

Field Records

February 1984



by George W. Gove, Robert H. Stymeist, Lee E. Taylor

February was extremely mild and wet; the temperature averaged 37.6°, 6.9° above normal. The only warmer February in 114 years of official records was that of 1925 when the average temperature was 38.0°. The highest temperature was a balmy 60° on February 23, and on the twelfth the mercury reached 58°, a new record high for that date. The month's low was 13° on February 8 and 10. A remarkable long stretch of warmer than normal days began on the eleventh and extended for eighteen days through February 28; this was one of the longest such runs on record. At Blue Hill Observatory in Milton, a new February mean record of 35.2° was set, 7.9° above normal.

Precipitation totaled 7.81 inches, 3.97 inches more than average and a new official record for the past 114 years, surpassing the old record of 7.08 inches set in 1969. Snowfall on the other hand totaled but 0.3 inch, 11.5 inches less than average. Fog was frequent and heavy and occurred on four days, twice the average number.

LOONS THROUGH WATERFOWL

A small loon was reported off Folly Cove, Rockport on February 8. The bird was beginning to show breeding plumage, and the observers were convinced they saw an Arctic Loon. A few Double-crested Cormorants were again noted with eight found in Squantum.

The Tundra Swan found in December continued in Plymouth. Other highlights included two Eurasian Wigeon, three King Eider, and twenty-two Harlequin Ducks at Chilmark, Martha's Vineyard. R.H.S.

<u>SPECIES/DATE</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>	<u>FEBRUARY 1984</u>
Common Loon:				
5,10	Newbypt, C. Ann	6, 10	G.d'Entremont#(both)	
17-20	M.V.	200+	R.Sargent#	
Arctic Loon:				
8	Rockport(Folly Cove)	1	H.Wiggin,M.Argue	
Horned Grebe:				
3,5	P.I.,Boston Harbor	25, 29	N.King,TASL	
11,17-20	C. Ann,M.V.	10, 14	BBC,R.Sargent#	
Red-necked Grebe:				
12,20,21	Gloucester(Bass Rocks)	27, 39, 52	T.Walsh,G.d'Entremont#,W.Petersen#	
12,19	N.Scituate	11, 6	B.Sorrie#,R.Abrams	
14,21	Dennis,Rockport	14, 19	B.Nikula,W.Petersen	
Northern Gannet:				
5,26	C. Ann	7, 2	SSBC,BBC	
11,22	P'town	18, 50	D.Brown#,W.Petersen#	
29	Edgartown	150+	W.Manter,V.Laux	
Great Cormorant:				
5	Boston Harbor	346	TASL	
Double-crested Cormorant:				
5,12	Squantum,Falmouth	8, 1 imm.	TASL,R.Heil#	
20,21	Rockport,Falmouth	1, 3	D.Brown#,R.Walton	
American Bittern:				
5,10	P.I.	1, 1	G.d'Entremont,R.Coyle#	
Great Blue Heron:				
4	Squantum,E.Bridgewater	2, 1	G.d'Entremont,W.Petersen	
17-20,23	M.V.,Osterville	18, 5	R.Sargent#,J.Berry	
Black-crowned Night-Heron:				
5,17-20	Scituate,M.V.	1, 1	E.Cutler,R.Sargent	

