pile or thicket. They arrive early, April or thereabout, and Grass Finches, which appear about a month later, are common everywhere. I will mention two other Sparrows, specimens of which I obtained this spring, though none were noted on the present occasion. One is the Fox-colored Sparrow, which seems to be of uncommon occurrence here, and the other Lincoln's Sparrow. Both are so retiring in their habits as to be readily overlooked. I have shot but two or three specimens of each in the Territory.

On returning to town shortly before noon, little further of interest is observed, as the ground traversed is about the same. It is still early for many of the smaller birds, some of which do not arrive till about the first of June.

AN ANNOTATED LIST OF BIRDS BREEDING IN THE DISTRICT OF COLUMBIA.

BY CHARLES W. RICHMOND.

In treating of the fauna and flora of the District of Columbia, authors generally extend the limits twenty miles from the Capitol in all directions. Owing to the fact that his experience does not extend far beyond the District limits proper, the writer has preferred to restrict the present notes, as much as possible, to within that boundary. Some species are left out, therefore, which would otherwise be included. Among such birds are the Bald Eagle (Haliæetus leucocephalus), the Wild Turkey (Meleagris gallopavo), and the Wood Duck (Aix sponsa), which are known to breed at Mt. Vernon, Va., about fourteen miles from Washington; the Turkey Vulture (Cathartes aura), and the Great Horned Owl (Bubo virginianus), breeding near Wilson's Station, Md., about seven miles from here, as the writer is informed by Mr. Frank White. The Red-tailed Hawk (Buteo borealis) has been found breeding at Sandy Spring, Md., about eighteen miles distant, by Dr. A. K. Fisher.

Mr. Hugh M. Smith kindly contributes the following interesting note on the breeding of the American Scaup Duck (Aythya

marila nearctica) at Mt. Vernon: "In May, 1881, a female duck was often noticed swimming to and from a marshy tract near Mt. Vernon Springs, and in June was flushed from the nest by Mr. L. P. Pumphrey, an experienced gunner and duck shooter. The nest contained fourteen eggs, which were not disturbed. Later in the same month they were found to have hatched (with the exception of one), and the young ducks were transferred to the care of a hen. The ducks grew, and when old enough to fly, went off one at a time and never returned. At no time was the male bird seen. Mr. Pumphrey's identification of the bird was complete, and his great familiarity with the birds of the river makes his dictum reliable." This instance, of course, was purely accidental, the bird probably being wounded and obliged to remain where it was discovered.

Three birds given as breeding in 'Avifauna Columbiana,' by Drs. Coues and Prentiss, are here omitted, viz: Brown Creeper (Certhia familiaris americana), Tree Swallow (Tachycineta bicolor), and Bronzed Grackle (Quiscalus quiscula æneus). The first is a winter resident, being common from the middle of October until the first week in April. The Tree Swallow is said to be "a common summer resident," whereas it does not occur as such, although small scattered flocks of migrants are often seen flying over the city during the latter part of July. The Bronzed Grackle is little more than a straggler, and individuals passing through here hardly remain to breed. However, the writer has a male, taken on April 17, 1886, a date when ordinary quiscula is nesting, and a female shot on April 6, 1887, about the time the Purple Grackles are laying their first eggs. Both of these birds were taken in a grove of cedars occupied by a colony of Purple Grackles.

The writer desires to thank Mr. H. W. Henshaw, Mr. Robert Ridgway, and others whose names are mentioned in connection with the following notes, for information and assistance in preparing the list. The notes apply to the breeding season only.

- 1. Botaurus exilis. LEAST BITTERN.—Rare. Has been seen here in summer.
- 2. Ardea egretta. American Egret.—Mr. Wm. Palmer has known this bird to nest in Arlington Cemetery.
- 3. Ardea virescens. Green Heron.—Quite common. Several pairs nest along the Eastern Branch every year.

