

white thickly streaked with black for the lower two-thirds; jugular plumage chiefly white, their lengthened tapering portion entirely so. Upper surface uniform bluish plumbeous, the lengthened scapular plumes however whitish or pale silvery gray. Upper breast uniform black; abdomen and lower breast white, rather indistinctly streaked with dark gray; anal region mixed black and white, in longitudinal dashes (the black rather predominating); crissum immaculate pure white. Tibiæ uniform light cinnamon; edge of the wing (especially near the bend) deeper cinnamon but this much mixed with white toward the bases of the quills; lining the wing, axillars, sides, and flanks, uniform plumbeous. Bill, apparently, entirely olivaceous-yellow; naked portion of tibiæ very pale brown (evidently yellowish or flesh-colored in life); tarsi light brown (olivaceous in life?), darker in front; toes light brown. Wing, 20.50: culmen, 6.75: depth of bill through nostril, 1.10; tarsus, 8.75; middle toe, 5.10; naked portion of tibiæ, 5.50.

Mr. W. H. Collins, of Detroit, who kindly presented the specimen described above to the National Museum, has sent me measurements of two other specimens, one in his own possession and the other mounted for Mr. Ward. As may be seen below they agree closely in dimensions with the type, their measurements being, respectively, wing 20.00-20.50; culmen 6.50-7.00; depth of bill through nostril, 1.25; tarsus, 8.75-9.00; middle toe, 5.25-5.45; naked portion of tibia, 5.75-6.00.

LIST OF BIRDS OBSERVED AT HOUSTON, HARRIS
CO., TEXAS AND VICINITY AND IN THE COUNTIES
MONTGOMERY, GALVESTON AND FORD
BEND.

BY H. NEHRLING.

1. *Turdus migratorius*, L. ROBIN. — Very common in the woods from November to April. Very shy and retiring during their stay; only a few have been observed in the larger gardens of Houston. Feeds abundantly on the berries of the holly (*Ilex opaca*) and the myrtle-holly (*Oreophila myrtifolia*). About the 15th of April all have departed for the North.
2. *Turdus mustelinus*, Gmel. WOOD THRUSH. — Arrives from the North early in October when the aromatic berries of the *Magnolia grandiflora* are ripe, on which they eagerly feed. On account of this food the flesh is very delicate and large numbers are killed by pot hunters, who call them "Grassets." In the winter months they appear not to be common and inhabit swampy thickets and bottom woods.

3. *Turdus fuscescens*, Steph. WILSON'S THRUSH.—Only a few observed during the fall migration.

4. *Turdus swainsoni*, Cab. OLIVE-BACKED THRUSH.—Not rare during the migrations.

5. *Mimus polyglottus*, Boie. MOCKINGBIRD.—A very abundant resident. Only a few remain to winter, in protected localities; the majority migrate further south. They arrive from their winter quarters early in March and are by the end of that month again common. Nest-building commences usually in the middle of April. Many are killed by farmers and gardeners on account of their fondness for ripe figs and grapes. Besides insects, they feed eagerly on the berries of the poke (*Phytolacca decandra*), the elder (*Sambucus canadensis*), and the Mexican mulberry (*Callicarpa americana*). In winter the berries of the myrtle-holly (*Oreophila myrtifolia*) and those of the mistletoe (*Phoradendron flavescens*) are their principal food.

6. *Mimus carolinensis*, Gray. CATBIRD.—I first observed a single specimen of this bird April 25, 1879. It was then my opinion that this bird must be a very rare migrant, as I did not meet with another that year. It was this year (1881), May 5, when I wandered through the thick underbrush in the woods on Spring Creek that I heard the peculiar cry of the Catbird, and a few minutes after I discovered the nest, which was built in a young oak sapling, about ten feet above the ground. They are not the familiar and confident birds of the Northern States, but extremely shy and retiring in their habits. They kept a good distance from me when I took the nest.

7. *Harporhynchus rufus*, Cab. BROWN THRUSH.—Common during the winter months in the thick underbrush of the woods near Spring Creek, in the northern part of Harris County. Very silent and extremely shy.

8. *Sialia sialis*, Hald. BLUEBIRD.—A very abundant winter sojourner and a common summer resident; but not so abundant as in the Northern States, and not so familiar. Commences to breed as early as February 15. I found a nest March 6, which contained newly hatched young. A nest discovered April 29 contained four pure white eggs.

