

BIRD OBSERVER

OF EASTERN MASSACHUSETTS



OCTOBER 1984

VOL. 12 NO. 5



BIRD OBSERVER

OF EASTERN MASSACHUSETTS

OCTOBER 1984
VOL. 12 NO. 5

President

Robert H. Stymeist

Treasurer

Theodore H. Atkinson

Editor

Dorothy R. Arvidson

Production Manager

Janet L. Heywood

Subscription Manager

David E. Lange

Records Committee

Ruth P. Emery, Statistician

Richard A. Forster, Consultant

George W. Gove

Robert H. Stymeist

Lee E. Taylor

Editorial Board

H. Christian Floyd

Harriet Hoffman

Wayne R. Petersen

Leif J. Robinson

Bruce A. Sorrie

Martha Vaughan

Soheil Zenden

Production

James Bird

Denise Braunhardt

Herman H. D'Entremont

Barbara Phillips

Shirley Young

Field Studies Committee

John W. Andrews, Chairman

Bird Observer of Eastern Massachusetts (USPS 369-850)

A bimonthly publication

Volume 12, No. 5 September-October 1984

\$8.50 per calendar year, January - December

Articles, photographs, letters-to-the-editor and short field notes are welcomed. All material submitted will be reviewed by the editorial board.

Correspondence should be sent to:

Bird Observer

▷ 462 Trapelo Road

Belmont, MA 02178

POSTMASTER: Send address changes to:

All field records for any given month should be sent promptly and not later than the eighth of the following month to Ruth Emery, 225 Belmont Street, Wollaston, MA 02170.

Second class postage is paid at Boston, MA.

ALL RIGHTS RESERVED.

Subscription to BIRD OBSERVER is based on a calendar year, from January to December, at \$8.50 per year. Back issues are available at \$7.50 per year or \$1.50 per issue.

Advertising space is available on the following schedule: full page, \$50.00; half page, \$25.00; quarter page, \$12.50. Subscribers only may advertise one-of-a-kind birding items free of charge on a space available basis. All advertising copy is subject to approval by the staff.

Bird Observer of Eastern Massachusetts has been declared a non-profit tax-exempt organization by the Internal Revenue Service. Any gifts to Bird Observer will be greatly appreciated and will be tax deductible to the full extent of the law.

TABLE OF CONTENTS

SOME NOTES ON SPRUCE GROUSE (<u>Dendragapus canadensis</u>)	Michael R. Greenwald	249
A FUDDLE OF FALCONS	Nancy Clayton	267
OBSERVATION OF A LONG-BILLED CURLEW IN MASSACHUSETTS	Blair Nikula and Henning Stabins	273
BIRDING AT A SOLAR ECLIPSE	Leif J. Robinson	277
FIELD RECORDS: JUNE 1984		280
FIELD RECORDS: JULY 1984		289
AT-A-GLANCE AUGUST 1984: ANSWER		297
AT-A-GLANCE		299

RENEWAL NOTICE

You will be receiving your 1985 BIRD OBSERVER renewal notice in the mail soon. We would greatly appreciate your prompt response.

Bird Observer Winter Courses

BIRD OBSERVER is proud to present a series of courses to be given by Wayne R. Petersen in January through April 1985. Some of these are new adventures, and all are designed to offer our readers ways to broaden their interests and to perfect their birding knowledge and skills.

BIRD BIOLOGY: a four-session evening seminar series in January-February

A WORKSHOP ON MASSACHUSETTS GULLS: an evening seminar and an all-day field trip in March

FUNDAMENTALS OF BIRDING: a four-session evening seminar series in March-April followed by an all-day weekend field trip in April

The exact times, dates, locations, and costs are now being worked out; a descriptive brochure with registration information will be sent to subscribers. Your suggestions would be very helpful. If you have comments or questions, please call Martha Vaughan, BOEM Program Coordinator, at 244-0166.



AUDUBON PRINTS

Originals from . . .
Birds of America
Quadrupeds of North America
Fine Reproductions

Havell, Bien, Bowen Editions

also Catesby, Wilson & Gould Prints

Ed Kenney, Proprietor
9720 Spring Ridge Lane, Vienna, Virginia 22180

Catalog—\$2 • (202) 484-3334

Smaller! Lighter! Brighter!

NEW NIKON ROOF PRISM BINOCULARS



Who would have thought binoculars this light and compact could be so bright and sharp, even on cloudy days or in fading light! It's the unique Nikon combination of ingenious design, superlative coated optics and rugged precision construction that makes it possible. Choose the all-purpose 7x26 or extra powerful 9x30, from the maker of the famous Nikon camera system. See the difference Nikon quality makes.

For literature and discount prices covering a complete line of sporting optics and accessories, write to the "Optics Headquarters for the Outdoorsman."

BIRDING

P.O. BOX 580
AMSTERDAM, N.Y.
12010

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION			
1. TITLE OF PUBLICATION		2. PUBLICATION DATE	
Bird Observer of Eastern Massachusetts		10/1/84	
3. FREQUENCY OF ISSUE		4. ANNUAL SUBSCRIPTION PRICE	
Bimonthly publication		\$6.50	
5. COMPLETE MAILING ADDRESS OF OWNER OFFICE OF PUBLICATION (Street, City, County, State and ZIP Code) (Not printer)			
462 Trapelo Road, Belmont, Middlesex, Massachusetts 02178			
6. COMPLETE MAILING ADDRESS OF THE HEADQUARTERS OR GENERAL BUSINESS OFFICES OF THE PUBLISHERS (Not printer)			
None			
7. FULL NAME AND COMPLETE MAILING ADDRESS OF PUBLISHER, EDITOR AND MANAGING EDITOR (This item must not be blank)			
PUBLISHER (Name and Complete Mailing Address): Bird Observer of Eastern Massachusetts Inc., Belmont, MA 02178			
EDITOR (Name and Complete Mailing Address): Dorothy R. Arvidson, 1 School Street, Arlington, MA 02174			
MANAGING EDITOR (Name and Complete Mailing Address): Robert H. Stymiel, 98 Boylston Street, Watertown, MA 02172			
8. OWNER (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the name and address of the individual owner must be given. If the publication is published by a partnership or other unincorporated firm, its name and address, as well as that of each individual must be given. If the publication is published by a corporation, its name and address must be stated. (This must be completed)			
None			
9. FULL NAME AND COMPLETE MAILING ADDRESS			
Bird Observer of Eastern Mass., 462 Trapelo Road, Belmont, MA 02178			
10. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
11. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
12. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
13. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
14. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
15. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
16. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
17. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
18. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
19. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
20. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
21. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
22. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
23. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
24. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
25. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
26. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
27. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
28. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
29. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
30. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
31. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
32. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
33. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
34. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
35. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
36. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
37. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
38. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
39. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
40. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
41. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
42. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
43. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
44. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
45. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
46. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
47. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
48. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
49. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
50. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
51. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
52. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
53. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
54. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
55. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
56. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
57. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
58. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
59. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
60. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
61. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
62. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
63. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
64. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
65. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
66. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
67. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
68. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
69. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
70. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
71. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
72. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
73. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
74. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
75. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
76. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
77. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
78. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
79. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
80. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
81. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
82. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
83. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
84. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
85. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
86. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
87. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
88. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
89. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
90. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
91. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
92. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
93. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
94. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
95. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
96. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
97. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
98. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
99. FULL NAME AND COMPLETE MAILING ADDRESS			
None			
100. FULL NAME AND COMPLETE MAILING ADDRESS			
None			



Bird Books

Annotated catalogues are issued 3 times a year (send \$2.00 for first year subscription). Wide selection of books on birds, out-of-print, rare and new-scholarly and fine color plate, regional and foreign field guides. Also books of interest to the naturalist on the flora and fauna of this country and foreign lands, biographies and travels of naturalists. Libraries and single copies purchased.

Appraisals.



Patricia Ledlie - bookseller

Box 46D, Buckfield, ME 04220 U.S.A.
207-336-2969

SOME NOTES ON SPRUCE GROUSE

(Dendragapus canadensis)

by Michael R. Greenwald, West Roxbury

One of the most frequently sought and least frequently found of New England's avifauna is the Spruce Grouse. All too often, when a bird is found, it is identified on the premises that a grouse that does not flee or a grouse observed in Maine, northern New Hampshire, northern New York, or extreme northern Vermont is a Spruce Grouse. Unfortunately, both premises are incorrect. A female Ruffed Grouse (Bonasa umbellus) will frequently stand her ground, display, and even charge at an unwelcome human intruder if chicks are anywhere in the vicinity. Furthermore, in all of the Spruce Grouse's New England range, the Ruffed Grouse is the more common grouse. This article is an attempt to provide some clues to the identification of the Spruce Grouse (especially the female), some hints on how to find this elusive bird in the White Mountains of New Hampshire, and some miscellaneous notes and observations.

There are five recognized subspecies of the Spruce Grouse (formerly Canachites canadensis): the nominate Hudsonian Spruce Grouse (Dendragapus c. canadensis), "Franklin's" grouse (D. c. franklinii), Valdez Spruce Grouse (D. c. atratus), Canada Spruce Grouse (D. c. canace), and Alaskan Spruce Grouse (D. c. osgoodi). (See The A.O.U. Checklist of North American Birds, Fifth Edition, 1957.) Since it is only the Canada Spruce Grouse that occurs in New Brunswick, Nova Scotia, southern Ontario, southern Quebec, New England, New York, and the north-central states, this discussion is confined to that subspecies except when, for lack of information, studies of the other subspecies must be used. For purposes of comparison in identification, only the Ruffed Grouse will be discussed, since it is the only other grouse occurring within the Spruce Grouse's range in the southern Canadian Maritimes, New York, and New England.

Identification. The adult male Spruce Grouse looks like no other bird that one is likely to encounter in New England. At first glance, the bird is chicken-like with gray upperparts, black breast, and black and white underparts. Closer inspection reveals that the color of the upperparts and wings is gray barred with black. The throat and breast are black, and on the sides of the breast and flanks, white barring appears and becomes increasingly heavier away from the center of the breast toward the tail, so that the undertail coverts appear white at first glance. Closer examination, however, shows them to be black with white tips. The tail itself is black with a terminal band that has been variously

described as chestnut (National Geographic Society's 1983 field guide, hereafter NGS, Robbins 1983, and Peterson 1980), as orange (Robinson in The Audubon Society Master Guide to Birding, 1983, hereafter MGB) as brownish (Johnsgard, 1973), or as tan (Ellison, 1968a). Also prominent over each eye is a scarlet-red comb, which varies in size from bird to bird.

The female, looking superficially like a Ruffed Grouse, presents a more difficult identification problem. While the base color of the female Spruce Grouse may be either red-brown or gray-brown, the red-brown birds predominate in New England. Pough (1951) notes that the browner (i.e., redder) birds predominate in the south, but we must remember that New England is the southern part of this bird's range. The base color is barred with black and buff, and as with the male, there are an increasing number of white-tipped feathers toward the tail. The tail of the bird is short and black and, in the Canada Spruce Grouse, has a terminal band that may be described as buff (MGB) or brown. (To my eye, it appears chestnut or cinnamon.) In New England, this fieldmark may be considered diagnostic. If it is not seen, assume that you are looking at a Ruffed Grouse.

Immatures look like the red-phase female (NGS) until they are between five and six weeks old. Ellison (1968a) says that at this age the postjuvinal breast feathers appear, and the chicks can be sexed by plumage. The male's postjuvinal breast feathers are black tipped with white while those of the female are tipped with white or buff and have one to three buffy bars on a black background. Pough indicates that by late August or early September, the young look virtually like the adults.

As with the female Spruce Grouse, the Ruffed Grouse is found in both red and gray phases, the red phase predominating in the southern part of the bird's range. But unlike the Spruce Grouse, northern New England is closer to the northern part of this bird's range. Thus many of our Ruffed Grouse are gray-phase birds. Since the color-phase is most noticeable in the tail, the tails of many of our Ruffed Grouse are dark, nearly black. This often makes the dark subterminal band of the Ruffed Grouse's tail unnoticeable, especially if the bird's tail is folded. Hence, observation of a dark-tailed bird does not in itself mean that the bird is a Spruce Grouse. If there is no chestnut terminal band, the bird is certainly a Ruffed Grouse.

Field guides usually emphasize the crest and ruff of the Ruffed Grouse. In the field, however, these are not always apparent. This is especially true of the female and of flying birds of either sex. Note also that, like the Spruce Grouse, male Ruffed Grouse often have small orange-red combs over the eyes. The presence of these combs is in no way

diagnostic for either species. The only field guides that show these on the Ruffed Grouse, however, are NGS, Robbins, and Pough. Again, throughout New England, if one does not see those field-marks that are characteristic of the Spruce Grouse, the bird is probably a Ruffed Grouse.

Habitat. Johnsgard (1973) presents an excellent summary of the variety of trees that numerous observers have shown support Spruce Grouse. Robinson and Maxwell (1968), studying birds in northern Michigan, showed that there is a propensity toward mixed forests of Jack Pine (Pinus banksiana) and spruces. In a later study Robinson (1969, page 113) found that "the birds chose areas of nearly pure conifers in which spruces (Picea mariana and P. glauca) were mixed with Jack Pines, the tree growth was sparser than on the area as a whole, and blueberries (Vaccinium angustifolium and V. myrtilloides) prevailed among the low vegetation." The findings of Lumsden (1961) and Lumsden and Weeden (1963) were identical. Ellison (1968b), studying populations in Alaska, found that two communities were favored: one of White Spruce (Picea glauca) and birches with grasses, spiraea, blueberry (V. uliginosum, known as Bog Bilberry in New England), and cranberry; and the other of Black Spruce (Picea mariana) with blueberry, cranberry, and lichen. Ellison also noted that Spruce Grouse were found in low stands of Black Spruce at the edges of bogs. MacDonald (1968), in a study of "Franklin's" Grouse in Alberta, found that the habitat consisted of Lodgepole Pine (Pinus contorta) interspersed with poplars. Brewster (1925), Forbush (1925-1929), and Fritz (1979), studying lowland populations in New England and New York, mention cedars and Larch (Larix laricina). Most observers mention the presence of Balsam Fir (Abies balsamea).

In evaluating such studies, one must be careful literally not to miss the forest for the trees. The proper conclusion seems to have been drawn by Robinson in MGB (1:272): Spruce Grouse require "large tracts of conifers, especially where living branches reach the ground and where there are numerous forest openings" (underlining mine). In his earlier study (1969), Robinson found that Spruce Grouse tended to shun mature stands of spruce and Jack Pine because the canopy was too closed and the lower branches too high. It is evident in the White Mountains, however, and is implied in Robinson's statement in MGB, that the maturity of the trees is not the issue, the height of the lower branches is. For the White Mountain populations, I would add that those areas inhabited by Spruce Grouse are usually quite flat. The factor that one must note is that these birds are dependent on the type of forest not on the species of trees. Precisely which species of trees make up the boreal forest changes as one moves from east to west across the continent. In the White Mountains, the forests in which Spruce Grouse occur are 90-95 percent Balsam Fir, the remainder of the trees being

Black Spruce, Heart-leaved Paper Birch (Betula papyrifera, var. cordifolia), Mountain-Ash (Sorbus sp.), with a very small number of Red Spruce (Picea rubens). In New England, such forests are found by going to the far north or, as in the case of the White Mountains, by going up. The effect of these habitat requirements is that in the White Mountains Spruce Grouse do not compete for habitat with Ruffed Grouse, which occur where the conifers are taller, in mixed and in hardwood forests. Robinson (1969) found the same to be true in his studies on the Yellow Dog Plains, and where there was a habitat overlap, it occurred in the winter when the Ruffed Grouse would encroach into Spruce Grouse territory. This means that if a Spruce Grouse is observed in habitat radically different from that described above, careful observation and notes should be made.

Voice. Although this bird is usually silent when encountered, there are, nevertheless, a number of different vocalizations used in different situations. The male has two challenge-calls. The first is a growling note usually described as "krrk, krrrk" (Robinson) or "kwerr, kwerr" (Johnsgard). Robinson, in MGB, calls this the lowest pitched sound of any North American bird. This may be a misprint, however, as this description is usually given not to the male's challenge-call but to his mating "hoot." [See page 2 of the insert in Peterson's recording, 1962 and 1975, A Field Guide to Western Bird Songs.] This latter note is very seldom heard, and its existence has even been disputed. Apparently the note is only uttered just before the male mounts the female for copulation and then only rarely. Its frequency is about 85-95 hertz, just within the low range of human hearing.

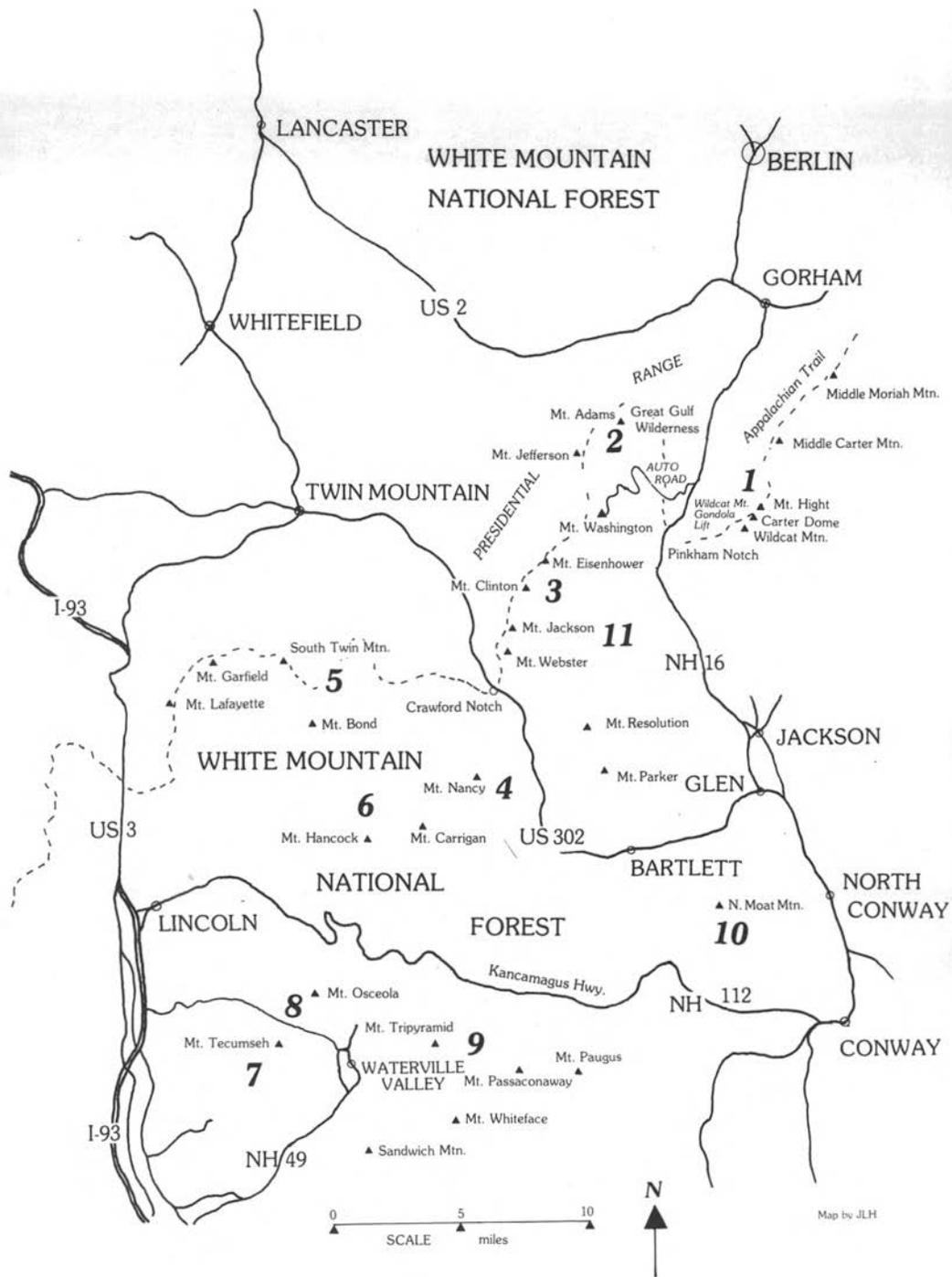
The female also has several calls. One, believed to be territorial, is described by Robinson as a "chicken-like prrp, prrrp, prrp, prrp, prrp, prrp, prp, prp, prp." MacDonald (1968) noted that this call always stimulated display behavior in the male. This call can be quite loud and to my ear has a trumpet-like quality. Johnsgard, in addition, describes a squeal or whine, a "pitting" note (which I think almost resembles the cluck of a chicken), and a guttural "kwerrr."

