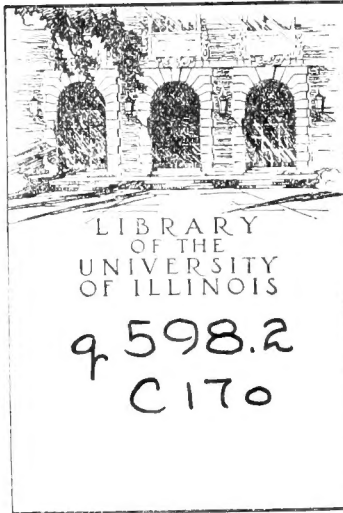


The background of the cover is a detailed embossed illustration of a pine branch. The branch runs horizontally across the top and middle of the cover, with several smaller branches extending downwards. The pine needles are finely detailed, and several pine cones are attached to the main branch. The entire design is rendered in a light, embossed tone against a dark, textured background.

Ornithology
OF
NEW ENGLAND

ELWIN A. CAPEN

COLORFUL ILLUSTRATIONS

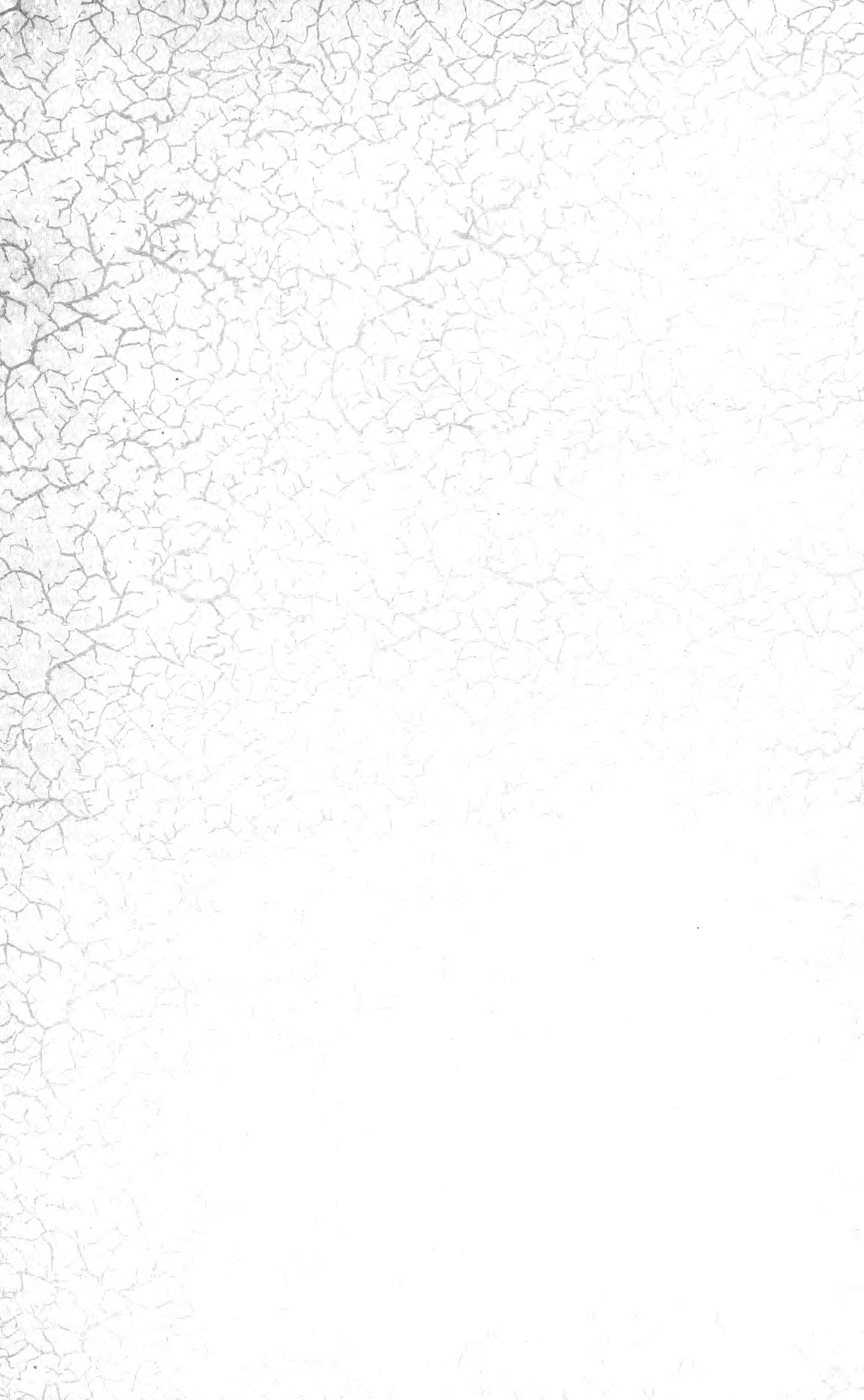


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OÖLOGY OF NEW ENGLAND:

A DESCRIPTION OF THE

EGGS, NESTS, AND BREEDING HABITS

OF THE

BIRDS KNOWN TO BREED IN NEW ENGLAND,

WITH

Colored Illustrations of their Eggs.

BY

ELWIN A. CAPEN.

BOSTON:
ALFRED MUDGE & SON, PRINTERS,
21 FRANKLIN STREET.
1886.

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PREFACE.

IN offering this volume to the public, I would say that my chief aim has been to render this work as useful and true to nature as possible. That the need of such a work has long been felt by the student of this branch of Natural History is very evident. I have devoted much time and study towards its completion, and I shall leave my readers to judge whether I have succeeded in the undertaking. In the illustrations I have made careful selections from many large collections to obtain the most typical, and in many cases where there is considerable variation, the most characteristic specimens. It is all but impossible for a single individual to be so fortunate as to observe the nidification of every bird, and I have therefore freely quoted from all accessible authentic sources, giving due acknowledgment for the benefit received. I had written more elaborate and lengthy accounts, but upon consideration, though it has been very tempting to enter into the general description of the birds, I have endeavored to confine myself strictly to the eggs, nests, and breeding habits.

This volume is intended for the student in oölogy and for the great mass of readers who have not the means to form costly collections, nor the time which this pursuit would necessarily involve. I hope, however, that the more advanced scientists will find something in it to interest them. I have adopted the classification and nomenclature of Dr. Coues, of Washington, D. C.

I have to acknowledge my indebtedness to many friends for hearty assistance and valuable information,—to Professor S. F. Baird, for the access he has given

me to the large and unrivalled collection at the National Museum; to Mr. G. A. Boardman, for information concerning some of the birds of Maine; to the Forbes Lithograph Company, for the excellent manner in which they have reproduced the plates; to Mr. C. J. Maynard and to many other kind friends, for innumerable services,—to all of whom I here take pleasure in expressing my gratitude.

E. A. C.

CANTON, Nov. 1, 1885.

PLATE I

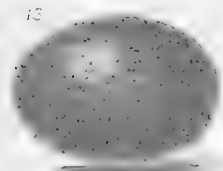
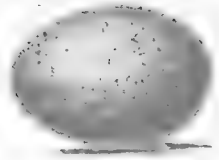
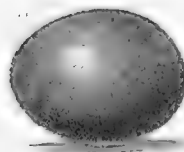
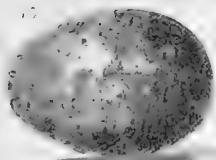
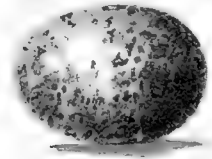
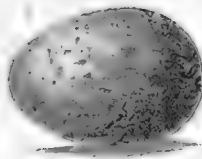
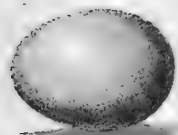
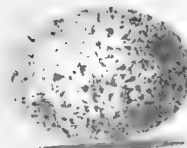
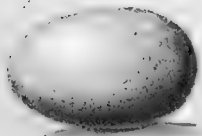
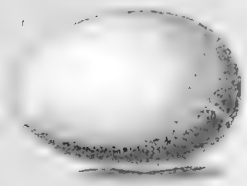


Fig. 1. Robin.

" . 2. Wood Thrush.

" . 3. 4. Hermit Thrush.

" . 5. 6. Olive-backed Thrush.

Fig. 7. Tawny Thrush.

" . 8. 9. 10. Mocking Bird.

" . 11. Cat Bird.

" . 12. 13. Brown Thrush.

Fig. 14. 15. Blue Bird.

OÖLOGY OF NEW ENGLAND.

Robin.

Turdus migratorius.

PLATE I.

DESCRIPTION.

EGGS.— Usually four, sometimes five, and very rarely six in number. They are of a handsome greenish blue, and normally without spots, but are occasionally speckled with reddish or dark brown. They measure from 1.10 to 1.25 in length by .75 to .87 of an inch in breadth.

NESTS.— Composed of straw, roots, moss, leaves, and the like, well cemented together with mud, making them strong, durable, and bulky structures. They are lined with fine grasses, moss, or pine-needles.

BREEDING HABITS.

The breeding habits of the Robin are so familiar that anything said seems superfluous. It is an abundant summer resident of all New England, many remaining in the southern portion throughout the year. The majority, however, arrive from the South about the middle of March, and begin building about the middle of April, or a little later, in orchard, garden, and evergreen trees, stone walls, old buildings, and in fact almost anywhere, as they seem to be one of the least particular of our birds as to choice of situation for a nesting site. As many as three broods are sometimes reared in a season.

Wood Thrush; Song Thrush.

Turdus mustelinus.

PLATE I.

DESCRIPTION.

EGGS.—The usual complement is four, often five. They are greenish blue in color, resembling those of the Robin, and measure from 1 to 1.12 in length by .68 to .75 of an inch in breadth.

NESTS.—They vary somewhat in construction, but are usually composed of moss and dead leaves, and sometimes twigs and mud are added. They are lined with fine grasses, moss, or fibrous roots, and are generally placed in a small shrub or tree from three to six feet from the ground.

BREEDING HABITS.

This unrivalled songster makes its appearance about the 10th of May, in the three southern States of New England, and seldom goes north of Massachusetts to rear its young. It haunts the shady glens and hollows along the borders of swamps, ponds, and running brooks, and has its nest built and eggs laid by the 1st of June. Two broods are occasionally reared.



Hermit Thrush.

Turdus pallasi.

PLATE I.

DESCRIPTION.

EGGS.—From three to five, usually four in number; are greenish blue, resembling those of the Wood Thrush, but are smaller and generally more elongated. They vary in dimensions from .96 to .87 in length by .65 to .58 of an inch in breadth.

NESTS.—Usually placed on the ground; are outwardly composed of moss, leaves, grass, and twigs, and inwardly of finer materials of the same nature or with pine-needles, the whole being loosely constructed.

BREEDING HABITS.

This species is seen in the two southern States of New England early in April, from where they steadily pass on to the three northern. A few, however, remain in

certain parts of Massachusetts to perform the duties of incubation. They breed quite commonly on Cape Cod, especially in the vicinity of Hyannis, and sparingly through other portions of Eastern Massachusetts.



Olive-backed Thrush.

Turdus swainsoni.

PLATE I.

DESCRIPTION.

EGGS.—Generally four, sometimes five in number, are of a light greenish blue, spotted with pale reddish, dark brown and lilac, chiefly at the larger end, and often finely blotched. They average about .88 by .66 of an inch.

NESTS.—Composed of small twigs, moss, etc., lined with moss and fibrous rootlets, and are placed in a low tree or shrub from two to ten feet from the ground.

BREEDING HABITS.

A common summer resident of Northern New England, where it arrives about the last of May or first of June, and immediately directs its attention towards building its nest and rearing its young.



Tawny Thrush; Wilson's Thrush.

Turdus fuscescens.

PLATE I.

DESCRIPTION.

EGGS.—Usually four, sometimes three or five; are of a greenish blue, varying in intensity of color, some bordering on the blue, while others have a decided greenish cast. They measure about .85 by .62 of an inch.

NESTS.—Placed on the ground in tussocks, occasionally in a low bush, or rarely in a tree five or six feet up, in swamps, and are constructed of grass, leaves, and grape-vine bark, lined with grass, fine roots, or horsehair.

BREEDING HABITS.

Quite abundant in the three southern States of New England as a summer resident, but not as common in the three northern. It arrives about the first week in May.

Mocking-bird.

Mimus polyglottus.

PLATE I.

DESCRIPTION.

EGGS. — Usually four and sometimes five in number, and average about 1 by .75 of an inch. They vary somewhat in ground color and shade of markings. (See Plate I., Figs. 8, 9, and 10.)

NESTS. — Placed in a bush or tree about three or four feet from the ground, and are composed of twigs, weed-stalks, leaves, grasses, and pieces of cotton or wool coarsely put together and lined with fibrous roots.

BREEDING HABITS.

The Mocking-bird, though of very rare occurrence, has been found breeding in all of the three southern States of New England, and is now regarded as a regular rare summer resident.



Catbird.

Mimus carolinensis.

PLATE I.

DESCRIPTION.

EGGS. — Usually four in number, often five. They are of a handsome dark green with a bluish cast, and measure about .90 by .70 of an inch.

NESTS. — Outwardly constructed of coarse materials, of twigs, weeds, dry grass, dead leaves, strips of bark, cast-off snake-skins, pieces of newspaper, wood shavings, old rags, and in fact anything that can be conveniently worked enters into the composition. They are usually lined with fibrous roots and occasionally with pine-needles.

BREEDING HABITS.

The Catbirds are rather rare summer residents in the northern part of New England, but are abundant in the southern portion. They arrive about the first week in May, and the greater part of them have their nests made and eggs laid by the first week in June. The nests are rarely placed in the deep woods, the usual resorts being margins of thickets about habitations, the favorite situation being often barberry and lilac bushes. Two sets of eggs are usually laid during a season.

Brown Thrush.

Harporhynchus rufus.

PLATE I.

DESCRIPTION.

EGGS. — Commonly four or five in number. They vary in shape, are pale greenish or dirty white in ground color, thickly and minutely dotted over the entire surface with various shades of brown, often nearly concealing the ground color, and measure about 1.05 by .80 of an inch.

NESTS. — Are constructed of twigs or weed-stalks, over which are dead leaves, grass, fibrous roots, and strips of cedar or grape-vine bark, lined with fine rootlets, fine grass, or horsehair. They are placed on the ground, or in a low bush or tree near it.

BREEDING HABITS.

A common summer resident in Southern New England, and rather rare in the northern part. It arrives from the South about the last of April or first of May. It breeds about the middle of May. But one brood is usually reared.



Bluebird.

Sialia sialis.

PLATE I.

DESCRIPTION.

EGGS. — Four or five in number, often six; measure about .85 by .65 of an inch, and vary from a pale greenish blue to pure white, but are normally pale blue.

NESTS. — Consist of a few straws and feathers carelessly put together, usually placed in a natural cavity of a tree, or often in a box or other receptacle put up for their accommodation.

BREEDING HABITS.

The Bluebird is an abundant summer resident in Southern New England, but is rather rare in the northern parts of Maine, New Hampshire, and Vermont. It makes its appearance from the last of February to the first of April, according to the advancement of the season. Two sets of eggs are laid, and sometimes three, during a season.

Golden-crested Kinglet.

Regulus satrapa.

PLATE II.

DESCRIPTION.

EGGS. — Are of a reddish cream color, minutely dotted with purplish and light red, and average about .54 by .40 of an inch.

NEST AND BREEDING HABITS.

This species is a summer resident to the three northern States in New England only, laying their eggs about the first of June. A nest with young was found by Mr. H. D. Minot the 16th of July, 1875, of which he says: "In a forest of the White Mountains, which consisted chiefly of evergreens and white birches. Having several times observed the bird there, I at last detected them in the act of conveying food to their young, and soon tracked them to their nest. This hung four feet above the ground, from a spreading hemlock bough, to the twigs of which it was firmly fastened. It was globular, with an entrance in the upper part, and was composed of hanging moss, ornamented with bits of dead leaves, and lined chiefly with feathers. It contained six young birds, but, much to my regret, no eggs."

Blue-gray Gnatcatcher.

Polioptila caerulea.

PLATE II.

DESCRIPTION.

EGGS. — Four in number, often five; average about .62 by .47 of an inch; are greenish white, blue tinged, in ground color, spotted with reddish and dark brown, and a little obscure lilac, chiefly at the greater end, often tending to form a confluent ring.

NESTS. — Composed of spiders' webbing, interwoven with fine grasses, bits of leaves, lichens, fern down, cotton, or wool, and small feathers, the whole being nicely shingled over the outside with bits of lichens, which are firmly fastened with cobwebs and silky fibres of various plants, and sparsely lined inside with cattle-hair and a few soft feathers. This forms an elastic, firm, and beautiful little nest, and measures inside about two inches in depth by one and a fourth in width. The walls are about one half an inch in thickness, nearly parallel, and slightly contracted at the top.

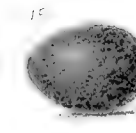
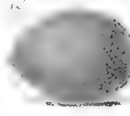
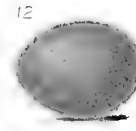
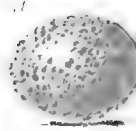
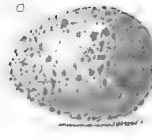
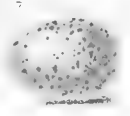
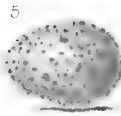
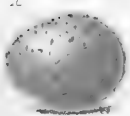


Fig. 1. 2. Golden-crested Kinglet. Fig. 9. Red-bellied Nuthatch.
 " 3. Blue-gray Gnatcatcher. " 10. Brown Creeper.
 " 4. 5. Black-capped Chickadee. " 11. Great Carolina Wren.
 " 6. 7. Hudsonian " 12. 13. House Wren.
 " 8. White-bellied Nuthatch. " 14. Winter "
 Fig. 15 Long-billed Marsh Wren.

BREEDING HABITS.

The Blue-gray Gnatcatcher is a rare summer visitor in Southern New England, generally nesting in the high hard-wood trees, from ten to fifty feet from the ground.

Black-capped Chickadee.

Parus atricapillus.

PLATE II.

DESCRIPTION.

EGGS.—Six to ten in number, white in color, spotted with reddish brown and a few lilac blotches, and measure about .63 by .50 of an inch.

NESTS.—Placed in holes in trees, deserted woodpeckers' nests, and old stumps. Decayed white birches in swamps are favorite nesting sites of this species, where they usually make their own excavations, from six to eighteen inches in depth. At the bottom of the hole is placed rabbit's hair, feathers, wool, moss, strips of bark, silky fibres of plants, fern down, etc.

BREEDING HABITS.

The Chickadee is an abundant resident throughout New England at all seasons of the year. They are gregarious, moving about through our woodlands and orchards in winter in small flocks, but separating into pairs as the breeding season approaches. Two sets of eggs are commonly laid in a season.

Hudsonian Chickadee.

Parus hudsonicus.

PLATE II.

DESCRIPTION.

EGGS AND NESTS.—Similar to those of the preceding species, but the eggs are smaller, averaging about .45 by .55 of an inch.

BREEDING HABITS.

This bird breeds sparingly in Northern Maine and probably New Hampshire and Vermont. The nesting habits are much the same as those of the Black-capped Chickadee.

White-bellied Nuthatch.

Sitta carolinensis.

PLATE II.

DESCRIPTION.

EGGS. — Usually four in number. They are white, with a roseate tint when unblown, and quite evenly spotted over the entire surface with light brownish red intermingled with dark brown and lilac, and average about .80 by .60 of an inch.

NESTS. — Placed at the bottom of an excavation made in a decayed tree or stump, and are composed of soft grasses, feathers, hair, etc.

BREEDING HABITS.

This species is a common summer resident throughout New England, nesting early in the season, about the first of May, and even earlier. But one brood is reared.



Red-bellied Nuthatch.

Sitta canadensis.

PLATE II.

DESCRIPTION.

NESTS AND EGGS. — Are the same as those of the white-bellied, but the eggs are smaller.

BREEDING HABITS.

A regular summer resident in the three northern States of New England, and has been recorded as having nested in Massachusetts. In breeding habits this species differs somewhat from that of the preceding, as has lately been recorded by several ornithologists, in having an extremely small hole for its entrance, and smearing the outside with pitch, making it difficult for the bird to enter, the feathers often sticking to the pitch.



Brown Creeper.

Certhia familiaris.

PLATE II.

DESCRIPTION.

EGGS. — From five to eight in number, measuring .55 to .64 in length by .45 to .50 of an inch in breadth. They are dull white, finely dotted with reddish brown, with or without the paler spots, especially about the greater end. The difference

in the times when fresh eggs have been found leads to the inference that two broods may be reared annually (N. E. B. L., 1883, pp. 91, 92).

NESTS.— Usually placed in a rift or crevice between the bark and the main wood, composed of dried grass and similar material.

BREEDING HABITS.

The Brown Creeper spends the summer in the woods and forests of all New England, but more abundantly in the northern portion than in the southern. Mr. Brewster, who closely studied the nidification and other breeding habits of the Creeper in the pine woods of Maine, has given us the best paper by far we possess upon this subject (Bull. Nuttall Club, IV., 1879, pp. 199, 200), fully describing the curious position of the nest, and giving other particulars of interest. He found fresh eggs as late as June 23.



Great Carolina Wren.

Thryothorus ludovicianus.

PLATE II.

DESCRIPTION.

EGGS.— From four to seven, usually five. They average about .73 by .58 of an inch; are white in ground color, thickly spotted with reddish brown and lilac, chiefly about the larger end. Others are more evenly and sparingly sprinkled over the whole surface, and are sometimes slightly blotched.

NESTS.— Those which I collected in the South were composed of strips of bark and straw, lined with fine grasses and hog's hair, placed in hollows of decayed stumps, among the roots of fallen trees; and one nest I found on the ground under some large roots at the base of a tree. It was entirely concealed, and I should have passed it by but for flushing the bird.

BREEDING HABITS.

An extremely rare summer visitor to Southern New England, Massachusetts being its northern limit. That it breeds here seems beyond doubt, as many specimens have been seen and taken, during the breeding season, in Massachusetts, Rhode Island, and Connecticut.

House Wren.

Troglodytes ædon.

PLATE II.

DESCRIPTION.

EGGS. — From six to nine in number, and measure from .58 to .66 in length by .48 to .52 of an inch in breadth. They are reddish white in ground color, evenly and minutely marked with innumerable dottings of light brownish red and purple, sometimes so thickly as to completely hide the ground color; and in others chiefly gathered about the crown, forming a confluent ring.

NESTS. — Placed in holes in trees, posts, boxes put up for their convenience, and in many odd nooks and quaint situations. I knew a pair that nested in a gallon jug, for a number of successive years, which had been fastened in a cherry-tree for their accommodation. The nest is usually composed of an abundance of sticks and twigs, nearly filling the cavity in which it is placed, lined with fine grasses, feathers, and other soft materials.

BREEDING HABITS.

These well-known happy and lively little birds arrive from the South about the end of April, and reside throughout New England, but are locally distributed. They soon begin to prepare for their descendants, usually selecting their abode near the habitations of man. Two sets of eggs are sometimes laid during a season.



Winter Wren.

Anorthura troglodytes.

PLATE II.

DESCRIPTION.

EGGS. — From five to eight in number, usually about six; are white, spotted with light brownish red and sometimes a few markings of lilac, and average about .68 by .50 of an inch.

NESTS. — Placed in hollow trees, stumps, logs, or under the roots of trees. Composed of moss, lined with fibrous roots, hair, and feathers.

BREEDING HABITS.

Mr. William L. Kells, of Listowel, Ontario, has given us a very interesting account of the breeding habits of this bird in the *Young Oölogist*, February, 1885.

in a part of which he says: "In the early part of June, 1878, I was out in a piece of low woods, about a mile south of this town, nest hunting. Seeing a large hemlock-tree partially turned up by the root, I thought that underneath it was a place likely to contain the nest of the Winter Wren, whose eggs I was now anxious to obtain for my collection. Gazing into this cavern, I saw a nest a few feet from the entrance, and a moment after a Wren popped on to the ground, and then flew out past me. This nest, like all the others, was composed of moss, in the form of a ball, and neatly lined with fine fibrous bark, hair, and Hawk feathers. It contained six eggs, which I found to have been several days incubated." They are summer residents to the most northern portion of New England and northward.



Long-billed Marsh Wren.

Telmatodytes palustris.

PLATE II.

DESCRIPTION.

EGGS. — From six to ten in number, and measure about .66 by .50 of an inch. The ground color is a chocolate brown of varying intensity, finely spotted over the entire surface with shades of a darker brown than the ground color, tending to increase in size and number about the larger end. Fig. 15, Plate II., represents an average specimen, or is perhaps a trifle darker.

NESTS. — Are bulky structures, securely fastened to the reeds and coarse grass, or sometimes a small bush. The general form is spherical, and they are composed of coarse grasses, small flags loosely woven together, and lined with fine, soft grass, and sometimes with down from various plants. The entrance is a small hole at the side.

BREEDING HABITS.

These Wrens make their appearance in the three southern New England States about the middle of May. Massachusetts is its northern breeding limit. They inhabit both the salt and fresh water marshes. But one brood is usually reared, which is early in June.

Short-billed Marsh Wren.

Cistothorus stellaris.

PLATE III.

DESCRIPTION.

EGGS.— From six to eight in number; are white, without spots, and average about .60 by .45 of an inch.

NESTS.— Composed of grass, fastened to living grass growing on a tussock, which is bent and woven into the structure.

BREEDING HABITS.

The breeding habits are not dissimilar to those of the preceding species, but the Short-billed Marsh Wren prefers the fresh to the salt water marshes, and, like the Long-billed, has a peculiarity of industriously building several nests, even after the eggs are laid in the one selected to rear its young, the male and female alternately taking part in building and incubating. But one brood is usually reared in a season.

—••—

Black and White Creeper.

Amniotilla varia.

PLATE III.

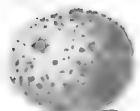
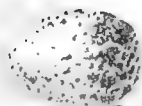
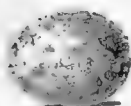
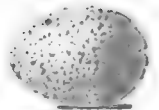
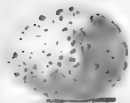
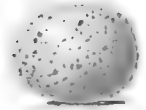
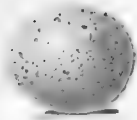
DESCRIPTION.