- 4. Nycticorax nycticorax nævius. Black-crowned Night Heron.—Same as Ardea egretta.
- 5 Rallus elegans. King Rail.—A nest found June 15, 1887, in a marsh opposite Long Bridge, by Mr. Melville Thompson, contained eleven eggs, partly incubated. This is the only nest found here, to the writer's knowledge.
- 6. Rallus virginianus. VIRGINIA RAIL.—This Rail and the following have been seen here during the nesting season, and both undoubtedly breed.
 - 7. Porzana carolina. Sora.
- 8. Philohela minor. WOODCOCK.—Rare. Mr. Henshaw informs the writer that the Woodcock used to nest quite commonly in the vicinity of Washington, before it was killed off by gunners.
- 9. Actitis macularia. Spotted Sandpiper.—Rather uncommon. Have never found the nest here, but have shot young birds.
- 10. Ægialitis vocifera. KILLDEER.—Rather rare. Sometimes seen or heard during the summer.
 - 11. Colinus virginianus. Bob-white.—Quite rare.
- 12. Bonasa umbellus. RUFFED GROUSE.—Rare. Both this bird and the preceding are abundant in the surrounding country in Maryland and Virginia.
- 13. Zenaidura macroura. Mourning Dove.—Common. Have found eggs as early as April 18. Nests generally in cedar thickets.
- 14. Accipiter velox. Sharp-shinned Hawk.—Rare. A nest with four eggs was found by Mr. Louis McCormick in Alexandria Co., Va., about six miles from Washington, on May 20, 1882.
- 15. Accipiter cooperi. Cooper's Hawk.—Rare. Mr. Hugh M. Smith has two eggs taken May 8, 1865.
- 16. Buteo lineatus. Red-shouldered Hawk.—Mr. Henshaw has found several nests.
- 17. Buteo latissimus. BROAD-WINGED HAWK.—Not common. Mr. Henshaw has found it breeding.
 - 18. Falco sparverius. American Sparrow Hawk.—Rare.
- 19. Strix pratincola. AMERICAN BARN OWL.—Very rare. The National Museum collection contains two eggs of this bird taken from the Smithsonian towers, one in June, 1861, and the other June 1, 1865.
- 20. Asio wilsonianus. American Long-eared Owl.—Rare. This species is given a place on the authority of Mr. Henshaw, who says that it breeds here.
- 21. Syrnium nebulosum. BARRED OWL.—Rare. This Owl breeds in Maryland and Virginia, and it has been seen here in June.
- 22. Megascops asio. Screech Owl.—Common. A nest found April 24, contained eggs about to hatch, and young birds fully fledged and flying about have been taken on May 30.
- 23. Coccyzus americanus. Yellow-billed Cuckoo.—Common. Eggs found first week in June. Nests generally in thick, dark woods with abundant undergrowth.

- 24. Coccyzus erythrophthalmus. BLACK-BILLED CUCKOO.—Rare.
- 25. Ceryle alcyon. Belted Kingfisher.—Uncommon.
- 26. Dryobates villosus. HAIRY WOODPECKER.—Very rare. Mr. Henshaw saw a pair of these birds late in May, 1887, and judged from their actions that they were nesting.
 - 27. Dryobates pubescens. Downy Woodpecker.—Rather common.
- 28. Melanerpes erythrocephalus. Red-headed Woodpecker.—Common. Eggs found second week in May.
- 29. Melanerpes carolinus. Red-bellied Woodpecker.—Very rare. Mr. Henshaw saw an individual about the last of May, 1887.
- 30. Colaptes auratus. FLICKER.--Common. Eggs found second week in May.
- 31. Antrostomus vociferus. Whip-poor-will.—Quite rare, but common in adjacent portions of Maryland and Virginia.
- 32. Chordeiles virginianus. NIGHTHAWK.—Uncommon. Have never found the nest here, but see the birds all through the summer.
- 33. Chætura pelagica. Chimney Swift. Abundant. Eggs found the second week in June.
- 34. Trochilus colubris. RUBY-THROATED HUMMINGBIRD.—Uncommon. Begins nesting the last week in May.
 - 35. Tyrannus tyrannus. KINGBIRD.—Quite common.
- 36. Myiarchus crinitus. Crested Flycatcher. Common. Have found only one nest containing the usual cast-off snake skin. Eggs found the first week in June.
- 37. Sayornis phæbe. Phæbe.—Common. An early breeder as compared with other species of the Tyrannidæ nesting here. Eggs found first week in May.
- 38. Contopus virens. Wood Pewee.—Common. Begins nesting first week in June.
- 39. Empidonax acadicus. Acadian Flycatcher.—Common. Eggs deposited second week in June; never more than three are found in one nest. The bird is always found in a solitary part of the woods, where few other birds are seen. Its nest is placed half-pendant at the end of a horizontal branch, generally so low that it can be reached without climbing; sometimes, however, it is twenty feet or more from the ground. The eggs resemble those of *Contopus virens*, but are slightly smaller; the ground is of a deeper cream color, and the spots, not so numerous or so large as in *virens*, are reddish brown. The note of *acadicus* is a sharp peep.
- 40. Cyanocitta cristata. Blue Jay.—Rare. Common in the adjoining country.
- 41. Corvus americanus. American Crow. Abundant. Have taken full clutches as early as March 27. Generally five or six eggs are found in a nest.
- 42. Corvus ossifragus. FISH CROW. Not common. Mr. Henshaw has found it nesting.
- 43. Molothrus ater. Cowbird.—Rare. Prior to 1884 the writer frequently found eggs of this parasite in nests of Vireo olivaceus, Dendroica

