

BIRD OBSERVER

OF EASTERN MASSACHUSETTS



AUGUST, 1980

VOL. 8 NO. 4



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July 31, 1980

To the Editor:

I read with interest the fine article by Blair Nikula on Massachusetts' non-resident terns in your most recent issue. It clearly summarizes the status of these terns to date. However, I would like to point out that the spring maxima for Black Tern occurred on 15 May 1967 when 25 were noted in Littleton and 30 in North Hadley. As the article accurately states, inland Black Terns are noted primarily in spring when heavy rains force them down.

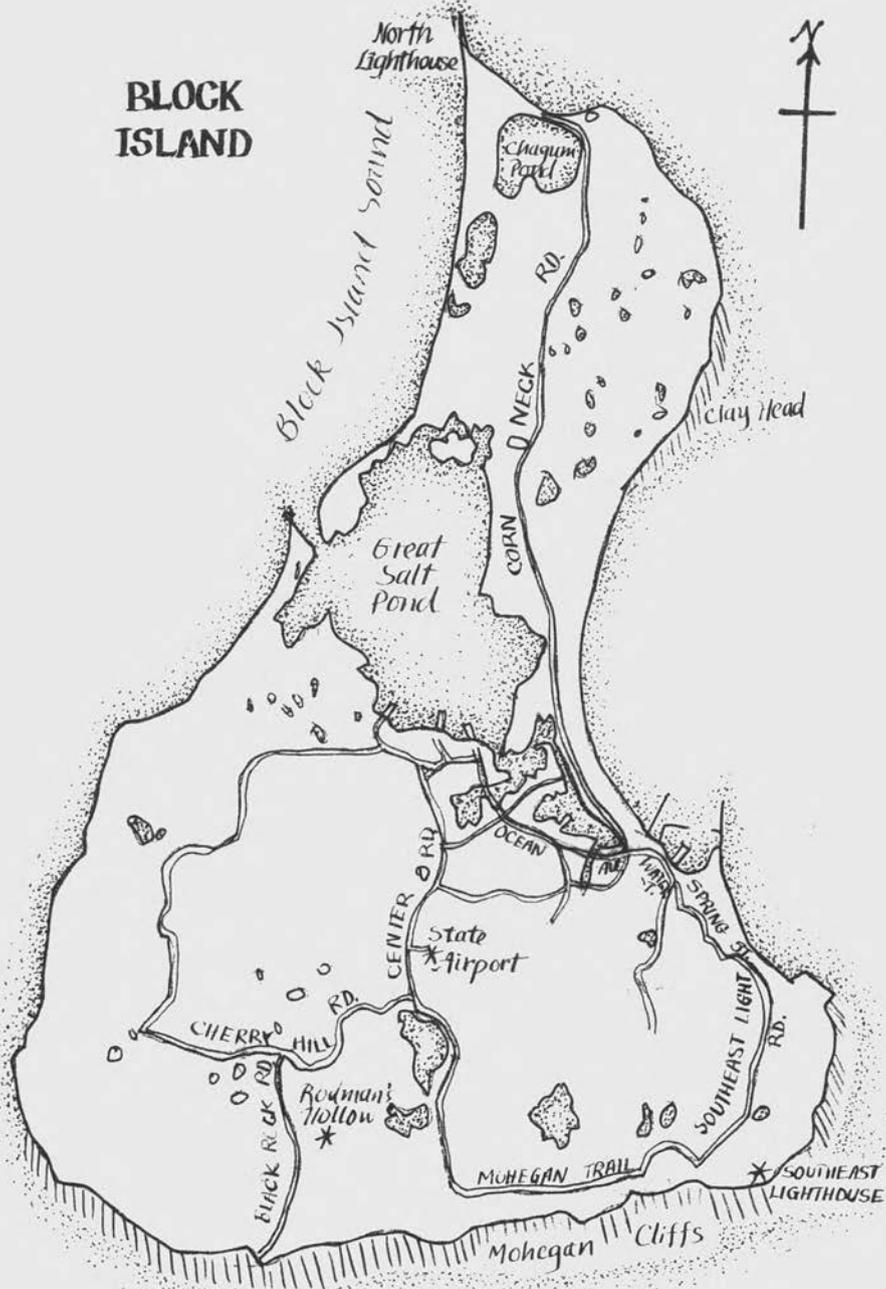
In no way is this comment meant to detract from Blair Nikula's excellent article.

Richard A. Forster
Natural History Services
Massachusetts Audubon Society

The new Peterson field guide is now available from Herman D'Entremont, Post Office Box 207, Newton, MA 02159. The cost is \$11.25 for hard cover (\$15.00 retail) or \$7.45 for soft cover (\$9.95 retail), plus \$.75 for postage and handling. Mass. residents add 5% sales tax.

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BLOCK ISLAND



BLOCK ISLAND

by Robert P. Fox, Hingham

My idea of a perfect getaway is to spend the first weekend of October on Block Island, Rhode Island, where fall bird migration is at its best. On the past 14 annual Rhode Island Audubon Block Island Weekends (held on this first October weekend) the leaders have averaged 140 species. The total list for this weekend is 240 species, which includes 7 species of woodpeckers, 11 flycatchers (including Olive-sided and Say's Phoebe), 5 wrens (including Bewick's), 6 vireos, 29 warblers (including Connecticut, Mourning, Worm-eating, and Prothonotary), 3 tanagers, and 15 sparrows (including Grasshopper and Lark).

Many species seen infrequently on the New England mainland throughout the year are regular and numerous on Block Island during early October. Land-birds, which normally breed in the coniferous forests of northern New England and Canada, are not only regular, but also easily seen and studied because of the bushes and low trees on the island. Birders have had the unforgettable experience of seeing 5 kinds of warblers in one bush and 12 species of sparrows on a small lawn!

Orange-crowned, Mourning, and Connecticut Warblers are seen on the majority of trips, as are Winter Wrens, Gray-cheeked Thrushes, Philadelphia Vireos, and Lincoln's Sparrows. Rare landbirds seen on Block Island in October include Red-headed Woodpecker, Western Kingbird, Carolina Wren, Yellow-breasted Chat, Blue Grosbeak, Dickcissel, and Clay-colored Sparrow. Among shorebirds, Louisiana Herons, Yellow-crowned Night Herons, American Oystercatchers, and American Avocets can be seen.

In addition, Block Island is an excellent place to see Peregrine Falcons, which have been observed here every year during the Audubon Weekend. Peregrines are usually seen circling high over town or the moorlands at Rodman's Hollow, dashing over a ridge at the north end of the island, or coursing below the clay cliffs at Southeast Light. Other falcons, as well as accipiters, are also commonly seen on the island as they migrate southwestward along the New England coast. Off the coast, loons, cormorants, geese, scoters and mergansers follow the same southwestward route, cutting between Block Island and the mainland on their way into Long Island Sound.

Field trip leaders are often asked why so many southern and western stragglers occur with such frequency on Block Island during October. One explanation is that some birds, upon leaving their breeding grounds in the Ohio Valley or southern Great Plains, instead of heading south, drift northeastward on surges of warm, southwest winds. They are finally stopped by the ocean and pile up on bits of land such as Block Island. This post-hatching drift may also explain the presence of migrant butterflies (such as the Buckeye) and the small Carolina mantises.

Nearly all the birds on Block Island in October are migrants. There are relatively few year-round residents, and even birds common on the mainland are scarce here. For example, Tufted Titmouse has not yet been recorded, and Black-capped Chickadee is not seen every year. However, with good conditions for migration - the passage of a cold front with clear skies, light northwest winds, and a 10° drop in temperature - thousands of birds appear.

During fall migration most species of birds move southwestward parallel to the coast some 20 miles inland. With strong northwest tailwinds, less fortunate individuals move out over the ocean and become disoriented. They head back to shore in the early morning, when radar has shown from 10 to 150 times as many birds over Boston heading southwestward as over Cape Cod heading southeastward. Species known to use this southwest route often occur in spectacular numbers on Block Island and can even be seen in the act of migrating. At Southeast Light at dawn these birds can be seen coming off the ocean, over the cliffs and into the shrubbery, and often streaming north along island roads. In the early morning at the north point, one can see Bluejays, Bobolinks, Rusty Blackbirds, warblers, and others circling upward for several hundred feet before heading northwest on a short low-level flight to the Rhode Island shore, where they rejoin the rest of the "pack."

Probably the most fascinating migration route to the Caribbean and South America is over the ocean. On Block Island one can be part of the send-off for this notable endurance trek, which is dominated almost totally by warblers. Radar has shown that on peak nights up to 12 million birds head southeastward from Cape Cod. Typically, the birds leave from a staging area somewhat inland in early evening, rise to 6,500 feet, and with strong tail winds cross Bermuda some 18 hours later. Then, using the light trade winds, they take another 48 hours to reach the Lesser Antilles after having climbed to 10,000 to 21,000 feet. Heading down the Lesser Antilles and being blown toward the South American coast, the birds fly for 18 more hours and drop in altitude until they are at 2,500 feet over Tobago. Finally, they reach coastal South America.

Some of these over-ocean migrants stop at or return to Block Island because of unfavorable weather, and are seen in numbers while they await more favorable conditions before heading southeast. Occasionally, species which normally take the southwest route head out over the ocean, often at low elevations, and come to rest on board ships or even reach Bermuda. None of these species, such as Barn Swallow, Red-eyed Vireo, Indigo Bunting, and Savannah Sparrow, is seen farther along the route.

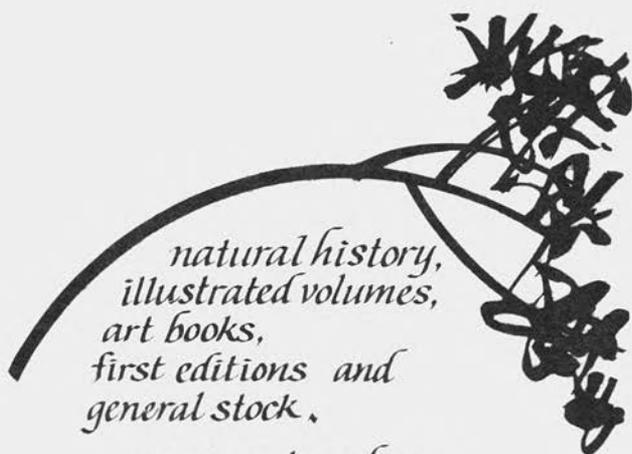
A trip to Block Island, even in the off-season, should be planned well ahead. Birders and many others take advantage of the opportunities to visit the island at this time and accommodations are limited. The Interstate Navigation Company, Box 482, New London, CT 06320, runs the ferry and should be contacted for reservations and the latest schedules. I prefer to take a 11:00 a.m. or 6:30 p.m. ferry from Galilee, Rhode Island, on a Friday, returning Sunday at either 11:00 a.m. or 3:30 p.m. The cost one way is \$4.00. If you take a car, the fare is \$23.00 round-trip for the car, but be sure you can get the car off the island when you plan to leave since car space is limited. For those who prefer to fly, there is a field on the island. I have taken a small charter from the Westerly, R.I., Airport.

Once on the island, you can hire a taxi; many are available at reasonable rates. The hotels do have van transportation, but this has to be worked out with your hotel, especially if you want them to meet a boat. There is also a rental car office on the island. For birding trips, bicycles are the best. They can be rented near the boat landing area or from the Surf Hotel. From the boat landing the most interesting birding areas -

North End and Southeast Light - can be reached by walking for an hour or more, birding en route.

The three hotels most used by birders are the Surf Hotel, just 500 yards from the boat landing; the Narragansett Inn, several miles away but located near the alternate landing site; and the 1661 Inn. The management of these inns can be contacted by mail in care of Block Island, R.I. 02847. All have plain, good quality rooms, fine island food, similar prices, and a loyal following.

Each fall the Audubon Society of Rhode Island, 40 Bowen Street, Providence, R.I., telephone: (401) 521-1670, runs very successful trips to the island. A number of bird clubs in the northeast also sponsor group trips.



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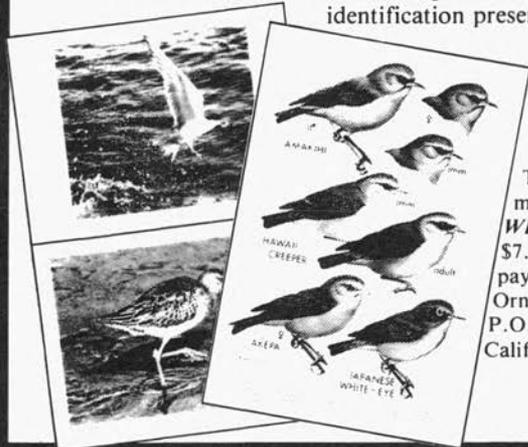
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FIELD IDENTIFICATION OF THE LESSER BLACK-BACKED GULL

by Richard R. Veit.

During the past 30 years, the Lesser Black-backed Gull (Larus fuscus) has become a regular annual vagrant to the east coast of the United States, ranging from Florida and the Caribbean north to the New York City area (AOU 1975; Bull 1964), with a number of recent records from the Great Lakes. Comparatively few records exist from the coast north of New York, and all Massachusetts records are relatively recent. The species was first recorded in Massachusetts on September 14, 1971 (Petersen, 1973). Since that time, a minimum of 15 sight records has accumulated for eastern Massachusetts (the majority from Cape Cod and the islands, especially Nantucket), and at least 11 of these have occurred during the period 1977 to 1980. In anticipation of increasing occurrences of this species in New England, it seems appropriate to describe the salient points for its field identification.

Identification of adults, or even birds in third-winter plumage, is comparatively straightforward for the competent observer familiar with our local larids. However, most North American observers would not attempt identification of individuals in first- or second-winter plumage, quite understandably, since these plumages (particularly the former) are not accurately described or illustrated in any of the more popular field guides. Indeed, some authors go so far as to suggest that immature Lesser Black-backed Gulls are indistinguishable in the field from the Herring Gull (Larus argentatus). My recent experience in western Europe has convinced me that this is not the case. As described below, the Lesser Black-backed Gull is a species which the careful and patient field observer can readily distinguish in any plumage from its congeners, particularly L. argentatus. Comparison with the Herring Gull is emphasized in the below descriptions of the Lesser Black-backed Gull's general structural features and plumages. The size difference between the Lesser Black-backed Gull and the Great Black-backed Gull is ordinarily large enough to preclude confusion of these species, provided that an adequate view is obtained.

General Structural Features

In comparison to the Herring Gull, the build of the Lesser Black-backed Gull is noticeably slighter overall; the bill is more slender and the head more smoothly rounded, yielding a rather "dove-like" appearance, not unlike the impression conveyed by the Iceland Gull (Larus glaucooides) or, more obviously, by the Mew Gull (Larus canus). In addition, the folded wings of a standing bird attenuate gradually to a fine point, so that the posterior profile suggests the "pencil-point" look of the White-rumped Sandpiper (Calidris fuscicollis). Although individual variation will in some instances obscure these generalized structural differences, they are for the most part not crucial to the conclusive identification of the Lesser Black-backed Gull.

Plumages

Before describing the plumages of this species, it may be helpful to outline its pattern of molt, which is similar to that exhibited by most other large larids (see Figure 1). The first set of contour feathers acquired

J F M A M J J A S O N D

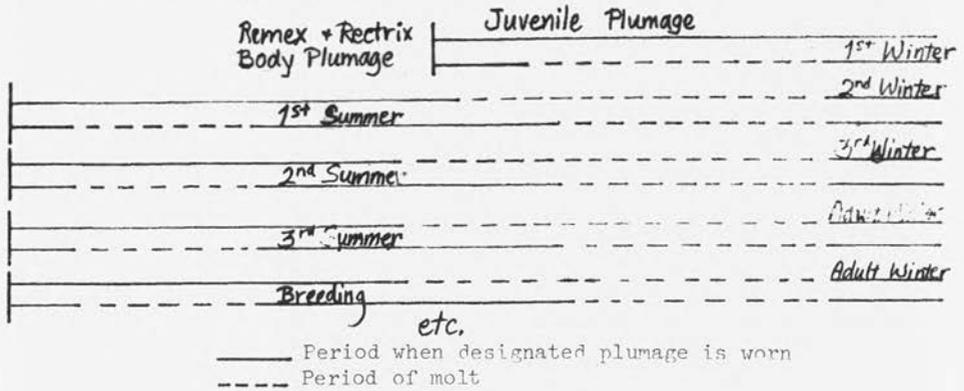


Figure 1. Molt Pattern of Large Gulls

following the downy stage constitutes the juvenile plumage. The remiges and rectrices grown at this time are retained for one full year. During the period September - November of the bird's first fall, a partial molt of the body plumage occurs, resulting in the first-winter plumage. A second partial molt of the body plumage during December - April yields the first-summer plumage. From this point on, all of the feathers are molted annually during the period June - November in a process referred to as the post-nuptial molt. The resulting fresh plumage is termed second-winter, third-winter, or adult winter, depending on the age of the bird. A second, partial molt of the body plumage every year during the period December - April (the pre-nuptial molt) results in the second-summer, third-summer, or breeding plumage. It is important to realize that molting is frequently a continuous process, and that the above somewhat arbitrary classification is adopted primarily as a convenience. Therefore, "intermediate" plumages are frequently observed, are to be expected, and should not engender needless frustration.