EGGS.— Commonly four or five in number; are white, of a creamy tinge, irregularly spotted with fine dots of reddish brown, sometimes confluent about the greater end, and measure about .65 by .55 of an inch.

NESTS.— Composed of mosses, straw, and dead leaves, lined with soft grass, hair, or fern down, and are usually placed on the ground at the foot of a tree or stump, and rarely in a hole in a tree.

BREEDING HABITS.

The Black and White Creeper is a common summer resident over all New England, though less abundant in the northern than the southern portion. It arrives about the last of April or first of May, and lays its eggs about the first of June. Two broods are often reared during a season.



Blue Yellow-backed Warbler.

Parula americana.

PLATE III.

DESCRIPTION.

EGGS. — Are four in number, and rarely five. They are white in ground color, finely spotted with light reddish brown, intermingled with lilac, chiefly about the crown; others quite heavily blotched, and often tending to form a ring about the crown. They are usually laid the first week in June, and measure about .62 by .48 of an inch.

NESTS. — Are purse-shaped, having a small hole for an entrance at the top or side. They are composed of hanging mosses and lichens, with a slight lining of pine grasses and a few hairs, occasionally without any lining whatever. They are usually placed near the end of a branch in a hemlock, cedar, oak, or old orchard tree, from ten to fifty feet from the ground.

BREEDING HABITS.

This active little bird is one of the handsomest of the family of Warblers. It arrives about the middle of May or earlier, and is a summer resident of all New England, but is more abundant in some portions than in others. The eggs are laid about the first of June, and a second set is almost invariably laid if robbed of the first.



Worm-eating Warbler.

Helminthophila vermivorus.

PLATE III.

DESCRIPTION.

EGGS. — Four in number, averaging about .68 by .52 of an inch; are white, finely spotted with light reddish brown and lilac, chiefly about the crown.

NESTS. — Placed on the ground, and composed of dead leaves, lined with grass and horsehair.

BREEDING HABITS.

A very rare summer resident in Southern New England, and, as far as I have been able to ascertain, but very few specimens have been seen or taken north of Connecticut.

Blue-winged Yellow Warbler.

Helminthophaga pinus.

PLATE III.

DESCRIPTION.

EGGS. — Usually four in number, sometimes five; are white, generally sparsely spotted with light red, light and dark brown, and lilac, mostly about the greater end, and average about .60 by .50 of an inch.

NESTS. — Placed in some retired locality, on the ground. They are composed of dead leaves, lined with grape-vine bark, and sometimes a few horsehairs are added.

BREEDING HABITS.

This species is distributed with us about the same as the preceding species, breeding in the southern portion of New England only. It arrives about the middle of May. But one brood is reared in a season.



Golden-winged Warbler.

Helminthophaga chrysoptera.

PLATE III.

DESCRIPTION.

EGGS. — Four in number, white, thinly spotted with light red and reddish brown, usually tending to form a wreath about the crown, and average about .66 by .54 of an inch.

NESTS. — Placed on the ground, and usually composed of leaves, lined with grape-vine bark, soft grasses, or horsehair, but exhibit some variation in the materials used.

BREEDING HABITS.

This bird is a summer resident in Southern New England, is rare, but not as much so as the two preceding species. It makes its appearance in Massachusetts about the 10th of May, and selects for its summer home a place in some swampy land or its immediate vicinity.

Nashville Warbler.

Helminthophaga ruficapilla.

PLATE III.

DESCRIPTION.

EGGS. — Four in number, sometimes five; are white, and irregularly and minutely spotted over the entire surface with light red and obscure lilac. Some are coarsely spotted or blotched, particularly about the larger end. Dimensions are about .55 by .60 of an inch.

NESTS. — Placed on the ground in some dry woodland or shrubbery, and vary somewhat in composition, but usually consist of dead leaves and grape-vine bark, lined with shreds of the inner bark of various trees or plants, or pine-needles, and sometimes horsehair.

BREEDING HABITS.

A common summer resident throughout New England. It makes its appearance early in May, and generally has its nest completed and eggs laid by the first of June.



Summer Warbler.

Deudreca aestiva.

PLATE III.

DESCRIPTION.

EGGS. — Four in number, often five; average about .67 by .50 of an inch; are bluish, grayish, or greenish white in ground color, spotted and blotched with lilac, yellowish and dark brown, usually tending to form a ring about the larger end.

NESTS. — The individual taste of this Warbler as to the matter used in the composition of its nest varies considerably, depending greatly upon the material in the immediate vicinity, but is usually composed of fine silky fibres from various plants, attached to the fork of a limb or branch in which it is built, and lined inside with plant and fern down and hair, or fine, soft grasses. Sometimes they are composed almost entirely of down, slightly interwoven with fine grass. I have often found nests near cotton or woollen mills composed entirely of yarn and cotton or wool waste from the mills. It is always a handsome and durable piece of architecture.

BREEDING HABITS.

The Summer Warbler is an abundant summer resident throughout New England. It makes its appearance about the first of May, and builds its nest in the latter part of May or early in June, in bushes and trees, in pastures, swamps, and cultivated grounds. I have also found that the borders of ponds and streams are favorite breeding grounds with this species. Two broods are sometimes reared in a season.

Black-throated Green Warbler.

Dendroica virens.

PLATE III.

DESCRIPTION.

EGGS. — Usually four in number, sometimes three; are creamy white, spotted with obscure lilac, light red, and yellowish and dark brown all over, and usually confluent blotched about the larger end. The average dimensions are about .67 by .55 of an inch.

NESTS. — Placed on the fork of a horizontal limb from ten to sixty feet from the ground, and are generally composed of strips of cedar bark, twigs of the pine or hemlock, and bits of dead leaves interwoven with grass and pine-needles, with pieces of cobwebs attached to the outside, and lined inside with soft grass and horsehair.

BREEDING HABITS.

This handsome bird, scarcely less abundant than the preceding species, is a common summer resident throughout New England. It reaches us about the first of May, preferring the pine-trees, in which it usually breeds.

Black-throated Blue Warbler.

Dendroica cerulea.

PLATE IV.

DESCRIPTION.

EGGS. — Four or five in number; grayish white in ground color, dotted with obscure lilac and several shades of brown, mostly about the larger end, and measure about .68 by .48 of an inch.

NESTS. — Rev. C. M. Jones (Bull. Nutt. Club, 1876), who found this bird breeding at Eastford, Conn., observes: "The nest was located in deep woods near the

PLATE

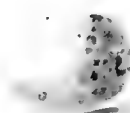
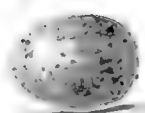
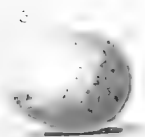
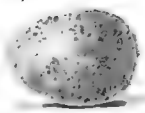
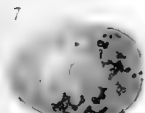
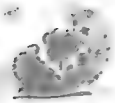
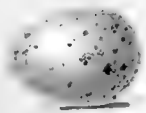


Fig. 1. *E. ...* Blue-Ward ... Fig. 6. *E. ...*
2. *E. ...*
3. *E. ...*
4. *E. ...*
5. *E. ...*
6. *E. ...*
7. *E. ...*
8. *E. ...*
9. *E. ...*
10. *E. ...*
11. *E. ...*
12. *E. ...*
13. *E. ...*
14. *E. ...*
15. *E. ...*

base of a hill which sloped down to a swampy run. It was built in a small laurel (*Kalmia latifolia*), a fourth of an inch in diameter at the base. About five inches from the ground the bush separated into three branches, and in this triple fork the nest was situated. It has a firm and compact appearance. It was composed outwardly of what appears to be a dry bark of grape-vine with a few twigs and roots. This is covered in many places with a reddish woolly substance, apparently the outer covering of some species of cocoon. The inside is composed of small black roots and hairs." The same writer has found several nests of this species, and observes, in the *Ornithologist and Oölogist*, March, 1884, "that they were all similarly situated, and that the birds show a partiality for wet ground."

BREEDING HABITS.

The Black-throated Blue Warbler arrives about the middle of May or a little later, the majority passing on to a more northern climate for nidification, a few, however, remaining with us throughout the summer.



Yellow-rumped Warbler.

Dendroica coronata.

PLATE IV.

DESCRIPTION.

EGGS. — Normally four in number, sometimes five, and rarely six. They measure from .64 to .80 in length, by .50 to .55 of an inch in breadth, and vary in shape, color, and markings. (See Plate IV., Figs. 2, 3, and 4.)

NESTS. — Usually placed in a small spruce-tree or bush about three or four feet from the ground, and are usually constructed of strips of inner bark and twigs of the hemlock or spruce, lined with fine grass and plant-down or feathers.

BREEDING HABITS.

Many of the Yellow-rumps remain in extreme Southern New England throughout the winter, but the majority migrate. They arrive from the South in great numbers from about the 20th of April to the middle of May, and pass on to the north of New England. A large number, however, remain in Maine, New Hampshire, and Vermont during the period of incubation. "Such is the usual and normal manner of the Yellow-rump's presence in New England. There is some-

thing curiously erratic, however, in its breeding instincts and capacities; for it is known to rear its young, in some instances, in localities far south of New England, even in the West Indies. A notice has lately appeared of its nesting in Maryland. (Bull. Nutt. Club, V., July, 1880, p. 182.) It is supposed by Mr. Allen, with good reason, to breed occasionally in Berkshire County, Mass.; and no one need be surprised to hear of a nest found in any portion whatever of New England." (N. E. B. L., 1883, Vol. I.)



Blackburnian Warbler.

Dendroica blackburnia.

PLATE IV.

DESCRIPTION.

EGGS. — Four in number, varying in shape, being oval, elliptical, or pyriform, and measure from .64 to .72 in length by .48 to .53 of an inch in breadth. They are of a delicate bluish green in ground color, spotted over the whole egg with lilac and various shades of brown, and usually blotched about the larger end or half, forming a confluent ring.

NESTS. — They build their nests high up in the tall coniferous trees. They are outwardly composed of hemlock twigs, pine-needles, and small rootlets, to which are attached bits of cobwebs and silky fibres of plants, and inwardly with fine grasses and horsehair.

BREEDING HABITS.

This Warbler, the most beautiful of its family, arrives about the first week in May, and is rare as a summer resident, excepting in Northern New England.



Black-poll Warbler.

Dendroica striata.

PLATE IV.

DESCRIPTION.

EGGS. — Commonly four or five in number, dull white, blotched with thin reddish brown, and spotted with reddish brown or dark brown, or both, and lavender, irregularly over the entire surface, and average about .70 by .50 of an inch.

NESTS. — Usually placed in an evergreen tree, are deeply hollowed, rather

loosely constructed, and rather bulky for so small a bird. A nest before me is composed of spruce twigs, moss, dead grass, feathers, and fine rootlets, with a small quantity of plant-down attached to the outside. The inside consists of fine grass, lined with soft feathers of gulls and ducks.

BREEDING HABITS.

The Black-polls make their appearance in New England the latter part of May, and deliberately pass to the northward, few remaining in Northern Maine, New Hampshire, and Vermont to rear their young.



Bay-breasted Warbler.

Dendroica castanea.

PLATE IV.

DESCRIPTION.

EGGS.—The first nest, which is described below, contained three eggs, as follows: No. 1 is bluish green, thickly spotted with brown over the entire surface, with a ring of nearly confluent blotches of brown and lilac at the larger end. The dimensions are .71 by .53 of an inch. No. 2 resembles No. 1, with the exception that there are some amber spots in the ring around the larger end, and the smaller end is immaculate. Dimensions, .65 by .50 of an inch. No. 3 is less spotted than the others, and has a few brown lines on the larger end. Dimensions, .70 by .50 of an inch. No. 1 is the most perfect in form, No. 2 more round, while No. 3 is long for the width.

NESTS.—Are large for so small a bird, and resemble those of the Purple Finch. The first one is composed outwardly of fine dead twigs from the larch, among which are scattered a little of the long tree moss. It is very smoothly and neatly lined with black fibrous roots, the seed-stalks of a species of ground moss, a few hairs of *Lepus americana*, and a single piece of green moss that grows in damp woods. The dimensions are: diameter, externally, six inches; internally, three inches: depth, externally, two and one half inches; internally, one and one fourth inches.

The second nest also resembles the first, but contains a few stalks of grass near the centre. It is lined with the same materials as the other, excepting the green moss.

BREEDING HABITS.

Mr. C. J. Maynard, in his catalogue of the birds of Coos County, N. H., and Oxford County, Me., gives the most complete and interesting description yet published. He says: "Two nests of this species were taken at Umbagog on June 8. The tree selected by the birds belonging to the first nest discovered as a summer home stood by the side of a cart-path in the woods. My attention was attracted to it while walking along, by seeing the female fly into the tree and alight on the nest, which was then (June 3) but just completed. It was on the horizontal branch of a hemlock, twenty feet from the ground, and five or six feet from the trunk of the tree. On June 8 the nest was taken, and then contained three fresh eggs. The second nest was found by Mr. Brewster, who, having shot a female that exhibited signs of nesting, searched for the nest, and discovered it in a hemlock-tree, on the side of a thickly wooded hill. This nest contained only two fresh eggs. It was likewise placed on a horizontal branch, about fifteen feet from the ground." This species breeds in Northern New England and northward:



Chestnut-sided Warbler.

Dendroica pensylvanica.

PLATE IV.

DESCRIPTION.

EGGS.— Usually four in number, often five; measure about .68 by .50 of an inch; are white or creamy white in ground color, spotted with lilac, dark and reddish brown, generally tending to form a ring about the crown. Some are very sparingly spotted, having only a few dots at the crown; while others are profusely and quite evenly spotted over the entire surface.

NESTS.— Placed in the fork of a low bush or shrub, in rather low land, showing a preference to hazel-bushes. They are constructed of coarse dried grass and strips of bark woven together, to which a few cobwebs are attached. They are lined with horsehair or pine-needles, back-lined with fine dry grass.

BREEDING HABITS.

The Chestnut-sided Warbler arrives from the South from the first to the middle of May. It is a common summer resident throughout New England, but is more plentiful in the southern than the northern portion. After its arrival it soon begins to build its nest, and usually has its complement of eggs laid by the 1st of June.

Black and Yellow Warbler; Magnolia Warbler.

Dendroica maculosa.

PLATE IV.

DESCRIPTION.

EGGS.—Are four and often five in number. They are white, thickly and minutely spotted with lilac (so much so as to give the ground color an ash-colored appearance), light purplish brown, and reddish brown, often blotched. They measure about .62 by .50 of an inch.

NESTS.—Placed in a spruce or hemlock, from two to eight feet from the ground. Of nine nests I have examined, all are similar in construction. They are composed of fine dry grass, weed-stalks, twigs, and fine rootlets, with a small amount of plant-down here and there attached to the outside, thinly lined with horsehair and black fibres of some variety of moss. They are lightly though strongly made, and the bottoms of all were so slightly built as to present a sieve-like appearance.

BREEDING HABITS.

This richly attired Warbler makes its appearance about the middle of May, or a little earlier, in the three southern States of New England, and continues on its journey to Maine, New Hampshire, and Vermont, where, in certain portions, it is a common summer resident.



Cape May Warbler.

Dendroica tigrini.

PLATE IV.

DESCRIPTION.

EGGS.—Usually four in number, sometimes five. They are dull white, minutely spotted all over with faint purplish brown and lilac, giving the general tone of the egg a bluish cast; at the greater end, with larger spots of dark and reddish brown, blotches of pink and purplish, usually forming a wreath about the crown. Sometimes the smaller end is without spots. They average about .66 to .70 in length by .49 to .54 of an inch in breadth.

NESTS.—An excellent account of the nesting of this bird is given in the *Auk*, January, 1885, by Mr. Montague Chamberlain. The nest was found in Edmunston, N. B., on the 10th of June, in a low cedar, less than three feet from the ground. "It was fastened to two of the tiny branchlets,—pendent from one and resting upon

the other, — and secured to each by strawberry-vines and spider silk. The walls of the nest are composed of minute twigs of dried spruce, grasses, and strawberry-vines, with spiders' webbing interwoven with the coarser fabrics, and knotted into numerous little balls, which are bound upon the surface as if for ornament. The exterior is rather roughly made, but is more compact, and bears evidence of more art than is shown in the nest of the Magnolia Warbler, which it somewhat resembles. The interior, however, is much more neatly and artistically formed in the Cape May's than in its congener's. The lining is composed entirely of horse-hair, and this is laid with precision, and shaped into a prettily formed cup, the brim being turned with exquisite grace."

BREEDING HABITS.

The arrival of the Cape May Warbler is of about the same time as that of the Black and Yellow, and does not differ very essentially from it in distribution and breeding habits, but is much rarer.



Prairie Warbler.

Dendroica discolor.

PLATE V.

DESCRIPTION.

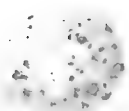
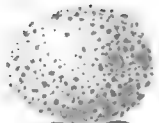
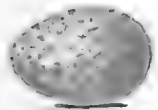
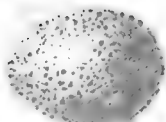
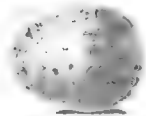
EGGS. — Varying in number from three to five, usually four; are pearly white, spotted with lilac and different shades of brown, the spots being larger and more thickly distributed about the crown. They measure about .66 by .50 of an inch.

NESTS. — Composed of strips of inner bark, bits of decayed wood, plant fibres, and cottony substances beautifully woven together, and lined with soft feathers, horsehair, or fine plant fibres.

BREEDING HABITS.

It arrives about the middle of May, and is locally abundant in Southern New England, Massachusetts being its northern limit. Their haunts are the by-gone fields and pastures grown up with bushes and shrubs. In the choice of a nesting location, they show a decided preference to the hard-wood tracts, where fire has consumed or killed the large wood, or where it has been cut off and a new growth has sprung up. In this favorite spot they build a handsome nest in the fork of a bush, from one to six feet from the ground.

1277



Pine-creeping Warbler.

Dendroica pinus.

PLATE V.

DESCRIPTION.

EGGS.— Usually four in number; are white, with a rosy tinge before blown, and spotted all over with different shades of brown and obscure purple, but chiefly at the larger end, usually forming a confluent wreath. They measure about .65 by .52 of an inch.

NESTS.— Almost invariably placed on the fork of a limb in a pine or cedar, from ten to fifty feet from the ground. They consist of pine-needles, pine twigs, and fine strips of bark, with a lining of pine-needles or horsehair. They resemble the nest of the Black-throated Green, but are not quite so neat or firm in appearance.

BREEDING HABITS.

This species is a common summer resident throughout Southern and Middle New England, making its appearance early in April, frequenting the groves of pine, where during the brighter days of early spring its peculiar and often-repeated song is heard. The eggs are laid in the latter part of May or the first week in June.



Golden-crowned Thrush; Oven Bird.

Sciurus aurocapillus.

PLATE V.

DESCRIPTION.

EGGS.— Commonly four or five, and rarely six in number; are white, minutely spotted with purplish, yellow ochre, reddish and dark brown over the entire surface. Others are sparingly spotted at the crown or all over, and sometimes blotched with light reddish. They measure from .80 to .90 in length, by .58 to .80 of an inch in breadth.

NESTS.— Generally well concealed among the leaves or bushes on the ground, and are roofed over (but not always), having an entrance at the side. They are composed of dead leaves, weed-stalks, and grasses, lined with finer materials of the same.

BREEDING HABITS.

An abundant summer resident throughout New England, arriving about the first of May, and inhabiting alike the high and low land.

Small-billed Water Thrush.

Sciiurus noveboracensis.

PLATE V.

DESCRIPTION.

EGGS. — Usually four, though sets of five and six are not uncommon. They are pure white in color, with purplish shell markings, minutely spotted or blotched with dull yellowish brown or yellow ochre, and various shades of brown, throughout the entire surface, and usually most numerous about the crown. They measure from .73 to .85 in length, by .52 to .62 of an inch in breadth.

NESTS. — Placed on or near the ground, composed of a mixture of moss, grass, leaves, and weed-stalks, lined with fibrous roots.

BREEDING HABITS.

The Water Thrush is a summer resident in Northern New England. It arrives about the first of May, haunting the low and swampy lands, or neighborhood of ponds, streams, and shady pools, where it builds its nest. The eggs are laid the first week in June.



Large-billed Water Thrush.

Sciiurus ludovicianus

PLATE V.

DESCRIPTION.

EGGS. — Closely resemble those of the preceding species, but are generally more spherical in form, and average a little larger.

NEST AND BREEDING HABITS.

The nest and breeding habits are also much the same, but are rarely seen in New England north of Rhode Island or Connecticut, where they are a fairly common summer resident.



Maryland Yellow-throat.

Geothlypis trichas.

PLATE V.

DESCRIPTION.

EGGS. — The usual number of eggs is four; five are common, and six are extremely rare. They are subject to considerable variation in size, distribution and color of markings, and measure from .85 to .68 in length, by .67 to .52 of an inch in

breadth. They vary from white to creamy white in ground color, spotted with lilac, yellow, and reddish or dark brown all over, but more thickly at the greater end. Sometimes with obscure lilac, and a few black, purplish, or dark brown spots about the crown. A set of two in my collection are dull white; one is immaculate, the other with three minute dark brown spots about the larger end.

NESTS.—Are usually placed on the ground in a tussock or at the base of a bush or tuft of grass, but I have twice found them about twelve inches from the ground, placed in an upright fork in a thicket of witch-hazels. They are generally loosely constructed of grass, a few dead leaves, strips of bark, and pieces of fern, lined with fine grass or hair. I have found many nests sunk in tussocks composed of a very little grass and without any lining whatever. They are sometimes, though rarely, roofed.

BREEDING HABITS.

A common summer resident throughout New England, arriving from the South about the middle of May, frequenting the swampy lands and meadows, where it almost invariably builds. Two broods are reared in a season, and I often found sets of eggs in September; and whether or no a third brood is sometimes contemplated, I am unable to say.



Mourning Warbler.

Geothlypis philadelphia.

PLATE V.

DESCRIPTION.

EGGS.—Commonly four or five in number, are white, spotted all over with lilac and light red, the lilac predominating, or lilac and thinly blotched with reddish brown, chiefly about the crown. They average about .73 by .55 of an inch.

NESTS.—Placed on the ground. They do not essentially differ in breeding habits from its congener, the Yellow-throat.

BREEDING HABITS.

The Mourning Warbler is a rare migrant in Southern New England, excepting the western part of Massachusetts, where, I am informed, it is rather common in certain localities, and breeds. It is also common in certain sections of Maine, New Hampshire, and Vermont. It makes its appearance in the latter part of May.

Yellow-breasted Chat.

Icteria virens.

PLATE V.

DESCRIPTION.

EGGS.—Normally four in number, often three, and very rarely five. They are glossy white in ground color, coarsely or minutely spotted over the entire surface with lilac and different shades of reddish brown; sometimes blotched and spotted all over; others with large spots and blotches becoming confluent at the greater end, and often forming a band around the same.

NESTS.—Usually a loose construction of dried leaves, grasses, and the like, lined with fine grass, with an intermediate lining of grape-vine bark.

BREEDING HABITS.

A rare summer resident of Southern New England, excepting some parts of Connecticut; and there is but one instance, as far as I have been able to ascertain, of its nesting north of Massachusetts. In a letter from Mr. J. N. Clark, of Saybrook, Conn., he says that it is quite common in his neighborhood, haunting the old hill pastures with bramble thickets, among which it usually builds its nest from two to five feet from the ground, and lays its eggs about the first of June. This species also occurs sparingly in the vicinity of Lynn, Mass., and breeds there.



Hooded Warbler.

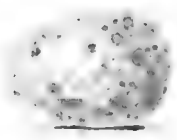
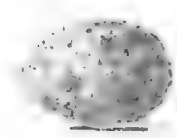
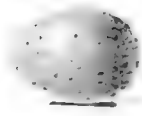
Myiodytes mitratus.

PLATE VI.

DESCRIPTION.

EGGS.—Usually four, sometimes three, and average about .70 by .55 of an inch. They are white, with a slight yellowish tinge, spotted mostly about the crown, tending to form a wreath, with lilac and reddish brown.

NESTS.—A nest before me, collected in Connecticut, was built in a small laurel about two feet from the ground, and is very artistic in appearance. It is outwardly composed of large, coarse blades of grass looped and interwoven with bits of dead leaves; inwardly of grass and bark fibres lined with fine grasses. The outside rim is securely fastened to the twigs, forming the fork, with spiders' webbing and caterpillars' silk.



BREEDING HABITS.

The Hooded Warbler is a very rare summer resident in Southern New England, Massachusetts being its northern limit. It breeds in Connecticut in some numbers, arriving about the middle of May. It generally selects a semi-swampy situation in dense woods and thickets, and places its nest in an upright fork of a low bush, usually the laurel.



Black-capped Yellow Warbler; Wilson's Black-cap.

Myiodiodes pusillus.

PLATE VI.

DESCRIPTION.

EGGS.—Four in number, dull white, marked with reddish and brown dots, chiefly about the crown, where they sometimes form a wreath. They measure about .65 by .50 of an inch.

NESTS.—Audubon found this bird breeding in Labrador. The nest was placed on the extremity of a horizontal branch among the thick foliage of a dwarf fir, a few feet from the ground, and in the very cluster of a thicket. It was made of bits of dry mosses and delicate pine twigs agglutinated together and to the branches and leaves around it, from which it was suspended. It was lined with fine vegetable fibres.

BREEDING HABITS.

The Black-caps are quite common some years during the migrations in New England, haunting the vicinity of streams and swampy land. They breed from Northern New England northward. But one brood is reared in a season.



Canada Flycatching Warbler.

Myiodiodes canadensis.

PLATE VI.

DESCRIPTION.

EGGS.—Are commonly four or five, and measure from .60 to .70 in length by .48 to .55 of an inch in breadth. They are white, thickly or sparsely spotted with lilac and different shades of brown, the lilac usually prevailing, and are generally rather pointed at the smaller end.

NESTS.—Placed in swampy ground about the first of June. Mr. G. O. Welsh, of Lynn, Mass., has twice found this bird breeding. The nests were each built in a tussock of grass in low swampy situations, similarly constructed and well concealed. They were composed mostly of pine-needles, a few fragments of dead leaves, fine strips of bark, grasses, rootlets, etc.

