

*Ampelis
garrulus*

SBv 97.41.9 (15)

v. 16

(1883-84)
But the winter will be chiefly remembered by our naturalists as the season when the Bohemian Waxwing was first seen by the rising generation of observers; when several individuals of the Brown Creeper, the Thistle Bird, the Purple Finch, and the Cedar Bird were taken near St. John in January and February, and when large numbers of Crows and Robins spent the entire season in the Province. *Chamberlain, Auk, July 1884, p. 294.*

Birds of Toronto, Canada,
by James H. Fleming,
Part II, Land Birds.
Auk, XXIV, Jan., 1907, p. 82.

231. **Ampelis garrulus.** BOHEMIAN WAXWING.— An irregular winter resident, rare. A flight occurred in 1895 when several small flocks spent a month or more in the residential parts of the city. Mr. Geo. E. Atkinson recorded their arrival on February 3; they were absent from the 13th to the 22d, and were last seen on March 6; Mr. Nash took one at East Toronto on the 22d.

Winter Birds of Webster, N. H. by Falco.

We were induced on the authority of another person to include the Northern Wax-wing, (*Ampelis garrulus*), in our list published in the *Forest and Stream*, but think it somewhat doubtful, probably the Common Waxwing was mistaken for this species, as the observer was not scientific.

O. & O. X. Jan. 1885. p. 74

Brief Notes.

A flock of Bohemian Waxwings visited us on March 12. A. M. Farmer, Amoskeag, N. H.

O. & O. Vol. 17, April 1892 p. 64

The Bohemian Waxwing in Vermont in Summer.— It has been my good fortune to spend the time from August 7 to the 20th at Willoughby Lake this summer. Lake Willoughby, in the town of Westmore in northern Vermont, about 25 miles from the Canadian border, is a well known region to the botanists and ornithologists of New England. On the sandy beach at the south end of the lake, between Mt. Pisgah and Mt. Hor there are many birches; some are bare, dead trees, while other are well covered with leaves.

While at the beach August 18 a few Cedar Birds were about the trees, but on a dead tree, a Black-throated Green Warbler was looking over the branches, when what I first thought was a Cedar Bird flew to the same tree, and remained there a long time. As I looked at it, it seemed larger than a Cedar Bird; then I saw some white wing bars plainly. I watched it for twenty minutes or more, and when I left the beach it was still there.

Since then I have had a dead Cedar Bird in my hand to examine, and this bird at Willoughby was certainly larger, and the white wing bars (3 I think) were plainly to be seen. There was plenty of time to look at the bird, for it remained just where it perched at first as long as I watched it, and there were no leaves or branches to hide it.

I reported this incident to Dr. Walter Faxon of Cambridge, who is familiar with this region. I take the liberty to quote his reply: "I do not doubt that the bird you saw was the Bohemian Waxwing. The size and particularly the white wing-bars would distinguish it from the Cedar Bird."

— ANNA E. COBB, *Providence, R. I.*

Aug 29. Jan. 1912. p. 104.

Ampelis garrulus

In Mass.

Williamstown, Mass.

In the collection of the Nat. Hist. Soc. of Williamstown College I have just seen a Bohemian Waxwing marked as follows:
"Male, Williamstown, Mass."

Some Additions to the List of Birds of Bristol County, Mass. by C. L. Phillips. Sighet, Mass.

Bohemian Waxwing (*Ampelis garrulus*). I saw two of these beautiful birds December 26, 1885. They were perched in a juniper in an old pasture. Not having my gun I did not secure them.

February 7th a fine ♂ Bohemian Waxwing was shot, and so far as I can ascertain it is the first ever captured here.

Cape Cod - - - F. L. Small.

O&O, XVI, March, 1891, p. 42

In the March number I stated on another person's statement that a ♂ Bohemian Waxwing had been shot here. It proved to be a Cedarbird.

Providence town, Mass. Fred. L. Small.

O&O, XVI, April, 1891, p. 64.

Ampelis garrulus.

R. A. Gilbert called, Dec. 4, 1901, on Mr. Paul Gidney, Columbia St., Maplewood, Malden, and saw a Bohemian Waxwing which Mr. Gidney says was taken in Hudson Mass. about 20 yrs. ago. Mr. Gidney said that he skinned, sexed & mounted the bird.

Rare Birds at Cold Spring, N. Y.

6. *Ampelis garrulus*, Gmel. Dr. Frederic Lente, of Cold Spring, showed me a beautiful Waxwing of this species which was shot near his residence, several winters before.

His son, Wm. K. Lente, informed me that he shot at several Bohemian Waxwings that sat in an evergreen tree close to their house. This occurred several years after the first specimen was taken. — EDGAR A. MEARNS, *Highland Falls, New York.*

Bull. N. O. C. 3, Jan., 1878, p. 46.

THE BOHEMIAN WAXWING IN NORTHERN NEW YORK. — I am indebted to Mr. George A. Davis for information regarding the occurrence of these beautiful birds in Mexico, Oswego Co., N. Y.

He first discovered them January 31, 1880, about a mile from the lake shore, in a section of country where the mountain-ash was abundant. A flock of some two hundred birds were feeding on the berries, in company with the Cedar Birds, and he captured a number. On February 2, he again visited the same locality, and shot twenty-three specimens; this time no Cedar Birds were seen. After feeding, the flock would retire to a deep swamp, where they would remain until again hungry, when they would return until the berries were nearly exhausted.

Mr. Davis has never before seen the Waxwings in flocks in his locality, but shot a single specimen in 1876. In all, he shot seventy specimens; and out of some twenty-five which I examined, but few were in full adult plumage. Mr. Boardman writes me, that about a dozen birds in immature plumage were taken near St. Stephens, N. B., early in December, and that he has heard of them occurring all the way from Nova Scotia to Oregon, though I judge not in the southern parts of the New England and Middle States. — RUTHVEN DEANE, *Cambridge, Mass.*

Bull. N. O. C. 5, April, 1880, p. 118.

239. NORTHERN WAXWING. — (*Ampelis garrulus*.) (Lin.) A rare winter visitant. Not recorded from this section previous to the winter of 1879-80. In December, '79, Mr. J. Hunter, of this place, observed a flock of sixteen of these beautiful birds in a mountain ash tree, about a half mile from Sterling, Cayuga Co., N. Y. Of these he shot twelve. Noticing the white marking on their wings, and supposing this to be an albinistic form of the Cedar Waxwing, he preserved the two best and brought them to Auburn. These, coming into the possession of Mr. Wright, were at once identified. Two more specimens of this bird were taken about Christmas time of the same year at Penn Yan, N. Y., by Reuben Wood. (Gilbert).

Birds of Central New York by Fowler, Wright, & Rathbun.

O. & C. VII. Jun. 1882, p. 132/133

The Bohemian Waxwing in Onondaga County, N. Y.— During the hard snow storm of Feb. 10, 1899, a flock of about 50 Cedar Waxwings were seen in a mountain ash tree, feeding on the berries. The tree is on one of the principal residence streets of Syracuse, and is thickly populated. The observer, being an amateur collector, and living but a few houses from the place, returned for his gun and shot into the flock, securing several Cedar Waxwings, and one, which was seen to drop some distance from the tree, proved to be a Bohemian Waxwing (*Ampelis garrulus*). This is the first specimen recorded from Onondaga County. It seems strange that this bird should be associated with its brother species.

I would like to know if it has been taken or recorded farther south than Syracuse, and whether these two species are in the habit of flocking together?— A. W. PERRIOR, *Syracuse, N. Y.*

Auk, XVII, Jan., 1900, p. 68.

The Bohemian Waxwing (*Bombycilla garrula*) at Ithaca, N. Y.—

While walking over the campus of Cornell University at noon on November 28, 1914, we observed a flock of about a dozen Cedar Waxwings in a group of trees that included a berry-laden mountain ash (*Pyrus americana*). An hour later we had stopped to watch the birds again, and were discussing the points of difference between the notes of our two species of Waxwings. At that moment the characteristic notes of *Bombycilla garrula* most opportunely caught our attention, and their author was presently distinguished among the rest of the Waxwings by means of its larger size and its white wing markings. In order that others might share in the pleasure of seeing such an unusual visitor, we summoned by 'phone Messrs. A. A. Allen, L. A. Fuertes, and A. H. Wright, and all were enabled to make observations on the bird under very favorable conditions.

Its actions accorded with the proverbial gentleness and amicability of the Waxwings. It allowed a Cedar Waxwing to perch beside it and feed upon the same cluster of mountain-ash berries; and twice a berry seemed to be passed from one to the other. It was somewhat restless, and once it circled swiftly around a nearby house, swerving from side to side in an erratic course suggesting that of a Teal.

The following prominent characters served to distinguish the Bohemian Waxwing from the other species in the field: its larger size; the white markings in the wing, conspicuous whether the bird is flying or at rest; the larger patch of black on its chin; its generally grayer coloration; and its chestnut-rufous under tail coverts.

Furthermore, its notes are very diagnostic. Though similar in general form to the "beady notes" of *B. cedrorum*, they are less shrill, are more leisurely uttered, and have a more noticeable rolling sound. They are also more distinct, there being a comparatively greater interval between each syllable in the series. The call has been represented by Seebohm as *cir-ir-ir-ir-re* (quoted in Sharpe's 'Hand-book to the Birds of Great Britain,' Vol. I, p. 177) and by Cameron as *zir-r-r-r* ('The Auk,' Vol. XXV, 1908, p. 47), but neither rendering seems to express exactly the decidedly sibilant quality of each syllable.

The bird was collected by Dr. Allen, and sketched in the flesh by Mr. Fuertes. It proved to be an adult male in full plumage. The skin has been placed in the collection of the Cornell University Museum. This is the first specimen recorded from the Cayuga Lake Basin.

On the following morning another Bohemian Waxwing was reported in the same place by Mr. H. H. Knight.— LUDLOW GRISCOM AND FRANCIS HARPER, *Ithaca, N. Y.*

Auk XXXII, July, 1915—p. 369

ALBINISM IN THE BOHEMIAN WAXWING. — On the morning of November 17, 1879, I shot a female Bohemian Waxwing (*Ampelis garrula*), which presented a lighter appearance than the rest of the flock; and when picked up I discovered that it was an albino. The description of this bird is as follows:— While the color of the ordinary Bohemian Waxwings varies some in different birds, in this specimen it is fully two shades lighter all over the body. The chestnut of the under tail-coverts, the orange-brown of the front and sides of the head, are the same as in ordinary specimens; but the velvety-black of the chin and the narrow line extending across the forehead and along the sides of the head, through the eyes, meeting on the occiput behind the crest, are in this specimen a dusky black. The very dark gray of the primaries, secondaries, and primary wing-coverts of the ordinary bird, is in this albino grayish-white, edged with brownish-ash; the yellow (or white) stripe at the end of outer webs of the primaries is the same; but directly opposite this, on the inner webs, is a triangular spot of pure white. The white tip on the outer webs of the secondaries is much larger than usual, and the secondaries are wax-tipped. The greater wing-coverts are pure white, delicately edged with brownish-ash, and broadly tipped with the same. This patch of white is very conspicuous, owing to its size. The yellow band on the tip of the tail is more of a lemon-color, and has not that distinct dividing line which is usual, but rather fades into the grayish-white of the tail-feathers. The tail-feathers above the yellow band are broadly edged on both webs with brownish-ash. The quills of the primaries, secondaries, the primary and greater wing-coverts, and the tail-feathers, are very dark gray; while the pure white patch on the sides of the under jaw, and the delicate crescent of white on the under eyelid, are the same as usual. Bill and feet normal. The peculiar markings of this specimen form a very beautiful bird, and, as it has been remarked, "give it a frosty appearance." — W. L. WALFORD, *Minneapolis, Minn.*

Bull. N. O. C. 5, July, 1880, p. 183-184.

BOHEMIAN WAXWING (*Ampelis garrulus*.) Took two (2) specimens yesterday (Jan. 30th) from a flock of seventy or eighty on Clear Creek. These are the first I have seen here. These birds agree with Dr. Elliott Coues' description, with one exception, and that is in regard to the white on the under eyelid as in the Cedar Bird (*A. cedrorum*.) Yet these birds are undoubtedly garrulous. I do not like to differ from such an ornithologist as the Doctor, but I will give my description and can show the specimen. Under tail coverts, chestnut; front and side of head, orange-brown color; primary wing coverts, tipped with white; wings, with yellow and white at outer web; chin, black; small black line across forehead and running through eyes meets on back of head, just back of the crest; bill and feet, black; tail, tipped with yellow; white on under eyelid, but none across forehead; 7.9 in. long; wing, 4.2 in. This bird generally retires south, but is occasionally seen during an open winter in large flocks. The prettiest thing about this bird is its curious appendages on the inner quills of the wing, which resemble red wax. Although not a singer, it has a very pleasant

note when heard in winter. I have never yet found signs of insect food in the stomach of these birds, and I am inclined to think they feed entirely on berries and seeds.—*Charles F. Morrison, Ft. McKinney, Wyoming.* Q. & O. IX. Apr. 1884. p. 40

Birds of Northwest Region.

The Bohemian Waxwing.

This magnificent bird is a tolerably common winter visitor to this locality, in fact it is a characteristic bird of the northwest. Inhabiting as it does the northern part of both hemispheres, straying in this country south to the northern tier of states in winter only, comparatively few have an opportunity of observing its habits, hence a few notes may be of interest.

As far as my experience goes I find that these birds visit this locality every two years. I remember seeing them in '83; in '85 they were quite common, in '87 they were found, but very few; last year not a solitary bird could be found, while this year they are more numerous than ever before.

In '87 the first were seen the latter part of February, this year they put in an appearance on January 17, when a flock of about fifty were seen, since then they have been seen almost daily up to date (February 20).

All seen this year so far have been in the city; there are probably about four flocks of fifty each in different parts of the town. Occasionally they all join in one large flock and when they light on a mountain ash tree, it is surprising to see how the berries disappear. While thus engaged they are very tame, allowing a person to walk directly under the tree without taking alarm. While in search of food they are very restless, flying about from one place to another, remaining but a moment at each place till a suitable ground is found. After gorging themselves with mountain ash berries which form their principal article of diet, they fly to a neighboring tree to enjoy the effects of their meal. The tree selected is generally one tall enough to allow the sun's rays to reach them over the house tops. Here they sit for hours if undisturbed, sunning themselves and digesting their food; under such a tree the ground will be found strewn with the skins of the berries, they swallowing the pulp and seeds; occasionally one will fly down to the roof of a house and take several large mouthfuls of snow; the berries seem to make them thirsty, as I have seen over half the flock eating snow at once, after feeding on the berries. They are generally found feeding early in the morning and again late in the afternoon; where they spend the night I have never been able to ascertain, but they are always seen to depart in the same direction as evening draws near.

Their manner of flight is peculiar; instead of moving in a compact body as most gregarious birds do, they string out, only two or three birds being abreast, giving the flock a much larger appearance than it really is. They are a long bodied bird and together with their quite long tail and neck, they present an odd appearance in flight; there is also a peculiar flutter of the wings, something characteristic of this species.

Quite often they are found in a frolicsome mood; a flock will pitch out of a tree top and with astonishing rapidity skim along near the ground, dart up over a house, turn a sharp corner like a flash and presently return to the same tree as meek as can be. Sometimes this feat is performed by a single bird and can hardly be followed by the sight. When acting thus

their flight most resembles the nervous flying of the Chimney Swift, but much more rapid. A Peregrine Falcon would, I believe, be taxed to his utmost to overtake a Waxwing.

In looking over a series of these birds many curious forms are found. One has the outer quill of the tail only about one-fourth as wide as its fellows, a regular "spurious quill" in fact. Another has the yellow band on the tail missing, with the exception of a few fine yellow threads in some of the feathers; it had surely not been worn off as the tail was perfectly formed. Others have the yellow mottled with black and still others have the color bright and pure on one side of the tail and either missing or pale on the other.

High plumaged birds have the red "wax" on the tip of the tail as well as the wings, they are also said to have it occasionally on the end of the crest but I have never found one; they are generally more highly developed in the male.

These red appendages do not necessarily denote maturity, for on Oct. 9, 1888, I took a young bird in streaked plumage with the "wax" well developed. Taking this bird at that time of the year I consider of unusual occurrence and must have been raised in the vicinity as it was very young, pin feathers showing in various places. It was taken in the city, in company with a flock of young Cedar birds. Possibly there may have been more of *garrulus* among them, but I saw only this one.

The Waxwings generally leave us about the middle of March, but they have been known to linger as late as the latter part of April.

Geo. G. Cantwell.

Minneapolis, Minn., Feb., 1889.

O. & O. XV, Feb. 1890 p. 20-21

1472. *Bohemian Waxwings*. By Dean W. Park. *Ibid.*, No. 5, May, 1886, p. 34. **Rand. Notes Nat. Hist. III**

cedrorum

Ampelis cedrorum.

- Dec. 1887. B. J. not observed
W. F. " "
- Jan. 1888. B. J. " "
W. F. " "
- Feb. 1888. B. J. not observed
W. F. 19. 26.
- Mar. 1888. B. J. on list, but no dates given
W. F. 4. 5. 6. 11. 18. "et seq."
- April 1888. B. J. on list, but no dates given
W. F. " " " " " "
- May 1888. B. J. " " " " " "
W. F. " " " " " "
- Oct. 1888. B. J. not observed
W. F. no list for this mo.
- Nov. 1888. B. J. not observed
W. F. 1 (small flock, Waverley)
- Dec. 1888. B. J. not observed
W. F. " "
- Jan. 1889. B. J. " "
W. F. " "
- Feb. 1889. B. J. " "
W. F. " "
- Mar. 1889. B. J. not observed
W. F. 31 (large flock, Arlington)
- April 1889. B. J. 6 "etc."
W. F. 9. 10. 13. 14. 17. 19. 20. 21. 28. 30.
- May 1889. B. J. 19. 26. 29. 30. 31.
W. F. [22. 25. 28. 29]* 30. 31.
- Oct. 1889. B. J. 2.
W. F. 1. 2. 4. 9. 10.
- Nov. 1889. B. J. not observed
W. F. " "
- Dec. 1889. B. J. not observed
W. F. " "
- Jan. 1890. B. J. no list for this mo.
W. F. 14. 18. ⁽²³⁾ ⁽²⁶⁾ ⁽²⁷⁾
- Feb. 1890. B. J. 3 (heard)
W. F. 9.
- Mar. 1890. B. J. 10.
W. F. not observed
- April 1890. B. J. not observed
W. F. 3. 11. 14. 29.
- May 1890. B. J. 30. 31.
W. F. 1. 7. 8. 9. 18. 22. 24. 25. 28. 29. 30. 31.
- Oct. 1890. B. J. not observed
W. F. 5. 8. 10. 12. 15.
- Nov. 1890. B. J. not observed
W. F. 1 (Payson Place)
- Dec. 1890. B. J. not observed
W. F. " "
- Jan. 1891. B. J. not observed
W. F. 13 (heard) Arlington Hts.
"O.W. 2." 25.
- Feb. 1891. B. J. observed, but report not yet out in
W. F. 10 (Waverley). 11 (Arl. Hts.)
"O.W. 2." 14. 21.

Cambridge
Feb. 26, 1891

* Mt. Graylock, Mass.

Ampelis cedrorum.

1889

April ^{Belmont (Reginald Faxon) 1890}
 12⁽¹⁾ 20⁽²⁾ - 14⁽¹⁾ 12⁽²⁾ - 15⁽²⁾ 25⁽²⁾ - 28⁽¹⁾ ^{heard distinctly} - 1889. 3⁽¹⁾ 11⁽¹⁾ - 14⁽¹⁾ 29⁽¹⁾ - 1890 19⁽¹⁾ 23⁽¹⁾ - 20⁽¹⁾ 22⁽¹⁾ - 24⁽¹⁾ 1891

May ^{Belmont (Reginald Faxon) 1890}
 17⁽¹⁾ 4⁽¹⁾ 19⁽¹⁾ - 25⁽¹⁾ ^{Quincy} - 26⁽¹⁾ 27⁽¹⁾ - 29⁽¹⁾ 30⁽¹⁾ - 31⁽¹⁾ - 1889. 3⁽¹⁾ 19⁽¹⁾ - 24⁽¹⁾ 28⁽¹⁾ - 29⁽¹⁾ 30⁽¹⁾ - 31⁽¹⁾ - 1890

June ^{Belmont (Reginald Faxon) 1890}
 1⁽¹⁾ 3⁽¹⁾ 6⁽¹⁾ 4⁽¹⁾ 8⁽¹⁾ 8⁽¹⁾ 9⁽¹⁾ 20⁽¹⁾ - 23⁽¹⁾ - 1889. 1⁽¹⁾ 3⁽¹⁾ 4⁽¹⁾ 5⁽¹⁾ 6⁽¹⁾ 7⁽¹⁾ 10⁽¹⁾ 11⁽¹⁾ 12⁽¹⁾ 13⁽¹⁾ - 14⁽¹⁾ 15⁽¹⁾ 20⁽¹⁾ - 1890

July ^{Belmont (Reginald Faxon) 1890}
 2⁽¹⁾ 7⁽¹⁾ 24⁽¹⁾ ^{heard} - 29⁽¹⁾ ^{hair} - 30⁽¹⁾ - 1889. 14⁽¹⁾ 26⁽¹⁾ - 14⁽¹⁾ - 1890

Aug. ^{Belmont (Reginald Faxon) 1890}
 2⁽¹⁾ 4⁽¹⁾ 5⁽¹⁾ 4⁽¹⁾ 6⁽¹⁾ 11⁽¹⁾ 12⁽¹⁾ 13⁽¹⁾ 14⁽¹⁾ 16⁽¹⁾ 23⁽¹⁾ 24⁽¹⁾ 27⁽¹⁾ 28⁽¹⁾ 31⁽¹⁾ - 1889. 7⁽¹⁾ 8⁽¹⁾ 12⁽¹⁾ 13⁽¹⁾ 19⁽¹⁾ 22⁽¹⁾ 28⁽¹⁾ 29⁽¹⁾ - 1890

Jan'y ^{Brookline Brookline}
 14⁽¹⁾ 18⁽¹⁾ - 1890 25⁽¹⁾ ^(Bellevue) - 13⁽¹⁾ ^{heard} ^(Faxon) - 1891. 7⁽¹⁾ - 1893

Feb. ^{Belmont (Reginald Faxon) 1890}
 1⁽¹⁾ 3⁽¹⁾ 6⁽¹⁾ 3⁽¹⁾ ^{Mon} - 5⁽¹⁾ ^{ampl} ^{Bellevue} ^u ⁹ ⁽¹⁾ ^{Mon} ¹⁸ ⁽¹⁾ ^u ¹⁴ ⁽¹⁾ ^{Bellevue} ¹⁰ ⁽¹⁾ ^{Mon} ¹¹ ⁽¹⁾ ^{Faxon} - 1891.

May ^{Belmont (Reginald Faxon) 1890}
 1⁽¹⁾ 7⁽¹⁾ 8⁽¹⁾ 9⁽¹⁾ 18⁽¹⁾ 22⁽¹⁾ 24⁽¹⁾ 25⁽¹⁾ 28⁽¹⁾ 29⁽¹⁾ 30⁽¹⁾ 31⁽¹⁾ - 1890. 26⁽¹⁾ 28⁽¹⁾ 29⁽¹⁾ 30⁽¹⁾ 31⁽¹⁾ - 1892

Feb. ^{Worcester}
 4⁽¹⁾ - 1891

June ^{Concord}
 21⁽¹⁾ 22⁽¹⁾ 24⁽¹⁾ 25⁽¹⁾ - 1890 1⁽¹⁾ 2⁽¹⁾ 3⁽¹⁾ 4⁽¹⁾ 5⁽¹⁾ 6⁽¹⁾ 7⁽¹⁾ 8⁽¹⁾ 12⁽¹⁾ 14⁽¹⁾ 15⁽¹⁾ 16⁽¹⁾ 17⁽¹⁾ 18⁽¹⁾ 19⁽¹⁾ 20⁽¹⁾ 22⁽¹⁾ - 1892

April ^{Worcester (Terry)}
 10⁽¹⁾ 17⁽¹⁾ 23⁽¹⁾ - 1891 26⁽¹⁾ - 1892

July ^{Concord}
 1⁽¹⁾ 2⁽¹⁾ 4⁽¹⁾ 5⁽¹⁾ 6⁽¹⁾ 7⁽¹⁾ 8⁽¹⁾ 9⁽¹⁾ 12⁽¹⁾ 13⁽¹⁾ 14⁽¹⁾ 15⁽¹⁾ 16⁽¹⁾ 18⁽¹⁾ 19⁽¹⁾ 23⁽¹⁾ 24⁽¹⁾ 25⁽¹⁾ 26⁽¹⁾ 27⁽¹⁾ - 1892

Aug ^{Concord}
 1⁽¹⁾ 2⁽¹⁾ 3⁽¹⁾ 12⁽¹⁾ 13⁽¹⁾ 14⁽¹⁾ 15⁽¹⁾ 17⁽¹⁾ 20⁽¹⁾ 21⁽¹⁾ 22⁽¹⁾ 23⁽¹⁾ 28⁽¹⁾ 29⁽¹⁾ 30⁽¹⁾ 31⁽¹⁾ - 1892

Sept ^{Concord}
 8⁽¹⁾ 16⁽¹⁾ - 1890 3⁽¹⁾ 4⁽¹⁾ 5⁽¹⁾ 6⁽¹⁾ 7⁽¹⁾ 8⁽¹⁾ 11⁽¹⁾ ^{catching flies on wire} - 19⁽¹⁾ 21⁽¹⁾ 22⁽¹⁾ 28⁽¹⁾ - 1892

Oct. ^{Belmont (Faxon)} ^{Worcester} ^{Belmont (Faxon)} ^{Saugus}
 1⁽¹⁾ 2⁽¹⁾ 4⁽¹⁾ 9⁽¹⁾ 10⁽¹⁾ 1889 ^{none seen after this until fairly 14. 1890} 5⁽¹⁾ 8⁽¹⁾ 10⁽¹⁾ 12⁽¹⁾ 15⁽¹⁾ - 1890 8⁽¹⁾ - 1891 8⁽¹⁾ - 1892.

Nov. ^{Belmont (Faxon)} ^{Worcester} ^{Worcester}
 1⁽¹⁾ - 1890 1⁽¹⁾ - 1892 1⁽¹⁾ ^{small flock (No. Faxon)} - 1888

Dec. 25⁽¹⁾ 26⁽¹⁾ - 1892.

March ^{Belmont (Faxon)} ^{Worcester} ^{Worcester} ^{Worcester} ^{Worcester} ^{Worcester}
 13⁽¹⁾ 8⁽¹⁾ 21⁽¹⁾ 22⁽¹⁾ 23⁽¹⁾ 31⁽¹⁾ - 1891. 2⁽¹⁾ 6⁽¹⁾ 7⁽¹⁾ 8⁽¹⁾ 12⁽¹⁾ 22⁽¹⁾ - 1891.

A. cedrorum.

Ampelis cedrorum.

1893.

January ^{c.} 7⁽¹³⁾
 February ^{Mass.} 4⁽¹⁰⁾ ^(7 or 8)
 March ^{a.} 13⁽²⁷⁾ (Fort) -
 April ^{c.} 17⁽⁰⁾, 19⁽¹⁵⁾ (Vermont)
 May. 22⁽²⁾ (Balls H.) 23⁽²⁾ - 26⁽²⁾ - 27⁽³⁾ - 28^{hd} - 29⁽⁵⁾ - 30⁽³⁾ Concord.
 June
 July. 1^{hd} - 2⁽²⁾ - 3² - 5² - 12^{hd} - 14^{hd} - 16^{hd} - 18^{hd} - 19^{hd} - 23² - 28^{hd} - 29^{hd} - 30^{hd} Concord.
 August. 2^{hd} - 7³ - 8² - 11² - 12^{hd} - 13² - 14^{hd} - 19^{hd} - 21² - 25³ - 26 - 27 - 28^{hd} - 31^{hd} Concord.
 September. 2⁽¹⁰⁾ ^{c.} (Balls H.) 4⁽¹⁰⁾ ^{Wycatsburg} ^{over river} - 8^{hd} ^{do.} Concord.
 October
 November ^{g.} 6⁽²⁾ (Mountain ash).
 December

Concord
28⁽²⁾

1894.

January
 February
 March 2⁽¹⁰⁾ (Fort)
 April
 May ^{a.} 13⁽⁸⁾ ^{Fort} 16^{hd} ^{a.} 26^{hd} 27^{hd} 28^{hd} Concord
 June ^{cl.} 7⁽⁹⁾ ^{Wareham} 9^{10 pairs} 10⁵ 11^{6 pairs}
 July ^{g.} 5^{hd} ^{cl.} 25⁽²⁾ ^{g.} 31^{hd}
 August ^{cl. min} 5⁽⁸⁾ ^{g.} 7^{hd} ^{g.} 9⁽³⁾ ^{g.} 11⁽²⁾ ^{cl. min} 12⁽²⁾ ^{g.} 14^{hd} ^{g.} 19^{hd}.
 Sept.
 Oct.
 Nov.
 Dec.

A. cedrorum.

^{g.} 2⁽³⁾ ^(early berries)
 2⁽³⁾ ^(flowering apple)

Ampelis cedrorum

1895.

January

Nov. Cg. Feeding on flowering apple in our garden, Cambridge

February

4⁽⁴⁾ 19⁽⁵⁾ at flowering apple, 20⁽¹⁷⁾ c. 21⁽⁴⁸⁾ c. 22⁽³⁰⁺⁾ da 23⁽²⁶⁾ 25⁽⁵⁰⁺⁾ 26⁽²⁰⁾ 27⁽³⁴⁾

March

6⁽¹¹⁾ 7⁽¹¹⁾ 9⁽¹³⁾ 14⁽⁷⁾ 16⁽⁷⁾ 23⁽⁸⁾

April

May

B. Rock M. Milton Hill
9 heard, 14⁽¹²⁾

June

July

Cg. 4 2 feeding cherries; the first
(seen in cherry trees this year)

August

9⁽²⁾ 26⁽⁴⁾ (run
cherry tree)

September

1, 6, 7, 8, 17, 18, 20, 24, 25, 28 - W. Faxon.

October

6⁽²⁾

W. Faxon's notes

November

10⁽¹²⁾ 17, 24, 28, 16⁽¹⁾

December

1⁽⁴⁰⁾ 12⁽¹²⁾ W. Faxon - 30
Roxbury very numerous
miss. (F. H. Proctor)

1896.

January

Arlington

26⁽⁷¹⁾ c.

February

7⁽¹³⁾ 6⁽⁶⁾ 11⁽⁸⁾ 27⁽¹⁰⁾ in
Mt. Ash

March

8⁽⁶⁾ 10⁽¹¹⁾ 14⁽¹⁰⁺⁾ 20⁽¹⁰⁺⁾ 22⁽²⁰⁺⁾ 25⁽⁷⁸⁾ c.

April

May

June

July

Camden

27 heard

August

6⁽¹²⁾

September

October

November

December

A. cedrorum

Ampelis Cedrorum

1889 Mass.

May 29

Watertown. - About a dozen, four flying together, the others in pairs in cedars, pines, and apple orchards, evidently getting ready for nesting. I have seen pairs & single birds in my garden the past week. I also saw a flock of six flying over it one day. At this season, however, Cedar-birds, when in flocks, fly in loose ^{straggling} order not in compact bunches as in winter & early spring.

In pairs & small flocks.
Flocks loose & scattered at this season.

June 20

Watertown. - Searched the orchards, cedar groves etc. where I saw so many birds on May 29th. But failed to find either the birds or any of their nests. I am inclined to believe that most of those observed on the date just mentioned were migrating. I saw a Cedar Bird in my garden to-day, however; it was feeding on cherries.

1890

July 14

Brookline. - A flock of 27 (counted) on the edge of the cat-tail swamp. When first seen they were scattered over a large cedar feeding on the berries but later they flew into the top of a dense oak where they clustered closely together and sat a long time sunning. Faxon who was with me says he has seen none for two months or more. He also says he cannot find a single berry on the cedars in Belmont & Waltham. Are the birds seen to-day migrants?

Early arrivals?

" 18

Faxon saw the flock of 27 birds again in the same ^{cedar} tree. Upon inspecting it he found it well supplied with berries. Later in the day he came upon another flock of Cedar Birds containing 20 individuals which were feeding on privet berries. The place was in Brookline half-a-mile or more from the first locality & the flock certainly not the same. No Cedar Birds yet reported from the Cambridge-Watertown-Belmont region: It looks as if these Brookline flocks were winter residents, not early migrants from the south.

Amphelis cedrorum

1890 Mass.

May 19 Waltham - A flock of eight or ten in a white oak in the woods apparently finding an abundance of insect food. They scattered all over the tree hopping from twig to twig with a slow, heavy motion like big bees, shaking the branches as they moved and peering in a near-sighted way among the unfolding leaves. These are the first birds of the second Spring migration.