Displays. There are two different occasions for display behavior in the Spruce Grouse: aggression and courtship. While it is beyond the scope of this article to discuss either in detail, a few words might still be in order. Readers interested in further information are referred to either Lumsden (1961) or Johnsgard (1973). Johnsgard writes of an instance in which two males came into contact: the resident territorial male sleeked down his plumage, raised his tail, flashed his lateral rectrices and upper tail coverts, and uttered his challenge notes. The territorial male then lowered his head, stretched out his neck, lowered his tail, held his wings slightly away from his flanks, and charged

the intruder. Robert Stymeist reported similar behavior directed towards him while he was hiking on Mt. Jackson in the White Mountains on Labor Day Weekend, 1982 (personal comment).

Courtship displays, which usually take place in an opening in the forest, are far more complicated. The male fluffs out the feathers of the breast and throat, inflates the combs over his eyes, droops his wings slightly, and raises his tail which appears to move from side to side. This latter movement is effected by retracting the lateral rectrices on alternate sides while the central rectrices remain more or less stationary. Other gestures include symmetrical tail-fanning, tail-flicking, a head-bobbing in which the head is turned from side to side so that both combs are presented to the female, a wing-flicking, a neck-jerking, and a head-on rush. It is during this latter gesture that the deep hoot of the male is uttered. In addition to these displays that are performed on the ground, there are aerial displays in which the male flies up and down into and from a nearby conifer ("flutter-jump"). In Franklin's race, this latter maneuver is often accompanied by a double wing-clap.

In April 1982, Jane E. Herrman of the Franklin Institute of Philadelphia and I observed Spruce Grouse mating behavior on Mt. Clinton (elevation 3800'). Mizpah Hut, in which we took shelter, is usually closed at this time of year, but was open due to a construction project in progress. The snow depth was three to twelve feet. Under such conditions, snowshoes with instep crampons are absolutely essential and the carrying of full crampons and an ice axe is strongly advised. On April 26, at 5:15 A.M. (EDT), approximately thirty minutes before sunrise, from a line of Balsam Fir mixed with some American Mountain-Ash that separates two clearings to the east of the hut, we heard a trumpeting sound. We did not see the bird that made the sound but thought it to have been the territorial call of a female Spruce Grouse. At 5:22 A.M., a female Spruce Grouse was sighted in these same firs. The bird came to the edge of the clearing and flew low over the ground across it. At 5:25 A.M., a male Spruce Grouse emerged from the same line of firs and began to run across the clearing. His tail was spread and raised seventy to eighty degrees above the horizontal. The tail was widely spread in a fan of varying width (between sixty and a hundred degrees) and appeared to "wag" from side to side in the manner described in the preceding paragraph. The black feathers of the throat and breast were fluffed out, and the eyecombs were raised. The wings were slightly drooped. This corresponds to the strutting-display described by Lumsden (1961). A third bird, a female, emerged from the line of trees. The male then became agitated and flew to a nearby Balsam Fir, perching at the very top of the tree, fifteen to twenty feet above the ground. As the bird flew, his wings could be heard flapping, but there was no drumming and no "flutter-jump" display. The third bird then crouched and began to feed on balsam needles on the ground



in a leisurely manner. A fourth bird, a male, appeared from the woods. There was no display behavior from this bird, and he fed in the same leisurely manner as the third bird. At 5:40 A.M., all four birds flew off into the woods down the slope. The air temperature was 46 degrees Fahrenheit, the surface wind was calm, and the upper winds were from the south.

Lumsden (1961) believes that strutting is a "low-intensity aggressive display," which may or may not be triggered by the presence of the observers. I do not know whether the birds observed on Mt. Clinton were aware of us or whether they simply were not ready to begin mating. Neither male approached a female; there were no aerial displays; and other than the initial call by the female, there was no vocalization. It is unusual, however, that male birds would tolerate each other while in the company of a territorial female. It is possible that the males were attracted by the territorial call of the female, but that still does not explain the presence of the second female. I have not found in the literature any mention of group-mating or lek behavior in Spruce Grouse, and as there was no overt mating display, this does not seem to be the explanation here. However, if this was a family group from the previous nesting season, it was surprising to find them together so long into the next season. Robinson and Maxwell (1968) report March 8 as the latest date for their observation of a family group.

Where to find Spruce Grouse in the White Mountains of New Hampshire.

Like many other Galliformes, Spruce Grouse are chanced upon. However, one may improve the chances of finding a bird by searching those areas where Spruce Grouse are known to occur. The White Mountains of New Hampshire represent the southern extreme of the bird's range in eastern North America, but its distribution there is not uniform. Rather, there are disjunct, isolated pockets of population in suitable habitat throughout the mountains. Studies have shown that Spruce Grouse have a population density that ranges from seven pairs per square mile in Alaska (Ellison, 1968b), in Montana (Stoneberg, 1967), and in the Adirondack Mountains of New York (Fritz, 1979) to ten to twelve pairs per square mile in northern Michigan (Robinson, 1969). Fritz's paper is particularly instructive for the study of White Mountain populations of Spruce Grouse since the Adirondack populations are also in isolated pockets. Fritz found that there is movement in and out of the population pockets in the Adirondacks. But his study was of lowland populations. Whether there is movement from one population pocket to another when the pockets are located on ridges separated by deep valleys as is the case in the White Mountains is not known.

As has been stated, these pockets of population occur in flat areas of conifers in which Balsam Fir predominates. Whereas Fritz's study was of lowland populations, the best habitat in the White Mountains is concentrated on broad ridges at elevations of 3500'-4500'. All such ridges that are not above treeline have the potential for supporting Spruce Grouse. From the studies above, it is possible to estimate that the population of Spruce Grouse in the White Mountains probably numbers no more than one to two hundred birds. Some pockets are presented here.

Area 1: The Moriah-Carter-Wildcat ridge, especially the southern end. Spruce Grouse have been found on this ridge from Zeta Pass between South Carter Mountain and Mt. Hight southward across the long ridge that is the summit of Wildcat Mountain. This area is to the east of Pinkham Notch and can be approached via several routes. For the maximum time and distance on the ridge, take NH 16 north of the Appalachian Mountain Club (AMC) Pinkham Notch Camp to the trailhead of the Nineteen-Mile Brook Trail (about one mile north of the Glen House, on the right side of the road). Take the Nineteen-Mile Brook Trail east for 1.9 miles to the junction with the Carter Dome Trail. Take the Carter Dome Trail which, after another 1.9 miles of steady climbing, reaches the Carter-Moriah Trail in Zeta Pass. Turn right (south) on either the Carter Dome Trail (which bypasses the summit of Mt. Hight) or the Carter-Moriah Trail (which goes over the summit of Mt. Hight) and watch for the grouse. After passing over or around the summit of Mt. Hight, one comes to Carter Dome and then begins the steep descent into Carter Notch. There, about 3½ miles south of Zeta Pass, one finds the AMC Carter Notch Hut (see below for accommodations). Carter Notch also contains two tarns - unique in that they have no outlet stream, a set of ramparts created by a huge rock fall (or falls) from Carter Dome, and caves which contain ice year-round. To continue southward, take the Wildcat Ridge Trail out of Carter Notch and continue for about four miles. The first mile is extremely steep but afterward, the trail begins to level off and one should begin looking for Spruce Grouse again. About four miles south of Carter Notch, one comes to the gondola station of the Wildcat Mountain Ski Area. From here, one may return to Carter Notch and descend on the Nineteen-Mile Brook Trail or continue southward for two miles on the Wildcat Ridge Trail (very steep), which emerges from the woods on NH 16, or descend on the gondola. One may also ascend to Carter Notch Hut via the Nineteen-Mile Brook Trail thus bypassing the summits of Mt. Hight and Carter Dome or ascend from AMC Pinkham Notch Camp via the Lost Pond and Wildcat Ridge Trails. Those not wishing to hike may ride up and down on the Wildcat ski gondola (open in summer). The Carter-Moriah, Wildcat Ridge, and Lost Pond trails are part of the Appalachian Trail (AT) and as such are marked with a characteristic white blaze. Camping is restricted along this section of the trail but

there is a shelter and limited tent space at Imp Shelter, about four miles north of Zeta Pass. Accommodations are available at Carter Notch Hut but camping near the hut is prohibited. There is little or no water on the ridge except at the hut. See AMC Map #7, "Carter-Mahoosuc."

Area 2: Northern Presidentials. Here Spruce Grouse are most usually found on the broad buttresses or knees of the mountains surrounding the Great Gulf. I have seen the birds on the Wamsutta Trail on Mt. Washington, and Jefferson's Knees and the Buttress on Mt. Adams have similar habitats. Spaulding Lake on the upper floor of the Great Gulf itself looks promising. These areas are extremely isolated and the trails, especially the Six Husbands Trail, are exceedingly steep. The latter trail in particular should not be attempted by novice hikers. To reach this area, take NH 16 north of the AMC Pinkham Notch Camp to the entrance of the Mt. Washington Auto Road and park. Walk up the auto road to the trailhead of the Osgood Trail (a few hundred yards). Take this trail for 1.6 miles to its junction with the Great Gulf Trail. Turn left (west) on the Great Gulf Trail and continue for another 2.8 miles (4.4 miles from the start of the Osgood Trail). At this point, the Wamsutta Trail branches left (south), the Six Husbands Trail branches right (north), and the Great Gulf Trail continues straight ahead. Spaulding Lake is reached on the Great Gulf Trail 1.9 miles past this junction. To reach the Buttress Trail, turn right on the Six Husbands Trail, continue for 0.5 mile, and turn right (northeast) where the Six Husbands and Buttress trails diverge. Camping is restricted in the Great Gulf and a permit is required for overnight use. Check at the White Mountain National Forest (WMNF) Androscoggin Ranger Station on NH 16 just south of Gorham for permits and current regulations. There are no shelters or campsites in the gulf, and camping is prohibited at the old sites. Camping is also prohibited at Spaulding Lake. See AMC Map #6, "Mt. Washington."

Area 3: Southern Presidentials. For at least the past fifteen years, this ridge has been the most reliable place in the White Mountains for producing Spruce Grouse. The birds can be found anywhere from about midway along the Webster Cliff to the col between Mts. Clinton and Eisenhower. The best area, however, is between the quaking bog on the north side of Mt. Jackson and the main (northern) summit of Mt. Clinton (Pierce). A single bird observed in the Clinton-Eisenhower col in 1983 was unusual as the suitable habitat here is restricted to a very small area. The trail along most of this ridge is the Webster Cliff Trail, which can be reached from several points in Crawford Notch. At the southern end of the notch, the Appalachian Trail crosses US 302. On the east side of the road, the AT is called the Webster Cliff Trail. It is 2.8 miles from the road to the summit of Mt. Webster, and the trail is very steep. Better

approaches are found from the north end of the notch. Just to the south of Saco Lake at the north end of the notch, the Webster-Jackson Trail leaves the east side of US 302. At 1.4 miles from the road, this trail splits. The right fork continues down the bank and then straight ahead to the summit of Mt. Webster (1.1 miles farther), and the left fork follows the stream to the summit of Mt. Jackson (1.3 miles). The two summits are one mile apart on the Webster Cliff Trail, but it is a much rougher mile than it appears on a map. This area can also be reached from US 302 by taking the Crawford Path east from a point directly opposite the AMC Crawford Notch Hostel (open to the public, see section on accommodations below). Take the Crawford Path 1.8 miles to its junction with the Mizpah Cut-Off. Turn right on the cutoff and continue to the junction with the Webster Cliff Trail. Turn right for Mt. Jackson or left for AMC Mizpah Spring Hut and Mt. Clinton. Spruce Grouse can be found on the cutoff, between the hut and Mt. Jackson, or between the two summits of Mt. Clinton. Beyond the summit of Mt. Clinton, the Webster Cliff Trail ends at the Crawford Path, which continues north to Mt. Washington. The Webster Cliff Trail and the Crawford Path above its junction with the Webster Cliff Trail are part of the Appalachian Trail and are marked with the AT white blaze. On the ridge itself, there is no water except at the hut and at a spring in the Clinton-Eisenhower col. Camping is restricted on the ridge and prohibited above timberline. There are tent platforms at Mizpah Hut, and the hut facilities are available to the public (see accommodations). See AMC Map #6, "Mt. Washington." This area has been described in the American Birding Association Bird-finding Guide, page NH-2, and by this author in 1981 (BOEM, 9:53-65).

Area 4: Nancy and Norcross Ponds. In this area, Spruce Grouse can be found anywhere from the top of Nancy Cascades to the outlet (west end) of Norcross Pond. The habitat is extensive, but reports of Spruce Grouse are few. This area is best known as one where (Northern) Three-toed Woodpeckers are occasionally found and where Black-backed (Three-toed) Woodpeckers, Rusty Blackbirds, and Boreal Chickadees nest. The trailhead for the Nancy Pond Trail is on the west side of US 302, 5.2 miles west of the blinking light in Bartlett or approximately 10 miles south (east) of the AMC Crawford Notch Hostel. It is 4.0 miles to the western end of Norcross Pond, and the hike up the Nancy Cascades is very steep. There are no campsites or shelters along the trail, but camping is generally permitted. If you do camp, please stay away from the trail and water sources, and be careful with waste. The trail is abundantly supplied with water but a word of caution: Nancy and Norcross Ponds are active beaver ponds. Beavers are known to carry an organism called Giardia lamblia which produces severe diarrhea and stomach cramps in humans (giardiasis). Any water that flows from these ponds (such as Nancy Brook) should be treated in order to be

absolutely sure that it is safe. See AMC Map #6, "Mt. Washington."

Area 5: The skewed T-shaped ridge that connects Zealand Mountain, Mt. Bond, South Twin, and the Garfield Ridge. This area and the Southern Presidentials are the largest of the accessible Spruce Grouse habitats in the White Mountains south of US 2. The habitat is not continuous along the ridge, however, and Spruce Grouse will be found only in the flatter areas in the Balsam Fir forest. Most sightings have been east of the summit of South Twin Mountain. Recent sightings west of South Twin have been near the summit of Galehead Mountain and on the Skookumchuck Trail just below its junction with the Garfield Ridge Trail (July 1984). This is not an easy area to reach and return from in a single day. Access can be had from US 302 by turning south into the WMNF Zealand Campground and continuing to the end of the road (about 7 miles). From the parking area, hike in to the AMC Zealand Falls Hut on the Zealand Trail (2.7 miles) and Twinway (0.2 mile from the end of the Zealand Trail to the hut). Continue on the Twinway. It is approximately 2 miles from the hut to the summit of Zealand Mountain, 3 miles to the northernmost summit of Mt. Guyot, 6 miles to the summit of South Twin, and 7 miles to AMC Galehead Hut. From Galehead Hut, continue on the Garfield Ridge Trail 6.0 miles to the junction with the Skookumchuck Trail, which enters from the west about three-quarters of a mile north of the summit of Mt. Lafayette. This ridge can be approached from US 3 via the North Twin Trail-North Twin Spur, the Gale River Trail (both of these require driving down forest roads - see the AMC map), or the Skookumchuck Trail. To approach from the Kancamagus Highway (NH 112), enter the Wilderness Trail (the trailhead is about 4 miles east of Lincoln at a huge parking lot), continue for 5 miles (be sure to turn right - east - at Franconia Brook Campground) to the Bondcliff Trail, and continue for another 6 miles to the northernmost summit of Mt. Guyot. On this route, Spruce Grouse can be found in the col between Mts. Bond and Guyot. Just beyond the summit of Mt. Guyot, the Twinway both enters from the right and continues straight ahead. Both the Twinway and the Garfield Ridge Trail are part of the Appalachian Trail and marked with the AT white blaze. Accommodations are available at the AMC Zealand Falls, Galehead, and Greenleaf huts (see below), and camping is permitted at Guyot and Garfield Ridge Campsites. Camping is restricted elsewhere along this stretch of the Appalachian Trail. The only water on this ridge is at the huts, the campsites, Zeacliff and Garfield ponds (both untested), and a spring near the junction of the Garfield Ridge Trail and the Franconia Brook Trail. See AMC Map #5, "Franconia Region."

Area 6: The ridge connecting the summits of Mt. Hancock and Mt. Carrigan. This entire area contains good Spruce Grouse habitat, but save for the trail connecting North and South

Hancock, there are no trails. Beyond the Hancocks, this trip requires heavy bushwhacking. To reach the Hancocks, take the Hancock Notch Trail from the lower end of the hairpin turn on the Kancamagus Highway (about eight and a half miles east of Lincoln). Continue on this trail for 1.8 miles to the junction with the Cedar Brook Trail. Turn left on the Cedar Brook Trail, and in 0.7 mile, the Hancock Loop Trail enters on the right. The entire loop is 4.5 miles. It does not matter in which direction one travels since the birds are found between the peaks. There are no maintained campsites along these trails, and above the Cedar Brook Trail, there is little or no water. See AMC Map #5, "Franconia Region."

