

# BIRD OBSERVER

OF EASTERN MASSACHUSETTS



VOL. 2 NO. 3  
MAY-JUNE 1974

MUD HEN



EDITOR-IN-CHIEF	PAULA BUTLER
EDITORIAL BOARD	JOSEPH T. LEVERICH PHILIP MARTIN WAYNE R. PETERSEN ROBERT H. STYMEIST
REGIONAL STATISTICAL EDITOR	RUTH P. EMERY
COMPILERS	(CHIEF) ROBERT H. STYMEIST RICHARD R. VEIT
PRODUCTION	LOUISE DEGIACOMO ETHEL C. PEARSON
BUSINESS MANAGER	HERMAN D'ENTREMONT

TABLE OF CONTENTS

BIRDING ON THE BOLTON-LANCASTER FLATS.....	BRADFORD G. BLODGET	68
BLUE- AND GOLDEN-WINGED WARBLERS AND THEIR HYBRIDS.....	J. T. LEVERICH	70
MONK PARAKEET UPDATE, NO. 2.....	J. T. LEVERICH	73
PROBABLE NESTING OF YELLOW-BREADED CHATS IN SANDWICH.....	BRUCE A. SORRIE	74
ON RECORDS OF BIRDS.....	BY THE STAFF	76
BALD EAGLE AND PEREGRINE FALCON UPDATE.....	J. T. LEVERICH	79
THE BIRD OBSERVER SUMMARY FOR MARCH 1974.....		80
THE BIRD OBSERVER SUMMARY FOR APRIL 1974.....		85

Subscription to BIRD OBSERVER is based on a calendar year, from January to December, at \$5.00 per year. Back issues to new subscribers will be supplied as available.

Articles, field notes, and photographs are welcome, though publication is not guaranteed.

Advertising space is available on the following schedule: full page, \$40.00; half page, \$20.00; quarter page, \$10.00. Subscribers only may advertise one-of-a-kind birding items free of charge on a space available basis. Such announcements must be limited to 25 words. All advertising copy is subject to approval by the staff.

REGIONAL COMPILERS

Please send all of your reports before the 5th of the following month to any of the compilers in your area:

Regional Statistical Editor:	Mrs. Ruth P. Emery, 225 Belmont Street, Wollaston 02170
Barnstable County:	Mr. Blair Nikula, Park Street, Harwich 02645
Bristol County:	Mrs. Phyllis Regan, 132R Horseneck Road, S. Dartmouth 02714
Essex County:	Mr. William C. Drummond, 24 Elm Street, Haverhill 01830
Middlesex County:	Mr. Robert H. Stymeist, 54 Banks Street, Cambridge 02138
Norfolk County:	Mr. David T. Brown, 35 Bridge Street, Quincy 02169
Suffolk County:	Mr. Stephen P. Grinley, 1189 Commonwealth Avenue, Allston 02134



EDITOR'S PAGE

TIDE TABLE

Here is the Tide Table for Newburyport Harbor, accurate to the nearest 1/2 hour for July and August: (For best shorebird viewing, be at the harbor approximately 1/2 hours before or after high tide.)

	<u>High Tide</u>	<u>High Tide</u>
Sat. - July 6	1:15 a.m.	1:45 p.m.
Sun. - July 7	1:45 a.m.	2:15 p.m.
Sat. - July 13	6:45 a.m.	6:45 p.m.
Sun. - July 14	7:15 a.m.	7:30 p.m.
Sat. - July 20	12:15 a.m.	12:45 p.m.
Sun. - July 21	1:00 a.m.	1:45 p.m.
Sat. - July 27	6:45 a.m.	7:00 p.m.
Sun. - July 28	7:45 a.m.	8:00 p.m.
Sat. - August 3	12:00 M	12:30 p.m.
Sun. - August 4	12:45 a.m.	1:15 p.m.
Sat. - August 10	4:45 a.m.	5:15 p.m.
Sun. - August 11	5:45 a.m.	6:15 p.m.
Sat. - August 17	11:30 a.m.	12:00 p.m.
Sun. - August 18	---	12:30 p.m.
Sat. - August 24	5:15 a.m.	5:30 p.m.
Sun. - August 25	6:15 a.m.	6:30 p.m.
Sat. - August 31	11:30 a.m.	11:45 p.m.
Sun. - September 1	12:00 a.m.	---

-----

AWARDS TO RICHARDSON AND PETERSON

The American Association of School Administrators annually awards solid gold keys to an "outstanding American and to the teacher who had a great influence on his life." This year's Golden Key Awards went to Elliot Richardson, former Secretary of Health, Education, and Welfare and former Attorney General, who chose Roger Tory Peterson as the teacher who had a decisive influence on his formative years as a student at the Rivers School in Brookline, Massachusetts.

## BIRDING ON THE BOLTON-LANCASTER FLATS

Bradford G. Blodget, Worcester

Perhaps no other locality in Worcester County has a richer ornithological history than the Bolton-Lancaster Flats. The birding here is exciting and diverse, particularly considering its inland location. Least Bittern, Ruff, Cattle Egret and Glossy Ibis have all been observed here. On one occasion this spring a record number of 35 Glossy Ibis circled the area but chose not to land. Worcester County observers will generally tell you that if you cannot find a whole day to go to Plum Island, the next best thing to do is to visit the "Bolton Flats," as they are called for short, even though most of them lie in adjacent Lancaster.

Evidently, detailed observations in this area began in the early 1800's. By the middle of the nineteenth century a natural history museum had been formed in Harvard, Mass. A detailed review of its activities would probably reveal prominently the names Holbrook, Jillson, Wheeler, Phelps, and Green. Jillson, in particular, did much collecting around Bolton, and numerous skins prepared by him found their way to the Museum of Comparative Zoology around 1870 upon the demise of the local natural history society.

James L. Peters spent many hours on the flats as well as near his home in Harvard, and he made a strong effort to revive the club in this century. Many of his skins from this area also lie in the M.C.Z.

Near the turn of the century Col. John E. Thayer studied and collected on the flats, particularly in Lancaster, assembling in the course of his life a gigantic collection of skins, eggs, and nests. Until last summer the Thayer Bird Museum was still operated in Lancaster, and for twenty-five cents one could view the last of the famous Thayer dioramas. These have since been moved to the Worcester Science Center--the building in Lancaster being absorbed by Atlantic Union College. Long ago the huge Thayer skin collection went to the M.C.Z., and the Thayer Hall of Birds can be seen today at the Peabody Museum in Cambridge.

Enough historical background. Let's get to the flats. They are located between and adjacent to the Still River and the Nashua River at their confluence in the village of Still River. This, incidentally, is also the access point to the newly created Oxbow National Wildlife Refuge (via an old tank road on the Fort Devens Military Reservation). Much of the riverbank and marsh downstream or through the reservation in Ayer will be incorporated into the new refuge. The Bolton Flats, at approximately 230 feet above sea level are very subject to periodic flooding. At times in the spring, both sides of Route 117 (see map) may appear to be one vast lake. Birding conditions on the flats are highly variable depending on the water conditions. The more water flooding the fields, the better the birding.

The best general access route into the area is a dirt road that leaves Route 117 right at the Bolton-Lancaster town line. A power transmission line parallels this road. Watch for shrikes and hawks. To the east of this road is a large cattle ranch, owned by Hycrest Farms, that is covered with "No Trespassing" signs. If the water is down and the Angus cattle are on the flats, one should proceed with caution. The west side of the access road is divided into smaller privately owned farms. The entire area offers superb birding when favorable water conditions properly coincide with migrations. For example, in the third week of May it is possible to record Dunlins, Dowitchers, Yellowlegs, peep, many herons, ducks, and even Black Terns. In March and April, waterfowl counts can rival those from Great Meadows to the east. Indeed, there may even be some interchange or commuting between the two areas--though Gadwalls are almost unknown on the Bolton Flats.

By virtue of their inland location, the flats furnish good early shorebirding. Pectoral Sandpipers are very reliable in early to mid-April. High counts of Common Snipe are possible (they also nest here). Certain species have occurred on dates considered unusual for Massachusetts, such as Solitary Sandpipers in early April and Semipalmateds in late April. The two Ruff records previously referred to were also in April.

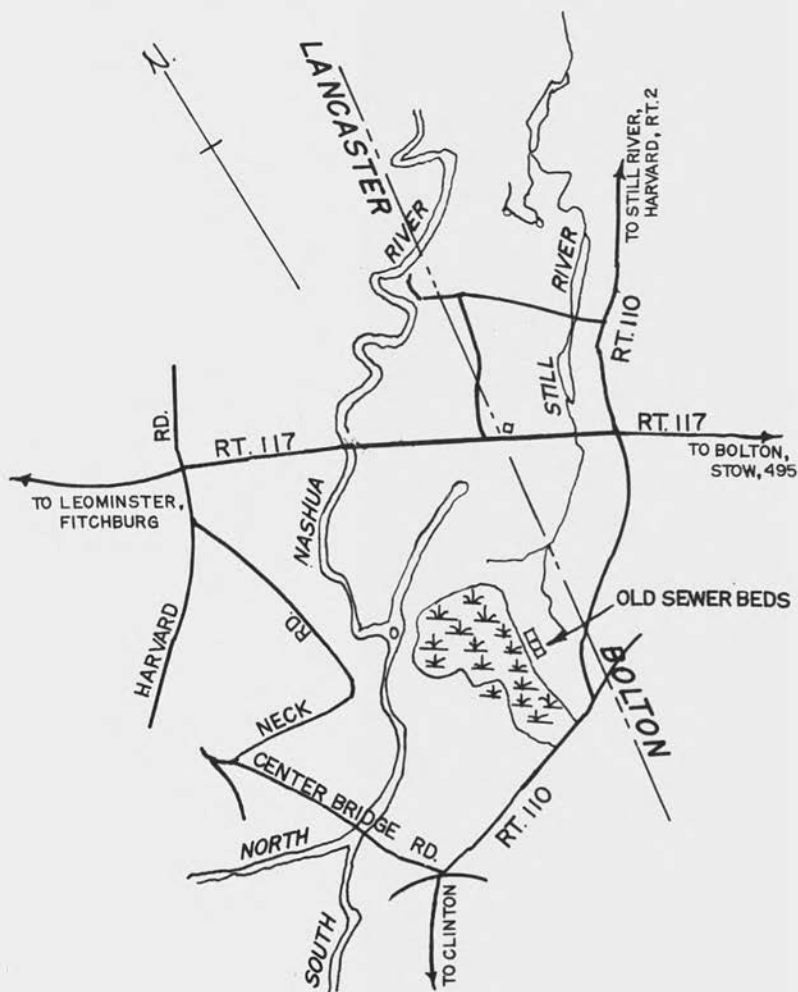
It would be misleading indeed to classify the Bolton Flats region as a dependable worder spot--which it certainly is not. Success there can be as erratic as some of the birds that visit it. The date, weather, and time of day must all be considered in determining the most appropriate time to visit the area.

Early morning is generally the most favorable time to see the highest counts--before the flocks have been disturbed. When approaching along the access road, use extreme care not to flush birds from the pools ahead. It is easy to do this and very frustrating when it happens. If you should lose everything, you can often catch up with most of the birds by following Route 110 downstream along the Still River. Usually the birds will resettle in this area when disturbed. There have been times when I have driven back and forth between the two areas playing hide-and-seek with a flock of teal before finally getting a good observation.

There are many other flooded fields in the spring, downstream from the confluence of the north and south branches of the Nashua River. These areas are approachable by car on Center Bridge Road and Neck Road in Lancaster.

Another interesting spot nearby is an alder, red maple, and cattail swamp across Route 110 from the Industrial School for Girls in Lancaster. A road threads its way through the area (not drivable) and can be very rewarding. In 1968, both Willow and Alder Flycatchers could be heard here within calling distance of each other.

The entire region of the Bolton-Lancaster Flats offers superb wildlife management potential, and this alone may generate more interest in the area in the future.



## BLUE- AND GOLDEN-WINGED WARBLERS AND THEIR HYBRIDS

J. T. Leverich, Cambridge

The Golden-winged Warbler (Vermivora chrysoptera) and the Blue-winged Warbler (Vermivora pinus) were known to Linnaeus, the father of modern taxonomy, and both were described in the 12th edition (1766) of his Systema Naturae. These two closely-related species most probably diverged from each other during the glaciations of the Pleistocene period, when the Mississippi River was an enormous bay some 100-200 miles in width. The Blue-winged Warbler evolved to the west of the river; the Golden-winged, along the Atlantic Coast.

Both species extended their ranges northward with the retreat of the glaciers but probably remained allopatric, separated by a "prairie peninsula" (extending from Iowa eastward into Ohio) and by the dense forests of the Appalachian range. Continuing improvement of the climate eventually allowed the two species to re-establish contact in the Great Lakes area. Secondary contact in the Northeastern states may be more recent and is perhaps the result of man's deforestation and agricultural activities. Mayr<sup>1</sup> suggests that this contact is only about 200 years old.

