. Fisk
24	Brookline, PI, South Shore	2, 2, 25	R. Stymeist, BBC, SSBC
Hermit Thrush:			
11	MV	1	R. Sargent
Wood Thrush:			
11, 27	MV, Whitman	1, 1	R. Sargent, W. Petersen
American Robin:			
17	Belmont	81 migrants	L. Taylor
Gray Catbird:			
thr	Nantucket (2 locations)	250 b, 12 b	E. Fisk, E. Andrews
11, 17	MV, PI	75, 80+	R. Sargent, P. Roberts
18	Eastham	37	D. Clapp
Water Pipit:			
10	Duxbury, PI	6, 2	R. Walton, BBC
29	Lexington	9	J. Andrews
Cedar Waxwing:			
8-10, 11	Annisquam, MV	49, 200	H. Wiggin, R. Sargent

<u>SPECIES/SEPTEMBER</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>
Cedar Waxwing (continued):			
24	Plymouth, Marshfield	69, 52	SSBC (Fall Roundup)
24	Scituate, Hingham	42, 19	SSBC (Fall Roundup)
<u>Loggerhead Shrike:</u>			
24	PI	1	F. Bouchard
Common Nighthawk:			
1, 2, 6	Brookline	236, 69, 4	R. Stymeist#
1, 2, 5	Newton	226, 40, 90	O. Komar#
10, 12	Yarmouthport, Nantucket	3, 17	J. Aylward, R. Stymeist#
18	Harwich	1	B. Nikula, D. Reynolds
19, 20	Cambridge, Boston	3-4, 3	F. Bouchard, R. Forster
Chimney Swift:			
1, 10	Lincoln, PI	100, 1	J. Baird, W. Drummond
24, 30	Lakeville, Mt. Wachusett	1, 6	W. Petersen, C. Floyd#
Ruby-throated Hummingbird:			
5	E. Middleboro, Sudbury	1, 4	K. Anderson, G. Abrahamson
8, 10, 11	Lincoln	1, 1, 1	R. Forster
16, 25	Belmont, Newton	1, 1	O. Komar
Red-headed Woodpecker:			
11, 28	MV, S. Peabody	3, 1 imm	R. Sargent#, R. Heil
Red-bellied Woodpecker:			
11, 28	MV, Newton	7, 1 imm	R. Sargent#, O. Komar
Yellow-bellied Sapsucker:			
24	Salem, Duxbury	1, 2	C. Blaszczak, SSBC
30	Newton, Squantum	2, 1	O. Komar, R. Abrams
Northern Flicker:			
11, 24	MV, PI	60, 28	R. Sargent#, BBC
Olive-sided Flycatcher:			
9	Annisquam, MNWS	1, 1	H. Wiggin, C. Blaszczak
Eastern Wood-Pewee:			
9; 18, 24	Annisquam; PI, outer Cape	6; 1, 1	H. Wiggin; BBC
Yellow-bellied Flycatcher:			
8; 23, 25	Nantucket	1 b; 1 b, 1 b	E. Andrews; E. Fisk
Acadian Flycatcher:			
12	Nantucket	1 b	E. Andrews#
"Traill's" Flycatcher:			
4-16	Nantucket	6 b	E. Andrews
Least Flycatcher:			
2-13	Nantucket	8 b	E. Andrews
Eastern Phoebe:			
22, 24	Newton, Middlesex Falls	3, 10	O. Komar, P. Roberts
Great-crested Flycatcher:			
23, 24, 25	Nantucket, Chatham, Hamilton	1 b, 2, 1	E. Fisk, BBC, J+N. Berry
Western Kingbird:			
18, 27	Truro, Eastham	1, 1	R. Stymeist#, R. Forster#
Eastern Kingbird:			
5	Ipswich, Scituate	15+, 15	J. Berry#, H. Mallers
10	PI, Nantucket	6, 16	BBC, R. Stymeist#
18, 27	PI, Eastham	2, 2	W. Petersen, R. Forster
Purple Martin:			
2, 11, 18	Newton, MV, PI	2, 1, 2	O. Komar#, R. Sargent#, G. d'Entremont
Tree Swallow:			
17, 26	PI	25,000+, 2500 [±]	G. Gove# + v.o.
16, 18	S. Middleboro, Middleboro	2000+, 100+	S. MacDonald, D. Briggs#
Rough-winged Swallow:			
18	W. Harwich	6	B. Nikula, D. Reynolds
Cliff Swallow:			
3	PI	1	BBC (R+D. Hale)
Barn Swallow:			
26	PI	10-30	G. Gove
White-eyed Vireo:			
10+17, 11	Scituate, MV	1 + 1, 3	W. Petersen, R. Sargent#
24	Nantucket	1 b	E. Fisk
Solitary Vireo:			
17, 23-25	Belmont, Nantucket	1, 3 b	L. Taylor, E. Fisk
24	Newton, Brookline	3, 2	R. Stymeist#
30	Sudbury	3	R. Walton
Yellow-throated Vireo:			
11, 15	MV, Nantucket	2, 1 b	R. Sargent#, E. Andrews
18, 24	Chatham, Plymouth	1, 1	B. Nikula, SSBC