Area 7: Mt. Tecumseh - between the peaks and on the broad west summit. This area can be reached from the Mt. Tecumseh Ski Area in the Waterville Valley or from Tripoli Road in Thornton Gap. The Mt. Tecumseh Trail leaves from the ski area parking lot and reaches the main (east) summit of Mt. Tecumseh in 2.2 miles. From here, hike over to the west summit. The birds have been found along this ridge. The other end of the Mt. Tecumseh Trail leaves the south side of Tripoli Road about midway between I-93 and Waterville Valley. It is most easily reached by leaving I-93 at Exit 31 (marked Tripoli Road) and looking for the trailhead on the right. From this direction it is 3.2 miles to the main summit of Mt. Tecumseh including the hike over the west summit. There are no campsites on this trail and no water save at Eastman Brook near Tripoli Road. If, as is apparently true, the Spruce Grouse population on Sandwich Mountain has been extirpated (Ridgely, 1983, BOEM 11:135), then the Tecumseh population represents the southernmost population of Spruce Grouse in eastern North America. See AMC Map #4, "Chocorua-Waterville."

Area 8: Mt. Osceola - between the peaks. This area can be reached from Tripoli Road, from the Kancamagus Highway, and from Waterville Valley. From I-93, exit at the Tripoli Road exit and drive for about seven miles to the trailhead of the Mt. Osceola Trail (on the left). From the trailhead, it is 3.6 miles to the main summit and another 0.6 mile to the East Peak. From the Kancamagus Highway, take the Greeley Ponds Trail (on the right about seven miles east of Lincoln where the road makes a sharp bend to the left) 1.7 miles south to the Mt. Osceola Trail. From here it 1.2 miles to the East Peak, but this part of the Osceola Trail is very steep. From Waterville Valley, take the Greeley Ponds Trail from Depot Camp on Livermore Road. Walk down the old truck road for about one mile, then continue on the trail for another 2.4 miles to the Mt. Osceola Trail. There are no campsites on this trail and above Greeley Ponds, no sure water. Greeley Ponds is a protected area, and camping is prohibited. In 1981, three (Northern) Three-toed Woodpeckers were found at Greeley Ponds. See AMC Map #4, "Chocorua-Waterville." This area has also been described in the ABA

Area 9: The east-west ridge from Mt. Trip pyramid to Mt. Paugus. There are numerous places at higher elevations along this ridge where Spruce Grouse habitat occurs. Spruce Grouse were observed on the summit of North Trip pyramid in April 1983 (New Hampshire Bird Records, 1984, 2:4). The habitat on the Rollins Ridge between Mts. Whiteface and Passaconaway also looks promising. My only encounter with a bobcat was at Camp Rich on Mt. Passaconaway just above this ridge. There is a myriad of trails allowing access to this region from both the north and the south. There are also campsites on Mts. Whiteface, Passaconaway, and Paugus. Consult the AMC guidebook and Map #4, "Chocorua-Waterville," for the trail of your choice.

Area 10. I have heard a single report of Spruce Grouse on North Moat Mountain in North Conway. The road directions to this area are rather complicated and anyone wishing to visit this site should check the AMC White Mountain Guide (1983), pages 270-271, for road and trail directions. The AMC Map #4, "Chocorua-Waterville," may be useful, but it does not show the whole trail. The USCGS "North Conway" topographic map may also be useful, although it is out-of-date.

Area 11: The Montalban Ridge. The birds have been found anywhere along the ridge from Stairs Mountain northward to the point where the trail begins to climb steeply in its ascent of Boott Spur. Mt. Resolution, immediately to the south of Stairs Mountain has suitable Spruce Grouse habitat and the birds should be looked for there. The trail along this ridge is the Davis Path and it may be approached from several directions. The Davis Path itself begins on U.S. 302 just north of the Inn Unique in Notchland at the southern end of Crawford Notch. There is a large parking lot on the east side of the road. From here it is about four miles to Stairs Col and about twelve miles to the ascent of Boott Spur. From Bartlett, one may ascend on the Mt. Langdon Trail [trailhead can be found by going north at the blinker, crossing the Saco River, turning left (west), and looking for the trailhead immediately on the right] to the Mt. Parker Trail, and the Mt. Parker Trail to the Davis Path. From here the distance to Stairs Col is about four miles and twelve miles to the ascent of Boott Spur. From Glen, one can go 1.8 miles west of Glen Station "and a short distance east of the bridge over the Saco River, and follow an old CCC camp road west about 0.3 mile past an old covered bridge to a new housing development." (AMC White Mountain Guide, p. 110). From here, take the Mt. Stanton Trail 5.5 miles to its junction with the Mt. Langdon Trail, the Mt. Langdon Trail 0.5 mile to the Mt. Parker Trail and then continue north on the Mt. Parker Trail as described above. From the trailhead to Stairs Col is about seven and a half miles, to the climb up Boott Spur, about fifteen and a half miles. From Glen one

may also go to a point one mile west of the junction of US 302 and NH 16 (just east of the bridge over the Rocky Branch and turn north on the Jericho Road. Continue to the end of the road (the last four miles are dirt). From here, take the Rocky Branch Trail 1.8 miles to the Stairs Col Trail. Take this trail 1.9 miles to Stairs Col and turn right on the Davis Path. It is another eight miles to the steep ascent of Boott Spur. One can also pick up the Rocky Branch Trail on NH 16 at a new parking lot a few hundred yards north of the Dana Place, about five miles north of Jackson. From here it is four miles to the Isolation Trail which should then be taken 2.5 miles to the Davis Path. From here it is best to turn south (left) along the ridge. As of the summer of 1984, shelters were available at Mt. Langdon, Mt. Resolution, Rocky Branch #1 and #2, and Dry River #3. However, this is a wilderness area and as those shelters fall into disrepair, they will be removed. If you plan to spend the night, check with the Forest Service as to their current status. On the ridge itself, water is available at a few springs and at all shelter sites. These tend to be several miles apart, however, so it is advisable to carry a canteen. See AMC Map #6, "Mt. Washington."

The author would appreciate hearing about any other confirmed reports of Spruce Grouse in the White Mountains.

Accommodations in the White Mountains.

There are numerous motels, hotels, and inns throughout the White Mountains region. These are usually full, however, and it is suggested that reservations be made in advance. There are a few private campgrounds in the area, but all are outside the national forest and are designed for recreational vehicles. The state of New Hampshire runs campgrounds at Lafayette Place in Franconia Notch State Park and at Dry River in Crawford Notch State Park. The Forest Service runs Dolly Copp Campground in Pinkham Notch, Zealand/Sugarloaf Campgrounds on US 302 west (north) of Crawford Notch, and numerous campgrounds along the Kancamagus Highway. All of these campgrounds operate on a first-come-first-served basis. A small fee is charged.

In the backcountry, the White Mountain National Forest and the Appalachian Mountain Club maintain several shelter and tent sites. Those with a caretaker require a fee and have limited capacity. If the shelter area is full, the hiker will be asked to camp elsewhere. These areas are available on a first-come-first-served basis. Certain backcountry areas are designated "Restricted Use Areas." Check with the forest service at any ranger headquarters, WMNF headquarters in Laconia, or with the AMC for current regulations. Camping is permitted anywhere else in the national forest, but it is recommended that people camp at least 200 feet from any trail or stream.

The Appalachian Mountain Club operates several facilities in the White Mountain region. Their North Country Headquarters is at Pinkham Notch Camp in Pinkham Notch on NH 16, eleven miles north of Glen. Guests are provided with full bedding, breakfast, and dinner. Lodging is in bunkrooms so expect to share with other people. Bathrooms and showers serve the entire floor but are not coed. In 1984, rates were \$25.75 per night with discounts for club members and children under ten. Advance reservations are essential. For reservations call (603) 466-2727. The hostel in Crawford Notch is also available but far more rustic. Guests are provided with a mattress and a pillow in a large dormitory-style room. There are three smaller bunkhouses available on a first-come-first-served basis. Food is not provided, but cooking facilities and utensils are available. There are no showers. In 1984, the rates were \$6.00 per night with a discount for club members. Reservations are usually not required on weekdays but are often necessary on weekends. For reservations, call the number given for Pinkham Notch.

The club also runs eight huts in the backcountry. These are rustic by urban standards but quite luxurious by backcountry standards. Guests are provided with a mattress, pillow, three blankets, breakfast and dinner. Bunkrooms are coed, but the bathrooms are not. There are no showers. Since bedding is provided, it is not necessary to carry a sleeping bag, but sheets might make for more comfortable sleeping. Reservations are essential; so call the number given for Pinkham Notch. In 1984, the cost was the same as for Pinkham Notch, but arrangements can be made so that one takes only one meal.

There are two final notes of caution that have appeared previously in this magazine but that should be repeated here. The first of these relates to the mountains. Most of the areas at higher elevations in the White Mountains are extremely fragile. The alpine plants that you see growing alongside the trail are especially adapted to withstand the desiccating winds, bitter cold, and the deep snow common at those elevations. They grow close to the ground with leaves that are leathery, fuzzy, or very small. Their root systems are adapted to anchor them in soils that are only a fraction of an inch thick. But in spite of all of this, they are not adapted to withstand human impact. The extremely rare Dwarf Cinquefoil (Potentilla robbinsiana) grows in soil so thin that even a minor disturbance will uproot the plant and kill it. Known areas of its growth have been surrounded by scree walls and posted by the forest service to keep humans out. A patch of Diapensia lapponica, which might be sixty years old, can be destroyed by a single footstep. In an alpine bog such as the quaking bog on Mt. Jackson, there is nothing underneath the plants but peat. Plants can be submerged into the peat with hand pressure. If you are crossing an alpine bog, please do not walk on it; stay on the

boardwalk and observe the damage caused by people who did not. Approximately 65,000 people hike in the Presidential Range every summer. If every one of those hikers wandered uncontrolled, the very environment that brought them into the mountains in the first place would soon be destroyed. Please stay on the trails! Should you happen to stray, stay on the rocks. In the White Mountains, both good birding and good hiking etiquette must be observed.

The second note of caution applies to you, the hiker. The signposts in the White Mountains caution that these mountains have the worst weather in America. This is not hyperbole. Treeline at 4000'-4500' as opposed to 9000'-11,000' in the west should attest to this sufficiently. Save for Antarctica, the White Mountains have the worst weather in the world. Winds on Mt. Washington are above hurricane force one-third of the time. The fastest surface wind ever recorded on earth blew across its summit at 231 miles per hour. This mountain has killed more people than any other mountain on earth. The combination of high winds, cold temperatures (even in summer), and sudden storms is fatal to the unprepared. Stay off exposed ridges in thunderstorms. Be sure that you are carrying plenty of extra clothing (including hat and mittens), preferably wool. Carry sturdy wind and rain gear, a first aid kit, extra food, extra water, a compass (and know how to use it), a map, and an AMC White Mountain Guide. Always let someone else know your itinerary and when you expect to return.

ACKNOWLEDGMENT

The author would like to thank Sally Merrill, state coordinator of the New Hampshire Breeding Bird Atlas, for providing him with access to their records.

REFERENCES

- American Birding Association. ABA Bird-finding Guide.
- AMC White Mountain Guide. 1983. Boston: Appalachian Mountain Club. All trail mileages in this article are from this guide.
- Bent, Arthur Cleveland. 1962. Life Histories of North American Gallinaceous Birds. New York: Dover Publications, Inc.
- Brewster, William and Ludlow Griscom. 1925. Birds of Lake Umbagog. Bulletin: Museum of Comparative Zoology: 276-286.
- Ellison, Laurence. 1966. Seasonal Foods and Chemical Analysis of Winter Diet of Alaskan Spruce Grouse. Journal of Wildlife Management 30:729-735.

- . 1968a. Sexing and Aging Alaskan Spruce Grouse by Plumage. Journal of Wildlife Management 32:12-16.
- . 1968b. Movements and Behavior of Alaskan Spruce Grouse during the Breeding Season. Mimeographed. Transactions of the Meeting of the California-Nevada Section of The Wildlife Society. This author has no direct access to this article. All references are from Johnsgard (1973).
- Farrand, John, Jr., ed. The Audubon Society Master Guide to Birding, 3 Vols. 1983. New York: Alfred Knopf. Referred to in this article as MGB.
- Fritz, Robert S. 1979. Consequences of Insular Population Structure: Distribution and Extinction of Spruce Grouse Populations. Oecologia 42:57-65.
- Greenwald, Michael R. 1981. Birding on Mts. Clinton and Jackson in the White Mountains of New Hampshire. Bird Observer of Eastern Massachusetts 9:53-65.
- Johnsgard, Paul A. 1973. Grouse and Quails of North America. University of Nebraska Press.
- Lumsden, Harry G. 1961. Displays of the Spruce Grouse. The Canadian Field Naturalist 75:152-160.
- Lumsden, Harry G. and Robert B. Weeden. 1963. Notes on the Harvest of Spruce Grouse. Journal of Wildlife Management 24:587-591.
- MacDonald, S. D. 1968. The Courtship and Territorial Behavior of Franklin's Race of the Spruce Grouse. The Living Bird 7:4-25.
- New Hampshire Bird Records. Audubon Society of New Hampshire.
- Peterson, Roger Tory. 1962, 1975. A Field Guide to Western Bird Songs. Boston: Houghton Mifflin Company.
- Peterson, Roger Tory. 1980. A Field Guide to the Birds East of the Rockies. 4th ed. Boston: Houghton Mifflin Company.
- Ridgely, Beverly S. 1983. A Guide to the Birds of the Squam Lakes Region, New Hampshire. Bird Observer of Eastern Massachusetts 11:135.
- Pough, Richard H. 1951. Audubon Water Bird Guide. Garden City, N.Y.: Doubleday & Company, Inc.
- Robbins, Chandler S., Bertel Bruun, and Herbert S. Zim. 1983. A Guide to Field Identification: Birds of North America 2nd ed. New York: Golden Press.

- Robinson, William L. 1969. Habitat Selection by Spruce Grouse in Northern Michigan. Journal of Wildlife Management 33:113-120.
- Robinson, William L. and D. E. Maxwell. 1968. Ecological Study of the Spruce Grouse on the Yellow Dog Plains. The Jack Pine Warbler 46:75-83.
- Scott, Shirley, ed. 1983. Field Guide to the Birds of North America. Washington, D.C.: National Geographic Society. Referred to in this article as NGS.
- Stoneberg, R. P. 1967. A Preliminary Study of the Breeding Biology of the Spruce Grouse in Northwestern Montana. Unpublished M.S. Thesis, University of Montana. (I had no direct access to this thesis. All references are from Johnsgard, 1973.)
- Tufts, R. W. 1975. Intergeneric Grouse Hybrids (Bonasa X Canachites). The Canadian Field Naturalist 89:72.

In addition to the above references, recent studies have been done on western subspecies by Boag, Ellison, and Keppie; and William Robinson has published a monograph (1980) entitled Fool Hen: The Spruce Grouse on the Yellow Dog Plains, University of Wisconsin Press.

MICHAEL GREENWALD, who recently joined the editorial staff of BOEM, has had extensive experience in the White Mountains of New Hampshire as a backpacking guide and is currently a naturalist-in-residence in the AMC hut system.

ANOTHER CHECKLIST AVAILABLE

A new checklist, prepared by Ruth Ogden of the Tucson Audubon Society, is a handy, pocket-sized booklet of twenty pages. The Check-list of North American Birds, United States and Canada Including Hawaii includes 917 species arranged in the sequence of the A.O.U. Checklist, Sixth Edition, with the new common and scientific names given as well as orders and families. There is an index, and introduced birds are marked with an asterisk. Published in 1984, it can be purchased from The Audubon Nature Shop, Tucson Audubon Society, 30-A North Tucson Boulevard, Tucson, Arizona, 85716 for \$1.00.

A FUDDLE OF FALCONS

by Nancy Clayton, Concord

One might question how anyone could become so utterly pre-occupied with the identification of a bird which she herself didn't even see. Well, that's the way some of us are about falcons! Thus it was with great excitement and not a little envy that I heard on the Voice of Audubon that a Gyrfalcon had been sighted at Squantum. The Brookline Bird Club's February 19, 1984 trip and Dave Brown as its leader were the fortunate ones. Dave had spotted a raptor - a large falcon - in the distance and had alerted the group. All were able to observe the bird approaching with slow, shallow wingbeats until it was circling directly overhead. Suddenly the wingbeats became deeper and faster providing that awesome acceleration which is so characteristic of falcon flight, and the bird took off to harass a Herring Gull and was finally lost to view as it climbed into the sky. If only I had been there! Three days of gyr-watching on Plum Island in December 1983 had only intensified an obsession.

Then came the great news that Stan Bolton, camera in hand, had been on the trip and had taken a half-dozen frames. The temptation to camp on his doorstep until the film was developed was resisted. Events now took a most intriguing turn - speculation had arisen that the bird might not have been a Gyrfalcon after all but actually a Lanner or perhaps a Saker Falcon - a vagrant from Europe, Africa, or Asia, or more likely an escaped falconer's bird. In the course of editing the BOEM records, two of Stan's "gyrfalcon" prints were shown to Dick Forster, Chris Leahy, and Jim Baird as evidence of the sighting. All three expressed the opinion that the bird as seen in the photographs did not have the obvious bulk of a Gyrfalcon - it did not seem to be heavy enough. Its wings did not have sufficient breadth, especially at the base, and the tail was too long and narrow. At this juncture I invested in a set of five of the photos for myself.