Juvenile and First-Winter Plumages

The salient point of distinction between these plumages of the Lesser Black-backed Gull and those of the Herring Gull is the coloration of the inner primaries and greater secondary coverts. In the Herring Gull, the innermost four or five primaries are pale-buff or creamy, forming a conspicuous contrast with the solidly dusky-brown outer primaries. This contrast is such that a translucent "window" appears at the inner "hand" of the bird. The greater secondary coverts are also pale-buff, lightly mottled with dusky brown, so that they form a conspicuous contrast with the uniformly dusky secondaries.

In the Lesser Black-backed Gull, all of the primaries and the greater secondary coverts are solidly dark-chocolate-brown. The net effect conveyed is a broad, dark, uninterrupted trailing edge to the wing. This diagnostic difference is obvious in flight, as clearly illustrated in the accompanying figures (Figures 2 and 3, which are excerpted from Lars



Figure 2. Lesser Black-backed Gull (juvenile)

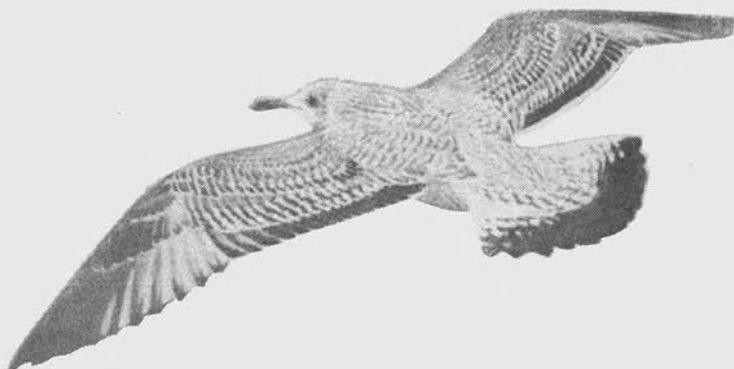


Figure 3. Herring Gull (first winter)

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from Birds of Sea and Coast by L. Jonsson.

Jonsson's Birds of Sea and Coast and are reprinted by permission). The Herring Gull illustrated here is of the western European subspecies, L.a. argentatus, which is much more pale-bodied than the North American L.a. smithsonianus. It possesses nevertheless the same primary greater-secondary-covert pattern as L.a. smithsonianus.

The coloration of the head and underparts of juvenile/first-winter Lesser Black-backed Gulls is variable with the stage of molt, but is generally similar to that of the Herring Gull, although some individuals that I have seen displayed a conspicuous dark nuchal collar set off from the otherwise whitish head - a feature that I have never noticed on young Herring Gulls. In addition, typical individuals show conspicuous dark eye spots caused by blackish feathering in that area. The bill is blackish-brown with a pale bone-white tip, and the legs either flesh or flesh-pink. The subterminal band on the tail is usually narrower and more sharply delineated than that of the Herring Gull. This character is frequently of some value as a field mark.

First-Summer Plumage

Since the juvenile remiges and rectrices are retained for the duration of the first-summer plumage, their coloration remains the most distinctive feature for identification in this plumage as well. The bill may begin to acquire a flesh-colored base in this plumage.

Second-Winter Plumage

With the onset of this plumage, which follows the first post-nuptial molt, Lesser Black-backed Gulls acquire the characteristic contrast between the mantle and underparts which renders them quite distinct from any plumage of the Herring Gull, and schematically similar to the first-winter plumage of the Great Black-backed Gull (Larus marinus). The head and underparts are whitish and irregularly marked with brown-gray spots, streaks, and blotches, particularly heavily about the nape and flanks. The newly molted mantle feathers (back as well as upper wing coverts) have slate-gray centers and broad brownish margins; the relative amounts of gray and brown vary so much that the bird may appear slate-mantled, brown-mantled, or slate scaled with brown. The new remiges are uniformly blackish, with no white markings in the primaries, while the fresh tail has, on the average, a narrower and more sharply delineated terminal band than that of the previous plumage. The legs remain flesh-pink or neutral-toned, while the bill usually acquires a fleshy base, which is sharply demarcated from the dark tip, although it may remain entirely dark until the third winter.

Second-Summer Plumage

The pre-nuptial molt of the body plumage renders the head and underparts whiter. A few solidly slate-gray feathers appear on the back, and some yellow coloration appears in the bill and legs, especially on the back, as in young Snowy Egrets.

Third-Winter Plumage

The remiges acquired with the post-nuptial molt are coal-black, with no

white markings in the primaries, while the fresh rectrices are pure white. The new mantle feathers are solidly slate-gray with the exception of the secondary coverts, which are narrowly margined with brown. The bill becomes largely yellow, frequently with a blackish smudge at the angle of the gonys, posterior to the red spot typical of all the larger larids. The legs assume a straw-yellow color. A bird molting from second-summer to third-winter plumage is clearly described by Petersen (1973).

Third-Summer Plumage

This plumage does not differ appreciably from the third-winter plumage, except for a continued intensification of the soft-part colors.

Fourth-Winter (=Adult Winter) and Breeding Plumages

The new primaries are coal-black; a single white spot is formed by the confluence of white spots on the tenth and ninth primaries (cf. double white spots of Herring Gull or Great Black-backed Gull). The tail and underparts are pure-white and the mantle is solidly slate-gray. The head and nape are much more profusely marked with brownish spots and streaks than in the Herring Gull in adult winter plumage, and the bill tends toward orange-yellow rather than straw-yellow. The leg color varies from a pale flesh through lemon to vivid orange; the intensity of the coloration of the soft parts is highest during the breeding season. The head and nape of breeding adults are pure-white.

Probable Origin of North American Vagrants

To date, virtually all subspecifically identified records from North America are assignable to L.f. graelsii, the breeding form of the British Isles and Iceland, which in winter regularly migrates as far south as tropical Africa, including Senegal, Ghana, Nigeria and the mouth of the Congo River (AOU, 1975). This migratory pattern, coupled with the pronounced southerly distribution of coastal North American records, strongly suggests that Lesser Black-backed Gulls observed here could have been drifted across the tropical Atlantic by the easterly trade winds and associated cyclonic activity, as analogously hypothesized for North American vagrant Curlew Sandpipers (Calidris ferruginea) and Ruffs (Philomachus pugnax) (Eisenmann, 1960). Alternatively, these birds could conceivably be continuing their typical autumnal east-west migratory route across the North Atlantic, as suggested for Palearctic waders by Nisbet (1959). This latter theory might better account for the presence of Lesser Black-backed Gulls in the Great Lakes region and off Labrador (Powers, 1979).

Acknowledgements

This manuscript was considerably improved through many helpful comments from P. A. Buckley, R. A. Forster, C. W. Leahy, S. A. Perkins, and W. R. Petersen. Special thanks to P. J. Grant for much enlightening discussion in the field and to W. R. Petersen for thorough editing of the manuscript.

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Notes on the Identification of Selasphorus and Archilochus Hummingbirds

by Bruce A. Sorrie, Marshfield

With the recent documentation of vagrant hummingbirds in the East (Conway and Drennan, 1979), hummingbird-watching has taken on a new flair; no longer should we be content to think only in terms of Ruby-throateds when afield. No less than five western species have been reliably reported east of the Mississippi River: Rufous, Allen's (!), Broad-tailed, Buff-bellied, and Black-chinned. Two of these have occurred in Massachusetts: Rufous (mid-April, 1978; Am.Birds: 32: 1139) and Black-chinned (late November-early December, 1979; B.O.E.M. 8: 33-34). Note that the record quoted by Conway and Drennan of Buff-bellied Hummingbird in Massachusetts has been rescinded (Am.Birds 33: 322).

As tantalizing as all this is, the realities of hummingbird identification are (1) that not all birds are adult males and (2) that many individuals will get by without even being assigned to genus. How many times have we seen, however poorly, a hummingbird zip past and have automatically called it a Ruby-throated? And, similarly, I have to believe that out of all the non-adult male Rufous Hummingbird records listed by Conway and Drennan, at least one of them would have proved to be an Allen's or a Broad-tailed if identified in the hand.

In this paper I wish to increase awareness of the differences between some closely related species so that future documentation can be made easier and more complete. Two generally available publications, Stiles (1971) and Phillips, Marshall, and Monson (1964), continue where field guides stop and are highly recommended for determining species in the field and/or in the hand.

When to Look:

Generally speaking, fall is the most productive--the flowers linger and so do the birds. Feeder-watchers in the far south may claim winter as the vagrant season; however, this almost surely results when birds that arrive in the area weeks earlier are forced to feeders by weather and lack of food. It must be pointed out that several western hummingbirds, e.g., Allen's, Costa's, and Rufous, migrate very early so that birds are already moving southward during the summer (Phillips, 1975; Sorrie, MS). This is particularly true of adult males, which take no active part in rearing of the young. In California, for example, adult male Rufous arrive in the Sierran meadows as early as late June, peaking in July (Sorrie, MS). It is perhaps noteworthy that the records of Rufous for Nova Scotia, Maine, and New Hampshire all occur during the summer (Conway and Drennan, op. cit.). Spring records, at least those prior to May, will be hard to find in New England due to the lack of appropriate flowers.

Identification:

Adult males present no field problem if seen well, but females and immatures are very difficult to separate into species, given present knowledge. In the hand, however, identification is straightforward and not particularly difficult, as well as being much more reliable. Therefore, unless the bird in question is found dead, every effort should be made to have a licensed bander capture it for measurements and photographs. Two

critical tail feathers (Selasphorus) or one inner primary (Archilochus) must be pulled and saved with the mensural data as a voucher. Measurements should include wing length, tail length, and length of exposed culmen. Good photographs of birds at feeders, etc., are an immense help when capture is impossible.

(A) Selasphorus. Fully adult males present no problems. The Rufous Hummingbird (S. rufus) has a wholly rufous back although there may be some scattered green feathers; Allen's (S. sasin) is wholly green. Both species show rufous extensively on the rump and upper tail coverts. In flight both species produce a somewhat metallic buzzy sound with their wings--not a low hum as made by most other hummingbirds and female Selasphorus but a buzz.

In the hand, rectrix #2 (next to the central tail feather) of S. rufus shows a distinct notch or cut-out on the inner web near the tip plus a sinuate margin on the outer web. Rectrix #2 of S. sasin shows only a sinuate margin on the inner web or none at all (Fig. 1).

Caution: I have seen at least ten specimens of S. rufus out of hundreds of museum skins plus one live bird in the hand whose backs were two-thirds to wholly green. These breeding-season males all showed the characteristic notching to rectrix #2. Some of these may have been males in their first breeding season which did not molt new adult back feathers. The possibility of hybridization between such closely related species should not be dismissed although it has not been described in the literature. The 1978 Massachusetts' Rufous Hummingbird had molted about fifty percent of the back and required close scrutiny of the photos to be sure of the species.

Females and immatures of both sexes are at present not reliably separable in the field as to species; they simply should be called "Selasphorus sp." In the hand, rectrices of S. rufus are wider, feather for feather, than those of S. sasin. Once sex and age have been determined (the key in Stiles, 1972, is adequate), rectrices #2 and #5 must be plucked from one side, measured, and saved. I suggest saving #2 rather than #1 because there is less variation in width than in #1 and because it, too, can be used to determine sex. Except for a limited amount of overlap in immature females, there is essentially no overlap in the width of rectrix #5, nor #2, for any age/sex class (Sorrie, MS).

A word should be said about the Broad-tailed Hummingbird, S. platycercus, a species no less likely here than the Allen's Hummingbird. It is decidedly larger than either S. rufus or S. sasin. Adult males have a magenta or rose-red gorget, not red (Ruby-throated) nor coppery-red (Allen's and Rufous), and make a shrill, buzzy wing noise when flying, louder and more metallic in quality than the other two Selasphorus species. In all ages and sexes, the Broad-tailed has less rufous on the underparts and tail than the others, but this requires careful observation in the field. In the hand, the longer wing and the enormously broad and long tail feathers will easily separate it from the others (see illustration in Stiles, 1971).

(B) Archilochus. There should be no problem assigning members of Archilochus and Selasphorus to the correct genus. Adult males and some pale-flanked female and immature Broad-tailed Hummingbirds may approach

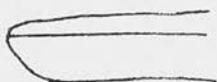
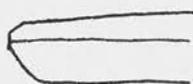


Rufous
(S. rufus)

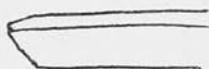


Allen's
(S. sasin)

Figure 1. Shape of right rectrix #2 in Rufous and Allen's Hummingbirds.



Black-chinned
(A. alexandri)



Ruby-throated
(A. colubris)

Figure 2. Shape of left primary #6 in Black-chinned and Ruby-throated Hummingbirds, showing variation.

in resemblance various ages and sexes of the two Archilochus, but the latter are distinguished by the distinctly shortened central tail feathers only slightly, or not at all, shorter in Selasphorus. This may be useful in the field, but a better mark for adult male Broad-taileds is the wing noise. Females and immature males will show orange basally on the lateral tail feathers.

Adult male Archilochus are adequately pictured in field guides especially Peterson's A Field Guide to Western Birds. As Peterson cautions, be sure to see the violet gorget band when identifying a Black-chinned.

Females and immatures are at present not reliably separable to species in the field. In the hand, there is apparently no overlap in the culmen length of immature males and little overlap in females, A. alexandri being longer; this is probably the best distinguishing mark. The shape of the tips of the inner primaries, #1 to #6, is also diagnostic as shown by Phillips (1975). In A. alexandri the tips are bluntly pointed with a relatively narrow outer web (Fig. 2). This fact was discovered independently by the writer while researching identification criteria for the 1979 Massachusetts specimen of the Black-chinned Hummingbird. It is applicable to both sexes.

Female and immature Costa's Hummingbirds (Calypte costae) look very much like Archilochus but are a paler sandy green above and almost pure white below. Stiles (1971) offers several good points of separation.

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THE LANGUAGE OF FLOWERS

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THE YEOMAN GROUP

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HAWK WATCHING AND BIRDS OF PREY: TWO REVIEWS

by Alden Clayton, Concord

A Guide to Hawk Watching in North America, Donald S. Heintzelman, University Park, Keystone Books, The Pennsylvania State University Press, 1979, 284 pp., illus. \$6.95.

Hawks and Owls of North America, Donald S. Heintzelman, New York. Universe Books, 1979, 195 pp., illus. \$18.50.

Throughout history birds of prey have fascinated mankind. In the ancient world raptors were symbols of divinity or earthly power - Horus, the falcon god of the Egyptians; the Owl of Athena, Goddess of Wisdom; the Golden Eagle borne aloft by the marching legions of Rome. During the Middle Ages the sport of falconry was enjoyed by all classes; but power determined ownership: Peregrines belonged to nobility, and Gyrfalcons were reserved for kings and emperors.

Now, in the late 20th century, an entirely new relationship between hawks and man is emerging - based on the organized study of hawks in their natural environment. Hawk watching is consistent with a new ethic which recognizes the coexistence of wild predators and mankind. It is a fast-growing spectator sport, has a strong element of direct participation, and interjects a serious note of scientific study.

The spectacle of fall hawk migration from a mountain lookout is indeed memorable. With the grand autumn setting as a backdrop, kettles of hundreds - even thousands - of hawks may soar overhead, or individuals may fly swiftly by within a few feet of the observer. But the full satisfaction of hawk watching is gained by learning to identify the birds under varying conditions of light, distance, flight angles, and speed. The unexpected and rare sighting provides the thrill needed for all enduring forms of sport. But hawk watching also has a serious purpose - the organized observation and reporting of information on the species and numbers of migrating hawks contribute significantly to the study of bird populations. The growing popularity of hawk watching may be a result of this unusual combination of satisfactions.

The history of hawk watching in the United States is amazingly brief. It began on Hawk Mountain, Pennsylvania, where the first counts were conducted by Maurice Broun in the 1930's. During the following decades hawk watching spread to a few other local areas, but the watershed for hawk watching on a national scale occurred only 8 years ago. In 1972 the United States and Mexico signed a long-overdue treaty that provided full legal protection for birds of prey and ended a shameful era of gunning. In that same year Don Heintzelman privately published A Guide to Northeastern Hawk Watching; four years later he published A Guide to Eastern Hawk Watching. Interest in hawk watching flourished, and in 1974 the Hawk Migration Association of North America was founded - hawk watching became truly national.