Today, the Blue-winged Warbler remains the more southerly and westerly form, and the Golden-winged Warbler is restricted to the more northern areas; but the ranges of both species are undergoing change. Particularly well-documented is the northern expansion of the Blue-winged Warbler, and the following dates should interest the local birder:

According to Bagg and Eliot,<sup>2</sup> the first recorded Blue-winged Warbler in Massachusetts was found in Dedham in 1857, and the species was not recorded here again until 1878 (West Roxbury), and then again in 1896. A pair successfully nested in Sudbury in 1909, and by 1913 Blue-winged Warblers were already hybridizing with Golden-winged Warblers in Lexington. The first Essex County record dates from May 31, 1931, but the record is in doubt inasmuch as the bird was only heard and could not be seen.

Blue-winged Warblers became common in the Connecticut Valley during the early 1930s, and for many years this was their only center of abundance in the state. As recently as 1955, Bailey wrote of this species: "...a rare visitor from the South...It is found primarily in the Connecticut Valley, is regularly reported in Berkshire County, and is an irregular visitor in Eastern Massachusetts...The observer is fortunate to see more than 1 or 2 birds per year."<sup>3</sup>

Today, along the Atlantic coast, I find them much more regular than Golden-winged Warblers. Each year brings an increased number of records from Mt. Auburn, where Golden-winged Warblers are now decidedly rare. The situation in the West Newbury area seems entirely parallel.

These two warblers hybridize throughout all areas of sympatry, and most field guides and reference works suggest that there are two "types" of hybrids:

1. Brewster's Warbler ("V. leucobronchialis"), which is described as being "like Golden-wings without the black throat...[with a] thin black eye-mark, as in the Blue-wing, and the white or largely white, instead of solid yellow, underparts."<sup>4</sup> The type was first described in the scientific literature by William Brewster in 1874.
2. Lawrence's Warbler ("V. lawrencei"), which is yellowish-"with white wing-bars... but with black face-pattern of Golden-wing."<sup>5</sup> This hybrid was likewise first recognized in the literature in 1874.

As early as 1881, Brewster<sup>6</sup> recognized that the two forms were in fact hybrids, but for many years it was thought that each hybrid "conformed to type," i.e., presented a standardized appearance with little or no variation. Certain of the genetic principles were recognized quite early, among which were the following:

1. The gene transmitting the black throat-patch is recessive and thus cannot evidence itself unless it is inherited from each parent. The parents themselves must obviously have descended (at least in part) from Golden-winged Warblers.
2. The gene transmitting the yellow underparts is likewise recessive. Again, both parents must have carried it, and we may therefore infer that each parent must have descended (at least in part) from Blue-winged Warblers.

(Note: It is now clear that this character, yellow underparts, is controlled by many

genes, not by one. Hence, the genetic analysis presented here and found also in much of the literature is unduly simplified.)

3. Points 1 and 2 above together imply that a Lawrence's Warbler must be the offspring of two parents, each of which is itself a hybrid of the Brewster-type. This fact alone suffices to account for the relative scarcity of the Lawrence-type hybrid. In fact, one would expect fewer than 1 out of 16 hybrids to be of this "type."

The absurdity of this particular two-way categorization is well-recognized by modern ornithologists, especially as it pertains to the face-mask-eye-stripe variation. Blue- and Golden-winged Warblers are two distinct species, differing genetically from each other in hundreds of genes. Hybrid offspring are fully fertile and mate both with each other and with individuals of either parental species (a phenomenon known as backcrossing). As a result, the hybrids exhibit a continuous spectrum of variation, with the two parental types as extremes. The presence or absence of a face mask is indeed controlled by a single gene or gene complex, and hence this character is inappropriately used as a classificatory criterion for hybrids.

(An analogy might help here. Eye color in humans is controlled by a small number of genes. Certainly, we should resist the argument that a blue-eyed child is more closely related to all other blue-eyed humans than he is to his own brown-eyed brothers and sisters!)

A proper classification of hybrids should be based on a survey of the full range of variation, representing the totality of the genetic differences between the two parental species. Lester L. Short attempted such an analysis in a 1962 article published in the Proceedings XIII International Ornithological Congress, Vol. I (available from the A.O.U.). The remainder of this article is largely abstracted from that work; page references without footnote citation are to this paper.

Both parental species are hard to know well. The birds are unobtrusive; their songs are weak and buzzy and do not carry well; and breeding birds depart for their winter homes almost immediately after nesting, i.e., the birds are only with us for approximately two months. As a consequence, much of the information available in current field guides is at best misleading. I shall attempt to correct some of these statements in two final paragraphs, but first, the analysis of the nature and extent of the hybridization process.

Short examined 1,028 adult warbler specimens, 500 of which were taken in the breeding season and another 288 of which were spring birds. He utilized five color characteristics in his analysis, and he found these to be essentially independent of each other. Blue-wings have 1) a greenish-yellow hindneck, 2) yellowish rump, 3) greenish-yellow back, 4) yellow underparts, and 5) two narrow, pure white wing bars. Golden-wings have 1-3) a blue-gray hindneck, rump and back, 4) white underparts, and 5) a single, broad (i.e., fused) yellow wing bar (p. 149). These characteristics vary continuously in the specimens from one extreme to the other. In technical language, the characters intergrade. Each individual specimen was therefore given a score of 0 to 4 for each character, depending upon the degree of similarity to one or the other parental phenotype. The over-all sum (hybrid index) may thus range from 0 (for "pure" Blue-wings) to 20.

Using the old-fashioned "Brewster-Lawrence" classification, only 117 hybrids (11 percent) were detected (p. 151). However, subjecting these same specimens to the more sophisticated hybrid index analysis showed that only 10.8 percent (113 individuals) were in fact "pure-bred" specimens. 89.2 percent were hybrids! (p. 151) Even after broadening the definitions of what constituted a phenotypically pure specimen, Short still found that 41.9 percent were hybrids.<sup>7</sup> Of these, he says, "I feel that, of the 431 specimens I regard as definite hybrids, up to 312 would not be identified as hybrids by most field observers." (p. 152)

Interestingly, there were two specimens, both from New Haven, Connecticut, which represented extremes of the "Brewster-Lawrence" phenomenon. One of these specimens was in every respect a "pure" Golden-winged Warbler, except that it possessed a transocular stripe rather than the expected face mask; the other specimen represented the opposite extreme--a "pure" Blue-winged Warbler with a black face mask. Brewster-type and Lawrence-type hybrids (i.e., hybrids without and with face masks) were found for all values of the hybrid index, from 0 to 20. Short says, "This tremendous variation again stresses that the terms 'Lawrence's' and 'Brewster's' cannot be applied precisely, and should be avoided wherever possible in favor of careful observation and notation of all features of color pattern." (p. 156)

## Song

According to the field guides, Blue-winged and Golden-winged Warblers differ in song. In part, this is true, but the actual situation is rather complex.

The early territorial song of the Blue-winged Warbler is usually rendered "bee-bzzz," with a descending pitch pattern. The two notes are quite dissimilar in timbre, the second note giving the effect of a loose and disconnected rattle. The early territorial song of the Golden-winged Warbler is usually rendered "bee-bzz-bzz-bzz." (There may be fewer or more "bzz"-notes.) This song is rather more uniform in quality, although the first note is quite definitely unlike the remainder of the series. I hear this song as being on one pitch except for the first note, which is lower by a whole tone---in musical notation, C-D-D-D. However, other individuals listening to the same bird will hear a different tonal sequence, and some will even insist that the bird sings a "melody" with a descending pitch sequence.

A quick glance at the Sonagram in Robbins, et al<sup>8</sup> will explain this disparity. The Golden-wing's notes are "blurs" of sound. In fact, the non-initial notes cover almost an entire octave. Out of this complex of tones, each individual human will single out certain frequencies to be the pitch "heard," but since this is a largely subjective process, different birders will "hear" different notes.

Both species have an alternate song. It is similar in the two species and may occasionally be heard during migration. Both species also have similar nesting songs, which can be heard later in the season.

Note that of the three songs, only the early territorial songs are well-differentiated in the two species; AND EVEN THEY ARE NOT DIAGNOSTIC! Phenotypically pure individuals of either parental species may sing the early territorial song of the other species exclusively. Moreover, there are at least 3 reports in the literature of individuals that sang both early territorial songs alternately (p. 156). In a subsample which Short studied more intensively, approximately one-third of the birds were heard singing the "wrong" song, at least part of the time!

## Habitat

Blue-winged Warblers are supposed to prefer low, swampy, semi-open areas; Golden-wings, drier, upland, woodland edges. In the Midwest, however, the reverse is true.<sup>9</sup> Short reports that over 60 percent of his specimens from central New York (for which habitat information was available) were in the "wrong" habitat. In fact, all of the phenotypically pure Golden-winged Warblers were so mislocated (pp. 156-157).

An alternate hypothesis may, in fact, be valid, viz., that both species tend to occur together in the same habitat in mixed colonies, but the preferred habitat varies in nature geographically. Certainly, this thesis is correct for the West Newbury, Bramanville and Longmeadow colonies in Massachusetts.

## Summary and Conclusions

Blue- and Golden-winged Warblers may well be two separate species which have not evolved sufficiently to allow for the development of effective isolating mechanisms. The course of future evolution is thus difficult to predict. The two forms may continue to diverge, developing more effective isolating mechanisms under the pressure of natural selection; or these two forms may begin to merge, resulting in one composite polymorphic species. At present, extensive hybridization is taking place with the result that differences in song and habitat preference are no longer species-characteristic (if, indeed, they ever were).

The genetic constitution of an individual hybrid can be analyzed in terms of five color characters. The presence or absence of a black face mask is a character of little or no utility for the determination of the genetic affinities of a given specimen. Consequently, the terms "Brewster's" and "Lawrence's" Warblers should be dropped.

## Footnotes

<sup>1</sup> Mayr, E. 1963. Animal Species and Evolution. Harvard University Press, Cambridge. p.117



- <sup>2</sup> Bagg, A.C., and Eliot, S.A., Jr. 1937. Birds of the Connecticut Valley in Massachusetts. The Hampshire Bookshop, Northhampton. p. 543.
- <sup>3</sup> Bailey, W. 1955. Birds in Massachusetts, When and Where to Find Them. The College Press, South Lancaster. p. 176.
- <sup>4</sup> Peterson, R.T. 1947. A Field Guide to the Birds, 2nd ed. Houghton Mifflin, Boston. p. 138.
- <sup>5</sup> Ibid., p. 139.
- <sup>6</sup> Brewster, W. 1881. On the relationship of Helminthophaga leucobronchialis, Brewster, and Helminthophaga lawrencei, Herrick; with some conjectures respecting certain other North American birds. Bull. Nuttall Ornithol. Club 6:218-225.
- <sup>7</sup> To be precise, only 10.8% of the specimens had a score of 0 or 20, and 41.9% had a hybrid index ranging from 3 to 17.
- <sup>8</sup> Robbins, C.S., Bruun, B., and Zim, H.S. 1966. Birds of North America. Golden Press, New York. p. 254.
- <sup>9</sup> Berger, A.J. 1958. The Golden-winged--Blue-winged Warbler complex in Michigan and the Great Lakes area. Jack-Pine Warbler 36:37-73.

Page references without citation refer to Lester L. Short, Jr., 1962. Hybridization in the Wood Warblers Vermivora pinus and V. chrysoptera in Proceedings XIII International Ornithological Congress, Vol. I, pp. 147-160.

#### MONK PARAKEET UPDATE, No. 2

The United States Department of the Interior has officially classified the Monk Parakeet (Myiopsittus monachus) as a potential agricultural pest in this country (Bureau of Sport Fisheries and Wildlife Leaflet, 496, 1971). In its native Argentina, it is particularly common in the vicinity of human habitation, destroying up to 45 percent of certain crops, notably cultivated fruits and grains (esp. maize and sorghum) and sunflower crops. The official status of the species as a potential pest was predicated on its destructiveness to these agricultural crops, but now it appears that there is more to the story.

William T. Shields, et al., report in the June 1974 issue of THE WILSON BULLETIN (Vol. 86, No. 2) on the feeding habits of a pair nesting in a park in Middlesex County, New Jersey. During March and April of 1973, 33 percent of their food consisted of buds, flowers and fruits of the American elm (Ulmus americanus), supplemented by seeds, acorns and buds of other native trees. All of the elms within the feeding range of this pair had the top three feet of their crowns completely stripped of foliage. Damage to willows in the area was also severe. The authors comment that, had a normal-sized flock of 15-50 individuals been present, the depredations on these trees would have been indeed serious.

Please report any sightings of this species to the Massachusetts Audubon Society or to the Massachusetts Division of Fisheries and Game. The species breeds in the metropolitan New York area. Let's try to keep it out of New England.

(For a brief description of the species, cf. BIRD OBSERVER, Vol. 1, No. 6, p. 131.)

J.T.L.

-----

RUSS MASON'S FLYING CARPET TOURS  
Natural History tours to many parts of the world  
For information and reservations in New England write:

BRADFORD BLODGET  
74 Hillcroft Avenue  
Worcester, Mass. 01606  
(617) 853-5474

## PROBABLE NESTING OF YELLOW-BREADED CHATS IN SANDWICH

Bruce A. Sorrie, Manomet Bird Observatory

On 1 June 1973 a pair of Yellow-breasted Chats (*Icteria virens*) were mist-netted and banded at the Scusset Beach State Reservation in northern Sandwich, Barnstable County. Both individuals were adults in alternate (breeding) plumage.