It was now April, and having been enticed some months earlier by a phrase in a travel brochure, "We shall also travel far out onto the blue waters of the Red Sea . . . Sooty Falcons breed on the islands," Alden and I were off for Egypt. Mark Beaman and Steve Madge, veterans of the raptor migrations at Eilat (Israel) and Istanbul and co-authors of a forthcoming guide to Western Palearctic birds, were the trip leaders. Arriving from London with their British cohorts, they probably did not anticipate more than minimal exposure to the two Americans on that first evening in Cairo. However, before they had finished their appetizers, the falcon prints were on the dinner table! Both were familiar with the Saker and expressed the opinion that the bird in the photographs was not that species since it did not appear to be broad and



*Falcon over Squantum
February 19, 1984*

Photos by Stan Bolton

heavy enough, not sufficiently robust, especially in the chest. Thereby the Gyrfalcon, a bird of even heavier and more powerful structure than Saker, was automatically ruled out as a possibility. They judged the bird not to be a Peregrine which is structurally so distinctive with its relatively short, broad-based arm, narrow hand, and very pointed wingtips. Its triangular-shaped wing, stocky body, and shorter tail give the Peregrine a more compact, less elongated look than that of other large falcons, the mystery bird included. Neither the Peregrine nor the Prairie Falcon has the solidly dark underwing coverts of the bird in Stan's photographs. Dave Brown had mentioned that he had been a bit puzzled by the size of the bird as it harassed the Herring Gull - it looked smaller than he would have expected a Gyr to be in relation to the gull. However, he had ruled out a Peregrine identification. In Mark and Steve's opinion the mystery bird was a Lanner or Laggar, the latter being very similar to the Lanner - its geographic replacement on the Indian subcontinent. After returning to England, Steve made a sketch of our bird as he remembered seeing it in the photos, indicating why he thought it might be a Laggar. He pointed out the very dark underwing coverts contrasting with the light flight-feathers, the dark flanks and belly, and the pale tip to the tail. He suggested I look at the photo of a Laggar in The Vanishing Jungle by Guy Mountfort. Recently I discovered even better photos of a Laggar in flight on pages 117-119 of Falconry by Humphrey Evans and a stunning view of a perched bird on page 43 of Der Sakerfalke by Wolfgang Baumgart.

Incidentally, although there were wonderful migrating raptors south of Suez, we never did find Sooty Falcon on the islands of the Red Sea. But there are new enticements from Beaman and Madge. Just back from China, Mark wrote that I would be amazed to hear that in Qinghai Sakers were really common and also rather tame. He was able to take frame-filling photographs of one by the roadside that allowed him to walk within thirty to forty feet.

For further corroboration the prints now went to Peter Alden. So generous with his time and expertise as always, Peter wrote a detailed analysis, taking twenty-one different falcons into consideration. One by one he eliminated all but the Gyrfalcon on the basis of pattern and color. Of the twenty-one possibilities he felt the Saker and Lanner were "close," but he concluded, "The bird is definitely a Gyrfalcon. The underwing pattern on this particular phase is emphasized in the European guides and is damn close to a Rough-leg."

Back to square one! The restoration of the Gyrfalcon identification took me by surprise. Guide descriptions, plates (particularly Figure 2 on Plate 42 in the Handbook of the Birds of Europe, the Middle East and North Africa, Volume II,

edited by Stanley Cramp), and photographs (especially the top photo on the Lanner page of Flight Identification of European Raptors by R. F. Porter et al., which Dick Forster had suggested I look at) had convinced me that the mystery bird was an immature Lanner. The idea that Falco biarmicus had been chasing Herring gulls in the skies over Squantum was delightful beyond measure, so much so in fact that I decided to consult just one more expert before abandoning the cause. Dean Amadon came to mind. However, he had recently written me concerning quite another problem that regrettably his only experience with Gyrfalcon had been a very distant view of one on Long Island (but, at least, it had been a white one.)

Bill Clark, former Director of the National Wildlife Federation's Raptor Information Center, banded raptors here and abroad, and presently working on a greatly anticipated guide to the raptors of North America, was the logical choice, and I summarize from his reply: "I am almost certain that the falcon in the photos is not a Gyrfalcon . . . it does not have any of the gestalt or jizz of that large and heavy falcon. The wings are too long and narrow and the tail is too narrow. It is also not a Peregrine; the two-toned underwing and slender build argue against that identification. So that leaves the Lanner group. It is too light in build for a Saker and even a bit slender and long-tailed for a Lanner. My best guess is that it may be an Eleonora's Falcon. This is very strange as they are primarily insectivorous and cannot do well in Massachusetts in winter. But whatever it is, it is not one of our native falcons, so it is most likely an escapee from a zoo or falconer, and thus any falcon species is possible." He based his case for Eleonora's Falcon on the very long tail, the very dark underwing coverts, the thick malar stripe, and the very narrow wings. But he repeated that he was not certain of the identification and emphasized that the immature Lanner was very similar. He suggested that I send the photos to Richard Porter.

Eleonora's Falcon! Having only seen one and that a dark-phase bird high in the Israeli skies, I was hardly qualified to appraise this new candidate. I remember my Eleonora's as being unbelievably long and narrow-winged with an exceptionally long tail giving a more rakish appearance than the bird in Stan's photos. Yet when I consulted R. F. Porter's photo pages of Falco eleonorae, I was impressed by the similarity in the underwing pattern of the light-phase bird with its dark brown coverts and pale flight-feathers bordered by a broad, dark trailing edge.

Bill noted that the bird had a broken or missing primary that he said a falconer would have mended since they like their birds in top flight. I assumed our bird was in transitional plumage moulting into adult, but this comment on the missing primary brought to mind a passage in Tom Cade's

Falcons of the World concerning falconry as it is practiced in Arabia. Falconers there consider high flying a dangerous way to lose a falcon and fly them right from the fist in direct pursuit as we do with Goshawks and then follow on horseback (or Cadillac - my addition - World of Falconry by Schlegel). The Kuwaiti falconers even tie the outer primaries together to prevent their falcons from going up. Could the ties on the left wing of the mystery bird have fallen off leaving the right still fastened but allowing this bird to take off from some Arabic compound on Long Island?

I am now reminded of HMANA (Hawk Migration Association of North America) chairman Paul Roberts' experience with a photograph identified as an albino Redtail that was submitted to him by a Colorado State ornithologist. Paul sent the photo to nine different raptor experts, who, between them, came up with six different species ranging from Ferruginous Hawk to Merlin. All were positive of their identifications. BOEM readers, veterans of the Skua/Pomarine jaeger and Red and Red-necked phalarope disputations, to say nothing of the Audubon's/Manx shearwater controversy, are aware of the perils of identification based on photographic evidence. Wayne Petersen gave such an insightful analysis of this in his article, "Small Shearwaters Are Not Always Black and White - and Neither Are Photographs" in the October 1982 issue of Bird Observer.

I must resign myself to the fact that field problems cannot always be solved by photographs and that this wondrous falcon will always be a mystery bird. And yet, the idea is tantalizing, what might Richard Porter say? Off to England - the prints are on their way.

Addendum: Porter Perceptions.

Richard Porter replied in a most gracious and informative letter that large falcons are notoriously difficult to identify, especially from photographs. However, he was fairly confident that the bird was a Lanner. He wrote that he could "safely rule out gyr, peregrine and Eleonora's for a number of reasons and the species left for serious consideration are saker, laggar, and lanner." He ruled Saker out on a combination of the uniformity of the darkness of the underwing coverts and strength of the moustachial streak. He was less certain about Laggar as he felt this species can appear very similar indeed to Lanner. However, he felt it did not have quite the right "feel" for Laggar, and if it were that species, he would expect it to be more noticeably streaked below. He "plumped" for Lanner for the following reasons: size and structure, uniform underwing coverts, head pattern, and the degree of streaking below. However, he reiterated that this was not a positive identification, and he doubted if one could be made on the basis of the existing photographs. He regretted that a photo with the upper head pattern was not available. He assumed, of course, that it was an escaped falconer's bird.

NANCY CLAYTON. During World War II, Nancy worked for the U.S. Department of State at AFHQ in Caserta, Italy, totally unaware of the existence of Eleanora's Falcon, much less that it was breeding eighty-odd miles away on Tremiti. Later during the occupation, she spent a year at the American Embassy in Vienna, completely oblivious of the Saker Falcon, which was at that time nesting in eastern Austria. She became hooked on hawks in February 1970 in New Canaan, Connecticut, when an adult and an immature goshawk frequented her backyard feeder in tandem for almost a month. For the last six years she has been membership secretary of the Hawk Migration Association of North America.

WINGS 1985

In 1985, **WINGS** will offer a twelfth year of birdwatching tours, weekends and workshops in 28 countries on six continents. For a copy of **WINGS 1985**, our 120 page catalog of events, please write or call:



WINGS INC.
P.O. Box 899
Northeast Harbor ME 04662
(207)276-5077

ALCID POSTER AVAILABLE

A 15" x 21" poster entitled Alcids of the North Atlantic featuring excellent black and white line drawings of these seabirds by the Canadian artist, Ian L. Jones, is available for \$5.50, including postage and handling, from

Seabird Poster
Atlantic Center for the Environment
39 South Main Street
Ipswich, MA 01938

OBSERVATION OF A LONG-BILLED CURLEW
IN MASSACHUSETTS

by Blair Nikula, Chatham, and Henning Stabins, Harwich

Shortly after arriving on the north island of Monomoy National Wildlife Refuge, Chatham, late in the afternoon of June 6, 1984, the writers flushed from the marsh a shorebird that, because of its large size and completely brown dorsal coloration, immediately attracted attention. The bird flew south, directly away from us, then wheeled and alighted on a dry mudflat about a hundred yards distant. As it landed, with wings momentarily raised, we were able to see that it had reddish-buff wing linings and buffy underparts. Most obvious at this point were a prodigious, decurved bill and the bird's large size relative to some nearby Brant (Branta bernicla) and Herring Gulls (Larus argentatus). Observation through a 20X telescope revealed that the crown was unstriped, eliminating any doubt that the bird was, as initially suspected, a Long-billed Curlew (Numenius americanus).

The bird remained on the flat for thirty minutes or so, during which time Massachusetts Audubon Society biologists, Denver Holt and Bob Humphrey, arrived. After several more minutes of observation, we began to move south to obtain a different angle and improved lighting but, in the process, flushed several night-herons, apparently alarming the curlew and causing it to flush also. The curlew flew west to the edge of the marsh, turned north for roughly four hundred yards, then flew south, and eventually landed a short distance south from where it took off. During this flight we were able to see again the coloration of the wing linings and dorsal surface. After the bird landed, we left the island, not wishing to disturb the curlew any further.

The curlew remained on Monomoy through midmorning on June 10 and was seen by an estimated seventy-five people during its stay. At about 9:00 A.M. in the morning of June 10, shortly after spotting the curlew among a distant group of plovers and gulls, the writers and two other observers watched it take off alone and fly off high to the southwest until completely out of sight. The bird was not reported from the area again.

The general impression given by the curlew was that of a very large, pale brown shorebird, which, when seen on the ground near several Herring Gulls, stood three or four inches taller than the gulls. The overall dorsal coloration was a mottled brown, resulting from the coverts and tertials being buff-brown with blackish centers and white spots along the fringes. The secondaries and inner primaries were uniform buffy-brown. The outermost four or five primaries were uniform dark brown and appeared quite worn. The underparts, from the breast to the undertail coverts were a warm, pale buff, with fine dark spotting or streaking on the sides of the upper breast. The

neck, throat, and face were light brown contrasting with a darker brown crown, which was finely streaked with black but lacked any semblance of a median stripe. A pale white line ran back from the base of the bill, over the eye, ending just behind the eye. The wing linings were cinnamon-buff, and the rump and tail were pale buff-brown with fine blackish streaking that was heaviest towards the ends of the rectrices.

The bill was extraordinarily long, approximately equal in length to the body of the bird, and was relatively straight over the basal half but prominently decurved through the distal half. The bill was mostly blackish except for the basal third or so of the lower mandible, which was distinctly pinkish. The legs were pale flesh-gray.

On June 8, Blair Nikula heard the bird call three or four times as it flew past at fairly close range. The call was two-syllabled, consisting of a short first note followed by a slurred, ascending whistle: "cur-leeeee." The bird was generally very wary, as is typical of this genus, and rarely allowed observers to approach closer than about seventy-five yards.

In identifying a Long-billed Curlew in this area, four other species of large shorebirds need to be considered. The most common species in the northeast, the Whimbrel (Numenius phaeopus), is smaller, less buffy, has brownish wing linings, a smaller, more uniformly decurved bill, and a bold pattern of dark brown and white stripes on the crown. The closest species in size and structure is the Eurasian Curlew (Numenius arquata), a very rare vagrant to North America (two or three records) that has been recorded on Monomoy once¹ (September 9 to October 12, 1976). It differs from N. americanus by its duller brown (less buffy) coloration overall, more heavily streaked underparts, whitish wing linings, and a prominent white "v" pattern up the rump and lower back. A very remote possibility in this area, the Far Eastern Curlew (Numenius madagascariensis), is also similar in size and structure but is less buffy, more heavily streaked underneath, and has whitish wing linings barred with brown. The fourth species, the Marbled Godwit (Limosa fedoa), is a bit smaller, brighter buff in coloration overall, has barring on the underparts, and a recurved bill.

Blodget (List of the Birds of Massachusetts, 3rd edition, Massachusetts Division of Fisheries and Wildlife, 1983) cites four previous Massachusetts records for Long-billed Curlew: one shot in Essex County in 1905 (fide Griscom and Snyder); one shot in Marshfield on August 10, 1909 (fide Griscom and Snyder); one collected in Chatham on June 15, 1938 (Bishop and Griscom); and a sight record from Monomoy on

¹Ed. note: In the interval since this paper was submitted to BOEM, another Eurasian Curlew appeared on Monomoy and remained from September 16 to October 1, 1984.

May 31, 1979 (Nisbet). The sighting detailed herein thus constitutes the fifth record for the state. Complete details of this record, accompanied by two recognizable photographs, have been submitted to the Massachusetts Records Committee for review and are on file at Massachusetts Audubon Society.

BLAIR NIKULA is an old hand at reporting rare birds. Among a number of articles that he has contributed to this magazine are several model field reports - on Swainson's Warbler, BOEM 10(4):219, on Little Stint, BOEM 8(5):187, and on Common Gull, BOEM 12(1):18. The fact that he has been on the scene of so many unusual sightings attests to his birding acuity and the long hours he spends in the field. Since 1982, he has served as the editor of the spring migration for the northeastern maritime region for American Birds. Blair is a lifelong resident of Cape Cod whose chief interest is shorebirds. He is president of the Cape Cod Bird Club and is currently co-operating with other members of the club to produce a bird-finding guide to Cape Cod. He has served as a tour leader on birding trips to Trinidad and Arizona and on pelagic trips off the Massachusetts coast, has birded in Churchill, and has studied shorebirds in Guyana and Surinam. He works as office manager and technician at a weather and wind instrument company on the cape.

HENNING STABINS is a senior at Harwich High School and has been birding for about two and a half years. He is considered by some to be the top seventeen-year-old birder on Cape Cod.

Bird Watcher's General Store

A Shop For Bird Lovers



Field Guides	Bird Baths
Feeders	The Observation Bird House
Binoculars	Decoys
Scopes	Prints
Recordings	Gifts

Mix Your Own Bird Seed

#37 Route 6A Orleans, MA (617) 255-6974

"Come In And Talk Birds"



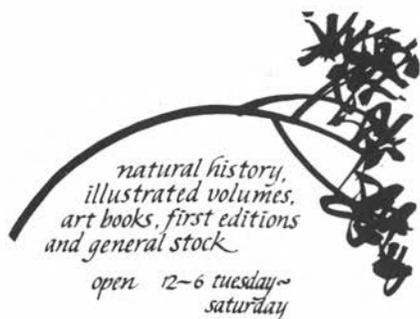
This is the place.

RED RIVER MOTEL

We love Birders
This is the spot to use
as home base for birding on CAPE COD.



Janet and Jo Baudanza
1011 Main Street
S. Harwich, MA 02661
432-1474



*natural history,
illustrated volumes,
art books, first editions
and general stock*

*open 12-6 tuesday~
saturday*

Saxifrage books

14 Derby Square, Salem, Mass. 617-745-7170



Dedham Travel Agency

a complete travel service

9 Eastern Avenue
Dedham, MA 02026

Tel. 329-1160



BIRDING AT A SOLAR ECLIPSE

by Leif J. Robinson, Wellesley

For many decades, astronomers have noticed that animals, insects, and plants react to a total eclipse of the sun much as they would a sunset. But only very recently have trained biologists examined this behavior. The first such study I can recall was at the 1972 total eclipse. A team from the Scripps Institute of Oceanography, aboard the cruise ship *Olympia*, measured the changing depth of plankton as the moon covered and uncovered the sun, resulting in a midday dimming and brightening of the sky.

The midday eclipse that occurred May 30, 1984, was not total (the moon completely hides the sun), but it was so nearly so that many eclipse watchers saw all the phenomena normally associated with a total eclipse: the sun's red inner atmosphere, its outer atmosphere (corona), and planets at midday.

I have never seen a report that describes eclipse-related activity for several species of birds. One only finds general comments such as "cocks crowed" or "birds sang and then went to roost." So here are my observations for May 30, as tape-recorded at Greer, South Carolina. In the table below is given the time in minutes (') and seconds (") [rounded to the nearest ten seconds before (+) and after (-) the central eclipse] at which a particular activity was observed. This is followed by the species involved, and the type of activity.

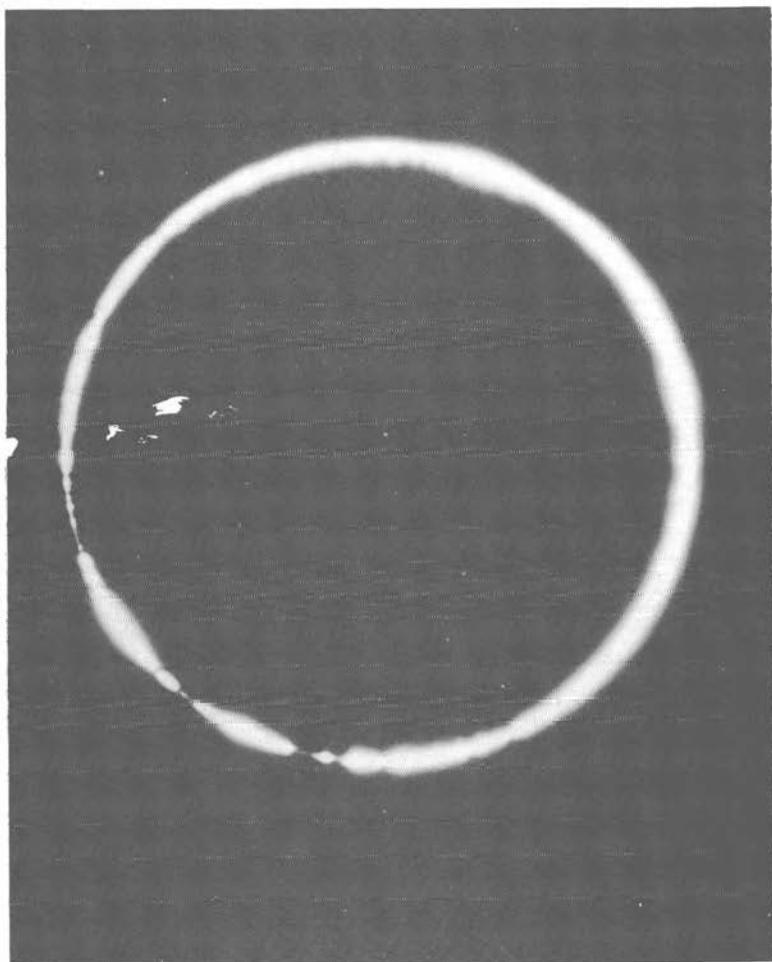
<u>Time</u>	<u>Species</u>	<u>Activity</u>
+12'50"	Rufous-sided Towhee	Singing.
+11'30"	American Robin	Going to roost.
+11'00"	Rufous-sided Towhee	Singing.
+10'50"	Chimney Swifts	Becoming lower in sky.
+09'00"	Carolina Wren	Begins 1'10" of song; only evidence of this species during 5 hours on site.
+05'00"	American Robins	Several singing for some tens of seconds.
+04'40"	Northern Flicker	Calling.
+04'20"	American Robin	Singing.
+02'30"	American Robin	Sings again; about 20 seconds.
+02'20"	Chimney Swifts	Now at treetop level.
+01'40"	Turkey Vulture	Appears on scene; lands.