The 1979 Heintzelman guide covers all of North America in a substantially expanded version of his earlier regional publications. The new guide contains, in concise size and format, an enormous amount of information about hawks and their behavior, brief but adequate descriptions of 35 species,

and sections on hawk identification and study, types of hawk watching, field equipment, the migration seasons, and the mechanics of hawk flight. Approximately 100 pages of photographs and drawings show each hawk species, perched and in flight, as well as the variety of plumages and flight angles.

For the hawk watcher interested in the geographical distribution of observation sites, the final section is rich with descriptive material. From Cape Canaveral and Santa Ana to northern wilderness points in Alaska, sites are ranked (where information is available) in terms of the number of sightings during fall and spring migration. Habitat and outlooks are described, and instructions about access are provided. The rankings are based on reports from local birders as well as Heintzelman's own experience.

Much information about hawk watching is new, some not even yet disseminated. Mt. Wachusetts, not noted in previous Heintzelman guides and only recently recognized even in Massachusetts as a major observation post for fall migration, is included in the current guide. Also mentioned is Pt. Diablo at the Golden Gate of San Francisco Bay which has only been "discovered" within the past two years, and is just being recognized as probably the single best location on the Pacific coast for autumn hawk watching. (For an Eastern birder it has a special appeal - Cooper's hawks are ranked as common. This reviewer was present on September 19, 1979, when, during a three-hour period, 80 Cooper's and 120 Sharp-shins flew overhead--most at close range!) In the category of yet-to-be-discovered (by Heintzelman) is Napatree Point at the southwest corner of Rhode Island. To indicate its importance - on October 8 and 14, 1979, the following two-day totals were reported: American Kestrel (1,045), Sharp-shinned (885), Merlin (60), Cooper's (11), Osprey (10), Northern Harrier (9), and Peregrine (4).

As an inexpensive, easy-to-read compendium, this excellent guidebook is recommended for both the raptor enthusiast and the neophyte.

Hawks and Owls of North America is intended "for students, birders, ecologists, conservationists, and raptor enthusiasts at less than professional level." In both text and pictures this volume makes little impact in competition with the many excellent books already available on birds of prey. Descriptions of individual species are necessarily brief, since hawk and owl ecology, migrations, endangered species, and conservation are also discussed. The result is a general and rather superficial overview of all topics. The book is overpriced in relation to its content, interest, and uniqueness for knowledgeable birders and raptor enthusiasts.

References:

"Fall Migration of Diurnal Raptors at Pt. Diablo, California," Laurence C. Binford, Western Birds, Vol. 10, No. 1, 1979.

Rhode Island Audubon Society Field Notes, October, 1979, Charles Wood, Editor.



THE SPRING MIGRATION MARCH — MAY 1980



by Richard S. Heil and Robert H. Stymeist

March was wet and a bit on the cool and cloudy side. The first month of spring began with two very cold days more characteristic of midwinter. The low of 7° on the first was the coldest March reading since 1967. Not until the third did the mercury rise above 32°. The month averaged 36.9°, 1.2° below normal, yet mild days predominated with 17 days above normal and only 12 below normal. The month's high mark was 59° on March 20. Precipitation totaled 5.37 inches, 1.36 inches above normal. This tied with 1972 as the nineteenth wettest March in 110 years. Snowfall was 3.6 inches, 4.5 under average. The most in any day was 3.0 inches on March 14. The seasonal total stands at 12.7 inches, 28.8 inches under average and the third least in 90 years of record. Miscellaneous phenomena included a thunderstorm on March 11 and ice glazing on March 14.

April showers were plentiful this year: precipitation totaled 4.36 inches, the most in April since 5.65 inches fell in 1973. Measurable amounts fell on 13 days. The mercury averaged 48.7°; the high of 75° was recorded on April 20; the low of 33° came on the first. Strong southwest winds were recorded on April 12, 15, and 20. The final days of the month were cold with the last nine days averaging 5° below normal with raw east and northeast winds. Birders were wondering if the migration would ever get under way.

May was on the warm, dry, and sunny side. The temperature averaged 59.4°; the high mark was 80° on May 22; the low was 41° on the third. Rainfall totaled only 2.3 inches, 1.17 under normal. Strong south or southwest winds were infrequent, but heavy migration occurred with favorable winds on May 11, 13, and 18. The best day was May 13 with a light mist and fog according to the watchers at Mount Auburn. R.H.S.

LOONS THROUGH GREENE

Common Loons were migrating in early May with small numbers observed moving on a NE track in the Provincetown-Turo area, apparently bound for the Canadian Maritimes. Additionally, 20+ were noted leaving the bay and crossing overland at N. Turo on a NE course May 9. A count of 600 Red-throated Loons moving north past the southeast corner of Nantucket March 23 was typical of spring flights observed there and at Gayhead-Martha's Vineyard in recent years. A breeding plumaged Eared Grebe was present at the Wachusett Reservoir in Clinton, May 19-24. There exists at least one prior inland record: from Horn Pond, Woburn, October 20-November 13, 1968. Louisiana Herons totaled 16 individuals during April and May, too many to describe individually. This is the highest spring total since the species' expansion into our region and its subsequent first breeding record in 1976 (cf. spring totals since 1975: 0, 16, 7 4-5, 3). A Least Bittern was found and captured alive in Scituate on the early date of March 18, probably a result of the big southerly storm of November 17-18. R.S.H.

Common Loon:

5/3,9	C.Cod Bay, N. Turo	30, 20+	W.Petersen#, R.Heil
	Above migrants on NE track.		
5/10,11	Nt.A., Framingham	5, 3 migrating	R.Forster#
5/25	Wonomoy	20	W.Petersen

Arctic Loon:

3/23	Gay Head (M.V.)	1	B.Kleiner#
	Good details received. Plumage description that of breeding bird.		

Red-throated Loon:

3/23	Nant.(Low Beach)	600 migrating N	R.Veit, M.Litchfield
5/3,11	C.Cod Bay, Framingham	10 migr.NE, 1 migr.	W.Petersen#, R.Forster

Red-necked Grebe:

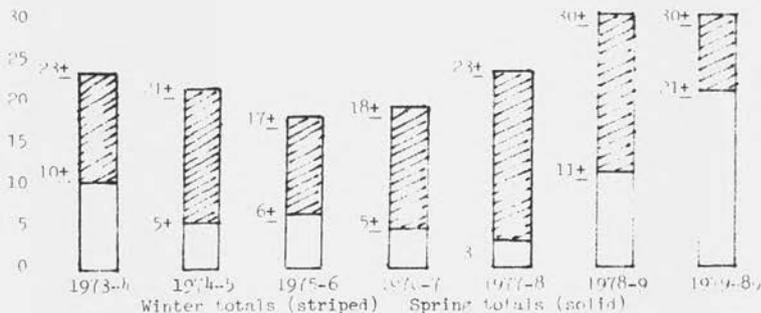
3/9,20	Gloucester, Cohasset	30, 11	R.Heil, S.Higginbotham
3/15,23	Nant.(Low Beach)	55, 70+ migr. N	R.Veit, M.Litchfield

Yellow-crowned Night Heron:			
5/2,8	WBWS, Lexington	1, 1	W.Bailey, B. McKres#
5/9,14	Willis, Dover	1 ad., 2 imms.	B.Cassie, F.Hamlen
5/16-20	Wellesley	1-2	E.Durkee#
Least Bittern:			
3/18	Scituate	1 (caught alive)	J.Keating, Eide W.Petersen
5/12-18,17	Wayland, Lynnfield	1, 1	R.Forster#, H.Wiggin#
American Bittern:			
3/2,16	Quincy, Eastham(F.H.)	1, 1	D.Brown#, D.Reynolds
3/17,23	Nantucket, P.I.	1, 1	M.Litchfield#, J.Nove
4/11,19	Eastham(F.H.), P.I.	2, 3	M.Ciccarelli+R.Barber, G.Gove
4/thr.,5/thr.	4 locales, 6 locales	4, 10 inds.	v.o.
5/18	Wayland	max. 5	R.Forster
Glossy Ibis:			
4/7,9	Halifax, Squantum	2, 1	J.Flaherty, D.Brown
4/23,26	Manchester, Marshfield	88, 33	P.Parsons, SSBC
5/5,14	S.Peabody, Manomet	28 migr.N, 10 migr.N	R.Heil, '80 staff

WATERPOWL

Two orange-breasted Brant in a flock of 675 at Squantum were color-dyed on Long Island, New York, this past winter. Large numbers of Brant again lingered late at Newburyport; 900+ were still present there on May 14. A dead Fulvous Whistling Duck found on Nantucket on March 20 was probably one of the two remaining individuals from the flock of four (of which two were shot) on the island last December 14. The Barrow's Goldeneye concentration at Newburyport peaked in late March when twelve (6 adult males, 2 immature males, and 4 females) were viewed from a single vantage point on March 23. Statewide totals of 21+ this spring and 30+ this past winter reflect this species' observed, if not actual, increase here in recent years. The following table shows the steady, nearly 80% increase in wintering Barrow's Goldeneye in eastern Massachusetts since a low point during the winter of 1975-6, according to B.O.E.' records:

Individuals 30



An immature male Common Eider far inland at Charlton, Worcester County, must have been a startling sight. The origin of any inland eider is certainly open to question since eiders, unlike scoters, are virtually unknown away from the coast.

Brant:			
3/7,10	Wollaston, Squantum	450, 675	S.Higginbotham
3/19	Squantum	2 (orange-dyed breasts)	R.Emery#
3/29	Salisbury, Duxbury Bay	70, 1400	R.Heil, B.Sorrie#
4/8,27	Winthrop, Newburyport	300, 640	M.Sharpe, R.Veit#
5/11,14	Scituate, Newburyport	200+, 900+	W.Petersen#, R.Heil
Snow Goose:			
3/5,22	Wareham, Milton	1, 1	D.Briggs, O.Wallen
3/29,4/3	Falmouth, P.I.	1, 80	S.Higginbotham, K.French
4/12,27	P.I., N.Scituate	280 migr., 7	P.Roberts, D.Brown
Fulvous Whistling Duck:			
3/20	Nantucket	1 (found dead)	K.Reilly, L.Tooker
Black Duck:			
3/16	Lynn, Quincy Bay	460, 561	TASL

3/26,29	Manomet, Dennis	125+, 150+	MBO staff, B.Nikula#
4/13,5/4	Thompsons I., N.Scituate	2, 1	D.Brown, J.Grugan
Horned Grebe:			
3/1,23	Randolph, Boston(Jam.Pd.)	1 road kill, 1	W.Petersen, A.Agush
3/16,29	Hingham Bay, Lakeville	27, 3	TASI, J.Kricher
4/12	P.I.	5h	P.Roberts
4/13	Quincy, Hingham	64, 48	TASI
Eared Grebe:			
5/19-24	Wachusett Reservoir(Clinton)	1 br. pl.	B.Blodget et al.
Pied-billed Grebe:			
3/15-23,16	Nantucket, Lakeville	1, 2	R.Veit#, BBC
3/22,23	Rockport, Sudbury	1, 1	G.Soucy, R.Forster
4/thr.	7 locales	11 inds.	v.o.
5/17	S.Hanson	pair on territory	W.Petersen
Northern Fulmar:			
3/22,4/15	Rockport, Stellw. Bank	1, 1	G.Soucy, B.Nikula
5/3,8	Stellw. Bank	35+(all light), 3	W.Petersen
Gannet:			
3/22	Barnstable, P'town	36, 42	BBC
3/30,4/5	Nahant Bay, Salisbury	15, 300+	S.Zendeh, P.Roberts
Great Cormorant:			
3/10,16	Nahant, Hull area	140, 266	S.Zendeh, TASI
4/12,26	N.Scituate	75, 12+	W.Petersen#
5/3,10	Stellw.Bank, Plymouth	3 imm. migr., 1	W.Petersen#
5/11	Millis, N.Scituate	1 ad., 10	B.Cassie, W.Petersen
5/16	Manomet	1 imm.	MBO staff
Double-crested Cormorant:			
3/4,21	Somerville, Nantucket	1(from Feb.), 1 imm.	J.Berry, R.Veit#
3/23,26	Lakeville, S.Dartmouth	9 migr.NE, 1	F.Correia, D.Briggs
4/12,19,21	Sudbury Valley	96, 22, 180	R.Forster
4/13	Nahant, Hingham	300, 452	TASI
4/12,27	W.Newbury, N.Scituate	75, 1300	G.Soucy, D.Brown
5/8,18	Rockport, Ipswich	300, 400+	J.Grugan, J.Berry
5/11,14	Millis	39, 157	B.Cassie
Great Blue Heron:			
3/thr.	6 locales	7 inds.	v.o.
4/11,12	W.Bridgewater, Sudbury V.	59, 9 migr.	S.Higginbotham, R.Forster
5/3	Cape Cod Bay	4 migr. NE	W.Petersen
5/5,10	GMNWR, P.I.	10, 7	L.Taylor, BBC
Green Heron:			
4/14,16	Mt.A.	1,2	L.Crofoot, F.Bouchard#
4/19 on	9 locales	16 inds.	v.o.
Little Blue Heron:			
3/30	Yarmouth	1	J.Aylward
4/12-13,27-30	Manchester, Squantum	1-2, 1	H.Weissberg, D.Brown
4/27,5/31	Marshfield	1, 2	D.Brown, SSBC
5/18	Saugus	1 ad.	C.Jackson
Cattle Egret:			
4/6,9	Bridgewater, Saugus	12, 5	J.Flaherty, P.Willis
4/19 on,20	Marshfield, Wopsfield	max. 4, 4	B.Sorrie#, G.Gove
5/14,18	Walpole, Ipswich	20, 14	D.Clapp, BBC
Great Egret:			
3/28-4/12,6	P.I., Westport	1-3, 1	H.Weissberg#, D.Davis
4/12-23,25-30	Marshfield, Nant.	1-2, 1	W.Petersen#, C.&E.Andrews
5/4,18	WBWS, Westport	1, 6	W.Bailey, BBC
5/22,31	Squantum, Marshfield	2, 1	G.Wilson, SSBC
Snowy Egret:			
3/18,28 on	Essex, P.I.	1, 1	P.Parsons, H.Weissberg#
3/29,4/7	Rowley	1, 25	R.Heil, R.Alexander#
4/7,13	Squantum, Scituate	11, 14	S.Higginbotham, M.F.Litchfield
5/23-26	Cape Pogue-M.V.	35	BBC
Louisiana Heron:			
4/5,8-9	Osterville, Wareham	1, 1	R.Barber, E.Akers
4/12 on,27	P.I., Cape Pogue-M.V.	max.4, 2	G.Gove#, V.Laux
4/10-5/31	8 other locales	singles	v.o.
Black-crowned Night Heron:			
3/16-30,4/20	6 locales, P.I.	16 inds., 40	v.o., F.Hallan
5/9,23-26	Milton, M.V.	10+, 37	U.Nania, BBC
5/31	Monomoy	18 nests found	P.Trull#