Second
Spring
migrations
Feeding in
oak

" 30 Wayland. A little after sunset saw an immense flock rise from an apple orchard and mounting to about 300 ft. fly out of sight in a westerly direction. They did not fly in the usual close order but on the contrary spread out over the space of an acre or more no two birds more than 6 or 8 ft. to one another. I counted eighty and did not get nearly all at that. On this day and the following two we saw or heard Cedar Birds frequently.

Immense
flocks.

June 3 Cambridge. Yesterday & to-day I have heard Cedar Birds in my garden.

" 12 Belmont. - One of a pair in an old orchard had its bill filled with a mass of something which looked like dry grass & was doubtless building material.

Building

1878 Mass.

June 17 Wayland. - E. A. & Outram Bangs take a nest with four eggs which are far advanced in incubation. Nest in apple tree

Nests

" 23 Watertown. - E. A. & Outram Bangs take nest with four fresh eggs. This nest also in apple tree.

1891

March 21 Watertown. - A flock of about fifty at the asparagus bed at the corner of Arlington and Mt. Auburn Sts. Their rendezvous was the same elm just over the wall that they have used for twenty-five years or more and from it they made frequent flights to the asparagus stalks and back again a dozen birds being frequently in the air at once but the greater part of the flock most of the time in the tree.

Eating
asparagus
berries.

Cedar Birds have been numerous for more than six weeks but these are the first that I have seen eating asparagus berries

Ampelis cedrorum

1891 Mass.

March 23 Cambridge. - While sitting in my study, this morning, penetrating writing, all the windows being closed at the time, quality of I became conscious of a peculiar, intermittent, notes ringing sound like that caused by the vibrations of some resonant material, perhaps glass, or not unlike some of the higher-pitched vibrations of a tuning fork. Although very faint they were so penetrating and insistent as to cause me, after a while, to lay aside my work and investigate. Failing to find the origin of the sound inside the house I finally opened a window and at once heard the notes of a number of Cedar-birds which were sitting in clusters in the top of one of the lindens over the house. I record this episode simply because it shows that the notes of the Cedar-bird have a quality which is not conspicuous on ordinary occasions. Indeed it is surprising how far they carry at times and how penetrating the sound is under certain conditions.

The birds observed this morning visited my ancient cedar but found no berries the Purple Finches having eaten all of last year's crop (in August, 1890.) This is the second flock of Cedar-birds which I have seen on my place this month. In Watertown and Belmont they have been fully as numerous, during the past six weeks, as they used to be twenty-five years ago showing that the ceaseless persecution which they suffer has no appreciable effect on their numbers.

Abundant
in Feb. & March
1891.

Massachusetts.

Amphispiza cedrorum

1892.

June. 15 Concord. Two Cedar birds sitting on a dead branch near my cabin passed something back & forth between them each as it accepted the proffered offering throwing up its head, opening its bill wide & quivering the half opened wings precisely like a young bird. I had left my glass in the canoe unfortunately & failed to make out what the morsel was. A third cedar bird at one time joined the other two without opposition or welcome on their part, then after sitting still a moment, left them.

Nov. 1 I saw two Cedar Birds this morning on the edge of Ash Swamp sitting close together in a small buttonwood. There were many barberry bushes loaded with fruit in the vicinity.

Amphispiza cedrorum.

Concord, Mass.
Mar. 21. 1888.

Cedar Birds appeared near the cabin w. to (2d end) Cedar B.
— a pair of them, sitting in the tops of blossoming oaks or in
young oaks and commenced after flying in etc.
They are the first that I have seen in Concord
this year.

Ampelis cedrorum.

1892 Mass.

- Dec. 25 Cambridge. - A flock of 18 sitting in the top of a horse chestnut in front of Mr. Nichols's house. The day was bitterly cold and the birds' looked dumpy & dejected & their plumage excessively puffy. There was a cedar tree not far off. I saw this species last at Nov. 1 - two birds together at Concord. None reported since.
- " 26 A flock of 14 feeding on berries of mountain ash on Brattle St. opposite the old Choate place. Only one bird, so far as I could see, had wax decorated wings.

1893.

- Jan'y 7 Visited the mountain ash tree on Brattle Street for the first time since the 26th ult. The Cedar Birds were there but there were 15 birds in the flock this morning. I am perfectly sure of the correctness of this count and equally so of the counts made on Dec. 25th & 26th. Why does the number vary on different occasions? The flock must be the same. They have made serious inroads into the supply of mountain ash berries but there are still a good many left on this tree.

1894

- June 9-11 Wareham. - Very abundant throughout the pitch pine woods on the barrens - "Plymouth woods" - in pairs, the majority acting as if looking for nesting sites. Two nests, with one & two eggs respectively, found June 11th in pitch pines. The ♀ sitting on the one egg, panting (it was 90° Fahr. at the time) with bill wide open. Breed very numerous on Cape Cod.

On the morning of the 10th June I saw a Cedar bird in oak woods Eating rambling about on the ground, moving by short hops & rustling the checkerberris leaves like a Towhee for which I at first mistook it. It proved to be searching for checkerberris of which I saw it eat five or six. It swallowed them with some effort for they were very large. It ranged over a space of twenty yards square which I was watching it. Query: Do Cedar birds breed so numerous on the Cape because they can get an abundance of checkerberris there? (This is the only place here)

Ampelis cedrorum.

1895. Mass.

December

Roxbury. During this month Cedar Birds have been very numerous in Roxbury although none have been seen in the Belmont-Arlington region since Nov. 28th. A large flock remained at the Arnold Arboretum up to Dec. 12th. On December 30th Mr. F. W. Brackett wrote me as follows: "Cedar Birds are very numerous just now, feeding on the berries of the mountain ash. A flock has been enjoying themselves on my neighbor's tree for about two weeks now but the berries are about gone and cannot last many days longer. My wife counted 46 at one time on a tree in our yard and thinks there were more &c &c. My brother counted over 100 at one time in his tree in Roxbury."

The Cedar Birds in large numbers visited the two mountain ash trees at the Hayes place in Concord daily during the last two weeks of September but none were seen there after Oct. 6th although Robins spent some time longer in these trees before they finished the berries. In Cambridge no birds have as yet attacked the mountain ash fruit although our trees are as abundantly supplied as any elsewhere in this region.

1891

February

Nellesley Hills "I have just received Loring's Feb. dates for the Cedar bird:

2^d 6¹²+7¹⁷, 13^d 28⁶⁰⁺ (W. Faxon, letter Feb. 1, 1891)

1897

Feb. 19

Cambridge. A flock of about 30 appeared in our garden for the first time this winter & at once attacked the fruit of my flowering apple. During a snow squall they perched in the upper branches of an elm where they made frequent sallies after snow flakes pursuing & catching them precisely as they catch flies in summer, 6 or 8 birds being frequently out in the air at once.

Catching snow flakes

A small flock of Cedar Birds wintered in Belmont but I have heard of no others.

" 20

fully 125 Cedar birds at the flowering apple (they stripped it completely in three days!)

Ampeelis cedrorum.

Cambridge, Mass.

1898. Where are the Cedar-birds? A small flock was seen in March 1. Belmont in December and Torrey met with a very large flock (upwards of 100) at Wellesley Hills early in the winter but if the usual February flight has come up from the south none of its members have visited this immediate neighborhood for had they done so they would surely have appeared in our garden. My Parkman's apple has a good crop of fruit and some of the hawthorns are covered with berries.

Peterborough, New Hampshire.

1898. From two or three to six or eight seen daily. On July July 5 20th upwards of thirty were noted at Cunningham Pond where to the attraction seemed to be shad bush berries on which the Aug.15. birds were feeding greedily.

Cambridge, Mass.

February birds in the Garden.

1899. A solitary Cedar bird with wax-tipped wings appeared in February. the crab apple tree at 1 P.M., Feb.1st. It was doubtless the same bird which we saw in the garden, January 30th. Strangely enough it did not appear to notice the unusually abundant fruit which still hangs on our Parkman's apple and on some Viburnum opulus bushes, and still more strangely this fruit has not attracted any other birds of the same species.

Ampelis cedrorum

1896

Penobscot Bay, Maine.

July 8

Ile au Haut... Six together among small spruces near the summit of the island; seen by C. H. Watson

" 15

Sedgwick } Common & very generally distributed but seen oftenest

" 16

Brooksville } in spruce grown pastures.

" 16

Deer Island. Knight tells me that he has seen a pair of Cedar birds repeatedly near his house about the middle of last month

Amphisp. cedrorum

1897 New Hampshire

March 7 Launceston (about latitude of Grafton, Me). A flock of over 100 appeared to-day in a garden feeding on boaberis. Thru. below ~~zero~~ of the therm. (Fide F. B. Spaulding letter March 7/97 / (Cedar birds appeared first in our garden in Cambridge this season on Feb. 19)

1897 Maine

June 20 Lincoln. "We have had an Albino Cedar Waxwing come in to be mounted. It is all white except the very tip of its tail which is very pale yellow. It is a young bird but in good feather - had pink eyes" (W. J. Clayton, letter Aug. 24, 1897, Lincoln, Me.)

1898 Mass.

Apr. 13 Concord. A flock of 14 passed over Davis's Hill flying due north and perhaps migrating. [Journ.]

July 2-4 Glendale (in or near), Berkshire Co. Common - [Journ.]

1899

Dec. 17 Cambridge. - While watching a flock of 14 Cedar birds this morning W. Deane & I saw two of them, sitting near together in a hawthorn, pass a mountain ash berry back and forth between them fifteen or twenty times. The berry was held in the tip of the bill and delivered by a quick forward thrust almost forcible enough to be called a pecking motion. The other bird would catch or receive it with great adroitness & precision and after holding it a moment return it in a similar manner. Once a third bird approached & tried to participate in the game but was gently rebuffed or at least ignored. I was at a loss to understand the meaning of the act but it looked like idle play rather than anything of a sexual character. It ended by one of the birds dropping the berry apparently intentionally as if tired of the sport. Four Cedar birds appeared in the trees about the Charles Deane home on the feeding on mountain ash berries & remaining seven days. Sixteen were seen in our garden on the 14th the eating berries of Portulaca affh, hawthorn, red. ash & hibiscus fulvus.

Passing a
berry from
bill to bill.

Ampelis cedrorum.

Cambridge, Mass.

1899. Perhaps the February flight of Cedar Birds did not take place
February. this year. I certainly have not heard that it did.

(No.2)

Notes from St. John, N. B.

During the Winter of 1879, '80, the Cedar Bird (*Ampelis cedrorum*) weathered the rigors of our climate as late as the middle of January.

O. & O. VII. June 1882. p. 134

Birds of Upper St. John.
Batchelder.

36. *Ampelis cedrorum* (Viell.) Bd. CEDARBIRD.—It was not uncommon at Grand Falls. At Fort Fairfield we found it common.

Bull. N. O. C. 7, April, 1882, p. 110

Notes from St. John, N. B.

I give a few causes that may be attributed to these birds remaining with us through this particular Winter, not that it was milder than usual, or more broken; rather the reverse, for several days the mercury reached the cypher. The abundance of food the Cedar Birds found in the berries of the Mountain Ash was a great attraction for them, for on these they fed sumptuously; in fact, gorging themselves to such an extent that they would apparently become stupid, and when in this state allow themselves to be captured by means of a wire noose attached to a fishing rod. If the wire happened to touch them before you succeeded in placing it over their heads, it would not alarm them in the least. They would pick at it, turn their heads and examine it, as though it were quite a curiosity. When one was captured the balance of the flock would fly away in great alarm. I kept several of these birds in confinement that I had captured in this way; they, however, proved themselves such very uninteresting pets that I afterwards gave them their liberty.

The abundance of food they found in the berries must have been a great attraction to them, for when the supply was exhausted, and they had entirely stripped

the trees, they disappeared, and did not again put in an appearance until June, which is their usual time of arriving from the south. None of the specimens that I captured had the usual waxen appendages on the secondaries, and were mostly young birds which had probably bred farther north and were only then moving south as scarcity of food and severity of weather compelled them; but why does not this occur every year? The berries upon which they fed have since been as abundant and no Cedar Birds have appeared at this late season. Their appearance may then be attributed to an erratic migration on the part of these birds. I was quite disappointed on first discovering them to find they were not the Bohemian Waxwing, (*Ampelis garrula*), for which bird I have kept a sharp lookout, but have not as yet succeeded in securing a single specimen. Harold Gilbert.

O. & O. VII. June 1882. p. 134.

Last Dates Migratory Birds observed by
E. D. Wintle, Fall 1885, Montreal, Can.

Sept. 17, Cedar Bird,
occasionally seen throughout the winter
here.

O. & O. XI. Mar. 1886. p. 44

Breeding Dates of Birds in Kings
County, N. S. Watson L. Bishop.

Cedarbird (*Ampelis cedrorum*). June 20.
July 3, 4.

O. & O. XIII. Mar. 1888 p. 45

common summer

, 235

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Bull. N. O. O. 7, April, 1882, p. 110

240. BLACK-THROATED BUTTING.—(*Spiriza americana*) (Gm.) Bonap. June 6th, 1879, an adult male was taken by F. S. Wright near the village of Cayuga, N. Y. A second male was taken by Mr. Wright in the same locality, June 9th, 1879. Both birds were in full song, and were shot from alder bushes overhanging a brook same year at Penn Yan, N. Y., by Reuben Wood. (Gilbert).

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Tim. One specimen in immature plumage was taken on Cayuga Lake, N. Y., October, 1879, by Wm. A. Demont, and identified at Auburn.

Birds within Ten Miles of Point
de Monts, Can. Comeau & Merriam.

26. *Ampelis cedrorum*. CEDAR-BIRD.—A tolerably common summer resident.

Bull. N. O. O. 7, Oct, 1882, p. 235

Summer Birds of Sudbury, Ont.
A. H. Alberger.

619. Cedar Bird. Abundant. Breeds.

O. & O. XV, June, 1880, p. 88

Last Dates Migratory Birds observed by
E. D. Wintle, Fall 1885, Montreal, Can.

Sept. 17, Cedar Bird,
occasionally seen throughout the winter
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O. & O. XI, Mar. 1886, p. 44

Breeding Dates of Birds in Kings
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Cedarbird (*Ampelis cedrorum*). June 20.
July 3, 4.

O. & O. XIII, Mar. 1888 p. 45

Summer Birds of Bras D'Or Region
Cape Breton Id., N.S. J. Dwight, Jr.

45. *Ampelis cedrorum*.

Auk, 4, Jan., 1887. p.16

Summer Bds. Restigouche Valley, N. B.
July, '88. J. Brittain and P. Cox, Jr.

Ampelis cedrorum. AMERICAN WAXWING.—Common in places burned over a few years ago, where wild cherries and June-berries are to be found.

Auk, VI. April, 1889. p.118

Dwight, Summer Birds of
Prince Edward Island.

Ampelis cedrorum. CEDARBIRD.—Seen now and again, but not common. There is a remarkable similarity between a lisp of this species, a certain note of the Robin, and one of the Hermit Thrush.

Auk X, Jan, 1893. p.12

Some Winter Birds of Nova Scotia.

By C. H. Morrell.

28. *Ampelis cedrorum* CEDAR WAXWING.—A flock of 10 seen in the city of Amherst March 1. Auk, XVI, July, 1899, p. 253.

Summer Birds of the Cobalt Region,
Nipissing District, Ontario.

by Frederick C. Hubel. Auk, XXI, Jan 1907, p. 51

50. *Ampelis cedrorum*. CEDAR WAXWING.—Generally distributed.

Birds of Toronto, Canada,
by James S. Fleming.
Part II, Land Birds.
Auk, XXI, Jan., 1907, p. 82.

232. *Ampelis cedrorum*. CEDAR WAXWING.—Resident, irregular in winter; breeds (June 20, 1898).

Maine (Brewer)

Spring arrival

1887

March 15. Nine appeared this morning on a mountain ash in front of my window. In forty years of experience I have never seen any here before until late in May - about the time apple trees are in blossom. They are much less numerous than they used to be.

Ampelis cedrorum. (over) (M. Hardy letter Mch. 15-87)

Maine

Ampelis cedrorum

(Adults feeding on another)

Some Cedar birds came March 15 and remained until May 20th. There were eight the first day and they increased to 13. They fed only on the dry berries of the mountain ash, and although old birds, they fed each other exactly as they feed their young. They left at a time when the species usually arrives here.

-----Manley Hardy,--Letter of June 18, '87.

Maine (Bangor)

Ampelis cedrorum

1889

Wintering

"Our Robin and six Cedar Birds have lived in a Bangor garden all the past winter"

M. Hardy letter Mch. 15-1889.

"April 11. The Cedar Birds are still here
and I have heard of others in the
vicinity." (M. H. letter Apr. 11)

Maine

Ampelis cedrorum (adults feeding on
another)

Some Cedar birds came March 15 and remained until May
20th. There were eight the first day and they increased to 13.
They fed only on the dry berries of the mountain ash, and although
old birds, they fed each other exactly as they feed their young.
They left at a time when the species usually arrives here.

-----Manley Hardy,--Letter of June 18, '87.

Maine (Bangor)

Ampelis cedrorum

1889

Wintering

"One Robin and six Cedar Birds
have lived in a Bangor garden
all the past winter"

M. Hardy letter Mch. 15-1889.

1889 Maine
July Brewer... Manly Hardy writes me that he has
totally seen Cedar Birds catching dragon-
flies.

Notes from Portland, Me.

The exceptionally mild winter of 1888-89 was not
without effect upon birds of this region.

A single flock of Cedarbirds (about twenty in number) appeared on
February 6.

J. C. Brown, Portland, Maine.

Auk, VI. July, 1889. p. 281.

Summer Birds Tim Pond Me. by F. H. C.

- Cedar Waxwing, (*Ampelis cedrorum*). Com-
monest bird about the camps.

O. & O. XI. Feb. 1886. p. 25.

Birds of Dead River Region, Me. F. H. C.

38. *Ampelis cedrorum*, (Cedar Waxwing). One
of the most abundant birds of the forests, being
found about Seven Ponds in numbers, and were
far more common in the wilderness than in the
cultivated districts. No nests were found, but
they undoubtedly breed, as Mr. Freeborn has
many sets, collected in his vicinity. I was absent
from the region during their usual period of nest-
ing, which may account for my failure to record
their nidification.

O. & O. XI. Oct. 1886. p. 146

Fall Birds of Northern Maine.
F. H. Carpenter.

Cedar Waxwing (*Ampelis cedrorum*). I have
always met this bird in every section of Maine,
and this trip was no exception.

O. & O. XII. Nov. 1887 p. 188

Summer Residents on Southwest
Coast of Maine. T. H. Montgomery, Jr.

619. Cedarbird. Common at Boothbay.

O. and O. 15. Nov. 1890. p. 162

a
and
1
1890
1890

Shelburne, N. H. Aug. 8-29-1865. R. D.

Ampelis cedrorum.—Rather abundant, occasionally in flocks. One nest with
eggs, another with full-grown young found.

110. *Ampelis cedrorum*.—Abundant
Rye Beach, N. H. July 23-24 1885.

**Birds Obs. at Moultonboro, N. H.
July 21-Aug. 11, 1883. F. H. Allen**

Ampelis cedrorum.—Very common.

Auk, VI. Jan., 1889. p. 78

Winter Birds of Webster, N. H. by Falco.

Cedar Bird, (*Ampelis cedrorum*). A flock of twenty
or more seen in Jan. 1878, and several shot.

O. & O. X. Jan. 1885. p. 14

**Birds Obsvd. near Holderness, N. H.
June 4-12, '86, and 4-11, '86. W. Faxon**

42. *Ampelis cedrorum*. CEDAR-BIRD.—Common.

Auk, V. April, 1888. p. 150

**Bds. Obs. in Franconia, N. H. June 11-21
'86, and June 4-Aug. 1, '87. W. Faxon**

50. *Ampelis cedrorum*. CEDAR-BIRD.—Abundant.

Auk, V. April, 1888. p. 152

**Summer Birds of Presidential Range,
White Mts. A. P. Chadbourne**

26. *Ampelis cedrorum*. CEDAR WAX-WING.—Several flew over us
near the fifth mile post of the carriage road on July 11, 1884. Others were
heard opposite the Half-way House on July 26. Not seen in 1886.

Auk, 4, April 1887. p. 105

**Birds Obs. at Bridgewater, N. H.
July 12-Sept. 4, 1883. F. H. Allen**

Ampelis cedrorum.—Common.

Auk, VI. Jan., 1889. p. 77

Breezy Point, Warren, N.H.

Tringa edwardsi

1894.

Date	Wings	Tarsus	Middle toe	Bill	Length	Weight
15	155	16	11	22	210	20
24	155	16	11	22	210	20

... ..

Breezy Point, Warren, N.H.

Tringa edwardsi

1895.

... ..

CEDAR BIRDS AND ROBINS.—A pair of Cedar Birds nested in a tree in the yard of Edward Safford of this place who took the eggs. A few weeks later, on looking into the nest it was found to contain a set of Robins' eggs. Was not this unusual?—*H.*
O. & P. VII. Apr. 1882. p. 111
B. Kingsley, Rutland, Vermont.

Summer Bds, Mt. Mansfield, Vt.

51. *Ampelis cedrorum*. CEDAR BIRD.—Said to be common. I observed them but once—four individuals on a dead tree near the summit of the mountain.

by Arthur H. Howell

Auk, XVIII, Oct., 1901, p. 348.

Ampelis cedrorum

Arrival

A flock of twelve Cedar Birds came circling over our place this morning evidently looking for a place to alight & apparently just arrived. Weather cloudy & warm, in fact our first distinct winter thaw

Ampelis cedrorum. Mass. - near Cambridge.

1885. Dec 13⁵⁰ - 17⁵⁰ - 22⁵⁰ - 27⁵⁰ - 28⁵⁰

1886 Jan'y 18⁵⁰ - 25⁵⁰ - 27⁵⁰

" Feb. 9⁵⁰ - 10⁵⁰ - 20⁵⁰ - 22⁵⁰ - 24⁵⁰

" March 5⁵⁰ - 6⁵⁰ - 15⁵⁰ - 29⁵⁰

" April 9⁵⁰ - 12⁵⁰ - 19⁵⁰ - 23⁵⁰

Mass. and New York

Ampelis

1885 Unusual appearance in Dec.

Dec.

Frasar tells me that C. abundant in Watertown during weeks of Dec. A millinery collected seventy-four in one day.

They were also seen at about the same time and in several dozens.

Frasar also heard of them when a correspondent of his abundant, thus the appearance in Cambridge was not an isolated

Ampelis cedrorum

Winter occurrence in Mass.

Haywards tells me that he and Chadbourne saw three Cedar Birds to-day among some cedars on the Hayward farm in Milton. They were with Dend. coronata. Have heard of no others this winter.

January 2, 1883

Milton, Mass.

Ampelis cedrorum

Arrival

A flock of twelve Cedar Birds came circling over our place this morning evidently looking for a place to alight & apparently just arrived. Weather cloudy & warm, in fact our first distinct winter thaw

Ampelis cedrorum. Mass. - near Cambridge.

1885. Dec 13⁵⁰ - 17⁵⁰ - 22⁴² - 27⁴ - 28⁸

1886 Jan 18⁸ - 25²⁰ - 27¹⁰

" Feb. 9⁵⁰ - 10⁵⁰ - 20⁸ - 22⁶ - 24⁵⁰

" March 5⁵⁰ - 6⁴ - 15⁵⁰ - 29⁵⁰

" April 9³⁰ - 12⁷ - 19²⁰ - 23²⁰

Mass. and New York

Ampelis cedrorum

1885 Unusual appearance in Dec.

Dec.

Frazar tells me that Cedar Birds were abundant in Watertown during the last two weeks of Dec. A millinery collector there killed seventy-four in one day.

They were also seen at Lynn, Mass., at about the same time and Peckary secured several dozens.

Frazar also heard of them in New York when a correspondent of his reported them abundant. Thus the appearance of the flock in Cambridge was not an isolated instance.

Winter occurs

Chas
and

in Milton. They were with Dend. coronata.
Have heard of no others this winter.

Mass. (Middlesex Co.)

Ampelis cedrorum.

1885

Occurrence at an unusual season.

Dec. 13

This morning, to my surprise, I found a large flock of Cedar Birds in Mr. Russell's front yard. They were sitting in clusters in the tops of two adjoining maples from which they made frequent incursions among the berries of the large mountain ash tree at hand. This tree, like all of its kind, is loaded with fruit this year, having at least twice as many cups of berries as I ever saw on it before. I have heard of no Cedar Birds elsewhere & consider the appearance of them remarkable. There were 54 birds in the flock.

Pigeon Cove, Mass.

Ampelis cedrorum.

1885

Young with waxy tips.

July 29

Found a young Cedar Bird out of the nest but able to fly only a few yards at a time. It was sitting on a rock calling incessantly for food in nearly the tones of the parent, but more brokenly. Another in some clither bushes near was equally noisy but I could not find it. The bird first mentioned had distinct hoft lines of wax on them of the feathers (secondaries) of each wing. They were as slender as fine silk threads not spread out as in the adult. The bird sat

1885

Dec. 17. - The Cedar Birds returned to Mr. Russell's mountain at this morning (12 M.) with their numbers more than doubled. I counted 125 sitting in a single den and there were at least 25 more in ten ash.

Dec. 22. Twelve at the mountain ash; several of them flew to a gutter of a neighboring house when they saw large mounds of snow.

Dec. 27 Four at the Russell's mountain ash.

" 28. Nine " " " "

1886

Jan. 18. Nine in the Russell's mountain ash.

" 25. Twenty " " " "

" 27. Fifty " " " "

(After this date none were seen at this mountain-ash. The reason is very simple; they had eaten all the berries.

In Belmont and Waterbury they were noted in large numbers through Feb. and March, feeding on cedar berries. Saw 50 Feb. 29

bluebirds and horn-larks
quantity. Its general coloring
was a fine dusky. And the
tail-feathers had not begun
to appear.

E. Mass. 1885. ^c June 12, 16, 17. ^c Sept. 30². ^{Comb} Dec. 13³⁰
 57. *Ampelis cedrorum*. - Pigeon Cove, Mass. July, 29-1885.
 5. *Ampelis cedrorum*. - Common. Feeds on berries.
 Princeton & Rutland, Mass. Aug. 2-1885
 9. *Ampelis ced.* - A flock of 10.
 Princeton & No. Rutland, Mass. June, 18-1886.
 20. *Ampelis cedrorum*. - juv.
 Mass. (Middlesex Co.)

Ampelis cedrorum

1886.

Flycatching - unusual flycatch.

April 9

In the Cedar woods bordering Prospect St. Belmont I found to-day about 25 Cedar Birds. They acted in a curious manner flitting about among the densest thickets, taking flight briefly as I approached and usually starting before I could get a sight at them but going only a few rods each time before alighting again. Usually I only heard the flutter of their wings. It was next to impossible to get a shot at any of them. Probably they have been hunted repeatedly. They acted very nearly

Mass. (Cambridge)

Ampelis cedrorum

1886

Feeding on rum cherries.

Sept. 18

A flock of twelve in one rum cherry tree with numerous Robins. I have seen others there at intervals during the past two weeks.

Mass. (near Cambridge)

1887

January 30³⁰
 February 4³⁰ - 17⁴⁴ - 20¹⁵
 April 6²⁵

Ampelis cedrorum.

as if Sparrows will under similar conditions.

About noon, the day being still and clear, and the sun warm, they took to a grove of ash and buttonwood trees standing in a small pond of rain water. They gathered about over a wide area, rarely more than one occupying the same tree, and perched on the topmost twigs engaged with great animation and persistence in catching flying insects, swooping straight upward or darting out horizontally in the former case. During this time as they descended, I have never seen them do this before at this season.

E. Mass. 1885. c. c. 2
37. *Ampelis cedrorum*. - June 12, 16, 17. Sept. 30². Dec. 13²
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Ampelis cedrorum

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Mass. (near Cambridge)

1887

January 30³⁰
February 4³⁰ - 17¹¹ - 20¹⁵
April 6²⁵

Ampelis cedrorum.

Mass. (near Concord).

1887

May 23⁶ - 25⁴ - 26⁸ - 28²⁰

June 2⁴⁰ - 3¹⁰ - 4¹⁰ - 8¹⁰ - 8⁶ - 13² - 18¹

July 2⁶ - 7⁶ - 15⁴ - 23² - 24⁶

Aug. 1⁴ - 9⁴ - 10³⁰ - 13²⁰ - 15¹⁰ - 17²⁰

Ampelis cedrorum.

* young on wing * flycatching over river

Mass. (Concord)

Ampelis cedrorum

Old birds feeding one another - Second arrival.

MAY 25 1887

Two, presumably a pair, sitting side by side on an oak limb. One caught a dragon fly and after holding it a moment passed it to the other who ~~after~~ slight apparent demur accepted and ate it.

I saw the first Cedar Birds here on May 23. I am very sure there were none about up to that date.

Mass (Wichendon)

1887

June 25¹⁰ - 26⁶ (Nest building on 25th)

Ampelis cedrorum.

Mass. (near Cambridge). Spring of 1888

1888

Feb. 18th

March 22⁵⁰ (one flock) - 24¹⁰⁰

Ampelis cedrorum

June 25-30, 1889.

Ampelis cedrorum

West Townsend, Ashby, Mt Watatic --- In the low country scarcely more numerous than about Cambridge, but on the sides of Mt Watatic, especially in pastures grown up to young spruces, it was fairly abundant. With one exception all the birds of this species that we saw were in pairs.

Cambridge, 26 Feb. 1891

My dear Brewster:

Happening to have Torrey's & my own monthly lists of birds at hand from Dec. 1887, I have calculated the ^{late autumn,} winter and spring dates for the Cedar-bird. As far as can be seen from the observations of two persons only, it would appear that in the Spring of 1888 the Cedar-bird appeared about the middle of Feb. and ran on pretty regularly thro' March. Data wanting for the later history.

In the Spring of 1889 neither of us saw a Cedar-bird till the last day of March from which date they were present with us till the end of April - then there is an hiatus till the 19th of May. In the Spring of 1890 they were seen in the middle of Jan-

June 25-30, 1889.

Amphelis cedrorum

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Yours sincerely
Walter Fugate

any, thru scattering dates in Feb. & Mar. - then my record is resumed early in April and continues on pretty regularly thro' April & May, while Torrey has a tremendous chase reaching to the 30th of May!! And so my well-laid schemes to arrive at a "generalization" gang a-gley! I hope that you, with your complete and time-honored record, will be able to show us the light.

You will observe that I have two Nov. records, Nov. 1, 1888 and Nov. 1, 1890.

Did I give you my Jan. 1891 dates for Carpodacus? 24. 27. Belmont?

Winter Notes from Taunton, Mass.
J. C. Cahoon.

February 1st four Cedar Waxwings were seen on a tree on one of the principal streets, but only remained a few moments. A flock was also seen on the outskirts of the city during the latter part of January. O. & O. XI, May, 1886, p. 77.

Birds of Bristol County, Mass.
F. W. Andros.

Ampelis cedrorum (Vieill.), Cedar Waxwing.
Resident, common. Breeds.

O. & O. XII, Sept. 1887 p. 140

Bds. Obs. near Sheffield, Berkshire Co., Mass. June 17-26, '88. W. Faxon

49. *Ampelis cedrorum*. CEDARBIRD.—Common.

Auk, VI, Jan., 1889, p. 45

Birds Known to Pass Breeding Season
nr. Winchendon, Mass. Wm. Brewster

54. *Ampelis cedrorum*.

Auk, V, Oct., 1888, p. 389

Bds. Obs. near Graylock Mt. Berkshire Co. Mass. June 28-July 16. W. Faxon

44. *Ampelis cedrorum*. CEDARBIRD.—Common in the cultivated lands.

Auk, VI, April, 1889, p. 102

An Early Spring.

Editor Cambridge Tribune: Does it really mean an early spring, the fact that crocuses and other early bulbous plants, in protected, sunny places, are already showing signs of early blossoming? We shall see. But there are signs that our thus far spineless will be unable, this year, to find a back A friend reports the trailing arbutus (*repens*) already found in blossom at the end on the fifth day of this month I saw of two dozen or more cedar-birds that as though they had come to stay. I believe, however, that it is now admitted that the of birds and animals — called by recent sappers a sort of "transmitted habit" — absolutely unerring. But, since this

appearance of the cedar-bird, or American waxwing, is a month or so earlier than its advertised or usual time of coming, it is well that a note be made of the fact. In 1886, I first saw them in Cambridge, February 21; in 1888, on February 25. The bird is easily known by its gentle notes of "twée, twée," as well as by its color — reddish olive — crested head, and yellow-tipped tail. The bird is deserving of our kindest consideration, notwithstanding a prejudice against it, born wholly of our ignorance of its real merit. It comes about as near to being omnivorous as any bird we have in New England; but its chief food from now to "fly-time," will of course consist chiefly of seeds, the fruit of the mountain ash constituting no inconsiderable part of its diet. Even in summer time, I have no doubt but they eat ten insects to one cherry, the cherry probably being taken as part payment for the service it renders the gardener, as well as to prevent indigestion.