BREEDING HABITS.

The Canada Flycatcher is a very rare summer resident in Southern New England, but quite common in the northern portion. It arrives from the South in the latter part of May, being one of the last arrivals of our migratory birds. It inhabits both the high and low land, but prefer that which is swampy.



Redstart.

Setophaga ruticilla.

PLATE VI.

DESCRIPTION.

EGGS.—Usually four and often five, and measure about .65 by .50 of an inch. They are creamy white, spotted over the entire surface with lilac, yellowish, and pale brown, particularly about the greater end.

NESTS.—Generally placed in a fork or crotch of a sapling, from three to twenty feet from the ground, in swampy woodland, or in the vicinity of ponds and streams. They usually consist of dead grasses and strips of bark circularly interwoven with pieces of weed-stalks, downy feathers, string, cotton, bits of paper, and dead leaves, caterpillar silk, spider webs, and the like, lined with fine grasses or horsehair.

BREEDING HABITS.

A common summer resident throughout New England, the majority arriving about the second week in May. It soon commences to build its nest, which is completed and eggs laid by the first week in June.

Scarlet Tanager.

Pyrranga rubra.

PLATE VI.

DESCRIPTION.

EGGS.—Commonly four or five, are of a light dull greenish blue in ground color, finely and thickly marked with lilac, amber, and purplish brown spots, tending to gather about the greater end. Some are sparingly and coarsely marked with reddish brown and lilac. They measure from .85 to 1 in length by .65 to .70 of an inch in breadth.

NESTS.—Usually placed on a horizontal limb from ten to twenty feet from the ground. They consist of interlaced sticks, twigs, and rootlets lined with finer rootlets or pine-needles; are slightly hollowed and frailly built.

BREEDING HABITS.

An abundant summer resident in the southern portion of New England and rare in the northern. It arrives from the South in the first and second weeks of May, and begins building the last of the month. A favorite place chosen for its summer home is in the hard-wood tracts and groves, though it sometimes selects a pine, hemlock, or orchard tree.



Barn Swallow.

Hirundo horreorum.

PLATE VI.

DESCRIPTION.

EGGS.—From four to six, usually four; are pure white and translucent, imparting a rosy tint before the contents are removed, and vary in shape and size. Some are thickly spotted with lilac, reddish and dark brown, chiefly about the crown; others with dark purple and purplish brown; and others with these two varieties combined, finely marked or spotted and blotched over the entire surface. The dimensions vary from .70 to .90 in length by .50 to .60 of an inch in breadth.

NESTS.—Constructed of pellets of mud plastered to the beams or rafters, built out and cemented together into a semi-cup-shaped form, inside of which is placed hay or straw and lined with soft feathers.

BREEDING HABITS.

The presence of this bird is looked for about the middle of April throughout New England. About the middle of May a nest is built, or an old one repaired, the same pair returning to their old nest many seasons. Two and sometimes three broods are reared in a season.



White-bellied Swallow.

Tachycineta bicolor.

PLATE VI.

DESCRIPTION.

EGGS.—Commonly four or five in number, and sometimes six. They are pure white, and, like all Swallows' eggs, have a rosy hue when unblown, and average .75 by .55 of an inch.

NESTS.—Composed of grass, straw, etc., profusely lined with feathers.

BREEDING HABITS.

Very common and quite evenly distributed throughout New England as a summer resident. It arrives from the South the first week in April, sometimes a little later, and builds its nest about the middle of May. It is usually placed in boxes and the like, put up for its accommodation. In sparsely settled districts it nests in hollows of trees. Two broods are usually reared in a season.



Cliff Swallow; Eave Swallow.

Petrochelidon lunifrons.

PLATE VI.

DESCRIPTION.

EGGS.—Resemble those of the Barn Swallow, but those of the Cliff Swallow average a little larger, and are usually more coarsely spotted.

NESTS.—Gourd-shaped, with a hole for an entrance at the extremity of the neck. Some nests, however, are without the neck. Inside is placed hay or straw lined with soft hen feathers. They are usually placed along in a row, and often joined together one above the other in clusters, sometimes as many as seventy or eighty to a colony.

BREEDING HABITS.

The Cliff Swallow is an abundant summer resident in New England, though locally distributed, arriving the last of April, and nesting in colonies. The most remarkable feature of this bird is the wonderful ingenuity displayed in the construction of its nest. It is composed of little pellets of mud plastered to the outside, and placed beneath the projections of stone bridges, eaves of barns, sheds, etc.



Bank Swallow.

Cotyle riparia.

PLATE VI.

DESCRIPTION.

EGGS. — From four to six in number, usually six; are pure white, and measure about .68 by .50 of an inch.

NESTS. — An excavation of two or three feet is burrowed in the loam or sand, nearly horizontally, two or three feet from the top of a sand or gravel bank in the neighborhood of the sea, rivers, or other sheets of water. The burrow is widened towards the extremity, and a nest loosely constructed of dry grass is lined with a few soft feathers.

BREEDING HABITS.

Like the preceding species, it nests in colonies, is distributed about the same, and makes its appearance about the same time. Two broods are reared in a season.



Rough-winged Swallow.

Stelgidopteryx serripennis.

PLATE VI.

DESCRIPTION.

EGGS. — Vary from four to six in number, pure white in color, and measure about .55 by .75 of an inch.

NESTS. — Placed in holes in eaves of buildings, bridge piers, and unused holes of Bank Swallows, Kingfishers, or natural cavities on the borders of rivers, etc., composed of grasses lined with feathers.

BREEDING HABITS.

This species is exceedingly rare in New England, being confined, as far as known, to Connecticut. They arrive from the South the latest of all our Swallows, not excepting the Bank Swallow. "They are exceedingly abundant in Pennsylvania, and I found them nesting in abundance on the Susquehanna River. Here they usually built their nests in holes of Kingfishers or those of the Bank Swallow which had been used the previous season, never, I believe, excavating for themselves." (Maynard.)



Purple Martin.

Progne purpurata.

PLATE VII.

DESCRIPTION.

EGGS.—From four to six in number, usually five or six, are pure white, and average about .95 by .70 of an inch.

NESTS.—Consist of hay, straw, and leaves, lined with feathers.

BREEDING HABITS.

The Purple Martins are common in Southern and Middle New England, but are locally distributed, many pairs breeding in some sections, and in others are entirely wanting. They depend entirely on the hospitality of man, breeding in bird-houses erected for their accommodation. The eggs are laid about the 20th of May, and two sets are commonly laid in a season.



Cedar Bird; Cherry Bird.

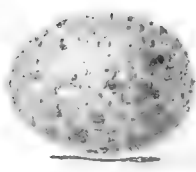
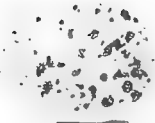
Ampelis cedrorum.

PLATE VII.

DESCRIPTION.

EGGS.—Commonly four or five in number, of a dull, pale bluish tint, some having a greenish tinge with well-defined spots of black, and obscure undermarkings of slate or dark purplish, tending to aggregate about the larger end. The average dimensions are about .80 by .60 of an inch.

NESTS.—Generally placed in apple and cedar trees, about ten or fifteen feet from the ground. They are rather large and bulky, are composed of weed-stalks, rootlets, strips of bark, grass, leaves, twine, bits of paper, etc., lined with root fibres, grass, or horsehair. They are built in the last of June or the first of July.



BREEDING HABITS.

Common throughout New England as a summer resident, and many remain in the southern portion during the winter, but the majority arrive from the South about the middle of March. Two broods are sometimes reared during a season.



Red-eyed Vireo.

Vireo olivaceus.

PLATE VII.

DESCRIPTION.

EGGS. — Number from three to five, usually four; are white, sparsely spotted about the greater end with dark brown or reddish brown, or both, intermingled with lilac, and, like all Vireos' eggs, have a roseate tint when unblown. They measure about .85 by .60 of an inch.

NESTS. — Pensile, suspended from the fork of a horizontal limb of some forest or orchard tree, or along the highways, in a maple, elm, poplar, or other shade tree, from five to twenty feet from the ground. They are constructed of strips of inner bark, pieces of wasps' nests or newspaper, and caterpillars' silk, woven together, and lined with fine strips of bark, pine-needles, or fine grass. To the outside are attached bits of decayed wood, newspaper, and caterpillars' silk.

BREEDING HABITS.

The Red-eyed Vireo is abundantly distributed throughout New England, inhabiting both the forest and neighborhood of man. It arrives early in May, and begins building the last of the month or the first week in June. Sometimes a second brood is reared.



Warbling Vireo.

Vireo gilvus.

PLATE VII.

DESCRIPTION.

EGGS. — Four or five in number, usually four, and are scarcely distinguishable from those of the Red-eye, excepting that they average a little smaller, the dimensions running from .77 to .85 in length, by .53 to .60 of an inch in breadth.

NESTS. — Are built about the first week in June, and various materials are employed in their composition. They are pensive, suspended from a fork of a small branch, usually from twenty to forty feet from the ground, and are composed of plant and bark fibres, firmly interwoven with yarn, string, cotton, wool, pieces of rags, downy feathers, and bits of paper, the whole being bound over on the outside with caterpillars' silk. Inside they are furnished with fine soft grass, and lined with horsehair. These are the firmest, strongest, and most durable bird structures of which I know.

BREEDING HABITS.

It is an abundant summer resident throughout New England, but not as much so as the Red-eye. It makes its appearance about the middle of May, haunting the tops of the shade trees, where it builds its nest, but the poplar and maple are its favorite trees. Two sets of eggs are sometimes laid in a season.



Yellow-throated Vireo.

Vireo flavifrons.

PLATE VII.

DESCRIPTION.

EGGS. — The usual complement of eggs is four. They are pure white, with dark or reddish brown and purplish spots irregularly distributed around the larger half, and measure about .82 by .60 of an inch.

NESTS. — In situation and material used the nests are similar to those of the Red-eye, but are more bulky and loosely constructed, and are profusely ornamented with lichens, recalling to mind the nest of the Humming-bird or Blue-gray Gnat-catcher.

BREEDING HABITS.

The Yellow-throated Vireo is quite a common summer resident of New England. It arrives about the first or second week in May, and constructs a beautiful nest, which is completed about the first week in June.

Blue-headed Vireo; Solitary Vireo.

Vireo solitarius.

PLATE VII.

DESCRIPTION.

EGGS.—Four is the usual number of eggs laid. They are white, finely and sparsely spotted with reddish and dark brown, and measure from .81 to .75 in length, by .62 to .50 of an inch in breadth.

NESTS.—Are pensive and suspended from a fork of a branch, usually about four or five feet from the ground. Two nests are all that I have ever found, and they are both loosely constructed of fine strips of bark, lined with fine grass and a few pine-needles. Attached to the outside are caterpillars' silk, plant-down, and a few lichens.

BREEDING HABITS.

The Solitary Vireo is a rare summer resident throughout New England, making its appearance about the first of May. Its haunts are the low lands and deep woods, where it builds its nest about the first of June. But one set of eggs is laid in a season.



White-eyed Vireo.

Vireo noveboracensis.

PLATE VII.

DESCRIPTION.

EGGS.—The usual number of eggs is four. They are pure white in ground color, minutely spotted with brown and faint lilac about the greater end. They average about .76 by .55 of an inch.

NESTS.—Do not materially differ from those of the Red-eye; they are attached to a horizontal fork of a bush or tree, three or four feet from the ground, in shrubbery of dry or swampy land, and not infrequently in a witch-hazel, young oak, or maple.

BREEDING HABITS.

This species is a common summer resident in the three southern New England States, and quite rare in the three northern. It arrives from the South about the second week in May, and begins building the last of this month or first of June. But one set is laid, unless the first has been robbed or met with some accident.

Loggerhead Shrike.

Collurio lubzicianus.

PLATE VII.

DESCRIPTION.

EGGS.— From four to six in number; are grayish white, spotted with yellow ochre, various shades of dull brown and obscure lilac, more or less confluent at the greater end, others being thickly blotched and spotted over the entire surface, and often nearly concealing the ground color. They measure about 1 by .75 of an inch.

NESTS.— Placed in trees or bushes, composed of sticks, weed-stalks, and similar material, lined with hair, wool, cotton, feathers, or any other soft substances. They are quite bulky structures in comparison to the size of the bird.

BREEDING HABITS.

There is something curious about the breeding range of the Loggerhead, as it is chiefly a Southern bird. Skipping a vast amount of territory, it is found breeding in certain sections of Maine, New Hampshire, and Vermont. I know of no instance of its breeding in any of the other New England States.



Pine Grosbeak.

Pinicolor enucleator.

PLATE VII.

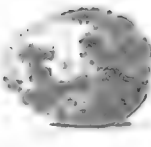
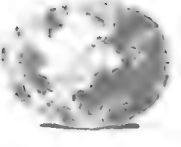
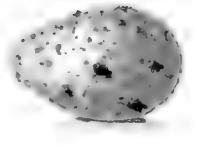
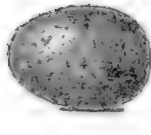
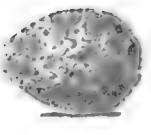
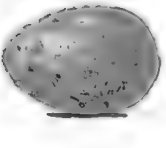
DESCRIPTION.

EGGS.— Usually four in number, are pale greenish blue in ground color, with reddish brown and lilac spots tending to aggregate about the larger end, and measure about 1 by .75 of an inch.

NESTS.— Mr. Boardman informs me that he found, near Calais, Me., a nest which he supposed to be of this species, composed chiefly of twigs and placed in an alder-bush in a wet meadow, containing two eggs.

BREEDING HABITS.

The Pine Grosbeak probably breeds in all three of the northern States of New England, as it has been observed there many times during the period of incubation, but its normal habitat is farther north. No positive identification of the nest and eggs has as yet been discovered in New England.



Purple Finch; Linnet.

Carpodacus purpureus.

PLATE VII.

DESCRIPTION.

EGGS.— Number from four to six, usually four. They are pale, dull greenish blue in ground color, with spots, blotches, or scrawls of black and ashy lilac, chiefly about the crown. They vary in dimensions from .72 to .80 in length by .53 to .62 of an inch in breadth.

NESTS.— Are sometimes placed in an orchard tree, but usually in a bush or small evergreen in old pastures. They are outwardly composed of interlaced weed-stalks and small twigs, and inwardly of fine rootlets lined with fine grass, bark fibres, or hair.

BREEDING HABITS.

The Purple Finch is an abundant summer resident of New England, especially in the southern portion, where a few pass the winter, but the majority arrive from the South about the first of April. They begin to construct a nest about the last of May. Two sets of eggs are often laid in a season.



Common Crossbill; Red Crossbill.

Loxia curvirostra.

PLATE VIII.

DESCRIPTION.

EGGS.— Four or five in number, of a pale greenish white with a slight bluish tinge in ground color, sparingly spotted with lilac and a few scrawls or spots of dark brown, sometimes slightly blotched, and measure about .75 by .56 of an inch.

NESTS.— Placed in evergreen trees. They are composed of fine strips of bark and moss placed on a platform of twigs.

BREEDING HABITS.

This species is a summer inhabitant in New England of the three northern States chiefly, though it has been seen and taken in Massachusetts during the breeding season, and has been found breeding at Tyngsboro' in August. They usually begin building the last of March or in April.

Goldfinch; Yellow-bird.

Chrysomitris tristis.

PLATE VIII.

DESCRIPTION.

EGGS.— Usually four in number, are pale bluish white, and average about .65 in length by .50 of an inch in breadth.

NESTS.— Usually placed in a crotch from four to twenty feet from the ground, in a birch, maple, or orchard tree, in pastures or along the roadside. They are deeply cupped, and neatly and compactly woven with strips of bark, plant fibres, and plant-down, lined with thistle-down.

BREEDING HABITS.

An abundant summer resident of New England, and many remain throughout the winter in the southern and middle portion. Two broods are often reared in a season, and their eggs may be found from the latter part of June to the middle of August, and sometimes even in September.



Pine Linnet; Pine Finch.

Chrysomitris pinus.

PLATE VIII.

DESCRIPTION.

EGGS.— Four in number, rounded oval in form, and pale bluish green in ground color, spotted with blackish brown and ashy lilac, more particularly about the crown. They average about .70 by .50 of an inch.

NESTS.— One found by Mr. Jenness Richardson a few miles north of Rutland, Vt., was placed near the top of a low pine-tree. It was composed of pine and hemlock twigs lined with hair.

BREEDING HABITS.

The summer habitat of this bird in New England is in the northern portions. The nest is placed in pine or fir trees.

Savanna Sparrow.

Passerculus savanna.

PLATE VIII.

DESCRIPTION.

EGGS.—The usual number of eggs is four, and measure from .68 to .83 in length by .52 to .60 of an inch in breadth. They exhibit great variation in form, color, and markings. (See Plate VIII., Figs. 5, 6, 7, and 8, where I have illustrated some of the most typical of the variations.)

NESTS.—Placed in a depression in the ground, and are composed chiefly of weed-stalks or fine rootlets lined with dry grasses or horsehair.

BREEDING HABITS.

The Savanna Sparrow is an abundant summer resident of all New England. It arrives from the first to the middle of April, and commences to build its nest about the middle or last of May. This species, like many other birds nesting on the ground, tumbles about and feigns lameness when flushed, alluring the intruder from its nest. Two broods are reared in a season.



Bay-winged Sparrow; Grass Finch.

Poocetes gramineus.

PLATE VIII.

DESCRIPTION.

EGGS.—Are commonly four or five in number, and vary about as much in coloration as the preceding species. An average specimen measures about .82 by .62 of an inch, is grayish or dirty white in ground color, with lilac spots and irregular blotches of light reddish or purplish brown, over which are spots or scrawls of a deeper shade of brown, which are sometimes nearly black. (See Plate VIII., Figs. 9, 10, 11, and 12.)

NESTS.—Constructed of grasses and rootlets lined with finer grasses or horsehair. They are placed in pastures and fields, usually at the base of a tuft of grass, or sunken in the ground.

BREEDING HABITS.

An abundant species throughout New England, making its appearance about the middle of April, and breeds about the last of May. Two sets of eggs are laid during a season.



Yellow-winged Sparrow.

Coturniculus passerinus.

PLATE VIII.

DESCRIPTION.

Eggs. — Usually four in number; are pure white, with purplish shell markings, burnt sienna and various shades of brown spots over the entire surface, tending to aggregate about the greater end, and in some to form a ring around the greater half. They vary in form, but are generally broader in proportion to their length than any of the other Sparrows. They average about .78 by .60 of an inch.

NESTS. — Placed on the ground in fields and pastures, and are composed of dry grasses, lined with horsehair.

BREEDING HABITS.

The Yellow-wing is a rare summer resident in Northern New England, but is more plentiful in the southern portion. It makes its appearance in the early part of May, and soon begins building a nest, which is completed about the first of June.



Henslow's Yellow-winged Sparrow.

Coturniculus henslowi.

PLATE IX.

DESCRIPTION.

Eggs. — Closely resemble those of the preceding species, except that they are more narrow, and are often of greenish tinge in ground color.

NEST AND BREEDING HABITS.

A rare summer resident in New England. It arrives about the same time as the *Coturniculus passerinus*. I have met with this species but once. In the Fowl meadows, Canton, Mass., June, 1878, I flushed one of these birds from its nest, which contained four eggs, all having a greenish tinge in ground color. It was placed in the grass on the top of a hassock, and composed about the same as nests

PLATE I

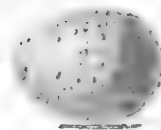
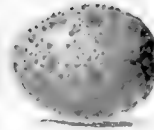
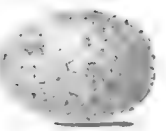
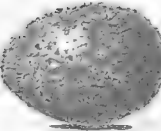
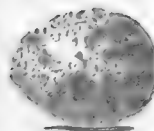
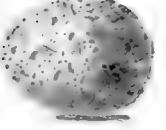
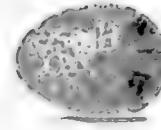
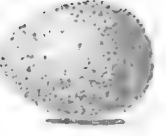
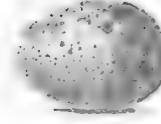
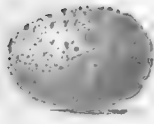
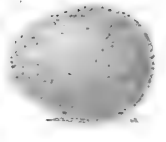
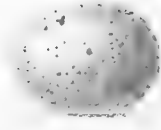


Fig. 2. 1 1 - a 100 x magn.
2 3 4 5 - a 100 x magn.
6 5 6 3 - a side

of the *Coturniculus passerinus*, for which species I should have labelled the eggs, but for having secured the bird. Another nest was taken shortly after by Mr. J. D. Dunbar, the eggs corresponding closely to mine. Mr. Maynard informs me that he found this species quite common at Tyngsboro', Mass.



Sharp-tailed Finch.

Ammodromus caudacutus.

PLATE IX.

DESCRIPTION.

EGGS.—Four or five in number, and average about .77 by .56 of an inch. They are grayish white or greenish tinged in ground color, finely and profusely spotted all over, or most thickly at the crown, with various shades of brown and a few spots of lilac.

NESTS.—Composed of dried grasses, and are concealed in the dead growth of grass of the previous season.

BREEDING HABITS.

The Sharp-tails in New England are locally distributed and "are practically confined to the salt and brackish marshes of the coast and its immediate vicinity." (N. E. B. L.) Two broods are reared in a season.



Seaside Finch.

Ammodromus maritimus.

PLATE IX.

DESCRIPTION.

EGGS.—Are usually five in number, and measure about .82 by .60 of an inch. They are grayish white in ground color, and cannot be readily distinguished from many specimens of the preceding species, but are generally a little coarser spotted and average a little larger.

BREEDING HABITS.

I know little or nothing of this species, but from what I can learn from others, it does not essentially differ in breeding habits from the *Ammodromus caudacutus*, but is not as northern in distribution, being rarely found north of Connecticut.

Swamp Sparrow.

Melospiza palustris.

PLATE IX.

DESCRIPTION.

Eggs. — The usual complement of eggs is four or five. They average about .80 by .60 of an inch, and exhibit considerable variation in ground color and markings. The ground color is white, grayish, greenish, or bluish tinted, profusely spotted and blotched with lilac, yellow ochre, and various shades of brown, chiefly about the larger end. Others are more finely and evenly distributed over the entire surface, and others having a confluent band about the crown and sparsely spotted elsewhere. There are many other styles of markings too numerous for description, but those I have described are the most typical.

Nests. — Placed on the ground, in swamps or meadows, sometimes in low bushes, and are usually composed wholly of dead grasses.

BREEDING HABITS.

An abundant summer resident over all New England, arriving from the South about the first of April, and commences incubation the last of May. A second brood is usually reared some time in July. Audubon says that this species is abundant in the vicinity of Boston during winter, — a statement which has been doubted by ornithologists. Mr. Maynard informs me that a specimen was, however, taken by Mr. F. H. Hitchcock, on Dec. 29, 1884, in the vicinity of Fresh Pond, Cambridge, Mass., and many others were seen.



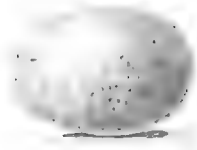
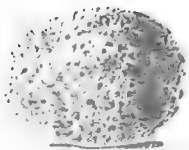
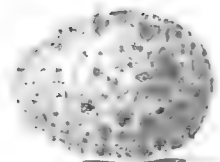
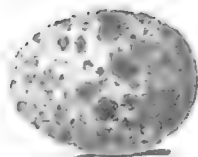
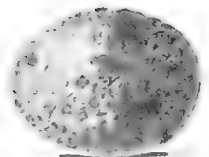
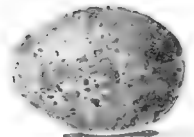
Song Sparrow.

Melospiza melodia.

PLATE IX.

DESCRIPTION.

Eggs. — The number of eggs in a set varies from three to six, but the usual complement is four or five. They exhibit an endless variation in color and markings; they also vary in form and measurements. (See Plate IX., Figs. 10, 11, 12, and 13.) There are certain types of the Song and Swamp Sparrows corresponding so closely to each other that it is impossible for even an expert oölogist to distinguish them.



NESTS. — Generally rather bulky, and placed in a bush or hedge or on the ground in fields and pastures, composed of grasses and weed-stalks.

BREEDING HABITS.

The Song Sparrows are abundant residents throughout New England, some remaining all winter. The eggs are laid about the middle of May, and two, and even three, broods are reared in a season.



Snow Bird; Junco.

Junco hyemalis.

PLATE IX.

DESCRIPTION.

EGGS. — Usually five in number, and measure about .80 by .60 of an inch; are bluish, greenish, or grayish white in ground color, finely and thickly spotted over the whole surface with obscure lilac and faint reddish purple, or with lilac, sienna, purplish, and different shades of brown, tending to aggregate about the crown, sometimes forming a ring.

NESTS. — Built about the last of May; are loosely constructed of dry grasses and leaves, and placed on the ground, but occasionally in a bush.

BREEDING HABITS.

The breeding range in New England is the three northern States and the elevated portions of Western Massachusetts.



Chipping Sparrow.

Spizella socialis.

PLATE X.

DESCRIPTION.

EGGS. — Two sets, of four or five eggs, are usually laid in a season. They are of a beautiful bluish green in ground color, spotted, blotched, or scrawled about the larger half or end with dark brown, black, and ashy lilac, and a few small spots scattered elsewhere. They measure from .64 to .70 in length, by .46 to .50 of an inch in breadth.

NESTS. — Placed in pines, cedars, orchard trees, and in vines and shrubs about dwellings, and sometimes in brier thickets on the ground in fields and pastures.

BREEDING HABITS.

The Chipping Sparrow is abundant throughout New England, but more so in the southern than northern portion. The first set of eggs is laid about the first of June; the second in July.

Field Sparrow.

Spizella pusilla.

PLATE X.

DESCRIPTION.

Eggs. — Number four or five; measure about .70 by .55 of an inch; are grayish or greenish white, spotted over the entire surface with lilac and light reddish brown of varying intensity, and in some so numerous as to nearly conceal the ground color at the greater end.

NESTS. — Composed of fine twigs and grass-stalks loosely put together, lined with fine grass or horsehair. They are placed on the ground in fields and pastures, or in a low scrub or bush two or three feet from the ground.

BREEDING HABITS.