Gadwall:			
3/2	Salem, Gloucester	14, 25+	R. Heil, BBC
3/16, 19	Nantucket, W. Harwich	8, 8	M. Litchfield#, B. Nikula
4/26, 27	Ipswich, Rowley	30, 30	M. Argue#, R. Veit#
Pintail:			
3/9, 15-23	Marshfield, Nantucket	4, 2	W. Petersen#, M. Litchfield#
3/15, 24	P.I., W. Bridgewater	25, 35	BBC, S. & R. Higginbotham
4/11	W. Bridgewater	20	S. Higginbotham
Green-winged Teal:			
3/21, 24	Nantucket, W. Bridgewater	50, 30	R. Veit#, S. & R. Higginbotham
3/22, 4/5	Sudbury Valley, P.I.	8, 75	R. Forster, J. Berry
4/26, 5/3	Rowley, P.I.	29, 10	R. Veit#, BBC
4/27	Rowley (Stilt Pd.)	1 m. (Eurasian race)	Veit, Perkins, Litchfield
Blue-winged Teal:			
3/20	Marshfield, P.I.	4, 2	S. Higginbotham, H. Merriman
3/24, 29	W. Bridgewater, Wayland	12, 4	S. Higginbotham, R. Forster
4/5, 26	S. Hanson, Rowley	4, 5	SSBC, BBC
European Wigeon:			
5/31	Newburyport	1 m.	L. Crofoot, G. Gove#
American Wigeon:			
3/6, 15-23	Belmont; Nantucket	100+; 300	M. Dodder; R. Veit#, M. Litchfield
4/5, 26	Belmont, Ipswich	45, 9	R. Stymeist, BBC
Northern Shoveler:			
3/18-19, 3/23-4/5	Needham, S. Hanson	1-2, pr.	O. Komar#, W. Petersen#
4/12, 21	P.I., Canton (P.M.)	15, 1 m.	v.o., D. Brown
5/17	Squantum	1 m.	W. Petersen#
Wood Duck:			
3/8, 9	S. Hanson, Belmont	4, 1	SSBC, L. Taylor
3/7-10, 30	W. A., G. NWR	3, 27	R. Stymeist, P. Roberts#
4/6	IRWS	30	R. Heil
Redhead:			
3/1, 16	Salisbury, Lakeville	1, 2	BBC
3/15-23	Nantucket	300	R. Veit, M. Litchfield#
4/6, 13	Braintree, Boston Harbor	1, 1	BBC, TASL
Ring-necked Duck:			
3/15, 23	W. Carver, IRWS	180, 37	K. Powers#, R. Heil
3/30	W. Newbury, S. Hanson	34, 100	I. Girunas, W. Petersen
4/5, 24	W. Bridgewater, S. Hanson	66, 75	SSBC
Greater Scaup:			
3/16	Nant; Hingham, Lynn	250; 601, 2030	M. Litchfield; TASL
4/5, 5/17	Newburyport	500, 2	BBC, G. Gove#
Lesser Scaup:			
3/9, 30	Newburyport, P.I.	1 m., 1 f.	J. Berry, I. Girunas
4/5, 24	S. Hanson	1, 2 m.	W. Petersen
4/24	Braintree (Great Pd.)	3	D. Brown
Common Goldeneye:			
3/2, 16	Cape Ann, Newburyport	450+, 300	BBC
3/15-23, 22	Nantucket, Woburn	350+, 8	R. Veit#, BBC
Barrow's Goldeneye:			
3/15-23, 16	Nantucket, Hull	6+, 1 f.	R. Veit#, W. Petersen#
3/thr.	Newburyport	max. 12 (6 ad. m., 2 imm. m., 4 f. - 3/23)	R. Heil#
3/23	Plymouth	1 ad. m.	B. Sorrie, E. Strawn
4/1, 5	Chatham, Newburyport	1, 4	J. Aylward, J. Berry
Bufflehead:			
3/16	5 Greater Boston locales	1351	TASL
5/17, 25	S. Hanson, Lynn	1 f., 1 f.	W. Petersen#, R. Stymeist#
Oldsquaw:			
3/29, 4/25	Duxbury, Newburyport	100, 1200	B. Sorrie, W. Petersen
5/14	Newburyport	300	R. Heil
Harlequin Duck:			
3/2-18, 19-4/3	Magnolia, Nantucket	3, max. 5	BBC#, S. Perkins#
4/9, 27	Rockport, N. Scituate	4, 1	C. Leahy, D. Brown
5/8, 25	Rockport, Lynn	2, 1 m. slightly oiled	J. Grugan, R. Stymeist#
Common Eider:			
3/9, 22	Plymouth, Manomet	8000, 2000	H. Wiggin#, SSBC
4/27	N. Scituate	850	D. Brown
5/3-4	Charlton (Worcester Co.)	1 imm. m.	R. Meservey, B. Blodgett
King Eider:			
3/1, 4/13	Rockport, Hull	1 f., 1 f.	BBC, S. Higginbotham

4/24,26-27	N.Scituate (Glades)	2 f., 1 f.	BBC, S.Higginbotham
5/25	Monomoy	1 imm. m.	W.Petersen, B.Sorrie
White-winged Scoter:			
4/12,27	P.I., N.Scituate	500, 102	P.Roberts, D.Brown
5/3,8	P.I., Winthrop	85, 200	H.'erriman,C.Jackson#
Surf Scoter:			
4/19,27	Nantucket,N.Scituate	200, 21	C.Jackson, D.Brown
Black Scoter:			
4/19,27	Nantucket,N.Scituate	100, 42	C.Jackson, D.Brown
Hooded Merganser:			
3/15,30	Eastham, Halifax	32, 7	J.Aylward,W.Petersen
Common Merganser:			
3/1,14	Newburyport, Wayland	127, 91	BBC, R.Forster
3/26	Plymouth, Littleton	50+, 60+	'BO staff, J.Baird
4/5	Lincoln	68	R.Stymeist
4/9,11	Braintree, Milton	180, 500	D.Brown
5/5	S.Peabody	3	R.Heil
Red-breasted Merganser:			
3/16,21	Hingham Bay,Nantucket	500+,1800+	W.Petersen#,R.Veit#
4/5	P.I., Harwich	225,500	BBC, J.Bird
5/17	Manchester	10	BBC

RAPTORS

The continued increase and expansion of the Turkey Vulture was never more apparent than with this spring's total of 170+ individuals reported. Last year there were 129+, a very hearty jump in numbers from only 35 reported during the spring of 1976. Certainly the Eastern Massachusetts Hawk Watch (EMHW) spearheaded by Paul Roberts has had its effect on the new improved totals of all our raptor species. The following list represents the EMHW totals from April 5 through May 10, 1980.

Turkey Vulture	81	Broad-winged Hawk	341
Goshawk	7	Rough-legged Hawk	2
Sharp-shinned Hawk	132	Marsh Hawk	28
Cooper's Hawk	10	Osprey	65
Red-tailed Hawk	111	Merlin	12
Red-shouldered Hawk	12	American Kestrel	528

Paul Roberts reports that the spring of 1980 hawk migration was rather sparse, and he hopes that the fall migration will be the best thus far for the EMHW.

It is also encouraging to see fair numbers of Red-shouldered Hawks in our area with 37 individuals reported. Also on the upswing are the Westport River Ospreys. Gil Fernandez reports that 21 pairs were on nests there; this is the most since there were 22 pairs in 1968.

The rarer species reported during the spring included two immature Golden Eagles, nine Bald Eagles, 17 Peregrine Falcons (including the downtown Boston winter resident), and a light phase Gyr Falcon at Salisbury. R.H.S.

Turkey Vulture:

3/18,29	Belmont, Milton	1, 1	P.Butler, D.Davis
3/30	W.Newbury, Quabbin	2, 3	E.Pyburn#, BBC(Drummond)
4/5-13,6	Framingham, Bridgewater	6(total), 2	R.Forster,K.Hamilton+W.Petersen
4/6,12	W.Newbury, Ashburnham	4, 4	R.Heil, R.Stymeist#
4/6,12	P'town, W'anomet	3, 2	B.Nikula, 'BO staff
4/18,20	Middleboro, Canton	3, 2	K.Holmes, D.Brown
5/27,29	Eastham, WBWS	6, 8	C.Smith, W.Bailey
May reports	various locales	25 ind.	v.o.
April reports	various locales	17 ind.	v.o.
Goshawk:			
early Mar.,3/23	Newburyport, Amesbury	1, 1	H.Weissberg, J.Grugan
4/19,24	Mt.Wachusett, Boxford	1, 1 m.(display flight)	W.Petersen#,R.Forster#
5/4 on	E.Middleboro	1 or 2	K.Anderson
5/16,25	Sharon, Norwell	1, 1	D.Clapp, B.Litchfield
5/26	Bridgewater, Framingham	1 ad.,pr. w/yg.	W.Petersen, K.S.Hamilton
Sharp-shinned Hawk:			
3/16,24	Nantucket, Lincoln	1, 1	'Litchfield#, R.Forster
3/28,30	Middleboro, Quabbin	1, 1	D.Briggs, BBC

4/20,5/3	Canton, W.Newbury	4, 12	D.T.Brown, P.Alden#
5/4	Milton, Framingham	24, 3	R.Veit#, R.Forster
5/4	Ipswich, E.Middleboro	1, 2	J.Berry#, K.Anderson
5/9,10,24	P.I.	19, 6, 1	J.Grugan,G.d'Entremont#,BBC
Cooper's Hawk:			
3/9,4/6	Bridgewater, Lexington	1, 1	H.Wiggin#, J.Andrews#
4/12,16;19	P'town; P.I., Mt.Wachusett	1, 2; 1, 1	B.Nikula#; G.Gove, SSBC
4/22,27	Lincoln, N.Scituate	1 ad., 1	R.Forster, D.Brown
5/10	W.Newbury, Rowley	1, 1	BBC(G.d'Entremont), R.Stymeist
Red-tailed Hawk:			
3/8	Sudbury-Bolton	22 (11 at Bolton)	R.Stymeist+P.+J.Roberts
3/2,9	Medfield, Bridgewater	5, 5	H.Robbins, H.Wiggin#
3/23	Rowley, G'NWR, W.Newbury	5, 4, 6	R.Heil,P.Hallowell,R.'cHale
4/11,12,20	Millis, Ashburnham, Canton	9, 13, 14	B.Cassie,R.Veit#,D.Brown
4/19	Wellesley	1 nest w/chicks on 8th fairway	J.Burns
5/23-26	Tisbury('V.)	10	BBC(Drummond)
Red-shouldered Hawk:			
3/9,10	Truro, Brewster	1, 1	B.Nikula#, P.Trull
3/6,8,	Braintree, Bridgewater	1, 1	R.Campbell, J.Flaherty#
3/13,16	Peabody, Rowley	1, 1	W.Drummond#, R.Heil
3/22;23	Norwell; S.Hanson, Medfield	1; 1, 1	B.Litchfield;W.Petersen,H.Robbins
3/28	Norton	2 displaying + 4 at same time	J.Kricher
4/1+5;6	Millis; Boxford, IRWS	2; 1-2, 1	B.Cassie, R.Veit#, R.Heil
4/12,20	Marshfield, Canton	1, 1	W.Petersen, D.Brown
5/9, 14 on	Truro, E.Middleboro	1 imm., 1-2	R.Heil, K.Anderson
5/18	Ipswich, Mt.A.	2, 1	I.Giriunas, L.Taylor
Broad-winged Hawk:			
4/12	Wayland, Ashburnham	1, 9	R.Forster#, R.Stymeist#
4/19,20	Mt.Wachusett, E.Middleboro	37, 3	SSBC, K.Anderson
4/20,21	Canton (P.M.)	37, 10	D.Brown
1/23,26	Manchester, WBWS	1, 1	P.Parsons, W.Bailey
5/4,5	Ipswich, Norton	4, 4	J.Berry#, J.Kricher
5/9,10	P'town, Truro	12, 25	R.Heil, B.Nikula
Rough-legged Hawk:			
3/1,10	P.I., Saugus	2, 1	F.Bouchard#, J.Berry
3/15,18	Marshfield, Nantucket	3, 2-3	W.Petersen, R.Veit#
3/23,4/6	Middleboro, P.I.	1, 1	S.Higginbotham,P.Roberts
Golden Eagle:			
3/23,5/4	W.Newbury, Milton	1 imm.; 1 imm.	R.McHale#, R.Veit
Bald Eagle:			
3/2,5 on	Orleans, Amesbury-Newbrypt	2 imm., 2-3 imm.	B.Nikula#,D.Alexander#+v.o.
4/15,24	W.Newbury, G'NWR	1 ad., 1 imm.	P.Parsons, M.Greenwald
5/3,10	W.Newbury, Truro	1, 1 imm.	SSBC, B.Nikula
Northern Harrier:			
Chr.spring	Newburyport-P.I.	1-2 + 11 on 4/6	P.Roberts# + v.o.
3/15-23	Nantucket	15+	R.Veit#
4/5	Taunton, Framingham	1 m., 1 m.	J.Kricher, R.Forster
4/20	Marshfield, Nantucket	2, 6	S.+N.Osborne,P.Hallowell
5/3; 4	W.Newbury; Mt.A., Milton	2; 1, 2	P.Alden#+D.Sipher,R.Veit#
Osprey:			
3/29	Lakeville	1-2	J.Kricher + v.o.
4/1	Wareham	2 nesting	N.+S.MacDonald + v.o.
spring	Westport River	21 prs. on nests	fide G.Fernandez
	This is the most since 22	pairs in 1968.	
4/3;5	Concord; Lincoln, W.Newbury	1; 2, 3	C.Lipson;R.Stymeist#,BBC
4/12	Ashburnham	12	R.Veit#
Apr. migrants		13 ind.	v.o.
May migrants		11 ind.	v.o.
5/23-26	Chappaquiddick ('V.)	7	BBC(Drummond)
Gyr Falcon:			
3/2	Salisbury	1 "light phase"	R.McHale, fide R.Forster
Peregrine Falcon:			
early Mar.	W.Newbury	1	E.Pyburn, S.Garrett
3/20	Monomoy, Nauset	1 ad.m., 1 imm.	B.Nikula, R.Prescott
4/3	Boston(Saks Fifth Avenue)	on roof eating pigeon	L.Apicella
4/14+17	Boston(State Street Bank)	1	T.Raymond
4/4,11	Eastham, W.Bridgewater	1, 1	P.Barber,S.Higginbotham
4/19+26	Monomoy	1, 1	B.Nikula#
4/20	N.Scituate, Newburyport	3, 1	S.+R.Higginbotham,P.Roberts

4/24	Gloucester	1	J.Baird
5/4,6	Milton, Mt.A.	1, 1	R.Veit#, S.Perkins#
5/15,18	P'town, S.Orleans	1, 1	C.Goodrich, B.Nikula#
Merlin:			
3/9+23	Salisbury	1 + 1	M.McClellan#, G.Gove
3/9,15+21	Duxbury, Nantucket	1, 1 + 1	W.Petersen#, M.Litchfield# +R.Veit#
3/16,19	Hingham, Beverly	1, 1	W.Petersen#, J.Nove#
3/23,27	P.I., Danvers	1, 1	T.Martin, R.Heil
4/5 on	P.I.	14 migr.	v.o.
4/22,27	MBO, N.Scituate	1, 1	MBO staff, D.Brown
5/14	Mt.A.	1	O.Komar#
5/18,24	Squantum, P.I.	1, 1	C.Jackson,BBC,H.Weissberg
American Kestrel:			
4/5,6	Rowley, W.Newbury	10-12, 20	J.Berry, R.Heil
4/5,6,11,12,19	P.I.	23, 57, 195, 38, 28	P.Roberts#, M.Schoene on 4/11
5/9	Truro	22	R.Heil

SHOREBIRDS

A very early American Oystercatcher arrived at Eel Point, Nantucket, by March 16 although the general arrival of the local breeders occurred in mid-April. A record count of 122 Willets at Chatham, April 24, occurred in conjunction with NE winds and fog April 23-24. Apparently these were Nova Scotia bound migrants which normally pass by far offshore but were intercepted by the concurrent northeaster. Red Knots and Pectoral Sandpipers were notably scarce with only eleven and sixteen individuals, respectively, reported. White-rumped and Semipalmated sandpipers both peaked around May 25-28 at Monomoy and Newburyport. Two winter-plumaged Long-billed Dowitchers in April and two Stilt Sandpipers and a Marbled Godwit in May were rare spring migrants this far northeast. Palearctic shorebirds this spring included a "Eurasian Whimbrel" at Muskeget Island on April 11 and an average complement of three Curlew Sandpipers and four Ruffs.

