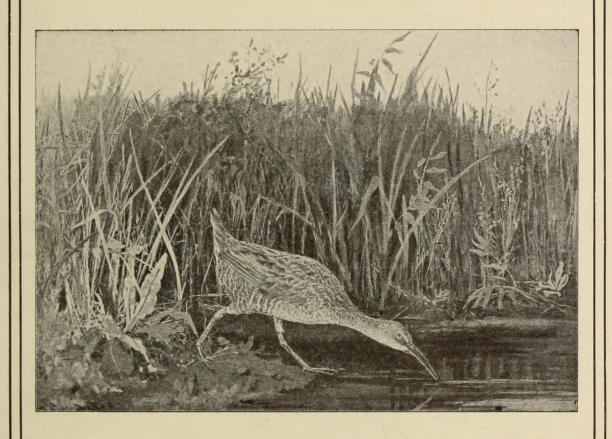
AMERICAN MUSEUM OF NATURAL HISTORY

Birds' Nests and Eggs



RV

Frank M. Chapman

Associate Curator, Department of Mammalogy and Ornithology

SUPPLEMENT TO AMERICAN MUSEUM JOURNAL VOL. IV, No. 2, APRIL, 1904

Guide Leaflet No. 14

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DUCK HAWK Group, Hall No. 204

Birds' Nests and Eggs,

With an Annotated List of the Birds Known to Breed within Fifty Miles of New York City.

A Guide Leaflet to the Collection

in the

American Museum of Natural History.

Ву

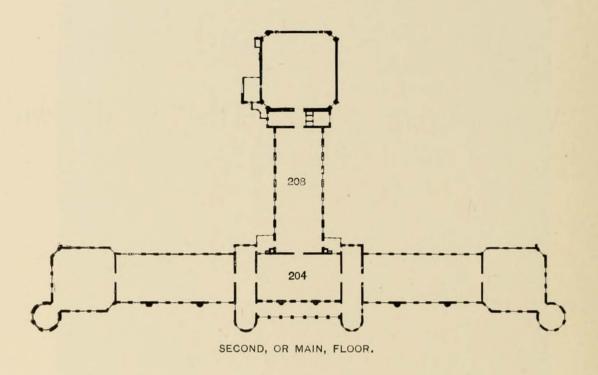
FRANK M. CHAPMAN,

Associate Curator of Mammalogy and Ornithology.

GUIDE LEAFLET No. 14.

SUPPLEMENT TO THE AMERICAN MUSEUM JOURNAL, Volume IV, No. 2, April, 1904.

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THIRD, OR GALLERY, FLOOR.

Key-plans of the Museum building, showing the location of the halls in which the specimens and groups may be found to which references are made in this Guide Leaflet.

BIRDS' NESTS AND EGGS.

WITH AN ANNOTATED LIST OF THE BIRDS KNOWN TO BREED WITHIN FIFTY MILES OF NEW YORK CITY.

BY FRANK M. CHAPMAN,

Associate Curator, Department of Mammalogy and Ornithology.

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BIRDS' NESTS.

(See the groups in Halls No. 204, 208, 304, 305 and 308, and the desk-cases in Halls No. 208 and 303.)

Nesting Season. — The first bird to nest in the region within fifty miles of New York City is the Great Horned Owl. The eggs of this locally rare species have been found as early as February 28, a date when the ground may be covered with snow and the nest itself decorated with icicles. This Owl is followed early in March by the more common Barred Owl, then come the Duck Hawk (Group, Hall No. 204), Woodcock (Group, Hall No. 208), Screech Owl (Group, Hall No. 208), Red-shouldered Hawk (Group, Hall No. 204), Red-tailed Hawk and so on through the list of our 120 breeding birds until we reach the Goldfinch and Cedar Waxwing which do not begin housekeeping until the middle of June.

Year after year essentially the same order of nesting is observed and the question may well be asked, What cause or causes determine the time of a bird's nesting season? Primarily, it may be replied, the date when a bird breeds is governed by the character of the food of its young. Young birds, particularly those

which are born naked and are reared in the nest, are dependent on their parents for food. Often a brood is fed several hundred times during the day and it is therefore of the first importance that there should be an abundant, easily accessible supply of the proper kind of food.

It may be noted that the first birds to nest are Hawks and Owls, which are predaceous, flesh-eating birds living largely on small mice and the like, and have no difficulty in supplying the wants of their young early in the season. In time these birds are followed by seed-, insect- and fruit-eating species, the young of which, therefore, are not hatched until the food they demand can be obtained.

The time of a bird's nesting season is also determined by its status in its breeding range, that is, whether it be a resident or a migratory species. Generally speaking, those species which are with us throughout the year nest earlier than migratory birds of It does not always follow, however, that among similar habits. migratory birds the first species to arrive in the spring are among the earliest to nest; and we learn, furthermore, that the time of a bird's nesting season is dependent on the character of its nestingsite. In this matter of site concealment is usually of the utmost consequence and a bird does not begin to build its nest until it can be properly hidden. For example, Red-winged Blackbirds reach this vicinity as early as the first of March, but they do not nest until the first half of May. The Woodcock, on the contrary, arrives about two weeks later, but nests more than a month earlier, its eggs sometimes being found as early as April 1. The Woodcock, however, nests on the ground and a site is available as soon as it reaches its summer home, while the Red-wing, swinging its woven basket among cat-tails or in bushes, awaits the growth of vegetation which will conceal it. Doubtless, also, the fact that the young Woodcock leave the nest within an hour or two after their birth, while young Red-wings are in the nest about two weeks, may be in part responsible for this difference in nesting dates.

Nesting Site. — After the formalities of courtship have won for a bird its mate, nest-building naturally follows as soon as a proper site has been selected. The nature of the situation in which a bird builds its nest appears to be determined first, by the necessity

for concealment (see groups of Song Sparrows, Worm-eating Warbler, Black and White Warbler, Hummingbird and others); second, by habits, whether arboreal, terrestrial or aquatic (compare the nests of the Red-shouldered Hawk, Kingbird, Grouse, Bob-white, Coot and Grebe); third, by haunt, whether in woodland or field, marsh or seashore, etc. (compare the nesting sites of the Catbird, Field Sparrow, Clapper-Rail and Common Tern); fourth, by temperament, whether social or solitary (compare the nesting habits of the Duck Hawk and Red-shouldered Hawk with those of the Cliff or Bank Swallow as shown in the groups in Halls No. 204 and 208).