Interval of 02'20" in the middle of which the central eclipse occurs and lasts for 8 seconds. During the entire time, no activity was observed.

-00'40"	American Robin	Singing.
-02'50"	Blue Jay	Leaves roost.
-03'50"	Rufous-sided Towhee	Calling accented "zeep."
-60'00"	Turkey Vulture	Circling high in the sky.

This ring eclipse was so dark that the sky took on the appearance of moderately bright twilight. It was also very different from a total eclipse - the sun was surrounded by a fireworks pinwheel, not a placid aureole. An even better "Fourth of July" will be celebrated in March, 1987, when a similar ring eclipse crosses Gabon, Africa. Join me!

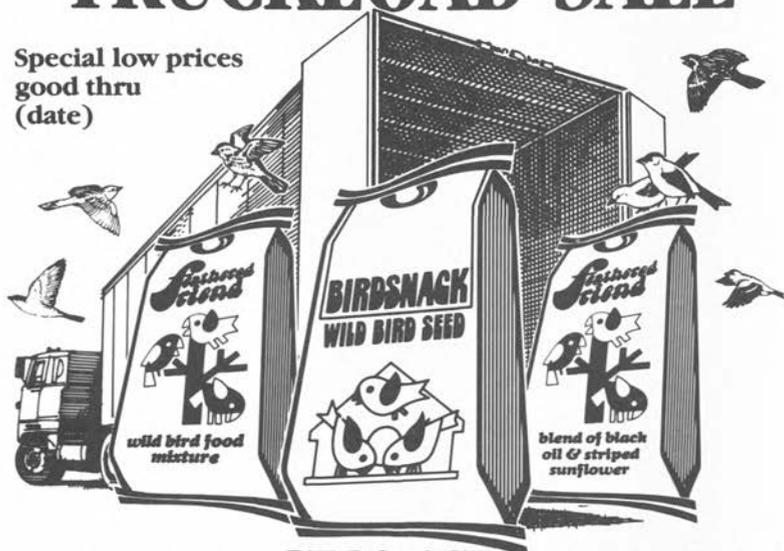
LEIF J. ROBINSON is editor of Sky and Telescope. He has been a bird student for sixteen years, was formerly editor of Bird Observer, and continues to contribute regular to BOEM. His principal interest is in resident populations of birds and the migration of birds of prey.



*The May 30, 1984 Ring Eclipse
Greer, South Carolina
Photographed by Leif J. Robinson
with a Bausch & Lomb/Criterion 4000 Telescope*

AGWAY Bird Feeding Headquarters TRUCKLOAD SALE

Special low prices
good thru
(date)



FEATHERED FRIEND® WILD BIRD FOOD MIX

Pure, cleaned and graded natural grain mixture attracts many different species.

\$9.39 50 lbs
\$4.59 20 lbs \$2.59 10 lbs

BIRDSNACK®

High in sunflower seed with canary seed, proso millet, peanut hearts and other seeds birds find irresistible.

\$12.89 50 lbs
\$5.99 20 lbs \$3.29 10 lbs

FEATHERED FRIEND SUNFLOWER SEED BLEND

A mix of oil-type and striped sunflower seed that appeals to a greater variety of species than either type alone.

\$15.25 50 lbs
\$7.25 20 lbs

Feathered Friend
Niger Seed (77-5487)
\$2.97 3 lbs

Feathered Friend
Sunflower Meats
and Chips
(77-5828,27)

\$11.99 20 lbs
\$20.99 40 lbs

8 oz. Hanging Suet
Feeder (77-5302)
\$1.29

PRICES SUBJECT
TO CHANGE.

WALTHAM STORE
50 Emerson Road
Waltham

Phone 894-4880
STORE HOURS

8 - 5 Mon.-Fri.
8 - 4 Sat.



PA11A

AGWAY answers your needs

AGWAY

Field Records

June 1984



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

June 1984 brought some record heat and a full quota of rain. An initial two-day period of cloudy, cool weather characterized by strong northeast winds with gusts to 46 MPH, fog, and heavy rain (1.49 inches within twenty-four hours) was followed by an eight-day heat wave on June 7-14, the longest and hottest so early in the year since June 1925. The high mark was 98° on both June 11 and June 13. This was the hottest June reading since 1953 and the earliest 98° day since 100° on June 6, 1975. New record daily highs were set on four dates: 97° on June 8, 96° on June 9, and 98° on June 11 and 13. The month's low mark was 51° on June 3. The temperature averaged 70.5°, 2.5° above normal. This was a topsy-turvy month: the first half of June was warmer than the last half. The average temperature was 7° above normal before midmonth, and the latter half averaged about 2° below normal.

Rain totaled 3.06 inches, 0.14 inch above normal. Measurable amounts fell on thirteen days, two more than average. The middle of the month was very dry. Amounts were quite variable in showers, and some Greater Boston areas had much more rain. Thunderstorms were frequent with some communities getting thunder on seven to eight days.

LOONS THROUGH HERONS

A two-day pelagic trip to Georges Bank on June 11-12 was highlighted by 4 Northern Fulmar, 27 Cory's, 2850 Greater, 2525 Sooty, one Audubon's and 9 Manx shearwaters. The vast majority of these birds were seen in the waters in the vicinity of Pollock Rip where they were observed in hugh rafts on a glass-surfaced ocean. The count of over 2500 Sooty Shearwaters is the maximum high number ever reported from the inshore fishing banks; the previous high was 1200 on June 6, 1969 at Monomoy. Greater Shearwaters have been reported in higher numbers with a maximum of 18,000 at Stellwagen Bank in October 1981, but the 2800+ is the highest reported for June, although over 15,000 were counted south of Martha's Vineyard in July 1981. On this same trip 55 Leach's Storm-Petrels were observed, 47 in the deeper waters near Hydrographer Canyon and 8 in the Georges Bank area. During the northeast storm on June 1-2, over 25 Leach's Storm-Petrels were noted among the 300+ Wilson's Storm-Petrels in Cape Cod Bay. Over 400 Wilson's Storm-Petrels were also found at the mouth of Barnstable Harbor on the last day of the month.

A sub-adult Northern Gannet was carefully scrutinized inland along Route 495, southeast of the junction with Route 24 at the Bristol and Plymouth county lines, in the towns of Raynham, Bridgewater and Middleborough. Bruce Sorrie, who has observed gannets in all plumages except nestling, as well as the four common pantropical boobies frequently over the years in the Caribbean, Central America, the Galapagos and the west coast of the United States, reports: "Bird was seen as it flew and glided in a southeast direction over the highway. The flight was clearly that of a seabird, with stiff shallow wingbeats. The bird interspersed its flight with frequent glides. The bill was pale horn color, the iris whitish as it looked down at me almost directly overhead. Underparts were white. Upperparts of wings were dark brown, mottled heavily with white in an irregular pattern. Primaries were dark. I believe it was not a Masked Booby because of lack of dark facial area and presence of dark edgings to bill (as in adult gannet); not a Red-footed Booby because of bill and soft part colors; not a Brown Booby because of extensive white on neck and upperparts."

An earlier inland record was of a bird caught alive at Enfield, October 11, 1917. (Enfield, Massachusetts was a former town in the Swift River Valley, now Quabbin Reservoir. The town was turned over to the MDC in 1938.) Since 1917, there have been only five or six reports of gannets this far inland.

Two adult Great Cormorants were found nesting on the Weepecket Islands in Buzzards Bay on June 4. The nest contained three eggs. This is the first record of breeding in

Massachusetts. The southernmost previous breeding and first U.S. record was from islands off the coast of Maine in 1983.

Heron highlights include as many as six Least Bitterns on Plum Island, two Tricolored Herons each at Monomoy and in Ipswich and a maximum count of seventeen Cattle Egrets in Ipswich. The major find of the month was that of an adult White Ibis at Squibnocket Pond, Gay Head on Martha's Vineyard. The bird flushed when approached and flew south-west towards Nomans Island where ironically another birder spotted it the same day.

A drake Eurasian Wigeon was found on Monomoy on June 27, and a Brant was found on that island on the very last day of the month, a very late record. R.H.S.

SPECIES/DATE	LOCATION	NUMBER	OBSERVERS	JUNE 1984
Red-throated Loon: 2,20	Eastham, P.I.	1, 1	W.Petersen, J.Smith	
Common Loon: 9	Monomoy	2	G.d'Entremont	
Northern Fulmar: 12	Georges Bank	4	BOEM (C.Leahy#)	
Cory's Shearwater: 11,12 24	Hydrographer Canyon, Pollock Rip 5 m. E. of Chatham	24, 3 30+	BOEM (C.Leahy#) W.Harrington	
Greater Shearwater: 11 12	Hydrographer Canyon Georges Bank-Pollock Rip	50 2800+	BOEM (C.Leahy#) BOEM (C.Leahy#)	
Sooty Shearwater: 2,3 4,18 6,10 11 12	Cape Cod Bay, P'Town Westport Chatham Hydrographer Canyon Georges Bank-Pollock Rip	3, 1 3, 4 125+, 40 25 2500+	W.Petersen, K.Holmes R.Laubach B.Nikula BOEM (C.Leahy#) BOEM (C.Leahy#)	
Manx Shearwater: 12	Georges Bank-Pollock Rip	9	BOEM (C.Leahy#)	
Audubon's Shearwater: 11	Oceanographer Canyon	1	BOEM (C.Leahy#)	
Wilson's Storm-Petrel: 2,3 11-12 16,24 24,26 30	Cape Cod Bay, Stellwagen Georges Bank-Pollock Rip Stellwagen, 5 m. E. of Chatham off Cape Ann, Boston Harbor Barnstable Harbor (mouth of)	300+, 15-20 525+ 70, 100+ 12+, 2 400+	W.Petersen, K.Holmes BOEM (C.Leahy#) R.Titus, W.Harrington# R.Laubach, D.Evans R.Scott	
Leach's Storm-Petrel: 2,3 11,12	Cape Cod Bay, off P'town Cont. Shelf, Georges Bank	25+, 1 47, 8	W.Petersen, K.Holmes BOEM (C.Leahy#)	
Northern Gannet: 2,3 23	Cape Cod Bay, Stellwagen <u>Raynham-Bridgewater</u>	150+, 4 1 sub ad.	W.Petersen, W.Smith B.Sorrie	
Full details on file.				
Great Cormorant: 4	Buzz. Bay (Weepecket I.)	(pr.) nesting	J.Hatch	
First breeding record for state.				
Double-crested Cormorant: thr. 3 3,13	Everett E.Boston, N.Scituate Lincoln, Wayland	max. 200+ (6/1) 100, 50+ 9, 9	J.Berry S.Zendeh, SSBC R.Forster	
American Bittern: 4,20	GMNWR, P.I.	2, 1	A.Williams, BBC	
Least Bittern: thr.,9	P.I.,Canton (F.M.)	max. 6, 1	v.o., G.d'Entremont	
Great Blue Heron: 3,6,23	E.Middleboro,GMNWR,Lakeville	2, 3, 2	K.Anderson,A.Williams,W.Petersen	
Great Egret: 2,11,20	Ipswich	1	J.Berry	
Snowy Egret: thr. 3,17	Saugus-Revere E.Boston	max. 17 (6/25) 23, 22	J.Berry S.Zendeh	
Little Blue Heron: 3;9,27	Scituate; Monomoy	1; 1, 2 ad.	B.Litchfield;G.d'Entremont,J.Lortie#	
Tricolored Heron: 8-10,11	Monomoy, Ipswich	2, 2	v.o., BBC	
Cattle Egret: thr. 12	Ipswich (Appleton Farm) Rowley	max. 17 (6/2) 7	J.Berry E.Perley	

<u>SPECIES/DATE</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>	<u>JUNE 1984</u>
Green-backed Heron:				
20	P.I.	8	BBC (A.Blaisdell)	
Black-crowned Night-Heron:				
3,8	E.Boston, Gay Head	40, 18	S.Zendeh, B.Sorrie	
11,20	Ipswich (Cranes), P.I.	21, 14	J.Berry#, BBC	
28,29,30	Watertown	38, 58, 48	B.Phillips	
<u>White Ibis:</u>				
8	Gay Head, Nomans Land	1 ad.	B.Sorrie, R.Andrews	
Glossy Ibis:				
thr.	Ipswich	max. 12 (6/15)	J.Berry	
Mute Swan:				
7,20	Acoxet, P.I.	100+, 2	M.Argue#, BBC	
Brant:				
2-7,30	Monomoy	max. 200 (6/2), 1	J.Barton#+v.o., B.Nikula#+v.o.	
Green-winged Teal:				
27	S.Monomoy	15	J.Lortie#	
Northern Pintail:				
27	S.Monomoy	8	J.Lortie#	
Northern Shoveler:				
4,27	P.I., Monomoy	2, 8	BBC, J.Lortie#	
Gadwall:				
27	Monomoy	29	J.Lortie#	
<u>Eurasian Wigeon:</u>				
27	Monomoy	1 m.	D.Holt# + v.o.	
American Wigeon:				
20,27	P.I., Monomoy	2, 4	J.Smith, J.Lortie# + v.o.	
Common Eider:				
3,16	N.Scituate, Rockport	50, 7 m.	SSBC, J.Berry	
Harlequin Duck:				
25	Menemsha (M.V.)	1 sub ad. m.	D.Oster	
Oldsquaw:				
4,30	E.Orleans, Chatham	1, 10	D.Williams, R.Titus	
White-winged Scoter:				
9	Chatham	1	G.d'Entremont#	
Common Merganser:				
3,16	Westport, Centerville	1 m., 1 m.	R.Laubach, H.Stabins#	
Ruddy Duck:				
thr.	Monomoy	max. 13	R.Prescott#	

TURKEY VULTURE THROUGH RAILS

Osprey nests were found in Marion and Lakeville, both previous and successful locations; and the nesting colony continues to flourish in the Westport River in Bristol County. Bald Eagles were reported from Lakeville and from Bellingham. Both these birds were adults. Six very young Bald Eagles made a brief stop-over in Hanscom Field, Lincoln, on June 14. These birds arrived from Cape Breton, Nova Scotia, where they had been removed from nests earlier in the week. A part of the Massachusetts Eagle Restoration Project, these six young eaglets will be set free from a hacking station in Quabbin Reservoir in the hope that they will return to nest some years in the future.

A Cooper's Hawk's nest was discovered in Newburyport on June 26. A scarce and elusive breeder, very few nests have been found in recent years. The last known recorded nesting in the Newburyport area was in 1955.

A Peregrine Falcon was observed in downtown Boston on June 21, a month before any were released there.

Clapper Rails were found at Wellfleet and Plum Island; a King Rail calling constantly and in clear view delighted many observers for two days on Plum Island. R.H.S.

<u>SPECIES/DATE</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>	<u>JUNE 1984</u>
Turkey Vulture:				
23	Westport, S.Dartmouth	2, 1	J.Gordon#	
27	Monomoy	1	J.Lortie#	
Osprey:				
thr.	Lakeville, Marion	1 pr., 3 yg., 1 pr.	K.Holmes + v.o., G.Gove#	
23	Westport	22 nests	G.Gove, J.Gordon	
Bald Eagle:				
15,16,18	Middleboro	1 ad.	K.Holmes# + v.o.	
17,21	Bellingham	1 ad.	M.Brown	
Northern Harrier:				
4	P.I.	1	BBC	

SPECIES/DATE	LOCATION	NUMBER	OBSERVERS	JUNE 1984
Sharp-shinned Hawk:				
29	Bourne	1	R.Forster	
Cooper's Hawk:				
26	Newburyport	pair at nest	W.Petersen, S.Higginbotham	
Red-shouldered Hawk:				
3,7	Topsfield, E.Middleboro	2, 1	R.Stymeist, K.Anderson	
12,23	Wayland, Marion	1, 1	T.Walsh, G.Gove	
27	Boxford	4+	J.Smith	
American Kestrel:				
19	Lakeville	5 yg. banded	K.Anderson	
Peregrine Falcon:				
21	Boston	1	W.Reagan	
Ruffed Grouse:				
17	Milton (F.M.)	hen w/3 yg.	G.Gove	
Clapper Rail:				
thr., 20	WBWS, P.I.	1, 1	D.Reynolds + v.o., J.Smith	
King Rail:				
3-4, 23	P.I., Chatham	1, 1 (dead)	v.o., W.Harrington#	
Virginia Rail:				
17	Wayland	5	R.Forster#	
23	Halifax	1 (road kill)	W.Petersen	
Sora:				
17	Wayland	2	R.Forster#	

SANDHILL CRANE THROUGH WOODPECKERS

Several unusual birds appeared this month. The first was a well-described Sandhill Crane that was seen in a marsh along the railroad tracks in Lynn, possibly the same bird seen on Plum Island in late May. The second was a Long-billed Curlew, only the fifth documented record of this species in Massachusetts since 1905 and the second recent record, the last being May 31, 1979. A complete account of this sighting with a detailed description of the bird is in this issue of BOEM. The third unusual record is that of a Bar-tailed Godwit, present in Chatham for nearly two weeks. This is the tenth state record of this species. The fourth record was that of a Curlew Sandpiper present on Monomoy for two days; this species is regular and there are three records this year. The fifth record is that of a Sandwich Tern seen on Monomoy, another species that is an increasingly frequent vagrant.

