ON THE AVI-FAUNA OF PINAL COUNTY, WITH REMARKS ON SOME BIRDS OF PIMA AND GILA COUNTIES, ARIZONA.

BY W. E. D. SCOTT.

With annotations by J. A. Allen.

(*Continued from page 389.*)

III.

51. **Columba fasciata.** BAND-TAILED PIGEON. — Common in the Catalina Mountains for almost the entire year. Breeds in July. I have met with it commonly in May and June as low down as 3500 feet, in flocks feeding on wild mulberries. It was not uncommon about the middle of April in the pine region, and I saw several flocks late in November, 1884 and 1885, in the same locality. In the fall, from the middle of September until early in December, I have met with it almost daily in flocks ranging from half a dozen to several hundred individuals. This later observation is from the oak region of the Santa Catalinas. I did not find the species in the Pinal Mountains, nor am I aware of its occurrence either about Tucson, Florence, or at Riverside.

52. **Zenaidura macroura.** MOURNING DOVE.—Resident throughout the entire region under consideration, except in the pine forests, where it probably occurs in summer. Near my house it is rare in winter, but abundant during the warmer portions of the year.

53. **Melopelia leucoptera.** WHITE-WINGED DOVE.—Though very generally distributed up to an altitude of 3500 feet, throughout the entire region, it is much more abundant in certain localities than at others. At a point about fifteen miles from Florence, on the road from that place to Riverside, is a spring known as the Little Cottonwood, where I found the birds by hundreds, in April and May, 1882. I have taken the eggs fresh, about the middle of May in the same cañon that my house is in, at an altitude of 3500 feet, but the bird is here rather uncommon. In the same locality I have also taken young just leaving the nest, June 4, 1885.

54. **Columbigallina passerina.** GROUND DOVE. — Not uncommon about Tucson and Florence, and also at Riverside. I have not met with it on the San Pedro, nor in the neighborhood of my house in the Santa Catalina range.

55. **Scardafella inca.** INCA DOVE.—The only points where I have seen this species are Tucson and Florence, where it is, especially in the latter place, of common occurrence during the warmer portion of the year. The birds are very tame and seem to affect particularly the streets and corrals and gardens in the heart of the town.

56. **Cathartes aura.** TURKEY VULTURE.—Rather common at the lower altitudes throughout the year, but migratory in the Catalina region, where I have not met with it above 4000 feet in winter, and it is rare even at that altitude at that season. I noted it in the pine woods as rare late in April, 1885, and took a nest containing two fresh eggs in the oak region of the Santa Catalinas, altitude 5000 feet, May 2, 1885.

57. **Circus hudsonius.** MARSH HAWK.—My records are from about Tucson in the fall, winter, and early spring, and also from the San Pedro River in January, 1886.

58. **Accipiter velox.** SHARP-SHINNED HAWK.—Common during the fall migration, from September 25 until the middle of November in the oak region of the Santa Catalina range. Pine region of the Catalina Mountains, one seen on November 27, 1884. San Pedro River, March 1, 1885, a few noted. Pines of Catalinas, 3d–8th November, 1885, several seen. San Pedro River, 26th–29th January, 1886, two noted. It was common in the fall of 1882 on Mineral Creek. These are all my notes in regard to this species.

59. **Accipiter cooperi.** COOPER'S HAWK.—Common. Resident and breeds in the oak region of the Catalina Mountains. But most abundant during the fall migration, which begins late in September. I have found two nests in this locality, both containing young just hatched. They were taken on June 9 and 11, 1885, and both were built in cottonwood trees, about sixty feet from the ground, and near springs.

I also found the birds common on Mineral Creek in August, 1882, and have records of its being seen during the several visits I have made to the pine region of the Santa Catalina Mountains.

60. **Parabuteo unicinctus harrisi.** HARRIS'S HAWK.—Mr. Brown has taken this species on a single occasion near Tucson.