Cont. Trib. Feb. 8-1890

J. W. FREESE.

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Cambridge, Feb. 8-1890

J. W. FREESE.

Connecticut, June, 1893.

Ampelis cedrorum

June 3⁶ - 4¹⁰ Fairfield
" 5⁴ - 6⁶ 7⁶ 9^{hd} 10⁴ 11² 12^{hd} (Saybrook)
" 13² 15^{hd} 16^{hd} 18² 19² 20^{hd})
" 22² 23² 24⁸ 25³ Andover

Rather more common than
in mass. Found chiefly in
or near villages, about farms
& in pastures in orchards
and shade trees.

Birds observed in Naval Hospital
Grounds, Brooklyn, G. H. Coues

33. *Ampelis cedrorum*. CEDAR-BIRD. — Common.

Bull. N. O. C. 4, Jan., 1879, p. 32

Birds of the Adirondack Region.
C. H. Merriam.

47. *Ampelis cedrorum* (*Vieillot*) *Baird*. CEDAR-BIRD. — Common
summer resident nesting in dense alder thickets near water.

Bull. N. O. C. 6, Oct, 1881, p. 229

Arrivals of Mig'y Birds, Spring-1886,
Central Park, N. Y. City. A. G. Paine, Jr.

March 15, *Ampelis cedrorum*, (619). Cedar
Waxwing.

O. & O. XI, July. 1886. p. 109

Proc. Linn. Soc. N. Y., 88-89

Use the former abundance of certain species
on New York Id. (1820-50) — Lawrence

In October flocks of Cedar birds (*Ampelis cedrorum*) migrated south
very regularly.

Auk, 6, Apr, 1889, p. 202

Birds of Washington Co. Oregon.
A. W. Anthony.

91. *Ampelis cedrorum*. CEDAR WAXWING.—Common throughout
the summer.

Auk, 3, April, 1886. p.170

Ampelis cedrorum has been taken in some striking stages of plumage, the crest, wax appendages on the wings, and the yellow tips of the tail feathers retaining color, while the rest of the body bore a bleached out appearance.

Bull. N. O. C. 1, April, 1876, p. 21

Descriptions of First Plumage of Certain North Am. Bbs. Wm. Brewster.

47. *Ampelis cedrorum*.

First plumage: female. Above generally duller cinnamon than in adult, with obscure streakings of dusky-buff; rump grayish-brown with a tinge of olive. Tail narrowly tipped with gamboge-yellow. Two secondaries on each wing slightly tipped with the red waxen appendages. Entire under parts brownish-buff, palest about anal region, deepest on throat and chin; breast and sides streaked thickly with cinnamon-brown. A dull black line, starting from the nostril, passes through the lore to the eye, where it terminates, embracing, however, the anterior half of both eyelids. From a specimen in my collection, taken at Upton, Me., August 14, 1874. I have seen specimens of this species in the first plumage with not only the secondaries wax-tipped, but several of the tail-feathers also. Nor is this horny appendage peculiar to the male, as has been stated, for several undoubted females before me have it fully developed. Much variation likewise obtains among different individuals in respect to the number and position of these appendages. One specimen (a male, Cambridge, March 21, 1870) has *every feather* of the tail conspicuously wax-tipped, in addition to nine of the secondaries on each wing, while another has the primaries (excepting the first three) tipped broadly with white, and in the centre of each white spot a smaller one of yellow.

Bull. N. O. C. 3, April, 1878, p. 64.

Brief Notes.

A RARE BIRD.—While collecting in Williamsport, Md., the past winter, I was fortunate enough to secure a fine partial Albino Cedar Bird. A description of the bird may be of interest to some of the readers of the O. and O. Back, white streaked with blackish brown; head and breast, a mixture of reddish brown and white; throat, white; breast, light reddish brown, running into yellow on the abdomen; wings, white with a blackish bar running diagonally across and having the wax tips; tail, white with the usual yellow tips; feet and bill, several shades lighter than those of a normally colored specimen. These colors and mixtures combined to form one of the most beautiful birds

that I ever had the pleasure to look upon.—J. F. Whiting,
Dorchester, Mass.

O. & O. IX, May, 1884, p. 61.

*Some Unusually Developed Birds Taken
near West Point, N. Y. ... E. A. Mearns.*

3. *Ampelis cedrorum*, (Linné) Selater. CEDAR-BIRD. — I have been so struck by the great variation in different specimens of this species, in regard to the red wax-like appendages, that I have taken particular pains to procure a large series of specimens illustrating this difference. In this series I can scarcely detect any sexual difference in that respect, except that the particularly well-developed specimens are all males. In the normal plumage the waxen appendages are confined to the tips of the secondary remiges, but in my cabinet are several specimens which have them affixed to the *primaries*, and in several instances even to the *rectrices*; but they are usually small and few in number. One specimen has several of these attachments to the *primaries*, which are nearly as well developed as those on the *secondaries*. But the most remarkable specimen is a handsome male (No. 545, ♂ ad., April 11, 1875, Highland Falls, N. Y., E. A. M.), having these ornaments attached, not only to each of the *secondaries* and *three of the primaries*, but each of the *rectrices* is embellished by a well-developed red appendage. Several other specimens have large red tips to each of the *rectrices*; and one (No. 1558 ♂, Feb. 23, 1878, E. A. M.) has *five* of its primary remiges (5th to 9th) tipped with yellow. Professor Baird † says: "A specimen from Guatemala (No. 50,455 ♂) is almost identical with examples from the United States, but differs in having a small spot of yellow at the tip of each primary; also there are red appendages on the tip of a few tail-feathers, as well as the *longest feather of the lower tail-coverts*." ‡

While speaking of this species, it may be well to add, that in specimens taken in worn plumage, late in summer, the colors are very much bleached, all of the colors being very much paler; the white band across the forehead is very much broadened, and the black of the chin much lightened. The top of the head and neck has an ochraceous suffusion, and the cinnamon-color of the back extends into, and partially subdues the ash of the rump.

† Baird, Brewer, and Ridgway, *Birds N. Am.*, Vol. I, p. 401, 1874.

‡ Italics my own.

Science Vol. XXI, No. 528, March 17, 1893, p. 144-145.
 A PRESUMABLY NEW FACT RELATIVE TO THE CEDAR
 WAXWING (*AMPELIS CEDRORUM*), WITH REMARKS
 UPON THE IMPORTANCE OF A THOROUGH KNOWL-
 EDGE OF FIRST PLUMAGES.

BY EDWIN M. HASBROUCK, WASHINGTON, D. C.

It is considered by every one that the individual waxwing possessing wax tips on both secondaries and rectrices is in the highest development of plumage, while a high development of plumage in any species whatever is usually accorded to the older birds.

Coues states that, "Specimens apparently mature and full-feathered frequently lack the wax-tips"; that "their normal appearance is unknown," and that "birds in the earliest known plumage may possess one or more." Beyond this little appears to be known.

In a somewhat extensive series of waxwings in the National Museum, in my own and other collections, appendages on the wings were developed in forty-five, fifteen displayed the ornaments on both wings and tail, while the remainder, apparently

adult birds, were entirely unadorned. (It might be well to state that the females as well as the males possess these tips, although less frequently, while some specimens examined showed the ornaments on both wings and tail.) Now, the natural conclusion from this would be that those birds possessing wing-tips only were older than those having none at all, while the fifteen on which both wings and tail were adorned were even older and were in the highest perfection of plumage. This is disproved by the fact that four birds of the year still in the striated plumage, taken in August, September, and October, respectively, display very distinct tips on the secondaries; and if on the secondaries at this early age when older birds possess none at all, why should they not also appear on the tail-feathers? The supposition of older birds only being adorned being disposed of, the question arises, When do these horny appendages appear? and on this I am able to throw considerable light.

It was in the summer of 1884 that I was spending a month at Port Byron, N. Y., when I ran across a nest of the waxwing, containing four young, every one of which had the wax tips on tail and wings perfectly developed. These birds were nearly fledged, although unable to fly, and I had good opportunity to observe them. Not being interested in collecting birds at that time they were not preserved, a circumstance to be regretted, but the full import of these appendages being developed in nestlings was appreciated.

The following table for the calendar year shows the conditions of specimens examined. So regularly and so nearly is it completely filled that it is evident that an examination of a larger series would undoubtedly fill the gaps.¹

Month.	Wings.	Both.	None.
Jan.	♂		♂ ♀
Feb.	♂	♂	♂ ♀
Mar.	♂ ♀		♀
Apr.	♂ ♀	♂	♂
May	♂ ♀	♂	♂ ♀
June	♀	♀	♂ ♀
July	♂	♂	♂
Aug.	♂ ♀ ♂ im	♂	♂ ♀
Sept.	♂ ♂ im		♂ ♀
Oct.	? ♂ im		♀
Nov.	♂		♂ ♀
Dec.	♂		♂

With this evidence it is apparent that these handsome ornaments are by no means a sign of age, but are, on the contrary, a purely individual development, appearing sometimes in their highest perfection in the nestling, while in an adult they may be entirely absent or barely beginning to appear; or again, appearing a few months after attaining first plumage, to go through a regular course of growth and development. Inasmuch as an individual with wax on both tail and wings is exceedingly rare, and the August and September birds are just beginning to acquire the tips it would be interesting to know just how often this development in the nest occurs, and this is published mainly with the hope of eliciting further information on the subject, and of prompting those in the field to be on the watch the coming season.

The importance of thus studying the first plumages cannot be too highly estimated, for not until comparatively recent years has a careful and thorough study of the life-history of each and

¹ In this table an attempt has been made to show merely that both sexes are adorned for each month in the respective columns. In a number of instances several individuals were found for each.

every one of our birds been deemed of any great importance by ornithologists. Of late, owing to the discovery of numerous errors that had crept into our nomenclature, careful attention has been paid to a species from the time of its advent into the world to a period when beyond all doubt it has reached its maturity. To the collector who accumulates a series, it is only too apparent how great is the difference between individuals, and that his series is not complete until each and every phase of plumage from various widely separated localities is represented.

Late in the season, while the full migration is at its height, a bird is secured which for the life of him he cannot name; in vain he searches the literature, compares specimens, and puzzles and worries only to find it at last an old acquaintance flitting under new colors. I have in mind a young man who, although not an accomplished ornithologist, ought to have known better, and who essayed to publish a list of the birds of the locality in which he lived. One winter he secured a bird entirely unknown to him, and in his dilemma sent it to the Smithsonian for identification; on its return the label bore: "American Goldfinch in winter plumage." This may be a little foreign to the subject but it shows how necessary was a thorough knowledge of the life-history of the species. Nor was it so very long ago that the "Gray Eagle," which for years was accorded specific rank, was found to be but an immature phase of *Halicetus leucocephalus*, while *Oidemia perspicillata trowbridgii* was shown to be but a seasonal variation of *perspicillata* proper. Even to this day it appears not to be generally known that the Golden Eagle takes from three to five years to acquire its full plumage; that the Bald Eagle attains his highest plumage at the age of three, the various intermediate stages being known as the Black Eagle, Gray Eagle, etc., and that the Little Blue Heron is pure white the first year, mottled and variegated with blue in every conceivable manner the second, and attains the perfection of its plumage only at the age of three; yet such are the facts. These are but isolated cases, while any day may bring about the unification of some two forms which at present are considered at least sub-specifically distinct.

Auk, XIV, July, 1897, pp. 277-8.

Ampelis cedrorum (Vieill.)

Some Abnormal Color Markings.

An adult Cedar Bird (No. 5481, Miller collection, Providence, R. I., February 18, 1886, J. M. Southwick), otherwise normal, has the flight feathers in each wing spotted subterminally with dull grayish white. These markings are as nearly alike on corresponding feathers of the opposite wings as is ever the case with a normal bilaterally symmetrical color pattern. On the distal primary the spot is very indistinct and nearly confined to the inner web where it occupies a space 3 mm. long (measured at the shaft) and 4 mm. from the tip of the feather. Toward the inner margin of the web the spot narrows rapidly and disappears without reaching the edge of the feather. On the outer web there is the faintest possible suggestion of a grayish trace close to the shaft and opposite the spot on the inner web. On the second and third primaries the spots become more distinct and extend nearly to the margin of the inner web. On the third primary the spot is 5 mm. long and 5 mm. from the tip of the feather. On the fourth primary in each wing the spot appears distinctly on the outer web, and from here on the portion of the spot on the outer web becomes larger and more conspicuous, that on the inner web at the same time diminishing until on the proximal true flight feather there is no mark at all on the inner web. The penultimate feather shows a trace of white on the inner web in the right wing, but none in the left, and the last spot is slightly larger in the right wing than in the left, otherwise the markings are exactly alike on the opposite wings.

While these markings have all the characteristics of a normal color pattern there is no known relative of the Cedar Bird with wings spotted in an analogous manner. *S. S. Miller, Jr.*

fore me, the set of four is somewhat larger than any of the five sets, measuring: Sets of four, 1.53x1.25; 1.50x1.28; 1.55x1.31; 1.53x1.27. Set of three, 1.45x1.20; 1.40x1.22; 1.42x1.22. The above being Screech Owls. The following California Mottled Owl, measuring: Set B, of three, 1.44x1.18; 1.42x1.20; 1.28x1.20. Set S, three, 1.42x1.21; 1.40x1.16; 1.42x1.16. Set E, three, 1.37x1.20; 1.38x1.22; 1.42x1.16. All are of the same glossy, crystal white peculiar to the Owl's eggs.

I give here a record of my first sets for each season, during six years: March 18th, 1880; April 24th, 1881; April 11th, 1882; March 24th, 1883; May 13th, 1884; April 12th, 1885. It will be seen that the year 1884 was later than the rest, the Spring being very wet all the hollows in the trees were filled with water.

I found one the past Spring that had taken up quarters in an old wood rat's nest placed on a limb of a Bay tree, some thirty feet from the ground. A large mass of dead leaves from the tree had been put together, and a hollow formed in the centre, lined with feathers of fowls and birds.

I took a young Mottled Owl from some boys two years ago, and put it in my greenhouse with a young Sparrow Hawk. They seemed to get on well together except in feeding, when the young Hawk wanted all the attention. When he got his portion he would take it in his claws, fly down in a corner on the long table, and spread his wings as though to hide his food. The Owllet would snap at his meat when a piece was held up to him, make a grab, shut his eyes and swallow it down with great satisfaction. The hot weather was too much for them in the hot house, with all the windows out, and I found them both laid out one afternoon.

"The Cedar Bird."

(*Ampelis cedrorum*, Vieillot.) Gray.

BY FRANK R. RATHBUN.

This bird belongs to the family of Waxwings, of which we have but two examples on this continent, the other being the Bohemian Waxwing or Chatterer, a somewhat larger bird, but strikingly similar in many respects. The Cedar Bird is a true tramp, breeding anywhere in his peculiar lazy way, and roaming from Florida to the Red River country. He is not, however, one of the diffident and solitary kind, but of a social cast, and may nearly always be seen consorting with members of his own kind. Whenever his "dreary whisper," his "wheezy" whistle is heard, a superficial search will almost invari-

bly find an encampment of the brotherhood. We have called him a true tramp, but we might qualify this statement somewhat by dubbing him a tramp of the gypsy clan, so nomadic and erratic are his movements and visitations. The heat of Summer and Winter's rigor have no depressing influence upon this indomitable bird. His characteristic fearlessness and independence is stamped upon his features, and evidenced in his striking profile. His sinister aspect, due to its peculiar markings, has always seemed to me to be surrounded with an eerie halo, with an atmosphere suggestive of the weird which is inexplicable. The sun neither incites nor delays his wooings, for sometimes the first young of the year are not seen until the month of August. In fact, he seems to take so much pleasure in his gregarious habits as to be unmindful of his domestic affairs.

The Cedar Bird is known and recognized as the Carolina Waxwing and the Cedar Waxwing. He also has such local names as the "Ring-tail" and the "Wax-bird," but is universally known in the north as the "Cherry Bird." The first name has been given him from the yellow color which tips the ends of his tail feathers; the second, from the peculiar red and horny appendages of his inner wing quills which much resemble red sealing wax; and the latter, for his love for "cherry-ripe," so tantalizing to the horticulturist.

This bird is of a very social, amiable, and very affectionate disposition. I had the good fortune to become intimately acquainted with a pair of them the past season. They had selected for their nesting place the bough of a soft Maple tree, some twelve or fifteen feet from the ground. The tree stood close to the sidewalk of the street, and immediately in front of my gate. From my breakfast table I could easily watch their labors. The situation was very public and the street a familiar thoroughfare of the boys and girls as they went to and from the public school. The birds had but one object in view, apparently, and that to build, brood and bring up. I often stood immediately beneath the scene of their toil, without for a moment inspiring fear or interrupting their labors. That they saw me was evident, for as they came to the spot alternately with materials, they would pause for an instant and peer at me with their gypsy eyes from beneath their sable frontlets, and seemingly satisfied that it was *only me*, proceed with their work of construction. I could but fancy they knew me and sought my protection, so trustful did they seem. When the female began to incubate her liege seemed very attentive and kind, bringing food and occasionally cheering her labors with a low whisper. Their bliss, however, was interrupted after a few days,

by the inherent destructiveness and mischief of some ruthless boy, who had, as I was led to infer from the scattered embryos and shells upon the walk beneath, either stoned or poked them from their nest. The pair disappeared and were never seen more.

The horticulturist has long eyed these "cherry birds" with suspicion, if not with hostility, for their peculiar fondness for garden fruits and cherries. They are, however, very beneficial birds, much more so than injurious, and for this reason should be protected and tolerated. They destroy vast numbers of harmful bugs, caterpillars and canker-worms. Occasionally they awake from their lethargic moods and launch forth on vigorous wing after flying insects.

While the Cedar Bird is to some extent a Spring and Autumn migrant, he does not hesitate to brave the rigor of our northern winters, where he collects in communities amid the thickets and groves. There they feed on various berries, especially those of the Cedar and other small clinging fruits. Occasionally they sally forth from these retreats and enter the cities and villages and feed upon the berry clusters of the ornamental Mountain Ash to repletion, sometimes spending the entire day in the tree. This is not unusual, for I have observed them thus for successive Winters.

The plumage of the Cedar Bird is strikingly soft and smooth, and the colors of the body are full of rich and insensible blendings, which shade from an ashy color on the rump through cinnamon to a rich purplish cinnamon on the breast and head; and through yellowish or yellowish buff on the belly, to the white of the under tail-coverts. He has a prominent crest of cinnamon drab and a sinister stripe of velvet black across and above the eyes, which is brought out in strong relief against the prevailing body color, by a marginal line of purest white above, and a spot of the same color at the lower base of the bill.

The inner wing quills and occasionally the tail feathers—which are each finished off with a touch of chrome yellow—terminate in peculiar horny-like appendages strangely suggestive of red sealing-wax. Sometimes these singular adjuncts are wanting, usually in the young birds.

This bird is from six to seven inches in length, and the eggs, which are laid in a carefully constructed nest of mosses and various fibrous materials, are from three to six in number, and have a pale or livid bluish ground sharply and thickly dotted and blotched with blackish spots. Average specimens of the eggs measure about eighty-two by sixty one hundredths of an inch.

But one of the most curious finds I have had this season is noted on the 18th of June, a newly constructed nest of a Cedar Bird, (*A. cedrorum*), in an orchard tree about seven feet from the ground which contained one egg. Passing that way on the 23d, imagine my surprise to see a Robin sitting upon the nest and the Cherry Bird upon a limb near. The Robin did not move until I had nearly got her in my hand when she flew off and disclosed to view four eggs of the Cherry Bird's and one Robin's egg. They were all fresh. Whether the Robin had been robbed before she had laid her complement of eggs or whether she lacked forethought in providing a receptacle for them is for the readers of the O. & O. to judge. Should like to hear from others on this question.—*P. W. Andros, Taunton, Mass.*

Curious Nesting.

O. & O. IX. Dec. 1884. p. 151-152.

Birds Tioga Co, N. Y. Alden Loring

151. Cedar Waxwing. Common. This bird is very useful in one way and quite destructive in another; useful, because up to the first of July their food consists of flies and insects; perched on the top of a tree they quietly wait for their prey to pass, when they dart out and often catch three or four flies before returning; destructive, because when cherries get ripe their food consists principally of them. The Cedar Bird arrives from the south in flocks about the middle of March. Near the middle of May, immediately after mating, the nest is built. This is placed on a horizontal limb from twenty to thirty feet from the ground, and is composed of dried grass and weeds, and is lined with fine roots, pine needles, etc. It is deeply hollowed, and contains four to five eggs of a light bluish color with a slight purple tinge, marked more or less with blotches and spots of black and more obscure lines of purplish-brown. The measurement is 7-8 in. by 19-30 in. About the first of September these birds gather in flocks of fifty to seventy-five individuals. At this time they live on the berries of the mountain ash. As the last of this month expires they leave for the south.

O. & O. XV. June, 1890. p. 82

Ampelis cedrorum AS A SAP-SUCKER.—The Cedar, or Cherry-Bird seems never to be very abundant in this section of the State; but early in the spring, when the birds first arrived from the south, I saw quite a large number of them, and observed what was to me a new habit. They resorted to the maple trees for the purpose of gathering the sap flowing from wounds made by the ice in the bark of the smaller branches. The birds would grasp a branch or twig with their claws, and partially swing themselves under it and drink the sap where it hung in drops. For a week or more these birds were so plentiful and so intent upon their sap-gathering that one was almost certain to find a flock wherever there was a group of maples. I took considerable pains to ascertain if this habit was shared by any other bird, but did not observe a single instance. In the Eastern States I have often seen squirrels drinking sap from the branches in this way, but never before saw it done by a bird.—F. E. L. BEAL, *Ames, Iowa.* *Bull. N. O. C.*, Jan, 1882, p. 54

Young Cedarbirds and Great Crested Flycatchers in Captivity.—While in Tamworth, N. H., last July, I imprisoned two broods of young birds when just ready to fly, with a view to seeing what their parents would do about it. One brood consisted of five Cedarbirds and the other of four Great Crested Flycatchers. I imprisoned the Cedarbirds on July 10, placing them in an ordinary wire canary cage. Their cries, when being caged, brought the mother, who first flew in my face and then perched on the outer edge of the cage as it rested on my knees. I put the cage very near the house, and it was only a short time before the parent birds began consoling the young with cherries (*Prunus pennsylvanica*). During the twelve days of their captivity the young were supplied with 8400 cherries, or one cherry a bird every six minutes. I ascertained the number by counting and weighing the stones left by them in the bottom of their cage. On an average the old bird or birds made 140 visits a day, bringing five cherries, each time. One was carried in the beak, and the others were jerked up from the throat one by one until all of the five young were fed. At their release the young were so tame that they returned to take cherries, from my fingers, but the old birds soon enticed them away.

The young Great Crested Flycatchers were taken from their cavern in an apple tree on July 21, and placed in a wire cage which I hung in the next tree. I could see it from my barn door. The old birds would never go near the young if I was in sight. Concealed, I watched them with a glass and occasionally saw the young fed. They were given harvest flies, dragon flies, and various beetles, and also smaller insects of which they left no fragments. I kept them caged until early in August. They were as wild on the last day as on the first, and if the parents changed their feelings towards me, it was only by intensifying their hatred.—FRANK BOLLES, *Cambridge, Mass.* *Auk*, VII. July, 1890, p. 290

The Oologist. 1635. *The Cedar Waxwing Eating Potato Bugs.* By George W. Vosburg. *Ibid.*, p. 237. *Auk*, VII. Jan. 1890. p. 84.

1487. *The Waxwings.* By W. L. Kells. '*The Sunny South Oologist*,' Vol. I, No. 1, March, 1886, pp. 1-2. *Auk*, VII. Jan. 1890. p. 80.

396. *Notes from St. John, N. B.* By Harold Gilbert. *Ibid.*, p. 134.—Notes on the Cedar Bird, Golden-winged Woodpecker, Robin, and Bohemian Wax-wing as winter birds, etc. *O. & O.* Vol. VII

File under Cedar-bird

Progne
subis

Progne subis.

1889
 April 20 (Butt) 21 (Faxon) 1889. ¹⁴ 15¹⁸ 16²⁸ 17³⁸ 18³⁸ 19^{do} 20^{do} 21^{do} 22^{no} 23³⁸ 24⁷ 26¹⁵ 1891
 Bird box in Lexington village - W. Faxon
 May 5⁴ 18¹ 17⁴ 18¹ 1889. 18^{heard} 30^o 31^z 1890 22⁶ 23^{4d} 24⁶ 1891.
 June 12^{ed} 16² 21⁴ 22⁴ 1889. 1^o 7^h 10^h 21^z 24³ 25⁵ 1890
 July 8^z 1889. 6⁵ 1890
 August 7^z 20^z 1889.
 Sept 13^{1st 8 mi. (Faxon)} 1890. 7^{1 juv. solitary bird flying on Great M.} Concord 1892. 4^{1 juv} Concord. 1893.

April 5⁴ 18²² 25^z 30^z Concord 1892
 Bedford 16 (Faxon) 22^z 24^z 28^{2z} 29^z 30^z Concord 1893.

May 2^z 3^z 4^z 5^z 7. 8. 9⁶ 10⁶ 11. 12. 13⁶ 14^z 16. 17. 18^o 19¹² 22^z 23⁶ 24^z 25^z 28^z 29^z 30 Concord 1892
 Lincoln 9⁶ (Faxon) 1 to 25 omitted accidentally. 26⁴ 27^z 28⁴ 29^z 30^z Concord 1893
 " 1^z 3^{hd} 4^z 5^{hd} 7^z 12^{hd} 13^{hd} 14⁶ 20^z 21^z 26⁶ 27^z 28^z 1894

June 2^{hd} 4^{hd} 6^z 7^z 12^z 18^z 19^z 20^{hd} 21^{hd} Concord 1892.
 " 26^z 27^z 28^z 30^z Concord 1893. P. subis.
 " Wareham Colony in 10 village. 1894

July 1^z 2^z 4^z 5^z 8^z 9^z 10^z 11^z 12⁶ 14^z 15^z 17^z 18^z 19^z 20^{hd} 21^z 23. 24. 25. } 1892
 26^{3 broods} 27¹⁵ 28¹² 29²⁰ 30. 31 (about bird box) Concord. 1892.
 1^{hd} 3^z 5^z 7¹² (at house) 12¹⁰ (at house) 13^z 14¹² (at house) 17^z 18^{hd} 19^z 20¹ (at box) 21¹ (at house) 22¹⁰ 23¹⁵ 24. 27¹⁵ 28¹⁰ 29²⁰
 30^z 31⁶ at box Concord 1893. 8² leaving high 20^{hd} 25^z 1894
 August 1^z 2^z 3^z 13^z 15^z 17^z 25² 26^z 28^{4 juv} Concord 1892
 " 16 2^{hd} 3^{hd} 4^{hd} 7^z 10^z 11^z 20^z 21^{1 juv} 24^{4 juv} Concord. 1893.
 " 5^z 2 juv 12⁶

Progne purpurea

1889 Mass.

May 10 Cambridge. - A single bird flying over my garden Flying over
" 18 " " " " " " " " warbling. my garden.

June 1 Concord. - The Sparrows must have driven nearly all the Nearly gone
Martins ^{out} of Concord for I saw only a single pair on Great Meadow during the entire day although from Concord
it was cloudy & misty and swallows numerous than skimming close over the grass.

" 16 Wayland. - Two flying over the river at sunset dipping down to drink.

New Hampshire

" 18 Wolfeboro. - About ten pairs breeding in a box raised by a pole only about 5 ft. long above the gable end of a barn. Three or four times during the day I saw the birds alight in the tops of small leafy trees, usually pear trees in a neighboring garden but also in sugar maples Alighting
near the lake shore. They would sit still for a few in trees
minutes then take wing & after a few wheels return & again alight. In every instance the ♀♀, only, alighted; although their mates were often with them & kept cackling about their perches.

June 21 Concord. - Apparently only two pairs breeding in the town
those just above the new bridge.

July 8 Cambridge. A ♂ flying high over my garden warbling at adults
about 10 A.M. Can the adults have begun to migrate? migrating

Aug. 5 Lexington. "Lexington friends tell me that the Martins left Leave their
their houses about three days ago. I could find none houses.
near their boxes this morning" (Faxon let. Aug 8-1889)

Progne subis

1890 Mass.

Sept 13 Warely. - "I was surprised to see a full-plumaged ♂ Purple Martin Solitary ad ♂ flying ^{yesterday} _{against} a strong south wind" (W. Faxon letter Sept. 14) my. late.

1891

April 14 Bexington. - "One male Purple Martin arrived yesterday at 5.30 P.M. Earliest It is the earliest date (April 14) I have for this bird. I don't arrive on understand his arriving alone. He has taken one of the record. compartments in that sparrow-infested box and sits on the piazza of the box surrounded by Passer domesticus as peacefully fraternizing as a dove beside its mate. There has not been the slightest with House attempt on the part of the sparrows to molest him altho. Sparrows. they outnumber him 12 or 15 to 1. I hate the English Sparrows as much as anyone, but the truth must be told.

Fiât justitia eruat cœlum" (W. Faxon letter Apr. 15-1891; "I have lived with them one summer and I know that way Denial of summer since the sparrows carry the Martins [at Bexington] alleged destine. have reared full broods without molestation xxx The Bexington of young by Martins have it all their own way, take their choice of House Sparrows. rooms and leave the rest to the sparrows" (Faxon let. Apr. 23/)

May 4 Faxon tells me that there are now four pairs of Martins occupying Arrive on the box next his house in Bexington. They arrived in the following order: at a time a ♂ April 14, a second ♂ on the 16th, a third ♂ on the 17th, two ♀♀ on the 18th, a third ♀ on the 23rd and finally a pair together most of them appeared or were first noticed in the morning. It was very cold on the 25th and 26th and all but one pair Sleep late left the box and were missing two days returning the 27th cold mornings this morning the mercury fell, in Bexington, to 33° Fahr. The Martins (who sleep each night now in the box although they Sleep in bird have not begun building yet) rose late and before emerging house from peeped out of the holes a number of times and then drew arrival. back. Finally they all came out and perched in a row on the eaves of a piazza where they got the sun & were sheltered from the E. N. E. wind.

Massachusetts,

Progne subis

1892.

July 26. Concord. Just above the swimming place I passed three broods of young Martins (5, 4 and 2 birds respectively) which were sitting on the topmost dead branches of tall elms and maples over the river. This habit in the young Martins is invariably choosing a high perch distinguishes them from the young of other Swallows. The parents were flying about and taking food to the young. Once I saw a young bird fed on wing the parent meeting and rising with it after the manner of the Cave Swallow. The young were very noisy uttering especially when on wing a loud rather unmusical peep.

Progne rubis.

1892. Mass.

July 27. Concord.- Numbers of Purple Martins again spent the day in the (NO.3) tall trees near the swimming place. The brood seen there yesterday were united into one flock to-day. I counted ten birds in one tree all young. The flock took wing and went off to the S.W. as I was passing on my way home.

Young
Martins

July 28. Concord.- Immediately after breakfast I started for a short walk As I was passing the Burrills' the calls of Martins attracted my attention and looking to the eastward I saw a flock of about a dozen of these birds flying in circles at a height of several hundred feet over the vineyard of Mr. Merwin's farm. They seemed to be excited about something and the cause was soon explained when a small Hawk which looked exactly suddenly appeared directly among them, coming from I know not where. For a moment or two it sailed about with them as if it meant them no harm but merely wished to join the flock. None of the Martins as far as I could see, tried to avoid it but all continued their slow, easy, circling flight. Perhaps they were too frightened or bewildered to attempt to escape or more probably the majority were young, unaware of the fearful risk they were running as they brushed past the strange bird in their midst. The latter, secure of his prey, doubtless found a certain savage pleasure in prolonging the moment of his triumph as a cat plays with her mouse or bird before ending its sufferings. But at

Young
Martins
caught
by a
Hawk.

Progne rubis.

1892. Mass.

July 28. Concord.- length there was a sudden dash, the flock were scatter Young
ed in every direction, and a single Martin closely pursued by Martin
the Hawk disappeared behind a cluster of trees. The ^{next} instant I caught
heard the screams of the poor victim, at first loud, then ~~faint-~~ by a
er, and finally, after a moment of silence, coming again in Hawk.
feeble despairing tones as the unfortunate creature drew its
last breath in the grasp of the sharp and relentless talons.

July 29. Concord.- The Martins were again assembled in the elms and Young
maples near the swimming place. They were all together and I Martins.
counted twenty, most of which looked like young. It is singular
what keeps them in this place. I saw only three lower down the
stream.