American Oystercatchers and Red Knots were present in the highest numbers for June in the past twelve years. Laughing Gulls occupied 804 nests on Monomoy and 254 nests on New Island where, in 1983, there had been only thirty nests, and only three in 1982. The Common Black-headed Gulls that had established the first U.S. breeding record were unsuccessful as the eggs were destroyed presumably by heavy rains just as the young were about to hatch.

Caspian and Royal terns were sighted this month on Monomoy as was the previously noted Sandwich Tern. A maximum of 65 "portlandica" Arctic Terns spent the month there as did two Forster's Terns and four Black Terns. A pair of Black Skimmers nested in the tern colony on Monomoy where up to six birds were present.

A total of 23 Short-eared Owls was counted on Monomoy (North and South islands), and 14 of these were young birds. Ruby-throated Hummingbirds were noted at four locations, and Red-headed Woodpeckers were also seen in as many locations with one adult reported from South Monomoy. Pileated Woodpeckers were also in evidence at a number of locations. G.W.G.

SPECIES/DATE	LOCATION	NUMBER	OBSERVERS	JUNE 1984
<u>Sandhill Crane:</u>				
20	Lynn Marsh along RR - well described	1	fide R.Forster	
Black-bellied Plover:				
thr.	N.Monomoy	max. 1000 (6/2)	v.o.	
3	E.Boston, Ipswich	35, 5	S.Zendeh, BBC	
24	Scituate	12	W.Petersen	
Semipalmated Plover:				
4,8,23	N.Monomoy	4, 2, 3	B.Nikula#	
Piping Plover:				
2,11	N.Monomoy, Ipswich	1, 2 ad.	BBC, BBC	
24	Scituate	2 pr. + 4 yg.	W.Petersen	
Killdeer:				
17	E.Boston	5	S.Zendeh#	

SPECIES/DATE	LOCATION	NUMBER	OBSERVERS	JUNE 1984
American Oystercatcher:				
thr.	N.Monomoy	max. 20+	B.Nikula#	
3,8	Naushon I., Boston Harbor	2 pr., 2	J.Hatch, B.Hoffman	
Greater Yellowlegs:				
3	Marshfield, E.Boston	4, 3	SSBC, S.Zendeh	
4	P.I.	2	BBC	
Lesser Yellowlegs:				
26	Newburyport, Rowley	1, 1	W.Petersen	
Willet:				
thr.	N.Monomoy	max. 35+	B.Nikula#	
1,20	Plymouth, P.I.	3, 6	W.Smith, BBC	
Spotted Sandpiper:				
2,17	N.Monomoy, Belmont	1, 1	BBC, L.Taylor	
Upland Sandpiper:				
20,21	E.Middleboro, N.Monomoy	6, 1	R.Heil#, B.Nikula	
Whimbrel:				
8	N.Monomoy	4	D.Holt#	
Long-billed Curlew:				
6-10	N.Monomoy	1 (ph.)	B.Nikula, H.Stabins + v.o.	
Hudsonian Godwit:				
23,30	N.Monomoy	1, 1	B.Nikula#	
Bar-tailed Godwit:				
13-25	Chatham	1	J.Lortie#	
Ruddy Turnstone:				
thr.	N.Monomoy	max. 50 (6/3)	v.o.	
Red Knot:				
thr.	N.Monomoy	max 160 (6/3)	v.o.	
11	Ipswich	3 ad.	BBC	
Sanderling:				
2	N.Monomoy	500	BBC	
Semipalmated Sandpiper:				
thr.	N.Monomoy	max. 1200 (6/8)	B.Nikula#	
4,11	P.I., Ipswich	12, 4	BBC	
Least Sandpiper:				
2	N.Monomoy	12	BBC	
White-rumped Sandpiper:				
thr.	N.Monomoy	max. 15 (6/8)	v.o.	
4	P.I.	1	BBC	
Pectoral Sandpiper:				
22	N.Monomoy	1	B.Nikula#	
Dunlin:				
thr.	N.Monomoy	max. 24 (6/2)	v.o.	
21	P.I.	5	BBC	
Curlew Sandpiper:				
13-14	N.Monomoy	1	B.Nikula#	
Ruff:				
20-29	N.Monomoy	1 (black)	R.Scott#	
Short-billed Dowitcher:				
thr.	N.Monomoy	max. 30 (6/8)	B.Nikula#	
Common Snipe:				
13	Framingham	1	R.Forster	
American Woodcock:				
28	P.I.	1	J.Smith	
Red-necked Phalarope:				
3	N.Monomoy	6	J.Russell#	
Pomarine Jaeger:				
2;11,12	Barnstable; Georges Bank	1 dark; 3, 2	W.Petersen; BOEM	
Parasitic Jaeger:				
1;2	Manomet; Eastham, Barnstable	1; 6, 4	W.Smith; W.Petersen	
Laughing Gull:				
thr.	N.Monomoy, Nauset (New I.)	804 nests, 254 nests	D.Holt#, P.Trull	
Common Black-headed Gull:				
thr.	N.Monomoy	1 nesting pr.	D.Holt#	
Bonaparte's Gull:				
3,11	E.Boston, Ipswich	17, 52 imm.	S.Zendeh#, BBC	
Black-legged Kittiwake:				
2	Cape Cod Bay, N.Monomoy	15, 4	W.Petersen, BBC	
Caspian Tern:				
11	Ipswich	1 ad.	J.Berry	
Royal Tern:				
10-30	N.Monomoy	max. 3	v.o.	
Sandwich Tern:				
10	N.Monomoy	1	R.Emery + W.Harrington	

<u>SPECIES/DATE</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>	<u>JUNE 1984</u>
Roseate Tern:				
2	N.Monomoy	3	BBC	
Common Tern:				
2,4	N.Monomoy, Westport	1000, 40	BBC, R.Laubach	
Arctic Tern (portlandica):				
thr.	Monomoy	max. 65	v.o.	
Forster's Tern:				
thr.	N.Monomoy	max. 2 ad.	v.o.	
11	Ipswich	1	BBC	
Least Tern:				
2,3	N.Monomoy, Scituate	20, 3	BBC, SSBC	
11,17	Ipswich, E.Boston	100+, 2	BBC, S.Zendeh#	
Black Tern:				
thr.	N.Monomoy	max. 4	v.o.	
12,22	Nantucket Shoals, Scituate	1, 1	BOEM, R.Campbell	
Black Skimmer:				
8-30	N.Monomoy	max. 6	D.Holt#	
15-30,30	Nauset, Chatham	max. 5, 1	P.Trull, R.Titus	
Black-billed Cuckoo:				
thr.	Sharon	2	R.Titus	
7,10	Manomet, Saugus	1 b., 3	MBO Staff, C.Jackson	
23,26	Westport, W.Newbury	2, 3	G.Gove, W.Petersen#	
	Reports of 8 individuals	from 8 locations.		
Yellow-billed Cuckoo:				
thr.	Sharon	3	R.Titus	
5,17	Lincoln, Annisquam	2, 1	J.Carter, H.Wiggin	
23	Westport	2	G.Gove	
	Reports of 9 individuals	from 9 locations.		
Eastern Screech-Owl:				
11	Ipswich	pr.	J.Berry	
Great Horned Owl:				
11	Ipswich	1	J.Berry	
Short-eared Owl:				
thr.	N.Monomoy, S.Monomoy	max. 3, max. 20 (14 yg.)	D.Holt#	
Common Nighthawk:				
1;5,8	Boston; Stoughton	1; 7, 14	P.Thayer; R.Titus	
16	Manchester	1 (dead)	J.Berry#	
Whip-poor-will:				
16	Rowley	2 calling, 4	R.Alexander, E.Perky	
Chimney Swift:				
17	E.Boston	4	S.Zendeh#	
Ruby-throated Hummingbird:				
9,23	E.Middleboro, Westport	1 m., 1 m.	K.Anderson, G.Gove	
24,27	Berkley, Boxford	1, 5	R.Titus#, J.Smith	
Red-headed Woodpecker:				
6,7	Mt.A., Plymouth	1 ad., 1	M.Nolan, MBO Staff	
10,20	S.Monomoy, Newton	1 ad., 1	C.Goodrich#, N.Komar#	
Hairy Woodpecker:				
2	P'town	nest w/yg.	W.Petersen	
Pileated Woodpecker:				
9,12	Sudbury, Lincoln	1, 1	D.Chapman, J.Carter	
13,15	Weston, N.Reading	1, 1	G.Gove, Mrs. Short	
22	Yarmouthport	1 (seen & heard)	K.Hamilton	

FLYCATCHERS THROUGH PINE SISKIN

Red-breasted Nuthatch, Golden-crowned Kinglet, and Yellow-rumped Warbler, all generally more northern breeding species, were again found this June at a few localized sites where breeding has been confirmed or suspected in the last few years. Eastern Bluebirds were reported from four locations, though no indication of presence at Tyngsboro was received. This has been a region of consistent bluebird success in recent years as a result of extensive nesting box placement. A Gray-cheeked Thrush banded at Manomet in the middle of the month provided the latest record ever for this species in spring migration. The breeding Yellow-throated Vireo pair in Halifax was certainly noteworthy: it was the first ever encountered breeding in Plymouth County by Wayne Petersen in his many years birding there.

A male Yellow-throated Warbler set up territory in Wareham early in the spring and remained through mid-June. Careful observation in future years may find this species breeding at that locale. The Blackpoll Warbler in Chatham at month's end was a notably late record for that species. Good numbers of reports of Worm-eating Warbler were received from locations south and west of Boston, including a nesting pair at Dover. Thirty-two or more Mourning Warblers, whose major migration occurs in June, arrived by

the end of the first week, and Manomet Bird Observatory had banded fourteen of this species by midmonth. The Louisiana Waterthrush banded June 4 at Manomet was probably a migrant; with this early-nesting species, the question is, which way was it going?

Of note in the oddity context were two reports of the orange variant of male Scarlet Tanager, in Wayland and Westwood. The East Boston White-throated Sparrow was a bit unusual in that it was detected as a result of its song--inside the TWA terminal at Logan Airport!

L.E.T.

<u>SPECIES/DATE</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>	<u>JUNE 1984</u>
Olive-sided Flycatcher:				
7,10	Annisquam, S. Monomoy	2, 1	H. Wiggin, C. Goodrich#	
Eastern Wood-Pewee:				
4,7	P.I., Annisquam	1, 1	BBC, H. Wiggin	
Yellow-bellied Flycatcher:				
4,7	Mt. A., Annisquam	1, 1	R. Stymeist#, H. Wiggin	
Acadian Flycatcher:				
3,4	Waltham, MNWS	1, 1	L. Taylor, J. Smith	
4	Mt. A.	1	R. Stymeist#	
Alder Flycatcher:				
3,6	Waltham, Lincoln	2, 1	L. Taylor, A. Williams	
11-15,16	Ipswich, Hamilton	1, 1	J. Berry	
Willow Flycatcher:				
17,20	Wayland, P.I.	20, 4	R. Forster, BBC	
Least Flycatcher:				
3,23	Waltham, Halifax	1, 2 pr.	L. Taylor, W. Petersen	
Eastern Phoebe:				
4	E. Middleboro	5 (fl. yg.)	K. Anderson	
Great Crested Flycatcher:				
3,16	N. Scituate, Manchester	2, 4	SSBC, J. Berry#	
Purple Martin:				
2,4	Eastham, P.I.	1, 50+	W. Petersen, BBC	
Northern Rough-winged Swallow:				
3,8	Ipswich, Lexington	4, 4	J. Berry, J. Carter	
9,16	Chatham, Manchester	2, 3	G.d'Entremont, J. Berry	
Bank Swallow:				
3,12	E. Boston, N. Carver	8,21 nest holes	S. Zende, K. Anderson	
Cliff Swallow:				
16,24	Rowley, Scituate	1 pr., 1	R. Alexander, W. Petersen	
Barn Swallow:				
3,4	E. Boston, P.I.	15, 12	S. Zende#, BBC	
Fish Crow:				
11;20,21	Canton; Hanover	1; 1, 1	G.d'Entremont; W. Petersen	
Red-breasted Nuthatch:				
7,17	E. Middleboro, Ipswich	1, 2	K. Anderson, J. Berry	
23,26	Lakeville, Newburyport	1, 5	W. Petersen#	
White-breasted Nuthatch:				
4	Norwell	1 m. w/ yg.	B. Litchfield	
Carolina Wren:				
8,23	Stoughton, Lakeville	1, 1	R. Titus#, W. Petersen	
24	Westport	5	A. Clarke#	
Marsh Wren:				
4-20,5	P.I., E. Orleans	max. 9, 1	BBC, A. Williams	
Golden-crowned Kinglet:				
23	Lakeville	2 pr.	W. Petersen	
Blue-gray Gnatcatcher:				
thr., 1-16	Sharon, W. Newbury	3 pr., 1 pr.	R. Titus, T. Walsh#	
Eastern Bluebird:				
thr.	Sharon, Plymouth	3, 6 pr.	R. Titus, MBO Staff	
thr., 16	E. Taunton, Hardwick	1 pr., 2 pr.	R. Turner#, G. Gove	
Veery:				
3	E. Boston	1	S. Zende#	
Gray-cheeked Thrush:				
13	Manomet	1 b.	MBO Staff	
Swainson's Thrush:				
3	N. Scituate, Waltham	1, 1	SSBC, L. Taylor	
Hermit Thrush:				
23,25	Middleboro, Sharon	max. 2-3, 1	W. Petersen, R. Titus	
Cedar Waxwing:				
1,20	Annisquam, W. Newbury	10, 10	H. Wiggin, BBC	
White-eyed Vireo:				
10,24	S. Monomoy, Acoaxet	1, 2	C. Goodrich#, A. Clarke#	
Solitary Vireo:				
thr.	Sharon	1	R. Titus	

<u>SPECIES/DATE</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>	<u>JUNE 1984</u>
Yellow-throated Vireo: 23	Halifax, Bridgewater	1 pr., 1 m.	W.Petersen	
Warbling Vireo: 12,23	Lincoln, Halifax	1, 6	J.Carter, W.Petersen	
Blue-winged Warbler: 10-18,23	Lincoln, Sharon	4+, 3 ad. + 1 yg.	J.Carter, R.Titus	
26	W.Newbury	8	W.Petersen#	
Golden-winged Warbler: 26	W.Newbury	1 pr. + yg.	W.Petersen#	
"Brewster's" Warbler: 1	Sharon	1	M.Shannon	
"Lawrence's" Warbler: 26	W.Newbury	1 m.	W.Petersen#	
Tennessee Warbler: 3	Mt.A.	4	R.Stymeist#	
Nashville Warbler: 5,9-23	P.I., E.Middleboro	1, 1 m.	F.Hamlen, K.Anderson	
10,26	Milton, Newburyport	1 m., 2	G.d'Entremont#,W.Petersen#	
Northern Parula: 5,8	P.I., M.V.	1, 1 m.	F.Hamlen, B.Sorrie	
Chestnut-sided Warbler: 3-5,13	3 loc., Manomet	3 singles, 1 b.	v.o., MBO Staff	
23	Sharon	3	R.Titus	
Magnolia Warbler: 3,7	MNWS, Annisquam	18, 1	C.Blaszczak, H.Wiggin	
Black-throated Blue Warbler: 2	N.Easton	1	R.Titus	
Yellow-rumped Warbler: 23	Lakeville	4 m. + 1 f.	W.Petersen	
Black-throated Green Warbler: 2-3,3	3 loc., Mt.A.	3 singles, 3	v.o., R.Stymeist#	
9,23	Saugus, Lakeville	3, 1	C.Jackson, W.Petersen	
26	Newburyport	1	S.Higginbotham	
Blackburnian Warbler: 3	N.Scituate, Waltham	3, 1 f.	SSBC, L.Taylor	
Yellow-throated Warbler: from May-16	Wareham	1 m.	L.Robinson	
Pine Warbler: thr.	Lincoln, Wayland	1, 1	R.Forster	
8,9	E.Middleboro, Saugus	2 m., 2	K.Anderson, C.Jackson	
Prairie Warbler: 10	Saugus	3	C.Jackson	
Bay-breasted Warbler: 3	Mt.A., N.Scituate	1, 2	R.Stymeist#, SSBC	
6	Manomet	1 b.	MBO Staff	
Blackpoll Warbler: 3,5	E.Middleboro, P.I.	1 m., 1	K.Anderson, F.Hamlen	
8,30	Manomet, Chatham	2 b., 1	MBO Staff, v.o.	
American Redstart: 3,5	Waltham, P.I.	13, 20	L.Taylor, F.Hamlen	
7	Annisquam	3	H.Wiggin	
Prothonotary Warbler: 6,12-17	Bolton, Wayland	1 m., 1 m.	E.Salmela, R.Forster	
Worm-eating Warbler: 7,9	Dover, Westport	1 pr. + nest, 1 m.	T.Raymond#, T.Walsh	
10,17-25	Milton, Sharon	2 m., 1	R.Campbell#, R.Titus#	
Northern Waterthrush: 14,16	Milton, Manchester	1, 1 m.	T.Raymond, J.Berry#	
Louisiana Waterthrush: 4	Manomet	1 b.	MBO Staff	
Kentucky Warbler: 10,24	Canton, S.Dartmouth	1, 2	J.Paputseanus, R.Titus#	
Mourning Warbler: 1-14,3	Manomet, 6 loc.	14 total b., 9	MBO Staff, v.o.	
3,4	P.I., MNWS	6, 3	M.Lynch#,C.Blaszczak	
4-7	6 loc.	8 total	v.o.	
Hooded Warbler: 9	Newton	1 m.	N.Komar	
Wilson's Warbler: 3,5	Mt.A., P.I.	1, 2	R.Stymeist#, F.Hamlen	
Canada Warbler: 3	Mt.A., N.Scituate	11, 4	R.Stymeist#, SSBC	
5,7	P.I., Annisquam	1, 2	F.Hamlen, H.Wiggin	

SPECIES/DATE	LOCATION	NUMBER	OBSERVERS	JUNE 1984
Yellow-breasted Chat: 22	Millis	2	B.Cassie	
Summer Tanager: 7,10	Manomet, S.Monomoy	1 m., 1 m.	MBO Staff, C.Goodrich#	
Scarlet Tanager: 17,21-30	Wayland, Westwood Both were "orange variants"	1, 1	R.Forster, S.Olanoff	
Vesper Sparrow: 30	Wellfleet	6	R.Titus	
Savannah Sparrow: 2,3	N.Monomoy, E.Boston	8, 6	BBC, S.Zendeh#	
6	Lincoln	2	A.Williams	
Grasshopper Sparrow: 3-15,24	Lincoln, S.Dartmouth	max. 7, 1	J.Carter#, A.Clark#	
thr.	Falmouth	4+ pr.	v.o.	
Sharp-tailed Sparrow: 2,9	N.Monomoy, S.Dartmouth	6, 20	BBC, T.Walsh	
20	P.I.	7	BBC	
Seaside Sparrow: 9	S.Dartmouth	2	T.Walsh	
White-throated Sparrow: thr., 8	Sharon, E.Boston	1, 1 m.	R.Titus, H.Merriman	
Dark-eyed Junco: 29	Dedham	1 juv.	J.Marshall	
Bobolink: 17,20	Ipswich, W.Newbury	10, 21	J.Berry, BBC	
Orchard Oriole: thr.,3	Rowley, Marshfield	1 pr., 1 m.	R.Alexander, SSBC	
7,8	Mt.A., Lexington	1 imm., 1 m.	P.Hollowell, J.Carter	
13,16	Wayland, S.Natick	1 ad. m., 1	R.Forster	
17,24	E.Bridgewater, Westport	1, 1	W.Petersen, R.Laubach	
Purple Finch: early June	Annisquam	3 m., 2 f.	H.Wiggin	
House Finch: thr.	Annisquam	46-48	H.Wiggin	
Pine Siskin: 1	Lincoln	1	R.Forster	

LIST OF ABBREVIATIONS

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

Scissor-tailed Flycatcher
 Plum Island, July 8, 1984
 Photo by Robert Stymeist



Field Records

July 1984

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

The warm, wet, and cloudy month of July 1984 had an average temperature of 74.7 degrees. That was 1.2 degrees above normal, but still 3.3 degrees cooler than the blistering July of 1983. Ice cream cones were melting, and the beer was flowing on July 15 when the temperature reached 98 degrees, breaking a 101-year-old record for that date by 2 degrees. Seven days had the mercury soaring to 90 degrees or higher, two more days than average, but only half the number of days last year. The sun shone 63 percent of the time, which is the monthly average, but the nights were relatively comfortable, although the evening of July 23 was a sticky 79 degrees, the highest overnight low of the month. The lowest temperature was a mild 58 degrees on July 9, 10, 27, and 28. Precipitation totaled 4.43 inches, 1.75 inches more than normal; the most in any one day was 1.19 inches on July 18. No severe local storms were noted near Boston, but several tornadoes spiraled across other parts of Massachusetts, New Hampshire, and Connecticut.