The Nest Itself. — Probably less than twenty, possibly not more than ten, per cent of the eggs laid by our smaller, perching birds bring forth chicks which reach maturity. So great, therefore, is the mortality among birds in the nest that it is of vital importance for a bird to select a site and build a home in which its eggs may be incubated and young reared with the least possible exposure to the dangers which beset birds at this season.

The character of a bird's nest depends fundamentally on the following factors:

First, Condition of Young at Birth. — Some birds are born covered with feathers and can swim or run about a few hours after leaving the shell. These are termed *præcocial* birds. Others are born practically naked and pass several weeks in the nest. These are termed *altricial* birds. With præcocial birds the nest is merely an incubator in which, with the aid of heat supplied by the parent bird, the eggs are hatched. With altricial birds the nest is not only an incubator but a cradle as well. It is obvious, therefore, that the nests of the latter class should be far more complete structures than those which are to shelter young birds only while their natal costume is drying. It is also to be remembered that præcocial birds nest on the ground, an additional reason why a well-made home is not needed.

Compare the nests and young of the Yellow-headed Blackbird and Warbling Vireo with those of the common Tern, Skimmer or Black Rail and one realizes the close relation existing between birds' nests and the condition in which the young leave the eggs. Second, Haunt. — The nature of a bird's haunts is often reflected in its nest through the materials employed in construction. Coots and Yellow-headed Blackbirds (Group, Hall No. 308), Red-winged Blackbirds and Marsh Wrens (Group, Hall No. 304) use reeds and marsh grasses; field-inhabiting birds employ the grasses and weed-stalks they find about them, and leaves enter largely into the nest of wood-loving birds. (Examine the groups of the Field Sparrow and the Oven-bird in Hall No. 308.)

Third, Structure of the Bird. — Although birds possessed of the same type of nest-building tools, that is, bill and feet, may build wholly unlike nests (compare the Cliff and Bank Swallows and their nests, Groups in Hall No. 208) the character of the nest is in some degree affected by the structure of the bird. Thus a soft-billed Dove would not be expected to hew out a cavity in trees as do the Woodpeckers, nor could the weak-footed, short-billed Whip-poor-will cling to swaying branches and weave the Oriole's pendent cradle.

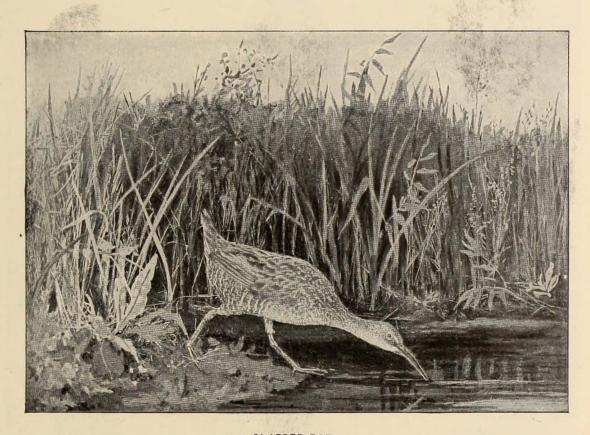
Fourth, Necessity for Concealment. — While concealment is secured chiefly through the selection of a site, it is also obtained in the building of the nest. The Oriole's deep cradle (Group, Hall No. 308) is a good type, and further illustrations are furnished by the admirably designed nests of the Oven-bird and Humming-bird, each of which, in a wholly different way, is made to resemble its immediate surroundings.

Variations in Nesting Habits. — The existing nesting habits of birds have doubtless been developed through adaptations to changing conditions, and it is of especial interest, therefore, to note any variation in the character of a bird's nest or nesting site and to learn whether the change is a response to some new factor in environment. Barn and Eaves Swallows, Chimney Swifts, Phœbes, Bluebirds and Wrens, for example, have, as a result of the invasion of their haunts by man, adopted new types of nesting sites, while Orioles, Vireos, House Finches and other species often find strings, rags and paper more desirable nest-material than fibres, rootlets and bark.

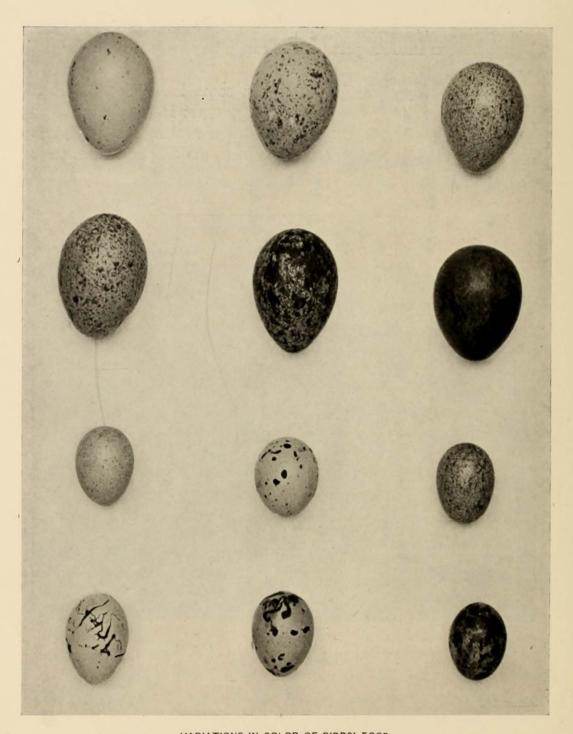
Second Broods. — Several of our earlier nesting species, the Robin, Song Sparrow and Phœbe, for example, rear second and

occasionally even third broods, which sometimes prolongs their nesting season into August. As a rule a new nest is built for the new family.

Return to Same Nesting Site. — In some instances, the Fish Hawk for example (Group, Hall No. 305), it is known that the same birds not only return to their former nesting localities, but that they actually occupy the same nest, making additions to it year after year.



CLAPPER RAIL Group, Hall No. 208



VARIATIONS IN COLOR OF BIRDS' EGGS
Six upper figures, eggs of the Crow; six lower figures, eggs of Purple Grackle
Desk-case, Alcove No. 3, Hall No. 208

BIRDS' EGGS.

(See desk-cases in Hall No. 208, and Local Collection, Hall No. 303.)

Number of Eggs in a "Set" or "Clutch."—The number of eggs comprising a full "set" or "clutch" ranges from one to as many as twenty. No law governing this number is known. Generally speaking birds of the same family lay approximately the same number of eggs, but there is much variation between birds of closely related families (e.g., Loons and Grebes), while birds of similar nesting habits may not lay the same number of eggs (e.g., Quail and Meadowlark).