Sept. 7. Concord.- A solitary young bird flying about over the meadows, Purple
calling, at 7 A.M. Martin.

Progne subis.

Danford, Mass.
April 29, 1903.

There are few if any Martins in the boxes about
Danford today, as there are many House Sparrows!
The Martins are evidently being crowded out.

Progne subis.

Concord, Mass.

Still in Concord.

1893. The Martins have not left Concord yet. Indeed they have
July 30. been exceptionally numerous during the past week. Most of
 them appear to be young but I heard the song thrice to-day.
 The broods of young perch usually in leafy tree tops. Both
 young and old feed chiefly over oak woods and visit the river
 and meadows much less often than do the Swallows.

July 31. On my way back from town this morning I passed near Mr.
 Edward Hoar's garden. To my surprise there were at least
 six Martins sitting on the ledges of his bird house or peep-
 ing out of the holes. This colony must have bred late this
 season for the birds left the boxes on the river bank beyond
 Nashawtuck Bridge nearly a week ago and broods of young Mar-
 tins with their parents have been scattered over the whole
 country about Concord for ten days or more. They seem to be
 unusually numerous and I think they must have been unusually
 successful with their young this year. Their voices sound
 pleasantly these still warm days coming from out the sky over
 meadows, fields and woods. Go where I will the call of the
 Martin is constantly in my ears whereas in May and June I see
 or hear but few away from the town. The old males are still
 "singing" freely.

Aug.4. The Martins are getting scarcer but I heard at least one
 to-day. The bulk left us about the 1st of this month.

Aug.16. Have all gone. Saw last one on the 11th.

Progne subis.

Peterborough, New Hampshire.

1898. Two or three seen flying over the village July 25th and
July 5 to 28th. Also heard calling at Ben Mere farm August 1st.
Aug. 15.

Concord, Mass.

Early morning song.

1899. Awaking just before daybreak (at 3.20) this morning, be-
June 8. fore the first Robin had uttered his first call, I heard, as
I was lying in bed at the Keyes', and for the first time in
my life, the song of the Purple Martin. It was a monotonous
er-e-er-itty-er-e repeated rapidly without pause or interval
many times in succession. As nearly as I could make out there
were two or three birds singing at once and they kept it up
for at least eight or ten minutes. The sound came from the
direction of the Hosmer's meadow and always from the same
point leading me to conclude that the birds were perched,
probably in the tops of the large elms that line the road
which skirts this meadow. Faxon heard this same song when he
was living at Lexington a few years ago. If I remember right-
ly he told me at the time that it was never uttered excepting
at daybreak.

Dec. 16 May, '91

My dear Brewster:

Either the 9.15 train for Franklin Park (Eastern R.R.) or the 9 train for Oak Island (Rivers B. R.R.) will suit me next Tuesday. If you have any choice please send me a line. If I don't hear from you I will be at Eastern Station at 9.15.

I don't find the Least Flycatcher or the Nashville Warbler on your last year's N.Y. list. You have the following land bird not on our this year's list: *Vireo olivaceus*, *Ammodramus passerinus*, *Coccyzus amer.*, *C. erythrophthalmus*, *Myiarchus*, *Contopus virens*, *Antrostomus*. On the other hand are added ^{on} this trip: *Dendroica virens*, *Petrochelidon*, *Euphonia min.* (H. B.), *Molothrus*, *Trochilus*, *Dryobates pubescens*, *Megascops*, *Accipiter velox*, *Tympanuchus*, *Bonasa*. Wilson gives an interesting account by a Mr. Mitchell of the habits

of the Heath Hen on Long Island in early part of this century. ^(Mitchell) He asserts that these birds preferred the brush to the taller shrubbery & trees - that they took to the latter when hunted - that in Pennsylvania, when a tract of brush grew up to trees the Heath Hens all disappeared from that tract.

We now have twelve Martins in the box - This is a large no. by far that ⁱⁿ ~~for~~ previous summers. They are now busily building. They go for material (hay, or) to a ~~plowed~~ plot beyond the limits of this place. The ♀ does all the work, but the ♂ invariably accompanies (or rather follows) her on every sortie. In the absence of one pair, another male will often scoot round the corner of the box & steal some of his neighbor's nest, giving it to his mate who quickly carries

it into her compartment. This is a reversal of Adam and Eve's order of stealing apples! It (like everything the Martins do) is done so prettily that you can't help forgiving the sin. They seem never to quarrel & it's a pretty sight to see them in the morning sitting in pairs - each pair at the door of his own room.

It seems to me that they were all paired from the first, altho' they came straggling along to Lex. one by one. There have been no signs of courtship or of rivalry among them. My recent spring dates for Wh-cr. Spar. are: May 22, '88 (2 in Concord, one in Sudbury). May 16, '90, one, E. Lex. May 14, '91, one, E. Lex. B. Torrey: May 11, '88! E. E. Faxon: about May 13, '90, John Brookline. May 24, '90 Purgatory Swamp, Dedham, one.

Recent arrivals: —

Sylvania pusilla 14, 16.

- Dendroica maculosa* 15²
Hylocichia canadensis 16². 16²
Geothlypis trichas 15² Rock Md.
 " *palustris* 15² Fr. P.D. sw.
Coccyzus erythrophthalmus 15. 16.
Passerina cyanea 16⁴
Dendroica blackburniae 16² Mystic Pond
 " *castanea* 16² " "
 " *striata* 16² Mys. P.D. + Deep.

The Baybreasts were very near the spot where I saw them May 19, '86. They were in *Betula papyracea* — must have felt at home! In '86 they were in *Acer rubrum*.

In sincerely

Walter Ferguson

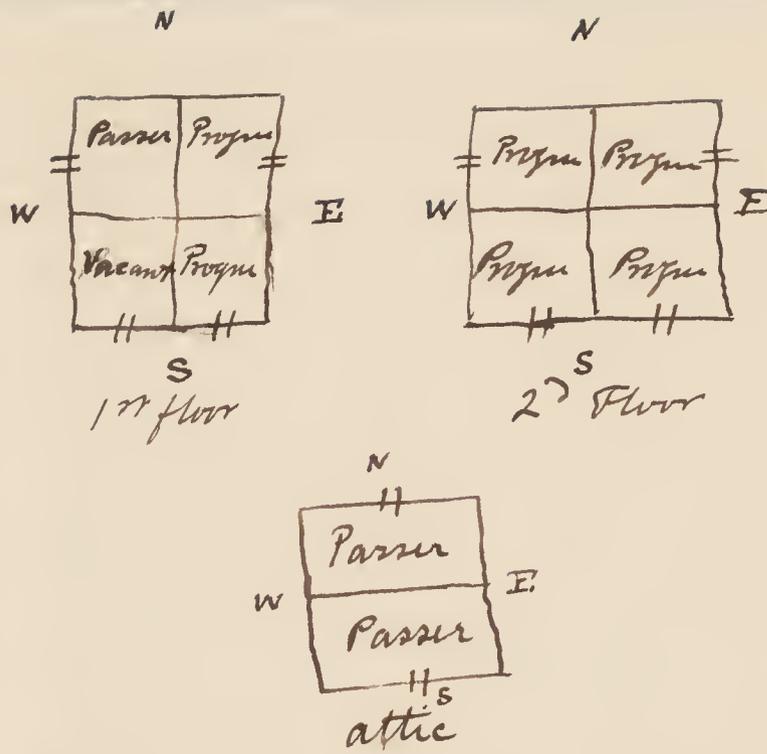
Lexington
 129 May, 1891

Dear Brewster:

I sent you by mail yesterday a Yellow-bellied Flycatcher from Topnot Swamp. It was emitting the "pea" note. I heard the same note in Oak Island on the 26th but was driven out by the mosquitoes without seeing the bird.

On the morning of the 27th I saw a beautiful ♂ Mourning Warbler on the roadside — Lake St., Waltham, near Head's Pond. I have been very lucky in seeing the four rare warblers — Cape May, Bay-breast, Tennessee and Mourning in one

Dead season.
 I think the ♀ Martins are now sitting, as they are in the box most of the time. The males spend most of our time on the piazzas like faithful but lazy husbands. When it rains they sit with their tails directed outward over the piazzas. The last touch in their nest-building consisted in carrying in fresh green leaves — for lining, I suppose. There was a great deal of stealing material from one another's nests during a neighbor's absence, while they were building, but I have never seen them quarrel. The assignment of rooms is as follows:—



Early in the season the vacant room on the SW corner, lower story, was occupied by a pair of Sparrows, but they deserted it, apparently oppressed (not aggressively) by the number of Martins congregating on the piazzas of the S. side of the box. I doubt if a Martin-house was

Dem ever watched more closely than
Hydr this one has been watched by
Listr me. It is directly in front of
my window, and of my bed.
Coccy from which I watch the birds
Paris for an hour or more before
Dem I rise in the morning. I
have never seen the least
interference between the two
species of birds. The colony
is as absolutely harmonious
as if it were composed
of but one species of bird.
The spr
The
wh
they
Except when the Martins came & took
possession, and even then it was
done without any contest, as
I wrote you before.

It seems a little singular that
I have never seen the Martins
copulate. I have often seen
a ♂ pursue, overtake and appar-

ently grasp the ♀, on the
wing, but it did not look
like coitus. I am inclined
to think that pairing is com-
municated in the voice. A
highly civilized bird!

In a future letter I wish to
tell you of some strange
occurrences in an old bird-
house in our back garden,
but I wish to follow the case
further first.

Last evening I walked
out on the Woburn road
& heard the best Whip-poor-
will concert that I have
enjoyed for years. There
were at least six singing
at once. We have a Cat-bird

Dem
Hydr
Lish
Coccy
Pan
Dem

Tophet Swamp yesterday
morning I flushed a
Woodcock. Came within
an inch (as usual) of
seeing him boring. The
ground was riddled with
his holes. A neighbor
with trained dogs tells me
that there are lots of wood-
cock breeding between
here & Burlington. He
gets them as soon as the
law is off.

The
spr.
The
when
they

sitting on nest in Syringa
bush under the kitchen
window. The ♂ sings on
a clothes-post near it.
As there are two cats in
the house I fear the bird's
chances of raising a
brood are very slim.
Lexington village appears to
me to be a remarkably
birdy place. The bluebirds
are in full song again -
preparing for 2^d brood?

Yours sincerely
W. Faxon

P.S. I know of three colonies
of Martins in this village. In

Progne subis
Arlington, 27 Dec. 1891

My dear Brewster:

I am very to hear that the physician takes your trouble so seriously—perhaps he exaggerates the danger a little, as professionals sometimes do.

Your enforced vacation has its compensations, however. I enclose the data concerning the breeding of the Bobolink.

On the 24th inst. I found the Maryland Yellowthroat again in precisely the same spot as before. On the 20th, passing rapidly thro' the Fish Pond Swamps toward dusk, I counted 15 Song Sparrows and 3 Swamp Sparrows.

I don't know whether the following notes on the Purple Martin will be of any interest to you
 Lexington, 1891.

Apr. 14.	Temp. 77°	1 ♂ arrived
" 16.		2 d ♂ "
" 17.		3 d ♂ "
" 18.		2 ♀
" 23.		6 birds here
" 24.	" 42°-56°	2 " "
" 25.	" 35°-43°	2 " "
" 26.	" 34° A.M.	6 " "
" 27.	" 77°	6 " "
" 29.	" 33°, 5 A.M.	6 " "
May 2		8 " "
" 4	" 34°	
" 5	" 33°	
" 6		9 (5♂, 4♀)
" 15		6 pairs building, ♀ does the work but is closely followed by ♂ during each trip for material. One of the males is in ♀ plumage
" 21		They are lining nests with green pear leaves. The ♂ is active

in this, alighting in the pear trees and cutting off the leaves.

May 25

A pair (♂ in immature plumage) appear & build in the old box in the back yard, never before occupied by Martins. Made quick work of the Sparrows! A second male, also in immature plumage appeared at this box ~~some time~~ ^{some time} ~~four days~~ later & lived there for two weeks or more - a bachelor, never meddling, so far as I could see, with the married couple, but sitting on the chimney most of the time.

Aug.

1. Martins leave the pig box with their young.
 6. The pair in the old box leave with their young.
 The young do not leave the boxes till they are able to fly as well as their parents, and do not return to the boxes after they have once left them. After

This they are seen over the
Great Meadow in E. Tex., the
parents feeding their young
in the air like *Falco sparverius*,
but at a much greater alt-
itude. The young of the year
both before & after leaving
the nest, has a diagnostic
note by which he may be
recognized up to the time
of leaving in the autumn.
I saw the Martins for the
last time on Sept. 8. After
they left the boxes they
sometimes come into the
village toward evening &
alight on the eaves or on the
church steeple, but during
the day they come over
the meadows, feeding.
The flight of the Purple
Martin appears to me to
be exactly like that of the

White-bellied Swallow, though
the greater size & weight of the
Martin make his aerial
evolution more impressive
to the looker-on. I never
tired of watching their
movements when toward even-
ing they all left the boxes
and spent a half-hour
or so in feeding and
exercising. They seemed
especially fond of this
spot when a pretty
stiff SW wind was
blowing.

The much-heard musical
warble of the Martin is,
I think, peculiar to the male
bird, and he has in ad-
dition a true song, which
I have never heard men-
tioned by any observer. This

song I never heard except
in the morning twilight
(during the robin chorus). It
is delivered by the ♂ while
sitting on the piazza of the
box. It consists of two
phrases -

♫ ♫ ♫ ♫ ♫
chip chip chée, chip chip
chwe

repeated ad infinitum and
making as continuous a
song as the Robin's. It
far surpasses the Burn
Swallow's song as a
musical effort.

After you went to Europe I
got my long-looked-for evidence
against the Horn Sparrow.
A pair appeared on the scene
when everything was quiet,
both sparrows and martins

apparently sitting. The fe-
male of this Antiochian
pair proved to be a ver-
itable Taitan. She would
get in the doorway of one
of the Martin's chambers
& cocking up her tail
& presenting her back to
the enemy hold the fort.
When, as sometimes happened,
she was dispossessed by the
infiltrated pair of Martins
she was quickly borne to
the ground by the larger
bird, but in recovering
her position and adopt-
ing the cat's tactics of get-
ting her back up, she
seemed to have the advan-
tage again. I soon put an

end to the contest by short-
ing the Sparrow. To show
^{how} well the Martins seemed to
understand the part I was
playing in the fray I will
add that while the Spar-
row was taking a last
short flight after being
mortally hit (I shot her
while she was on the roof
of the house) and directly
after the report of the gun
the ♂ Martin dived upon
her in the air. In another
second she fell dead on the
grass, but the mischief
had been done, that pair
of Martins was broken
up & game up the box.
After this there was no
more trouble among the Mar-
tins.

Yrs. sincerely
W. Faxon

1896

Maine

Progne subis

Decrease of the Purple Martin.

FOR THE MAINE SPORTSMAN.

L. W. Robbins of Gardiner, in speaking of the decrease of the purple martin, does not think they have been driven away by the English sparrow. They have been leaving here for ten years or more, and I have been looking sharply after the cause. The English sparrow gets possession of the boxes before the arrival of the martins in the spring, and many of them used to nest together in the same boxes, but kept fighting all the time. Unless the martins keep a strict watch, the sparrows will steal their nest material and they will take the chick martins by the neck and drop them to the ground to feed the eats. I have found four little chicks at one time of the martins on the ground after a fight. A piece of lath nailed over the holes in the boxes as soon as the martins leave in August and not take them off until about the time they return in the spring will keep them for a time, but they will not nest long where they have to fight the sparrows. Out of the dozens of martin houses in this vicinity I only know of one that had martins last year, and that one not one-fourth the oldtime number. I used to see purple martins breeding in holes of trees in California, and I suppose our birds now go to the forest and breed in holes like woodpeckers.

GEO. A. BOARDMAN.

Calais, Jan'y 19, 1897.

Maine Sportsman, Vol 4 no 42 Feb. 1897, p. 5

(Purple Martins have increased very greatly at S. Umbagog (where there are no Sparrows) within the past 15 years but they nest in bird houses exclusively)

Driven from the towns by Sparrows. Capt. W. S. Umbagog

1898 N. H.

June 14-15 Wolfboro. As numerous as ever. [Journ.]

July 2-4 Glendale (in or near), Berkshire Co. Two or three. [Journ.].

1899.

June 8 Concord. — Just before day break (at about 3.20) this morning, before the first Robin has uttered its first call, I heard, as I was lying in bed at the 'Keyes', the song of the Purple Martin. Fumbling for my note book & pencil I wrote as follows: "Two or three martins singing not far from the house in the direction of the Hosmer's meadow & probably perched in the tops of the large elms along the road since the sound comes always from the same place & they cannot be moving about. The song is er-e-er-itty-er-e, er-e-er-itty-er-e etc repeated many times in succession without pause or interval & very tinny after the first few repetitions." The birds kept it up incessantly for eight or ten minutes. This song is wholly new to me but Haydon has heard it at Lexington

Song before day break.

Progne subis.

Waynesburg, Pa.

1900. Extract from a letter by J. Warren Jacobs to Ruthven Deane
Feb. 1900.

(I send you) a picture of one of my Purple Martin houses. You may not be much interested in it but I am sure you would be tremendously interested in my Martin colony when they return.

A brief history of this colony is as follows:-

In 1896 I constructed a house of 20 compartments and was much gratified to see five pairs of birds take possession. They had some bad luck and only 13 young reached maturity. In 1897 all these with the exception of one immature returned and at the end of their breeding season 33 young left the house. I now found that in order to keep pace with the colony I must provide more room, so accordingly in 1898 I constructed ^{and erected} one of 34 rooms which is the one shown in the photo. I think 23 broods were hatched in the two houses that year, and such a "swarm" of birds I had for my trouble was a wonder. It occurred to me that accommodations for the birds would be insufficient for the returning horde in '99, and I accordingly doubled my efforts to provide nesting room.

This time I gave them 50 more rooms, fashioning the house after the Pa. State Building at the World's Fair. 47 pair nested, bringing out almost 200 young birds. What to do

Progne subis.

Waynesburg, Pa.

1900. do with them this spring is puzzling me. Nearly 150 pairs
(No.2). will return and as I have but 104 nesting compartments you
can realize the situation. Could put up another house, but I
already have three, besides our other buildings, on a square
of ground 190 feet by 200 feet, in the busy part of the town.

I am very sorry that I find myself surrounded by obsta-
cles just when the colony becomes intensely interesting - 150
pair would rear nearly or quite 500 young, which would make
a colony of 800 birds, and after making due allowance for
death, etc., 300 or more nesting pair could be counted upon
for 1901, and again the increase would be enormous, as they
would produce between 1000 and 1200 young.

Kennett Square, Pa.

November 24, 1903.

My dear Mr. Brewster:-

I enclose correspondence just received from Mr. Hoopes. It is not at all complete, but taken with his letter to me also enclosed you can get an idea of what was done. I have asked him where the printed ^{account} occurred and will try to get it for you. He does not ask to have this correspondence returned but I think it would be best.

So far as I can learn no Martins were destroyed hereabouts by the rain storms of June. I hope you were none the worse for your Phila. trip. X X X X X

Very truly

C. J. Pennock.

(copy).

West Chester, Pa.

November 24, 1903.

Charles J. Pennock,

Kennett Square, Pa.

Esteemed friend:-

Referring to thine of the 23rd, I believe the attempt to transport the Martins rests with me as Mr. Carson and myself, some years ago, conceived the idea that we could colonize them at the "Zoo" by removing the young birds before they could fly. I have not heard from him for the present season and do not know whether they had any or not but am very fearful, they did not put in appearance there. I think it was in the year of 1899 that we made the removal. I placed a large box on a tall pole and by means of a spring trap and rope, we would be able to shut up all the door-ways instantly and then we removed the box and put it on the night train and the next morning they were hanging on a pole in the Zoological Gardens.

X X X X X X X X X X X X

Very sincerely,

Josiah Hoopes.

(copy. The writer is of the firm

Hoopes, Bro. & Thomas,

Maple Avenue Nurseries,
West Chester, Pa.)

The Zoological Society of Philadelphia.

Fairmount Park.

Philadelphia, July 30, 1899.

Mr. Josiah Hoopes,

West Chester, Penna.

Dear Sir,

Pardon me for not writing before but have been waiting for something definite to tell you. Without giving up all hope I am very much afraid the martin experiment will prove a failure. We have a number of the young birds still with us but although some of them fly perfectly well they have not shown the slightest inclination to forage for themselves, except their six meals a day to be put in their mouths and are the tamest birds I ever saw. Not a day has past but one or two of the old birds have been here, they fly with the young ones sometimes but do not seem to have taught them anything. The man who feeds them seems to think that two or three will learn in time to care for themselves but I doubt it, if they do and go south this fall there is a chance of a pair or two locating here next spring and perhaps some of the old ones having become used to the place may settle here next year but I am afraid that is very doubtful too. I do not know how I will feel about trying it over again next year but if I do will take advantage of your kind permission to put the box up again.

Very sincerely yours, Rob't D. Carson.
(copy).

The Zoological Society of Philadelphia.

Fairmount Park.

Philadelphia, August 13, 1899.

My dear Mr. Hoopes-

I regret that I did not see you the last time you were here. I am beginning to think that my experiment with the martins may be successful after all. I also believe that at least two of my young birds have been to West Chester more than once and I would like to have you or some one keep an eye on your box and we may be able to prove as these birds are marked so they can be known. One of them has the second quill on each side of the tail squared off in this manner and the other one has one quill on each side of the two central tail feathers cut in the same manner, so I marked these two birds in this way so I would know them if they came back next spring, the mark can be easily seen at quite a distance if you are nearly under them. These two birds are now able to take care of themselves, are often away for hours, on several occasions after being away for a long period they have come back with other martins and today two old birds came here at 9.30 and when they left at about 10. took one of mine with them, she did not return until 4. this afternoon.

Our man told me you said you had only five birds left when you were here. On August 6 I counted five strange martins flying with mine. I would like to hear from you soon.

Very truly yours, Rob't D. Carson.

An unmarked young one flew away with 3 old ones last Wednesday and did not return. The direction of their flight was South, this hardly indicates that they were migrating and mine went with them but it is not impossible. R.D.C.

The Zoological Society of Philadelphia.

Fairmount Park.

Philadelphia, April 5, 1900.

Dear Mr. Hoopes-

I am in receipt of yours of yesterday. I am, indeed, very much disappointed to learn that your brother has erected a new box in his yard, and am much afraid his doing so has materially lessened my chance of getting the birds here for, as you know, my main hope depended on the birds from the box I erected on your place last spring not finding quarters for them in their old locality and in consequence coming here where they had been so often last year that the place had become familiar to them. The fact of there being a new box in close proximity to the location of the old one will in all probability induce them to settle in it whereas otherwise it seems to me they would have come here.

Now, I fear, all my trouble and work is to go for nothing

Very truly yours,

Rob't D. Carson.

(copy).

The Zoological Society of Philadelphia.

Fairmount Park.

Philadelphia, May 6, 1900.

Mr. Josiah Hoopes,

Dear Sir,

On Saturday, April 28, several martins visited the Garden. They remained some little time flying about and feeding. I was away and cannot say that they alighted on the box but think not. This is all the encouragement I have had so far.

Will you be kind enough to notify me when your birds begin to build. It is not quite time for them yet I think. In case they do not come here, as I am afraid, would you care to spare me out of your abundance a few half grown young ones? I think with the experience we had last year we would be able to raise them and it would give us one more chance to establish the colony I so much want. Ten or a dozen would be enough or if you would not care to have so many taken I would try it with less. They could be taken when most of the old birds are away and but one from a clutch. If you ^owould not care to have the box disturbed you will, of course, not hesitate to say so.

Very truly yours,

(copy).

Rob't D. Carson.

The Zoological Society of Philadelphia.

Fairmount Park.

Philadelphia, June 26, 1900.

Dear Mr. Hoopes,

The report of the Martins having returned to my box is true. I was waiting until I could find time to write you and also until I was assured they had come to stay and I did not know the papers had said anything about the matter. Yes, in spite of my several disappointments the birds have come and, I begin to feel, they will be a fixture, and, moreover, their actions prove that some of them if not all are those I raised by hand. On last Saturday at 1.15 P.M. 8 came to the box all remaining half an hour. One pair stayed until nearly 7 o'clock. On Sunday all came again and remained all day. One pair commenced building. They were here again yesterday and today, very busy and happy and apparently quite at home. Is this not very late for them to nest?

I feel very much gratified that my plan to colonize them here has been successful. No one seemed to have the slightest idea it would be. I again thank you for your share in the experiment in allowing me to place my box in your yard and hope you will come to see my birds.

Very truly yours,

Rob't D. Carson.

(copy).

The Zoological Society of Philadelphia.

Fairmount Park.

Philadelphia, Sept.5, 1900.

Dear Mr.Hoopes,

One and perhaps two pairs of Martins bred in my box this season, but in addition to those that bred, there were two or three pairs and sometimes more on and about the box nearly every day and, on the 18th of August, at about dusk, there must have been over 100 in sight at once. A few were seen early the next day but, with the exception of the young birds from my box which left on the 24th, none have been seen since. I would like ^{to know} when your birds left so, if you have the date, I will be obliged if you will send it to me. I think I may say that the Martins have yielded to the determined effort to bring them here and will in future make the Zoo one of their summer homes. I thank you however for your offer to place your colony at my service again.

Very truly yours,

Rob't D.Carson.

(copy).

The Zoological Society of Philadelphia.

Fairmount Park.

May 12, 1901.

My dear Mr. Hoopes-

On April 30 I saw one Martin on the box but none since until today at 12 M. when several appeared and seem to have made up their minds to remain. I have been disappointed that they did not come before and cannot understand it. Excuse postal and haste.

Very truly yours,

Rob't D. Carson.

(copy).

The Zoological Society of Philadelphia.

Fairmount Park.

Philadelphia, July 30, 1901.

Dear Mr. Hoopes,

I regret I can say nothing very encouraging about the Martins. As you know, they bred in my box last year and I was quite sure I would have more this year, but, although, several pairs came and remained several weeks, they finally left; some or all of them have been back at intervals but they certainly have not bred here and I have seen none at all for the past three weeks. I hope for better luck next year.

Very truly yours,

Rob't D. Carson.

(copy).

The State Board of Agriculture

OF DELAWARE.

S. H. MESSICK, Bridgeville, PRESIDENT.
J. T. SHALLCROSS, Middletown, VICE PRESIDENT.
A. W. SLAYMAKER, Camden, SECRETARY.

CHARLES J. PENNOCK,
Ornithologist.

Kennett Square, Pa. 1/8/07

My dear Mr. Brewster,

I have just received the enclosed from Mr. Carson who made the experiments together with Mr. Hoopes on the Martins -

This account is extremely interesting - It seems too bad they were not more successful.

You are at liberty to make what use you may desire of the enclosed notes so far as I am concerned & Mr. Carson does not seem to object.

Kindly return me Mr. C's notes when you are through with them -

With very best wishes I am

Sincerely yours
C. J. Pennock

The Zoological Gardens.

Philadelphia, January 6th, 1904.

Mr. Charles J. Pennock,

Kennett Square, Pa.,

Dear Sir:-

I have been away from my office for some weeks and this will explain why your inquiry, regarding my attempt to induce the Martins to colonize in the Zoological Gardens, has not received attention before. I regret to say that the experiment did not result in the birds locating here permanently

In the Spring of 1898 I had two swinging Martin boxes, each of 24 compartments, 12 on each side, put up on a pole near the office. No Martins appeared that year and, I may say, that none, as far as I know, had ever been seen in the Gardens. The following Spring, that of 1899, through the kindness of Mr. Josiah Hoopes, I had a pole with a cross-arm erected near his colony in West Chester, to which on March 13th., I swung one of my boxes, at the same height and facing the same direction as it did here; this box was so arranged that by pulling a cord the openings into the interior could be closed. Mr. Hoopes kept me informed, first - that the box was tenanted, then that the old birds were feeding their young. On July 12th., I took an assistant to West Chester and when all was quiet, about 9 P.M., pulled the cord, lowered the box and brought it to the Gardens and by midnight it was back in its former position. At 2 A.M. I pulled the cord again, this

time so arranged that it would open instead of close the entrances to the nests: Instantly there was a volley, no other word will express it, of birds from both sides of the box and strange to say, the direction of flight, as far as I and two men who had been helping me, could see, was, without exception towards West Chester. I watched for a while but no more appeared, but about daybreak I counted four more as they took flight, these left singly but each one took the same course as all the others. I have often thought over this and believe if systematic experiments, based on this observation, were made with Martins and other birds something further could be learned in regard to the sense of direction, If it was verified, it appears to me, that nothing but a special sense, and a very keen one at that, could explain it. Mr. Hoopes reported the next day that what he believed to be the old birds were flying about the pole from which the box had been taken and acting in a "distracted manner". No old birds were seen in the Gardens all day and at 7.30 that evening we lowered the box and found that we had nine clutches of young ones, 32 altogether. There was but one thing to do, feed the young by hand. At first it took two men two hours to feed them, for a while they were fed three times and afterwards twice each day. They were in stages of development from less than half grown

to almost ready to fly. The second day some of the old Martins came and continued coming all through the season but seemed always to go away before night and they did not feed the young ones. I put a light rope and pulley attachment to the box so it could be lowered at feeding time, at other times it was kept in position on the pole. We had fair success in rearing the nestlings, the youngest died and some of the older ones were soon strong enough to fly and they promptly disappeared, several got into trouble on their flight so that finally we had four left and then two of these flew away, the remaining two we felt sure were a Male and a Female. They became quite tame, would forage for themselves but for a long time were ready to come at meal times, they made the box their home but after a while it did not have to be lowered as they would alight on a bush nearby and allow the man who fed them to come near enough for them to eat from a dish he held in his hand, they would at times alight on the dish and even eat from his fingers. At intervals adult birds, sometimes one or two and at other times quite a number would appear and the young pair would fly with them. I give you here my last notes for the season.

August 19th. Two old birds came and flew with the young ones for a little while then, at about 8.30 A.M., all four flew away and the young ones did not return until 4.30, each

ate six meal worms out of C's hand, first time they have been so fed for some days. August 20th. Neither bird would come down to C. this morning, they were both flying and feeding with an old one, when C. came. At 8.30 the male one and the old one went away together, the young female was chasing a dragonfly at the time, she caught it, returned to the box and ate it and in about ten minutes followed the others. No more Martins were seen in the Gardens in 1899.

Notes made in 1900.

March 12th. Hung one Martin box. April 28th C.saw 3 Martins feeding over Lion House shortly before 2.P.M.

June 23rd. At 1.15 P.M. 7 or 8 Martins came to the box, in and out, all remained about half an hour then all but two left, these two remained until 6.45, seemed to be selecting a hole, were seen with straws in their bills.

June 24th. Martins all day, one pair building.

June 25th. C.saw one alight on bush where he fed last year's birds, also on Chestnut tree (a last year's favorite place for some of the young). One pair to-day which remained until 8 P.M.

June 26th. One pair until 8 P.M.

June 27th. One pair until 5 P.M.

June 28th. I saw one at 7.30 A.M. carry five or six sticks into box in about 20 minutes.

June 29th. Do not think they stay in the box at night except at nesting time. At 7.30 this evening, the only one I had seen for an hour left and did not return. I believe female has commenced to sit.

June 30th. Four to-day. It appears as if only one pair had decided to build.

July 1st. Another pair appears to be building on the other side of the box.

July 17th. Saw one Martin, after 7 P.M., make 4 or 5 trips, apparently to gether food, it would remain in hole about a minute and be away from 5 to 15 minutes. Is it feeding young or mate?

July 18th. Saw 7 Martins flying and on box at one time, some act as if new to locality.

July 28th. 3 possibly 8 this A.M.

August 7th. Saw one young bird at eastern hole and afterwards on ledge this A.M.

Aug.9th. Saw 2 young ones on platform on east side this A.M. M.says he saw 2 on W.side (doubtful).

Aug.16th. Many Martins on tops of trees about office. C.says he saw them feeding young. Have the young left the box?

Aug.18th. Large number, 30 or more, flying at different heights this P.M. V.says at six P.M. there must have been 100.

Aug.19th. Martins on crosstrees of flagpole, would fly away a moment when touched by halliards but would return at once. This was early this A.M. Are they preparing to migrate

Aug.20th. Saw young birds on box, also two or three old ones flying about box.

Aug.24th. C.saw 2 young birds flying alone over carpenter shop. These were the last seen in 1900.

In 1901 the birds came and were here more or less during the season, but not in sufficient numbers to make them independent of the sparrows which had occupied the box and while we thought one pair made a nest and commenced to sit, no young ones were seen.

In 1902 a few came but less than the year before, and last year, 1903, none were seen. The box is still up and we continue to hope the birds will come. If I could spare the time, I would try the experiment again and believe with the advantage of the former experience I could raise a much larger number and make it a lasting success.