<u>SPECIES/SEPTEMBER</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>
Warbling Vireo:			
18,25	PI,Nantucket	1, 2 b	G.d'Entremont,E.Fisk
Philadelphia Vireo:			
1, 3	Chatham,PI	1, 1	R.Forster,BBC(Hales)
5,10-25	Ipswich,Nantucket	1, 7 b	BBC(Berry),E.Andrews
11	PI,MV	2, 15	B+W.Drummond,R.Sargent#
15,16	Bridgewater,Woburn	1, 1	K.Holmes,N.King
Red-eyed Vireo:			
9-25,15-25	Nantucket(2 locations)	26 b, 14 b	E.Andrews,E.Fisk
9,11	MNWS,MV	6, 30	C.Blasczak,R.Sargent#
24,25	Outer Cape,Newton	4, 1	J.Barton,O.Komar

WARBLERS

There was a good fall flight of warblers this September at Mothball Pines, Nantucket at Edith Andrews' banding station. A total of twenty-nine species was netted during the month, including a Golden-winged, nearly three hundred Cape May, a Worm-eating, five Connecticut, five Mourning, and twelve Yellow-breasted Chats. The highlight was a hatching year male MacGillivray's Warbler netted and measured on September 4, 1983. Identification and separation of the species of *Oporornis* warblers is difficult, and very careful measurements by an experienced bander are required to safely identify this species. Full details are on file of all the critical measurements.

In addition to the Nantucket reports, Golden-winged Warblers totaled eight individuals, double the four that were reported in September 1982. A Prothonotary Warbler was found at midmonth in the Middlesex Fells. Seven Connecticut Warblers were noted at as many localities, and seven Mourning Warblers were counted in addition to the five banded on Nantucket. Ten Yellow-breasted Chats were noted from eight locations, three more than last year excluding the Nantucket reports. R.H.S.

Blue-winged Warbler:			
5,13	PI,Braintree	1, 1	BBC,R.Campbell
20,24	MNWS,Plymouth	1, 1	J.Smith,SSBC
Golden-winged Warbler:			
5,9,13	MNWS	1, 1, 1	J.Smith,R.Heil#,J.Smith
8,12	Nantucket,Lincoln	1 b, 1	E.Andrews,D.Holt#
11,26	MV,Eastham	2, 1 f	R.Sargent#,P.Vickery
Tennessee Warbler:			
8-23	Nantucket	7 b	E.Andrews
8,10	Framingham;Lexington,PI	3; 1, 1	R.Forster;J.Carter,BBC
11	PI,Ipswich,MV	3, 2, 3	B+W.Drummond,J.Berry,R.Sargent
24,25	W.Roxbury,Newton	3, 1	R.Stymeist#,O.Komar
Orange-crowned Warbler:			
24	PI	1	D.Stemple#
Nashville Warbler:			
5,8-27	Nantucket	1, 6 b	J.Grugan,E.Andrews
11	Ipswich,MV,PI	1, 1, 3	J.Berry,R.Sargent,B+W.Drummond
22;28,30	Newton,PI	1; 2, 1	O.Komar;G.Gove,W.Drummond
Northern Parula:			
10	PI,Lexington,Ipswich	1, 2, 5	BBC,J.Carter,J.Berry
13-30	Nantucket	11 b	E.Andrews
Yellow Warbler:			
2-16,11	Nantucket,MV	8 b, 6	E.Andrews,R.Sargent
24,27	PI,Newton	3, 1	BBC, O.Komar
Chestnut-sided Warbler:			
24,30	N.Scituate,PI	1, 1	W.Petersen,W.Drummond
Magnolia Warbler:			
8,8-30	Framingham,Nantucket	2, 19 b	R.Forster,E.Andrews
18,25	Eastham,Newton	1, 1	R.Stymeist,O.Komar
Cape May Warbler:			
2-30,23-30	Nantucket (2 locations)	281 b, 19 b	E.Andrews,E.Fisk
5,9;11	Annisquam;MV	3, 19; 25	H.Wiggin;R.Sargent#
24,28	PI,Brookline	4, 3	J.Grugan,H.Wiggin
Black-throated Blue Warbler:			
8-30	Nantucket	13 b	E.Andrews
10	Lexington,Braintree	6, 1	J.Carter,R.Campbell
24,30	Brookline,PI	5, 2	R.Stymeist,W.Drummond
Yellow-rumped Warbler:			
9-30,14-30	Nantucket (2 locations)	51 b, 113 b	E.Andrews,E.Fisk