61. **Buteo borealis calurus.** WESTERN RED-TAIL. — Resident and breeds abundantly throughout the entire region. Though many breed along the water courses, selecting generally a high cottonwood or sycamore, I have found them nesting quite as commonly in the low mesquites, miles from any water. In these cases the nests are not more than twenty and often as low as ten feet from the ground, and I found a nest once but seven feet from the ground. Not infrequently, too, I have seen the nests placed in a giant cactus where the lowest arms branch from the main trunk. On the San Pedro slope of the Santa Catalina range at an altitude of 3500 feet on March 12, 1885, I took three eggs, which had been incubated for at least a week, from a nest situated in a mesquite tree rather less than ten feet from the ground. The only instance where I have met with the very dark phase of this subspecies was near my house. It is No. 1130, ♂, and was taken on the 11th of October, 1884. The specimen is now in the collection of the American Museum of Natural History in New York.

On one occasion in 1883 I took a nestling which I kept for some eighteen months. The bird was a male, I think, and on moulting in the spring of 1884, when a year old, it assumed the full breeding plumage with clear red tail.

62. **Buteo abbreviatus.** ZONE-TAILED HAWK.—This species has been so fully discussed by Dr. Mearns in a recent number of this journal (Auk II, pp. 63-69, January, 1886) that it will suffice to say that I have met with it at all the points where I have collected, that I have records of its breeding throughout the region, generally in April, and that in the San Pedro region and about Tucson it is apparently strictly migratory.

On two occasions I have seen from the railroad, while passing through the country between Casa Grande and Bowie stations, flocks of at least fifty birds of this species, evidently migrating and closely associated together. This was in the early part of September, 1882, and as the train was going very slowly, and I was close to the birds, and had become very familiar with them in life about Riverside in the months just preceding, I could be very certain of my identification.

63. **Buteo swainsoni.** SWAINSON'S HAWK.—Only met with in the immediate vicinity of Tucson where, during the warmer portion of the year, it is common. I have seen flocks of this species congregated together, evidently migrating, in September. This was on the plain just outside of Tucson about the middle of September, 1882.

64. **Asturina plagiata.** MEXICAN GOSHAWK.—Mr. Brown tells me this species is not uncommon in the spring and during the breeding season in the vicinity of Tucson. I have not met with it at other points, but saw the species on a few occasions while driving in the neighborhood of Tucson in May, 1883.

65. **Aquila chrysaëtos.** GOLDEN EAGLE.—Common resident throughout the region at an altitude above 4000 feet. I have seen the birds carrying material for nest building early in December and noted them mating at about the same time. The birds were among those I saw almost daily throughout the year near my house in the Catalina Range.

66. **Falco mexicanus.** PRAIRIE FALCON.—A rather common resident on the plains throughout the region.

67. (?) **Falco columbarius.** PIGEON HAWK.—A small Falcon, seen several times at a considerable distance in the pine region of the Catalinas, I can only refer to this species.

68. **Falco sparverius.** SPARROW HAWK.—Resident and common up to an altitude of 5000 feet at all the points visited, but rarely seen above that elevation. It breeds commonly in deserted Woodpecker holes in the giant cacti wherever they flourish, nesting in late April and May.

69. **Polyborus cheriway.** AUDUBON'S CARACARA.—Rather common about Tucson during the warmer portion of the year, and a few are apparently resident. I have no records of the species from other points.

70. **Pandion haliaëtus carolinensis.** AMERICAN OSPREY.—Not uncommon along the larger water courses, but I have no records of it in winter, nor of its breeding.

71. **Strix pratincola.** BARN OWL.—Taken on three occasions near Tucson, which are the only records I have of the species.

72. **Megascops asio trichopsis.** MEXICAN SCREECH OWL.—Common resident and breeds about Tucson in April and early May. Also taken at

Riverside breeding in April. I took a male (No. 1675) at an altitude of 4500 feet on the San Pedro slope of the Santa Catalina Range on January 20, 1885.

This is one of the species that particularly affect the growths of giant cactus, it living and breeding in deserted Woodpecker holes.