This is the first abstract I have made of this experiment All that has been published, as far as I know, was a very short article in a West Chester paper, from Mr.Hoopes, I think, and a mere item regarding it in one of our city papers.

Very truly yours

Rob't D.Carson.

P.S. In the Spring of 1900 Mr. Josiah Hoopes' brother put up two Martin boxes near the original one at their place in West Chester, and I think this was one of the reasons, and probably the principal one, that the experiment was not a complete success.

(Copy of a letter loaned by Mr. Charles J. Pennock in January, 1904).

Some Wonders from the West.

LIV.—A MARTIN VILLAGE.



A GENERAL VIEW OF THE MARTIN VILLAGE.
From a Photo.

and dwells by preference where man has his habitation, rarely being seen far from settlements. This fact has led to the custom of supplying him with a home for himself and family. There are few farms that have not a martin house reared for Mr. Martin, and the invitation extended by an unoccupied box is soon accepted. No "To Let" sign is necessary; the mere fact of the house being untenanted is sufficient for the martins, and once domiciled they fight for their homes valiantly, rendering service for the leasehold by protecting the feathered dwellers in the barn-yards from the attacks of thieving hawks.

The largest martin village in the United States is one maintained by Mr. Otto Widmann, a few miles from St. Louis, in the State of Missouri. There are eighteen houses in the village proper, and every spring the martins return there. The inevitable spring house-cleaning is no small task, but they work valiantly, putting things to rights and refitting, and then settle down to their Lilliputian housekeeping for the summer months.

The houses in the little village are all in a row and face towards the south. In front of



ONE of the best-known birds of temperate North America is the purple martin. He is a bold fellow and follows the first breath of spring north from Cuba and Mexico, where he passes the winter months.

Long of wing and swallow-like in form, he is a strong flier and he knows not what fear is. The larger predatory birds are aware of his prowess, and the call of the single martin to the clans is followed by a precipitate retreat on the part of the trespasser. He is of an extremely sociable disposition,



From a A NEARER VIEW OF SOME OF THE MARTIN HOUSES. *[Photo*

each is a comfortable veranda, and the martins sit there in the evenings discussing men and things, gossiping merrily, unmindful of the clatter that ensues from all talking at once. On the outskirts of the village proper are several suburban cottages occupied by martins who arrived too late to take a town house, but no line is drawn between town and country dwellers. The cottages on the outskirts of the village are truly suburban, for they are perched up among the branches of the trees that surround the settlement, and the green foliage and the pleasant shade make them delightful habitations.

When the little martins arrive there are busy times in the village and its suburbs, for they have tremendous appetites, and the families consist of from four to six children each. It is amusing to see the comfort the martins find in their tiny homes. Sometimes the wife will sit in the front door, her head only peeping out, and berate her spouse for some real or fancied neglect until the poor fellow takes flight. Often they sit side by side under the slanting roof, gossiping with their next-door neighbours and chattering away noisily, each trying to outdo the other. The branches of the trees in the vicinity are favourite resting-places for them when they feel disinclined to share the noisy gossip of the village, and it is amusing to see

a couple sitting side by side demurely watching the turmoil, as one of the photographs shows them. Let a dog or cat approach the martins' village and the uproar is indescribable. Even a strange human being creates

much of a disturbance; but the birds know the man who built their village and do not resent his visits in the least.

When the young birds have grown to maturity their parents send them out upon the world with little preliminary

instruction, but they launch forth bravely and are strong winged from the first trial. Not until the second year do the young birds attain the full glory of their plumage. The first is spent in sombre, dull black, that makes them look vastly different from their elders, but the next summer finds them clothed in purple and resplendent.

Beyond doubt many of the martins have dwelt in the tiny village from the time of its founding, eight years ago. Some of them are so marked that it is easy for a bird-lover to identify them, and year after year they come back to the spot that is their home and that was built for their pleasure.

When the winter winds wisp the snow through the open doors and pile it up into little drifts on the porches, the feathered villagers, far to the south, are revelling in the suns of Cuba or Mexico, thinking perhaps of their little cottages swaying in the winter winds far to the north.



From a

"UNDER THE SLANTING ROOF."

[Photo.



From a

"WATCHING THE TURMOIL."

[Photo.

Birds of Upper St. John.
Batchelder.

35. *Progne subis* (Linn.) *Bd.* PURPLE MARTIN.—Common, breeding in martin-houses at Fort Fairfield. This bird seems to be generally distributed throughout eastern Maine and the adjoining parts of New Brunswick, where there are settlements. While on our way to Fort Fairfield we noticed it at a number of places between Bangor and Woodstock, N. B., as well as at various points along the St. John River between Fredericton, N. B., and Fort Fairfield. It is also common at Houlton.

Bull. N. O. C., 7, April, 1882, p. 110

Last Dates Migratory Birds observed by
E. D. Wintle, Fall 1885, Montreal, Can.

Aug 16, Purple Martin.

O. & O. XI, Mar. 1886, p. 44

Nesting Habits of Texas Birds.
H. P. Atwater, London, Ontario, Can.

— Purple Martin, (*Progne subis*). Breed in martin boxes at the ranches. First eggs taken May 17th, 1884.

O. & O. XII, July 1887 p. 105.

Birds of Toronto, Canada,
by James S. Fleming.
Part II. Land Birds,
Auk, x x 14, Jan., 1907, p. 82.

225. *Progne subis*. PURPLE MARTIN.—Regular summer resident, local and decreasing, April 18 to August 25; breeds (June 7, 1890).

Summer Residents on Southwest
Coast of Maine. T. H. Montgomery, Jr.

611. Purple Martin. Saw about a dozen at
Camden, Aug. 3d.

Orn. 19, 18, Nov, 1890. p. 162

Maine Bird Notes.

I have never seen any suggestion of Martins (*Progne subis*) being night birds, but a few years ago, about ten o'clock of a bright moonlight night in August — my note-book says August 8 — I was resting in a hammock outdoors, when I heard the calls of Martins. A few minutes later my husband coming up the walk said, "Did you hear that?"

"Hear what?" I asked evasively.

"Well, I heard Martins if I ever heard them!" he replied, "and, moreover, I saw them. I looked up quickly and there were some flying across the face of the moon."

June 15, 1900, Mr. Bates, walking home from a train that reached Waterville between two and three in the morning, without having a thought of Swallows, suddenly heard them in the air above. Again it was bright moonlight.

Abby F. C. Bates, Waterville, Maine.

Auk, XVIII, Oct., 1901, pp. 400, 401,

Progne purpurea. - ^{miss.} July 20 Rye Beach, N. H. 1867.

Progne purpurea. - ^{2 shot 8/18} Aug. 17 Rye Beach, N. H. 1868.

Progne purpurea. - ^{sw.} Aug. 6, '23 Rye Beach, N. H. 1871.

Progne purpurea. - Aug. 9 Rye Beach, N. H.

Shelburne, N. H.

Progne purpurea

1884.

July 9

An adult ♂ seen on the river meadows by Chadbourn.
This was the only individual observed in
Shelburne but a small colony was afterwards
found at Gorham, six miles distant, breeding
in a Martin box in the center of the village.
The bird does not occur at the Glen House but
it breeds numerously in Bethel, Maine.

Wolfeboro, N. H. June 17-1887.

Progne purpurea - ^{twelve}
Wolfeboro, N. H. June 18-1889.

Progne subis, About 8 per. Martin box on barn in town.

Birds Obs. at Moultonboro, N. H.
July 21 - Aug. 11, 1883. F. H. Allen

Progne subis. - Common.

Auk, VI. Jan., 1889. p. 78

Birds Obs. at Bridgewater, N. H.
July 12 - Sept. 4, 1883. F. H. Allen

Progne subis. - A few seen.

Auk, VI. Jan., 1889. p. 77

Birds Obs. near Holderness, N. H.
June 4-12, '85, and 4-11, '86. W. Faxon

38. *Progne subis*. PURPLE MARTIN. - Common.

Auk, V. April, 1888. p. 150

Bds. Obs. in Fraconia, N. H. June 11-21
'86, and June 4 - Aug. 1, '87. W. Faxon

45. *Progne subis*. PURPLE MARTIN. - A flock passed through the
village, June 19, 1887. Apparently not breeding in the village.

Auk, V. April, 1888. p. 152

Birds of Hillsboro Co. N. H. June 27, '92
Arthur M. Farmer, Amoskeag, N. H.
Purple Martin, several were observed fly-
ing about during the rains.

O. & O Vol. 17, Sept. 1892 p. 136

Colbrook, N. H.

1896

Progne subis

June 14 Near the station is a very tall pole supporting an electric light which is sheltered above by a tin cap identical in form & construction with the caps used over the arc lights in Cambridge ("Witches' caps" being used to call them). As I approached the pole I saw a pair of Martins circling about the cap. Presently the ♂ alighted just below it and a moment later the ♀ flew up into it. With my glass I could see portions of a nest projecting over the edge of the board in the top of the cap & also the bird's head & neck.

A large Martin box in the village also harbored two pairs of Progne but most of the apartment nests were occupied by Passer domesticus.

PURPLE MARTIN, (*Progne subis*). Rare Summer resident, quite local. Arrives May 1 to 8. Breeds, nesting in boxes made for their use.

B. O. Tracy, Taftville, Vt.

O. & O. X. May. 1885. n. 71

Mortality of Purple Martins (*Progne purpurea*) at Brattleboro, Vt.—
During the long rain in June, 1903, the nests in the bird house belonging to William C. Horton of Brattleboro, Vt., became completely water-soaked, and thirty young and two adult Purple Martins were found dead in their nests. The remaining members of the martin colony abandoned the house, leaving twelve eggs unhatched. Occasionally a few return and fly about as if trying to catch a glimpse of the inside of their home but none have ventured to enter up to this date (July 17).—FRANCES B. HORTON, *Brattleboro, Vt.* *Auk*, XX, Oct., 1903, p. 435-436.

Fringetown & Rutland, Mass. Aug. 2, 1885

10. *Progne subis*

Absent on Martha's Vineyard, Mass.

Mr. Howard Norris of Cottage City tells me that he has never seen a Martin on Martha's Vineyard & that he is sure none were bred there.

Progne subis

Mass. (near Concord).

1887

May 8² - 10⁶ - 13⁴ - 17⁴ - 21¹ - 23² - 25² - 26⁴
June 2⁶ - 4⁸ - 6⁴ - 7⁶ - 12¹⁰ - 16⁶ - 17⁴
July 4⁸ - 7⁸ - 10⁶ - 15² - 20⁴ - 24⁴ - 25² - 26² - 31²
Aug. 9¹ - 13^{2 ad ♂} (white beneath) - 17² (white beneath)

young out.

Progne purpurea.

Mass. (Winchendon)

1887

June 24⁴ - 25¹⁰ - 26⁴

Progne purpurea

Progne pur. 11⁸ - 18¹⁰ (in Winchendon, Mass. June, 1888.
(in Winchendon only)

Falmouth, Mass. 1889.

4. *Progne purpurea* July 4^{8 ad} - 14^{8 ad} - 21² - 28⁴

Mass. (Concord)

Progne purpurina

1887

Habits

June 12

Four adults (1 ♂ + 2 ♀) alighting in the tops of leafy elms on the river bank at 6 P.M. They alight in trees, even at this season, much oftener than any other Swallows except *T. brevicornis*.

Two ♀s on gravelly shore of river moving about freely by short runs with mincing steps very like Terns. They were picking up and eating something.

Fall Migration, Bristol County, Mass.
1885. Charles H. Andros.

Aug. 24; Purple Martins are now very common.

O. & O. XI. Jan. 1886, p. 1

Fall Migration, Bristol County, Mass.
1885. Charles H. Andros.

Sept. 10; fresh N. E. wind. More Purple Martins passed over.

O. & O. XI. Jan. 1886, p. 2

Fall Migration, Bristol County, Mass.
1885. Charles H. Andros.

Seen on Sept. 13; - a score of Purple Martins. They were the last seen of these species.

O. & O. XI. Jan. 1886, p. 2

Birds of Bristol County, Mass.
F. W. Andros.

Progne subis (Linn.), Purple Martin. Summer resident, common. Breeds.

O. & O. XII, Sept. 1887 p. 140

Fall Migration, Bristol County, Mass.
1885. Charles H. Andros.

Sept. 9; strong southerly wind. Great numbers of Purple Martins passed over, taking a southerly direction. The flight was quite steady for as much as forty-five minutes.

O. & O. XI, Jan. 1886, p. 1

Fall Migration, Bristol County, Mass.
1885. Charles H. Andros.

Aug. 22 Purple Martins are commencing to flock.

O. & O. XI, Jan. 1886, p. 1

Birds Known to Pass Breeding Season
Winchendon, Mass. Wm. Brewster

Progne subis.

Auk, V, Oct., 1888, p. 389

What has happened to the Martins? — Last summer the Martins (*Progne subis*) were suddenly either destroyed or driven away from their boxes in this town where for many years they have been domiciled. I watched interestedly for their arrival this spring, and was delighted on May 8, 1904, to see one about their old homes; but my delight has been short-lived, as the one lone bird disappeared and no others have come. Does it mean that the largest Concord colony I know of, where for many years at least fifteen pairs have nested, is wiped out? I would like to know if other New England towns have so mysteriously lost their Martins. — REGINALD HEBER HOWE, JR., *Concord, Mass.*
Auk, XXI, July, 1904, p. 387.

Connecticut, June, 1893

Progne subis

June 4⁶³ Fairfield.
" 5⁶ 6⁶ 7-8⁵ 9⁸ 10⁴ 11³ 12⁵ Saybrook
" 14² 15¹ 16⁶ 18¹ 19^{2ad} 4^{prop} " Ferry.

two pairs appeared at Mr. Clark's after
... and took possession of a box worked
... under a window. The males of both
pairs were immature but on the
8th an adult joined the colony.
Mr. Clark says the Martins never take
his boxes until very late in the season.
June 19th a flock of his birds appeared
about the house as usual from acting
as if they had just arrived &
were looking for nesting places. After
inspecting our premises they all flew
to the house & cards that the two of the
... must have been old males.

The Tagging of Nesting Birds.—The plan introduced by Dr. Leon J. Cole of New Haven, Conn., for the marking of birds, both old and young, should prove in time of much value by its help in solving some of the problems connected with their migratory movements, and for that reason we may wish it a success.

My experience, however, in the tagging of young Martins, as I regret to say, has not proved altogether successful. For example, a brood tagged July 26 was found to have left the chamber safely, but not so the remaining members of another brood similarly marked two days later. On August 12 the remains of this bird were found just outside the chamber on the martin-house platform, some of the nesting material it seems having become attached to the aluminum band on the bird's right leg, holding it fast and thus causing it to perish after being abandoned to its fate by the older birds. Unfortunately my attention had been drawn elsewhere soon after the marking, otherwise this tragedy might have been prevented.

But this incident serves to show that some caution will have to be exercised in the marking of the young; and, in the writer's opinion, it may be necessary for us to confine our work to the larger and more powerful birds.

For obvious reasons such birds as the Vireos, and particularly the Orioles and various members of the family Paridae, should be stricken from the list; in fact, any of the birds where a similar mishap is likely to occur.

A tag might be devised, however, which would remedy all this and allow us to proceed with the original plan, but nothing thus far has presented itself to my mind. Others perhaps may have met with a similar experience.—BENJ. T. GAULT, *Glen Ellyn, Ill.*

Auk XX VII. Jan. 1910. 13 92. 93.

Birds of the Adirondack Region.
C. H. Merriam.

48. *Progne subis* (Linn.) Baird. PURPLE MARTIN.—Breeds in "Martin houses" in the villages that lie within the limits of the Adirondack region.

Bull. N. O. C. 6, Oct, 1881, p. 229

Birds Tloga Co, N. Y. Alden Loring.

152. Purple Martin. Rare.

O. & O. XV, June, 1890, p. 82

Birds of Oneida County, New York.
Egbert Bagg.

Progne subis.—Given as "A not uncommon summer resident. Breeds." Has practically disappeared; within the last few years an occasional migrant is all that has been seen.

Auk XI. April. 1894 p. 164

Birds at Fort Hamilton, L. I. . . . Bersier.

Progne purpurea See under
picus villosus.

Bull. N. O. C. 6, Jan., 1881, p. 13.

Notes on the birds of Madison County, New York.
with especial reference to Embury's recent list.

19. *Progne subis*. PURPLE MARTIN.—"Rarely seen," etc. Breeds at Oneida and seems to be holding its own against the English Sparrows. I took a set of 4 eggs from an electric arc lamp at Oneida, July 12, 1895.

By William R. Maxon. Auk, XX, July, 1903, p. 265.

Decrease of Purple Martins on Long Island, N. Y.—Seeing a note on Purple Martins in Concord, Mass., a short time ago in 'The Auk,' I thought the following might possibly be of some interest. Three summers ago, Purple Martins (*Progne subis*) were very common at Quogue, L. I., and bred in boxes erected for their occupation. The summer of 1903 they had decreased in number, and last summer they had disappeared apparently from the locality. I am afraid English Sparrows took possession of their boxes.

The summer of 1903, I killed a Black-breasted Plover (*Squatarola squatarola*) on July 1, as recorded in 'The Auk' (XXI, p. 79). Last summer I saw one on July 6, with a very black breast, but unfortunately missed him. Snipe and Plover were exceedingly rare all last summer.—

F. W. Kobbé, New York City.

Auk, XXI, Apr., 1905, p. 211.

Birds of Washington Co. Oregon.
A. W. Anthony.

86. Progne subis. PURPLE MARTIN.—One seen in May.

Aug. 3, April, 1886. p. 160

9/2/03

— copy —
Purple Martin

Kennett Square Pa.

Have noticed for a few days these birds
hunting in bands of 3 to 6 or 8—
about 1 1/2 P.M. (to-day) as I was returning
from Taylor's woods I found them here
abundant & noticed 50 or more on &
about Vane & Steeple of the Methodist
Church, from which (place) they would
scout out into the surrounding
country— At one time the entire
flock left at about the same time
spreading over more than a quarter
of the Arc of the horizon, but breaking
(later) into small bands—
About 2 weeks ago, I noticed, twice in
one day, 8 or 10 (of these birds) perched in a
dead tree top 1/2 mile north of Miles' Mill.
At the Mill there is a considerable
colony nesting—

Bird Notes by C. J. PENNOCK,

Kennett Square, Chester County, Pa.

Albinism and Melanism in North
American Birds. Ruthven Deane.

I have seen specimens of P. purpurea, in this white dress.

Bull. N.O.C. 1, April, 1876, p. 21

Auk, XIV, Oct., 1897, pp. 407-8.

Purple Martins (*Progne subis*) Breeding in Electric Arc-light Caps. — During a recent visit to Vergennes, Vt., I noticed that many pairs of Purple Martins were nesting in the caps suspended over the electric street lamps in the heart of that rural city. Indications of the same proclivity to utilize the street lamps for domestic purposes were shown by Purple Martins that I watched near North Adams, Mass., in 1895, and Mr. Brewster tells me that he found a pair of these birds breeding in a similar situation in Colebrook, N. H., in 1896. Probably many of the readers of 'The Auk' who live in a Martin region are familiar with this nesting habit of the Martin, though I do not remember to have seen any mention of it in print. The late Frank Bolles ('Boston Post,' Feb. 3, 1891) facetiously remarked that the House Sparrow's propensity to build its nest and rear its young "on the edge of Hades" (*viz.*, in electric-lamp reflectors) was sufficient evidence that it was the offspring of evil and justly under the ban of the Commonwealth. I had always deemed this a just count against the Sparrow, until I discerned the same disposition in our own favorite Martin! I hope the lamp-tenders of Vergennes discriminate between Martins and Sparrows in their daily visits to the lamps. — WALTER FAXON, *Museum of Comparative Zoölogy, Cambridge, Mass.*

The Purple Martin in the South.

BY W. B. HINTON, SPRINGVALE, GA.

The annual visits of no bird meet with warmer welcome than those of the Purple Martin (*Progne purpurea*). As a protector of the poultry-yard against the depredations of hawks, he is held in high and general esteem by our farmer friends, who attest their appreciation of his worth by erecting for his reception tall poles from which swing a number of capacious gourds. At this juncture it may be proper to state the curious fact that the Martin prefers a gourd to a box as a nesting place. I have frequently put this matter to a test and invariably had the case settled in favor of the gourd. Why this is true I am at a loss to explain, unless it results from the shape of the gourd being better adapted to nesting purposes — conforming as it does to the shape of the nest. Or, may not the pendent position of the gourd afford greater security against the intrusions of such robbers as the Blue Jay (*Cyanocitta cristata*), Loggerhead Shrike (*Collyris ludovicianus*) and the common house cat?

If there are among your Northern readers any not familiar with the primitive method before mentioned, of providing homes for the Martin, and who would like to make a trial of it for the mere sake of variety, let them procure a half-dozen or more gourds, not less each than six inches in shortest diameter, and about three inches from the bottom, holes just large enough for the easy ingress and egress of the desired occupants, and with strong strings passed through the necks of the gourds, tie them closely and securely to the outer ends of the horizontal limbs of a pole, not forgetting in the preparation of the gourds to bore two or three gimlet-holes in the bottom to drain off the water during severe rains.

In this latitude (31° 45') the Purple Martin arrives regularly by the first day of March, the first arrival this season being noted by me the 27th of February. On the 22nd of February it was reported that a pair had that morning been seen upon the pole in my garden, but as the birds did not come under my personal observation I will not venture here to commit the arrival to record. Had I seen the birds, however, I should not have been surprised, for the peach and plum had been in bloom nearly two weeks, and the maple was red with blossoms.

The most interesting period of the Martin's stay with us, embraces the interval between the date of arrival and the commencement of nidification. During those six or eight weeks he is all fuss and flutter, each member of the colony endeavoring to make more noise than his neighbor, and each is eminently successful. It is pleasing to watch them rise to the upper air for the purpose of feeding, then suddenly furl their wings and pitch head-long for the

pole from a point at an angle of forty-five degrees and at a height of three or four hundred feet. The entire descent is made with wings closed tightly against the sides; and often the most graceful deflection from a direct line is accomplished in order to reach the entrance to a gourd or a box that may chance to be in a position contrary to the point of descent. In these aerial races, for they are nothing else, I have observed that the bird which arrives earliest in the spring and makes first choice of a nesting-place, always leads, seeming to be afraid that some other member of the company will out-strip him, seize and take possession of his own particular property. This leader invariably terminates his descent only by plunging into his little room, as if to renew his claims and assert anew his right of possession; but he no sooner enters than he emerges again and is as light hearted and garrulous as before.

The gregarious nature of these little birds is food for thought to the ornithological student, while the perfect harmony in which they dwell together is a characteristic that must attract the attention of the most thoughtless observer. Being sensitive to cold they not infrequently suffer in consequence of the cool weather that sometimes succeeds their early arrival. After a cool spell of wind and rain once that lasted two or three days, I counted ten emerging one behind another, from a single large gourd.

About the first of May nest-building begins; a piece of labor that devolves mainly upon the female, her liege in his suit of glossy black escorting her with clownish gallantry back and forth in search of building material. An examination, for many seasons, of the old nests reveals the information that thin scales of pine bark constitute the body of the nest, to which a few grass straws and fine bits of weed are added. I would be glad to know what material they employ in lieu of the bark in divisions of the country where the pine does not grow. If the male manifests his industry in constructing the nest, I am not sure that he does not exhibit more daring in the defence of the young; though both birds display admirable courage when attacking a foe. Nor do they wait until they have hatched before giving proof of their prowess, but are willing at any season to wage war upon a recognized enemy. I witnessed one, yesterday afternoon drive a Sparrow Hawk (*Falco sparverius*) before him at a furious rate.

O. & O. XII. May. 1887 p. 77-78.

W. B. H. ... Smithville, Georgia.

BIRDS BUILDING THEIR NESTS.

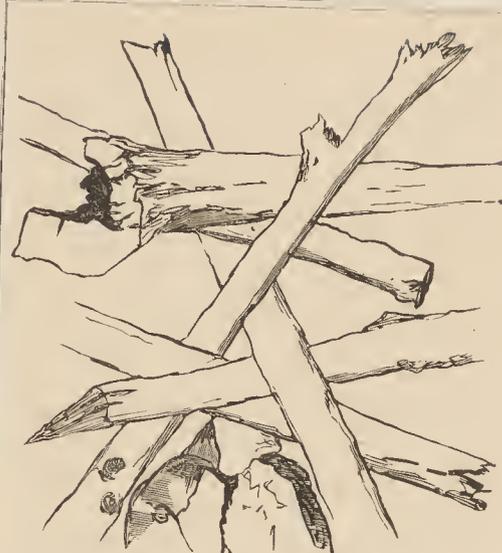
The Martins were busy conveying light layers of pine bark to the nesting places which I had provided for them. These agile birds fasten themselves after the manner of Woodpeckers to the towering boles of the pine, and with their bills detach bits of bark thin as letter paper. Out of this bark they construct the foundation and major portion of the body of their nests.

The Martins are building earlier this spring than usual. Indeed they arrived two weeks earlier than I ever saw them before — the first (a male) reaching here the 12th of February.

About two feet distant from a pair of Martins is an English Sparrow's nest; yet the birds do not annoy one another. Apropos of this subject: Last year a little Martin house containing four rooms, each facing a different point of the compass, had three of its rooms occupied by Martins, and the fourth one by a pair of English Sparrows, all rearing broods at the same time; still there was no manifest contention among the birds.

Not two rods from the Martin's quarters, suspended from the branch of an Oak is a gourd in which is a snug nest built by a pair of Bluebirds.

O. & O. 14, July, 1889, p. 108.



PECULIAR NESTING PLACE. On May 21, 1880, Paul Hoffman, of Rockville, Conn., while out collecting, noticed a Purple Martin enter the end of a hollow rail in a Virginia fence. On examining the cavity he found the nest of the Purple Martin about eighteen inches in the cavity. It was composed of dried grass and contained four eggs. The opening to the nest was about four feet four inches from the ground. Our illustration is a correct representation sketched on the spot. O. & O. VIII, Sept. 1883, p. 67

Chalybea Naxia Reith 111
1788
Hirundo violacea Gmel 1, 1800
not in Am. *Caerules* Vieill. Oris. Am. 1807 5-7, p. XXVI-XXVII
Am. " *Pro. Va. versicolor* N. Nov. Dict. XIV, 509
" *ludoviciana* Bur. R. A. 1, 374 (no one)
" *fulvipes* Bonn. Sp. N. 1766, 344
" *subis* " " 1758, 192

Purple Martin:
See " Bird Vain
Light House "
under Little "
O. & O. X. Oct. 11

1 Purple Martin taken at night, at the Light House, Washington, Fla. March 22, 1885. By D. D. S., Oscego, N. Y.

O. & O. X. Oct. 1885, p. 158.

- 914. *How Young Birds Are fed.* By O. Widmann. *Ibid.*, p. 484.— Minute observations on the feeding of young Purple Martins (*Progne subis*) by their parents. **For. & Stream. XXII**
- 943. *Where the [Purple] Martins Roost.* By O. Widmann. *Ibid.*, Oct. 2, p. 183. — Many thousands, late in August, roost in the willows below St. Louis, Mo. The article forms a very interesting chapter in this bird's history, hitherto unwritten. **For. & Stream. XXIII**
- 1063. *Die Purpurschwalbe (Progne subis Baird, Purple Martin).* By H. Nehrling. *Der Zoologische Garten*, Jahrg. XXVI, No. 1, 1885, pp. 22-27.— History of the species.

The Oologist. 1577. *The History of a Bird Box.* By Harry G. Parker. May and June, 1886, pp. 31-32.— Notes on *Progne subis*. *Ibid.*, No. 3 Aug. VII, Jan. 1880, p. 43.

W. B. H. ... Smithville, Georgia.

BIRDS BUILDING THEIR NESTS.

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O. & O. X. July, 1889. p. 108.



Such was my first Great-horned Owl's nest, by that Owl's nest, for any King's throne. I exchanged my seat on that old mossy tree for feelings of exultation. I would not have made like finds can imagine my in my collection box. Those only who white and fresh eggs safely stowed away a few moments time I had the set of two ing to the tree. Climbing was easy and in cover. I did not lose much time in go- eyes. On coming home he told his dis- head illuminated by a pair of great staring

Chalybea Maxima Reiter 111, 354 "subtus alba" (Cayenne) 1788
Hirundo violacea Gmel 1, 1026 ✓
 not in Am. *Caerules* Vieill. *Oris. Ann.* 1807 5-7, M. XXVI-XXVII
 Art. " *Pro. in* *versicolor* " *Nouv. Dict.* XIV, 509
 " *ludoviciana* Cur. R.A. 1, 374 (severe) 1817
 " *purpurea* Bonn. *hp.* N. 1766, 344
subis " " 1758, 192

Purple Martin:
 See " Bird Visitors at a Florida Light House," by D. D. S. ... under Little Black Rail.
 O. & O. X. Oct. 1885. p. 158.

1 Purple Martin taken at night, at the Light House, Warrington, Fla. March 22, 1885. By D. D. S., Osceola, N. Y.
 O. & O. X. Oct. 1885. p. 158.

914. *How Young Birds Are fed.* By O. Widmann. *Ibid.*, p. 484.— Minute observations on the feeding of young Purple Martins (*Progne subis*) by their parents. **For. & Stream. XXII**
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W. B. H. ... Smithville, Georgia.

BIRDS BUILDING THEIR NESTS.

The Martins were busy conveying light layers of pine bark to the nesting places which I had provided for them. These agile birds fasten themselves after the manner of Woodpeckers to the towering boles of the pine, and with their bills detach bits of bark thin as letter paper. Out of this bark they construct the foundation and major portion of the body of their nests.

The Martins are building earlier this spring than usual. Indeed they arrived two weeks earlier than I ever saw them before — the first (a male) reaching here the 12th of February.

About two feet distant from a pair of Martins is an English Sparrow's nest; yet the birds do not annoy one another. Apropos of this subject: Last year a little Martin house containing four rooms, each facing a different point of the compass, had three of its rooms occupied by Martins, and the fourth one by a pair of English Sparrows, all rearing broods at the same time; still there was no manifest contention among the birds.

Not two rods from the Martin's quarters, suspended from the branch of an Oak is a gourd in which is a snug nest built by a pair of Bluebirds.

O. & C. X. 14. July, 1889. p. 108.



Such was my first Great-horned Owl's nest, by that Owl's nest, for any King's throne. exchanged my seat on that old mossy tree feelings of exultation. I would not have have made like finds can imagine my in my collection box. Those only who white and fresh eggs safely stowed away a few moments' time I had the set of two ing to the tree. Climbing was easy and in cover. I did not lose much time in go- eyes. On coming home he told his dis- head illuminated by a pair of great staring

Purple Martin:
See "Bird Visitors as a Florida
Light House," by D. D. S. ...
under Little Black Rail.

O. & C. X. Oct. 1885. p. 158.

1 Purple Martin taken at night, at the Light House, Washington, Fla. March 22, 1885. By D. D. S., Oswego, N. Y.

O. & C. X. Oct. 1885. p. 158.

914. How Young Birds Are fed. By O. Widmann. *Ibid.*, p. 484.— Minute observations on the feeding of young Purple Martins (*Progne subis*) by their parents. **For. & Stream. XXII**

943. Where the [Purple] Martins Roost. By O. Widmann. *Ibid.*, Oct. 2, p. 183.— Many thousands, late in August, roost in the willows below St. Louis, Mo. The article forms a very interesting chapter in this bird's history, hitherto unwritten. **For. & Stream. XXIII**

1063. Die Purpurschwalbe (*Progne subis* Baird, Purple Martin). By H. Nehrling. *Der Zoologische Garten*, Jahrg. XXVI, No. 1, 1885, pp. 22-27.— History of the species.

Hir. ludovicianus sp. n. emb. 7257, ex Catesby

1, 51

Crayon of Audubon
B. Meisel

Cor. 7. Nat. & Franklin

The Oologist. 1577. The History of a Bird Box. By Harry G. Parker. *Ibid.*, No. 3 Aug. V11, Jan. 1880. p. 43.
May and June, 1886, pp. 31-32.— Notes on *Progne subis*.

Destruction of Birds by Cold.

The past three weeks have been very wet and cold, with frost three times and snow once.

May 31, in the morning, there was about two inches of snow, and still snowing, and changed to cold rain about 10 o'clock and rained all day. Saturday morning cold and cloudy, and the thermometer very near the freezing point.

At a friend's place where I go fishing, etc., there were about one hundred pairs of Martins and Tree Swallows breeding, and on Saturday morning they were nearly all dead; the children showed me many of them. My friend says he took seven dead Martins in one box, nine under another. Other boxes, not easy to get at, were full of dead ones, and they could be seen partly out of the holes. He told me that at a railroad bridge, near Chester, he could have picked up a *bushel* basket of dead Cliff Swallows.

He goes after his mail in a boat about three miles, and on that morning he saw two Least Bitterns dead by their nests, picked up young ducks so cold they could not swim, which died in the boat before he got home.