LOONS THROUGH HERONS

A breeding-plumaged Red-throated Loon was observed at Stage Harbor in Chatham on the fifteenth. At Wareham 28 Common Loons were found in Little Harbor, nearly half of which were in summer plumage.

Twenty-five Cory's, 130 Greater, and just one Sooty shearwater were noted at Stellwagen Bank on the fifth. A single Greater Shearwater was observed sitting on the beach at Monomoy, being continually harassed by terns. Two immature Great Cormorants were noted near the target ship off Eastham, and Double-crested Cormorants were found in good numbers at East Boston, Squantum, and on Plum Island.

Fifty-three Great Blue Herons were counted at the Suasco Dam area in Westboro, a location where they nest. Tricolored Herons were found in just three locations, Plum Island, South Monomoy, and Nantucket. Likewise Little Blue Herons were few and far between with reports of three on South Monomoy and one or two from Essex County. At the spillway on the Charles River in Watertown, counts of Black-crowned Night-Herons were made several times during the month. On July 6, 97 were counted, including 11 immatures, and on July 14, 73 birds were recorded including just 7 immatures. This area has been a traditional gathering spot for night-herons; on July 1, 1976, 201 were tallied there.

R.H.S.

<u>SPECIES/DATE</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>	<u>JULY 1984</u>
Red-throated Loon: 15	Chatham(Stage I.)	1 br. pl. (ph.)	V.Cordes	
Common Loon: 14,28	Wareham(Little I.)	20+, 28	L.+C.Robinson	
Pied-billed Grebe: 11	S.Monomoy	1	B.Nikula#	
Cory's Shearwater: 5	Stellwagen	25	R.Heil	
Greater Shearwater: 4,5	N.Monomoy,Stellwagen	1 sitting on beach,	130	R.Heil
Sooty Shearwater: 5	Stellwagen	1	R.Heil	
Great Cormorant: 10	Eastham(target ship)	2 imm.	A.Morgan	
Double-crested Cormorant: thr. 28,29	E.Boston(Belle Isle) P.I.area,Squantum	max. 250 (7/22) 350+, 300	S.Zendeh# G.d'Entremont#,S.Zendeh	
American Bittern: 7,8 14,22	P.I.,E.Boston Lancaster,W.Newbury	1, 1 2, 1	R.Titus,S.Zendeh S.Carroll#,R.Titus	

<u>SPECIES/DATE</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>	<u>JULY 1984</u>
Least Bittern:				
thr.	P.I.	max. 3	v.o.	
8,22	Marshfield,GMNWR	3-4, 2 imm.	W.Petersen#,M.Lynch#	
Great Blue Heron:				
10	Westboro(Suasco)	53	M.Lynch,S.Carroll	
Great Egret:				
22,29	IRWS; P.I., Westport	3; 2, 20	R.Titus,J.Berry,R.Stymeist#	
Snowy Egret:				
thr.	E.Boston(Belle Isle)	59 (7/8) max. 70	(7/22 S.Zendeh	
2,7	P.I.,Squantum	45, 40	BBC,R.Abrams	
Little Blue Heron:				
1,6	P.I.,Rowley	1, 1	I.Giriunas,R.Forster	
11,29	S.Monomoy;P.I.,Ipswich	3; 1 ad., 1 ad.	D.Holt#;G.Gove	
Tricolored Heron:				
1-2,11	P.I.,S.Monomoy	1, 1	I.Giriunas#,D.Holt	
18	Nantucket	1	N.Jenks-Jay	
Cattle Egret:				
4,29,30	Ipswich	3, 8, 3	J.Berry,G.Gove,J.Berry	
Green-backed Heron:				
thr.,14	P.I.,Lancaster	max. 8, 11	v.o.,M.Lynch#	
Black-crowned Night-Heron:				
thr.	Watertown(Square)	max. 97+ incl. 11 imm.	(7/6) B.Phillips	
13,22	Eastham(Hem.Landing)	44, 68	B.Nikula	
20,25	Charlestown,Squantum	19, 10	T.Ahearn,G.d'Entremont	
Yellow-crowned Night-Heron:				
8,22	N.Scituate,Eastham	1 imm., 3 imm.	R.Titus,B.Nikula	
28,28-29	N.Monomoy,P.I.	1 imm., 1 ad.	CCBC,v.o.	
Glossy Ibis:				
thr.	P.I.,E.Boston	max. 9 (7/21), max. 9 (7/22)	E.Nielsen#,S.Zendeh	
4	Natick(Broadmoor)	1	E.Taylor	
3,14	N.Monomoy	6, 8	D.Holt#+v.o.	

WATERFOWL THROUGH NORTHERN BOBWHITE

Forty-six Wood Ducks were tallied at Great Meadows on July 22, and a female Pintail had eight young in tow on July 15. Unusual July waterfowl were Greater Scaup in Wareham, a pair of Bufflehead at Wachusett Reservoir in Clinton, and the interesting report of three young Hooded Mergansers in the Bolton Flat area of Lancaster.

On July 3, an immature Bald Eagle was seen feeding on carrion on the river flats between Woodbridge Island and the Sportsman's Lodge, Newburyport, occasionally getting up and flying around only to be harassed by gulls and terns, then settling back down to feed. Another immature Bald Eagle was observed flying very low over the Worcester Art Museum on July 27. In Newburyport, two young Cooper's Hawks were out of the nest on July 11; this nest, found in June, was the first known nesting of this species in many years for Essex County.

A Mississippi Kite was well observed on July 8 in Wareham. This sub-adult bird was the eighth record for the state, the most recent being a bird seen in Chatham and Truro on May 6 and 7, 1983. R.H.S.

<u>SPECIES/DATE</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>	<u>JULY 1984</u>
Mute Swan:				
14	P.I.	1	G.d'Entremont#	
Wood Duck:				
22	GMNWR	46	RRC	
Northern Pintail:				
15	P.I.	1 f. + 8 yg.	G.Gove	
Blue-winged Teal:				
29	P.I.	30 + incl. yg.	J.Berry	
Gadwall:				
21,28	P.I.	7, 7	BBC	
American Wigeon:				
11,29	P.I.	3, pr.	W.Petersen#,J.Berry	
Greater Scaup:				
14	Wareham(Little H.)	1 m.	L.+ C.Robinson	
Oldsquaw:				
2	Chatham	3	B.Nikula	

SPECIES/DATE	LOCATION	NUMBER	OBSERVERS	JULY 1984
Black Scoter:				
14,21	Wareham	7 m., 5 m., 2 f.	L.+ C.Robinson	
White-winged Scoter:				
14,21	Wareham	25, 58	L.+ C.Robinson	
Bufflehead:				
1	Clinton(Wachusett Reservoir) pr.		R.Titus	
Hooded Merganser:				
14	Lancaster(Bolton Flats)	3 yg.	M.Lynch,S.Carroll	
Red-breasted Merganser:				
21,23	Wareham,S.Dartmouth	1 f., 1 f.	L.+ C.Robinson,R.Laubach	
Turkey Vulture:				
2,9	Milton,Hopkinton	2, 1	W.Regan,P.Anderson	
10,20	Dedham,Wayland	1, 1	J.Marshall,H.Parker	
Osprey:				
2,11	Wareham,Lancaster	3, 1	L+C.Robinson,M.Lynch#	
21,29	Newbypt.;M.V.,Westport	1, 7, 54	BBC;A.Ellis,R.Stymeist#	
Mississippi Kite:				
8	Wareham	1 sub-ad.	G.LeBaron	
Bald Eagle:				
3	Newbypt.	1 imm.	B.Sorrie	
27	Worcester	1 imm.	M.Lynch#	
Cooper's Hawk:				
11	Newbypt.	Pr. at nest + 2 yg. out of nest.	W.Petersen	
Northern Goshawk:				
1	Lincoln	1 ad.	R.Forster	
Red-shouldered Hawk:				
2,14	E.Middleboro,N.Carver	1, 1 imm.	K.Anderson	
American Kestrel:				
21	Plymouth Beach	2 ad. + 3 m. + 2 f. yg.	G.Gove#	
29	Lincoln(Hanscom)	6+	J.Carter	
Northern Bobwhite:				
3,29	Canton,Bedford(Hanscom)	1, 2	G.d'Entremont,J.Carter	

RAILS THROUGH WOODPECKERS

On a BBC walk at Great Meadows, 10 Virginia Rails and 3 Soras were noted. Reports of Lesser Golden-Plover are scarce in summer; nevertheless, two were reported this month -- one in breeding plumage. The highest counts in 12 years of records of American Oystercatchers (40) and Willets (95) were recorded this month from North Monomoy, where a very high count of Least Sandpipers was also made. Also, excellent numbers of Whimbrels were counted there with 148 and 195 seen going to roost on July 19 and 30, respectively.

Among a flock of 500 Red Knots seen on Plymouth Beach were 10 to 12 color-banded birds. These were some of the knots that had been banded at Scituate (Third Cliff) in the summer of 1983. Three, and possibly four, Curlew Sandpipers were noted this month. The possibility of four birds exists because the bird seen at Squantum on July 23-29 may or may not have been the same bird that had been reported to Massachusetts Audubon Society on the twenty-seventh as having been seen at Thompson's Island for a week previous.

The Common Black-headed Gulls, which had failed in their nesting attempt in June, were still present on North Monomoy, where a Lesser Black-backed Gull in second summer plumage was also seen. An albino Great Black-backed Gull, at first mistaken for a Glaucous, caused excitement at Plymouth. A Gull-billed Tern was noted at Plum Island and a Caspian and 11 to 13 Royal Terns were reported, one of the latter being a banded bird. Last month it was said that Sandwich Terns are of irregular occurrence; this month 3 were seen at three different locations. Arctic Terns were present in good numbers. This is the southern limit of their breeding range but most of these birds were of the portlandica form; that is, first year, non-breeding birds. The largest and most productive Least Tern colony in the state, at Nantucket, had 560 pairs of adults and 310 immature birds. The pair of Black Skimmers nesting on North Monomoy was seen with three young; we hope the young successfully fledged and the skimmers will return to breed here next year.

No woodpeckers of any species were reported this month! This does not mean, however, that there are no woodpeckers in Massachusetts.

SPECIES/DATE	LOCATION	NUMBER	OBSERVERS	G.W.G. JULY 1984
Clapper Rail:				
28	P.I.	1 heard	BBC	
Virginia Rail:				
14,16	Lancaster,P.I.	5, 1 f. + 5 yg.	M.Lynch#,BBC	
22,28	GMNWR,Chatham	10, 1 dead	BBC,J.Aylward	

<u>SPECIES/DATE</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>	<u>JULY 1984</u>
Sora:				
22	GMNWR	3	BBC	
Common Moorhen:				
thr.	GMNWR	1-2	v.o.	
11,29	S.Monomoy,P.I.	1, 2 ad. + 6 yg.	B.Nikula#,J.Berry	
Black-bellied Plover:				
thr.	N.Monomoy	max. 400	B.Nikula#	
8,31	Scituate,Plymouth	12, 7	W.Petersen,K.Anderson#	
Lesser Golden-Plover:				
4,21	N.Monomoy,Plymouth	1 br. pl., 1	G.Gove#	
Semipalmated Plover:				
thr.	N.Monomoy	max. 300 (7/28)	B.Nikula#	
8,28	Scituate,P.I.	2, 10	W.Petersen,BBC	
Piping Plover:				
8,19	Scituate	8, 4 ad. + 6 yg.	W.Petersen,G.d'Entremont#	
26	Monomoy	max. 15	B.Nikula#	
Killdeer:				
1	Halifax,Bedford	50, 10	W.Petersen,J.Carter	
10,21	Sharon,P.I.	16, 15	R.Titus,BBC	
American Oystercatcher:				
14	Nantucket,N.Monomoy	7, 20	A.Ellis,BBC	
21,26	Chatham,N.Monomoy	1, 40	W.Reagan,B.Nikula#	
Greater Yellowlegs:				
thr.	E.Boston,P.I.	max. 32 (7/29), max. 20 (7/28)	S.Zendeh,BBC	
14	N.Monomoy	100	BBC	
Lesser Yellowlegs:				
thr.	E.Boston,P.I.	max. 40 (7/14), max. 21 (7/21)	S.Zendeh,v.o.	
19,20	N.Monomoy,Halifax	130, 11	B.Nikula#,K.Anderson	
22	Newbypt	223	R.Titus	
Solitary Sandpiper:				
14-16	P.I.	1	v.o.	
20,22	Halifax,GMNWR	3, 1	K.Anderson,BBC	
Willet:				
2-28	P.I.	max. 6-8	v.o.	
10,28	Barnstable,Squantum	nest. pr., 8	G.Wilson,W.Reagan	
thr.	N.Monomoy	max. 95 (7/28)	B.Nikula#	
Spotted Sandpiper:				
14,15	Lancaster,Belmont	1 ad. + 1 yg., 2	M.Lynch#,L.Taylor	
16,22	P.I.,GMNWR	4, 3	BBC	
17,27	Nantucket,E.Boston	2, 3	N.Jenks-Jay,S.Zendeh	
Upland Sandpiper:				
1,4	Halifax,E.Middleboro	5, 2	W.Petersen,K.Anderson	
15,29	Newbypt,Bedford	3, 19	G.Gove,J.Carter	
Whimbrel:				
12,19,30	N.Monomoy	40, 148, <u>195</u>	B.Nikula#	
15;21,31	Nantucket;Plymouth	10; 8, 5	N.Jenks-Jay;G.Gove,W.Smith	
1-2 birds from each of 6 locations				
Hudsonian Godwit:				
thr.	N.Monomoy	max. 63 (7/28)	v.o.	
7-29	Newbypt-P.I.	max 8 (7/28)	v.o.	
8-29	E.Boston	max. 11 (7/22)	S.Zendeh	
Ruddy Turnstone:				
12,25	Nantucket	2, 7	N.Jenks-Jay	
21,30	Plymouth,Wareham	20, 40	G.Gove#,L+C.Robinson	
Red Knot:				
thr.	N.Monomoy	max. 1400 (7/28)	v.o.	
19,29	N.Scituate	150, 1100	G.d'Entremont#,R.Titus	
21	Plymouth	500	G.Gove#	
Sanderling:				
thr.	N.Monomoy	max. 3000 (7/24)	B.Nikula#	
22,29	E.Boston,Nantucket	150, 46	S.Zendeh,N.Jenks-Jay	
Semipalmated Sandpiper:				
thr.	N.Monomoy	max. 2000 (7/24, 26)	B.Nikula#	
22,28	E.Boston,P.I.	500, 75	S.Zendeh,BBC	
29	Scituate	400	R.Titus	
Least Sandpiper:				
thr.	N.Monomoy	max. 1400 (7/19)	B.Nikula#	
20,22	Halifax,Newbypt	67, 265	K.Anderson,R.Titus	
29	Scituate	150	R.Titus	
Pectoral Sandpiper:				
2,7,21,22	P.I.	1, 1, 1, 1	v.o.	
4	N.Monomoy	1	G.Gove	
22,29	E.Boston	3, 2	S.Zendeh	