American Oystercatcher:

3/16	Eel Pt.-Nantucket	1	M.Litchfield,S.Perkins
4/thr.-5/thr.	Monomoy	max.14 (2 nests)	B.Nikula,P.Trull#
4/26	Bird I.-Marion, Eastham	2, 3	I.Nisbet#,J.Kricher
5/11,23-26	Scituate, Cape Pogue-M.V.	1, 6	W.Petersen#,BBC

Semipalmated Plover:

5/17,24	Newburyport	1, 27	BBC
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Piping Plover:

3/23-31,28	P.I.,Plymouth Beach	1-2,2	M.McClellan#,MBO staff
4/6,24	Plymouth, Scituate	14, 6	MBO staff,W.Petersen
4/thr.	Monomoy	max. 50(4/19)	B.Nikula
5/11;26	P.I.; Plymouth	5; 6 ads.,4 chicks	BBC; R.Stymeist#

Killdeer:

3/1,2	Squantum, Salem	1, 1	G.Gove, R.Heil
3/13 on	14 other locales	46 inds.	v.o.
4/5,6	Tyngsboro,Newburyport	20, 36	R.Stymeist, R.Veit#

American Golden Plover:

3/20-4/1,17-26	Salisbury, Monomoy	1, 1 (both winter pl.)	H.Merriman#,B.Nikula#
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Black-bellied Plover:

3/16-23,29	Nantucket, Duxbury	1, 4	M.Litchfield#,W.Petersen#
4/23,thr.	Duxbury, Monomoy	80, max.400+	W.Petersen, B.Nikula
5/16,18	Monomoy, E.Boston	1500, 1000	B.Nikula, C.Jackson
5/6, 28	Newburyport	450, 3500	R.Heil

Ruddy Turnstone:

5/14,18	Squantum, off S.Boston	10, 50	R.Emery#, C.Jackson#
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American Woodcock:

3/1	Amesbury, N.Chatham	1, 1	BBC, W.Cordes
3/16 on,25	11 other locales, Sudbury	19 inds., 5	v.o. R.Forster
4/21	Norwood to Milton	<u>22</u>	D.Brown
5/4,23-26	Hamilton,Chappaquiddick I.	6-8, 5	J.Berry, BBC

Common Snipe:

3/16,20	Bridgewater, Nantucket	8, 3	BBC, R.Veit
3/24,29	Newburyport, Ipswich	6, 5	L.Crofoot, R.Heil

4/12	W.Newbury,Sudbury Valley	40, 103	R.Heil#,R.Forster#
4/21	Norwood to Milton	83	D.Brown
5/10 on	E.Bridgewater	pair on territory	W.Petersen
Whimbrel:			
4/6,17;19	P.I.	1, 1; 1	R.Veit#;M.McClellan#
4/11	Muskeget I.	1 (<u>Eurasian type</u> -no details)	C.&E.Andrews
4/15,19	Squantum, Monomoy	1, 3	D.Brown,B.Nikula
4/20,20-21	S.Chatham,Nantucket	1, 1	B.Sorrie#,P.Hallowell
4/26-5/4	WBWS	3	W.Bailey
Upland Sandpiper:			
4/19-26	4 locales	5 inds.	v.o.
5/3	Lancaster, Newburyport	3, 5	H.Merriman,H.Wiggin#
Spotted Sandpiper:			
4/20	P.I. basin, Nantucket	1, 1	F.Hamlen#,C.Jackson#
4/26-27	3 locales	singles	v.o.
5/18	Medford, Wayland	6, 9	C.Jackson#,R.Forster#
Solitary Sandpiper:			
4/16-20,21	Concord, F.M.	1, 2	J.Baird#, D.Brown
5/3-17	8 locales	9 inds.	v.o.
Willet:			
4/20,23	S.Chatham, Duxbury	1, 1	W.Petersen#
4/20,24	Nantucket, Chatham	4, 122	P.Hallowell,B.Nikula
5/6-25,14	Newburyport,Squantum	1-3, 8	R.Heil#, G.Wilson#
5/23	Monomoy	12	B.Nikula#
Greater Yellowlegs:			
3/20,29	Newburyport,Rowley	1, 8	H.Merriman,R.Heil
4/5,6	Concord,Newburyport	1, 14	R.Forster, R.Veit
4/19,30	Marshfield, Squantum	48, 82	B.Sorrie, D.Brown
5/6,14,28	Newburyport	500, 230, 150	R.Heil
Lesser Yellowlegs:			
4/12-23,14-24	Marshfield,Nantucket	1-2, 3	W.Petersen#,E.Andrews
4/14,27	Newburyport	1, 12+	M.McClellan#,R.Veit#
4/20,26	Squantum, Rowley	4, 2	D.Brown, BBC
5/11,14	Marshfield,Newburyport	7, 3	W.Petersen, R.Heil
Red Knot:			
3/9,4/23	N.Scituate,Duxbury	1, 3	H.Coolidge#,W.Petersen
5/thr.	Only 7 singles reported		v.o.
Purple Sandpiper:			
3/7,16	N.Scituate,Hingham	100+, 100	S.Higginbotham, TASH
4/13,26	Winthrop,Acoaxet	300, 35	R.Stymeist, BBC
5/18,26	Winthrop,Scituate	5-10, 25	C.Jackson#,W.Petersen
Pectoral Sandpiper:			
3/23	P.I.	1	WBO staff
4/5 on	4 locales	5 inds.	v.o.
4/17,21	P.I., F.M.	4, 3	M.McClellan#, D.Brown
5/17-24	3 locales	singles	v.o.
White-rumped Sandpiper:			
5/6,28	Newburyport	1, 10+	F.Heil
5/16,25	Monomoy	30+,50	B.Nikula#,W.Petersen#
Least Sandpiper:			
4/27	Newburyport	1	R.Veit#,Litchfield
5/6,14,28	Newburyport	900, 800, 275	R.Heil
5/11,16	Scituate, Monomoy	300, 500	W.Petersen#,B.Nikula#
Curlew Sandpiper: (all breeding plumage)			
5/16-19	Monomoy	1	B.Nikula, R.Forster#
5/23-28,24	Newburyport	1, 2	L.Crofoot#,C.Gove#
Dunlin:			
3/16	Lynn Harbor, Quincy Bay	120, 93	TASH
4/23,27	Duxbury,Newburyport	450, 70	W.Petersen, R.Veit
5/6,14,28	Newburyport	400, 600, 200	R.Heil
5/16	Monomoy	3500	B.Nikula
Short-billed Dowitcher:			
4/11,12	Newburyport	1, 1	S.Perkins, R.Heil#
4/17,26	Monomoy, WEWS	10+, 20	B.Nikula, W.Bailey
5/6,14,28	Newburyport	50, 400, 100	R.Heil
Long-billed Dowitcher:			
4/6,13	E.Boston, Chatham	1, 1(both winter pl.)	R.Veit#,B.Nikula
Stilt Sandpiper:			
5/11,17	Marshfield, P.I.	1 breeding pl., 1	W.Petersen, BBC

Semipalmated Sandpiper:			
5/6,14,28	Newburyport	4, 2200, 6000	R.Heil
5/28	'onomoy	2000	B.Nikula
<u>Mottled Godwit:</u>			
late May	Cockle Cove-Chatham	1	R.Pyler, D.Reynolds
Ruff:			
4/12,21	W.Bridgewater, Canton(F.M.)	1 m., 1 m.	S.Higginbotham#, D.Brown
4/27-5/14,3	Newburyport	1 m., 1 f.	R.Veit#, G.Gove#
Sanderling:			
3/16,5/16	Lynn, 'onomoy	90, 3500	TASL, B.Nikula#
Wilson's Phalarope:			
3/11 on	P.I.	max. 2 pairs	v.o.
5/22-31,23-25	Cockle Cove-Chatham, 'onomoy	max. 2 prs., 2	H.Rich#, B.Nikula
Northern Phalarope:			
5/3,23	Stellwagen Bank, 'onomoy	6, 15	W.Petersen#, B.Nikula#
5/19	Wachusett Reservoir, Clinton	1	B.Blodget

JAEGERS THROUGH ALCIDS

Four Lesser Black-backed Gulls were found on Nantucket: one adult, one third winter, and two second winter plumaged birds. For more information on these sightings and the identification of Lesser Black-backed Gulls, see Richard Veit's paper in this issue. At Revere, an adult Common Gull was well photographed on May 9, and another was well observed in Hull on the TASL Boston Harbor survey on April 13. An adult Sabine's Gull was found on 'onomoy where a Forster's Tern, a rare spring visitor, was also found. This was only the fourth satisfactory report of a spring Forster's Tern in Massachusetts. A Royal Tern, the seventh spring record for this species in the state, was also found on 'onomoy on May 25. Finally, another Sooty Tern, long dead, was found in Chatham bringing the total to 88 individuals that were blown up during Hurricane David in 1979. R.H.S.

Parasitic Jaeger:			
5/3,10	Stellwagen Bank	1-2, 2	W.Petersen#
Glaucous Gull:			
3/7,13	N.Scituate	1, 1	S.Higginbotham
3/9	P.I., Gloucester	1(1W), 2(2W)	R.Heil
3/19-22	Nantucket(Low Beach)	3(1W)	R.Veit#, M.Litchfield
4/23,25	Duxbury, P.I.	1(2W), 1 imm.	W.Petersen#
5/11,24	Newburyport, Nauset	1, 1(2W)	L.Crofoot#, T.Leverich
5/25	'onomoy	1 imm.	W.Petersen#
Iceland Gull:			
3/19-22,22	Nantucket, Gloucester	35,15	R.Veit#, L.Jodrey#
3/23,4/13	P.I., Dover	15-20, 1	J.Grugan, F.Hamlen
4/20,27	Gloucester,Cape Pogue--"V.	2, 2	BBC, V.Laux
5/9,25	Provincetown, 'onomoy	1(2W), 1 imm.	R.Heil,W.Petersen#
<u>Lesser Black-backed Gull:</u>			
3/19-23	Nantucket(Low Beach)	4(1 ad.,1(3W),2(2W)	Veit,Perkins,Litchfield
Herring Gull:			
3/19-23	Nantucket(Low Beach)	3000+	R.Veit#
Ring-billed Gull:			
4/11,27	Quincy Bay,Newburyport	280, 650	D.Brown, R.Veit#
5/8	Revere	860	C.Jackson#
<u>Common Gull:</u>			
4/13,5/9	Hull, Revere	1 ad.(W pl.), 1 ad.(well ph.)	W.Petersen#,S.Zendeh
Black-headed Gull:			
3/1-2:thr.	Gloucester; Newburyport	1 ad; 1 ad, 1(1W)	M.McClellan#,R.Heil#
4/15,21	Dorchester	1 ad., 1 imm.	D.Brown
4/19,27	Newburyport	2 ad., 3(1 ad.,2(1W)	D.Alexander,R.Veit
4/24-5/22	Chatham	1-3 imm.	B.Nikula#
5/8,14	Plymouth, Newburyport	1, 2(first yr.)	W.Petersen, R.Heil#
Laughing Gull:			
4/5,20	Chatham, Nantucket	1, 2-3	J.Bird, C.Jackson
4/26,5/17	'ashpee, Newburyport	6+, 2 ad.	B.Cassie, G.Gove
5/7	Chatham	800+	R.Heil
Bonaparte's Gull:			
3/18-23	Nantucket (Low Beach)	150	R.Veit, S.Perkins#
4/27,5/6	Newburyport	62+, 350	R.Veit#, R.Heil

Little Gull:			
3/1-2, thr.	Gloucester, Newburyport	1 ad., 2(1 ad., 1(1W)	M. McClellan#, R. Heil#
5/14	Newburyport	4(2 hooded ad., 2(1W)	R. Heil
5/14, 16-31	Truro, Monomoy	1 dead(1W), 2 imm.	D. Minsky, v.o.
Black-legged Kittiwake:			
5/17, 25	P'town (R.P.), Monomoy	400 imm., 12	B. Nikula, W. Petersen#
<u>Sabine's Gull:</u>			
5/19, 22	Monomoy	1 ad.	D. Clapp + R. Forster#, W. Bailey + C. Goodrich
<u>Forster's Tern:</u>			
5/23-31	Monomoy	1-2 winter pl.	B. Nikula, W. Petersen#
Common Tern:			
4/22, 26	M.V., Bird I.-Marion	6, 40	V. Laux, I. Nisbet#
4/27	Monomoy	100	P. Trull
5/9, 21	Provincetown, Wayland	750+, 1	R. Heil, R. Forster
Arctic Tern:			
5/10, 26	Monomoy, Plymouth	6, 15 (6 nests)	R. Heil#, R. Stymeist#
Roseate Tern:			
4/26	Bird I.-Marion, Mashpee	85, 156	I. Nisbet#, B. Cassie
<u>Sooty Tern:</u>			
4/27	Chatham	1 (long dead)	P. Trull
Royal Tern:			
5/25	Monomoy	1	B. Sorrie, W. Petersen
Caspian Tern:			
4/30	Hull	1	B. Treat#
5/3, 8	Squantum, Rockport	1, 1	K. Winston#, J. Grugan
5/17, 24	Squantum, Plymouth	1, 1	W. Petersen#, B. Sorrie#
Black Tern:			
5/8	Wayland (Heards Pd.)	12	R. Forster
5/16, 23	Monomoy	1, 2	B. Nikula
5/19, 24	Wachusett Res.-Clinton	1, 1	H. Merriman, FBC
Razorbill			
3/15, 4/18	Nantucket	25, 82	M. Litchfield#, S. Perkins
4/10, 27	Nantucket Sound, N. Scituate	5, 2	C. Jackson, D. Brown
Black Guillemot:			
3/2, 23	Rockport, Nantucket (Low Beach)	5, 12	BBC, R. Veit#
3/26, 4/13	Acoaxet, P'town Harbor	1, 12	D. Briggs, P. Trull#
4/27	N. Scituate	16	D. Brown
4/28	C. Cod Bay, Rockport	1-2, 1	W. Petersen#, J. Grugan



Common Gull (left) in Revere (5/19/80). Photographed by Soheil Zendei

CUCKOOS THROUGH WOODPECKERS

Cuckoos were reported in good numbers again this year; however Black-billed Cuckoos outnumbered Yellow-billed. Note the very early arrival date of April 18 of a Yellow-billed Cuckoo banded at 'anomet. Four active nests of Barn Owls were located on the Vineyard this summer with others reported from Orleans and Nantucket. The Great Gray Owl, first found on February 7, was still present in Oakham on March 1.

The highlight of the month was a Burrowing Owl found on Plymouth Beach on May 13. The last time this bird was reported in Massachusetts was on May 15, 1875 in Newburyport where it was collected. It is now in the Boston Museum of Science. A more recent New England record was a bird which appeared in New Haven, Connecticut, December 19-28, 1979.

At least three Chuck-will's-widows were seen and heard on Chappaquiddick Island. Chucks have been reported for several years on the Vineyard and Nantucket although no nests have yet been found. Thirty-seven Ruby-throated Hummingbirds were banded at 'anomet during May, and at least twenty were seen on May 24 on Plum Island. A Pileated Woodpecker was observed in Mount Auburn Cemetery, a strange sight indeed! Ten Red-bellied Woodpeckers were reported as compared to only one last spring and there were eight Red-headed Woodpeckers noted. For the second year in a row Yellow-bellied Sapsuckers were scarce with only fourteen reported all spring. R.H.S.

Yellow-billed Cuckoo:

4/18	'anomet	1 (b)	MBO
4/27,5/17	Cape Pogue ('V.), Willis	1(early), 1	V.Laux, R.Cassie
5/18,20	'iddlesex Fells,E.'iddleboro	2, 1	P.Roberts,K.Anderson
5/26,27	G'NWR,Winchester	1, 1	BBC, G.Gove
5/31	Scituate,'ilton	2, 1	SSBC, F.Harlan

Black-billed Cuckoo:

5/14	Lexington,'ilton,W.Newbury	3, 2, 2	J.Andrews,R.Vernon,D.Bridge
5/15,16,17	Winchester,Wayland,Whitman	2, 1, 1	G.Gove,R.Heil,W.Petersen
5/18 on	various locales	29 inds.	v.o.

Barn Owl:

3/2,17-23	Pochet I., Nantucket	1, 1	v.o., R.Veit#
4/7	'V.	nest w/3 yg.	V.Laux
thr.'ay	'V.	4 active nests	fide V.Laux

Screech Owl:

3/2,9	IRWS,'iddleboro	4, 7	R.Heil,W.Petersen
thr.'ay	't.A.	nest w/2+ yg.	T.Giriunas + v.o.

Great Horned Owl:

3/9	'iddleboro	4	W.Petersen
5/2	Lancaster	1 flightless yg.	H.Merriman

Burrowing Owl:

5/13	Plymouth Beach	1 studied for ½ hr.	B.Harrington
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Barred Owl:

4/11	Boston(Beacon Hill)	1	D.Gearon
5/26	Lakeville	4-6(2-3 prs.)	W.Petersen
'ay	Boxford,Bridgewater,Stow	nesting pairs	J.Berry#,W.Petersen,R.Miller

Great Gray Owl:

3/1(from 2/1)	Oakham	1	D.Shepherd
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Long-eared Owl:

3/16,17-23	Salisbury,Nantucket	1, 6-7	R.Clayton#,R.Veit#
4/1	Quincy	1	D.Brown

Short-eared Owl:

3/23,24	Scituate,P.I.	1, 2	S.Higginbotham,L.Crofoot
4/5,12	Barnstable,Squantum	1, 1	J.Bird,R.Clayton#
5/10	'onoroy	1	R.Heil

Saw-whet Owl:

3/2,9	IRWS,E.'iddleboro	1, 1	R.Heil, W.Petersen#
4/25 + 5/18-22	Brewster	1, 4	P.Trull, v.o.
5/18-24	Wellfleet	1(at hole)	N.Proctor

Chuck-will's-widow:

5/23-26	Chappaquiddick I.('V.)	3	BBC(W.Drummond)
Heard and seen on road; well described: H.D'Entremont.			