The children brought me a Least Bittern that they found sitting on a boat so cold it could not fly, which they warmed and fed. It was too soiled for skinning so I let it go; it ran off to the marsh.

May 24, I got two Hudsonian Godwits here, and saw a White Pelican.

June 7, I got a Black Tern that is white under around the neck and from the bill to nearly even with the eyes. The back and top of the head the usual color of the back. There is no other Tern that will answer that description, is there?

That makes the eighth specimen that is white and partly white, all collected by myself or for me, I have in my collection.

Delos Hatch.

Oak Centre, Wis.

O & O. XIV. Aug. 1889 p. 122

Massachusetts Bird Notes.

Progne subis. — Mr. A. H. Kirkland, late entomologist to the Massachusetts State Board of Agriculture, informs me that while observing the ravages of the fire-worm (*Rhopobota vacciniana* Pack.) in the cranberry bogs of Plymouth and Barnstable counties, he found the Purple Martins feeding freely on the imagos of the pest. The Martins were abundant at many of the bogs, a Martin box on a pole being, according to Mr. Kirkland, "apparently as much a necessary adjunct to a well-regulated bog as a dyke or a cranberry house."

As two broods of the imagos of the fire-worm are on the wing during the summer, and as the female imagos are most active before laying their eggs, the benefits accruing to the cranberry grower from the presence of the Martins are obvious. Mr. Kirkland states that the cranberry growers estimate that in a term of years they lose fifty per cent of their crops because of the damage done by injurious insects, chief among which is the fire-worm.

Auk, XVIII, Oct., 1901, p. 399.

J. A. Farley, Malden, Mass.

File under Martin.

'Revival of the Sexual Passion in Birds in Autumn.'—In addition to the notes of Messrs. Brewster and Chapman which have lately appeared in 'The Auk' on the above subject the following observations may be of interest. From my Journal for September 2, 1898, Jamestown, R. I., I copy the following:—"This morning a number of Purple Martins (*Progne subis*) were seen alighting on the rigging of the small boats anchored in the harbor, they being not uncommon here early in September; later in the morning they were in good numbers (15 or 20 birds) along the roadsides in company with the Tree Swallows. The Martins almost always alighted on the cross bars of the telegraph poles, rather than with the Swallows on the wires. While I was watching two birds, supposedly young, they were seen a number of times to go through the actions of copulation."

Another record was made on September 15, 1898.—"While sitting in the blind (Jamestown, R. I., Round Marsh) a Sharp-tailed Sparrow (*Ammodramus caudacutus*) came and lit near by and performed some interesting antics. The bird would now and then utter a few hurried notes, run a few feet and jump excitedly into the air. The bird also from time to time (five times) went through the actions of copulation on a little, cropped off tussock of grass about the size of its body. I was within a few feet of the bird, being protected by the blind, and am positive that its actions were those of copulation. Possibly this bird was mentally deranged. I took the bird and found it to be a young male, its sexual organs of normal size for that time of season. Two interesting questions present themselves. Is the accompanying non-enlargement of their sexual glands due to their being still non-functional, or is the passion caused by simple sensory, nervous excitement? Is the autumn song period, of some species, correlated with this passion?"

The species of birds that have now been recorded, as far as I know, as showing this autumn habit, include the Bluebird, English Sparrow, Bank Swallow, Tree Swallow, Eave Swallow, Barn Swallow (?), Purple Martin and Sharp-tailed Sparrow, and I have no doubt that further observation will add many other species to the list.—REGINALD HEBER HOWE, JR., *Longwood, Mass.* *Auk*, XVI, July, 1899, pp. 286-287.

*Petrochelidon
leucifrons*

Petrochelidon lunifrons.

1889

Gdr. Ed. ^{Gdr. R. Way May M. F. C. W. Way M. F. W. F. W. F.}
 May 5^h 17^h 1889. 15^h 26^h 30^h 31^h 1890 10^h 23^h 24^h 31^h 1891
 Gdr. May. Gd. ^{Way May North F. W. F.}
 June 1^h 16^h 21^h 1889. 1^h 10^h 10^h 1890 1^h 2^h 3^h 1891.

April ^{Weyland C. d.}
 25^h 26^h 27^h 1891

" 25^h ^{arr. G. d.} 1894

" 28^h 29^h 1895

" ^{Balls Hill Concord} 22^h ^{Ball's Hill} 24^h 25^h 27^h Concord 1896 24^h Concord 1897

May 2^h 4^h 6^h 7^h 9^h 12^h 18^h 19^h 23^h 24^h 25^h Concord 1892

14^h 15^h 18^h 19^h 21^h 22^h (N. Bed.) 27^h 28^h 29^h Concord 1893.

Concord ^{cd.} 1^h 3^h 6^h 14^h 1894

cd. ^{cd. ball Pond} 5^h 19^h 20^h 1895

June 3^h 4^h 7^h 19^h Concord. 1892 ^{Balls H. Cd.} 22^h 1897 ^{15th West Bedford} 1^h 23^h ^{Colony 7 miles, W} 98 1898

Concord 26^h 27^h 30^h 1893.

July 1^h 2^h 10^h 12^h 14^h 15^h 19^h 21^h 23^h 24^h 34^h Concord. 1892.

1^h 2^h 3^h 5^h 6^h 7^h 12^h 18^h 20^h 22^h 23^h (Balls H.) Concord. 1893.

August 1^h 2^h 13^h 26^h 30^h Concord 1892

" 1^h (Kings field) 7^h (high in air over river) 8^h 14^h 16^h 17^h 19^h 21^h 24^h 26^h Concord 1893.

" 12^h 1894

September 4^h Concord. 1893.

May ^{Balls H.} 3^h 7^h 9^h 13^h 17^h 18^h 22^h Concord 1898 ^{W. Bay} 1^h ^{B. H.} 4^h ^{12th Rd.} 12^h ^{B. H.} 18^h ^{D. + B. H.} 19^h ^{B. H.} 20^h 21^h Concord, 1899.

lunifrons

Petrochelidon lunifrons

1890 Mass.

June 1

Wayland. - A strong colony nesting on the N. side of a small barn which stands on the edge of the meadows within 100 yds. of the river. The farmer tells me that they built last year on the S. side but having nothing to attach the nests to, more than some slight moulding over the seams in the boarding, most of the nests fell down before the young were out. This year he nailed a wide strip of board along the north side about a foot below the eaves and ~~about~~ thirty feet in length. On this there were 60 nests, crowded together in a continuous row and, in places, in a double tier one above the other. The nests varied considerably in form and shape but the average shape was much that of a gourd with a distinct neck in the end of which was the entrance hole. Every inch of space between the strip and the eaves was filled and four or five nests in ~~various~~ stages had been begun on the precarious vertical wall beyond the end of the strip. ~~One~~ Several of them the birds were at work. They plastered mud pellets in a cluster on the surface of the board and then built out sideways and upwards until the structure assumed a crescent shape like the half of a deep saucer. When this stage was reached the pair took formal possession spending much time sitting cuddled close together twittering their mutual congratulations. Then one or both would fly off and soon return with a great pellet of wet mud in the bill. ^{on the outer edge} Sitting inside the saucer this would ^{be} worked in place by a rapid quivering motion of the head. Sometimes when a bird ~~would~~ brought a particularly large and unmanageable pellet it would merely hold it in place while its mate did the plastering, using its bill like a trowel (does not this account for the broad shape) and going around the edges of the pellet several times in succession the heads of the two touching most of the time making a pretty picture. All of these busy workers had their bills coated with dry mud. I did not

2 (Continued)

Petrochelidon lunifrons

1890 Mass.

June 1

Wayland.) See them getting mud but Faxon who visited the colony after a heavy rain observed them collecting it about puddles in the road crowding together and holding their wings open above their backs. He also saw a bird stealing mud from a neighbor's nest and working it into its own.

Collecting mud

Stealing mud

By far the greater part of the colony had finished their nests and were doubtless incubating, although while I was there they seemed to spend most of their time in looking out keeping their heads moving continually from side to side and up and down with a rolling motion the white forehead gleaming like a spot of light in the dark opening. They were very noisy keeping up a continual low talking, rather frog-like in tone, and making the cork-in-the-bottle sound which I take to be the song of the male. The call-note, given when flying or as a greeting to and by incoming birds, is te-hee or te-hee-te-hee very like the note of the Bank Swallow but fuller and hoarser. The note of alarm or apprehension is peep given in a high, shrill tone.

Although I did not often see more than one bird at a time at the entrance hole, two and sometimes three would come out of ^a ~~the~~ nest when a general alarm was sounded. At such a time the whole colony would turn out in a few seconds and dash excitedly about in a dense cloud uttering the shrill peep already described. After a minute or two they would begin to return and very soon the normal quiet was resumed. Incoming birds sometimes swept up directly into the nest but often poised for a moment in front of it beating the wings rapidly like Hummers. At one time when there was a strong wind blowing several birds in succession poised on set wings and hung suspended like a Hawk. This I have never seen a Swallow do before. The manner of entering

#3 (Continued)

Petrochelidon lunifrons.

1890 Mass.

(June 1 Wayland) The nest varied. Some birds shot directly in merely checking their speed and closing their wings at the last moment. Others alighted with the head at the entrance, the body beneath the neck with the back downward and the tail pressed firmly upward and after clinging in this position for a minute or two clambered rather awkwardly in with a fluttering of the wings.

Sometimes a bird would attempt to enter a nest evidently not his own when the rightful owner would appear at the hole, seize the intruder by the feathers of the throat or breast and thrust him forcibly outward after following and clinging to him the two whirling down nearly to the ground together.

As a whole, however, the members of this feathered community seemed to live together in a spirit of mutual good nature and forbearance but, like most simple country folk, they were evidently much given to gossip and ~~perhaps~~ to an excessive interest in each others family affairs. Thus when a bird arrived from a distance his call was sure to be answered by a general chorus of cries from the nests that occupants of which, almost to a bird, would thrust out their heads for a moment and crane their necks about to discover if possible ^{just} what the stranger was doing or how much news he had brought.

The paired birds when together in a half finished nest sit close to one another and move with a sidelong motion continually crowding one another and often quivering their half-opened wings.

A dog and cat came under the row of nests several times without apparently alarming, or even attracting the notice of, the birds.

Petrochelidon lunifrons

1890 Mass.

June 4 Wayland. - Faxon found a large colony breeding at the first farm east of the lower bridge. He counted 95 nests on one side of the barn and 25 on the other. Most of them were on strips put up by the farmer to support them, some in tin pans nailed to the side of the barn with the open side ^{up} ~~out~~. The farmer told him that he put up these pans to hold some young which had fallen to the ground. Upon their arrival the next spring the birds were shy of them but soon took possession & built in every one. Large colony
nests in
tin pans

" 10 Visited the colony above mentioned. The nests in pans (5 in all) are built precisely like those on chaps and have a neck projecting out over the edge of the pan. Saw English Sparrows hanging about alighting on the eaves and peeping over at the nests. The farmer was getting his gun to shoot them when we drove up. He says he has seen them pull the young down from the nest & kill them. nests in pans
Passer hanging
about & killing
young.

On May 28 Mr. Faxon saw a "bird jiffing round from the nest of its neighbor during his absence from home" (letter May 28/90) Relieving
round fr. nest.

1891

June 1-3 North Leno. - A colony of about 30 pairs nesting in an open barn cellar nearly filled with manure the majority of the nests attached to the beams which supported the floor above but resting directly on slats nailed to these beams. A few nests were ranged along the sills which were laid on the top of the floor underpinning and in the very midst of them were two Barn Swallow's nests, the two species mingling in perfect harmony. None of the Barn Swallow's nests had pronounced necks but all of those that were finished had the tops domed & the entrance in the side. Nesting in
barn cellar
with Barn
Swallows.

1896

Apr. 22 Concord. Noted first arrival to-day, heard distinctly at Ball's Hill in the late afternoon

Massachusetts.

Petrochelidon lunifrons.

1892.

July 14 Lynn. A flock of fully 40 Cave Swallows passed over the Buttricks house this evening sometime after sunset. They were rather high up and were moving towards the S.W. So far as I could make out there was not a single Swallow of any other species with them, I do not think they were migrating. Probably it was merely a flight to the roost. By the way where and how do Cave Swallows roost? Investigate this!

July 19 The Cave Swallow feeds its young on wing the two birds meeting in ^{the} air and rising straight upward six or eight feet face to face until the bills finally come together one or both uttering the teha note rapidly the while. I saw this tonight shortly after sunset when the two birds engaged were fully 300 ft. above the earth.

Petrochelidon lunifrons.

Concord, Mass.
May, 23. 1898.

May

Mr. Bartrick tells me that there is one inhabited
Barn Swallow's nest on Mr. Hayes's barn. He saw
the birds enter it yesterday. Mr. Hayes's farm says
that several pairs nested there last year. Mr. Bartrick
calls them "babblers swallow" & says that this was
the name by which they were generally known in
Concord when he was a boy.

Concord

Petrochelidon lunifrons.

Concord, Mass.

1898. In the afternoon I crossed the river and visited Parker's
June 23. where I found a small colony of Eave Swallows. There were
seven nests on the E. side of the barn. Parker says that he
counted 78 three years ago but last year during the continual
heavy rains of early June most of the nests fell down and the
birds left.

Peterborough, New Hampshire.

1898. From one or two to five or six were seen almost daily on
July 5 Ben Mere farm from July 15th to 31st. Early in August some
to good-sized flocks appeared there associating with the Barn
Aug. 15. Swallows and perching on telegraph wires. (August 1⁽²⁰⁾, 2⁽⁴⁰⁾,
3⁽²⁰⁾, 12^{heard}).

Petrochelidon lunifrons

1896. Penobscot Bay, Maine.

Deer Island. June 28 (Emerson farm)

June 29 N. E. Fox Islands (N. Bristol Haven). A single bird flying over the sea among these islands

July 8 Isle au Haut. At least a dozen seen, seven of them together hovering for insects in a sheltered cove over the sea. There must be a breeding colony somewhere on this island.

" 15 Sedgwick } I have never before seen Barn Swallows in any thing like
" 16 Brooksville } the numbers that I observed in these towns on the above
dates nor have I ever seen them so generally & evenly distributed. In driving over about 15 miles of country roads we found them almost everywhere. We saw no large colonies - certainly not one a dozen or fifteen nests on any one building - but apparently every house or barn the eaves of which furnished suitable accommodations had one or more nests. On one house I saw six nests crowded together in a bunch and supported on some carved wood work placed against the end of the house well up under the peak of a gable end of the roof.

In a number of places we saw broods of young sitting in bunches on sloping roofs of buildings, their parents feeding them, but none were seen among the young Barn Swallows & White-bellies perched on fences or bushes by the roadside or along the edges of meadows. I wonder if the Barn Swallows are really peculiar in this respect.

June 16-22 Machias Islands. Common - field H. K. Feb.

Birds of Upper St. John.
Batchelder.

33. *Petrochelidon lunifrons* (Say) Lawr. EAVE SWALLOW.—Common at Grand Falls. Abundant at Fort Fairfield.

Bull. N. O. O. 7, April, 1882, p. 110

Birds within Ten Miles of Point
de Monts, Can. Comeau & Merriam

25. *Petrochelidon lunifrons*. CLIFF SWALLOW.—A small colony nested in the deserted Hudson's Bay Trading Post at Godbout this year.

Bull. N. O. O. 7, Oct, 1882, p. 235

Dwight, Summer Birds of
Prince Edward Island,

Petrochelidon lunifrons. CLIFF SWALLOW.—A common bird, locally distributed, and nesting in colonies under the eaves of barns and houses.

Auk X, Jan, 1893, p. 12

Summer Birds of Bras D'Or Region
Cape Breton Id., N. S. J. Dwight, Jr.

41. *Petrochelidon lunifrons*.

Auk, 4, Jan., 1887, p. 16

Birds, Haute Island, Bay of Fundy, July
26, 1887. W. L. Bishop, Kentville, N. S.

Cliff Swallow, *Petrochelidon lunifrons*; rare.

O. & O. XII. Sept. 1887 p. 146

Breeding Dates of Birds in Kings
County, N. S. Watson L. Bishop.

Cliff Swallow (*Petrochelidon lunifrons*). June
10, 20. July 7.

O. & O. XIII. Mar. 1888 p. 45

Birds of Toronto, Canada,
by James H. Fleming
Part II. Land Birds.
Auk, xxiv, Jan. 1907, p. 82.

226. *Petrochelidon lunifrons*. CLIFF SWALLOW.—Regular summer resident, usually from early in May to the middle of August; earliest record April 23, 1890, latest September 8, 1906; breeds locally and is not by any means as common as it was.

47.
Summer Birds of the Cobalt Mining Region
Nipissing District, Ontario
by Frederick C. Hubel. Auk, xxiv, Jan. 1907, p. 57.

47. *Petrochelidon lunifrons*. CLIFF SWALLOW.—Found only at North Temiskaming, where they are quite common.

Summer Residents on Southwest
Coast of Maine. T. H. Montgomery, Jr.

612. Cliff Swallow. Abundant at Booth-
bay. I found several houses, the eaves of
which were lined by their mud nests. In the
first week of July several of the nests con-
tained young, nearly fledged.

Oland O, 15, Nov, 1890. p. 162

Glen House, N. H.

Petrochelidon lunifrons

1884

July 12. Young on wing at the Glen House where a large colony was breeding under the eaves (of a barn) as in 1869.

Bds. Obs. in Franconia, N. H. June 11-21 '86, and June 4-Aug. 1, '87, W. Faxon

46. *Petrochelidon lunifrons*. EAVE SWALLOW.—Common.

Auk, V. April, 1888. p. 152

Birds Obs. at Bridgewater, N. H.
July 12-Sept. 4, 1888. F. H. Allen

Petrochelidon lunifrons.—One colony seen.

Auk, VI. Jan., 1889. p. 77

Birds Obsvd. near Holderness, N. H.
June 4-12, '85, and 4-11, '86, W. Faxon

39. *Petrochelidon lunifrons*. CLIFF SWALLOW.—Common.

Auk, V. April, 1888. p. 150

Bds. Obs. at Franconia and Bethlehem
N. H. July-August, 1874. J. A. Allen

31. *Petrochelidon lunifrons*. Abundant.

Auk, V. April, 1888. p. 154

Petrochelidon lunifrons.—Aug. 13, 15th Rye Beach, N. H. 1868.

Petrochelidon lunifrons.—² July 28; ^a Aug. 7, 23; ^a Sept. 2nd Rye Beach, N. H. 1871.

Petrochelidon lunifrons.—July Rye Beach, N. H. 1872.

Rye Beach, N. H. July 23-24 1885
111. *Petrochelidon lunifrons*.—Abundant—flocking

Breezy Point, Warren, N.H.

Petrochelidon lunifrons

1894.

June 16-17-19 15 225 240000

27-28 233 3.2

Breezy Point, Warren, N.H.

1895.

Petrochelidon lunifrons

July

27' 2128 mts 3/4 1/4

4 2 1/2 1-2 1/2

5' 1/2 1/2 1/2

Mass. (near Concord).

1887

May 8⁶ - 10⁶ - 11⁶ - 13⁶ - 28⁶
June 2⁶ - 4⁶ - 6⁶ - 7⁶ - 17⁶
July 26⁶
Aug. 13⁶

Petrochelidon lunifrons

W. Middlesex Co. Mass.
June 25-30, 1889.

Petrochelidon lunifrons

West Townsend---A colony of about twelve pairs nesting under the eaves of a barn about two miles west of the village. None others observed anywhere in the region.

Fall Migration, Bristol County, Mass.
1885. Charles H. Andros.

Fall Migration, Bristol County, Mass.
1885. Charles H. Andros.

Sept. 5;

great numbers of Cliff Swallows are passing over, taking a south-easterly direction.

Sept. 6; saw to-day an immense flock of Cliff Swallows flying in a southerly direction. They were the last seen.

O. & O. XI. Jan. 1886. p. /

O. & O. XI. Jan. 1886. p. /

Birds of Bristol County, Mass.
F. W. Andros.

Birds Known to Pass Breeding Season
nr. Winchendon, Mass. Wm. Brewster

Petrochelidon lunifrons (Say.), Cliff Swallow.
Summer resident, locally common. Breeds.

50. *Petrochelidon lunifrons*.

O. & O. XII. Sept. 1887 p. 140

Auk, V, Oct., 1888. p. 389

Bds. Obs. near Sheffield, Berkshire
Co., Mass. June 17-23, '88. W. Faxon

46. *Petrochelidon lunifrons*. EAVE SWALLOW.—Common.

Auk, VI. Jan., 1889. p. 45

Bds. Obs. near Graylock Mt. Berkshire
Co. Mass. June 28-July 16. W. Faxon

Petrochelidon lunifrons

41. *Petrochelidon lunifrons*. EAVE SWALLOW.—Common. According to Dr. Emmons, this bird first appeared in Williamstown in 1825.*

1895.

Falmouth, Mass.

* Amer. Jour. Sci. and Arts, XXVI, 208, 1834.

July 17th 27th 28th

Auk, VI. April, 1889. p. 102

60. *Petrochelidon lunifrons*. - June 16th E. Mass. 1885.

19. *Petrochelidon lunifrons* Only
Princeton & No. Rutland, Mass. June 18-1886.

29. *Petrochelidon lunifrons* Falmouth, Mass. 1889.

1901 Petrochelidon lunifrons

May 15 A small colony nesting under eaves of
barn on Bolton road. About 20 nests
on which the birds were on work.

June 6 The largest colony I have ever seen nesting
under the eaves of a long barn about half a mile
from the Bolton road along on the road to
Haverhill. On both sides of the barn the nests
were built on broad chests put up, the farmer
told me, by his grandfather about 25 years ago.
On one side ~~there~~ I counted 172 nests. They
were closely crowded together in a single tier
stretching without the slightest break the
entire length of the barn. Many were
completed with the birds heads showing at the
entrances. On the other side there were several
gaps but I counted 110 nests many of which
were uncompleted. Here there was a double tier
in places. Only a few birds were flying
about near the barn being on wing at
any one time. The owner of the place
visited the colony briefly. He says they
eat all the mosquitoes. The barn stands upon
the edge of a glacial river terrace.

Launceston, Mass

Connecticut, June, 1893.

Petrochelidon lunifrons

June 6 (Friday) Saybrook

" 21" Vernon

" 23rd - 25th Andover

The only bird seen near Saybrook was collected near at a woods side puddle and taking it up under the eaves of an old barn. Clark says that one or two pairs have nested in this barn for several years past. It is the only breeding place he knows.

At Andover Barn Swallows were not uncommon but we did not ascertain where they were nesting. They observed were flying up & down the corners of the barn building. It is probable that we made undue allowance for the number & hence the number of several times & that more than one nest was noted near the barn.

Birds of the Adirondack Region.
O. H. Merriam.

49. *Petrochelidon lunifrons* (Say) Lawrence. CLIFF SWALLOW.—
Breeds at suitable localities.

Bull. N. O. C. 6, Oct, 1881, p. 229

Birds Toga Co. N. Y. Alden Loring.

153. Cliff Swallow. Rare.

O. & O. 27, June, 1890, p. 82

Notes on the Spring Migration of Birds in the
Northern Adirondacks [Axtell], New York [1901].

April 16 to 20.

Cliff Swallow. Several flocks.

E. A. Sterling, Brooklyn, Pa.

Auk, XIX, July, 1902, p. 298.

Notes concerning certain birds of Long Island, N. Y.
By William C. Braislin, M. D.

Petrochelidon lunifrons. According to the personal testimony of Mr. W. W. Worthington the Cliff Swallow was formerly rather common locally on Long Island. As a breeding bird it is, now, certainly rare. It seems to migrate along the ocean coasts much less abundantly than other species of swallows. Though often looked for, the writer only obtained his first Long Island specimen Sept. 5, 1904, at Rockaway Beach.

Auk, XXII, Apr., 1905, p. 169.

Birds of Washington Co. Oregon.
A. W. Antholy.

87. *Petrochelidon lunifrons*. CLIFF SWALLOW.—Abundant summer resident. A colony of about two hundred built at Beaverton this spring, for the first time in the memory of its inhabitants.

Auk, 3, April, 1886. p. 169

Birds of Fort Klamath, Oregon. J. C
Merrill. Remarks by Wm. Brewster

Petrochelidon lunifrons.—Common, nesting abundantly in the buildings about the Fort.

Auk, V. October, 1888. p. 360

For a note on *Petrochelidon lunifrons*
see *Chondestes grammacus* under
"Additions to the Avifauna of North
Carolina in 1889."

O+C. XV. Feby. 1890. p. 23.

For
Description of a Hybrid between
the Barn and Cliff Swallows.
Texas. by Edgar A. Mearns.

Auk, XIX Jan. 1902, pp. 73, 74

See *Hirundo erythrogastra*

Albinism and Melanism in North
American Birds. Ruthven D. Ane.

I have seen specimens of *P. lunifrons* in pure
white dress.

Bull. N. O. C. 1, April, 1876, p. 21

ALBINOS.—A perfectly pure albino *Petrochelidon*
lunifrons was seen to-day in possession of a tax-
idermist in this city. The bird was shot here a
day or two ago and sent to be mounted. Unfor-
tunately it was shot with coarse shot and some-
what mutilated, but otherwise it is perfect, and
one can hardly hope to see a finer specimen.

A. H. Anthony, Denver, Col.

O. & O. X. Oct. 1885, p. 152.

1884.

July 5

In an open cellar under Philbrook's barn several pairs of *Sav. Swallows* have their nests. These are curiously placed - in mortar holes in some large beams which support the floor above. There are at least a dozen nests thus situated but only two are at present occupied the others being apparently old ones more or less broken down and dilapidated. The inhabited nests have round entrance holes but little larger than the bird's body but neither has any approach to a neck.

NOTES ON THE HABITS OF THE CLIFF SWALLOW (*Petrochelidon lunifrons*). — Within my collecting grounds is a locality where numbers of these birds have nested for many years. This is a shed, open only on one side, where the birds have attached their nests to the sleepers of the loft. In the spring of 1878 they returned about the usual time and soon began repairing old nests or constructing new ones. One day, while watching them, I noticed one bird remained in her half-finished nest, and did not appear to be much engaged. Soon a neighbor, owning a nest a few feet away, arrived with a fresh pellet of clay and, adjusting it in a satisfactory manner, flew away for more. No sooner was she out of sight than the quiet bird repaired to the neighbor's nest, appropriated the fresh clay and moulded it to her own nest! When the plundered bird returned, no notice was taken of the theft, which was repeated as soon as she was again out of sight. I saw these movements repeated numerous times, but was called away, and when I again returned both nests were completed. In the same place a nest remained undisturbed, and was occupied by probably the same pair of birds for several seasons. This spring they returned to the old nest, and all appeared prosperous, until one day I noticed a number of Swallows engaged in walling up the entrance of this old nest. This, and the outline of a new nest over the old, was soon completed. I then broke open the closed nest and found within the dead body of a Swallow. This bird had probably died a natural death, and the friends being unable to remove the body, and knowing it would soon become offensive, adopted this method of sealing it up. — F. H. KNOWLTON. *Brandon, Vt.*

Bull. N. O. C. 3, Jan., 1881, p. 55.

CLIFF SWALLOW, (*Petrochelidon lunifrons*.) May 26th I visited a "colony" of Cliff Swallows, accompanied by my friend George H. Jennings, M. D., who is an enthusiastic ornithological student.

About one mile from Griswold P. O., there is a barn that has for several years attracted large numbers of these swallows. Their nests are placed under the barn, upon the sides of the chestnut timbers that support the floor, and are composed of mud which the birds bring from a swamp near by.

As the Doctor and I stepped under the barn the occupants of the forty-seven nests eyed us curiously for a few seconds, and then with a musical "tweet" flew out. The chestnut patch on the forehead of the Cliff Swallow is very noticeable as their heads protrude from the "nose" of their bottle-shaped mud nests.

The swallows find a protector in the person of Mr. Ezri Reynolds, who warmly appreciates the honor which they confer upon him by returning every spring to his barn, and to his alone. As they rear two broods a season and feed their young upon insects, the number destroyed by them must be incalculable. Any person molesting the swallows in any way would be apt to arouse the ire of the kind hearted farmer, who rightly considers them his friends.

Notes from Everett City, Vermont.

O. & O. IX, Aug. 1884, p. 100-101

John Edward Davis

The front of the nest is mostly
 rounded and built in the least
 degree of pellets of clay. The
 interior of the nest has four
 openings, the back and sides the most
 being left upward, the living of the
 nest being but could not that there
 was a narrow passage, or seam, both
 sides of the nest. The old
 nest contained young. The old
 nest was when I went without apparent
 cause of the nest. They would
 sit beside the entrance, their
 heads about in the entrance
 looking out at me. The
 entrance was their cork. In the
 nest, with their chimney
 and steel. The nests
 are very often
 built on the
 edge of the
 roof.

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Notes from Everett City, Conn.

Lahan, Edward Davis
O. & O. IX, Aug. 1884, p. 100-101

The Cliff Swallow is not known to breed in the southern portion of its United States range. Nests south of the parallel of 38° are very rare. The following note from Waverly, Miss., 33rd, is therefore the more interesting: On April 10, a pair of these Swallows appeared and soon commenced house-building. Two broods were raised and the nest, which was a great curiosity in that country, is still preserved. Had one seen the thousands and thousands of these Swallows, which one evening in the last of July were nesting on a marsh near Red Rock, Indian Territory, he would have been tempted to believe that Prof. Aughey's two thousand nests had emptied their entire contents on this particular place.

We found the colony much larger than when I last visited it, and most of the sets were fresh and complete. After taking several sets of five and six eggs, I put my hand in a nest which seemed to be literally full of eggs, and I thought at once of the dreams I had had of taking phenomenally large sets of eggs.

The nest was in a difficult position to get at, and the eggs could only be taken out one at a time. I counted them up to eight to myself and that was too much, so I counted out aloud "9, 10, 11," which cleaned out the nest. It had got too dark to examine them, so packing them up carefully we started for home.

Upon examining them we could see at once that they were laid by two birds, as six of the eggs were much larger than the other five, and much more heavily marked, and it was further proved upon attempting to blow them. In the six eggs the incubation was nearly completed, while in the five eggs, two of them were fresh, and in the other three incubation had commenced, showing that this set had been sat upon from the time the first one was laid.

C. E. Hoyle.

W. Millbury, Mass.

O. & O. XIV, June, 1889 p. 88-89

1877. *Cliff Swallow Nesting in December.* By H. D. Moore, M.D.
Ibid., p. 104. **For. & Stream, Vol. 34 Feb. 27.**

2003. *Changing Habits in the Nesting of Birds.* By L. T. Meyer.
Ibid., Vol. II, No. 2, Sept., 1886, p. 17.—*Chaetura pelagica*, *Passer domesticus*, *Petrochelidon lunifrons*, *Sitta carolinensis*, *Sialia sialis.* **Essex Naturalist,**

Birds of Ventura Co., California.
B. W. Evermann.

154. * *Petrochelidon lunifrons*. (612.) CLIFF SWALLOW.—An abundant summer resident. In 1881, a colony of more than a hundred pairs nested in a shed in Santa Paula. The nests were fastened to the rafters, much after the manner of the Barn Swallow. Many horse-hairs were plastered into the nests and these often caused the death of the builders. I took from this shed some six or eight dead birds which I found hanging about the nests, they having gotten entangled in the hairs.

Auk, 3, April, 1886. p. 183

CLIFF SWALLOW, (*Petrochelidon lunifrons*). Abundant Summer resident. Arrives from May 3 to 8. Breeds, nests beneath the eaves of barns. It is no uncommon thing to see a hundred or more of the gourd-shaped mud nests of this species beneath the eaves of one barn. The nests are repaired and used for many years in succession if not disturbed. A few ignorant farmers destroy them as they do not want the Swallows around their barns, but usually they are protected. This species associates closely with the preceding, being equally industrious and social, and much more abundant. For a few weeks before their departure for the South, large numbers of Barn and Cliff Swallows frequently alight upon the telegraph and telephone wires, especially during damp and rainy weather, hundreds of them often being on the wire at once.

C. O. Tracy, Taftsville, Vt.

O. & O. X, May, 1885, p. 71

Double Set of Cliff Swallow's Eggs.

Being in need of a few sets of Cliff Swallow's eggs (*Petrochelidon lunifrons*) I started with a friend of mine, one evening in the early part of June, 1888, for a colony where I had previously obtained their eggs.

BULLETIN
OF THE
NUTTALL ORNITHOLOGICAL CLUB.

Vol. III.

JULY, 1878.

No. 3.

THE EAVE, CLIFF, OR CRESCENT SWALLOW (*PETROCHELIDON LUNIFRONS*).*

BY DR. ELLIOTT COUES, U. S. A.

