



the  
university of  
connecticut  
libraries



598.29746/M551r

BOOK 598.29746.M551R c.1  
MERRIAM # REVIEW OF BIRDS OF  
CONNECTICUT



3 9153 00147464 4









A REVIEW

OF THE

BIRDS OF CONNECTICUT.

BY

C. HART MERRIAM.



NEW HAVEN :  
TUTTLE, MOREHOUSE & TAYLOR, PRINTERS.  
1877.



A REVIEW OF THE BIRDS OF CONNECTICUT, WITH REMARKS ON  
THEIR HABITS. BY C. HART MERRIAM.

Read June 20, 1877.

THE little State of Connecticut, forming, as it does, the southwestern corner of New England, and lying between the forty-first and forty-second parallels (exactly  $41^{\circ}$  to  $42^{\circ} 3' N.$ ), and extending, in an east and west direction, from the meridian  $71^{\circ} 55'$  to  $73^{\circ} 50'$  west longitude, contains an area of but 4,674 square miles. Nevertheless it is highly probable, so favorably is it situated, that no equal area in the country can boast a greater number of species of birds than may be found within its limits. Indeed, nearly half the total number of species in the United States have already been detected inside its borders, and it is certain that future investigation will decidedly increase this number.

Zoologically speaking, Connecticut belongs to that division of country known as the Alleghanian Fauna. Still, as Mr. Purdie has said,\* its southern border has an evident tinge of the Carolinian, and I may add that this "tinge" runs up the valley of the Connecticut River, extending completely through the State, and even into Massachusetts.

Some years ago Prof. A. E. Verrill stated that whenever such birds as the Crossbills, the Spruce Partridge and the Canada Jay "breed abundantly in any region, it may safely be considered as belonging to the Canadian Fauna."† With equal truth it may be said that whenever such birds as the Worm-eating, Blue-winged Yellow, and Hooded Warblers, together with the Large-billed Water Thrush and Yellow breasted Chat, *breed regularly and in considerable numbers*, the region may safely be included in the Carolinian Fauna. That these species are so found in southern Connecticut—notably about the mouth of the Connecticut River—is now too well known to need further confirmation.

The dividing lines between the several faunæ are always more or less irregular, and never very sharply defined. The distribution

\* Am. Nat., vol. vii, No. 11, p. 693, Nov., 1873.

† Proceed. Essex Inst., vol. iii, p. 138. 1863.

of those species by which the different faunæ are distinguished, is unquestionably governed, in great measure (as shown by Professor Verrill),\* by the temperature *during the breeding season*, of the regions in which they commonly breed. Hence the dividing lines between faunæ do not follow, when placed on the chart, such smooth, regular curves as serve to represent the isothermal lines (which show the average temperature for the entire year), but more nearly coincide with lines drawn to indicate the average temperature during the months of April, May, and June,—the period in which the great majority of singing birds breed. It has been stated by Professor Verrill that “a line drawn upon the map of Eastern North America representing the mean temperature of 50° F., during these three months, will coincide with the southern boundary of the Canadian Fauna, as previously determined from the examination of the birds breeding in that sub-division. Another line representing the temperature of 65° will represent the southern boundary of the Alleghanian Fauna,”\* as distinguished from the Carolinian.

The fact that, during the thirty-four years that have elapsed since the publication of Linsley's “*Catalogue of the Birds of Connecticut*,” no enumeration of the birds of this State has appeared, is sufficient excuse for the present attempt. Moreover, the Connecticut Academy resolved, some time since, to publish a series of papers on the fauna of this State, and Professor Verrill did me the honor to request that I should prepare, as the first of this series, “A Review of the Birds of Connecticut,” which I have done as well as the limited time at my disposal would permit.

In the year 1861, Dr. William Wood, of East Windsor Hill, Conn., published, in the Hartford Times, a series of twenty-one admirable and most interesting articles on our “Birds of Prey,” and it is much to be regretted that he did not, in like manner, take up the remaining groups. A few brief notices of the occurrence of some of the rarer species within our limits have, from time to time, appeared in the American Naturalist and Bulletin of the Nuttall Ornithological Club, but nothing like a systematic list of the birds of the State has been attempted.

My object has not been to give the largest possible number of species, but to represent faithfully our true knowledge of the Avifauna of Connecticut. An acknowledged fault with most local lists is that their authors include, not only those species which have actually been detected, but also those which, from their occurrence

---

\* Am. Jour. Sci. and Arts, vol. xli, p. 249, (Second Series.) 1866.

in neighboring districts, may, at some future time, be looked for with a degree of success directly proportionate to the ornitho-distributional knowledge of the writer. In the preparation of the following list I have scrupulously examined the evidence on which each species stands, and have rigorously excluded all those whose occurrence rests on insufficient proof.

In a note, under each genus or family, will be found those species which should, and probably do, occur, but which, owing to the small number of collectors in this State, have not as yet been detected. Information has been solicited from all, so far as I have been able to ascertain, who are familiar with our birds—whether active collectors or not—and I take this means of expressing my thanks and gratitude for the many favors received, believing, at the same time, that they should not be regarded as mere personal favors, but as real contributions to science, for in preparing this list I act but as the exponent of the present state of our knowledge concerning the birds of Connecticut. I am indebted to my friends, Mr. George Bird Grinnell, Mr. A. J. Dayan, Prof. Wm. D. Whitney, Dr. Wm. H. Hotchkiss, Mr. Thomas B. Osborne, Mr. E. B. Wilson, Dr. F. W. Hall, Walter R. Nichols, the Stadtmüller Brothers, Robert F. Morris, and Fred. Sumner Smith, for information relating to species found in the immediate vicinity of New Haven; to Capt. O. N. Brooks, of Faulkner's Island Light, for a list of the water birds of that portion of the Sound; to Messrs. W. W. Coe and John H. Sage, of Portland, Erwin L. Shores, of Suffield, and J. N. Clark, of Saybrook, Conn., for notes on the species observed in the Connecticut Valley; to Dr. William Wood, of East Windsor Hill, Conn., for valuable information on the time of occurrence and relative abundance of many of the rarer species—especially in regard to the Hawks and Owls; to Prof. G. Brown Goode, of Middletown, Conn., not only for throwing open for my inspection the cases of birds contained in the Museum of Wesleyan University, but also for laboriously searching the Museum Catalogue for records of the capture of the rarer species within the State; to Josiah G. Ely, Esq., for notes on the rarer species found about Lyme, New London County, Conn.; and to Drs. D. Crary and D. Crary, Jr., of Hartford, Conn., for information concerning the less common birds of that vicinity. To each of these gentlemen due credit is given under the species to which their notes pertain. I am also under obligations to Mr. Robert Ridgway, of the Smithsonian Institution, Dr. Thomas M. Brewer, of Boston, and Mr. William Brewster, of Cambridge, for the identification of birds and eggs, and for other information.

My thanks are especially due to W. W. Coe, John H. Sage, Erwin I. Shores, Thomas B. Osborne, Capt. O. N. Brooks, and the Stadtmüller Brothers, for placing their manuscript notes at my disposal; also, to Professors A. E. Verrill, Sidney I. Smith, and Franklin B. Dexter, for the use of books not in the College Library; and to Dr. William H. Hotchkiss for aid in the preparation of the special lists appended to this paper, as well as for much kindly assistance rendered from time to time during the progress of the work.

Numerous references have been made to the writings of others, and I hold myself responsible for all dates and statements of any kind, where the contrary is not expressly stated. Neither have quotations been omitted, when they seemed desirable, either for the value of the facts they contain, or for their antiquity; and, as a rule, I have taken pains to refer to the older and less accessible works, rather than to those with which we are all familiar.

Although Ornithology, as a science, is, in this country, of comparatively recent date, still that the birds of New England early attracted the attention of our forefathers is evident from their writings. In the year 1616, Capt. John Smith said that there were, in New England, "Eagles, Gripes, diuers sorts of Haukes, Cranes, Geese, Brants, Cormorants, Ducks, Sheldrakes, Teale, Meawes, Guls, Turkeys, Diue-doppers, and many other sorts, whose names I knowe not."\* And a few years later (1622) one William Hilton writes that the land "*affords beasts of diuers sorts, and great flocks of Turkeys, Quailles Pigeons and Patriges: many great lakes abounding with fish, fowls, Beuers and Otters. The sea affords us as great plenty of all excellent sorts of sea-fish, as the riuers and Iles doth varietie of wild fowle of most vseful sorts.*"† And there are numerous others of a like nature, some of which have been reproduced under the species to which they refer.

It is worthy of note that many birds once common along the coast, and some throughout the greater part of New England, are now either extremely rare or not to be met with at all within its limits, while a few species have unquestionably increased in numbers since the country has become settled. Among the former class may be mentioned the Great Auk (*Alca impennis*), the Crane (*Grus Canadensis*, and perhaps *G. Americana* also), the Swan (*Cygnus Americanus*, and perhaps *C. buccinator*), the Wild Turkey (*Meleagris gallopavo*), the Pinnated Grouse or Prairie Chicken (*Cupidonia cupido*),

\* A Description of New England, by Capt. John Smith. p. 16. 1616.

† New England's Trials. p. 14. 1622.

the Swallow-tailed Kite (*Nauclerus forficatus*), the Raven (*Corvus corax*) now common only in northern New England, the Mocking-bird (*Mimus polyglottus*), and many others. That these birds were common here two or three hundred years ago is clear from the numerous references to them in the writings of the time. And during this period many others have greatly decreased in numbers—such as the Pigeon (*Ectopistes migratoria*), Pileated Woodpecker (*Hylotomus pileatus*), black-birds, water fowl, and waders of all descriptions.\* The disappearance of some of these birds is readily accounted for by the advance of civilization with its concomitant evils—destruction of forests, increased use of fire arms, etc.—but in other cases the cause is less easily explained.

Few people, living away from the coast, have any idea that hundreds of thousands of birds are killed each year, during migrations, by flying against lighthouse towers. Capt. O. N. Brooks, of Faulkner's Island Light, tells me that between two and three hundred dead birds were picked up at the foot of the tower on the morning of May 16th, 1877, and that at the same time thousands of living ones stopped at the Island, devouring all the tender plants and newly sown seeds in his garden. During the same night about three hundred birds killed themselves against the light at the entrance of New Haven Bay, and the daily papers stated that over seven hundred were picked up on the decks of one of the New York steamers. When we take into consideration the number of light-houses and steamships along our whole coast it becomes clear that the number of birds that perish annually by this means is simply immense. Nearly all our common, and many rare, migrants are found among the dead, but the Maryland Yellow-throats (*Geothlypis trichas*) greatly predominate, constituting full one third of the total number examined. It is lamentable that this wholesale slaughter of our song-birds seems to be unavoidable.

The nomenclature and arrangement of species adopted in the present paper is that given in Coles' "Key to North American Birds," with such corrections as have since appeared in his "Birds of the Northwest" and elsewhere.

---

\* See also an interesting article by J. A. Allen in Bull. Nutt. Ornith. Club, vol. i, No. 3. Sept. 1876.

A. *General List, giving times of occurrence and relative abundance of the species; together with notes on the habits and distribution of some of the less common forms.*

### Family, TURDIDÆ.

#### 1. *Turdus migratorius* Linné. Robin.

An abundant summer resident; breeds abundantly, and several times during the season. A few winter. The summer residents arrive during the middle and latter part of February (Feb. 18, 1876; Feb. 27, 1875), and remain in considerable numbers till near the close of November.

#### 2. *Turdus mustelinus* Gmelin. Wood Thrush.

A common summer resident; breeds. Arrives about May 3d (common before the 10th), remaining till October. Mr. John H. Sage, of Portland, Conn., informs me that he and Mr. J. N. Clark, and also Mr. W. W. Coe, have found its eggs "covered with fine black specks." Mr. Fred. Sumner Smith, of this city, has recently shown me a large egg of this species which is marked with a few small, brownish-red spots. On sending the egg to Dr. Brewer, I received the following: "The spots I never noticed before, but any egg, always excepting a woodpecker's, is liable to be marked by minute effusions of colored lymph of the parent, in its exclusion." Mr. Smith tells me that the nest, which contained these speckled eggs, was placed on a railway bridge, and within *six inches* of the rail. A number of trains pass daily over this bridge.

#### 3. *Turdus Pallasi* Cabanis. Hermit Thrush.

Common during its migrations, particularly so in the fall. Arrives from the South before the middle of April (April 7, 1877, Coe; April 6, 1875, Sage; April 13, 1874, Sage; April 14, 1876, Osborne; April 16, 1877, April 19, 1875), remaining till early in May; on their return are with us from early in October till the latter part of November (Nov. 14, 18, 20, 1875). The woods abound with them during the middle and latter part of October.

#### 4. *Turdus Swainsoni* Cabanis. Olive-backed Thrush.

Common during its migrations, but never so abundant as the last. It is met with in spring from May 10th to 26th, and in autumn from

Sept. 4th (1874, Hall) to Oct. 13th. In the fall it is not uncommonly found in flocks of a dozen or fifteen in low swampy woods where there is an abundance of undergrowth.

4a. *Turdus Swainsoni*, var. *Aliciaë* (Baird) Coues. Gray-checked Thrush.

Occurs, during migrations, with the foregoing, and is more common in the vicinity of New Haven—judging from the proportionate number of skins in private collections about here. Near Portland, Conn., on the contrary, the true *Swainsoni* type seems to predominate—as shown by specimens in the cabinets of W. W. Coe and John H. Sage.

5. *Turdus fuscescens* Stephens. Wilson's Thrush.

A summer resident; breeds. Arrives early in May (May 8). Common in the immediate vicinity of New Haven, especially during the spring migrations.

6. *Mimus polyglottus* (Linné) Boie. Mocking-bird.

A rare summer visitant; used to breed here and may occasionally\* do so now. Mr. Geo. Bird Grinnell has taken it near Milford, Conn. Mr. Erwin I. Shores writes me, on the authority of Milton Lester, that it has been killed at Suffield, Conn. Mr. J. N. Clark thinks that it bred pretty regularly at Saybrook, Conn., many years ago; and I am informed by Mr. Osborne that he saw one above the Whitney Lakes, near New Haven, May 30th, 1877. Also taken late in the fall of 1874, by Mr. William Brewster, near Concord, Mass.† “Stratford and New Haven,” Linsley.

There can be little doubt but that Mocking-birds were once common in Connecticut, Rhode Island, and Massachusetts, if not still farther north. In an appendix to the Mass. Agricultural Report for 1863, Samuels gives it as a “rare summer visitant,” stating that it “occasionally breeds;” and in 1864 Allen says that they “have been known to breed in Springfield several times within five years, and in 1860 two pairs nested here. June 20th, 1860, I found a nest containing three freshly laid eggs. . . . Locality, a sandy field growing up to pitch pines, in one of which the nest was placed, about three feet from the ground.”‡

\* A Catalogue of the Birds of Connecticut, arranged according to their natural families; by Rev. James H. Linsley, published in Am. Jour. of Sci. and Arts, vol. xlv, No. 2, p. 255. April, 1843.

† Rod and Gun, vol. v, No. 24, p. 370, Mar. 13, 1875.

‡ Catalogue of the Birds found at Springfield, Mass., by J. A. Allen. pp. 67-8. 1864.

7. *Mimus Carolinensis* (Linné) Gray. Cat-bird.

An abundant summer resident, arriving early in May (May 4, 1877, Portland; May 5, 1874, Sage; May 6, 1876, C. H. M., and 6, 1877, E. B. Wilson), and remaining till November (Nov. 4, 1874 and 1875); breeds.

8. *Harporhynchus rufus* (Linné) Cabanis. Brown Thrush; "Thrasher."

A common summer resident; breeds. Arrives during the last of April or first of May (April 30, 1876, Osborne; May 1, 1877) departing early in October (Oct. 2).

## Family, SAXICOLIDÆ.

9. *Sialia sialis* (Linné) Haldeman. Common Bluebird.

Resident; abundant during summer; breeds in holes in trees and posts, etc. They arrive early in February (Feb. 8, 1876), remaining till about the middle of November (Nov. 13, 1876). Have found it singing as early as March 5th. Though generally evenly distributed and everywhere a common species, Mr. Shores "could not find it in 1872" about Snfield, Conn.\* A few small flocks frequently winter in secluded spots.

## Family, SYLVIIDÆ.

10. *Regulus calendula* (Linné) Licht. Ruby-crowned Kinglet.

Common during its migrations. Arrives about the middle of April (April 11, 1875, Sage); remaining till the middle of May (16, Osborne). Have taken it in the fall from Oct. 13th to Nov. 24th.

11. *Regulus satrapa* Lichtenstein. Golden-crested Kinglet.

A winter resident; have seen it at repeated intervals from Oct. 13th till spring (May). Commonly found, with the preceding, associated with small flocks of chickadees (*Parus atricapillus*), and frequently accompanied by a few nuthatches of both species (*Sitta Carolinensis* and *S. Canadensis*).

12. *Polioptila cærulea* (Linné) Selater. Blue-gray Gnatcatcher.

A rare summer visitant. "Stratford," Linsley. "Two were shot at Wauregan (Windham County), Conn., by Mr. C. M. Carpenter,—a male in 1874 and a female in 1876. Three or four were seen by me

\* MS. notes of Erwin I. Shores, Esq.

at Providence, R. I., May 23d, 1875.”\* Mr. Jencks writes me that the Connecticut record is a mistake, as all the specimens were taken near Providence, R. I.

Mr. William Brewster thus speaks of their habits and appearance in the south: “When seen one hundred feet or more above the earth they remind one more of insects than of birds, so active, and so very frail and slender do they seem. In motions, they bear, perhaps, a greater resemblance to the Redstart (*Setophaga ruticilla*) than to any other bird, like him launching out frequently after insects and alighting with spread tail and drooping wings. They have withal an impertinent, quizzical air, savoring strongly of Cat-bird ways; the song is indeed quite that of the latter bird, but in miniature (if I may apply such an expression to sound), a quaint mocking little strain, continued half a minute or more at a time, and full of mewings and harsh chatters, with an occasional full round note, but altogether so feeble as scarcely to be audible at twenty yards’ distance. The note used by both sexes is a harsh but rather faint lisp.”†

#### Family, PARIDÆ.

#### 13. *Lophophanes bicolor* (Linné) Bonaparte. Tufted Titmouse.

A rare visitor from the south. “New Haven,” Linsley. Josiah G. Ely, Esq., writes me from Lyme, New London Co., Conn., that he shot a Tufted Titmouse, Feb. 27th, 1872, in that vicinity (the ground being covered to a considerable depth with snow), and saw another in Jan., 1874. They were found flitting about among dense hemlocks in a very wild portion of country. It has also been taken near Hartford, Conn., by Dr. D. Crary, but must be regarded as accidental, though a common resident in northern New Jersey (Elizabeth, 1871-72). Also breeds on Long Island “seeking retirement in the lonely part of the woods among the heavy timber.”‡ It has been found as far north as New Hampshire.§

#### 14. *Parus atricapillus* Linné. Black-capped Chickadee.

A common resident; breeds in holes in trees. Gregarious except during the breeding season.

\* Mr. Jencks to H. A. Purdie, see Bulletin of the Nuttall Ornithological Club, vol. ii, pp. 20 and 21. Jan. 1877.

† Annals Lyceum Nat. Hist. N. Y., vol. xi, p. 132, June, 1875.

‡ Birds of Long Island, J. P. Giraud, Jr. p. 78. 1844.

§ Belknap's History of New Hampshire, vol. iii, p. 173. 1792.

15. *Parus Hudsonicus* Forster. Hudsonian Chickadee.

A rare accidental visitor from the north. In the July (1876) number of the Bulletin Nuttall Ornith. Club, I called attention to the first instance of the capture of this northern chickadee in Connecticut: "On Nov. 13, 1875, Mr. Robert Morris, while shooting in a wooded ravine a few miles from town [New Haven], killed a female Hudsonian Titmouse (*Parus Hudsonicus*). The specimen is now in the collection of Mr. Thomas Osborne of this city." Its occurrence so far south must be regarded as purely accidental. Mr. Wm. Brewster took a specimen at Concord, Mass., Oct. 30, 1870.\* This was supposed to be the most southern, and only Massachusetts, record, but as long ago as 1839, Peabody tells us that it "has been found by S. Eliot Greene, Esq., near his house in Brookline."†

## Family, SITTIDÆ.

16. *Sitta Carolinensis* (Gmelin) Latham. White-bellied Nuthatch.

Resident; breeds. Not particularly abundant immediately about New Haven, especially in summer. Its nest, however, has been taken within city limits by the Stadtmüller Brothers.

17. *Sitta Canadensis* Linné. Red-bellied Nuthatch.

A tolerably common winter resident, arriving about the middle of October (Oct. 13, 1875, abundant), and remaining till after the middle of April (April 19, 1876, Osborne).

## Family, CERTHIIDÆ.

18. *Certhia familiaris* Linné. Brown Creeper.

A rather common resident; breeds. Particularly abundant in winter, when it may frequently be seen running about on the elms in the heart of the city.

## Family, TROGLODYTIDÆ.

19. *Troglodytes ædon* Vieillot. House Wren.

A summer resident; breeds. Not abundant. Arrives late in April or early in May (Apr. 27, 1869, Hartford; 27, 1877, Portland; May

\* Am. Nat., vol. vi, No. 5. p. 306. May, 1872.

† A Report on the Ornithology of Massachusetts, by Wm. B. O. Peabody. p. 402. 1839.

2, 1863; 3, 1876; 4, 1861, 1873, all Portland, Conn., Jno. H. Sage), remaining till late in October (Oct. 26 and 30, 1875).

**20. *Anorthura troglodytes*, var. *hyemalis* (Vieill.) Cones. Winter Wren.**

A winter resident; rather common during migrations. Have seen it early in October (Oct. 2d), and secured a specimen on the 24th of November, 1875. Mr. Grinnell has taken it every month during winter.

**21. *Telmatodytes palustris* (Wilson) Baird. Long-billed Marsh Wren.**

A common summer resident; breeds abundantly in the brackish water marshes bordering the Quinnipiac river, near New Haven. Mr. A. J. Dayan and myself found dozens of completed nests, a few of which contained from 1 to 5 eggs each, on the 7th of June, 1876. Also breeds in suitable fresh water marshes throughout the State.

**22. *Cistothorus stellaris* (Licht.) Cabanis. Short-billed Marsh Wren.**

A rather rare summer resident; breeding in suitable localities along our southern border and in the Connecticut Valley. "New Haven," Linsley. Dr. Wood tells me that it is not common about Hartford, Conn.; and Mr. Erwin I. Shores writes me that it breeds in a marsh near Southwick (or Congannick) Ponds, in the town of Suffield, Hartford Co., Conn. (close to the Massachusetts border). Mr. J. G. Ely, of Lyme, Conn., writes me that the Short-billed Marsh Wren breeds abundantly in that vicinity.

NOTE.—The Great Carolina Wren, *Thryothorus Ludovicianus* (Latham) Bonap., has been known to breed in Massachusetts\* and on Long Island, and doubtless occurs, as a rare summer resident from the South, in the Connecticut Valley, and along our southern border.

Family, ALAUDIDÆ.

**23. *Eremophila alpestris* (Forst.) Boie. Horned Lark.**

A winter resident, occurring along the shore, and also in barren, sandy, tracts, throughout the State. Mr. Dayan, Mr. Osborne, Mr. Grinnell, and myself, have seen it here in fall (Nov. 18, 1874, C. H. M.) and winter, and Mr. W. W. Coe has found it at Portland, Conn., as late as March 26, (1875).

\* Bull. Nutt. Ornith. Club, vol. i, No. 3, p. 76. Sept. 1876.

## Family, MOTACILLIDÆ.

24. *Anthus Ludovicianus* (Gmelin) Licht. Titlark.

Common along the coast during migrations. Have taken it as late as Nov. 14. It passes north in the month of May (Dr. Wood). Dr. Brewer says that he has "found it, sometimes in large flocks, in open country near the coast, in Massachusetts, in midwinter."\*

## Family, SYLVICOLIDÆ.

25. *Mniotilta varia* (Linné) Vieillot. Black-and-white Creeper.

A summer resident; breeds. Particularly abundant during migrations. Arrives late in April or early in May (April 30, 1877, May 2, 1876), remaining till October (Oct. 2). Mr. J. H. Sage writes that, in company with Mr. J. N. Clark, he took a nest containing five eggs of this species, at Saybrook, Conn., May 30, 1877. I shot it at New Haven on June 23, and have seen several others during the breeding season. Mr. Sage also took another nest containing five eggs ("young well developed"), at Portland, Conn., June 12, 1875.

26. *Parula Americana* (Linné) Bonap. Blue Yellow-backed Warbler.

A summer resident; breeds. One of our commonest migrants. Arrives early in May (May 2d, Osborne). In the fall it is very abundant during the middle and latter part of September, and I have taken it as late as Oct. 13th. Mr. W. W. Coe showed me a number of their beautiful hanging nests, composed entirely of *Usnea*, which he had found about Portland, Conn. It has also been found breeding near New Haven (Maltby Park—Stadt Müller Brothers).

27. *Helmitherus vermivorus* (Gmelin) Bonap. Worm-eating Warbler.

A rare summer resident; breeds. As long ago as the year 1843, Dr. J. D. Whelpley observed this species at New Haven (Linsley), and it has since been taken in this vicinity by several collectors. In the "Bull. Nutt. Ornith. Club," (vol. ii, No. 1, Jan., 1877, p. 21), Mr. H. A. Purdie states that "Mr. Shores shot a male at Suffield (Hartford County), Conn., August 22, 1874. This is, I think, its most northerly record in the Atlantic States yet noted." Also, in the American Naturalist for Nov., 1873 (vol. vii, No. 2, p. 692), the same author remarks that Mr. J. N. Clark, of Saybrook, Conn., writes him that he has taken "in the nesting season, *Helmitherus vermivorus*,

\* Bull. Nutt. Ornith. Club, vol. i, No. 4, p. 92. Nov. 1876.

but as yet has failed to find the nest." Mr. Clark tells me he has seen as many as five individuals in a single day. Mr. Thomas Osborne, of New Haven, has a mounted specimen in his cabinet, procured May 17, 1875. Two or three others specimens were shot near here in May, 1875, and Mr. George Bird Grinnell tells me that he has known of the capture of several in this vicinity.

So little is really known concerning the habits of this rare warbler, that I take great pleasure in quoting the following interesting account of it from the observations of my friend, Mr. William Brewster, of Cambridge, "On the Birds of Ritchie County, West Virginia." Mr. Brewster writes that it is "most partial to the retired thickets in the woods, along water courses, and is seldom or never found in the high open groves. They keep much on the ground, and *walk* about rather slowly, searching for food among the dried leaves. In general appearance they are quite unique, and I rarely failed to identify one with an instant's glance, so very peculiar are all their attitudes and motions. The tail is habitually carried at an elevation considerably above the line of the back, which gives them quite a smart, jaunty, air, and if the dorsal aspect be exposed, in a clear light, the peculiar marking of the crown is quite conspicuous. Seen as they usually are, however, dimly flitting ahead through the gloom and shadow of the thickets, the impression received is that of a dark little bird which vanishes unaccountably before your very eyes, leaving you quite uncertain where to look for it next: indeed, I hardly know a more difficult bird to procure, for the slightest noise sends it darting off through the woods at once. Occasionally you will come upon one winding around the trunk of some tree, exactly in the manner of *Mniotilta varia*, running out along the branches with nimble motion, peering alternately under the bark on either side, and anon returning to the main stem, perhaps the next instant, to hop back to the ground again. On such occasions they rarely ascend to the height of more than eight or ten feet. The males are very quarrelsome, chasing one another through the woods with loud, sharp, chirpings, careering with almost inconceivable velocity up among the tops of the highest oaks, or darting among the thickets with interminable doublings until the pursuer, growing tired of the chase, alights on some low twig or mossy log, and, in token of his victory, utters a warble so feeble that you must be very near to catch it at all, a sound like that produced by striking two pebbles very quickly and gently together, or the song of *Spizella socialis* heard at a distance, and altogether a very indifferent performance."\*

---

\* Annals Lyceum Nat. Hist. N. Y., vol. xi, pp. 134-5. June, 1875.

28. *Helminthophaga pinus* (Linné) Baird. Blue-winged Yellow Warbler.

A summer resident in southern Connecticut and in the Connecticut Valley; breeds. Not common at New Haven. Mr. L. C. Bragg took a female May 12, and I captured a male on the 24th, 1876. Mr. J. N. Clark finds it breeding regularly, and in considerable numbers, at Saybrook, Conn.\* Mr. W. R. Nichols shot one at Branford, Conn., May 12th, 1877. On the 23d of June last (1877) while collecting with Mr. Wm. H. Taylor, in a piece of woods within a mile of the city of New Haven, I succeeded in shooting a fine adult male of this species, which Prof. Wm. D. Whitney was kind enough to mount for the collection of New England birds now on exhibition in the Peabody Museum of Yale College. The bird kept flitting about so actively in the dense undergrowth that it was with difficulty secured. It unquestionably had a nest in the immediate vicinity.

29. *Helminthophaga chrysoptera* (Linné) Cabanis. Blue Golden-winged Warbler.

A rather rare summer resident; breeds in the northern part of the State. Mr. Walter R. Nichols shot one near New Haven August, 24, 1876, and Mr. Osborne tells me that he saw one in May, 1875, killed by a friend of his. I have not yet met with it. The finest specimens of this beautiful warbler that I have ever seen are in the cabinets of Mr. Coe and Mr. Sage, of Portland, Conn. They were taken in that vicinity. Mr. Sage informs me that he has seen it from May 11th, (May 11 and 27, 1876) to the 30th, (May, 30, 1877, Saybrook). Mr. J. N. Clark, of Saybrook, Conn., tells me that he has seen but one specimen there. Mr. Erwin I. Shores writes me from Suffield, Conn.: "Not common; breeds. On July 7th, 1876, I obtained a female and three young just able to fly. Have taken it at two other times." Dr. Crary has taken it near Hartford.

30. *Helminthophaga ruficapilla* (Wilson) Baird. Nashville Warbler.

A summer resident; abundant spring and autumn migrant. Arrives early in May. Breeds sparingly throughout the State.

31. *Helminthophaga peregrina* (Wilson) Cabanis. Tennessee Warbler.

A rather rare migrant. Two specimens were taken near New Haven during the latter part of May, 1876 (May 24, Osborne; May 26, Bragg). Mr. Erwin I. Shores shot one near Suffield, Conn., June 8,

---

\* Am. Nat., vol. vii, No. II, p. 692. Nov. 1873.

1875, which is so late one might almost suspect it of breeding within our limits. Mr. J. N. Clark, of Saybrook, has a specimen in his cabinet in unusually high plumage; it is a rare bird there. I am told by Mr. Clark and others that its note is peculiarly loud and clear, serving to distinguish the species when some distance away.

NOTE.—The Orange-crowned Warbler, *Helminthophaga eclata* (Say) Baird, has been taken both in Massachusetts\* and Rhode Island,† and also in New York State (by Mr. E. P. Bicknell, and but a few miles from our western border)‡ and unquestionably occurs within our limits.

32. *Dendrœca æstiva* (Gmelin) Baird. Yellow Warbler.

A common summer resident; breeds. Arrives about the first of May (May 7, Osborne; May 4, 1874, and May 5, 1873, Portland, Conn., Sage).

33. *Dendrœca virens* (Gmelin) Baird. Black-throated Green Warbler.

A summer resident; very abundant during its migrations. Arrives about May 1st, remaining through the month (May 23); have taken them in the fall, from September 15th to October 18th. Mr. W. W. Coe tells me that they remain through the entire summer in dense swamps about Portland, Conn., and doubtless breed, though he has not yet taken the nest. I am also informed by Mr. J. N. Clark that a few breed at Saybrook, where he has found two nests after the young had hatched. I am surprised at this, for it is the last place in the State where they *ought, theoretically*, to breed.

34. *Dendrœca cærulescens* (Linné) Baird. Black-throated Blue Warbler.

A summer resident. Common spring migrant; Mr. Osborne and myself have also taken it here in autumn (October 7, 12, and 19). Arrives about May 10th; breeds sparingly in the northeastern part of the State (Eastford), where two nests were found in June (8 and 13, 1874,) by the Rev. C. M. Jones. §

35. *Dendrœca cærulea* (Wilson) Baird. Cærulean Warbler.

A very rare summer visitant from the Southern and Central States. This rare warbler was observed at Stratford, Conn., by Linsley, as

\* Bull. Nutt. Ornithol. Club, vol. i, No. 4, p. 95. Nov. 1876.

† Ibid, vol. ii, No. 1, p. 21. Jan. 1877.

‡ In letter from E. P. Bicknell.

§ Bull. Nutt. Ornith. Club, vol. i, No. 1, p. 11. April, 1876.

long ago as April, 1841. H. A. Purdie says, "a male was obtained by Mr. Shores at Suffield, June 12, 1875."\* Mr. Shores writes me that he "obtained it purely by accident while trying to shoot a Warbling Vireo (*Vireo gilvus*)." So far as I am aware these two are the only instances of its capture within the State.

36. *Dendroæca coronata* (Linné) Gray. Yellow-rumped Warbler.

Very common during migrations. Have taken it as early as April 18th (1875). In the fall it may be seen from the last of September till the first of November, some remaining still later (Nov. 15), and Mr. Grinnell informs me that he has taken it every month during the entire winter.

37. *Dendroæca Blackburniæ* (Gmelin) Baird. Blackburnian Warbler.

Common during the migrations, being particularly abundant in spring. A few sometimes breed. Arrives about May 9th, remaining till the last of the month (May 27). Also occurs from the middle of September till early in October (Oct. 3). In the spring great numbers of them frequent the elms in the heart of the town. Mr. Josiah G. Ely writes me, from Lyme, Conn., that he "shot a female Blackburnian Warbler in July, 1873, with its belly minus of feathers. It evidently had a nest somewhere in that vicinity."

38. *Dendroæca striata* (Forster) Baird. Black-poll Warbler.

One of our most abundant migrants. Arrives from the south about May 13th, remaining till the last of the month (May 30; June 2, 1872, Portland, Conn., Sage). In the autumn they are quite numerous by Sept. 10th, and their number does not decrease much till after the middle of October—some staying till the last of the month (Oct. 26).

39. *Dendroæca castanea* (Wilson) Baird. Bay-breasted Warbler.

Sometimes quite abundant during the spring migration (1876, for example); at other times extremely rare, if occurring at all. Arrives about the middle of May, remaining till the last of the month. Mr. Osborne has seen it in fall (Sept. 30 and Oct. 17, 1876). Mr. Shores gives it as "rare," never having taken "but two specimens," at Suffield, Conn.†

\* Bull. Nutt. Ornith. Club, vol. ii, No. 1, p. 21. January, 1877.

† MS. notes of Erwin I. Shores.

40. *Dendrœca Pennsylvanica* (Linné) Baird. Chestnut-sided Warbler.

A summer resident; breeds. Very abundant during migrations. Arrives early in May (7), the greater number passing north before the first of June.

41. *Dendrœca maculosa* (Gmelin) Baird. Black-and-yellow Warbler.

A common spring and autumn migrant. Arrives about May 12th, remaining till June 1st. Have taken it in the fall, from the middle of September to October 1st, and it probably remains still later.\*

42. *Dendrœca tigrina* (Gmelin) Baird. Cape May Warbler.

A rather rare migrant, though a few are taken every season. Have known of its occurrence from May 10th, (Osborne) to the 25th. Mr. Shores writes me that it is generally rare about Suffield, Conn., but that it was not uncommon there in the spring of 1876.

43. *Dendrœca discolor* (Vieillot) Baird. Prairie Warbler.

A summer resident; not common about New Haven. Breeds sparingly. Mr. Dayan has taken it on May 13th and Sept. 15th. Mr. W. W. Coe tells me that it breeds near Portland, Conn., but is rather rare. I shot one near New Haven, May 14th, 1877. I am informed by Mr. E. I. Shores, of Suffield, that it is not rare about Enfield, Conn. Mr. J. N. Clark tells me that it breeds plentifully about Saybrook, Conn.

44. *Dendrœca dominica* (Linné) Baird. Yellow-throated Warbler.

A rare accidental visitor from the south. Dr. Daniel Crary, of Hartford, Conn., writes me that during fifteen years of bird collecting in that vicinity (in the Connecticut Valley) he has secured several specimens of this rare species. Dr. E. L. R. Thompson also assures me that he has seen it about New Haven. Coes, in his "List of the Birds of New England," states, and very properly too, that "there is no good evidence," that this species "ever straggles as far north as New England,"† but, for some unaccountable reason, in his "Birds of the Northwest" (p. 66) disregards his former correct statement and says that the bird occurs "north to Connecticut (Linsley)." A glance at Linsley's catalogue shows that he did not know of its occurrence in this State.

\* For an interesting account of the habits of this bird, see an article by William Brewster, in Bull. Nutt Ornith. Club, vol. ii, No. 1, pp. 1-7. Jan., 1877.

† Proceed. Essex. Inst., vol. v, p. 270.

45. *Dendroeca palmarum* (Gmelin) Baird. Red poll Warbler.

A common spring and autumn migrant. Arrives, in spring, about the middle of April (13, 1877; 18, 1875), usually remaining but a few days; in fall I have taken it from Oct. 18th to Nov. 4th. But few were seen this spring (1877), and they straggled along in the most unaccountable manner. I shot one as late as May 5th! Along with *D. pinus* and *D. coronata* it may be seen, in spring, long before the hosts of other warblers make their appearance. It is also one of the last to depart in the fall, at which time it is found along fences, and among low bushes, by the road-side, and in open fields. In early spring, before the snow has quite all disappeared, large numbers of them may sometimes be seen, in company with the English Sparrows, running about on the plots of bare ground, and the roots of the elm trees, in the *City Green*, in the heart of New Haven. In fact they seem to pay but little attention to the weather, as may be seen from the circumstance that they were really abundant on the 18th of April, 1875, at a time when the ground was covered with snow nearly a foot deep, with only here and there a bare spot; while none were seen this season (1877) till April 13th, notwithstanding the fact that the ground had been bare since the latter part of March, and the weather unusually mild. Apparently in great haste to reach the breeding grounds, their stay with us, in spring, is generally brief—a few days and all are gone. During the autumnal migrations, however, the case is quite different. Having safely accomplished a long and perilous journey to the far north, and having successfully struggled with the elements and the hungry animate world in rearing and providing for a family of children, its anxiety is over, and now it lingers, for two or three weeks, in its favorite haunts by the road-side, before taking its final departure for Cuba or the Bahamas; or, perchance, it may not pass beyond our own limits, but, finding some suitable spot in the Gulf States, concludes to go no farther, and winters there.

The abundance of this species during its migrations varies considerably in different years. Thus in the spring of 1875 they were very numerous, while this season (1877) less than half a dozen were seen. This remark applies with equal force to *D. pinus* and several other species.

46. *Dendroeca pinus* (Wilson) Baird. Pine-creeping Warbler.

A summer resident; tolerably common during migrations. It breeds in pines, and is more often heard than seen. Arrives before the

middle of April\* (April 14, and probably earlier) and departs in September (Sept. 29, 1875, Sage). They are so partial to the tree whose name they bear that, in speaking of their habits in the "Pine-barrens" of South Carolina and Georgia, I remarked that "it was very appropriately named the *pine*-creeping warbler, as I never, except on one occasion, saw it alight, even for an instant, on anything but a pine tree; here it would sit by the hour and warble out its sweet song."† I might also state that at such times it is generally so concealed among the branches that one may not unfrequently spend half an hour in vainly endeavoring to "get a shot"—the bird, meanwhile, uttering, at intervals, its characteristic note, which is not unlike a certain strain in the pleasant and perplexing song of the common field-sparrow (*Spizella pusilla*). On referring to my MS. notes on the birds of Central Massachusetts, I find the following: "Seldom found except in pine woods, where a few were found breeding on June 25th, 1874." Here, however, though evidently preferring similar tracts, they may be met with, especially during the migrations, in a variety of situations. In the spring of 1875, for example, they were frequently seen in the City Green hopping about on the ground in company with *D. palmarum* and the English Sparrows, and running up and down on the trunks of the large elms searching for insects. Mr. C. J. Maynard, in his beautiful, but lamentably incomplete, work on the "Birds of Florida," says: "While walking in the pine woods of Florida one will suddenly observe that the trees over his head are filled with birds, where but a moment before not a living thing was to be seen; and his ears will be saluted by a variety of sounds. Beside the loud, harsh notes of the woodpeckers and nuthatches, and the mellow whistle of the bluebirds, the slowly given trill of the pine warblers will occasionally be heard. There are hundreds of these little birds in every passing flock, yet but few of them ever sing. They are extremely active, now searching for insects among the swaying foliage of the pines high overhead, then clinging to the brown trunks to peer into the crevices of the bark, or alighting on the ground. . . . Of all the thousands of this species which spend the colder season in Florida but few remain to breed, and by the middle of March the greater portion leave for the North. They arrive in New England in early April, and by the first of May

\* Dr. J. A. Allen stated, in the "New England Farmer" for 1861 (p. 510): "The present year [1861] I observed them the 4th of April, at which time a recent snow covered the ground to the depth of several inches."

† Am. Nat., vol. viii. No. 1, p. 7. Jan. 1874.

begin to construct their nests, which are commonly placed in a fork of the topmost limb of a pine tree.”\*

47. *Siurus auricapillus* (Linné) Swainson. Golden-crowned Thrush;  
“Oven Bird.”

A common summer resident, arriving early in May (May 3), and remaining till the latter part of September. Breeds abundantly. Its characteristic loud, but not particularly pleasing, note frequently annoys one while listening for the softer tones of some of the rarer warblers.

48. *Siurus nævius* (Boddaert) Cones. † (*Noveboracensis* of Authors.) Water-Wagtail; Water Thrush.

Rather common during migrations. Possibly a few occasionally remain and breed. Arrives early in May. Have taken it in spring from May 5th to 27th; and in fall from Sept. 28th to Oct. 18th. Mr. Gentry, in his late work on the “Birds of Eastern Pennsylvania,” says that it “cannot be considered either abundant or rare.” The same remark applies here in spring, when they frequent their favorite haunts near some small stream or swampy place in woodland. In the fall, however, they sometimes congregate in rather large flocks and may then be seen on hill-sides away from water.

49. *Siurus motacilla* (Vieillot) Cones. (*Ludovicianus* of Authors.) Large-billed Water Thrush.

Not rare in southern Connecticut, where it breeds regularly, and probably in considerable numbers. Arrives earlier than either of the other species. I shot a fine male on the 27th of April, 1877. That they also breed very early is shown by the fact that a female, containing an egg ready for the nest, was shot by my friend, Mr. Dayan, on the 17th of May, 1876; and Mr. J. N. Clark, of Saybrook, Conn., tells me that the young are generally hatched *before* May 25th. The fact of its breeding regularly in southern New England has now become so well established that it would be superfluous to cite the numerous published records of its capture.

In habits it seems to agree with *S. nævius*—at least in its fondness for shaded streams. Its note is peculiarly loud and clear, and does

\* The Birds of Florida. By C. J. Maynard. Part II, p. 49. Salem, 1873.

† For the nomenclature of this genus, see Cones, in Bulletin of the Nuttall Ornith. Club, vol. ii, No. 2. April, 1877.

not resemble that of any other bird I have ever heard. Dr. F. W. Hall shot a pair in Maltby Park (near New Haven) June 10th, 1874; they had evidently bred there. W. R. Nichols and Thos. B. Osborne saw several specimens on the 2d of May, one of which they secured; and on the 15th I saw still another. I am informed by Mr. J. N. Clark, of Saybrook, that a favorite site for their nests is among the upturned roots of a fallen tree.

In writing of the habits of this species in West Virginia, Mr. Brewster says: "While the northern Water Thrush [*S. navius*] was confined to the muddy banks of the creek—and I will remark *en passant* that I never saw one other than in a muddy locality—this species seemed to delight in the pebbly streams of the hills; just such streams as in the New England mountains would be called good trout brooks, overshadowed by mighty forest trees, frequently choked up by fallen logs, and abounding in beautiful cascades, still, deep pools, and wild rocky ravines. In the deepest, darkest retreats you were most likely to find him, and here, on several occasions, I was fortunate enough to hear his song. It is somewhat like that of *S. noveboracensis* [*S. navius*], being quite as loud, almost as rapid, and commencing in nearly the same way, but lacking the beautiful crescendo termination, and, altogether, a less fine performance. Represented by words, it would be nearly as follows: *pseur, pseur, per sèc ser*. This is usually uttered several times in succession from some shelving rock, or fallen log overhanging the stream; the bird in the intervals between each repetition tilting its body incessantly, and looking nervously about as if he didn't half like your appearance and had a good mind to be off, and this expression, in the majority of cases, soon finds vent in action, for he is a very shy little fellow the moment he begins to suspect that he is wanted to grace your cabinet. Come upon him suddenly, however, as he is running nimbly along the margin of some quiet pool or rippling eddy, and at times he will seem to pay little regard to your presence, and you may have a fine chance to observe his motions and sandpiper-like ways, as he wades knee deep into the water, or splashes through it in hot pursuit of some aquatic insects."\*

50. *Oporornis agilis* (Wilson) Baird. Connecticut Warbler.

A rare spring and autumn migrant. The only specimen that I have ever seen alive was a female, which I shot near New Haven, Oct. 2d,

\* Annals Lyceum Nat. Hist. N. Y., vol. xi, pp. 136-37. June, 1875.

1875. Nearly four years ago Mr. H. A. Purdie called attention to the fact that it had been obtained, in September, at Saybrook, Conn., by Mr. J. N. Clark;\* and Mr. Clark has recently informed me that he has taken several specimens there in fall, and one "full-plumaged male in spring." This last is the finest specimen I have ever seen, and, at first sight, I mistook it for the Mourning Warbler (*Geothlypis Philadelphia*), the male of which it closely resembles, both in the deep ash of the throat and breast (which is almost black where it joins the yellow below), and in the shade and limited extent of the yellow of the belly. The ring around the eye, however, is well marked, and pure white.

As its name indicates, this species was first discovered in Connecticut, and by the distinguished Ornithologist, Alexander Wilson. He met with it but once in this State, but afterwards found it in Pennsylvania, and says, "It was found, in every case, among low thickets, but seemed more than commonly active, not remaining for a moment in the same position."† Its habits are such as to render it unlikely to be observed unless present in considerable numbers.

51. *Oporornis formosus* (Wilson) Baird. Kentucky Warbler.

A rare summer visitor from the South. Mr. Erwin I. Shores, who has favored me with so many valuable notes concerning our rarer birds, writes that he "obtained a male of this species at Suffield, Conn., Aug. 16th, 1876,"‡ thus adding another bird, not only to the Avi-fauna of Connecticut, but also to New England. I am aware that Dr. Cones, in his "Birds of the Northwest" (p. 73), states that the species occurs "north to the Connecticut Valley," but on what authority I am unable to surmise. Perhaps the learned Doctor's knowledge of the distribution of birds, and of that something in their hearts which oftentimes causes those inexplicable peregrinations, together with his marvelous power of intuition, told him that it did occur in the Connecticut Valley, and had long been waiting to be discovered by Mr. Shores. Indeed, nearly ten years ago, Dr. Cones prophesied that "the occurrence of this species as a rare or casual summer visitor in southern New England is to be confidently anticipated,"§ and it is an old saying that probabilities become facts if only given time enough.

\* Am. Nat., vol. vii, No. 2, p. 693, Nov. 1873.

† American Ornithology. Vol. ii, p. 160. Edinburgh. 1831.

‡ MS. notes of Erwin I. Shores.

§ Proceed. Essex Inst., vol. v, p. 269. 1868.

Its nest was found at Sing Sing, Westchester Co., N. Y., in June, 1875, by Mr. A. K. Fisher,\* and Mr. E. P. Bicknell writes me that he secured a male at Riverdale, in the same county, May 30, 1876. Giraud found it on Long Island many years ago.† Wilson says, "This species is seldom seen among the high branches, but loves to frequent low bushes and cane swamps, and is an active, sprightly bird. Its notes are loud, and in threes, resembling *twedde, twedde, twedde*. . . . It appeared to me to be a restless, fighting species, almost always engaged in pursuing some of its fellows; though this might have been occasioned by its numbers, and the particular season of spring, when love and jealousy rage with violence in the breasts of the feathered tenants of the grove; who experience all the ardency of those passions no less than their lord and sovereign man."‡

Since writing the above I learn from Mr. J. G. Ely of Lyme, Conn., that he has "shot one Kentucky Warbler."

52. *Geothlypis trichas* (Linné) Cabanis. Maryland Yellow-throat.

A common summer resident, breeding plentifully. Arrives early in May (May 5), remaining till late in the fall (Nov. 1st, 1876).

53. *Geothlypis Philadelphia* (Wilson) Baird. Mourning Warbler.

A rather rare migrant, but probably more abundant than commonly supposed—not coming till after most of the warblers are gone. Have only seen it in spring. Mr. Bragg shot a male on May 24th, 1876, in low bushes. On the following day Mr. Dayan secured two males; and I saw several on the morning of the 27th. Mr. Thomas Osborne has seen it as early as May 15th (May 15 and 17, 1876). I shot a beautiful male near Savin Rock, Conn., May 25th, 1877. Mr. Grinnell tells me that he killed a pair (♂ and ♀) late in May, 1875, near Milford, Conn. Mr. J. N. Clark, also, has killed it, late in May, at Saybrook, Conn. At Easthampton, Mass., in the spring of 1874, I shot two specimens: "The first, May 27th, in a brush-heap; and the other, May 28th, on a large birch tree." Large numbers of them breed regularly, in suitable localities, in Lewis and Herkimer Counties, in northern New York. It also breeds abundantly about Umbagog Lake, Oxford Co., Maine (Brewster), and in Minnesota (T. Martin Trippe), even as far west as "the Red River, between Dakota and Minnesota" (Coues).

\* Am. Nat., vol. ix, No. 10, p. 573. Oct., 1875.

† Birds of Long Island. By J. P. Giraud, Jr., p. 50. 1844.

‡ Wilson's American Ornithology. Vol. ii, p. 151-2. 1831.

Regarding its song, Samuels, in his "Birds of New England," says, "Its note was a simple chirp, with a warbling termination like the syllables *chirpchee*, *chirpchee*, uttered in a soft, pensive tone" (p. 207). I am perfectly familiar with the song of the bird in question, but never heard it utter a note that could, by any legitimate stretch of the imagination, be construed into Samuels' "*chirpchee*." Its common song consists of a simple, clear, warbling whistle, resembling the syllables 'trúé, 'trúé, 'trúé, 'trú, 'toó, the voice rising on the first three syllables and falling on the last two. Sometimes, when otherwise occupied, the first, or first two, syllables are omitted. All through the breeding season, and till late in July, they have a very characteristic habit of perching, at frequent intervals during the day, on some branch, generally a dead one, and commonly ten or fifteen feet from the ground, and singing for half an hour at a time.

54. *Icteria virens* (Linné) Baird. Yellow-breasted Chat.

A common summer resident, breeding in dense undergrowth. Arrives before the middle of May (May 13, 1876, Osborne; 14, 1877). Extends up the Connecticut Valley to Massachusetts ("not rare" at Suffield).\* Given by Emmons, in 1833, as an "occasional visitant" in Massachusetts.† Their loud, ringing, notes surpass those of the Catbird and almost equal the richly varied song of the Brown Thrush (*Harporhynchus rufus*). Its habits so closely resemble those of its western congener (var. *longicauda*) that I take the liberty to quote the following brief extract, relating to some of the peculiarities of that bird, from my report on the Mammals and Birds collected by the U. S. Geol. Survey of the Territories in the year 1872: "They are shy, suspicious creatures, and, although when disturbed they flit about in a scolding, angry manner, generally manage to keep out of sight. You hear them in the bushes imitating the mewling of a cat, the shrill notes of the Jay, sometimes singing like a Catbird, and again they sing sweetly in their own peculiar manner. They have a strange habit of elevating themselves in the air to the height of thirty or forty feet, then, poising for a moment, descend again to the bushes. During the descent they jerk themselves about in the air, at the same time uttering clear, ejaculated notes, which can be heard for quite a distance, and are not altogether unpleasant to the ear."‡

\* MS. notes of Erwin I. Shores, Esq.