9. *Regulus calendula*, Licht. RUBY-CROWNED KINGLET, and

10. *Regulus satrapa*, Licht. AMERICAN GOLDEN-CRESTED KINGLET.—Both are common during the winter months, when, in company with Titmice, they inhabit the pine woods near Houston. Are to be observed during the whole winter in the mountain cedars (*Juniperus occidentalis texanus*), which are common in the gardens of the city.

11. *Polioptila cærulea*, Sclat. BLUE-GRAY Gnatcatcher.—Common in the heavy wooded bottom lands on the Brazos, Spring Creek, and San Jacinto, and especially abundant on Buffalo Bayou when the magnificent *Magnolia grandiflora* is in bloom. Almost with the agility and grace of a Hummingbird, it flies around the showy flowers in pursuit of insects. Nest-building commences early in May. This beautiful little domicile is built very high, in small branches of elms, swamp-oaks (*Quercus palustris*) and other densely leaved forest trees.

12. *Lophophanes bicolor*, *Bon.* TUFTED TITMOUSE.—A very common bird and resident throughout the year, even in the city gardens, where it is exceedingly tame and confiding. Breeds as early as the beginning of March. Nests in deserted Woodpeckers' holes, in old stumps, in cedar-posts, in hollow branches, etc.
13. *Parus carolinensis*, *Aud.* SOUTHERN CHICKADEE.—Very common and familiar. Resident throughout the year. April 15 I discovered a nest of this diminutive bird in an old fence-post; it contained six nearly fledged young. The cavity was filled up about nine inches with soft mosses, cow's hair, and the fur of smaller animals. Usually the nest is built in the hollow of a branch.
14. *Thryothorus ludovicianus*, *Bon.* CAROLINA WREN.—Very common in all low wooded localities with dense underbrush. Thickets of smilax, blackberry bushes, snowball (*Viburnum molle* and *V. dentatum*), *Rhamnus carolinianus*, *Bumelia lanuginosa*, intermixed with a few larger trees (oaks or elms), which are commonly overgrown by the mustang-grape and the grotesque forms of the supple jack (*Berchemia volubilis*), are its favorite resorts. In a few instances I have known a pair to build their nest in a bird-box near a dwelling.
15. *Thryothorus bewicki*, *Bonap.* LONG-TAILED HOUSE WREN.—Abundant in all suitable localities and very familiar, breeding in bird-boxes, stables, corn-cribs, and even in houses over doors, etc. One pair built their nest in the pocket of an old coat, hanging out doors.
16. *Troglodytes aëdon*, *Vieill.* HOUSE WREN.—Only a winter visitant, occurring in considerable numbers in secluded localities.
17. *Cistothorus palustris*, *Baird.* LONG-BILLED MARSH WREN.—Rare during the migrations.
18. *Cistothorus stellaris*, *Cab.* SHORT-BILLED MARSH WREN.—Observed so late as May 2 in the marshy prairie districts in the northern part of Harris County, and in September in the sugar-cane fields on the Brazos in Ford Bend County. Probably breeds.
19. *Anthus ludovicianus*, *Licht.* AMERICAN PIPIT; TITLARK.—Very common during winter, from the middle of November to the second week in April. Comes fearlessly in the streets of the city and in the door-yards.
20. *Neocorys spraguei*, *Sclat.* MISSOURI SKYLARK.—Observed small flocks early in November on the prairies near Houston. They were often associated with *Passerculus savanna*, and in habits resembled very closely the Titlark. All disappeared soon.
21. *Mniotilta varia*, *Vieill.* BLACK-AND-WHITE CREEPER.—Not uncommon during the migrations. Noted first March 22. At the 15th of April the majority depart for the north, only few remaining to breed.
22. *Parula americana*, *Bon.* BLUE YELLOW-BACKED WARBLER.—This beautiful little Warbler is rather common during the migrations in all wooded portions, especially in the river bottoms, where almost every tree is covered with the long gray Spanish moss (*Tillandsia usneoides*). Some remain to breed, as I have seen the parents feeding the young in July and August.

23. *Protonotaria citrea*, *Bd.* PROTHONOTARY WARBLER.—A not uncommon summer resident in marshy localities on Spring Creek and in Ford Bend County in the Brazos bottom, where so-called lakes are abundant. It breeds in hollows of trees, deserted Woodpeckers' holes, and in stumps standing in the water. I usually met with this bird in localities where the Little Blue Heron (*Florida carulea*) and the Snowy Heron (*Garzetta candidissima*) were common. I can add nothing to the unsurpassable life-history of this bird given by Mr. William Brewster in this Bulletin, Vol. III, pp. 153-162.

