

15. *Acanthis linaria*. REDPOLL.— A bird has been seen which was probably of this species.

16. *Passerella iliaca unalaschensis*. TOWNSEND SPARROW.— Specimens observed prior to the recognition of *P. i. fuliginosa* were recorded as of this subspecies, perhaps not always erroneously.

17. *Riparia riparia*. BANK SWALLOW.— I have several times seen birds thought to be of this species, but have failed to secure a specimen.

LIST OF THE BIRDS OF LOUISIANA. PART V.

BY G. E. BEYER, ANDREW ALLISON, AND H. H. KOPMAN.

(Continued from page 180.)

129. BOB-WHITE (*Colinus virginianus*). A common resident except in the swamp sections of the southeastern part of the State; but even in this low, fertile alluvial district, the Bob-white is fairly well established about the large sugar plantations, the thorough drainage of the land in such cases providing a suitable habitat for the species. In the uplands, this bird is most abundant in piney sections. In the southern part of the State mating begins about March 1, and nesting is well under way by the middle of April. Two broods are frequently reared, and birds just beginning to fly may often be seen as late as September 1.

The natural cover of Bob-whites in the piney sections is the edges of the runs or "branches" with which such country is interspersed. The birds usually seek such cover when flushed in the open pines. The thicket-like growths of small oak and hickory and of such shrubs and vines as witchhazel, smilax, and sumach that often occur in the higher portions of the pine woods also serve as excellent cover for Bob-whites, from a standpoint of both food and shelter. In the fertile alluvial section of the southeast, the sugar cane or corn and the edges of the swamp give this species its necessary cover. On model plantations, the ditch banks are kept clean, but in some cases Bob-whites may resort to them in safety.

130. PRAIRIE HEN (*Tympanuchus americanus*). This species, represented in western Louisiana by probably both the typical form, and by Attwater's Prairie Hen (*T. americanus attwateri*) is growing constantly scarcer in the State, and is known only near the Texas border.

131. WILD TURKEY (*Meleagris gallopavo silvestris*). The Wild Turkey is still common in some sections of the State. It appears to be entirely absent from the typical fertile alluvial section of the southeast. It is commonest in piney sections, and extends its range as far as the coast through the narrow strip of piney lands on the west of Pearl River.

132. PASSENGER PIGEON (*Ectopistes migratorius*). The last recorded occurrence of this species in Louisiana was during the extremely severe weather of February, 1895, when two were taken at Mandeville. One of these birds is in the museum of Tulane University.

133. MOURNING DOVE (*Zenaidura macroura*). Resident, but decidedly commoner in winter, an increase occurring at the latitude of the coast about October 1. This species is more generally distributed in the breeding season in the upland regions than near the coast, but in the latter section it nests freely about some of the plantations, especially in central southern Louisiana. It is most generally dispersed in the coast region in fall.

Nesting extends over a long period, the earliest record being April 17 (Ellisville, Mississippi, 1908), and young birds being found in the nest until late in September. The site is also variable: rarely the nest is placed on the ground, but pines and twiggy branches of deciduous trees are much more usual. One nest was observed in a dead plum bush, completely surrounded by the long moss-like *Usnea*. In southeastern Louisiana nests have been found in low willows over the water.

Singing begins a little after the middle of February, and continues until July; or even August, though this is not general.

134. WHITE-WINGED DOVE (*Melopelia leucoptera*). Birds unquestionably of this species have twice been killed on Grand Isle,—in May, 1894, and in August, 1895, and were reported and described by the captor, but the specimens were not saved for identification, owing to the heat (Beyer).

135. GROUND DOVE (*Columbigallina passerina terrestris*). A resident, but decidedly rare in most localities.

136. TURKEY VULTURE (*Cathartes aura*). An abundant resident, but not so common as the following species; slightly commoner in the northern part of the State than in the southern.

137. BLACK VULTURE (*Catharista urubu*). A very abundant resident, slightly commoner in the southern part of the State than in the northern. The proportion of this species to the preceding in southern Louisiana is probably about 3 to 1. Soaring flocks containing only this species are more frequently seen than flocks containing only Turkey Vultures, though the usual flock is composed of both species, with the Black Vultures preponderating. The Turkey Vulture flying singly is more often seen than the Black Vulture under similar circumstances.