Whip-poor-will:

5/4,4 on	Hamilton, E.'iddleboro	1, 1	J.Berry, K.Anderson
5/13,14	W.'ansfield,'illis	1, 1	J.Kricher, B.Cassie

5/17,23-26,25	Rowley, W.V., W.Newbury	10, 16, 6	R.Stymeist#, BBC, T.Lawrence#
Common Nighthawk:			
5/7	Manomet	1	WBO staff
5/12,13	E.Middleboro, Wayland	1, 3	K.Anderson, R.Forster
5/14 on, 15	on Brookline, Cambridge	4-5 pr., 3-4 pr.	R.Stymeist
5/17,22,25	W.Newbury, Lexington, P.I.	9,21,17	H.Wiggin#, J.Carter, R.Stymeist#
Chimney Swift:			
4/24	Lynnfield, Randolph	2, 8	R.Forster, D.Brown
4/27,5/14	Brookline	1, 1 dead on tree	H.Wiggin#, R.Stymeist#
5/18	Ipswich	36	BBC
Ruby-throated Hummingbird:			
5/5,10-31	Sharon, WBO	1, 37 (10 m., 17 f.)	D.Clapp, WBO staff
5/11	Plymouth, Winchester	1, 1	W.Brewster, G.Gove#
5/17-31	"T.A.	max. 10 (5/25)	v.o.
5/13,14	Needham, E.Middleboro	1, 2	B.Cassie, K.Anderson
5/16,5/17 on	Salem, P.I.	3, max. 20(5/24)	C.Blasczak, v.o.
5/17	Nahant, W.Peabody	6, 4	H.Wiggin#, H.Coolidge#
Belted Kingfisher:			
late May	"T.A.	Pr.nesting in future monument hole.	R.Stymeist#
Common Flicker:			
3/16	Nantucket	15	M.Hitchfield#
Pileated Woodpecker:			
4/19,23	Beverly, Winchester	1, 1	J.Nove#, P.Parsons#
3/29,4/19	Norton, "T.Auburn	1, 1	J.Kricher, J.Hill
April	8 locales	singles	v.o.
5/13,23,29	Manchester, Concord, Dover	1, 1, 1	R.Heil#, J.Taylor, J.Marshall
Red-bellied Woodpecker:			
thr. Mar.-Apr.	Brewster	1	R.Pyle
3/1-29, thr. Mar.	Rehoboth, Adamsdale	1, 1	fide R.Forster
mid-March on, 3/14	Needham, Millis	1, 1	VanAartsen, B.Cassie
4/12,13	Sandwich, Middleboro	1, 1	J.Aylward, fide K.Anderson
5/10-18, 23-26	WBWS, "Isbury (W.V.)	max. 2, 1	C.Goolrich# + v.o., BBC
Red-headed Woodpecker:			
3/1,3/14-5/17	Lanesville, "Illis	1, 1	F.Rouchard#, B.Cassie
5/12,14-16	Wayland, P'town	1, 1	B.Boyer, B.Nikula#
5/22	Lynn	pair at nest	R.Heil
5/25	Boxford, Monomoy	1, 1	T.Lawrence#, R.Finch
Yellow-bellied Sapsucker:			
4/10,15;24	"T.A.	1, 1; 1	R.Stymeist; S.Zendeh
4/17,18	Lynn, Millis	2, 1	R.Heil, B.Cassie
4/19	"Milton, P.I.	1, 1	G.Wilson, G.Gove
4/20,26	Squam, Newburyport	1, 1	D.Brown, G.Soucy#
5/4,9	Danvers, Lexington	1, 1	L.Taylor#, J.Andrews
5/14,17	"T.A., Newburyport	1, 1	v.o., M.Noland#

FLYCATCHERS THROUGH SHRIKES

An Ash-throated Flycatcher was found in Rowley where it remained from May 18-24; this is the second spring record for the northeast and the fourth record for the state. Speculation as to whether this bird was one of the several reported last fall and winter was raised. Could this bird have wintered in the southeast somewhere? Only two Acadian Flycatchers were noted this spring, both banded at Manomet. A Western Wood Pewee was seen and heard at Morris I., Chatham, on May 23, only the fourth state record. The other three records are from nearby Monomoy Island.

A concentration of Bank Swallows extending from the Plum Island airport to the Plum Bush and southward to Pine Island was carefully estimated at 1200+ individuals. On the airport runway, 450 were actually counted and at least 10 were killed by airplane traffic. These birds were observed around 2 P.M. on May 28, and there were virtually none at 4:30 P.M. A pair of Ravens was watched for twenty minutes or so at Nutting Hill, Ashburnham. They were seen diving and rolling in a spectacular flight show, oblivious of the 30 Common Crows that were constantly harassing them. Another Raven was heard and the call recorded in nearby Baldwinville.

Certainly the highlight of the month was a Mountain Bluebird that came aboard a ship about 70 miles south southeast of Nantucket. J. Cherry of the Manomet Bird Observatory was able to get the specimen when the bird died of exhaustion. Another highlight was a Northern Wheatear on Cape Cod, a first spring record. R.H.S.

Eastern Kingbird:			
4/19-21,21	P'town, Canton(F.M.)	2, 1	B.Nikula + v.o.,D.Brown
5/3,4 on	Lexington, Mt.A.	1, max 12 (5/25)	J.Andrews, v.o.
5/17	P.I.	20	BBC
Fork-tailed Flycatcher:			
5/22	Wellesley	1	C.Quinlan
No details.			
Great-crested Flycatcher:			
4/26,27	Holbrook, Canton	1, 1	D.Brown
5/9	G'NWR,Newburyport	1, 1	L.Taylor,J.Grugan
5/10	E.Middleboro,Dover	1, 1	K.Anderson,F.Hamlen
5/10 on	Mt.A.	max. 6 (5/25)	v.o.
Ash-throated Flycatcher:			
5/18-24	Rowley	1 ph.	A.Blaisdell,I.Giriunas
Last seen on 5/24 by BBC-H.Weissberg.			
Eastern Phoebe:			
3/14,17	Willis,Newbury	1, 1	B.Cassie,D.Alexander#
3/23	Sharon,IRWS,Middleboro	1, 1, 1	D.Clapp,R.Heil,D.Briggs
3/29	8 locales	13 inds.	v.o.
4/6	3 locales	30 inds.	v.o.
5/2 + 28	E.Middleboro	5 eggs in nest, 5 yg.(b)	K.Anderson
5/21	Willis	1 melanistic	B.Cassie
Yellow-bellied Flycatcher:			
5/18,19	Newton, Mt.A.	1, 1	O.Komar,S.Higginbotham
5/20,25	Hingham,Nahant	1, 1	R.Campbell,R.Stymeist#
5/31	Mt.A.,P.I.	1 1	O.Komar, J.Berry
Acadian Flycatcher:			
5/17,30	Manomet	1(b), 1(b)	MBO staff
Willow Flycatcher:			
5/9,14,16	Newburyport,Milton,Bolton	1(early), 1, 2	J.Grugan,R.Veit,H.Merriman
5/17,19	Lynnfield,G'NWR	1, 1	H.Wiggin#,L.Taylor
5/22,25	Newton,Lynnfield	2, 6	O.Komar,R.Stymeist#
5/26;31	G'NWR;Lexington,P.I.	4; 4, 3-4	A.+N.Clayton;J.Andrews,J.Berry
Alder Flycatcher:			
5/11,19	Mt.A., G'NWR	1, 1	M.Lynch#,L.Taylor
5/25	Lynnfield,Nahant	1, 1	R.Stymeist#,T.Lawrence#
5/26,31	Lexington,P.I.	1, 4-5	J.Andrews,J.Berry
Least Flycatcher:			
5/9	Manomet, Harvard	1(b), 1	MBO staff, H.Merriman
5/11,11-16	N.Scituate, Mt.A.	1-2,max.3(5/11)	W.Petersen, v.o.
5/13	MNWS, Nahant	5, 3	R.Heil
5/14,16	S.Peabody, Wayland	6, 5	R.Heil
5/14	P'town, Milton	5, 12	B.Nikula, R.Veit
Eastern Wood Pewee:			
5/8,14 on	Squibnocket (M.V.), Mt.A.	1, max. 4 (5/22)	V.Laux#, v.o.
5/15,18	Sharon, Westport area	1, 9	D.Clapp, BBC
Western Wood Pewee:			
5/23	Chatham (Morris I.)	1 heard	W.Bailey
Olive-sided Flycatcher:			
5/16; 17	P'town; P.I.,E.Middleboro	1; 1, 1	C.Goodrich;BBC,K.Anderson
5/18	Mt.A.,W.Newbury,Middlesex Fells	3, 1, 1	v.o.,B.Cassie,P.Roberts#
5/19,25,29	Lexington	1, 1, 1	J.Andrews
5/22;31	Manomet;Scituate,Annisquam	1, 1, 4	MBO;SSBC,H.Wiggin
Horned Lark:			
3/15	Nantucket	44	M.Litchfield,S.Perkins
Tree Swallow:			
3/21,23	Halifax, G'NWR	12, 3	G.Flaherty,P.Hallowell
3/30,31	G'NWR, Carver	60+, 150+	R.Stymeist#, R.Turner
4/5	G'NWR,W.Carver,Hamilton	100+, 350, 120	P.Roberts#,K.Anderson,R.Heil
4/12, 19	Sudbury Valley, P.I.	600, 300	R.Forster#,S.+ E.Wilson#
Bank Swallow:			
4/5,12	N.Carver, Sudbury	1, 1	W.Petersen, R.Forster#
4/13, 19	Nahant, Sudbury	3, 50	R.Stymeist, R.Forster
thr."ay	Willis	130 active nests	B.Cassie
5/28	Newburyport	1200+	R.Heil
Rough-winged Swallow:			
4/13, 16	Wayland, Marshfield	4, 3	R.Forster, B.Sorrie
4/19, 21	P.I., Milton	1, 12	R.Emery#, D.Brown
5/17, 31	Manchester, Marshfield	7, 5	BBC, SSBC

Barn Swallow:			
4/6,11	Plymouth, Scituate	1, 4	'BO, M.Litchfield
4/12	Hanover, P.I.	2, 5-6	W.Petersen,P.Parsons#
5/11	N.Scituate	50+	W.Petersen
Cliff Swallow:			
4/5	Plymouth, Hamilton	1, 1	'BO, R.Heil
4/26,27	W.Newbury, Essex	1, 1	H.Wiggin#, J.Nove#
5/25	P.I.	15	BBC
Purple Martin:			
4/3,5	Middleboro, Nantucket	6, 2	D.Briggs, E.Andrews
4/5,19	Hamilton, P.I.	1, 1	R.Heil, R.Emery#
5/25	P.I.	100	BBC
Blue Jay:			
thr. 'ar.	Essex Co.	very low numbers	fide R.Heil
5/11	N.Scituate, Winchester	100 migr., 23	W.Petersen#, BBC
5/22	Scituate, 'BO	1500 in 1 hr., 40(b)	G.Flaherty, 'BO
5/22,23	't.A.	29, 30 migr.	R.Stymeist
5/25	P.I.	250	BBC (Olivers)
Northern Raven:			
4/12	Ashburnham(Nutting Hill)	2	O.Komar, 't.+M.McClellan
	Excellent details from all observers.		R.Stymeist, R.Veit
4/14	Baldwinville	1	J.O'Regan
	Call recorded.		
Fish Crow:			
thr. Apr.-'ay	't.A.	pair nesting	R.Stymeist + v.o.
4/21,26	Canton(F.'.), 'arshfield	7, 25	D.Brown, W.Petersen#
5/9,11	'BO, S.Carver	10, 5	'BO staff, B.Sorrie#
5/11,22	Wareham, Hingham	3, 2	B.Sorrie#
Red-breasted Nuthatch:			
3/23,4/6,22	IRWS,Boxford,'t.A.	1, 1, 1	R.Heil,R.Veit#,W.Drummond#
5/3	FallRiver, E.'Middleboro	1, 1	R.Stymeist#,K.Anderson
5/26	Lakeville, Framingham	2, 1	W.Petersen, R.Forster
Brown Creeper:			
3/26,28	Needham, Lynn	3, 3	O.Komar, R.Heil
4/3, 6	Canton, Boxford	8, 4	D.Brown, R.Veit#
5/3	Boxford, Wakefield	nest w/eggs,pr.nesting	R.Forster,C.Jackson#
House Wren:			
4/21	Rowley,'arshfield,'BO	1, 1, 1	R.Alexander,B.Sorrie,'BO
4/26,27	Fall River, Brookline	1, 1	H.Willoughby#,H.Wiggin
5/3	Boxford, Winchester	1, 1	P.Alden#, N.King#
5/11,16	Winchester, Sharon	5, 5	BBC, D.Clapp
Winter Wren:			
3/20,22	Nantucket, Falmouth	1, 1	S.Perkins, BBC
4/12-5/3	Boxford S.F.	1	V.Kovsky# + v.o.
4/18,19	P.I., 't.Wachusett	1, 2	F.Bouchard, SSBC
4/24;26	N.Scituate;FallRiver,'arshfield	1; 1, 1	W.Petersen;BBC,SSBC
5/1,4	Millis, Phillipston	1, 2	B.Cassie,J.O'Regan
Carolina Wren:			
3/1-28	Brookline	1	D.Arvidson#
4/11	Nahant	1	J.Cort
5/23-26,25	M.V., Westport	20, 3	BBC(Drummond),J.'arshall
Long-billed 'arsh Wren:			
3/9 + 4/5	W.Harwich	2, 2	B.Nikula, J.Aylward
4/20,27	Nantucket, Milton	1, 1	S.Perkins, R.Veit#
5/25,26	P.I., G'NWR	25, 6	BBC, BBC
Gray Catbird:			
3/2,4/26	Milton, Fall River	1, 1	BBC, BBC
5/3	'BO, Saugus	1, 1	'BO, C.Jackson
5/4,6 on	MNWS, 't.A.	1, max.15(5/14)	C.Blasczak, v.o.
5/11,17	Winchester, Millis	17, 106	G.Gove#, B.Cassie
5/23-26,25	M.V., P.I.	150, 50	BBC, BBC
Brown Thrasher:			
thr.'ar.,3/2	Brookline, 'NWS	1, 1	R.Stymeist#, R.Heil
4/21,23	Lexington, Holbrook	1, 1	J.Andrews, D.Brown
4/24,25	P.I., 't.A.	1, 1	M.McClellan,F.Bouchard#
5/11	Millis	27	B.Cassie
American Robin:			
mid-'arch	First arrivals in good numbers		v.o.
4/21	Neponset Valley	1535	D.Brown

Wood Thrush:			
5/4,5	WBWS, G'NWR	1, 1	W.Bailey, L.Taylor
5/6,7-25	Dover, 't.A.	1, max. 3	F.Hamlen, v.o.
5/18,24	FallRiver area, Nahant	12, 6	BBC, BBC
Hermit Thrush:			
3/2, 16	'NWS, Mt. A.	1, 1	R.Heil, P.Butler
4/17,22	Lynn, 't.A.	7, 16	R.Heil, W.Drummond#
thr.'ay	E.'iddleboro	1 singing	K.Anderson
5/11,22	't.A., Nahant	1, 1	v.o., M.Noland
Swainson's Thrush:			
5/10 on	't.A.	max.10(5/13 + 5/25)	v.o.
5/12,13	'BO, Wollaston	1(b), 1	'BO, R.Emery
5/14	Brighton, S.Peabody	1, 6	O.Komar, R.Heil
5/17,18	Newburyport, Needham	6, 6	W.Drummond#, J.'arshall#
Gray-cheeked Thrush:			
5/11,14	't.A., S.Peabody	1, 1	v.o., R.Heil
5/17,18	Nahant, 't.A.	3, 1	H.Wiggin#, L.Taylor
5/24,25	Dover, Brookline	1, 3	F.Hamlen, R.Stymeist#
Veery:			
4/20,22,27	P.I.,Boxford,N.Scituate	1, 1, 1	D.Alexander#, R.Emery#, D.Brown
5/3	Boxford, 'iddleboro	1, 1	P.Alden#, D.Briggs
5/5-25	Mt.A	max.5(5/13)	v.o.
5/14	Needham, 'illis	4, 9	J.'arshall, B.Cassie
5/16	Dedham	5	J.'arshall
Eastern Bluebird:			
3/23,31	Woburn, Tyngsboro	1, 2	G.Gove, L.Files
Apr.	7 locales	12 inds.	v.o.
5/8,15	Carver, 'iddleboro	pr., 1	R.Harju#, E.Akers#
Mountain Bluebird:			
4/28	About 70 m. SSE Nantucket 40°08' 69°34' -- Bird came aboard and died.	1 m.	J.Cherry-MBC Specimen.
Northern Wheatear:			
5/21(?)23	Osterville, Chatham	1, 1	N.Proctor, B.Nikula#
Blue-gray Gnatcatcher:			
4/11,12	'BO, P.I.	1, 2	'BO, BBC
4/13,16-30	N.Scituate, 't.A.	1, max.4	M.Litchfield,R.Stymeist#+v.o.
4/20 on	many locales	1-2 inds.	v.o.
4/21	P'town	8	B.Nikula
thr.'ay	W.Newbury	pr. at nest	v.o.
5/9	P'town, 'illis, G'NWR	10, 1, 1	R.Heil,B.Cassie,L.Taylor
5/13 on	Bridgewater, 'anchester	pr.on terr., pr. at nest	W.Petersen, R.Heil
5/11 on,20 on	Sharon, Lincoln	pr.building nest, pr.at nest	D.Clapp, R.Forster
Golden-crowned Kinglet:			
3/26,thr.Apr.	Needham, 't.A.	4, max.30(4/6)	O.Komar#, R.Stymeist#+v.o.
4/17,30	Lynn, 'NWS	5, 10	R.Heil, R.Heil
5/18	Fall River	3	BBC
Ruby-crowned Kinglet:			
3/3,8,24	S.Peabody,Bridgewater,Ipswich	2, 1, 1	R.Heil,SSBC,R.Alexander#
4/5 on	't.A.	4-90(max. 4/22)	R.Stymeist#, v.o.
4/6	many locales	small numbers	v.o.
4/17,20	Lynn, P.I.	45, 25	R.Heil, D.Alexander#
4/20,21	Gloucester, P'town	26, 30	J.Nove#, B.Nikula#
5/1-16,27	't.A.	max.25(5/5 + 5/7), 1	v.o., F.Bouchard
5/1, 3	P'town Boxford	100, 20	B.Nikula, P.Alden#
Water Pipit:			
3/20	Nantucket	1 (excellent details)	R.Veit
4/12	Concord (9 Acre Corner)	1	R.Veit,R.Stymeist,O.Komar
5/12,16	Plymouth, Wayland	1, 2	R.Heil
5/24	Chatham	1	R.Stymeist, B.Nikula
Cedar Waxwing:			
3/19	Beverly	40	J.Nove#
5/24,25	Framingham, Boxford	160, 100+	R.Forster, T.Lawrence#
Migrating flocks.			
Northern Shrike:			
3/2,13 + 15	Ipswich, P.I.	1, 1 + 1	McClellan#, McClellan#
3/23	G'NWR	1	P.Hallowell
Loggerhead Shrike:			
3/23,4/17	Boxford, WBWS	1, 1	G.Soucy#, W.Bailey

VIREOS THROUGH WARBLERS

Spring migration was slow with warbler watchers (hundreds of them!) at Mt. Auburn Cemetery wondering if the migration would ever begin. There was no real early spring storm to bring up some of the southern strays that we have been getting accustomed to during the past few springs. Early, however, were a reported Red-eyed and a Yellow-throated Vireo at Provincetown on April 13. Only three Philadelphia Vireos were noted this spring as compared to six last year.