SPECIES/DATE	LOCATION	NUMBER	OBSERVERS	FEBRUARY 1984
Tundra Swan: Feb.	Plymouth	1	D.Clapp, fide R.Forster	
Mute Swan: 18	Westport	158	H.Merriman	
Snow Goose: 26	Newbypt	1	P.Roberts	
Brant: 5	Boston Harbor	1596	TASL	
25,26	Newbypt, Scituate	35, 500	BBC, I.Giriunas	
Green-winged Teal: 22	E.Orleans, Wayland	1, 2	W.Petersen#, R.Forster	
American Black Duck: 5	Westport, Boston Harbor	500 ⁺ , 1512	T.Raymond, TASL	
7,25	Halifax, Newbypt-P.I.	2000 ⁻ , 500 ⁺	K.Anderson, BBC	
Northern Pintail: 24,26	Wayland, W.Bridgewater	3, 12	R.Walton, W. Petersen	
Northern Shoveler: 18-19,25	Squantum, P.I.	2, 1	R.Abrams+v.o., BBC	
Gadwall: 26	Ipswich	17	J.Berry	
Eurasian Wigeon: 4-22,26-29	E.Orleans, Chilmark	1 m., 1 m.	A.Williams+v.o., W.Manter#	
American Wigeon: 8,20	Cambridge, Braintree	6, 3	F.Bouchard, R.Abrams	
Canvasback: 5	Assonet, Westport	110, 130	T.Raymond(both)	
11	Falmouth, Lakeville	125, 4	SSBC, G.d'Entremont#	
18	Westport	115	H.Merriman	
Redhead: 5,18+20	Assonet, Lakeville	1, 1 m.	T.Raymond, W.Petersen#	
12,17-20	Falmouth, M.V.	2, 50	M.Lynch#, R.Sargent+v.o.	
Ring-necked Duck: 13,22	Lakeville, Millis	15, 5	D.Briggs, B.Cassie	
Greater Scaup: 5	Boston Harbor	3653	TASL	
Lesser Scaup: 17-20,20	M.V., Lakeville	11, 100+	R.Sargent#, W.Petersen	
Common Eider: 5	Boston Harbor	5319	TASL	
King Eider: 1-26	Scituate	1 ad. m.	R.Abrams+v.o.	
19,21	Newbypt, Magnolia	1 f., 1 f.	R.Heil, W.Petersen#	
Harlequin Duck: thr.	Chilmark, M.V.	max. 22 (2/2)	W.Manter	
thr.	Rockport, P'town	4-6, 1 imm. m.	v.o., v.o.	
11-26,21	N.Scituate, Gloucester	max. 8, 2 m.	W.Petersen#+v.o.(both)	
Common Goldeneye: 5,19	Boston Harbor, Newbypt	1622, 1900+	TASL, R.Heil	
21,25	Lakeville, GMNWR	150+, 34	D.Briggs, R.Walton	
Barrow's Goldeneye: thr.	Newbypt. Harbor	max., 8 (2/12, 2/19)	G.Gove#+v.o.	
5,11-26	Gloucester, N.Scituate	2, 1	SSBC, W.Petersen#+v.o.	
29	M.V., Squantum	2, 7	W.Manter#, D.Brown	
Bufflehead: 5	Boston Harbor	1497	TASL	
Hooded Merganser: 5	Boston Harbor, Assonet	3, 6	TASL, T.Raymond	
5,8	Brighton, Cambridge	3, 1	J.Paputseanos, F.Bouchard	
12,13	Watertown, Lakeville	2, 6	J.Heywood#, D.Briggs	
22,26	Wayland, Milton	3, 2	R.Forster, G.d'Entremont	
Common Merganser: 4,5	E.Orleans, Assonet	25, 15	A.Williams, T.Raymond	
18,20	Milton, Braintree	31, 188	R.Abrams(both)	
Red-breasted Merganser: 3,17-20	P.I., M.V.	500, 800	N.King#, R.Sargent#	
Ruddy Duck: 13	Lakeville	1	D.Briggs	

VULTURES THROUGH WOODPECKERS

Turkey Vultures were moving into the region at month's end. A total of sixteen Bald Eagles was reported from four locations, and two-thirds of them were subadult birds. One subadult was marked with a blue plastic streamer attached to the wing. All of the accipiters were represented in this month's reports. A Red-shouldered Hawk was seen on a suet feeder in Concord, and Red-tailed Hawks were noted in abundance with ninety to a hundred reported. A large falcon was observed and photographed at Squantum in mid-month. Although the quality of the photographs is not good, they are sufficiently clear to create some question about the identity of the bird. Examination by experts may prove definitive. A covey of twelve Bobwhite was noted in Belmont, the first covey in four years that the observer had seen there in spite of intensive coverage of the area.

