ago, was suspended from a two-inch limb, containing little or no moss outside of that of which the nest was constructed; but this J do not consider a typical nest.

The inside measurements of the nests vary, ranging from about one and a half to two inches both in depth and diameter.

The eggs show a remarkable variation both in size and shape. They have a white ground color, and are more heavily dotted with reddish brown and lilac at the larger ends, often forming a ring around them.

Camden, N. J.

## SUMMER BIRDS OF SUMMIT (UNION COUNTY), NEW JERSEY, AND VICINITY.

## BY LA RUE K. HOLMES.

Summit is located on the crest of the Second Mountain, at an elevation varying from 300 to 520 feet above sea level. The surrounding hills were at one time well wooded, but most of the timber now standing is of recent growth, only a few small tracts of virgin forest now remain and these are being rapidly cut. The cover is for the most part deciduous, there being but few groves of coniferous trees in this neighborhood that I know of. The ground is furrowed in every direction by streams, mostly of a small size and a river (the Passaic), runs through the center of the territory covered by this list. Several fresh-water swamps of considerable area are within walking distance of Summit and are frequently visited.

As will be seen from the list, Summit is located between the Carolinian and Alleghanian zones; and such Carolinian birds as Bæolophus bicolor, Thryothorus ludovicianus, Icteria virens; and Alleghanian birds as Dendroica pensylvanica, Habia ludoviciana, etc., are found breeding here.

1. Aix sponsa. Wood Duck.—A rare summer resident, formerly more common. A pair succeeded in rearing a brood of 8, this last summer (1904) within three miles of Summit. The parent birds with the young were seen daily by many people and were apparently devoid of fear.

2. Botaurus lentiginosus. American Bittern.—A rare summer resident in the large fresh-water marshes. I only know of three nests having been found.

## HOLMES ON SUMMER BIRDS OF SUMMIT, N. J.

3. Ardetta exilis. Least Bittern. A summer resident, probably rare. I have no nesting record.

4. Butorides virescens. Green Heron. A rather common summer resident in all suitable localities. Never more than one pair breeding in a woods (?).

5 Nycticorax n. nævius. Black-crowned Night Heron. A large colony of these birds was formerly located in this vicinity; but after having been attacked many times by plume hunters and eggers, was finally broken up. I have no recent record of its having bred in this section.

6. Rallus elegans. King Rail. A nest containing nine eggs of this species was found in the Great Swamp several years ago. It may breed there regularly.

7. Philohela minor. Woodcock. A rather rare summer resident. Breeds early in the spring. Nests have been found while snow was yet on the ground.

8. Bartramia longicauda. Bartramian Sandpiper. A very rare summer resident. I know of but one field inhabited by this bird and as a rule two pairs of birds breed there each season.

9. Actitis macularia. Spotted Sandpiper. A rather rare summer resident; breeding chiefly in low-lying corn fields; at least that is where nests have most often been found.

10. Colinus virginianus. Bob-white. Formerly common. Now a rare summer resident, but seems to be increasing in the last year or two.

11. Bonasa umbellus. Ruffed Grouse. The same may be said of this, as of the preceding species.

12. Zenaidura macroura. Mourning Dove. Rare. Some years more common than others.

13. Circus hudsonius. Marsh Hawk. A few pairs breed in the larger fresh-water marshes.

14. Accipiter velox. Sharp-shinned Hawk. A very rare summer resident.

15. Accipiter cooperi. Cooper's Hawk. The nest of this species is met with more often than that of A. velox, and judging from individuals seen I should say it was much more common.

16. Buteo borealis. Red-tailed Hawk. A very rare summer resident and becoming rarer with the cutting of the virgin forests on the higher hills.

17. Buteo lineatus. Red-shouldered Hawk. Our commonest breeding hawk.

18. Buteo latissimus. Broad-winged Hawk. A very rare summer resident.

19. Falco sparverius. Am. Sparrow Hawk. A not uncommon summer resident; next to *B. lineatus* in point of numbers.

20. Strix pratincola. Am. Barn Owl. An extremely rare summer resident. I know of but one nest having been found and have

9

a record of five young birds not fully feathered having been caught in a trap set for hawks and owls in a pasture.

21. Asio wilsonianus. Am. Long-eared Owl. A rare summer resident.

22. Syrnium varium. Barred Owl. Formerly a rather common resident but now rapidly disappearing.

23. Megascops asio. Screech Owl. A not uncommon resident; rapidly decreasing in numbers.

24. Bubo virginianus. Great Horned Owl. Never common, but now almost entirely exterminated locally. I doubt if a pair breeds nearer than ten miles of Summit. It has, however, been captured, during the early winter (December and January) in steel traps set on posts in meadows near Summit within the last year or two, and it may breed in the wilder portion of the county.

25. Coccyzus americanus. Yellow-billed Cuckoo. A rather common summer resident; more abundant some years than others.

26. Coccyzus erythrophthalmus. Black-billed Cuckoo. Not as common as the preceeding, and equally erratic.

27. Ceryle alcyon. Belted Kingfisher. A rather common sum-. mer resident; nesting in all suitable localities.

28. Dryobates villesus. Hairy Woodpecker. A rather rare summer resident.

29. Dryobates pubescens medianus. Downy Woodpecker. A common summer resident.

30. Melanerpes erythrocephalus. Red-headed Woodpecker. Locally common.

31. Colaptes auratus luteus. Northern Flicker. The commonest breeding woodpecker.

32. Antrotosmus vociferus. Whip-poor-will. Formerly a common summer resident, but I have no record of any having been seen in the summer for the past fifteen years.