A common summer resident throughout New England, and abundant in the southern portion. It arrives late in April, and the nest is built and eggs laid by the latter part of May. Two broods are reared in a season.

White-throated Sparrow.

Zonotrichia albicollis.

PLATE X.

DESCRIPTION.

Eggs. — Usually four in number, often five, measure about .87 by .65 of an inch, and are grayish white or pea green in ground color. They vary from being profusely and confluent spotted and blotched, to sparingly and finely dotted with burnt sienna, dark brown, lilac, or with pale shades of the same.

NESTS. — Are placed on the ground, occasionally in a low bush in swampy lands and pastures, and closely resemble those of the Song Sparrow.

BREEDING HABITS.

This species arrives in Southern New England in the latter part of April, and passes on to the northern States, where it breeds. A few instances, however, are recorded of its breeding in Massachusetts.

Black-throated Bunting.

Euspiza americana.

PLATE X.

DESCRIPTION.

EGGS.—Four or five in number, are of a light and bright greenish blue, unspotted, and measure about .78 by .59 of an inch.

NESTS.—Composed of grass, weed-stalks, etc., and lined with finer material. They are placed on the ground or in a bush near it. In the "Nuttall Bulletin" for 1878, p. 45, Mr. H. A. Purdie speaks of a nest with four eggs found by Mr. F. E. Bean, at Medford, Mass., June 9, 1877, at which date the eggs were fresh. This nest was in a bush about a foot from the ground, supported by the stem of the bush and the blades of the grass-clump in which it rested. Towards the end of June the same observer found a second nest, in another locality, with four young. This was in a field by the roadside; the song of the male perched upon the fence attracted attention, and both parents were seen feeding their young. Still other pairs had been in the same vicinity, as Mr. Bean heard other birds in this and previous years. (N. E. B. L.)

BREEDING HABITS.

In New England the Black-throated Bunting is a rare summer resident, though a number of instances of its occurrence have been recorded. Massachusetts is its northern limit.



Indigo Bird.

Cyanospiza cyanea.

PLATE X.

DESCRIPTION.

EGGS.—Normally four in number, average about .75 by .55 of an inch, and are white with a bluish tint, and very rarely spotted.

NESTS.—Differ from being loose and bulky in construction to neatly and compactly woven structures. They consist of dry leaves, grass, and weed-stalks, lined with fine grass and not infrequently with horsehair.

BREEDING HABITS.

A common summer resident in Southern New England, and rather rare in the northern portion. It makes its appearance from the first to the middle of May. Its favorite haunts during the period of incubation are all kinds of shrub-

bery, low bushes, and weedy patches in low woodlands, fields, and pastures, where it places its nest in an upright fork from two to five feet from the ground. Two broods are often reared in a season in Southern New England.



Rose-breasted Grosbeak.

Goniaphea ludoviciana.

PLATE X.

DESCRIPTION.

Eggs. — Usually four in number, often three, and seldom five, are bluish green or dull greenish gray, spotted all over with obscure lilac, pale reddish and purplish browns of varying intensity. In others the markings are darker and more sharply defined. (Plate X., Figs. 9 and 10.)

Nests. — Usually placed in the crotch of a sapling, sometimes on the fork of a horizontal branch, about ten or fifteen feet from the ground. They are frailly constructed of interlaced twigs, roots, straws, and weed-stalks, lined with fine fibrous roots, fine grass, or pine-needles.

BREEDING HABITS.

Common summer resident in Southern New England, but is rather rare in the northern portions. It makes its appearance in the southern portion about the first of May. Its favorite breeding haunts are the dense swamps of alders and maples, though it sometimes chooses a situation in higher ground on cultivated estates.



Cardinal Grosbeak.

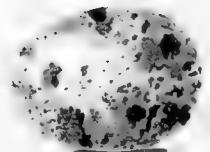
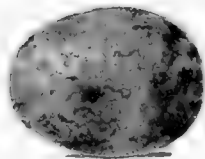
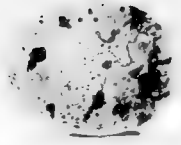
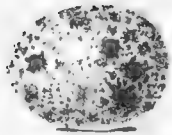
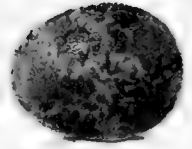
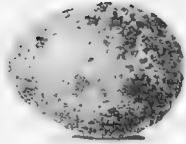
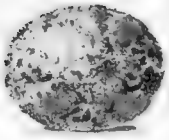
Cardinalis virginianus.

PLATE X.

DESCRIPTION.

Eggs. — The number of eggs in a set in New England is three, and average about 1 by .80 of an inch. They are white, spotted over the entire surface with yellow ochre, reddish or purplish browns, and obscure lilac, sometimes very profusely with confluent spots and blotches so as to nearly hide the ground color.

Nests. — The nests are "composed of strips of grape-vine, or other pliable bark, twigs, leaves, and grasses; are rather loosely built, generally in a thicket of briars, or in a low tree, therefore near the ground and preferably in the vicinity of water." (N. E. B. L.)



BREEDING HABITS.

A very rare summer visitor to Southern New England. Its breeding haunts are the thickets and shrubbery in the neighborhood of swamps and ponds.



Chewink; Towhee Bunting.

Pipilo erythrophthalmus.

PLATE X.

DESCRIPTION.

EGGS.—From four to six in number, usually four, and vary in size from 1.02 to .94 in length by .79 to .70 of an inch in breadth. They are white, thickly and finely dotted over the entire surface with rich reddish brown and lilac. Much paler types also occur. (See Plate X., Figs. 14 and 15.)

NESTS.—Are built the last of May or first of June, placed on the ground often under a pile of dead brush, and sometimes in a low bush close to the ground. They are composed of leaves, twigs, and grass, lined with fine grass or pine-needles rather loosely constructed.

BREEDING HABITS.

An abundant summer resident in the southern portion of New England, and rather uncommon in the northern portions. It arrives about the first of May, haunting alike the shrubbery and undergrowth of the high and low lands. Two broods are reared in a season.



Bobolink.

Dolichonyx oryzivorus.

PLATE XI.

DESCRIPTION.

EGGS.—Four or five in number, the dimensions varying from .95 to .85 in length by .70 to .62 of an inch in breadth. They are greenish or warm brownish white in ground color, spotted, blotched, clouded, or scrawled with reddish and dark browns, and spots of brownish lilac over the entire surface, sometimes so thickly blotched and clouded as to nearly conceal the ground color.

NESTS.—Composed of dried grasses, and are sunken in the ground in a low field or meadow, through which, or near by, is a running brook or stream.

BREEDING HABITS.

This merry bird is a common summer resident throughout New England, making its appearance about the middle of May. The first of June or a little later they begin to breed. But one brood is reared in a season.



Cow Bird; Cow Blackbird.

Molothrus pecoris.

PLATE XI.

DESCRIPTION.

Eggs. — Measure about .87 by .65 of an inch, are white, finely dotted over the entire surface with several shades of brown, interspersed with obscure purplish shell markings. Sometimes they are blotched or coarsely spotted.

BREEDING HABITS.

The Cow Bird is an abundant summer resident throughout New England, arriving about the first of April. It is polygamous, and instead of building a nest of its own, it stealthily approaches the domicile of another bird, deposits an egg, and leaves it to the care of the owner of the nest. The nests chosen are generally those of the Warblers, Vireos, Thrushes, and Sparrows; the Yellow Warbler, Red-eyed Vireo, and Maryland Yellow-throat being the birds the most often afflicted. Sometimes the nest is forsaken, or a second story built over the egg. The Yellow Warbler has been known to build over, four and five stories high, before submitting to her inevitable fate. But the unwelcome egg is usually hatched, and the young reared by its foster-mother. Two, three, and even five eggs are sometimes found in a nest, though usually but one. The number of eggs laid is unknown, but is probably four or five.



Red-winged Blackbird.

Agelaius phoeniceus.

PLATE XI.

DESCRIPTION.

Eggs. — Four or five in number, and vary in ground color from a dull bluish white to a faint greenish blue, with spots or blotches of obscure brownish lilac, and scrawls, spots, and sometimes blotches of dark brown and black, chiefly about the larger end. They measure from 1.08 to .85 in length, by .80 to .68 of an inch in breadth.

NESTS. — Placed on the ground in a tussock of grass or in bushes, and some times in trees and saplings. They are composed of coarse blades of grass, mud, and leaves, and when near the coast, sea-weed enters largely into the composition. They are lined with rootlets and soft grass.

BREEDING HABITS.

This common and well-known bird arrives from the South about the middle of March, earlier or later, according to the advancement of the season. They are gregarious, and nest in communities. One set of eggs is laid the last of May, and another in July.

Meadow Lark.

Sturnella magna.

PLATE XI.

DESCRIPTION.

EGGS. — From four to six in number; measure from 1.20 to 1 in length, by .90 to .70 of an inch in breadth; are pure white, finely spotted or blotched with lilac, reddish, and Vandyke brown over the entire surface, but mostly on the larger end.

NESTS. — Placed on the ground in fields, meadows, and marshes, generally in a tussock or at the base of a tuft of grass, and are usually well concealed. They are composed of grasses, and generally, but not always, roofed, having an opening at the side.

BREEDING HABITS.

The Meadow Lark is a common summer resident throughout New England, though more plentiful in the southern than the northern part. It arrives the last of March, and builds its nest from the middle of May to the first week in June. Two sets of eggs are often laid during a season.

Orchard Oriole.

Icterus spurius.

PLATE XI.

DESCRIPTION.

EGGS. — Bluish or greenish white in ground color, with brownish lilac, reddish brown, and black spots or scrawls, chiefly about the greater end. The markings

are generally more in spots and with less lines and scrawls than the eggs of the Baltimore Oriole. They are usually four in number, and average about .86 by .60 of an inch.

NESTS. — Placed in the fork of a limb of an apple or other low tree. They are pensile, and generally composed entirely of grasses handsomely woven into a fine fabric.

BREEDING HABITS.

A rare summer resident in Southern New England, seldom ever making its appearance north of Massachusetts. It arrives in Connecticut in the early part of May, in which State it is the most numerous, in New England. But one brood is reared in a season.



Baltimore Oriole.

Icterus baltimore.

PLATE XI.

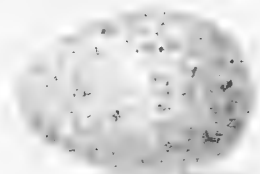
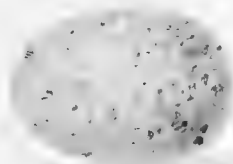
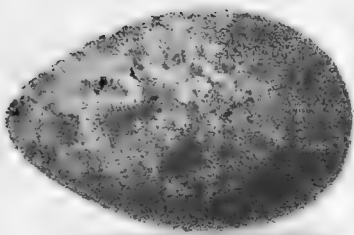
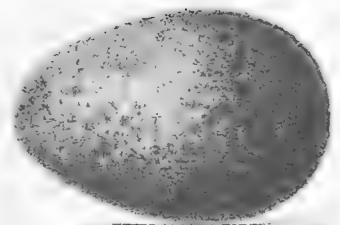
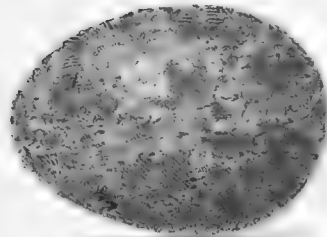
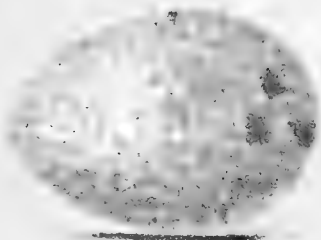
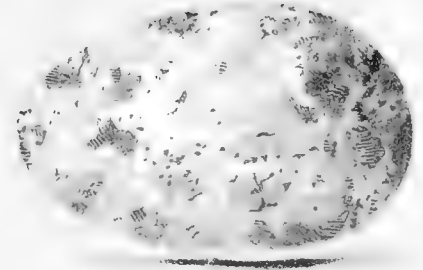
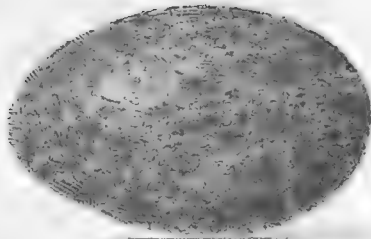
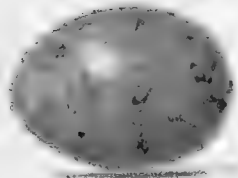
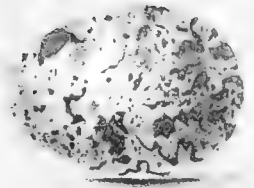
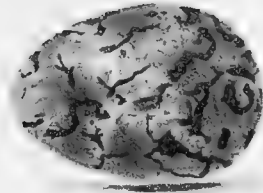
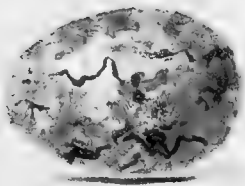
DESCRIPTION.

EGGS. — From four to six in number, usually four; five are common, and six are extremely rare. They are light drab or neutral tinted, spotted, lined, and scrawled with brown and black, and under-markings of dull lilac, chiefly about the greater half, and measure about .92 by .60 of an inch.

NESTS. — Are pensile or pouch-shaped, and securely suspended from the twigs at the extremities of the drooping branches of an elm, poplar, or apple tree, usually from fifteen to thirty feet from the ground, along the borders of highways or on cultivated estates. They are composed of such materials as string, yarn, silk, thread, cotton, wool, horsehair, and often grass, firmly woven together and lined with horsehair. Sometimes cotton or some other soft material is placed in the bottom of the nest.

BREEDING HABITS.

This Oriole is an abundant summer resident in New England, but less common in the northern than the southern portion. It makes its appearance in the early part of May, and begins building the latter part of the month or first week in June. A second set of eggs is seldom laid.



Rusty Grackle.

Scolecophagus ferrugineus.

PLATE XI.

DESCRIPTION.

EGGS. — Usually four in number; average about 1.02 by .78 of an inch, and vary in ground color from a grayish to a light bluish green, spotted with lilac, and thinly blotched or clouded with reddish or yellowish brown, over which are spots, blotches, and small scrawls of dark brown. Sometimes they are blotched or clouded over the entire surface with brownish red, so as to nearly conceal the ground color, over which are dark brown markings. These two variations are sometimes combined.

NESTS. — Mr. E. A. Samuels found a number of pairs breeding on the Magalloway River, in Maine, June, 1864. He says: "These nests were all built in low alders overhanging the water; they were constructed of, first, a layer of twigs and brier-stalks; on this was built the nest proper, which was composed of stalks and leaves of grass, which were mixed with mud, and moulded into a firm, circular structure, and lined with fine leaves of grass and a few hair-like roots. The whole formed a large structure, easily seen at the distance of a few rods through the foliage." Mr. James W. Banks, St. John, N. B., in the *Auk*, January, 1885, describes the nest and eggs of this species which he found in the suburbs of St. John, within thirty feet of a house, built amongst the dense foliage of the upper branches of a spruce-tree, and by this description it seems that they are not altogether confined to low and swampy districts.

BREEDING HABITS.

In New England the Rusty Grackles are confined to the northern portions during the period of incubation, migrating southward in winter.



Purple Grackle; Crow Blackbird.

Quiscalus purpureus.

PLATE XII.

DESCRIPTION.

EGGS. — Usually four, often five, and seldom six. They average about 1.25 by .90 of an inch, and exhibit such variation, both in ground color and markings, that any one description would be quite inadequate. (See Plate XII, Figs. 1, 2, 3, and 4.)

NESTS. — Built from the middle of May to the first of June, and are usually bulky affairs, composed of dry grasses, twigs, and roots, mixed with mud, and lined with fine grass. They are placed in a bush or tree in the vicinity of ponds and streams, or in oaks or evergreens in higher land.

BREEDING HABITS.

The Crow Blackbirds are abundant summer residents of all New England in favorable localities. They make their appearance about the first of April, and nest in communities. In the camp-ground at Cottage City, Martha's Vineyard, Mass., in June, 1877, I noticed that a great number of these birds had built their nests in open and exposed situations, about fifteen feet from the ground, in the small oak-trees and saplings along the avenues. They were very tame, and seemed to take no notice whatever of people passing and repassing beneath them. The nests were composed of an abundance of wood-shavings and sea-weed, mixed at the bottoms with mud, and lined with fine grass, and, in some, with horsehair.



Raven.

Corvus corax.

PLATE XII.

DESCRIPTION.

EGGS. — From four to six, usually four, and measure about 1.00 by 1.30 inches. They closely correspond to those of the Crow, except in size. (See Plate XII, Figs. 5 and 6.)

NESTS. — “The nests are composed of twigs, sticks, sea-weed, and pieces of turf and are lined with finer sea-weeds and algæ found on the seacoast.” (Samuels.)

BREEDING HABITS.

The Raven is a very rare bird of Northern New England. I am told that they are occasionally seen during the breeding period about Eastport, Me.; and Mr. Boardman informs me that they used to breed and were common all along the coast of Maine on the high cliffs; that they breed early, and a few breed now on the island of Grand Menan, where he obtained a nest that was large enough to fill a large-sized wash-tub.

Common Crow.

Corvus americanus.

PLATE XII.

DESCRIPTION.

EGGS.— Usually four; five are common, and six are extremely rare. They measure about 1.62 by 1.25 inches. They are subject to great variations in ground color, running from a sea green or light greenish blue to a light gray or drab, spotted, blotched, or splashed, finely or coarsely, or both, with various shades of brown and olive, and sometimes with purple and gray. They are often abnormally colored in various ways, sometimes being unmarked.

NESTS.— Composed of interlaced sticks, twigs, and strips of bark, lined with strips of cedar bark, grasses, and leaves, and are sometimes without any lining whatever.

BREEDING HABITS.

An abundant resident throughout New England, both summer and winter. About the middle of April they begin to pair, and commence constructing a nest in some lofty pine or cedar. But one brood is usually reared in a season.



Blue Jay.

Cyanurus cristatus.

PLATE XII.

DESCRIPTION.

EGGS.— Usually four in number, sometimes five, and average about 1.15 by .80 of an inch. They are pale dull green, greenish olive, creamy buff, or olive drab in ground color, spotted pretty evenly and thickly over the entire surface with greenish or yellowish brown, interspersed with slate-colored shell markings. In some specimens the markings are subdued and indistinct, and in others they are gathered chiefly about the larger end.

NESTS.— Generally placed in a small evergreen tree, about fifteen or twenty feet from the ground, in the deep woods, or some retired spot on a farm or cultivated estate; they are loosely constructed of twigs and coarse roots, lined with fine fibrous roots.

BREEDING HABITS.

This cautious and handsome bird is pretty evenly distributed over New England. About the last of April they begin to pair, and by the middle of May commence building. But one set of eggs is usually laid during the season.



Canada Jay.

Perisoreus canadensis.

PLATE XII.

DESCRIPTION.

EGGS.— Usually four in number, and measure from 1.06 to 1.25 in length, by .80 to .85 of an inch in breadth. They are light gray in ground color, sometimes with a greenish or a yellowish tint, quite evenly spotted and blotched over the entire surface with slate color, lilac, and subdued reddish brown; others with faint brown and purple, gathered in a ring around the larger end, and sparingly spotted elsewhere.

NESTS.— Audubon says: "It begins as early as February or March to form its nest, which is placed in the thickest part of a fir-tree, near the trunk, and at a height of from five to ten feet. The exterior is composed of dry twigs, with moss and grass, and the interior, which is flat, is formed of fibrous roots."

BREEDING HABITS.

The Canada Jay is confined to the northern districts of New England, and the breeding habits are about the same as those of the preceding species. But one brood is reared in a season.



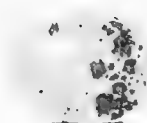
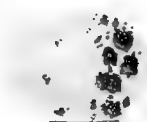
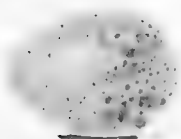
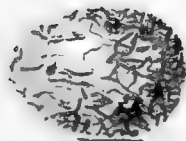
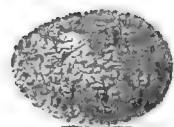
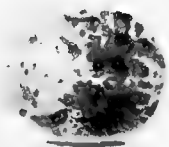
King Bird.

Tyrannus carolinensis.

PLATE XIII.

DESCRIPTION.

EGGS.— Usually four in number, often five; average about .72 by .98 of an inch; are creamy white, with sharply defined spots and splashes of lilac, yellow ochre, reddish and dark brown; they are very characteristic and readily identified.



NESTS.— Placed on the branch of an orchard or garden tree, sometimes in bushes, fields, and pastures, and often along the borders of rivers and ponds. The materials used in the construction are miscellaneous. A nest before me is composed of twigs, interwoven with rootlets, weed-stalks, moss, feathers, string, rags, and cotton, lined with fine fibrous roots and horsehair.

BREEDING HABITS.

The King Bird is distributed throughout New England in summer, arriving about the first week in May, and begins to breed about the last of the month, or a little later.

Great-crested Flycatcher.

Myiarchus crinitus.

PLATE XIII.

DESCRIPTION.

EGGS.— Normally four in number, sometimes five, and very rarely six, and vary in dimensions from 1 to .75 in length, by .78 to .60 of an inch in breadth. They are creamy buff or pale yellow in ground color, sparsely spotted with lilac and dark brown, with numerous longitudinal lines and scrawls of brownish purple or wine color.

NESTS.— Placed in the hollows of trees, in forests and old neglected orchards. They are composed of straws, weed-stalks, feathers, and similar materials, and a cast-off snake-skin usually enters into the composition.

BREEDING HABITS.

The Great-crested Flycatcher is a summer resident in all the New England States, though irregularly distributed, and in Northern New England is very rare. It arrives about the middle of May, and about a month later it breeds.

Pewee; Phœbe.

Sayornis fuscus.

PLATE XIII.

DESCRIPTION.

EGGS.— Usually five in number, normally pure white, but are sometimes sparingly spotted with faint reddish brown, and average about .58 by .75 of an inch.

NESTS.— Placed on juttings under bridges, barns, sheds, and ledges of rocks. They are constructed of mud, sticks, roots, and mosses, lined with fine grasses, feathers, or horsehair.

BREEDING HABITS.

The Pewee is an abundant summer resident throughout New England, arriving from the South in the last of March or first part of April. About a month later it commences building. Two sets of eggs are usually laid in a season.



Olive-sided Flycatcher.

Contopus borealis.

PLATE XIII.

DESCRIPTION.

Eggs.— From three to five in number, — usually four, often three, and seldom five; are creamy or pure white, with lilac, brownish red, and obscure reddish spots, most numerous about the larger end, and measure from .92 to .85 in length, by .68 to .64 of an inch in breadth.

NESTS.— Usually placed in pines, and not uncommonly in orchard trees, and are usually composed of sticks and twigs, strips of bark, and weed-stalks, lined with rootlets or moss, but some authors state that they resemble the nests of the King Bird.

BREEDING HABITS.

In Southern New England this species is a rare summer resident, but is more plentiful in the three northern States. It makes its appearance about the middle of May.



Wood Pewee.

Contopus virens.

PLATE XIII.

DESCRIPTION.

Eggs.— Often three, but usually four in number, and average about .74 by .50 of an inch. They vary in ground color from a pale to a rich cream color, usually with large blotches of lilac and dark and reddish brown wreathed about the larger end or half, and a few small spots of the same scattered elsewhere.

NESTS.—Saddled on to a horizontal limb of an oak, or sometimes placed in a crotch. They are generally pretty high up, and are constructed of intertwined twigs, rootlets, pine-needles, grass, and bits of dead leaves, lined with tree moss. They are thickly coated over the outside with lichens, and closely resemble the limb on which they are built.

BREEDING HABITS.

This species is an abundant summer resident throughout New England, but less numerous in the northern than the southern portion. It makes its appearance about the middle of May, and about a month after its arrival a nest has been constructed and eggs laid. Two broods are often reared in a season.



Acadian Flycatcher.

Empidonax acadicus.

PLATE XIII.

DESCRIPTION.

EGGS.—The number of eggs in a set is from two to four. They measure from .80 to .64 in length, by .56 to .50 of an inch in breadth, and vary in ground color from a pale yellowish white to a rich creamy buff, with large blotches of light red or reddish brown, or both, about the larger end, and a few fine spots scattered elsewhere; others occur with fine dots sparsely scattered over the entire surface.

NESTS.—Of the nests, Mr. H. W. Henshaw says ("Nutt. Bull.," 1876, p. 16): "It is a slight structure, made of fine grasses, interspersed more or less with the blossoms of trees, the whole disposed in a circular form and fitted between two twigs; a firm support is derived from a binding of spiders' webs, which are interwoven with the sides of the nest, and then carried over the twigs on either side, encircling them with strong bands. The entire base of the nest is without support, and so thin is the slight structure that the eggs might almost be seen from below. It was built in a small tree, perhaps twenty feet from the ground." In Pennsylvania, nests differ considerably from the above described, being composed largely of moss, are very flat in form, and are placed only a few feet from the ground, more usually in a witch-hazel than in any other shrub.

BREEDING HABITS.

In New England this species occurs in the southern portion only, and, as an extremely rare summer visitor, haunting the dry woodlands.

Traill's Flycatcher.

Empidonax traillii.

PLATE XIII.

DESCRIPTION.

Eggs. — Usually three, and occasionally four. They closely correspond to those of the *Empidonax acadicus* in every respect, except the markings of the Traill's will average lighter in color in the general run of specimens.

Nests. — Placed in low bushes, generally alders, usually about two or three feet from the ground, in an upright fork. They are composed of dried grasses, plant fibres, and rootlets, lined with grasses, horsehair, or thistle-down, somewhat resembling the poorer nests of the Yellow Warbler.

BREEDING HABITS.

A common summer resident in the northern part of New England, and rare in the southern portion, excepting the western part of Massachusetts, where it is said to be fairly common. It makes its appearance in the latter part of May, haunting the low lands and swamps, particularly the neighborhood of streams. They breed during the latter part of June.



Least Flycatcher.

Empidonax minimus.

PLATE XIII.

DESCRIPTION.

Eggs. — Normally four, often five, and seldom three; average about .62 by .50 of an inch, and are white, with a slight yellowish tinge, usually immaculate, but very rarely spotted.