Shorebirds again produced no surprises with the usual winter types present but not in any impressive numbers. Woodcock were seen displaying at Chatham on February 15, however. There were four Common Black-headed Gulls reported this month and no little Gulls. An estimated 5000 gulls of three species - Great Black-backed, Herring, and Ring-billed - were seen sitting on the ice at Lake Assawampsett in Lakeville on the twelfth. Fifty or more Iceland (Kumlein's) Gulls were present at Cape Ann and at Nantucket with reports of others at various locations. Glaucous Gulls were reported from eight locations and Black-legged Kittiwakes were noted at coastal locations and in Boston Harbor.

Four species of alcids, not including Dovekie, were reported with 170 and 215 Black Guillemots at Provincetown on February 11 and 12 where an immature Atlantic Puffic was seen on the fifth.

A Mourning Dove was seen nest building in Concord on February 23 and Great Horned Owls were seen on nests in Marshfield and Middleboro.

Red-headed and Red-bellied woodpeckers were noted on Martha's Vineyard where thirty to forty Northern Flickers were counted also. A Yellow-bellied Sapsucker continued from January at a feeder in Belmont but was seen only once this month. A male Downy Woodpecker was seen excavating a nest hole in Osterville.

G.W.G.

<u>SPECIES/DATE</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>	<u>FEBRUARY 1984</u>
Turkey Vulture:				
25,26	Quabbin,Milton	3, 1	SSBC,S.Higginbotham	
26,27	Holliston,Lincoln	1, 1	J.Baird,T.Urquhart	
29	Wayland,Worcester County	1, 5	R.Forster,R.Kleber	
Bald Eagle:				
thr.	Quabbin	max. 5 ad., 5 imm.	v.o.	
thr.	Newbypt-P.I.	max. 1 ad., 2 sub-ad., 1 imm.	v.o.	
5-26	Westport	1 imm.	v.o.	
12	Lakeville	1 ad.	D.Briggs	
Northern Harrier:				
thr.	P.I.	max. 7	v.o.	
5	Hingham	2	TASL	
3-20	Middleboro	max. 3 f., 2 m.	K.Anderson	
17-20	M.V.	4	R.Sargent#	
Sharp-shinned Hawk:				
1,11	E.Middleboro,Marshfield	1 m., 1	K.Anderson,W.Petersen#	
19,17-20	N.Scituate,M.V.	1, 2	R.Abrams,R.Sargent#	
22	Orleans	1	R.Walton	
Cooper's Hawk:				
19,21	Worcester,Weymouth	1, 1	T.Walsh,R.Campbell	
20-29	Chatham	1 ad.	P.Trull#	
27	Sudbury	1 ad.	R.Forster	
Northern Goshawk:				
10,13	E.Middleboro	1	K.Anderson	
11	Westminister	1	R.Stymeist#	
Red-shouldered Hawk:				
thr.	Orleans,Concord	1 ad., 1 ad.	v.o.,fide R.Walton	
Red-tailed Hawk:				
5,10	Randolph,Middlesex County	11, 12	H.Mallers,J.O'Regan#	
17-20	M.V.	15-18	R.Sargent#	
19	Newbypt-Salisbury	10	P.Roberts	
25	13 seen on a day trip from Bridgewater to Quabbin.			
thr.	25-30 seen at 14 locations.			