- æstiva, D. discolor, and other small birds, but since then has not found one. Molothrus generally lays its eggs in nests of birds smaller than itself, and which lay similar spotted eggs. Have occasionally found its egg in the nest of the Chipping Sparrow, and once in a Bluebird's nest situated in a hole in a fence post. This nest contained two eggs of the Cowbird, almost exact counterparts of each other, and probably laid by the same bird.
 - 44. Agelaius phœniceus. RED-WINGED BLACKBIRD.—Common.
 - 45. Sturnella magna. MEADOWLARK.—Common.
 - 46. Icterus spurius. ORCHARD ORIOLE.—Uncommon.
 - 47. Icterus galbula. BALTIMORE ORIOLE.—Very uncommon.
- 48. Quiscalus quiscula. Purple Grackle.—Abundant. Breeds in communities. Nests exclusively in cedar or other coniferous trees. Eggs may be found the first week in April, five or six being laid. 'Runt' eggs are sometimes found. Two broods are raised, perhaps three.
- 49. Passer domesticus. European House Sparrow.—This little renegade is excessively abundant. They are frequently seen building nests during mild days in winter, and rear four or five broods a year, probably more. In June, large numbers, mostly young birds, congregate about grain fields and along country roads, where they remain until harvest time is over. Eggs generally five or six; nest lavishly lined with feathers.
- 50. Loxia curvirostra minor. AMERICAN CROSSBILL. Extremely rare. An adult male accompanied by one young bird was seen by Mr. Hugh M. Smith on May 17, 1885. This species has been known to breed in Maryland. (See 'The Auk,' Vol. I, p. 292, and Vol. II, p. 379.)
- 51. Spinus tristis. AMERICAN GOLDFINCH. Very common. A late breeder, hardly beginning to nest before the middle of July. Mr. Smith has taken eggs as late as August 30. Eggs five or six.
 - 52. Poocætes gramineus. VESPER SPARROW.—Rather common.
- 53. Ammodramus savannarum passerinus. Grasshopper Sparrow.—Common.
- 54. Ammodramus henslowii. Henslow's Sparrow.—Very common around Falls Church, Va., a short distance from Washington.
- 55. Spizella socialis. Chipping Sparrow. Very common. Three broods are raised.
- 56. Spizella pusilla. FIELD SPARROW. Abundant. Often nests on the ground. Three broods are reared.
- 57. Melospiza fasciata. Song Sparrow.—Abundant. Commonly nests on the ground and in low bushes. One nest found was in a cedar, seven feet from the ground.
- 58. Pipilo erythrophthalmus. Towhee. Common. Three or four eggs generally constitute a clutch.
- 59. Cardinalis cardinalis. Cardinal.—Common. Have never found more than three eggs in a nest.
 - 60. Guiraca cærulea. Blue Grosbeak.-Rare.
- 61. Passerina cyanea. Indigo Bunting.—Common. Begins nesting first week in June. Four eggs are generally laid.