Nests. — Placed on a horizontal branch or in an upright fork, from ten to twenty feet from the ground, in orchard trees along the highway, or in dry woodlands. The materials used in their construction vary, depending upon the location. Those near dwellings are composed of fine strips of inner bark, fine grasses, rootlets, plant-down, string, cotton, wool, and soft feathers, compactly woven together, and fastened with spiders' webbing and caterpillars' silk, and lined inside with fine grasses or feathers and horsehair. When built in the woods, they are composed principally of bark fibres and rootlets, lined with grasses or pine-needles.

BREEDING HABITS.

The Least Flycatcher is a common summer resident in all New England, with the exception of some localities in the northern portion. They arrive early in May, and begin to build the last of the month or first of June. Two sets of eggs are commonly laid in a season.

Yellow-bellied Flycatcher.

Empidonax flaviventris.

PLATE XIII.

DESCRIPTION.

EGGS. — Four in number, white, sparingly marked with light reddish brown about the larger end, and measure about .68 by .52 of an inch.

NESTS. — “ It has proved no easy task to disentangle the history of this species from that of its two nearest relatives, considering the conflicting or erroneous accounts which have crept into the books, resulting from wrong identification of nests, or other mistakes. Thanks to several active and successful New England observers, the doubt has been dispelled, and the nest and eggs of *flaviventris* should be as recognizable as those of any other species. One of the most satisfactory accounts, which may be transcribed in part, is that given by Mr. Purdie in the “Nuttall Bulletin” for October, 1878, p. 166. Remarking that Dr. Brewer, and following him, Dr. Coues, had described the eggs as white, unmarked, he notes his experiences with the bird at Houlton, Me.: ‘Mr. Bradbury informed us that he had found, on June 15, a nest unknown to him, with one egg. On the 18th he conducted us to the edge of a wooded swamp, and pointing to the roots of an upturned tree, said the nest was there. We approached cautiously, and soon saw the structure, and then the sitting bird, which appeared to be sunken in a ball of green moss. Our eager eyes were within two feet of her, thus easily identifying the species, when she darted off; but to make doubly sure, Mr. Deane shot her. There was no mistake; we at last had a genuine nest and eggs of the Yellow-bellied Flycatcher. A large dwelling it was for so small and trim a bird. Built in and on to the black mud clinging to the roots, but two feet from the ground, the bulk of the nest was composed of dry moss, while the outside was faced with beautiful fresh green mosses, thickest around the rim or parapet. The home of the Bridge Pewee (*Sayornis fuscus*) was at once suggested. But no mud entered into the

actual composition of the nest, though at first we thought so, so much was clinging to it when removed. The lining was mainly of fine black rootlets, with a few pine-needles and grass stems." ("New England Bird Life.")

BREEDING HABITS.

The Yellow-bellied Flycatcher is not numerous during the breeding season in Northern Maine, and I know of no instance of its breeding south of that locality.



Whippoorwill.

Antrostomus vociferus.

PLATE XIV.

DESCRIPTION.

Eggs. — Two in number; average about 1.25 by .85 of an inch; are elliptical in form, with a glossy surface; they are creamy white in ground color, blotched, marbled, and lined with subdued purplish and brownish lilacs.

BREEDING HABITS.

The Whippoorwill is a common summer resident throughout New England, but is rather locally distributed. It arrives from the South from about the middle to the last of May. The eggs are laid in the first week of June, in a slight depression made on the ground in some retired locality of dry woodland or scrub.



Night Hawk.

Chordeiles virginianus.

PLATE XIV.

DESCRIPTION.

Eggs. — Two in number, measure about 1.25 by .85 of an inch, and are elliptical in shape, with a highly polished surface. They are light grayish in ground color, thickly marked over the entire surface with fine variegated dots and markings of different shades of umber and obscure lilac and slate color.

BREEDING HABITS.

The Night Hawk is an abundant summer resident throughout New England, making its appearance about the first of May, and about the last of the month the eggs are deposited on the bare ground, sometimes on leaves, on a bare rock, and often on the gravelled roofs of houses in large cities.

PLATE XIV

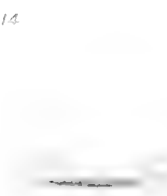
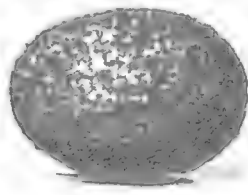
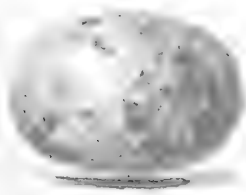


Fig. 1. Whippoorwill.

" 2. Nighthawk.

" 3. Chimney Swallow.

" 4. Ruby-throated Hummingbird.

" 5. Belted Kingfisher.

" 6. Black-billed Cuckoo.

" 7. Yellow " "

Fig. 8. Pileated Woodpecker.

" 9. Hairy " "

" 10. Downy " "

" 11. Black-backed " "

" 12. Banded " "

" 13. Yellow-bellied

" 14. Red-headed

Fig. 15. Golden-winged Woodpecker.

Chimney Swallow.

Chatura pelagica.

PLATE XIV.

DESCRIPTION.

EGGS. — Usually four in number, rarely five; measure about .70 by .50 of an inch, and are pure white, unmarked.

NESTS. — Are basket-like, composed of interlaced twigs, glued together with the saliva of the bird. They are semi-saucer shaped, and fastened to the inside of chimneys with this same glutinous substance. "In the North woods the nests are still often constructed in hollow trees, as well as in barns and sheds in the sparsely settled districts." ("New England Bird Life.")

BREEDING HABITS.

The Chimney Swallows are common summer residents of all New England. They arrive from the South in the first part of May, and breed the last of the month or first of June. Two broods are often reared in a season.



Ruby-throated Humming-bird.

Trochilus colubris.

PLATE XIV.

DESCRIPTION.

EGGS. — Two in number, elliptical in form, and pure white, measuring about .50 by .35 of an inch.

NESTS. — These birds construct beautiful little cup-shaped nests about an inch and a half in diameter externally, and three fourths of an inch internally, by an inch and one fourth in depth externally, and three fourths of an inch internally. They are composed mainly of plant-down, and fastened to the limb with fine spiders' webbing, covered over the entire outside surface with bits of lichens, and lined inside with fine silky husks from various seeds.

BREEDING HABITS.

The Humming-bird is a common summer resident throughout New England, arriving about the middle of May. About the first of June the nest is placed on a branch of almost any kind of a tree in woods, pastures, or cultivated estates. I have found the cedar to be its favorite tree. But one brood is reared in a season.

Kingfisher.

Ceryle alcyon.

PLATE XIV.

DESCRIPTION.

EGGS. — The number of eggs in a set is usually seven, pure white, with a glossy surface, and measure about 1.35 by 1.05 inches.

NESTS. — This species burrows a hole in a sand-bank to a distance of five to nine feet long. At the extremity the burrow is enlarged, where sometimes a few straws or fish-bones constitute an apology for a nest, the eggs usually being deposited on the bare sand.

BREEDING HABITS.

A common summer resident throughout New England, making its appearance about the first of April or earlier, according to the season. It may be found about mill-ponds, streams, rivers, and near the coast.



Black-billed Cuckoo.

Coccyzus erythrophthalmus.

PLATE XIV.

DESCRIPTION.

EGGS. — From two to five in number, light greenish blue, either oval or elliptical in form, and average about 1.12 by .86 of an inch.

NESTS. — Are loose and frail, composed of sticks and twigs, and sometimes a little moss, strips of bark, or leaves are added. They are generally placed in a low tree or shrub in dry woodland, three or four feet from the ground.

BREEDING HABITS.

Eggs in different stages of incubation are often found in the same nest, some nests having young birds and freshly laid eggs. Sometimes a part of the eggs are addled, which is probably owing to lack of sufficient heat, the parent being unable to incubate them after the others have been hatched. The Black-billed Cuckoo is a regular summer resident of all the New England States, but less numerous in the northern than the southern portion. It reaches the southern portion about the first of May.

Yellow-billed Cuckoo.

Coccyzus americanus.

PLATE XIV.

DESCRIPTION.

EGGS. — Vary from two to five in number; are light greenish blue, paler than those of the Black-billed Cuckoo, and measure from 1.10 to 1.30 in length by .84 to 1 inch in breadth.

NEST AND BREEDING HABITS.

The nest, breeding habits, and distribution do not differ from those of the Black-billed Cuckoo, but usually this species is not as common.



Pileated Woodpecker.

Hylotomus pileatus.

PLATE XIV.

DESCRIPTION.

EGGS. — Usually six in number, — very rarely more, and often four or five, — and average about 1.25 by 1 inch. They are, as are all Woodpeckers' eggs, of a pure, brilliant, and translucent white.

NESTS. — All Woodpeckers nest in a hole of a tree, and without any inner nest, excepting the decayed chips chiselled from the sides of the hole. This species usually nests pretty high up, excavating its hole to the depth of about fifteen or twenty inches.

BREEDING HABITS.

In New England the Pileated Woodpecker is confined to the thickly timbered districts of Northern Maine, New Hampshire, and Vermont, where it is a resident through the year, and in some localities is common.



Hairy Woodpecker.

Picus villosus.

PLATE XIV.

DESCRIPTION.

EGGS. — Usually five, seldom six in number, and often four, and measure about .85 by .65 of an inch.

NESTS.— This species excavates a hole from five to twenty inches in depth in a decayed tree, and lays its eggs about the middle of May.

BREEDING HABITS.

A common summer resident in the northern portion of New England, but rather rare in the southern portion. The breeding haunts are in the woods, very seldom nesting in orchards.



Downy Woodpecker.

Picus pubescens.

PLATE XIV.

DESCRIPTION.

EGGS.— Normally five in number, four are common, and as many as seven have not infrequently been found. They average in dimensions about .75 by .60 of an inch.

NESTS.— Are made in the deep woods, in decayed pines, birches, and poplars, and often in old neglected orchard trees. The hole is about an inch and a quarter in diameter at the entrance, is round and cleanly cut, widens as it extends downward, and varies in depth from six to twenty-four inches.

BREEDING HABITS.

This species is a common resident of all New England through the year. The building operations are sometimes commenced as early as the middle of April, but usually three or four weeks later.



Black-backed Three-toed Woodpecker.

Picoides arcticus.

PLATE XIV.

DESCRIPTION.

EGGS.— Vary from three to six in number, though normally four, and average about 1 by .80 of an inch.

BREEDING HABITS.

In New England this species is a summer resident in the three northern States only; is rare, and nests chiefly in decayed coniferous trees.

Banded-backed Three-toed Woodpecker.

Picoides americanus.

PLATE XIV.

DESCRIPTION.

The eggs, nests, breeding habits, and distribution do not differ from the preceding species, but it is a much rarer bird.



Yellow-bellied Woodpecker.

Sphyrapicus varius.

PLATE XIV.

DESCRIPTION.

EGGS.—From four to six in number, and average about .90 by .75 of an inch.

BREEDING HABITS.

The Yellow-bellied Woodpeckers are unknown as summer residents in Southern New England, excepting the elevated parts of Western Massachusetts, but are quite common in the three northern States. The eggs are laid the last of May. Mr. C. O. Tracy, in the *Ornithologist and Oölogist*, of November, 1884, says: "I have had abundant opportunities to study the breeding habits of this species, and, with rare exceptions, have found them to select a live tree in which to make their nest."



Red-headed Woodpecker.

Melanerpes erythrocephalus.

PLATE XIV.

DESCRIPTION.

EGGS.—Commonly four in number, five or six are often found, rarely three, and still more rarely seven. They measure about 1 by .80 of an inch, and are not readily distinguished from any of the three preceding species.

BREEDING HABITS.

The Red-headed Woodpecker is an extremely rare summer resident throughout New England. It prefers the wooded districts for breeding, and the nesting habits do not differ from the rest of its family.

Golden-winged Woodpecker.

Colaptes auratus.

PLATE XIV.

DESCRIPTION.

EGGS.— Usually six in number, commonly five, and often seven or more; measure about 1.15 by .90 of an inch, but vary in size and shape.

NESTS.— About the middle of May the nests are made in the trunk or large limb of decayed pines, maples, poplars, or old orchard trees, from five to twenty feet from the ground. The excavation varies from six inches to three feet in depth, and is sometimes made in the sound, green wood, and sometimes they relieve themselves of all this labor by occupying the same nest year after year.

BREEDING HABITS.

A common summer resident of all the New England States, and is the most abundant of its family. A few remain in the southern part during the winter, but the majority make their appearance about the middle or last of March. When the eggs are removed from a nest, the female continues to lay, and there are many instances where there have been successive removals of their laying, from twenty to fifty and even sixty eggs, before the exhausted but ambitious bird reluctantly leaves the nest she has so industriously labored to complete.



Great Horned Owl.

Bubo virginianus.

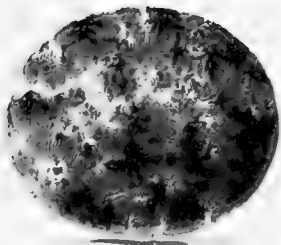
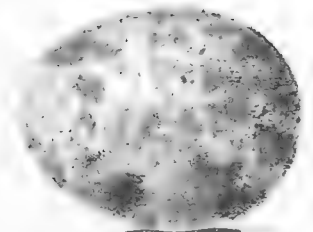
PLATE XV.

DESCRIPTION.

EGGS.— The number of eggs is usually two, sometimes three or four, and as many as six have been found. They are white, sometimes with a slight tinge of yellow, are nearly spherical in form, and average about 2.25 by 1.95 inches.

NESTS AND BREEDING HABITS.

The Great Horned Owl is a permanent resident in all the New England States, but is more common in the northern than the southern portion. In February or



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March the eggs are laid in the most retired localities of the deep woods; sometimes in the fissure of a rock, but usually high up in a pine, in the deserted nest of a Crow or Hawk which they have slightly repaired. A pair of young I found in Pigeon Swamp, Canton, Mass., in the early part of March, 1878, were occupying a deserted Crow's nest in a pine-tree about seventy feet from the ground. They appeared to be but a few days old, and kept up a continual squawking. Beside them on the nest was a freshly slain frog. On the ground at the base of the tree were bones of fish and rodents, and the remains of frogs, eels, and hornpouts, emitting considerable odor for that season of the year. While at the nest the female exhibited no small amount of courage, hovering closely around and threatening several attacks, coming nearly within an arm's reach of me, ruffling her feathers, and making a loud, snapping noise with her beak. Visiting the nest on the succeeding day, for the purpose of obtaining the young and old birds for my collection, they were so shy that it was with great difficulty that I succeeded in obtaining a shot. The catching of fish was probably an individual peculiarity, as their food usually consists of small animals.



Mottled Owl; Screech Owl.

Sops asio

PLATE XV.

DESCRIPTION.

EGGS.— Usually four in number, sometimes five; are somewhat spherical in form, measuring about 1.36 by 1.22 inches, and are white, sometimes having a yellowish tinge.

NESTS AND BREEDING HABITS.

This species is a common summer resident throughout New England. The eggs are laid about the middle of April in hollow trees and stumps about six or seven feet from the ground, in the woods or old orchards, and sometimes in a deserted Woodpecker's nest. They are deposited on the dirt or decayed chips at the bottom of the hole or hollow, though a slight nest of leaves, grass, and feathers is sometimes made. A second brood is often reared.

Long-eared Owl.

Otus vulgaris.

PLATE XV.

DESCRIPTION.

Eggs. — The number of eggs in a set is usually four, and occasionally five. They are nearly spherical in shape, are pure white, and average about 1.60 by 1.30 inches.

NESTS. — Usually placed in a pine or hemlock, in some retired location, in dry or swampy woodland. They are built of twigs, leaves, and grass, though sometimes an old Crow's or Hawk's nest is slightly repaired.

BREEDING HABITS.

The Long-eared Owl is a common summer resident throughout New England. The eggs are laid about the last of April, and sometimes a second set later in the season.



Short-eared Owl.

Brachyotus palustris.

PLATE XV.

DESCRIPTION.

Eggs. — Usually four in number, though often five or six. They are white, nearly spherical, and measure about 1.55 by 1.30 inches.

NESTS AND BREEDING HABITS.

This species is a common summer resident in Northern New England, but is less common in the southern portion, and prefers the neighborhood of the coast to the interior. Mr. F. H. Carpenter, of Rehoboth, Mass., in the *Ornithologist and Oölogist*, Vol. VIII., page 84, 1883, says: "This little Owl, so far as my observation has extended, seems peculiar to the coast, where among the reeds and thick marshes of the shores and neighboring islands it finds a covert from the noisy world. Having found such a place, they, unlike all other New England Owls, build in colonies. A locality not far from here has been from my earliest recollection a breeding-place for these Owls. The situation is most desirable, being a meadow or flat, level with the coast, over which the tide completely flows, but leaves it entirely dry when it recedes. This meadow is covered with a coarse grass, and surrounded by tall

brakes and reeds. In these latter they gather together the remains of last year's frost-bitten reeds, and place them in a promiscuous heap on a tussock. This is afterwards hollowed out, and the set of eggs is then laid. Six is the largest number I ever found, with the exception of one nest, in which I found ten; but these were laid by two females, who sat together on the same nest in perfect harmony." Incubation usually commences about the last of May.

Barred Owl.

Syrnium nebulosum.

PLATE XV.

DESCRIPTION.

Eggs.—The number of eggs is usually four, and sometimes three or five. They are white, nearly spherical, and measure from 2.10 to 1.90 in length, by 1.83 to 1.65 inches in breadth.

NESTS AND BREEDING HABITS.

A common resident in New England, breeding in dense and retired localities of the forests. The nest is generally built in April, though they sometimes patch up a deserted nest of a Crow or Hawk. It is composed of sticks, lined with grasses and leaves, and is placed in pines, hemlocks, cedars, and oaks, and sometimes in the hollow of a tree.

Acadian Owl; Saw-whet.

Nyctale.

PLATE XV.

DESCRIPTION.

Eggs.—From four to six in number, normally four, and of the usual form of Owls' eggs. They are pure white, and measure about 1.05 by .90 of an inch.

NESTS AND BREEDING HABITS.

This species is a rather rare resident throughout New England. It breeds in hollow trees and the deserted nests of Crows, Hawks, and Woodpeckers, about the last of April.

Marsh Hawk; Harrier.

Circus cyaneus hudsonius.

PLATE XV.

DESCRIPTION.

EGGS.—From three to seven in number, but are commonly four or five. They vary in shape and in measurement from 2 to 1.75 in length, by 1.65 to 1.45 inches in breadth. When first laid, they are of a light greenish blue in ground color, and soon fade to a pearly or bluish white. Some are plain and unmarked, others with obscure lilac shell markings, and again others with the shell markings and pale yellowish or reddish brown spots or blotches scattered over the entire surface.

NESTS.—Placed in a large tussock or on the ground in meadows, marshes, and bushy swamps. They are generally composed of sticks and grasses, though I have often found eggs of this species in a mere depression in the centre of a tussock, without any indications of a nest whatever.

BREEDING HABITS.

The Marsh Hawks are common summer residents in New England, making their appearance about the first of April. The eggs are laid from the first to the last of May.

—

Sharp-shinned Hawk.

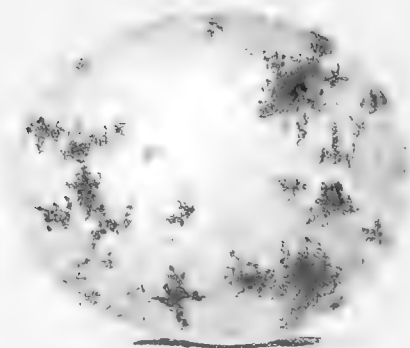
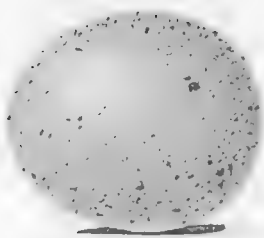
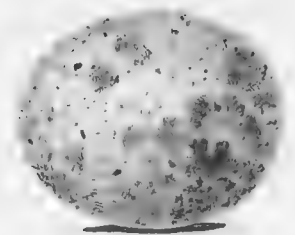
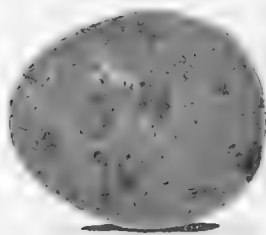
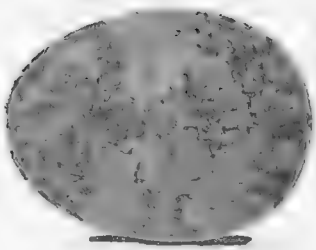
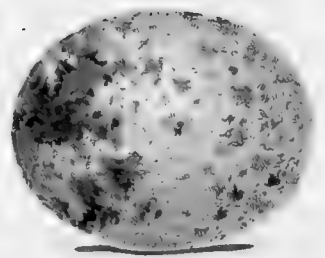
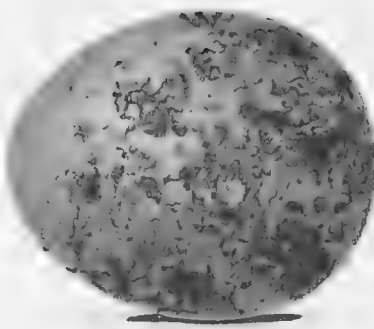
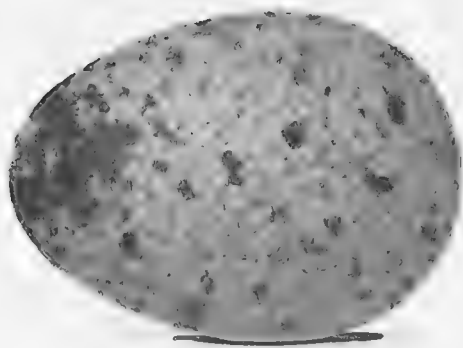
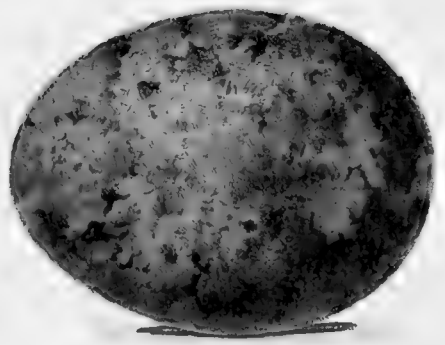
Accipiter juncus.

PLATE XV.

DESCRIPTION.

EGGS.—Four in number, often five. They vary in form, but are usually nearly spherical, and measure from 1.52 to 1.23 in length, by 1.08 to 1.25 inches in breadth. The ground color varies from a pale greenish to a bluish white, and is beautifully marked with spots and confluent blotches of yellowish, reddish, and dark browns, of varying intensity, distributed over the entire surface. In some specimens these blotches form a confluent band around the centre or the greater or lesser end of the egg, and are sometimes, though very rarely, immaculate.

NESTS.—Usually placed in a pine or oak tree from fifteen to thirty feet from the ground, and are usually large and slightly hollowed, composed of sticks and twigs, lined with a few dry leaves, grass, strips of bark, and similar material.



BREEDING HABITS.

This species is one of the most common Hawks of New England, making its appearance the latter part of April. The eggs are laid from the second week in May to the first week in June. This bird, like the majority of the Hawk family, will lay a second and even a third set when robbed of her eggs.



Cooper's Hawk; Chicken Hawk.

Accipiter cooperi.

PLATE XV.

DESCRIPTION.

EGGS.— Usually four in number, sometimes three or five; are elliptical in form, though often oval, and measure from 2.10 to 1.82 in length, by 1.60 to 1.50 inches in breadth. They are pale bluish white in ground color, sometimes unmarked, but usually with thin, pale reddish brown markings scattered over the entire surface, and are scarcely distinguishable from those of the Marsh Hawk, but are usually more equal-ended and average a little larger.

NESTS.— Usually placed high up close to the trunk in an evergreen tree. They are composed chiefly of sticks and twigs, with a slight depression in the middle, with a scanty lining of grass and leaves.

BREEDING HABITS.

The Cooper's Hawk is an abundant summer resident, and many remain in the southern portion of New England through the cold season. The eggs are laid from the first to the third week in May.



American Goshawk.

Astur atricapillus.

PLATE XVI.

DESCRIPTION.

EGGS.— Are three or four in number, somewhat spherical in form, and measure from 2.35 to 2.20 in length, by 1.95 to 1.75 inches in breadth. They are pale bluish white in ground color. Some are plain and unmarked, and others sparingly marked over the entire surface with obscure reddish or yellowish spots and lilaceous shell markings, resembling in color the eggs of the Marsh and Cooper's Hawk.

NESTS.— Placed in a tall evergreen, and are similar in construction to those of the other Hawks.

BREEDING HABITS.

The Goshawk is very rare in Southern New England as a summer resident, but is a regular inhabitant in the northern portion during the breeding season. In Maine, the eggs are laid about the second week in May.

Duck Hawk; Peregrine Falcon.

Falco communis.

PLATE XVI.

DESCRIPTION.

EGGS. — From two to five, though four seems to be the usual number. They vary in shape, also in size, measuring from 2.25 to 1.90 in length, by 1.71 to 1.50 inches in breadth. The ground color varies from a light reddish white to a brick red, spotted, blotched, or scrawled with dull reds and rich browns of varying intensity. (See Plate XVI., Figs. 2, 3, and 4.)

NESTS. — Mr. J. A. Allen gives a very interesting account of the breeding habits of this species in the "Proceedings of the Essex Institute," Vol. IV., 1864, of which I am reluctantly obliged to quote but a small portion. He says: "All accounts agree that the nest is placed on almost inaccessible cliffs, and often it can only be approached by a person being let down by a rope from above. The old birds are represented as bold in the defence of their nests, approaching so near as generally to be easily shot. They arrive early at their nesting-place, and though they often bestow no labor in the construction of a nest, beyond the scraping of a slight hollow in the ground, they defend their chosen eyry for weeks before the eggs are laid, and are known to return for several years to the same site. Incubation commences very early, the young having been found in the nest at Mount Tom, May 30, nearly fledged, and on Talcott Mountain, in the same condition, June 1; so that the laying of the eggs must occur by the last of March, or very early in April."

BREEDING HABITS.