DISCOVERY of this notable Swallow, commonly attributed to Say, was made long before Long's expedition to the Rocky Mountains, though the species was first named in the book which treats of that interesting journey. The bird may have been discovered by the celebrated John Reinhold Forster; at any rate, the earliest note I have in hand respecting the Cliff Swallow is Forster's, dating 1772, when this naturalist published in the *Philosophical Transactions* "An Account of the Birds sent from Hudson's Bay; with Observations relative to their Natural History; and Latin Descriptions of some of the most Uncommon," — a rather noted paper, in which seven new species, viz., *Falco spadiceus*, *Strix nebulosa*, *Emberiza* [i. e. *Zonotrichia*] *leucophrys*, *Fringilla* [i. e. *Junco*] *hudsonias*, *Muscicapa* [i. e. *Dendroica*] *striata*, *Parus hudsonicus*, and *Scolopax* [i. e. *Numenius*] *borealis*, are described, with references to various other new birds by number, such as "*Turdus* No. 22," which is *Scolecophagus ferrugineus*, and "*Hirundo* No. 35," which is *Petrochelidon lunifrons*. The next observer — in fact, a rediscoverer — was, perhaps, Audubon, who says that he saw Republican or Cliff Swallows for the first time in 1815 at Henderson, on the Ohio; that he drew up a description at the time, naming the species *Hirundo republicana* [sic]; and that he again saw the same bird in 1819 at Newport, Ky., where they usually appeared about the 10th of

* By permission, from advance sheets of the "Birds of the Colorado Valley," Vol. I.

Petrochelidon lunifrons X Tachycineta bicolor

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CHAPMAN, *A Hybrid Swallow.*

[Auk
Oct.

A HYBRID BETWEEN THE CLIFF AND TREE
SWALLOWS.

BY FRANK M. CHAPMAN.

THE American Museum of Natural History has recently acquired from the collector what seems to be a hybrid between *Petrochelidon lunifrons* and *Tachycineta bicolor*. The specimen (No. 78,119 Springfield, Mass., Aug. 20, 1902, Leon C. Holcomb) is apparently a bird of the year and, in addition to presenting evidences of hybridism, exhibits also albinistic characters, though it is possible the latter may be a result of hybridity. Generally speaking this specimen resembles *bicolor* below and *lunifrons* above, the rusty and buff markings of the last named species, however, being, in this supposed hybrid, white. A more definite understanding of this interesting bird's color and markings may be gathered from the appended comparative tables:

FORM.

T. bicolor. ♂ im. *Hybrid.* ♂ im. *P. lunifrons.* ♂ im.

Bill.

Medium; width at nostril 4.5 mm. Nostril elliptical; a well-developed operculum.	Medium; width at nostril 4.5 mm. Nostril circular; a well-developed operculum.	Rather heavy and broad; width at nostril 6.3 mm. Nostril circular; no operculum.
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Wing.

Long, 118 mm.	Short, 103 mm.	Medium, 105 mm.
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Tail.

Medium, 50 mm.; fork, 9 mm. deep.	Short, 40 mm.; fork, 4 mm. deep.	Medium, 45 mm.; fork, 2 mm. deep.
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Feet.

Slender, tarsus 11 mm.; middle-toe, 11 mm.; nail, 4 mm.	Medium, tarsus, 11 mm.; middle-toe, 11 mm.; nail, 3 mm.	Rather stout, tarsus, 11 mm.; middle-toe, 11 mm.; nail, 5 mm.
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Retrochelidon lunifrons X *Tachycineta bicolor*

Vol. XIX]
1902

CHAPMAN, *A Hybrid Swallow.*

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COLOR.

T. bicolor. ♂ im. *Hybrid.* ♂ im. *P. lunifrons.* ♂ im.

Under parts.

White, sides of breast dusky sometimes forming a faint breast band.	White, a well-defined dusky breast band; left side of throat and abdomen washed with yellow.	Throat dusky black more or less mixed with cinnamon and, usually, whitish; breast and sides dusky washed with rufous.
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Under wing-coverts.

Dusky, bend of wing whitish.	White, bend of wing partly yellow.	Dusky washed with rufous or cinnamon.
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Under tail-coverts.

White.	White.	Mixed dusky and rufous or cinnamon.
--------	--------	-------------------------------------

Upper parts.

Uniform dusky slate or grayish brown.	Forehead white, a faint yellowish tinge; pileum sooty black with slight steel-blue reflections; a well marked nuchal collar white faintly tinged with dusky and yellow; back like pileum the feathers basally white; rump white, slightly tinged with yellow anteriorly.	Forehead cinnamon, usually mixed with dusky and sometimes white; pileum dusky black with slight steel-blue reflections; nuchal collar grayish brown, back somewhat paler than pileum, tipped with buffy, rump ochraceous buff.
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Upper tail-coverts.

Dusky slate or grayish brown.	White tipped with fuscous.	Grayish brown, edged with buffy.
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Tail.

Dusky slate or grayish brown.	Fuscous, inner web of outer feather white, except at end; outer web of three outer feathers edged with whitish.	Grayish brown faintly iridescent, with indications of a white terminal mark on the inner web of the outer feather.
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Retrochelidon lunifrons X *Tachycineta bicolor*

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General Notes.

[Auk
Oct.]

Wings.

Dusky slate or grayish brown, inner tertials lightly edged with white.

Fuscous, tertials faintly edged with whitish.

Grayish brown faintly iridescent, the coverts slightly, tertials more widely, margined with buffy or ochraceous.

It is of course well known that in the Tree Swallow both birds of the year and adults moult before leaving us for the South while the Cliff Swallow migrates before moulting. It is consequently of interest to observe that in this hybrid moult has begun normally with the innermost primaries.

This fact is also of importance in determining the bird's age and, in connection with the unworn condition of the wing-feathers, it leaves no doubt that the specimen is in post-natal plumage.

The radical differences in the character of the nests of the supposed parents of this bird lead one to speculate on the type of nest-structure in which it was reared, but, unfortunately, our curiosity in this direction cannot be gratified.

Auk, XIX, Oct., 1902, pp. 392-4.

*Chelidon
erythrogastra*

Chelidonium erythrogaster.

1889

April 25¹ 29¹ 30² 1889. 7⁷ 1888 17¹⁰ 24¹ 25²⁵ 26¹⁰ 27¹⁵ 1891.

May 5³ 6¹ 8¹ 10¹ 11⁴ 14⁶ 17⁶ 28¹ 30⁶ 1889. 2⁴ 7² 9² 13¹ 15¹⁰ 16⁶ 17² 18¹⁰ 19¹⁰ 22² 23¹ 1890

June 1⁴ 9¹ 14² 21² 1889. 1⁶ 7¹ 8¹ 10¹⁵ 12⁶ 13² 14¹ 15⁴ 19⁶ 21² 24⁶ 25⁶ 28¹⁷ 29¹⁰ 1890

July 7² 16¹⁰ 31^m 1889. 1² 6¹⁰ 13¹ 29² 16² 18⁶ 19⁶ 20³⁰ 29⁴ 30² 1890

Aug. 5⁶ 7² 8² 9⁴ 29¹ 1889. 7²⁰ 2¹⁶ 3²⁵ 17¹⁰ 2¹¹ 6¹¹ 1890

May 26⁴ 28⁴ 30¹⁰ 31² 1890. 4¹ 10² 9¹ 10¹ 11¹ 12⁴ 18¹⁰ 19¹⁵ 20⁶ 23²⁶ 25¹⁰ 28⁸ 31¹⁵ 1891.

1⁶ 2⁸ 3¹⁵ 4¹⁰ 5⁴ 6³ 7⁴ 8² 9⁶ 10¹² 11³⁰ 12, 13, 14, 15, 16⁴ 17, 18¹⁵ 19¹⁵ 20²⁵ 22¹⁰ 23³⁰ 24³⁵ 25²⁰ 28¹⁰ 27, 31¹ Concord 1892

1¹⁰ 9⁴ 10⁴ 11³ 12² 13²⁰⁰ 14²⁰ 15¹⁰ 16⁴ 17⁶ 18²⁰ 19⁶ 20¹⁵ 21⁶ 22⁸ 23⁷ 24³⁵ 25⁶ 26⁴ 27¹⁵ 28⁶ 29⁵ 30⁶ 31¹ Concord 1893

Concord 3⁶ 4¹⁴ 6⁶ Concord 12, 13, 14 8¹ West. 15¹ 18² Barnstable 19¹⁵ 20³⁰ Concord 26⁴ 27⁶ 28¹⁰ 1894

June north June 1¹⁰ 2¹⁰ 3⁸ 1891.

" 1² 2² 3⁴ 4⁴ 6² 18² 21² 22² 23⁴ Concord 1892.

" 3¹⁵ 4¹⁰ 5¹² 8¹⁴ 10⁶ 11⁸ Concord 26⁴ 27⁶ 30² 1893.

July 1¹⁰ 2⁶ 3² 4⁶ 6² 7² 9²⁵ 14^{ad} (count) 10⁸ 13²⁰ 14³⁰ 15⁴ broods 16²⁰ 17²⁰ 18¹⁰ 19²⁰ 21¹⁰ 22³⁰ 1892.

23⁶ 24¹⁰ 26¹⁵ 27⁷⁵ 29¹⁵ 31⁷⁵ Concord 1892.

3³⁰ (young mt) 5¹² 6¹⁵ 7¹⁵ 12²⁰ 13²⁰ 14²⁵ 18²⁰ 20³⁰ 22²⁰ 23⁵⁰ 29¹ 30¹ 31¹ Concord 1893.

9¹ 11⁵ 25¹⁰ 1894

August 1⁵⁰ 2⁴ 3³⁰ 4¹⁰ 5¹² 12⁴ 13²⁰ 14²³ 15¹⁰ 17²⁰ 21⁷ 22¹⁰ 23² 24¹ 26² 27² 28⁴ 29² 30⁵ 31⁵ Concord 1892.

2⁵ 3⁵ 5¹⁰ (coursing low) 6² 7³ 8¹⁰⁰ 10⁵ 11⁷ 12⁵ 13⁷ 14³ 16⁵ 17⁶ 19² 20⁵ 21⁵ 24⁶ 26¹² 27⁵ 28¹³ 30¹⁰ 31⁸ Concord 1893.

5⁵ 11⁵ 12⁷ 1894

Sept 1⁸ 3⁵ 4⁷ 5⁵ 6²⁰ 7⁶ 8³ 9¹² 16² Concord 1892

2² 3³ 4³ 7¹² 24¹² flying south high up at sunset. 9¹² sunset river meadows. Concord 1893.

April 8¹ 18¹ 20¹ 24¹ 29²⁰ 30² Concord 1892

5¹ (Foxon) 21³ (Fox) 22² 24³ 25²⁰ 28¹⁵ 29¹⁵ 30¹⁰ 1893

25¹ (Fox) 1894

C. erythrogaster

Chelidon erythrogaster. B.F. = Barnet farm
B.H. = Barn's Hill

April
 B. Rock M. Concord
 19 (Hoffmann) - 28⁶ 29³⁰ 30
 1895 ^{Mystic Pond} 10^{ar.} 1892
 14² (Ball's Hill) 16² (Ball's Hill) 17^{hd} 18^{hd} 19^{hd} 20^{hd} 21¹² 22³⁰ 23¹⁵ 24¹⁰ 25⁶ 26⁸ 27³⁰ (Ball's Hill) 28¹⁵ 29⁸ Concord 1896
 Ball's Hill
 9 (50 Blue Swallows) 21¹ 27⁸ 28² 29⁴ 1897. 24⁴ 25¹² 26⁸ 30⁶ Concord 1898
 Sudbury
 19 W. Dun 24² 25^{hd} 26^{hd} 27^{hd} 28^{hd} 29^{hd} Concord, 1899.

May
 Concord
 2¹⁰ 3³ 4⁶ 5²⁰ 6¹⁵ 7¹⁰ B. Brown farm Rd. E. Pond
 9² 12¹² 18² 19⁸ 20¹⁵ 23⁴ 15¹⁰ 1895
 B. (Rock M.) Cg farm Ball's Hill, Concord
 6⁸ 9¹ 17 1 2 3⁶ 4^{hd} 7^{hd} 8³⁰ 9³⁰ 10¹⁰ 11⁶ 12² 17²⁰ 18, 19, 20¹² Concord 1898
 1^{hd} 2¹⁰⁰ 3⁵ 4¹⁰ 12⁸ 14²⁵ 18²⁰ 19⁵⁰ 20⁷⁵ 21²⁰ 22² 29¹⁵ Concord 1899.

June
 B. Field at foot of Hill
 11 3 16 on top blind.
 22¹ 1897 2² 4¹² 5⁴ 6⁸ 12 22 23 = Concord 1898

July

C. erythrogaster

August
 Ch. 8⁵⁰ G. Horns 12¹ 1895

September

Shelburne, N. H.

Hirundo horreorum

1884.

July. Abundant, breeding in very suitable barns. I have learned something new about them. When the nest is placed on a sloping rafter there is almost invariably near it a crescent-shaped parapet built in the usual manner of mud pellets, but without either finish or lining. These structures I at first supposed to be merely the beginnings of nests abandoned for some reason or other. But to-day (July 21) I discovered that they are regularly occupied by the ♂ while the ♀ is sitting or feeding the young. It would of course require a constant effort on this part to maintain a footing on the smooth, steeply inclined surface of the hard wood rafter but on this artificial platform he can stand at ease or even lie down as I saw one do more than once to-day.

I saw the first young on wing July 12; on the 13th there was a general exodus from the barns but several broods stayed in the nests until the 22nd. For a few days after leaving them they would sit in rows along the fences or on the ridge-poles of barns where they were fed by their parents. They soon became self-supporting, however, forming in large flocks and hovering about one pine in pastures.

On the 28th the migration began, several large flocks passing down the valley, alighting for an hour or more on fence poles and in the top of a large elm in the meadow, then rising high in air, circling once or twice, and rushing on. Sometimes they would circle and return.

The usual call of this swallow is wick, wick; short, sharp, metallic. The bird also has what appears to be a true song. July 13, about sunrise, five alighted on the roof under my windows and began a jingling melody that sounded not unlike that of a flock of Blackbirds. At length all flew except one who continued this warbling for several minutes. His song, for it really was a song - was a long, sweet, varied warble of wick and effressin.

They have another curious habit. In the evening twilight - when it is nearly dark - five or six will emerge from the barn and dash excitedly about for several minutes, usually in silence, clustering close together at times and circling near the ground or hovering under the eaves, then returning to their nests.

Hirundo horreorum

1889 Mass.

May 30 Belmont. Six or eight flying in and out the barn at the cross roads just east of the "Willows". I know of no breeding colony near Cambridge although I have seen a bird or two daily of late, flying over my garden.

Distribution

June 14 Cambridge. - Two on telegraph wire in Fresh Pond marshes one, evidently the ♂, twittering. This twitter is evidently a song. The bird while uttering it turned his head from side to side and I could see his throat swell & tremble. The twitter is prolonged, varied, and not unmusical while its general effect is decidedly pleasing.

"
Song

July 15 Falmouth. - Abundant, the young out sitting in broods on barns, dead trees, telegraph wires, and even fences, the old birds feeding them. To-day during a heavy north easter saw many old birds skimming close to the ground over lawns and along the village streets. Each bird regularly went over the same route many times in succession. Upon reaching the windward end of his beat he would rise, turn and scale back to the leeward end before the strong wind. One bird invariably began in a field, crossed it irregularly, passed over the top of a fence, then taking the sidewalk followed it for about 100 yds. then scaled back to the starting point. He skimmed the ground so closely that the tips of his swiftly moving wings seemed to brush the turf. He would pass me within 2 feet when I stood still in the middle of the sidewalk but when I moved would take to the street. His course was usually nearly straight. When feeding in this manner Barn Swallows are invariably nearly silent.

Skimming
the ground
in cloudy
weather

Cambridge

Aug 7 Two large flocks of *T. bicolor* sitting on telegraph wires had each a single Barn Swallow. (See also notes on *T. bicolor* under Aug 8, 9, 1889)

In flocks
of *T. bicolor*

1890. Ktama.

Hirundo horreorum.

June 28 Martha's V.

The moment my buggy appeared on the plains south of Edgartown Barn Swallows began to collect and to follow ~~it~~ closely. After we had gone a mile there were between 30 and 40. When we stopped at the beach they at once left us. On our return they assembled again gradually dropping off gradually as we approached Edgartown but ~~then~~ following us into the village. They kept wholly on our leeward side and when we went before the wind in front of us skimming down wind about 30 yds. then turning and beating back. The attraction was obvious. Our horse and wheels started from the grass that hung over the ruts countless small gray or white moths. About half of these that essayed a long flight were caught by the swallows usually within 15 feet of us. They rarely missed a good chance although most of these were cross shots. They sometimes clicked their bills audibly but usually seized their prey in silence. At times there would be a dozen or more darting in mazy lines about the horse's head presenting a beautiful sight, their steel blue backs glistening in the sunlight, their long forked tails sometimes wide spread, sometimes closed, the deep rufous under-parts showing as they wheeled. My driver told me that nervous horses are sometimes badly frightened by them. The Swallows on Nantucket have a similar habit of following carriages , across the open commons. The birds paid no attention to-day to dragon flies.

Hirundo horreorum

1890 Mass.

July 19 Martha's Vineyard. During a heavy thunder shower a Barn Swallow took refuge under the gravelly bank of a ditch near me where it was wholly protected from the strong wind and partially from the sheets of heavy rain drops mingled at times with hail stones. As soon as the shower slackened it resumed its flight. Seek shelter during storm

" 20. Crossing the plains in a carriage this afternoon I was surprised to find that some of the numerous Barn Swallows in sight came about the horse after by this usual manner here. This was apparently due to the fact that there was not enough wind to carry the moths, which are started from the grass, a sufficient distance to enable them to be easily caught for when a fresh breeze sprang up an hour or two later the birds at once began to collect about us. They did not, however, assemble in nearly as great numbers as in June probably because they were they were obliged to keep rather near their young which were sitting in rows on the telegraph wires. Catching moths started by carriage

On the morning of the 19th I found a nest which the young had evidently just left in a gurnet's "shanty" on the shore of Great South Pond. It was built on a sloping rafters after the usual fashion. Directly beneath it was a pile of dried excrement which would have filled a pint measure. Does not this indicate that the excrement of the young is not removed by the parents as is the case with *Tachycineta*? The birds must have entered & left this shanty by one or other of the several holes which Flickers had drilled through its walls.

Hirundo erythrogaster

1891 Mass.

May 18 Cambridge - Saw at least 50 in company with an equal number of Bank Swallows and a few White-bellies skimming close over the water in sheltered cove and pond-holes on the west side of Fresh Pond. The morning was cold with a high N. wind. In the afternoon there were also many Swallows and *Glacialis*. Can they be migrating at this late date? Certainly no such numbers of Barn Swallows breed anywhere near Cambridge. I have not seen so many collected hereabouts for twenty years or more.

About Fresh Pond in old-timber swamps.

1895

June 17 Great Island, Hyannis. The nest represented by this photograph



was built on the top of a blind on the north side of Mr. Cory's house under shelter of the piazza roof and about 8 ft. above the floor of the piazza. The sitting bird is shown in the

photograph. She would permit half a dozen of us to walk or stand directly beneath the nest or a child to ride past on a rattling bicycle but she was afraid of my camera & would nearly always fly when I stopped & held it up. I did not examine the contents of the nest. Mr. Cory's barns are too light for Swallows to enter.

Massachusetts.

Chelidon erythrogaster (no. 1.)

1892.

July 7. Concord. Barn Swallows have appeared on the river with their young since I last went down stream. I counted no less than seven broods today with 3, 3, 3, 3, 4, 4, and 5 young respectively. The young of each brood were perched within a few feet or inches of each other usually on the leafy branch of a maple or willow low over the water but sometimes on a dead branch. The parents (both sexes) were feeding them largely if not wholly with small insects. When the parent bird approached, the latter would open its mouth wide and chatter loudly, at the same time quivering its wings. It usually received the insect in the tip of its bill and swallowed it at once. The parent never seemed to hesitate in its choice of the young bird which it afterwards fed but flew directly to one or other of the fluffy little groups. Once I saw an old Swallow feed the same young bird three times in succession although four other young were huddled together not far off.

July 14 Barn Swallows were numerous along the river today but most of them were flying, and I think the young are now getting their own living for I saw only three or four single birds perched. At least this was the case in the morning, but at evening a little before sunset, fully thirty were assembled in one tree, a black willow opposite the swimming place. There used to be a roost in this tree years ago (1886-87) and I think the birds which I saw there tonight were

Massachusetts,

Chelidon erythrogaster. (no. 2.)

1892.

preparing to go to roost, although I was unable to watch them long enough to settle the point.

July 15 The broods of young Barn Swallows have not all broken up or joined other broods for I saw no less than four (broods) along the river this evening, the members of each sitting close together on a willow or maple branch over the water. Perhaps these are broods that have just come from the nest. I saw both parents feed the young of one brood.

Sept. 6. Sometime after sunset in fact it was fast getting dark I heard the twittering of Barn Swallows and looking up saw about 20 of these birds descending nearly vertically with great swiftness from a considerable height, to the broad reach of river opposite my cabin when some thirty feet above the water they checked their speed and glided off down river towards the willows at the bend below where I think they must have a roost. They flew in nearly as compact a flock as do Cedar Birds or Blackbirds.

Chelidon erythrogastra.

Concord, Mass.

1893. (I was returning from the cabin at twilight in my open
July 18. canoe). Soon after the Red-wings had been driven away from
the roost on the Barrett meadow, in fact before they had
quite disappeared in the gloom a flock of twenty Barn Swallows
came dashing past flying low over the water, doubling and
twisting like so many Snipe and making a great outcry as if
alarmed or excited. After whirling about for several moments
they swept in over the meadow and apparently alighted in the
Phalaris at the very spot which the Blackbirds had evacuated.
I say apparently because I did not actually see any of the
birds alight but merely lost sight of them at this point and
failed to see them reappear against the sky or over the water
lower down river. On several occasions last year I saw Swal-
lows flying about this Blackbird roost at evening and once or
twice was nearly sure that they alighted in the Phalaris al-
though I never could settle the point definitely.

Chelidon erythrogastra.

Concord, Mass.

1893. During most of the afternoon a number of Barn Swallows
Aug.5. were flying about over Mr.Keyes's field, coursing close over
the stubble like hounds searching for a lost trail. It is one
of the prettiest sights which the summer brings—these graceful
long-winged, fork-tailed birds skimming swiftly to and fro
turning and returning abruptly and seldom leaving the bounda-
ries of the field. It carried my thoughts back to boyhood and
to England.

Aug.8. Fully 100 Barn Swallows were flying over the meadows op-
posite Ball's Hill this forenoon. I reviewed a large portion
of the flock without detecting any other species except the
Eave Swallow of which I saw a single representation.

Chelidon erythro^{gas}ter.

1895. Mass.

Aug. 3 Gloucester

Miss Marion B. Keyes tells me that at Eastern Point, Gloucester, Mass. on Aug. 3 she saw a brood of four young Swallows leave the nest which was on a ledge under the roof of a piazza. The old Swallows spent nearly the whole forenoon in persuading them to fly calling to them from the opposite side of the piazza and taking short flights to show them how. By noon all the young had departed. Miss Keyes is sure of this for she stood on a chair and looked into the nest which was positively empty. That evening at sundown all four of the young Swallows returned to the nest, crowded into it and spent the night there. Both of their parents also returned and roosted on the ledge near the nest. Miss Keyes afterwards learned from the friend who owns the house that the young Swallows returned on each of the three following nights making four nights in all. This is the only instance that has ever come to my notice of young birds of any kind returning to their nest.

Chelidon erythrogaster

1896. Penobscot Bay, Maine.

Deer Island. June 20² 21² 22² 23² 24² 25² 26² 27² 28² 29² 30²

July 1² 2² 3² 4² 5² 6² 7² 8² 9² 10³ 11² ^{8 flying E. thence} for 40.5 miles) 13² ^{6 Barn at point of road com.}

Isle au Haut. July 8²

Marshall Island. July 9. Pair with brood of young on wing.

Sedgwick, July 15 } Abundant in both towns but everywhere outnumbered
Brooksville, " 16 } by the Barn Swallows. The young of both species were
out, those of the Barn Swallow ~~sitting~~ perched on bushes
& fences along the roadsides, those of the Sea Swallow sitting
on roofs of barns & houses. These two species did not
intermingle except over a large marsh where both were
flying about together & with White-bellies also.

Stinson's well, Deer Island. Only one pair breeding in the farmer's
barn but several pairs in a barn on an adjoining farm. These
birds regularly followed ~~us~~ or rather preceded - as when we were
walking in the fields sweeping back & forth a yard or two
in advance swooping up small insects disturbed by our
feet.

Matineus Islands June 16-22. Common - vide H. K. Job.

Chelidon erythrogaster.

Peterborough, New Hampshire.

1898. Abundant, nearly every suitable barn having its colony of breeding birds. There were eight nests in the barn and one under a shed, on Ben Mere farm. On Aug. 5th three of the broods had flown, on the 11th only one brood remained in the nest. Flocking began July 20, old and young birds collecting in long lines on telegraph wires. (July 20⁽²⁰⁾, 21⁽³⁰⁾, 24⁽³⁰⁾, 28⁽²⁰⁾, 29⁽³⁰⁾, 30⁽⁴⁰⁾, Aug. 1⁽²⁰⁾, 2⁽²⁴⁾, 3⁽¹⁵⁾, 6⁽²⁰⁾, 7⁽³⁰⁾, 8⁽¹⁰⁾). The song twitter was heard constantly through July and up to Aug. 15th.

1899. A brood of young were fed by their parents on the same branch (a short dead branch of a beech near the house) daily from July 9th to 14th.

Hirundo erythrogastrus

1895. Mass.

Aug. 10

Poultney. "I was much amused to see a Barn Swallow torment a Kingfisher. The latter started to fly across Houghton's Pond (about 1/3 of a mile) when the former attacked. On the way over the Kingfisher was forced to go entirely under water seven distinct times his tormentor near leaving [him] until the opposite side of the pond was reached. My brother also saw a Barn Swallow attack & drive away a Sharp-shinned Hawk" (J. H. Bowles, letter Oct. 10, 1895)

attacks a Kingfisher

1898

July 2-4 Glendale (in or near), Berkshire Co. Common. [Journ.]

1904

Aug. 1

Concord. - After having been about one of the barns on the Reelin farm for I know not how many years the Swallows occupied it this season entering through a hole which I had had cut over the front door. They appeared about the barn soon after their arrival to the number of five or six but only one pair settled down. They took possession of one of the three remaining old nests, added a bit of fresh mud to the rim, and it properly with feathers and covered a brood of young. After the young took wing they with their parents were seen about the barn for a few days after which they all disappeared for a time. Entering the barn on August 1 I was surprised to hear young evidently but just hatched chirping feebly. Presently an old bird appeared & fed the young. A week later (Aug. 8) I could see the heads of the young protruding over the rim of the nest. Exact dates of other observations of this nest are noted in my field list. I did not know before that the Barn Swallow ever nests two broods in one season but this seems to be an instance of it.

Reelin
old nest

Rearing two broods in one season

Summer Bds. Restigouche Valley, N. B.
July, '88. J. Brittain and P. Cox, Jr.

Chelidon erythrogaster. BARN SWALLOW.—Rare.

Ank, VI. April, 1889. p.118

Birds of Upper St. John,
Batchelder.

31. *Hirundo erythrogastra* Bodd. BARN SWALLOW.—Common.

Bull, N. O. C., 7, April, 1882, p.110

Birds within Ten Miles of Point
de Monts, Can. Comeau & Merriam.

23. *Hirundo erythrogastra horreorum*. BARN SWALLOW.—Rare,
and not known to breed. Mr. Comeau shot one May 29, 1882.

Bull, N. O. C., 7, Oct, 1882, p. 235

Last Dates Migratory Birds observed by
E. D. Wintle, Fall 1885, Montreal, Can.

Aug. 15. Barn Swallow.

O. & O. XI. Mar. 1886, p. 44.

Dwight, Summer Birds of
Prince Edward Island.

Chelidon erythrogaster. BARN SWALLOW.—Abundant and generally
distributed.

Ank X, Jan, 1893. p.12

Ornithological Trip to St. Bruno, P. Q.
May 25, 1885. E. D. Wintle, Montreal.

Barn Swallow, scarce.

O. & O. XI. May. 1886. p. 75-

Summer Birds of Bras D'Or Region
Cape Breton Id., N.S. J. Dwight, Jr.

42. *Chelidon erythrogaster*.

Ank, 4, Jan., 1887. p.16

Hopedale, Labrador

Hirundo erythrogaster. BARN SWALLOW, taken at Hopedale in July,
1908. The only previous record for Labrador. is that the bird "breeds at
North-west River at the head of Hamilton Inlet" (*loc. cit.*, p. 403).—
CHARLES W. TOWNSEND. M. D., Boston, Mass.

Ank 26, Apr-1909, p. 201.

Summer Birds of Sudbury, Ont.
A. H. Alberger.

613. Barn Swallow. Common in the village.

O. & O. XV, June, 1890, p. 88

Notes from the Magdalen Islands.

Hirundo erythrogaster

H. K. W. Kent, Conn.

Ank, XVIII, April, 1901, p. 200.

Summer Birds of the Cobalt Mining Region
Nipissing District, Ontario.

by Frederick C. Hubel. *Auk*, XXIV, Jan. 1907, p. 17.

48. *Hirundo erythrogastra*. BARN SWALLOW.— Common at Hailey-
bury. Breeds.

Birds of Toronto, Canada,
by James H. Fleming,
Part II, Land Birds,
Auk, XXIV, Jan. 1907, p. 82.

227. *Hirundo erythrogastra*. BARN SWALLOW.— Regular summer
resident, common April 20 to August 30; earliest record April 8, 1890;
breeds (June 25, 1892).

Birds of Dead River Region, Me. F. H. C.

39. *Hirundo erythrogastra*, (Barn Swallow).
Noticed at Farmington. It is not to be expected
that this species would be very abundant in a
thinly populated country.

O. & O. XI. Oct. 1886. p. 146

Summer Residents on Southwest
Coast of Maine. T. H. Montgomery, Jr.

613. Barn Swallow. Rather uncommon at
Boothbay. Abundant at Camden.

O. and O. 16. Nov. 1890. p. 162

Maine Bird Notes. — The Swallow Roost, of which I gave an account
some years ago (*Auk*, Jan., 1895, p. 48) has moved to another location
within two or three years.

I think the first impulse to change was given by the felling of most of
the willows which they were wont to frequent. From time to time trees
had been cleared away, but this cutting was on more wholesale lines and
not to the Swallows' liking. There was, however, sufficient small willow
growth farther back on the point for roosting, but they did not take to it,
and though the banks are again thick with new growth they have not
returned.

The next summer after the cutting of the trees they would collect, yet
in smaller and smaller numbers, and go through some of their evolu-
tions, either in memory of old times or from force of habit, and then
depart half a mile southeast to the Kennebec River. I have been told by
people living close by, that there had been for some time a smaller roost
on an island in the Kennebec, seven or eight hundred feet long and cov-
ered by a thicket of willows with an occasional elm tree. It was to this
roost that the Messalonskee Swallows joined themselves. Here are per-
formed by a countless host similar interesting manœuvres to those before
described and by the same kinds of *Hirundinidæ*.

Abby F. C. Bates, Waterville, Maine.
Auk, XVIII, Oct. 1901, p. 401.

Hirundo horreorum. - Not plentiful. Shelburne, N. H. Aug. 8-29-1865. R. D.

Hirundo horreorum. - ^{Abund.} Aug. 20 Eye Beach, N. H. 1867.

Hirundo horreorum. - ^{H. F. 7-7.} Aug. 13, 15 Eye Beach, N. H. 1868.

Hirundo horreorum. - ^{a a a} July 28, Aug. 7, 23; ^{Abund.} Sept. 2 Eye Beach, N. H. 1871.

Hirundo horreorum. - July Eye Beach, N. H. 1872.

Rye Beach, N. H. July 23-24 1885.

112. *Hirundo horreorum*. - Abundant - flocking

Bds. Obs. at Franconia and Bethlehem
N. H. July-August, 1874. J. A. Allen

32. *Chelidon erythrogaster*. Abundant.

Auk, V. April, 1888. p. 154

Birds Obsvd. near Holderness, N. H.
June 4-12, '85, and 4-11, '86. W. Faxon

40. *Chelidon erythrogaster*. BARN SWALLOW.—Common.

Auk, V. April, 1888. p. 150

Bds. Obs. in Franconia, N. H. June 11-21
'86, and June 4-Aug. 1, '87. W. Faxon

47. *Chelidon erythrogaster*. BARN SWALLOW.—Common.

Auk, V. April, 1888. p. 152

Birds Obs. at Bridgewater, N. H.
July 12-Sept. 4, 1883. F. H. Allen

Chelidon erythrogaster.—Common.