- 62. Spiza americana. Dickcissel.—Extremely rare. This bird is said to have been abundant, formerly, but it appears to have withdrawn almost entirely from this vicinity. A male was seen by Mr. Henshaw about the last of May, 1887. It was very likely nesting.
- 63. Piranga erythromelas. SCARLET TANAGER. Quite rare. Mr. W. F. Roberts has taken young birds.
- 64. Piranga rubra. Summer Tanager.—Very uncommon. Found a nest July 4, 1885, containing three fresh eggs.
- 65. Progne subis. PURPLE MARTIN.—Rather common. There are several nesting sites where the Martins still 'hold the fort,' despite the English Sparrows, notably the Masonic Temple and the Post Office Department building.
 - 66. Petrochelidon lunifrons. CLIFF SWALLOW.—Rare.
- 67. Chelidon erythrogaster. BARN SWALLOW.--Very common. Begins nesting about the third week in May.
 - 68. Clivicola riparia. BANK SWALLOW.—Very common.
- 69. Stelgidopteryx serripennis. Rough-winged Swallow. Common. Numbers of these birds nest along the river in crevices among the rocks. I know of a small colony that frequents a stone culvert, over which is a railroad track, and through which a small stream passes. This culvert is built of rough uncut stones, and presents innumerable fine nesting sites for the Swallows. One nest found here was placed in a crevice about one foot above running water, and contained young. Six or seven eggs are laid, and first clutches are completed by May 17. A set of seven eggs found during June, 1887, contained six of this species and one of the Barn Swallow.
- 70. Ampelis cedrorum. CEDAR WAXWING.—Common. The Cedarbird does not nest till late in the season, and is sometimes eccentric about choosing a nesting place. A nest found within the city limits was situated in a lamp post, and contained one egg. It will forsake its nest on the slightest provocation, even after laying one or more eggs.
- 71. Vireo olivaceus. Red-Eyed Vireo. Abundant. The nesting season usually begins about the last week in May. A nest, found by Mr. M. Thompson, was in a small shrub only a foot and a half from the ground. One egg of a set of three in the possession of the writer, is unspotted.
- 72. Vireo gilvus. WARBLING VIREO.—Uncommon. The rarest of the breeding Vireos.
- 73. Vireo flavifrons. Yellow-throated Vireo.—Rather common. It appears to nest much earlier than *olivaceus*.
 - 74. Vireo noveboracensis. WHITE-EYED VIREO.—Rather common.
- 75. Mniotilta varia. Black-and-white Warbler.—Common. Have found fully fledged young by June 14.
- 76. Helmitherus vermivorus. Worm-eating Warbler.—Not rare. Discovered a nest on a steep hillside bordering on Rock Creek, May 31, 1885, containing six eggs, well incubated. The nest was large for the size of the bird, and very loosely constructed. The outer part was com-

posed of skeleton leaves, and the lining was of hair moss (*Polytrichum*). On the 14th of June the same year, another nest, containing five young birds half-fledged, was found in the same locality. The next year a deserted nest was found, corresponding in size and material with the other two. June 5, 1887, Mr. M. Thompson found a nest with five half-grown young.

The nest was on a hillside facing the west, as were the other three, and was composed of like materials.

77. Helminthophila pinus. Blue-WINGED WARBLER. — Extremely rare. Mr. Herman H. Birney found a nest containing four eggs about to hatch, early in June, 1880. This is probably the only known instance of its occurrence here during the breeding season.