24. *Helmintherus vermivorus*, *Bon.* WORM-EATING SWAMP WARBLER.—A few seen April 6, 1881, in a flowering plum tree in a city-garden.

25. *Helminthophaga chrysoptera*, *Cab.* BLUE-WINGED YELLOW WARBLER.—Common during the migrations, in October and April.

26. *Helminthophaga peregrina*, *Cab.* TENNESSEE WARBLER.—Not uncommon during migrations.

27. *Helminthophaga celata*, *Bd.* ORANGE-CROWNED WARBLER. Seen only during migrations and very rare.

28. *Dendroeca aestiva*, *Bd.* SUMMER YELLOW BIRD.—Very abundant during migrations. Not a very common summer sojourner, but quite regularly distributed.

29. *Dendroeca coronata*, *Gray.* YELLOW-RUMPED WARBLER.—The most common of all the Warblers from November to April. Winters abundantly in this region and numbers visit the gardens, even those in the interior of the city.

30. *Dendroeca maculosa*, *Bd.* BLACK-AND-YELLOW WARBLER, and

31. *Dendroeca blackburniæ*, *Bd.* BLACKBURNIAN WARBLER, are both, so far as I observed, exceedingly rare during migrations.

32. *Dendroeca pennsylvanica*, *Bd.* CHESTNUT-SIDED WARBLER.—Somewhat common in the latter part of April and early in May.

33. *Dendroeca castanea*, *Bd.* BAY-BREADED WARBLER.—This elegant Warbler is one of the most common of its family during the spring migration. I observed small flocks of from eight to ten so late as May 5.

34. *Dendroeca striata*, *Bd.* BLACK-POLL WARBLER.—Transient; arrives from winter quarters late in April, when the host of Warblers pass northward. Tolerably common.

35. *Dendroeca virens*, *Bd.* BLACK-THROATED GREEN WARBLER.—Abundant during migrations. Moves in flocks of from four to ten.

36. *Dendroeca dominica albilora*, *Ridg.* YELLOW-THROATED WARBLER.—A very rare summer resident and very difficult to observe in the high moss-grown forest trees of the river bottoms. The song resembles that of *Dendroeca aestiva*, but is louder and more varied. I think it is almost impossible to discover a nest of this bird in the high trees, so densely covered with *Tillandsia*.

37. *Dendroeca pinus*, *Bd.* PINE WARBLER.—Winters in small companies in the woods in the northern part of Harris County, near Spring Creek.

I did not find so many Warblers as I expected, although I kept a diligent lookout. I did not observe *D. palmarum*, *D. canadensis*, *D. discolor*, or *D. cærulea*.

38. *Siurus auricapillus*, Sw. GOLDEN-CROWNED THRUSH.—Transient and not common.

39. *Siurus nævius*, Coues. WATER THRUSH.—Not uncommon in suitable localities during migrations.

40. *Oporornis formosa*, Bd. KENTUCKY WARBLER.—A common summer resident; exceeding in numbers even the Maryland Yellow-throat, with which it occupies the same localities. Common in wet fields with patches of low bushes, and in the dense undergrowth near water. Visits frequently the country gardens. Very abundant on Spring Creek, in the northern part of Harris County, and in Montgomery County. Arrives about April 21. Commences nest-building early in May. Nest very difficult to find.

41. *Geothlypis trichas*, Cab. MARYLAND YELLOW-THROAT.—Arrives about April 15, from its winter quarters. A common summer sojourner. Like the preceding species, most common in grassy localities with thickets interspersed. On a farm near Houston is a wet piece of land containing about two acres, where I found three pairs breeding. Through this runs a ditch and the whole ground is covered with high broom-grass (*Andropogon macrurus*) with briar patches, thickets of water-oak, *Viburnum dentatum*, black haw (*V. prunifolium*), etc. The field is surrounded by an almost impenetrable hedge of Cherokee-roses (*Rosa laevigata*). Here the Yellow-throats occur with Kentucky Warblers, White-eyed Vireos, Yellow-throated Vireos, Painted Finches, and Blue Grosbeaks, all living in harmony. Two broods are raised yearly in this latitude. In almost every nest of this bird, and also of the Kentucky Warbler, eggs of the Cow Bird are to be found.

42. *Geothlypis philadelphia*, Bd. MOURNING WARBLER.—Transient and rather-rare.