73. **Bubo virginianus subarcticus.** WESTERN HORNED OWL.—Common resident and breeding in February and March, according to altitude. Twice I have found nests in small caves on the bluff sides of cañons near my house. Both contained young birds.

74. **Speotyto cunicularia hypogæa.** BURROWING OWL.—Near Benson, which is just outside of the region indicated on the map and to the east of it, is a very considerable colony of these birds, and I have heard from good observers of another colony northeast of Florence. The bird is unusual, however, in this area.

75. **Glaucidium phalænoides.** FERRUGINEOUS PYGMY OWL.—Not uncommon about Tucson. I have no record of its occurrence at other points, but have strong reasons for believing it obtains not at all rarely throughout this entire region up to an altitude of at least 5000 feet.

76. **Micrathene whitneyi.** ELF OWL.—This species is decidedly the commonest Owl breeding in this region, and is, at least during the breeding time, very abundant. I have found it at all the points where I have collected up to an altitude of 5000 feet. While it seems particularly to like the Woodpecker holes of the giant cactus, I found it on one occasion breeding in a deserted Woodpecker's nest in a mesquite tree. The eggs range from two to four in number, and once I took five from the same nest. The ordinary number is three. On one occasion while collecting with Mr. F. Stephens, near Fuller's Ranch, about the last of May, 1883, we secured with no particular exertion, over twenty of the birds and a dozen or more nests of eggs, in about six hours. I give this so that an idea of their abundance may be had. They frequent holes only when breeding.

77. **Geococcyx californianus.** ROAD-RUNNER.—A common resident up to an altitude of 4000 feet; and in the warmer months and early fall they are often to be found as high as 5000 feet, and even a little higher, thus going well into the evergreen oak belt. While perhaps more abundant on the plains, I found them in the Pinal and Catalina Mountains, and in the latter locality they bred commonly.

From my notes I take the following abbreviated data in regard to some of the various nests found on the San Pedro slope of the Catalina Mountains.

March 17th, 1885. Altitude, 3000 feet. A nest in a cholla, three and a half feet from the ground. A very compact and well built structure, looking much like the common Crow's nest as found in the East, except that the loose outer part of twigs is not so bulky as in that species. The inner structure is lined with grasses and cow and horse dung. The nest contained two fresh eggs, and the birds had evidently not finished laying. This is the earliest date that I have found the species breeding in this region.

March 23, 1885. Altitude, 3200 feet. Found an unfinished nest in a cholla 2 feet 6 inches from ground. Visiting the same nest on 25th March, it was finished and contained two fresh eggs. Structure identical with that found on 17th March. On the 27th it contained four fresh eggs, which I secured.

March 28, 1885. Altitude, 3400 feet. Nest in cholla, two feet from the ground. Similar to nest of 17th of March, being built of same materials. Contained, when found, two fresh eggs. On April 1 it contained six eggs and the parent bird was sitting.

I have data of other nests built at considerable height, the greatest being rather more than fifteen feet from the ground, and though a preference seems to be shown for building in the chollas, yet I have found nests in almost all the varieties of trees that grow in the region frequented by the birds. The greatest number of eggs found in one nest is eight. The males share the duties of incubation with the females and show quite as great concern in the care of the young.

[Mr. Scott's collection contains a series of five young of different ages. These show that the first or nestling plumage differs little from the adult stage, except in being softer or more fluffy and downy. In the youngest specimens, apparently not many days old, the clothing feathers are tipped with a white hair-like appendage, one-fourth to half an inch in length. These hair-like tips soon fall off, only a very few remaining on specimens nearly ready to leave the nest. The chief difference in color consists in the broad shaft stripes of the feathers of the neck and breast being less sharply defined in the young than in the adult, and in the brown edgings bordering the shaft-stripes being paler.—J. A. A.]

78. **Coccyzus americanus.** YELLOW-BILLED CUCKOO.—Rare during the months of June and July on the San Pedro slope of the Catalina Mountains, ranging as low as 4000 feet. The only specimen collected is an adult male (No. 500), taken July 4, 1884, at an altitude of 4000 feet.