The occurrence of the chat as a breeding species in Massachusetts historically has been sporadic (Forbush, 1929; Bagg & Eliot, 1937; Griscom & Snyder, 1955; Bailey, 1955), and in the most recent treatment of the avifauna of Cape Cod, Hill (1965) states that during spring and summer chats are "very rare and erratic, may nest casually, but no satisfactory proof as yet."

The Scusset birds were caught along the southwestern edge of Sagamore Hill, at a banding site that has been operated by the Manomet Bird Observatory between spring and fall from 1971 to 1973. Sagamore Hill is surrounded on three sides by an extensive fresh-water marsh largely composed of cat-tails and *Phragmites* reeds interspersed with low hillocks and ridges that support alders, sweet gale and small trees. The slopes leading down to the marsh are thinly clothed in some areas with pitch pine, scrub oak, black oak, and lowbush blueberry, while the rest are covered with dense thickets of arrowwood, shadbush, highbush blueberry, catbrier, bayberry, and sumac.

At the time of first capture, the female possessed a brood patch in an early stage of development, the skin lightly vascularized. The male's cloacal protuberance was not noticeably enlarged. In three subsequent visits to the site (7 & 8, 21 & 22, 28 & 29 June) the male was frequently heard singing in the thickets, but only rarely was seen due to the density of cover. A search for a nest proved fruitless.

On 5 July the female was again mist-netted, and both birds were caught on the following day. This time the male possessed a swollen cloacal protuberance, and the female's brood patch was moderately vascularized and edematous, a condition which in songbirds normally indicates that egg-laying is complete and incubation is in progress or about to begin. The male was heard singing again on 12 July, but neither bird was found after that date, nor were any young seen.

I believe that the data can best be interpreted as follows: by 1 June the pair probably had completed nest building and were about to lay eggs. This first nesting was unsuccessful, perhaps due to the unseasonably cool and wet weather during June. The pair attempted to nest again, and by 5 July had laid the second clutch of eggs. The outcome of the second nesting is unknown.

I base my interpretations of two critical data. 1) The weight of the female on 1 June was 28.9 g., an unusually high weight for a female chat not having fat. On 5 and 6 July she weighed 23.8 g. and 22.4 g., indicating that on 1 June she had an egg in the oviduct and was in the process of laying the first clutch, whereas by 5 July she had laid the second clutch. 2) The 34 days between captures is too short a time for the chats to have laid eggs, incubated, raised young to fledging, redeveloped brood patch, and laid another clutch by 5 July. Therefore I feel that the first nesting was a failure.

Due to the comparatively retiring nature of most chats during the breeding season, its current status as a breeder is not well known; it is hoped that Massachusetts Audubon's Breeding Bird Census will provide new and more comprehensive field data.

### References

- Bagg, A. C. and S. A. Eliot, Jr., 1937, Birds of the Connecticut Valley in Massachusetts, Hampshire Bookshop, Northampton, Mass. pp. 498-501.
- Bailey, W., 1955, Birds in Massachusetts, College Press, South Lancaster, Mass. p. 196.
- Forbush, E. H., 1929, Birds of Massachusetts and other New England States, Part III, Norwood Press, Norwood, Mass., pp. 298-302.
- Griscom, L. and D. E. Snyder, 1955, The Birds of Massachusetts, Peabody Museum, Salem, Mass., pp. 209-210.
- Hill, N. P., 1965, The Birds of Cape Cod, Massachusetts, Wm. Morrow & Co., New York, p. 269.

## BIRD BONANZAS TOURS

### India and Nepal offer —

- a **wealth of bird life**. 1,300 species inhabit the Indian subcontinent including 50 pheasants, exotic families such as bee-eaters, flower-peckers, pittas, broadbills, barbets and hornbills. (On our 1973 tour to this area 555 species of birds were recorded.)
- a **wealth of mammal life**, including tigers, elephants, rhinos and many other spectacular mammals. (On our 1973 tour 32 species of mammals were recorded.)
- **outstanding scenery**. The towering snow-capped Himalayas. One 1973 participant said, "To be in those mountains is an unforgettable experience." The scenic beauty of the vale of Kashmir. Though we emphasize birds, we will briefly visit the Taj Mahal or similar noteworthy sights during the part of the day when birds are less active.



Plate by John Henry Dick from  
"A Field Guide to the Birds of India."  
(Actual plate is in full color.)

**There is no more competent leader** for a tour to this area than Ben King. He has seen more species of birds in Asia than anyone else, as far as we know, 1,066 species in 1973 alone. He has lived in the field months at a time and netted and banded about 93,000 birds of about 500 species in Asia. He spent more than a year in India doing daily field research for "A Field Guide to the Birds of Asia." Being in a **small group of enthusiastic birders**, as in all **BIRD BONANZAS** tours, you will have the maximum opportunity to see the greatest possible number of birds. *In early 1975 we also have outstanding tours with expert leaders to Ethiopia, West Africa, Panama, Belize-Guatemala and Costa Rica. Send attached coupon for additional information.*

### BIRD BONANZAS, INC.

12550 Biscayne Boulevard, Suite 501  
North Miami, Florida 33161

Please send additional information about

- |                                                            |                                                              |
|------------------------------------------------------------|--------------------------------------------------------------|
| <input type="checkbox"/> Panama, January 11-26             | <input type="checkbox"/> India & Nepal, February 9 - March 8 |
| <input type="checkbox"/> Ethiopia, January 18 - February 8 | <input type="checkbox"/> West Africa, March 24 - April 13    |
| <input type="checkbox"/> Belize, Guatemala, February 9-23  | <input type="checkbox"/> Costa Rica, April 12-27             |
| <input type="checkbox"/> Entire 1975 tour program          |                                                              |

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

## ON RECORDS OF BIRDS

by the Staff

BIRD OBSERVER OF EASTERN MASSACHUSETTS publishes in each issue two one-month summaries of bird species identified within the ten-county area shown on the map inside the front cover. These summaries are drawn from reports submitted to the compilers by bird-watchers throughout the area. The publication of these summaries is, of course, a major function of our magazine, and we are deeply grateful to all of the dedicated birders who, month after month, take the time to write out the reports which form the primary data.

Obvious limitations of space prevent the publication of many records which are sent in to us. Less frequently a report of an unusual sighting is rejected for lack of convincing documentation. Unfortunately, the omission or rejection of certain of these records has been in the past a cause of hard feelings, and it is therefore incumbent upon you to make certain points plain:

1. The integrity of the reporter is assumed; his expertise is not. None of us is fully familiar with every species which may appear within our area. Moreover, atypical or freak individuals are not uncommon within the avian world, and even the professional ornithologist is necessarily "inexperienced" with respect to aberrations of this sort.
2. The most competent and experienced observers do make mistakes. Unusual wind conditions or lighting effects often drastically change the appearance of a bird and lead to misidentification. Professional field ornithologists are quick to admit to this possibility, and we should follow their example.
3. Most of our readers and reporters are amateurs for whom birding is a hobby, a sport, a source of pleasure. BIRD OBSERVER is directed primarily toward this audience. However, our magazine is also on occasion a source of scientific data. Hence, we are obliged as compilers to adhere to generally accepted standards with regard to the reporting of unusual sightings. In past years, such reports were never acceptable without the securing of a specimen. More recently, photographs have come to be accepted as "incontrovertible evidence."

Our policy has never been this strict, and we have from the beginning published reports of unusual sightings backed by no more than a good written description. But conservatism IS our rule. To accept a misidentification and to reject a correct identification are both compiling errors--but they are not of equal seriousness. Compilers generally agree that the former is the more serious error. We concur in this attitude, and it is therefore to be expected that perfectly valid sightings will from time to time be rejected. The observer need draw no inference from this action. Rejection of a report sometimes results from a decision by the compilers that a misidentification has occurred. More frequently no such suggestion is intended. Rather, the rejection should be taken to mean simply that the submitted evidence fails to convince the compilers beyond all reasonable doubt of the correctness of the identification.

### A. Minimal data for all reports.

Whatever the report may be, please be sure to include the following data:

1. Species name.
2. Accurate count or careful estimate.
3. Immature or adult plumage (if determinable).
4. Sex (if determinable).
5. Date and place of observation.
6. Observer(s).

The estimating of large numbers of birds is clearly an art, but one which can be learned. Reporters are urged to read Robert Arbib's article, "On the art of estimating birds," from the August 1972 issue of American Birds. Reprints are available for 25¢ from: American Birds, 950 Third Avenue, New York, N. Y. 10022.

### B. Which reports are most noteworthy?

The compilers are most interested in reports of the following types:

1. Early and late dates for migratory species.
2. Maximum counts for migrants or non-breeding visitors.
3. Unusually high or abnormally low numbers of the more common species.

4. Species outside their normal ranges, especially when such records may point to breeding range extensions.
5. Species not on the current M.A.S. yearly checklist.

The very active birder will know from his own experience and records which reports are of greatest interest. The less experienced or less vigorous observer may need help in determining which reports to submit. What is an early date for Yellow Warblers? What is an unusually high count of them?

Fortunately, in Massachusetts there are several easily obtained books and pamphlets detailing information of this type. We urge all reporters to obtain and consult the following:

1. Griscom, L. and Snyder, D.E., The Birds of Massachusetts (Salem: Peabody Museum, 1955).
2. Bailey, W., Birds in Massachusetts, Where and When to Find Them, available from Massachusetts Audubon Society, Lincoln, Mass.
3. Hill, Norman P., The Birds of Cape Cod, Massachusetts (New York: Morrow, 1965). (Now out of print)
4. Bailey, W., Birds of the Cape Cod National Seashore, and its supplement.

#### C. Reports of "difficult" species.

In the opinion of the compilers, certain of the species on the current M.A.S. Checklist, although of regular occurrence, are rather difficult to identify. We would single out the following:

Cory's Shearwater  
 Leach's Storm-Petrel  
 Cormorants out of breeding season  
 Little Blue Heron (immature) vs. Snowy Egret  
 Yellow-crowned Night Heron (immature)  
 European and American Wigeons (female)  
 Greater Scaup vs. Lesser Scaup  
 Common vs. Barrow's Goldeneye (females)  
 King Eider (females)  
 Sharp-shinned Hawk, Cooper's Hawk and Merlin  
 King Rail vs. Clapper Rail  
 Baird's Sandpiper and Western Sandpiper  
 Short-billed vs. Long-billed Dowitcher  
 Reeve  
 Red Phalarope (winter plumage)  
 Pomarine Jaeger vs. Parasitic Jaeger  
 Glaucous and Iceland Gulls  
 Little Gull  
 Forster's Tern  
 Arctic Tern  
 Royal Tern and Caspian Tern  
 Razorbill  
 Willow and Alder Flycatchers  
 Fish Crow  
 Swainson's and Gray-cheeked Thrushes  
 Northern and Loggerhead Shrikes  
 Philadelphia Vireo  
 Worm-eating Warbler  
 Orange-crowned Warbler  
 Cape May, Pine, Blackpoll and Bay-breasted Warblers (immatures)  
 Northern and Louisiana Waterthrushes  
 Connecticut and Mourning Warblers  
 House Finch  
 Lincoln's Sparrow

The birds on this list are here for various reasons. In some cases (e.g., Lesser Scaup Duck, Philadelphia Vireo, Willow and Alder Flycatchers), the species are objectively difficult to identify, i.e., they are genuine sibling species. Certain of these species (e.g., Connecticut and Mourning Warblers) are as a rule uncooperative, allowing a far from perfect viewing. For some, the information in the standard field guides is, in our opinion, misleading (e.g., the "wing-length criterion" for Iceland and Glaucous Gulls).

Finally, a large group of species is included on this list for the simple reason that a "well-publicized" instance of misidentification by an observer whom we regard as essentially competent is known to us.

The compilers would hope that, in addition to the basic data listed above in paragraph A, reports of these species would contain details of the diagnostic characteristics actually observed or heard. Did you clearly see the vermiculations on the side of that Lesser Scaup? If so, enough said. Did that Alder Flycatcher sing its territorial song? In what habitat was it? At what elevation?

Massachusetts Audubon Society offers a birder's kit for \$5.15 per year, which includes mailings of occasional short papers on field identification problems. Eleven of these have appeared so far, and all are excellent. We urge you to subscribe.

#### D. Reports of rarities.

Any report of a species not on the M.A.S. Checklist requires documentation of a more extensive nature. The additional information submitted should usually include the following:

1. Exact location and description of the habitat in which the bird occurred.
2. Time of day and duration of observation.
3. Weather conditions (esp. wind direction and speed) both during the observation and in the preceding hours and days.
4. Lighting conditions.
5. Optical equipment in use and distance of the bird.
6. Primary Identification.
  - a. Size, shape and posture of the bird, plumage description, any other visual characters noted.
  - b. Songs or other sounds heard.
  - c. Behavior of the bird, description of its movements. (On what was the bird feeding? In flight, did it soar? What was its wingbeat velocity? Etc.)
  - d. Associates, i.e., what other species were present? Of these, with which did the bird fraternize? (Instances of interspecific hostility are often excellent clues as to the identity of a bird.)
7. Differential Diagnosis.
  - a. With which other species was a direct comparison made? What conclusions were reached as a result of these comparisons?
  - b. Which other species were considered as possible identifications, however briefly and perfunctorily? How was each of these eliminated?