SPECIES/DATE	LOCATION	NUMBER	OBSERVERS	FEBRUARY 1984
Rough-legged Hawk:				
thr.	Newbypt-P.I.	max. 6 (2/10)	v.o.	
3-20	E.Middleboro	max. 4 (2/20)	K.Anderson	
5	Salisbury	5 (3 dk.)	G.d'Entremont#	
11,12	Marshfield,Truro	3, 1	W.Petersen#,B.Nikula	
<u>Golden Eagle:</u>				
25	Quabbin(Gate 43)	1 imm.	M.Lynch,S.Carroll	
American Kestrel:				
1,11	Newton,Quincy	1, 4	O.Komar,G.d'Entremont	
19,25	Newbypt,Salisbury	5, 8	P.Roberts,BBC	
Merlin:				
3,19	Newbypt	1, 1 ad. f.	N.King#,BbC	
Peregrine Falcon:				
28	M.V.	1	W.Manter	
<u>Falco sp.:</u>				
19	Squantum	1 (ph.)	BBC(D.Brown)	
Ruffed Grouse:				
5,27	Amesbury,Milton	1, 1	G.d'Entremont,D.Brown	
Northern Bobwhite:				
12,17	Belmont,Osterville	12, 15	L.Taylor,J.Berry#	
Sora:				
5	Ipswich	1	G.d'Entremont#	
Black-bellied Plover:				
17-20	M.V.	7	R.Sargent#	
Killdeer:				
11,22	Orleans,Millis	1, 1	B.Nikula,B.Cassie	
Ruddy Turnstone:				
1,19	N.Scituate	8, 25	R.Abrams	
Sanderling:				
5,17-20	Nahant,M.V.	30, 25-30	TASL,R.Sargent#	
Purple Sandpiper:				
thr.	N.Scituate	max. 300 (2/1)	R.Abrams	
5-11	C.Ann	max. 175	v.o.	
5,26	Nahant	85, 100	TASL,BBC	
6	Marshfield	50	S.Higginbotham	
Dunlin:				
5,6	Nahant,Marshfield	2, 30	TASL,S.Higginbotham	
17-20,26	M.V.,Westport	10, 60	R.Sargent#,C.Gove	
Common Snipe:				
19	Newbypt	1	BBC	
American Woodcock:				
15,20	Chatham,Lynn	2, 1	B.Nikula,C.Jackson	
Common Black-headed Gull:				
thr.	P'town	1 (1W)	v.o.	
5	Winthrop	1	TASL	
5-12	Gloucester	2 (1W)	v.o.	
Bonaparte's Gull:				
26	C.Ann	20	BBC	
Ring-billed Gull:				
17-20,22	M.V.,Osterville	50, 50	R.Sargent#,J.Berry	
Herring Gull:				
17-20	M.V.	1500+	R.Sargent#	
Iceland Gull:				
thr.	Gloucester,Newbypt	max. 40 (2/11),	max. 15 (2/5) v.o.	
1,5	Nant.,C.Ann	50, 50	W.Manter#,SSBC	
2	Cambridge	1	L.Robinson	
11-22	P'town	max. 12 (2/22)	v.o.	
Glaucous Gull:				
1,6	N.Scituate,Marshfield	1 (2W), 1	R.Abrams,S.Higginbotham	
5,8	Gloucester	2, 1	SSBC,M.Argue#	
5	Nahant,E.Boston	1, 1	TASL	
11	P'town	1	D.Brown#	
26	Salisbury,Plymouth	1 (1W), 1 (1W)	P.Roberts,B.Sorrie#	
Black-legged Kittiwake:				
5	Rockport,Boston Harbor	40, 15	SSBC,TASL	
17-20	M.V.	40-50	R.Sargent#	
22	P'town	1000	W.Petersen#	
Thick-billed Murre:				
11,12	P'town	3, 1	D.Brown#,B.Nikula	
19,25	Quincy,N.Scituate	1, 1	BBC,B.Sorrie#	