79. **Trogon ———?** —A species of Trogon undoubtedly occurs casually in the Catalina Mountains. A laborer who had manifested considerable interest in my collections, described to me a bird he had seen only a few hours before, which he believed "was a kind of bird of paradise." He said it was quite tame, allowing him to approach closely. "Had a very long brilliant tail, and was bright pink on the breast." This was on September 20, 1884, and about a mile from my house. Subsequently two other men saw the same or a similar bird.

80. **Ceryle alcyon.** KINGFISHER.—A resident species. Met with at the several points where I collected, but it retires from the mountains in the winter. It is a curious fact that the species is frequently to be found in this region far from water, feeding on the larger insects and lizards. It always seemed strange to meet the bird under 'desert' conditions.

81. **Dryobates villosus harrisii.** HARRIS'S WOODPECKER.—Resident in the pine forests, and a winter visitor to the lower altitudes, though I believe thus far it has not been detected about Tucson. It generally made its appearance about my house (altitude 4500 feet) early in November, and

was rather common until the last of January. On my visits to the pine woods, both of the Pinal and Catalina Mountains, I have always found it rather common.

82. **Dryobates pubescens gairdnerii.** GAIRDNER'S WOODPECKER.—A rare species, apparently, which I have only met with in a single locality. This was on the Gila River, near Riverside, in April, 1882, where I took a single male, the only one seen.

83. **Dryobates scalaris.** TEXAN WOODPECKER.—Common in all the localities visited. Limited in its upward range on the mountains to about 5000 feet; not at all common above 4000 feet. On the plains, especially in the mesquite parks, it is very common, and it also affects the cholla region. Here I have frequently met with the species digging in the ground at the roots of a cactus. They are at times gregarious. I particularly noticed this in December, 1885, when I frequently met the species in flocks of from four to a dozen, on the plains at an altitude of 3000 feet. I have found the species breeding in May at an altitude of 3500 feet. On May 27, 1884, I found a nest in a mesquite tree. The opening to the nest was fourteen feet from ground. Eggs, five, nearly ready to hatch.

84. **Dryobates stricklandi.*** STRICKLAND'S WOODPECKER.—The only point where I have met with this species is in the oak region on the San Pedro slope of the Catalina Mountains. Here, except in midwinter, it is not uncommon, and Mr. Brown has found it common in the Santa Rita Mountains. I have never found it so commonly as Mr. Henshaw did in the Santa Ritas, nor have I found it gregarious, as described by Mr. Henshaw. Rarely have I met with more than two in company, and a family, two parents and three young, were the most I ever saw associated together. But I frequently met in the fall a party composed of Arizona Jays, California Woodpeckers, various Titmice and Warblers, and a pair of Strickland's Woodpeckers. The birds where I have met with them appear late in January or early in February, and are apparently already mated. A nest found on the 27 of May, 1884, was in an oak about ten feet from the ground. The nest was much like that of the Hairy Woodpecker, save that the opening was a little smaller. It contained three young birds about two-thirds grown and half feathered. The young birds have at first a full red cap on the head, without regard to sex, though it is perhaps more

* [In 'The Ibis' for April, 1886 (pp. 112-115) Mr. E. Hargitt considers the *Picus stricklandi* of Malherbe, from Mexico, to be specifically distinct from the Arizona Woodpecker, hitherto so-called. He therefore names the Arizona bird *Picus arizonæ*, and gives the following diagnosis:

"*P.* similis *P. stricklandi*, sed dorso uniformi nec albo-fasciato distinguendus.

"*Hab.* In montibus 'Santa Rita' dictis in Arizona."

D. stricklandi is said by Mr. Hargitt to have "the upper parts barred with white, whereas in the Arizona bird the back is perfectly uniform in both old and young."