Some notes follow, on the feeding habits of the two vultures. It may be stated first, that a common method of approach, in the case of *Catharista*, is a rapid and direct hurtling down, with the wings half-closed, producing a loud rushing sound. This brings the bird to within a hundred feet or less of the ground.

"I watched some Vultures at a dead horse to-day, and was much interested, although I could not, like Wilson, steal up until my feet were within a yard of the horse's legs, and sit down. The Black Vultures settle down in a much less dignified way than the Turkey Vultures: they begin, from

some distance up, to drop down at an angle of about sixty degrees, legs hanging, and wings flapping furiously. The other species circles about for some minutes, getting lower and lower, before it finally settles down, with less quick flapping than the Carrion Crow employs. The method of procedure with a carcass seems to be: To clean off the exterior trimmings first, then make a large hole under the tail — by which Wilson says they enter — and one in the side, from both of which they reach the entrails."

138. SWALLOW-TAILED KITE (*Elanoides forficatus*). A rather common summer resident in some sections, especially in the southern part of the State, where it often frequents the vicinity of bayous. It enters the State about April 1. (March 18, 1902, Bay St. Louis, Miss.). In the early fall, beginning about August 15, it collects in small flocks, often associating with the Mississippi Kite. At such times, it feeds largely on cicadas — or "locusts," as they are called in Louisiana; to secure this prey it remains in the neighborhood of cornfields on the plantations in the southern part of the State.

139. WHITE-TAILED KITE (*Elanus leucurus*). An accidental visitor. One was shot on the west bank of the Mississippi, opposite Kenner, on October 11, 1890 (Beyer).

140. MISSISSIPPI KITE (*Ictinia mississippiensis*). A rather common summer resident, preferring somewhat elevated country to the immediate coast section. In the early fall, however, it frequents the plantations of the southern part of the State in large flocks to prey on the cicadas in the cornfields. It arrives in spring during the first week of May.

141. MARSH HAWK (*Circus hudsonius*). A resident, but occurring in the southeastern section of the State chiefly if not entirely as a winter visitor. Breeding most commonly in the southwestern, or prairie section of the State. Winter visitors arrive in southeastern Louisiana the latter part of September, and remain until the latter part of March. It is common during this period in nearly all open localities.

142. SHARP-SHINNED HAWK (*Accipiter velox*). Chiefly a winter visitor, but has been observed in the southern part of the State occasionally in summer. Like most of the other hawks, this and the following species are present chiefly from October to March.

143. COOPER'S HAWK (*Accipiter cooperi*). Its movements are similar to those of the preceding species. Both of these breed more commonly in the upper districts.

144. HARRIS'S HAWK (*Parabuteo unicinctus harrisi*). Not observed by any of the writers, but has been reported as occurring along the coast and on some of the larger islands (Beyer).

145. RED-TAILED HAWK (*Buteo borealis*). A common winter visitor, occurring in about equal abundance in all sections, arriving at the coast about October 1, and departing the latter part of March.

146. KRIDER'S HAWK (*Buteo borealis kriderii*). A rather rare winter visitor.

147. HARLAN'S HAWK (*Buteo borealis harlani*). Rather common as

a winter visitor. None of the writers has evidence of its breeding in Louisiana.

148. RED-SHOULDERED HAWK (*Buteo lineatus*). A common winter visitor.

149. FLORIDA RED-SHOULDERED HAWK (*Buteo lineatus alleni*). A resident, and the commonest hawk in the State.

150. BROAD-WINGED HAWK (*Buteo platypterus*). Chiefly if not entirely a summer visitor, and confined as a breeder to the upland regions, especially pinewood sections. Usually makes its appearance in the southern part of the State about the end of March, and disappears in September.

151. AMERICAN ROUGH-LEGGED HAWK (*Archibuteo lagopus sanctijohannis*). A rather rare winter visitor.

152. GOLDEN EAGLE (*Aquila chrysaetos*). A specimen of this bird exhibited in the Mississippi Fish and Game display at the Louisiana Purchase Exposition in St. Louis, in 1904, was recorded by the taxidermist, Mrs. Carrie S. Vaughn, of Natchez, Miss., as having been killed at Jackson, La.