Six Prothonotary Warblers were reported with the bird in Needham being present into June and seen by many, many observers. Apparently this bird had an injured wing and could be found in the same area each day. Again, Golden-winged Warblers were hard to find with just ten reported. There was no great flight of Yellow-rumped Warblers reported this year. Last year on April 28, 600 were seen at Provincetown compared with a high of only 150 there this year; at Mt. Auburn on May 5, 1979, 150 were seen but only 65 were noted this year on the same date.

Highlights include 4 Cerulean, 3 Yellow-throated, 5 Kentucky, and 8 Hooded warblers and 2 Yellow-breasted Chats. The big day at Mt. Auburn Cemetery was May 13 when 24 species were recorded in good numbers; in fact, the week of May 11-18 was hailed as the best week in many, many years by a number of observers. R.H.S.

White-eyed Vireo:

4/23	Manchester	1	P.Parsons
5/4,6,12,13	WWS	1, 1, 1, 1	C.Blasczak + R.Heil
5/10,11 + 14	Dover, Mt.A.	2, 1 + 1	F.Hamlen, v.o.
5/13,17	Nahant, P'town	1, 2	R.Heil, C.Goodrich
5/24	P.I., Marshfield, Rochester	1, 1, 1	W.Drummond#, W.Petersen#, G.Mock
5/26	Plymouth, Yarmouth	1, 2	J.Grugan

Yellow-throated Vireo:

4/13 + 5/1	P'town	1, 1	J.Aylward, B.Nikula#
5/15,18	Milton, Wayland	1, 1	G.Wilson, R.Forster#
5/18,19	Holliston, Mt.A.	2, 1	T.Raymond, J.Berry#

Solitary Vireo:

4/19-20,24	P.I., Mt.A.	1, 3	BEC, F.Bouchard
4/22,24	IRWS, Boxford	1, 3	R.Emery#, R.Forster#
5/1-22	Mt.A.	max. 6(5/11)	v.o.
5/13,14	WWS, P'town	6, 10+	R.Heil, B.Nikula
5/14,25	S.Peabody, Boxford	10, 2	R.Heil, T.Lawrence#

Red-eyed Vireo:

4/13	P'town	1	B.Nikula
5/9,10	Wayland, P.I.	1, 1	R.Forster, G.d'Entremont#
5/11,11 on	Littleton, Mt.A.	1, max. 6(5/25)	J.Baird, v.o.
5/17,23-26	Millis, M.V.	16, 35	B.Cassie, BEC(Drummond)

Philadelphia Vireo:

5/10,14,17	Dover, Mt.A., N.Scituate	2, 1, 1	F.Hamlen, M.Greenwald, G.Wilson
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Warbling Vireo:

4/17,20	Lincoln, Gloucester	1, 1	F.Richardson, D.Briggs
5/6	Cambridge, Dedham	2, 1	L.Taylor, H.Robbins
5/9,11-16	Harvard, Mt.A.	7, 1-3	H.Merriman, v.o.
5/14,19-21	Needham, Woburn	4, 6-8	O.Komar, G.Gove

Black-and-White Warbler:

4/13,20-30	Millis, Mt.A.	3, 1-3	B.Cassie, F.Bouchard#
4/21,27	Middleboro, Milton	3, 8	K.Anderson, R.Veit
5/1-30	Mt.A.	max.25(5/11)	v.o.
5/7-28	Middlesex Fells	max.20(5/14)	G.Gove
5/3	Fall River, Dartmouth	18,10	R.Stymeist#, D.Arvidson#
5/11,14	Millis, S.Peabody	13, 40	B.Cassie, R.Heil
5/14,17	P'town	40+, 25	B.Nikula
5/17	Manchester, Melrose	11, 15	G.Hotz#, C.Jackson#

Prothonotary Warbler:

4/28-5/1	WWS	1-2	W.Bailey# + v.o.
5/7-8,11-31	M.V., Needham	1, 1	V.Laux#, J.Marshall#+v.o.
5/19,22	Lincoln, Scituate	1, 1	J.Cousins, J.Flaherty

Worm-eating Warbler:

5/6-11,16	Mt.A.	1, 2	I.Giriunas+v.o., P.Roberts#+v.o.
5/11, 14	Scituate, Brighton	1, 1	G.Wilson, O.Komar
5/14,15,19	Millis, Dover, Sharon	1, 1-2, 1	B,Cassie,F.Hamlen,R.Forster

Golden-winged Warbler:			
5/3,14	Boxford; Millis, Milton	1; 1, 1	R.Forster; B.Cassie, R.Veit
5/16,18	W.Newbury, Holliston	1+, 2	R.McHale, T.Raymond
5/18,25	Framingham, Wellesley	1, 1	R.Forster, K.Winkler
5/26	Lincoln, G.NWR	1, 1	R.Forster, A.+N.Clayton
Blue-winged Warbler:			
5/3,5	Fall River, Lincoln	1, 1	R.Stymeist#, W.Harrington
5/9	Lancaster, Middlesex Fells	3-4, 1	H.Merriman, G.Gove
5/12,13,25	Mt. A.	1, 2, 1	J.Berry# + v.o.
5/15,25	Millis, W.Newbury	17, 15	B.Cassie, T.Lawrence#
Brewster's Warbler (hybrid):			
5/10-31	W.Newbury	1-2	G.d'Entremont# + v.o.
Lawrence's Warbler (hybrid):			
5/4+5	S.Natick (Broadmoor)	1	E.Smith
5/18,19	Carlisle	1	B.Valentine
Tennessee Warbler:			
4/30 (early)	WBWS	1	C.Goodrich
5/11-28	Mt.A.	max.12(5/25)	v.o.
5/13,13-23	Needham, Middlesex Fells	4, max.16(5/20)	J.Marshall, G.Gove
5/14	Milton, S.Peabody	8, 11	R.Veit#, R.Heil
5/17	P'town, Melrose	20, 10	B.Nikula, C.Jackson#
Orange-crowned Warbler:			
5/9-11;13,14+17	Littleton; Mt.A.	1; 1+	J.Baird; J.Grugan, R.Emery#
5/15,17	Newburyport, Lynnfield	1, 1	R.Emery#, H.Wiggin#
Nashville Warbler:			
5/1,6-25	Millis, Mt.A.	1, max.6(3 dates)	B.Cassie, v.o.
5/9;11,14 + 17	Lancaster; M.Fells	9; 1, 5, 2	H.Merriman; G.Gove
5/14,16	S.Peabody, W.Bridgewater	12, pr. breeding	R.Heil, B.Sorrie#
Northern Parula:			
4/27,5/1-25	Mt.A.	1, max. 20(5/14)	L.Taylor, v.o.
5/2-21	Middlesex Fells	max. 20(5/16)	G.Gove
5/10,13	Lancaster, MNS	9, 22	H.Merriman, R.Heil
5/14	P'town, S.Peabody	40+, 50+	B.Nikula, R.Heil
Yellow Warbler:			
4/27,5/5 on	Mt.A.	1, max 10(5/14)	L.Taylor, v.o.
5/3	S.Dartmouth, Newburyport, MBO	1, 1, 1	R.Stymeist#, P.Alden#, MBO
5/9 on	Wayland (Heard's Pond)	max.7(5/11,23)	R.Forster
5/11,14	G.NWR, P'town	32, 25	BBC, B.Nikula
5/17,25	P'town, P.I.	35, 50	B.Nikula, BBC
Magnolia Warbler:			
5/3,4	P.I., MNS	1, 3	P.Alden#, C.Blaszczak#
5/9 on,11-23	Mt.A., M.Fells	max.18(5/14), max.25(5/14)	v.o., G.Gove
5/13	MNS, Nahant; Sharon	13, 10; 2	R.Heil; D.Clapp
5/14	S.Peabody, Needham, Milton	22, 7, 15	R.Heil, J.Marshall, R.Veit
5/14,17	P'town	40+, 25+	B.Nikula
5/17,18	Newburyport, W.Newbury	25, 14	BBC
Cape May Warbler:			
5/5-25	Mt.A.	max.8(5/11, 13)	v.o.
5/10,14,16	Lancaster, Lynn, Dedham	6, 3, 3	H.Merriman, C.Blaszczak, J.Marshall
5/14,17	S.Peabody, P'town	9, 40	R.Heil, B.Nikula
Black-throated Blue Warbler:			
4/27	N.Scituate (Glades)	1	D.Brown
5/3,4,5	Newburyport, Ipswich, Halifax	1, 1, 2	P.Alden#, J.Berry, D.Briggs
5/5-25	Mt.A.	max.10(5/13,14+19)	v.o.
5/11-21	Middlesex Fells	max.4(5/13, 21)	G.Gove
5/14,17	S.Peabody, Newburyport	5, 10	R.Heil, BBC
Yellow-rumped Warbler:			
3/4,15	E.Middleboro, Nantucket	1, 45	K.Anderson, M.Litchfields#
4/5,6	N.Carver, Mt.A.	100, 2	SSBC, R.Stymeist
4/20,26	P'town, Fall River	150, 10	W.Cornwell, BBC
5/1-27	Mt.A.	max.65+(5/5)	v.o.
5/2-18	Wayland (Heard's Pond)	35 on 5/5, 48 on 5/9	R.Forster
5/3	Boxford, S.Dartmouth	15, 35	P.Alden#, R.Stymeist#
5/3-16	Middlesex Fells	35 on 5/5, 30 on 5/11	G.Gove
5/3,14,17	P'town	300+, 150, 300	B.Nikula
5/10	Lancaster	130+	H.Merriman
Black-throated Green Warbler:			
4/24,5/3	Boxford	1, 8-10	R.Forster#, J.Berry
5/3,5-26	Lexington, Mt.A.	1, max.18(5/18)	J.Andrews, v.o.

5/9-21	Middlesex Fells	max.16(5/14)	G.Gove
5/10,14	Lancaster, S.Peabody	6, 15	H.Merriman, R.Heil
Cerulean Warbler:			
5/10;14,15,17	't.A.; P'town	1; 1	M.Argue#; B.Nikula#
5/15,25	Attleboro, Chatham	1, 1	E.Keil, J.Alyward
Blackburnian Warbler:			
5/3,5	Boxford, Boston	2, 1	L.Crofoot, F.Bouchard
5/7-31	't.A.	max. 23(5/13)	v.o.
5/12-23	Wayland (Heard's Pond)	total 7	R.Forster
5/13-20	Middlesex Fells	max.8(5/16)	G.Gove
5/14	Lynn, S.Peabody	3, 12	C.Blaszczak, R.Heil
5/17	Dover, Manchester	6, 6	F.Hamlen, G.Hotz
Yellow-throated Warbler:			
5/10-11	Seekonk	1	D.Emerson, C.Wood
5/11,16	't.A., Scituate	1, 1	D.Kurz, G.Bartlett
Chestnut-sided Warbler:			
5/7-25	't.A.	max.11(5/13)	v.o.
5/11-21	Middlesex Fells	max.7(5/14)	G.Gove
5/12,13	Manomet, Sharon	1(b), 2	'BO, D.Clapp
5/17	Newburyport, Manchester	3, 6	BBC
Bay-breasted Warbler:			
5/10-25	't.A.	max.30(5/18)	v.o.
5/12-18	Wayland(Heard's Pond)	9+	R.Forster
5/13,14,19	Middlesex Fells	6, 5, 12	G.Gove
5/14,17	S.Peabody, P'town	8, 15	R.Heil, B.Nikula
5/17	Dover, Millis	20+, 5	H.Robbins, B.Cassie
Blackpoll Warbler:			
5/11-31	't.A.	max.20(5/25)	v.o.
5/13-23	Middlesex Fells	max.10(5/13 + 14)	G.Gove
5/17	Dover, Newburyport	6, 5	F.Hamlen, BBC
5/23,25	Wayland, Dedham	11, 6	R.Forster, J.Marshall
5/23-26	Oak Bluffs ('t.V.)	25	BBC(Drummond)
Pine Warbler:			
4/11	Lincoln, 'BO	1, 5	R.Forster#, 'BO
4/12	Wayland; P.I., Manchester	1; 1, 1	R.Forster#; BBC
4/12,13	't.A., Middleboro	1, 2	L.Crofoot, K.Anderson
4/13	P'town, Marshfield	30+, 1	B.Nikula, B.Sorrie
4/18,27	Plymouth-Wareham, Lincoln	11, 3	B.Sorrie, R.Forster
5/3,4	Fall River, Pocasset	2, 4	R.Stymeist#, P.Hallowell
5/8,17-25	Mt.A., Dedham	1, 1+	BBC, J.Marshall
5/23-26	Chappaquiddick I.	12	BBC(Drummond)
Prairie Warbler:			
5/3	Fall River, WBWS, Newburyport	1, 1, 1	D.Arvidson, W.Bailey#, P.Alden#
5/9,10	Manomet, Saugus	1, 5	'BO, C.Jackson#
5/11,12	't.A., Lexington	4, 3	v.o., J.Andrews
5/18,25	Fall River, W.Newbury	12, 8	BBC
5/23-26	M.V.	25	BBC(Drummond)
Palm Warbler:			
3/23	Middleboro	1	D.Briggs
4/10-5/13	't.A.	max.20(4/20), last on 5/13	v.o.
4/13,17	P'town, Lynn	25+, 25	B.Nikula, R.Heil
4/21,25	Wayland, Lexington	15, 8	R.Forster, J.Andrews
5/3	Boxford, P'town	6, 12+	P.Alden#, B.Nikula
Ovenbird:			
5/3	Fall River, P.I.	2, 1	R.Stymeist#, P.Alden#
5/4,5	E.Middleboro, Lexington	4, 1	K.Anderson, J.Andrews
5/5-30,7	't.A., Sharon	max.6(5/15), 8	v.o., D.Clapp
5/14,15,19,20	Middlesex Fells	8 each day	G.Gove
5/14	S.Peabody	22	R.Heil
Northern Waterthrush:			
4/20,21	M.V., E.Middleboro	1, 1	V.Laux, K.Anderson
4/25,27	'illis, Canton	3, 1	B.Cassie, D.Brown
5/3	Boxford, Fall River	1, 1	J.Berry, R.Stymeist
5/4,5	E.Middleboro, Hamilton	2, 1	K.Anderson, J.Berry
5/5-25,11	Mt.A., Millis	max.6(5/5), 11	v.o., B.Cassie
5/13+17	P'town	20, 20	C.Goodrich, B.Nikula
5/14,15,28	Needham	8, 8, 2	J.Marshall
5/15,15 on	MNWS, Middlesex Fells	12, 5	R.Heil, G.Gove