In addition to Mr. Scott's remarks respecting the red cap in the young, it may be remarked that in his series of 21 specimens, about one-fourth of them show more or less distinct white bars on the rump, irrespective, apparently, of sex or age. In some examples these bars are quite conspicuous; but none of them show any white bars on the interscapulars.—J. A. A.]

conspicuous in the young male. This gradually disappears with the first moult, though I have taken young birds in October that still showed traces of the red cap.

85. **Sphyrapicus varius nuchalis.** RED-NAPED SAPSUCKER.—So far as I am aware, this species is migratory and does not breed in the area under consideration. Nor do many remain here during the winter months. They begin to arrive early in September in the Catalina region, and are at first mostly young birds of the year. During the months of October and November they are particularly abundant, but are rarely seen in December or January, and though to be found in the succeeding spring months, February, March, and April, they are not nearly so common then as in the fall.

Many of the adult birds have, in addition to the red nuchal band, characteristic of the subspecies, a greater or less amount of red on the sides of the head and on the face.

86. **Sphyrapicus thyroideus.** WILLIAMSON'S WOODPECKER. — This species I have found only in the pine region of the Catalina Mountains. Even there it is not common and is chiefly to be met with in fall, winter, and very early in the spring. I did not find it in the pine woods of the Catalinas in April, and do not think it breeds there.

87. **Melanerpes formicivorus bairdi.** CALIFORNIAN WOODPECKER.—Common and resident in the mountain regions, both in pines and oaks, as low as 4000 feet. It was abundant in the pine woods of the Pinal Mountains late in November, 1882. And it was among the more conspicuous species in the pine forests of the Catalinas. The only record I have of its breeding is in the Catalina Mountains, where I took a nest containing three young, half-grown, on July 30, 1884. This was at an altitude of 4700 feet. The nest was in a sycamore tree, fifty feet from the ground, in a natural cavity caused by decay. The entrance was where a small branch had been broken off, leaving a natural opening.

88. **Melanerpes torquatus.** LEWIS'S WOODPECKER. — An abundant though irregular migrant in the Catalina Mountains at the lower altitudes, and probably breeds in small numbers in the pine woods. If present in the Pinal Mountains it escaped my notice. About my house it generally appeared about the 20th of September, and some years was very abundant. It stays as late as April 20, and then is not seen again till fall, though I have seen the species in the pine region above me late in the spring. In 1884, there was an unprecedented abundance of the species throughout the entire region under consideration. They came in countless numbers about the ranches, both on the San Pedro and near Tucson. Arriving early in September, they did great injury to the fruit crops raised in these regions, and I heard much complaint of them. In the oak woods they were equally abundant, living almost altogether on acorns, but spending much of the warmer portion of the day catching insects on the wing, very much as any of the larger Flycatchers do, only that on leaving the perch of observation or rest, the flight is much more prolonged than in the Flycatchers that I have seen.

[A series of eight young birds, partly in nestling plumage, show that the young in first plumage not only lack the divided, bristly tips to the feathers of the narrow nuchal collar and lower plumage, so characteristic of adult birds, but differ also from the latter notably in color. In the nestling plumage the whole upper surface of the head, including the hind head, is dull, dusky brown, with a trace of reddish on the forehead, but without greenish gloss or any metallic tints. The back and upper surface of the wings are bronzy green nearly as in the adult, with, however, in addition, broad bars of steel-blue on the scapulars and quills. These bars are especially prominent on the secondaries and inner vanes of the primaries, and are seen also in some specimens on the rectrices. The steel-blue edging the outer vanes of the quill feathers in the adult is absent; and the inner secondaries and longest primaries are tipped more or less prominently with white. The throat, fore-neck and breast are dusky-brown, varied with dull brownish white; sides blackish brown, washed with dull brownish white, the latter often prevailing; abdomen washed with dull red, this color sometimes extending forward over the breast. The forehead, cheeks, and region about the eye mixed dark red and blackish.

The specimens before me present considerable individual variation, irrespective of sex, some lacking wholly the white tips to the remiges; in some the steel-blue bars crossing the quills are not strongly defined; and the amount of red on the lower surface varies greatly.