<u>SPECIES/SEPTEMBER</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>
Black-throated Green Warbler:			
9,11	Annisquam,PI	1, 2	H.Wiggin,B+W.Drummond
Blackburnian Warbler:			
1, 8	Chatham,Framingham	2, 2	R.Forster
14,23	Nantucket	1 b, 2 b	E.Andrews
Pine Warbler:			
15-29,24	Nantucket (2 locations)	4 b, 1 b	E.Andrews,E.Fisk
Prairie Warbler:			
4-16,23	Nantucket (2 locations)	6 b, 2 b	E.Andrews,E.Fisk
24,25	Chatham,Newton	1, 1	J.Barton#,O.Komar
Palm Warbler:			
8,8-24	Annisquam,Nantucket	2, 10 b	H.Wiggin,E.Andrews
Bay-breasted Warbler:			
3-30	Nantucket	56 b	E.Andrews
11	PI,MV,Ipswich	3, 8, 5	B+W.Drummond,R.Sargent#,J.Berry
17,23	Eastham,E.Middleboro	1, 1	H.Wiggin#,K.Anderson
Blackpoll Warbler:			
10-30,23-30	Nantucket (2 locations)	180 b, 12 b	E.Andrews,E.Fisk
10,11,24	Braintree,MV.Brookline	5, 10, 10	R.Campbell,R.Sargent,R.Stymeist#
Black-and-white Warbler:			
6-28	Nantucket	30 b	E.Andrews
24	Salisbury,Brookline	1, 5	J.Grugan,R.Stymeist#
American Redstart:			
2-30,16-25	Nantucket (2 locations)	96 b, 9 b	E.Andrews,E.Fisk
11	MV,Ipswich	30, 4	R.Sargent#,J.Berry
13,24	MNWS,Outer Cape	7, 6	C.Blaszczak,J.Barton#
Prothonotary Warbler:			
15	Middlesex Fells	1	P.Roberts
Worm-eating Warbler:			
3,12,20	Nantucket,Scituate,WBWS	1 b, 1, 1	E.Andrews,G.d'Entremont,D.Reynolds
Ovenbird:			
2-30,23-24	Nantucket (2 locations)	16 b, 4 b	E.Andrews,E.Fisk
10-24	Scituate,Brookline	3, 1	W.Petersen,R.Stymeist#
Northern Waterthrush:			
1-27,23-28	Nantucket (2 locations)	34 b, 10 b	E.Andrews,E.Fisk
11,12	MV,WBWS	6, 15	R.Sargent,D.Reynolds
21,24	Salem,Brookline	1, 1	C.Blaszczak,R.Stymeist#
Connecticut Warbler:			
1,8	S.Peabody,Annisquam	1, 1	R.Heil,H.Wiggin
10	Scituate,Lexington	1, 1	W.Petersen,J.Carter
12-23,13	Nantucket,Braintree	5 b, 1	E.Andrews,R.Campbell
19	Cambridge,Newton	1, 1	L.Robinson,O.Komar
Mourning Warbler:			
3-23,5	Nantucket	5 b, 1	E.Andrews,J.Grugan#
15,16	MNWS,Salisbury	2, 2	J.Smith,R.Heil
24	Ipswich,Plymouth	1, 1	J.Berry,SSBC
MacGillivray's Warbler (Full details on file.):			
4	Nantucket	1 b (ph)	E.Andrews#
Common Yellowthroat:			
1-30,15-24	Nantucket (2 locations)	107 b, 6 b	E.Andrews,E.Fisk
Hooded Warbler:			
24-26,28	WBWS,Newton	1 m, 1	v.o. fide D.Reynolds,O.Komar
Wilson's Warbler:			
24	PI;Scituate,Plymouth	1; 1, 1	J.Blaisdell;SSBC
Canada Warbler:			
7,8;10	Nantucket;Manchester	2 b; 1	E.Andrews,BBC
Yellow-breasted Chat:			
2,2-28	MNWS,Nantucket	1, 12 b	J.Smith,E.Andrews
6;11	Manomet;Halifax,MV	2 b; 1, 1	MBO,W.Petersen,R.Sargent
24	W.Roxbury,Chatham	1, 2	R.Stymeist,BBC(Barton)
24,26	Plymouth,Woburn	1, 1	SSBC,C.Gove