The superior field observer is often distinguished most clearly by his excellence in and attention to the differential diagnosis. Remember the old maxim: a rare or unusual view of a common bird is much more probable than a sighting of a rare or unusual bird. So be sure to check through in your mind ALL realistic alternatives, however unlikely they may at first seem--and then submit your conclusions to the compilers.

8. Additional supporting evidence, e.g., drawings, tape-recordings or photographs, if available. The clearer this evidence, the less verbal description is necessary.
9. Names of all observers, and a record of any disagreements in identification. Were the observers immediately aware of the bird's potential rarity?

BIRD OBSERVER has already published two fully documented reports which may be used as models:

1. Sighting of a Black-browed Albatross, by Richard R. Veit (Vol. 1, No. 6, p. 137).
2. A Note on Brewer's Blackbird in New England, by Wayne R. Petersen (Vol. 2, No. 2, p. 55).

Obviously, not every such report need be in publishable form, but the submitted report will be kept on file and may be made available for serious ornithological research. Some of the Massachusetts reports written in 1900 are still consulted today. Try to keep this in mind as you write your own reports. Be complete. The reader in the year 2050 may need those details.

A few more words of advice are in order:

1. Take notes at the time of your sighting, preferably before consulting a reference book.

2. In describing a bird don't copy the description from a field guide. The impression given is that the bird was not very carefully scrutinized. Try to include descriptive details which you have never seen in print.
3. Try to get confirmation of the sighting. A good photograph is unbeatable as evidence.
4. Notify local birders quickly so that other observers can confirm the identification.

#### BALD EAGLE AND PEREGRINE FALCON UPDATE

At present, the federal government offers the rosiest prospects for the Bald Eagle that it has advanced in several years. According to reports issued by the Fish and Wildlife Service, there are approximately 1000 nesting pairs in the lower 48 states. Eagle populations in Chesapeake Bay, parts of Florida, the Pacific Northwest and the northern interior of Minnesota, Wisconsin and Michigan are holding steady, with possible gains in the Minnesota population. On the other hand, breeding populations in the Northeast, on the Great Lakes shores, and in the Southeast (except parts of Florida and Louisiana) are either declining or gone.

These 1000 nests mean that 2000 adult eagles are involved in breeding. Since eagles do not breed until they are five years old, there must be about 3000 eagles in the sub-adult pool, working their way toward maturity. These two figures together yield a total Bald Eagle population estimate of 5000 individuals for the contiguous United States.

The estimate for the year 1965 was likewise 5000 individuals, but that does not mean that the population remained steady over the past eight years. In fact, there is considerable evidence that numbers actually declined steadily until 1970, and have advanced slowly since then.

The Bald Eagles nesting in Merrymeeting Bay in Maine have become so polluted with pesticides that they can no longer produce viable eggs. Shells break as soon as the female sits upon them. Maine, however, abandoned the use of DDT and dieldrin in 1970, and it is therefore possible that the environment has cleared enough that young eagles can mature and become reproductively viable. In a new and bold experiment this year, the Fish and Wildlife Service gathered six sturdier eggs from nests in the Chippewa National Forest in Minnesota and transplanted them to the Maine nests. At last report, the foster parents had accepted the eggs and were incubating them. The Minnesota birds will, of course, re-lay, so that no loss in that population is envisioned.

A recent technological breakthrough has enabled man to breed Peregrine Falcons in captivity. Last year's breeding projects produced 20 birds, and it is now imperative that biologists determine where and how captive-reared birds can be returned to the wild.

Peregrine Falcons, like Bald Eagles, are at the top of a food chain and are hence extremely susceptible to contamination by pesticides. Experts at a recent conference in Greenwich, Connecticut, reported that only large cities are sufficiently free of these pollutants to risk a transplant of birds. So the day may soon arrive when these superb predators will nest on the skyscraper "cliffs" of downtown Boston, Hartford and Providence, using the ubiquitous city Rock Doves as their primary food source.

(Condensed from material supplied by Massachusetts Audubon Society)

J.T.L.

THE BIRD OBSERVER SUMMARY FOR MARCH, 1974

The warmer than usual weather continued during the first week of March, with a south-westerly flow on the 1st and 2nd. Generally fair weather continued through March 13th. At midmonth, it became windy and cold with another winter storm which deposited from 1.00 to 3.00 inches of moisture. Below normal temperatures continued until the weekend of the 23rd, when seasonal temperatures returned. Precipitation averaged above normal, occurring mainly with a fast moving storm on the 21st which dumped 2.07 inches of snow in Boston. At months end, there was another warming trend with a southwesterly flow on the 30th & 31st.

For most birders, March signals the start of the migration period. Winter weather is nearly over and anticipation of new arrivals awaits the observer. An early southwesterly flow brought the first Woodcocks, while the blackbirds and Song Sparrows became much more numerous. However, the first real push came at the end of the month.

Snowy Egrets were reported from only two localities, but this is still slightly early, and the report of two dead Black-crowned Night Herons is especially discouraging since they were very scarce on Cape Cod this winter. The roost at Fort Hill, Eastham had only a few birds while the one at Muddy Creek, Chatham had just six. Waterfowl numbers were more promising with 1200 Brant, 3000 Black Duck, 60 Gadwall, 107 Green-winged Teal, 250 Pintail, 2500 Greater Scaup, 5000 Common Goldeneye, 1000 Bufflehead and 400 Oldsquaw.

The movement of early spring hawks was unremarkable, with the first Ospreys returning to Westport on the 24th of the month. Shorebirds were reported in fair numbers, with the first Woodcocks reported early in the month. Killdeer were seen in good numbers after the 20th, and Piping Plovers showed up in only two localities. A Ruff and a Reeve were found in the Rowley area, the only bonus shorebirds reported. The number of Sanderlings at Revere remained a constant 800 all winter.

No month, however unseasonal, is without its special birds. Two Whistling Swans, two European Wigeons, King Rail, two Common Gallinules, Mew Gull, Red-bellied Woodpecker, Boreal Chickadee, Black-headed Grosbeak and three Hoary Redpolls were reported.

R.H.S.

Common Loon:			
16	P.I.	11	BBC(H.Weissberg)
Red-throated Loon:			
2	Orleans-Chatham	6	W.Petersen
Red-necked Grebe:			
thr.	Dennis	22	B.Nikula#
Horned Grebe:			
31	Chatham	200	B.Nikula#
Pied-billed Grebe:			
2,9	So.Dartmouth,Westport	4,6	P.Regan,PBC(R.Howland)
Gannet:			
10	Eastham	100	B.Nikula
Great Cormorant:			
17	North Scituate	30+	C.Clark
Great Blue Heron:			
10	Chatham	55	B.Nikula#
Snowy Egret:			
28,31	Manchester,Marshfield	4,4	P.Parsons,R.Ames
Black-crowned Night Heron:			
22	Eastham	2 dead	E.Pearson
American Bittern:			
18,23	Lakeville,Marshfield	1,1	R.Turner, SSBC(W.Harrington)
23-30	P.I.	1	v.o.
Mute Swan:			
9	Acoaxet	47	PBC(R.Howland)
Whistling Swan:			
3-31,4	Acoaxet,Magnolia	1 imm.,1	v.o.,M.Listman
Canada Goose:			
23	P.I.	1000	BBC(I.Giriunas)
Brant:			
18	Squantum	1200	D.Brown
Snow Goose:			
13,27	Falmouth,P.I.	8,12	C&B Holdridge,D.Brown



Black Duck:				
9	P. I.	3000		BBC(L. Jodrey)
Gadwall:				
12,14	Concord(GMNWR), P. I.	20,40		L. Robinson, R. Arnold
Pintail:				
5	P. I.	250		N. Claflin
Green-winged Teal:				
5,12,16	P. I., Concord, Wayland	55,30,22		P. Butler#, L. Robinson, R. Forster
Blue-winged Teal:				
23,24	West Roxbury, Rowley	3 m., 7		F. Atwood, R. Forster#
European Wigeon:				
thr., 8	Orleans, Cohasset	2,1		v. o., M. Litchfield
American Wigeon:				
thr., 9	East Orleans, Concord	40,58		v. o., J. Pickup
Northern Shoveler:				
thr., 3-10	P. I., Ipswich	2,3		v. o., J. Berry
Wood Duck:				
8,16	Hingham, Wayland	6-8,10		N. Osborne, R. Forster
Redhead:				
16,30	Wellesley, So. Groveland	1 m., 1		R. Forster, J. O'Regan
Ring-necked Duck:				
16	Wayland	27		E. Taylor
Canvasback:				
10	Acoaxet, Falmouth	110,100		W. Petersen#, J. Robertson
Greater Scaup:				
2	Newburyport	2500+		BBC(G. Soucy)
Common Goldeneye:				
24	Newburyport	5000+		W. Petersen, R. Forster
Barrow's Goldeneye:				
thr., 2	Plymouth, Newburyport	7,3		B. Sorrie, BBC(G. Soucy)
Bufflehead:				
2	Newburyport	1000+		BBC(G. Soucy)
Oldsquaw:				
24	Newburyport	400		W. Petersen, R. Forster
Harlequin Duck:				
30	Magnolia	12		E. Morrier#
Common Eider:				
2,3	P. I., Wollaston	2000+, 2000		BBC(G. Soucy), BBC(H. Donovan)
10	Plymouth Harbor	1000		D&R Emerson
King Eider:				
thr.; 10	E. Orleans; Westport	3 f., 3 m., 1 f.		W. Petersen; R. Forster
Surf Scoter:				
17	Cohasset	6		E. Morrier
Black Scoter:				
23	P. I.	50		BBC(I. Giriunas)
Ruddy Duck:				
13	Falmouth	10		B. Holdridge
Hooded Merganser:				
28	Brewster	25		B. Nikula
Common Merganser:				
16	Lincoln	24		V. Albee
Goshawk:				
3,10,13	Harwich, Rehoboth, Eastham	1,1,1		B. Nikula, D&R Emerson, H. Rowell
17;28,31	Brookline; Plymouth, Manomet	1;1,1		A. Agush; M. B. C. Staff
Sharp-shinned Hawk:				
thr.	6 localities	singles		v. o.
Cooper's Hawk:				
15	Milton	1		D. Brown
Red-shouldered Hawk:				
thr.; 2	6 localities; Orleans	singles; 1		v. o.; W. Petersen, C. Goodrich
Rough-legged Hawk:				
thr., 30	East Orleans, West Newbury	1,1		v. o., N. Claflin
Marsh Hawk:				
thr.	7 localities	9 individuals		v. o.
Osprey:				
24,31	Westport	1,3		P. Regan, H. D'Entremont
American Kestrel:				
thr.	8 localities	31 individuals		v. o.

Ruffed Grouse:				
6	Canton	1		D. Brown
King Rail:				
9	Plymouth	1		C. Goodrich, B. Nikula
Virginia Rail:				
19, 23	Gloucester, Marshfield	1, 1		H. French, W. Harrington
Common Gallinule:				
19	West Harwich	2		B. Nikula
Piping Plover:				
24, 26	Acoaxet, Plymouth	3, 2		S&J Harrison, M. B. O. Staff
Killdeer:				
24	Rowley-Newburyport	40		W. Petersen & R. Forster
Woodcock:				
2	Cambridge (Mt. A.), Lincoln	2 (first), 1		R. Stymeist, I. Nisbet
3 on	19 localities	37 individuals		v.o.
Common Snipe:				
23, 24	W. Roxbury, Rowley	6, 9		F. Atwood, W. Petersen
Greater Yellowlegs:				
9	Orleans	3		C. Goodrich#
Purple Sandpiper:				
5	Manomet	1		M. B. O. Staff
Dunlin:				
9, 17	Revere, Cohasset	200, 1000+		R. Veit#, C. Clark
24	Dartmouth	200		S&J Harrison
Ruff:				
14-29	Rowley	1 m., 1 f.		D&R Alexander, J. Kieran, G. Soucy
Sanderling:				
9	Revere	800		R. Veit, S. Perkins
Glaucous Gull:				
thr.; 9	P. I., Gloucester; Lynn	1, 4 imm.; 1		v.o.; R. Veit
Iceland Gull:				
9, 17	Lynn, P. I.	2, 25		R. Veit, D. Brown
Great Black-backed Gull:				
30	West Roxbury Dump	500		F. Atwood
Herring Gull:				
9	Lynn Dump	<u>20,000+</u>		R. Veit#
Ring-billed Gull:				
14, 16	West Roxbury, Newburyport	51, 370		J. Pickup, BBC (H. Weissberg)
Black-headed Gull:				
2	Newburyport; Orleans	5 ad., 1 imm.; 1		R. Veit; W. Petersen
Bonaparte's Gull:				
9	Newburyport	100		BBC (L. Jodrey)
Mew Gull:				
2-24	Newburyport	1 ad.		v.o.
Laughing Gull:				
6	Brookline	2 imm.		H. Coolidge
Little Gull:				
3	Newburyport	2 imm.		J. Berry
Black-legged Kittiwake:				
2	Gloucester	1 ad.		R. Veit#
Dovekie:				
24	Rockport	1		D. Brown
Black Guillemot:				
2	Gloucester	3		R. Veit#
Canary-winged Parakeet: (Exotic)				
3	New Bedford	1		P. Regan
Monk Parakeet: (Exotic)				
2	Haverhill	1		BBC (G. Soucy)
Ring-necked Parakeet: (Exotic)				
24	Plymouth	1		G. Soucy#
Screech Owl:				
7, 17 on	Concord, Brookline	1, 1 (nesting)		D. Brown, H. Wiggin#
22 on	Foxboro	1 (nesting)		W. DeHaro
Great Horned Owl:				
22	Needham	1		J. Pickup