The number of eggs in a set, or clutch, is no indication of the fecundity of the bird. At the time of laying the ovary contains a large number of partly formed eggs, of which, normally, only the required number will become fully developed. But if the nest be robbed, the stolen eggs will sometimes be replaced. The long-continued laying of our domestic fowls is an instance of this unnatural stimulation of the ovary caused by persistent robbing.

Size of Eggs.— The size of the egg depends primarily upon the size of the bird. The graduated series, from an Ostrich to a Hummingbird (Alcove No. 3, Hall No. 208) represents the range of variation among the eggs of living birds. Size, however, is further influenced by the condition of the young when hatched. Præcocial birds, for example, the domestic fowls, lay relatively larger eggs than altricial birds, for example, Pigeons.

This will be appreciated by comparing the egg of the Crow with that of Wallace's Megapode, or the eggs of the Meadowlark with those of the Bartramian Sandpiper (See desk-case, Alcove No. 3, Hall No. 208). The young of the Crow and the Meadowlark are hatched naked and are reared in a well-formed nest. The Sandpiper lays its eggs in a slight depression in the ground, and its young run about soon after birth. The Megapode buries its egg and leaves it to be hatched by the heat generated by decay of the vegetable debris in which it is placed. The young are born fully feathered and ready to fly.

The period of incubation depends upon the size of the egg, and varies from twelve days in the smaller Passeres to fifty-six in the Emeu.

The Shell. — The egg-shell is composed largely of carbonate of lime, which is deposited in layers on the surface of the egg in the lower, or uterine, dilation of the oviduct, the process requiring from twelve to twenty hours. The final layers vary greatly in character, and may be simply a rough, chalky deposit, easily scraped off, showing the harder layer below, as in Gannets and Flamingoes, or thin and highly polished, as in Woodpeckers and Tinamous. The structure of the surface, whether pitted or smooth, depends upon the action of the walls of the uterus, from which it receives an impression.

Colors of Eggs. — The colors of eggs are due to pigments deposited by ducts while the egg is receiving its shell. One or all the layers of the shell may be pigmented, and variation in color may be caused by a super-imposed stratum of carbonate of lime, producing lilac tints and "clouded" or "shell" markings. It is supposed that eggs are colored for the purpose of rendering them less conspicuous, and, as a rule, birds which nest in holes lay white eggs.

Shape of Eggs. — Birds' eggs are generally ovate in form, but there are many variations from this shape. The conical eggs of Snipes and Plovers are placed in the nest point downward or inward, and they fit together so closely that they can easily be covered by the comparatively small-bodied parent. The pyriform egg of Murres, when moved slowly, describes a circle about its own point, and is therefore less liable to roll off the rocky cliffs on which it is laid, than one more oval in shape would be. Contrary to the generally prevalent idea, the egg passes down the oviduct and is deposited large end first.

Individual Variations. — Although, generally speaking, eggs of the same species resemble one another, there is so great a range of variation in both color and pattern, that it frequently is impossible to identify eggs unless the parent is known. This variation is due largely to the physiological condition of the bird. Fully adult, vigorous individuals of birds which lay colored eggs, secrete a larger amount of pigment than their younger or weaker

fellows, and their eggs are therefore more heavily marked. The first eggs, as well as the earlier sets, where more than one set is laid in a season, are apt to be more strongly pigmented than the later.



YELLOW-BILLED CUCKOO Group, Hall No. 308



THE BIRDS KNOWN TO BREED WITHIN FIFTY MILES OF NEW YORK CITY.

- 1. (6.) ¹ Pied-billed Grebe (*Podilymbus podiceps*). Local status: Chiefly a migrant, sometimes wintering and probably breeding rarely. *Eggs*: 6–10, soiled whitish. *Date*: No definite record. Group, Hall No. 208.
- 2. (58.) Laughing Gull (Larus atricilla). Local status: An uncommon migrant and rare summer resident, nesting now, if at all, in a few localities on Great South Bay. Site: Salt marshes. Eggs: 3-5, grayish olive-brown or greenish gray, spotted, blotched and scrawled with chocolate. Date: June 8. Group, Hall No. 208.
- 3. (70.) Common Tern; Sea Swallow; Mackerel Guil (Sterna hirundo). Local status: Formerly an abundant summer resident, but since its destruction by milliners a comparatively uncommon migrant. It is doubtful if it nests nearer than Gardiner's Island. Site: Beaches and sometimes adjoining uplands. Eggs: 2-3, very variable, usually olive-gray or olive-green marked with chocolate. Date: May 8. Group, Hall No. 308.
- 4. (133.) Black Duck (Anas obscura). Local status: A common migrant and winter visitant; not known to nest nearer than Gardiner's Island. Site: On the ground, in undergrowth or heavy grasses, not necessarily in the immediate vicinity of water. Eggs: 8-12, pale greenish or bluish white or creamy. Date: May 5. Group, Hall No. 208.
- 5. (144.) Wood Duck (Aix sponsa). Local status: A not uncommon migrant; rare and local in the summer. Site: A hollow in a tree, usually twenty feet or more from the ground. Eggs: 8-14, pale buffy white. Date: May 6.
- 6. (190.) Bittern (Botaurus lentiginosus). Local status: Not uncommon migrant; rare summer resident. Site: On the ground in grassy marshes. Eggs: 3-5, pale olive-buff. Date: May 10.
- 7. (191.) Least Bittern (Ardetta exilis). Local status: Rather rare and local summer resident, more common and generally distributed during migrations. Site: Reedy marshes, usually 2-4 feet above water. Eggs: 4-6, bluish white. Date: May 31.
- 8. (201.) Little Green Heron (Butorides virescens). Local status: Common summer resident. Site: Bushes or trees from 5-20 feet from the ground. Eggs: 4-5, pale, dull blue. Date: May 6.
- 9. (202.) Black-crowned Night Heron (Nycticorax nycticorax nævius). Local status: Locally abundant summer resident, nesting in colonies. Site: In trees 20–80 feet from the ground. Eggs: 4–6, pale, dull blue. Date: May 1.
- 10. (208.) King Rail (Rallus elegans). Local status: Rare summer resident. Site: On the ground in grassy fresh-water marshes. Eggs: 7-12, buffy white, heavily spotted and speckled with rufous-brown. Date: May 15.
 - 11. (211.) Clapper Rail; Mud Hen (Rallus crepitans). Local status:

¹ The numbers between parentheses refer to the Check-List of North American Birds of the American Ornithologists Union.



WOODCOCK Group, Hall No. 208

Abundant summer resident. Site: On the ground in salt, coastal marshes. Eggs: 8-12, buffy white, speckled and spotted with rufous-brown. Date: May 10. Group, Hall No. 208.

