

them are largely, if not wholly due to pitch, intensity or the presence of liquid consonants.

Thus, all five of the factors, pitch, duration, intensity, pronunciation and quality, may be recorded on a single sheet by this graphic method. The results, I believe, will be intelligible to musicians, and a little less "like Greek" to those whose knowledge of written music is slight.

LIST OF THE BIRDS OF LOUISIANA. PART VII.

BY H. H. KOPMAN.

(Concluded from p. 29.)

247. WESTERN TANAGER (*Piranga ludoviciana*). The only known record of the occurrence of this bird in Louisiana is a specimen taken on March 19, 1898, by Mr. Andrew Allison in Jefferson parish, on the opposite bank of the Mississippi river from New Orleans. It was a parti-colored male, with yellow predominating.

248. SCARLET TANAGER (*Piranga erythromelas*). This bird is seldom very common in Louisiana except for a few days at a time. It is most apt to occur at New Orleans about April 20 and in the early part of October. The earliest date of arrival at the latitude of New Orleans is April 8, 1900, at Bay St. Louis, Miss., and the latest date in spring is May 9, 1903, at Lobdell, La. Considerable waves are sometimes present the latter part of April, and about Oct. 10, 1896, I saw an unusual number in the suburbs of New Orleans. The latest date of departure is Oct. 20, 1897, at Ariel, Miss.

249. SUMMER TANAGER (*Piranga rubra rubra*). Common summer visitor, especially in the higher sections of the State. In the swampy region in the southeastern part it shows a disposition to frequent particular neighborhoods, especially those which are better drained. The earliest date of arrival in the latitude of New Orleans is March 31, 1902, at Bay St. Louis, Miss. The latest date of departure is Oct. 27, 1899 and 1900, at Covington, La. It is sometimes remarkably abundant at New Orleans during waves in the latter part of April and early part of October.

250. PURPLE MARTIN (*Progne subis subis*). Common summer visitor, arriving usually about Feb. 15, becoming common about March 10, and disappearing more or less completely from the southern part of the State about Sept. 15. A large southward flight is usually noted at the Gulf

coast about August 22. The earliest record of arrival at New Orleans is Feb. 7, 1897, and the latest recorded departure is Oct. 22, 1894.

251. CLIFF SWALLOW (*Petrochelidon lunifrons lunifrons*). A rather rare bird in the southern and eastern parts of the State at least. Has been noted in Plaquemines and St. James parishes, along the Mississippi river, in September. Noted also at Bay St. Louis, Miss., in September.

252. BARN SWALLOW (*Hirundo erythrogaster*). Common transient. The earliest date of arrival in spring at New Orleans is March 20, 1894. Usually arrives about April 1, and is commonest the last week or ten days of April, and the first few days of May. Has been noted at New Orleans as late as May 25. Returns usually about August 1, but one was seen at Bay St. Louis, Miss., July 8, 1899. Is more or less common until the early part of October and sometimes later. Was noted at Gulfport, Miss., Nov. 6, 1910, and a few may usually be seen until about Nov. 1.

253. TREE SWALLOW (*Iridoprocne bicolor*). Abundant as a transient; irregularly present and sometimes even common, near the coast, in winter; present through much of the summer, though not known to breed anywhere in the State. Usually becomes common in spring about March 20; remains more or less common until about the 10th or 15th of May. Has been noted in abundance near New Orleans the first week in July. Is most abundant in October, especially after the 10th or 15th, and remains very common until decidedly cold weather in November, about Nov. 15 or 20. Sometimes fairly common at intervals throughout open winters; other seasons rare or entirely absent.

254. BANK SWALLOW (*Riparia riparia*). Apparently not very common anywhere in the State except possibly in the most northern sections, where it may perhaps breed. Noted in the southern part of the State chiefly at the seasons when other swallows are commonest, from the latter part of March to the early part of May, and from August to the latter part of October.

255. ROUGH-WINGED SWALLOW (*Stelgidopteryx serripennis*). Common summer visitor, but apparently not breeding in the extreme southeastern part of the State. Arrives the latter part of March and departs about Nov. 1.

256. CEDAR WAXWING (*Bombycilla cedrorum*). Common chiefly in the latter part of winter, and throughout the spring, even to the last of May or first days of June. It has been seen on several occasions at Bay St. Louis, Miss., however, in October; once on Oct. 13, 1898, when two were seen. At New Orleans, little is seen of it until about Feb. 1, when it arrives to feed on the fruit of hackberry and Japan privet, and the flowers of the elm. It later feeds on the blossoms of the pecan, and finally on the fruit of the mulberry. The latest date of departure at New Orleans is May 19, 1900; at Bay St. Louis, Miss., May 27, 1902, and at Pass Christian, Miss., June 2, 1906.