Snowy Owl:			
2-23,2,9	P.I.,Scituate,Salisbury	1,1,1	v.o.,S.Swaebe,v.o.
10,13-15	Milton,Boston(Logan Airport)	1,1	R.Veit,fide M.A.S.
20,23	Wellfleet,Duxbury	1,1	fide W.Bailey,W.Harrington
Barred Owl:			
3&5,7	Danvers,Concord	1,1	P.Butler#,D.Brown
23	No.Dartmouth	2	R.O'Hara,P.Regan
Short-eared Owl:			
1-15	Squantum	1-2	v.o.
Saw-whet Owl:			
thr.	P.I.	1	v.o.
Pileated Woodpecker:			
2,19	Natick,Weston	1,1	E.Taylor,A.Johnson,Jr.
22,24	Scituate,Topsfield	1,2	R.Small,fide G.Soucy
28,29	Weymouth,Dover	1,1	D.Brown,F.Hamlin
Red-bellied Woodpecker:			
13	S.Natick	1	W.Biggart
Red-headed Woodpecker:			
thr.	Littleton,Wayland,Woburn	singles	v.o.
Eastern Phoebe:			
4,6,9	Salem,Littleton,Salisbury	singles	W.Foley,R.Baird,S.Swaebe
16,20,28	Middleboro,Wayland,Tewksbury	singles	D.Briggs,R.Emery,M.Wilson
30,31	Needham,Cambridge(Mt.A.)	singles	R.Forster,R.Stymeist
Tree Swallow:			
7,18	Bolton,Lakeville	2,6	S.Higginbotham,R.Turner#
23,24	Plymouth,E.Harwich	1,1	B.Sorrie,B.Nikula
Blue Jay:			
16,17	Cambridge,Jamica Plain(A.A.)	40,20	L.Robinson#,BBC(P.Deveau)
Fish Crow:			
6,30	Roslindale,W.Roxbury	86,50	D.Brown,F.Atwood
Boreal Chickadee:			
1-9	P.I.	1	v.o.
Red-breasted Nuthatch:			
8-30,9	P.I.,Ipswich	1,3	v.o.,J.Berry
Brown Creeper:			
2,17	Tewksbury,Brookline	10+,3	M.Wilson,A.Agush
Winter Wren:			
9,22	Sandwich,Plymouth	1,1	C.Goodrich,M.B.O.Staff
Carolina Wren:			
1,4	Brewster,Carlisle	1,1	M.Eddy,K.Harte
10,24	Acoaxet,Westport	1,6	W.Petersen#,S&J Harrison
Long-billed Marsh Wren:			
14,19	W.Harwich	1,3	B.Nikula
Brown Thrasher:			
1,30	Concord,Dedham	1,1	S.Raabe#,F.Atwood
American Robin:			
17,23	Jamaica Plain(A.A.),Marshfield	50,60	BBC(P.Deveau),SSBC(W.Harrington)
Hermit Thrush:			
22	Eastham	1	E.Pearson
Eastern Bluebird:			
thr.	Dennis,Chatham	15,20	Greenlaw,Locatell
15	Lincoln	2(carrying nesting mat'l.)	P.Swift
24,28	Sherborn,W.Roxbury	2,1	J.Willison,J.Pickup
29,31	Plymouth,S.Yarmouth	12,2	L.Bonney,C&B Holdridge
Ruby-crowned Kinglet:			
2	East Orleans	1	W.Petersen#
Cedar Waxwing:			
13	Plymouth	8	M.B.O.Staff
Northern Shrike:			
thr.,2,18	E.Orleans,P.I.,Plymouth	1,1,1	v.o.,BBC(G.Soucy),M.B.O.Staff
23;24	Salisbury;West Newbury	1;1	R.Emery#;R.Forster,W.Petersen
Pine Warbler:			
1-20	Chatham	1	V.Saunders#
Common Yellowthroat:			
2	East Orleans	1	W.Petersen#
Eastern Meadowlark:			
3,29	Fairhaven,Bridgewater	20+,26	PBC(Welling),D.Brown

Redwinged Blackbird:			
2,3	Natick, Fairhaven	6,100+	E. Taylor, PBC (Welling)
3,9	P. I.	1,250	G. Soucy#, BBC (L. Jodrey)
9	Wayland, Westport	200,200+	H. Wiggin, PBC (Howland)
23	Marshfield	400	SSBC (W. Harrington)
Northern Oriole:			
thr., 1-13	Haverhill, Orleans	1,2	N. Goodrich#, E&C Lund
Rusty Blackbird:			
3,15	Wayland, Canton (F.M.)	1,1	R. Forster, D. Brown
19,23	Wilmington, Tewksbury	5+, 40+	M. Wilson
24,26	Newburyport, Concord	12,5	R. Forster, S. Raabe#
Common Grackle:			
2,5	Tewksbury, Jam. Plain (A.A.)	5+, 100	M. Wilson, J. Pickup
9,23	Wayland, Marshfield	40+, 100	H. Wiggin, W. Harrington
Brown-headed Cowbird:			
16,22,23	P. I., Braintree, Marshfield	20,15,30	H. Weissberg, D. Brown, W. Harrington
<u>Black-headed Grosbeak:</u>			
1-26	N. Scituate	1 (from Feb.)	B. Litchfield & v.o.
Dickcissel:			
1-11,4,21	Harwich, Newburyport, Tewksbury	1,1,1	B. Nikula, C. Simmons, M. Wilson
Evening Grosbeak:			
3,9	Fairhaven, S. Dartmouth	21,8	PBC (Welling), PBC (Howland)
23	Marshfield	9	SSBC (W. Harrington)
Purple Finch:			
30	Dedham	55	F. Atwood
House Finch:			
23	Marshfield	20	SSBC (W. Harrington)
Pine Grosbeak:			
10	Weston	2	D. Dumaine
<u>Hoary Redpoll:</u>			
1-6;11	Lincoln; Sherborn, Rockport	1;1,1	W. Harrington; E. Taylor, L. Jodrey
Common Redpoll:			
thr.	Beverly, Rockport, Lincoln	100+, 100+, 200	G. Soucy, L. Jodrey, W. Harrington
Pine Siskin:			
thr., 3	Wellesley, Fairhaven	9,10-20	L. Robinson, PBC (Welling)
Red Crossbill:			
3,9	Cambridge (Mt. A.), P. I.	32,20	R. Stymeist#, BBC (L. Jodrey)
10,15	Tewksbury, Brookline	10,3	M. Wilson, H. Wiggin
White-winged Crossbill:			
thr.	Sherborn, P. I.	7, max. 16	E. Taylor#, v.o.
2,22	Middleboro, Annisquam	5(b.), 6	D. Briggs, H. Wiggin
Rufous-sided Towhee:			
17,24	No. Scituate, Wellesley	1,1	C. Clark, R. Forster
Savannah Sparrow: (Ipswich)			
9,23	P. I., Duxbury	1,1	BEC (L. Jodrey), R. O'Hara
Dark-eyed Junco:			
thr.	Cambridge (Mt. A.)	45+ (1 Oregonus)	R. Stymeist#
Tree Sparrow:			
5	P. I.	600	N. Claflin, P. Butler#
Field Sparrow:			
9,25	Wayland, Concord	1,2	H. Wiggin, S. Raabe#
Fox Sparrow:			
thr.	Cambridge (Mt. A.)	max. 3	R. Stymeist
thr.	W. Roxbury, P. I.	6,3	F. Atwood, v.o.
21,25	Sherborn, Littleton	3,2	C. W. Taylor, V. Sprong
Song Sparrow:			
31	Cambridge (Mt. A.)	74	R. Stymeist
Lapland Longspur:			
11	Scusset Beach	50	M. B. O. Staff
Snow Bunting:			
9,24	Scusset Beach, P. I.	20,1	M. B. O. Staff, W. Petersen#

THE BIRD OBSERVER SUMMARY FOR APRIL, 1974

The month of April began with temperatures ranging from the 40's to the 70's, with many scattered showers. On the 9th through the 12th, heavy rains fell throughout the Northeast, preventing migrants from reaching the area during the latter two weeks of the month; unseasonably high temperatures prevailed, with highs in the 70's and 80's on the 29th and 30th. Generally, early migrants such as Palm Warbler, Yellow-bellied Sapsucker and Winter Wren, as well as many other warblers and thrushes, arrived earlier and in greater numbers than usual due to the prevailing southwesterly winds throughout these latter two weeks.

Relatively high concentrations of Horned Grebes were interesting to note during April, after their marked decline in the region during the winter months. Virtually, all of the southern species of herons appeared at various localities towards the end of the month, presumably due to the warm weather during this period. The Whistling Swan at Accoaxet lingered through the 7th.

Typical numbers of waterfowl appeared in the state in April. Counts of 127 Gadwall in Ipswich and 150+ Snow Geese with four Blue Morphs at the Newburyport salt marshes being noteworthy. The Barrow's Goldeneye remained in Newburyport Harbor until the 14th. A normal migration of accipiters was noted, including the presence of three Goshawks lingering from the winter's flight. Red-shouldered Hawk continues its decrease in Massachusetts, indicated by only three reports during the month.

The American Oystercatchers returned to Monomoy and Nantucket by the 20th, and migrating shorebirds, such as Lesser Yellowlegs, arrived earlier than normal (on the 7th at Chatham). A Golden Plover was unusual at Squantum on the 7th, and a Ruff appeared at Truro on the 21st.

A pair of Barn Owls apparently nested in Boston Harbor, bearing one young by the incredibly early date of April 25th, while one Snowy Owl lingered until April 11th.

Five Red-headed Woodpeckers were reported, and, as I mentioned earlier, many passerines arrived earlier than usual. Among these were two Lincoln's Sparrows, Carolina Wren north of its normal breeding grounds, Prothonotary and Worm-eating Warblers, a Summer Tanager on the Cape, and an astounding Short-billed Marsh Wren at W. Harwich on the 11th.

A Western Meadowlark was singing in Milton on the 22nd. This species is now an annual visitant and occasional breeder in the state.

In all, 231 species were recorded in eastern Massachusetts during the month, with two additional species from Western Massachusetts, a Sandhill Crane in Ashley Falls on the 3rd, and a male Painted Bunting in Southhampton on the 16th-20th.

R.R.V.

Common Loon:			
20	Westport-So. Dartmouth	10	R. Stymeist, R. Veit#
Red-throated Loon:			
6, 20, 26	P. I., Squantum, Westport	2, 1, 1	S. Grinley, R. Emery#, R. Stymeist#
Horned Grebe:			
6, 13	Barnstable (S. N.); W. Concord	45+, 50	W. Petersen; W. Petersen & R. Forster
Gannet:			
6, 7, 8	Rockport (A. P.), Eastham, P. I.	2, 2, 12	J. Berry, BRC (Baines), M. McClellan
Great Cormorant:			
6, 21	Magnolia, Marshfield	27, 1	J. Berry, W. Petersen
Double-crested Cormorant:			
6, 14	Newburyport, Squantum	2, 38	BEC (P. Parsons), D. Brown
20, 27	Plymouth, Squantum	59, 110	SSBC (E. Smyth), R. Stymeist#
Great Blue Heron:			
12	P. I.	15	S. Swaebe#
Green Heron:			
5, 18 & 23	W. Roxbury, Cambridge (Mt. A.)	1, 1	J. Pickup, S. Barr#, L. Robinson#
25, 27, 30	Rewley; P. I., Winchester	2; 5, 3	BRC (J. Berry); M. McClellan
Little Blue Heron:			
6, 19	Rowley, Dartmouth, Marshfield	1 ad., 1 ad., 1	R & D Hale#, R. Emery#, R. Gould#
29	Cambridge (Mt. A.), Manchester	1 ad., 1 ad.	R. Stymeist#, P. Parsons