All the places to my knowledge of the Duck Hawk's breeding are Talcott Mountain, Connecticut, Mount Holyoke, Mount Tom, and Sugar Loaf Mountain, Massachusetts, Brandon, Vermont, and Mount Katahdin, Maine. In the latter State they are no doubt the most numerous, as they are often seen there during the summer months. Mr. Boardman informs me that he collected a set of eggs on the island of Grand Menan, within a few rods of a Raven's nest, both species breeding in perfect harmony.

Pigeon Hawk; Merlin.

Falco columbarius.

PLATE XVI.

DESCRIPTION.

EGGS. — The number of eggs found in a set is from three to six; five is the usual number. They vary in shape from oval to being nearly equal-ended, and average about 1.56 by 1.30 inches. The ground color varies from a creamy white to a light brick red, spotted and confluent blotched over the entire surface or wreathed about either end with dull reds and browns of varying intensity, the darker types closely resembling those of the Duck Hawk in coloration.

NESTS. — Placed in an evergreen tree about the first of May, and are composed of sticks and twigs lined with grasses, moss, and leaves.

BREEDING HABITS.

The Merlin, as he is sometimes called, is a rare summer resident of New England, Massachusetts being its southern breeding limit, as far as now known, although it has been observed in Connecticut during the breeding season.



Sparrow Hawk.

Falco sparverius.

PLATE XVI.

DESCRIPTION.

EGGS. — From three to seven; five is the usual number. They are usually nearly spherical, though varying in form, also in color and marking. The ground color is light buff, dark cream color, light reddish yellow, or white. Some are, though rarely, immaculate; others, finely and thickly dotted over the entire surface with dull ochre, dark brown, and dull red; others, blotched at either end with yellowish and dark brown, the remaining surface being finely dotted with yellow ochre, burnt sienna, and dark brown; and others are sparingly blotched and spotted over the entire surface with dark brown and burnt sienna. They measure about 1.30 by 1.15 inches.

NESTS AND BREEDING HABITS.

This little Hawk is a common summer resident of Northern New England, but in the southern portion it is not so common, and is rather locally distributed. It lays its eggs about the middle of May, in a hollow tree or in a deserted Woodpecker's nest, from about six to twenty-five feet from the ground, and occasionally in an old Crow's nest.



Red-tailed Hawk or Buzzard; Hen Hawk.

Buteo borealis.

PLATE XVI.

DESCRIPTION.

Eggs.— Usually three in number, seldom more or less, varying in shape from nearly spherical to oval, and average about 2.20 by 1.80 inches or more. They are dirty white or bluish white in ground color, sparingly or thickly spotted and blotched with several shades of reddish brown, interspersed with faint purplish, but vary considerable in distribution and color of markings.

NESTS AND BREEDING HABITS.

The Red-tail is a common resident of New England. The nest is usually placed in a tall pine, and is a large and bulky affair, composed of interlaced twigs with a slight depression in the centre, and lined with grasses, moss, leaves, etc. I knew a pair of these Hawks that built their nest in a bushy swamp at about three feet from the ground, on the stump of an overturned tree. They repaired and occupied the nest for seven successive years, and would probably have continued, had not the female been shot by a wanton sportsman. The eggs are laid about the middle of April.



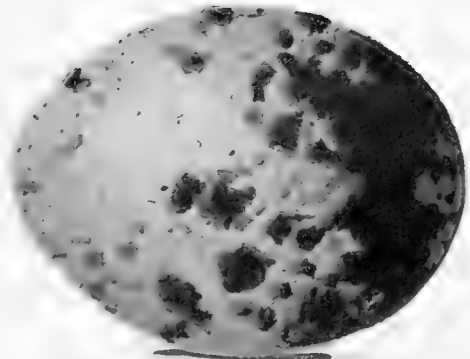
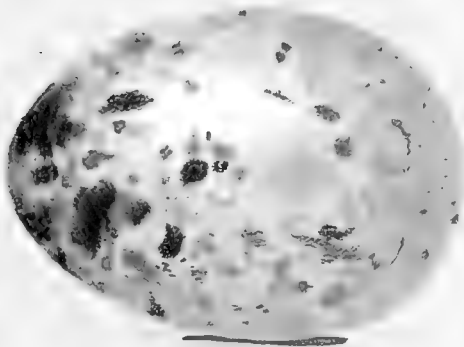
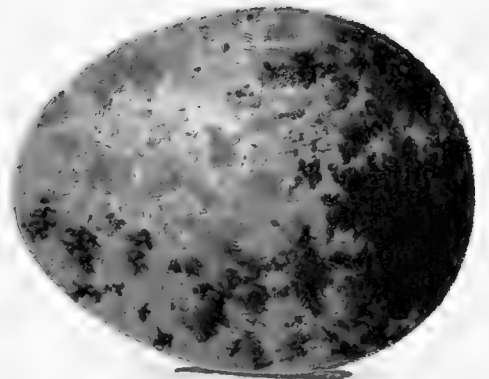
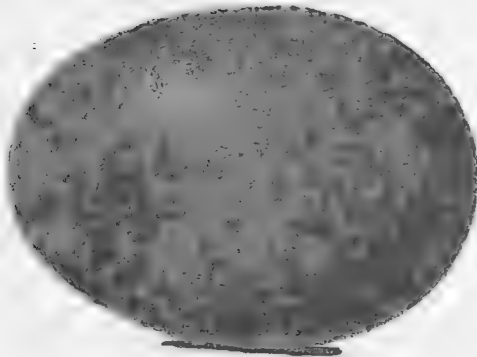
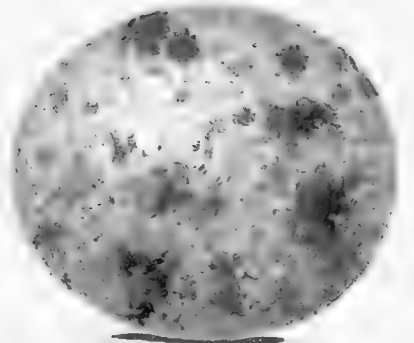
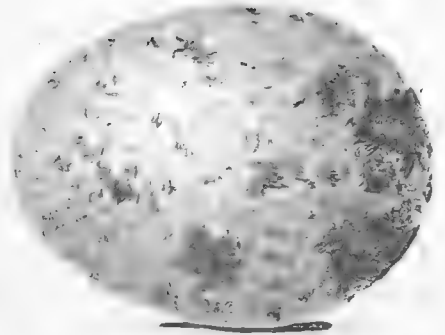
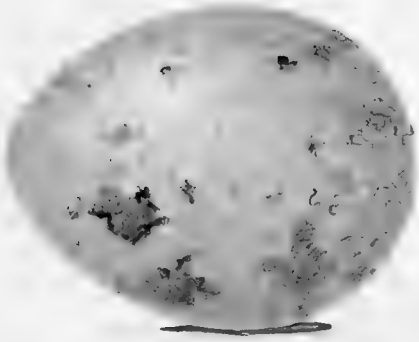
Red-shouldered Hawk.

Buteo lineatus.

PLATE XVII.

DESCRIPTION.

Eggs.— Commonly three or four in number; two or five are extremely rare. They vary so remarkably in shape, color, and markings, that I shall attempt to describe but a few of the most typical. In some, the ground color is white, with a



slight tinge of blue, blotched over the entire surface with thin dirty yellow, and finely marked with dull brown and burnt sienna; others are dirty white in ground color, with thin, semitransparent blotches of dull yellow, over which are spots and blotches of sienna red and dark brown, principally about the larger end, and intermingled throughout with lilac spots. In others, the ground color is light yellow or cream color, with blotches of a deeper shade and yellowish brown; sometimes with a few scrawls of dark brown, and occasionally without any apparent markings. They measure about 2.20 by 1.70 inches.

NESTS AND BREEDING HABITS.

The Red-shouldered Hawk, like the preceding species, is a resident throughout the year; the majority, however, migrate. The nest is usually placed in a pine or hemlock, often in an oak or other deciduous tree. It is rather bulky, and composed of large sticks, lined with fine twigs, moss, and leaves. They usually build a new nest, but sometimes occupy the same one many seasons. The eggs are laid about the last of April.



Broad-winged Hawk.

Buteo pennsylvanicus.

PLATE XVII.

DESCRIPTION.

EGGS.—Nominally four in number, occasionally three or five. They are nearly spherical in form, and average about 2 by 1.65 inches; are white, marked with thin blotches of yellowish, over which are spots and blotches of reddish or yellowish and dark brown of varying intensity; others, with dull yellowish and reddish brown thinly or thickly distributed over the entire surface; and others with the same colors much subdued.

NEST AND BREEDING HABITS.

This species is a common summer resident in Northern New England, but is rather rare in the southern part. The nest is usually placed in swamps or woodlands, in pines or hemlocks, from fifteen to fifty feet from the ground, and is composed of coarse sticks and twigs, lined with strips of bark, grasses, or feathers. The eggs are laid from the latter part of April to the middle of May.

Fish Hawk; Osprey.

Pandion haliaetus.

PLATE XVII.

DESCRIPTION.

EGGS.—Generally three in number, often two, and rarely four. They exhibit remarkable variation in color, size, shape, and distribution of markings, and measure from 2.60 to 2.20 in length, by 1.85 to 1.60 inches in breadth. They vary from being nearly pyriform to rounded oval. The ground color is white, bluish white, reddish white, light yellow, deep cream color, or buff, more or less thickly spotted and blotched over the entire surface with rich reddish and dark brown of varying shades. Some are so thickly and confluent blotched as to nearly hide the ground color; others confluent massed about the larger end,—sometimes the smaller end; and others sparingly spotted or blotched. But the variations are too numerous to attempt description. I have therefore represented four types of the most remarkable varieties. (Plate XVII.)

NESTS.—Are large and bulky structures, measuring from two and a half to four or five feet in the external diameter. They are composed of a mixture of large sticks and clods of earth, lined with sea-weed, and are generally added to and repaired from year to year.

BREEDING HABITS.

The Fish Hawk is a common summer resident of New England in the States bordering the sea, and in Massachusetts is much more common than most authors have generally supposed. It makes its appearance in March, usually nesting in communities, in tall trees, and is given by Mr. Merriam as building on the ground, in Connecticut, there being no desirable trees in the vicinity of their breeding grounds.



Golden Eagle.

Apula chrysaetus.

PLATE XVIII.

DESCRIPTION.

EGGS.—Usually two in number. They are nearly spherical in form, and measure from 2.65 to 3.45 in length, by 2.15 to 2.45 inches in breadth. They are white or creamy white in ground color, with obscure purplish or grayish shell markings, and light reddish or yellowish stains, over which are irregular spots and

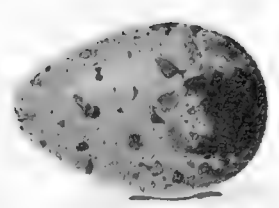
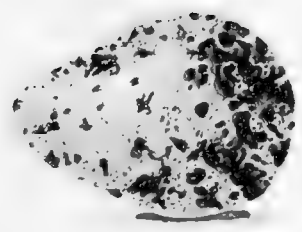
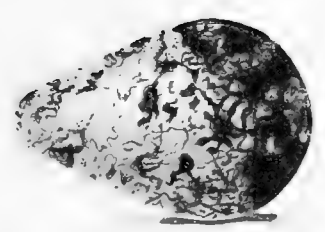
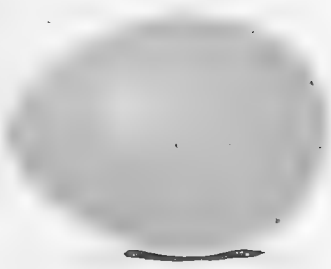
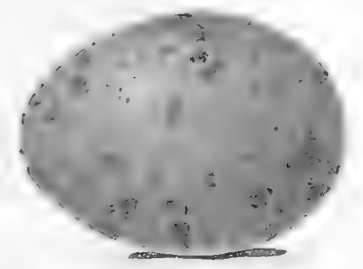


FIG. 1. Golden Eagle.
 White-headed Eagle
 Wild Pigeon
 " Dove
 Canada Grouse

FIG. 6. Ruffed Grouse
 " "

blotches of pale yellow, burnt sienna, or reddish brown. They are usually pretty evenly marked, though often most numerous about the larger end, and very rarely, they occur unmarked.

NESTS AND BREEDING HABITS.

The Golden Eagles in New England are residents of the three northern States only; and, from what I am able to gather, they are nowhere abundant. They construct a loose and bulky nest of large sticks on the projections of the nearly inaccessible cliffs in the mountainous regions.



White-headed Eagle; Bald Eagle.

Haliaeetus leucocephalus.

PLATE XVIII.

DESCRIPTION.

EGGS.— Usually two in number, and occasionally three. They are nearly spherical in form, average about 3 by 2.50 inches, and are ashy white or dull yellowish white, unmarked, but often stained with yellowish.

NESTS AND BREEDING HABITS.

The Bald Eagle is common in some parts of Northern New England, but is not very often seen in the southern portions, unless it be Western Massachusetts, where, as given by Mr. J. A. Allen, it "sometimes breeds on Mount Tom." The nest does not essentially differ from that of the Fish Hawk, and is built on the top of a large tree.



Wild Pigeon; Passenger Pigeon.

Ectopistes migratorius.

PLATE XVIII.

DESCRIPTION.

EGGS.— Two in number, occasionally only one; are pure white, elliptical or nearly so in shape, and measure about 1.50 by 1.10 inches.

NESTS.— In communities, constructing a light, frail nest, consisting of a few interlaced twigs, through which the eggs may often be seen from the ground.

BREEDING HABITS.

This once abundant species of New England is becoming quite rare, being now chiefly confined to the northern portions as summer residents, though still numerous in Western Massachusetts. The eggs are laid in the months of April and May.



Wild Dove; Mourning Dove.

Zenaidura carolinensis.

PLATE XVIII.

DESCRIPTION.

Eggs.—Are to the number of two, nearly elliptical in form, pure white, and measure about 1.10 by .85 of an inch.

NESTS AND BREEDING HABITS.

A rare summer resident in Northern New England, but in the southern portion it is common in favorable localities, arriving in small flocks or single pairs about the last of March. About the middle of May the nest, much the same as that of the preceding species in construction, is placed in the woods in almost any kind of a tree, or in bushes, stumps, or even on the ground. Two broods are reared in a season.



Heath Hen.

Cupidonia cupido.

PLATE XXIV.

DESCRIPTION.

Eggs.—The egg represented is from a set of six in the collection of Mr. C. J. Maynard, which were collected at Martha's Vineyard during the past season (1885), after all the other eggs had been figured, and was inserted in Plate XXIV., between the eggs of the Horned and Pied-billed Grebes, that being the most available place left. The following description is from the manuscript of Mr. Maynard: "They are regularly oval in form, all the specimens being quite uniform in this respect. The color is yellowish green of a peculiar shade, quite different from the more decided greenish brown seen in the Western species, from which the eggs now in hand also differ in being unspotted. There is little variation in the dimensions of all six, the average measurements being 1.72 by 1.27 inches. This is the only set of eggs I have ever seen."

BREEDING HABITS.

This bird is of a peculiar species of Grouse, which inhabits Martha's Vineyard, and recently separated from the Western Prairie Hen by Mr. William Brewster. In the *Auk*, Vol. II., 1885, Mr. Brewster says: "Formerly found at various points in Eastern Massachusetts, Southern Connecticut, Long Island, New Jersey, and Pennsylvania; perhaps also Southern New England and the Middle States generally." The same writer says: "The Heath Hen (I use the vernacular name by which it was known to our forefathers) is still common on Martha's Vineyard, where it is mainly, if not exclusively, confined to the woods, haunting oak scrub by preference, and feeding largely on acorns. Being strictly protected by law, but few are probably killed. I am told by one of the Boston marketmen, however, that he has had as many as twenty from the Vineyard in a single season. He also says that they average nearly a pound less in weight than the Western specimens, and on this account do not sell as readily. The bird is not found on the neighboring island of Naushon, despite statements by recent writers to that effect, nor is there any good evidence that it ever occurred there. There is also no reason to believe that the stock on Martha's Vineyard has been vitiated by the introduction of Western birds. It is simply the last remnant of a once more or less widely distributed race, preserved in this limited area, partly by accident, partly by care. According to the best testimony available, the colony is in no present danger of extinction."

Canada Grouse; Spruce Partridge.

Tetrao canadensis.

PLATE XVIII.

DESCRIPTION.

Eggs.—From six to fourteen in number, but usually about ten, and vary in size, shape, and markings. The ground color varies from a dull white to light yellow, deep cream color, or reddish buff, dotted and blotched irregularly over the entire surface with yellowish and dark brown. They average about 1.68 by 1.23 inches.

NESTS AND BREEDING HABITS.

This species is confined to Northern New England, where it is a permanent resident, and in some portions abundant. About the middle or latter part of April or early May it deposits its eggs on a few leaves in a depression made in the

ground, usually selecting some retired and swampy location. These birds are so tame and easy of approach that they are fast being exterminated, and sent to our city markets in great numbers.



Ruffed Grouse; Partridge.

Bonasa umbellus.

PLATE XVIII.

DESCRIPTION.

Eggs.—Are commonly from eight to twelve in number. They vary from a pale yellowish white to a dark cream color, sparingly marked with a few yellowish or light sienna dots, and are often unmarked. They vary in shape from being nearly pyriform to a rounded oval, and measure from 1.70 to 1.60 in length, by 1.28 to 1.15 inches in breadth.

NESTS AND BREEDING HABITS.

This well-known bird is an abundant resident of New England throughout the year. The last of April or first of June the female hollows a place in the ground, lining it with a few leaves, grasses, or moss, and deposits her eggs. They are laid either in the high or low ground, and probably never attempt to rear a second brood, unless an accident has befallen the first, as the young mature slowly.



Virginia Partridge; Quail or Bob-white.

Ortyx virginianus.

PLATE XVIII.

DESCRIPTION.

Eggs.—Are from eight to twenty-four in number, but usually about sixteen. They are pure white, with a brilliant surface, sometimes stained with yellowish, are abruptly pyriform in shape, and measure 1.20 by 1 inch.

NESTS AND BREEDING HABITS.

The Partridge is common in the three southern States of New England, and rapidly becomes rare as we advance north of Massachusetts. The nest is placed on the ground in open fields or brush-land, at the base of a low bush, tuft of grass, or in a brier thicket, and usually consists of dead leaves, strips of bark, and grass. The eggs are laid about the last of May. A second set is sometimes laid, and fresh eggs are occasionally found as late as November in Southern New England.

Kildeer Plover.

Ægialitis vociferus.

PLATE XVIII.

DESCRIPTION.

EGGS.— Invariably four in number; measure from 1.45 to 1.65 in length, by 1.12 to 1.05 inches in breadth, and are narrowly pyriform in shape. The ground color is yellowish buff or dull clay color, with yellowish and blackish brown spots, blotches, and scrawls, interspersed with small spots of slate or purplish, all of which are chiefly disposed about the larger end. In some, the spots are fine and rather rounded, devoid of scratches and scrawls.

NESTS AND BREEDING HABITS.

The Kildeer can hardly be called common in New England, though it is pretty well distributed. It arrives from the South about the first of March, and begins to breed about the first week in May, occasionally about the large ponds and lakes in the interior, but more common along the seacoast. Wilson, in describing the nest, says: "The nest is usually slight, a mere hollow, with such materials drawn in around it as happen to be near, such as bits of sticks, straw, pebbles, or earth. In one instance I found the nest of the bird paved with fragments of clam and oyster shells, and very neatly surrounded with a mound or border of the same, placed in a very close and curious manner. In some cases there is no vestige whatever of a nest." But one brood is reared in a season.

Piping Plover; Ringneck.

Ægialitis melodus.

PLATE XVIII.

DESCRIPTION.

EGGS.— Are four in number, rarely five; are abruptly pyriform in shape, and average in dimensions about 1.28 by .92 of an inch. They are light clay color or sometimes creamy buff in ground color, finely and sparsely marked all over with blackish brown and lilac or slate-colored dots.

NESTS AND BREEDING HABITS.

This species is abundantly distributed along the seacoast of New England. They make their appearance about the last of April in small flocks, and soon after their arrival begin to pair. The last of May or early in June the eggs are laid,

either upon the bare sand, or upon a few pieces of dry grass or sea-weed carelessly placed together. The islands along the coast seem to be their favorite resort, and seldom wander far towards the interior of the main-land. But one set of eggs is laid during a season.



Red Phalarope.

Phalaropus fulicarius.

PLATES XVIII. AND XIX.

DESCRIPTION.

Eggs. — Usually four, though occasionally three in number; are pyriform in shape, and average about 1.25 by .82 of an inch. The ground color varies from light greenish olive to a brownish drab, thickly spotted and blotched all over with thin, semitransparent brown, blackish brown, and a few markings of purplish lilac, often becoming confluent at the larger end, and completely concealing the ground color.

NESTS AND BREEDING HABITS.

The Red Phalaropes inhabit New England chiefly as migrants, arriving in small flocks of three or four, frequenting the shores of ponds and lakes and the sea-shore. It usually breeds in the more northern sections of our continent; but, like the Northern Phalarope, is occasionally seen, during the breeding season, in Northern Maine. In a letter from Mr. Boardman, he says: "Twice I have found the Red Phalarope breeding in Maine." The eggs are laid the first part of June, in a slight depression made on the ground, sparsely lined with moss and grass, and but one brood is reared in a season.



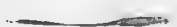
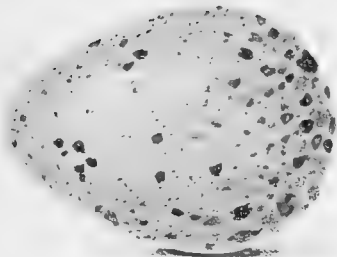
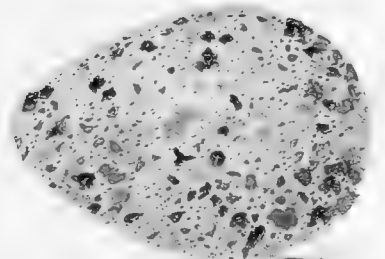
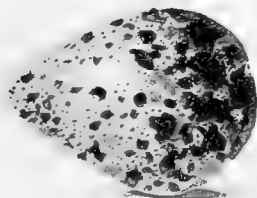
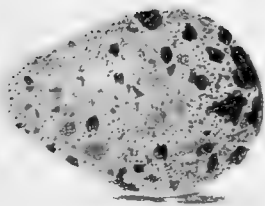
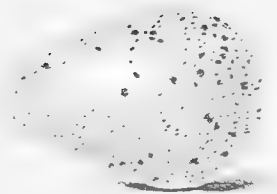
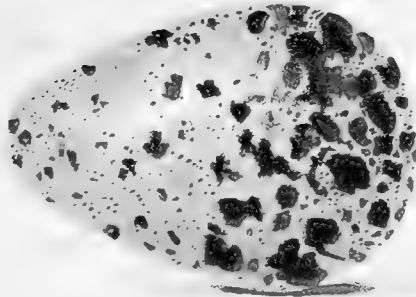
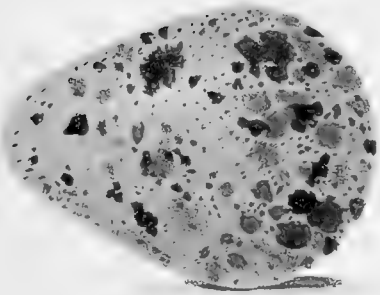
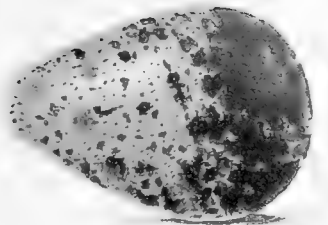
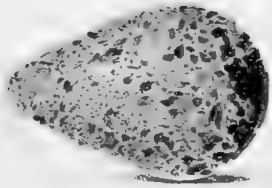
Woodcock.

Philohela minor.

PLATE XIX.

DESCRIPTION.

Eggs. — The number of eggs is usually four, sometimes three; they measure about 1.55 by 1.20 inches, though varying, and are somewhat pyriform in shape. The ground color varies, but is usually a rich creamy drab or light buff, thickly spotted and blotched with light reddish browns and obscure spots of lilac and slate color.



NESTS AND BREEDING HABITS.

The Woodcock is commonly distributed over all New England as a summer resident, but is more numerous in the northern than southern portion. It is an early breeder, selecting a dry spot in swampy land, in a birch or alder thicket, or in underbrush, in early April, to commence nidification. It lays its eggs on the bare ground, but sometimes makes use of a few leaves, barely sufficient to keep them from the ground. They are very assiduous in the duties of incubation, and will not leave the nest until closely approached. I have known of birds being killed while on the nest with sticks in hands of wanton boys, and caught by the well-known pest to many of our birds, the farmers' grimalkin.



American Snipe ; Wilson's Snipe.

Gallinago wilsoni.

PLATE XIX.

DESCRIPTION.

Eggs.—The usual number of eggs is four, often three; they are pyriform in shape, and measure about 1.55 by 1.10 inches, but vary considerably. The ground color varies from olivaceous drab to greenish brown, marked with umber-brown spots and blotches of varying intensity and a few obscure shell spots. They are occasionally marked with lines and scrawls of black or dark brown; sometimes evenly marked throughout the entire surface, but usually most numerous and confluent about the larger end or half.

NESTS AND BREEDING HABITS.

The Snipe breeds in Northern New England, northward, though it has been known to breed as far south as Massachusetts, but such an occurrence is extremely rare. About the first week in May the eggs are laid in a slight depression made in the moss or grass of a boggy meadow, and occasionally on a few grasses and leaves collected together by the bird. But one brood is reared in a season.

Willet.

Totanus semipalmatus.

PLATE XIX.

DESCRIPTION.

Eggs.—Almost invariably four in number; are pyriform in shape, and vary in dimensions from 1.90 to 2.15 in length, by 1.45 to 1.58 inches in breadth. The ground color is brownish olive, pale olive, drab, greenish, or greenish white, but usually of the two former colors, marked with bold and decided spots or small blotches throughout the whole surface, and sometimes confluent about the greater end with various shades of umber brown and obscure shell markings.

NESTS AND BREEDING HABITS.