43. *Icteria virens*, Bd. YELLOW-BREADED CHAT.—A common summer resident, arriving from its winter quarters about April 15. Many winter in sheltered places. Its most favorable resorts are brier-patches in fields, thickets on the edge of woods, myrtle-holly thickets overgrown with tangled *Smilax laurifolia*, and similar localities. Nest in the interior of thickets near the ground; it has some resemblance to the Catbird's, and is built of nearly the same material.

44. *Myiodioctes mitratus*, Aud. HOODED WARBLER.—This beautiful species is common during migrations. Arrives from the South in the last part of April, when the host of Warblers migrate northward. I never observed the bird during the summer months and do not think that any remain to breed.

45. *Myiodioctes canadensis*, Aud. CANADIAN FLYCATCHING WARBLER.—Not very common during the spring migration.

46. *Myiodioctes pusillus*, Bon. BLACK-CAPPED WARBLER.—I consider this the most common species of the genus during migrations.

47. *Setophaga ruticilla*, Sw. AMERICAN REDSTART.—Moves northward late in April and early in May, when the throng of Warblers migrate to their summer quarters in high northern latitudes.

48. *Vireosylvia olivacea*, Bon. RED-EYED VIREO.—A common summer resident in all the deciduous woods.

49. *Vireosylvia gilva*, Cass. WARBLING VIREO.—Evidently a rare species, even during the migrations.

50. *Lanivireo flavifrons*, Bd. YELLOW-THROATED VIREO.—Abundant and breeding. The first nest, beautifully constructed, I discovered April 28 in a high blackberry-bush about four feet above the ground, near Houston. It contained four fresh eggs and one of the Dwarf Cowbird (*Molothrus ater obscurus*). Nest and eggs in my collection. Many more nests were discovered during the months of May and June, and many contained one and two eggs of the Cowbird.

51. *Lanivireo solitarius*, Bd. SOLITARY VIREO.—Rare during migrations.

52. *Vireo noveboracensis*, Bon. WHITE-EYED VIREO.—A common summer resident in localities where *Viburnum dentatum*, *V. molle*, *V. prunifolium*, *Rhamnus carolinensis*, *Cornus florida*, laurel-oaks (*Quercus imbricaria*), and elms are growing, especially on the borders of woods, in open thickets, peach gardens, etc.

53. *Vireo belli*, Aud. BELL'S VIREO.—A common summer sojourner. A not quite finished nest was discovered April 15 on a horizontal branch of a *Viburnum dentatum* on the edge of a thicket, about five feet above the ground. It contained three fresh eggs. The nests of this Vireo are more purse-shaped and deeper than any other Vireo nests I am acquainted with.

54. *Lanius ludovicianus excubitorides*, Coues. WHITE-RUMPED SHRIKE.—A generally dispersed summer resident, but not abundant. Prefers to build in the hedges of the osage orange.

55. *Ampelis cedrorum*, Vieill. CEDAR BIRD.—Abundant migrant. Observed flocks of from thirty to fifty as late as May 6. None remain to breed.

56. *Progne subis*, Bd. PURPLE MARTIN.—Abundant summer resident. Arrives March 1 from the South. Breeds in large numbers under the wooden awnings of sidewalks, even in the business part of Houston and Galveston. Abundant also in the country where bird-boxes are put out for its convenience. Two broods are commonly raised in this latitude.

57. *Petrochelidon lunifrons*, Lawr. CLIFF SWALLOW.—Seen in great numbers during September, but does not breed in this region.

58. *Hirundo erythrogastra*, Bodd. BARN SWALLOW.—Large numbers seen in the latter part of August, but not found breeding.

59. *Tachycineta bicolor*, Cab. WHITE-BELLIED SWALLOW.—Common during migrations. A few observed in summer on the borders of woods.