<b>Cattle Egret:</b>			
3-30	Ipswich	1-7	L.Jodrey & v.o.
6	P.I.,Edgartown(M.V.)	1,1	BBC(P.Parsons),G.Ben David
12&21,15	Marshfield,Dover	1&4,1	W.Petersen & R.Gould#,F.Hamlen
19,29	Squantum,Tewksbury	1,1	E.Morrier,P.Goldsworthy
<b>Great Egret:</b>			
5	Carver,Middleboro	1,1	R.Turner,E.Korpinen
6-14,24	Chatham,Squantum	1,2	B.Nikula#,G.Wilson#
19,20	Dartmouth,Edgartown(M.V.)	6,1	W.Petersen#,A.Silva
<b>Snowy Egret:</b>			
30,3&6	Squantum,P.I.	2-20(max.Apr.19),2&19	E.Morrier & v.o.,BBC(P.Parsons)
4,12	Manchester,Cohasset-Duxbury	7,20+	P.Parsons,W.Petersen
<b>Louisiana Heron:</b>			
6,7	Chatham,Orleans	1,1	C.Goodrich,B.Nikula
12,17	P.I.,So.Dartmouth	1,1	S.Swaebe,P.Regan
<b>Black-crowned Night Heron:</b>			
4,5&6	Woburn,P.I.	2,2&25	P.Fox#,R.Arnold & S.Grinley
<b>Yellow-crowned Night Heron:</b>			
8,26	Gloucester,Cambridge(Mt.A.)	1 ad.,1 ad.	A.Robinson,R.Stymeist#
28,29	Essex,Harwich	1 ad.,1 ad.	W.Cornwell#,B.Nikula
<b>Least Bittern:</b>			
11-28	West Harwich	1	D&H Baines & v.o.
<b>American Bittern:</b>			
5&28,14	P.I.,W.Newbury	2&2,1	R.Arnold,W.Petersen#
21	Cambridge(Mt.A.)	1	R.Stymeist & v.o.
23	Concord,Squantum	2,2	T.Leverich#,E.Morrier
26,28	Lynnfield,Peabody	singles "pumping"	P.Fox#,R.Stymeist
<b>Glossy Ibis:</b>			
5-30	Squantum	2-13(max.Apr.27)	R.Emery# & v.o.
5-30	Rowley	35-45	D.Alexander# & v.o.
6-30,16-30	P.I.,E.Bridgewater	4,42	v.o.,J.Komanisky
12-15,13	Marshfield,W.Concord	35-44,1	W.Petersen#,R.Forster#
22,29	Chatham,W.Harwich	9,3	R.Clem,B.Nikula
<b>Whistling Swan:</b>			
thr. 7	Westport(Acoaxet)	1(from Mar.)	M.Argue#
<b>Canada Goose:</b>			
6,27	P.I.	1500+,2000+	S.Grinley
<b>Brant:</b>			
1,2	Westport,Squantum	40,300	P.Regan#,E.Morrier
6-28,6	P.I.,Barnstable	17-50,500+	BBC(P.Parsons)& v.o.,W.Petersen
12,27	Duxbury Bay	1150,700+	W.Petersen#
20-27	Chatham,Ipswich	100,60	BBC(P.Aiken),BBC(J.Berry)
<b>Snow Goose:</b>			
4-13,5	Concord,Squantum	1,34	R.Forster & v.o.,D.Brown#
6-30	P.I.	80-150(max.Apr.18)	BBC(P.Parsons),R.Arnold & v.o.
<b>Snow Goose (Blue Morphs):</b>			
18,27	Salisbury,Marshfield	4,3	R.Arnold#,W.Petersen#
<b>Black Duck:</b>			
6	Newburyport	1000+	BBC(P.Parsons)
<b>Gadwall:</b>			
thr.,12-15	Ipswich,Marshfield	127,3-10	J.Berry & v.o.,D.Brown
15	Concord	60	J.Hinds
<b>Pintail:</b>			
14	W.Newbury	24	W.Petersen#
<b>Green-winged Teal:</b>			
13,15	P.I.,Marshfield	40,150	BBC(W.Drummond),D.Brown#
<b>Blue-winged Teal:</b>			
1;6	S.Dartmouth;P.I.,Concord	2;35,9	R.O'Hara;S.Grinley,E.Taylor
7,15	Wayland,Marshfield	4,35	P.Martin#,D.Brown#
<b>European Wigeon:</b>			
thr.	Orleans(Cedar Pond)	1	v.o.
<b>American Wigeon:</b>			
7,28	Concord(GMNWR),Harwich	20,2	SSBC(J.Kenneally),CCBC(D.Baines)
<b>Northern Shoveler:</b>			
thr.	P.I.,Concord(GMNWR)	2-15,1-3	v.o.
15,20	Marshfield,Falmouth	4,1	D.Brown#,R.Pease

Wood Duck:				
6,7	Rowley,Wayland	2,12	S.Swaebe#,R.Stymeist#	
12,13	Needham,Natick(Broadmoor)	2,12	J.Pickup,E.Taylor	
Ring-necked Duck:				
14,28	W.Newbury,Littleton	35,6	W.Petersen#,J.Baird	
Canvasback:				
6	Newburyport	1	S.Grinley	
Greater Scaup:				
6	Newburyport	1500	BBC(P.Parsons)	
Lesser Scaup:				
25	Squantum	1	W.Cornwell	
Common Goldeneye:				
6	Newburyport	80	BBC(P.Parsons)	
Barrow's Goldeneye:				
6-14	Newburyport	1-2	v.o.	
Bufflehead:				
20,28	Chatham,Littleton	200,2	CCBC(P.Aiken),J.Baird	
Oldsquaw:				
7	Newburyport	700+	W.Petersen,R.Forster	
Common Eider:				
1,27	Boston(off Long I.),Duxbury	1400,400	D.Brown,SSBC(W.Petersen)	
White-winged Scoter:				
20	Plymouth	7	SSBC(B.Smyth)	
Surf Scoter:				
20	Plymouth	2	SSBC(B.Smyth)	
Common Scoter:				
20	Plymouth	7	SSBC(B.Smyth)	
Ruddy Duck:				
thr.	P.I.	1-2	v.o.	
Hooded Merganser:				
7,12,20	Sherborn,Edgartown(M.V.),P.I.	3,4,5	E.Taylor,G.Ben David,W.Petersen#	
Common Merganser:				
28	Littleton	8	J.Baird	
Turkey Vulture:				
16,18	Randolph,Wellfleet	1,2	D.Brown,C.Goodrich#	
20,28	Littleton,Orleans	1,1	J.Baird,C.Goodrich#	
Swallow-tailed Kite:				
14 or 15	Braintree	1 picked up dead	M.C.Z.	
Goshawk:				
7,13	Eastham,Westport	singles	BBC(H&D Baines),R.O'Hara	
21	Topsfield(IRWS)	1	J.Berry	
Sharp-shinned Hawk:				
28,29	Boston Harbor(Moon I.),P.I.	3,5	D.Brown#,W.Petersen#	
Cooper's Hawk:				
7,11	Chatham,Weston	1,1	BBC(H&D Baines),L.Robinson	
15,18,19	P.I.,Wellfleet,Dover	1,1,1	S.Swaebe#,C.Goodrich#,F.Hamlen	
Red-shouldered Hawk:				
19,21	Westport,Millbury	1 ad.,1	W.Petersen#,H.Wiggin#	
27	Marshfield	1 imm.	W.Petersen	
Broad-winged Hawk:				
14,20	Foxboro,Westport	1,1	D.Brown,S.Perkins#	
21,29	Sandwich,Cambridge(Mt.A.)	1,1	R.Pease,M.Baird#	
Rough-legged Hawk:				
7	Chatham(North Beach)	1	C.Goodrich,B.Nikula	
Bald Eagle:				
16,20	Duxbury,Falmouth	1,1	Wesinger,J.Peterson	
Marsh Hawk:				
6,21	P.I.,Martha's Vineyard	6,8	R.Stymeist#,D.Brown	
Osprey:				
thr.	10 localities	singles	v.o.	
12,17	Vineyard Haven(M.V.),Westport	2,21	M.Hancock,G.Fernandez	
Peregrine Falcon:				
6,9	P.I.,Concord	1,1	Horns,V.Sprong	
21	Martha's Vineyard	1	D.Brown	
28	Wellfleet(WBWS)	1	W.Bailey	

Merlin:				
6,13,27,28	P.I.		singles	R.Stymeist#,W.Drummond#, S.Grinley,W.Petersen#
7,15	Westport,Marshfield		singles	H.Wiggin#,D.Brown
21,30	Martha's Vineyard,Orleans		singles	D.Brown,W.Bailey#
American Kestrel:				
21	Martha's Vineyard		10	D.Brown
Ruffed Grouse:				
7	Canton(F.M.),Wayland(GMNWR)		2,1	R.Veit,P.Martin#
12,20	Weston,Ipswich		1,1	L.Robinson,J.Berry
Bobwhite:				
thr.	S.Dennis		13	C&B Holdridge
King Rail:				
22	Milton(F.M.)		1	D.Brown
Clapper Rail:				
13,23-30	S.Dartmouth,W.Harwich		1,1	R.O'Hara,B.Nikula
Virginia Rail:				
6,7,11	P.I.,Canton(F.M.),Squantum	1,5,1(dead)		S.Grinley,R.Veit,E.Morrier
Sora:				
26;27	Lynnfield;Hanover,Ipswich		singles	P.Fox#;W.Petersen#,J.Berry#
Common Gallinule:				
6,13	P.I.,Falmouth		1,2	S.Grinley,R.Pease
27;28	Lynnfield,P.I.;Concord		1,1;1	M.Argue#,R.Stymeist#;D.Brown#
American Oystercatcher:				
7;20	Eastham,Wellfleet;Chatham		1,1;2	R.O'Hara,R.Lout;BBC(P.Aiken)
Piping Plover:				
6,7	Barnstable(S.N.),Dartmouth		2,2	W.Petersen,M.Argue#
20,21	Westport,Martha's Vineyard		8,4	R.Stymeist#,D.Brown
21	Plymouth Beach		2	A.Rios#
Killdeer:				
2	Concord(9 Acre Corner)		27	R.Forster
<u>Golden Plover:</u>				
7	Squantum	1(excellent details)		W.Cornwell
Black-bellied Plover:				
11,13	W.Dennis,Ayer		1,2	D&H Baines,F.Pickup#
19,28	Westport,Newburyport		4,1	W.Petersen#
Ruddy Turnstone:				
25	Hull		3	P.Fox
American Woodcock:				
thr.	Belmont,Topsfield		5-6,3-4	P.Butler#,J.Berry#
28,29	Long Island,Cambridge(Mt.A.)		1,1 (late migrants)	J.Clancy,R.Stymeist#
Common Snipe:				
7,11	Rowley,W.Roxbury		35,21	W.Petersen#,J.Pickup
14,15	W.Newbury-Rowley,Marshfield		125+,103	W.Petersen#,D.Brown#
<u>Whimbrel:</u>				
5,6	P.I.		1,2	D.Johnson,C&T Banes
Upland Sandpiper:				
18,19	P.I.,S.Dartmouth		5,1	R.Arnold#,P.Regan
25,28	Newburyport,W.Newbury		4,6	M.McClellan#,W.Petersen
Spotted Sandpiper:				
13	Tisbury(M.V.)		1	S.Whiting
Solitary Sandpiper:				
4&13,16	Bolton,S.Natick(Broadmoor)		1,1	R.Forster#,M.McClellan
19,27	S.Dartmouth,Dover		1,1	W.Petersen,F.Hamlen
Willet:				
14;27	Wollaston;Newburyport,Orleans		1;1,2	D.Brown#;R.Stymeist#,C.Goodrich#
28	Chatham		15	R.Pease,B.Nikula
Greater Yellowlegs:				
6	Barnstable(S.N.)		4	W.Petersen
6,28	Newburyport		10,150+	R.Stymeist#,W.Petersen#
29,30	Squantum,S.Wellfleet(WBWS)		88,150	W.Cornwell#,W.Bailey
Lesser Yellowlegs:				
7,12	Chatham(N.Beach),Marshfield		1,3	C.Goodrich#,W.Petersen
21,28	Rowley,Newburyport		3,4	J.Berry,R.Forster#
Purple Sandpiper:				
12,29	Scituate,Salisbury		160+,60	W.Petersen,S.Swaebe#