153. BALD EAGLE (*Haliaeetus leucocephalus*). Resident; breeds in various parts of the State, especially near the coast. Several nests were located for a number of years in tall dead cypresses in the swamps on the southern shore of Lake Pontchartrain near New Orleans.

154. DUCK HAWK (*Falco peregrinus anatum*). A common winter visitor in some sections, frequenting especially the marshes about the delta of the Mississippi, where it preys largely upon ducks and coots.

155. PIGEON HAWK (*Falco columbarius*). A fairly common winter visitor, appearing in the southern part of the State about the middle of September, and remaining until the latter part of March. It is commoner in open localities.

156. AMERICAN SPARROW HAWK (*Falco sparverius*). Resident, except in most of the southern part of the State. It reappears in considerable numbers at the latitude of the coast the latter part of August, and grows very common in September, disappearing from the coast section by the middle of March. It is about equally common in all sections of the State.

157. AUDUBON'S CARACARA (*Polyborus cheriway*). Restricted to the immediate coast section, west of the Mississippi River, being fairly common in some localities (Beyer).

158. AMERICAN OSPREY (*Pandion haliaetus carolinensis*). Occurs in nearly all sections of the State, but is most abundant in the southern part, breeding along the coast and about the shores of lakes and inlets.

159. AMERICAN BARN OWL (*Strix pratincola*). Rather generally distributed, but nowhere common. In the sugar districts of Louisiana, the ruins of the old-fashioned brick sugar houses frequently provide suitable haunts for this species.

160. AMERICAN LONG-EARED OWL (*Asio wilsonianus*). A rather rare winter visitor. A wing-quill of this species was found near Abbeville on June 18, 1904.

161. SHORT-EARED OWL (*Asio accipitrinus*). A rather common winter visitor, arriving in October, and remaining until March. It may be found in various open localities, including marshes, prairies, and plantations. An apparently authentic record exists of the breeding of this owl in Jones County, Mississippi, about 32° latitude. A discussion of the Screech Owl before a group of school children elicited from one of them the information that a nest containing "six little owls" had been found on the ground in her father's garden. It seems not possible that these could have been anything but this species.

162. BARRED OWL (*Syrnium nebulosum*). Occurs chiefly in the colder portions of the winter.

163. FLORIDA BARRED OWL (*Syrnium nebulosum alleni*). An abundant resident in all parts of the State.

164. SAW-WHET OWL (*Nyctala acadica*). There is only one record of the occurrence of this species in Louisiana known to any of the writers. This bird was killed in December, 1889, near Madisonville.

165. FLORIDA SCREECH OWL (*Megascops asio floridanus*). A common resident in all sections of the State.

166. GREAT HORNED OWL (*Bubo virginianus*). A resident, but not common in all parts of the State; occurs rather plentifully in the pine hills in the parishes north of Lake Pontchartrain. It is not very common in the fertile alluvial section of the southeastern part of the State.

167. SNOWY OWL (*Nyctea nyctea*). The late Mr. Gustav Kohn, of Paris and New Orleans, who spent a large part of his life forming a private collection of the fauna of Louisiana, recorded the occurrence of this owl at Baton Rouge a number of years ago. An owl said to have been of this species was killed at Bayou Des Allemands during the winter of 1878-1879 (Beyer).

168. BURROWING OWL (*Speotyto cunicularia hypogaea*). This bird is reported as being common about Jackson, and a male collected there November 24, 1898, is now in the museum of Tulane University. This owl has been observed also in Plaquemine Parish by Dr. H. L. Ballowe.

169. CAROLINA PAROQUET (*Conurus carolinensis*). There is a specimen of this bird in the Tulane museum that was undoubtedly collected in Louisiana, but when or where has not been determined. In localities where this species might still be expected to occur, the inhabitants did not know that a paroquet had ever occurred in Louisiana, and it is extremely doubtful whether this species should still be considered a Louisiana bird.

170. ANI (*Crotophaga ani*). The following notes, contributed by Dr. H. L. Ballowe, Coroner of Plaquemine Parish, and copied almost verbatim from his letter, represent almost the sum total of our knowledge of the Ani in Louisiana. It has been reported occasionally from St. Bernard Parish (Beyer), and once rather doubtfully from New Orleans.