† See Hitchcock's Report, p. 547. 1833.

‡ See Hayden's Report for 1872, p. 675.

Wm. Brewster, Esq., speaking of its habits in West Virginia, remarks that they arrived there about May 1st, "and for a few days were silent, but soon became very noisy, especially when their retreats were invaded. Their notes are so varied as almost to defy description. What I took to be the *song* of the male was a series of about eight very loud bell-like whistles, commencing quickly, and becoming slower and more emphatic toward the end, then, after an interval of a few seconds, would follow a scolding chatter, to be immediately succeeded by a single very clear note, then the series of whistles again, but all these notes were varied to an almost infinite extent. All this time the bird would be dodging through the bushes ahead, keeping always in the thickest places, and perhaps, after a moment of silence, would suddenly strike up directly behind you. In this way I have frequently pursued one for fifteen or twenty minutes without so much as getting a glimpse at him. Several times, however, when I came upon him suddenly, he would put on a very innocent and injured air and vociferate his notes directly *at* me, as if to dispel any possible suspicion, on my part, that he had been running, or, to speak more literally, flying away."\*

55. *Myiodiocetes mitratus* (Gmelin) Audubon. Hooded Warbler.

A summer resident, breeding in the Connecticut valley and along our southern border. Although breeding abundantly at Saybrook, Conn., according to Mr. J. N. Clark (recorded by H. A. Purdie),† I have, as yet, seen but a single specimen from this vicinity. An adult female was shot at Hamden (near New Haven) June 2, 1874, by Dr. F. W. Hall. It was evidently breeding. Still it was found here in June, by Dr. Whelpley, as long ago as 1842.‡ Mr. Clark writes me from Saybrook: "The Hooded Warbler is very abundant here in dense woods, breeding everywhere in suitable places, always in a low Laurel (*Kalmia*) bush." Mr. E. I. Shores has taken it at Suffield, Conn., near the Massachusetts border, but in the Connecticut Valley.

My friends, Messrs. John H. Sage of Portland, Conn., and Eugene P. Bicknell of Riverdale, Westchester Co., N. Y., have recently called my attention to an interesting state of plumage, in the female of this species, which was alluded to by Wilson§ and Nuttall|| but

\* Ann. Lye. Nat. Hist. N. Y., vol. xi, pp. 137-8. June, 1875.

† Am. Nat., vol. vii, No. 11, p. 692. Nov., 1873.

‡ Linsley's Catalogue of the Birds of Connecticut, p. 257. 1843.

§ American Ornithology, vol. ii, p. 136. 1831.

|| Manual of Ornithology. Vol. i, p. 374. 1832.

has since been denied by both Cones\* and Baird,† who positively, assert that the female has no black on the head. Concerning it, Mr. Sage favors me with the following note: "When collecting at Saybrook, Conn., with Mr. J. N. Clark, May 30th, 1877, he shot a female *M. mitratus* in a plumage not mentioned in our Ornithological works, and thinking a description would be interesting, I send the following: Bill black. Feet flesh-color. Head and fore part of breast black (but not so pure as in the adult male), with slight indications of black on the throat. A broad patch on the forehead, extending down on the cheeks, with the under parts bright yellow. Ear-coverts tinged with olive. Upper parts olive-green. Wings unmarked. Greater part of inner webs of outer three tail feathers white. The ova of this specimen were large. We took the nest with four eggs."

I have lately seen, in the cabinet of Mr. Sage, the bird from which the above description was taken, and have now before me another female (killed by Dr. F. W. Hall, near New Haven, June 2, 1874) which agrees well with the description of Mr. Sage's specimen, but has the crown of the head, or "hood," deep black—as rich as in the male. The lores also, in this specimen, are black, and the auriculars lack the olive tinge, being bright yellow. Since the birds from which Prof. Baird and Mr. Ridgway, and Dr. Cones, took their descriptions were dried skins, and not "in the flesh," it is not so surprising that the mature females were mistaken for young males. From the limited amount of material I have been able to examine, and from the notes given me by Mr. Sage and Mr. Bicknell, I am inclined to believe that the female bird, like the male, is several years—at least three—in attaining its full plumage; and that the two sexes, when fully adult, can only be distinguished by the fact that, in the female, the throat, though strongly tinged with black, is never *pure black* as in the male.

56. *Myiodioctes pusillus* (Wilson) Bonaparte. Green Black-capped Fly-catching Warbler.

A tolerably common spring migrant, arriving about the middle of May. Have not taken it later than the 25th. This species is by no means so common here as it seems to have been formerly.

† Cones' Key to N. Am. Birds. p. 109. 1872.

§ Baird, Brewer and Ridgway, History N. Am. Birds, vol. i, p. 314. 1874.

57. *Myiodioctes Canadensis* (Linné) Audubon. Canadian Fly-catching Warbler.

Common during the migrations. Arrives early in May. Have taken it from the 6th to the 29th. Mr. W. W. Coe informs me that it doubtless breeds about Portland, Conn., as he has seen it there throughout the summer.

58. *Setophaga ruticilla* (Linné) Swainson. Redstart.

A common summer resident; breeds. Arrives early in May. Have taken it from May 8th to September 22d. Mr. Stadtmüller has a very beautiful nest of this species which "was placed in the fork of an oak tree about fifteen feet from the ground. It was built of grass and bits of paper, and covered with cotton all over outside, and lined with a few horse hairs."\* It contained four eggs, June 10, 1874.

Family, TANAGRIDÆ.

59. *Pyrranga rubra* (Linné) Vieillot. Scarlet Tanager.

A summer resident; not uncommon. Most frequent during the spring migrations; breeds. Arrives about May 10th, after which date they are common till the first of June. Took a female Sept. 11th, 1875.

60. *Pyrranga æstiva* (Linné) Vieillot. Summer Redbird.

A rare summer visitant from the South. "Stratford and New Haven, Linsley," and in a foot-note he further states that "The Summer Redbird is more rare than the Scarlet Tanager, though I have taken both here [Stratford] during the season of cherry blossoms."† In the Bulletin of the Nuttall Ornithological Club for Jan., 1877 (vol. ii, No. 1, p. 21), Mr. Purdie says, "Mr. Jencks informs me that a male was shot, a few years since, on Ten-mile River, six or eight miles northeast of Providence," R. I. I have never met with it except in Florida, where it has a very pleasant song. Dr. Thompson, of this city, informs me that he shot one near New Haven, in summer, about five years ago; and I am told by Prof. Wm. D. Whitney that a friend of his, who was perfectly familiar with the species, saw two individuals, at different seasons, in Hillhouse Avenue, New Haven.

---

\* MS. notes of the Stadtmüller Brothers.

† Am. Jour. Sci. and Arts, vol. xlv, No. 2, p. 261. April, 1843.

Mr. Erwin I. Shores writes me that he killed one at Suffield, Conn. (in the Connecticut Valley) July 21st, 1876. Does it not sometimes breed here?

Family, HIRUNDINIDÆ.

61. *Hirundo horreorum* (Barton.) Barn Swallow.

A common summer resident, breeding abundantly under the roofs of barns. Arrives during the latter part of April (April 21, 1877), remaining till September. Under the head of this species, Peter Kalm wrote, from Raccoon, New Jersey, in 1750: "I observed them for the first time on the 10th of April [new style]; the next day in the morning, I saw great numbers of them sitting on posts and planks, and they were as wet as if they had been just come out of the sea," and the translator of his "Travels," John Reinhold Forster, F.A.S., puts in a foot-note, saying: "It has been a subject of contest among naturalists, to determine the winter-retreat of *Swallows*. . . . The question must therefore be decided by facts; nor are they wanting here: *Dr. Wallerius*, the celebrated *Swedish* Chemist, wrote in 1748, *September* the 6th, O. S., to the late Mr. *Klein*, Secretary of the City of *Dantzick*: 'That he has seen more than once *Swallows* assembling on a reed, till they were all immersed and went to the bottom; this being preceded by a dirge of a quarter of an hour's length. He attests likewise, that he had seen a *Swallow* caught during winter out of a lake with a net, drawn, as is common in northern countries, under the ice: this bird was brought into a warm room, revived, fluttered about, and soon after died. Mr. *Klein* applied to many *Fermiers generaux* of the King of *Prussia's* domains, who had great lakes in their districts. . . . All the people questioned made affidavits upon oath before the magistrates."

"*First*, The mother of the Countess *Lehndorf* said, that she had seen a bundle of Swallows brought from the *Frith-Haff* (a lake communicating with the *Baltic* at *Pillau*) which when brought into a moderately warm room, revived and fluttered about. *Secondly*, Count *Schlischen* gave an instrument on stamped paper, importing, that by fishing on the lake belonging to his estate of *Gerlauen* in winter, he saw several *Swallows* caught in the net, one of which he took up with his hand, brought it into a warm room, where it lay about an hour, when it began to stir, and half an hour after it flew about in the room. *Thirdly*, Fermier general (*Amtman*) *Witkowski* made affidavit, that in the year 1740, three *Swallows* were brought

up with the net in the great pond at *Didducken*; in the year 1711, he got two *Swallows* from another part of the pond, and took them home, (they all being caught in his presence); after an hour's space they revived all in a warm room, fluttered about, and died three hours after. 4thly, *Antman Bönke* says, that having had the estate *Kleskow* in farm, he had seen nine *Swallows* brought up in the net from under the ice, all which he took into a warm room, where he distinctly observed how they gradually revived; but a few hours after they all died. Another time his people got likewise some *Swallows* in a net, but he ordered them again to be thrown into the water. 5thly, *Andrew Rutta*, a master fisherman, at *Oltsko*, made affidavit, 1747, that 22 years ago, two *Swallows* were taken up, by him, in a net, under the ice, and being brought into a warm room, they flew about. 6thly, *Jacob Kosiulo*, a master fisherman, at *Stradauen*, made affidavit, that in 1736, he brought up in winter, in a net, from under the ice of the lake at *Raski*, a seemingly dead *Swallow*, which revived in half an hour's time, in a warm room, and he saw, a quarter of an hour after, the bird grow weaker, and soon after dying. 7thly, I can reckon myself among the eye-witnesses of this *paradoxon* of natural history. In the year 1735, being a little boy, I saw several *Swallows* brought in winter by fishermen, from the river *Vistula*, to my father's house, where two of them were brought into a warm room, revived, and flew about. I saw them several times settling on the warm stove (which the *Northern* nations have in their rooms) and I recollect well that the same forenoon they died, and I had them, when dead, in my hand. . . . In *January* [1754] the lake of *Lybshau*, belonging to these estates, being covered with ice, I ordered the fishermen to fish therein, and in my presence several *Swallows* were taken; which the fishermen threw in again; but one I took up myself, brought it home, which was five miles from thence, and it revived, but died about an hour after its reviving. These are facts, attested by people of the highest quality. . . . It is therefore highly probable, or rather incontestibly true, that *Swallows* retire in the *Northern* countries during winter, into the water, and stay there in a torpid state, till the return of warmth revives them again in spring."\*

Not many years ago I brought upon myself the everlasting odium of an old lady, in the northern part of New York State, by presuming to question her statement that she had seen, "with

\* Peter Kalm's Travels into North America, vol. ii, pp. 140-44. 1771.

her own eyes," a number of Swallows that had been exhumed, in a torpid state, from the muddy bottom of a pond in the neighborhood of her dwelling. She further stated that, on taking them into the kitchen, "they soon came to life and flew about the room," but whether this premature "thawing out" was followed, like the cases above recorded by Forster, by an equally speedy death, I do not remember.

62. *Tachycineta bicolor* (Vieillot) Cabanis. White-bellied Swallow.

A common summer resident, breeding in holes in trees (generally standing in or about ponds). The earliest to arrive and last to depart. Mr. Grinnell has observed it as early as April 7th, and I have found it quite common by the 13th.

In looking over Mr. W. W. Coe's note book I find the following interesting item: "While collecting in the vicinity of Portland, Conn., June 14th, 1873, I found, in the same tree, three Bluebird's eggs and four White-bellied Swallow's eggs, and thereby hangs a tale: in cutting away the hole to take out the Bluebird's eggs, I noticed a white feather sticking up through the nest. Never having seen feathers in a Bluebird's nest, and knowing that the White-bellied Swallows build theirs almost entirely of them, I thought the Bluebirds might have driven off the Swallows and appropriated the nest to their own use. On removing the Bluebird's nest I found this to be the case, for, underneath it was the nest of the White-bellied Swallow complete and containing four fresh eggs—the eggs of both are now in my cabinet."\*

63. *Petrochelidon lunifrons* (Say) Scater. Cliff Swallow; Eave Swallow.

A common summer resident, breeding abundantly under the eaves of barns. Arrives about April 20th (April 15, 1877, Osborne; 21, 1877, A. J. Dayan), remaining till September. Professor Verrill, some years since, showed conclusively that the Cliff Swallow had not, as formerly supposed, immigrated from the West, but was actually known in New England as long ago as the year 1800—long before its discovery in the West. He also states that a large colony of them was known to breed at Windsor, Conn., in 1830.†

\* MS. notes of W. W. Coe.

† Proceed. Bost. Soc. Nat. Hist., vol. ix, p. 276, July 1, 1863.

64. *Cotyle riparia* (Linné) Boie. Bank Swallow.

A common summer resident, breeding in colonies in holes in banks, generally near some pond or river. Arrives early in May (April 21, 1877, A. J. Dayan). Williams, writing of the Swallows of Vermont, in 1794, relates the following, which I transcribe for what it is worth: "The usual times of the appearance and disappearance of these birds, serve to mark the temperature of the climate, with as much precision, as any of the phenomena of nature. But they do not seem to be properly birds of passage. At *Dauby* in this State, the inhabitants report, that some of them were taken out of a pond in that town, some years ago. A man was employed in the winter, to procure the roots of the pond lily, for medicinal purposes. Among the mud and roots which he threw out, several swallows were found enclosed in the mud; alive, but in a torpid state. . . . It has been doubted by some able naturalists, whether it is possible for the Swallow to live in such a situation. I saw an instance which puts the possibility of the fact beyond all room for doubt. About the year 1760, two men were digging in the salt marsh, at Cambridge, in Massachusetts: on the bank of the Charles River, about two feet below the surface of the ground, they dug up a Swallow, wholly surrounded and covered with mud. The Swallow was in a torpid state, but being held in their hands, it revived in about half an hour. The place where this Swallow was dug up was every day covered with the salt water, which at every high tide, was four or five feet deep. The time when this Swallow was found was the latter part of the month of February."\*

65. *Stelgidopteryx serripennis* (Audubon) Baird. Rough-winged Swallow.

A rare summer visitant. "A female of this species was shot at Suffield, Conn., by Mr. Shores, June 6th, 1874."† My friend, Mr. Eugene P. Bicknell, informs me that he has found it in numbers at Riverdale, N. Y., within a few miles of the Connecticut line, and that it breeds there—sometimes placing its nest "under a bridge."

66. *Progne purpurea* (Linné) Boie. Purple Martin.

A summer resident, breeding in "Martin Boxes" in villages. Arrives during the middle or latter part of April (April 17, 20, 25,

\* The Natural and Civil History of Vermont. By Samuel Williams. pp. 115-16. Printed at Walpole, N. H. 1794.

† Purdie in "Nuttall Ornith. Bulletin, vol. ii, No. 1, p. 21. Jan. 1877.

1877). A large colony of them is located over the First National Bank, in the center of New Haven. They are abundant at Guilford, Conn., and a single pair breeds on Faulkner's Island, occupying a house erected for them by Capt. Brooks.

#### Family, AMPELIDÆ.

##### 67. *Ampelis garrulus* Linné. Bohemian Waxwing.

A rare, almost accidental, winter visitant. On the 11th of February, 1875, Prof. S. I. Smith saw a large *Ampelis* which he thinks was, without doubt, *A. garrulus*. It was in the old wooded cemetery in New Haven. Prof. Smith is familiar with the bird in question, having seen it in Maine. A number of cases of its occurrence in Massachusetts have been recorded, but the only instance of its capture in this State is that given by J. A. Allen. "It has been taken in Connecticut [near Hartford] by Dr. Wood,"\* and the Doctor tells me that he shot them by accident, when firing into a flock of Cedar Birds. "Several were shot on Long Island in 1830 and 1832."†

##### 68. *Ampelis cedrorum* (Linné) Selater. Cedar Bird; Cherry Bird.

A resident. Generally common. Breeds in orchards and low thickets. Gregarious. Almost the only bird that feeds, to any great extent, on canker worms.

#### Family, VIREONIDÆ.

##### 69. *Vireo olivaceus* (Linné) Vieillot. Red-eyed Vireo.

An abundant summer resident, breeding chiefly in high woodland. Arrives during the first week in May (May 6), remaining as late as the first of October (Oct. 2). Superfluously noisy.

##### 70. *Vireo gilvus* (Vieillot) Bonaparte. Warbling Vireo.

A common summer resident, breeding in orchards. Arrives before the middle of May (May 7, 1876, Osborne; 12, 13, 14, 1877.) Coes thus briefly alludes to the habits of this pleasing little songster: "Not born to 'waste its sweetness on the desert air,' the Warbling Vireo forsakes the depths of the woodland for the park and orchard and

\* Notes on some of the Rarer Birds of Massachusetts, p. 25. 1869.

† Giraud's Birds of Long Island, p. 165. 1844.

shady street, where it glides through the foliage of the tallest trees, the unseen messenger of rest and peace to the busy, dusty haunts of men."

71. *Vireo flavifrons* Vieillot. Yellow-throated Vireo.

A tolerably common summer resident; particularly abundant in spring and fall. Arrives early in May (May 6), remaining till after the middle of September (Sept. 15, 17, 1875).

72. *Vireo solitarius* (Wilson) Vieillot. Blue-headed, or Solitary Vireo.

Not uncommon during the migrations. A few breed. Arrives during the first week in May (May 2, 1876, Osborne; 6, 1875, C. H. M.; May 5, 1877, Nichols). Have taken it as late as Oct. 13th. A nest of this species, found June 18th, 1875, near New Haven (Beaver Swamp), by the Stadtmüllers, "was out on the limb of a Chestnut tree about 30 feet from the ground, and was constructed of the bark of different kinds of trees, lined with grass. Moss and caterpillars' silk were plastered outside. It contained four eggs, which were two-thirds hatched."\*

73. *Vireo noveboracensis* (Gmelin) Bonaparte. White-eyed Vireo.

A summer resident, but not particularly common except along southern Connecticut, and in the Connecticut Valley, where it is common all the way up to the Massachusetts line (Suffield, E. I. Shores). Arrives before May 10th (May 7, Osborne).

NOTE.—*Vireo philadelphicus* Cassin, undoubtedly occurs within our limits, as a rare, or accidental, visitant, but as yet no record of its capture has appeared. On Sept. 7th, 1875, Mr. William Brewster "shot a female of this beautiful little species in Cambridge, Mass."†

Family, LANIIDÆ.

74. *Collurio borealis* (Vieillot) Baird. Bucher Bird; Shrike.

A somewhat irregular winter resident. Arrives in October or November (Oct. 29, 1876, Sage;) remaining till the latter part of March (March 24, 1876, Osborne). Very abundant some years, and equally scarce in others. Mr. Maynard says, "when the Lesser Red-

\* MS. notes of the Stadtmüller Brothers.

† Bull. Nutt. Ornith. Club, vol. i, No. 1, p. 19. April, 1876.

polls or the Pine Finches are common, the Shrikes follow them and prey upon them." During the winters of 1874-5 and 1875-6, when the Red-polls (*Aegiothus linaria*) and the Pine Finches (*Chrysomitris pinus*) were here, Butcher Birds were notably scarce; while during the past winter (1876-7) Shrikes have been uncommonly plenty, but neither of the other birds were seen at all. It is but fair to state, however, that during the first two winters mentioned neither the Linnets nor Finches were here in large enough numbers to have afforded the Butcher Birds a reliable source of diet. Last winter the English Sparrows supplied all deficiencies and it was no uncommon thing to see a Butcher Bird flying across the street with one in its talons. The "poor sparrows," unused to danger of any sort, were utterly helpless, and at one time it seemed as if we were actually going to be rid of the little pests, but warm weather came to their relief, driving the intruders back to their boreal homes, and now the sparrows are apparently as numerous as ever they were. Mr. Nichols shot one Jan. 13th, 1876, whose stomach contained grasshoppers! Where could it have found them at that season?

75. *Collurio Ludovicianus* (Linné) Baird.      Loggerhead Shrike.

A rare visitor from the South and West. Mr. W. W. Coe has a fine specimen of this species in his cabinet, which he shot near Portland, Conn., in Nov., 1876. Franklin Benner, Esq., writes me that he "saw a Shrike of some species at Mt. Carmel [near New Haven] May 24th, 1873," which, if he was not mistaken in the bird, could hardly have been the northern Butcher Bird, and might have been this species.

Family, FRINGILLIDÆ.

76. *Pinicola enucleator* (Linné) Cabanis.      Pine Grosbeak.

An irregular winter visitant. They were here through the months of Feb. and Dec., 1875, and during Jan. and Feb., 1876, but none were seen last winter. Messrs. Coe and Sage, of Portland, Conn., tell me that it is found there regularly *every winter*, though the red males are not always seen, and that they have observed it as late as March 12th (1873), and as early as Nov. 24th (1875, and 25, 1874).

77. *Carpodacus purpureus* (Gmelin) Gray.      Purple Finch.

Resident, breeding abundantly. Gregarious. Mr. Grinnell informs me that he has taken it during every month of the year. Dr.

Wood, of East Windsor Hill, tells me that they were almost unknown here twenty years ago, and have gradually become common since. I am likewise informed by Mr. Clark, of Saybrook, that the bird has only recently become a common species in that vicinity.

78. *Loxia leucoptera* Gmelin. White-winged Crossbill.

An irregular winter visitant. They were not uncommon during the months of Jan., Feb. and March, 1875.

79. *Loxia curvirostra*, var. *Americana* (Wilson) Coues. Red Crossbill.

An irregular winter visitant, like the last, and more frequently seen. Linsley gave it in his list, stating that it had "been repeatedly seen in Trumbull, in this [Fairfield] county, by a Mr. Beers." Mr. W. W. Coe has taken a number of this, as well as the preceding species, about Portland, Conn. A few were seen about New Haven early in Dec., 1876. It has been known to breed near New York City.\*

80. *Ægiothus linaria* (Linné) Cabanis. Red-poll Linnet.

Also an irregular winter visitant. They were quite common here during the month of March, 1875 (and Mr. Sage saw a flock at Portland, Conn., March 31), but none were seen in the winters of 1875-6 and 1876-7. Mr. W. W. Coe took it at Portland, Conn., March 22d, 1873, and saw there large flocks of them (including many highly plumaged males) in March, 1875.†

81. *Chrysomitris pinus* (Wilson) Bonaparte. Pine Finch; Pine Linnet.

An irregular fall and winter visitant. Quite common from Oct., 1874, till March, 1875. Also seen in Oct., 1875. Linsley says: "I took one specimen from a large flock, which was here in my yard [Stratford, Conn.] as late as Nov. 7th, 1840." In March and April, 1873, I found them extremely abundant near the boundary line between Georgia and South Carolina, notwithstanding the statement, in Baird, Brewer, and Ridgway's great work, that: "according to Dr. Coues, this species occasionally strays as far to the South as the Carolinas, but it is not common there," (p. 481). This case simply affords another example of their irregular migrations.

\* Am. Nat., vol. x, No. 4, p. 237. April, 1876.

† MS. notes of W. W. Coe, Esq.

82. *Chrysomitris tristis* (Linné) Bonaparte. Common Yellowbird.

An abundant resident, breeding late. Common everywhere, and is gregarious.

83. *Plectrophanes nivalis* (Linné) Meyer. Snow Bunting.

A common winter visitor, generally seen during snow-storms. Linsley, in his "Catalogue of the Birds of Connecticut," so frequently cited, says, "Large flocks of the Snow Bunting were repeatedly seen here in the winters of 1840, 1841 and 1842. Previous to that period, *I had not seen one here in eighteen years.*" (p. 261, foot-note).

84. *Plectrophanes Lapponicus* (Linné) Selley. Lapland Longspur.

Occurs as a winter visitant, along with *P. nivalis*, though no record of its capture has yet been published. My friend, Mr. Geo. B. Grinnell informs me that he has seen half a dozen specimens, killed near the Connecticut River (Portland, Conn.), by Mr. W. W. Coe. Mr. Walter P. Nichols has taken it near New Haven, and Mr. Erwin I. Shores "obtained a male out of a flock of *P. nivalis*, in Nov., 1874" at Suffield, Conn. Mr. Coe has taken it as late as March 16th, (1875).

85. *Passerculus princeps* Maynard. Maynard's Sparrow.

Probably occurs quite regularly along the coast in Nov. and Dec. (and perhaps also in March) in such sparing numbers as to escape notice. The only specimen of this beautiful bird yet taken in this State, so far as I am aware, is the one shot by myself while collecting invertebrates, at low water, with my friend, Mr. S. F. Clark. "On Nov. 4th, 1875, while collecting along the beach at 'South End,' a few miles below New Haven, I was fortunate enough to secure a fine specimen of the Ipswich Sparrow (*Passerculus princeps* Maynard). The specimen was a female, and in excellent condition. Its mate was seen, but escaped capture."\* The day was cold and chilly, with occasional flurries of snow.

86. *Passerculus Savanna* (Wilson) Bonaparte. Savanna Sparrow.

An abundant summer resident, breeding in open fields and pastures. Arrives early in April, remaining, in large numbers, till after the middle of November.

\* Bull. Nutt. Ornithol. Club, vol. i, No. 2, p. 52. July, 1876.

87. *Poocetes gramineus* (Gmelin) Baird. Bay-winged Bunting; Grass Finch.

A common summer resident, breeding abundantly, like the last, in open fields. Arrives early in April (April 6, 1875 and same date 1877, Sage); remaining till about the middle of November.

88. *Coturniculus passerinus* (Wilson) Bonaparte. Yellow-winged Sparrow.

A common summer resident in some parts of Connecticut (notably in the Connecticut Valley and along our southern border); not found at all in others. Arrives early in May. Frequents dry, sandy, treeless wastes. Linsley found it breeding here and at Stratford. "In the vicinity of Hartford, Conn., this bird appears also to be a not uncommon summer resident."\* Mr. Purdie states that "at Saybrook, Conn., its notes were to be heard in every field."† I have taken it near Savin Rock (May 29, 1877), and Mr. Grinnell tells me it is not uncommon about Milford, Conn. It also breeds about Portland, Conn. (Coe and Sage). I am informed by Messrs. Grinnell and Clark that it builds a beautiful covered nest, not unlike that of the Oven Bird (*Sirus auricapillus*). Mr. Erwin I. Shores writes me that he has taken it at Enfield, Conn., in the northern part of the State, but in the Connecticut Valley, in July (July 6, 1874).

89. *Coturniculus Henslowi* (Audubon) Bonaparte. Henslow's Sparrow.

A rare summer resident. I am very glad to be able to include this species on the strength of a specimen just received from my friend Dr. F. W. Hall. He shot it at Killingworth, Middlesex Co., Conn., July 18th, 1873, and it is in the worn breeding plumage. I had searched in vain for it in the many collections of the birds of this State to which I have had access, and had really despaired of finding it at all. Many specimens have been taken in Massachusetts and it doubtless occurs regularly in the Connecticut Valley, if not in other parts of the State. Giraud says that on Long Island "it is not so rare as is generally supposed. In general, it frequents the low, wet meadows, and passes most of its time on the ground among the tall grass, and is exceedingly difficult to flush, even when pursued with dogs; it will not fly until nearly within their reach, when it starts from the ground, moves on only a few yards, and again drops among the grass."‡

\* Baird, Brewer and Ridgway, vol. i, p. 554.

† Bull. Nutt. Ornith. Club, vol. ii, No. 1, p. 17. January, 1877.

‡ Giraud's Birds of Long Island, p. 104. 1844.

90. *Ammodromus maritimus* (Wilson) Swainson. Seaside Finch.

A common summer resident, breeding abundantly in the salt and brackish water marshes near the coast. Remains into September.

91. *Ammodromus caudacutus* (Gmelin) Swainson. Sharp-tailed Finch.

A common summer resident, like the last, and breeds in the same situations. Arrives about the middle of April (Apr. 14, Osborne). Their eggs are laid during the last of May and first of June. Mr. Dayan found a nest containing four fresh eggs on May 31, 1876, at Savin Rock, and on the 7th of June both species were breeding abundantly. We found great numbers of both along the Quinnipiac River, and so far inland that the water was almost, if not quite, fresh. In some particular spots the *maritimus* outnumbers the *caudacutus*, but on the whole the latter greatly predominates.

92. *Melospiza palustris* (Wilson) Baird. Swamp Sparrow.

A common summer resident, breeding plentifully. Arrives early in April, remaining till late in November (Nov. 20).

93. *Melospiza melodia* (Wilson) Baird. Song Sparrow.

An abundant resident; particularly numerous from February to December, but not uncommon all through December and January. In the winter season they frequent old fences alongside which a copious growth of brushwood has sprung up; also found in back-yards in the city. Mr. W. W. Coe, of Portland, Conn., found a Song Sparrow's nest in a hole in a tree ten feet from the ground (early June, 1873).\*

94. *Melospiza Lincolni* (Audubon) Baird. Lincoln's Finch.

A rather rare summer resident. Mr. J. N. Clark, of Saybrook, Conn., showed me a mounted specimen of this species which he had shot in a brush heap in his garden in the spring of 1875. He thinks he saw another a few days before, but it was very shy and he did not kill it. Mr. Erwin I. Shores, of Suffield, Conn., writes me that it is "not rare" in that vicinity, where he took one specimen in 1874, and three more this spring (1877). Mr. Shores says that on May 23, and again on June 2d, he "saw one with small twigs in its bill," hence, although he did not actually find the nest, there can be no reasonable

---

\* MS. notes of W. W. Coe.

doubt of its breeding. He further states: "There is a small piece of woodland in this place where surely they cannot be considered rare. Have seen several that I've not been able to shoot. They are very shy. You just barely get a glimpse of one and have just time to get an idea of what it is, when down he goes into the thick shrubbery, and no amount of patient waiting will tempt him to come in sight again. Provoked, you determine to kill every one that comes in sight, and after the slaughter of half a dozen innocent Song or Swamp Sparrows, you conclude that that won't do. *Then*, perhaps, almost the first bird you leave will be Lincoln's Sparrow. I think they are much more common than generally supposed, but are so shy, and inhabit such bushy pastures, that they are hard to find."\* J. G. Ely, of Lyme, Conn., "took three this spring" (1877).

95. *Junco hyemalis* (Linné) Selater. Slate-colored Snowbird.

A common winter resident, arriving, from the north before the middle of October (Oct. 8, 1876, Osborne), and remaining till the first week in May (last seen May 2, 1877, Osborne; May 3, 1876).

96. *Spizella monticola* (Gmelin) Baird. Tree Sparrow.

A common winter resident, but more numerous in spring and fall. Arrives from the north about the last of October (Oct. 28, 1875), and remains till near the middle of April (Apr. 12, Osborne).

97. *Spizella socialis* (Wilson) Bonaparte. Chipping Sparrow.

An abundant summer resident, arriving as early as the latter part of February (Feb. 23, 1877, G. B. Grimmell), and remaining, in numbers, till the last of November. Sometimes places its frail nest on the ground, as well as on trees and bushes (Coe). A few sometimes spend the winter with the English Sparrows about town. They often awake in the night, sing once, and go to sleep again. Scarcely a night passes (in June and early July) but that I hear one sing several times—generally about midnight.

98. *Spizella pusilla* (Wilson) Bonaparte. Field Sparrow.

An abundant summer resident, generally breeding in open fields. Arrives early in April (Apr. 6, 1877, Portland, Conn., Sage), remaining till December (have taken it all through November and on Dec.

\* MS. notes of Erwin I. Shores.

2, 1875). They are untiring songsters, particularly in early spring, and may be found everywhere except in dense woods. The song of the Field Sparrow is loud, clear, and pleasing, and he may consider himself fortunate, who has mastered its numerous variations. Minot says of it, "No sounds are more refreshing, on a warm afternoon of early summer, than those which they produce." It nests both on the ground and in low bushes.

99. *Zonotrichia albicollis* (Gmelin) Bonaparte. White-throated Sparrow.

Abundant during the migrations, sometimes remaining all winter. Arrives from the north about Sept. 22d, remaining through November. Returns in April and departs about May 20, at which date it was last seen, both in 1876 and 1877. During the winter of 1874-5 they were very numerous all about the city, as well as in the surrounding country. Mr. Erwin I. Shores, of Suffield, Conn., writes me that on May 15, 1877, they were extremely abundant in the woods in his vicinity—outnumbering all the other species together.

100. *Zonotrichia leucophrys* (Forst.) Sw. White-crowned Sparrow.

An irregular migrant; sometimes quite common. (Nov. 28 and Dec. 5, 1874; Oct. 25, 1877, common.) Mr. Dayan shot a beautiful specimen May 10, 1876. Mr. Osborne saw it on May 15, 1877. Mr. W. W. Coe shot one at Portland, Conn., March 20, 1875.

101. *Passer domesticus* Brisson. English Sparrow; House Sparrow.

Introduced. An abundant resident in all the larger, and most of the smaller, towns throughout the State. The opening sentence, under the head of this species, in H. E. Dresser's magnificent work on "The Birds of Europe," shows that its habits have remained unchanged, in one respect at least, notwithstanding the great distance it has been carried, and the varied conditions to which it has been subjected: "Throughout Europe the House Sparrow is very generally distributed almost wherever there are human habitations (except in the extreme north); for it follows the footsteps of man almost like a domestic animal, and where he fixes his habitation there the Sparrow also takes up its abode." Their pugnacity seems to vary in different parts of the country and at different times of the year. In New Haven their attitude toward other species is not generally offensive, and they are commonly seen on the friendliest terms with the Chipping Sparrows, throughout the entire season. In early spring I have

observed them feeding quietly with the Red-poll Warblers (*Dendroica palmarum*) on the City Green, and in fall it is no uncommon thing to find them associated with *Passerella iliaca*, *Zonotrichia albicollis*, *Melospiza melodia*, and *Spizella socialis* and *pusilla*, without showing the slightest sign of animosity. In New York and other cities, however, they are sometimes quite belligerent, attacking and driving off the birds that once occupied the same ground. This is especially noticeable in spring, when they appropriate the houses put up for Bluebirds, Wrens, and other species. That they do some good in destroying injurious insects is certain. "In open places where there are a few trees in the towns, such as the gardens in the squares or in the parks, it is eminently useful in ridding the foliage of the insects which would otherwise destroy the leaves and tender shoots; . . . . . and destroys myriads of the small smooth caterpillars and larvæ which feed on the buds of the trees, and is one of the best guardians of the orchard."\* A few days ago my attention was attracted by the peculiar actions of one of these Sparrows. It was hopping along on the uppermost rod of a fence, and whenever it came to a post (into which the fence rods were inserted) it would stand on tip-toe and peep up under the ornamental top-board of the post, as if looking for something. On coming nearer I discovered that the bird was searching for moths, of which it secured one or more at each post, and, after proceeding in this manner for several rods, it flew away, evidently having had enough for one meal. In passing the fence since, I have, on several occasions, seen a Sparrow, apparently and probably the same individual, going through with precisely the same procedure, and with the same result. Do not cases like the above go far to prove that many birds are highly intelligent and possess a good degree of memory? The Sparrow in question discovered a moth, doubtless by accident, concealed beneath the overlapping edge of the top-board of a fence-post. Was he content with simply gobbling this one up? By no means; if there is one there may be more, and sure enough he soon spies another, and, going to the next post, still another, and so on till he is satisfied. Next day, when searching for breakfast, does he forget yesterday's experience? Not at all; he returns to the fence-posts and readily secures another meal. The chance finding of the first moth has led to the knowledge that similar insects take refuge, by day, in certain places; and in the

\* A History of the Birds of Europe, including all the species inhabiting the Western Palearctic Region. By H. E. Dresser. Part XLVIII, March, 1876.

establishment of a regular habit of searching for them. In spring, when the trees are in flower, and the swollen buds give place to tender green leaves, the House Sparrows join the early Warblers in running about among the branches in pursuit of one another as well as of the small beetles that come there to feed upon the fresh foliage. But so far as the accomplishment of the object for which they were imported, viz., the extermination of the canker worm (*Anisopteryx vernata* and *A. pomataria*) in our larger towns and cities, they have most signally failed. That they occasionally devour the full-grown moth can not be doubted; neither do I feel justified in denying that they sometimes eat the worms themselves, though I have never seen them touch one—not even when hopping about in the midst of hundreds of canker worms. They seem to prefer the small beetles and seeds abounding in the horse droppings about the streets. It is true that there was a great diminution in the ranks of the canker worms soon after the introduction of the House Sparrows, but I am informed that this was due to a parasite (*Platygyaster*) which preyed upon and destroyed great numbers of the worms by depositing its eggs in the eggs of the canker worm moth, and not, as generally supposed, to the Sparrows. It may, perhaps, be considered as somewhat of a digression in a mere local list like this, to devote so much space to the biography of a species, but I believe that notes recording actual observations on the habits of any bird should always prove acceptable, especially when there is difference of opinion, resulting in controversy, regarding the merits of a species, for in this way the possibility that individuals, or colonies, may differ in habits in different localities, or at different seasons, is suggested, and warns us not to be too dogmatic in our statements, or too hasty in drawing conclusions.

For abundant and unquestionable evidence of the pugnacity and disagreeable qualities of this bird, in some sections, see the writings of Cones, Gentry, and others. Velmont de Bomare, writing in 1791, says: "In Brandebourg, in order to diminish the ravages committed by Sparrows, a price is set on their heads, and the peasants are compelled by law to bring in a certain number yearly; in each village there are Sparrow hunters who sell the birds to the peasants to enable them to pay their tribute. . . . It follows the farmer while sowing, harvesting, threshing, or feeding his poultry; it enters the Dovecot, and with its bill pierces the throats of young pigeons, to obtain the grain in their craw."\*

---

\* Quoted by Charles Pickering in *Proceed. Bost. Soc. Nat. Hist.*, vol. xi, p. 158, April 17, 1867.

The English House Sparrow was first introduced into New England, so far as I am aware, in the fall of 1858, when "Six birds were set at liberty in a large garden" in the city of Portland, Maine. "They were introduced into Boston by the city government in 1868,"\* and have since spread over the greater part of New England.

102. *Passerella iliaca* (Merrem) Swainson. Fox-colored Sparrow.

Common during the migrations, arriving from the North during the middle or latter part of October (Oct. 10, 1876, Osborne; 23, 1877), and remaining about a month (Nov. 20). Have taken it, in spring, from March 6th to April 19th. Gregarious. The largest and surely one of the handsomest of our Sparrows. Speaking of its song, Dr. Brewer says: "His voice is loud, clear, and melodious; his notes full, rich, and varied; and his song is unequalled by any of this family that I have ever heard."

103. *Euspiza Americana* (Gmelin) Bonaparte. Black-throated Bunting.

Dr. Linsley, in his "*Catalogue*," takes particular pains to state that this species was "very common" at New Haven (p. 261), but I have never seen it here and can find no other record of its capture in this State. It must be regarded as very rare in New England, although several have been taken, breeding, in Massachusetts. Its former abundance and present scarcity in this section affords another excellent example of the irregular migrations of birds. Giraud gave it as breeding commonly on Long Island,† but says the eggs are "white, speckled with black," whereas they are blue, unmarked.

104. *Goniaphea Ludoviciana* (Linné)<sup>‡</sup> Bowditch. Rose-breasted Grosbeak.

A common summer resident, breeding in dense undergrowth. Arrives before the middle of May (May 11, 1874, Portland, Conn., Sage), and I shot a female as late as Nov. 25th, (1874), in the city. I am informed by Prof. G. Brown Goode, of Middletown, Conn., that he knew an individual of this species to live eighteen years in confinement. Mr. J. Hammond Trumbull tells me that it was almost unknown about Hartford, Conn., thirty-five years ago.

NOTE.—*G. carulea* probably occurs as an accidental visitant from the South. It has been taken on the Island of Grand Menan,‡ and

\* Birds of North America, Baird, Brewer & Ridgway, vol. i, p. 526, 1874.

† Birds of Long Island, p. 100. 1844.

‡ Herrick's Partial Catalogue of the Birds of Grand Menan, p. 8. 1873.

Mr. Boardman states that it was "common in the spring of 1861" in the vicinity of Calais, Maine!\*

105. *Cyanospiza cyanea* (Linné) Baird. Indigo Bird.

A common summer resident, breeding, like the last, in thick patches of bushes. Arrives before the middle of May (May 14, 1874, J. H. Sage; 14, 1876, Osborne; 14, 1877, C. H. M.; also May 9, 1875, Sage), remaining into September.

106. *Cardinalis Virginianus* (Brisson) Bonaparte. Cardinal Grosbeak.

A rare and accidental summer visitor from the South. Mr. Thomas Bostwick of this city found one lying dead during the summer of 1874, and Mr. Geo. Bird Grinnell, who examined the specimen, tells me that its bill and feet, as well as the plumage, proved it to be a wild bird. Numerous specimens have, from time to time, been taken or seen along the Connecticut Valley, and it is highly improbable that they were all escaped cage birds. My friend, Mr. E. P. Bicknell, has taken a number of individuals about Riverdale, Westchester Co., N. Y., and it is certain that most, if not all, of them were wild.

Regarding the age to which our small birds attain, it is worthy of mention that my grandmother kept a Cardinal Bird caged for twenty-one years—it was noisy to the last. Its colors began to fade several years before its death, till finally it looked very like a worn female.

It winters as far north as southern New Jersey and Pennsylvania (Turnbull).†

107. *Pipilo erythrophthalmus* (Linné) Vieillot. Chewink; Towhee Bunting.

A common summer resident, breeding on the ground, in undergrowth, and in the woods. Arrives early in May (May 1, 1876, Osborne; 4, 1877), remaining till November (Oct. 28, Nov. 8.) Mr. J. H. Sage has a fine male in his cabinet which was shot near Portland, Conn., *Jan.* 22d, 1876! A characteristic nest, found May 24th, 1874, "under a Virginia Juniper," by the Stadtmüller Brothers, "was composed externally of cedar bark, lined with grass and horse hair."‡

\* *Proceed. Bost. Soc. Nat. Hist.*, vol. ix, p. 127. 1862.

† *The Birds of Eastern Pennsylvania and New Jersey.* By Wm. P. Turnbull, LL.D. p. 24. 1869.

‡ MS. notes of the Stadtmüller Brothers.

## Family, ICTERIDÆ.

108. *Dolichonyx oryzivorus* (Linné) Swainson. Bobolink; Reed-bird,  
Rice-bird.

A common summer resident, breeding in meadows. Arrives before the middle of May (May 7, 1876, Osborne; same date at Portland, Sage; May 12, 1877).

109. *Molothrus pecoris* (Gmelin) Swainson. Cow-bird.

An abundant summer resident, arriving in March or early in April and remaining till November (Nov. 4, 1874). Sometimes winters. Mr. Geo. Bird Grinnell writes me that he took it twice in mid-winter (Jan. 15, 1874, and Jan. 16, 1875).

110. *Agelæus phœniceus* (Linné) Vieillot. Red-winged Blackbird.

A common summer resident, breeding abundantly in swampy places. Sometimes winters. Arrives during the latter part of February or early in March (March 4), remaining till late in the fall. Though generally choosing clumps of bushes for their characteristic nests, they sometimes place them on the ground. On the 6th of June, 1876, Mr. Dayan and myself, while collecting on a part of the Quinnipiac marshes where there were no bushes, found several nests containing fresh eggs. The nests were extremely shallow—very unlike those commonly found in bushes—and were placed on the bare ground, in the grass, with no attempt at concealment. I am informed by Mr. Grinnell that he has taken it in January (Jan. 15, 1874, and Jan. 16, 1875). This is the bird concerning which Josselyn wrote (in 1675) that there were, in New England, “*Starlings* black as *Ravens* with scarlet pinions.”\* Mr. W. W. Coe once wounded one of these birds (probably striking it in the head) which “started into the air and kept going up—up—up—sailing in larger circles—still ascending till lost to sight.”†

111. *Sturnella magna* (Linné) Baird. Meadow-lark.

Resident, but particularly abundant from early spring till late in the fall. A few small flocks winter along the coast. The Rev. Mr. Peabody observes that this bird “has few enemies excepting Hawks, snakes, and young sportsmen.”

\* An Account of two Voyages to New England, p. 100. 1675.

† MS. notes of W. W. Coe.

112. *Icterus spurius* (Linné) Bonaparte. Orchard Oriole.

A common summer resident, breeding chiefly in orchards. Arrives during the first week in May (May 7, 1876, Osborne).

113. *Icterus Baltimore* (Linné) Daudin. Baltimore Oriole.

A common summer resident, breeding plentifully in the city as well as country throughout the State. Arrives about May 10th. Have taken it on the 8th, and Mr. Osborne saw one as early as the 6th (1876), while this year (1877) it did not come, in any numbers, till the 13th, when the whole country was literally "alive with them." Mr. J. H. Sage saw it at Hartford, May 6th, 1868 and 7th, 1872; also at Portland, Conn., May 7th, 1876, and May 10th, 1874 and 1875.

114. *Scolecophagus ferrugineus* (Gmelin) Swainson. Rusty Grackle.

Abundant during the migrations, sometimes wintering. Arrives before the middle of February (Grinnell) remaining through March into April (April 19, Osborne). In the fall it returns before the middle of September (Sept. 11, 1875 several flocks seen), remaining into November. Mr. Grinnell informs me that he took it, at Milford, Conn., Jan. 16th and 29th, and Feb. 6th, 1875.

115. *Quiscalus purpureus* (Linné) Licht. Crow Blackbird.

A common summer resident, breeding in evergreen trees in the city, as well as outside. Arrives about March 1st, though a few are generally seen in February (Feb. 13, 1876). Departs in November.

Such was the abundance, in early colonial times, of some of our commoner, and at present harmless, birds, that "premiums were paid by the local governments for the destruction of many of these species, and not without cause."\* The town of Lynn, on March 8th, 1697, voted "that every householder in the town, should, sometime before the fifteenth day of May next, kill or cause to be killed, twelve blackbirds, and bring the heads of them, at or before the time aforesaid, to Ebenezer Stocker's, or Samuel Collins's, or Thomas Burrage's, or John Gowing's, who are appointed and chose by the town to receive and take account of the same, and take care this order be duly prosecuted; and if any householder as aforesaid shall refuse or neglect to kill and bring in the heads of twelve blackbirds, as aforesaid, every

\* J. A. Allen in Bull. Nutt. Ornith. Club, vol. i, No. 3, p. 54. Sept., 1876.

such person shall pay three pence for every blackbird that is wanting, as aforesaid, for the use of the town.”\*

Peter Kalm, in his “Travels into North America,” thus speaks of their depredations: “A species of birds, called by the Swedes, maize-thieves, do the greatest mischief in this country. They have given them that name, because they eat maize, both publicly and secretly, just after it is sown and covered with ground, and when it is ripe. The English call them blackbirds. There are two species of them, both described and drawn by Catesby.† Though they are very different in species, yet there is so great a friendship between them, that they frequently accompany each other in mixed flocks. However, in Pennsylvania, the first sort are more obvious, and often fly together without any of the red-winged stares. . . . Their chief and most agreeable food is maize. They come in great swarms in spring, soon after the maize is put under ground. They scratch up the grains of maize and eat them. As soon as the leaf comes out, they take hold of it with their bills, and pluck it up, together with the corn or grain; and thus they give a great deal of trouble to the country people, even so early in spring. To lessen their greediness of maize, some people dip the grains of that plant in a decoct of the root of the *veratrum album*, or white hellebore, (of which I shall speak in the sequel), and plant them afterwards. When the maize-thief eats a grain or two, which are so prepared, his head is disordered, and he falls down: this frightens his companions, and they dare not venture to the place again. But they repay themselves amply towards autumn, when the maize grows ripe; for at that time they are continually feeding. They assemble by thousands in the maize-fields, and live at discretion. They are very bold; for when they are disturbed, they only go and settle in another part of the field. In that manner, they always go from one end of the field to the other, and do not leave it till they are quite satisfied. They fly in incredible swarms in autumn; and it can hardly be conceived whence such immense numbers of them should come. When they rise in the air they darken the sky, and make it look quite black. They are then in such great numbers, and so close together, that it is suprising how they find room to move their wings. I have known a person shoot a great number of them on one side of a maize-field, which was far from frightening the rest; for they only just took flight, and dropped

---

\* History of Lynn, by Alonzo Lewis and James R. Newhall, p. 298.

† See Catesby's Nat. Hist. of Carolina, vol. i, tabs. 12 and 13.

at about the distance of a musket-shot in another part of the field, and always changed their place when their enemy approached. They tired the sportsman, before he could drive them off the maize, though he killed a great many of them at every shot. They likewise eat the seeds of the *aquatic tare-grass* (*Zizania aquatica*) commonly late in autumn, after the maize is got in. I am told, they likewise eat buckwheat, and oats. Some people say, that they even eat wheat, barley, and rye, when pressed by hunger; yet, from the best information I could obtain, they have not been found to do any damage to these species of corn. In spring, they sit in numbers on the trees, near the farms; and their note is pretty agreeable. As they are so destructive to maize, the odium of the inhabitants against them is carried so far, that the laws of *Pennsylvania* and *New Jersey* have settled a premium of three pence a dozen for dead maize-thieves. In *New England*, the people are still greater enemies to them; for Dr. *Franklin* told me, in the spring of the year 1750, that, by means of the premiums which have been settled for killing them in *New England*, they have been so extirpated, that they are very rarely seen, and in a few places only. But as, in the summer of the year 1749, an immense quantity of worms appeared on the meadows, which devoured the grass, and did great damage, the people have abated their enmity against the maize-thieves; for they thought they had observed that those birds lived chiefly on these worms before the maize is ripe, and consequently extirpated them, or at least prevented their spreading too much. They seem therefore to be entitled, as it were, to a reward for their trouble."†

NOTE.—The Boat-tailed Grackle (*Quiscalus major*, Vieillot) has been accredited to New England by Linsley and others, but an unusually large Crow Blackbird was probably mistaken for it.\*

### Family, CORVIDÆ.

#### 116. *Corvus Americanus* Audubon. Common Crow.

An abundant resident; generally lays five eggs and sometimes six (Coe). On the 25th of January, 1875, I saw a flock of several hundred Crows near New Haven. "It is related of a certain ancient philosopher, walking along the sea-shore to gather shells, that one of

\* Peter Kalm's Travels into North America, vol. ii, pp. 73-78. 1771.

† See Coues' Birds of the Northwest, p. 204. 1874.

these unlucky birds, mistaking his bald head for a stone, dropped a shell-fish upon it, and thus killed at once a philosopher and an oyster.”\*

117. *Corvus ossifragus* Wilson. Fish Crow.

This species must be regarded as a rare summer visitor so far north as this State, although it has been seen in Massachusetts by Mr. William Brewster, who writes: “On the morning of March 16th, 1875, I saw a bird of this species flying swiftly over our place in Cambridge. It was pursued by at least twenty-five or thirty of our common species (*Corvus Americanus*), and at each renewal of their attacks gave utterance to its peculiar and unmistakable notes.”† Linsley gave it as occurring at “Stratford,” Conn.‡

118. *Cyanurus cristatus* (Linné) Swainson. Blue Jay.

An abundant resident; frequently seen about the city.

Family, TYRANNIDÆ.

119. *Tyrannus Carolinensis* (Linné) Temminck. King-bird; Bee-bird.

A common summer resident, arriving early in May (Mr. Dayan informs me that he saw one as early as April 13, 1877). Departs about the middle of September (Sept. 15) or later. Mr. Sage has twice seen it at Portland, Conn., as early as May 7th (1864 and 1876) and once on the first (1877), but it generally comes on the 10th.