Pectoral Sandpiper:			
4,7	Concord, Hingham	2,4	R. Forster, C. Clark
6,14	Newburyport	15,32	R. Stymeist#, W. Petersen#
Least Sandpiper:			
21,28	Truro, Newburyport	4,40	C. Goodrich#, W. Petersen#
Dunlin:			
7,28	Dartmouth, Newburyport	135,200+	R. Emery#, W. Petersen#
Short-billed Dowitcher:			
11,28	W. Dennis, Newburyport	1,2	D&H Baines, W. Petersen#
Ruff:			
21,30	Truro, Wellfleet (WBWS)	1,1 (same?)	C. Goodrich#, W. Bailey
Sanderling:			
21	Martha's Vineyard	45	D. Brown
Red Phalarope:			
9,11	Sandwich, Brewster	7,2	R. Pease, L. Walsh
Northern Phalarope:			
11,21	Brewster, Gay Head (M.V.)	1,2	D&H Baines, D. Brown
Glaucous Gull:			
6	Gloucester	2	J. Berry
Iceland Gull:			
1,7,28	Long Island, P.I., Littleton	1,8,1	D. Brown, W. Petersen#, J. Baird
Ring-billed Gull:			
15	Marshfield	200	D. Brown
Black-headed Gull:			
12	Squantum	8 ad., 1 imm.	D. Brown
14 on	Newburyport	1 ad., 2 imm.	W. Petersen#
Laughing Gull:			
7,20,15	S. Dartmouth; Marshfield	3,25;1	P. Regan; D. Brown#
Bonaparte's Gull:			
15	Concord (GMNWR)	2	L. Robinson
Little Gull:			
1,6	off Long Island, Newburyport	1 imm., 1 ad.	D. Brown, R. Stymeist#
14,20,28	Newburyport	1 imm.	W. Petersen, R. Forster
Common Tern:			
30	Squantum	2	D. Brown, R. Emery
Caspian Tern:			
30	Orleans, off Squantum	1,1	W. Bailey#, D. Brown#
Black Guillemot:			
6	Rockport (A.P.)	1	J. Berry
Monk Parakeet:			
1-20,19-21	Haverhill, Waban	1,1	S. Stetson, E. Taylor & v.o.
Barn Owl:			
25;27	Boston (Long Island)	2 ad., 1 juv.;1	R. Veit; R. Veit#
Screech Owl:			
22	Wakefield	1	A. Gardner
Great Horned Owl:			
1-7,6	Westport, Needham	1 (on Osprey nest), 1	R. O'Hara & v.o., J. Pickup
16&21,17	Scituate, Norwell	2 yg. in nest, 1 pr.	M&B Litchfield
Snowy Owl:			
5-11	Squantum (Thompson's Island)	1	E. Morrier and v.o.
Barred Owl:			
9	Lincoln	1	P. Swift
Short-eared Owl:			
2&11,6	Squantum, Barnstable (S.N.)	2&1,1	E. Morrier, W. Petersen
Whip-poor-will:			
17,24	North Tisbury (M.V.)	1,1	R. Woodruff
23,25	Sandwich, Boston (Long Isl.)	1,1	R. Pease, R. Veit
27,30	Cambridge (Mt. A.), Lakeville	1 (dead), 2-3	B. Cassie, R. Turner#
Chimney Swift:			
28,29	Littleton, Lakeville	1,2	J. Baird, R. Turner
Ruby-throated Hummingbird:			
22,28	Squantum, P.I.	1,1	E. Morrier, W. Petersen
Belted Kingfisher:			
15	Marshfield	6	D. Brown#
Common Flicker:			
6-30	Cambridge (Mt. A.)	1-18 (max. Apr. 6)	R. Stymeist & v.o.

Fileated Woodpecker:			
2 on,2	Weston,Natick(Broadmoor)	1,2	fide D.Howard,E.Holden
13,22	Milton(F.M.),Lincoln	2,1	J.Clancy,C.Chapin
Red-headed Woodpecker:			
4,7 on	Woburn,Wayland(GMNWR)	1,1	P.Fox#,A.Scott & v.o.
14&15,14-17	Hanover,Oak Bluffs(M.V.)	1,2	B&M Litchfield,N.Culin
Yellow-bellied Sapsucker:			
3,6,8,13	P.I.	1,2,1,8	F.Parsons & v.o.
5-30	Cambridge(Mt.A.)	1-9(max.Apr.14)	L.Robinson & v.o.
Eastern Kingbird:			
30	Cambridge(Mt.A.)	1	S&J Harrison
30	Newton,W.Tisbury(M.V.)	1,1	J.Pickup,M.Hancock
Great-crested Flycatcher:			
29	Cambridge(Mt.A.)	1	BBC(D&A Banes)
Eastern Phoebe:			
thr.,6	Cambridge(Mt.A.),P.I.	1-8,7	R.Stymeist & v.o.,BBC(P.Parsons)
13	Milton(F.M.)	12	J.Clancy
Least Flycatcher:			
28	Cambridge(Mt.A.)	1	C.Marks
Tree Swallow:			
2,4	S.Natick,Sudbury Valley	12,20	E.Holden,R.Forster
6,7	P.I.,Concord(GMNWR)	1,100+	S.Grinley,E.Taylor & v.o.
20	S.Carver	500+	D.Briggs,C.Corwin
Bank Swallow:			
7,13	Harwich,Wayland	3,4	B.Nikula,W.Petersen#
Rough-winged Swallow:			
7,19	Harwich,Westport	2,2	B.Nikula,W.Petersen#
20,22,25	Ipswich,Middleboro,Milton	1,8,2+	J.Berry,D.Briggs,R.Veit
28	Hingham,Lynnfield	4,12(nesting)	C.Clark,R.Stymeist#
Barn Swallow:			
6,13	Harwich,Wayland	1,2	B.Nikula,W.Petersen#
17,20	Milton,S.Carver	2,1	R.Veit,D.Briggs
27,30	S.Natick,Cambridge(Mt.A.)	2,1	E.Taylor#,R.Stymeist#
Purple Martin:			
1;6	Middleboro;Eastham,P.I.	6;1,6	R.Maxim;C.Goodrich#,C&T Banes
14	E.Middleboro	12	K.Anderson
Fish Crow:			
thr.	Cambridge(Mt.A.)	1-5	R.Stymeist# & v.o.
15	Dover,Wellesley	2,1	F.Hamlen,W.Petersen
21,27	Menemsha(M.V.),Boston(Long I.)	1,1	D.Brown,R.Veit#
28	Peabody,Hanover	2,1-2	R.Stymeist,W.Petersen#
Boreal Chickadee:			
6,6-25	Cambridge,P.I.	1,1	A.Horn,v.o.
Red-breasted Nuthatch:			
2,11,14	Tewksbury,Wellesley,Needham	2,1,4	M.Wilson,L.Robinson,J.Pickup
27,30	Boxford,Boston(Pru.)	1,1(dead)	S.Grinley,H.Wiggin
Brown Creeper:			
5-30	Cambridge(Mt.A.)	1-5	R.Stymeist & v.o.
House Wren:			
4,21	Acton,Norwell	1,1-2	M.DeCamillis,M&B Litchfield
22,29	Needham,Belmont(H.F.)	1,10	J.Pickup,L.Robinson
Winter Wren:			
2,15,21,26,30	Cambridge(Mt.A.)	1-2	R.Stymeist & v.o.
4-30	Boxford(Crooked Pond)	1-3	W.Petersen & v.o.
18	Boston(Pru.)	1	H.Wiggin
25,27,28	P.I.	1-2	M.McClellan,R.Veit#,W.Petersen
Carolina Wren:			
14,20	Cambridge(Mt.A.),Westport	1,12	F.Foot#,R.Veit & R.Stymeist#
25,28	W.Newbury,Orleans	1,1	M.McClellan,CCFC(D.Baines)
Long-billed Marsh Wren:			
27;28	P.I.;Lynnfield;Harwich	4,4;1	R.Stymeist#,R.Veit#;CCFC(D.Baines)
Short-billed Marsh Wren:			
11	W.Harwich	1(well seen)	D&H Baines
Gray Catbird:			
16,20,30	Acoaxet,Chatham,Easton(Pru.)	1,1,1	R.O'Hara,P.Aiken#,H.Wiggin.
Brown Thrasher:			
15,16	Duxbury,Acoaxet	1,1	W.Petersen,R.O'Hara
19,22-30	Dartmouth,Cambridge(Mt.A.)	1,1-5	W.Petersen#,R.Stymeist# & v.o.

American Robin:			
thr.	Cambridge(Mt.A.)	40-250(Apr.6)	R.Stymeist & v.o.
2,14	Hingham,W.Newbury	200+,2000+	C.Clark,W.Petersen
15	Marshfield	450	D.Brown#
Wood Thrush:			
12,29,30	Needham,Middleboro,Millis	1,1,1	J.Pickup,R.Maxim,J.Marshfield
Hermit Thrush:			
7-30	Cambridge(Mt.A.)	1-12(Apr.23)	P.Butler & v.o.
11,14	S.Lincoln,Weston	1,10	M.McClellan,J.Pickup
22,30	Squantum,Boston(Pru.)	10,6	E.Morrier,H.Wiggin
Swainson's Thrush:			
28	Westwood	1	J.Clancy
Veery:			
23	Cambridge	2	S.Metzger
Eastern Bluebird:			
1,6	Middleboro,Plymouth	2,1	E.Korpinen,W.Petersen
7,8 on	W.Tisbury(M.V.),Boxford	1,2	S.Whiting,Curtis & v.o.
8	Lincoln	2	H.Wiggin
20	Winchester,Marshfield	2,2	BBC(R.Clayton),SSBC(B.Smyth)
Blue-gray Gnatcatcher:			
12,26;18	Milton,Orleans	1,8;8	R.Veit;C.Goodrich#
15	P.I.,Concord	1,1	S.Swaeb,BBC(J.Hinds)
15 on	Cambridge(Mt.A.)	1-5	R.Stymeist & v.o.
16 on	22 localities	39 individuals	v.o.
Late April	Manomet	20 in one day	B.Sorrie
Golden-crowned Kinglet:			
6-30	Cambridge(Mt.A.)	max.20(Apr.6)	D.Brown# & v.o.
Ruby-crowned Kinglet:			
6 on	Cambridge(Mt.A.)	1-52(max.Apr.22)	D.Brown,R.Stymeist & v.o.
7	Newton,P.I.	1,4	P.Martin,W.Petersen
27	Boxford(Crooked Pond)	35	S.Grinley
Water Pipit:			
13,15,27	Rowley,Marshfield,Ipswich	2,1,2	V.Albee#,D.Brown#,BBC(J.Berry)
Northern Shrike:			
3,11	W.Newbury,W.Roxbury	1,1	Dickson#,J.Pickup
Loggerhead Shrike:			
3-13,14	P.I.,W.Newbury	1-2,1	R.Emery# & v.o.,W.Petersen
15,16	Marshfield,Chatham(N.Beach)	1,1	D.Brown#,C.Goodrich#
White-eyed Vireo:			
18,27,30	Orleans	1,1,1	C.Goodrich# & v.o.
Solitary Vireo:			
14,22-30	Cambridge(Mt.A.)	1,1-6(Apr.23)	H.Wiggin#,R.Stymeist# & v.o.
14,23	Weston,Middleboro	5,1	J.Pickup,D.Briggs
27	Boxford(Crked.Pd.),S.Natick	6,2	S.Grinley,BBC(E.Taylor)
Warbling Vireo:			
29	Middleboro	1	R.Maxim
Black-and-white Warbler:			
21	Vineyard Haven(M.V.)	1	D.Brown
22-30	Cambridge(Mt.A.)	1-6(max.Apr.29)	R.Emery# & v.o.
24,25	Hanover,Milton(Blue Hills)	1,1	W.Petersen,R.Veit
26,28	Barnstable,Littleton	1,1	R.Pease,J.Baird
29	Belmont(H.F.)	4	L.Robinson
Prothonotary Warbler:			
3-21	Chatham (at feeder)	1	Coughlin & v.o.
Worm-eating Warbler:			
23-25	Cambridge(Mt.A.)	1	T.Lawrence#
Nashville Warbler:			
28-30	Cambridge(Mt.A.)	1-2	T.Leverich# & v.o.
Northern Parula:			
29-30	Cambridge(Mt.A.)	4-1	R.Stymeist# & v.o.
Yellow Warbler:			
23,27	Wellfleet(WBWS),Camb. (Mt.A.)	1,1	W.Bailey,fide V.Albee
30	Wellesley,Barnstable	2,1	E.Holden,R.Pease
Magnolia Warbler:			
25	Newburyport(cemetery)	1	P.Parsons
Black-throated Blue Warbler:			
28,29	P.I.	1,1	W.Petersen,S.Swaebe