"...One killed at Diamond in midsummer, 1893 [Now in Tulane University collection]. On January 29, 1906, I saw one in Buras. Got within a few feet of it. Heard its note. On January 14, 1908, I saw one

a few miles below Buras. On January 27, I saw another at Buras. February 8, I saw four together at Buras. All that I saw were on the public road, very gentle, hopping along the fences or among the low branches of orange trees.

"I saw young oranges that had been bitten into, the damage of which was blamed on them. Grackles are very destructive in orchards, but they *peck* the fruit. These oranges had *sections bitten out*. I understand that flocks of Anis are still seen in some orchards, but that twenty years ago they were *very* numerous and destructive."

171. GROOVE-BILLED ANI. (*Crotophaga sulcirostris*). Occasional in the southern parishes. One taken near New Orleans about 1890 is in the Tulane University collection.

172. YELLOW-BILLED CUCKOO (*Coccyzus americanus*). Few birds are more generally distributed in Louisiana than this species, and, though it is not unusually plentiful in any section, few are more uniformly common. Any deciduous tree growth attracts it, though it is commonest in moist situations. Yet it is by no means rare in scanty broad-leaved growths in the driest parts of pine hills and barrens. While the scrubby blackjack oaks of such situations often serve to conceal it, it is fondest, of course, of more leafy covers; but it resorts almost as readily to close groves in the open as to the forest. Probably it occurs in greatest abundance where cultivation borders the swamp or woodland in the lowlands. Low growths are most attractive to it when they occur in very wet localities, so that it often occurs in the marshes among the farthest outposts of the swamp.

The average date of the general arrival of this species in the latitude of New Orleans is April 15, though an irregular movement may occur the first week in April. The earliest recorded movement for the neighborhood of New Orleans is April 2 and the latest May 8. In advanced seasons it is decidedly common by April 20; in late seasons, no large numbers will be seen until May 1. It is seldom conspicuous except for a day or two at a time, after the middle of September, though the last has been observed at New Orleans on November 3, and a considerable passage of transients has been noted as late as October 13 (1894). Nesting begins very shortly after arrival, and laying usually begins about May 15. There are undoubtedly two broods raised in a season, fresh eggs having been discovered in July. A comparatively little choice seems to be exercised in regard to nesting sites, except that low nests are commonest in wet situations. The nidification in Louisiana does not differ essentially from that of the species elsewhere, though, of course, its materials there are peculiar in some cases. Near Jeanerette, St. Mary Parish, one of the writers found a strange cuckoo's nest on July 5, 1895. It was in a buttonbush (*Cephalanthus*) over the water; the foundation was lichen-covered oak twigs; the lining consisted of moss and dry cypress leaves. A very similar nest was found in Plaquemine Parish on June 9, 1904.

The habit of flying by night, and uttering its song as it flies, is very well marked. The migrations seem to be performed usually in silence; but after the first of May the nocturnal song is a common sound.

173. BLACK-BILLED CUCKOO (*Coccyzus erythrophthalmus*). This species is decidedly rare, though the difficulty of always distinguishing it from the preceding species doubtless causes it to be overlooked sometimes. A close lookout for it in southeastern Louisiana during the past ten or twelve years, however, has resulted in the observation of but one individual, which was seen at New Orleans, October 8-11, 1899. At Bay St. Louis, Miss., it has been observed of late years on the following dates: August 15, 1898; April 14, 1902; and October 15, 1902. It occurs only as a transient, of course.

174. BELTED KINGFISHER (*Ceryle alcyon*). Occurring chiefly along the coast, this species is nevertheless to be looked for at some season of the year on every water-course in the State. In winter it is almost confined to the coast and to the vicinity of the larger bodies of fresh water; but in the breeding season it is frequent also on the small creeks of the pine regions, and the stagnant sloughs of the swamps.

The character of the nest varies greatly with differing conditions of soil: On the coast it is content with such elevations as can be found on the shores, and the burrow is sometimes scarcely more than a pocket in the clayey banks; in the upper districts, the site is often far from water, and the soft, coarse-grained soil renders easy the excavation of a burrow five or six feet deep, enlarged at the end, and often partly lined with leaves and pine straw; and, finally, a unique condition exists in the extensive gum-swamps in the lake region of the southeast, where the land — always submerged — is perfectly flat, and nothing stands above water except innumerable trees and stumps of *Nyssa*: the nest is placed in the top of a decaying stump, with no attempt at excavation.