The habit, so characteristic of this species, of attacking, and driving away from the vicinity of its nest, Hawks, Crows, and other large birds, early attracted attention, for we find, in Josselyn's Voyages to New England (published in 1675, p. 96), the following account of it: “There is a small Ash-color Bird that is shaped like a *Hawke* with talons and beak that falleth upon *Crowes*, mounting up into the air after them, and will beat them till they make them cry.”§ The description of the bird would fit a Shrike even better than the one in question were it not that it “falleth upon Crows” which pastime this bird is not supposed to indulge in; still I have seen a Northern

\* Nuttall's Manual of Ornithology, vol. i, p. 211. 1832.

† Bull. Nutt. Ornith. Club, vol. i, No. 1, p. 19. April, 1876.

‡ Am. Jour. Sci. and Arts, vol. xlv, No. 2, p. 260. April, 1843.

§ Reprinted in Collections of the Mass. Historical Society, vol. iii, 3d series, p. 275. 1833.

Butcher Bird chase a Barred Owl for the space of half an hour, closely following him to and fro through the woods, till I put an end to his misery by shooting both.

120. *Milvulus forficatus* (Gmelin) Sw. Swallow-tailed Flycatcher.

An extremely rare accidental visitor. The only record of its capture in this State is that recently published by Mr. H. A. Purdie: "Mr. Jencks informs me that a specimen of this species was shot by Mr. Carpenter, at Wauregan, Conn., about April 27, 1876. The bird first attracted Mr. Carpenter's attention by its opening and closing the tail while flying about a small sheet of water in quest of insects. The only other Eastern United States capture of this species, is a male taken at Trenton, New Jersey, a few years ago, as recorded by Dr. C. C. Abbott."\* Dr. Abbott's specimen was shot on the 15th of April, 1872, and "when captured, was busily engaged in picking semi-dormant insects from the bark of the trees; creeping about very much as is the custom of *Certhia familiaris*, and all the while opening and shutting the long scissor-like tail."† Its proper habitat is the lower part of the Mississippi Valley and Texas, thence southward into South America.

121. *Myiarchus crinitus* (Linné) Cabanis. Great-crested Flycatcher.

A common summer resident, generally placing its well-known snake-skin-lined nest in the hollow limb of some old apple tree, or rotten fence-post. Arrives early in May (May 8, 1873, Hartford, Sage), and Mr. W. W. Coe has taken its nest (four eggs) as late as June 13th, (1873). The history of this bird affords us a remarkably good example of the change in habitat of a species during a comparatively brief period of years.

Mr. T. Martin Trippe, in one of his interesting articles on "The Irregular Migrations of Birds,"‡ thus details his experience with the bird in question: "In a series of several years close observation at Orange, New Jersey, I searched for the Great-crested Flycatcher (*Myiarchus crinitus*), year after year, but all in vain; and what made the fact very singular was, that twelve or fifteen miles off, I had seen the bird sufficiently often to convince me that if not common, it was by no means rare. Yet for some inexplicable reason it did not

\* Bulletin Nuttall Ornithological Club, vol. ii, No. 1, p. 21, Jan., 1877.

† American Naturalist, vol. vi, No. 6, p. 367, June, 1872.

‡ Am. Nat., vol. vii, No. 7, p. 390-91, July, 1873.

inhabit the country immediately about Orange, for, although in the woods nearly every week for years, I never saw it until, after I had almost despaired of ever finding it, I did succeed in shooting a single specimen. This was in the fall; the next spring I saw a pair . . . , and, after an absence of two years, returning to Orange, I strolled through the woods, my old hunting grounds, and, to my surprise, almost the first bird I saw was the Great-crested Flycatcher. Subsequently I scarcely ever took a walk through the woods without seeing or hearing it." A precisely parallel case occurred in the vicinity of my home in Lewis County, northern New York. There, prior to the year 1870, they were unknown, at least so far as I can ascertain, and it is safe to say that they were extremely rare. In 1870 my cousin, Mr. C. L. Bagg, shot one specimen, the first we had ever seen. During the next season I shot a pair. I was away from home in 1872, but Mr. Bagg informs me that he took several Great-crested Flycatchers that year, and that they were quite common. In August, 1873, I shot eight in about an hour's time, and since then they have been one of our commonest species, breeding abundantly in the tall maple and birch forests, where their characteristic, but rather harsh cry, may be heard at any hour of the day throughout the entire season.

Regarding its former scarcity in Connecticut, Linsley said "a specimen of the Great-crested Fly-catcher was shot by me in the spring of 1838, in my front yard, the only living individual of this bird I have ever seen in this State,"\* and Nuttall observed that it was "nearly unknown in New England."† That it is now really a common bird in *southern* Connecticut, at least, is certain. However, we must take into consideration the fact that these gentlemen (Nuttall and Linsley) were probably not familiar with its characteristic—I may even say diagnostic—note, and my experience with the bird has been that it is rarely seen, unless, guided by its note, it is persistently followed up, and even then one is often at his wits end to get a shot, so well does the bird keep concealed amongst the foliage. And surely it is not particularly conducive to tranquillity of mind to stand, up to one's knees in water, amidst myriads of mosquitoes, in a hot day in summer, gazing intently up into a tall tree, where, directly overhead, the cry of the Great-crested Flycatcher is constantly heard, and yet the most careful search fails to reveal the exact where-

---

\* Am. Jour. Sci. and Arts, vol. xlv, No. 2, p. 259, April, 1873.

† Manual of the Ornithology of the United States and Canada. By Thomas Nuttall. Vol. i, Land Birds, p. 271, 1832.

abouts of its author; and, when one's neck is nearly broken, to hear the cry again, this time issuing from another and still deeper portion of the swamp.

In support of this view I now propose to bring forward pretty conclusive proof: Mr. W. W. Coe, who early became familiar with the note of this species, tells me that it has been a common bird in the vicinity of Portland, Conn., for at least fifteen years—ever since he commenced collecting birds. Prof. William D. Whitney, of New Haven, on inquiry, informs me that he has known the bird for at least thirty years, and that he has always regarded it as common. His observations extend over portions of Massachusetts (about Northampton) as well as Connecticut. Mr. J. N. Clark, of Saybrook, Conn., says that it was not rare, about the mouth of the Connecticut, twenty-five years ago; and Dr. Wm. Wood, of East Windsor Hill, Conn., tells me that it has bred regularly, and has not been uncommon, in that vicinity, for the last twenty-five or thirty years.

In the face of these facts what is to be done? For my own part, I am willing to admit that in northern New York the bird may not have been rare prior to the year 1870 (although I feel pretty sure that this was not the case), and that it escaped notice because I was then unfamiliar with its note. In New Jersey, however, a similar supposition will not hold, for Mr. Trippe *was* familiar with its note and habits, from observations in a neighboring district, and asserts positively that it suddenly became abundant in a locality where before it was nearly, if not quite, unknown. Hence it is only fair to conclude that, while some of the supposed cases of change of habit may be explained on the ground that the observers were not sufficiently familiar with the bird, yet there are others concerning which the proof is ample, and the *cause* of the change only remains to be accounted for. Whether this be due to changed conditions in the physical features of the country (such as the cutting away of timber, drying up of streams and swamps, etc., for example), or to an increase in some species of insects on which the bird feeds (caused perhaps by the abundance of some particular food-plant—due, may be, to altered climatic conditions), or to an actual increase in the number of birds themselves, I will not take upon myself to decide, so imperfect is the present state of our knowledge on these points.

122. *Sayornis fuscus* (Gmelin) Baird. Powee Flycatcher; Phoebe-bird.

A common summer resident. Comes very early: Dr. F. W. Hall tells me he saw it on Feb. 25th. 1876, and Mr. Osborne saw one March

11th of the same year. I first noticed it on the 24th of March this season (1877), and Mr. Sage found it at Portland, Conn., on the 30th. In the fall it remains till, or after, the middle of October (Oct. 7, 1874; Oct. 13, 18, 1875). Breeds abundantly under the gable-ends, or on exposed beams, of houses and outbuildings, in old sheds, and under bridges. The primitive habit of building on the side of some rocky cliff is still adhered to in some parts of the State, and the most beautiful nest I have ever seen was found by Prof. Daniel C. Eaton and myself, while botanizing near Mt. Carmel, on the 23d of May, 1875. It was placed in a small wedge-shaped niche in the face of the rock, and its exterior was composed entirely of delicate green mosses. It contained five pure white, unspotted, fresh eggs. Another beautiful nest, similarly placed, was found on the "Hanging Hills of Meriden," by my friend, Mr. William H. Patton, on the 12th of May, 1877. It contained four fresh eggs, one of which is distinctly sprinkled, chiefly at the larger end, with small brownish-red spots. It also breeds on the faces of Pine and West Rocks near New Haven.

123. *Contopus borealis* (Swainson) Baird. Olive-sided Flycatcher.

Rare; probably a few sometimes breed in the more northern and hilly portions of the State, as they are known to do in Massachusetts. Not previously recorded from Connecticut, except by Linsley, who gave it, with a query, from Stratford. On the 18th of October, 1875, attracted by its characteristic note, "which is a short whistle resembling the syllables *O-whéö*, *O-whéö*, *O-whéö*," uttered several times in succession, "with the accent on the *whé*, and the voice falling on the last *ö*,"\* I caught a momentary glimpse of one, perched on the top of a tall tree; but the bird was very shy and I did not succeed in getting a shot. Mr. Erwin I. Shores writes me that he took a male at Suffield, Conn., August 5, 1874. This is strong evidence of their breeding in the hills about that portion of the State, for migrants would hardly appear in Connecticut during the *first* of August. On turning to my manuscript notes on the birds of Easthampton, Mass., I find the following: "Breeds. Not so rare as it should be. Four specimens procured: one shot Sept. 10, 1873, and another May 23, 1874, in a small grove of pines northwest of town; two shot May 28, 1874, on Mt. Nonotuck [part of Mt. Tom], where they appear to be quite common. Their alimentary tracts contained coleopterous insects,

\* Am. Nat., vol. vii, No. 12, p. 750, Dec., 1873.

wasps, and humble-bees." In Prof. Whitney's private collection, and in the beautiful cabinet of mounted birds presented by him to the Peabody Museum of Yale College, are two or three specimens of this bird, which he killed in the vicinity of Northampton, Mass., some years ago—one as late as June 4th, (1846). Mr. Ruthven Deane writes: "During the past three or four years I have observed each year several specimens of this beautiful Flycatcher in the vicinity of Cambridge, Mass., and, although I consider this a rare bird with us, I am inclined to think a few breed within the limits of the State every year."\* The species was described by Nuttall, from specimens taken in the vicinity of Cambridge, "in the woods of Sweet Auburn," in June, 1830 and 1831, and it has since been observed in eastern Massachusetts by Audubon (1832), Welch (1858), Brewster, Maynard, Cabot, Minot, and others. Nuttall says that his friend, W. Cooper, Esq., "received this bird likewise the preceding summer from the vicinity of Cape May, and Egg-harbor, in New Jersey,"† but Turnbull gives it as "very rare" in eastern Pennsylvania and New Jersey, and states that it only occurs as a migrant, being "generally seen early in May on its way north, . . . returns in September."‡ The occurrence in New Jersey, in "summer" (the month is, unfortunately, not stated) would indicate its breeding there, which hardly seems credible from what is now known concerning its distribution, though it is true that the "Pine-barrens" would afford it many congenial spots for nesting. Concerning their habits in the Adirondack region, in northern New York, where they breed plentifully, I have already observed that "they all seemed to have the same habit of choosing a large hemlock tree with a few dead branches on top, and were sure to light on the uppermost twig."§ Messrs. Maynard and Brewster gave it as "quite common and breeding at Umbagog," Maine, where "it has the habit of perching on dead stubs on the edge of clearings."|| Professor Verrill gave it as a "summer visitant, not very common,"¶ at Norway, Maine (about forty miles south of

\* Am. Nat., vol. viii, No. 5, p. 308, May, 1874.

† Manual of Ornithology, p. 284, 1832.

‡ The Birds of Eastern Pennsylvania and New Jersey, by William P. Turnbull, 1869.

§ Am. Nat., vol. vii, p. 750, Dec., 1873.

|| A Catalogue of the Birds of Coos Co., N. H., and Oxford Co., Me., by C. J. Maynard, with notes by William Brewster. From Proceed. Boston Soc. Nat. Hist., vol. xiv, p. 21, Oct. 18, 1871.

¶ Catalogue of the Birds found at Norway, Oxford Co., Me., by A. E. Verrill. From Proceed. Essex Institute, vol. iii, p. 144, May, 1863.

Umbagog), and Prof. Charles E. Hamlin also observed it, in Kennebec County, in the same State.\* Dr. W. H. Gregg found that it was "not a very common species" near Elmira, Chemung Co., southern New York, "where he met with only two specimens during several years of bird collecting."† In central Ohio it is, according to the high authority of Dr. J. M. Wheaton, a "rare migrant."‡ The record of its occurrence in the east, south of New Jersey, is not well authenticated. My friend, Mr. E. P. Bicknell, informs me that he has taken several specimens "and saw six or seven individuals between August 21st and Sept. 26th, 1876, at Riverdale, Westchester Co., N. Y.

Now, on the other hand, on going northward, we find it breeding at Randolph, Vermont (Chas. S. Paine),§ and Mr. Osborne has seen it about Mt. Washington. "Audubon found it in Maine, on the Magdeline Islands, and on the coast of Labrador,"|| as mentioned by Dr. Brewer, who further states that "Mr. Boardman reports the Olive-sided Flycatcher as having of late years been very abundant during the summer in the dead woods about the lakes west of Calais [eastern Maine] where formerly they were quite uncommon," and that he is informed by Mr. Hoy "that this species used to be quite common near Racine [Wisconsin], frequenting the edges of thick woods, where they nested."

From the above references it will be seen that the Olive-sided Flycatcher belongs, in the east, to the Canadian fauna, while it occasionally extends down into the Alleghanian, and, if Cooper's record can be relied on, stragglers have been known to breed in the Carolinian. Going westward, however, the case is quite different, and we find *Contopus borealis* breeding in numbers from the "Cumberland House, on the Saskatchewan, in latitude 54°,"¶ where it was obtained by Sir John Richardson, and described by Swainson in 1831 (this description having priority over Nuttall's, which was not published till 1833), to Camp Bowie, Arizona, latitude 32°, "within one hundred miles of Mexico," where both "young and old were secured in

\* Report Sect. Maine Board Agriculture, p. 170, 1865.

† Catalogue of the Birds of Chemung Co., N. Y., by W. H. Gregg, M.D. From Proceed. Elmira Academy of Sciences, 1870.

‡ The Food of Birds as related to Agriculture, by J. M. Wheaton, M.D. From Ohio Agricultural Report, p. 8, 1874.

§ Appendix to Zaddock Thompson's History of Vermont, p. 21. 1853.

|| History N. Am. Birds, Baird, Brewer and Ridgway, vol. ii. p. 354.

¶ Coues, Birds of the Northwest, p. 244. 1874.

August," by my friend, Mr. H. W. Henshaw, who, in his recent excellent work on the birds of that region, observes that "Its favorite perching places are the tops of the high pine stubs. From these stations it makes frequent sallies after passing insects, and seems rarely to miss its prey. When thus engaged, the clicking noise of its bill may be heard quite a distance. About the first of June, in southern Colorado, they had all mated, and each pair maintained a most jealous watch over the neighborhood chosen as its summer residence, never allowing the intrusion of the larger birds to pass unnoticed. The loud call notes of the male are, at this season, almost incessantly repeated."\* Mr. Henshaw also states that "specimens were taken near Camp Apache [Arizona] in July, which doubtless were breeding," and that he "found it almost as numerous in eastern Arizona, quite far to the south, as in Colorado."

Numerous specimens have been taken in Colorado by Allen,† Henshaw, Aiken, Trippe, and others. Regarding its occurrence at Idaho Springs, Colorado, T. Martin Trippe writes Dr. Coues that "It is quite uncommon, only three or four pairs having been observed throughout the summer, and these at widely different points, each pair apparently monopolizing a wide range. It keeps in the tops of the trees, and is an active flycatcher; its noise is loud and distinct; and its nest is placed in the top of a pine, and jealously guarded from all intrusion with as much fierceness and energy as the Kingbird's."‡ It is given by Snow as "rare in western Kansas."§ Notices of its occurrence in Utah have been published by Allen "several seen among the cottonwoods along Weber River",|| Henshaw,¶ Ridgway "breeding in Parley's Park, Wahsatch Mts.,"\*\* Nelson (who "obtained one specimen from the top of a dead pine," among the mountains, thirty miles south of Fort Bridger),†† and myself;‡‡

\* Report upon the Ornithological Collections made in portions of Nevada, Utah, California, Colorado, New Mexico and Arizona, during the years 1871, 1872, 1873 and 1874. By H. W. Henshaw. Forming Chapter III of the Zoological Volume published under the direction of Lieut. Geo. M. Wheeler, in charge of the Geographical and Geological Explorations and Surveys west of the 100th meridian. p. 350. Washington. 1875.

† Bulletin Museum Comp. Zoöl. Cambridge, vol. iii, No. 6, p. 158. 1872.

‡ In Coues' Birds of the Northwest, p. 245. 1874.

§ Catalogue of the Birds of Kansas. By F. H. Snow. 3d ed., p. 8. 1875.

|| Bull. Mus. Comp. Zoöl. Cambridge, vol. iii, No. 6, pp. 169, 179. 1872.

¶ Report upon Ornithological Specimens, pp. 22, 46. Wash. 1874.

\*\* Bull. Essex Inst., vol. vii, No. 2, p. 33. Feb., 1875.

†† Proceed. Boston Soc. Nat. Hist., vol. xvii, p. 344. Jan., 1875.

‡‡ Sixth Annual Report U. S. Geol. Survey of the Territories for the year 1872. p. 691.

and it was taken in Nevada by Biscoff (recorded by Henshaw), and Ridgway,\* who writes me as follows: "Although I found it at very few localities, I am certain of its occurrence wherever suitable localities exist. . . . It there inhabits the coniferous woods at an altitude of from about 8,000 feet up to timber line, and I noticed that it preferred localities where the trees had been denuded by fire. The only places, in Nevada, where I met with this bird, were the pine woods of the East Humboldt and Ruby Mountains." Concerning its occurrence in California, Dr. Cooper says: "It seems to be resident in most parts of the State where it is found, but not occurring south of Monterey, where Dr. Gambel found young in July. I found them rather common in the Coast Range toward Santa Cruz, where they had nests in May, but I could not examine any of these, their location being generally on a high inaccessible branch. I also found this bird at Lake Tahoe in September. It is rather silent, keeping mostly on tops of the trees, and catching passing insects."† Mr. Ridgway also found it breeding in California, "on the eastern slope of the Sierra Nevada."‡ In Oregon and Washington Territory it is, according to Dr. Cooper, "a much more abundant bird near the Columbia River and throughout the northern Rocky Mountains. There they migrate, remaining at the Lower Columbia from May to October."‡ Dr. Brewer writes: "In Washington Territory this bird appears to be somewhat more common than in other portions of the United States. Dr. Suckly obtained a specimen at Fort Steilacoom, July 10th, 1856. It was not very abundant about Puget Sound, and showed a preference for shady thickets and dense foliage [contrary to its usual habit], where it was not easily shot." "A single specimen," continues Dr. Brewer, "was taken, Aug. 29th, 1840, at Nenortalik, Greenland [by Reinhardt], and sent to Copenhagen."§ Hence the distribution of this beautiful and interesting Flycatcher affords an excellent illustration of the manner in which some species that are confined, during the breeding season, to the Canadian and Alleghanian faunæ in the Eastern Province, are found, during the same period, in the far West, extending from the Saskatchewan, in British America, almost, if not quite, to Mexico.

\* Bull. Essex. Inst., vol. vii, No. 1, pp. 21, 38. Jan., 1875.

† Ornithology of California, vol. i, p. 324. 1870.

‡ Bull. Essex. Inst., vol. vi, No. 10, p. 174. Oct., 1874.

§ Baird, Brewer and Ridgway, Birds N. Am., vol. ii, p. 356. 1874.

124. *Contopus virens* (Linné) Cabanis. Wood Pewee.

A common summer resident, generally placing its beautiful lichen-covered nest astride the horizontal branch of some tall birch, or maple, in deep forests, but sometimes choosing an orchard or garden, in close proximity to occupied buildings. Arrives before the middle of May (May 10, 1876, Osborne), remaining through September. It is one of the few birds that may be found alike, during the breeding season, in the heart of the city, near the farm house, and in the darkest swamps and most secluded forests, far from the habitations of man. Its mournful note may sometimes be heard at all hours of the night.

125. *Empidonax Acadicus* (Gmelin) Baird. Acadian Flycatcher; Small Green-crested Flycatcher.

A rare summer visitant from the Middle States; may breed in the Connecticut Valley.

It affords me great pleasure to be able, through the kindness of Mr. Erwin I. Shores, to replace this species among the birds of New England. As is well known, it was formerly included in all New England lists, but, as shown by Dr. Coues, Mr. H. W. Henshaw, and others, the records were founded on erroneous identifications—the bird having been mistaken for *E. minimus* or *Traillii*, generally the former. In a letter to Dr. Coues, Dr. Brewer says “I do not think the bird occurs in New England, even in the Connecticut Valley,”\* and Mr. William Brewster, of Cambridge, the highest authority on the Birds of New England, has expressed similar views. Hence it was with a peculiar sense of gratification that I received, a few days since, an unmistakable example of this species, from Mr. Shores, who states that he shot it “in Suffield, Conn., June 24th, 1874, in a piece of woods known as Beech Swamp.” For the benefit of those who might not feel disposed to accept my identification in so important a matter, and to avoid all possibility of mistake, I at once sent the bird to my friend Mr. Robert Ridgway, of the Smithsonian Institution, and he pronounces it to be a “typical *E. Acadicus*.”

126. *Empidonax Traillii* (Audubon) Baird. Traill's Flycatcher.

A common summer resident, arriving early in May (May 6, 1877). Frequents swampy lowlands, where it breeds.

---

\* Birds of the Northwest, p. 251. 1874.

127. *Empidonax minimus* Baird. Least Flycatcher.

An abundant summer resident, arriving early in May (May 5, 1877), and remaining till late in September. Breeds abundantly in gardens throughout the city.

128. *Empidonax flaviventris* Baird. Yellow-bellied Flycatcher.

Not uncommon during migrations; arrives about the middle of May (May 20, 1876), remaining till the last of the month, and Mr. Grinnell tells me he has seen it in early June. Have taken it in fall, about the middle of September (Sept. 17, 1875). Not known to breed.

## Family, CAPRIMULGIDÆ.

129. *Antrostomus vociferus* (Wilson) Bonaparte. Whippoorwill.

A common summer resident. Arrives early in May (May 2, 1877, Osborne). Nocturnal, spending the day on the ground beneath some tree, or among thick bushes. When disturbed, its flight is short and irregular, and it may easily be shot. The Stadtmüller Brothers have an unusually pale set of eggs taken on Mill Rock (near New Haven) May 30th, 1875. "They were not placed by the side of a rock or log, as Samuels says."\*

130. *Chordeiles Virginianus* (Brisson) Bonaparte. Night-hawk;  
Buli-bat.

A common summer resident, arriving early in May (May 11, 1875, Sage). Mr. W. W. Coe has taken its eggs as late as June 23d (1872). By no means strictly nocturnal like the last, but may be seen, especially in autumn, flying about high in the air and constantly uttering its peculiar cry, at any hour of the day, though generally preferring the twilight. Commonly roosts on old logs or horizontal limbs (sometimes quite high up) on which they lie longitudinally.

131. *Chætura pelagica* (Linné) Baird. Chimney Swift.

An abundant summer resident, arriving in April or May (April 14, 1876, Osborne; April 30, 1877, May 5, 1874, Portland, Sage; May 8, 1874), and remaining till late in September (Sept. 27, Osborne); breeds abundantly in old chimneys. Before the days of

---

\* MS. notes of the Stadtmüller Brothers.

brick chimneys, and to some extent since, these birds used to congregate in multitudes about certain large hollow trees, where they bred regularly, and, according to some, spent the winter also. Williams, in his "Natural and Civil History of Vermont," published in 1794, relates the following concerning three "Swallow trees" which came under his observation. "The species called the house or Chimney Swallow, has been found during the winter, in hollow trees. At *Middlebury* in this State, there was a large hollow elm, called by the people in the vicinity the Swallow tree. From a man who, for several years, lived within twenty rods of it, I procured this information: He always thought the Swallows tarried in the tree through the winter, and avoided cutting it down, on that account. About the first of May, the Swallows came out of it, in large numbers, about the middle of the day; and soon returned. As the weather grew warmer, they came out in the morning with a loud noise, or roar, and were soon dispersed; about half an hour before sun down, they returned in millions, circulating two or three times round the tree, and then descending like a stream, into a hole about sixty feet from the ground. It was customary for persons in the vicinity, to visit this tree, to observe the motions of these birds. And when any persons disturbed their operations, by striking violently against the tree, with their axes, the Swallows would rush out in millions, and with a great noise. In November, 1791, the top of this tree was blown down, twenty feet below where the Swallows entered. There has been no appearance of the Swallows since. Upon cutting down the remainder, an immense quantity of excrements, quills, and feathers, were found; but no appearance or relicks of any nests. Another of these swallow trees was at *Bridport*. The man who lived the nearest to it, gave this account: The Swallows were first observed to come out of the tree, in the spring; about the time that the leaves first began to appear on the trees. From that season, they come out in the morning, about half an hour after sunrise. They rushed out like a stream, as big as the hole in the tree would admit, and ascended in a perpendicular line, until they were about the height of the adjacent trees; then assumed a circular motion, performing their revolutions two or three times, but always in a larger circle, and then dispersed in every direction. A little before sundown, they returned in immense numbers, forming several circular motions, and then descended like a stream into the hole, from whence they came out in the morning. About the middle of September, they were seen entering the tree, for the last time." "Neither of these accounts are attended

with the highest degree of evidence, which the subject may admit of: but I am led to believe from them, that the House Swallow, in this part of America, generally resides during the winter, in the hollow of trees.”\*

The tree above described, from Middlebury, Vermont, finally blew down, and, more than half a century (in 1852) after Williams wrote the account above given of it, its *remains* were visited by his successor, in the historical line, Zadock Thompson, and were found scarcely less interesting than the tree itself when inhabited by thousands of Swifts. Thompson gave this account of its condition and contents in 1852: “The tree had rotted away, leaving little besides the cylindrical mass, which had filled its hollow. The length of this mass was about seven feet, and its diameter fifteen inches. Of the materials which composed it, about one-half consisted of the feathers of the Chimney Swallow, being, for the most part, wing and tail feathers. The other half was made up of exuvia of insects, mostly fragments and eggs of the large wood-ant, and a brown substance probably derived from the decayed wood of the interior of the tree. This discovery at Middlebury, though interesting, would not have been regarded as very remarkable, if the materials which filled the hollow of the tree, had been promiscuously and disorderly mingled together. Such a jumbled mass would be what we should expect to find in a hollow tree which had been, for centuries, perhaps, the roosting place of myriads of Swallows. But this is not the case. In their general arrangement, the larger feathers have nearly all their quills pointing outward, while their plumes, or ends on which their webs are arranged, point inward. . . . But this is not the most remarkable circumstance connected with the subject. In various parts of the mass, are found, in some cases, all the primary feathers of the wing; in others, all the feathers of the tail, lying together in contact, and in precisely the same order and position, in which they are found in the living Swallow. In a lump of the materials, measuring not more than seven inches by five, and less than three inches thick, five wings and two tails were plainly seen, with their feathers arranged as above mentioned, and in one of the wings, all the secondary quills were also arranged in their true position with regard to the primaries. Now, we cannot conceive it possible that these feathers could be shed by living birds, and be thus deposited. We may

---

\* The Natural and Civil History of Vermont. By Samuel Williams, pp. 116-18. 1794.

suppose that the birds died there, and that their flesh had been removed by decay, or by insects, without deranging the feathers. But in that case what has become of the skeletons? I do not learn that a bone, beak, or a claw, has been found in any part of the whole mass. What then has become of these? They could hardly have been removed by violent means, without disturbing the feathers. But, if done quietly, what did it? What insect would devour the bones, and beak, and claws, and not meddle with the quills? Or would the formic, or any other acid, which might be generated within the mass, dissolve the former without affecting the latter?\*"

### Family, TROCHILIDÆ.

132. *Trochilus colubris* Linné. Ruby-throated Hummingbird.

A common summer resident. Arrives early in May (May 5, 1877), remaining till the middle of October (Oct. 5, 1876; Oct. 16, 1874). They usually breed early in June, but Dr. F. W. Hall informs me that a friend of his found a nest completed, and containing two eggs, as early as May 27th (1877).

Thomas Morton, in 1632, expressed his astonishment at the dimensions and habits of this bird, in the following words: "There is a curious bird to see to, called a humming bird, no bigger than a great Beetle; that out of question lives upon the Bee, which he eateth and catcheth amongst Flowers. For it is his custome to frequent these places. Flowers hee cannot feed upon by reason of his sharp bill, which is like the poynt of a Spanish needle, but shorte. His fethers have a glasse like silke, and as hee stirres, they show to be of a chaingable coloure: and has bin, and is admired for shape, coloure, and size."† And two years later, William Wood, in his "New England's Prospect" informs us that "The Humbird is one of the wonders of the Countrey, being no bigger than a Hornet, yet hath all the demensions of a Bird, as bill, and wings, with quills, spider-like legges, small clawes: For colour she is as glorious as the Raine-bow, as she flies, she makes a little humming noise like a Humble-bee: wherefore shee is called the Humbird."‡

"The Humberd for some Queene's rich Cage more fit,  
Than in the vacant Wildernesse to sit."‡

\* Zadock Thompson, *Appendix to the History of Vermont*, p. 26, 1853.

† Force's *Historical Tracts*, vol. ii, Tract 5, p. 50.

‡ *New England's Prospect*, by William Wood, p. 31, 1634.

Family, **ALCEDINIDÆ.**133. *Ceryle alcyon* (Linné) Boie. Belted Kingfisher.

A common summer resident about water courses and along the coast. Arrives during the latter part of March (Mar. 29, 1877), remaining into November (Nov. 13, 1875). A few sometimes winter. One was seen near Hartford, Feb. 13, 1874, by Mr. K. C. Humphrey.\* Mr. Fred. S. Smith, of this city, informs me that he once found the eggs of this species placed on a bed of fish bones, about six feet from the entrance to the hole. This was near Lake Whitney, Conn. In this latitude their eggs are generally deposited during the latter part of May. Josselyn, in enumerating the birds of New England, in 1675, says there are "*Kingsfishers*, which breed in the spring in holes in the Sea-bank, being unapt to propagate in Summer, by reason of the driness of their bodies, which becomes more moist when their pores are closed by cold."†

Family, **CUCULIDÆ.**134. *Coccyzus erythrophthalmus* (Wilson) Bonaparte. Black-billed Cuckoo.

A common summer resident, arriving about the middle of May (May 15, 1876), and remaining till the latter part of September (Sept. 28, 1875).

135. *Coccyzus Americanus* (Linné) Bonaparte. Yellow-billed Cuckoo.

A common summer resident. Arrives early in May (May 7, 1876), remaining into October (Oct. 11, 1873, shot, Hall). Both Mr. Coe and myself have found, on the same day, and in the same Cuckoo's nest, fresh eggs and young birds.

Family, **PICIDÆ.**136. *Hylotomus pileatus* (Linné) Baird. Pileated Woodpecker.

A rare winter visitant; it was once common throughout the State, but is now almost exterminated and driven into the less civilized districts. Linsley gave it from Stratford and New Haven. Mr. W. W. Coe tells me that a specimen was killed near Portland, Conn., in

---

\* MS. notes of John H. Sage, Esq.

† Voyages to New England, p. 101, 1675.

November, 1876; and "Mr. Wm. King took a specimen, several years ago, at Suffield, Conn.)\* No longer ago than 1839, Peabody gave it as resident in Massachusetts, where it was "not uncommon in the woodlands."†

137. *Picus villosus* Linné. Hairy Woodpecker.

Resident, but not common. Have taken four specimens and seen several others in the immediate vicinity of New Haven. Found chiefly in winter. Mr. Coe tells me that it is quite common about Portland, Conn.

138. *Picus pubescens* Linné. Downy Woodpecker.

A common resident; found everywhere except in open fields devoid of stumps and fences.

139. *Picoides arcticus* (Swainson) Gray. Black-backed Three-toed Woodpecker.

A rare winter visitor from the North. In the Museum at Middletown is a specimen, from the Shurtleff Collection, taken at Simsbury, Conn., in 1860. Dr. Wood has also taken it at East Windsor Hill, Conn.

140. *Sphyrapicus varius* (Linné) Baird. Yellow-bellied Woodpecker.

Rare about New Haven. Have seen but four individuals (Sept. 28, and Oct. 2, 1875, and March 30, and May 3, 1876). Mr. J. N. Clark finds it to be "abundant in fall" at Saybrook.‡ Linsley gave it from New London, Conn. It is rare about Portland, Conn., as I am informed by Messrs. Coe and Sage. Mr. Thos. Osborne tells me that they were quite common about New Haven last fall (1876) and that he secured four specimens. Mr. Grinnell says that it is not uncommon about Milford, Conn., in fall; and Mr. J. N. Clark, of Saybrook, writes me that he has observed it to be "very common both in spring and fall," but that he "never saw it after April till autumn."

Though most Woodpeckers are residents where they are found at

\* MS. notes of Erwin I. Shores.

† Peabody's Report on the Ornithology of Mass., p. 334. 1839.

‡ Am. Nat., vol. vii, No. 11, p. 693. Nov., 1873.

all, in any numbers, this is truly, though not strictly, a migrant.\* Dr. Wm. O. Ayres writes me: "At New Canaan, Conn., I used to find them each autumn, though never very numerous; I never saw them in the spring.

141. *Centurus Carolinus* (Linné) Swainson. Red-bellied Woodpecker.

A rare accidental visitor from the South. Linsley saw one "ascending an apple tree, on the 16th of October, 1842."† Dr. Crary says he has killed it near Hartford, Conn.; and Mr. Erwin I. Shores writes me that he "took a female, July 30th, 1874," at Suffield, Conn. Giraud gave it as breeding regularly on Long Island, though not very common.‡

142. *Melanerpes erythrocephalus* (Linné) Swainson. Red-headed Woodpecker.

A rare summer resident; breeds at Saybrook, sometimes remaining all winter.§ Linsley gave it from Stratford, and Dr. J. D. Whelpley informed him that it was "rare at New Haven"† thirty-five years ago, and, so far as I am aware, its numbers have not increased since. In fact, as Dr. Cones has remarked: "Comparisons of the older with more recent local authorities indicate that the species is now much less numerous than formerly."‖ Dr. F. W. Hall took one at West Haven in December, 1872, and has seen several other specimens in this vicinity. W. W. Coe and J. H. Sage have each taken it about Portland, Conn., but find it rarely. Dr. Wood, of East Windsor Hill, tells me that they were really abundant, in that vicinity, thirty-five years ago, being more numerous than the Flicker (*Colaptes auratus*). Four years later a large flock was seen, and since then they have been one of our rare birds. A few, however, still breed pretty regularly in the vicinity of East Windsor, Conn. Mr. J. N. Clark informs me that, during the latter part of September, 1872, they suddenly became abundant in a grove of oaks near Saybrook, Conn. The adult birds were mostly killed off by boys from the neighborhood, while the young-of-the-year, lacking the brilliant and

\* For a valuable contribution to the biography of this beautiful Woodpecker, see an article by William Brewster, in Bull. Nutt. Ornith. Club, vol. i, No. 3, pp. 63-70. Sept., 1876.

† Am. Jour. Sci. and Arts, vol. xlv, No. 2, p. 263. April, 1843.

‡ Birds of Long Island, p. 179. 1844.

§ Am. Nat., vol. vii, No. 11, p. 693. Nov., 1873.

‖ A List of the Birds of New England. [From Proc. Essex Inst., vol. v, p. 15.] 1868.

much prized red heads, were spared and remained through the winter—some even breeding there the next summer (1873). Mr. J. H. Sage killed one at Hartford, Dec. 31st, of the same winter (1872). Their food consisted chiefly of acorns. In this connection I will state that in northern New York (Lewis Co.), where they are usually one of our commonest Woodpeckers, they subsist almost exclusively on beech-nuts, of which they evidently are extremely fond, eating them, apparently with equal relish, whether green or fully matured. It is truly a beautiful sight to watch these magnificent birds, together with their equally abundant cousins, the Yellow-bellied Woodpeckers (*Sphyrapicus varius*), creeping about, after the manner of the Warblers, among the small branches and twigs, which bend low with their weight, while picking and husking the tender nuts—the bright crimson of the head, neck and breast, the glossy blue-black back, and creamy-white belly, together with the scarcely less striking colors of their yellow-bellied companions, contrast handsomely with the deep green foliage.

143. *Colaptes auratus* (Linné) Swainson. Golden-winged Woodpecker; Yellow-hammer; High-holder; Flicker; Yaffle.

Resident; common from early April till November. A few generally winter. It breeds in holes in old stubs and trees. The migrants arrive during the latter part of March (March 28), remaining till the middle or latter part of November (Nov. 14 and 28). My friend, Mr. A. J. Dayan, saw one, near New Haven, on the 26th of January, 1877. Mr. Geo. Bird Grimell tells me that he has taken it, near Milford, Conn., in December (Dec. 25, 1876), January (Jan. 1, 1877), and February (Feb. 27, 1875). Mr. W. W. Coe writes me that they also spend the winter in the vicinity of Portland, Conn.

Kalm states, in his *Travels*, that “this species is destructive to maize-fields and orchards, for it pecks through the ears of maize, and eats apples. . . . Some years ago there was a premium of two pence per head, paid from the public funds, in order to extirpate this pernicious bird.”\*

#### Family, STRIGIDÆ.

144. *Strix flammea*, var. *Americana* (Audubon) Schl. Barn Owl.

A rare accidental visitor from the South. Taken by Linsley at Stratford, Conn.† Prof. J. A. Allen states that Dr. Wood “has a

\* Peter Kalm's *Travels into North America*, vol. ii, pp. 86-7. 1771.

† *Catal. Birds Conn.*, p. 253. 1843.

specimen in his cabinet that was shot 'at Sachem's Head, Connecticut, Oct. 28th, 1868.'"\* Massachusetts also lays claim to two specimens: the first "was killed near Springfield, Mass., about the last of May," 1868,† and the other "was shot near Lym, in the same State, in 1863."‡

Since writing the above I have seen, in the cabinet of Capt. O. N. Brooks, at Faulkner's Island, Conn., a mounted specimen of this species which was killed at Madison, Conn., some years ago; and Dr. Wm. O. Ayres, now of Easthampton, Long Island, writes me that he found one at Hartford, Conn., about the year 1841. Hence at least four have been killed in this State.

#### 145. *Bubo Virginianus* (Gmelin) Bonaparte. Great Horned Owl.

Resident; not rare. Breeds in suitable localities throughout the State. It feeds on the larger game (hares, grouse, and the like), not forgetting the poultry yard, and seems particularly fond of turkeys, of which it seldom touches more than the head, if there are a plenty about. Indeed I have known one to kill and decapitate three turkeys and several hens in a single night, leaving the bodies uninjured and fit for the table. Hence, if not so prone to select valuable fowls the loss would not be great. Their tenacity to life is something remarkable. A number of years ago I kept one in confinement for six or eight months, during which time I was twice attacked by him and bear the marks of his talons to this day. On both of these occasions I kicked and pounded him with sticks till he was, as I supposed, dead, but always on returning to skin the bird I found him sitting up on his perch, blinking, snapping his bill, and making faces at me as usual. Dr. Wood writes that a gentleman, while viewing one of this species in his collection, said: "I suppose that is the kind of bird that once scared me almost to death. While riding on horseback through a tract of large woods in New York State, one night, with a white beaver on my head, something, without the least noise or warning, struck my head with such force that it took my hat, and I supposed for a time the top of my head off. I thought the devil was after me, and the way that old horse went for the next three miles would have astonished John Gilpin. It seemed to me my heart beat

\* Notes on some of the Rarer Birds of Massachusetts, p. 17. 1869. I have lately seen this specimen.

† Proceed. Essex Institute, vol. v, p. 312.

‡ Coues' Birds of the Northwest, p. 300. 1874.

louder than an ordinary church bell, and I had to swallow fast to keep it from coming into my throat and choking me.”\*

My friend, Mr. W. W. Coe, of Portland, Conn., has had such remarkable success in finding the nests, and securing the eggs, of this species, that I was induced to trouble him for an account of some of his exploits in that direction, and he has been kind enough to favor me with the following: “In 1868, a farmer’s boy told me that a pair of Great Horned Owls and their two young had taken up their abode in a piece of woods near his place, and that a pair had lived there for several years. He had often seen them when at work in the woods in winter, and observed them one morning on the lower limbs of a large hemlock. One sat on a branch directly above the other and had a rabbit in its claws, upon which they both seemed to be feeding. He watched them for sometime and then frightened them off. The bird with the rabbit carried it with him a short distance, but finally dropped it. The boy offered to shoot one of the Owls for me, but I told him not to do it, for I wanted to get the eggs, if possible, the next year.

“On the first of May, 1869, we went to look for the nest and found it in a large chestnut tree. It contained two young Owls almost large enough to fly. I brought them both home, stuffed one, and kept the other alive sometime, when it got killed while I was away. During the latter part of March, 1870, we went again and found the Owls occupying the same nest. One old bird was on, and I thought myself sure of the eggs this time, but on ascending to the nest found two young Owls covered with down. They were, I should think, about two weeks old, so we left them for seed and determined to be in time next season, but sickness and extra work forced me to neglect it. In the following year (1872) we started out on the 2d of March and visited the old nest, but for some reason it had been abandoned. We then visited another piece of woods near by and soon found a vary large nest in a chestnut tree, but it showed no sign of life. While deliberating whether it was best to climb it or not, I gave the tree several hard raps with a club, when off went the old bird with a *hoo, hoo, hoo*. My companion climbed the tree and found two eggs. I thought they might lay again, since it was so early, and accordingly, on the 12th of April, visited the same nest, and, on getting near, a bird jumped up from it which I at first took to be the Owl, but as it started off I saw it was a Red-tailed Hawk, which we found had

---

\* Hartford Times, chap. xvii, July 20, 1861.

taken possession and layed two eggs. We then went to the old Owl's nest, where we had found young in 1869 and 1870, and found the old bird on. This nest now contained two eggs in which the young were well advanced—so the old birds must have laid again soon after the first nest was robbed.

“About the first of March, 1873, we again visited the same place but could not find the birds, though I noticed one of their feathers, and, since snow had fallen a day or two before, I know they could not be far off. Finally, on the 13th of March, I found them occupying a nest about two miles from the old place. It was the old nest of a Red-tailed Hawk from which I took three eggs April 29th, 1872. The nest now contained one young Owl, apparently about five or six days old, and one rotten egg. I think the egg had been frozen, for it was badly cracked. I am, of course, unable to say whether or no all the eggs above mentioned were deposited by the same pair of Owls, since three or four old birds have been killed in this vicinity. However, I am quite sure that they all belonged to the same family. I also took their nests in 1874 (Feb. 28), 1875 (took young in May), 1876 (Feb. 22), and 1877 (took eggs twice, Feb. 19 and Mar. 23). During the whole time I have known of them they have not built a new nest, but have either occupied the same one for at least three years, or taken some vacant Hawk's nest.

“To sum up: my experience with Great Horned Owls has been that they lay in old nests of Red-tailed Hawks, in hollow trees, and occasionally in ledges of rocks. I never knew them to build a nest, or to lay more than two eggs, and I have known of many nests not mentioned above.”

146. *Scops asio* (Linné) Bonaparte. Mottled Owl; Screech Owl.

A common resident throughout the State. It lays five eggs, in a hollow tree, about the last of April. This is, I think, the most nocturnal of our Owls. At least it can generally be approached in broad day-light more easily than the other species, and seems to be dazzled by the light. It sometimes catches fish through a hole in the ice, like the Snowy Owl.\*

147. *Otus vulgaris*, var. *Wilsonianus* (Lesson) Allen. Long-eared Owl.

A common resident. Its large nest is commonly placed on some thick tree—generally a pine—but sometimes in low bushes. It is

\* Bull. Nutt. Ornithol. Club, vol. ii, No. 3, p. 80. July, 1877.

said to take possession of the deserted nests of Crows and Hawks. "Mr. J. S. Brandigee, of Berlin, Conn., found a nest, early in April, in a hemlock tree, situated in a thick dark evergreen woods. The nest was flat, made of coarse sticks, and contained four fresh eggs."\* Have taken it, in company with the following species, in clumps of low bushes near the coast.

148. *Brachyotus palustris* (Bechst.) Gould. Short-eared Owl.

Resident about the salt marshes near the coast; also found throughout the State. Nests on the ground. Not uncommon. In the year 1856, on the island of Grand Menan, "A nest of this bird was found by Mr. Cabot in the midst of a dry, peaty bog. It was built on the ground, in a very slovenly manner, of small sticks and a few feathers, and presented hardly any excavation."†

149. *Syrnium cinereum* (Gmelin) Audubon. Great Gray Owl.

A rare straggler from the north. Linsley captured a specimen at Stratford, Conn., Jan. 6, 1843.‡

During the winter of 1852 a large Great Gray Owl was killed near Boston, Mass., after creating some little excitement among the inhabitants: "A light snow fell on Sunday evening, March 21st, and the next morning mysterious footprints were discovered in the vicinity of Nahant street and Long Beach. They were of a shape that excited much curiosity, and no one was able to determine what sort of a creature had made them. But on Monday evening Mr. John Barry shot a very large gray owl, on the marsh, near the foot of Pleasant street, and it was concluded that the wonderful tracks were made by him. He measured more than five feet from tip to tip of the wings."§

150. *Syrnium nebulosum* (Forster) Boie. Barred Owl.

A common resident throughout the State. Mr. J. N. Clark, of Saybrook, Conn., tells me that he once found it breeding, in a hollow tree, within twenty-five rods of the nest of a pair of Great Horned Owls.

\* Baird, Brewer & Ridgway, vol. iii, p. 22, 1874.

† A List of Birds observed at Grand Menan and at Yarmouth, N. S., June 16 to July 8, 1856. Proceed. Boston Soc. Nat. Hist., vol. vi, p. 115. March, 1857.

‡ Am. Jour. Sci. and Arts, vol. xlv, No. 2, p. 253. April, 1843.

§ History of Lynn, Mass., pp. 432-3, 1865.

Dr. Wm. Wood, of East Windsor Hill, Conn., relates the following amusing anecdote, which serves well to illustrate "the nature of the beast" under certain conditions, and at the same time affords us an excellent example of conjugal affection and innate wisdom in our own species: "A gentleman who fancied himself a taxidermist because, forsooth, he had seen a single specimen stuffed, determined to allow that talent no longer to be buried, but bring it to light by practically demonstrating to the world in general, and mankind in particular, the way by which the feathered species can forever look 'as natural as life and a little more so.' Having obtained a specimen of the Barred Owl that was only slightly winged, he let it loose in the cellar till a leisure day. The bird, with only the tip of the wing injured, and having free use of its limbs and feet, could visit any part of her prison, and finding herself sole mistress, was not long in appropriating anything and everything that would promote her own comfort and ease. The potato and apple bins, as well as the soap and pork barrels were indiscriminately and alike used for places of rest and repose. The day arrived when this nuisance could no longer be tolerated. Approaching, with hand extended, to seize the Owl, my friend received the benefit of her claws in and around his fingers. Grasping the bird's leg to disengage it from its gripe, the other claw was instantly brought in requisition and seized the other hand. Both hands being now securely held by the bird, no wonder that our hero called out lustily for help when he saw the Owl expanding herself almost indefinitely, and snapping her bill in anticipation of the dainty repast which, according to appearance, she was about to swallow! The terrified scream alarmed the whole household, and the rush down the cellar stairs reminds one very forcibly of the second and fourth illustrations in Bachelor Butterfly, on page 14th, where he jumped overboard, and, in order to save the life of the Naturalist, was followed by his omnipresent Dorothy and the whole crew. His better half becoming alarmed for the safety of her beloved, seized the enraged bird by the head and pulled with all the force that conjugal fidelity or nervous excitement could arouse. The more she pulled the deeper were the talons of the Owl inserted, as was evidenced by the musical entertainment given by our friend, which comprised a scale of at least two octaves, with trills and variations that would have astonished an Italian prima donna! What more could be done? The adage that 'necessity is the mother of invention' proved true in this case, for the imminent danger, to say nothing of the excruciating pain, roused our hero to the importance of trying what

virtue there was in his incisors. Being blest with a good set he with much difficulty succeeded in biting off all the claws of the Owl, and relieving himself from his perilous position, probably a wiser man for his first lesson in Ornithology.”\*

Surely Thomas Morton, Esq., could not have been familiar with the love calls of this species, or he would never have written: “There are Owles of divers kindes: but I did never heare any of them whop as ours doe.”†

### 151. *Nyctea Scandiaca* (Linné) Newton. Snowy Owl.

This magnificent bird seems to be a pretty regular winter visitant along our coast. Linsley had secured five specimens from Stratford, Conn., and Dr. Whelpley had observed it at New Haven, prior to the year 1843.‡ Two specimens came to my notice during the winter of 1875-6 (the first on Nov. 10), and no less than a dozen specimens were killed in the immediate vicinity of New Haven in October (Oct. 17, Osborne), and November last (1876). They unquestionably belonged to the immense flock of these Owls that passed through eastern Massachusetts about the same time. Over *two hundred* specimens were shot about Boston in October and November. For a detailed account of this wonderful and really perplexing migration, consult an article by Ruthven Deane, Esq., in the Bulletin of the Nuttall Ornithological Club, No. 1, vol. ii, p. 9, for January, 1877. Dr. Wm. Wood, of East Windsor Hill, Conn., writes that they were unusually abundant here during the winter of 1858-9, when fifteen or twenty were shot in Hartford County. He further observes that “it hunts either by day, or in the twilight, occasionally pursuing game on the wing and securing it after the manner of the true falcons, but generally devouring it on the spot like the Marsh Hawk. When annoyed and teased by Crows it will now and then seek shelter in a hollow tree. Some years since I was pursuing one of these birds, in our meadows, that was followed and tormented by a great number of Crows. It finally alighted on an apple tree about a hundred rods distant, and in a few moments the whole tree was black with his tormenters, and still they came from all directions, attracted by the noise and confusion of those diving at the Owl. Soon they began to

\* Hartford Times, chap. xx, August 17, 1861.

† New English Canaan, p. 49. (Reprinted in Force's Historical Tracts, Tract 5, vol. ii.)

‡ Am. Jour. Sci. and Arts, No. 2, vol. xlv, p. 253, 1843.

leave, and before my arrival all was quiet. This was a mystery to me, for I had not seen the Owl fly, and if he had, the crows would certainly have given the alarm and followed him, yet no Owl was in sight. Having passed the tree some fifteen or twenty rods I heard a noise, and turning about saw the Owl coming out of a hollow apple-tree stump close by the tree. This was rather provoking, for I had been, just a moment before, near enough to the stump to have touched it with my gun.”\*

About the middle of March, 1863, “four large Arctic Owls were shot during one week, at Nahant, and on the beaches” about Boston.†

152. *Surnia ulula*, var. *Hudsonia* (Gmelin) Coues. Hawk Owl.

A rare winter visitor from the North. To Dr. F. W. Hall belongs the honor of adding this species to the birds of our State. In Nov. 1869, he saw the bird in an elm tree in an open field. Not having a gun with him he returned for it and secured a fine specimen of the Hawk Owl. It was mounted by the Rev. C. M. Jones, and is now in the cabinet of Dr. Hall. In the vicinity of Hudson’s Bay, during the winter season, the white Ptarmigan (*Lagopus albus*) constitutes its chief article of diet; and it is said to follow the hunter, pouncing upon his game before he has time to reach it. As early as 1833 the Hawk Owl was recorded, by Ebenezer Emmons, M.D., as a rare “autumn” visitant in Massachusetts.‡ It has been shot as far South as Haddington, near Philadelphia.§

153. *Nyctale Tengmalmi*, var. *Richardsoni* (Bonaparte) Ridgway. Richardson Owl.