With the beginning of the first moult the bristly tipped feathers become sprinkled through the breast plumage, and metallic tinted feathers appear on the head, producing a peculiar mottled effect.—J. A. A.]

89. **Melanerpes uropygialis.** GILA WOODPECKER.—A common resident, especially in the giant cactus regions, and occurs in numbers up to an altitude of 4500 feet. Their occurrence at this altitude seems to be coincident with the regular fall migration, as I have not noticed the species about my house in summer, though they are rather common in fall and spring, and are common at all times up to an altitude of 3000 feet. Though breeding in mesquite and cottonwood trees, they show a great preference for groves of giant cactus, which afford nesting places for thousands of pairs about Tucson, Florence, and Riverside. Near Tucson I have taken many sets of fresh eggs, from three to five in number, from May 15 until the last of the month. They do not always excavate new nesting holes in the giant cactus, but more frequently take advantage of some former nesting place. Besides their preference for this cactus in nesting, they are very fond of the fruit of this and other cacti, and frequent the plants in very large numbers at the time the fruit ripens.

90. **Colaptes cafer.** RED-SHAFTED FLICKER.—Common throughout the region, except during the breeding season, when most if not all the representatives of the species retire to the upper oak and pine forest regions, rarely being seen in summer lower down than about 6000 feet. In the series that I have collected are a number of individuals having, to a greater or less degree, the peculiar plumage of the so-called '*hybridus*.' I found the birds about to breed in the pine region of the Santa Catalina Mountains during the last week in April, 1885.

91. **Colaptes chrysoides.** GILDED FLICKER.—A rather common resident wherever the giant cactus occurs throughout the region, but is much more common in the giant cactus of the southern part of the area under consideration than to the northward. They are common all about Tucson in such localities as I have indicated, but are more rare in the San Pedro Valley. I have met with the species in early spring and fall on the San Pedro slope of the Catalinas as high up as 3000 feet. I have now and then seen single individuals in the mesquite timber, far away from any giant cactus. All that I have ever met with breeding have been in giant cactus. The breeding time about Tucson is from April 10 until the last of May. Unlike the other Flickers that I am aquainted with, the number of eggs is small, varying from two to five, which latter is the largest number I have ever found in a nest. I have in a former paper described a so-called hybrid between this species and the Red-shafted Flicker (*C. cafer*). The bird was taken by Mr. Herbert Brown, near Tucson. (For details see 'The Arizona Daily Star,' Tucson, December 16, 1884.)

92. **Antrostomus vociferus arizonæ.** STEPHEN'S WHIP-POOR-WILL.—On the evening of the 16th of April, 1885, I heard a Whip-poor-will, which I was unable to get. The note was somewhat harsher than that of the true Whip-poor-will of the East, but the same in cadence. I can only refer it to this species. This was at a point near my house in the Catalina Mountains, and is the only time I have met with the bird.

93. **Phalænoptilus nuttalli.** POORWILL.—An abundant migrant. It breeds in the mountain regions but, so far as I am aware, does not occur much below an elevation of 3000 feet. They arrive from the middle to the last of February in the Catalinas, and are in full song at the time of arrival. I have heard them singing as late as November 10, which is the latest record I have of their stay in the Catalinas. (For the occurrence of the species at the higher altitudes, see Auk, Vol. II, No. 4, p. 256.) These birds are frequently to be heard singing in the daytime and my records of this are numerous. "Catalinas, 4000 feet, 15th July, 1884. Bright sunshine. Heard a *Phalænoptilus nuttalli* singing continuously from 12 M. till 12.20 P.M." I have similar records of singing in the forenoon and afternoon, and usually the birds begin singing before it is dark.

94. **Chordeiles virginianus henryi.** WESTERN NIGHTHAWK.—Met with a few times in the early spring in the Catalinas at an altitude exceeding 4000 feet. Not observed at other times of the year, and apparently uncommon at any time.