33. Chætura pelagica. Chimney Swift. An abundant summer resident.

34. Trechilus colubris. Ruby-throated Hummingbird. A common summer resident.

35. Tyrannus tyrannus. Kingbird. A common summer resident.

36. Myiarchus crinitus. Crested Flycatcher. Rather common in woodland.

37. Sayornis phœbe. Phœbe. An abundant summer resident.

38. Contopus virens. Wood Pewee. A common summer resident in woodland.

39. Empidonax minimus. Least Flycatcher. A rather rare summer resident.

40. Cyanocitta cristata. Blue Jay. Abundant.

41. Corvus brachyrhynchos. American Crow. Abundant.

42. Dolichonyx oryzivorus. Bobolink. Locally common. Apparently decreasing in numbers.

43. Molothrus ater. Cowbird. Common.

44. Agelaius phœniceus.. Red-winged Blackbird. Abundant in the fresh-water marshes.

45. Sturnella magna. Meadowlark. Common.

46. Icterius spurius. Orchard Oriole. Locally rare.

47. Icterus galbula. Baltimore Oriole. Common; breeding even in the heart of the city.

48. Quiscalus guiscula. Purple Grackle. Common. Breeds in colonies in conifers.

49. Passer domesticus. English Sparrow. Abundant everywhere.

50. Astragalinus tristis. American Goldfinch. Common.

51. Spizella socialis. Chipping Sparrow. Abundant in the settled portions: rare in rural districts.

52. Spizella pusilla. Field Sparrow. Abundant summer resident. 53. Melospiza cinerea melodia. Song Sparrow. Abundant summer resident.

54. Melospiza georgiana. Swamp Sparrow, Abundant summer resident.

55. Pipilo erythrophthalmus. Towhee. Common summer resident.

56. Cardinalis cardinalis. Cardinal. A rare summer resident; only two or three records.

57. Zamelodia ludoviciana. Rose-breasted Grosbeak. A common summer resident.

58. Passerina cyanea. Indigo Bunting. A rather common summer resident.

59. Piranga erythromelas. Scarlet Tanager. A common summer resident.

60. Petrochelidon lunifrons. Cliff Swallow. Formerly common; has now entirely disappeared.

61. Chelidon erythrogaster. Barn Swallow An abundant summer resident.

62. Riparia ripara. Bank Swallow. Never very common, but now entirely extirpated.

63. Stelaidopteryx serripennis. Rough-winged Swallow. A very rare summer resident.

64. Ampelis cedrorum. Cedar Waxwing. A common summer resident.

65. Vireo olivaceus. Red-eyed Vireo. Abundant summer resident.

66. Vireo flavifrons. Yellow-throated Vireo. Rather rare.

67. Vireo noveboracensis. White-eyed Vireo. Common along streams.

68. Mniotilta varia. Black-and-white Warbler. Rather rare.

69. Helmitherus vermivorus. Worm-eating Warbler. An extremely rare summer resident.

70. Helminthophila pinus. Blue-winged Warbler. A common summer resident.

11

71. Dendroica æstiva. Yellow Warbler. Common summer resident.

72. Dendroica pensylvanica. Chestnut-sided Warbler. Rare summer resident; but apparently increasing as a summer resident.

73. Seiurus aurocapillus. Oven-bird. Commonest breeding warbler.

74. Geothlypis trichas brachidactyla. Northern Yellow-throat. Common summer resident.

75. Icteria virens. Yellow-breasted Chat. Rather common summer resident.

76. Setophaga ruticilla. American Redstart. A very rare summer resident; but one record.

 $\cdot$  77. Galeoscoptes carolinensis. Catbird. Abundant summer resident.

78. Toxostoma rufum. Brown Thrasher. Common summer resident.

79. Thryothorus Iudovicianus. Carolina Wren. A very rare summer resident; but two records.

80. Troglodytes aëdon. House Wren. Rather common.

81. Cistothorus stellaris. Short-billed Marsh Wren. Locally common; breeds in a very restricted area.

82. Cistothorus palustris. Long-billed Marsh Wren. Locally common in fresh-water marshes and along Passaic river.

83. Sitta carolinensis. White-breasted Nuthatch. Common.

84. Bæolophus bicolor. Tufted Titmouse. Rare; becoming more common.

85. Parus atricapillus. Chickadee. Common.

86. Turdus mustelinus, Wood Thrush. Abundant.

87. Turdus fuscescens. Wilson's Thrush. Rather common.

88. Merula migratoria. Robin. Abundant.

89. Sialia sialis. Bluebird. Abundant.

The foregoing list I believe to be fairly complete; there are however, several birds whose status, as far as this locality is concerned, I am in doubt of, and have thought it best to eliminate them from the list.

It will of course be understood that the relative abundance of birds mentioned in this list is applicable to the breeding season only.

12