12. (212.) Virginia Rail (Rallus virginianus). Local status: Rather rare and local summer resident. Site: On the ground in marshy places. Eggs: 6-12, pale buffy white, spotted and speckled with rufous-brown. Date: May 15.

13. (214.) Sora; Carolina Rail (Porzana carolina). Local status: Rare summer resident on Long Island; abundant fall migrant in wild rice marshes. Site: On ground in marshy places. Eggs: 8–15, buffy white, spotted and speckled with rufous-brown. Date: May 20.

14. (228.) American Woodcock (Philohela minor). Local status: Not uncommon summer resident. Site: On the ground in or near woods. Eggs: 4, buffy, distinctly and obscurely spotted with shades of rufous. Date: April 1. Group, Hall No. 208.

15. (261.) Upland Plover; Bartramian Sandpiper (Bartramia longicauda). Local status: Uncommon and local summer resident. Site: On the ground in any field. Eggs: 4, creamy white, or buff, spotted with reddish brown or chocolate, chiefly at the larger end. Date: June 1.

16. (263.) Spotted Sandpiper; Tip-up (Actitis macularia). Local status: Common summer resident. Site: On the ground, usually near water. Eggs: 4, creamy buff or white, thickly spotted and speckled with chocolate, chiefly at the larger end. Date: May 24.

- 17. (273.) Killdeer (Oxyechus vociferus). Local status: Rare and local summer resident. Site: On the ground in pastures or cornfields. Eggs: 4, buffy white, spotted and scrawled with chocolate, chiefly at the larger end. Date: May 10.
- 18. (289.) Bob-White (Colinus virginianus). Local status: Not uncommon resident. Site: On the ground in fields, often near fences or hedges. Eggs: 10-18, white. Date: May 26. Group, Hall No. 208.
- 19. (300.) Ruffed Grouse (Bonasa umbellus). Local status: Of local distribution in the more heavily wooded sections. Site: On the ground in the woods, often at the base of a tree. Eggs: 8–14, pale ochraceous-buff. Date: May 10. Group, Hall. No. 208.
- 20. (316.) Mourning Dove (Zenaidura macroura). Local status: Common summer resident. Site: Lower branches of trees, generally within 10 feet of the ground, very rarely on the ground. Eggs: 2, white. Date: April 25.
- 21. (331.) Marsh Hawk (Circus hudsonius). Local status: Common summer resident, of rare occurrence in winter. Site: On the ground in marshes. Eggs: 4-6, dull white or pale bluish white. Date: May 20.
- 22. (332.) Sharp-shinned Hawk (Accipiter velox). Local status: Not common summer resident, rare in winter. Site: In trees, 15-40 feet from the ground. Eggs: 3-6, varying from bluish to pale cream buff, distinctly spotted or heavily blotched with cinnamon or cinnamon rufous. Date: May 21.
- 23. (333.) Cooper Hawk (Accipiter cooperii). Local status: Not uncommon in summer, rare in winter. Site: In trees, 25-60 feet from the ground. Eggs: 3-6, pale bluish white, sometimes speckled with brownish. Date: May 1.
- 24. (337.) Red-tailed Hawk (Buteo borealis). Local status: Permanent resident, more numerous in winter. Site: In trees, 30–70 feet from the ground. Eggs: 2–4, dull white, generally scantily and irregularly marked with cinnamon-brown. Date: April 1.
- 25. (339.) Red-shouldered Hawk (Buteo lineatus). Local status: Common permanent resident. Site: In trees, 30-60 feet from the ground. Eggs: 2-5, dull white, generally more or less sprinkled, spotted or blotched with cinnamon or chocolate. Date: April 3. Group, Hall No. 204.
- 26. (343.) Broad-winged Hawk (Buteo platypterus). Local status: Not common permanent resident. Site: In trees, 25-50 feet from the ground. Eggs: 2-4, dull white, speckled, blotched or washed with ochraceous-buff or cinnamon brown. Date: May 5.
- 27. (356.) **Duck Hawk** (Falco peregrinus anatum). Local status: Rare and local summer resident, more common on coasts in migrations. Site: A cliff. Eggs: 3-4, creamy white marked with cinnamon-brown to reddish brown. Date: March 30.
- 28. (366.) Sparrow Hawk (Falco sparverius). Local status: Not uncommon in summer, rare in winter. Site: Usually a hole in a tree, from 15-60 feet from the ground. Eggs: 3-7, creamy white to rufous, generally finely and evenly marked with shades of the ground color. Date: April 25.
- 29. (374.) American Osprey; Fish Hawk (Pandion haliaëtus carolinensis). Local status: Locally common summer resident near the coasts. Site: In a tree, 15-50 feet from the ground. Eggs: 2-4, rarely dull white, sometimes almost solid chocolate, generally buffy white, heavily marked with chocolate, chiefly at the larger end. Date: May 2. Group, Hall No. 205.

- 30. (365.) Barn Owl (Strix pratincola). Local status: A rare summer resident. Site: A hole in a tree, sometimes in a tower or church-steeple. Eggs: 5-9, white. Date: April 20.
- 31. (366.) Long-eared Owl (Asio wilsonianus). Local status: An uncommon resident. Site: Generally in an old crow's, hawk's or squirrel's nest. Eggs: 3-6, white. Date: April 1.
- 32. (368.) Barred Owl (Syrnium varium). Local status: Common permanent resident. Site: In a hollow tree, and sometimes in an old crow's or hawk's nest. Eggs: 2-4, white. Date: March 12.
- 33. (373.) Screech Owl (Megascops asio). Local status: Common permanent resident. Site: Generally in a hollow tree. Eggs: 4-6, white. Date: April 3. Group, Hall No. 208.
- 34. (375.) Great Horned Owl (Bubo virginianus). Local status: Rare permanent resident, restricted to the less settled and heavily wooded regions. Site: Generally an old hawk's, squirrel's or crow's nest. Eggs: 2-3, white. Date: February 28.
- 35. (386.) Black-billed Cuckoo (Coccyzus erythrophthalmus). Local status: Common summer resident. Site: Generally in low trees, vines or bushes, 4-10 feet from the ground. Eggs: 2-5, dull greenish blue. Date: May 29.
- 36. (387.) Yellow-billed Cuckoo (Coccyzus americanus). Local status: Common summer resident. Site: Generally in low trees, vines or bushes, 4–10 feet from the ground. Eggs: 3–5, dull greenish blue. Date: May 30. Group, Hall No. 308.
- 37. (390.) Kingfisher (Ceryle alcyon). Local status: Locally common summer resident. Site: In a hole in a bank, about 6 feet from the entrance. Eggs: 5-8, white. Date: May 1.
- 38. (393.) Hairy Woodpecker (Dryobates villosus). Local status: Not uncommon permanent resident. Site: In a hole, generally in a dead tree. Eggs: 4-5, white. Date: May 23.
- 39. (394.) **Downy Woodpecker** (Dryobates pubescens medianus). Local status: Very common permanent resident. Site: In a hole, generally in a dead tree. Eggs: 4-6, white. Date: May 21.
- 40. (406.) Red-headed Woodpecker (Melanerpes erythrocephalus). Local status: Local summer resident of irregular distribution, sometimes winters, rarely abundant in migrations. Site: A hole, generally in a dead tree. Eggs: 4-6, white. Date: May 13.
- 41. (412.) Flicker; High-hole (Colaptes auratus luteus). Local status: Common summer resident, abundant migrant, rare in winter. Site: In a hole in a tree, frequently in orchards, about 10 feet from the ground. Eggs: 5-9, white. Date: May 7.
- 42. (417.) Whip-poor-will (Antrostomus vociferus). Local status: Locally common summer resident. Site: No nest, the eggs being laid on the bare ground or dead leaves in the woods. Eggs: 2, dull white, with delicate, obscure, lilac markings and a few distinct brownish gray specks. Date: June 3.
- 43. (420.) Nighthawk (Chordeiles virginianus). Local status: Locally common summer resident, frequently seen in the city. Site: Nest, none, the eggs being laid on the bare ground, in open fields, or on the flat roof of a house. Eggs: 2, dull white, evenly marked with small irregular shaped blotches or speckling of grayish brown or brownish gray. Date: June 1.