<u>SPECIES/DATE</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>	<u>FEBRUARY 1984</u>
Razorbill: 17-20	M.V.	1	R.Sargent#	
Black Guillemot: thr. 5-22	C.Ann P'town	max. 7 (2/5) 170 (2/11), 215 (2/12)	v.o. v.o.	
11-26	N.Scituate	max. 26 (2/12)	B.Sorrie#	
Atlantic Puffin: 5	P'town	1 imm.	H.Merriman#	
Mourning Dove: thr. 17-20	Brookline M.V.	max. 59 60	B.Rielly# R.Sargent#	
23	Concord	1 (building nest)	R.Walton	
Common Barn-Owl: 17-20	M.V.	2	R.Sargent#	
Eastern Screech-Owl: 17-20	M.V.	2	R.Sargent#	
Great Horned Owl: thr. 11,20	P.I. Marshfield,Middleboro	1 1, 1	v.o. W.Petersen#	
19	Milton	2	BBC	
	Reports of 6 from 6 locations.			
Snowy Owl: thr. 5,10	M.V.,P.I. E.Boston,Salisbury	1, max. 2 1, 1 (dk.)	v.o. TASL, J.O'Regan#	
Barred Owl: 3,23	IRWS,Cambridge	1, 1	R.Heil,F.Bouchard	
27	Boston	1	N.Weir	
Short-eared Owl: 17,17-20	P.I.,M.V.	1, 1	NWR staff,R.Sargent#	
26	E.Boston	1	C.Jackson	
Northern Saw-whet Owl: 6	Little Nahant	1	W.Crawford	
15,25	P.I.,Milton	1, 1	NWR staff,G.d'Entremont	
Belted Kingfisher: 5,11	Newbury,Belmont	1, 1	G.d'Entremont,L.Taylor	
11,17-20	Marshfield,M.V.	2, 5	W.Petersen#,R.Sargent#	
Red-headed Woodpecker: 17-20	M.V.	2	R.Sargent	
Red-bellied Woodpecker: 17-20	M.V.	1	R.Sargent#	
Yellow-bellied Sapsucker: 10	Belmont	1 ad. m. from Jan.	J.Wissman	
Downy Woodpecker: 5,22	Newbypt, Osterville	15, 1 m.	G.d'Entremont,J.Berry	
Hairy Woodpecker: thr. 12,25	Easton E.Middleboro,Milton	pr. 3, 3	K.Ryan K.Anderson,G.d'Entremont	
Northern Flicker: 9	Squantum	4	R.Abrams	
17-20	M.V.	30-40	R.Sargent#	
Pileated Woodpecker: 2,25	Worcester,Quabbin	2, 2	M.Lynch#,SSBC	

HORNED LARK THROUGH EVENING GROSBEAK

The end of February usually brings the first influx of spring migrants. This year by 22 February all four regularly-occurring blackbird species had reached the North Shore in numbers. In the same area, Ruby-crowned Kinglet successfully overwintered at least until late February. Inland, a small group of Tree Swallows in Baldwinville constituted arrivals early by about a month.

Several species were reported in impressive numbers on single days during February. The one hundred Fish Crows in Natick provided a good winter count, though at an expected location. Good counts of Carolina Wren were made at both Falmouth and the Marshfield/Scituate area, the latter count consisting mostly of birds singing due to the abnormally warm weather. Also in Falmouth, eighteen Rufous-sided Towhees represent a normal number for a winter count. This species is usually found in distinctly smaller numbers, early-on into the winter and Christmas Count time.

Rarities for the month included upwards of twenty Bohemian Waxwings in the Athol area. This continued a 1983-84 winter trend of substantial Bohemian Waxwing counts. Lesser numbers of the Athol waxwings lingered for a few weeks. The Orleans Clay-colored Sparrow continued in place for yet another month.