<u>SPECIES/DATE</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>	<u>JULY 1984</u>
Dunlin: 15	P.I.	1 br. pl.	G.Gove	
<u>Curlew Sandpiper:</u> 14, 22	Nantucket, N. Monomoy	1 br. pl., 1	A. Ellis, L. Taylor#	
22-29	Squantum	1 br. pl.	v.o.	
<u>Stilt Sandpiper:</u> 6-29	P.I.	max. 34 (7/28)	v.o.	
<u>Short-billed Dowitcher:</u> thr.	N. Monomoy	max. 2300 (7/14)	v.o.	
thr.	P.I., Newbypt	max. 375 (7/22)	v.o.	
thr.	E. Boston	max. 120 (7/8)	S. Zende#	
7, 8	Squantum, Scituate	200, 25	R. Abrams, W. Petersen	
<u>Long-billed Dowitcher:</u> 11	P.I.	1	W. Petersen#	
<u>Common Snipe:</u> 11	Lancaster	2	S. Carroll#	
<u>American Woodcock:</u> 8; 21, 23	Lincoln; Newbury	1; 1	J. Carter; BBC	
<u>Wilson's Phalarope:</u> 2, 26	P.I., N. Monomoy	2, 1	BBC, D. Holt#	
<u>Parasitic Jaeger:</u> 4, 6	Marion	5, 1	P. Hallowell	
<u>Laughing Gull:</u> 15, 28	P.I.	1 ad. + 1 imm., 1	br. pl. G. Gove	
18, 25	Nantucket, Squantum	45, 5	N. Jenks-Jay, G. d'Entremont	
<u>Little Gull:</u> 7, 8	P.I., Newbypt	1 imm., 1	R. Titus, BBC	
<u>Common Black-headed Gull:</u> thr.	N. Monomoy	2-3 ad.	D. Holt#	
2, 22	E. Boston	1	S. Zende#	
<u>Bonaparte's Gull:</u> 8	P.I., Revere	60, 90	BBC, S. Zende#	
<u>Ring-billed Gull:</u> 23, 30	Westport	1, 6	R. + C. Laubach	
<u>Lesser Black-backed Gull:</u> 22	N. Monomoy	1 (2 S)	C. Floyd#	
<u>Great Black-backed Gull (albino):</u> 8	Plymouth	1	W. Smith	
<u>Gull-billed Tern:</u> 1	P.I.	1	J. Soucy, L. Jodrey	
<u>Caspian Tern:</u> 1	P.I.	1	R. Williams	
<u>Royal Tern:</u> 1-22	N. Monomoy	max. 3 (7/4)	v.o.	
3, 15	Nantucket	2, 3	E. Andrews, N. Jenks-Jay	
8, 10	Revere, Plymouth	2, 1 b.	S. Zende#, W. Smith	
14	P.I.	2	G. d'Entremont#	
<u>Sandwich Tern:</u> 6, 11	P.I., S. Monomoy	1, 1 (ph.)	R. Heil, B. Nikula#	
29	Nantucket	1	N. Jenks-Jay	
<u>Roseate Tern:</u> 4, 15	P.I.	2, 1 br. pl.	G. d'Entremont, G. Gove	
8	Nantucket, Scituate	1, 4	N. Jenks-Jay, W. Petersen	
<u>Common Tern:</u> 8, 29, 30	Nantucket	46, 136, 200	N. Jenks-Jay	
<u>Arctic Tern:</u> thr.	N. Monomoy	max. 80 (7/14)	B. Nikula#	
thr.	Orleans	max. 25 (7/21)	B. Nikula#	
8	Nantucket	3 ad. + 2 imm.	N. Jenks-Jay	
<u>Forster's Tern:</u> 23	N. Monomoy	1	R. Humphrey#	
<u>Least Tern:</u> thr.	P.I.	max. 67 (7/15)	v.o.	
thr.	Nantucket	1430	N. Jenks-Jay	
<u>Black Tern:</u> 4	N. Monomoy	1 br. pl. + 1	G. Gove#	
8, 18, 25, 29	Nantucket	2, 1, 1, 1	N. Jenks-Jay	
<u>Black Skimmer:</u> thr.	N. Monomoy	1 pr. with 3 chicks, max. 6	D. Holt#	
thr.	Orleans	pr.	P. Trull#	
8, 25	P.I., Naushon I.	1, 2	v.o., J. Hatch	
<u>Black-billed Cuckoo:</u> 1, 25	Ipswich, S. Monomoy	1, 1	J. Berry, B. Nikula#	
Four from four locations.				

<u>SPECIES/DATE</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>	<u>JULY 1984</u>
Yellow-billed Cuckoo:				
thr.	E.Middleboro	1-2	K.Anderson	
22	Newbypt	2	R.Titus	
6 from 6 locations				
Eastern Screech-Owl:				
29	M.V.	2 gray-phase	A.Ellis#	
Great Horned Owl:				
7	P.I.	1	J.Berry#	
Barred Owl:				
1	Lakeville,Medfield	pr., 4-5	W.Petersen#,B.Cassie#	
Short-eared Owl:				
thr.	N.Monomoy	3	D.Holt#	
25	S.Monomoy	5	B.Nikula#	
Northern Saw-whet Owl:				
7	Wellesley	1	fide N.King	
Common Nighthawk:				
18	Stoughton	1	R.Titus	
Whip-poor-will:				
2,4	Newbury,Natick	2, 3	BBC	
14,23	E.Middleboro,Newbury	1, 2	K.Anderson,BBC	
Chimney Swift:				
4	Natick	15	BBC	
Ruby-throated Hummingbird:				
23	E.Middleboro	1	P.Anderson	
Belted Kingfisher:				
22,23	GMNWR,Randolph	2, 1	BBC,G.d'Entremont	

FLYCATCHERS THROUGH PURPLE FINCH

An individual Acadian Flycatcher seen in Wareham constituted an unusual summer location for this species, which is much more regular as a breeder in central and western Massachusetts. Another surprise from the southeastern part of the state was the nesting pair of Willow Flycatchers at Whitman; this was only the third breeding record in Plymouth County known to Wayne Petersen. Cliff Swallows started out the season auspiciously at the maintenance buildings on Plum Island, with a large number of nests. By mid-July, however, only two adults were present and the nests were all destroyed or abandoned. The apparent cause was competing House Sparrows. A Sedge Wren was heard and carefully observed during the first week of the month in Nonquitt, near New Bedford. At month's end an adult Swainson's Thrush was banded at Rockport.

July observers at coastal sites turned up some nice rarities. For three days beginning July 6, an immature Scissor-tailed Flycatcher was seen at Plum Island. Another report of what was very likely the same individual was received from Chatham a week later. Interestingly, of the two long tailed flycatcher species, this North American one has occurred less often in recent years than the South American Fork-tailed. Interest in the Jackdaw near Siasconset on Nantucket heightened when apparent plumage differences were detected. Indeed, on July 9 two Jackdaws were seen together at that site. This is not quite so astounding an occurrence in the light of other recent Jackdaw activity in North America. An article on this situation will be published in a later issue of this magazine.

L.E.T.

<u>SPECIES/DATE</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>	<u>JULY 1984</u>
Olive-sided Flycatcher:				
1	Medfield	1	W.Reagan	
Eastern Wood-Pewee:				
thr.,9	E.Middleboro,P.I.	1, 1	K.Anderson,BBC	
Acadian Flycatcher:				
1	Wareham	1	L.+ C.Robinson	
Alder Flycatcher:				
14,15	Lancaster,Lincoln	1, 1	S.Carroll#, C.Floyd#	
Willow Flycatcher:				
1	Whitman,Lincoln	pr., 2	W.Petersen,J.Carter	
14,22	Lancaster,GMNWR	8, 4	M.Lynch#,BBC	
Eastern Phoebe:				
6	Concord	3	J.Carter	
Great Crested Flycatcher:				
14	Sharon	3	R.Titus	
Eastern Kingbird:				
2,14	Sharon,P.I.	16, 10	R.Titus,BBC	
Scissor-tailed Flycatcher:				
6-8,14-15	P.I.,Chatham	1 imm., 1 ad.	R.Heil + v.o.,L.Pivacek#	

<u>SPECIES/DATE</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>OBSERVERS</u>	<u>JULY 1984</u>
Horned Lark: 29	Bedford	3	J.Carter	
Purple Martin: 1-18	Marshfield,Middleboro	16 pr., 43 pr.	R.Turner	
1-18	Halifax,Rehoboth	12 pr., 17 pr.	R.Turner	
21-28	P.I.	30 max.	v.o.	
Northern Rough-winged Swallow: 4,28	Wayland,Stoughton	7, 1	R.Forster,R.Titus	
Bank Swallow: 2-21,12	P.I.,Lincoln	6 max., 100+	BBC,J.Carter	
Cliff Swallow: 2-14,8	P.I., Marshfield	2 max., 1	v.o.,W.Petersen#	
Blue Jay: 23-25	Chatham	several flocks migr.	D.Holt	
Fish Crow: 7-22	Canton	2 max.	v.o.	
<u>Jackdaw:</u> 9-31	Nantucket	<u>2</u>	N.Jenks-Jay#	
Red-breasted Nuthatch: 9,11	Concord,Newbypt	2, 1	J.Carter,W.Petersen#	
25,26	Framingham,E.Middleboro	1, 1	R.Forster,K.Anderson	
Brown Creeper: 3-14	Concord	pr. + 2 yg.	C.Floyd#	
Sedge Wren: 6-7	Nonquitt	1	A.Ellis	
Marsh Wren: 2-21,22	P.I.,GMNWR	12 max., 17	v.o.,BBC	
Golden-crowned Kinglet: from June-1	Lakeville	2 pr.	W.Petersen	
Eastern Bluebird: 7	Lexington	1	R.Titus	
Veery: 15	Bolton	7	R.Titus#	
Swainson's Thrush: 30	Rockport	1 ad. b.	R.Norris	
Hermit Thrush: 14	Sharon	2	R.Titus	
Gray Catbird: 22	Newbypt	37	R.Titus	
Solitary Vireo: 11	Sharon	1	R.Titus	
Yellow-throated Vireo: from June-1,1	Halifax,Bridgewater	nesting pr., pr.	W.Petersen#	
Warbling Vireo: 22	GMNWR	2	BBC	
Red-eyed Vireo: 14	Sharon	23	R.Titus	
Blue-winged Warbler: 2	Concord	1 m.	J.Carter	
Nashville Warbler: 1	Berlin	1	R.Titus	
Northern Parula: 11	W.Newbury	1 m.	W.Petersen	
Chestnut-sided Warbler: 15	Waltham	1 m.	L.Taylor	
Black-throated Green Warbler: 1,30	Lakeville,Middleboro	1, 1 m.	W.Petersen#,K.Anderson	
Pine Warbler: 1	Lancaster,Medfield	2, 1	R.Titus,W.Reagan	
3,14	E.Middleboro,Concord	2 m., pr.	K.Anderson,J.Carter	
Prairie Warbler: 1,3	N.Carver,Concord	1 m., 2 m.	K.Anderson,J.Carter	
Black-and-white Warbler: 14,21	Sharon,Newbury	4, 2	R.Titus,BBC	
Worm-eating Warbler: from May-14	Sharon	1	R.Titus	
Northern Waterthrush: 1	Medfield,Lakeville	1, 5	W.Reagan,W.Petersen#	
Canada Warbler: 1	Lakeville	2 pr.	W.Petersen#	
Indigo Bunting: 3,20	Concord,Halifax	5, 4 m.	J.Carter,K.Anderson	

SPECIES/DATE	LOCATION	NUMBER	OBSERVERS	JULY 1984
Field Sparrow: 3,20	Concord, Halifax	5, 1 m.	J. Carter, K. Anderson	
Grasshopper Sparrow: 9,15	Lincoln, M.V.	3 ad. + 2 yg., 1	J. Carter, M. Vaughan	
Sharp-tailed Sparrow: thr.	E. Boston, P.I.	8-10, 4 max.	S. Zendeher, v.o.	
Seaside Sparrow: 1, thr.	P.I., E. Boston	2, 1-2	I. Giriunas, S. Zendeher	
Swamp Sparrow: 10,14	Needham, Lancaster	8, 11	J. Marshall, S. Carroll#	
White-throated Sparrow: 11	W. Newbury	pr.	W. Petersen#	
Bobolink: 4,21	Sherborn, Rowley	3, 35	BBC	
Eastern Meadowlark: 4,9	Sherborn, P.I.	4, 2 nesting	BBC	
13,20	Lincoln, Halifax	2 nesting, 6	J. Carter, K. Anderson	
Orchard Oriole: 4,8	E. Orleans, Scituate	2, 1 m.	A. Williams, W. Petersen	
Purple Finch: 28	P.I.	10	BBC	



CHRISTMAS BIRD COUNT

A Christmas Bird Count is a popular census of birdlife taken each year by a number of birdwatchers between December 10 and January 2. This traditional activity, sponsored by the National Audubon Society and the U.S. Fish and Wildlife Service, dates back to 1899 and has grown from a limited affair involving only a few people to an event in which tens of thousands of birders in Canada, United States, Mexico, Central and South America participate. In the 79th Christmas Bird Count (CBC) of 1978, 31,140 people joined in 1269 separate counts to report a total of 103,403,790 individual birds of 600 species. In the CBC of 1982, the number of species reported in any one count ranged from 3 to 306 with the highest count in the U.S. being 222.

Although the participants vary in expertise from beginner to seasoned expert, the magnitude of the undertaking provides data of some scientific significance. For this reason, very specific rules are set up to guide those who take part. Each CBC is a day-long census of all birds within a circular area 15 miles in diameter, and compilers try to "field" as many competent birders as they can to cover the roughly 177 square miles of a count circle, pairing up the less experienced with the better qualified so that all sightings can be confirmed. The competition is keen to produce the highest number of species, and this undoubtedly insures the thoroughness with which the count areas are covered. And with the great number of birders in the field, there are bound to be a number of "rare bird" sightings - something that enables Massachusetts birders to participate enthusiastically despite the rigors of a cold winter's day. The day's activity usually ends with a celebratory suppertime gathering during which the final tally or "countdown" is made.

This year's count period is from Saturday, December 15, 1984 through January 1, 1985. Bird Observer encourages anyone wishing more information or desiring to participate, whatever your level of birding accomplishment, to send a stamped and self-addressed envelope to Robert H. Stymeist, 98 Boylston Street, Watertown, MA 02172.



Because of its stubby, conical bill, our August bird is readily recognizable as a "finch." Of course, assignment to that loose category still leaves a lot of field guide pages to look at for a match. At least we know we must look near the back of the book. The modest size of the bill rules out the cardinals and grosbeaks, and the apparent lack of distinct streaking in the upperparts seems to rule out typical sparrows and longspurs.

Now, what else stands out about our bird? - pale, apparently unstreaked underparts; dark upperparts with narrow, paler feather edges barely visible on the back; two pale wing bars; and, most notably, a clear pale shoulder patch (probably not white) much like the epaulette of a Red-winged Blackbird. Can we find a match to these characters in our standard North American field guide? The extensive contrasting markings of the wings and the chunky proportions steer us to such birds as goldfinches and buntings - a considerably smaller number of candidates in our field guide.

Among the finch-like birds of regular occurrence, the closest candidates seem to be the Dickcissel and the winter-plumaged American Goldfinch, both of which possess a shoulder patch. But neither of these fits, even superficially. The Dickcissel lacks the wing bars, and its shoulder patch is rich chestnut, not pale. The American Goldfinch does not have so much contrast between upper- and underparts. Neither of these birds has the very noticeable small white (?) patch beneath the lower wing bar.

At this point we must consider the possibility that our bird is a vagrant from somewhere else in the world. For a finch-like bird in February, the most likely origin is Eurasia. Checking the finch plates of any European field guide, we quickly find two candidates: the Chaffinch (Fringilla coelebs) and the Brambling (F. montifringilla). Each of these has a large pale shoulder patch and a smaller white mark visible at the bases of the primaries on the folded wing. A good mark

Photo by Roger Everett



of distinction between these species in the field is the rump - greenish in the Chaffinch and white in the Brambling, but the rump is not visible in the photograph. On closer examination, the Chaffinch fits less well. Its shoulder patch is really just an enlarged wing bar - i.e., it is bordered above by a darker row of wing coverts, and the patch is pure white, not just pale as it seems in the photograph. The winter male Brambling fits well, however. Its shoulder patch is pale rusty, contrasting with the white upper wing bar. Its underparts are clear and generally whitish except for the pale rusty upper breast. The head and back are blackish with narrow paler feather edges. (The brilliant black head and back of the summer male Brambling emerge with the wearing away of these feather edges.) The more extensive feather edging of the head creates some contrasting pale areas, particularly near the eye, something very evident in our photograph.

Our bird is indeed a Brambling, a species immediately recognizable to anyone familiar with it. For most readers, then, the challenge of this "At A Glance" was not to recognize the familiar in the obscure, but the challenge of the unfamiliar itself, clearly presented.

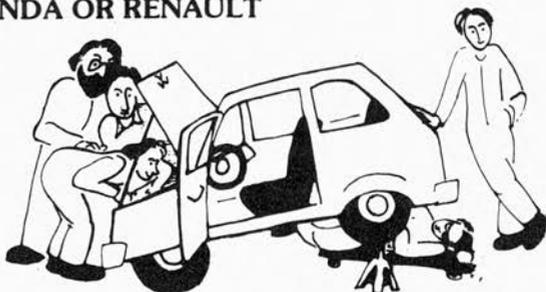
The Brambling is a common breeding bird of the birch and coniferous forests throughout northern Eurasia, from Scandinavia in the west to Siberia in the east. It migrates irruptively, sometimes in huge flocks, and can be found in winter throughout most of southern and central Europe and temperate Asia. Its status as an uncommon migrant in the western Aleutian Islands and as a casual visitor to the Alaskan mainland accounts for its inclusion in the more recent North American field guides. It is a casual winter visitor in Iceland, the most likely origin for a bird of this species that appears as an accidental in Massachusetts. But, as the 6th A.O.U. Checklist suggests: "Some records, especially those from the northeastern states, may be of escaped cage birds" (p. 742).

Chris Floyd, Lexington

Join the Flock!

**GET YOUR RABBIT, DASHER, VOLVO,
DATSUN, TOYOTA, HONDA OR RENAULT
REPAIRED AT:**

CO-OP GARAGE
106 Pleasant Street
Watertown
923-0941
(Convenient to MBTA)



At a Glance . . .

Photo by Roger Everett.



Can you identify this bird? Identification will be discussed in next issue's *At a Glance*. Bird Observer will again award a PRIZE to the reader who submits the most correct answers in 1984. Please send your entry on a postcard to Bird Observer, 462 Trapelo Road, Belmont, MA 02178 before the answer is published in the next issue.



**PURE
SEED
BIRD
FEED.**
A Better Way to Feed Birds

Let us show you how to attract a greater variety of birds, feed them better and have it cost no more.

Send Your Name:

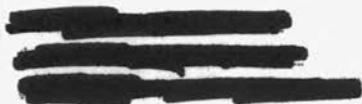
Name _____
Address _____
City _____
State _____ Zip _____

Find Out
Why Birds Love It.

 **Bird'n Hand** Box 806, New Ipswich, New Hampshire 03071

BIRD OBSERVER (USPS 369-850)
462 TRAPELO ROAD
BELMONT, MA 02178

SECOND CLASS
POSTAGE PAID
AT
BOSTON, MA.



**FIELD CHECKLISTS
FOR MOST AREAS OF THE WORLD . . .**

We also stock foreign and domestic field guides and natural history publications of general interest.

Write For Free Catalog

Operating a few Select Tours to various areas of the world since 1955. *Write for listing.*



RUSS MASON'S

NATURAL HISTORY TOURS, INC. BOE
POST OFFICE BOX 2045
KISSIMMEE, FLORIDA 32741 U. S. A.
PHONE: 305-847-3656