The Willet is a rare resident all along the New England coast, arriving in the latter part of April or early in May. Rev. J. H. Langille, in describing the nest of this species, says: "The Willet does not belong to those birds which make their nests on the open beach by simply scooping out a little hollow in the sand. It seeks the shelter of the marshes, building quite a bulky nest in some tussock of grass, the nest being raised sometimes as much as five or six inches, and composed of dried rushes and grasses. As it is pretty well rounded up, the four pyriform eggs, lying with their points together, seem almost to stand on the points, presenting their larger ends to the body of the bird." But one brood is reared in a season.



Solitary Sandpiper.

Totanus solitarius.

PLATE XIX

DESCRIPTION.

Eggs.—Light drab in ground color, finely spotted with dark brown and slate-colored shell markings over the entire surface. They are pyriform in shape, and measure about 1.37 by .95 of an inch.

NESTS AND BREEDING HABITS.

The Solitary Sandpiper is common throughout New England, during the migrations frequenting the shores of the fresh-water ponds and lakes, singly and in pairs. The above description is taken from the egg collected and loaned to me by Mr. Jenness Richardson. In a letter, Mr. Richardson says: "At Lake Bom-

bazine, Castleton, Vt., near what is known as 'Birch Point,' there is a small stream emptying into the lake, at the mouth of which is a large swampy tract, covering several acres, and having a dense growth of alders. The swamp at this time of the year is partially flooded. Here the Woodcock, Snipe, and Solitary Sandpiper are very abundant. A search was at once commenced to find the nest of the latter bird. One morning, about twenty feet from me, as I was about to enter the swamp, I flushed one of these birds, which displayed considerable anxiety. I immediately began hunting for its nest, which I soon discovered, concealed, and partly sheltered, by a thicket of small hemlocks. The nest was a mere depression on the ground, without any vestige of a lining whatever, and contained only one egg. The bird was shot, and, upon dissection, two eggs were found, which would probably have been laid in a few days. This egg was found May 28, 1878." Mr. James W. Banks, St. John, N. B., found a nest of this bird, July 3, 1880, containing three eggs. It was on the shore of a lake in the suburbs of the city, about two hundred yards from the edge of the lake, on a dry spot in the midst of a rather swampy patch of meadow.



Spotted Sandpiper.

Tringoides macularius.

PLATE XIX.

DESCRIPTION.

Eggs.— The number of eggs in a set is usually four, are abruptly pyriform in shape, and average about 1.30 by .97 of an inch. They are light creamy brown or yellowish drab in ground color, marked with spots, blotches, and dots of blackish brown, a few yellowish spots, and obscure shell markings. They are sometimes pretty evenly marked, but usually become confluent and more heavily blotched about the larger end.

NESTS AND BREEDING HABITS.

This species is pretty generally distributed over all New England, arriving from the South the latter part of April or beginning of May. The time of incubation is from the first to the middle of May. It breeds upon sandy flats and marshes near the seacoast, or in fields and meadows in the interior, usually in the neighborhood of ponds and lakes. The nest is sometimes nothing more than a slight cavity scratched upon the surface of the ground, but generally has a slight lining of grass, straw, or moss.

Bartram's Sandpiper; Upland Plover.

Actiturus bartramius.

PLATE XIX.

DESCRIPTION.

EGGS. — Are four in number; sometimes, though rarely, three. They are more oval in form than most of the other waders, and average in dimensions about 1.75 by 1.28 inches. In ground color they are a rich buff or creamy drab spotted with yellowish, reddish, purplish, and dark browns, and the usual obscure neutral tinted shell spots. The markings are pretty evenly distributed over the entire surface, but are usually more numerous about the larger end, and are very rarely blotched, the markings being rather small.

NESTS AND BREEDING HABITS.

This Sandpiper is rather rare in New England as a summer resident, but is abundant during the migrations in May and August. It differs from the other waders, by preferring the dry upland fields and pastures to those of marshes and flats. The nest is a mere depression in the earth, with a few grass-stalks barely sufficient to keep the eggs from the ground. A set of eggs I found at the "South Shore" of Martha's Vineyard, 1878, was deposited on the bare ground. Merely a slight hollow had been scraped on the sandy loam, without any vestige of a nest whatever. The bird was very shy, and circled around at considerable height, but with great anxiety, repeating its call-note at short intervals. But one brood is reared in a season.



Great Blue Heron.

Ardea herodias.

PLATE XIX.

DESCRIPTION.

EGGS. — Are three, more commonly four, and sometimes five; are nearly elliptical, although they vary in shape; measure about 2.62 by 1.75 inches, and are of a pale bluish green color.

NESTS AND BREEDING HABITS.

The Great Blue Heron is a common summer resident of New England in suitable localities, and is abundant in certain sections of Maine. It makes its appearance the middle of April or a little earlier, and commences building about

the middle of May. The nest is a loose construction placed in trees, usually in hemlock or cedar swamps, in New England, and is composed of interlaced sticks and twigs, with a slight hollow in the centre. But one brood is reared in a season.



Green Heron.

Ardea virescens.

PLATE XIX.

DESCRIPTION.

EGGS.— Are from three to six in number, usually four or five; nearly elliptical in shape; average about 1.50 by 1.20 inches; are pale greenish blue, and unmarked, as are all Herons' eggs.

NESTS AND BREEDING HABITS.

A common summer resident throughout New England. It makes its appearance the last of April, and begins building about the middle or last of May in communities, and often in single pairs, or in company with the Great Blue or Night Herons. The nest is placed on the branches or near the trunk of a tree or bush, usually in the vicinity of pools or ponds, and is loosely constructed of sticks and twigs. But one brood is reared in a season.



Night Heron; Qua-bird.

Nyctiardea grisea.

PLATE XIX.

DESCRIPTION.

EGGS.— Are from three to six in number, usually four. I have found as many as eight in a nest, but they were probably laid by more than one bird. They are light bluish green in color, although they vary a trifle in shade in different specimens. They vary in form and size, being either oval or elliptical, and average about 2.10 by 1.45 inches.

NESTS AND BREEDING HABITS.

This species is the most abundant of Herons in New England, and is distributed over all New England in large communities, during the breeding season, in

suitable situations. It arrives from the South about the last of April. Few, however, have been known to remain in Southern New England through the winter. About the 20th of May they begin to construct a rather durable nest, which is often bulky, of sticks and twigs, and will return to the same nest year after year, if not disturbed. It is generally placed on the horizontal limbs close to the trunk of a tree in thick and dense swamps, those of the cedar being the ones most often selected.



American Bittern; Indian Hen.

Botaurus minor.

PLATE XIX.

DESCRIPTION.

EGGS. — Are usually four in number, occasionally five, and often three; broadly elliptical in form, measuring about 1.90 by 1.50 inches, and are dark yellowish or brownish drab in color. The one represented in the plate is an average specimen, some varying lighter or darker.

NESTS AND BREEDING HABITS.

A common summer resident of New England, and abundant in certain sections of the northern portion. It arrives from the South about the middle of April, and breeds in boggy meadows and bushy swamps in communities, and often in single pairs. About the first of May the nest is placed in a tussock or on the ground, and is composed of reeds and weed-stalks. But one brood is reared in a season.



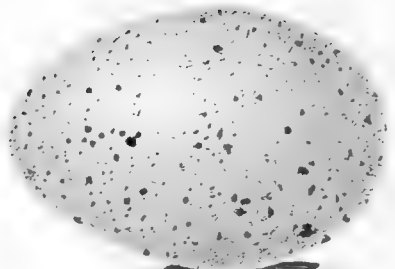
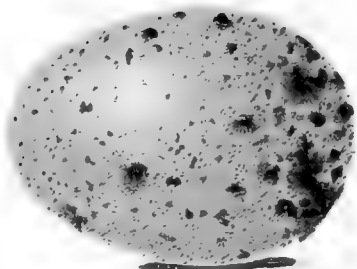
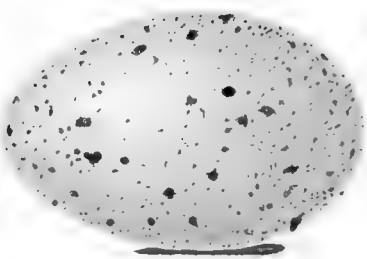
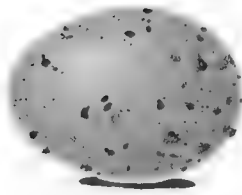
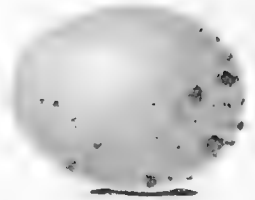
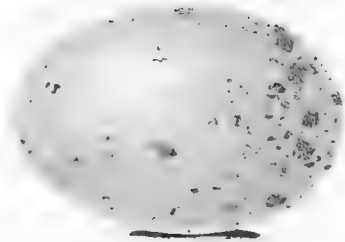
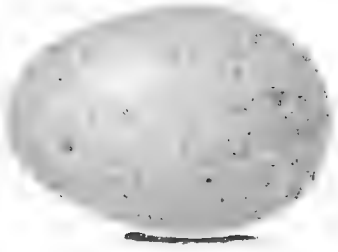
Least Bittern.

Ardeetta exilis.

PLATE XIX.

DESCRIPTION.

EGGS. — From three to five in number, usually four; are pale bluish white when first laid, but soon fade to a lighter tint. They are nearly elliptical in form, and measure from 1.20 to 1.30 in length, by .90 to .98 of an inch in breadth.



7. ♂ Florida Gallinule.
8. Mudhen
9. Jusky Duc
10. ♀ Green-winged Teal

NESTS AND BREEDING HABITS.

This, the smallest of the family of Herons, is rather rare in New England, excepting in the extreme southern portions, where it may be considered as common in some localities. It occurs, however, quite commonly on the marshes of the Concord River, in Massachusetts, and breeds there regularly. Like the preceding species, it inhabits the marshy districts, and constructs its nest upon tussocks and masses of broken reeds and rushes, just above the water, and sometimes in low bushes. It is composed of reeds, grass, and the like, finer towards the inside.

Clapper Rail.

Rallus longirostris.

PLATE XX.

DESCRIPTION.

Eggs. — Usually seven or eight in number, and vary from being pointedly, but not sharply, oval to nearly elliptical in form, and measure from 1.84 to 1.63 in length, by 1.25 to 1.14 inches in breadth. They are creamy drab or pale yellowish buff in ground color, spotted rather sparingly throughout with lilaceous shell spots, reddish purple and reddish brown. In some the spots are most numerous about the larger end.

NESTS AND BREEDING HABITS.

This Rail is a rare visitor to all of the New England States, but has not been known to breed in any of them excepting Connecticut, as far as I have been able to ascertain. I took a female specimen at Canton, Mass., in the latter part of May, 1879; another was taken in the same locality a few days later; other records of its presence in this and the other States of New England are numerous, and the probability is that it may breed farther north than is now known. It is a bird mostly of the salt marsh, and in these localities it often goes by the name of Marsh-hen or Mud-hen. They are very diligent in the duties of incubation and very shy, though they will not leave the nest until one is almost upon them, when they quickly and noiselessly conceal themselves by running through the tall grass and reeds. The nest is usually well hidden under a tuft of grass or among the reeds, and is composed of dry grasses and reeds, slightly hollowed.

Virginia Rail.

Rallus virginianus.

PLATE XX.

DESCRIPTION.

Eggs. — From six to twelve in number, usually about eight; are pale creamy or reddish buff in ground color, spotted with obscure lilac, reddish brown, and purple of different shades. They are usually sparingly spotted and slightly blotched over the entire surface, but more thickly about the larger end, the majority of specimens greatly resembling in color and markings those of the Clapper Rail. They vary in shape from rounded to pointed oval, and measure from 1.30 to 1.23 in length, by .97 to .90 of an inch in breadth.

NESTS AND BREEDING HABITS.

A common summer resident throughout New England; they frequent both the salt-water and fresh-water marshes, but prefer the latter. It makes its first appearance about the first of May, sometimes a little earlier. The nest is placed in a tussock of grass or on the ground, anywhere from the middle of May to the first of June, sometimes later. It consists of reeds and grasses, and is hollowed. But one brood is reared unless the first is broken up.



Carolina Rail; Sora Rail.

Porzana carolina.

PLATE XX.

DESCRIPTION.

Eggs. — The number of eggs laid, color, and disposition of the markings, are about the same as those of the preceding species, but they differ in ground color, being a yellowish drab with a decided olive tint and are easily distinguished. They measure about 1.20 by .90 of an inch. Many occur lighter than the one in the plate.

NESTS AND BREEDING HABITS.

Like the preceding species, this bird is common throughout New England, and in many localities is abundant. The nest and breeding habits are also about the same.

Yellow Rail; Crake.

Porzana novboracensis.

PLATE XX.

DESCRIPTION.

EGGS.—Usually about five or six, and measure about 1.10 by .82 of an inch. They are of a reddish buff in ground color, finely dotted over the entire surface with lilac and brownish red, and spots of the latter color clustered around the larger end.

NESTS AND BREEDING HABITS.

This species is a rare summer visitor in New England, and is seen mostly during the migration. The nesting habits do not differ essentially from those of the other Rails. Mr. Boardman informs me that he has found it breeding near Calais, Me., and frequently seen other birds of this species during the breeding season.

Florida Gallinule; Common Gallinule.

Gallinula galeata.

PLATE XX.

DESCRIPTION.

EGGS.—From four to ten in number, usually about six; measure from 1.92 to 1.54 in length, by 1.32 to 1.12 inches in breadth, and are nearly elliptical or rounded oval in shape. They are dirty cream color or brownish buff, with spots and small blotches of reddish and purplish brown over the entire surface, thickly intermingled with fine dots of the same colors. The markings are usually pretty evenly distributed, though often most numerous about the larger end.

NESTS AND BREEDING HABITS.

This species is a rare and occasional visitor in the three northern States of New England, is not uncommon in Massachusetts, and breeds regularly in the two southern States. "The nest of the Common Gallinule is usually built on shallow water, among the sedges and marsh grass, to which it is fastened,—about ten or twelve inches in diameter, and continued six or eight inches above the surface of the water, often with an indentation to one side, like a platform, for walking up from the water. This elegant raft, made of leaves of cat-tails, sedges, and marsh grass, is neatly hollowed like a saucer on the top." (Rev. J. H. Langille.)

Coot; Mud-hen.

Fulica americana.

PLATE XX.

DESCRIPTION.

EGGS.—Are from six to twelve in number, usually about ten. They vary in form, and measure from 2 to 1.75 in length, by 1.38 to 1.20 inches in breadth. They are clay color, or pale creamy brown, profusely and minutely dotted throughout the entire surface with obscure lilac and purplish browns, sparingly intermingled with larger dots or spots of the latter color. Sometimes the markings tend to gather about the larger end, and with a few blotches.

NESTS AND BREEDING HABITS.

The Mud-hen, as it is often called, arrives from the South late in April or early in May, and breeds from Northern New England, southward. The mode of nesting is similar to that of the preceding species,—the nest being arranged in the reeds or cat-tails in such a way as to rise and fall with the tide, though it is sometimes placed in fresh-water marshes, and sometimes upon the wet or boggy ground.



Dusky Duck; Black Duck.

Anas obscura.

PLATE XX.

DESCRIPTION.

EGGS.—Are from six to twelve in number, usually seven or eight; are elliptical or nearly so in shape, measure about 2.30 by 1.70 inches, and vary from creamy white to a pale buff color.

NESTS AND BREEDING HABITS.

This species is the most abundant of all our Ducks. It is a common resident, breeds throughout New England, and abundantly in the northern portion. The incubation period is from the last of April to the early part of June. The nest is placed on the ground, in the grass or rushes in the neighborhood of ponds, pools, or streams, in meadows, and sometimes swamps. It is a large and neatly arranged structure of weeds and grass, nicely hollowed and lined with down and feathers from the breast of the bird.

PLATE XXI



Fig. 1. Golden Duck
2. Golden-eyed Duck
3. Golden Duck
4. Golden Duck

Fig. 5. Merganser, Goosander.
6. Red-breasted Merganser.
7. Hooded Merganser.
8. Common Cormorant.

Green-winged Teal.

Querquedula carolinensis.

PLATE XX.

DESCRIPTION.

EGGS. — From five to ten in number, usually about eight; are oval or elliptical in contour, and average about 1.82 by 1.28 inches. They are creamy or buff color, with a slight greenish tinge.

NESTS AND BREEDING HABITS.

It arrives from the South early in May, and breeds from Northern New England northward and westward, preferring the inland ponds and lakes to the salt water. The nest is placed upon the ground in meadows in the thick grass or reeds, or on the borders of ponds and streams. It is constructed of grass and weeds, with a slight lining of down and feathers.



Blue-winged Teal.

Querquedula discors.

PLATE XX.

DESCRIPTION.

The eggs, nests, and breeding habits of the Blue-winged Teal are identical with those of the Green-wing. It is common in the migrations, appearing in the spring about the last of April, and continues on to higher latitudes to pass the period of incubation. Occasionally, however, a pair remains in Northern Maine to rear its young. Mr. Geo. A. Boardman informs me that it bred about Calais, Me., a few years ago, but has now entirely disappeared in that locality.



Summer Duck; Wood Duck.

Aix sponsa.

PLATE XXI.

DESCRIPTION.

EGGS. — From eight to twelve in number, sometimes more and seldom less. They are elliptical in form, of a dirty yellowish white color, and average about 2 by 1.50 inches.

NESTS.— Usually placed in the hollow of a decayed tree, in some retired locality; the hole at the entrance being so small, sometimes, that it would seem almost impossible for the bird to pass in and out. The hollow is often as much as five or six feet in depth, at the bottom of which the nest is placed. It is composed of twigs or grass-stems, lined with a thick felting of soft down from the breast of the bird. They often occupy the same nest for many successive years, and if robbed of their eggs, will, after a few days' deliberation, lay a second set.

BREEDING HABITS.

This beautiful bird, the handsomest of our Ducks, is an abundant summer resident throughout New England, making its appearance usually the latter part of March. Incubation commences the last of April or early in May.



Golden-eyed Duck.

Bucephala clangula.

PLATE XXI.

DESCRIPTION.

Eggs.— Usually about eight or ten in number, rounded oval in form, of a light ashy green color, and vary in dimensions from 2.55 to 2.25 in length, by 1.78 to 1.70 inches in breadth.

NESTS AND BREEDING HABITS.

This species breeds in Northern New England and northward; is known chiefly as a migrant, and often remains throughout the winter in the southern portion. It builds in hollow trees or in the tops of decayed stubs. The nest consists of grass, leaves, and moss, lined with down from the bird's breast.



Eider Duck.

Somateria mollissima.

PLATE XXI.

DESCRIPTION.

Eggs.— From six to ten in number, usually about eight; are dull greenish drab, and most often sparingly marked with spots and blotches of a semitransparent dark green substance, which appears to be of an oily nature, and may be easily scraped off. They are often stained with yellowish, probably from the feet of the bird. They measure about 3 by 2 inches.

NESTS AND BREEDING HABITS.

The Eider Duck is a summer resident of New England, breeding sparingly along the eastern coast of Maine, northward. Incubation begins in June or early in July. The nest is placed on the ground, and is composed of weeds and grasses, upon which is a thick lining or layer of down taken from the breast of the bird.

Ruddy Duck; Dipper Duck.

Erismatura rubida.

PLATE XXI.

DESCRIPTION.

EGGS.—Number about a dozen, often more or less. They are ashy white in color, elliptical in form, and measure about 2.50 by 1.75 inches.

NESTS.—“The nest may be quite well built of fine colored grasses, circularly laid, or simply a mere matting together of the tops of green marsh grass, with a slight addition of some dry flexible material.” (Rev. J. H. Langille.)

BREEDING HABITS.

This is a bird of high latitude during the breeding season, though it breeds occasionally as far south as Northern Maine, and young in the down have been taken on Cape Cod; thus it is extremely probable that the Ruddy Duck may breed there.

Merganser; Goosander; Fish Duck; Sheldrake.

Mergus merganser.

PLATE XXI.

DESCRIPTION.

EGGS.—Usually about eight in number, often more, and occasionally less. They are rounded oval in form, measuring from 2.50 to 2.80 in length, by 1.70 to 1.90 inches in breadth; are yellowish white in color, sometimes varying to a light buff.

NESTS.—Are placed in the hollows of decayed trees, after the manner of the Wood Ducks, and are composed of leaves, moss, and grasses, over which is placed a thick layer of down from the breast of the parent bird.

BREEDING HABITS.

Well known as a migrant and winter resident. Breeds in Northern New England and northward. It is a bird mostly of the coast, having all the habits of the Sea Ducks, but repairs to the vicinity of fresh-water ponds and lakes in the interior to rear its young.



Red-breasted Merganser.

Mergus serrator.

PLATE XXI.

DESCRIPTION.

EGGS. — The number of eggs in a set varies from six to twelve, usually about nine or ten; they are oval or elliptical in shape, and vary in dimensions from 2.65 to 2.48 in length, by 1.82 to 1.65 inches in breadth. The color is a yellowish or reddish drab, and sometimes a dull buff, occasionally inclining to green.

NESTS AND BREEDING HABITS.

A common migrant and winter resident. Breeds commonly in Northern New England, northward. Unlike the other two Mergansers, they nest on the ground amongst the tall grass and bushes, in a hollow scooped in the earth, on the woody shores of fresh-water ponds and creeks which make in from the sea. They are composed of dry leaves, moss, lichens, and the like, lined with down and feathers.



Hooded Merganser.

Mergus cucullatus.

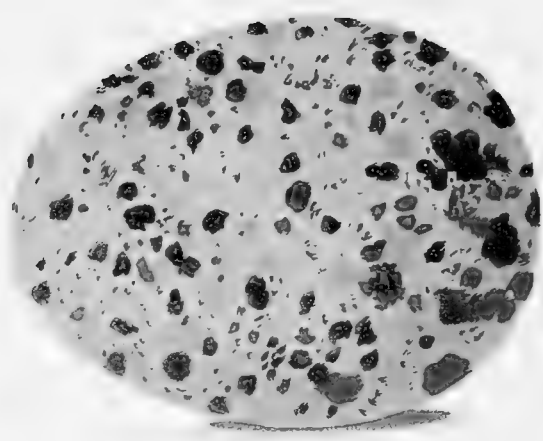
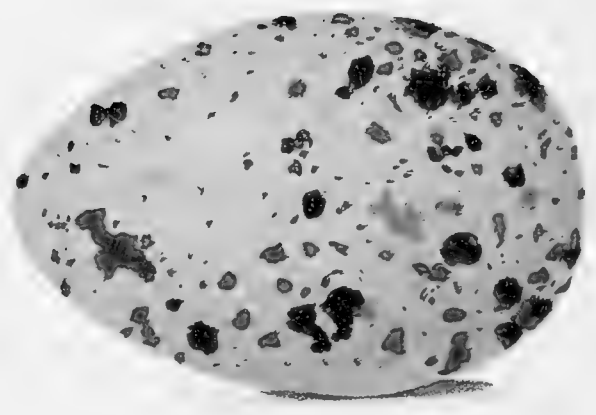
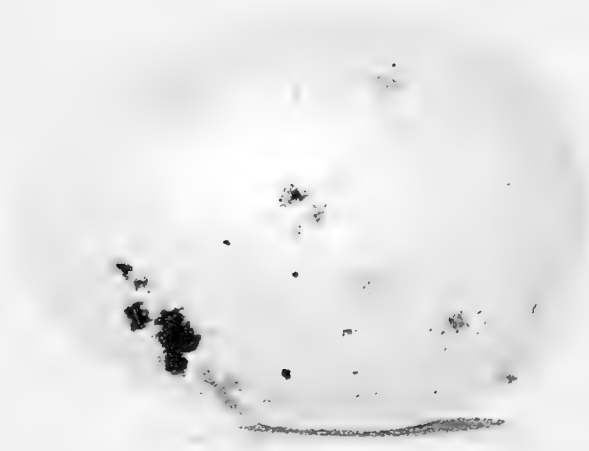
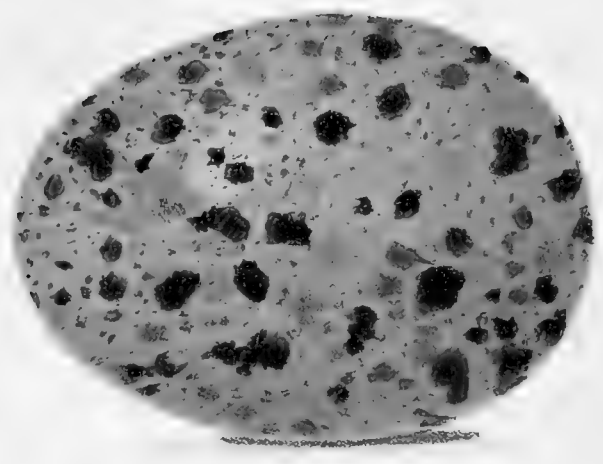
PLATE XXI.

DESCRIPTION.

EGGS. — Vary from seven to fourteen in number, — usually about a dozen; are of a delicate pearly white, rounded oval or nearly spherical in contour, and average about 2.13 by 1.75 inches.

NESTS AND BREEDING HABITS.

The Hooded Merganser is partial to the ponds and lakes of the interior, and in distribution and nesting habits is not unlike that of the *Mergus merganser*, is much more rare, but breeds sparingly in Northern Maine. The young soon take to the water, as is the case with all the swimming birds.



Common Cormorant; Shag.

Graculus carbo.

PLATE XXI.

DESCRIPTION.

EGGS.—The complement of eggs is usually three, sometimes four, and rarely two. They are pale greenish blue, covered over the surface with a thick chalky coating, which soon becomes stained, scratched, and often partly removed by the feet of the bird. They are narrowly elliptical in form, and measure about 2.75 by 1.65 inches.

NESTS AND BREEDING HABITS.

The Common Cormorant is well known along the New England coast in the autumn and winter months, and breeds commonly as far south as the island of Grand Menan, off the coast of Maine. It is found breeding in communities, upon the tops of ledges, or on projections and in the crevices of precipitous rocks, which are whitened over with the excrement of the birds. The nest is usually bulky, and composed of a large quantity of sea-weed. It is placed from a few feet to a considerable height above high water.



Double-crested Cormorant.

Graculus dilophus.

PLATE XXII.

DESCRIPTION.