<u>Yellow-rumped Warbler:</u>			
15	Newton, Concord (GMNWR)	5,3	J. Pickup, BBC (Hinds)
21-30	Cambridge (Mt. A.)	2-21 (max. Apr. 29)	E. Elrick# & v.o.
22, 25, 29	Needham, Millis, Belmont (H.F.)	5, 15, 20	J. Pickup, J. Marshall, L. Robinson
<u>Black-throated Green Warbler:</u>			
15, 25	Marshfield, Quincy	1, 1	B. Litchfield#, W. Cornwell
28	Boxford (Crooked Pond)	1	S&J Harrison
30	Cambridge (Mt. A.)	1	R. Stymeist
<u>Pine Warbler:</u>			
3, 6	W. Roxbury, Norwell	1, 1	J. Pickup, B. Litchfield
6-18	Needham (Cutler Park)	1-2	J. Pickup
15, 18	Plymouth, Cambridge (Mt. A.)	2, 1	D. Brown, R. Stymeist#
20, 25, 30	P. I., Manchester, Groton	2, 2, 1	S. Swaebe#, P. Parsons, N. Powell
<u>Prairie Warbler:</u>			
13, 29	Westport, Middleboro	1, 1	R. O' Hara, R. Maxim
<u>Palm Warbler:</u>			
7	Wayland (GMNWR), W. Roxbury	1, 1	R. Stymeist, W. Petersen
7, 8	W. Gloucester, Norwell	3, 2	P. Alden, B&M Litchfield
11, 12	Wellesley, Milton	1, 12	J. Lyon, R. Veit
17-30, 20	Cambridge (Mt. A.), P. I.	1-8 (Apr. 23), 12	R. Stymeist# & v.o., S. Swaebe#
<u>Northern Waterthrush:</u>			
13, 18	Natick (Broadmoor), Orleans	1, 1	L. Robinson#, C. Goodrich#
<u>Louisiana Waterthrush:</u>			
7&17, 15	Cambridge (Mt. A.), Dover	2&1, 2	R. Stymeist# & v.o., F. Hamlen
20 on, 28	Boxford (Crooked Pond), Westwood	1-4, 2	S. Swaebe# & v.o., J. Clancy
<u>Common Yellowthroat:</u>			
11&12, 30	Mancmet (M.B.O.), Middleboro	1, 1	M.B.O. Staff, R. Maxim
<u>Yellow-breasted Chat:</u>			
5&6, 18	Cambridge (Mt. A.), Milton	1, 1	L. Robinson & R. Stymeist, D. Brown
<u>Hooded Warbler:</u>			
27	Wellfleet (WBWS)	1	P. Bailey# & v.o.
<u>Eastern Meadowlark:</u>			
22	Canton (F.M.)	20	D. Brown
<u>Western Meadowlark:</u>			
22	Milton (F.M.)	1 seen & heard	D. Brown
<u>Redwinged Blackbird:</u>			
2	Concord (9 Acre Corner)	3000+	R. Forster
23	Concord (GMNWR)	400+	R. Stymeist#
<u>Northern Oriole:</u>			
28, 30	Middleboro, W. Tisbury (M.V.)	1, 1	L. Pratt, M. Hancock
<u>Rusty Blackbird:</u>			
7, 28	Wayland (GMNWR), Peabody	18, 2	P. Martin#, R. Stymeist
<u>Common Grackle:</u>			
2	Concord (9 Acre Corner)	7000+	R. Forster
<u>Brown-headed Cowbird:</u>			
20 on	Beverly	75	G. Soucy
<u>Scarlet Tanager:</u>			
21	Rowley	1	L. Holman
<u>Summer Tanager:</u>			
10-30	Eastham	1	Matheson & v.o.
<u>Black-headed Grosbeak:</u>			
5&6	Lexington	1 (photographed)	J. Wallace
<u>Indigo Bunting:</u>			
11-21, 15	Chatham, Vineyard Haven (M.V.)	1, 1	V. Saunders, R. Noble
29	Middleboro	1	C. Corwin
<u>Dickcissel:</u>			
8	Lexington	1	W. Hoest
<u>Evening Grosbeak:</u>			
6-30, 27	Cambridge (Mt. A.), Boxford	5-22, 20	R. Stymeist#, S. Grinley
<u>Purple Finch:</u>			
thr., 27	Cambridge (Mt. A.), P. I.	4-10 (Apr. 22), 12	R. Stymeist# & v.o., S. Grinley
<u>House Finch:</u>			
thr.	Cambridge (Harvard Sq.)	1 pr. nesting	T. Leverich
4-30, 10 on	Cambridge (Mt. A.), Beverly	1-8 (Apr. 30), 10	R. Stymeist#, G. Soucy
25, 28, 30	Quincy, Orleans, Falmouth	4, 3, 8	W. Cornwell, CCBC (Baines), A. Clarke
<u>Pine Grosbeak:</u>			
18	W. Roxbury	2 at feeder	J. Pickup

Hoary Redpoll:			
1	Beverly, Vineyard Haven (M.V.)	1,1	G. Soucy, M. Hancock
6,7	Rockport, Annisquam	1,2	J. Berry, L. Duca
Common Redpoll:			
1-20,9	Beverly, Littleton	100-150,50	G. Soucy, V. Sprong
16	Canton, Vineyard Haven (M.V.)	4,2	D. Brown, M. Hancock
Pine Siskin:			
7-30,26	Cambridge (Mt. A.), Sharon	1-8,20	R. Stymeist# & v.o., J. Pickup
27	Boxford (Crooked Pond)	24	S. Grinley
Red Crossbill:			
20	Ipswich, P.I.	13+,3	J. Berry, W. Petersen#
25	Boston (Long Island)	3	R. Veit
30	W. Tisbury (M.V.)	2	M. Hancock
White-winged Crossbill:			
thr.,7	Beverly, Annisquam	12-16,24	G. Soucy, L. Duca
13,20	Sherborn, Plymouth	6,5	E. Taylor#, SSEC (B. Smyth)
Rufous-sided Towhee:			
11,12,20	Concord, Scituate, Westport	2,2,14	S. Raabe#, W. Petersen, R. Stymeist#
21-30	Cambridge (Mt. A.)	1-8 (Apr. 29)	R. Stymeist# & v.o.
Savannah Sparrow:			
13	Truro (Corn Hill)	150+	R. Veit, S. Perkins, F. Hamlen
Seaside Sparrow:			
26	Eastham (F.H.)	6	B. Nikula
Vesper Sparrow:			
13,18	P.I., Cambridge (Mt. A.)	3,2	BBC (W. Drummond), fide R. Stymeist
15	Marshfield, Wayland	1,1	D. Brown#, L. Robinson
20	Westport, Littleton	1,1	T. Leverich, R. Baird
27,30	Duxbury, Barnstable	1,1	W. Petersen#, R. Pease
Dark-eyed Junco:			
thr.	Cambridge (Mt. A.)	15-250+ (Apr. 18)	R. Stymeist & v.o.
		(including 1 Oregon type)	
13	P.I.	100	BBC (W. Drummond)
Tree Sparrow:			
13	P.I., Truro	40,220	BBC (W. Drummond), R. Veit#
30	Hingham, Sandwich	6,1	G. Wilson, R. Pease
Chipping Sparrow:			
6,15-30	Cambridge (Mt. A.)	1,1-14 (Apr. 26)	R. Stymeist# & v.o.
13;18	S. Natick; Milton, Hanover	2;1,1	E. Taylor; D. Brown, W. Petersen
19,28	Dartmouth, Littleton	2,8	W. Petersen, J. Baird
Field Sparrow:			
thr.;1-15	Cambridge (Mt. A.), Beverly	1-8 (Apr. 6),4	R. Stymeist# & v.o., G. Soucy
White-crowned Sparrow:			
18;19,29	Needham; Middleboro	1;1,1	J. Pickup; C. Corwin, D. Briggs
White-throated Sparrow:			
thr.	Cambridge (Mt. A.)	4-65 (Apr. 22)	R. Stymeist# & v.o.
22,30;29	Boston (Pru.); W. Roxbury	50,31 (6 dead);40	M&A Argue, H. Wiggin; J. Pickup
Fox Sparrow:			
1-21 (late)	Cambridge (Mt. A.)	1-7 (Apr. 14)	R. Stymeist# & v.o.
6,8	P.I., Jamaica Plain (A.A.)	24,15	S. Grinley, J. Pickup
14	Squantum	11	E. Morrier
<u>Lincoln's Sparrow:</u>			
25,30	Squantum, Middleboro	1,1 (both early)	D. Brown, D. Briggs
Song Sparrow:			
13	P.I.	150	BBC (W. Drummond)
Lapland Longspur:			
6	Barnstable (S.N.)	1	W. Petersen

Corrigenda

Volume 1, Number 5: Summary for August, 1973

Lesser Black-backed Gull:

16-17	Nauset (Coast Guard Beach)	1 (sub-adult)	W. Petersen, C. Goodrich & v.o.
		<u>should be</u>	
17	Nauset (Coast Guard Beach)	1 (sub-adult)	W. Petersen, C. Goodrich & v.o.

Volume 1, Number 6: Summary for September, 1973

Black-browed Albatross:

15	Nantucket Sound	1	R. Veit
		<u>should be</u>	
16	Nantucket Sound	1	R. Veit

Volume 2, Number 1: Summary for November, 1973

Forster's Tern:

4,8	Eastham (F.H.), Dennis	3,1	R. Forster, P. Donahue
		<u>should be</u>	
7,8	Eastham (F.H.), Dennis	3,1	R. Forster, P. Donahue
Thick-billed Murre:			
4,24	Eastham, P.I.	2,1	R. Forster, BBC (S. Garrett)
		<u>should be</u>	
7,24	Eastham, P.I.	2,1	R. Forster, BBC (S. Garrett)

Water Pipit:

3,4,8	P.I., Eastham (F.H.), Truro	12,4,8	BBC (V. Albee), R. Forster, P. Donahue
		<u>should be</u>	
3,7,8	P.I., Eastham (F.H.), Truro	12,4,8	BBC (V. Albee), R. Forster, P. Donahue

Brewer's Blackbird:

4	Truro (Corn Hill)	1	C. Goodrich, B. Nikula, V. Laux
		<u>should be</u>	

Brewer's Blackbird:

7	Truro (Corn Hill)	1	R. Forster, C. Goodrich, B. Nikula, V. Laux
---	-------------------	---	---------------------------------------------

Summary for December, 1973

Northern Skua:

28	Rockport	1	C. Leahy
		<u>should be</u>	
21	Rockport	1	C. Leahy
Great-crested Flycatcher:			
29	Marion	1 (excellent details)	K. Anderson, T.L. Evans# CBC
		<u>should be</u>	
15	Marion	1 (excellent details)	K. Anderson, T.L. Evans# CBC

-----  
Abbreviations

ad.	adult	SSBC	South Shore Bird Club
b.	banded	GMNWR	Great Meadows National Wildlife Refuge
f.	female	IRWS	Ipswich River Wildlife Sanctuary
imm.	immature	MBO	Manomet Bird Observatory
m.	male	WBWS	Wellfleet Bay Wildlife Sanctuary
max.	maximum	A.A.	Arnold Arboretum
thr.	throughout	A.P.	Andrews Point
unc.	uncommon	E.P.	Eastern Point
v.o.	various observers	F.H.	Fort Hill, Eastham
yg.	young	F.M.	Fowl Meadow, Milton
#	additional observers	M.C.Z.	Museum of Comparative Zoology
CBC	Christmas Bird Count	Mt. A.	Mt. Auburn Cemetery
BBC	Brookline Bird Club	M.V.	Martha's Vineyard
CCBC	Cape Cod Bird Club	P.I.	Plum Island
PBC	Paskamansett Bird Club	Pru.	Prudential Center, Boston
		S.N.	Sandy Neck, Barnstable

## Bird Bonanzas Tours

are ornithological tours — not "nature" or "natural history" tours. They are designed not by travel agents, or even by "birders," but by ornithologists with extensive experience in the areas of the tours.

All leaders of our coming spring tours have done advanced study, writing and teaching in the field of ornithology, and, in addition, have lived for extended periods of time in the areas of their tours.

For example, Dr. C. Hilary Fry of the Department of Zoology, University of Aberdeen, who will lead our WEST AFRICA tour has lived in Nigeria seven years. He inaugurated the Nigerian Ornithologists Society and edited its bulletin. His research has taken him to East, South and Central Africa, and he has participated in trans-African expeditions mapping out areas for faunal reserves. He has published numerous articles in the Ibis and other publications.

In designing our West African tour, he didn't think only of tourist attractions, but primarily of faunal and vegetation zones and an itinerary most productive for the visiting ornithologist.

West Africa has much to offer the ornithologist — a diverse fauna and geography and forest zones vastly more extensive than those in East Africa.

During our visit, March 24 - April 13, there will be much courtship activity and native and Palearctic migration will be

in full swing. We will visit exotic areas, such as the great Congo, Volta and Niger Rivers,

Lake Chad and Timbuktu. If you are not the typical tourist who merely wants

a few photos of elephants (though you'll see as many mammals as

anywhere in Africa) think about joining us in

West Africa for a real ornithological adventure.



YELLOW-HEADED  
ROCKFOWL  
*Picathartes gymnocephalus*  
WEST AFRICA

Other **BIRD BONANZAS** tours this spring to Central America, Northern India and Nepal, and Ethiopia will be led by equally qualified ornithologists. For additional information send the following coupon.

---

### BIRD BONANZAS, INC.

12550 Biscayne Boulevard, Suite 501  
North Miami, Florida 33161

Please send additional information about

- |                                                            |                                                              |
|------------------------------------------------------------|--------------------------------------------------------------|
| <input type="checkbox"/> Panama, January 11-26             | <input type="checkbox"/> India & Nepal, February 9 - March 8 |
| <input type="checkbox"/> Ethiopia, January 18 - February 8 | <input type="checkbox"/> West Africa, March 24 - April 13    |
| <input type="checkbox"/> Belize, Guatemala, February 9-23  | <input type="checkbox"/> Costa Rica, April 12-27             |
| <input type="checkbox"/> Entire 1975 tour program          |                                                              |

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_


CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

BIRD OBSERVER

P.O. Box 507  
Newton Center  
Massachusetts 02159

DATED MATERIAL INSIDE

THIRD CLASS MAIL



**OUR SPECIAL BIRD SEED MIX**

**TREAT**

**ECONOMY BIRD SEED**

**SUETS**

**MILLET**

**DOG & CAT FOOD**

**PEANUT HEARTS**

**BLUE SEAL**

**HORSE FEEDS**

**Old Newbury Aviary**

**COMPLETE LINE OF WILD AND DOMESTIC BIRD SEED**

**SUNFLOWER HEARTS**  
\$20. per hundred

**BIRD BATHS**

**BIRD HOUSES**

**WOODEN AND PLASTIC FEEDERS**

Route 1 -- P.O. Box 404  
Newbury, Mass. 01950  
Phone 465-3176  
OPEN 7 DAYS A WEEK