RUFFED GROUSE Group, Hall No. 208

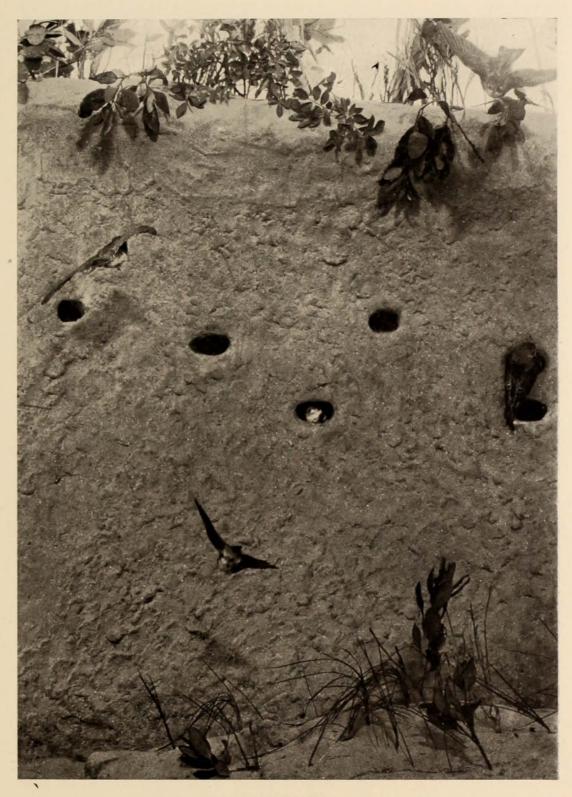
- 44. (423.) Chimney Swift (Chætura pelagica). Local status: Abundant summer resident, frequenting the city in numbers. Site: The inside of a chimney. The nest is attached to the side, generally about 10 feet from the top. Eggs: 4-6, white. Date: May 25. Group, Hall No. 208.
- 45. (428.) Ruby-throated Hummingbird (Trochilus colubris). Local status: Common summer resident. Site: The limb of a tree, generally 10-25 feet from the ground. Eggs: 2, white. Date: May 12. Group, Hall No. 308.
- 46. (444.) Kingbird (Tyrannus tyrannus). Local status: Common summer resident. Site: Usually orchards or shade trees, near the end of a branch, 15-25 feet from the ground. Eggs: 3-5, white, spotted with umber. Date: May 29. Group, Hall No. 308.
- 47. (452.) Crested Flycatcher (Myiarchus crinitus). Local status: Common summer resident. Site: In a hollow tree, generally less than 20 feet from the ground. Eggs: 3-6, creamy white streaked longitudinally with chocolate. Date: June 3.
- 48. (456.) **Phœbe** (Sayornis phæbe). Local status: Common summer resident. Site: A beam or rafter in an outbuilding or under a piazza or bridge, often under a bank or shelving rock. Eggs: 4-6, white. Date: April 28.
- 49. (461.) Wood Pewee (Contopus virens). Local status: Common summer resident. Site: Generally saddled on a limb 20-30 feet from the ground. Eggs: 3-4, white, with a wreath of umber markings about the larger end. Date: June 5.
- 50. (465.) Green-crested or Acadian Flycatcher (Empidonax virescens). Local status: Common summer resident in the Hudson Valley as far north as Ossining; apparently rare elsewhere. Site: The lower limbs of a tree, often of a beech, about eight feet from the ground. Eggs: 3-4, white, with a few cinnamon spots. Date: May 14. Group, Hall No. 308.
- 51. (466.) Alder Flycatcher (Empidonax traillii alnorum). Local status: Not common migrant, rare and local summer resident, has been found nesting only at Nyack, N. Y., and Plainfield, N. J. (Miller). Eggs: 3-4, creamy white, with cinnamon-brown markings about the larger end. Date: June 16.
- 52. (467.) Least Flycatcher; Chebec (Empidonax minimus). Local status: Common summer resident. Site: Generally in a crotch of a fruit or shade tree, 10-20 feet from the ground. Eggs: 3-5, white. Date: May 21.
- 53. (477.) Blue Jay (Cyanocitta cristata). Local status: Permanent resident, abundant in fall, common in winter, less numerous in summer. Site: Usually in crotch of a tree 10-20 feet from the ground. Eggs: 4-6, pale olivegreen, rather thickly marked with varying shades of cinnamon-brown. Date: May 14.
- 54. (488.) American Crow (Corvus americanus). Local status: Abundant permanent resident. Site: In trees in woods, 20 to 50 feet from the ground. Eggs: 4-6, generally bluish green, thickly marked with shades of brown, but sometimes light blue or even white with almost no markings. Date: April 9.
- 55. (490.) Fish Crow (Corvus ossifragus). Local status: Common summer resident of Hudson Valley as far north as Ossining, less so on Long Island; in winter restricted to the coast. Site: In trees in woods, generally 20–50 feet from the ground. Eggs: 4–5, similar in color to those of preceding species, but smaller. Date: May 17.
 - 56. (493.) Starling (Sturnus vulgaris). Local status: Introduced into



SCREECH OWL Group, Hall No. 208

Central Park in 1890 and now a common permanent resident. Site: Holes in buildings or in trees. Eggs: 4-6, pale bluish.