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Horned Lark: 6,25	Duxbury,P.I.	12, 30	S.Higginbotham,BBC	
Tree Swallow: 26	Baldwinville	4	J.O'Regan	
American Crow: 3-22,20	Halifax,Sudbury	100 max., 150 ⁺	K.Anderson,F.Bouchard	
Fish Crow: 19,27	Natick,Newton	100, 1	T.Walsh,O.Komar	
Common Raven: 25	Hardwick	1-2	SSBC	
Black-capped Chickadee: 3,12	IRWS,Falmouth	110+, 185+	R.Heil	
Boreal Chickadee: 4,27	Newbypt,Milton	1, 1	BBC,D.Brown	
Red-breasted Nuthatch: 4-25,5	Newbypt,Ipswich	5 max., 1	v.o.,BBC	
17-20,22	M.V.,Osterville	3, 5	R.Sargent#,J.Berry	
Brown Creeper: 23,25	Osterville,Braintree	3, 7	J.Berry,G.d'Entremont	
Carolina Wren: 8,12	Marshfield/Scituate,Falmouth	10, 17	D.Clapp,R.Heil	
Winter Wren: 23	Cambridge (F.P.)	1	F.Bouchard	
Golden-crowned Kinglet: 17-20,22	M.V.,Osterville	25, 4	R.Sargent#,J.Berry	
Ruby-crowned Kinglet: 22	S.Peabody	1	R.Heil	
Eastern Bluebird: 10,29	M.V.	1	W.Manter#	
Hermit Thrush: 12	Falmouth	3	R.Heil	
American Robin: 4-13,27	Newton,Marshfield	15 max., 6	O.Komar,D.Clapp	
Gray Catbird: 4,12	Squantum,Falmouth	1, 2	R.Abrams,R.Heil	
17-20,22	M.V.,Salem	1, 1	R.Sargent#,R.Heil	
Brown Thrasher: 12,17-20	Rockport,M.V.	1, 1	T.Walsh,R.Sargent#	
Cedar Waxwing: thr.,11-12	Middleboro,Athol	150 max. (2/5), 56	D.Briggs,v.o.	
Bohemian Waxwing: 1-12	Athol	20 max.	m.ob.	
Northern Shrike: 1,5	Nant.,P'town	1, 1	V.Laux#,H.Stabins#	
7-25,19	P.I.,Chatham	1, 1	v.o.,P.Trull	
Yellow-rumped Warbler: 9,17-20	Squantum,M.V.	50 ⁺ , 45 ⁻	D.Brown,R.Sargent#	
Northern Cardinal: 12,17-20	Falmouth,M.V.	52 ⁺ , 12	R.Heil#,R.Sargent	
Rufous-sided Towhee: 3	Brookline,IRWS	1, 1	H.Wiggin,R.Heil	
12,17-20	Falmouth,M.V.	18, 1	R.Heil,R.Sargent	
American Tree Sparrow: 9,11	Squantum,Belmont	20, 35	R.Abrams,L.Taylor	
Clay-colored Sparrow: from Dec-22	Orleans	1	v.o.	
Field Sparrow: 20,22	Westport,Orleans	8, 13	R.Lanbach,R.Walton	
Savannah Sparrow: 17-20	M.V.	12	R.Sargent#	
Fox Sparrow: from Jan-12,thr.	Wayland,Watertown	1, 2	H.Parker,B.Phillips	
Swamp Sparrow: 11,20	Squantum,Westport	1, 1	G.d'Entremont,R.Lanbach	

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White-throated Sparrow: 17-20,26	M.V., Brookline	25 ⁺ , 10	R.Sargent#, B.Rielly#	
White-crowned Sparrow: from Jan. thr. Feb.	M.V.	1 (feeder)	W.Manter	
Lapland Longspur: 19	Salisbury	1	BBC	
Snow Bunting: thr., 6	Fall River, Duxbury	10 ⁺ , 6	R.Caron, S.Higginbotham	
12-25, 17-20	Hardwick, M.V.	3 max., 8	v.o., R.Sargent#	
Red-winged Blackbird: 20, 22, 25	M.V., Millis, P.I.	general arrival	v.o.	
Eastern Meadowlark: 10	Westport	11	R.Lanbach	
Rusty Blackbird: 11, 29	Middleboro, Milton	6, 6	v.o., D.Brown	
Common Grackle: 20, 25	Middleboro, Newbypt	5, 40	K.Anderson, E.Nielsen#	
Brown-headed Cowbird: 5, 12	Lexington, Athol	15, 5	A.Williams, G.d'Entremont#	
22, 29	Millis, Concord	15, 100	B.Cassie, R.Forster	
Pine Grosbeak: 5, 12-18	Hamilton, Athol	1, 12	G.d'Entremont, v.o.	
21, 27	Hardwick, N.Weymouth	4, 3	R.Forster, D.Brown	
House Finch: 17-20, 18	M.V., Cohasset	65, 60	R.Sargent#, H.Mallers	
Purple Finch: 1, 18	Westport, Cohasset	7, 10	R.Lanbach, H.Mallers	
Common Redpoll: from Jan. thr. Feb. 29	Squantum, Milton	3 max., 4	v.o., D.Brown	
Pine Siskin: thr., 5	Middleboro, Salisbury	100 max. (2/11),	25 D.Briggs, R.Campbell#	
23	Lincoln	7	R.Forster	
Evening Grosbeak: thr.	Middleboro, S.Middleboro	85, 150 max.	D.Briggs, S.MacDonald	
11, 18	Athol, Cohasset	271, 28	R.Stymeist#, H.Mallers	

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)	GBBBC	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)	NEBC	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