An extremely rare accidental winter visitor from the North. Dr. Wm. Wood has a fine specimen of this boreal Owl in his cabinet. It was captured some twenty years ago, in mid-winter, near East Windsor, Conn. The doctor gives the following account of the manner in which he came in possession of this specimen, in one of his interesting articles published in the “Hartford Times,” Aug. 24th, 1861: “Visiting a patient some three miles from my office, I was

\* Hartford Times, chap. xvi, July 6, 1861.

† History of Lynn, Mass., by Alonzo Lewis and James R. Newhall, p. 473, 1865.

‡ Report on the Geology, Mineralogy, Botany, and Zoology of Massachusetts. By Edward Hitchcock, Amherst. p. 546. 1833.

§ Birds of East Pennsylvania and New Jersey. By William P. Turnbull, M.D., p. 41. 1869.

informed that word had been left for me to call at a house near by. On driving over and meeting the occupant at the gate, I inquired who was sick? After giving me an evasive answer I was invited into the house. Being well acquainted with the gentleman, and knowing that he had quite a taste for natural history, I began to suspect that it was not professional advice that was wanting. Leaving the room for a few minutes, he returned with an Owl. This bird, he informed me, sat upon the verandah early the previous morning, and approaching cautiously, he captured it without its making the least resistance or effort to escape, and put it into a cage. The next morning, from some unknown cause, the bird was found dead, and 'thinking it might be something a little different from any in my collection,' he saved it for me. No one but a naturalist can imagine the satisfaction it afforded me when I beheld Richardson's Owl; and I assure you that I would not only have gone three miles, but ten times three to obtain it." Several specimens have been taken in Massachusetts.\*

154. *Nyctale Acadica* (Gmelin) Bonaparte. Acaadian Owl; Saw-whet Owl.

Resident, though rather rare, or at least not often seen, for, owing to its diminutive size and nocturnal habits, it might be quite common and yet escape notice. Linsley never saw "but two individuals," one of which "was found lying upon his back in a barn-yard in a cold morning in March, 1841, though still living." A specimen was taken at East Haven, Conn., Nov. 26th, 1874, by Dr. F. W. Hall.

Mr. Coe and Mr. Sage have each fine examples of this species in their cabinets, and the former gentleman showed me a set of five eggs found in a hole in a tree near Portland, Conn. Dr. Wood, of East Windsor Hill, has several specimens taken in that vicinity, and I have lately seen quite a number, killed about New Haven, and throughout the State. It feeds on small birds, mice, grasshoppers, beetles, etc. "For rearing its young the Saw-whet takes possession of the old nest of a crow, or some other large bird, or of a hollow cavity of an old tree."†

\* J. A. Allen's Notes on some of the Rarer Birds of Mass., pp. 47-8. 1869.

† Zaddock Thompson's History of Vermont, pp. 66-7. 1842.

## Family, FALCONIDÆ.

155. *Circus cyaneus*, var. *Hudsonius* (Linné) Schl. Marsh Hawk; Harrier; "Mouse Hawk."

A tolerably common summer resident, especially about salt marshes, where it breeds, placing its nest on the ground. Arrives in March or April (April 9, 1876, Osborne), remaining into November (Nov. 6).

I take the following interesting account of the audacity sometimes displayed by this bird, from one of Dr. Wood's articles in the Hartford Times: "If once introduced to your young poultry a faithful supervision will be exercised over them to see that none *are left* to suffer from want of attention or hunger. I know of an instance where the old bird returned daily, and about the same hour, until all were taken. Coming one day when the owner was there, the Hawk evidently intended to convince him that he was sole proprietor of that brood. The chickens having fled into the coop, he made himself quite at home by alighting on the shed near by and waiting for them to appear. The farmer caught up a stick and threw it at him, which so enraged the bird that it flew about his head, diving at him and squealing at a most furious rate, when he returned again to the shed, scolding vehemently. The farmer remarked that 'he was the sauciest little thing he ever saw.' In capturing mice partly concealed they sometimes 'wake up the wrong passenger' and get captured. An instance of this occurred in East Hartford. A Mouse Hawk was observed sailing over some tall grass, evidently intent on game. Poising himself for a moment by the slow, easy flappings of his wings, he suddenly dove, and soon appeared, ascending slowly and with difficulty. The very singular movements of the Hawk attracted the notice of several persons who were talking together, and they watched every motion with interest. He gradually rose higher and higher, till his strength began to fail, when he began to descend obliquely for a little way, then headlong to the ground. On arriving at the place they found that the Hawk had seized a weasel, that had killed its assailant by eating into the sides of the bird, where he was still at work!"

"Some years since, a student in the seminary came running up to me in a great hurry, almost out of breath, puffing like a locomotive, and exclaiming, 'Doc—doc—doctor,—can—you—shoot—flying?' I replied that sometimes I did such things. "Well, I wish you would go out East and shoot a Hawk that has chased me for half a

mile, diving so close to my head that I expected every moment he would have hold of me.' Taking my gun, we walked towards the swamp, when he informed me that 'he came out there to practice elocution, so as not to disturb any one, and before he had finished the vowel sounds the Hawk came at him.' On arriving near the place I requested him to commence his vocal exercises again, so as to afford me an opportunity for practicing on the wing. He commenced, and, if that was a specimen of elocution, no wonder the Hawk drove him from the premises, for of all the earthly or unearthly sounds ever uttered, those exceeded anything I ever heard. If blind-fold, one would have supposed that there was a concert of Great Horned Owls of all ages, echoing through the forest 'waugh ho! oo, é, ah,

'Making night hideous,'

almost tempting one to think, if not to utter, the penult of the word named. The bird without doubt recognized the vowel sounds, for she soon came around, but either not liking the looks of me or my gun, kept at a respectful distance, flying about, uttering the peculiar cry of the Marsh Hawk. Neither the attempts of Audubon or Nuttall to interpret their song has elucidated it according to my ear. It appears to me to sound like the male falsetto descending quickly from high F to D, key of two sharps, with the syllables hey, ha, ha, in compound time, accenting the first note very forcibly. The next day we went again to the swamp, but taking the precaution to conceal myself in the bushes before he commenced his elocutionary exercises, the bird dove at him as before, when he sung out lustily, 'shoot! shoot! shoot!' Discovering me the hawk changed her tactics, much to the relief of my friend, and, poising herself for a moment, dove with so much force at my head as to make a distinct rustling sound. After allowing her to repeat this several times to see if she would really take hold of my cranium, my old gun went off, carrying death in its track, much to the joy of my companion, who now, for the first time, ventured to take a full breath since coming into the swamp."\*

156. *Nauclerus forficatus* (Linné) Ridgway. Swallow-tailed Kite.

A rare straggler from the South, at present. Mr. Josiah G. Ely, of Lyme, New London County, Conn., writes me that while hunting on the 2d of July (1877), one of these magnificent birds flew over his

---

\* Hartford Times, chap. xv, June 29, 1861.

head, and that "there is no doubt as to its identity." Mr. W. W. Coe, of Portland, Conn., tells me that he saw a Swallow-tailed Kite in that vicinity, during the summer of 1861. He was crossing an open meadow when the Kite suddenly dove, close to where he was standing, and arose with a snake in its talons. This it devoured while in the air, much to the surprise of Mr. Coe, who was not then familiar with its habits. A specimen has also been observed in Massachusetts quite recently.\* It has been shot on Long Island (Giraud). The cause of its restricted northern range, in the eastern province, at the present time, can scarcely depend on the temperature (as generally supposed), for it was once not only common in New England, but actually wintered here. Williams, writing in 1794, says that they were then found in Vermont, and "seem to be fitted by nature, to endure all the diversity of our climate, and are to be seen in the coldest weather of our winters."† The power of wing exhibited by this splendid species is truly wonderful. Its swift flight and abrupt turnings can only be compared to those of the Swallow. I have often seen them, in Florida, dart down and pick a wasp's nest from the under side of a palmetto leaf, devouring the grubs it contained while on the wing.‡ Dr. Coues writes thus of it: "The Swallow-tailed Kite is a marked feature of the scene in the Southern States, alike where the sunbeams are redolent of the orange and magnolia, and where the air reeks with the pestilent miasm of the moss-shrouded swamps that sleep in perpetual gloom. But, imbued with a spirit of adventure, possessed of unequalled powers of flight, it often wanders far from its southern home; it has more than once crossed the ocean, and become a trophy of no ordinary interest to the ardent collector in Europe." It extends northward in the Mississippi Valley, "where it regularly occurs above the mouth of the Missouri." "Marked among its kind by no ordinary beauty of form and brilliancy of color, the Kite courses through the air with a grace and buoyancy it would be vain to rival. By a stroke of the thin-bladed wings and a lashing of the cleft tail, its flight is swayed to this or that side in a moment, or instantly arrested. Now it swoops with incredible swiftness, seizes without a pause, and bears its struggling captive aloft, feeding from its talons as it flies; now it mounts in airy circles till it is a speck in the blue ether and disappears."§

\* Rarer Birds of Mass., J. A. Allen, p. 46, 1869.

† The Natural and Civil History of Vermont, by Samuel Williams, p. 112, July 16, 1794.

‡ Am. Nat., vol. viii. No. 2. p. 88, Feb., 1874.

§ Coues' Birds of the Northwest, p. 332, 1874.

157. *Accipiter fuscus* (Gmelin) Bonaparte. Sharp-shinned Hawk.

A common summer resident, breeding on trees and on high rocky cliffs throughout the State. Mr. W. W. Coe writes me, that, of all our Hawks, they are the latest to breed, laying their eggs, generally five in number, in June. He has found them "in an old grey squirrel's nest fixed up for the occasion." Arrives in March, remaining into November. F. W. Putnam, in 1856, gave it as "resident," but "not abundant," in Essex County, Mass. I have no authentic record of its occurrence here in winter. Dr. Wood writes: "Its flight is quick, irregular, and so rapid, that, if your gun is not cocked it will pass out of range before you can get aim. It pounces upon its prey with such velocity that no time is allowed for escape. While riding one day, one passed within a few feet of me and dashed into a cluster of alders, interwoven with grapevines and briars, and seized a half-grown quail, passing out with it, without scarcely checking its speed. Although the hedge was within twenty feet of me, it was so thick that I could not discern the bird until it appeared on the opposite side in the talons of the Hawk. When hungry and in search of game, it knows no fear, often diving within a few feet of you and seizing a chicken. Sometimes you will see one flying along very swift and low, wheeling right and left, taking a 'bird's-eye view' of every hedge and bush, until it starts some little bird, whose fate is surely sealed."\* Nuttall writes: "Descending furiously and blindly upon its quarry, a young Hawk of this species broke through the glass of the green-house, at the Cambridge Botanic Garden; and fearlessly passing through a second glass partition, he was only brought up by the third, and caught, though little stunned by the effort."†

158. *Accipiter Cooperi* (Bonaparte) Gray. Cooper's Hawk; Chicken Hawk.

A common summer resident, generally placing its nest in some tall pine or other high tree. "Their four eggs are usually deposited about the middle of May. They frequently build a new nest every year but often take possession of the old nest of a Red-tailed or Red-shouldered Hawk."‡ Arrives in March, remaining into November. Dr. Wood writes that he knew of six of their nests in the vicinity of East Windsor Hill, Com., in a single season, and that he obtained

\* Hartford Times, chap. x, May 25th, 1861.

† Nuttall's Manual of Ornithology, vol. i, p. 88. 1832.

‡ MS. notes of W. W. Coe.

eggs from five of them. He says, "It is bold and fearless, often diving within a few rods of the farmer and seizing his chickens. If once introduced to the young poultry, you may rest assured of a daily call till all are gone, unless you are fortunate enough to secure the intruder. I once saw one of these Hawks seize a chicken on a very steep side-hill, close beside the old hen. In an instant the enraged mother flew upon the thief, and both came tumbling down the hill, clinched together; running up, I was just about to grasp the Hawk when they parted. It sometimes attacks full grown poultry with success. A gentleman once informed me that, 'while standing by his wood-pile, close by the house, one of these birds dove upon a full grown rooster, within six or eight rods of him. The fowl ran some two or three rods and dropped dead. The Hawk soon returned to devour his game, as it was too heavy for him to carry away, but his audacity cost him his life.'"<sup>\*</sup>

In the old colonial days, when every man spelled as best suited his own fancy, the different kinds of Hawks did not pass unnoticed, for in 1632 Morton wrote: "There are Hawkes in New England of 5. sorts, and these of all other fether fowles I must not omitt, to speake of, nor neede I to make any Apology for my selfe, concerning any trespass, that I am like to make upon my judgment, concerning the nature of them, having bin bred in so genious a way, that I had the common use of them in England: and at my first arrivall in those parts practiced to take a Lannaret, which I reclaimed, trained, and made flying in a fortnight, the same being a passinger at Michuelmas. I found that these are most excellent Mettell, rank winged, well conditioned, and not tickleish footed, and having whoods, bels, lners, and all things fitting, was desirous to make experiment of that kinde of Hawke, before any other. And I am perswaded: that nature hath ordained them to be of a fare better kinde, then any that have bin used in England."<sup>†</sup> It seems to me that there is little doubt but that the above remarks refer to Cooper's Hawk.

159. *Astur atricapillus* (Wilson) Jardine. Goshawk.

Rather rare, and somewhat irregular, winter visitant. Said to breed, occasionally, as far south as Massachusetts (Maynard and Minot).

<sup>\*</sup>Hartford Times, chap. ix, May 18th, 1861.

<sup>†</sup>New English Canaan. By Thomas Morton, p. 49. 1632. [Reprinted in Force's Hist. Tracts, vol. ii, T. 5.]

Professor Wm. D. Whitney has a finely mounted specimen, in his cabinet, which was shot, some years ago, at Hamden Plains, near New Haven, Conn. W. W. Coe, and Jno. H. Sage, of Portland, Conn., have each several fine specimens taken in the State—one near Hartford, Nov. 9th, 1867. Mr. Geo. Bird Grinnell secured one, late in the fall (Nov. or Dec.) of 1876, at Milford, Conn. For several days previous to its capture it had been in the habit of lurching on a neighbor's chickens. Mr. Erwin I. Shores writes me that, in the vicinity of Suffield, Conn., he has seen it "four or more times during the last two winters." I am informed by Dr. Wm. Wood, of East Windsor Hill, Conn., that they are really common in that vicinity about once in ten years (he once had seven specimens, in the flesh, on hand at one time) but are seldom seen between times. The doctor relates the following anecdote as illustrating well the boldness and daring often displayed by this species: An old man, over eighty years of age, was sitting quietly in the kitchen with his maiden daughter. The door was open and their quiet was suddenly broken by a hen who rushed frantically into the room, followed closely by a large Goshawk. There, right on the kitchen floor, and in the presence of the two, the bold Hawk seized the hen. The feeble old man came to the rescue, and, with stick in hand, finally succeeded in beating off the intruder, who now made for the door. But it was too late—the daughter had closed the door and actually caught the furious bird in her hands and put him to death!

Zadock Thompson says: "Its disposition is very savage, and it is withal so much of a cannibal as sometimes to devour its own young!"\* Dr. Wm. Wood, of East Windsor Hill, writes that a specimen which he once kept alive in a small room "refused food until the thirteenth day, when it devoured an entire hen. . . . It died the next night, a victim to its voraciousness."† "The poet Chaucer in alluding to it says,—

'Riding on hawking by the river,  
With gray Goshawk in hand.'

Falconry and hawking, as defined by our lexicographers, are synonymous, but formerly birds of sport were divided into two classes, those of falconry, and those of hawking. This bird came under the latter class." "The Goshawk does not usually soar high, like the longer winged Hawks, nor dart upon its prey by a direct descent, as do the

---

\* History of Vermont, p. 62. 1842.

† Hartford Times, chap. ix, May 18th, 1861.

true Falcons, but by a side glance. It is restless, seldom alighting but for a moment, except to devour its quarry, and then it stands almost erect. Its flight is so rapid that it can easily overtake the swift Pigeon on the wing. . . . . When looking for prey it skims along near the surface of the ground with great velocity, and catches its game so quickly and easily as scarcely to be seen by the looker-on." "The Goshawk is the most daring and venturesome of any of our diurnal birds of prey. A farmer who resides a few miles from my office, wishing to perpetuate the old New England custom of having a chicken-pie for Thanksgiving dinner, caught some fowls, took them to a log, severed the neck of one, and threw it down beside him. In an instant a Goshawk seized the struggling fowl, and, flying off some ten rods, alighted and commenced devouring its prey. The boldness of the attack so astonished the farmer that he looked on with blank amazement. Recovering from his surprise, he hastened into the house and brought out his gun, which secured him both the Hawk and the fowl."\*

Pennant, in 1785, tells us that Goshawks "are used by the Emperor of *China* in his sporting progresses, attended by his grand falconer, and a thousand of the subordinate. . . . . The Emperor often carries a Hawk on his hand, to let fly at any game which presents itself; which are usually Pheasants, Partridges, Quails, or Cranes. *Marco Polo* saw this diversion about the year 1269."†

160. *Falco communis* Gmelin. Peregrine Falcon; Duck Hawk.

Resident, but rare; breeds on Talcott Mountain, near Hartford, Conn. Linsley tells us that, previous to the year 1842, a specimen of this celebrated and powerful bird was wounded by a gun-shot in Stratford, [Conn.], and after he was taken soon recovered, and was kept on poultry until he became too expensive to the owner,"‡ who then released him. Mr. Geo. Bird Grinnell informs me that he saw, on the 23d of February, 1876, a Duck Hawk (or Great-footed Hawk, as it is often called), flying about the Sound, near Milford, Conn.

On the 29th of June, 1877, while enjoying the hospitality of Capt. O. N. Brooks, at Faulkner's Island, Conn., in company with my friend, Mr. Jno. H. Sage, the Terns breeding on Goose Island (one mile

\* Dr. Wood, in *Am. Nat.*, vol. x. No. 3, pp. 132-4. March, 1876.

† *Arctic Zoology*. By Thomas Pennant, vol. ii, p. 204. 1785.

‡ Linsley's *Catal. Birds Conn.*, p. 250, 1843.

distant) were observed to be in an unusual state of commotion. The Captain remarked that they had been agitated, the day previous, by a Duck Hawk which might still be prowling in the vicinity, and he kindly offered to take us over there. We landed, and, on rounding the island, the Falcon suddenly started from her retreat among the rocks and weeds, which, as we afterwards discovered, was strewn with feathers. But the captain's gun was in readiness, and, through his kindness, the bird now graces my collection. During her brief visit she had made sad havoc among the Terns, and her crop was greatly distended with their remains, which had been swallowed in incredibly large pieces—whole legs, and the long bones of the wings were found entire and unbroken! Indeed she was perfectly gorged, and contained the remains of at least two adult Terns, besides a mass of newly hatched young! The only other great-footed Hawk that Capt. Brooks has ever taken, he killed, at this same place, twelve years ago. Query: did this bird come from Talcott Mountain, or did it breed far beyond our limits? It is said that they are able to fly many hours without resting, and at the enormous rate of an hundred miles per hour!\* They sometimes live nearly 200 years!

In the Hartford Times of June 29th, 1861, Dr. Wm. Wood, of East Windsor Hill, Conn., published the first account of the first Duck Hawk's nest found in New England. It was discovered by Dr. Moses, on Talcott Mountain, near Hartford, Conn., May 25th, 1861, and contained four young almost large enough to fly. The finding of this nest was, at the time, of particular interest, since, as Dr. Wood remarked, "it settled beyond dispute three points: 1st, that they breed on cliffs; 2d, that they breed in Connecticut; and 3d, that they nest very early" (sometime in March).†

They have since been known to breed regularly on Mount Tom, Mass., where their eggs were first taken, April 19, 1864, by Mr. C. W. Bennett,‡ of Holyoke. Their nest was again robbed, by Mr. Bennett, in 1866 and in 1869. Mr. J. A. Allen, in his "Notes on some of the Rarer Birds of Massachusetts," writes: "During a visit to this Mountain [Mt. Tom], in company with Mr. Bennett (Apr. 28, 1869), we had the great pleasure of discovering their second eyrie, from which, with considerable difficulty, three freshly laid eggs were obtained. Not discouraged by this second misfortune, they nested

\* See an interesting Article in *Am. Nat.*, vol. v, No. 2, p. 82, April, 1871.

† *Hartford Times*, June 29, 1861.

‡ See *Proceed. Essex Inst.*, vol. iv, p. 153.

again, this time depositing their eggs in the old eyrie from which all except the last set of eggs have been obtained. Again they were unfortunate, Mr. Bennett removing their second set of eggs, three in number, May 23d, at which time incubation had just commenced. The birds remained about the mountain all the summer, and from the anxiety they manifested in August it appears not improbable that they had laid a third time, and at this late period had unfledged young.\* Mr. Harold Herrick states that it is common on the Island of Grand Menan, N. B., where it "breeds on the cliffs, but in such inaccessible situations that its nest is rarely taken. There is a place between 'Fish Head' and the 'Old Bishop' known as the 'Seven Day's Work,' where the cliff is divided into seven strata as sharply defined as lines of masonry. On an indentation in the face of this cliff, about one hundred feet from the top, and one hundred and fifty feet from the bottom, a pair of these Falcons have had their eyrie for a succession of years, secure alike from the assaults of the most zealous naturalist, and the small boy of bird's-egging proclivities."†

Mr. W. W. Coe, of Portland, Conn., tells me that while duck shooting a few years since, as the birds rose at the report of his gun, a Duck Hawk dove, struck a Teale, on the wing, and carried it off! Dr. Wood writes: "In the vicinity of their breeding places they are a terror to the poultry as well as a dread to the farmer, for there they usually hunt in pairs, one following directly after the other, and if the first one misses the game, the other is sure to pick it up; there is no escaping the two. This is the universal testimony of all the farmers living in the vicinity of the cliffs where they breed. One of my collectors went over one hundred miles to get a nest of their eggs, from only hearing a farmer in the vicinity of the cliff describe their manner of hunting; knowing from this circumstance alone that it must be the Duck Hawk."‡

161. *Falco columbarius* Linné. Pigeon Hawk.

Resident, but rare in summer, and not often seen in winter. It is not uncommon here in spring and fall. Dr. Wm. Wood tells me that he has found it about East Windsor Hill, Conn., in May, June, and July, but failed to discover the nest. He is not, of course, perfectly

\* Notes on some of the Rarer Birds of Mass., p. 10-11, 1869.

† Herrick's Partial Catalogue of the Birds of Grand Menan, p. 10, 1873.

‡ Am. Nat., vol. v, No. 2, p. 82, April, 1871.

certain that they breed there at all, though their occurrence in early summer certainly looks like it. I have seen it, in the vicinity of New Haven, in April, and again in August and September, and now have notes of its presence in this State in every month of the year. In one of his interesting articles on the "Game Falcons of New England," Dr. Wood writes: "In May, 1860, a gentleman who resides some five miles distant, informed me that a small Hawk came almost every day and carried off a chicken for him—that it never missed, for it went so like lightning that there was no escaping its grasp. He said that it always came in the same direction from a tract of woods near his house . . . . . Accompanied by my friend, we carefully searched the woods without finding anything except the nest of the Red-shouldered Hawk. The next day the same little Hawk returned and was shot, and is now in my collection, a beautiful representative of the Pigeon Hawk. I have no doubt that it had a nest about there, as it was the season for nesting, and it always came from, and went to, the same piece of woods, and in the same direction. If it had not young it must have been carrying food to its mate while incubating. If a mere straggler it would come and go without any definite place of resort. Our inability to find the nest was not strange, as there were some sixty or eighty acres of heavy-timbered oaks and pines in the tract."\* Mr. Geo. A. Boardman states that it "breeds in hollow trees,"† which would, of course, render its nest still more difficult to find. I am strongly inclined to believe that a few pairs do occasionally breed in Connecticut, for, though its nest has not yet been actually discovered, the fact that the birds are sometimes found here throughout the entire year is strong evidence that they breed, and mere negative evidence, in such cases, amounts to little or nothing.

162. *Falco sparverius* Linné. Sparrow Hawk.

A rather rare resident; only a few pairs breed within the State, and it is seldom seen in winter. Mr. W. W. Coe tells me that it breeds near Portland, Conn., and I am informed by Dr. Wood that it sometimes breeds in the vicinity of East Windsor Hill.

Dr. Wood thus describes a novel site for a nest of this Hawk which was found at Granby, Conn.: "A farmer made a dove house inside of his barn with holes through the sides of the building com-

\* *Am. Nat.*, vol. vii, No. 6, pp. 342-3, June, 1873.

† *Proceed. Bost. Soc. Nat. Hist.*, vol. ix, p. 122, Sept., 1862.

municating with it. A pair of doves that had nested there were attacked and killed by a pair of Sparrow Hawks who took possession of their nest, laid four eggs, and commenced to sit. During incubation they found the farmer's chickens very convenient for food—too much so for their own good. I saw both birds after they were killed; also their four eggs, two of which are now in my cabinet.”\* In Elizabeth, New Jersey, several years ago, I saw a pair of Sparrow Hawks fly up under the eaves of an old barn, and drag a couple of Swallows out of their nests! Mr. Sage has seen it in January (Jan. 6, 1877), near Portland, Conn., and Dr. Wood writes me that he has occasionally taken it in winter.

“Sparhawkes there are also,” wrote Morton in 1632, “the fairest, and best, shaped birds that I have ever beheld of that kinde, those that are litle, no use is made of any of them, neither are they regarded, I onely tried conclusions with a Lannaret at first comming; and when I found, what was in that bird, I turned him going: but for so much as I have observed of those birds, they may be a fitt present for a prince; and for goodnesse too be preferred before the Barbary, or any other used in Christendome, and especially the Lannars and Lannarets.”† The above may have referred to the Sharp-shinned Hawk.

### 163. *Buteo borealis* (Gmelin) Vieillot. Red-tailed Hawk; Hen Hawk.

A common resident, but more numerous in early spring and during the fall migrations than at other times of the year. The migrants arrive early in March, and in fall, may be seen, in considerable numbers, in September, October, and November. On the 25th of September, 1875, I saw, near New Haven, a flock of twenty-six Red-tailed Hawks, soaring high, and sailing slowly southward. The day was clear and cool, and there was little wind.

Mr. W. W. Coe, of Portland, Conn., has been remarkably fortunate in finding the nests of this Hawk, having taken, during the past five years, nearly forty of its eggs! The best time to go for them seems to be about the middle of April, but he has found nests, containing eggs, at all dates from March 30th (1875) to May 23d (1873), though the young generally hatch during the latter part of April or early in May. The Stadtmüller brothers found a nest, near New Haven, April 13, 1877, containing three eggs which “were just beginning to

\* Am. Nat., vol. viii, No. 5, p. 268, May, 1874.

† New English Canaan, p. 50. [Reprinted from Force's Hist. Tracts, vol. ii, T. 5.]

hatch.”\* The Red-tailed Hawk generally lays two, frequently three, and sometimes four, eggs. In writing of them, from Portland, Conn., Mr. Coe says: “Their nests are easily identified, being the largest nests built in this locality, and the earliest. They lay in the same nest year after year if not disturbed, and often if they are. I once found a nest in a young chestnut, not over twenty feet from the ground, but they commonly build high up in large trees.”†

The Rev. Mr. Peabody, in his Report on the Birds of Massachusetts (in 1839), remarked that these Hawks, “like the Crow, seem to have an intuitive perception of the use and reach of the gun, for if they see a person armed, they give a scream of disgust, and sail away far beyond his reach.”‡

They are often called Hen Hawks from their frequent visits to the poultry yard. I have also found, in their alimentary canals, the remains of mice, snakes, and frogs.

#### 164. *Buteo lineatus* (Gmelin) Jardine. Red-shouldered Hawk.

A common resident, like the last, but more frequently seen in winter. Also breeds in high trees. Mr. Coe writes me that it generally lays a little later than the Red-tail, makes a smaller nest, and is more likely to build a new one every year. He has taken their eggs from April 16th (only one egg, just deposited) till May 19th. They generally lay three or four eggs, and sometimes five. Dr. Wood once found six! I once took from the stomach of one of these Hawks a snake (*Eutainia saurita*) measuring twenty-two inches in length!

A young bird, which Dr. Wood raised, became very much attached to him. He says: “by giving a whistle he would answer with his *ka-hee, ka-hee, ka-hee*, and fly from the tree and alight on my shoulder, expecting his accustomed morsel. I did not confine him at all, but allowed him to fly where he pleased, knowing that he would not go far off. The domestic fowls became so well acquainted with him that they showed no signs of fear when he alighted on a tree or post near them. One morning he did not come at my call, nor at noon. In the afternoon I went in search of him and whistled till my lips would not pucker any longer, yet no bird answered to the music. The next morning he was brought to me as a rare specimen with the following

---

\* MS. notes of the Stadtmüller Brothers.

† MS. notes of W. W. Coe.

‡ A Report on the Ornithology of Massachusetts, by William B. O. Peabody, p. 268, 1839.

sequel: 'He came and alighted on my fence within a few feet of me when I was feeding my fowls. They flew in every direction. Carefully stepping up I caught the pretty creature and thought I would save him for the doctor. Putting him into a box, I gave him some corn; but he did not seem hungry, and would not eat a kernel.'\* Again, under the name of "Winter Hawk (*Buteo hyemalis*)," the doctor continues: "Sitting patiently upon a tree near some spring or marshy ground, it will watch by the hour for a frog to make its appearance, when it is immediately seized and drowned. There is a side-hill, some few miles from my office, from which springs constantly run in the coldest weather, forming quite a wet, marshy place, offering great inducements to the Winter Hawk. Here you may see one or more of these birds every winter, perched upon a tree near by watching for its favorite food. I received two specimens shot from that tree in one day."†

165. *Buteo Pennsylvanicus* (Wilson) Bonaparte. Broad-winged Hawk.

A rather rare resident, seldom seen in winter. It breeds sparingly about New Haven, and Mr. W. W. Coe has taken quite a number of their nests, together with several of the finest specimens of the bird that I have ever seen, in the vicinity of Portland, Conn. He informs me that they generally lay later than the Red-shouldered Hawks, and, like them, often build a new nest every year.

Mr. F. W. Putnam (in 1856) gave it as a rare winter visitant so far north as Essex Co., Mass.‡

166. *Archibuteo lagopus*, var. *Sancti-Johannis* (Gmelin) Ridgway.  
Rough-legged Hawk; Black Hawk.

A winter visitor; not common. I saw one near New Haven, Nov. 20th, 1875. Mr. Geo. Bird Grinnell tells me that he has seen it, in spring, near North Haven, Conn. It is sometimes quite abundant on the low meadows bordering the Connecticut River, where, in the vicinity of East Windsor Hill, Conn., Dr. William Wood has secured a large number of specimens. The splendid series thus obtained, enabled him, many years ago, to prove the identity of the two forms, *lagopus* and *Sancti-Johannis*, then considered, by our

\* Hartford Times, chap. xii, June 8th, 1861.

† Hartford Times, chap. xiii, June 15th, 1861.

‡ Proceed. Essex Inst., vol. i, p. 203. 1856.

best Ornithologists, to be specifically distinct. As long ago as 1861 Dr. Wood published the following: "The difference in size is no more than frequently occurs in birds of the same species. The shape and general form, the small claws, the same habits in every respect, their arrival at the same time, associating and sailing together, the plumage of the one running into the other as it changes, so that it is difficult, if not impossible, to tell where the dividing line comes, some being jet-black, others not quite as dark, others slightly mixed, some more so, certainly make a strong case in favor of their identity."\* Three years later the doctor wrote J. A. Allen that he had then taken and examined about forty specimens, and could now state positively that: "The Rough-legged Falcon and Black Hawk *are the same.*"† Both Baird and Coles, in their late works on our birds, state that the examination of a large number of specimens leaves little doubt as to the identity of the two forms under consideration, each using such language as to indicate an original discovery dependant on his own investigations, and neither alludes to the published records of Dr. Wood, who, long before, arrived at the same conclusion, and from a larger amount of material, and of better quality, than is to be found in any other collection in the world.

167. *Pandion haliaëtus* (Linné) Cuvier. Fish Hawk; Osprey.

A summer resident, breeding abundantly along the coast, both on the main land and on islands in the Sound. It is particularly abundant during the spring migrations. It arrives late in March (March 28, 1877), remaining through October (Oct. 23). The migrants pass northward during the latter part of April, and return again in September. Mr. Fred. Sumner Smith, of this city, tells me that a friend of his found a Fish Hawk's nest in Heron Swamp (near New Haven) as late as July 4th, (1870). It was a small one, being little larger than a bushel basket, was placed in a clump of thick bushes, and contained three eggs. Mr. W. W. Coe informs me that they do not breed so far up the Connecticut River as Middletown and Portland, but are common at its mouth (about Saybrook), and that he has taken their nests, along the Sound, all the way from Saybrook to New London, Conn. "Immense numbers of them breed regularly at Plumb Island, Conn., where I saw, last spring, at least five hundred nests, and over a thousand birds. There is only one small piece of

\* Hartford Times, chap. xiv, June 22d, 1861.

† Allen's notes on some of the Rarer Birds of Mass., p. 14. 1869.

timber on the island, and every tree contains a Fish Hawk's nest, or from eight to ten Night Herons' nests. There is quite a colony of Night Herons there. There not being trees enough for the Hawks to nest in, many of them build on the ground and some lay their eggs in the sand. They occupy the same nest for years, adding a little to it each season, till some of them, that were originally placed flat on the ground, had become so large that I could not look into them. Many were seven feet high and measured six or eight feet across the top! On the 4th of June I found both young birds and fresh eggs in some of the nests. The Crow Blackbirds had built their nests in among the large sticks on the sides of the Fish Hawk's nests, there being often four or five of the former placed about the sides of one of the latter. Besides the Fish Hawks, Night Herons, and Crow Blackbirds, many other birds breed upon this island, among which might be mentioned the Upland and Killdeer Plover, and large numbers of Terns.\*

The Rev. Wm. B. O. Peabody, in 1839, thus wrote of their habits: "The Fish Hawk is on excellent terms with the fishermen, though they are of the same trade. Its coming announces the arrival of the shoals of fish that crowd our rivers in the spring. Perhaps its exemption from persecution may be owing also to its well known gentleness of disposition. Unlike other birds of prey, the Fish Hawks are social and friendly to each other. They come to us in flocks of eight or ten, who build near each other, and rear their young in perfect harmony, and this spirit of hospitality and kindness is extended to other birds that seem to have no claim upon them. The Crow Blackbirds are permitted to shelter in the interstices of their nests, which are huge constructions, made of a cartload of heavy materials firmly matted together."†

168. *Aquila chrysaëtus* Linné. Golden Eagle.

A rare winter visitant. Dr. Wood informs me that it is sometimes seen about Hartford, Conn. Mr. J. N. Clark, of Saybrook, Conn., writes me that he sees one or two there every year, and that one remained in that vicinity a week, about the middle of May last (1877). One was secured at Deep River, Conn., Nov. 13th, 1875, by Mr. Harry Flint. Zadock Thompson stated that they sometimes live in Vermont, and says that "the nest is placed upon the inaccessible shelf of some

\* MS. notes of W. W. Coe.

† Peabody's Report on the Ornithology of Mass., p. 265. 1839.

rugged precipice, and consists of a few sticks and weeds barely sufficient to keep the eggs from rolling down the rocks. . . . These eagles feed upon young fawns, hares, raccoons, wild turkeys, partridges, and other quadrupeds and birds, but will feed on putrid flesh only when severely pressed by hunger.”\*

169. *Haliaëtus leucocephalus* (Linné) Savigny. Bald Eagle.

A resident; not uncommon during the migrations. Saw one flying over the city, Nov. 20th, 1875. Also observed five individuals during Feb. and March, 1876. They unquestionably breed about four miles above the mouth of the Housatonic River, Conn., as I am told by my friend, Mr. Geo. Bird Grinnell. One was shot near the mouth of the East Haven River in Nov., 1876, and is now in the collection of Mr. Thomas Osborne of this city. Used to breed in suitable localities throughout the State, and there were formerly two eyries within a few miles of New Haven, one at Mt. Carmel, and the other on Saltonstall Ridge.†

Linsley kept an immature specimen (called by him “Washington’s Eagle”) alive for some time, concerning which he writes: “I kept him awhile confined, but soon found it unnecessary, because if he left my premises he would return to the stand at night. I have known him to eat fourteen birds (mostly King-birds), and then he was satisfied for a week. He appeared to prefer this mode of living, and paid no attention to a daily supply. He, however, in the course of the summer, became so mischievous among the young ducks of my neighbors, that I was compelled to kill him. A single anecdote of his conduct may not be uninteresting: While he had possession of my front yard, occupying the centre as his stand (the walks making a semicircle to the door), he would remain perfectly quiet if *gentlemen* or *ladies* entered; but if a person with tattered garments, or such persons as were not accustomed to come in at the front door, entered the yard, it was actually dangerous for them, and they could only escape the tremendous grasp of his talons by running with their full strength and shutting the gate after them. Facts of this kind often occurred, and I was occasionally compelled to release from his grasp such individuals as he had taken captive. With one claw in the sward and grass, he would hold quietly any man with the other.”

\* History of Vermont, by Zadock Thompson, p. 59, 1842.

† Am. Jour. Sci. and Arts, vol. xlv, No. 2, p. 251, April, 1843.

In 1634, William Wood wrote: "The Eagles of the Countrey be of two sorts, one like the Eagles that be in *England*, the other is something bigger, with a great white head and white taylor: these be commonly called Gripes; these prey upon Duckes and Geese, and such Fish as are cast upon the Sea-shore. And although an Eagle be counted King of that feathered regiment, yet is there a certaine blacke Hawke that beates him; so that he is constraigned to soare so high, till heate expell his adversary."\*

### Family, CATHARTIDÆ.

#### 170. *Cathartes aura* (Linné) Illiger. Turkey Buzzard.

A rare visitor from the South, at present, although once "not uncommon"† according to Linsley, who further states: "I have known it in Connecticut from a child, having at that period counted twenty in a flock in Northford in the month of August." "At the South, where they abound, it is seldom one attacks domestic poultry; but many years since I saw in Northford, in this State, a splendid male Turkey Buzzard pounce down upon a chicken about three-quarters grown, and within about three rods of where I was standing with two other persons. As he turned his eye upon us, still standing upon the chicken, he appeared so much alarmed as to be unable to rise; we all ran upon him, and when within a few feet of him he rose, just clearing our heads, and dropping the chicken at our feet, he hurried off."‡ This fact is particularly interesting, since they are commonly believed to feed exclusively on carrion. Nuttall heard that they were "accused, at times, of attacking young pigs and lambs, beginning their assault by picking out the eyes." But that he did not believe it is evident, for he goes on to say: "Mr. Waterton, however, while at Demerara, watched them for hours together amidst reptiles of all descriptions, but they never made any attack upon them. He even killed lizards and frogs and put them in their way, but they did not appear to notice them till they had attained the putrid scent. So that a more harmless animal, living at all upon flesh, is not in existence, than the Turkey Vulture."§ Nevertheless, since our own mod-

\* New England's Prospect, p. 30, 1634.

† Regarding its former abundance, Mr. J. N. Clark writes me that an old hunter told him "that they used to be very common" about the mouth of the Connecticut, where "he had shot a good many, but not recently."

‡ Am. Jour. Sci. and Arts, vol. xlv, No. 2, p. 250, April, 1843.

§ Nuttall's Manual of Ornithology, p. 45, 1832.

ern classification of the Animal Kingdom is not sufficiently plastic to admit of grouping together chickens, pigs, and lambs, under the head of "Reptiles," along with "lizards and frogs," and the like, and since the word of so careful and conscientious an observer as Mr. Linsley is unimpeachable, we are forced to admit that these "harmless animals" do occasionally visit the farm-yard with "malice aforethought," and that a young fowl, safely lodged in the otherwise empty stomach, may not prove an altogether distasteful article, exerting, perchance, as soothing an effect over the sluggish intellect of one of these indolent scavengers as the most delicious morsel of putrescent carrion. Indeed, Audubon says of it: "they often watch the young kid, the lamb, and the pig, issuing from the mother's womb, and attack it with direful success." "Any flesh that they can at once tear with their very powerful bill in pieces, is swallowed, no matter how fresh; . . . but it frequently happens that these birds are forced to wait until the hide of the prey gives way to the bill."\* Mr. Grinnell tells me that one was shot at the mouth of the Housatonic River, Conn., in June, 1875, by C. Merwin, of Milford Point. Turkey Buzzards have been observed at Saybrook, Conn., by Mr. J. N. Clark) recorded by Purdie;† two were taken in Massachusetts,‡ and one even strayed as far to the north as Calais, Maine, where it was captured by Mr. G. A. Boardman (recorded by Prof. A. E. Verrill).§ Dr. Wood tells me that one was seen, feeding on carrion, near East Windsor, Conn., only three years ago (1874). The Rev. J. Howard Hand writes me as follows, concerning the occurrence of Turkey Buzzards in Connecticut: "I took one specimen at Cromwell, Conn., Sept. 23d, 1874; also one at Westbrook, Conn., Oct. 16th, 1875, and again eight specimens on Oct. 18th (two days afterwards). They are not common." Dr. Wm. O. Ayres writes me that he took one at New Haven in 1853.

Along our eastern coast it does not breed farther north than Southern New Jersey; but in the West its range is much more extensive, its northern limit being "about 53° in the region of the Saskatchewan, where it arrives in June,"|| and was obtained by Sir John Richardson. Dr. Coues saw it at Fort Randall, Dakota, lat. 43° 11', and I have

\* Appendix to Wilson's American Ornithology, vol. iv, pp. 254 and 258, 1831.

† Am. Nat., vol. vii, No. 11, p. 693, Nov., 1873.

‡ Samuel's Descriptive Catalogue of the Birds of Massachusetts, p. 3, 1864. [From Agr. Mass., App., p. xviii, 1863.]

§ Proc. Bost. Soc. Nat. Hist., vol. ix, p. 122, Sept., 1862.

|| Coues' Birds of the Northwest, p. 380, 1874.

myself observed it in Idaho, Wyoming, and Utah. It was once common throughout New England, as attested by numerous old writers. Josselyn must have been blessed with a keen appetite and an admirable digestion, for he says: "The turkie-buzzard, a kind of kite, but as big as a turkie; brown of color, and very good meat."\*

NOTE.—The Black Vulture, *Cathartes atratus* (Ray) Lesson, may sometimes occur as a rare straggler from the South, and the Rev. J. Howard Hand writes me that he thinks he has killed three specimens of it at Westbrook, Conn. (Aug. 10, Sept. 12 and 21, 1874), but they may have been young Turkey Buzzards. Unfortunately the specimens were not preserved. Several individuals have been recorded from Massachusetts,† and it has even straggled as far north as Maine (Calais, G. A. Boardman)‡ and Nova Scotia.

### Family, COLUMBIDÆ.

#### 171. *Ectopistes migratoria* (Linné) Swainson. Wild Pigeon.

Sometimes quite abundant during the migrations. A few breed (late in May). Arrives about the first of April (Apr. 2, 1875, Sage). Mr. Coe tells me that numbers of them bred about Portland, Conn., in 1875, and that a few generally nest there.

Concerning the enormous flocks of Wild Pigeons which passed to and fro over the country in former years (and which, on a smaller scale, are still to be met with in some parts of the West), Gov. Thomas Dudley wrote, as early as 1631: "Vpon the 8 of March, from after it was faire day light, untill about 8 of the clock in the forenoone, there flew over all the townes in our plantacons soe many flocks of dones, each flock conteyning many thousands and some soe many that they obscured the lighte, that it passeth credit, if but the truth should bee written, and the thing was the more strange, because I scarce remember to have seene tenne dones since I came into the country. They were all turtles as appeared by diverse of them wee killed flying, somewhat bigger than those of Europe, and they flew from the north east to the south west; but what it portends I know not."§ And in the following year (1632), Thomas Morton, of Clif-

\* New England's Rarities Discovered. By John Josselyn, p. 11, 1672.

† Coues' List of the Birds of New England, p. 6, 1868; J. A. Allen's Rarer Birds of Mass., p. 47, 1869; etc.

‡ Am. Nat., vol. iii, p. 498, Nov., 1869.

§ Reprinted in Force's Historical Tracts, Tract 4, p. 17-18.

ford's Inn, speaking of his impressions of the country, when first he landed in New England, said: "The more I looked the more I liked it. And when I had more seriously considered of the bewty of the place, with all her faire indowments, I did not thinke that in all the knowne world it could be paralep'd." "Contained within the volume of the Land, Fowles in abundance, Fish in multitude, and discovered besides; Millions of Turtledoves one the greene boughes: which sate pecking, of the full ripe pleasant grapes, that were supported by the lusty trees, whose fruitfull loades did cause the armes to bend, which here and there dispersed (you might see) Lillies and of the Daphnean-tree, which made the Lande to mee seeme paradise, for in mine eie, t'was Natures Master-peece."\*

In looking over a curious old pamphlet, printed in 1630, and entitled "New-England's Plantation. Or, a Short and true description of the Commodities and discommodities of that countrey. Written by a reuerend Diuine now there resident.", I find the following notice of the Wild Pigeon: "In the Winter time I haue seene Floekes of Pidgeons, and haue eaten of them: they doe flye from Tree to Tree as other Birds doe, which our Pidgeons will not doe in *England*: they are of all colours as ours are, but their wings and tayles are farr longer, and therefore it is likely they fly swifter to escape the terrible Hawkes in this Countrey."† Samuel Williams, in his Natural and Civil History of Vermont (published in 1794), writes as follows: "In the Wild Pigeon, the multiplying power of Nature acts with great force and vigour. The male and female always pair: They sit alternately upon the eggs, and generally hatch but two at a time; but this is repeated several times in a season.—The accounts which are given of the number of pigeons in the uncultivated parts of the country, will appear almost incredible to those who have never seen their nests. The surveyor, *Richard Hazen*, who ran the line which divides Massachusetts from Vermont, in 1741, gave this account of the appearances, which he met with to the westward of Connecticut river. 'For three miles together the pigeon's nests were so thick, that five hundred might have been told on the beech trees at one time; and could they have been counted on the hemlocks, as well, I doubt not but five thousand at one turn round.' The remarks of the first settlers of Vermont, fully confirm this account. . . . The settlement of the country has since set bounds

---

\* Reprinted in Force's Historical Tracts, Tract 5, p. 42.

† Reprinted in Peter Force's Historical Tracts, vol. i, Tract 12, p. 11.

to this luxuriance of animal life; diminished the number of these birds, and drove them further to the northward.”\*

Two centuries after Morton's description was written, Nuttall remarks: “To talk of hundreds of millions of individuals of the same species habitually associated in feeding, roosting, and breeding, without any regard to climate or season as an operating cause in these gregarious movements, would at first appear to be wholly incredible. . . . . The approach of the mighty feathered army with a loud rushing roar, and a stirring breeze, attended by a sudden darkness, might be mistaken for a fearful tornado about to overwhelm the face of nature. For several hours together the vast host, extending some miles in breadth, still continues to pass in flocks without diminution. The whole air is filled with them; their muting resembles a shower of sleet, and they shut out the light as if it were an eclipse. At the approach of the Hawk, their sublime and beautiful aerial evolutions are disturbed like the ruffling squall extending over the placid ocean; as a thundering torrent they rush together in a concentrating mass, and heaving in undulating and glittering sweeps towards the earth, at length again proceed in lofty meanders like the rushing of a mighty animated river.” “Alighting, they industriously search through the withered leaves for their favorite mast [chiefly beech nuts and acorns]; those behind are continually rising and passing forward in front in such quick succession, that the whole flock, still circling over the ground, seems yet on the wing. As the sun begins to decline they depart in a body for the *general roost*, which is often hundreds of miles distant, and is generally chosen in the tallest and thickest forests almost divested of underwood. Nothing can exceed the waste and desolation of these nocturnal resorts; the vegetation becomes buried by their excrements to the depth of several inches. The tall trees, for thousands of acres, are completely killed, and the ground strewed with many branches torn down by the clustering weight of the birds which have rested upon them. The whole region for several years presents a continued scene of devastation, as if swept by the resistless blast of a whirlwind.”† Wilson tells us that their breeding places are still more extensive than the roosts, mentioning one in Kentucky “which stretched through the woods in nearly a north and south direction; was several miles in breadth, and was said to be upwards of forty miles in extent!” “On some single trees

---

\* The Natural and Civil History of Vermont, p. 114, 1794.

† Nuttall's Manual of Ornithology, vol. i, pp. 631-2, 1832.

upwards of one hundred nests were found, each containing *one* young only,"\* though undoubtedly two eggs are always laid—the one hatching first and crowding the other out of the nest, which is, at best, but a frail cradle, formed merely “of a few slender dead twigs, negligently put together, and with so little art that the concavity appears scarcely sufficient for the transient reception of the young,”† which, like the eggs, may readily be seen from below, through the delicate net-work of twigs. Wilson says it was dangerous to walk under these flying and fluttering millions, from the frequent fall of large branches, broken down by the weight of the multitudes above, and which, in their descent, often destroyed numbers of the birds themselves; while the clothing of those engaged in traversing the woods were completely covered with the excrements of the Pigeons.” “The ground was strewed with broken limbs of trees, eggs, and young squab Pigeons, which had been precipitated from above, and on which herds of hogs were fattening. Hawks, Buzzards, and Eagles, were sailing about in great numbers, seizing the squabs from their nests at pleasure.”‡ Audubon’s description of a night passed at one of their roosting places deserves introduction here: Reaching it early in the afternoon, before the pigeons had come in, “many trees two feet in diameter” were observed “broken off at no great distance from the ground; and the branches of many of the largest and tallest had given way, as if the forest had been swept by a tornado.” “Everything proved,” continued Audubon, “that the number of birds resorting to this part of the forest must be immense beyond conception. As the period of their arrival approached, their foes [man] anxiously prepared to receive them. Some were furnished with iron pots containing sulphur, others with torches of pine-knots, many with poles, and the rest with guns. The sun was lost to our view, yet not a pigeon had arrived. Everything was ready, and all eyes were gazing on the clear sky, which appeared in glimpses amidst the tall trees. Suddenly there burst forth a general cry of ‘here they come!’ The noise which they made, though yet distant, reminded me of a hard gale at sea, passing through the rigging of a close-reefed vessel. As the birds arrived and passed over me, I felt a current of air that surprised me. Thousands were soon knocked down by the pole men. The birds continued to pour in. The fires were lighted, and a magnificent, as well as wonderful, and almost terrifying, sight presented itself. The Pigeons, arriving by thousands,

\* American Ornithology, by Alexander Wilson, vol. ii, pp. 295-6. Edinburgh, 1831.

† Wilson, *ibid.*, pp. 295-6.

‡ Nuttall, *ibid.*, p. 633.

alighted everywhere, one above another, until solid masses were formed on the branches all around. Here and there the perches gave way under the weight with a crash, and, falling to the ground, destroyed hundreds of the birds beneath, forcing down the dense groups with which every stick was loaded. It was a scene of uproar and confusion. I found it quite useless to speak, or even to shout to those persons who were nearest to me. Even the reports of the guns were seldom heard, and I was made aware of the firing only by seeing the shooters reloading. . . . . The Pigeons were constantly coming, and it was past midnight before I perceived a decrease in the number of those that arrived. . . . . Towards the approach of day the noise in some measure subsided; long before objects were distinguishable the Pigeons began to move off in a direction quite different from that in which they had arrived the evening before; and at sunrise all that were able to fly had disappeared. The howling of the wolves now reached our ears, and the foxes, lynxes, cougars, bears, racoons, opossums, and pole-cats were seen sneaking off, whilst Eagles and Hawks of different species, accompanied by a crowd of Vultures, came to supplant them, and enjoy their share of the spoil." Two farmers, "distant more than a hundred miles, had driven upwards of three hundred pigs to be fattened on the Pigeons which were to be slaughtered."\*

"Audubon attempts to reckon the number of Pigeons in one of these flocks, and the daily quantity of food consumed by it. He takes, as an example, a column of one mile in breadth, and supposes it passing over us, without interruption, for three hours, at the rate of one mile per minute. This will give us a parallelogram of 180 miles by 1, averaging 180 square miles; and allowing two Pigeons to the square yard, we have one billion one hundred and fifteen millions one hundred and thirty-six thousand Pigeons in one flock: and as every Pigeon consumes fully half a pint per day, the quantity required to feed such a flock must be eight millions seven hundred and twelve thousand bushels per day!"†

"Indeed, for a time," Nuttall correctly remarks, "in many places nothing scarcely is seen, talked of, or eaten, but Pigeons!"