- 57. (494.) Bobolink; Reedbird (Dolichonyx oryzivorus). Local status: Locally common summer resident, apparently decreasing in numbers, abundant fall migrant in wild rice marshes. Site: On the ground in pastures and meadows. Eggs: 4-6, grayish white, with numerous spots of olive-brown or umber. Date: May 29.
- 58. (495.) **Cowbird** (*Molothrus ater*). Local status: A common summer resident and abundant migrant. Site: Parasitic, laying eggs in the nests of other species. Eggs: white, evenly speckled with cinnamon-brown or umber. Date: May 5.
- 59. (498.) Red-winged Blackbird (Agelaius phæniceus). Local status: Abundant summer resident. Site: In grassy or bushy borders of pond, 3-6 feet from the ground, in reeds, bushes or tussock of grass. Eggs: 3-6, pale blue, streaked, spotted or scrawled with dark purple or black. Date: May 18. Group, Hall No. 304.
- 60. (501.) **Meadowlark** (Sturnella magna). Local status: Common summer resident, rare in winter. Site: On the ground, in pastures and meadows. Eggs: 4-6, white, speckled with reddish brown. Date: May 10.
- 61. (506.) Orchard Oriole (Icterus spurius). Local status: Locally common summer resident. Site: Generally in orchards, 10–15 feet from the ground, near the extremity of a limb. Eggs: 3–5, bluish white, spotted, blotched and scrawled with blackish. Date: May 30. Group, Hall No. 308.
- 62. (507.) Baltimore Oriole (Icterus galbula). Local status: Common summer resident. Site: Generally in fruit or shade trees, near the extremity of a limb, 20–40 feet from the ground. Eggs: 4–6, white, scrawled with blackish lines and with a few spots or blotches. Date: May 25. Group, Hall No. 308.
- 63. (511.) Purple Grackle; Crow Blackbird (Quiscalus quiscula). Local status: Abundant migrant, locally common summer resident, nesting in colonies. Site: In colonies, generally in coniferous trees, about 30 feet from the ground. Eggs: 3-6, very variable, generally pale bluish or bluish green, spotted, blotched or scrawled with brown or black, but sometimes evenly speckled with brownish and rarely almost solid cinnamon- or rufous-brown. Date: April 25. Group, Hall No. 305.
- 64. (517.) Purple Finch (Carpodacus purpureus). Local status: Rare and local summer resident, common in migrations and sometimes in winter. Site: Generally in a coniferous tree, 5-30 feet from the ground. Eggs: 4-6, blue, spotted about the larger end with blackish. Date: May 24.
- 65. House Sparrow; English Sparrow (Passer domesticus). Local status: Introduced from Europe in 1851 and later dates and now an abundant permanent resident. Site: About buildings or in trees. Eggs: 4-7, generally white, finely and evenly marked with olive, sometimes plain white or almost uniform olive-brown.
- 66. (529.) Goldfinch (Astragalinus tristis). Local status: Common permanent resident. Site: In a bush or tree, 5-30 feet from the ground. Eggs: 4-6, pale bluish white. Date: June 20.
- 67. (540.) Grass Finch; Vesper Sparrow (Poœcetes gramineus). Local status: Common summer resident. Site: On the ground, generally in dry,



BANK SWALLOW Group, Hall No. 208

- grassy fields. Eggs: 4-5, bluish or pinkish white, speckled and blotched with brown. Date: May 10.
- 68. (542a.) Savanna Sparrow (Passerculus sandwichensis savanna). Local status: Rare summer resident, abundant migrant. Site. On the ground, generally in wet meadows. Eggs: 4-5, bluish white, thickly marked with reddish brown or cinnamon. Date: May 10.
- 69. (546.) Grasshopper Sparrow (Coturniculus savannarum passerinus). Local status: Locally common summer resident. Site: On the ground in dry grassy fields. Eggs: 4-5, white, spotted and speckled with reddish brown. Date: May 28.
- 70. (547.) **Henslow Sparrow** (Ammodramus henslowii). Local status: Rare and local summer resident. Site: On the ground, generally in wet meadows. Eggs: 4-5, grayish white, thickly and evenly marked with pale reddish brown. Date: May 10.
- 71. (549.) Sharp-tailed Finch (Ammodramus caudacutus). Local status: Abundant summer resident in salt marshes. Site: On the ground, in salt marshes. Eggs: 3-4, whitish, finely speckled with cinnamon-brown, especially at the larger end. Date: May 30. Group, Hall No. 308.
- 72. (550.) Seaside Finch (Ammodramus maritimus). Local status: Abundant summer resident of salt coastal marshes. Site: On the ground, in salt marshes. Eggs: 3-4, whitish, clouded or finely speckled with cinnamon-brown, especially at the larger end. Date: May 30. Group, Hall No. 308.
- 73. (560.) Chipping Sparrow (Spizella socialis). Local status: Abundant summer resident. Site: In trees or bushes, near houses or cultivated grounds, 5-20 feet from the ground. Eggs: 4-5, greenish blue, with cinnamon-brown or blackish markings, chiefly at the larger end. Date: May 14.
- 74. (562.) Field Sparrow (Spizella pusilla). Local status: Abundant summer resident. Site: In bushy fields, on the ground, or in a low shrub. Eggs: 3-5, whitish, with numerous reddish brown markings, chiefly about the larger end. Date: May 15. Group, Hall No. 308.
- 75. (581.) Song Sparrow (Melospiza cinerea melodia). Local status: Common winter, abundant summer resident. Site: Generally on the ground, sometimes in a low bush. Eggs: 4-5, whitish, with numerous reddish brown markings which sometimes nearly conceal the ground color. Date: April 29. Group, Hall No. 308.
- 76. (584.) Swamp Sparrow (Melospiza georgiana). Local status: Abundant summer resident, rare in winter. Site: On the ground, in wet meadows or marshes. Eggs: 4-5, resemble those of the preceding species, but the markings generally more confluent. Date: May 15. Group, Hall No. 308.
- 77. (587.) **Towhee; Chewink** (*Pipilo erythrophthalmus*). Local status: Abundant summer resident. Site: On the ground, in or at the border of woods or thickets. Eggs: 4-5, white, finely and evenly speckled with reddish brown, sometimes blotched at the larger end. Date: May 14. Group, Hall No. 308.
- 78. (593.) Cardinal (Cardinalis cardinalis). Local status: Local permanent resident. Site: Generally in bushes in dense thickets. Eggs: 3-4, white or bluish white, spotted or speckled with grayish or reddish brown. Date: May 3. Group, Hall No. 208.