Auk, VI. Jan., 1889. p. 77

Birds Obs. at Moultonboro, N. H.
July 2.-Aug. 11, 1883. F. H. Allen

Chelidon erythrogaster.—Very common.

Auk, VI. Jan., 1889. p. 78

Birds of Hillsboro Co. N. H. June 27, '92
Arthur M. Farmer, Amoskeag, N. H.

Barn Swallow, fairly common.

O. & O Vol. 17, Sept. 1892 p. 136

Breezy Point, Warren, N.H.

Chelidon erythrogaster

1894.

June 16-17-18-19-20-21-22-23-24

Woodcock
258

188

[Faint handwritten notes, possibly describing bird sightings or counts]

Breezy Point, Warren, N.H.

Chelidon erythrogaster

1895.

May
7

29
15
315

[Faint handwritten notes, possibly describing bird sightings or counts]

Summer Bds, Mt. Mansfield, Vt.

49. *Chelidon erythrogaster*. BARN SWALLOW.—Common in the valley.

by Arthur H. Howell.

Auk, XVIII, Oct., 1901, p.343.

61. *Hirundo horreorum*. E. Mass. 1885, 20 ^{Concord} June 16; ^{Mass.} July 12; 17
 Pigeon Cove, Mass. July 29-1885. *migrating*
 7. *Hirundo horreorum*. - *a few* migrating
 Princeton & Rutland, Mass. Aug. 2-1885
 11. *Hirundo horreorum*. - *Common - not Hocking*
 Princeton & No. Rutland, Mass. June, 18-1886.
 17. *Hirundo horreorum*. *About*

Hirundo horreorum Mass. - near Cambridge.
 1886 April 23^x, 27^x

Mass. (near Concord).

1887

May 6¹² - 9⁶ - 10⁴ - 13¹⁵ - 17⁴ - 21² - 23⁶ - 26⁶ - 28²⁰
 June 2⁸ - 4²⁰ - 6² - 7² - 12² - 16⁸
 July 4⁸ - 7⁵⁰ - 10²⁰ - 15³⁰ - 23¹⁰ - 24⁵⁰ - 26²⁰ - 31³⁰
 Aug. 1³⁰ - 9¹⁰ - 10¹⁰ - 13¹⁰⁰ - 14³⁰ - 15¹⁵⁰ - 17¹⁰⁰

Hirundo horreorum # young out.
 Mass. (Concord)

Hirundo horreorum.

1887

Aug. 15 About 150 with perhaps 50 *Tachycineta bicolor*
 going to roost at dusk in a thicket of
 black willows & white maples. (See journal
 of this date for extended notes).

Mass (Winchendon)

1887

June 25¹⁰ - 26¹⁰

Hirundo horreorum.

1888
APR 25¹

Hirundo horreorum

Winchendon, Mass. June, 1888.
Hir. hor. 12² 13² 15⁶ 16² 18²

Falmouth, Mass. 1889.
15 *Hirundo* July 4²⁰ 14⁵⁰ 21¹⁰ 28¹⁰

Falmouth, Mass. 1889. Aug. 4⁵⁰
9 *Hirundo horreorum*

W. Middlesex Co. Mass.
June 25-30, 1889.

Hirundo horreorum

West Townsend, Ashby, Mt. Watatic, --- Common and very generally distributed throughout this region, breeding in every suitable barn. Several were seen skimming about the summit of Mt. Watatic.

Chelidon erythrogaster.

1895. Falmouth, Mass.

July 12² 14¹ 19² 20³ 23² 25² 26¹ 29⁽³⁾ 31⁵

Aug. 3⁽⁵⁾ ^{7⁵⁰}
S. Watatic, Mass.

July 20 Late this evening, when twilight was fading into night, I was watching the Robin nest in Blackbird Swamp when a Barn Swallow skimmed past me and plunged directly into the cedars. I am confident that it alighted in them as I should have seen it against the sky had it passed over them.

Fall Migration, Bristol County, Mass.
1885. Charles H. Andros.

Aug. 14: slightly cooler weather. Barn Swallows have begun to flock together,

O. & O. XI, Jan. 1886, p. /

Fall Migration, Bristol County, Mass.
1885. Charles H. Andros.

the Barn Swallow, on the contrary, departed earlier than usual, which goes to show that some birds, though they may be of the same kindred, have more animal heat than their congeners.

O. & O. XI, Jan. 1886, p. /

Birds of Bristol County, Mass.
F. W. Andros.

Chelidon erythrogaster (Bodd.), Barn Swallow. Summer resident, common. Breeds.

O. & O. XII, Sept. 1887 p. 140

Birds Known to Pass Breeding Season
nr. Winchendon, Mass. Wm. Brewster

51. *Chelidon erythrogaster*.

Auk, V, Oct., 1888. p. 389

Bds. Obs. near Graylock Mt. Berkshire
Co. Mass. June 28-July 16. W. Faxon

42. *Chelidon erythrogaster*. BARN SWALLOW.—Common. Often seen flying about the summit of Graylock.

Auk, VI. April, 1889. p. 102

Bds. Obs. near Sheffield, Berkshire
Co. Mass. June 17-26, '88. W. Faxon

47. *Chelidon erythrogaster*. BARN SWALLOW.—Common.

Auk, VI. Jan., 1889. p. 45

Barn Swallows (*Hirundo erythrogastra*).— Within a few yards of the house occupied by Mr. John R. Sandsbury during the time he is caring for the Terns on Muskeget Island, and where I make my headquarters when visiting there, is an old shed or boathouse which has several apertures. This shed has been used as a nesting place for the past six years by apparently the same pair of Barn Swallows. At my request Mr. S. made a few notes on these birds, which arrived this year (1898) on May 29. It is their custom to repair the old nest, they never having built any since the first one. Four young birds were hatched this season. The old birds would occasionally fly into the sitting-room of the house, but were always frightened on getting inside. When I was visiting Muskeget this summer (July 2-5, 1898), I found, in addition to the old pair of birds, still another pair, apparently birds of last year, assisting in feeding the four young ones in the nest. This they continued to do up to July 10, the date on which the young left the nest. On this date they were all flying about together, the young going at intervals to the nest to rest. On July 11, there were only the two original old birds and the four young ones, and they remained around until July 19, the young returning to the nest every night. The young birds were so tame that they would alight on, and even run over Mr. Sandsbury's fingers while he rested his hand upon a beam which was near the nest. They returned occasionally up to August 1, but were not so tame, alighting on top of the shed and on the clothes line near the house. At this latter date the group consisted of the two old birds and the four young.—GEORGE H. MACKAY, *Nantucket, Mass.*
Auk, XVI, April, 1899, p. 184.

Monomoy Island, Mass.

Barn Swallow (*Hirundo erythrogaster*).— On August 16, 1909, an albino male specimen was shot by Russell Bearse at Chatham, Mass. The bird was taken on the flats off Monomoy Island where Mr. Bearse had gone after shore birds, and where it had been seen previously for several days. It was nearly pure white and the only suggestion of any other color was on the inner webs of the middle tail feathers where the white spots ordinarily exist in the normal plumage. These white spots on close scrutiny could still be seen, showing that the rest of the plumage was not pure white. This specimen is in the collection of the Boston Society of Natural History.

Auk 27, Apr-1910 p. 219.

Connecticut, June, 1893.

Colaptes erythrogastrus

June 4¹⁰ Fairfield

6⁴ 7² 8³ 9¹² 10⁴ 11¹ } Saybrook

12¹ 13⁴ 14⁸ 15⁶ 16¹ 17³ }

18⁶ 19⁸ 20⁶

21⁴ 22⁶ 23⁸ 24³ 25⁶ Andover

By far the commonest of the Swallows at Saybrook, Andover and Bolton Notch. At Saybrook most of our birds were seen flying over the marshes which they frequent at all times of the day in all weather but chiefly at morning & evening & when the weather is cloudy. One of our Clouds, migrants had a lot of the eggs done. The usual number is five but the of the

Birds observed in Naval Hospital
Grounds, Brooklyn, G. H. Coues

32. *Hirundo horreorum*. BARN SWALLOW.— Common; breeds.

Bull. N. O. C. 4, Jan., 1879, p. 32

Birds of the Adirondack Region.
C. H. Merriam.

50. *Hirundo erythrogaster*, *Boddaert*. BARN SWALLOW.— Common
enough everywhere outside the woods.

Bull. N. O. C. 6, Oct, 1881, p. 229

Arrivals of Mig'y Birds, Spring-1886.
Central Park, N. Y. City. A. G. Paine, Jr.

April 29, *Chelidon erythrogaster*, (613). Barn
Swallow.

O. & O. XI, July, 1886, p. 109

Bds. Obs. at Little and Great Gull Is-
lands, N. Y. Aug. '88 E. H. Dutcher.

17. *Chelidon erythrogaster*. BARN SWALLOW.—Almost every day
while I was at Little Gull Island flocks of these birds could be seen on
their southward migration. These birds and those of the succeeding
species seemed, in their flight, to follow the line of the islands, from the
mainland to Fisher's Island, from Fisher's to Little Gull. Little Gull to
Great Gull, Great Gull to Plum, and so to Long Island.

Auk, VI, April, 1889, p. 130

Birds Tioga Co, N. Y. Alden Loring.

154. Barn Swallow. Common; breeds. The
nest is placed under the eaves of a barn. It is
composed of mud and is lined with feathers or
fine straw, and contains four eggs, sometimes
five. They are of a creamy white color spotted
with two shades of brown, mostly at the larger
end. The measurement is usually .76 by .56.
Two broods are sometimes reared in one
season.

O. & O. XV, June, 1890, p. 82

Notes on the Spring Migration of Birds in the
Northern Adirondacks [Axtell], New York [1901].

April 25 to 30.

Barn Swallow. Tolerably common.

E. A. Sterling, Brooklyn, Pa.

Auk, XIX, July, 1902, p. 298.

Birds at Fort Klamath, Oregon.
J. A. Mearns.

16. *Hirundo erythrogastra horreorum*, Barton. BARN SWALLOW.—June 15, 1875 (*McElderry*). A summer resident (*Henshaw*).

Bull. N.O.C. 4, July, 1879, p.164

.Birds of Washington Co. Oregon.
A. W. Anthony.

88. *Hirundo erythrogaster*. BARN SWALLOW.—Rather rare; seen for a few days only in spring and fall.

Auk, 3, April, 1886. p.170

Birds of Fort Klamath, Oregon. J. C
Merrill. Remarks by Wm. Brewster

Chelidon erythrogaster.—Common.

Auk, V. October, 1888. p.360

DESCRIPTION OF A HYBRID BETWEEN THE BARN
AND CLIFF SWALLOWS.

BY EDGAR A. MEARNS.

IN THE 'Bulletin of the Nuttall Ornithological Club,' Vol. III, No. 3, July, 1878, page 135, Doctor Spencer Trotter described a hybrid between *Hirundo erythrogaster* Boddaert and *Petrochelidon lunifrons* (Say). The specimen was taken at Linwood, Delaware County, Pennsylvania, May 22, 1878, by C. D. Wood. "Unfortunately he [Wood] did not carefully determine its sex by dissection, though he believed it to have been a male."

On June 14, 1893, at Fort Hancock, El Paso County, Texas, I found a pair of swallows which were mated, and had almost completed a nest attached to a rafter of an old building, in a situation too difficult for me to reach. As I recall it, the nest was similar to that of the Barn Swallow, having the entrance at the top. Both birds were shot. The male (No. 134,420, U. S. National Museum) was a typical Barn Swallow; but the female (No. 134,421, U. S. National Museum), which was about to lay eggs, was a hybrid between *Hirundo erythrogaster* and *Petrochelidon lunifrons*.¹ It may be described as follows: Length, 149 mm.; alar expanse, 296; wing, 107; tail, 59; culmen (chord), 8; tarsus, 12; middle toe with claw, 15.8.² The characters are, in general, intermediate between those of the two genera — *Hirundo* and *Petrochelidon* — and species. As regards the form of the bill and the form and

¹The resident Cliff Swallow of the Rio Grande Valley is *Petrochelidon lunifrons*, not *P. melanogaster*, which latter occurs on the Mexican boundary line to the westward, from the San Luis Mountains to Nogales (monuments 65 to 122 of the latest survey). See Proc. Biol. Soc. Washington, Vol. XIV, September 25, 1901, p. 177.

²Its mate, a typical male of *Hirundo erythrogaster*, measures: Length, 169; alar expanse, 308; wing, 114; tail, 82; culmen, 6.9; tarsus, 11; middle toe with claw, 16.2.

An adult female of *Petrochelidon lunifrons* (No. 163,687, U. S. National Museum), taken at Fort Clark, Kinney County, Texas, April 28, 1898, measures: Length, 145; alar expanse, 300; wing, 106; tail, 53; culmen, 7.7; tarsus, 14.5; middle toe with claw, 16.

position of the nostrils this is precisely the case. The wing is but slightly longer than that of the Cliff Swallow. The tail is forked, and of intermediate length. The feet are intermediate, but most resemble those of the Cliff Swallow. The colors of the iris, bill, and feet, were noted at the time of capture as indistinguishable from those of its mate—a Barn Swallow. In coloration, the wings and tail are intermediate between those of the two species, which are brown in the Cliff Swallow and blue in the Barn Swallow. The forehead is ferruginous, as in the Barn Swallow; but the sides of the head and neck, behind the eye, where blue in the Barn Swallow and ferruginous in the Cliff Swallow, are an intimate mixture of the two. On the back, the buffy-white edging of the feathers is apparent, but not so plainly indicated as in the Cliff Swallow (the whole upper surface, except the ferruginous frontal band, is uniform steel-blue in the Barn Swallow). The rump and upper tail-coverts differ from those of either species, although the pattern is that of the Cliff Swallow; the color instead of tawny-ochraceous is cream-buff, lightly and irregularly spotted with blue, the longest coverts being purplish brown. The under parts most closely resemble those of the Barn Swallow; chin and throat hazel, darker than the Barn Swallow and lighter than the Cliff Swallow, from which latter it differs in having the hazel color more extended posteriorly, and in lacking the black pectoral spot. The whole underparts, including the under tail-coverts, are washed with ferruginous, but less strongly so than in the Barn Swallow. The under wing-coverts are intermediate. Two outer rectrices are spotted with grayish white on the inner webs, these being immaculate in the Cliff Swallow, spotted in the Barn Swallow.

Auk, XIX, Jan., 1902, pp. 73, 74

Albinism and Melanism in North
American Birds. Ruthven D. ana.

*I have seen specimens of H. horreorum in pure
white dress.*

Bull. N. O. C. 1, April, 1876, p. 21

Descriptions of First Plumage of Cer-
tain North Am. Bbs. Wm. Brewster.

43. *Hirundo horreorum*.

First plumage: female. Fork of tail not deep; outer feathers project-
ing one-half inch beyond the inner ones. Remiges and rectrices brown;
upper parts, in general, glossed with dull steel-blue; feathers of rump
and upper tail-coverts edged with rusty; frontal band narrowed to a mere
line of pale fawn-color. Beneath similar to adult, but everywhere paler.
From a specimen in my collection taken at Rye Beach, N. H., August 21,
1872.

Bull. N. O. C. 3, April, 1878, p. 63.

ALBINO BARN SWALLOW. July 2, I had the good luck to
shoot an Albino Barn Swallow that was evidently not long
out of the nest, but still was in good plumage. It was a
creamy white on belly, the back of a lighter shade, and
contrary to most Albinos, did not have pink eyes. I need
not say I gladly welcomed it to my collection.—A. J. John-
son, Hydeville, Vt. O. & O. IX. Aug. 1884, p. 104

Notes on the Moulting of *Spizus pinus*
and of *Hirundo erythrogastra* -
[Reviewed in Auk, Jan. 1901, by Witmer Stone]

Mr. Stone and I do not quite agree about the Barn Swallow (*Hirundo erythrogastra*), for he speaks of an "apparent prenuptial moult," basing his opinion on a bird (Phila. Acad. Nat. Sci. No. 28576, September 1, Pennsylvania), which he considers an adult after the postnuptial moult, and therefore requiring a prenuptial moult to produce the attenuated lateral rectrices of the breeding bird. The specimen in question has been kindly loaned to me, and I am satisfied it is a young bird in fresh juvenal plumage, for the slight forking of the tail and the green tinge of the back with reddish-brown edgings on the rump, nape and wing-coverts are characteristic of a dozen other young birds in my own collection. The green tinge, by the way, is peculiar to the young of all our Swallows, and of other birds with iridescent feathers, like Crows and Blackbirds, in which adults are usually bluer or purpler than young birds. Here is a case where immaturity might be shown by softening the skin and examining the ossification of the skull.

Three other interesting Barn Swallows have been sent to me by Mr. Stone. Two of them have already been noticed in his valuable paper on moult, and I agree with him that two of them (Phila. Acad. Nat. Sci., No. 28574, August 7, Pennsylvania, and No. 28577, September 1, Pennsylvania), are adults just beginning the postnuptial moult, which, doubtless, would have been completed after they had reached winter quarters, or perhaps while on the journey thither. The same sort of feather renewal takes place among some of the Tyrannidæ, Laridæ, Limicolæ and others of strong flight, and the body feathers are very apt to precede in their growth the remiges and rectrices, although in the two specimens cited, the rectrices are already partly renewed. The third specimen (Phila. Acad. Nat. Sci., No. 15661, French Guiana), is unfortunately undated, but it is evidently passing from the juvenal plumage by what must be called a postjuvenal moult. The worn first primary, inner secondaries and a few of the rectrices, together with a green-tinged back, indicate a young bird. The crown now worn brown also indicates juvenal plumage, while new feathers are breaking from their sheaths, both on the head and throat. These birds all bear out my conclusion that adult Swallows moult earlier than young birds which undergo a complete postjuvenal moult, often in midwinter. It is, on the whole, expedient to speak of a postjuvenal moult and not of a prenuptial, even in those species which are late in assuming a first winter dress, which then becomes that of the first summer simply through wear. This sequence of plumages obtains largely both among the North American Hirundinidæ and Tyrannidæ, and I am glad of this opportunity of calling attention to it.

I would also correct here a slip of Mr. Stone's pen at page 118 of his review in 'The Auk,' where he has inadvertently credited the Cross bills with a "prenuptial" moult, meaning of course, the postnuptial.—

JONATHAN DWIGHT, JR., *New York City.*
Auk, XVIII, April, 1901, pp. 203-4.

Notes concerning certain birds of Long Island, N.Y.
by William C. Braisted, M.D.

Hirundo erythrogastra. An albino Barn Swallow was shot by the writer at Centre Moriches, L. I., Aug. 19, 1904. Hundreds of this species and *Tachycineta bicolor* were at this season passing westerly on their day-time migration and this white bird was seen approaching over the salt meadows, conspicuous from its color. It was supposed to be an albino before it came to bag but the species was not determined until then. The chin and throat and portions of the remiges margining the usual white spots on the tail are washed with buffy; elsewhere the bird is pure creamy white.

Auk, XXI, Apr., 1905, p. 169.

DESCRIPTION OF A HYBRID (*HIRUNDO HORREORI-LUNIFRONS*) BETWEEN TWO NORTH AMERICAN SWALLOWS.

BY SPENCER TROTTER.

THE bird from which the following description is taken was shot at Linwood, Delaware County, Pa., May 22, 1878, by Mr. C. D. Wood, whose attainments as an ornithological collector are well known. Unfortunately he did not carefully determine its sex by dissection, though he believed it to have been a male. My attention was first called to it by his informing me that he had shot a cross between the Barn and the Cliff Swallow; and from the following description it will be seen that the bird presents the more strongly marked features of both *Hirundo horreorum* and *Petrochelidon lunifrons*. This blended likeness stamps it as a *hybrid* between the two above-mentioned species. The specimen has been examined by several competent ornithologists, who all pronounce its hybrid nature as unquestionable. The bird is remarkable not only as being the result of a *mésalliance* between two different species, but between two different genera, and it curiously combines the characters of both in a most marked degree. I have therefore named the bird *Hirundo horreori-lunifrons*, this name suggesting the nature of the hybrid in question.

Description.—Bill similar to that of the Barn Swallow (*Hirundo erythrogastra* var. *horreorum*), but rather stouter. Nostrils opening laterally, partially overhung by membrane, though not so much so as in the above-named species. Tarsi about as long as middle toe without the claw, feathered at the upper end on the inside. Toes left as in *horreorum*; the lateral claws reach to base of middle. Tail forked for about *one fourth* of its length, with white spots on the rectrices, but not so strongly marked as in *horreorum*; and the outer feathers are not lengthened and linear as in that species. The wings, when folded, reach nearly to end of tail. Head and back steel-blue with a chestnut-brown frontlet, as in *horreorum*, the chestnut extending farther back on the head than in that species. Rump reddish-white, the color paler than in the Cliff Swallow (*Petrochelidon lunifrons*). Wings similar to those of *horreorum*. Throat and breast chestnut-brown, with a slight central black patch, as in *lunifrons*, and a pe toral band as in *horreorum*. Sides under the wings and under parts generally of a shade varying between that of *horreorum* and *lunifrons*. Crissum reddish-white, the longer feathers with a slight smoky tinge. Lores dusky; rictus slightly bristled. Cheeks steel-blue, as in *horreorum*, but with a slight tendency to chestnut, as in *lunifrons*. Dimensions (from the dried skin): length, 5.88; wing, 4.63; tail, 2.69.

Bull. N. O. C. 3, July, 1878, p. 135-136.

The Singing of Birds. E.P. Bicknell.

Hirundo erythrogastra. BARN SWALLOW.

An almost universal misconception regards the Swallows as a tribe of songless birds. But the Barn Swallow has as true claims to song as many species of long-established recognition as song-birds. Its song is a low chattering trill, suggestive of that of the Long-billed Marsh Wren, but often terminating with a clear, liquid note with an accent as of interrogation, not unlike one of the notes of the Canary. This song is wholly distinct from the quick, double-syllabled note which so constantly escapes the bird during flight; nor is it, as may be supposed, produced by the commingling of the notes of many individuals in a species highly gregarious. I have heard it repeated many times from single birds, often when they were perched alone on telegraph wires. It is also uttered during flight, and continues into August.

Auk, I, Oct., 1884. p. 325

1884

July

Abundant, breeding in every suitable barn. I have learned something new about them. When the nest is built on a sloping rafter there is almost invariably near it a crescent-shaped parapet built in the usual manner of mud pellets but without either finish or lining. These structures I have always taken to be merely the beginnings of nest abandoned for some reason or other. But to-day (July 21). I discovered that they are regularly occupied by the male while the female is sitting or feeding the young. It would require

BARN SWALLOW, (*Hirundo erythrogastra*). Abundant Summer resident. Arrives from April 25th to May 4th. Breeds, making its nest against rafters in barns and other outbuildings. Among our birds no species occupy a stronger place in my admiration than the Barn Swallow. Long before tastes which developed later had manifested an existence, the "Fork-tailed Swallow" was a well known object to my youthful eye. Later in life as I drove the mowing machine and hay tedder, scores of them were my companions, circling about me hour after hour, catching with an ease and precision that ever called forth my deepest admiration, the countless insects which the machine disturbed from their retreat in the grass. Another feature of this swallow which always pleased me was their promptness in the field upon such occasions. No waiting for them until the work was half completed, they were there at the start be it morning, noon, or evening, and often have they followed me until darkness closed around us. Once I saw a man set his dog upon a neighbor's hens that had gone upon his newly sown grain field. One was soon nearly stripped of her feathers, when almost instantly a colony of Barn Swallows which were repairing their previously occupied nests in an old barn one-fourth of a mile away, appeared on the scene and in a wonderfully short time carried the feathers to their nests.

C. O. Tracy, Taftsville, Vt.

O. & O. X. May. 1885. p. 71

SMITH, National Museum, Washington, D. C.

nest of the Barn Swallow
 something of a curiosity.
 and, Virginia, July 7, 1884,
 in the settlement. It was
 and was thickly lined with
 1/2 inches in diameter and
 eggs. The writer is wholly
 usual style of architecture
 nly no dearth of mud out
 proved type.—HUGH M.

Auk, 3, April, 1886. p. 278.

Auk, XIV, Jan., 1897, pp. 95-6.

Natural Breeding Haunts of the Barn Swallow (*Chelidon erythrogaster*).
—The Barn Swallow is such a familiar tenant of our barns and out-houses that it may not have occurred to many to wonder where they nested before man provided them with such resorts. During the summer of 1895, while visiting the headwaters of Lake Chelan, in Washington, I found the Swallows *at home*. The shores of the lake near its head are very precipitous, since the mountains rise here some 7,000 feet above the surface of the water. Along the shore line, in the side of the cliffs, which continue several hundred feet below the water, the waves have hol-

lowed out crannies and caves. In one of these latter, which penetrated the granite wall to a depth of some twenty feet, I found four or five Barn Swallows' nests, some containing young, and two, although it was so late in the season (July 9, 1895), contained eggs. Others were to be found in neighboring crannies outside the cave. Another visit paid to this spot on August 10 of this year (1896) discovered one nest still occupied, which contained four eggs. Although breeding thus in a perfectly primitive state there was no important difference observed in the birds' methods of construction. The nests were either affixed to the vertical walls of the cavern or else rested slightly on rocky knobs and projections. The feathery linings of the nests consisted of copious collections of the feathers of wild fowl, such as Ducks, Grouse, etc.

The only other place in Okanogan County where I recall having seen Barn Swallows was at Malott, some 60 miles distant, where the birds had adopted the manners of civilization and were breeding in a large barn.—
WILLIAM L. DAWSON, *Oberlin, Ohio.*

Auk, XV, April, 1898, p. 193.

Birds Nesting under Arc-light Hoods.

The Friends' Meeting House, corner of South Carolina and Pacific Avenues, has been used as a breeding place by a colony of Barn Swallows (*Chelidon erythrogastra*) for a number of years, building their nests on top of the caps of the pilasters around the outside of the building. While watching their movements from the veranda of a cottage on the opposite side of the street, I noticed a Swallow fly out from under an arc-light hood which stood above the sidewalk. From the frequent trips to and fro, the nest I thus discovered no doubt contained young.—
J. HARRIS REED, *Beverly, N. J.*

Hirundo erythrogastra

White's "Selbourne" contains
(in Chapter on the Swallows)
an account of the European
Chimney Swallows following
to secure our wide doors
to collect the insects which
they remove from our
just as our Swallows from
Ireland in places. White
correctly thinks that these
Swallows are not
nearly so common.

The Migration of the Swallows.—I have noticed for several years that before the young Swallows were capable of enduring a prolonged flight, old and young gathered together in one vast assembly and moved gradually southward, making short stages from farm to farm; at last (in 1884, on August 9), with a favorable north wind and a clear sky, they left the Island in a body, only a few stragglers remaining, just enough to remind us that summer was still with us.—FRANCIS BAIN, *North River, P. E. I.* **Auk, 2, April, 1885. p. 216.**

587. *Swallows in Boston.* By Carl Reddets and Leander Wetherell. *Ibid.*, No. 29, p. 222.—First seen in 1883 about August 4. **Science, Vol. II**

582. [Absence of] *Swallows in Boston.* By Carl Reddets. *Ibid.*, No. 26, p. 135. **Science, Vol. II**

A SWALLOW ROOST AT WATERVILLE, MAINE.

BY ABBY F. C. BATES.

NOT FAR from where a small stream, called the Messalonskee, joins the Kennebec River, one may see at evening from the middle of July to about the third week in September, an interesting sight in the bird line.

The willow trees along the banks of this stream, particularly a close row some five or six hundred feet in length, form the roosting place of vast numbers of Swallows. During the forenoon and early afternoon very few Swallows are to be seen in the sky,—indeed they are conspicuous by their absence,—but a little before sunset the birds begin to arrive in the vicinity, flying, sailing, chasing each other around in the upper air, everywhere within eye's reach. From north and south, east and west, in they

I ever saw them perform. Occasionally they drop down into the trees like pieces of paper, but oftener the final alighting is a combined movement, sometimes in the shape of an inverted cone,—usually in a grand sweep after their most elaborate evolution. Frequently they swoop out from the trees company after company, several times before the last settling, their wings not only making a tremendous whirring, but a perceptible movement of the air. Their chattering keeps up from half to three quarters of an hour after they settle in the trees and their dark little bodies against

¹ Just here let me say that having asked six men of reputed good judgment to give their individual ideas of the number of Swallows when this congregating season is at its height, the average of guesses (for such only could they be) brings the number about thirty thousand, the highest guess being one hundred thousand, the lowest, five thousand. Attempts have been made to photograph them, but at the time when they are best massed and sufficiently near for a photograph, the light is so dim that nothing whatever appears on the film.

Swallows going to roost.

Concord, Mass.

1887. I pushed out into midstream and ate my lunch there. The
Aug.15. sun was setting and the scene very peaceful and beautiful.
Nearly 200 Swallows (about 150 Barn and 50 White-bellies)
passed in the course of fifteen minutes straggling along in
the usual manner. I suspected at first that they were migrat-
ing as they were flying up river (due South) but a little
later when I reached the bend just below Ball's Hill I was
surprised to finding them dashing about in a close swarm now
high, now just over the meadow grass. I saw at once that they
were preparing to go to roost but for nearly twenty minutes
they gave no clear indication of the precise spot. During
this time they were whirling about in the most erratic manner,
rising to a height of 300 or 400 feet, then dashing down close
over the river and meadow, at times massed together like a
swarm of waders, at others spreading out more like Bobolinks
but always flying in a nearly direct course and never inclin-
ing from side to side in the usual way. Finally the whole
throng dashed into and through a cluster of young white maples
and black willows - trees 12 to 15 feet high - on the end of
the point around which the river bends. Dozens swished
through the leaves but not one, as far as I could see, actu-

Swallows going to roost.

Concord, Mass.

1887. ally settled. About 100 Red-wings had previously gone to
Aug.15. roost in this thicket and the sudden dash of the Swallows
(No.2). threw them into a panic. For a moment ^{the air} was black with birds
and their wings made a rushing like wind in the tree tops. The
Red-wings soon settled again and after a few high evolutions
the Swallows made another headlong dash at the thicket. This
time perhaps one quarter of them alighted and the remainder
soon joined them. For several minutes more they kept up a
continual fluttering among the leaves. I could see them
against the light in the west and noticed that they perched
on the maple leaves bending them down with their weight. A
small numbers settled in the willows. They made a curious
chattering for awhile like English Sparrows. It was nearly
dark before they were all settled and still, and dusky before
they alighted at all. After all was quiet I pushed my boat
noisily in among the trees and thrashed the branches with the
paddle, shouting at the same time but although most of the
Red-wings decamped in great alarm only three or four Swallows
could be dislodged.

Notes on Generic Names of Certain Swallows.—In the raid on nomenclature made a few years ago Dr. L. Stejneger seems to have been peculiarly unfortunate. I have not yet trailed him anywhere without finding that either he did not go far enough in the right direction, or else he went in the wrong direction. The A. O. U. is to be commiserated in unwittingly adopting sundry changes Dr. Stejneger proposed and sought to impose on nomenclature. For example, he undertook to upset the established names *Hirundo* and *Cotile* by substituting *Chelidon* for the former, and *Clivicola* for the latter, after Forster, 1817. It appears from Sharpe's introduction to the Monograph of *Hirundinidae*, p. xxxv, that *Hirundo* Linn. was characterized by Schæffer, Elem. Orn. 1774, with *H. rustica* as type. If Dr. Sharpe's method of determining the type of a genus be not at variance with A. O. U. canons, this operation of Schæffer's throws out Forster's later attempt to transpose *Hirundo* and *Chelidon*, and we may happily revert to the *status quo ante bellum*. Again, Dr. Sharpe, p. xlv, shows that *Riparia* Forster, 1817, has that sort of priority over *Clivicola* Forster, 1817, which results from previous pagination, and I believe we recognize that myth officially; if so, the name of the Bank Swallow becomes the tautonym *Riparia riparia*, or else *R. europæa*, or else *R. cinerea*. It is but justice to Dr. Stejneger to say that he was aware of this (Pr. Nat. Mus. V, 1882, p. 32), only he "preferred to accept the name *Clivicola*," though the reason for his preference is obviously a futile one by our rules. It is also due him to add, that he only "supposed" his generic synonymy of Swallows to be correct (*ibid.* p. 31). But neither supposition nor preference has any place in the A. O. U. Code. I can suppose a good many things that are not canonized in the code, and certainly prefer some things that are not canonized. For example, I "prefer" *Riparia* to *Clivicola*, and I "suppose" Dr. Stejneger wrong about *Hirundo*. The case thus raised by Dr. Sharpe should come up for consideration at the next meeting of the Union.—ELLIOTT COUES, Washington, D. C.

Reverial of the Sexual Passion in Birds
in Autumn. Wm Brewster, Cambridge.
Auk, XV, Apr., 1898, pp. 194-5.
~~Chelidon erythrogaster~~
See under *Retrochelidon lunifrons*.