Louisiana Waterthrush:			
4/11-12,15-23	WBWS, Dover	1, 1-2	C.Goodrich#, F.Hamlen
4/22 on	Boxford State Forest	max. 4	R.Emery# + v.o.
4/20,25-30	Medfield, Brookline	1, 1	H.Robbins, D.Arvidson#
4/27	Marshfield	1	D.Brown
5/5,13+14	Mt.A., Millis	1, 1	P.Hallowell, B.Cassie
Kentucky Warbler:			
5/11,16	N.Scituate, P'town	1, 1	B.Smyth#, C.Goodrich#
5/17,18,24	P.I., Holliston, Mt.A.	1, 1, 1	P.Roberts#, T.Raymond, R.Rabinov#
Mourning Warbler:			
5/15,17	Needham, P'town	1, 1	R.Forster, C.Goodrich
5/24,25	Annisquam, Mt.A.	1, 1	H.Wiggin, v.o.
5/27,28	MBO, Rockport	1(cat kill), 1(b)	MBO, R.Norris
5/29;31	Winchester; P.I., Ipswich	1; 2, 1	G.Gove; L.Crofoot, J.Berry
Common Yellowthroat:			
4/28	MBO	1(b)	MBO
5/5,5-30	G'NWR, Mt.A.	4, max.13(5/15)	L.Taylor, v.o.
5/7 on	Middlesex Fells	max.12 (5/19+21)	G.Gove
5/9-29	Wayland(Heard's Pond)	max.9(5/11)	R.Forster
5/10,15	P.I., Millis	10, 85	BBC, B.Cassie
5/23-26,25	M.V., P.I.	50, 30	BBC, BBC
Yellow-breasted Chat:			
5/15,22	Eastham, Nahant	1, 1	B.Nikula, M.Noland
Hooded Warbler:			
4/22,25	Hingham, MBO	1, 1(b)	K.Groh, MBO
4/26,30	Lexington, WBWS	2, 1	J.Andrews, C.Goodrich
5/4,15	MBO, WBWS	1(b), 1	MBO, B.Nikula#
c.5/15	Needham	1	W.Allan + v.o.
Wilson's Warbler:			
5/10,11	Saugus, G'NWS	2, 1	C.Jackson#, R.Vernon
5/11-30	Mt.A.	max.8(5/14)	v.o.
5/13,14	Manomet, Newton	3(1b), 6	MBO, O.Komar
Canada Warbler:			
5/11-30	Mt.A.	max.7(5/14)	v.o.
5/14	Needham, Middlesex Fells	5, 12	J.'arshall, G.Gove
5/19	Manomet	7(b)	MBO
American Redstart:			
5/3,9-31	Newburyport, Mt.A.	1, max.26(5/25)	P.Alden#, v.o.
5/11,14-20	Middlesex Fells	10, 25, 25	G.Gove
5/12,14	Needham	12, 16	J.'arshall
5/14,18	S.Peabody, Ipswich	30, 14	R.Heil, I.Giriunas#
5/23,25	Wayland, P.I.	8, 25	R.Forster, BBC

BLACKBIRDS THROUGH SNOW BUNTING

Two adult Yellow-headed Blackbirds were reported this spring bringing the total of spring records to just 14 since 1973. Orchard Orioles continue to increase each year with at least 37 individuals noted as compared with 33 last year. The Western Tanager continued in Dover through early May; it had been reported at a feeder there since December. Seven Summer Tanagers were noted, way down from 15 reported last spring. Certainly the appearance of an adult male Painted Bunting at a feeder on Nantucket and one week later in Hull was most interesting. The last early record was of an adult male at a feeder in Hyannis through March 5, 1978.

A Dickcissel found on the Christmas Bird Count remained in Newton until April 8. Another holdover from the Marshfield CBC, a Harris' Sparrow, remained at Bruce Sorrie's feeder until May 1. Bruce was able to document the molt and follow this bird to nearly full adult plumage (see photograph). A Golden-crowned Sparrow was present at an Orleans feeder for a week; the last spring record was an adult at Mt. Auburn from April 25 through May 7, 1966. (See photograph.) R.H.S.

Bobolink:			
5/3,6	Newburyport, Plymouth	1, 1	P.Alden#, MBO
5/7,11	S.Natick, Mt.A.	1, 18	F.Hamlen, R.Stymeist
5/14	S.Peabody, Medfield	100+, 100+	R.Heil, J.Goldthwait
5/14	Newton, Needham	24, 11	O.Komar#
5/15,17	Sharon, Millis	26, 56	D.Clapp, B.Cassie
Eastern Meadowlark:			
3/16,24	Bridgewater, Wollaston	14, 31	BBC, G.Wilson

4/25	Mt.A.	5	F.Bouchard#
<u>Yellow-headed Blackbird:</u>			
3/16	Needham	1	R.Jones
4/5	Quincy	1	M.Robinson
<u>Red-winged Blackbird:</u>			
early 'arch	First arrivals in small numbers.		v.o.
3/5	Sudbury	400	J.Baird
mid-'arch	Good numbers reported throughout.		v.o.
3/13,16	Needham, Bridgewater	1200+, 1700+	J.Clancy, BBC
<u>Orchard Oriole:</u>			
5/6,11,14	Mt.A.	2, 1, 1	v.o.
5/6,9 on	Lexington, Newton	1, 1-2	J.Andrews, O.Komar
5/12 on	Woburn (Horn Pond)	3	G.Gove
5/13	Winchester, Framingham	1, 1	G.Gove, R.Forster
5/13 on,14	Bridgewater, S.Peabody	2, 3	W.Petersen, R.Heil
5/15-29,15 on	'anomet, Rowley	7(4 b), 2	MBO, v.o.
5/16,17	Wayland, Melrose	3, 1	R.Heil, C.Jackson
5/24	W.Newbury, Hingham	2, 1	R.Stymeist#, R.Campbell
5/25,26	Truro, Natick	1, 1	J.Grugan, E.Taylor#
5/28,31	Hanover, Marshfield	1, 1	W.Petersen,N.+S.Osborne
<u>Northern Oriole:</u>			
4/30	'iddleboro	1	D.Briggs
5/2-31	Mt.A.	max.35(5/13)	v.o.
5/11,18	Winchester, Ipswich	8, 12+	G.Gove#, I.Giriunas#
<u>Rusty Blackbird:</u>			
3/6,8	Braintree, Lincoln	25-30, 1	R.Campbell#, R.Stymeist#
3/9,11	Wayland, S.Hanson	2, 3	R.Forster,S.+R.Higginbotham
3/29,30	Byfield, G'NWR	22, 18	E.Pyburn#, P.Roberts#
4/6,23	Mt.A.,Framingham	2, 139	R.Stymeist, R.Forster
5/1,9(last)	'illis	30, 1	B.Cassie
5/4	Ipswich River	25	L.'aylor,R.Stymeist
5/4	'anomet	1(b-first since 1973)	'BO
5/9	Wayland	6	R.Forster
<u>Common Grackle:</u>			
early 'arch	First arrivals in small numbers.		v.o.
3/6	Bridgewater	2300+	BBC(Davis)
4/6	Newburyport	1100	R.Veit#
<u>Brown-headed Cowbird:</u>			
3/16	Bridgewater	600	BBC(Davis)
4/5,20	'yngsboro, Marshfield	120, 200	R.Stymeist,N.+S.Osborne
<u>Western Tanager:</u>			
Mar.-early 'ay	Dover	1 from winter	fide P.Hallowell
<u>Scarlet Tanager:</u>			
5/7,10	Haverhill, Dover	1, 2	K.Carpenter, F.Hamlen
5/11,11-25	'BO, Mt.A.	1, max.6(5/13)	MBO, v.o.
5/11	N.Scituate, Winchester	1, 5	G.Wilson, G.Gove#
5/12,14	'arblehead, Annisquam	3, 3	C.Blasczak, L.Duca
5/16,22	Lynn, Scituate	2, 4	C.Blasczak, G.Flaherty
<u>Summer Tanager:</u>			
4/9-30	M.V.	1	V.Laux
5/2-4	'BO	1	MBO
5/6,12	Mt.A.	2, 1	P.Roberts#, J.Berry#
5/17,24	Princeton, P'town	1, 1	T.Raymond, B.Nikula
<u>Rose-breasted Grosbeak:</u>			
4/11,13 on	Manomet, outer Cape Cod	1 road kill, 4-5	'BO, B.Nikula
4/15,16-21	'anchester, Taunton	1, 2	P.Parsons, D.Emerson
4/17,21	Nantucket, Neponset	1, 1	E.Andrews, D.Brown
4/30	'arshfield, Cohasset	1, 1	M.Corbett, M.'cNeil
5/3,6-31	WBWS, Mt.A.	2, max.12(5/11)	W.Bailey, v.o.
5/7,9,10	G'NWR, P.I., Norfolk	1, 1, 1	L.Taylor,J.Grugan,J.Kricher
5/11,14	Winchester, Milton	8, 20	G.Gove#, R.Veit
5/14,15	S.Peabody, 'illis	16, 12	R.Heil, B.Cassie
5/14+17	P'town	20, 20	B.Nikula
<u>Indigo Bunting:</u>			
4/11,16	Rockport, Mt.A.	2, 1	L.Jodrey, F.Bouchard
4/20	Orleans, Nantucket	1, 4	B.Sorrie#, P.Hallowell
4/23	'anchester	1	P.Parsons
5/3,4	WBWS, Pocasset	1, 3	W.Bailey#, P.Hallowell
5/6-31	Mt.A.	max.3(5/13)	v.o.

5/12,13	W.Roxbury, Wayland	3, 2	R.'ullins, D.Warner
5/15,24	Oak Bluffs, Milton	8, 3	P.Carter, P.O'Neil#
<u>Painted Bunting:</u>			
5/7	Nantucket.	1 m.	K.'ock
5/14	Hull	1 m.	Mrs.S.Gahn
At feeder one day only; photograph on file at M.A.S.			
<u>Dickcissel:</u>			
3/1-4/8	Newton	1(from 12/16)	S.Denison#
4/1	P.I.	1	F.Bouchard#
<u>Evening Grosbeak:</u>			
3/12,22	Baldwinville, Marshfield	35, 25	J.O'Regan, BBC
3/23,4/5	IRWS, Tyngsboro	30+, 50	R.Heil, R.Stymeist#
5/4	Baldwinville	2	J.O'Regan
<u>Purple Finch:</u>			
3/23,4/26	IRWS, Lexington	40, 15	R.Heil, J.Andrews#
<u>American Goldfinch:</u>			
3/29	a Beverly feeder	30	R.Heil
<u>Rufous-sided Towhee:</u>			
thr.'Mar.,3/31	Middleboro, Nahant	1, 1	F.+E.Cushman,D.Arvidson#
4/13,16	Winchester, Brookline	1, 2	M.'cClellan, R.Stymeist#
5/23-26	M.V.	300	BBC(Drummond)
<u>Savannah Sparrow-Ipswich race:</u>			
thr.'Mar.	P.I. (behind church)	max.4	R.Heil
3/29	Duxbury	2	W.Petersen
<u>Savannah Sparrow:</u>			
4/21,23,29	Squantum, P.I., Ipswich	45, 10, 12	D.Brown, 'BO, R.Heil
5/13,16	Newton, Wayland	35, 25	O.Komar, R.Heil
<u>Grasshopper Sparrow:</u>			
5/18,19	Dartmouth, Newburyport	1, 1	BBC(Davis), C.Leahy
5/23-26,25	M.V., P.I.	3, 1	BBC, R.Stymeist#
<u>Sharp-tailed Sparrow:</u>			
3/19	Nantucket	1	R.Veit, M.Litchfield
4/26	Monomoy	1 (possible <u>A.c.ãltera</u>)	B.Nikula
5/10,24	Monomoy, Chatham	3, 5	R.Heil#, J.Grugan
5/25,30	S.Dartmouth, Rockport	11, 1(b)	J.Marshall, R.Norris
<u>Seaside Sparrow:</u>			
3/19	Nantucket	1	R.Veit, M.Litchfield
5/25	Monomoy	2 m. on territory	W.Petersen#
<u>Vesper Sparrow:</u>			
4/18,20	Plymouth, Salisbury	1, 1	B.Sorrie, F.Hamlen
4/21,25	Squantum, P.I.	1, 1	D.Brown, W.Petersen#
5/17,31	Plymouth, Wellfleet	3+, 3 m.	W.Petersen#, R.Stymeist#
<u>Dark-eyed Junco:</u>			
5/5,10	Mt.A., Saugus	2, 2	v.o., C.Jackson
5/16,22	'BO, Lexington	1(b), 1	'BO, J.Andrews
<u>Tree Sparrow:</u>			
4/6,12	Framingham, P.I.	20, 1	R.Forster, BBC.(P.Campbell)
<u>Chipping Sparrow:</u>			
3/6	E.Middleboro	1(from Feb.)	K.Anderson
4/14,17 on	P.I., Mt.A.	2, max.15(4/30)	M.'cClellan, v.o.
4/18,19	Plymouth, Wayland	1, 1	B.Sorrie, R.Forster
<u>Field Sparrow:</u>			
3/22,23	Woburn, S.Peabody	6, 10	BBC, R.Heil
4/12,16	P.I., W.Roxbury	2, 4	BBC, M.Greenwalt
4/18,26	Plymouth, Rowley	4, 1	B.Sorrie, BBC
<u>Harris' Sparrow:</u>			
'Mar.-5/1	Marshfield	1(at feeder)	B.Sorrie# + v.o.
<u>White-crowned Sparrow:</u>			
3/3 on	Danvers	1 ad. + 2 imm.	E.Pyburn
3/20,4/21	Nantucket, Milton	1, 1	S.Perkins, D.Brown
4/26-5/2,13	Mt.A.	1, 3	P.Alden#, v.o.
5/5-19	Rockport	22(b)	R.Norris
5/13-18	Wellfleet-P'town	10+	fide B.Nikula
5/17-23	Manomet	4(b)	'BO
5/17	Willis, Mt.A., P.I.	5, 5, 12	B.Cassie, J.Berry#,R.Stymeist#
<u>Golden-crowned Sparrow:</u>			
4/18-24	Orleans	1 ad.	Mrs.L.Brown + v.o.
<u>White-throated Sparrow:</u>			
5/5	S.Peabody	150	R.Heil
5/22,25	Mt.A., Nahant	1, 2	v.o., M.Lawrence#

Fox Sparrow:			
3/15,25	Mt.A., Sharon	7, 4	R.Stymeist, D.Clapp
3/28,31	S.Peabody, Newton	6, 2	R.Heil, S.Denison
4/1,6	E.Middleboro, IRWS	1, 5	K.Anderson, R.Heil
Lincoln's Sparrow:			
5/9;12	P.I.; 'NWS, Weston	1; 1, 1	J.Grugin;C.Blasczak,R.Forster
5/12-31	'Manomet	21(b)	'MBO
5/12-31	Rockport	13(b)	R.Norris
5/13	WBWS, P'town	2, 2	C.Goodrich
5/13-21	't.A.	4 inds.	v.o.
5/14	S.Peabody, Needham, 'Milton	8, 3, 1	R.Heil, O.Komar, S.Higginbotham
5/15,16	'NWS, Wayland	2, 2	R.Heil
5/17-31	11 locales	15 inds.	v.o.
Swamp Sparrow:			
3/4,30	E.'Middleboro, G'NWR	6, 7	K.Anderson, R.Stymeist#
Song Sparrow:			
3/29	Sudbury Valley, Ipswich	38, 75	R.Forster, R.Heil
4/16	W.Roxbury	50	'N.Greenwalt
Lapland Longspur:			
3/23	Salisbury	35-40	J.Grugin
5/10+16	'ononoy	1	B.Nikula
5/18	Westport	1	BBC(Davis)
Snow Bunting:			
3/11,17	Groveland, Rowley	120, 50	R.Veit, R.Alexander
3/31	Squantum	2	W.Cornwell
4/5,20	Plymouth, P'town	1, 2	'MBO, W.Cornwell

List of Abbreviations

ad.	adult	I.	Island
b.	banded	't.V.	'Martha's Vineyard
br.	breeding	't.A.	'Mt. Auburn Cemetery, Cambridge
dk.	dark phase	Nant.	Nantucket
f.	female	P.I.	Plum Island
imm.	immature	P'town	Provincetown
ind.	individual	R.P.	Race Point, Provincetown
lt.	light phase	S.N.	Sandy Neck, Barnstable
m.	male	Stellw. B.	Stellwagen Bank
max.	maximum	ABC	Allen Bird Club
migr.	migrating	BBC	Brookline Bird Club
ph.	photographed	BOE'	Bird Observer of Eastern Massachusetts
pl.	plumage	CEC	Christmas Bird Count
thr.	throughout	DFWS	Drumlin Farm Wildlife Sanctuary
v.o.	various observers	FBC	Forbush Bird Club
W	winter (e.g., 2W = second winter)	G'NWR	Great Meadows National Wildlife Refuge
yg.	young	IRWS	Ipswich River Wildlife Sanctuary
#	additional observers	'AS	Massachusetts Audubon Society
A.A.	Arnold Arboretum	'BO	Manomet Bird Observatory
A.P.	Andrews Point, Rockport	'MNWS	'Marblehead Neck Wildlife Sanctuary
C.Cod	Cape Cod	SSBC	South Shore Bird Club
E.P.	Eastern Point, Gloucester	TASL	'Take A Second Look (Boston Harbor project sponsored by BOE')
F.E.	First Encounter Beach, Eastham	WEWS	Wellfleet Bay Wildlife Sanctuary
F.H.	Fort Hill, Eastham	W'WS	Wachusett Meadows Wildlife Sanctuary
F.'.	Fowl Meadow, 'Milton		

TIDE CHART

Tide Table for Boston Harbor.
Add one hour for Daylight Savings Time.

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