BLACK AND WHITE WARBLER Group, Hall No. 308

- 79. (595.) Rose-breasted Grosbeak (Zamelodia ludoviciana). Local status: Common summer resident. Site: In bushes or small trees, 5-20 feet from the ground. Eggs: 4-5, pale blue, with numerous reddish brown or olive-brown markings. Date: May 20. Group, Hall No. 208.
- 80. (598.) Indigo Bunting (Cyanospiza cyanea). Local status: Common summer resident. Site: Generally in the crotch of a bush near the ground. Eggs: 3-4, pale bluish white. Date: May 29. Group, Hall No. 208.
- 81. (608.) Scarlet Tanager (*Piranga erythromelas*). Local status: Common summer resident. Site: Generally near the end of a horizontal limb, 7–20 feet from the ground. Eggs: 3–4, pale greenish blue with numerous reddish brown markings. Date: June 3. Group, Hall No. 304.
- 82. (611.) Purple Martin (*Progne subis*). Local status: Local summer resident, apparently decreasing in numbers. Site: In bird-boxes or gourds, erected for the bird's occupation. Eggs: 4-5, white, with numerous spots of olive-brown or reddish brown. Date: May 25.
- 83. (612.) Cliff Swallow; Eaves Swallow (Petrochelidon lunifrons). Local status: Local summer resident, apparently decreasing in numbers. Site: Placed beneath a cliff, or under the eaves of a barn or other building. Eggs: 45, white, with numerous blotches of olive-brown or reddish brown. Date: May 30. Group, Hall No. 208.

- 84. (613.) Barn Swallow (Hirundo erythrogaster). Local status: Abundant summer resident. Site: Generally placed on the rafter of a barn or outbuilding. Eggs: 4-6, white, with numerous blotches of olive-brown or reddish brown, and generally smaller than those of the preceding species. Date: May 8.
- 85. (614.) Tree Swallow (Iridoprocne bicolor). Local status: Rare and local summer resident, abundant migrant, particularly from late July to October. Site: In a hollow tree or bird-box. Eggs: 4-7, white. Date: May 19.
- 86. (616.) Bank Swallow (Riparia riparia). Local status: Locally abundant summer resident. Site: In a hole in a sand-bank, 2-3 feet from the entrance. Eggs: 4-6, white. Date: May 19. Group, Hall No. 208.
- 87. (617.) Rough-winged Swallow (Stelgidopteryx serripennis). Local status: Local and not common summer resident. Site: Beneath bridges, in stone walls, or a hole in a bank. Eggs: 4-8, white. Date: May 30.
- 88. (619.) Cedar Waxwing (Ampelis cedrorum). Local status: Common summer resident. Site: Generally in fruit or shade trees, 5-20 feet from the ground. Eggs: 3-5, pale bluish gray, blotched with black or umber. Date: June 19.
- 89. (624.) Red-eyed Vireo (Vireo olivaceus). Local status: Abundant summer resident. Site: Suspended from a forked branch, 4-40 feet from the ground. Eggs: 3-4, white, with a few blackish spots about the larger end. Date: May 28.
- 90. (627.) Warbling Vireo (Vireo gilvus). Local status: Locally common summer resident. Site: Suspended from a forked branch, usually in shade trees, 8-40 feet from the ground. Eggs: 3-4, white, usually with a few blackish or brownish spots about the larger end. Date: May 30. Group, Hall No. 308.
- 91. (628.) Yellow-throated Vireo (Vireo flavifrons). Local status: Common summer resident. Site: Suspended from a forked branch, 10-30 feet from the ground. Eggs: 3-4, white, with a few specks or spots of blackish or brownish, chiefly about the larger end. Date: May 28.
- 92. (631.) White-eyed Vireo (Vireo noveboracensis). Local status: Common summer resident. Site: In thickets suspended from a forked branch, 1-4 feet from the ground. Eggs: 3-4, white, with a few specks of blackish or brownish at the larger end. Date: May 25. Group, Hall No. 308.
- 93. (636.) Black and White Warbler (Mniotilta varia). Local status: Common summer resident. Site: On the ground in the woods, generally at the base of tree, stump or rock. Eggs: 4-5, white, spotted and speckled with cinnamon-brown to umber, chiefly in a wreath at the larger end. Date: May 18. Group, Hall No. 308.
- 94. (639.) Worm-eating Warbler (Helmitheros vermivorus). Local status: Rather rare and local summer resident. Site: On the ground, generally in dry woods. Eggs: 4-6, white, speckled, spotted or blotched with cinnamon- or reddish-brown. Date: May 20. Group, Hall No. 308.
- 95. (641.) Blue-winged Warbler (Helminthophila pinus). Local status: Generally common summer resident; not common on Long Island. Site: On the ground, usually in or near second growths. Eggs: 4-6, white, thinly speckled with reddish brown. Date: May 16. Group, Hall No. 308.
- 96. (642.) Golden-winged Warbler (Helminthophila chrysoptera). Local status: Rare summer resident, sometimes not uncommon August migrant.



WORM-EATING WARBLER Group, Hall No. 308

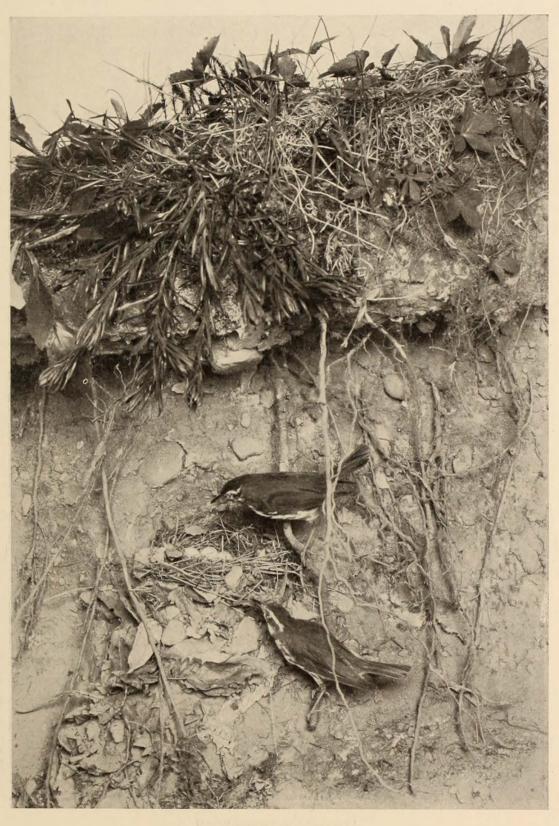
Site: On the ground, usually in or near second growth. Eggs: 4-5, white, speckled, chiefly about the larger end, with brownish. Date: May 30.