95. **Chordeiles texensis.** TEXAN NIGHTHAWK.—An abundant migratory species, below an altitude of 4500 feet. Breeds commonly. About Tucson this species is particularly common during the months of May and June, and I observed it at Florence and Riverside all through the summer months and early in October. I have also notes of their occurrence, though by no means so commonly, both in the Catalina and Pinal Mountains, up to the altitude indicated above. In the Catalinas I found a pair breeding May 20, 1885, at an altitude of 3500 feet.

96. **Chætura vauxii.** VAUX'S SWIFT.—The only time that I have met

with this species was early in October, 1884, on the San Pedro slope of the Catalina Mountains, at an altitude of 3000 to 4000 feet. From the 2d to the 6th of the month they were rather common, from a dozen to twenty being noted each day. The birds are, as far as I am aware, very like the common Chimney Swift in general habits and flight. Mr. Allen has very kindly identified the species for me, from a female (No. 996) taken October 2, 1884, in the locality above mentioned.

97. **Micropus melanoleucus.** WHITE-THROATED SWIFT.—An abundant migrant, and a few probably occur in winter. I have no positive record of its breeding in the area in question, but have constant records of seeing the species in the Catalinas, from the middle of March until August. The bird is probably most abundant about the middle of May in the vicinity of Tucson, at which time I have seen them by hundreds. Here at this season they do not appear to have the habit of high flight so noticeable in Colorado and at other points where I have met with them, but are to be seen skimming low over ponds, and even close to the ground, in pursui of insects, and quite as tame and unsuspicious as the Chimney Swift of the East. That a few are winter residents there can be little doubt, as my records mention them every month in the year, save February, either in the Catalinas or near Tucson. On January 5 of the present year, which is about midwinter in this region. I saw five in the foothills of the Catalina Mountains, at an altitude of about 3500 feet.

98. **Trochilus alexandri.** BLACK-CHINNED HUMMINGBIRD.—A common summer resident in the Catalina Mountains, where it breeds very commonly. Arrives early in March, and is abundant by the last of that month. By the last of April the birds are mated and begin breeding; and I have found nests with fresh eggs late in July and early in August. By the 10th of October they have all left the region in question.

Though I have found many, at least a hundred, Hummingbirds' nests in the Catalinas in vicinity of my house, and have been very careful to identify the owners, and though most of the species to be presently mentioned are quite as abundant as *Trochilus alexandri*, and though two at least (*I. latirostris* and *T. costæ*) are present all the time that *T. alexandri* is found, yet I have no positive record of any other Hummingbird breeding in this immediate locality.

I have not found this species to be of common occurrence above 7000 feet altitude in the Catalina Mountains. It is common and breeds in the neighborhood of Fort Lowell, which is North of Tucson, and lies at about the same altitude, but Mr. Brown regards it as rare about Tucson, and has no record of its breeding there.

99. **Trochilus costæ.** COSTA'S HUMMINGBIRD.—My first acquaintance with this species was made at Riverside in April and May, 1882. The birds were not very common there, but were the only Hummingbirds observed. On May 5, 1882, I found a nest, the female sitting, and the very conspicuous male in close attendance, often perching on a twig but a few inches away. This nest was built in a cottonwood tree, almost at the extremity of one of the branches, and about thirty-five feet from the ground.

In 1884 I did not meet with the birds in the Catalinas till late in July, and then only sparingly. But in 1885, in the same locality, the birds were very common by April 5, particularly the males, in the most gorgeous plumage. The absence of adult females for the next six weeks was very noticeable. I think I took only three, though the males were common all the time. About the 20th of May young birds of the year began to be abundant, and adult birds of either sex were difficult to find. The young birds were common all through June; I could often count twenty near my house, but after June 1 I was unable to get any adult birds of either sex. I do not think the birds bred in the Catalinas, but think that probably they did breed in numbers on the San Pedro River.

100. **Trochilus anna.** ANNA'S HUMMINGBIRD.—The only time that I have met with this species was in the Catalina Mountains at an altitude of 5000 feet, when on October 1, 1883, I took a male bird, young of the year (No. 420 of my collection). Mr. Brown has no records of its occurrence about Tucson at any season, and I am disposed to regard it as a rare species throughout the area under consideration.