\* The Birds of America, by John James Audubon, vol. v, pp. 29-30.

† Wilson, *ibid.*, Appendix, vol. iv, p. 323.

172. *Zenædura Carolinensis* (Linné) Bonaparte. Carolina Dove;  
 "Turtle Dove."

A rather common summer resident, sometimes remaining through the winter (Jan. 15, 1874; 16, 1875, Grinnell). Arrives early in May (May 5, 1875, shot, Sage). On May 24th, 1876, I found a nest containing two fresh eggs, on a maple sapling, fifteen feet above the ground. In the south and west they generally, though by no means exclusively, breed on the ground.\* In central Massachusetts I have taken it as late as the middle of November (1873). It is particularly abundant throughout the far west, and near the Pacific coast has been seen as far north as "lat. 49° in summer, while a few winter in California"† about San Francisco, latitude 38°. Mr. Stadtmüller found a nest of this species, about twelve feet from the ground, in a pine grove, near New Haven, June 20th, 1874. "It was close to the trunk of the tree, and consisted of a few sticks placed loosely on top of a common squirrel's nest, and contained one egg and one young dove. I took the egg and four weeks later went to get the nest, but found another egg in it."‡ Surely the squirrel's nest must have been deserted, or it would hardly have constituted a safe base for bird's eggs.

NOTE.—The Wild Turkey, *Meleagris gallopavo*, var. *Americana* (Bartram) Coes, long since exterminated from this State, was once common here. Wild Turkeys were plenty in 1780, and occasionally seen as late as 1790.§ Regarding their former abundance in New England, one Thomas Morton, of Clifford's Inn, Gent., wrote (printed by Charles Green, in 1632): "Turkies there are, which divers times in great flocks have sallied by our doores; and then a gunne (being commonly in a redinesse) salutes them with such a courtesie, as makes them take a turne in the Cooke roome. They daunce by the doore so well. Of these there hath bin killed, that have weighed forty-eight pound a peece. They are by mainy degrees sweeter than the tame Turkies of England, feede them how you can. I had a salvage who hath taken out his boy in a morning, and they have brought home

\* Vide: Coes' *Birds of the Northwest*, p. 389, 1874; Allen, *Bull. Mus. Comp. Zool.*, vol. iii. No. 6, p. 170, 1872; Cooper, *Ornithology of California*, p. 513, 1870; Merriam, *Zool. Report in 6th Annual Report U. S. Geol. Survey Terr.*, p. 710, 1872; Henshaw, *Report upon Ornithological Specimens*, p. 68, 1874.

† Cooper, *Ornithology of California*, p. 513, 1870.

‡ MS. notes of the Stadtmüller Brothers.

§ A *Statistical Account of the County of Middlesex, in Connecticut*, by David D. Field, p. 19. 1819.

their loads about noone. I have asked them what number they found in the woods, who have answered neent metawna, which is a thousand that day; the plenty of them is such in those parts. They are easily killed at rooste, because the one being killed, the other sit fast neverthesse, and this is no bad commodity.”\* Linsley says: “The last Wild Turkey that I have known in Connecticut, was taken by a relative of mine, about thirty years since [about 1813], on Totoket Mountain, in Northford. It was overtaken in a deep snow, and thereby outrun. It weighed, when dressed, twenty-one pounds.”† In 1842, Zadock Thompson wrote that a few “continue still to visit and breed upon the mountains in the southern part of the State” (Vermont).‡ As late as 1833 it was “frequently met with on Mt. Holyoke,” but had “become scarce and nearly extinet” in other parts of the State.§ Professor Wm. D. Whitney once mounted a fine specimen of the Wild Turkey killed on Mt. Tom, Mass., Nov. 1st, 1847. It may now be seen in the beautiful case of birds given by Prof. Whitney to the Peabody Museum of Yale College, and is of particular value as being, in all probability, the last of its race seen in that State. In the month of October, “the *Turkey Moon* of the aborigines,” they used to wander far and wide in quest of food, frequently assembling in vast numbers in districts where there was an abundanee. Audubon tells us that “When they come upon a river, they betake themselves to the highest eminences, and there often remain a whole day, or sometimes two, as if for the purpose of consultation. During this time the males are heard gobling, calling, and making much ado, and are seen strutting about, as if to raise their courage to a pitch befitting the emergency. Even the females and young assume something of the same pompous demeanor, spread out their tails, and run round each other, *purring* loudly, and performing extravagant leaps. At length, when the weather appears settled, and all round is quiet, the whole party mount to the tops of the highest trees, whence, at a signal, consisting of a single *cluck*, given by a leader, the flock takes flight for the opposite shore.”||

Josselyn says “their eggs are very wholesome and restore decayed nature exceedingly.”¶

\* Reprinted in Force's Historical Tracts. Tract 5, p. 48.

† Am. Jour. Sci. and Arts, vol. xlv, No. 2, p. 264. April, 1843.

‡ History of Vermont, Natural, Civil, and Statistical. By Z. Thompson, p. 101. 1842.

§ See Hitchcock's Report, p. 549. 1833.

|| Audubon's Birds of America, vol. v, p. 43.

¶ Two Voyages to New England. p. 99. 1675.

## Family, TETRAONIDÆ.

173. *Bonasa umbellus* (Linné) Stephens. Ruffed Grouse.

A common resident. Breeds on both East and West Rock, near New Haven, as well as throughout the State. In May, 1877, Prof. Verrill found a nest, containing twelve eggs, within ten feet of a traveled road, near the city. In the vicinity of Easthampton, Mass., they were particularly abundant, and on one occasion I frightened one off from an apple tree directly behind the "Town Hall." Large numbers of them are caught in snares every fall, and the market is well supplied with native birds. Of it, in 1632, Morton wrote: "Partridges, there are much, like our Partridges of England, they are of the same plumes, but bigger in body. They have not the signe of the horseshoe-shoe on the breast as the Partridges of England; nor are they coloured about the heads as those are; they sit on the trees. For I have seene 40. in one tree at a time; yet at night they fall on the ground, and sit until morning so together; and are dainty flesh."\*

174. *Ortyx Virginianus* (Linné) Bonaparte. Quail; Bob White.

A common resident, breeding in thick brushwood at South End and many other places near New Haven.

This species also attracted Morton's attention, for he says: "There are quailles also, but bigger then the quailles in England. They take trees also: for I have numbered 60. upon a tree at a time. The cocks doe call at the time of the yeare, but with a different note from the cock quailles of England."\*

NOTE.—The Prairie Chicken, or Pinnated Grouse, *Cupidonia cupido* (Linné) Baird, was formerly a resident of New England, but, like the Wild Turkey, was exterminated many years ago—at least so far as the main land is concerned, for it is said that a few still exist on some of the islands south of Cape Cod (Naushon for example, and perhaps Martha's Vineyard). However, it is pretty certain that many years have elapsed since the last "wild chicken" was seen in Connecticut, for even Linsley, in 1842, gave it as a bird of the past. Nuttall, ten years earlier (in 1832), said that they were still met with "on the brushy plains of Long Island, and in similar shrubby barrens

---

\* Force's Historical Tracts, vol. ii, Tract 5, p. 48.

*in Westford, Connecticut.*”\* That our ancestors were fond of “fowling,” and that it sometimes cost them their lives, may be seen from the following: In October, 1636, one “Joseph Tilly, master of a bark, came to anchor nearly opposite Calve’s Island, and taking one man with him, went on shore for the purpose of fowling. As soon as he had discharged his piece, a large number of Pequots, rising from their concealment, took him and killed his companion; and then gratified their malice by putting him to torture. They first cut off his hands and then his feet; after which he lived three days. But as nothing which they inflicted upon him excited a groan, they pronounced him a stout man.”† And this occurred in the town of Saybrook, Conn., at a time when many of our forefathers perished at the hands of the Indians, before bringing them to submission. One Thomas Morton, writing in 1632, speaks of the presence of this bird in New England in the following language: “There are a kinde of fowles which are commonly called Pheisants, but whether they be pheysants or no, I will not take upon mee, to determine. They are in form like our pheasant-henne of England. Both the male and the female are alike; but they are rough footed: and have staring feathers about the head and neck, the body is as bigg as the pheysant-henne of England; and are excellent white flesh, and delicate white meate, yet we seldom bestowe a shoot at them.”‡ The “white flesh” must have been a mistake unless he referred to the Ruffed Grouse which is immediately spoken of under the name of “Partridge.” Nuttall says of its habits: “The season for pairing is early in the spring, in March or April. At this time the behavior of the male becomes remarkable. Early in the morning he comes forth from his bushy roost, and struts about with a curving neck, raising his ruff, expanding his tail like a fan, and seeming to mimic the ostentation of the Turkey. He now seeks out or meets his rival, and several pairs at a time, as soon as they become visible through the dusky dawn, are seen preparing for combat.”§

\* Manual of Ornithology, vol. i, p. 662. 1832.

† A Statistical Account of the County of Middlesex, in Connecticut. By David D. Field, p. 36. 1819.

‡ Force’s Historical Tracts, vol. ii, Tract 5, p. 48.

§ Nuttall’s Manual of Ornithology, vol. i, pp. 663-64. 1832.

## Family, CHARADRIIDÆ.

175. *Squatarola helvetica* (Linné) Brehm. Black-bellied Plover.

Occurs during the migrations. Taken at Stratford by Linsley. Mr. W. W. Coe has a splendid specimen of this bird, taken in fall, on the Sound near the mouth of the Connecticut. Dr. F. W. Hall shot several specimens about the middle of October (Oct. 18, 1873), and tells me that they were remarkably tame.

176. *Charadrius fulvus*, var. *Virginicus* (Bork.) Coues. Golden Plover.

Common during migrations. Capt. Brooks informs me that they are "plenty at Guilford, Conn., in spring and early fall," and that "sometimes a few stop in the fall and stay a few days" at Faulkner's Island. Linsley found it at Stratford. Mr. Coe has taken it as far inland as Portland, Conn., on the river.

177. *Ægialitis vocifera* (Linné) Bonaparte. Killdeer Plover.

A summer resident, but not very common. It generally arrives late in March (Feb. 24, 1875, plenty by last of March; April 5, 1872; Portland, Conn., W. W. Coe). Mr. Coe informs me that it breeds on Plumb Island, and in the vicinity of Portland, Conn., where it used to be very common.

178. *Ægialitis Wilsonia* (Ord) Cassin. Wilson's Plover.

Not common. Linsley took it at Stratford. It has also been taken on Long Island (Giraud), but seldom strays so far North.

179. *Ægialitis semipalmata* (Bonap.) Cabanis. Semipalmated Plover.

A common migrant. Arrives about, or before, the middle of May (May 17, 1876, Osborne). During the latter part of May, and first of June, they may be seen, in small flocks, running along the beach, in search of food, as the tide goes out. Mr. W. W. Coe writes me that he has taken it at Portland, Conn., twenty-five miles from the Sound.

180. *Ægialitis meloda* (Wilson) Bonaparte. Piping Plover; Ringneck.

A summer resident. Linsley found it breeding at Stratford. Mr. J. N. Clark also finds it breeding at Saybrook, Conn., and Mr. W. W. Coe has taken it at Portland.

Family, HÆMATOPODIDÆ.

181. *Hæmatopus palliatus* Temminck. Oyster-catcher.

A rare migrant. Linsley says: "The Oyster-catcher is now rare here, but fifteen years since they were not very uncommon in autumn."\*

182. *Streptilas interpres* (Linné) Illiger. Turnstone.

A common migrant. Linsley gave it from Stratford, and Capt. Brooks writes me that it is "quite common in spring and fall" about Faulkner's Island, Conn. Mr. Sage, of Portland, has a beautiful male, which he killed at Westbrook, Conn., May 23d, 1877. In fall it returns during the latter part of August (Aug. 31, 1874, F. W. Hall).

Family, RECURVIROSTRIDÆ.

183. *Recurvirostra Americana* Gmelin. Avocet.

A rather rare migrant. Josiah G. Ely, Esq., writes me that he has seen but one specimen of the Avocet taken on our coast. "It was caught, in 1871, between Saybrook and East Lyme, in an old seine strung out on the beach to dry," and was kept alive for some time by a storekeeper.

Family, PHALAROPODIDÆ.

184. *Steganopus Wilsoni* (Sabine) Coues. Wilson's Phalarope.

Of rare and almost accidental occurrence in New England, though common throughout the West. Linsley says of it: "Wilson's Phalarope I have in my cabinet; it was killed in Bridgeport [Conn.] and sent to me by a friend, and is probably one of the rarest birds in New England. It is not only beautiful, but the great quantity of plumage on a bird so small and delicate, together with his unique bill, seems to render it one of the most peculiar of this class of animals."†

185. *Phalaropus fulicarius* (Linné) Bonaparte. Red Phalarope.

A rare visitor from the North. Mr. W. W. Coe has a specimen in his cabinet, killed at Portland, Conn., in September.

\* Am. Jour. Sci. and Arts, vol. xlv, No. 2, p. 265. April, 1843. † Op. cit., p. 268.

## Family, SCOLOPACIDÆ.

186. *Philohela minor* (Gmelin) Gray. Woodcock.

A resident; common from early spring till November. A few commonly, if not regularly, winter in low swamps. They arrive early in March ("Mar. 3, 1877, Middletown, Conn., killed by flying against a telegraph wire"\*), and breed very early. On the 3d of April, 1877, my young friend, Walter R. Nichols, found, near Branford, Conn., a nest containing four fresh eggs. They may breed twice, for Mr. Nichols found a second nest, in the same locality, and containing the same number of eggs, as late as July 20th, 1877. The eggs were partially incubated, and the old bird was shot as she left the nest. Mr. W. W. Coe writes that he found one, near Portland, Conn., April 12, 1872, also containing four eggs: "The nest was on a bog, in the middle of a brook which ran through a swamp. It was not more than six inches above the water. The grass was short, and there were no bushes near, so that it was very much exposed, but still hard to find, for, although we had hunted the ground over carefully, the old bird did not fly off until my man stepped on the bog. I had my old dog Dincks with me, and his nose is first class, and yet he passed within a foot of her several times without scenting her, which satisfies me that a bird sitting on her eggs gives out no scent, for this is not the first time I have tried it. The nest was simply a shallow hole scraped in the top of the bog; there was a little coarse grass, a few leaves, and one or two of the Woodcock's feathers in it."† Mr. John H. Sage tells me that, while collecting with Mr. W. W. Coe near Portland, Conn., May 30th, 1874, they flushed a Woodcock with young, one of which she carried off in her claws! and Mr. Coe writes me, "in regard to the Woodcock carrying off its young: Mr. Sage and I were not four feet apart when the old bird got up between us, rose about three feet, and then dove down again and picked up a young bird with her feet, and, with her tail spread and held forward under the young, carried it off about eight rods, and came back for the others, but my boy frightened her away."

Thomas Morton, in 1632, thus alluded to the resemblance between our bird and the European Woodcock (*Scolopax rusticola*): "Simpes, there are like our Simpes in all respects, with very little difference. I have shot at them onely, to see what difference I could finde be-

\* MS. notes of John H. Sage.

† MS. notes of W. W. Coe.

twene them and those of my native country, and more I did not regard them.”\*

187. *Gallinago Wilsoni* (Temminek) Bonaparte. Wilson's Snipe.

A resident; common during the migrations; sometimes breeds. In October and November (some remain into December) large numbers are shot on our salt marshes. Mr. W. W. Coe took it Feb. 4th, 1872, near Portland, Conn., and thinks they sometimes winter there in low swampy places. Arrives in March (Mar. 18, 1874, Sage). Mr. W. W. Coe and Mr. J. H. Sage inform me that they took a nest containing three fresh eggs of this species at Portland, Conn., May 13th, 1874. The eggs were “fully identified, as the parent bird was found on the nest.”† It was not previously known to breed as far south as Connecticut. The nearest approach to it is “a set of eggs in the Smithsonian labeled Oneida Co., N. Y.”‡ Mr. Coe tells me that there were a number of Snipe in the field at the time, and he thinks there were other nests which they did not find.

188. *Macrorhamphus griseus* (Gmelin) Leach. Red-breasted Snipe.

Not rare during the migrations. “Stratford,” Linsley. Mr. J. H. Sage of Portland has a specimen which he shot at Saybrook, Conn., Aug. 21st, 1874.

189. *Ereunetes pusillus* (Linné) Cassin. Semipalmated Sandpiper.

A summer resident; common along the shore during the migrations. Mr. W. W. Coe has seen it in June. On the 20th of July, 1877, Mr. Walter R. Nichols found, at Branford, Conn., four eggs of a small Sandpiper. They were placed on a few straws in a slight excavation in a corn field, about half a mile from the shore. Supposing them to be the eggs of this species I sent one to Dr. Brewer, who writes: “In the absence of my cabinet, for comparison, I cannot be certain, but I have little or no doubt that it is the egg of *Ereunetes pusillus*.” It is unnecessary to state that this is the first authentic record of its breeding in southern New England. In fall, Dr. F. W. Hall has taken it as early as Aug. 25th (1874).

\* Reprinted in Force's Historical Tracts, vol. ii, Tract 5, p. 47.

† MS. notes of John H. Sage, Esq.

‡ Coues' Birds of the Northwest, p. 476.

190. *Tringa minutilla* Vieillot. Least Sandpiper.

A common migrant. Maritime. Found along the shore in May and early June, and again in August and September.

191. *Tringa maculata* Vieillot. Pectoral Sandpiper; Jack Snipe.

Common during migrations. Mr. Coe tells me that it is common in fall as far up the Connecticut as Middletown. Arrives from the north early in August (Aug. 6, 1873, Hall).

192. *Tringa fuscicollis* Vieillot. Bonaparte's Sandpiper; White-rumped Sandpiper.

Not rare during migrations, though Linsley took only two specimens at Stratford, Conn. Dr. Hall has taken it late in August (Aug. 31, 1874).

193. *Tringa maritima* Brunnich. Purple Sandpiper.

Not uncommon during the migrations. Many winter on the islands along the coast. Not found by Linsley. Captain Brooks writes me from Faulkner's Island that "Purple Sandpipers come here in early fall and stay till spring," and that they are common and get to be quite tame.

194. *Tringa alpina*, var. *Americana* Cassin. Dunlin; "Ox-Bird."

A common migrant; a few may winter.

195. *Tringa subarquata* (Guld) Temminck. Curlew Sandpiper.

A rare visitor along our coast. Mr. Josiah G. Ely writes me that one was shot near Saybrook, Conn., some time ago, and I am informed by Dr. D. Crary, of Hartford, that a specimen of this species was killed, Oct. 3d, 1859, at Keeny's Cove, on the Connecticut River, in East Hartford (Hockanum), Conn. Also, Dr. E. L. R. Thompson, of this city, tells me that he shot three Curlew Sandpipers on the Quinipiac River (near New Haven) in June, 1874. Dr. Wm. O. Ayres, now of Easthampton, Long Island, writes me that he "killed it once at Miller's Place, L. I., in 1839,"\* and it has also been taken in Massachusetts.†

\* See also Giraud's Birds of Long Island, 1844.

† Catalogue of the Birds of New England. By T. M. Brewer, p. 13. 1875.

196. *Tringa canutus* Linné. Red-breasted Sandpiper; Knot.

Common during migrations. Taken at Saybrook, by Mr. Sage, Aug. 21st, 1874; and Mr. Coe tells me that it is found about the Connecticut River, near Middletown, in summer.

NOTE.—The Stilt Sandpiper, *Micropalama himantopus* (Bonap.) Baird; and Baird's Sandpiper, *Tringa Bairdii* Coues, doubtless occur along the coast during migrations.

197. *Calidris arenaria* (Linné) Illiger. Sanderling.

Occurs during migrations, and is extremely abundant in fall. Linsley took it at Stratford. Mr. Grinnell informs me that they arrive during the latter part of September, remaining late into October. Thomas Morton wrote of them in 1632: "Sanderlings are dainty bird, more full bodied than a Snipe, and I was much delighted to feede on them, because they were fatt, and easie to come by, because I went but a stepp or to for them: and I have killed betweene foure and five dozen at a shoot which would lead me home. Their foode is at ebbing water on the sands, of small seeds, that grows on weeds there, and are very good pastime in August."\*

198. *Limosa fedoa* (Linné) Ord. Great Marbled Godwit.

A rare migrant. Linsley found it at Stratford, Conn., in August, 1842, "in large flocks, but very shy."† Nearly an hundred years ago, Thomas Pennant, in his Arctic Zoölogy, stated that "it inhabits Hudson's Bay and Connecticut."‡

199. *Limosa Hudsonica* (Latham) Swainson. Hudsonian Godwit.

A rare migrant. Taken at Stratford by Linsley. Coues suggests that the *Limosa Edwardsii*? of Linsley (p. 267) is "perhaps an albino"§ of this species, but Pennant thought it was the Avocet (*Recurvirostra Americana*).|| The good old preacher (Linsley), in speaking of these birds, could not take his Lord's name in vain on so slight a provocation—hence he called them "Goodwits."

\* New English Canaan, p. 47, 1632. Reprinted in Force's Historical Tracts, vol. ii, Tract 5.

† Am. Jour. Sci. and Arts, vol. xlv, No. 2, p. 267, 1843.

‡ Arctic Zoölogy, vol. ii, p. 465, 1785.

§ List of the Birds of New England, p. 48, 1868.

|| Arctic Zoölogy, vol. ii, p. 502, 1785.

200. *Totanus semipalmatus* (Gmelin) Temminck. Willet; Tattler.

A summer resident; not common. Linsley found it breeding at Stratford, Conn. Mr. Grinnell has taken it, near Milford, late in the summer, and Mr. W. W. Coe took a nest, containing three eggs, at Madison, Conn., June 5th, 1873.\*

201. *Totanus melanoleucus* (Gmelin) Vieillot. Greater Yellow-legs.

Common during migrations. Arrives in May (May 14, 1874, Sage), remaining till June (June 1, 1877, Sage). Found both coastwise and in the interior. I first became acquainted with it at Yellowstone Lake, where I killed four at one shot, Aug. 23d, 1872.

202. *Totanus flavipes* (Gmelin) Vieillot. Lesser Yellow-legs.

A common migrant. Killed one May 7th, 1877, on a fresh water pond near Meriden, Conn. Returns about the middle of August (Aug. 17, 1874, Hall).

NOTE.—*Totanus chloropus* Nilsson. Green-shanlis.

Linsley states that a specimen of this rare straggler was taken at Stratford, Conn., in the autumn of 1842.† This is, so far as I am aware, the only recorded instance of its capture north of Florida (Audubon shot three on Land Key, Fla., May 28, 1832),‡ where its occurrence seems to be purely accidental, its proper home being in the "Old World;" and since Dr. Coues states that it was given by Linsley "very possibly through an erroneous identification,"§ I do not feel justified in including it among the species ascertained to occur within our limits.

203. *Totanus solitarius* (Wilson) Audubon. Solitary Tattler.

Common during the migrations. Arrives early in May (May 2, 1877), frequenting muddy ponds and sluggish streams, in small flocks of about half a dozen. Solitary individuals may be seen as late as early June, (Coe; June 10, Grinnell).

204. *Tringoides macularius* (Linné), Gray. Spotted Sandpiper.

A common summer resident, arriving during the latter part of April or first of May (May 1, 1874, Sage). I once found its nest

\* MS. notes of W. W. Coe, Esq.

† Am. Jour. Sci. and Arts, vol. xlv, No. 2 p. 266, 1843.

‡ Audubon's Birds of North America, vol. v, p. 321.

§ Proceed. Essex Inst., vol. v, p. 296, 1868.

within eight feet of a railroad track where trains passed every hour of the day! Remains into October (Oct. 6, 1874). Found wherever there is a pond or small stream.

205. *Actiturus Bartramius* (Wilson) Bonap. Bartramian Sandpiper;  
"Upland Plover."

A common summer resident. Breeds in open fields away from water. I am informed by Mr. Coe that large numbers of them breed on Plum Island, off New London, Conn. Arrives about May 1st (May 2, 1874, Portland, Conn., Sage).

206. *Tryngites rufescens* (Vieillot) Cabanis. Buff-breasted Sandpiper.

Occurs during the migrations, but is not common. Josiah G. Ely, Esq., writes me that two were killed near Saybrook, a few years ago, and Dr. Daniel Crary had one in his collection which "was shot near Hartford some years ago."

207. *Numenius longirostris* Wilson. Long-billed Curlew.

Not particularly rare during migrations, but excessively shy. Linsley took it at Stratford, Conn. Regarding its occurrence near Faulkner's Island, Conn., Capt. Brooks writes: "Not plenty; occasionally one stops here in the fall." It was seen at Milford, Conn., by Mr. Grinnell, during the summer of 1873. Mr. J. N. Clark, of Saybrook, Conn., tells me that it sometimes occurs there in the fall, but is rare. Dr. Crary tells me that it has been taken near Hartford, Conn.

208. *Numenius Hudsonicus* Latham. Hudsonian Curlew.

A rare migrant. Taken at Stratford, Conn., by Linsley. I am informed by Dr. Crary, of Hartford, Conn., that it has been killed in that vicinity. Under date of "July 20, 1877," the Rev. J. Howard Hand writes me, from Southampton, Long Island: "Have just taken three specimens of the Hudsonian Curlew this morning."

209. *Numenius borealis* (Forster) Latham. Eskimo Curlew.

Not common. Occurs during migration. Taken at Stratford, Conn., by Linsley. Mr. J. N. Clark has a fine mounted specimen in his cabinet, killed at Saybrook, Conn., Oct. 13, 1874.

## Family, TANTALIDÆ.

210. *Ibis falcinellus*, var. *Ordii* (Bonaparte) Coues. Glossy Ibis.

A rare accidental visitor from the South. At Stratford, Conn., Linsley obtained five specimens of this species.\* Stragglers have also been taken in Massachusetts. There is a specimen of this species in the Museum of Wesleyan University, at Middletown, Conn., taken in that vicinity, by Dr. Barrat about the year 1855.

211. *Ibis alba* (Linné) Vieillot. White Ibis.

One only recorded from New England. It was seen by Mr. Geo. Bird Grinnell within ten miles of New Haven: "Late in the afternoon of May 23, [1875] I observed near Milford, Conn., a specimen of *Ibis alba*. I recognized the bird as it flew over me, and following it to a small pond where it went down, discovered it perched upon a tree over the water. I carefully examined it with a good glass, at a distance of about one hundred and fifty yards, and by this means was enabled to note every detail of form and color. It was in full plumage, the white being pure, and the naked skin about the head, bright red. After watching it for a few moments I tried to approach it, but before I came within gunshot it flew, uttering a hoarse cackle as it went off."† Two specimens have been killed on Long Island.‡

## Family, ARDEIDÆ.

212. *Ardea herodias* Linné. Great Blue Heron.

A summer resident. Common during the migrations. Arrives before the middle of April (Apr. 4, 1873, Coe; 12, Sage), and I have seen it as late as Nov. 26th (1875), along the coast. On April 17th, 1877, Mr. A. J. Dayan and I saw about a dozen of these splendid birds on the Whitney Lakes, within a couple of miles of New Haven, but they were very shy and remained only a few days. Mr. Grinnell once saw a flock of twenty-eight flying over the Sound. Mr. W. P. Nichols saw one near New Haven, June 2d, 1877.

\* Am. Jour. Sci. and Arts, vol. xlv, No. 2, p. 266, 1843.

† Am. Nat., vol. ix, No. 8, p. 470, 1875.

‡ Giraud's Bird's of Long Island, p. 275, 1844.

213. *Ardea egretta* (Gmelin) Gray. Great White Egret.

A rare visitor from the South. Several specimens have been taken in Massachusetts, and I have myself seen it at the "Ox Bow" on the Connecticut. A specimen was shot near Middletown, Conn., some years ago, and is now in the Museum of Wesleyan University. Mr. Grinnell has seen it on the marshes near Milford, Conn., in September. Dr. Wood tells me that, several years ago, one spent a week on a marsh near East Windsor Hill, Conn. Mr. Fred. Sumner Smith tells me that he saw a pair of these birds at Lake Saltonstall (near New Haven), Conn., during the latter part of July, 1876, and two weeks later, at the same place, saw no less than seven individuals feeding together. They were exceedingly shy and he could not approach within gunshot.

214. *Ardea candidissima* (Jacquin) Gmelin. Little White Egret.

A rare accidental visitor from the South. Seen at Stratford, Conn., by Linsley. Also taken in Massachusetts, and one straggler even reached Nova Scotia ("Jones"). Dr. Crary says that he has taken it near Hartford, Conn.

215. *Ardea cærulea* Linné. Little Blue Heron.

A very rare accidental visitor from the South. Linsley took it at Stratford, Conn. Has been taken in Massachusetts. Mr. Dayan saw a small Heron on Lake Whitney, early in April, 1877, which he supposes to have been this species. In the Cabinet of Mr. Coe, of Portland, Conn., is a beautiful specimen of this species which he shot in that vicinity early in July, 1875. It was a young bird and is pure white all over, excepting the tips of the primaries, which show a little slate-blue color. There were two of them together, but the other escaped. Mr. Erwin I. Shores, of Suffield, Conn., writes me that one was shot there about the middle of May by Mr. Chas. Newton. Mr. Shores did not see the specimen, but says: "Dr. Newton described it to me as 'a small Heron blue all over,' and I have no doubt but that it was this species."

216. *Ardea virescens* Linné. Green Heron.

A common summer resident. Breeds in several places near New Haven—notably in "Pine Swamp." Arrives late in April or early in May (May 3), remaining into October. Capt. Brooks informs me

that they sometimes stop at Faulkner's Island in spring. Breeds late in May and in early June.

217. *Nyctiardea grisea*, var. *nævia* (Boddert) Allen. Night Heron.

A common summer resident. Breeds in Pine and Heron Swamps, near New Haven, and in several other places about the State, and on islands off the coast. Mr. A. J. Dayan started a small flock on Lake Whitney, April 24th, 1877, and they alighted on a tree. On his near approach all took flight but one, which he brought down, and an examination proved that it had a well marked cataract in the eye facing the direction from which he approached. This is an interesting fact in Ornithological pathology. Remains into October. Mr. W. W. Coe, of Portland, Conn., on the 17th of April, 1872, visited a "*Heronry*" of this species, at Rocky Hill, Conn. He writes: "Saw hundreds of nests, each containing from two to five eggs. Eight and even ten nests were frequently found on one tree, and the same nest often contained fresh eggs, eggs half hatched, and young birds. The trees were white from the excrements of the birds, and looked as if they had all been whitewashed; nothing could grow under them."\*

NOTE.—The Yellow-crowned Night Heron (*Nyctiardea violacea*) has been taken in Massachusetts, by Mr. Vickery (Oct., 1862),† and doubtless occurs as a rare accidental visitor.

218. *Botaurus minor* (Gmelin) Boie. Bittern; Stake-driver.

A common summer resident. Arrives in April (Apr. 26, 1875, Sage), remaining till November. Linsley relates the following amusing anecdotes concerning this species: "I obtained a fine specimen of the American Bittern two years since, which had previously given great alarm to many of our inhabitants by its peculiarly doleful and mournful sounds at evening. One man who was laboring near the swamp, it is said, ran a mile in the greatest consternation, alleging that 'the d—l was after him.' It is also stated by several of our most respectable inhabitants, that forty-seven years since, [1796] one hundred men united in a company on the Sabbath to traverse this swamp, and succeeded in killing one of these same birds, and that their sounds have not been heard in town since, until the former instance occurred which secured a specimen to me."‡

\* MS. notes of W. W. Coe, Esq.

† Allen, *Rarer Birds of Massachusetts*, p. 39, 1869.

‡ *Am. Jour. Sci. and Arts*, vol. xlv, No. 2, p. 265, 1843.

219. *Ardetta exilis* (Gmelin) Gray. Least Bittern.

The Least Bittern seems to be, at present, a pretty regular summer resident, though formerly regarded as an accidental visitor. Linsley gave it from Northford, Conn., without comment. It has certainly bred here for several years past, and on June 27th, 1876, Mr. Nichols found its nest at Branford, Conn., containing one fresh egg. Have seen it in September. They were particularly abundant throughout the State during the season of 1875. Mr. W. W. Coe, who has seven beautiful specimens in his cabinet, showed me five eggs which he took from a nest at Portland, Conn., June 14th, 1873, and says that they breed regularly in that vicinity. Mr. Geo. Bird Grinnell also tells me that he takes two or three every year (generally in August or September). They follow up the Connecticut Valley to Massachusetts (Suffield, Conn., July, E. I. Shores).

NOTE.—The Sand-hill Crane, *Grus Canadensis* (Linné) Temm., though not occurring in New England at the present time, even as a rare straggler, was once common here. Thomas Morton, writing of the birds of New England, in 1632, says, of "Cranes, there are great store, that even more came there at S. Davids day, and not before: that day they never would misse. These sometimes eate our corne, and doe pay for their presumption well enough; and serveth there in powther, with turnips to supply the place of powthered beefe, and is a goodly bird in a dishe, and no discommodity."\* The fact that they ate corn, and were themselves, in turn, eaten by the inhabitants, clearly shows, as Prof. J. A. Allen has said, "that the Crane, and not a Heron, is the bird to which reference is made."† Moreover, Samuel Williams, more than an hundred and fifty years later (in 1794), says that the Sand-hill Crane ("*Ardea Canadensis*") was among the commonest of the "Water Fowl" found in Vermont at that time.‡ Belknap also gives it, in 1792, as one of the birds of New Hampshire.§ And even so recently as 1842, Zaddock Thompson wrote that the Whooping Crane, *Grus Americana* (Linné) Temminck, was "occasionally seen during its migrations,"|| in Vermont.

\* New English Canaan. Printed by Charles Greene, 1632. Reprinted in Force's Historical Tracts, vol. ii, Tract 5, pp. 47-8.

† Bull. Nutt. Ornith. Club, vol. i, No. 3, p. 58. Sept., 1876.

‡ The Natural and Civil History of Vermont, p. 119. 1794.

§ The History of New Hampshire, vol. iii. By Jeremy Belknap, p. 169. 1792.

|| History of Vermont, p. 103. 1842.

The present distribution of the Sand-hill Crane is interesting from its peculiarity. Common throughout the West, they extend northward even into Alaska, breeding about the Yukon (Dall),\* but are not found east of the Mississippi Valley, except in Florida, where I have seen them, both on the Ocklawaha River,† and flying over the St. Johns. Both Mr. Grinnell‡ and myself§ found them to be abundant in the Yellowstone National Park, though so wary that it was difficult to obtain a shot at them. They were particularly numerous in the Lower Geyser Basin, in August, and used to make such an unnecessary amount of noise, mornings, that sleep, after daylight, was well nigh out of the question. Showing a decided preference for the grassy meadows (called "Parks," in the West) surrounded by heavy forests, and marking, perhaps, the course of some mountain stream, which is content to check its headlong speed while passing through a neighboring valley, the Sand-hill Crane, ever on the alert, keeps well away from the trees, and at the approach of any suspicious object, at once takes flight, uttering its warning cry for the benefit of those of its kind who happen to be near. The flats which they frequent are often studded with wooded knolls, and the best way to hunt them is to betake one's self, in company with a good rifle, to one of these "Islands" before the fog rises in the morning, and remain concealed and perfectly quiet. When the fog lifts, the stately forms of the Cranes may be seen scattered over the meadows, always peering about in search of danger; but at least one is pretty sure to be within rifle range. And at the report the alarm is given and the others lose no time in beating a hasty retreat. Their flight is heavy, and seemingly laborious. To their edible qualities I can testify with a good grace. The flesh is really excellent, deep red in color, and not unlike that of the Beaver. Few birds are more difficult to skin.

Thomas Pennant, in his *Arctic Zoölogy* (1785) says that "they arrive in May about Severn River, Hudson's Bay. Frequent lakes and ponds. Feed on fish and insects. Hatch two young; and retire southward in autumn.¶ I must observe, that they formerly made a halt in the Hurons country, at the season in which the Indians set their maize; and again on their return from the North, when the harvest was ready, in order to feed on the grain. The Indians, at

\* Alaska and its Resources. By William H. Dall. Appendix G, p. 583. 1870.

† Am. Nat., vol. viii, No. 2, p. 89. Feb., 1874.

‡ Ludlow's Report for 1875, p. 87.

§ Hayden's Report for 1872, p. 702.

¶ Phil. Trans., lxii. 409.

those times, were used to shoot them with arrows headed with stone; for Theodat,\* my authority, made his remarks in that country in the beginning of the last century.”†

### Family, RALLIDÆ.

#### 220. *Rallus longirostris* Boddert. Clapper Rail.

Not common. Taken at Stratford by Linsley, who remarks that it “breeds abundantly” there.‡ Frequents *salt* marshes. Recently recorded from Massachusetts by Mr. Purdie. “The bird was captured by its flying on board a vessel in the [Boston] harbor, May 4, 1875.”§

Several well authenticated instances of its occurrence in Connecticut have recently come to my notice.

#### 221. *Rallus elegans* Audubon. King Rail.

Rather rare. Found breeding at Stratford, by Linsley.‡ Frequents *fresh-water* marshes. Mr. W. W. Coe has taken it at Portland, Conn. Mr. J. N. Clark of Saybrook, Conn., has a fine specimen in his cabinet taken there in *mid-winter* (Jan. 14, 1876).

#### 222. *Rallus Virginianus* Linné. Virginia Rail.

A common summer resident, breeding plentifully in both salt and fresh-water marshes. They are quite abundant in the brackish-water marshes bordering the Quinnipiac River, and here my friend, Mr. Dayan, found a nest containing seven fresh eggs and secured the old bird, on June 7th, 1876. Concerning the nocturnal proclivities, and shrill, startling cry of the Rail, Dr. Cones thus graphically writes: “At nightfall some Mallard and Teal settled into the rushes, gabbling curious vespers as they went to rest. A few Marsh Wrens had appeared on the edge of the reeds, queerly balancing themselves on the thread-like leaves, sea-sawing to their own quaint music. Then they were hushed, and as darkness settled down, the dull, heavy croaking of the frogs played bass to the shrill falsetto of the insects. Suddenly they too were hushed in turn, frightened, may be, into silence; and from the heart of the bullrushes, ‘*crik-crik-rik-k-k-k*,’

\* As quoted by De Buffon.

† Arctic Zoölogy, vol. ii, p. 413. 1785.

‡ Am. Jour. Sci. and Arts, vol. xliiv, No. 2, p. 267, 1843.

§ Bull. Nutt. Ornith. Club, vol. ii, No. 1, p. 22, January, 1877.

lustily shouted some wide-awake Rail, to be answered by another and another, till the reeds resounded. Then all was silent again till the most courageous frog renewed his pipes. The Rail are, partially at least, nocturnal. During such moonlight nights as these they are on the alert, patrolling the marshes through the countless covered ways among the reeds, stopping to cry 'all's well' as they pass on, or to answer the challenge of a distant watchman. That they feed by night as well as by day, cannot be doubted. Their habit of skulking and hiding in the almost inaccessible places they frequent renders them difficult of observation, and they are usually considered rarer than they really are."\*

223. *Porzana Carolina* (Linné) Cabanis. Carolina Rail; Sora.

An abundant summer resident. Large numbers are killed each year for the market. Have seen them as late as October (1874). Found both in fresh and salt-water marshes where there is an abundant growth of "Bullrushes," "Cat tails" and the like. Linsley says of it: "The Carolina Rail was so abundant here [Stratford, Conn.] last Autumn, in the marshes of the Housatonic, that something like hundreds were killed in a few hours, and that too for several days together. They were esteemed a great delicacy."† Regarding the difficulty of seeing them in their favorite haunts, Mr. Maynard writes: "I have been in a swamp where there were literally thousands of them, yet was unable to start more than two or three!"‡ I have had many similar experiences. One will suffice: Well do I remember finding a Rail's nest in a marshy swail near the mouth of a small cañon at the foot of the Wahsatch Range, just back of Ogden, Utah. It was early in June, and the nest, which was large and bulky, being composed of coarse marsh grass, was hidden in a clump of flags, whose arching blades met overhead, so concealing the enclosed treasures that they could only be seen by stooping over and peering through a small opening in the side, left for the passage of the parent bird. As yet but two eggs had been deposited, and the bird stole so silently and quickly through the reeds that I hardly felt sure it was not a snake till careful search revealed the nest. The next thing to be done was to secure the old bird, and with this end in view the place was visited at least once each day

\* Coues, *Birds of the Northwest*, pp. 537-8, 1874.

† *Am. Jour. Sci. and Arts*, vol. xlv, No. 2, p. 267, April, 1843.

‡ *Maynard's Naturalists' Guide*, pp. 145-46, 1873.

till the middle of June, but, notwithstanding the fact that I exercised the greatest caution in approach, I never so much as caught a momentary glimpse of her form, though once or twice a shadow seemed to flit hurriedly by and disappear in plain sight. What made it still more remarkable was that the number of eggs kept increasing day by day, and I always found them warm, showing that the bird had been gone but an instant. Once, while feeling of the eggs, I was so startled by her harsh crackling cry, uttered suddenly at my very feet, that I came near breaking them all, but still saw nothing of her. The time had come when we must move camp, so on the 15th of June I made a final effort to secure the old bird. The nest now contained twelve eggs, and I fancied I could hear the faint peeping of a young bird in his attempt to extricate himself from the shell. Stepping back a few paces, I waited, gun in hand, for the space of two long hours, standing first on one leg, then on the other, like a bashful country boy, till my patience was nearly exhausted and I was on the point of leaving, when something darted quickly toward the nest—it was enough; the mangled remains sufficed to determine the species. Meanwhile the egg had fairly hatched, and its noisy contents had already gained no little use of its tiny twigs. How the first hatched youngsters amuse themselves during the ten days, or two weeks, whilst the other eggs are coming to maturity, will doubtless be fully elucidated by he who attempts to explain how it is that a bird can give origin, in the course of a couple of weeks, to a dozen of eggs, each nearly as large and heavy as her own body. Certain it is that the processes of digestion, and assimilation of nutriment, must go on in them much more rapidly than in ourselves.

Wilson remarked that, "Of all our land or water fowl, perhaps none afford the sportsman more agreeable amusement, or a more delicious repast, than the little bird now before us. This amusement is indeed temporary, lasting only two or three hours in the day for four or five weeks in each year." The mode of procedure is thus described: "The sportsman furnishes himself with a light batteau, and a stout experienced boatman, with a pole of twelve or fifteen feet long, thickened at the lower end to prevent it from sinking too deep into the mud. About two hours or so before high water they enter the reeds, and each takes his post, the sportsman standing in the bow ready for action, the boatman on the stern seat pushing her steadily through the reeds. The Rail generally spring singly, as the boat advances, and at a short distance ahead, are instantly shot down, while the boatman, keeping his eye on the spot where the bird fell,

directs the boat forward and picks it up while the gunner is loading. . . . . In this manner the boat moves steadily through and over the reeds, the birds flushing and falling, the gunner loading and firing, while the boatman is pushing and picking up. . . . . In these excursions it is not uncommon for an active and expert marksman to kill ten or twelve dozen in a tide!"\* Mr. Grinnell informs me that the same method of hunting is practiced on the marshes bordering the Housatonic River, Conn.

224. *Porzana Noveboracensis* (Gmelin) Cassin. Yellow Rail.

Not common. Taken at Stratford, Conn., by Linsley. Though one of the rarer birds, it breeds about Middletown, Conn., as I am informed by Mr. Coe, who took it there in 1874 and 1875. Mr. Thos. Osborne has a specimen killed near New Haven. Mr. Grinnell favors me with the following note concerning its occurrence on the marshes near Milford, Conn.:

DEAR MERRIAM—The specimens of *Porzana Noveboracensis* about which you enquire were taken for the most part during the month of October, 1876, although I procured one individual as late as Nov. 10th. The securing of the first two or three was quite accidental.

I was working a young setter on Snipe (*Gallinago Wilsoni*) on a piece of wet meadow near Milford, Conn., and several times during the early part of the day was annoyed by the pertinacious way in which the dog would trail up some bird which neither he nor I could start. At length during one of these performances I saw the puppy grasp at something in the bogs before him, and immediately a small Rail rose and fluttered a few yards. Noticing its small size, and the fact that it had some white on its wings, and seeing from its flight that it was a Rail, I shot the bird before it had gone far, and when it was brought by the dog I was delighted to see that it was *P. Noveboracensis*, a species which I had never before seen alive. During the day several more individuals were secured. The next opportunity that I had of looking for these birds was, I think, Oct. 14th. That day my brother and I secured eight in an hour or two. They were ridiculously tame and would run along before the dog, creeping into the holes in the bogs and hiding there while we tried in vain to start them. I killed one with my dog whip, caught one alive in my hand, and the dog brought me another, uninjured, which he had

\* Wilson's American Ornithology, vol. iii, p. 115, 1831.

caught in his mouth. From what I saw of their habits, I am convinced that the only successful way of collecting these birds is to look for them with a dog. Without one they could never be forced from the ground. Yours sincerely,

Geo. Bird Grinnell.

225. *Porzana Jamaicensis* (Gmelin) Cassin. Black Rail.

An extremely rare summer resident. But three specimens of this rare bird have as yet been obtained in New England. The second Connecticut record is that given by Mr. H. A. Purdie, who writes: "Of this species Mr. Clark, of Saybrook, Conn., writes me that a neighbor of his, while mowing at that place, July 10th, 1876, swung his scythe over a nest of ten eggs on which the bird was sitting, unfortunately cutting off the bird's head and breaking all but four of the eggs."\* I have recently seen the eggs in question, in Mr. Clark's collection. They agree precisely with Coues' description of the eggs of this bird, "being creamy-white, sprinkled all over with fine dots of rich, bright reddish-brown," and are totally unlike those of any other species of Rail. The bird was not preserved, but there seems to be no reasonable doubt of its identity. Mr. Purdie further states that he has "lately seen a skin of this species belonging to Mr. Browne, of Framingham. The bird was picked up dead, in August, 1869, by a relative of his, on Clark's Island, Plymouth Harbor [Mass.], and was forwarded to him as something entirely new to our shores. This instance adds a new bird to the Fauna of Massachusetts."\* The only other recorded instance of its capture in New England is that given by Dr. Thos. M. Brewer: "Hazenville, Conn., Batty."

226. *Gallinula galeata* (Licht.) Bonaparte. Florida Gallinule.

A rather common summer resident, as I am told by Mr. Grinnell, who has taken a number of specimens about Milford, Conn. Mr. W. W. Coe has also taken it near Portland, Conn.

227. *Porphyrio Martinica* (Linné) Temminck. Purple Gallinule.

A rare accidental visitor from the South. A specimen of this species was killed near Middletown, Conn., about the year 1855, and is now in the Museum of Wesleyan University. It has been taken in Massachusetts, as recorded by G. P. Whitman: "A fine specimen

---

\* Bull. Nutt. Ornith. Club, No. vol. ii. 1, p. 22, January, 1877.

of the Purple Gallinule was shot at 'Henry's Pond,' 'South-end,' Rockport, Mass., on April 12th, [1875] by Mr. Robert Wendell."\*

228. *Fulica Americana* Gmelin. Common Coot; Mud Hen.

Common during the migrations, particularly in fall. May breed. Linsley took five specimens at Stratford, remarking that it was "by no means common" there. Last October (1876), my friend, Mr. A. J. Dayan, shot several on Lake Whitney, and ascertained that no less than fifty specimens were killed there during that month!

Family, ANATIDÆ.

229. *Cygnus Americanus* Sharpless. Whistling Swan.

A rare, almost accidental, visitor, occurring only in winter. Linsley mentions the occurrence of four specimens, at Stratford, Conn., two of which were killed. My friend, Dr. Wm. H. Hotchkiss, of this city, tells me that he was informed, by William Beers, Esq., that two Swans were seen in Branford Harbor, during a severe gale, about the middle of March, 1876. I take it for granted that they were of this species, since there is no positive record of the occurrence of the Trumpeter Swan (*Cygnus buccinator*) within our limits. Mr. Grinnell also informs me that several Swans were seen near Milford, Conn., about the same time. Swans were once common in New England, during the migrations, as seen from Morton's remarks concerning them (in 1632): "And first of the Swanne, because she is the biggest of all the fowles of that Country. There are of them in Merrimaek River, and in other parts of the Country, greate Store at the seasons of the yeare. The flesh is not much desired of the inhabitants, but the skinnes may be accompted a commodity, fitt for divers uses, both for fethers, and quiles."†

NOTE.—The Trumpeter Swan (*Cygnus buccinator* Richardson), may, and very probably does, sometimes occur within our limits. Dr. Wood, of East Windsor Hill, informs me that a hunter in his vicinity, who was perfectly familiar with this bird in the West, where they were common, once told him that he had heard the unmistakable note of the Trumpeter Swan, but did not see the bird. A short

\* Am. Nat., vol. ix. No. 10, p. 573, Oct., 1875.

† Force's Historical Tracts, vol. ii, Tract 5, p. 46.

time afterwards, however, on again meeting the Doctor, the hunter said that, a few days before, he heard the Swans coming and rushed into the house for his gun, but before he returned with it they had passed over, between the house and barn, that he had a good sight at them and was confident that they were Trumpeters. Proof is wanting to show that some of the birds mentioned under the last species were not really *Cygnus buccinator*.

230. *Anser hyperboreus* Pallas. Snow Goose.

A rare winter visitor. Linsley records seven specimens from Stratford, Conn. Mr. W. W. Coe, of Portland, has a magnificent specimen of this species in his cabinet. It was killed on the coast near Saybrook, Conn., in the fall of 1875.

NOTE.—The Barnacle Goose (*Branta leucopsis* Boie), a rare accidental visitor to our coast, from Europe, is given by Linsley from Stonington, Conn., but on insufficient evidence. Stragglers have been taken from South Carolina to Hudson's Bay, and a fine specimen of this Goose was killed on Long Island, N. Y., in October, 1876 (recorded by Mr. Lawrence),\* hence it may occur as a rare accidental straggler.

231. *Branta bernicla* (Linné) Scop. Brant Goose; Black Brant.

A tolerably common spring and autumn migrant, sometimes remaining through the winter. Linsley said: "The Brant is common here. [Stratford, Conn.] in winter" (p. 269). Captain Brooks writes me that they are "not common" at Faulkner's Island, where he has "only taken one." Mr. Grimmell informs me that two specimens of this species were killed off Stratford Light, Conn., last spring (1877). Mr. Osborne also saw three individuals near the mouth of the East Haven River, Conn., April 14th, 1876. Dr. Wood, of East Windsor Hill, Conn., has a fine specimen in his cabinet. It was shot on the Connecticut River, *above* Hartford, in the spring of 1876.

This species is first recorded from New England by Thomas Morton, who, in 1632, wrote: "There are Geese of three sorts, vize, brant Geese, which are pide, and white Geese which are bigger, and gray Geese, which are as big and bigger then the tame Geese of England, with black legges, black bills, heads and necks black, the flesh farre more excellent, then the Geese of England, wild or tame,

\* Bull. Nutt. Ornith. Club, vol. ii, No. 1, p. 18, Jan., 1877.

yet the purity of the air is such, that the biggest is accompted but an indifferent meale for a couple of men. There is of them great abundance. I have had often 1000. before the mouth of my gunne. I never saw any in England for my part so fatt, as I have killed there in those parts, the fethers of them makes a bedd, softer than any down bed that I have lyen on: and is there a very good commodity, the fethers of the Geese that I have killed in a short time have paid for all the powther and shott, I have spent in a yeare, and I have fed my doggs with as fatt Geese there, as I have ever fed upon myself in England.”\*

232. *Branta Canadensis* (Linné) Gray. Canada Goose; Wild Goose.