97. (648.) Parula Warbler (Compsothlypis americana usneæ). Local status: Common migrant, local summer resident, nesting only where Usnea moss occurs. Site: In bunches of hanging Usnea moss. Eggs: 4-5, white, with reddish brown markings, chiefly about the larger end. Date: May 22.

98. (652.) Summer Yellowbird; Yellow Warbler (Dendroica æstiva) Local status: Abundant summer resident. Site: In bushes or trees 4-20 feet from the ground. Eggs: 4-5, bluish white, thickly marked with brownish, with frequently a wreath about the larger end. Date: May 20. Group, Hall No. 308.

99. (659.) Chestnut-sided Warbler (Dendroica pensylvanica). Local status: Locally common summer resident, increasing in numbers. Site: In bushes, usually about 3 feet from the ground. Eggs: 4-5, white, with numerous cinnamon- and olive-brown markings, chiefly in a wreath about the larger end. Date: May 29.

- 100. (673.) Prairie Warbler (Dendroica discolor). Local status: Locally common on Long Island, rare elsewhere. Site: In briery bushes about 3 feet from the ground. Eggs: 4-5, white, spotted with cinnamon- or olive-brown, chiefly in a wreath at the larger end. Date: May 30. Group, Hall No. 308.
- 101. (674.) Oven-bird (Seiurus aurocapillus). Local status: Abundant summer resident. Site: On the ground, usually in dry woods. Eggs: 4-5, white, speckled with reddish brown. Date: May 20. Group, Hall No. 308.
- Not uncommon summer resident in lower Hudson Valley and northern New Jersey, rare on Long Island. Site: In wet woods, beneath a bank, or the upturned roots of a fallen tree. Eggs: 4-6, white, speckled or spotted with reddish brown. Date: May 11.
- 103. (677.) Kentucky Warbler (Geothlypis formosa). Local status: Locally common in the Hudson River Valley as far north as Ossining, rare elsewhere. Site: In the woods, on or near the ground. Eggs: 4-5, white, speckled or blotched with reddish brown. Date: June 1.
- 104. (681.) Northern Yellow-throat (Geothlypis trichas brachidactyla). Local status: Abundant summer resident. Site: In swampy thickets, on the ground. Eggs: 4-5, white, thinly speckled and spotted with reddish brown, chiefly at the larger end. Date: May 25. Group, Hall No. 308.
- 105. (683.) Yellow-breasted Chat (*Icteria virens*). Local status: Common summer resident. Site: In thickets, 2-3 feet from the ground, in the crotch of a bush. Eggs: 3-5, white, rather evenly speckled and spotted with reddish brown. Date: May 23.
- 106. (684.) **Hooded Warbler** (Wilsonia mitrata). Local status: Common summer resident in the lower Hudson Valley and eastward along the Sound, apparently a rare breeder elsewhere. Site: In woods, 2-4 feet from the ground, in the crotch of a bush or sapling. Eggs: 4-5, creamy white, thinly speckled or spotted with reddish brown; color generally in a wreath at the larger end. Date: May 15.
- 107. (687.) Redstart (Setophaga ruticilla). Local status: Abundant summer resident. Site: In the crotch of a sapling, 5-20 feet from the ground. Eggs: 4-5, bluish white, spotted and blotched, chiefly at the larger end, with cinnamon- or olive-brown. Date: May 17. Group, Hall No. 308.
- 108. (704.) Catbird (Galeoscoptes carolinensis). Local status: Abundant summer resident. Site: In thickets, about 3-5 feet from the ground. Eggs: 3-5, greenish blue. Date: May 17.
- 109. (705.) Brown Thrasher (Toxostoma rufum). Local status: Common summer resident. Site: In thickets, in the fork of a bush, or on the ground. Eggs: 3-6, grayish white, thickly, evenly and minutely speckled with reddish brown. Date. May 16. Group, Hall No. 208.
- manent resident of irregular distribution, evidently increasing in numbers. Site: In a hollow in a tree, bird-box or out-house. Eggs: 4-6, creamy white, with numerous reddish-brown and lavender markings. Date: March 28.
- summer resident. Site: In a hole in a tree or stump, a bird-box or crevice in an out-building. Eggs: 6-8, vinaceous, uniform or minutely speckled, with generally a wreath of a darker shade at the larger end. Date: May 18.



LOUISIANA WATER-THRUSH Group, Hall No. 308



LONG-BILLED MARSH WREN Group, Hall No. 308

- Local summer resident, generally rare. Site: On or near the ground in a tussock of tall grass. Eggs: 6-8, white, rarely with a few lavender spots. Date: June 7.
- status: Abundant summer resident. Site: In marshes, attached to reeds, about 4 feet from the ground. Eggs: 5-9, uniform, minutely speckled or thickly marked with cinnamon- or olive-brown. Date: May 31. Group, Hall No. 304.
- Common permanent resident. Site: In a hole in a tree or stump. Eggs: 5-8, creamy white, thickly and evenly spotted and speckled with rufous and lavender. Date: April 17.
- 115. (731.) **Tufted Titmouse** (Bæolophus bicolor). Local status: Not uncommon permanent resident in northern New Jersey and on Staten Island, sometimes extending farther north. Site: In a hole in a tree, stump or similar situation. Eggs: 5-8, creamy white, rather coarsely and evenly marked with reddish brown. Date: May 22.
- manent resident, less numerous in summer. Site: In an old stump or hollow limb, 5–15 feet from the ground. Eggs: 5–9, white, spotted and speckled, chiefly at the larger end, with reddish brown. Date: May 19.
- 117. (755.) Wood Thrush (Hylocichla mustelina). Local status: Abundant summer resident. Site: Generally in the woods, in a sapling about 6-8 feet from the ground. Eggs: 3-5, greenish blue. Date: May 17. Group, Hall No. 208.
- Common summer resident. Site: In low, wet woods, on or near the ground. Eggs: 3-5, greenish blue. Date: May 20.
- most abundant summer resident, of not infrequent occurrence during winter. Site: In a variety of situations, most frequently in fruit or shade trees, 5–30 feet from the ground. Eggs: 3–5, greenish blue. Date: April 20. Group, Hall No. 308.
- 120. (766.) Bluebird (Sialia sialis). Local status: Common summer resident, not rare in winter. Site: In a hollow tree or bird-house. Eggs: 4-6, bluish white. Date: April 10.



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