The kingfisher is charged with much harm to the levees along the Mississippi River, in which the nest-burrows are said to be very long and tortuous. It is possible that the softness of the soil is conducive to such extensive burrowing; but the matter has not yet been sufficiently investigated. At any rate, the great destructiveness to young crawfish that is acknowledged to be characteristic of the kingfishers in the fertile alluvial districts, would seem to offset the damage done to the levees; for the constant burrowing of these crustaceans, near the water-line, is a source of danger and annoyance to those dependent upon the levees for protection.

A well-marked migration takes place during the last week of March; the increase at that time is obvious everywhere, and it is then that the species first appears on the small streams of the interior. Two of the writers found, on March 25, 1907, what seemed to be a temporary resting-place constructed by a newly-arrived kingfisher, which was seen near it: this was a shallow pocket in the high bank of a creek in the interior, lined with green moss and pine straw. Whether or not such structures are usual, and whether this was intended to serve later as a nest, I cannot say: but deeper burrowing would have been easy, in the sandy soil of this bluff.

175. IVORY-BILLED WOODPECKER (*Campephilus principalis*). This

great woodpecker is probably confined to the deep swampy forests of northern Louisiana, where it is locally not uncommon. The following remarks, quoted here, for convenient reference, from 'The Auk,' Vol. XVII, 1900, pp. 97-99, are based upon observations made by Prof. Beyer in Franklin Parish in 1899, "in an almost inaccessible swamp, which extends from the most northern portion of Franklin Parish, between the Tensas River and Bayou Maçon, to Black River."

"The borders of Big Lake — in the midst of a heavy cypress swamp, — as well as the banks of some of the larger cross-bayous, are heavily timbered with ash, oak, and elm. In some of such localities are the homes of the Ivory-bill, and from them they do not appear to stray very far; in fact, I was assured that the range of a pair of these birds does not extend more than a mile from their nest.

"... We could hear quite frequently the rather plaintive but loud cry of the "Log-god" — for such the bird is called... in that section of the State... They are certainly noisy, and by their oft-repeated cry we became accustomed to locate them....

"But when Audubon states that they never build in dead or even dying trees, he was certainly mistaken; for I took one pair, with one of their progeny, from a nest situated in an old and nearly rotten white elm stump, a little over forty feet from the ground... We found and examined several nests; but we noticed only one — about twenty-five feet from the ground — in a *living* over-cup oak (*Quercus lyrata*).

"... I believe only one brood is raised; and the old birds continue to feed and care for their young long after they are able to take care of themselves. It was then near the middle of July, and old and young birds were still together; and the attention of the old ones was too entirely taken up by the young to leave any opportunity of preparing for a second brood."

176. SOUTHERN HAIRY WOODPECKER (*Dryobates villosus auduboni*). A fairly common resident in all forested regions. It shows no particular preference for one sort of timber over another, beyond shunning the most extended pine forests.

177. DOWNY WOODPECKER (*Dryobates pubescens*). A common resident, and well distributed, frequenting woodlands and orchards in practically all parts of the State. At the latitude of the coast, both the Downy and the Hairy Woodpecker begin nest-building in the first half of March. In most cases, two broods are raised, one in April, and one in June. In the Mississippi delta region, the Downy Woodpecker appears to prefer willow stubs as nesting sites. The Hairy Woodpecker nests indifferently in most of the common hardwoods.

178. RED-COCKADED WOODPECKER (*Dryobates borealis*). So far as we have been able to discover, this species is restricted to pine regions, and ordinarily it never enters the hardwood growths of such sections unless mixed with pine. It is resident wherever occurring. It is highly characteristic of the open long-leaf pine forests of the southern section of the State, and extremely common and noisy there. The time of breeding corresponds

rather closely with that of the Downy and Hairy Woodpeckers. It does not occur in southwestern Louisiana (Beyer).

179. YELLOW-BELLIED SAPSUCKER (*Sphyrapicus varius*). A regular and rather common winter visitor to all sections of the State, somewhat commoner in the upland regions. At the latitude of the coast, this species is present, from about October 15 to March 15. The first influx in the fall occurs, however, earlier in October, being about simultaneous with that of the migratory Red-shouldered Hawks and Barred Owls. The latest recorded date in spring is April 16 (Bay St. Louis, Miss., 1902).