A winter resident, common during migrations; they arrive in November (Nov. 24, 1872, Sage), some remaining through April and sometimes even into May (May 22, 1864, Sage; May 10, 1877, C. H. M.). Linsley writes that “Hundreds of the common ‘Wild Geese’ winter at the mouth of the Housatonic, and so near my own dwelling that I often with my telescope present a distinct view of their *eyes* to my friends who call. Birds are said to be near enough to shoot when their eyes are visible to the sportsman. Many are killed here merely for sale by gunners, who frequently send them to New York.”† Capt. Brooks says that they occasionally stop about the islands off Guilford, Conn., and that he killed two last November. Mr. Grinnell tells me that generally a few still winter about the mouth of the Housatonic River, Conn., and that over two hundred remained there last winter (1876-7). They begin to go north (some passing nearly due east) during the latter part of March (from Mar. 24th on), and all through April large flocks may be seen and heard overhead. Many of these contain upwards of one hundred and fifty birds, and I should say that they average about seventy-five. They were particularly numerous last spring (1877), and scarcely a day passed during April but one or more flocks were seen.

233<sup>a</sup>. *Branta Canadensis*, var. *Hutchinsii* (Rich.) Coes. Hutchins’ Goose; Southern Goose.

Not common. “Stratford,” Conn. (Linsley). Mr. Geo. Bird Grinnell tells me that the hunters about Milford, Conn., all make a distinction between the common or Canada Goose and the Southern

\* Force’s Historical Traets, Tract 5, (vol. ii.) p. 46.

† Am. Jour. Sci. and Arts, vol. xlv, No. 2, p. 269, 1843.

Goose. That the latter does not arrive till after the Canada Geese have all come, and that they do not stay long, but pass southward—hence their name. They are also noticeably smaller than the Canada Goose.

233. *Anas boschas* Linné. Mallard.

A rare migrant. Have notes of its occurrence here September 30th, October, and November 13th, 1875, and Mr. Grimmell saw it in October and November, 1876. Linsley gives it from Stratford. Capt. Brooks writes me from Faulkner's Island, Conn., that they are not abundant: "occasionally see a few with Black Ducks in the fall."

234. *Anas obscura* Gmelin. Black Duck.

A resident, but most abundant during the migrations. Capt. Brooks writes me that they "come in September and stay through the winter. Leave in May and June." Linsley said that they occasionally bred about Stratford, Conn. That their edible qualities were early appreciated is seen from the writings of Thomas Morton, who said (in 1632): "Ducks, there are of three kindes, pide Ducks, gray Ducks, and black Ducks, in greate abundance: the most about my habitation were black Ducks: and it was a noted eustoma at my howse, to have every mans Duck upon a trencher, and then you will thinke a man was not hardly used, they are bigger boddied, then the tame Ducks of England: very fatt and dainty flesh. The common doggs fees were the gibletts, unlesse they were boyled now and than for to make broath."\*

235. *Dafla acuta* (Linné) Bonaparte. Pintail; Sprigtail.

A rather rare winter resident. Have seen but few specimens. Linsley found it at Stratford, Conn. Mr. Osborne saw one in March (23), 1877. Mr. J. N. Clark, of Saybrook, Conn., tells me that he does not consider it particularly rare; in fact that he thinks it is rather common in spring and fall in that vicinity—about the mouth of the Connecticut. Dr. Wood, of East Windsor Hill, has two specimens killed on the Connecticut River above Hartford, but they are extremely rare there.

\* New English Canaan, p. 47. Reprinted in Peter Force's Historical Tracts, Tract 5.

236. *Chaulelasmus streperus* (Linné) Gray. Gadwall; Gray Duck.

It occurs during the migrations; not common. Captain Brooks tells me that they are "occasionally seen" about Faulkner's Island, Conn., "but are not plenty." Linsley writes: "Flocks of the Gray Duck were here as early as August last season [1842], and were among the best of ducks for the table."\*

237. *Mareca Americana* (Gmelin) Stephens. Widgeon; Baldpate.

Not particularly rare during the migrations; may winter. Taken at Stratford, Conn., by Linsley, and all along the coast by others, too numerous to mention. Dr. Wood has seen three specimens, one of which he shot, near East Windsor, Conn., but they are rare in this State so far inland. Dr. Coues states that "the Widgeon breeds in abundance in Northern Dakota and Montana along the banks of the streams and pools."† Thomas Morton found them in New England in 1632, for he writes: "Widggens there are, and abundance of other water foule, some such as I have scene, and such as I have not scene else where, before I came into those parts, which are little regarded."‡

238. *Querquedula Carolinensis* (Gmelin) Stephens. Green-winged Teal.

A common migrant. Have seen it in March. Taken by Linsley at Stratford, Conn. Concerning this and the following species Morton wrote, in 1632: "Teales, there are of two sorts greene winged, and blew winged: but a dainty bird, I have bin much delighted with a rost of these for a second course, I had plenty in the rivers and ponds about my howse."

239. *Querquedula discors* (Linné) Stephen. Blue-winged Teal.

A rather common migrant. Mr. Dayan secured a beautiful male of this species on Lake Whitney, September 25th, 1875. Arrives in August (Grimmell), remaining through October (Oct. 20, 1874, Sage).

240. *Spatula clypeata* (Linné) Boie. Shoveller; "Spoonbill-duck."

This splendid species is a rare migrant along our shores. Linsley "obtained two fine males" at Stratford, Conn. Mr. Grimmell informs

\* Am. Jour. of Sci. and Arts, vol. xlv, No. 2, p. 269, April, 1843.

† Birds of the Northwest, p. 564, 1874.

‡ Reprinted in Foree's Historical Tracts. Tract 5, p. 47.

me that he took two or three specimens about October 8th, 1875, in the Sound near Milford, Conn., and that he does not consider them particularly rare at that season. Mr. W. W. Coe has an immature specimen taken at Saybrook, December 8th, 1874. Mr. Robert Morris, of this city, tells me that he has killed it late in *July* on the West Haven meadows, and has also seen it, about the same time, and early in August, on the Quinnipiac marshes.

241. *Aix sponsa* (Linné) Boie. Wood Duck; Summer Duck.

A tolerably common summer resident, breeding in holes in trees. Arrives in March (March 18, 1876, Osborne), frequenting fresh-water ponds and streams, and lays in May, remaining into October. Zaddock Thompson, speaking of its occurrence in Vermont, says, "The Wood Duck is one of the most beautiful birds seen in this State, and is one of the very few permanent residents here."\*

242. *Fuligula marila* (Linné) Stephens. Greater Scaup Duck; Broad-bill; Blue-bill.

A rather common winter resident. Taken at Stratford by Linsley. Captain Brooks informs me that they are "plenty at Guilford, Conn." In spring Mr. Thos. Osborne has taken it as late as May 17th, (1876).

243. *Fuligula affinis* Eyton. Lesser Scaup Duck; Blue-bill.

A common winter resident. Much prized for the table. Remains till the middle or latter part of May (May 17, Osborne). Dr. Wood, of East Windsor Hill, once killed it on the Connecticut river in his vicinity.

244. *Fuligula collaris* (Donovan) Bonaparte. Ring-necked Duck.

It is not common, but may winter. Linsley took it at Stratford, Conn. Mr. Geo. Bird Grinnell has secured several specimens of this bird, in early spring, on the Sound, in the vicinity of Milford, Conn.

245. *Fuligula ferina*, var. *Americana* (Eyton) Coues. Red-head; Pochard.

Rare. Linsley took it at Stratford. The Rev. J. H. Hand writes me that he has taken it at Westbrook, Conn., but it is rare there.

\* History of Vermont, p. 109, 1842.

246. *Fuligula vallisneria* (Wilson) Stephens. Canvas-back Duck.

Rare. "Stratford," Conn., (Linsley). Mr. Robert Morris, of this city, saw one May 7th, 1876. I am also informed by Rev. J. H. Hand, that it occurs at Westbrook, Conn., where it is "very rare."

247. *Bucephala clangula* (Linné) Coues. Golden-eye; Whistler.

A common winter resident. Found on the Sound and on fresh-water ponds from November to April or May (April 16th). Captain Brooks writes, from Faulkner's Island, "only see them here in very cold winters."

248. *Bucephala islandica* (Gmelin) Baird. Barrow's Golden-eye.

A rare winter visitant from the North. I include this species on the strength of a most typical (male adult) specimen in the cabinet of Mr. John H. Sage, of Portland, Conn. It was purchased by him, November 14th, 1867, from a man who said it was killed on the Sound, and there seems to be no reason for doubting his statement, especially since it has been taken as far South as New York City.\* Mr. William Brewster records it from Massachusetts with the following remarks: "I obtained an adult female in the flesh from Cape Cod, December 7th, 1871, which was pronounced by Prof. Baird unquestionably *B. Islandica*. Since then I have seen numbers of females and two fine adult males in the Boston Markets, most of them shot within State limits."†

249. *Bucephala albeola* (Linné) Baird. Butter-ball; Buffle-head.

A common winter resident. Found both on fresh and salt water. Nov., April 15th.

250. *Harelda glacialis* (Linné) Leach. Long-tailed Duck; Old Wife; Old Squaw.

A common winter resident; particularly abundant during the migrations. Captain Brooks writes me that they "usually come in October and leave in April or May." This is by far the most abundant species of duck found along our coast, and during the migrations (notably in November) hundreds of thousands of them can be seen on the Sound, covering the water as far as the eye can reach in every direction, and almost deafening one by their constant, and, to my ears, not altogether unpleasant, cackle. They are continually on the

\* Coues' *Birds of New England*, p. 52 (300), 1868.

† *Am. Nat.*, vol. vi, No. 5, pp. 306-7, May, 1872.

move and, notwithstanding their immense numbers, it is no easy task to approach within gunshot of the flock. Though as strictly maritime as any of our ducks, they have occasionally strayed so far into the interior as Central Ohio (Wheaton). Mr. Grinnell tells me that they occasionally breed here, but these may be wounded birds—"pensioners" as they are commonly called. Dr. Wood has taken it on the Connecticut River above Hartford, but it is rare there.

**251. *Camptolæmus Labradorius* (Gmelin) Gray.** Labrador Duck; Pied-Duck.

A very rare winter visitor. Linsley took it at Stratford, Conn. Pennant, in his *Arctic Zoölogy*, says that this species was "sent from *Connecticut* to Mrs. Blackburn,\* in England."

**252. *Somateria mollissima* (Linné) Leach.** Eider Duck.

A rare winter visitant along our coast. Linsley states that "one or two Eider Ducks were killed" at Stratford, Conn., by Mr. Lucius Curtis. Mr. Grinnell tells me, that he saw a specimen killed on the Sound, near Milford, Conn., by a gunner (Samuel Brown by name) May 29th, 1877, and that two Eider Ducks, *probably* of this species, were shot there in the fall of 1874.

**253. *Somateria spectabilis* (Linné) Boie.** King Eider.

A rare winter visitor, like the last, and also taken at Stratford, Conn., by Linsley, who says of it: "I have obtained here this season two specimens of the King Duck, said never to have been seen here before. They are among the best for the table."† Girard also states that "an adult male in perfect plumage was shot on Long Island Sound, in the winter of 1839."‡

**254. *Ædemia Americana* (Wilson) Swainson.** Black Scoter; Gray Coot

A tolerably common winter resident, but less so than either of the following. Linsley had it from Stratford. Have seen it early in October (October 4, 1876), and again in November, but the hunters regard it as rather rare. It sometimes visits the Great Lakes in winter, and Dr. Wheaton writes me that one was taken near Columbus, Ohio, in Dec. 1876.

\* *Arctic Zoölogy*, vol. ii, p. 559, 1785. † *Catal. Birds of Conn.*, p. 270, 1813.

‡ *Birds of Long Island*, p. 333, 1814.

255. *Ædemia fusca* (Linné) Swainson. Velvet Scoter; White-winged Coot.

It is extremely abundant on the Sound during fall and spring, some remaining through the winter. Arrives about the first of October (Oct. 4, 1876) remaining till the middle of May (May 15, Osborne). Thousands of them visit the coast in October and November, to feed on the small shells (chiefly *Maetra lateralis*) which the shallow muddy bottoms furnish in abundance. And in this connection it may be stated that the alimentary canals of the sea ducks afford the conchologist a rich collecting ground, often yielding unexpected treasures. This is the largest of our ducks, and like the other members of the genus, is generally considered unfit for the table, but when properly prepared and well cooked they are by no means bad eating. Though properly marine, it occurs on the Great Lakes in winter. Dr. Wood has taken two specimens on fresh water near East Windsor Hill, Conn.

256. *Ædemia perspicillata* (Linné) Stephens. Surf Duck; Sea Coot; Scoter.

A common winter resident, being intermediate in numbers between the two foregoing—that is, it is neither abundant nor uncommon. Arrives late in September or early in October, remaining till the middle of April. Captain Brooks writes me that they are “common through fall, winter and spring” in the vicinity of Faulkner’s Island, Conn. I saw one on the Sound as late as June 29th (1877), and I am told that a few generally remain all summer, but they are probably “pensioners” (wounded birds) and do not breed.

257. *Erismatura rubida* (Wilson) Bonaparte. Ruddy Duck.

It is not rare during the migrations. Taken by Linsley at Stratford, Conn. Found both on fresh and salt water. Mr. J. N. Clark, of Saybrook, tells me that they are rather common about the mouth of the Connecticut, but that full plumaged birds are very rare. Dr. Crary tells me that one was shot on the Connecticut river, near Hartford, Conn., in October, 1858.

258. *Mergus merganser* Linné. Sheldrake; Merganser.

It is common during migrations; some probably wintering. Frequents fresh water lakes and rivers in the interior, and is “found occasionally about Guilford Harbor, Conn.” (Capt. Brooks), but is not

common on salt water. Remains into April (April 17, 1875, male adult shot, Sage).

259. *Mergus serrator* Linné. Red-breasted Merganser.

A common migrant, wintering on the Sound. Captain Brooks writes me that they are "plenty during winter and spring" about Faulkner's Island, Conn. Also found on fresh water. Remains into April (April 14, 1876, Osborne).

260. *Mergus cucullatus* Linné. Hooded Merganser.

A winter resident; not common. Linsley obtained two specimens from a fresh water pond near Stratford, Conn., and Captain Brooks has one, killed at Guilford, Conn., on salt water. Mr. W. W. Coe has taken it during the migrations, and I saw one in November, 1875. Dr. Wood has taken it near East Windsor, but finds it rarely. Mr. Sage writes me that one was killed near Middletown, Conn., March 6th, 1876.

### Family, SULIDÆ.

261. *Sula bassana* Linné. Common Gannet; Solon Goose.

A rare winter visitant. Captain Brooks writes me from Faulkner's Island, that he has "only seen two specimens," one of which is now in his collection: "It was killed at Guilford, Conn., in the spring, about ten years ago." Linsley took it at Stratford, Conn., and, concerning its gastronomic proclivities, remarks: "The true Solon Goose killed here, which I presented to the Yale Natural History Society, had in its stomach a bird, and in the stomach of the latter was also a bird—destruction on destruction. Mr. B. Silliman, Jr., and Dr. Whelpley, who opened the stomach, observed this fact, as the former gentleman informed me. It was previously supposed this bird lived wholly on fishes."\* Giraud saw a few specimens, killed about Long Island and in the vicinity of New York City.† Mr. Robert Morris tells me that he saw an adult specimen, shot off Branford late in the fall of 1872 or 1873. There is also, in a restaurant in New Haven, a mounted example of the young of the Solon Goose, killed near here a few years ago.

\* Am. Jour. Sci. and Arts. vol. xlv, No. 2, p. 271, April, 1843.

† Giraud's Birds of Long Island, p. 345, 1844.

262. *Sula fiber* Linné. Booby Gannet.

A rare or accidental visitor from the South. Linsley took it at Guilford, Conn. It has been taken as far north as Massachusetts (in September).\*

## Family, PHALACROCORACIDÆ.

263. *Graculus carbo* (Linné) Gray. Common Cormorant; Shag.

A tolerably common winter visitant. Captain Brooks writes me that they are "plenty in April and May" and are sometimes seen in fall. Linsley took it at Stonington, Conn.

264. *Graculus dilophus* (Swainson) Gray. Double-crested Cormorant.

It occurs along the coast during fall and spring, but usually not in very large numbers, though Captain Brooks informs me that he "saw large flocks of them feeding about Faulkner's Island, Conn., in the month of May, 1876," and that he captured two of them. Linsley had a specimen from Stratford, Conn., and he regarded it as a very rare bird. Mr. W. W. Coe has a specimen in his cabinet which he killed on the Connecticut River, near Middletown, October 29th, 1875. While out duck-hunting at the mouth of the East Haven River, November 13th, 1875, with Mr. Thomas Osborne, we saw a Cormorant which I judged to be of this species. In speaking of the Cormorants, in New England, in 1675, Josselyn observes: "Though I cannot commend them to our curious palats, the *Indians* will eat them when they are fley'd, they take them prettily, they roost in the night upon some Rock that lyes out in the Sea, thither the *Indian* goes in his Birch-*Canow* when the moon shines clear, and when he is come almost to it, he lets his *Canow* drive on of it self, when he is come under the Rock he shoves his boat along till he come just under the *Cormorants* watchman, the rest being asleep, and so soundly do sleep that they will snore like so many Pigs; the *Indian* thrusts up his hand of a sudden, grasping the watchman so hard round about his neck that he cannot cry out; as soon as he hath him in his *Canow* he wrings off his head, and making his *Canow* fast, he clam-breth to the top of the Rock, where walking softly he takes them up as he pleaseth, still wringing off their heads; when he hath slain as many as his *Canow* can carry, he gives a shout which awaketh the surviving *Cormorants*, who are gone in an instant."†

\* Putnam, in Proceed. Essex Inst., vol. i, p. 221. 1856.

† Josselyn's Two Voyages to New England, p. 102. 1675.

## Family, TACHYPETIDÆ.

265. *Tachypetes aquilus* (Linné) Vieillot. Frigate Pelican; Man-of-war Bird.

An extremely rare accidental visitor from the South. But one instance of its occurrence in New England has been recorded, and that was published in the Naturalist, by Mr. Grinnell, nearly two years ago: "The occurrence of *Tachypetes aquilus* in Connecticut is not generally known, Long Island being, up to this time, the northernmost locality on record for this bird. A female of this species was killed at Faulkner's Island in this State, in the autumn of 1859, and is now in the collection of Captain Brooks. It was hovering over the island when shot."\* I have seen this specimen in Capt. Brooks's Cabinet.

## Family, LARIDÆ.

266. *Stercorarius parasiticus* (Brünn.) Schæff. Richardson's Jaeger.

A rare winter visitor. Linsley gave it from Bridgeport, Conn. I have lately seen a specimen in the cabinet of Mr. John H. Sage, of Portland, Conn., which was killed at that place in the fall of 1875.

267. *Stercorarius Buffoni* (Boie) Cones. Long-tailed Jaeger.

A rare straggler from the far North. Not previously recorded from Connecticut. I have just received, from Mr. Wm. F. Lane, a beautiful adult specimen of this Larine plunderer, which he shot on the Community Lake at Wallingford, Conn., August 30th, 1873. Mr. Lane writes me that he was out sailing on the lake, with his brother, when they noticed a curious bird, unlike any they had ever before seen. "It was chasing a swallow, which it soon caught, and then lit on the water with the swallow in its mouth, and commenced swimming around and did not seem to be very wild." Mr. Lane then went ashore for his gun, and, on returning, sailed so close to the bird that his brother was obliged to splash the water with an oar in order to make it fly, and as it rose he shot it. He says: "The bird was alone and had been flying around the lake for about an hour when I shot it. I noticed that it was very swift on the wing, also a very fast swimmer. It did not seem at all afraid of anyone."

NOTE.—The Pomarine Jaeger, *Stercorarius pomatorhinus* (Temminck) Vieillot, doubtless occurs as a rare winter visitant.

\* Am. Nat., vol. ix, No. 8, p. 470, Aug., 1875.

268. *Larus marinus* Linné. Great Black-backed Gull.

A winter resident; not rare. Linsley records it from Stratford, Conn. During January, February and March, one frequently sees two or three *Larus marinus* flying about the Harbor in company with the common Herring Gulls.

269. *Larus argentatus*, var. *Smithsonianus* Coues. Herring Gull.

An abundant winter resident. Arrives from the North in October, remaining till April or May. Have seen hundreds of them together in New Haven Harbor in February and March. Mr. Thomas B. Osborne has seen them in June and early September, and a few doubtless spend the summer, but they are probably young birds and do not breed. Dr. Wood occasionally finds it about the Connecticut River above Hartford. On June 29th, 1877, I saw five together near Faulkner's Island, Conn. Four of these were in the young (gray) plumage, while one was white.

270. *Larus Delawareensis* Ord. Ring-billed Gull.

Not rare. Linsley found it at Stonington, Conn. The young of this species, easily recognized by having "a broad, subterminal band of black" across the tail (Coues), may frequently be seen in winter associated with the foregoing. My attention was first called to it by Mr. E. P. Bicknell, of Riverdale, N. Y.

271. *Larus tridactylus* Linné. Kittiwake Gull.

Occurs in winter, but is not common. Linsley gave it from Stonington, Conn. Mr. Osborne has seen it from March 8th till April 14th.

272. *Larus atricilla* Linné. Laughing Gull.

Not common. Possibly a few breed on some of the islands off our coast. Linsley states that they were occasionally killed at Stonington, Conn. Mr. Osborne informs me that he saw one June 1st, 1876.

273. *Larus Philadelphia* (Ord) Gray. Bonaparte's Gull.

Is tolerably common in fall. Captain Brooks writes me that they are "quite common about Faulkner's Island, Conn., in October and November," and that he occasionally sees them "with Terns at Goose Island, Conn., *in summer*." Linsley states that he "obtained an

individual of this beautiful species of gull, August 1st, 1842." (p. 271.) I saw the remains of one that had been killed in November, 1875, near New Haven. Specimens of it are also in the collections of W. W. Coe and J. H. Sage of Portland, Conn., and Mr. Wm. F. Lane sends me a specimen from Wallingford, Conn., stating that eight were seen there in the fall of 1874.

NOTE.—The Burgomaster (*Larus glaucus* Brünnich) may sometimes occur along our coast as a rare winter visitant from the North, but I have, as yet, been unable to procure satisfactory evidence of its presence within our limits, although it has been taken on Long Island.

274. *Sterna hirundo* Auct. Common Tern; Wilson's Tern; Sea Swallow.

A common summer resident along the coast. Captain Brooks informs me that they breed at Goose Island, Conn., but not so abundantly as the Roseate.

275. *Sterna macroura* Naumann. Arctic Tern.

A rare visitor to our shores. Mr. J. N. Clark, of Saybrook, Conn., writes me: "I have an undoubted specimen, in the fall plumage of the young (as described by Coues), taken here last season—never captured a mature bird."

276. *Sterna Dougalli* Mont. (*S. paradisea* of Authors.)\* Roseate Tern.

An abundant summer resident. Captain Brooks writes me that they first "make their appearance about the middle of May, and commence laying about the first of June, at Goose Island (one mile west of Faulkner's Island, Conn.), where they breed in great quantities, if not disturbed." Through the kindness of Captain Brooks I have recently (June 29, 1877) visited Goose Island, and have thus been permitted to witness the magnificent aerial evolutions of these beautiful birds, as hundreds of them swept to and fro over our heads, constantly uttering their characteristic cries. They would rise high in the air and immediately dive to the water's edge, then, suddenly turning, would sweep over the island and settle on the large rocks with which it is bordered, always, as the Captain remarked, "keeping their heads to the wind'ard." It is truly a splendid sight, and one well worth going many miles to see. As they cover the rocks, almost

\* See Coues' Birds of the Northwest, p. 688 1874.

hiding them from view, their jet-black caps and pearly mantles contrast nicely with the pure white under parts and bright red legs. The eggs were now hatching and thousands of downy young covered the island. I actually caught an adult female entangled in the weeds, among which their eggs are deposited with little attempt at a nest. Where the weeds were particularly thick, forming dense mats, the eggs were sometimes placed *upon*, as well as under, them; we found several such. Great credit is due Captain Brooks for his watchfulness over this little colony: but for him they would long since have been exterminated.

277. *Sterna superciliaris*, var. *Antillarum* Coues. Least Tern.

Not very common. Linsley took it at Stratford, Conn. Mr. J. N. Clark, of Saybrook, Conn., tells me that they are sometimes quite abundant there during the migrations.

278. *Sterna fuliginosa* Gmelin. Sooty Tern.

A rare visitor from the South. The claim of this species to a place among the birds of New England has only recently been established, the only authentic instances of its capture having been published within a year. In a late number of the "Bulletin," Mr. H. A. Purdie says that Mr. J. N. Clark has a specimen in his collection "that last summer flew against the side of the steamboat wharf depot, at Saybrook, Conn. Stunned by the concussion it fell and was picked up. It had been noticed for several days, flying about the mouth of the river, as something unusual."\* Professor Sanborn Tenney states that a specimen was killed as far inland as the northwestern corner of Massachusetts ("near the Hoosac river") in September, 1876.† These two are, so far as I am aware, the only recorded instances of its capture in New England. Mr. Frederick T. Jencks, of Providence, R. I., writes me that he took a particularly beautiful specimen at Point Judith, R. I., last fall. Through the kindness of several friends I am enabled to add five Connecticut examples to those given above, thus increasing the total number ascertained to have occurred in New England to eight, six of which were killed in this State. Four of these I have myself seen. The circumstances connected with the capture of these specimens are as follows: Two adult birds killed themselves, last September (1876), by flying against the lighthouse

\* Bull. Nutt. Ornith. Club, vol. ii, No. 1, p. 22, Jan., 1877.

† Am. Nat., vol. xi, No. 4, p. 243, April, 1877.

tower at Faulkner's Island. One of them is now in the collection of Captain O. N. Brooks, of that place; Mr. Elbert Coe, of Stony Creek, Conn., has a mounted specimen which was killed there with a stone, late in the summer (1876); Mr. Norman Elmore, of Granby, Conn., has just sent me, for examination, a bird of this species that was taken in that vicinity, September 20th, 1876. The Rev. J. Howard Hand writes me that it was procured in a singular place and manner: "It was knocked down with a stick by a gentleman who was netting wild pigeons. He first saw it, I think, on the pigeon poles. He got it alive, but of course could not get it to eat, and after keeping it two or three days it died." This and the one killed by Elbert Coe, Esq., are both in the young-of-the-year plumage, as described by Coes.\* It is a singular fact that all these specimens were killed last fall, and probably all in September.

279. *Hydrochelidon lariformis* (Linné) Coes. Black Tern; Short-tailed Tern.

A rare visitor, occurring chiefly in fall. Though essentially an inland species, it is sometimes found along the coast during migrations. Captain Brooks took one specimen near Goose Island, Conn., about twelve years ago—the only one he has ever seen. Mr. George Bird Grimmell informs me that his brother shot a bird of this species, late in August, near Milford, Conn.

NOTE.—Several species of Terns, not mentioned above, doubtless occur within our limits. *Sterna anglica* (*aranea* of Wilson), *S. cautiuea* (*uciflavida* of Cabot), *S. caspia* and *S. regia* are to be looked for as rare visitors from the South, while *S. Forsteri* probably occurs occasionally in fall, and *Nema Sabini* may be met with as a rare straggler from the North.

Family. PROCELLARIIDÆ.

280. *Cymochorea leucorrhœa* (Vieillot) Coes. Leach's Petrel.

Tolerably common off the coast in summer, but is more frequently seen outside than in the Sound. I am informed by Captain Brooks that it is "occasionally seen during the summer months cruising in the vicinity of Faulkner's Island." Dr. Crary, of Hartford, Conn.,

\* Birds of the Northwest, p. 699, 1874.

informs me that one was shot, October 27th, 1857, by George Meigs, on the Connecticut River, above Hartford. Since writing the above I have twice seen it, on the Sound, in the vicinity of Faulkner's Island, and near New Haven. I am inclined to believe that a few breed on some of the islands off our coast.

281. *Oceanites oceanica* (Kuhl.) Coues. Wilson's Petrel.

Not common; occurs off the coast in summer. Linsley says that he has seen this species "not only in our Sound, but even west of Stratford, and sitting quietly upon the water," and further states that he once caught a specimen "at sea, by floating about two hundred feet of thread in the air, against which it flew, and thus became entangled and taken."\*

282. *Puffinus major* Faber. Greater Shearwater.

Not rare in winter off the coast, but generally keeps outside the Sound. Linsley found it common about Stonington in the southeast corner of the State. In the Museum of Wesleyan University, at Middletown, is the head of a bird of this species which is said to have been killed at Granby, Conn.

Family, COLYMBIDÆ.

283. *Colymbus torquatus* Brunn. Loon; Great Northern Diver.

A tolerably common winter resident. Arrives from the North in October, remaining till April or May (April 29, 1876, Osborne). I have a beautiful specimen killed at Branford, Conn., April 23d, 1875, and presented to me by Dr. Wm. H. Hotchkiss. It has been known to breed on a pond at Easthampton, Conn. (W. G. Buell).

284. *Colymbus septentrionalis* Linné. Red-throated Diver.

A common winter resident. Arrives from the North in October, remaining till May, and Mr. Nichols informs me that he saw one as late as June 2d (1877). Frequently killed by gunners while duck-shooting on the Sound, but, as Captain Brooks writes, "you seldom get one with the red throat."

---

\* Am. Jour. Sci. Arts, vol. xlv, No. 2, . 272, April, 1843.

NOTE.—*Colymbus Arcticus* may possibly occur as an extremely rare winter visitor from the far north, but I am unable, as yet, to find sufficient evidence of its capture within our limits, although there is a specimen so labelled in the Museum at Middletown. I cannot believe this to be anything more than an immature *Colymbus septentrionalis*, with the throat tinged with black.

### Family, PODICIPIDÆ.

285. *Podiceps cristatus* (Linné) Latham. Crested Grebe.

Tolerably common during the migrations and in winter. Recorded by Linsley from Stratford, Conn. W. W. Coe and J. H. Sage have each specimens of this species taken here in winter. Dr. Wood, of East Windsor Hill, tells me that he has had but four specimens from that locality, and that they were all caught by hand in winter; having alighted in the snow they were unable to rise.

286. *Podiceps griseigena*, var. *Holbolli* (Reinh.) Coues. Red-necked Grebe.

A rather rare winter resident. Captain Brooks says he has not seen one for years. Occurs both on fresh and salt water. Linsley took it at Stratford. Mr. J. H. Sage has a specimen which he took at Saybrook, Conn., February 23d, 1875. Dr. Wood has a very handsome specimen, in full plumage, shot near East Windsor some years ago. I am informed by Dr. Crary, of Hartford, Conn., that one was shot in that vicinity, by Jerry Crocker, October 19th, 1860.

287. *Podiceps cornutus* Latham. Horned Grebe.

A common winter resident. Found on the coast as well as on lakes and ponds in the interior. Arrives in September or October, remaining till May.

288. *Podilymbus podiceps* (Linné) Lawrence. Pied-billed Dabchick; Hell Diver.

A summer resident; common during the migrations. Found chiefly on fresh water, but is not rare on the Sound. Arrives from the North in September, remaining into November (and a few may winter). Mr. Geo. Bird Grinnell tells me that it breeds within the State.

Family, **ALCIDÆ.**

289. *Utamania torda* (Linné) Leach. Razor-billed Auk.

A rare winter visitor in the Sound.

290. *Mergulus alle* (Linné) Vieillot. Sea Dove; Dovekie.

A rare winter visitor on our coast. Prof. G. Brown Goode published the first authentic record of the capture of this species within the limits of the State. He states that, at Middletown, during a severe northeast storm, about the middle of November, 1871, "two individuals were captured in full winter plumage, and plump, though with empty stomachs. Their occurrence thirty miles inland is somewhat remarkable. Allen records the capture of a single specimen at Greenfield, Mass., on the Connecticut, and Linsley places the species among the birds of Connecticut on the strength of one captured near Martha's Vineyard,"\* Mass. Several others were secured at Middletown, by W. W. Coe and J. H. Sage, during this same storm during which Mr. Goode's were taken, and Mr. Sage has still another, captured there November 25th, 1874, in a gale. One was taken at Saybrook at the same time. Dr. Wood, of East Windsor Hill, showed me a specimen of this species, shot near Portland, Conn., November 10th, 1849. Two other individuals were killed on a pond at Wallingford, Conn., in September, 1874, by Wm. F. Lane, Esq. It is occasionally taken as far south as Egg Harbor, New Jersey.†

291. *Lomvia troile* (Linné) Brandt. Foolish Guillemot; Murre.

A rare winter visitant in the Sound, though common enough outside. Captain Brooks took one near Faulkner's Island, Conn., "about eight years ago."

NOTE.—The Great Auk (*Alca impennis* Linné), supposed now to be extinct, was formerly, without doubt, a winter visitor to our coast. Aside from the three species of *Alcide* given above, as occurring within our limits, several others have been found still farther south and may be looked for in winter off Stonington, Conn., and perhaps even in the Sound. These are: *Fratereula Arctica*, *Uria grylle*, and *Lomvia arva*.

\* Am. Nat., vol. vi, No. 1, p. 49, Jan. 1872.

† Birds of East Penn. and New Jersey. By Wm. P. Turnbull, p. 48, 1869.

## B. List of the Families of Birds now found in the State of Connecticut, with the number of their representative species.

	Species.		Species.
1 Turdidae, .....	8	25 Picidae, .....	8
2 Saxicolidae, .....	1	26 Strigidae, .....	11
3 Sylviidae, .....	3	27 Falconidae, .....	15
4 Paridae, .....	3	28 Cathartidae, .....	1
5 Sittidae, .....	2	29 Columbidae, .....	2
6 Certhiidae, .....	1	30 Trogonidae, .....	2
7 Troglodytidae, .....	4	31 Charadriidae, .....	6
8 Alaudidae, .....	1	32 Haematopodidae, .....	2
9 Motacillidae, .....	1	33 Recurvirostridae, .....	1
10 Sylvicolidae, .....	34	34 Phalaropodidae, .....	2
11 Tanageridae, .....	2	35 Scolopacidae, .....	24
12 Hirundinidae, .....	6	36 Tantalidae, .....	2
13 Ampelidae, .....	2	37 Ardeidae, .....	8
14 Vireonidae, .....	5	38 Rallidae, .....	9
15 Laniidae, .....	2	39 Anatidae, .....	32
16 Fringillidae, .....	32	40 Sulidae, .....	2
17 Icteridae, .....	8	41 Phalacrocoracidae, .....	2
18 Corvidae, .....	3	42 Tachypetidae, .....	1
19 Tyrannidae, .....	10	43 Laridae, .....	14
20 Caprimulgidae, .....	2	44 Procellariidae, .....	3
21 Cypselidae, .....	1	45 Colymbidae, .....	2
22 Trochilidae, .....	1	46 Podicipidae, .....	4
23 Alcedinidae, .....	1	47 Alcidae, .....	3
24 Cuculidae, .....	2		

## C. Special Lists, giving, in tabular form, the residents, summer and winter visitants, migrants, etc.

## (A.) SUMMER RESIDENTS.

## 1. Species known to breed.

1 Turdus migratorius.	21 Dendroæa carulescens.*
2 Turdus mustelinus.	22 Dendroæa Blackburniæ.*
3 Turdus fuscescens.	23 Dendroæa Pennsylvanica.
4 Mimus Carolinensis.	24 Dendroæa discolor.
5 Harporhynchus rufus.	25 Dendroæa pinus.
6 Sialia sialis.	26 Siurus auricapillus.
7 Parus atricapillus.	27 Siurus motacilla.
8 Sitta Carolinensis.	28 Geothlypis trichas.
9 Certhia familiaris.	29 Icteria virens.
10 Troglodytes ædon.	30 Myiodioctes mitratus.
11 Telmatodytes palustris.	31 Myiodioctes Canadensis.*
12 Cistothorus stellaris.*	32 Setophaga ruticilla.
13 Mniotilta varia.	33 Pyrranga rubra.
14 Parula Americana.	34 Hirundo horreorum.
15 Helmintherus vermivorus.	35 Tachycineta bicolor.
16 Helminthophaga pinus.	36 Petrochelidon lunifrons.
17 Helminthophaga chrysoptera.*	37 Cotyle riparia.
18 Helminthophaga ruficapilla.	38 Progne purpurea.
19 Dendroæa æstiva.	39 Ampelis cedrorum.
20 Dendroæa virens.*	40 Vireo olivaceus.

\* An asterisk placed after a species indicates that it does not breed abundantly.

- |                                 |                                     |
|---------------------------------|-------------------------------------|
| 41 Vireo gilvus.                | 89 Bubo Virginianus.                |
| 42 Vireo flavifrons.*           | 90 Scops asio.                      |
| 43 Vireo solitarius.            | 91 Otus vulgaris, var. Wilsonianus. |
| 44 Vireo noveboracensis.        | 92 Brachyotus palustris.            |
| 45 Carpodacus purpureus.        | 93 Sturnium nebulosum.              |
| 46 Chrysomitris tristis.        | 94 Nyctale Acadica.                 |
| 47 Passerculus Savanna.         | 95 Circus cyaneus, var. Hudsonius.  |
| 48 Poocetes gramineus.          | 96 Accipiter fuscus.                |
| 49 Coturniculus passerinus.     | 97 Accipiter Cooperi.               |
| 50 Coturniculus Henslowi.*      | 98 Falco communis.*                 |
| 51 Ammodromus maritimus.        | 99 Falco sparverius.*               |
| 52 Ammodromus caudacutus.       | 100 Buteo borealis.                 |
| 53 Melospiza palustris.         | 101 Buteo lineatus.                 |
| 54 Melospiza melodia.           | 102 Buteo Pennsylvanicus.           |
| 55 Melospiza Lincolni.*         | 103 Pandion haliaëtus.              |
| 56 Spizella socialis.           | 104 Haliaëtus leucocephalus.*       |
| 57 Spizella pusilla.            | 105 Ectopistes migratorius.         |
| 58 Passer domesticus.           | 106 Zenaidura Carolinensis.         |
| 59 Euspiza Americana.*          | 107 Bonasa umbellus.                |
| 60 Goniaphea Ludoviciana.       | 108 Ortyx Virginianus.              |
| 61 Cyanospiza cyanea.           | 109 Ægialitis vocifera.             |
| 62 Pipilo erythrophthalmus.     | 110 Ægialitis meloda.               |
| 63 Dolichonyx oryzivorus.       | 111 Philohela minor.                |
| 64 Molothrus pecoris.           | 112 Gallinago Wilsoni.*             |
| 65 Agelaius phœnicus.           | 113 Totanus semipalmatus.*          |
| 66 Sturnella magna.             | 114 Ereunetes pusillus.*            |
| 67 Icterus spurius.             | 115 Tringoides macularius.          |
| 68 Icterus Baltimore.           | 116 Actiturus Bartramius.           |
| 69 Quiscalus purpureus.         | 117 Ardea herodias.*                |
| 70 Corvus Americanus.           | 118 Ardea virescens.                |
| 71 Cyanurus cristatus.          | 119 Nyctiardea grisea, var. naevia. |
| 72 Tyrannus Carolinensis.       | 120 Botaurus minor.                 |
| 73 Myiarchus crinitus.          | 121 Ardetta exilis.                 |
| 74 Sayornis fuscus.             | 122 Rallus longirostris.            |
| 75 Contopus virens.             | 123 Rallus elegans.                 |
| 76 Empidonax Traillii.          | 124 Rallus Virginianus.             |
| 77 Empidonax minimus.           | 125 Porzana Carolina.               |
| 78 Antrostomus vociferus.       | 126 Porzana noveboracensis.*        |
| 79 Chordeiles Virginianus.      | 127 Porzana Jamaicensis.*           |
| 80 Chætura pelagica.            | 128 Gallinula galeata.              |
| 81 Trochilus colubris.          | 129 Anas obscura.                   |
| 82 Ceryle alcyon.               | 130 Aix sponsa.                     |
| 83 Coccyzus erythrophthalmus.   | 131 Harelda glacialis.*             |
| 84 Coccyzus Americanus.         | 132 Sterna hirundo.                 |
| 85 Picus villosus.              | 133 Sterna Dougalli.                |
| 86 Picus pubescens.             | 134 Colymbus torquatus.*            |
| 87 Melanerpes erythrocephalus.* | 135 Podilymbus podiceps.            |
| 88 Colaptes auratus.            |                                     |

2. *Species which probably breed occasionally, but are not known to do so.*

- |                                |   |
|--------------------------------|---|
| 1 Mimus polyglottus.           | 12 Contopus borealis.                     |
| 2 Polioptila caerulea.         | 13 Empidonax Acadicus.                    |
| 3 Lophophanes bicolor.         | 14 Sphyrapicus varius.                    |
| 4 Thryothorus Ludovicianus.    | 15 Centurus Carolinus.                    |
| 5 Dendroeca cerulea.           | 16 Strix flammea, var. Americana.         |
| 6 Dendroeca Dominica.          | 17 Falco columbarius.                     |
| 7 Sturnus naevius.             | 18 Ægialitis Wilsonia.                    |
| 8 Oporornis formosus.          | 19 Totanus solitarius.                    |
| 9 Pyrranga æstiva.             | 20 Sterna superciliaris, var. Antillarum. |
| 10 Stelgidopteryx serripennis. | 21 Cymochorea leucorrhœa.                 |
| 11 Cardinalis Virginianus.     |   |

## (B.) RESIDENT SPECIES.

- |    |                                    |    |  |
|----|------------------------------------|----|--|
| 1  | <i>Turdus migratorius.</i>         | 22 | <i>Bubo Virginianus.*</i>                    |
| 2  | <i>Sialia sialis.*</i>             | 23 | <i>Scops asio.*</i>                          |
| 3  | <i>Parus atricapillus.*</i>        | 24 | <i>Otus vulgaris, var. Wilsonianus.*</i>     |
| 4  | <i>Sitta Carolinensis.*</i>        | 25 | <i>Brachyotus palustris.*</i>                |
| 5  | <i>Certhia familiaris.*</i>        | 26 | <i>Syrnium nebulosum.*</i>                   |
| 6  | <i>Ampelis cedrorum.</i>           | 27 | <i>Nyctale Acadica.*</i>                     |
| 7  | <i>Carpodacus purpureus.</i>       | 28 | <i>Falco communis.</i>                       |
| 8  | <i>Chrysomitris tristis.</i>       | 29 | <i>Falco columbarius.</i>                    |
| 9  | <i>Melospiza melodia.</i>          | 30 | <i>Falco sparverius.</i>                     |
| 10 | <i>Spizella socialis.</i>          | 31 | <i>Buteo borealis.</i>                       |
| 11 | <i>Passer domesticus.*</i>         | 32 | <i>Buteo lineatus.</i>                       |
| 12 | <i>Molothrus pecoris.</i>          | 33 | <i>Buteo Pennsylvanicus.</i>                 |
| 13 | <i>Agelaius phoeniceus.</i>        | 34 | <i>Haliaeetus leucocephalus.</i>             |
| 14 | <i>Sturnella magna.</i>            | 35 | <i>Zenaidura Carolinensis.</i>               |
| 15 | <i>Corvus Americanus.</i>          | 36 | <i>Bonasa umbellus.*</i>                     |
| 16 | <i>Cyanurus cristatus.*</i>        | 37 | <i>Ortyx Virginianus.*</i>                   |
| 17 | <i>Ceryle alcyon.</i>              | 38 | <i>Philohela minor.</i>                      |
| 18 | <i>Picus villosus.*</i>            | 39 | <i>Anas obscura.</i>                         |
| 19 | <i>Picus pubescens.*</i>           | 40 | <i>Harelda glacialis.</i>                    |
| 20 | <i>Melanerpes erythrocephalus.</i> | 41 | <i>Larus argentatus, var. Smithsonianus.</i> |
| 21 | <i>Colaptes auratus.</i>           |    |  |

## (C.) MIGRANTS NOT KNOWN TO BREED.

(Some of these winter.)

- |                |  |    |  |
|----------------|--|----|--|
| 1              | <i>Turdus Pallasi.</i>                       | 28 | <i>Aquila chrysaetus.</i>                  |
| 2              | <i>Turdus Swainsoni.</i>                     | 29 | <i>Squatarola Helvetica.</i>               |
| 2 <sup>a</sup> | <i>Turdus Swainsoni, var. Aliciae.</i>       | 30 | <i>Charadrius fulvus, var. Virginicus.</i> |
| 3              | <i>Regulus calendula.</i>                    | 31 | <i>Aegialitis semipalmata.</i>             |
| 4              | <i>Regulus satrapa.</i>                      | 32 | <i>Haematopus palliatus.</i>               |
| 5              | <i>Anorthura troglodytes, var. hyemalis.</i> | 33 | <i>Streptopelia interpres.</i>             |
| 6              | <i>Anthus Ludovicianus.</i>                  | 34 | <i>Recurvirostra Americana.</i>            |
| 7              | <i>Helminthophaga peregrina.</i>             | 35 | <i>Phalaropus fulicarius.</i>              |
| 8              | <i>Dendroeca coronata.</i>                   | 36 | <i>Macrorhamphus griseus.</i>              |
| 9              | <i>Dendroeca striata.</i>                    | 37 | <i>Tringa minutilla.</i>                   |
| 10             | <i>Dendroeca castanea.</i>                   | 38 | <i>Tringa maculata.</i>                    |
| 11             | <i>Dendroeca maculosa.</i>                   | 39 | <i>Tringa fuscicollis.</i>                 |
| 12             | <i>Dendroeca tigrini.</i>                    | 40 | <i>Tringa maritima.</i>                    |
| 13             | <i>Dendroeca palmarum.</i>                   | 41 | <i>Tringa alpina.</i>                      |
| 14             | <i>Siurus naevius.</i>                       | 42 | <i>Tringa subarquata.</i>                  |
| 15             | <i>Oporornis agilis.</i>                     | 43 | <i>Tringa canutus.</i>                     |
| 16             | <i>Geothlypis Philadelphia.</i>              | 44 | <i>Calidris arenaria.</i>                  |
| 17             | <i>Myiodioctes pusillus.</i>                 | 45 | <i>Limosa fedoa.</i>                       |
| 18             | <i>Passereulus princeps.</i>                 | 46 | <i>Limosa Hudsonica.</i>                   |
| 19             | <i>Junco hyemalis.</i>                       | 47 | <i>Totanus melanoleucus.</i>               |
| 20             | <i>Spizella monticola.</i>                   | 48 | <i>Totanus flavipes.</i>                   |
| 21             | <i>Zonotrichia albicollis.</i>               | 49 | <i>Totanus solitarius.</i>                 |
| 22             | <i>Zonotrichia leucophrys.</i>               | 50 | <i>Tryngites rufescens.</i>                |
| 23             | <i>Passerella iliaca.</i>                    | 51 | <i>Numenius longirostris.</i>              |
| 24             | <i>Scolecophagus ferrugineus.</i>            | 52 | <i>Numenius Hudsonicus.</i>                |
| 25             | <i>Contopus borealis.</i>                    | 53 | <i>Numenius borealis.</i>                  |
| 26             | <i>Empidonax flaviventris.</i>               | 54 | <i>Fulica Americana.</i>                   |
| 27             | <i>Sphyrapicus varius.</i>                   | 55 | <i>Anser hyperboreus.</i>                  |

\* Those marked with an asterisk are resident *individually*, while the others are represented here, in winter, by individuals which probably breed much farther north.

56	<i>Branta bernicla</i> .	73	<i>Edemia Americana</i> .
57	<i>Branta Canadensis</i> .	74	<i>Edemia fusca</i> .
57 <sup>a</sup>	<i>Branta Canadensis</i> , var. <i>Hutchinsii</i> .	75	<i>Edemia perspicillata</i> .
58	<i>Anas boschas</i> .	76	<i>Eristmatura rubida</i> .
59	<i>Dafila acuta</i> .	77	<i>Mergus merganser</i> .
60	<i>Chaulelasmus streperus</i> .	78	<i>Mergus serrator</i> .
61	<i>Mareca Americana</i> .	79	<i>Mergus cucullatus</i> .
62	<i>Querquedula Carolinensis</i> .	80	<i>Graculus carbo</i> .
63	<i>Querquedula discors</i> .	81	<i>Graculus dilophus</i> .
64	<i>Spatula clypeata</i> .	82	<i>Larus tridactylus</i> .
65	<i>Fuligula marila</i> .	83	<i>Larus atricilla</i> .
66	<i>Fuligula affinis</i> .	84	<i>Larus Philadelphica</i> .
67	<i>Fuligula collaris</i> .	85	<i>Sterna macroura</i> .
68	<i>Fuligula ferina</i> , var. <i>Americana</i> .	86	<i>Sterna superciliiaris</i> , var. <i>Antillarum</i> .
69	<i>Fuligula vallisneria</i> .	87	<i>Hydrochelidon lariformis</i> .
70	<i>Bucephala clangula</i> .	88	<i>Colymbus septentrionalis</i> .
71	<i>Bucephala Islandica</i> .	89	<i>Podiceps cristatus</i> .
72	<i>Bucephala albeola</i> .	90	<i>Podiceps cornutus</i> .

## (D.) WINTER RESIDENTS, MORE OR LESS REGULAR.\*

1	<i>Regulus satrapa</i> .	19	<i>Fuligula marila</i> .
2	<i>Sitta Canadensis</i> .	20	<i>Fuligula affinis</i> .
3	<i>Anorthura troglodytes</i> , var. <i>hyemalis</i> .	21	<i>Bucephala clangula</i> .
4	<i>Eremophila alpestris</i> .	22	<i>Bucephala albeola</i> .
5	<i>Dendroeca coronata</i> .	23	<i>Harelda glacialis</i> .
6	<i>Collurio borealis</i> .	24	<i>Edemia Americana</i> .
7	<i>Pinicola enucleator</i> .	25	<i>Edemia fusca</i> .
8	<i>Plectrophanes nivalis</i> .	26	<i>Edemia perspicillata</i> .
9	<i>Spizella monticola</i> .	27	<i>Mergus serrator</i> .
10	<i>Junco hyemalis</i> .	28	<i>Mergus cucullatus</i> .
11	<i>Zonotrichia albicollis</i> .	29	<i>Graculus carbo</i> .
12	<i>Nyctea Scandiaca</i> .	30	<i>Larus marinus</i> .
13	<i>Astur atricapillus</i> .	31	<i>Larus argentatus</i> .
14	<i>Archibuteo lagopus</i> , var. <i>Sancti-Johannis</i> .	32	<i>Larus Delawarensis</i> .
15	<i>Tringa maritima</i> .	33	<i>Colymbus torquatus</i> .
16	<i>Branta bernicla</i> .	34	<i>Colymbus septentrionalis</i> .
17	<i>Branta Canadensis</i> .	35	<i>Podiceps cristatus</i> .
18	<i>Dafila acuta</i> .	36	<i>Podiceps cornutus</i> .

## (E.) WINTER VISITANTS, MORE OR LESS IRREGULAR.

1	<i>Lophophanes bicolor</i> .	17	<i>Cygnus Americanus</i> .
2	<i>Parus Hudsonicus</i> .	18	<i>Anser hyperboreus</i> .
3	<i>Ampelis garrulus</i> .	19	<i>Bucephala Islandica</i> .
4	<i>Loxia leucoptera</i> .	20	<i>Camptokemus Labradorius</i> .
5	<i>Loxia curvirostra</i> , var. <i>Americana</i> .	21	<i>Somateria mollissima</i> .
6	<i>Ægiothus linaria</i> .	22	<i>Somateria spectabilis</i> .
7	<i>Chrysomitris pinus</i> .	23	<i>Sula bassana</i> .
8	<i>Plectrophanes Lapponicus</i> .	24	<i>Stercorarius parasiticus</i> .
9	<i>Passerculus princeps</i> .	25	<i>Stercorarius Buffoni</i> .
10	<i>Zonotrichia leucophrys</i> .	26	<i>Larus tridactylus</i> .
11	<i>Hylotomus pileatus</i> .	27	<i>Puffinus major</i> .
12	<i>Picoides Arcticus</i> .	28	<i>Podiceps griseigena</i> , var. <i>Holbolli</i> .
13	<i>Syrnium cinereum</i> .	29	<i>Utamania torda</i> .
14	<i>Surnia ulula</i> , var. <i>Hudsonia</i> .	30	<i>Mergulus alle</i> .
15	<i>Nyctale Tengmalmi</i> , var. <i>Richardsoni</i> .	31	<i>Lomvia troile</i> .
16	<i>Aquila chrysaëtus</i> .		