101. **Trochilus platycercus.** BROAD-TAILED HUMMINGBIRD. — Rather common spring and fall migrant, and a few remain during the summer, doubtless breeding in the higher altitudes of the Catalinas. All of the birds collected by me in the region about my house, even in spring, are either females or males that have not assumed full plumage. The birds seem to be most common in the Catalinas from August 20 to September 10, and a few remain till October 1. They arrive here in the spring about April 1. The species doubtless occurs, at least during the migrations, throughout the entire area, though my only notes are from the Catalinas.

102. **Trochilus rufus.** RUFOUS HUMMINGBIRD. — Not common in spring, but young birds of the year begin to appear about the middle of July, and by August 1 are common. In August and September they are very abundant, feeding on thistles and a kind of scarlet flower very similar to the salvia or scarlet sage. It is no uncommon sight at such places and times to see from twenty to fifty of the birds at once. They leave early in October. I have taken very few adult birds of this species at any season, and only one male in full plumage in a large series. These observations are based on data accumulated in the Catalina Mountains: altitude 4000 to 6000 feet. There can be little doubt that the species breeds, perhaps commonly, at the higher altitudes in these mountains.

103. **Trochilus alleni.** ALLEN'S HUMMINGBIRD. — The only record that I am aware of, of this species from the territory of Arizona, is an adult male (No. 589) taken in the Catalina Mountains at an altitude of 4500 feet, July 23, 1884, and now in the collection of the American Museum of Natural History at Central Park, New York City.

104. **Trochilus calliope.** CALLIOPE HUMMINGBIRD. — This species seems to be of uncommon occurrence in the area under consideration. I have only two records of its capture, both in the Catalina Mountains, at an altitude of 5000 feet. These are both females, apparently adult (No.

730, ♀ad., 12th August, 1884; No. 2141, ♀ad., 14th April, 1885). Mr. Brown has not met with this species about Tucson nor at other points visited by him.

105. **Iache latirostris.** BROAD-BILLED HUMMINGBIRD. — During the spring, summer, and early fall of 1884 this was a rather common species in the Catalina Mountains, from an altitude of 3500 to 5000 feet, but in the corresponding season of 1885 the birds were apparently rare. The birds arrive at this point early in April, the 5th of that month being my earliest record, when I took two adult males. They remain throughout the spring and summer, leaving from the middle to the last of September. I took an adult female on June 26, 1884, that contained an unlaid egg with shell nearly formed, so that there can be little doubt that the birds breed at this point. Besides, I have the young birds in first plumage from July 1st until late in August.

[Young birds of the year, of both sexes, have the upper plumage edged with fulvous, particularly on the head and lower back. The young males have an oblong blue patch on the throat, each feather of which is edged with dark gray, like the rest of the lower plumage, with sometimes a few metallic green feathers on the sides of the breast. In one specimen (No. 703, August 9, 1884) the breast is about half-covered with metallic feathers. —J. A. A.]

BIRD NOTES FROM LONG ISLAND, N. Y.

BY WILLIAM DUTCHER.

1. **Megalestris skua.** SKUA.—Mr. M. F. King, one of the crew of the Life Saving Station at Amagansett, Suffolk Co., sent to me, in the flesh, a specimen of this species. He informed me that he found the bird March 17, 1886, in a large piece of ice which had formed on the meadow back of the beach. He also stated that January 9, the tides were exceedingly high, by reason of a very severe northeast storm and gale of wind. He thought the bird probably died near the shore and was driven by the very violent surf and wind to where it was found. The high tide was followed immediately by very cold weather, which encased this bird in its icy tomb, thus preserving it until found, and permitting a new record for Long Island and the third and most southern one for North America.* Mr. King stated further that

* The previous records may be found in Bull. Nutt. Orn. Club, III, 1878, p. 188; Auk, I, 1884, p. 395.