257. LOGGERHEAD SHRIKE (*Lanius ludovicianus ludovicianus*). The true Loggerhead is a bird of the pineries and other dry locations in Louisiana,

none of this species being found during the breeding season in the fertile alluvial and prairie regions of the southern part of the State. About August 20, however, the Shrike appears at New Orleans, and is fairly common thereafter in the lowland section until the middle or latter part of March. It seems probable, however, that a majority if not all of the birds seen in these localities are Migrant Shrikes (*L. ludovicianus migrans*).

258. RED-EYED VIREO (*Vireosylva olivacea*). Abundant summer visitor wherever there are deciduous trees, though seldom found in the cypress. Generally arrives at New Orleans about March 22, becoming common the last week in the month. Earliest dates of arrival March 18, 1894, and March 19, 1899. Transient movement in fall begins in August, and continues to be heavy until Oct. 10 or 15. Last one is usually seen about Oct. 20. Feeds extensively in fall on the seeds of the Magnolias (*M. foetida* and *M. virginiana*).

259. PHILADELPHIA VIREO (*Vireosylva philadelphia*). A rather rare transient; spring records lacking; numerous in August, 1893, in heavy growth of willow, hackberry, cottonwood, deciduous holly, and other low trees on the batture of the Mississippi river in St. James parish; the first noted August 2. Noted also in October: Oct. 10, 1896, at New Orleans; Oct. 17, 1897, at Ariel, Miss.; Oct. 15, 1901, at Bay St. Louis, Miss.

260. WARBLING VIREO (*Vireosylva gilva gilva*). Fairly common summer visitor in the southern part of the State, occurring chiefly in shade trees in suburban sections of New Orleans, and in willows along the river and edges of pastures. Arrives the latter part of March; earliest arrival, March 27, 1897. Disappears early in the fall; sings occasionally as late as the early part of September.

261. YELLOW-THROATED VIREO (*Lanius flavifrons*). Fairly common summer visitor except in the coastal section. Noted during the breeding season, however, in a suburban locality in New Orleans in 1912, 1913, and 1914. Seldom nesting south of about latitude 31°. Arrives about March 25. Latest date of departure, Oct. 21, 1897, at Ariel, Miss.

262. BLUE-HEADED VIREO (*Lanius solitarius solitarius*). Fairly common in midwinter in the fertile alluvial region of the southeast. Appears to arrive usually in October: Oct. 25, 1901, Bay St. Louis, Miss.; Oct. 6, 1905, Biloxi, Miss.; but a single specimen was taken at Diamond, La., Aug. 4, 1893. Latest date of departure, March 24, 1904, New Orleans.

263. WHITE-EYED VIREO (*Vireo griseus griseus*). An abundant summer visitor in all moist or swampy woodland; may be seen occasionally in the coastal section in winter, even singing on mild days in December and January. Becomes common from March 15 to 20, and remains so until about Nov. 1.

264. BLACK-AND-WHITE WARBLER (*Mniotilta varia*). Common transient, especially in the fall, and probably breeds sparingly in the northern part of the State. Usually arrives at the coast about March 20; earliest date of arrival, March 15, 1902, at Bay St. Louis, Miss. Remains until

about May 1. Returns very early; recorded July 4, 1906, at Bay St. Louis, Miss.; commonest in August and September. Last at New Orleans, Oct. 25, 1914.

265. PROTHONOTARY WARBLER (*Protonotaria citrea*). Common summer visitor in river bottoms and swampy regions, especially about sloughs and along sluggish streams. Usually arrives by March 20; earliest arrival at New Orleans, March 15, 1894. Leaves about the end of September. The arrival in the immediate coast section, where it is most abundant, is decidedly earlier than in moist bottoms in the higher parts of the State, where the first are usually seen early in April.

266. SWAINSON'S WARBLER (*Helinaia swainsoni*). Occurs chiefly in wild cane brakes in low woods or along streams. Occurs rather commonly as a spring transient in one of the former of such locations near New Orleans. I found it surprisingly common not only in the cane brakes but throughout a considerable section of rich swampy woods in the same general locality on April 14, 1905. At least twenty-five or thirty were noted in covering a distance of probably ten miles. There was a good deal of water in the swamps at the time. Earliest arrival at New Orleans, March 30, 1905. Have never noted it in fall. May breed sparingly at New Orleans.

267. WORM-EATING WARBLER (*Helmitheros vermivorus*). A transient only in the more southern part of the State, seldom very common, and usually seen only for brief periods. Prefers deep, moist woods. The earliest in spring was noted at Bay St. Louis, Miss., April 5, 1902; the earliest arrival in fall near the coast is August 11, 1897, at Beauvoir, Miss. Latest date of departure in fall, Sept. 30, 1897, at Ariel, Miss.