\* This list does not include resident species.

## (F.) IRREGULAR SUMMER VISITANTS.

1	Mimus polyglottus.	16	Cathartes aura.
2	Polioptila caerulea.	17	Ægialitis Wilsonia.
3	Lophophanes bicolor.	18	Ibis falcinellus, var. Ordii.
4	Dendroeca caerulea.	19	Ibis alba.
5	Dendroeca Dominica.	20	Ardea egretta.
6	Oporornis formosus.	21	Ardea candidissima.
7	Pyrranga æstiva.	22	Ardea caerulea.
8	Stelgidopteryx serripennis.	23	Porzana Jamaicensis.
9	Euspiza Americana.	24	Porphyrio Martinica.
10	Cardinalis Virginianus.	25	Sula tiber.
11	Corvus ossifragus.	26	Tachypetes aquilus.
12	Milvulus forficatus.	27	Sterna fuliginosa.
13	Empidonax Acadicus.	28	Hydrochelidon lariformis.
14	Centurus Carolinus.	29	Cymochorea leucorrhoa.
15	Strix flammea, var. Americana.	30	Oceanites oceanica.

## (G.) RARE ACCIDENTAL VISITORS.

1	Mimus polyglottus.	24	Phalaropus fulicarius.
2	Polioptila caerulea.	25	Limosa Hudsonica.
3	Lophophanes bicolor.	26	Ibis falcinellus, var. Ordii.
4	Parus Hudsonicus.	27	Ibis alba.
5	Oporornis formosus.	28	Ardea egretta.
6	Pyrranga æstiva.	29	Ardea candidissima.
7	Stelgidopteryx serripennis.	30	Ardea caerulea.
8	Ampelis garrulus.	31	Porzana Jamaicensis.
9	Collurio Ludovicianus.	32	Porphyrio Martinica.
10	Euspiza Americana.*	33	Cygnus Americanus.
11	Cardinalis Virginianus.	34	Bucephala Islandica.
12	Corvus ossifragus.	35	Camptolemus Labradorius.
13	Milvulus forficatus.	36	Somateria mollissima.
14	Hylotomus pileatus.	37	Somateria spectabilis.
15	Picoides Arcticus.	38	Sula bassana.
16	Centurus Carolinus.	39	Sula tiber.
17	Strix flammea, var. Americana.	40	Tachypetes aquilus.
18	Syrnium cinereum.	41	Stercorarius parasiticus.
19	Surnia ulula, var. Hudsonia.	42	Stercorarius Buffoni.
20	Nyctale Tengmalmi, var. Richardsoni.	43	Sterna fuliginosa.
21	Aquila chrysaëtus.	44	Utamania torda.
22	Ægialitis Wilsonia.	45	Mergulus alle.
23	Steganopus Wilsoni.	46	Lomvia troile.

## (H.) RARE AND IRREGULAR MIGRANTS.

1	Passerculus princeps?	11	Anser hyperboreus.
2	Ægialitis Wilsonia.	12	Anas boschas.
3	Hæmatopus palliatus.	13	Chauleasmus streperus.
4	Steganopus Wilsoni.	14	Fuligula collaris.
5	Phalaropus fulicarius.	15	Fuligula ferina, var. Americana.
6	Tringa subarquata.	16	Fuligula vallisneria.
7	Limosa fedoa.	17	Bucephala Islandica.
8	Limosa Hudsonica.	18	Sterna macroura.
9	Numenius borealis.	19	Hydrochelidon lariformis.
10	Cygnus Americanus.		

\* Although Linsley gives this species as "very common" at New Haven (in 1842), it has not since been met with, either by myself or any other collector in the State, so far as I am aware. Hence I am forced to regard its occurrence, at present, as purely accidental, and this without doubting Linsley's statement that it was once common. Indeed, I have recently seen two of Linsley's mounted specimens.

D. *An Analysis of Linsley's "Catalogue."*

In the year 1843, the Rev. James H. Linsley published, in the American Journal of Science and Arts, "*A Catalogue of the Birds of Connecticut, arranged according to their natural families.*"\* In this Catalogue Mr. Linsley enumerates 302 species, this number including both those that had already been detected within our limits and those whose presence he thought likely (judging from their occurrence in contiguous States) future investigation might reveal. He likewise included the introduced and domesticated species—such as the California Quail, Pea Cock, Guinea Fowl, the various races of the domestic Pigeon (*Columba livia* Linne), and the common barn-yard fowl, numbering them with our native birds. Many species are given twice, and some even three times, the immature and seasonal plumages having been mistaken for distinct species. There are also a few doubtful forms, and at least two had been exterminated before his paper was written.† Hence it is that a critical examination of this list at once enables us to eliminate 63 species, thus reducing the total number from 302 to 239.‡

(A.) LIST OF THOSE SPECIES GIVEN BY LINSLEY IN HIS "*Catalogue of the Birds of Connecticut,*" CONCERNING THE OCCURRENCE OF WHICH HE PROBABLY HAD SUFFICIENT PROOF.

1	Turdus migratorius.	31	Dendroeca coronata.
2	Turdus mustelinus.	32	Dendroeca Blackburniæ.
3	Turdus Pallasi.	33	Dendroeca striata.
4	Turdus fuscescens.	34	Dendroeca castanea.
5	Mimus polyglottus.	35	Dendroeca Pennsylvanica.
6	Mimus Carolinensis.	36	Dendroeca maculosa.
7	Harporylnchus rufus.	37	Dendroeca tigrina
8	Sialia sialis.	38	Dendroeca discolor.
9	Regulus calendula.	39	Dendroeca palmarum.
10	Regulus satrapa.	40	Dendroeca pinus.
11	Polioptila cerulea.	41	Siurus auricapillus.
12	Lophophanes bicolor.	42	Siurus naevius.
13	Parus atricapillus.	43	Geothlypis trichas.
14	Sitta Carolinensis.	44	Icteria virens.
15	Sitta Canadensis.	45	Myiodyctes mitratus.
16	Certhia familiaris.	46	Myiodyctes Canadensis.
17	Troglodytes ædon.	47	Setophaga ruticilla.
18	Anorthura troglodytes, var. hyemalis.	48	Pyrranga rubra.
19	Telmatodytes palustris.	49	Pyrranga æstiva.
20	Cistothorus stellaris.	50	Hirundo horreorum.
21	Eremophila alpestris.	51	Tachycineta bicolor.
22	Anthus Ludovicianus.	52	Cotyle riparia.
23	Mniotilta varia.	53	Progne purpurea.
24	Parula Americana.	54	Ampelis cedrorum.
25	Helmitherus vermivorus.	55	Vireo olivaceus.
26	Helminthophaga ruficapilla.	56	Vireo gilvus.
27	Dendroeca æstiva.	57	Vireo flavifrons.
28	Dendroeca virens.	58	Vireo solitarius.
29	Dendroeca cærulescens.	59	Vireo Noveboracensis.
30	Dendroeca cærulea.	60	Collurio borealis.

\* Am. Jour. Sci. and Arts, vol. xlv, No. 2, pp. 249–274, April, 1843.

† Namely: the Wild Turkey (*Meleagris gallopavo*) and the Prairie Grouse or Prairie Chicken (*Cupidonia cupido*).

‡ The collection of birds given by Linsley to the Yale Natural History Society, and kept for many years in the Yale Medical School, has recently been transferred to the Peabody Museum of Yale College.

- 61 *Pinicola enucleator*.  
 62 *Carpodacus purpureus*.  
 63 *Loxia curvirostra*, var. *Americana*.  
 64 *Ægiothus linaria*.  
 65 *Chrysomitris pinus*.  
 66 *Chrysomitris tristis*.  
 67 *Plectrophanes nivalis*.  
 68 *Passerculus Savanna*.  
 69 *Poocetes gramineus*.  
 70 *Coturniculus passerinus*.  
 71 *Ammodromus maritimus*.  
 72 *Ammodromus caudicutus*.  
 73 *Melospiza palustris*.  
 74 *Melospiza melodia*.  
 75 *Junco hyemalis*.  
 76 *Spizella monticola*.  
 77 *Spizella socialis*.  
 78 *Spizella pusilla*.  
 79 *Zonotrichia albicollis*.  
 80 *Zonotrichia leucophrys*.  
 81 *Passerella iliaca*.  
 82 *Euspiza Americana*.  
 83 *Goniaphia Ludoviciana*.  
 84 *Cyanospiza cyanea*.  
 85 *Cardinalis Virginianus*.  
 86 *Pipilo erythrophthalmus*.  
 87 *Dolichonyx oryzivorus*.  
 88 *Molothrus pecoris*.  
 89 *Agelaius phoeniceus*.  
 90 *Sturnella magna*.  
 91 *Icterus spurius*.  
 92 *Icterus Baltimore*.  
 93 *Scolecophagus ferrugineus*.  
 94 *Quiscalus purpureus*.  
 95 *Corvus Americanus*.  
 96 *Corvus ossifragus*.  
 97 *Cyanurus cristatus*.  
 98 *Tyrannus Carolinensis*.  
 99 *Myiarchus crinitus*.  
 100 *Sayornis fuscus*.  
 101 *Contopus borealis* ?  
 102 *Contopus virens*.  
 103 *Empidonax Traillii*.  
 104 *Empidonax minimus* ("Acadicus").  
 105 *Antrostomus vociferus*.  
 106 *Chordeiles Virginianus*.  
 107 *Chaetura pelagica*.  
 108 *Trochilus colubris*.  
 109 *Ceryle alcyon*.  
 110 *Coccyzus erythrophthalmus*.  
 111 *Coccyzus Americanus*.  
 112 *Hylotomus pileatus*.  
 113 *Picus villosus*.  
 114 *Picus pubescens*.  
 115 *Sphyrapicus varius*.  
 116 *Centurus Carolinus*.  
 117 *Melanerpes erythrocephalus*.  
 118 *Colaptes auratus*.  
 119 *Strix flammea*, var. *Americana*.  
 120 *Bubo Virginianus*.  
 121 *Scops asio*.  
 122 *Otus vulgaris*, var. *Wilsonianus*.  
 123 *Brachyotus palustris*.  
 124 *Syrnium cinereum*.  
 125 *Syrnium nebulosum*.  
 126 *Nyctea Scandinica*.  
 127 *Nyctale Acadica*.  
 128 *Circus cyaneus*, var. *Hudsonius*.  
 129 *Accipiter fuscus*.  
 130 *Falco communis*.  
 131 *Falco columbarius*.  
 132 *Falco sparverius*.  
 133 *Buteo borealis*.  
 134 *Buteo lineatus*.  
 135 *Buteo Pennsylvanicus*.  
 136 *Archibuteo lagopus*, var. *Sancti-Johannis*.  
 137 *Pandion haliaëtus*.  
 138 *Haliaëtus leucocephalus*.  
 139 *Cathartes aura*.  
 140 *Ectopistes migratorius*.  
 141 *Zenaidura Carolinensis*.  
 142 *Bonasa umbellus*.  
 143 *Ortyx Virginianus*.  
 144 *Squatarola Helvetica*.  
 145 *Charadrius fulvus*, var. *Virginicus*.  
 146 *Ægialitis vocifera* ?  
 147 *Ægialitis Wilsonia*.  
 148 *Ægialitis semipalmata*.  
 149 *Ægialitis meloda*.  
 150 *Hæmatopus palliatus*.  
 151 *Streptilas interpres*.  
 152 *Steganopus Wilsoni*.  
 153 *Philohela minor*.  
 154 *Gallinago Wilsoni*.  
 155 *Macrorhamphus griseus*.  
 156 *Ereunetes pusillus*.  
 157 *Tringa minutilla*.  
 158 *Tringa maculata*.  
 159 *Tringa fuscicollis*.  
 160 *Tringa alpina*, var. *Americana*.  
 161 *Tringa canutus*.  
 162 *Calidris arenaria*.  
 163 *Limosa fedoa*.  
 164 *Limosa Hudsonica*.  
 165 *Totanus semipalmatus*.  
 166 *Totanus melanoleucus*.  
 167 *Totanus flavipes*.  
 168 *Totanus solitarius*.  
 169 *Tringoides macularius*.  
 170 *Actiturus Bartramius*.  
 171 *Numenius longirostris*.  
 172 *Numenius Hudsonicus*.  
 173 *Numenius borealis*.  
 174 *Ibis falcinellus*, var. *Ordii*.  
 175 *Ardea herodias*.  
 176 *Ardea candidissima*.  
 177 *Ardea ærulea*.  
 178 *Ardea virescens*.  
 179 *Nyctiardea grisea*, var. *æveia*.  
 180 *Botaurus minor*.  
 181 *Ardetta exilis*.  
 182 *Rallus longirostris*.  
 183 *Rallus elegans*.  
 184 *Rallus Virginianus*.  
 185 *Porzana Carolina*.

- |  |   |
|--|---|
| 186 Porzana Noveboracensis.            | 213 Edemia fusca.                         |
| 187 Fulica Americana.                  | 214 Edemia perspicillata.                 |
| 188 Cygnus Americanus.                 | 215 Erismatura rubida.                    |
| 189 Anser hyperboreus.                 | 216 Mergus merganser.                     |
| 190 Branta bernicla.                   | 217 Mergus serrator.                      |
| 191 Branta Canadensis.                 | 218 Mergus cucullatus.                    |
| 192 Branta Canadensis, var Hutchinsii. | 219 Sula bassana.                         |
| 193 Anas boschas.                      | 220 Sula fiber.                           |
| 194 Anas obscura.                      | 221 Graculus carbo.                       |
| 195 Dafila acuta.                      | 222 Graculus dilophus.                    |
| 196 Chaulelasmus streperus.            | 223 Stercorarius parasiticus.             |
| 197 Mareca Americana.                  | 224 Larus marinus.                        |
| 198 Querquedula Carolinensis.          | 225 Larus argentatus, var. Smithsonianus  |
| 199 Querquedula discors.               | 226 Larus atricilla.                      |
| 200 Spatula clypeata.                  | 227 Larus Philadelphia.                   |
| 201 Aix sponsa.                        | 228 Sterna hirundo.                       |
| 202 Fuligula marila                    | 229 Sterna superciliaris, var. Antillarum |
| 203 Fuligula collaris.                 | 230 Oceanites oceanica.                   |
| 204 Fuligula ferina, var. Americana.   | 231 Puffinus major.                       |
| 205 Fuligula vallisneria.              | 232 Colymbus torquatus.                   |
| 206 Bucephala clangula.                | 233 Colymbus septentrionalis.             |
| 207 Bucephala albeola.                 | 234 Podiceps cristatus.                   |
| 208 Harelda glacialis.                 | 235 Podiceps griseigena, var. Holbölli.   |
| 209 Camptolæmus Labradorius.           | 236 Podiceps cornutus.                    |
| 210 Somateria mollissima.              | 237 Podilymbus podiceps.                  |
| 211 Somateria spectabilis.             | 238 Utamania tarda.                       |
| 212 Edemia Americana.                  | 239 Uria grylle.                          |

(B.) LIST OF THOSE SPECIES GIVEN BY LINSLEY IN HIS "*Catalogue of the Birds of Connecticut*," CONCERNING THE OCCURRENCE OF WHICH HE DID NOT HAVE SUFFICIENT PROOF.

- |   |                            |
|---|----------------------------|
| 1 Helmintherus Swainsoni.                     | 18 Totanus chloropus.      |
| 2 Helminthophaga chrysoptera.                 | 19 Tryngites rufescens.    |
| 3 Dendroeca Dominica.                         | 20 Ardea egretta.          |
| 4 Oporornis agilis.                           | 21 Gallinula galeata.      |
| 5 Petrochelidon lunifrons.                    | 22 Porphyrio Martinica.    |
| 6 Ampelis garrulus.                           | 23 Branta leucopsis.       |
| 7 Collurio Ludovicianus.                      | 24 Histrionicus torquatus. |
| 8 Collurio Ludovicianus, var. excubitoroides. | 25 Larus Delawarensis.     |
| 9 Loxia leucoptera.                           | 26 Larus tridactylus.      |
| 10 Quiscalus major.                           | 27 Rhynehops nigra.        |
| 11 Picoides Arcticus                          | 28 Fulmarus glacialis.     |
| 12 Accipiter Cooperi.                         | 29 Cymochorea leucorrhœa.  |
| 13 Recurvirostra Americana.                   | 30 Puffinus obscurus.      |
| 14 Lobipes hyperboreus.                       | 31 Fratercula Arctica.     |
| 15 Phalaropus fulicarius.                     | 32 Mergulus alle.          |
| 16 Tringa maritima.                           | 33 Lomvia troile.          |
| 17 Tringa subarquata.                         | 34 Lomvia arra.            |

(C.) LIST OF THOSE "SPECIES" GIVEN BY LINSLEY, IN HIS "*Catalogue of the Birds of Connecticut*," WHICH REPRESENT IMMATURE, ABNORMAL, OR SEASONAL PLUMAGES OF OTHER STATED SPECIES.

- | <i>Name used by Linsley.</i>     | <i>Modern Equivalents.</i> |
|----------------------------------|----------------------------|
| 1 Regulus cristatus = tricolor.  | Regulus satrapa.           |
| 2 Sylvia trochilus = æstiva.     | Dendroeca æstiva.          |
| 3 Sylvia sphagnosa = Canadensis. | Dendroeca cærulescens.     |

<i>Name used by Linsley.</i>	<i>Modern Equivalents.</i>
4 <i>Sylvia parus</i> = Blackburnia.	<i>Dendroica Blackburnia.</i>
5 <i>Sylvia autumnalis</i> = castanea.	<i>Dendroica castanea.</i>
6 <i>Sylvia Roseoe</i> = trichas.	<i>Geothlypis trichas.</i>
7 <i>Fringilla ambigua</i> = <i>Icterus peccoris.</i>	<i>Molothrus peccoris.</i>
8 <i>Strix Scandiaca</i> = <i>Virginica</i> (albino)?	<i>Bubo Virginianus.</i>
9 <i>Falco temerarius</i> = columbarius.	<i>Falco columbarius.</i>
10 <i>Falco buteoides</i> = hyemalis.	<i>Buteo lineatus.</i>
11 <i>Falco chrysaetos</i> ? Linné = leucocephalus.	<i>Haliaeetus leucocephalus.</i>
12 <i>Falco Washingtoniensis</i> = leucocephalus.	<i>Haliaeetus leucocephalus.</i>
13 <i>Limosa Edwardsii</i> ? = Hudsonia.	<i>Limosa Hudsonica.</i>
14 <i>Falligula nigra</i> = Americana.	( <i>Eidemia Americana.</i>
15 <i>Phalacrocorax graculus</i> = carbo.	<i>Graculus carbo.</i>
16 <i>Larus capistratus</i> = Bonapartii.	<i>Larus Philadelphia.</i>
17 <i>Podiceps minor</i> = Carolinensis.	<i>Podilymbus podiceps.</i>

(D.) LIST OF INTRODUCED AND DOMESTICATED SPECIES GIVEN BY LINSLEY, IN HIS "Catalogue of the Birds of Connecticut," WHICH SCARCELY DESERVE TO BE MENTIONED AMONG OUR NATIVE BIRDS.

1 <i>Columba domestica</i> Linné.	4 <i>Gallus domesticus</i> Linné.
2 <i>Pavo cristatus</i> Linné.	5 <i>Lophortyx Californicus</i> Bonaparte.
3 <i>Numida meleagris</i> Linné.	6 <i>Anas moschata</i> Willoughby.

(E.) LIST OF THOSE SPECIES GIVEN BY LINSLEY IN HIS "Catalogue of the Birds of Connecticut," WHICH WERE EITHER EXTERMINATED OR DRIVEN BEYOND THE STATE BEFORE HIS "CATALOGUE" WAS WRITTEN.

1 <i>Meleagris gallopavo</i> Linné.	2 <i>Cupidonia Cupido</i> Baird.
-------------------------------------	----------------------------------

(F.) LIST OF THOSE SPECIES GIVEN BY LINSLEY IN HIS "Catalogue of the Birds of Connecticut," WHICH WERE INSERTED, PROBABLY, ON ERRONEOUS IDENTIFICATION.

1 <i>Quiscalus major</i> Vieillot.*	4 <i>Larus canus</i> Linné.
2 <i>Empidonax Acadiensis</i> (Gmelin) Baird.†	5 <i>Larus fuscus</i> Linné.
3 <i>Sylvia flava</i> Linné.	

(G.) LIST OF THOSE SPECIES GIVEN BY LINSLEY IN HIS "Catalogue of the Birds of Connecticut," THE IDENTITY OF WHICH I HAVE NOT BEEN ABLE TO DETERMINE.

1 <i>Sylvia auricollis</i> Latham.	2 <i>Sylvia flava</i> Linné.
------------------------------------	------------------------------

\* "Probably a mistake." Coues' Birds of the Northwest, p. 204, 1874.

† Probably *E. minimus*.

E. *List of the Publications, containing Notes on the Birds of New England, to which reference has been made in the foregoing Review.*

A Description of New-England, by Captaine Iohn Smith. Printed at London, 1616. [Tract 1, vol. ii.]

New Englands Trials. Written by Captaine Iohn Smith, sometimes Governour of Virginia, and Admirall of New-England. London. Printed by William Iones. 1622.

New England's Plantation. Or a Short and true description of the commodities and discommodities of that Countrey.—Written by a reuerend Diuine now there resident. London, Printed by T. C. and R. C. for *Michael Sparke*, dwelling at the Signe of the *Blue Bible* in *Greene Arbor* in the little *Old Bailey*. 1630. [Reprinted in Peter Force's Historical Tracts, vol. i, Tract 12.]

Gov. Thomas Dudley's Letter to the Countess of Lincoln, March, 1631. Printed in full in Peter Force's Historical Tracts, vol. ii, Tract iv. Washington, 1838.

New English Canaan; Or New Canaan, containing An Abstract of New England. Composed in three Bookes, etc. Written by Thomas Morton, of Cliffords Inn, Gent. Upon ten Yeers Knowledge and Experiment of the Countrey. Printed by Charles Green. 1632. [Reprinted in Peter Force's Historical Tracts, vol. ii, Tract 5. 1838.]

New Englands Prospect. A true, lively, and experimentall description of that part of *America*, commonly called *Nevv England*; discovering the state of that Countrie, both as it stands to our new-come *English* Planters; and to the old Native Inhabitants. Laying downe that which may both enrich the knowledge of the mind-traveling Reader, or benefit the future Voyager. By William Wood. Printed at London, etc. 1634.

New-England's Rarities Discovered: in Birds, Beasts, Fishes, Serpents, and Plants of that Countrey. [Etc.] By John Josselyn, Gent. London. 1672. [Reprinted in *Archæologia Americana*, vol. iv, pp. 133-238.]

An Account of two Voyages to New-England, etc. By John Josselyn, Gent. The Second Addition. *London*. Printed for G. Widdowes at the Green Dragon in St. Pauls Church-yard, 1675. [Reprinted in Collections of the Massachusetts Historical Society, vol. iii, 3d Series. 1833.]

Travels into North America; containing its Natural History, and a Circumstantial Account of its Plantations and Agriculture in general, etc. etc. By Peter Kalm. Translated into English, by John Reinhold Forster, F.A.S. Vol. ii. London, 1771.

Arctic Zoölogy. By Thomas Pennant. Vol. ii. 1785.

The History of New-Hampshire. By Jeremy Belknap, A.M. Vol. iii. Boston, 1791.

The Natural and Civil History of Vermont. By Samuel Williams, LL.D. Published according to Act of Congress. Printed at Walpole, New Hampshire, 1794.

A Statistical Account of the County of Middlesex, in Connecticut. By David D. Field. Published by the Connecticut Academy of Arts and Sciences. Middletown, Conn. Printed by Clark & Lyman. April, 1819.

American Ornithology. By Alexander Wilson. Edinburgh, 1831.

A Manual of the Ornithology of the United States and Canada. By Thomas Nuttall. 1832.

Report on the Geology, Mineralogy, Botany, and Zoology of Massachusetts. Made and published by order of the Government of that State, etc. By Edward Hitchcock (Report on Birds, by Ebenezer Emmons, M.D.). Amherst, 1833.

The Birds of North America. By John James Audubon. 1831-9.

A Report on the Ornithology of Massachusetts. By William B. O. Peabody. 1839

History of Vermont, Natural, Civil, and Statistical. In three parts, with a new map of the State, and 200 engravings. By Zadock Thompson. Burlington: Chauncy Goodrich, 1842. Also Appendix to same, published in 1853.

A Catalogue of the Birds of Connecticut, arranged according to their natural families. By the Rev. James H. Linsley. [Published in the Am. Jour. Sci. and Arts, vol. xlv, No. 2, pp. 249-74. April, 1843.]

The Birds of Long Island. By J. P. Giraud, Jr. New York. 1844.

The Birds of Essex County, Mass. By F. W. Putnam. [Published in Proceed. Essex Inst., vol. i, pp. 201-31. 1856.]

A List of Birds observed at Grand Menan and at Yarmouth, N. S., from June 16 to July 8, 1856. By Dr. Henry Bryant. [From the Proceedings of the Boston Society of Natural History, vol. vi. March, 1857.]

Birds of North America. By S. F. Baird. [Vol. ix of Pacific Railroad Reports, 1858.]

Catalogue of the Birds found at Norway, Oxford County, Maine. By A. E. Verrill. With a List of the Birds found in Maine not observed at Norway. [From Proceedings of the Essex Institute, vol. iii. 1863.]

Catalogue of the Birds found in the Vicinity of Calais, Maine, and about the Islands at the Mouth of the Bay of Fundy. By George A. Boardman. [Edited by Prof. A. E. Verrill.] [From the Proceedings of the Boston Society of Natural History, vol. ix. Sept., 1862.]

Catalogue of the Birds found at Springfield, Mass., with notes on their Migrations, Habits, &c.; together with a List of those Birds found in the State not yet observed at Springfield. By J. A. Allen. 1864. [From the Proceedings of the Essex Institute, vol. iv, No. 2, pp. 48-98. July, 1864.]

A Descriptive Catalogue of the Birds of Massachusetts. By E. A. Samuels. 1864. [From Massachusetts Agricultural Report. 1863.]

Catalogue of Birds found in the vicinity of Waterville, Kennebec County, Maine. By Charles E. Hamlin. [Printed in the Tenth Annual report of the Secretary of the Maine Board of Agriculture, pp. 168-173. 1865.]

History of Lynn, Essex County, Massachusetts: including Lynnfield, Saugus, Swampscot, and Nahant. By Alonzo Lewis and James R. Newhall. Boston, 1865.

A List of the Birds of New England. By Elliott Coues, Assistant Surgeon U. S. A. [Reprinted from the Proceedings Essex Institute, vol. v.] Salem, Mass. pp. 71. 1868.

The Birds of East Pennsylvania and New Jersey. By William P. Turnbull. 1869.

A Catalogue of the Birds of Coos County, N. H., and Oxford County, Maine. By C. J. Maynard, with Notes by William Brewster. Oct., 1871. [From the Proceedings of the Boston Society of Natural History, vol. xiv. Oct. 18, 1871. Repaged.]

Key to North American Birds. By Elliott Coues. 1872.

A Partial Catalogue of the Birds of Grand Menan, New Brunswick. By Harold Herrick. [From the Bulletin of the Essex Institute, vol. v, Nos. 2 and 3. 1873.]

The Birds of Florida. By C. J. Maynard. 1873.

A History of North American Birds. By Baird, Brewer and Ridgway. 1874.

Birds of the Northwest. By Elliott Coues. 1874-5.

The Birds of New England and Adjacent States. By Edward A. Samuels. Boston, 1875.

A Catalogue of the Birds of New England. By Thomas M. Brewer. 1875.

The Naturalist's Guide. By C. J. Maynard.

The Land and Game Birds of New England. By H. D. Minot. Salem, 1877.

American Journal of Science and Arts. New Haven.

Proceedings of the Boston Society of Natural History.

Annals of the Lyceum of Natural History. New York.

Proceedings of the Essex Institute.

Bulletin Essex Institute.

Bulletin of the Museum of Comparative Zoölogy, Cambridge.

American Naturalist. Salem.

Bulletin of the Nuttall Ornithological Club. Cambridge, 1876-7.

New England Farmer.

Hartford Times, for 1861.

Rod and Gun=American Sportsman.

Collections of the Massachusetts Historical Society.

Report of the Secretary of the Maine Board of Agriculture.

# INDEX.



## A.

Abbott, C. C., 50.  
 Acadian Flycatcher, 58.  
     "    Owl, 74.  
 Accipiter Cooperi, 78, 79, 140, 146.  
     "    fuscus, 78, 140, 145.  
 Actiturus Bartramius, 109, 140, 145.  
 Ægialitis meloda, 102, 140, 145.  
     "    semipalmata, 102, 141, 145.  
     "    vocifera, 102, 140, 145.  
     "    Wilsonia, 102, 140, 143, 145.  
 Ægiothus linaria, 34, 35, 142, 145.  
 Ageleus phœniceus, 45, 140, 141, 145.  
 Aiken, Chas. E., 55.  
 Aix sponsa, 125, 140, 146.  
 Alaudidæ, 11, 139.  
 Alca impennis, 4, 138.  
 Alcedinidæ, 63, 139.  
 Alcidae, 138, 139.  
 Alleghanian Fauna, 1, 2, 57.  
 Allen, Prof. J. A., 5, 7, 19, 32, 46, 56, 66,  
     74, 77, 82, 88, 93, 98, 112, 113, 138, 149.  
 American Journal of Science and Arts, 2,  
     27, 49, 51, 65, 70, 72, 90, 91, 99, 103,  
     107, 108, 110, 112, 115, 116, 121, 124,  
     129, 136, 149, 150.  
 American Naturalist, 2, 10, 12, 14, 19, 22,  
     23, 25, 35, 50, 53, 54, 65, 77, 81, 82, 83,  
     84, 85, 92, 93, 110, 114, 120, 126, 131,  
     134, 138, 150.  
 Amherst, Mass., 149.  
 Ammodromus caudacutus, 38, 140, 145.  
     "    maratimus, 38, 140, 145.  
 Ampelidæ, 32, 139.  
 Ampelis cedrorum, 32, 139, 141, 144.  
     "    garrulus, 32, 142, 143, 146.  
 Amtman Bönke, 29.  
     "    Witkowski, 28.  
 Anatidæ, 120, 139.  
 Anas boschas, 123, 142, 143, 146.  
     "    moschata, 147.  
     "    obscura, 123, 140, 141, 146.  
 Anisopteryx pometaria, 42.  
     "    vernata, 42.  
 Anorthura troglodytes, var. hyemalis, 11,  
     141, 142, 144.  
 Anser hyperboreus, 121, 141, 142, 143,  
     146.

Anthus Ludovicianus, 12, 141, 144.  
 Antrostomus vociferus, 59, 140.  
 Apache, Camp, Arizona, 75.  
 Archibuteo lagopus, var. Sancti-Johannis,  
     87, 142, 145.  
 Arctic Owl, 73.  
     "    Tern, 133.  
 Ardea cerulea, 111, 143, 145.  
     "    Canadensis, 113.  
     "    candidissima, 111, 113, 145.  
     "    egretta, 111, 143, 146.  
     "    herodias, 110, 140, 145.  
     "    virescens, 111, 140, 145.  
 Ardeidæ, 110, 139.  
 Ardetta exilis, 113, 140, 145.  
 Aquila chrysaëtus, 89, 141, 142, 143.  
 Astur atricapillus, 79, 142.  
 Audubon, John James, 54, 55, 76, 92, 96,  
     97, 99, 108, 149.  
 Auk, Great, 4, 138.  
     "    Razor-billed, 138.  
 Avocet, 103, 107.  
 Ayres, Dr. Wm. O., 65, 67, 92, 106.

## B.

Bagg, Clinton L., 51.  
 Baird, Prof. Spencer F., 26, 35, 37, 43, 55,  
     65, 88, 126, 149.  
 Baird's Sandpiper, 107.  
 Baldpate Duck, 124.  
 Baltic, 28.  
 Baltimore Oriole, 46.  
 Bank Swallow, 31.  
 Barn Owl, 66.  
     "    Swallow, 28.  
 Barnacle Goose, 121.  
 Barrat, Dr., 110.  
 Barred Owl, 70, 71.  
 Barrow's Golden-Eye, 126.  
 Barry, John, 70.  
 Bartramian Sandpiper, 109.  
 Bay-breasted Warbler, 16.  
 Bay-winged Bunting, 37.  
 Bay of Fundy, 149.  
 Bee Bird, 49.  
 Beers, Mr., 35.  
 Beers, William, 120.  
 Beaver Swamp, 33.

- Benner, Franklin, 34.  
 Bennett, C. W., 82, 83.  
 Berlin, Conn., 70.  
 Belted Kingfisher, 63.  
 Bicknell, Eugene P., 15, 23, 25, 26, 31, 44,  
 54, 132.  
 Bischoff, 57.  
 Bittern, American, 112.  
     " Least, 113.  
 Black-and-yellow Warbler, 17.  
     " -and-white Creeper, 12.  
     " -backed Three-toed Woodpecker, 64.  
     " -bellied Plover, 102.  
     " -billed Cuckoo, 63.  
     " bird, Boat-tailed, 48.  
     " " Crow, 46, 89.  
     " " Red-winged, 45.  
     " " Rusty, 46.  
     " Brant, 121.  
     " Duck, 123.  
     " Hawk, 87, 88.  
     " -poll Warbler, 16.  
     " Rail, 119.  
     " Scoter, 127.  
     " Tern, 135.  
     " -throated Blue Warbler, 15.  
     " " Bunting, 43.  
     " " Green Warbler, 15.  
 Blackburn, Mrs., 127.  
 Blackburnian Warbler, 16.  
 Blue-bill (Duck), 125.  
     " -headed Vireo, 33.  
     " Heron, Great, 110.  
     " " Little, 111.  
     " Golden-winged Warbler, 14.  
     " Jay, 49.  
     " -winged Teal, 124.  
     " Yellow-backed Warbler, 12.  
     " -winged yellow Warbler, 1, 14.  
     " -gray Gnatcatcher, 8.  
 Belknap, Jeremy, 9, 113, 148.  
 Birds of the Northwest, Coues, 5, 17, 22,  
 58, 67, 77, 92, 98, 105, 116, 124, 133,  
 135, 147, 150.  
 Bluebird, 8, 19, 30, 41.  
 Beuers, 4.  
 Bob White, 100.  
 Bohemian Waxwing, 32.  
 Bonaparte's Gull, 132.  
     " Sandpiper, 106.  
 Bonasa umbellus, 100, 140, 141, 145.  
 Bönke, Amtman, 29.  
 Bomare, Vermont de, 42.  
 Boardman, George A., 44, 55, 84, 92, 93,  
 149.  
 Bobolink, 145.  
 Booby Gannett, 130.  
 Boston, Mass., 3, 43, 70, 72, 73.  
 Bostwick, Thomas, 44.  
 Botaurus minor, 112, 140, 145.  
 Bowie, Camp, Arizona, 55.  
 Brachyotus palustris, 70, 140, 141, 145.  
 Bragg, Luther C., 14, 23.  
 Brants, 4.  
 Brant Goose, 121.  
 Branta bernicla, 121, 142, 146.  
     " Canadensis, 122, 142, 146.  
     " " var. Hutchinsii, 122,  
 142, 146.  
 Branta leucopsis, 121, 146.  
 Brandige, J. S., 70.  
 Branford, Conn., 14, 104, 105, 113, 120,  
 129, 136.  
 Brandebourg, 42.  
 Bridgeport, Conn., 103, 131.  
 Bridport, Vermont, 60.  
 Brewer, Dr. Thos. M., 3, 6, 12, 26, 35, 37,  
 43, 55, 57, 58, 70, 105, 106, 119, 150.  
 Brewster, William, 3, 7, 9, 10, 13, 17, 21,  
 23, 25, 33, 49, 54, 58, 65, 126, 150.  
 Broad-bill, 125.  
 Brooks, Capt. O. N., 3, 4, 5, 32, 67, 81, 82,  
 102, 103, 106, 109, 111, 121, 122, 123,  
 124, 125, 126, 128, 129, 130, 131, 132,  
 133, 134, 135, 136, 137, 138.  
 Brookline, Mass., 10.  
 Brown Creeper, 10.  
     " Thrush, 8, 24.  
 Brown, Samuel, 127.  
 Bryant, Dr. Henry, 149.  
 Bubo Virginianus, 67, 140, 141, 145, 147.  
 Bucephala albeola, 126, 142, 146.  
     " clangula, 126, 142, 146.  
     " Islandica, 126, 142, 143.  
 Buff-breasted Sandpiper, 109.  
 Buffle-headed Duck, 126.  
 Bull-bat, 59.  
 Bulletin of the Nuttall Ornithological Club,  
 2, 5, 9, 10, 11, 12, 15, 16, 17, 20, 27, 31,  
 33, 36, 37, 46, 49, 50, 65, 69, 72, 113,  
 115, 119, 121, 134, 150.  
 Bunting, Bay-winged, 37.  
     " Black-throated, 43.  
     " Snow, 36.  
     " Towhee, 44.  
 Buell, W. G., 136.  
 Burgomaster Gull, 132.  
 Burlington, Vt., 149.  
 Burrage, Thomas, 46.  
 Butcher Bird, 33, 34, 50.  
 Buteo borealis, 85, 140, 141, 145.  
     " hyemalis, 87.  
     " lineatus, 86, 140, 141, 145, 147.  
     " Pennsylvanicus, 87, 140, 141, 145.  
 Butter-ball, 126.  
 Buzzard, Turkey, 91-92, 96.

## C.

- Cabot, Mr., 54, 70.  
 Cærulean Warbler, 15.  
 Calais, Maine, 41, 55, 92, 93, 149.  
 Calidris arenaria, 107, 140, 145.  
 California Quail, 144.  
 Calve's Island, Conn., 101.  
 Cambridge, Mass., 3, 13, 31, 33, 49, 54, 78.  
 Camp Apache, Arizona, 56.

- Camp Bowie, Arizona, 55.  
 Campolaemus Labradorius, 127, 142, 143, 146.  
 Canada Goose, 122.  
     " Jay, 1.  
 Canadian Fauna, 1, 2, 57.  
 Canvas-back Duck, 126.  
 Cape Cod, Mass., 100, 126.  
     " May, New Jersey, 54.  
     " Warbler, 17.  
 Caprimulgidae, 59, 139.  
 Carmel, Mt., (near New Haven), Conn., 34, 53.  
 Cardinal Grosbeak, 44.  
 Cardinalis Virginianus, 44, 140, 143, 145.  
 Carolina Dove, 98.  
     " Rail, 116.  
     " Wren, 11.  
 Carolinian Fauna, 1, 2.  
 Carpenter, C. M., 8, 50.  
 Carpodacus purpureus, 34, 140, 141, 145.  
 Cat-bird, 8, 9, 24.  
 Catesby, 47.  
 Cathartes atratus, 93.  
     " aura, 91, 143, 145.  
 Cathartidae, 91, 139.  
 Cedar Bird, 32.  
 Certhia familiaris, 10, 50, 139, 141, 144.  
 Certhiidae, 10, 139.  
 Centurus Carolinus, 65, 140, 143, 145.  
 Ceryle alcyon, 63, 140, 141, 145.  
 Chatura pelagica, 59-62, 140, 145.  
 Charadriidae, 102, 139.  
 Charadrius fulvus, var. Virginicus, 102, 141, 145.  
 Charles River, Mass., 31.  
 Chat, Yellow-breasted, 1, 24.  
 Chauleasmus streperus, 124, 142, 143, 116.  
 Cherry Bird, 32.  
 Chestnut-sided Warbler, 17.  
 Chewink, 44.  
 Chickadee, Black-capped, 8, 9.  
     " Hudsonian, 10.  
     " Tufted, 9.  
 Chicken Hawk, 78.  
 Chimney Swallow, 60, 61  
     " Swift, 59-62.  
 Chipping Sparrow, 39, 40.  
 Chordeiles Virginianus, 59, 140, 145.  
 Chrysonitris pinus, 34, 35, 142, 145.  
     " tristis, 36, 140, 141, 145.  
 Circus cyaneus, var. Hudsonius, 75, 140, 145.  
 Cistothorus stellaris, 11, 139, 144.  
 Clapper Rail, 115.  
 Clark, J. N., 3, 6, 7, 12, 13, 14, 15, 17, 20, 21, 22, 23, 25, 26, 35, 37, 38, 52, 64, 65, 70, 89, 91, 92, 102, 109, 115, 119, 123, 128, 133, 134.  
 Clark, Samuel Fessenden, 36.  
 Clark's Island, Mass., 119.  
 Cliff Swallow, 30.  
 Coast Range, California, 57.  
 Coccyzus Americanus, 63, 140, 145.  
     " erythrophthalmus, 63, 140, 145.  
 Cock, Pea, 144.  
 Cod, Cape, Mass., 100, 126.  
 Coe, Elbert, 135.  
 Coe, W. W., 3, 4, 6, 7, 11, 12, 14, 15, 17, 27, 30, 34, 35, 36, 37, 38, 39, 40, 45, 48, 50, 52, 59, 63, 64, 65, 66, 68, 74, 77, 78, 80, 83, 84, 85, 86, 87, 88, 89, 93, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 118, 119, 121, 125, 129, 130, 133, 137, 138.  
 Colaptes auratus, 65, 66, 140, 141, 145.  
 Collinus, Samuel, 46.  
 Collurio borealis, 33, 142, 144.  
     " Ludovicianus, 34, 143, 146.  
     " var. excubitoroides, 146.  
 Columba domestica, 147.  
     " livia, 144.  
 Columbia River, 57.  
 Columbidae, 93, 139.  
 Columbus, Ohio, 127.  
 Colymbidae, 136, 139.  
 Colymbus Arcticus, 137.  
     " septentrionalis, 136, 137, 142, 146.  
 Colymbus torquatus, 136, 142, 146.  
 Common Cormorant, 130.  
 Common Gannet, 120.  
     " Coot, 120.  
     " Tern, 133.  
     " Yellowbird, 36.  
 Concord, Mass., 7, 10.  
 Connecticut River, 106, 107, 121, 123, 125, 127, 128, 130, 132, 136.  
 Connecticut Valley, 3, 11, 14, 17, 22, 24, 25, 28, 33, 37, 44, 58, 113.  
 Connecticut Warbler, 21.  
 Congunick Ponds, 11.  
 Contopus borealis, 53-7, 140, 141, 145.  
     " virens, 58, 140, 145.  
 Cooper, W., 54.  
 Cooper's Hawk, 78, 79.  
 Cooper, Dr., 57, 98.  
 Coot, Common, 120.  
     " Gray, 127.  
     " Sea, 128.  
     " White-winged, 128.  
 Copenhagen, 57.  
 Cormorants, 4.  
     " Common, 130.  
     " Double-crested, 130.  
 Corvus Americanus, 48, 49, 140, 141, 145.  
     " corax, 5.  
     " ossifragus, 49, 143, 145.  
 Coturniculus Henslowi, 37, 140.  
     " passerinus, 37, 140, 145.  
 Cotyle riparia, 31, 139, 144.  
 Coues, Dr. Elliott, 5, 17, 20, 22, 23, 25, 35, 42, 48, 55, 56, 58, 65, 67, 77, 88, 92, 93, 98, 105, 107, 108, 115, 119, 124, 126, 132, 133, 135, 147, 149, 150.  
 Cow-bird, 45.  
 Corvidae, 48, 139.

- Cranes, 4, 81, 113.  
 Crane, Sand-hill, 113-15.  
     " Whooping, 113.  
 Crary, Dr. D., 3, 9, 14, 17, 65, 106, 109,  
     111, 128, 135, 137.  
 Creeper, Brown, 10.  
     " Black-and-White, 12.  
 Crested Grebe, 137.  
 Crocker, Jerry, 137.  
 Cromwell, Conn., 92.  
 Crossbill, Red, 1, 35.  
     " White-winged, 1, 35.  
 Crow Blackbird, 46, 48, 89.  
     " Common, 48, 86.  
     " Fish, 49.  
 Cuckoo, Black-billed, 63.  
     " Yellow-billed, 63.  
 Cuculidae, 63, 139.  
 Cupidonia cupido, 4, 100-1, 147.  
 Curlew Sandpiper, 106.  
     " Eskimo, 109.  
     " Hudsonian, 109.  
     " Long-billed, 109.  
 Curtis, Lucius, 127.  
 Cyanospiza cyanea, 44, 140, 145.  
 Cyanurus cristatus, 49, 140, 141, 145.  
 Cygnus Americanus, 4, 120, 142, 143, 146.  
     " buccinator, 4, 120, 121.  
 Cymochorea leucorrhoa, 135, 140, 143, 146.  
 Cypselidae, 59, 139.
- D**
- Dabchick, Pied-billed, 137.  
 Dafila acuta, 123, 142, 146.  
 Dall, Wm. H., 114.  
 Danby, Vermont, 31.  
 Dantzick, 28.  
 Dayan, A. J., 3, 11, 17, 20, 23, 30, 31, 38,  
     40, 45, 49, 66, 110, 111, 112, 115, 120,  
     124.  
 Deane, Ruthven, 54, 72.  
 Deep River, Conn., 89.  
 Demarara, 91.  
 Dendroica æstiva, 15, 139, 144, 146.  
     " Blackburniae, 16, 139, 144, 147.  
     " cærulea, 15, 140, 143, 144.  
     " cærulescens, 15, 139, 144, 146.  
     " castanea, 16, 141, 144, 147.  
     " coronata, 16, 18, 141, 142, 144.  
     " discolor, 17, 139, 144.  
     " Dominica, 17, 140, 143, 146.  
     " maculosa, 17, 141, 144.  
     " palmarum, 18, 19, 40, 141, 144.  
     " pinus, 18-20, 139, 144.  
     " Pennsylvanica, 17, 139, 144.  
     " striata, 16, 141, 144.  
     " tigrina, 17, 141, 144.  
     " virens, 15, 139, 144.  
 Dexter, Prof. Franklin B., 4.  
 Didlacken, 29.  
 Diucoppers, 4.  
 Diver, Great Northern, 136.  
     " Red-throated, 136.  
 Dolichonyx oryzivorus, 45, 140, 145.  
 Domestic Pigeon, 144.  
 Double-crested Cormorant, 130.  
 Dove, Carolina, 98.  
     " Turtle, 98.  
     " Sea, 138.  
 Dovekie, 138.  
 Downy Woodpecker, 64.  
 Dresser, H. E., 40, 41.  
 Duck Hawk, 81-3.  
 Ducks, 4, 91, 123-9.  
 Duck, Baldpate, 124.  
     " Barrow's Golden-eye, 126.  
     " Black, 123.  
     " Black Scoter, 127.  
     " Blue-bill, 125.  
     " " -winged Teal, 124.  
     " Broad-bill, 125.  
     " Buffle-head, 126.  
     " Butter-ball, 126.  
     " Canvas-back, 126.  
     " Eider, Common, 127.  
     " " King, 127.  
     " Gadwall, 124.  
     " Golden-eye, 126.  
     " Gray, 124.  
     " " Coot, 127.  
     " Greater Scaup, 125.  
     " Green-winged Teal, 124.  
     " Hooded Merganser, 129.  
     " King Eider, 127.  
     " Labrador, 127.  
     " Lesser Scaup, 125.  
     " Long-tailed, 126.  
     " Mallard, 123.  
     " Merganser, Common, 128.  
     " " Hooded, 129.  
     " " Red-breasted, 129.  
     " Old Squaw, 126.  
     " " Wife, 126.  
     " Pied, 127.  
     " Pintail, 123.  
     " Pochard, 125.  
     " Red-breasted Merganser, 129.  
     " " -head, 125.  
     " Ruddy, 128.  
     " Ring-necked, 125.  
     " Scaup, Greater, 125.  
     " " Lesser, 125.  
     " Scoter, Black, 127.  
     " " Common, 128.  
     " " Velvet, 128.  
     " Sea Coot, 128.  
     " Sheldrake, 128.  
     " Shoveller, 124.  
     " Spoon-bill, 124.  
     " Sprigtail, 123.  
     " Surf, 128.  
     " Summer, 125.  
     " Teal, Blue-winged, 124.  
     " " Green-winged, 124.  
     " Whistler, 126.  
     " White-winged Coot, 128.

- Duck, Widgeon, 124.  
 " Wood, 125.  
 " Velvet Scoter, 128.  
 Dudley, Gov. Thomas, 93, 148.  
 Dunlin, 116.
- E**
- Eagles, 4, 89-90, 96, 97.  
 Eagle, Bald, 89.  
 " Golden, 90.  
 " Washington's, 90.  
 Eastford, Conn., 15.  
 Easthampton, Conn., 136.  
 " Long Island, N. Y., 67, 106.  
 " Mass., 23, 53, 100.  
 East Hartford, Conn., 106.  
 " Haven, Conn., 74.  
 " " River, Conn., 90, 121, 130.  
 " Humboldt Mt., Nevada, 57.  
 " Lyme, Conn., 103.  
 " Windsor Hill, Conn., 2, 3, 35, 52, 64,  
 65, 71, 72, 73, 74, 78, 80, 82, 83,  
 87, 92, 111, 120, 121, 123, 124,  
 125, 128, 129, 137, 138.  
 Eaton, Prof. Daniel C., 53.  
 Eave Swallow, 30.  
 Ectopistes migratorius, 5, 9, 93-7, 140, 145.  
 Egg Harbor, New Jersey, 54, 138.  
 Eider Duck, Commou, 127.  
 " " King, 127.  
 Elizabeth, New Jersey, 9, 85.  
 Elmore, Norman, 135.  
 Ely, Josiah G., 3, 9, 11, 16, 23, 39, 76,  
 103, 106, 109.  
 Emmons, Dr. Ebenezer, 24, 73, 149.  
 Empidonax Acadicus, 58, 140, 143, 145,  
 147.  
 " flaviventris, 59, 141.  
 " minimus, 59, 140, 145, 147.  
 " Traillii, 58, 140, 145.  
 Enfield, Conn., 17, 37.  
 English Sparrow, 18, 19, 34, 40-3.  
 Eremophila alpestris, 11, 142, 144.  
 Ereunetes pusillus, 105, 140, 145.  
 Erismatura rubida, 128, 142, 146.  
 Eskimo Curlew, 109.  
 European Woodcock, 104.  
 Euspiza Americana, 43, 140, 143, 145.  
 Eutainia saurita, 86.
- F**
- Falco columbarius, 83, 140, 141, 145, 147.  
 " communis, 81, 140, 141, 145.  
 " chrysaëtus, 147.  
 " buteoides, 147.  
 " hyemalis, 147.  
 " leucocephalus, 147.  
 " sparverius, 84, 140, 141, 145.  
 " temerarius, 147.  
 " Washingtoniensis, 147.  
 Falcon, Peregrine, 81.  
 Falconidæ, 75, 139.  
 Falligula Americana, 147.  
 Falligula nigra, 147.  
 Faulkner's Island, Conn., 3, 5, 32, 67, 81,  
 102, 103, 106, 109, 112, 121, 123, 124,  
 126, 128, 129, 130, 131, 132, 133, 135,  
 136, 138.  
 Fermiers generaux, 28.  
 Field, David D., 98, 101, 148.  
 Field Sparrow, 19, 39-40.  
 Finch, Grass, 37.  
 " Lincoln's, 38.  
 " Pine, 35.  
 " Purple, 34.  
 " Seaside, 38.  
 " Sharp-tailed, 38.  
 Fish Crow, 49.  
 " Hawk, 88-9.  
 " Head, Grand Menan Island, N. B., 83.  
 Fisher, A. K., 23.  
 Flicker, 65, 66.  
 Flint, Harry, 89.  
 Flycatcher, Acadian, 58.  
 " Great-crested, 50-2.  
 " Least, 59.  
 " Olive-sided, 53-7.  
 " Pewee, Common, 52.  
 " " Wood, 58.  
 " Swallow-tailed, 50.  
 " Traill's, 58.  
 " Tyrant (see King-bird).  
 " Small Green-crested, 58.  
 " Wood Pewee, 58.  
 " Yellow-bellied, 59.  
 Foolish Guillemot, 138.  
 Fort Bridger, Utah, 56.  
 " Randall, Dakota, 92.  
 " Steilacoom, W. T., 57.  
 Fox-colored Sparrow, 43.  
 Forster, John Reinhold, 28, 30, 148.  
 Framingham, Mass., 119.  
 Franklin, Dr., 48.  
 Fratercula Arctica, 138, 146.  
 Frigate Pelican, 131.  
 Fringilla ambigua, 147.  
 Fringillidæ, 34, 139.  
 Frith-Haff, 28.  
 Florida Gallinule, 119.  
 Fulica Americana, 120, 141, 146.  
 Fuligula affinis, 125, 142, 146.  
 " collaris, 125, 142, 143, 146.  
 " ferina, var. Americana, 125, 142,  
 143, 146.  
 " marila, 125, 142, 146.  
 " vallisneria, 126, 142, 143, 146.  
 Fulmarus glacialis, 146.
- G**
- Gadwall, 124.  
 Gallinago Wilsoni, 105, 118, 140, 145.  
 Gallinula galcata, 119, 140, 146.  
 Gallinule, Florida, 119.  
 " Purple, 119, 120.  
 Gallus domesticus, 147.  
 Gambel, Dr., 57.