TANAGERS THROUGH EVENING GROSBEAKS

Summer Tanagers were noted from Chatham and Marshfield, but only two Blue Grosbeaks were reported, seven less than last September. Dickcissels on the other hand were well represented with eleven identified in ten locations. Clay-colored Sparrows were found in three locations, and one Lark Sparrow was found among the Vespers at Marconi station in South Wellfleet. Lincoln Sparrows were moving during the third week of

September when eleven were counted in Framingham and another five in Sudbury on September 24. An adult Harris' Sparrow was found at Corn Hill, Truro at month's end, and a Henslow's Sparrow was photographed in Wayland on September 27. R.H.S.

<u>SPECIES/SEPTEMBER</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>
Summer Tanager: 18,19	Chatham,Marshfield	1, 1	B.Nikula#,SSBC
Scarlet Tanager: 11,18	MV,PI	10, 2	R.Sargent#,G.d'Entremont
Rose-breasted Grosbeak: 11,29	MV,Annisquam	2, 2	R.Sargent#,H.Wiggin
Blue Grosbeak: 9-10,27	Lincoln,Truro	1, 1	R.Veit#,R.Forster#
Indigo Bunting: 18	Bridgewater,Newton	1, 7	K.Holmes,O.Komar
24,27	Bridgewater,Truro	18, 3	W.Petersen,R.Forster
30	Newton	3	O.Komar
Dickcissel: 7,11,17	P'town,MV,Harwich	1, 1, 1	W.Cornwell,R.Sargent,B.Nikula
16,25	Salisbury,Truro	1, 1	R.Heil,G.d'Entremont#
23+24,24	Belmont,Newton	1, 2	L.Taylor,O.Komar
24	W.Bridgewater;Hingham,Holbrook	1; 1, 1	W.Petersen;SSBC
Chipping Sparrow: 9,29	Annisquam	6, 15	H.Wiggin
28	Newton,PI	10, 80	O.Komar,G.Gove
Clay-colored Sparrow: 12,24	Lincoln,PI	1, 1	J.Baird,D.Stemple#
29	Annisquam	1	H.Wiggin
Field Sparrow: 11,24	MV,Newton	1, 2	R.Sargent#,O.Komar#
Vesper Sparrow: 18,25	S.Wellfleet	5, 8	J.Heywood#,R.Stymeist#
10,17	Manchester,PI	1, 1	BBC
Lark Sparrow: 17	S.Wellfleet	1 imm	J.Barton
Savannah Sparrow: thr	E.Boston	max 60 (9/24)	S.Zendeh#
18-30	Newton	max 36 (9/29)	O.Komar
24	Halifax,PI	75, 48	W.Petersen,BBC
Grasshopper Sparrow: 8,11;16	MV;Naushon I.	1, 5; 1	R.Sargent#;B.Sorrie
Henslow's Sparrow: 27	Wayland	1 ad (ph)	J.Hines+R.Walton
Sharp-tailed Sparrow: 4,18,27	Monomoy,Newbypt,Eastham	4, 1, 9	BBC,G.d'Entremont,R.Forster
Seaside Sparrow: 4,18,27	Monomoy,Newbypt,Eastham	1, 5, 2	BBC,W.Petersen,R.Forster#
Song Sparrow: 11,26	MV,Newton	50, 50	R.Sargent#,O.Komar
Lincoln's Sparrow: 24	W.Roxbury,Framingham,Sudbury	2, 11, 5	R.Stymeist#,K.Hamilton,R.Walton
24,28	Belmont,Newton	3, 4	L.Taylor#,O.Komar
13-30	15 individuals from 10 locations		
Swamp Sparrow: 11,25	Ipswich	5, 5	J.Berry
30	Newton	9	O.Komar
White-throated Sparrow: 18-28	PI	max 50 (9/28)	v.o.
White-crowned Sparrow: 9,25	Annisquam,Ipswich	1 imm, 1 imm	H.Wiggin,J.Berry
17,24;28	PI	2, 1 imm; 1 ad + 2 imm	BBC;G.Gove
Harris' Sparrow: 28-29	Truro	1 ad	R.Comeau,S.Clifton#
Dark-eyed Junco: 10,29	Annisquam	3, 150	H.Wiggin
28	PI	150	G.Gove
Snow Bunting: 24	PI	6	J.Grugan