180. PILEATED WOODPECKER (*Ceophlaeus pileatus*). Common but retiring in most well-wooded sections of the State; it is seldom found in the pinewoods, however, except in hardwood growths. Its favorite haunts are the heaviest swamps. It usually nests high; nests are sometimes not more than 25 feet from the ground.

181. RED-HEADED WOODPECKER (*Melanerpes erythrocephalus*). The distribution and time of occurrence of this species in Louisiana are decidedly complicated. Perhaps its most important status is that of a common summer visitor to the dryer regions of the State, especially the pine belts and the bluff lands; yet it is irregularly resident throughout the State, and may be found nesting or wintering, sometimes nesting *and* wintering, in localities in every section. Though least common in the Mississippi delta region, it has of late years become a resident in Audubon Park, New Orleans, and in other environs of the city. In those sections where it nests only, it does not usually appear until the latter part of April, and in those localities where it is a common summer visitor, its numbers increase at this season. While this species in Louisiana, as elsewhere, is fond of the neighborhood of cultivation, it is occasionally found in hardwood forests at considerable distances from human habitation. It is very fond of the open pine forests of the southern part of the State.

Nesting begins about May 1; two broods are raised,—the first, at the coast, during the height of the mulberry and blackberry season; the second brood is raised during July, in the fig season.

182. RED-BELLIED WOODPECKER (*Centurus carolinus*). The typical swamps of the lowland, and the mixed hardwood bottoms of the higher regions are the usual resorts of this species. It is met with in open situations rather frequently, and often nests about groves as well as in the woods. It is probably the commonest of the generally distributed woodpeckers in Louisiana. In time, its nesting corresponds with that of the other regular resident species. In some localities of the Mississippi delta region, this species occurs on the sugar plantations in much the rôle of the Red-headed Woodpecker as found elsewhere; it often leaves the woods and swamps to nest in telegraph poles and other exposed situations; the analogy is carried out by resemblances in notes and other habits.

183. FLICKER (*Colaptes auratus*). A common winter visitor, in all sections rather uncommon, especially in the southern section, as a resident. The bulk of the winter visitors are undoubtedly Northern Flickers (*C.*

auratus luteus). At the latitude of the coast the winter influx usually occurs October 10. The last winter visitors leave the coast the last of March. On the whole, flickers are commoner in upland and piney regions in Louisiana than in the lowlands. The Flicker is for the most part a woodland species in Louisiana. It is sometimes common in tree-dotted fields and pastures, however, and not infrequently breeds in such situations.

184. NORTHERN FLICKER (*Colaptes auratus luteus*). While, as suggested in the notes on the preceding, this subspecies is undoubtedly a common winter visitor, to Mr. A. H. Howell and Mr. P. A. Taverner is due the credit for the only definite records. I quote from Mr. Howell's notes (Proc. Biol. Soc. Wash., Vol. XXI, 1908, pp. 119-124): "Occurs in small numbers in all timbered regions [of northwestern Louisiana]: particularly common at Lecompte. . . . Taken also at Mansfield, April 27, 1907. . . . The only previous record of the Northern Flicker from Louisiana appears to be that given by P. A. Taverner of a tagged Iowa bird shot at Many, December 25, 1905 (Auk, XXIII, 1906, p. 232)."

185. GILDED FLICKER (*Colaptes chrysoides*). The Gustave Kohn collection, recently added to the Tulane University Museum, contains a male of this species, labelled Deer Range Plantation, Plaquemine Parish, December, 1863. It has some trace of red on the primary quills, and some sub-basal black spots on the red feathers of the mustache.

THE KING CAMEOS OF AUDUBON.

BY C. HART MERRIAM.

Plate VII.

THROUGH the courtesy of O. Atkins Farwell of Detroit and Frederic H. Kennard of Boston I am enabled to lay before the readers of 'The Auk' photographic reproductions of two cameos of John James Audubon. Both photographs are from casts of intaglios cut by John C. King, a Scotch artist and sculptor of Boston.

The cameo shown in the Farwell photograph was cut in 1844, and the photograph was presented by the sculptor to Mr. Farwell's father in 1871. Mr. Farwell, who kindly called my attention to the existence of the cameo and sent me the photograph, has also con-