- Gannet, Booby, 130.  
 " Common, 129.  
 Gentry, Thomas, 20, 42.  
 Geothlypis Philadelphia, 22, 23-4, 141.  
 " trichas, 5, 23, 139, 144, 147.  
 Geyser Basin, Lower, Wy. Ter., 114.  
 Gilpin, John, 67.  
 Giraud, J. P., Jr., 9, 23, 32, 37, 43, 65, 77,  
 102, 106, 110, 127, 128, 129, 149.  
 Glossy Ibis, 110.  
 Gnatcatcher, Blue-gray, 8.  
 Godwit, Great Marbled, 107.  
 " Hudsonian, 107.  
 Golden-crested Kinglet, 8.  
 " -crowned Thrush, 20.  
 " Eagle, 89.  
 " -eye, Barrow's, 126.  
 " Common, 126.  
 " Plover, 102.  
 " -winged Woodpecker, 66.  
 Goode, Prof. G. Browne, 3, 43, 138.  
 Goodwit, 107.  
 Goose Island, Conn., 81, 132, 133, 135.  
 " Black, 121.  
 " Brant, 121.  
 " Canada, 122, 123.  
 " Hutchins, 122.  
 " Snow, 121.  
 " Solon, 129.  
 " Southern, 122.  
 " Wild, 122.  
 Goiaphea cerulea, 43.  
 " Ludoviciana, 43, 140, 145.  
 Goshawk, 79-81.  
 Gowing, John, 46.  
 Geese, 4, 91, 121-3.  
 Grackle, Boat-tailed, 48.  
 " Purple (see Crow Blackbird).  
 " Rusty, 46.  
 Graculus carbo, 130, 142, 146, 147.  
 " dilophus, 130, 142, 146.  
 Granby, Conn., 84, 135, 136.  
 Grand Menan Island, N. B., 43, 70, 83,  
 149, 150.  
 Grass Finch, 37.  
 Gray-cheeked Thrush, 7.  
 " Coot, 127.  
 " Duck, 124.  
 Great Auk, 4, 138.  
 " Black-backed Gull, 132.  
 " Blue Heron, 110.  
 " Carolina Wren, 11.  
 " -crested Flycatcher, 50-2.  
 " -footed Hawk, 81, 82.  
 " Gray Owl, 70.  
 " Horned Owl, 67-9, 70, 76.  
 " Marbled Godwit, 107.  
 " White Egret, 111.  
 " Northern Diver, 136.  
 Greater Scaup Duck, 125.  
 " Shearwater, 136.  
 " Yellow-legs, 108  
 Grebe, Crested, 137.  
 Grebe, Horned, 137.  
 " Pied-billed, 137.  
 " Red-necked, 137.  
 Green, Charles, 88, 148.  
 Greene, S. Eliot, 10.  
 Green Heron, 111.  
 " -shanks, 108.  
 " -winged Teal, 124.  
 Greenfield, Mass., 138.  
 Gregg, Dr. W. H., 55.  
 Grinnell, George Bird, 3, 7, 11, 13, 16, 23,  
 30, 34, 36, 37, 39, 44, 45, 46, 59, 64, 66,  
 80, 81, 87, 90, 92, 98, 107, 108, 109,  
 110, 111, 113, 114, 118, 119, 120, 121,  
 122, 123, 124, 125, 127, 131, 135, 137.  
 Gripes, 4, 91.  
 Grosbeak, Cardinal, 44.  
 " Pine, 34.  
 " Rose-breasted, 43.  
 Grouse, Pinnated, 4, 100-1.  
 " Ruffed, 100, 101.  
 Grus Americana, 4, 113.  
 " Canadensis, 4, 113-15.  
 Guilford, Conn., 32, 102, 122, 125, 128,  
 129, 130.  
 Guillemot, Foolish, 138.  
 Guinea Fowl, 144.  
 Guls, 4.  
 Gull, Bonaparte's, 132.  
 " Black-backed, Great, 132.  
 " Burgomaster, 132.  
 " Great Black-Backed, 132.  
 " Herring, 132.  
 " Kittiwake, 132.  
 " Laughing, 132.  
 " Ring-billed, 132.
- H**
- Haddington, Penn., 73.  
 Hæmatopodidæ, 103, 139.  
 Hæmatopus palliatus, 103, 141, 143, 145.  
 Hairy Woodpecker, 64.  
 Haliaëtus leucocephalus, 90, 140, 141, 145,  
 147.  
 Hall, Dr. Franklin W., 3, 7, 21, 25, 26, 37,  
 52, 62, 63, 65, 73, 74, 102, 103, 105,  
 106, 108.  
 Hamden (near New Haven), Conn., 25, 80.  
 Hamlin, Prof. Chas. E., 55, 149.  
 Hand, Rev. J. Howard, 92, 93, 109, 125,  
 128, 135.  
 Harelda glacialis, 126, 140, 141, 142, 146.  
 Harporhynchus rufus, 8, 24, 139, 144.  
 Harrier, Marsh, 75.  
 Hartford, Conn., 3, 9, 10, 11, 14, 17, 32,  
 37, 43, 46, 50, 63, 65, 66, 67, 73, 80, 81,  
 89, 106, 109, 111, 121, 123, 127, 128,  
 132, 135, 136, 137.  
 Hartford Times (for 1861), 2, 68, 72, 75,  
 76, 78, 79, 80, 82, 87, 88, 150.  
 Haukes, 4.  
 Hawks, 3, 45, 49, 75-97.  
 Hawk, Black, 87, 88.

- Hawk, Broad-winged, 87.  
 " Chicken, 78-9.  
 " Cooper's, 78-9.  
 " Duck, 81-3.  
 " Fish, 88-9.  
 " Gos., 79-81.  
 " Hen, 85-6.  
 " Marsh, 75-6.  
 " Mouse, 75-6.  
 " Peregrine, 81-3.  
 " Pigeon, 83-4.  
 " Red-shouldered, 86-7, 78, 84.  
 " " -tailed, 68, 69, 78, 85-6.  
 " Rough-legged, 87-8.  
 " Sharp-shinned, 78.  
 " Sparrow, 84-5.  
 " Winter, 87.  
 Hawk Owl, 73.  
 Hayden, F. V., 24.  
 Hazen, Richard, 94.  
 Hell Diver, 137.  
 Helminthophaga celata, 15.  
 " chrysoptera, 14, 139, 146.  
 " peregrina, 14, 141.  
 " pinus, 14, 139, 144.  
 " ruficapilla, 14, 139.  
 Helminthophaga vermivorus, 12-3, 139, 144.  
 " Swainsoni, 146.  
 Hen Hawk, 85-6.  
 " Mud, 120.  
 Henry's Pond, Mass., 120.  
 Henshaw, H. W., 56, 57, 58, 98.  
 Henslow's Sparrow, 37.  
 Heron Swamp, 88, 111, 112.  
 Heron, Great Blue, 110.  
 " " White, 111.  
 " Green, 111.  
 " Little Blue, 111.  
 " " White, 111.  
 " Night, 89, 112.  
 " Yellow-crowned Night, 112.  
 Herrick, Harold, 43, 83, 150.  
 Herring Gull, 132.  
 Hermit Thrush, 6.  
 High-holder, 66.  
 Hilton, William, 4.  
 Hirundinidae, 28, 139.  
 Hirundo horreorum, 28, 139, 141.  
 Histrionicus torquatus, 146.  
 Hitchcock, Edward, 24, 73, 99, 149.  
 Hockamun, Hartford County, Conn., 106.  
 Holyoke, Mt., Mass., 82, 99.  
 Hooded Warbler, 1, 25.  
 " Merganser, 129.  
 Hoosac River, Mass., 134.  
 Horned Grebe, 137.  
 " Lark, 11.  
 Hotchkiss, Dr. Wm. H., 3, 4, 120, 136.  
 Housatonic River, Conn., 90, 92, 116, 118, 122.  
 House Sparrow, 40-3.  
 " Swallow, 60, 61.  
 " Wren, 10.  
 Hudson's Bay, 73, 107, 114, 121.  
 Hudsonian Curlew, 109.  
 " Godwit, 107.  
 " Titmouse, 10.  
 " Chickadee, 10.  
 Humphrey, K. C., 63.  
 Hoy, 55.  
 Hutchin's Goose, 122.  
 Hyalomus pileatus, 5, 63, 112, 113, 145.  
 Hydrochelidon lariformis, 135, 142, 143.
- I**
- Ibis alba, 110, 113.  
 " falcinellus, var. Ordii, 110, 113, 145.  
 " Glossy, 110.  
 " White, 110.  
 Icterus virens, 24-5, 139, 144.  
 " " var. longicauda, 24.  
 Icteridae, 45, 139.  
 Icterus Baltimore, 46, 140, 145.  
 " spurius, 46, 140, 145.  
 Idaho Springs, Colorado, 56.  
 Indigo Bird, 44.  
 Ipswich Sparrow, 36.
- J**
- Jack Snipe, 106.  
 Jaeger, Long-tailed, 131.  
 " Pomarine, 131.  
 " Richardson's, 131.  
 Jay, Blue, 24, 49.  
 Jencks, Frederick T., 9, 27, 50, 134.  
 Jones, Rev. C. M., 15, 73.  
 " William, 148.  
 " Mr., 111.  
 Josselyn, John, 45, 49, 63, 93, 99, 130, 148.  
 Junco hyemalis, 39, 141, 142, 145.
- K**
- Kalm, Peter, 28, 29, 47, 48, 66, 148.  
 Kalmia, 25.  
 Kentucky Warbler, 22-3.  
 Key to North American Birds, (Cones), 5.  
 Killdeer Plover, 89, 102.  
 King-bird, 49, 56, 90.  
 " Eider, 127.  
 " Rail, 115.  
 King, William, 64.  
 Kingfisher, Belted, 63.  
 Kinglet, Golden-crested, 8.  
 " Ruby-crowned, 8.  
 Killingworth, Conn., 37.  
 Kite, Swallow-tailed, 5, 76-7.  
 Kittiwake Gull, 132.  
 Kleskow, 29.  
 Klein, 28.  
 Knot, 107.  
 Kosiulo, Jacob, 29.
- L**
- Labrador Duck, 127.  
 Lagopus albus, 73.

- Lake Tahoe, 57.  
 " Whitney, 7, 63.  
 Land Key, Fla., 108.  
 Lane, Wm. F., 131, 133, 138.  
 Laniidæ, 33, 139.  
 Lannar, 85.  
 Lannaret, 79, 85.  
 Lapland Longspur, 36.  
 Large-billed Water Thrush, 1, 20-1.  
 Lark, Horned, 11.  
 " Meadow, 45.  
 Laridæ, 131, 139.  
 Larus argentatus, var. Smithsonianus, 132, 141, 142, 146.  
 Larus atricilla, 132, 142, 146.  
 " Bonapartii, 147.  
 " canus, 147.  
 " capistratus, 147.  
 " Delawarensis, 132, 142, 146.  
 " fuscus, 147.  
 " glaucus, 133.  
 " marinus, 132, 142, 146.  
 " Philadelphia, 132, 142, 146, 147.  
 " tridactylus, 132, 142, 146.  
 Laughing Gull, 132.  
 Laurel, 25.  
 Least Bittern, 113.  
 " Flycatcher, 59.  
 " Sandpiper, 106.  
 " Tern, 134.  
 Leach's Petrel, 135.  
 Lehdorf, 28.  
 Lesser Red-poll, 33.  
 " Scaup Duck, 125.  
 " Yellow-legs, 108.  
 Lester, Milton, 7.  
 Lewis, Alonzo, 47, 73, 149.  
 Limosa Edwardsii, 107, 147.  
 " fedoa, 107, 141, 143, 145.  
 " Hudsonica, 107, 141, 143, 145, 147.  
 Lincoln's Finch, 38.  
 Linnæus, Pine, 35.  
 " Red-poll, 34, 35.  
 Linsley, Rev. James H., 7, 8, 9, 11, 15, 17, 25, 27, 35, 36, 37, 43, 48, 49, 51, 53, 63, 64, 65, 66, 70, 72, 74, 81, 90, 91, 92, 99, 100, 102, 103, 105, 106, 107, 108, 109, 113, 115, 116, 118, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 134, 136, 137, 138, 143, 144, 146, 147, 149.  
 Little Blue Heron, 111.  
 " White Egret, 111.  
 Lobipes hyperboreus, 146.  
 Lomvia arra, 138, 146.  
 " troile, 138, 142, 143, 146.  
 Long-billed Curlew, 109.  
 " " Marsh Wren, 11.  
 " -tailed Duck, 126.  
 " " Jaeger, 131.  
 " Island, N. Y., 9, 23, 32, 37, 43, 65, 77, 100, 102, 106, 110, 121, 131, 133, 149.  
 Longspur, Lapland, 36.  
 Loon, Common, 136.  
 " Red-throated, 136.  
 Lophophanes bicolor, 9, 140, 142, 143, 144.  
 Lophortyx Californicus, 147.  
 Loxia curvirostra, var. Americana, 35, 142, 145.  
 Loxia leucoptera, 35, 142, 146.  
 Lybshau, 29.  
 Lyme, New London Co., Conn., 9, 16, 23, 39, 76.  
 Lynn, Mass., 46, 47, 67, 70, 73, 149.  
 Lynnfield, Mass., 149.
- M**
- Macrorhamphus griseus, 105, 141, 145.  
 Macra lateralis, 128.  
 Madison, Conn., 67, 108.  
 Magdeline Islands, 55.  
 Maize Thieves, 47, 48.  
 Mallard Duck, 115, 123.  
 Man-of-war Bird, 131.  
 Maltby Park, (near New Haven), Conn., 12, 21.  
 Mareca Americana, 124, 142, 146.  
 Marsh Hawk, 72, 75, 76.  
 " Wren, Long-billed, 11, 115.  
 " Short-billed, 11.  
 Martha's Vineyard Island, Mass., 100, 138.  
 Maryland Yellow-throat, 5, 23.  
 Maynard, C. J., 19, 20, 23, 54, 116, 150.  
 Maynard's Sparrow, 36.  
 Meadow-lark, 45.  
 Meawes, 4.  
 Melanerpes erythrocephalus, 65, 140, 141, 145.  
 Meleagris gallopavo, var. Americana, 4, 98-9, 147.  
 Melospiza melodia, 38, 41, 140, 141, 145.  
 " Lincoln, 38, 140.  
 " palustris, 38, 140, 145.  
 Meigs, George, 136  
 Merganser, Common, 128-9.  
 " Hooded, 129.  
 " Red-breasted, 129.  
 Mergulus alle, 138, 142, 143, 146.  
 Mergus cucullatus, 129, 142, 146.  
 " merganser, 128-9, 142, 146.  
 " serrator, 129, 142, 146.  
 Meriden, Conn., 108.  
 Merriam, C. Hart, 1, 8, 11, 33, 44, 98, 122.  
 Merrimack River, 120.  
 Merwin, C., 92.  
 Middlebury, Vermont, 60, 61.  
 Middletown, Conn., 3, 43, 88, 104, 106, 107, 110, 111, 118, 119, 129, 130, 136, 137, 138.  
 Micropalama himantopus, 107.  
 Milford, Conn., 7, 23, 37, 46, 64, 66, 80, 81, 92, 109, 110, 111, 118, 119, 120, 122, 125, 127, 135.  
 Miller's Place, Long Island, 106.  
 Milvulus forficatus, 50, 143.

- Mill Rock (near New Haven), Conn., 59.  
*Minus Carolinensis*, 8, 139, 144.  
     " *polyglottus*, 5, 7, 140, 143, 141.  
 Minot, H. D., 54, 150.  
 Mocking-bird, 5, 7.  
 Monterey, California, 57.  
*Molothrus pecoris*, 45, 140, 141, 145, 147.  
 Morris, Robert T., 3, 10, 125, 127, 129.  
 Moses, Dr., 82.  
*Motocillidae*, 12, 139.  
 Morton, Thomas, 62, 72, 79, 85, 93, 95,  
     98, 100, 101, 104, 107, 113, 120, 121,  
     123, 124, 148.  
 Mount Carmel, Conn., 34, 90.  
     " Holyoke, Mass., 99.  
     " Nonotuck, Mass., 53.  
     " Tom, Mass., 53, 82, 99.  
 Mourning Warbler, 22-3.  
 Mouse Hawk, 75.  
*Mniotilta varia*, 12, 13, 139, 144.  
 Mud Hen, 120.  
 Murre, 138.  
 Museum, Peabody of Yale College, 14, 54,  
     99.  
 Museum of Wesleyan University, 3, 61,  
     110, 111, 119, 136, 137.  
*Myiarchus crinitus*, 50-2, 140, 145.  
*Myiodioides Canadensis*, 27, 139, 144.  
     " *mitratus*, 25, 26, 139, 144.  
     " *pusillus*, 26, 141.
- N**
- Nahant, Mass., 73, 149.  
 Nashville Warbler, 14.  
*Naucleus forficatus*, 5, 76-7.  
 Naushon Island, Mass., 100.  
 Nelson, E. W., 56.  
 Nenortalik, Greenland, 57.  
 New Canaan, Conn., 65.  
     " Haven, Conn., 3, 7, 10, 11, 12, 13,  
     14, 17, 21, 25, 26, 27, 32, 33, 34,  
     35, 36, 40, 43, 48, 52, 53, 59, 64,  
     65, 66, 72, 74, 80, 85, 87, 88, 90,  
     92, 100, 106, 110, 112, 129, 132,  
     133, 135.  
     " Haven Bay, Conn., 5.  
     " London, Conn., 64, 88, 109.  
     " York City, N. Y., 35.  
 Newhall, James R., 47, 73, 149.  
 Newton, Chas., 111.  
     " Dr., 111.  
 Nichols, Walter R., 3, 14, 21, 33, 34, 36,  
     104, 105, 110, 113, 136.  
 Night Hawk, 59.  
     " Heron, Common, 89, 112.  
     " " Yellow-crowned, 112.  
 Northford, Conn., 90, 99, 113.  
 Northampton, Mass., 52, 54.  
 North Haven, Conn., 87.  
 Norway, Maine, 54, 149.  
 Nova Scotia, 111.  
*Numenius borealis*, 109, 141, 143, 145.  
     " *Hudsonicus*, 109, 141, 143, 145.
- Numenius longirostris*, 109, 141, 145.  
*Numida meleagris*, 147.  
 Nuthatches, 8, 10, 19.  
 Nuthatch, Red-bellied, 10.  
     " White-bellied, 10.  
 Nuttall, Thomas, 25, 49, 51, 51, 55, 76,  
     78, 91, 95, 96, 97, 100, 101, 149.  
*Nyctale Acadica*, 71, 110, 141, 145.  
     " *Tengmalmi*, var. *Richardsoni*, 73,  
     112, 113.  
*Nyctea nivea*, 72.  
     " *Scandiana*, 72, 142, 145.  
*Nyctiardea grisea*, var. *navia*, 112, 140, 145.  
*Nyctiardea violacea*, 112.
- 
- Oceanites oceanica*, 136, 143, 146.  
 Ocklawaha River, Fla., 114.  
*Oedemia Americana*, 127, 142, 146, 147.  
     " *fusca*, 128, 142, 146.  
     " *perspicillata*, 128, 142, 146.  
 Ogden, Utah, 116.  
 Old Bishop, Grand Menan Island, N.B., 83.  
     " Squaw, 126.  
     " Wife, 126.  
 Oletsko, 29.  
 Olive-backed Thrush, 6.  
     " -sided Flycatcher, 53-7.  
*Oporornis agilis*, 21, 141, 146.  
     " *formosus*, 22-3, 110, 143.  
 Orange-crowned Warbler, 15.  
 Orange, New Jersey, 50, 51.  
 Orchard Oriole, 46.  
 Oriole, Baltimore, 46.  
     " Orchard, 46.  
 Osborne, Thomas B., 3, 4, 7, 8, 10, 11, 13,  
     14, 15, 16, 17, 21, 23, 30, 32, 33, 38, 39,  
     40, 43, 44, 45, 46, 52, 55, 58, 59, 64, 72,  
     75, 90, 102, 118, 121, 123, 125, 128, 129,  
     130, 132, 136.  
 Osprey, 88.  
*Ortyx Virginianus*, 100, 141, 145.  
 Otters, 4.  
 Oven Bird, 20, 37.  
*Otus vulgaris*, var. *Wilsonianus*, 69, 140,  
     141, 145.  
 Owls, 3.  
 Owl, Arctic, 73.  
     " *Acadian*, 74.  
     " *Barn*, 66.  
     " *Barred*, 70-2.  
     " *Great Gray*, 70.  
     " " *Horned*, 67-9, 76.  
     " *Hawk*, 73.  
     " *Long-eared*, 69.  
     " *Mottled*, 69.  
     " *Richardson's*, 73-4.  
     " *Saw-whet*, 74.  
     " *Screech*, 69.  
     " *Short-eared*, 70.  
     " *Snowy*, 69, 72-3.  
 Ox bird, 106.  
 Oyster-catcher, 103.

## P

- Paine, Chas. S., 55.  
 Pandion haliaëtus, 88-9, 140, 145.  
 Paridae, 9, 139.  
 Parley's Park, Utah, 55.  
 Partridges, 4, 100, 101.  
     " Spruce, 1.  
 Parus atricapillus, 8, 9, 139, 141, 144.  
     " Hudsonicus, 10, 142, 143.  
 Patton, William H., 53.  
 Pavo cristatus, 147.  
 Parula Americana, 12, 139, 144.  
 Passer domesticus, 40, 140, 141.  
 Passerculus princeps, 36, 141, 142, 143.  
     " Savanna, 36, 140, 145.  
 Passerella iliaca, 41, 43, 141, 145.  
 Pea Cock, 144.  
 Peabody, Rev. Wm. B. O., 10, 45, 64, 86, 89, 149.  
 Peabody Museum of Yale College, 14, 54.  
 Pectoral Sandpiper, 106.  
 Pennant, Thomas, 81, 107, 114, 127, 148.  
 Peregrine Falcon, 81.  
 Petrel, Leach's, 135.  
     " Wilson's, 136.  
 Petrochelidon lunifrons, 30, 139, 146.  
 Pewee, Common, 52-3.  
     " Wood, 58.  
 Phalaacrocoracidae, 130, 139.  
 Phalaacrocorax carbo, 147.  
     " graeculus, 147.  
 Phalarope, Red, 103.  
     " Wilson's, 103.  
 Phalaropodidae, 103, 139.  
 Phalaropus fulicarius, 103, 141, 143, 146.  
 Pheasants, 81, 101.  
 Philohela minor, 103, 140, 141, 145.  
 Phoebe-bird, 52.  
 Picidae, 63, 139.  
 Pickering, Charles, 42.  
 Picoides Arcticus, 64, 142, 143, 146.  
 Picus pubescens, 64, 140, 141, 145.  
     " villosus, 64, 140, 141, 145.  
 Pigeons, Common, 4, 5, 93-7.  
     " Domestic, 144.  
     " Passenger, 4, 5, 93-7.  
     " Wild, 4, 5, 93-7.  
 Pied-billed Dabchick, 137.  
     " Duck, 127.  
 Pigeon Hawk, 83-4.  
 Pileated Woodpecker, 5, 63.  
 Pillau, 28.  
 Pine-creeping Warbler, 18-19.  
     " Finch, 34, 35.  
     " Grosbeak, 34.  
     " Linnæus, 35.  
     " Swamp (near New Haven), Conn., 111, 112.  
 Pinicola enucleator, 34, 142, 145.  
 Pinnated Grouse, 4, 100-1.  
 Pintail Duck, 123.  
 Pipilo erythrophthalmus, 43, 140, 145.  
 Piping Plover, 102.  
 Platygaster, 42.  
 Plectrophanes Lapponicus, 36, 142.  
     " nivalis, 36, 142, 145.  
 Plover, Black-bellied, 102.  
     " Golden, 102.  
     " Killdeer, 89, 102.  
     " Piping, 102.  
     " Ringneck, 102.  
     " Semipalmated, 102.  
     " Upland, 89, 109.  
     " Wilson's, 102.  
 Plumb Island, Conn., 88, 102, 109.  
 Plymouth Harbor, Mass., 119.  
 Podicipidae, 137, 139.  
 Podiceps Carolinensis, 147.  
     " cornutus, 137, 142, 145.  
     " cristatus, 137, 142, 145.  
     " griseigena, var. Holbolli, 137, 142, 145.  
     " minor, 147.  
 Podilymbus podiceps, 137, 140, 145, 147.  
 Point Judith, R. I., 134.  
 Pomarine Jaeger, 131.  
 Pochard, 125.  
 Polo, Marco, 81.  
 Poocetes graminus, 37, 140, 145.  
 Porphyrio Martinica, 119, 143, 146.  
 Portland, Maine, 43.  
 Portland, Middlesex Co., Conn., 3, 6, 7, 8, 10, 11, 12, 14, 15, 16, 17, 25, 27, 30, 34, 35, 36, 37, 38, 39, 40, 43, 44, 45, 46, 49, 52, 53, 59, 63, 64, 65, 66, 68, 74, 77, 80, 83, 84, 85, 86, 87, 88, 93, 102, 103, 104, 105, 109, 112, 113, 115, 119, 121, 126, 131, 133, 138.  
 Porzana Carolina, 116, 140, 145.  
     " Jamaicensis, 119, 140, 143.  
     " Novaboracensis, 118, 140, 146.  
 Polioptila caerulea, 8, 140, 143, 144.  
 Prairie Chicken, 4, 100.  
     " Warbler, 17.  
 Procellariidae, 135, 139.  
 Progne purpurea, 31, 139, 144.  
 Providence, R. I., 9, 27, 134.  
 Puffinus major, 136, 142, 146.  
     " obscurus, 146.  
 Puget Sound, W. T., 57.  
 Purdie, H. A., 1, 12, 16, 22, 25, 27, 31, 37, 50, 92, 115, 119, 134.  
 Purple Finch, 34.  
     " Gallinula, 119-20.  
     " Martin, 31.  
     " Sandpiper, 106.  
 Putnam, F. W., 78, 87, 130, 149.  
 Ptarmigan, White, 73.  
 Pyrauga aestiva, 27, 140, 143, 144.  
     " rubra, 27, 139, 144.

## Q

- Quail, Common, 4, 81, 100.  
     " California, 144.  
 Querquedula Carolinensis, 124, 142, 146.  
     " discors, 124, 142, 146.

Quinnipiac River, 11, 38, 45, 106, 115, 125.  
*Quiscalus major*, 48, 146, 147.  
 " *purpureus*, 46-8, 140, 145.

## R

Raccoon, New Jersey, 28.  
 Racine, Wisconsin, 55.  
 Rail, Carolina, 116.  
 " Clapper, 115.  
 " Black, 119.  
 " King, 115.  
 " Sora, 116.  
 " Virginia, 115.  
 " Yellow, 118.  
 Rallide, 115, 139.  
*Rallus elegans*, 115, 140, 145.  
 " *longirostris*, 115, 140, 145.  
 " *Virginianus*, 115, 140, 145.  
 Randolph, Vermont, 55.  
 Raski, 29.  
 Raven, 5, 45.  
 Razor-billed Auk, 138.  
*Recurvirostra Americana*, 103, 107, 141, 146.  
*Recurvirostridae*, 103, 139.  
 Red-bellied Woodpecker, 65.  
 " " Nuthatch, 10.  
 " -breasted Merganser, 129.  
 " " Sandpiper, 107.  
 " " Snipe, 105.  
 " Crossbill, 35.  
 " -eyed Vireo, 32.  
 " -headed Duck, 125.  
 " " Woodpecker, 65-6.  
 " -necked Grebe, 137.  
 " Phalarope, 103.  
 " -poll Linnets, 34, 35.  
 " " Warbler, 18, 41.  
 " -shouldered Hawk, 78, 84, 86, 87.  
 " -tailed Hawk, 68, 69, 78, 85-6.  
 " -throated Diver, 136.  
 " -winged Blackbird, 45.  
 " " Stare, 47.

Redbird, Summer, 27.

Red River, 23.

Redstart, 9, 27.

Reed-bird, 45.

*Regulus calendula*, 8, 141, 144.

" *cristatus*, 146.

" *satrapa*, 8, 141, 142, 144, 146.

" *tricolor*, 146.

Reinhardt, 57.

Richardson, Sir John, 55, 92.

Richardson's Jaeger, 131.

" Owl, 73-4.

Rice-bird, 45.

Ridgway, Robert, 3, 26, 35, 37, 43, 55, 56, 57, 58, 70, 150.

Ring-billed Gull, 132.

Ringneck Plover, 102.

Ring-necked Duck, 125.

Riverdale, Westchester Co., N. Y., 23, 25, 44, 54, 132.

*Rhynchops nigra*, 146.

Robin, 6.

Rockport, Mass., 120.

Rocky Hill, Conn., 112.

Rose-breasted Grosbeak, 43.

Roseate Tern, 133.

Rough-legged Hawk, 87-8.

" -winged Swallow, 31.

Ruby-crowned Knight, 8.

" Mts., Nevada, 57.

" -throated Hummingbird, 62.

Ruddy Duck, 128.

Ruffed Grouse, 100, 101.

Rusty Grackle, 46.

Rutta, Andrew, 29.

## S

Sage, John H., 3, 4, 6, 7, 8, 11, 12, 14, 15, 16, 25, 26, 33, 34, 35, 37, 39, 43, 44, 45, 46, 49, 50, 53, 59, 63, 64, 65, 66, 74, 80, 81, 85, 93, 98, 103, 104, 105, 107, 108, 109, 110, 112, 122, 124, 126, 129, 131, 133.

Sachem's Head, Conn., 67.

St. John's River, Fla., 114.

Saltonstall Lake, 111.

Saltonstall Ridge, Conn., 90.

Samuels, Edward A., 7, 24, 92, 148, 150.

Sand-hill Crane, 113-14.

Sanderling, 107.

Sandpiper, Baird's, 107.

" Bartramian, 109.

" Bonaparte's, 106.

" Buff-breasted, 109.

" Curlew, 106.

" Least, 106.

" Pectoral, 106.

" Purple, 106.

" Red-breasted, 107.

" Semipalmated, 105.

" Solitary, 108.

" Spotted, 108.

" Stilt, 107.

" White-rumped, 106.

Santa Cruz, 57.

St. John's River, Fla., 114.

Savanna Sparrow, 36.

Savin Rock, Conn., 23, 37, 38.

Saskatchewan, 57, 92.

Saw-whet Owl, 74.

Saugus, 149.

Saxicolidae, 8, 139.

Saybrook, Conn., 3, 7, 12, 14, 15, 17, 20,

21, 22, 23, 25, 26, 35, 37, 38, 52, 61, 65,

70, 88, 92, 101, 102, 103, 106, 107, 109,

115, 119, 121, 123, 125, 128, 133, 134,

138.

Sayornis fuscus, 52-3, 140, 145.

Scarlet Tanager, 27.

Scaup Duck, Greater, 125.

" " Lesser, 125.

Schlieben, 28.

*Scolecophagus ferrugineus*, 46, 141, 145.

- Scolopaciæ, 104, 139.  
*Scolopax rusticola*, 104.  
*Scops asio*, 69, 140, 141, 145.  
 Scoter Duck, Black, 127.  
     "    "    Common, 128.  
     "    "    Velvet, 128.  
 Sea Coot, 128.  
     "    Dove, 138.  
     "    Swallow, 133.  
 Seaside Finch, 38.  
 Semipalmated Plover, 102.  
     "    Sandpiper, 105.  
*Seiurus* (see *Siurus*).  
*Setophaga ruticilla*, 9, 27, 139, 144.  
 Seven Day's Work, Grand Menan Id., 83.  
 Severn River, 114.  
 Shag, 130.  
 Sharp-shinned Hawk, 78, 85.  
     "    -tailed Finch, 38.  
 Shearwater, Greater, 136.  
 Sheldrake, 4, 128.  
 Short-eared Owl, 70.  
     "    -tailed Tern, 135.  
 Shoveller, 124.  
 Shrike, Loggerhead, 34.  
     "    Northern, 33, 34, 49.  
 Shurtleff Collection (at Middletown), 64.  
 Shores, Irwin I., 3, 4, 7, 8, 11, 12, 14, 16,  
     17, 22, 24, 25, 28, 31, 33, 37, 38, 40, 53,  
     58, 64, 65, 80, 111, 113.  
 Short-billed Marsh Wren, 11.  
*Sialia sialis*, 8, 139, 141, 144.  
 Sierra Nevada, 57.  
 Silliman, Benj. Jr., 129.  
*Sitta Canadensis*, 8, 10, 142, 144.  
     "    *Carolinensis*, 8, 10, 139, 141, 144.  
*Sittidæ*, 10, 139.  
*Siurus auricapillus*, 20, 37, 139, 144.  
     "    *Ludovicianus*, 20.  
     "    *motacilla*, 20-1, 139.  
     "    *nævus*, 20, 21, 140, 141, 144.  
     "    *Noveboracensis*, 20, 21.  
 Sing Sing, Westchester Co., N. Y., 23.  
 Slate-colored Snowbird, 39.  
 Small Green-crested Flycatcher, 58.  
 Smith, Capt. John, 4, 148.  
     "    Fred. Sumner, 3, 6, 63, 88, 111.  
     "    Prof. Sidney I., 4, 32.  
 Smithsonian Institute, Washington, D.C., 3.  
 Snowbird, Slate-colored, 39.  
     "    White, 36.  
 Snow Bunting, 36.  
     "    Goose, 121.  
     "    Prof. F. H., 56.  
 Snipe, Jack, 106.  
     "    Red-breasted, 105.  
     "    Wilson's, 105.  
 Solitary Tattler, 108.  
     "    Vireo, 33.  
 Solon Goose, 129.  
 Song Sparrow, 38, 39.  
*Sonaterja mollissima*, 127, 142, 143, 146.  
     "    *spectabilis*, 127, 142, 143, 146.  
 Sooty Tern, 134.  
 Sora Rail, 116.  
 South End (near New Haven), Conn., 36.  
     "    "    Mass., 120.  
 Southern Goose, 122.  
 Southampton, Long Island, 109.  
 Southwick Ponds (Hartford Co.), Conn., 11.  
 Sparke, F. C., 148.  
     "    Michael, 148.  
     "    R. C., 148.  
 Sparrow Hawk, 84-5.  
     "    Chipping, 39, 40.  
     "    English, 18, 19, 34, 39, 40-3.  
     "    Field, 19, 39-40.  
     "    Fox-colored, 43.  
     "    Henslow's, 37.  
     "    House, 40-3.  
     "    Ipswich, 36.  
     "    Maynard's, 36.  
     "    Savanna, 36.  
     "    Song, 38, 39.  
     "    Swamp, 38, 39.  
     "    Tree, 39.  
     "    White-crowned, 40.  
     "    "    throated, 40.  
     "    Yellow-winged, 37.  
*Sphyrapicus varius*, 64, 66, 140, 141, 145.  
*Spizella monticola*, 39, 141, 142, 145.  
     "    *pusilla*, 19, 39, 41, 140, 145.  
     "    *socialis*, 13, 39, 41, 140, 141, 145.  
 Spoonbill Duck, 124.  
*Spatula Clypeata*, 124, 142, 146.  
 Spotted Sandpiper, 108.  
 Sprigtail, 123.  
 Springfield, Mass., 7, 67, 149.  
 Spruce Partridge, 1.  
*Squatarola Helvetica*, 102, 141, 145.  
 Stadtmüller Brothers, 3, 4, 10, 12, 27, 33,  
     44, 59, 85, 86, 98.  
 Stake Driver, 112.  
 Starlings, 45.  
*Steganopus Wilsoni*, 103, 143, 145.  
*Stelgidopteryx serripennis*, 31, 140, 143.  
*Stercorarius Buffoni*, 131, 142, 143.  
     "    *parasiticus*, 131, 142, 143, 146.  
     "    *pomatorhinus*, 131.  
*Sterna aculeifluida*, 135.  
     "    *anglica*, 135.  
     "    *aranea*, 135.  
     "    *cantiaea*, 135.  
     "    *caspia*, 135.  
     "    *Dougalli*, 133, 140.  
     "    *Fosteri*, 135.  
     "    *fuliginosa*, 134, 143.  
     "    *hirundo*, 133, 140, 146.  
     "    *macroura*, 133, 142, 143.  
     "    *paradisea*, 133.  
     "    *regia*, 135.  
     "    *superciliaris*, var. *Antillarum*, 134,  
     140, 142, 146.  
 Stilt Sandpiper, 107.  
 Stocker, Ebenezer, 46.  
 Stonington, Conn., 121, 130, 132, 136, 138.

- Stony Creek, Conn., 135.  
 Stratford, Conn., 7, 8, 15, 27, 35, 37, 49,  
 53, 63, 65, 66, 70, 72, 81, 102, 105, 106,  
 107, 108, 109, 110, 111, 115, 116, 118,  
 120, 121, 122, 123, 124, 125, 126, 127,  
 129, 130, 132, 134, 136, 137.  
*Strepsilas interpres*, 103, 141, 145.  
 Strigidae, 66, 139.  
*Strix flammea*, var. *Americana*, 66, 140,  
 143, 145.  
*Strix Scandiacæ*, 147.  
 " *Virginica*, 147.  
*Sturnella magna*, 45, 140, 141, 145.  
 Suckly, Dr., 57.  
 Suffield, Hartford Co., Conn., 3, 7, 8, 11,  
 12, 14, 16, 17, 22, 24, 25, 28, 31, 33, 38,  
 40, 53, 58, 64, 65, 80, 111, 113.  
*Sula bassana*, 129, 142, 143, 146.  
 " *fiber*, 130, 143, 146.  
 Sulidae, 129, 139.  
 Surf Duck, 128.  
 Summer Redbird, 27.  
 " Duck, 125.  
*Surnia ulula*, var. *Hudsonia*, 73, 142, 143.  
 Swainson, 55.  
 Swainson's Thrush, 6.  
 Swallows, 28, 31, 60, 61, 77, 85, 131.  
 Swallow, Bank, 31.  
 " Barn, 28-30.  
 " Cliff, 30.  
 " Eave, 30.  
 " Rough-winged, 31.  
 " White-bellied, 30.  
 " -tailed Flycatcher, 50.  
 " " Kite, 5, 76-7.  
 Swamp Sparrow, 38, 39.  
 Swampscot, Mass., 149.  
 Swan, Trumpeter, 4, 120-21.  
 " Whistling, 4, 120.  
 Swift, Chimney, 59-62.  
*Sylvia æstiva*, 147.  
 " *auricollis*, 147.  
 " *autumnalis*, 147.  
 " *Blackburniæ*, 147.  
 " *Canadensis*, 147.  
 " *Castanea*, 147.  
 " *flava*, 147.  
 " *parus*, 147.  
 " *Roscoe*, 147.  
 " *sphagnosa*, 147.  
 " *trichas*, 147.  
 " *trochilus*, 147.  
 Sylvicolidae, 12, 139.  
*Sylviidæ*, 8, 139.  
*Syrnium cinereum*, 70, 142, 143, 145.  
 " *nebulosum*, 70, 140, 141, 145.
- T**
- Tachycineta bicolor*, 30, 139, 144.  
*Tachypetes aquilus*, 131, 143.  
 Tachypetidae, 131, 139.  
 Talcott Mt. (near Hartford), Conn., 81, 82.  
 Tanager, Scarlet, 27.  
 Tanager, Summer, 27.  
 Tanagridæ, 27, 139.  
 Tantalidae, 109, 139.  
 Tattler, 108.  
 " Solitary, 108.  
 Taylor, Wm. H., 14.  
 Teal, 4, 115.  
 Teal, Blue-winged, 124.  
 " Green-winged, 124.  
*Telmatodytes palustris*, 11, 139, 144.  
 Tennessee Warbler, 14.  
 Tenney, Prof. Sanborn, 134.  
 Terns, 81, 82, 89, 132, 133-5.  
 Tern, Arctic, 133.  
 " Black, 135.  
 " Common, 133.  
 " Least, 134.  
 " Roseate, 133.  
 " Short-tailed, 135.  
 " Sooty, 134.  
 " Wilson's, 133.  
 Tetraonidae, 100, 139.  
 Theodat, 115.  
 Thompson, Dr. E. L. R., 17, 27, 106.  
 " Zadock, 55, 61, 62, 74, 80, 89,  
 90, 99, 113, 125, 149.  
 Thrush, Brown, 8, 24.  
 " Golden-crowned, 20.  
 " Gray-cheeked, 7.  
 " Hermit, 6.  
 " Large-billed Water, 20-1.  
 " Olive-backed, 6.  
 " Swainson's, 6.  
 " Water, 20.  
 " Wilson's, 7.  
 " Wood, 6.  
 Thrasher, Brown, 8, 24.  
*Thryothorus Ludovicianus*, 11, 140.  
 Tilly, Joseph, 101.  
 Titlark, 12.  
 Titmouse, Black-capped, 9.  
 " Hudsonian, 10.  
 " Tufted, 9.  
 Tom, Mount, Mass., 53, 82, 99.  
*Totanus chloropus*, 108, 146.  
 " *flavipes*, 108, 141, 145.  
 " *melanolencus*, 108, 141, 145.  
 " *semipalmatus*, 108, 140, 145.  
 " *solitarius*, 108, 140, 141, 145.  
 Totoket Mt., Conn., 99.  
 Towhee Bunting, 44.  
 Traill's Flycatcher, 58.  
 Trenton, New Jersey, 50.  
*Tringa alpina*, var. *Americana*, 106, 141,  
 145.  
 " *Bairdii*, 107.  
 " *canutus*, 106, 141, 145.  
 " *fusciollis*, 106, 141, 145.  
 " *maculata*, 106, 141, 145.  
 " *maritima*, 106, 141, 142, 146.  
 " *minutilla*, 106, 141, 145.  
 " *subarquata*, 106, 141, 143, 146.  
*Tringoides macularius*, 108, 140, 141, 145.

Trippe, T. Martin, 23, 50, 52, 56.  
 Trochilidae, 62, 139.  
 Trochilus colubris, 62, 140, 145.  
 Troglodytes aëdon, 10, 139, 144.  
 Troglodytidae, 10, 139.  
 Trumbull, Prof. J. Hammond, 43.  
 Trumbull, Fairfield Co., N. J., 35.  
 Trumpeter Swan, 120-1.  
 Tryngites rufescens, 109, 146.  
 Tufted Titmouse, 9.  
 Turdidae, 6, 139.  
 Turdus fuscescens, 7, 139, 144.  
 " migratorius, 6, 139, 141, 144.  
 " mustelinus, 6, 139, 144.  
 " Pallasi, 6, 141, 144.  
 " Swainsoni, 6, 7, 141.  
 " " var. Aliciae, 7, 141.  
 Turkey Buzzard, 91-3.  
 " Wild, 4, 98-9, 100, 101.  
 Turnbull, Wm. P., 44, 54, 73, 138, 149.  
 Turnstone, 103.  
 Turtle Dove, 94, 98.  
 Tyrannidae, 49, 139.  
 Tyrannus Carolinensis, 49, 140, 145.

### U

Umbagog Lake, Oxford Co., Me., 23, 54, 55.  
 Upland Plover, 89, 109.  
 Uria grylle, 138, 146.  
 Utamania torda, 138, 142, 143, 146.  
 Usnea, 12.

### V

Velvet Scoter, 128.  
 Veratrum album, 47.  
 Verrill, Prof. A. E., 1, 2, 4, 30, 54, 92, 100, 149.  
 Vickery, 112.  
 Vireo, Blue-headed, 33.  
 " flavifrons, 33, 140, 144.  
 " gilvus, 16, 32, 140, 144.  
 " noveboracensis, 33, 140, 144.  
 " olivaceus, 32, 139, 144.  
 " philadelphicus, 33.  
 " Red-eyed, 32.  
 " solitarius, 33, 140, 144.  
 " Solitary, 33.  
 " Warbling, 33.  
 " White-eyed, 33.  
 " Yellow-throated, 33.  
 Vireonidae, 32, 139.  
 Virginia Rail, 115.  
 Vistula, 29.  
 Vulture, Black, 93.  
 " Turkey, 91-3, 97.

### W

Wagtail, Water, 20.  
 Wahsatch Mts., Utah, 56, 116.  
 Wallerius, Dr., 28.  
 Wallingford, Conn., 131, 133, 138.  
 Walpole, N. H., 118.  
 Warbler, Black-and-White, Creeping, 12.  
 " " -and-Yellow, 17.

Warbler, Black-throated, Blue, 15.  
 " " " Green, 15.  
 " Blackburnian, 16.  
 " Black-poll, 16.  
 " Ray-breasted, 16.  
 " Blue, Golden-winged, 14.  
 " " -winged, Yellow, 1, 14.  
 " " Yellow-backed, 12.  
 " Cærulean, 15-6.  
 " Cape May, 17.  
 " Canadian Flycatching, 27.  
 " Chestnut-sided, 17.  
 " Connecticut, 21-2.  
 " Flycatching, Canada, 27.  
 " " Green, Black-capped, 26.  
 " Green, Black-capped, Flycatching, 26.  
 " Hooded, 1, 25-6.  
 " Kentucky, 22-3.  
 " Maryland Yellow-throat, 5, 23.  
 " Mourning, 23-4.  
 " Nashville, 14.  
 " Orange-crowned, 15.  
 " Pine-creeping, 18-20.  
 " Prairie, 17.  
 " Red-poll, 18.  
 " Tennessee, 14.  
 " Worm-eating, 1, 12-3.  
 " Yellow, 15.  
 " " -rumped, 16.  
 " " -throated, 17.  
 Warbling Vireo, 16, 32.  
 Water Thrush, Common, 20.  
 " " Large-billed, 20-1.  
 " Wagtail, 20.  
 Waterton, Mr., 91.  
 Waterville, Me., 149.  
 Wauregan, Windham Co., Conn., 50.  
 Waxwing, Bohemian, 32.  
 " Common, 32.  
 Weber River, Utah, 56.  
 Welch, Mr., 54.  
 Wendell, Robert, 120.  
 Westbrook, Conn., 92, 93, 103, 125, 127.  
 Wesleyan University, 3.  
 Westford, Conn., 140.  
 West Haven, Conn., 65, 125.  
 Wheaton, Dr. J. M., 54, 127.  
 Wheeler, Lieut. Geo. M., 56.  
 Whelpley, Dr. J. D., 12, 25, 65, 72, 129.  
 Whippoorwill, 59.  
 Whistler, 126.  
 Whistling Swan, 120.  
 White-bellied Swallow, 30.  
 " " Nuthatch, 10.  
 " -crowned Sparrow, 40.  
 " -eyed Vireo, 33.  
 " Egret, Great, 111.  
 " " Little, 111.  
 " Ibis, 110.  
 " -rumped Sandpiper, 106.  
 " -throated Sparrow, 40.  
 " -winged Coot, 128.

- White-winged Crossbill, 35.  
 Whitman, G. R., 119.  
 Whitney Lakes (near New Haven), Conn.,  
 7, 110, 111, 112, 120, 124.  
 Whitney, Prof. Wm. D., 3, 14, 27, 52, 54,  
 80, 99.  
 Whooping Crane, 113.  
 Widdowes, G., 148.  
 Widgeon, 124.  
 Wild Pigeon, 93-7.  
 " Turkey, 4, 98-9, 100, 101.  
 " Goose, 122.  
 Williams, Samuel, 31, 60, 61, 77, 94, 113,  
 148.  
 Willet, 108.  
 Wilson, Alexander, 22, 23, 25, 92, 95, 96,  
 97, 116, 148.  
 Wilson, Edmond B., 3, 8.  
 Wilson's Petrel, 136.  
 " Phalarope, 103.  
 " Plover, 102.  
 " Snipe, 105.  
 " Tern, 133.  
 " Thrush, 7.  
 Windsor, Conn., 30.  
 " Hill, Conn., see East Windsor Hill.  
 Winter Hawk, 87.  
 " Wren, 11.  
 Witkowski (Amtman), 28.  
 Wood, Dr. William, 2, 3, 11, 12, 32, 35,  
 52, 64, 65, 66, 67, 71, 72, 73, 74, 75, 78,  
 80, 81, 82, 83, 84, 86, 87, 88, 89, 92, 99,  
 111, 120, 121, 123, 124, 126, 127, 128,  
 129, 132, 137, 138.  
 Wood, William (of 1634), 62, 91, 148.  
 " Duck, 125.  
 " Pewee, 58.  
 " Thrush, 6.  
 Woodcock, 104.  
 Woodpecker, Black-backed-Three-toed, 64.  
 " Downy, 64.  
 Woodpecker, Golden-winged, 66.  
 " Hairy, 64.  
 " Pileated, 5, 63.  
 " Red-bellied, 65.  
 " " -headed, 65-6.  
 " Yellow-bellied, 64-5.  
 Wren, Great Carolina, 11.  
 " House, 10.  
 " Long-billed Marsh, 11.  
 " Short- " " 11.  
 " Winter, 11.
- X**
- Xema Sabini, 135.
- Y**
- Yaffle, 66.  
 Yarmouth, Nova Scotia, 70, 149.  
 Yellow-bellied Flycatcher, 59.  
 " " Woodpecker, 64, 66.  
 " -breasted Chat, 1, 24.  
 " -crowned Night Heron, 112.  
 " -legs, Greater, 108.  
 " " Lesser, 108.  
 " Hammer, 66.  
 " Rail, 119.  
 " -rumped Warbler, 16.  
 " -throated Vireo, 33.  
 " " Warbler, 17.  
 " Warbler, 15.  
 " -winged Sparrow, 37.  
 Yellowbird, Common, 36.  
 Yellowstone Lake, Wy. Ter., 108.  
 " National Park, 114.  
 Yukon River, Alaska, 114.
- Z**
- Zenaidura Carolinensis, 98, 140, 141, 145.  
 Zizania aquatica, 48.  
 Zonotrichia albicollis, 40, 41, 141, 142, 145.  
 " leucophrys, 40, 141, 142, 145.

## ERRATA AND ADDENDA.

---

- 3d page, 20 lines from top, for Robert F. read Robert T.  
5th page, 7 lines from top, for migratoria read migratorius.  
7th page, 21 lines from top, for Wm. Brewster read H. A. Purdie.  
28th page, 10 lines from top, for [ read (.  
93d page, 15 lines from top, for migratoria read migratorius.  
108th page, 14 lines from top, for shanlis read shanks.  
122d page, 32 lines from top, for 233<sup>a</sup> read 232<sup>a</sup>.

I have recently learned that the Hudsonian Curlew (*Numenius Hudsonicus*, p. 199) has occurred along the coast this year in such numbers as to render the term "rare" incorrect. Mr. Geo. Bird Grinnell writes: "My brother killed *Numenius Hudsonicus* July 20th, 1877 [near Milford, Conn.]. He saw sixteen birds of that species on that day; twelve in one flock, and two pairs. Others were seen later in July by other parties." I am informed by Mr. J. H. Sage that two specimens of this species were killed, near Saybrook, Conn., August 27th, 1877.