EGGS.—The eggs exactly correspond to those of the preceding species, except that they average a little smaller, measuring about 2.30 by 1.40 inches.

NESTS AND BREEDING HABITS.

The distribution and nesting habits are also about the same as those of the preceding species.



Great Black-backed Gull.

Larus marinus.

PLATE XXII.

DESCRIPTION.

EGGS.—Usually three in number; vary in shape from pointedly to broadly oval, and measure about 2.95 by 2.25 inches. The eggs, as well as those of the succeeding species, exhibit so great a variation in ground color, also in shade and

frequency of the spots and blotches with which they are marked, that any one description would be very inadequate. In Plate XXII, Figs. 2, 3, 4, 5, and 6, I have represented two types of the Great Black-back and three of the Herring. The eggs of the one might be readily taken for the other, as regards ground color and markings; but those of the Herring Gull average a little smaller,—measuring about 2.75 by 1.90 inches.

NESTS AND BREEDING HABITS.

The Great Black-back formerly bred commonly along on the coast of Maine, but a few, if any, do now. It breeds sparingly on Grand Menan. The nest is placed on the naked rock, and is composed of sea-weeds, sticks, etc.



Herring Gull; Common Gull.

Larus argentatus.

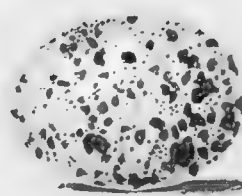
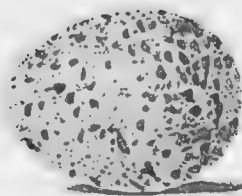
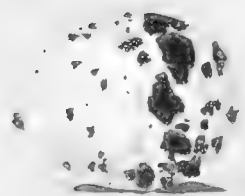
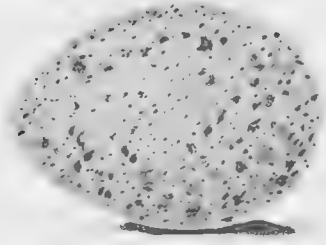
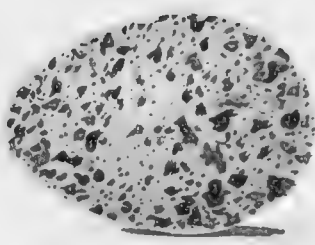
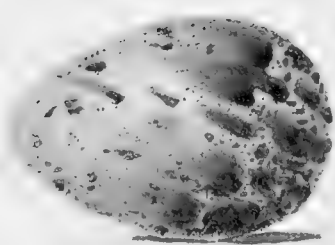
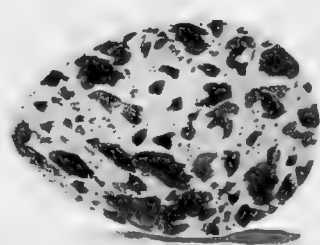
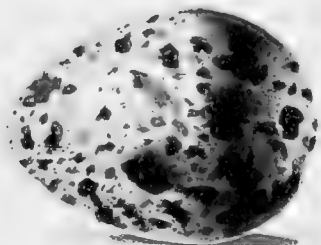
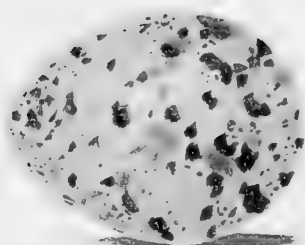
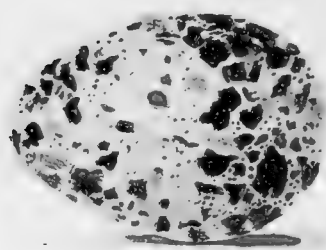
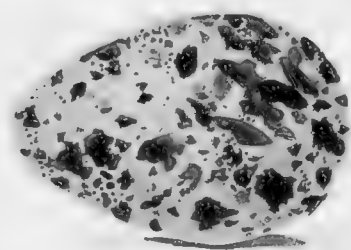
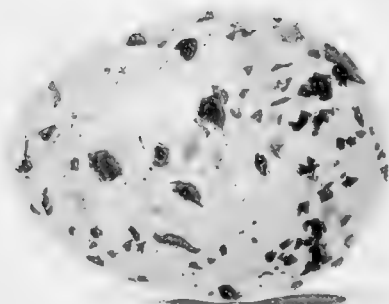
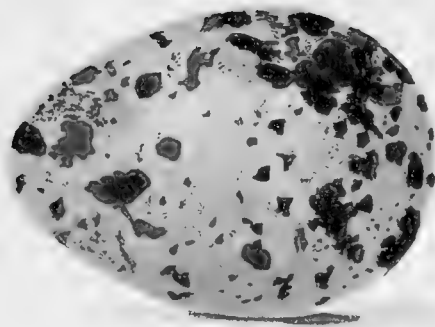
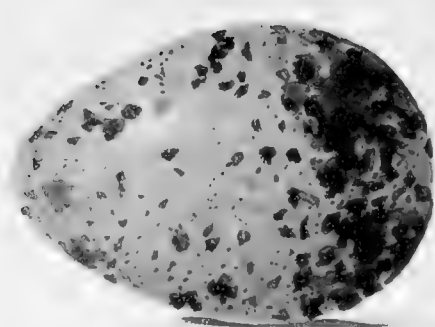
PLATE XXII.

DESCRIPTION.

Eggs.—For description of eggs, see Great Black-backed Gull.

NESTS AND BREEDING HABITS.

This species is a common summer resident in localities in Eastern Maine and northward. About the last of June the nest is built and eggs laid. The nest is placed on the ground or on rocks, and sometimes in trees. It consists of a heap of grasses, mosses, sea-weed, and dirt. Rev. J. H. Langille, on the breeding habits of this Gull, says: "Visiting Seal Island, Yarmouth County, Nova Scotia, last June (1883), I was most intensely interested in studying the nesting of these Gulls on trees. A great part of the island, as also of other islands in the vicinity, is covered with a peculiar growth of black spruce (*Abies nigra*); rather low, as if stunted by the cold, foggy atmosphere, the branches are very thick and numerous for the height of the tree, as if made dense by the shortening of the trunk; and the broad top is as flat as a Chinese umbrella. Climbing to the tops of these trees, one seems to have reached an immense level plane of dark green, across which a squirrel might run with all ease. Indeed, it almost appears to the eye as if a man might



traverse it, at least with snow-shoes. My first survey of this scene was just after a bright June sunset. All over this expanse of dark verdure, hundreds of Gulls were alighted, singly, in pairs, and in groups; their chaste white figures most elegantly tinted with rosy hues of the lingering sunlight, while many others were describing their grand and noisy circles overhead. In the open spaces, where fire had destroyed the trees, a good many nests were on the ground, built as described above; but many more were on the almost level tops of the trees, and were constructed precisely like those on the ground. In foggy weather, this immense colony of birds, much magnified by the mists, as they describe their maze of circles in the sky, are a weirdly grand sight, which cannot be surpassed even by that of hundreds that sail through the mists arising from Niagara Falls in winter. On searching the above locality for nests, one is well convinced of the increased security resulting from this change in the manner of nesting; and one is not a little surprised at the sagacity of the bird which has availed itself of so evident an advantage."

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Laughing Gull; Black-headed Gull.

Larus atricilla.

PLATE XXIII.

DESCRIPTION.

Eggs.— Usually three in number, sometimes two, and vary in dimensions from 2.28 to 2 in length, by 1.65 to 1.50 inches in breadth. They vary in ground color and markings in about the same manner as those of the two preceding species.

NESTS AND BREEDING HABITS.

This, a Southern species, arrives from the South in April, and breeds but sparingly along the coast of New England, commencing incubation some time during the month of May. The nest is usually placed in some sandy situation, and sometimes on the border of a marshy flat. It is usually a slight structure of a few pieces of grass, sea-weed, and sticks, slightly hollowed. Along the western coast of Florida, in the spring of 1881, I observed great numbers breeding in colonies, together with a few of other species. When disturbed, they rose in a perfect

cloud, hovering overhead with tumultuous screams, breaking the monotony of the almost uninhabited stretches of desolate and sandy shores, and changing the scene into what seemed a perfect pandemonium, which was startling and indescribable. Some of these places are visited as soon as the inhabitants—who come for many miles—have ascertained the birds to be incubating, and all the eggs are destroyed; after which they go every day or two for the fresh eggs, which are very edible. When thus robbed, the unfortunate birds are kept laying for some considerable time; at least, as long as an egg diet continues palatable to the “Crackers.”



Common Tern; Wilson's Tern; Sea Swallow.

Sterna hirundo.

PLATE XXIII.

DESCRIPTION.

EGGS.—From two to five in number, commonly three, often four, and sometimes two or five, and average about 1.70 by 1.25 inches. They exhibit great variation in ground color, also in markings, and cannot be distinguished from the two succeeding species. In the plate I have figured eight specimens of the Common, Arctic, and Roseate, and those of the one are faithful representations of either of the other two. I have examined a large number of sets of these three species, both on the breeding grounds and in collections, and fail to distinguish any appreciable difference by which they may be determined. The only positive means of identification, when breeding in colonies with the other species, is by watching the bird to or from its nest.

NESTS AND BREEDING HABITS.

This species, the most abundant of our Terns, is found breeding all along the coast of New England, in suitable localities. The period of incubation commences about the first of June. They sometimes construct quite a bulky nest of straws, grasses, and sea-weed, often a slight arrangement of the same, and again it is a mere depression upon the bare grass or sand.

Arctic Tern.

Sterna macroura.

PLATE XXIII.

DESCRIPTION.

EGGS.— For description of eggs, see preceding species.

NESTS AND BREEDING HABITS.

The Arctic Tern is distributed along the New England coast, in the same manner as the Common Tern, is less numerous, and is more abundant in the northern than the southern portion. It breeds in communities with the other Terns, though sometimes by themselves.

Roseate Tern.

Sterna paradisica.

PLATE XXIII.

DESCRIPTION.

EGGS.— For description of eggs, see Common Tern.

NESTS AND BREEDING HABITS.

This species occurs along the shores of Southern New England, with about the same degree of frequency as the preceding species. It is a Southern bird, and does not breed in any numbers north of Massachusetts. The only places that I have seen it in any abundance are the islands of Muskegat, Nantucket, and Martha's Vineyard. On the former island it breeds, commonly associating with the large flocks of the Common Tern, from which it is not easily distinguishable, unless one is quite near. The nesting habits are essentially the same as those of the two preceding species.

Least Tern.

Sterna superciliiaris.

PLATE XXIII.

DESCRIPTION.

EGGS.— Usually three in number, sometimes two, and seldom four. They average about 1.25 by .95 of an inch, are rounded oval in form, and vary in ground color from a light pale drab to an olivaceous or deep buff, pretty evenly marked

over the entire surface with spots of obscure lilac or slate color and browns of different intensity; or with large blotches of the same colors, tending to form a wreath about the larger half, and small spots scattered elsewhere. Sometimes these two types are combined.

NESTS AND BREEDING HABITS.

The Least Tern occurs in New England under the same circumstances as the Roseate. It arrives from the South about the first of May, commencing incubation about the first of June in the same localities, and nests in a like manner as the other Terns.

Leache's Petrel.

Cymochorea leucorrhœa.

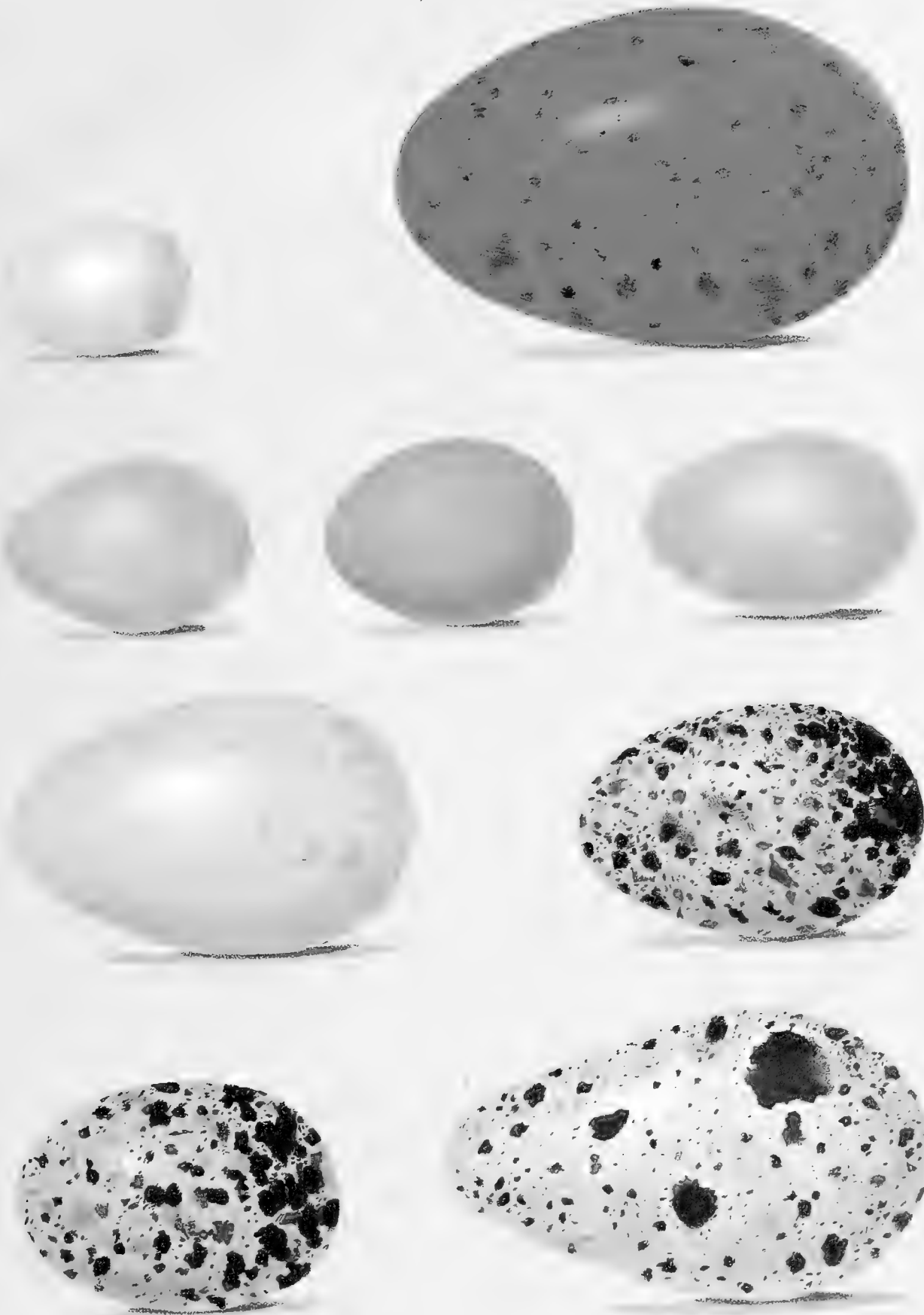
PLATE XXIV.

DESCRIPTION.

Eggs.— This species lays only one egg, which is pure white when first laid, but soon becomes stained and discolored by the bird's feet and belly. It is sometimes marked with fine confluent dots of obscure pink or lilac clustered around the larger end.

NESTS AND BREEDING HABITS.

Breeds on the islands off the eastward coast of Maine, northward. Rev. J. H. Langille says: "The burrows of the year were readily distinguished by their fresh appearance, and by the excavated dirt newly thrown out. Down on hands and knees we went to work, digging for the sitting birds. The reddish mould, staining the hands and clothing of the operator, was quite mellow; and following the sinuous course of the burrows, generally several feet in length, the birds, each with its single egg, were soon brought to light. Occasionally the burrow contained two birds and no egg, the pair probably cohabiting previous to incubation. On being unearthed, the birds seemed perfectly astounded and stupid,—dazed, perhaps, from having the light of day thus suddenly let in upon them. Sometimes they would sidle off the egg; often they would permit themselves to be taken without any effort to escape. If thrown into the air, they would come down again, almost or quite to the ground, striking against any object which might happen to be in their way. Only after a few seconds could they command their wonted agility and swiftness of wing. Frequently, if taken in the hand or flying against a bush or a



3. Horned
4. Heath H

stump, they would vomit the clear yellow oil from which their peculiar odor arises, and which is common to the whole family of Petrels." "About Mud and Seal Islands, N. S., their nests could be found all through the woods,—in the ground, in rotten logs and stumps, and under the roots of trees."

Great Northern Diver; Loon.

Colymbus torquatus.

PLATE XXIV.

DESCRIPTION.

EGGS.—Are normally two in number, sometimes three; they vary from being narrowly oval to elliptical in form, and measure from 3.90 to 3.40 in length, by 2.38 to 2.10 inches in breadth. They vary from an olive brown to an olive drab in ground color, sparingly marked with spots and small blotches of indistinct brown and blackish brown.

NESTS AND BREEDING HABITS.

The Loon is a common summer resident in Northern New England. It is common all along the coast in winter and early spring, retiring to ponds and lakes in the interior to rear its young. The nest, which is built in June, is often large and bulky, and is placed in the rank herbage close to the water's edge on the main-land or on some small low island. It consists of a heap of grasses, weeds, and mud, well hollowed, and lined with finer grasses and weeds.

Horned Grebe.

Podiceps cornutus.

PLATE XXIV.

DESCRIPTION.

EGGS.—From four to seven in number, usually four or five; are ellipsoidal in form, and measure from 1.56 to 1.86 in length, by 1.12 to 1.21 inches in breadth. They are bluish white, with a white chalky covering, which soon becomes discolored and smeared from the bird's feet and the wet materials of which the nest is composed, and look like diminutive Cormorant eggs.

NESTS AND BREEDING HABITS.

The Horned Grebe is common along our coast, and on the ponds and streams of the interior, during the migrations. It proceeds to the north of New England to pass the period of incubation, although it occasionally breeds in Northern Maine, as it is now and then seen in that portion during the breeding season; and for further proof, Mr. Boardman procured a female with young but a few years ago, near Calais, Me. Audubon says: "Two nests which I found were placed at a distance of about four yards from the water's edge, on the top of broken-down tussocks of rank weeds, the materials of which they were composed of the same nature, and rudely interwoven to a height of upwards of seven inches. They were rather more than a foot in diameter at the base; the cavity only four inches across, shallow, but more finished with finer plants, of which a quantity lay on the borders, and was probably used by the bird to cover the eggs when about to leave them."



Pied-billed Grebe; Dabchick.

Podilymbus podiceps.

PLATE XXIV.

DESCRIPTION.

Eggs.—The usual complement of eggs is five or six, and they are scarcely distinguishable from those of the preceding species.

NESTS AND BREEDING HABITS.

The Dabchick is a summer resident throughout New England, and in the northern portion it breeds abundantly. The nest is placed close to the edge of lakes, ponds, and rivers amongst the rushes, or farther out, a few yards from the shore, in the shallow water. It is a collection of rushes, weeds, grasses, and aquatic plants piled up into a large and bulky mass, until it rests on the bottom, if close to the shore; if in deeper water, it floats. The middle is then hollowed out, and sometimes lined with a few finer materials. The eggs are almost invariably covered on the departure of the bird by a few materials of the nest, to conceal them from observation.

Common Puffin; Sea Parrot.

Fratercula arctica.

PLATE XXIV.

DESCRIPTION.

EGGS.—But a single egg is laid; it is dull white, sometimes, when fresh, greenish, in ground color; oval (rather pointedly) in form, and soon becomes stained and soiled with yellowish. They are often marked with obscure purplish spots and blotches, and measure from 2.25 to 2.85 in length, by 1.45 to 1.85 inches in breadth. The one represented in the plate is a more highly colored specimen than the average.

NESTS AND BREEDING HABITS.

The breeding habitat of this peculiar looking bird is from the northeastern coast of Maine, northward. A few annually resort to the island of Grand Menan, and I have been informed by good authority that they breed sparingly on some of the rocky cliffs between Machias and Eastport, Maine. Farther north they breed in thousands on the clefts and in the crevices of rocky cliffs; also in the sides of bluffs, burrowing a horizontal hole in the earth to the depth of a couple of feet or more, for which their feet and powerful bills seem fully sufficient. Along the coast of Labrador and on Bird Rock they dig a burrow in the surface of the soil. Sometimes two birds are found sitting in the same burrow. The usual time of breeding is early in July.



Black Guillemot; Sea Pigeon.

Uria grylle.

PLATE XXIV.

DESCRIPTION.

EGGS.—The usual complement of eggs is two, and often three. They are oval in form, and vary in ground color from a dull greenish white or light drab to pale yellow or buff, spotted and blotched with obscure lilac or slate color, and yellowish, reddish, and dark browns or black, chiefly about the larger end, where they often become confluent. They measure about 2.30 by 1.55 inches.

NESTS AND BREEDING HABITS.

Breeds on the islands off the northeastern coast of New England, northward. They make no nest, but lay their eggs in holes and crevices, and such situations as the rocks and bowlders afford them.

Common Guillemot; Murre.

Lomtia troile.

PLATES XXIV. AND XXV.

DESCRIPTION.

EGGS. — The Common Guillemots lay only a single egg. They are pyriform in shape, and measure from 3 to 3.50 in length, by 1.95 to 2.10 inches in breadth. They vary from white to bluish or dark emerald green in ground color. Some varieties are occasionally white and unmarked, but they are usually beautifully spotted, blotched, or lined, with various tints of lilac, brown, and black. (See plates.) There is no bird whose eggs show a greater variation in ground color and markings than the present species, and for richness of coloring they are unsurpassed. In the plates, I have represented the most characteristic specimens, with the exception of Fig. 1 in Plate XXV., which is a remarkable variety, at least so far as the large number of specimens that have come under my observation.

NESTS AND BREEDING HABITS.

The Common Guillemot is not uncommon on our coast in the winter months, and breeds from the northeastern coast of New England to the northward. It is usually abundant wherever it breeds, depositing its egg on the bare rock of some low island, or upon the shelves and jettings of precipitous rocky cliffs. They are laid close together, some of the more highly colored ones presenting a beautiful contrast with the rocks, which are whitewashed over by the excrement of the birds. Incubation commences about the first of June.

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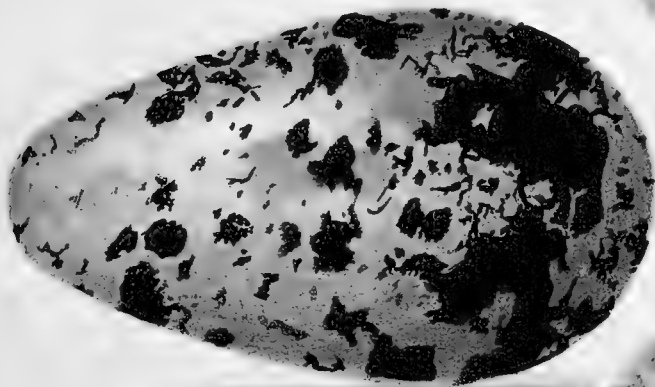
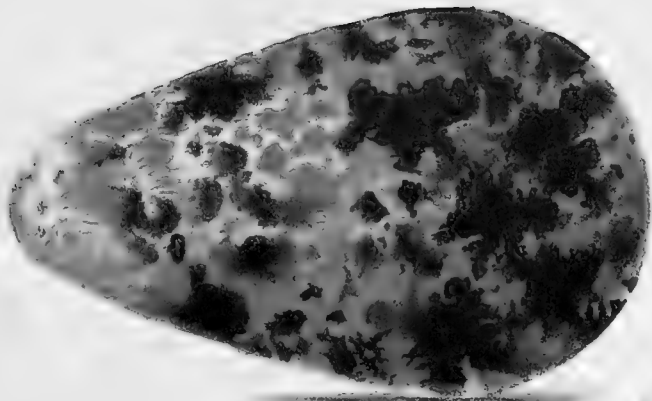
Razor-billed Auk.

Utamania totia.

PLATE XXV.

DESCRIPTION.

EGGS. — The Razor-bills usually lay but a single white or bluish white egg, though occasionally two, variously and boldly spotted, blotched, or scrawled with browns, yellows, and blacks of different intensity, — the markings often becoming confluent, and sometimes concealing the ground color at the larger end. They are oval in form, though many approach the pyriform shape; are not distinguishable



from some of the varieties of the Common Guillemot, but are shorter in proportion to their breadth, and usually more rounded at the smaller end. They exhibit an almost endless variety in the distribution and manner of markings, and measure about 3 by 2 inches.

NESTS AND BREEDING HABITS.

In distribution the Razor-billed Auk is similar to the Common Guillemot, and breeds from the northeastern coast of Maine to the northward. The Razor-bill seldom deposits its eggs in open sight, usually concealing them beneath a rock or in a crevice.

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Olive-backed	7	I	Yellow-rumped	21	IV
Small-billed Water	28	V	Water Thrush, Large-billed	28	V
Song	6	I	Small-billed	28	V
Tawny	7	I	Whippoorwill	64	XIV
Wilson's	7	I	Willet	88	XIX
Wood	6	I	Winter Wren	14	II
Towhee Bunting	51	X	Woodcock	86	XIX
Vireo, Blue-headed	39	VII	Wood Pewee	60	XIII
Red-eyed	37	VII	Woodpecker, Banded-backed		
Solitary	39	VII	Three-toed	69	XIV
Waibling	37	VII	Woodpecker, Black-backed		
White-eyed	39	VII	Three-toed	68	XIV
Yellow-throated	38	VII	Woodpecker, Downy	68	XIV
Warbler, Bay-breasted	23	IV	Golden-winged	70	XIV
Blackburnian	22	IV	Hairy	67	XIV
Black-capped Yellow	31	VI	Pileated	67	XIV
Black-poll	22	IV	Red-headed	69	XIV
Black-throated Blue	20	IV	Yellow-bellied	69	XIV
Black-throated Green	20	III	Wren, Great Carolina	13	II
Black and Yellow	25	IV	House	14	II
Blue Yellow-backed	17	III	Long-billed Marsh	15	II
Blue-winged Yellow	18	III	Short-billed Marsh	16	III
Cape May	25	IV	Winter	14	II
Chestnut-sided	24	IV	Yellow Bird	42	VIII
Golden-winged	18	III	Yellow-breasted Chat	30	V
Hooded	30	VI	Yellow-throat, Maryland	28	V

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