<u>SPECIES/SEPTEMBER</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>
Bobolink:			
2,11	Newton, MV	415, 200	O.Komar, R.Sargent#
24	Newton	10	O.Komar
Eastern Meadowlark:			
11,25	MV, Ipswich	2, 5	R.Sargent#, J.Berry
Yellow-headed Blackbird:			
3,7	Monomoy, P'town	1, 1	W.Bailey#, W.Cornwell
18,19	Naushon I., PI	1 f, 1	B.Sorrie, D.Zabowski
Rusty Blackbird:			
27,29	Truro, Newton	1, 6	R.Forster#, O.Komar
Common Grackle:			
18	Eastham	1000+ (roost)	R.Stymeist#
Brown-headed Cowbird:			
28	Lexington	175	L.Taylor
Northern Oriole:			
10,18	PI	1, 4	BBC
Purple Finch:			
5,9	PI, Annisquam	20, 27	BBC, H.Wiggin
11,24	MV, Truro	30, 12	R.Sargent#, BBC
American Goldfinch:			
11	MV	40	R.Sargent#
Evening Grosbeak			
10	Manchester	3	BBC

CORRIGENDA: July 1983 FIELD RECORDS

<u>King Eider:</u>	2	Boston Harbor	8 imm.	J.Grugan
		should read		
Common Eider:	2	Boston Harbor	8	J.Grugan
<u>Curlew Sandpiper:</u>				
1,2	P.I.		1	R.Emery#, A.Williams
		should read		
1,2	P.I.		1	A.Williams, R.Emery#
<u>Orchard Oriole:</u>				
30	W.Newbury		1 f.	A.Williams
		should be deleted.		

LIST OF ABBREVIATIONS

ad.	adult	F.M.	Fowl Meadow, Milton
alt.	alternate (plumage)	gr.	greater as in Gr.Boston area
b.	banded	I.	Island
br.	breeding	M.V.	Martha's Vineyard
dk.	dark (phase)	Mt.A.	Mt. Auburn Cemetery, Cambridge
f.	female	Nant.	Nantucket
fl.	fledge	Newbypt	Newburyport
imm.	immature	ONWR	Oxbow National Wildlife Refuge
ind.	individuals	P.I.	Plum Island
loc.	locations	P'town	Provincetown
lt.	light (phase)	R.P.	Race Point, Provincetown
m.	male	S.N.	Sandy Neck, Barnstable
max.	maximum	Stellw.	Stellwagen (Bank)
migr.	migrating	ABC	Allen Bird Club
ph.	photographed	BBC	Brookline Bird Club
pl.	plumage	BOEM	Bird Observer of Eastern Massachusetts
pr.	pair	CBC	Christmas Bird Count
thr.	throughout	DFWS	Drumlin Farm Wildlife Sanctuary
v.o.	various observers	FBC	Forbush Bird Club
W	winter (2W = second winter)	GBBCC	Greater Boston Breeding Bird Census
w/	with	GMNWR	Great Meadows National Wildlife Refuge
yg.	young	IRWS	Ipswich River Wildlife Sanctuary
#	additional observers	MAS	Massachusetts Audubon Society
A.A.	Arnold Arboretum	MBO	Manomet Bird Observatory
A.P.	Andrews Point, Rockport	MNWS	Marblehead Neck Wildlife Sanctuary
Buzz.	Buzzards (Bay)	NBCC	Newburyport Breeding Bird Census
C.Cod	Cape Cod	SSBC	South Shore Bird Club
E.P.	Eastern Point, Gloucester	TASL	Take a Second Look (BOEM project)
F.E.	First Encounter Beach, Eastham	WBWS	Wellfleet Bay Wildlife Sanctuary
F.H.	Fort Hill, Eastham	WMWS	Wachusett Meadows Wildlife Sanctuary