60. *Cotyle riparia*, *Boie*. BANK SWALLOW.—A few pairs remain to breed in such localities as the banks of Buffalo Bayou and Galveston Bay.
61. *Stelgidopteryx serripennis*, *Bd*. ROUGH-WINGED SWALLOW.—A very abundant summer resident. Often nests under the roofs of sidewalks and on old buildings in Houston, but is more a companion to the preceding on the high banks on Buffalo Bayou and Galveston Bay.
62. *Pyranga rubra*, *Vieill*. SCARLET Tanager.—A moderately common bird during the migrations. Arrives from the South about April 15 and passes without lingering to its more northern breeding range.
63. *Pyranga æstiva*, *Vieill*. SUMMER REDBIRD.—A common summer resident, particularly in oak woods. It is an elegant species, as are all the members of this family, but is more retired in its habits and quicker and more restless in its motions than the preceding. The song is more varied, louder, and wilder. The nest is usually built on the horizontal branch of an oak, from seven to twenty feet above the ground. It is a very open-worked inartificial structure, and the eggs cannot with certainty be distinguished from those of the Scarlet Tanager.
64. *Astragalinus tristis*, *Cab*. GOLDFINCH.—A very abundant winter sojourner. Feeds almost entirely on the seeds of the sycamore or button-wood (*Platanus occidentalis*).
65. *Chrysomitris pinus*, *Bon*. PINE FINCH.—A somewhat rare winter sojourner.
66. *Passerculus savanna*, *Bon*. SAVANNA SPARROW.—Common resident throughout the year. Breeds on the low grassy prairies, but the nest is difficult to find.
67. *Poœcetes gramineus*, *Bd*. GRASS FINCH.—Only to be found during migrations. None remain, so far as I know, to winter or to breed.
68. *Coturniculus passerinus*, *Bon*. YELLOW-WINGED BUNTING.—Seen occasionally during the winter months.
69. *Ammodromus caudacutus*, *Sw*. SHARP-TAILED FINCH.—Observed near the coast of the Gulf of Mexico and Galveston Bay. Doubtless breeds.
70. *Chondestes grammacus*, *Bon*. LARK FINCH.—This interesting, lively bird is the most common of its family in all suitable localities, that is, on the prairies, near woods. Departs for the South late in September and early in October; arrives from his winter quarters again in April. Breeds in May, June, and July, and two or even three broods are raised yearly. Nests in gardens on mulberry-trees, in the corners of rail-fences, in cotton fields on the ground, but most commonly on a low horizontal branch of an oak densely covered with *Tillandsia*, on the borders of woods, where they are exceedingly difficult to discover. After breeding-time the birds assemble in large flocks.
71. *Zonotrichia albicollis*, *Bon*. WHITE-THROATED SPARROW.—Rare and occurs only in winter.
72. *Zonotrichia leucophrys*, *Sw*. WHITE-CROWNED SPARROW.—Abundant in winter.
73. *Zonotrichia gambelli intermedia*, *Ridg*. GAMBEL'S FINCH.—Not uncommon in winter.

74. *Spizella socialis*, Bon. CHIPPING BIRD.—Abundant in October and November, and again in March.
75. *Spizella pallida*, Bon. CLAY-COLORED BUNTING.—Abundant in winter near thickets and in fields with brier-patches.
76. *Spizella pusilla*, Bon. FIELD SPARROW.—Not uncommon during winter.
77. *Junco hiemalis*, Sclat. COMMON SNOWBIRD.—Abundant winter visitor.
78. *Melospiza fasciata*, Scott. SONG SPARROW.—Common during the winter months.
79. *Melospiza lincolni*, Bd. LINCOLN'S SPARROW. Common in winter in the thick undergrowth on the borders of woods.
80. *Peucæa cassini*, Bd. CASSIN'S FINCH.—A common summer resident on the open grassy prairies. It runs like a mouse through the grass, and is very shy and difficult to observe. A nest I never discovered.
81. *Pipilo erythrophthalmus*, Vieill. GROUND ROBIN.—A rare summer resident. A few pairs breed in the woods on Spring Creek.
82. *Calamospiza bicolor*, Bon. LARK BUNTING.—Abundant in winter on the prairies.
83. *Euspiza americana*, Bon. BLACK-THROATED BUNTING.—A common summer resident. Breeds abundantly in all the prairie districts.
84. *Cardinalis virginianus*, Bon. CARDINAL GROSBEEK.—This well-known bird is the most abundant of the family and resident throughout the year.
85. *Guiraca cærulea*, Sw. BLUE GROSBEEK.—Regularly distributed summer resident, but nowhere abundant. Nests discovered always in brier-patches in fields, on road-sides, and on the border of woods.
86. *Cyanospiza ciris*, Bd. PAINTED FINCH.—Inhabits with the preceding similar localities. Very common from April to October. Nest usually in blackberry-bushes, but always well hidden and not easy to find. These birds are very shy and exceedingly quick in all their motions.
87. *Cyanospiza cyanea*, Bd. INDIGO BIRD.—Observed only during the migrations. None I think remain to breed.

(To be concluded.)

ON THE SESAMOID AT THE FRONT OF THE CARPUS IN BIRDS.

BY J. AMORY JEFFRIES.

IN the Bulletin for October, 1881, is a paper by Dr. Shufeldt entitled "On the Ossicle of the Antibrachium as found in some of the North American Falconidæ," in which the author describes