- 78. Compsothlypis americana. Parula Warbler.—Rare. Heard a male singing June 10, 1886, and watched it for some time, hoping it would give me information regarding the whereabouts of its nest, something it firmly declined to do.
 - 79. Dendroica æstiva. YELLOW WARBLER.--Common.
 - 80. Dendroica vigorsii. PINE WARBLER.—Very rare in summer.
- 81. Dendroica discolor. Prairie Warbler.—Common. The nest is very difficult to find.
- 82. Seiurus aurocapillus. Oven-BIRD.—Abundant. Begins nesting about the last week in May; eggs four or five.
 - 83. Seiurus motacilla. Louisiana Water-Thrush.—Uncommon.
- 84. Geothlypis formosa. KENTUCKY WARBLER.—Rare. Mr. Henshaw has found the nest here, and I have found young birds hardly able to fly.
 - 85. Geothlypis trichas. MARYLAND YELLOW-THROAT.-Abundant.
- 86. Icteria virens. Yellow-breasted Chat.—Common. Begins nesting last week in May.
 - 87. Setophaga ruticilla. American Redstart.—Rather common.
 - 88. Mimus polyglottus. Mockingbird.—Rare.
- 89. Galeoscoptes carolinensis. Catbird.—Very abundant. Commences nesting about the middle of May; eggs four or five.
- 90. Harporhynchus rufus. Brown Thrasher.—Moderately abundant. Begins nesting about two weeks earlier than the preceding. The nest is sometimes found on the ground.
- 91. Thryothorus ludovicianus. CAROLINA WREN.—Common. An early breeder. After leaving the nest the young birds continue with the old for some time.
- 92. Troglodytes aëdon. House Wren.—Very common. A nest found at Dunn-Loring, Va., by Mr. J. D. Figgins, was built inside of a deserted Barn Swallow's nest, and contained seven eggs.
- 93. Cistothorus palustris. Long-billed Marsh Wren.—Very numerous. Breeds abundantly in all the marshes around Washington. Dr. Coues, in his 'Birds of the Northwest,' speaks as follows on the nidification of the Marsh Wren: "The eggs, as usual, are numerous—six or eight—sometimes so many as to induce the suspicion that they were not all laid by the same bird." This can hardly apply to the birds around here, as I have examined a great many nests just for the sake of finding a large set, and have never found more than five eggs or young in one nest.

- 94. Sitta carolinensis. WHITE-BREASTED NUTHATCH.—Rarc. Have seen young being fed by old birds early in July.
 - 95. Parus bicolor. TUFTED TITMOUSE.—Very common.
- 96. Parus carolinensis. CAROLINA CHICKADEE. Uncommon. An early breeder. Have found fully fledged young on May 24.
- 97. Polioptila cærulea. Blue-Gray Gnatcatcher.— Quite rare. Saw a family of young Gnatcatchers being led about by old ones, on August 12, 1886.
- 98. Turdus mustelinus. Wood Thrush.—Common. Regarding the material composing the nest, Dr. Coues says: "As is well known, the nest of this species is saddled on the bough of a bush, shrub, or low tree, and has mud in its composition" ('Birds of the Northwest,' p. 2). In 'Avifauna Columbiana,' p. 34, he contradicts this statement, and speaks as follows: "The nest, placed in a bush or sapling, differs from that of the Robin in having no mud in its composition." As far as the writer's experience goes, and it accords with that of other collectors here, the nest of the Wood Thrush does contain considerable mud. The number of eggs found in a nest is usually four, and the nest is placed in a small sapling or tree, anywhere from four to twenty feet from the ground.
- 99. Merula migratoria. American Robin.—Common. Begins nesting about the middle of April.
 - 100. Sialia sialis. BLUEBIRD.—Common.

FEEDING HABITS OF PELECANUS ERYTHRO-RHYNCHOS.

BY N. S. GOSS.

Naturalists that have not seen the White Pelicans upon their feeding grounds, have without doubt read Audubon's interesting description of the manner in which the birds unite and drive the fishes into shallow water, where they can catch them, which they cannot well do in deep water, as their skins are honeycombed with air cells that buoy them up like a cork, and prevent their diving, * and they do not plunge for their food when upon the wing, like their cousins, the brown Pelicans, and therefore have to adopt fishing habits suited to shallow waters. I have often noticed the birds in flocks, in pairs, or alone, swimming on the

^{*}The statement in 'North American Birds—Water Birds,' Vol. II, page 137, that this species "dives with great celerity" must be an error.