268. BACHMAN'S WARBLER (*Vermivora bachmani*). In the more southern parts of Louisiana and Mississippi at least, this species is undoubtedly only a transient. Besides the previously published records of its capture on the northern shore of Lake Pontchartrain in Louisiana by Mr. Charles Galbraith (Auk, Vols. 4 and 5), it has been noted by Mr. Andrew Allison in Mississippi on the following occasions: March 26, 1902, Bay St. Louis, Miss.; March 24, 1906, Ellisville, Miss.; July 4, 1906, Bay St. Louis, Miss.

269. BLUE-WINGED WARBLER (*Vermivora pinus*). May breed in the northern part of the State; a rather rare transient in all localities where I have made observations. Earliest date of arrival in spring, March 13, 1902, Bay St. Louis, Miss.: earliest arrival in fall, July 23, 1898, Bay St. Louis, Miss.

270. GOLDEN-WINGED WARBLER (*Vermivora chrysoptera*). A rather rare transient. Appears to migrate rather late in spring and early in fall: August 12, 1897, Beauvoir, Miss.

[NASHVILLE WARBLER (*Vermivora rubricapilla rubricapilla*). This species does not appear to have ever been recorded in the State, though it has been noted at Bay St. Louis, Miss., in September, and I am practically sure of having seen it at Beauvoir, Miss., at the same season.]

271. ORANGE-CROWNED WARBLER (*Vermivora celata celata*). A common winter visitor in the alluvial region of the central southern and south-

eastern portions of the State. Earliest date of arrival, Nov. 19, 1901, New Iberia, La., and latest date of departure, April 3, 1909, New Orleans, Usually commonest from about Dec. 15 to Feb. 15. Often seen in live oaks.

272. TENNESSEE WARBLER (*Vermivora peregrina*). An abundant transient in fall, especially in the alluvial section of the southeast, irregular in spring but sometimes common late in April or early in May. In fall, it usually arrives Sept. 22 or 23, and becomes very abundant in October, especially in weedy fields and about the edges of the woods, often in company with the Indigo Bunting. Departs usually about Nov. 1; latest, Nov. 8, 1913. Earliest arrival in spring, March 12, 1900; latest departure in spring, May 9, 1903.

273. NORTHERN PARULA WARBLER (*Compsothlypis americanus ausneæ*). An abundant summer visitor, especially in the southeastern part of the State, though found practically everywhere in mixed forest growth on more or less moist ground. Arrives at New Orleans early in March (earliest Feb. 22, 1893) and is sometimes common by March 10 or 12, seldom later than March 15. Nests invariably in the Spanish moss (*Tillandsia*) in the southeastern part of the State. Nesting begins early in April. Prefers the live oak as a nesting tree. Feeds indiscriminately in deciduous trees, however, especially the pecan, elm, maple, locust, tupelo, ash and cypress. Remains common until at least Oct. 20; latest date of departure, Oct. 26, 1899, Covington, La.

274. CAPE MAY WARBLER (*Dendroica tigrina*). A record of its occurrence (New Orleans, April, 1890) noted by Prof. Beyer in his list of the Birds of Louisiana is the only one of which I have any knowledge.

275. YELLOW WARBLER (*Dendroica æstiva æstiva*). Abundant transient, especially in the late summer and fall; breeds occasionally except in the extreme southernmost section of the State. Has been noted as a breeder at Baton Rouge by Mr. Andrew Allison and in Pointe Coupee parish by Mr. A. B. Blakemore. Usually arrives at the Gulf Coast the first week in April — earliest, March 30, 1904, and is commonest usually from about April 15 to April 25. Latest date in spring at New Orleans, May 4, 1897. Reappears usually in the latitude of New Orleans about July 15 — earliest, Bay St. Louis, Miss., July 7, 1899; and becomes very common by the end of July. Remains common in August and throughout the greater part of September, though there are periods of increased abundance from time to time. Latest date of departure at New Orleans, Oct. 15, 1903.

[BLACK-THROATED BLUE WARBLER (*Dendroica cerulescens*). Though reputed to occur in the State, I have never seen it, have no knowledge of any specimens being taken in Louisiana, and am unable to find any well authenticated record of its occurrence. I saw what I thought was an individual of this species at New Orleans March 26, 1897, but did not observe it satisfactorily and was by no means convinced of its identity.]

276. MYRTLE WARBLER (*Dendroica coronata*). Abundant winter visitor. Arrives in southern Louisiana about Oct. 15; Oct. 11, 1905, at Biloxi, Miss. Departs from the coast about April 22. Latest at New

Orleans, April 27, 1897 and 1903. More or less continuously abundant throughout some winters, but almost rare in occasional seasons. A decided transient movement is observable usually at the end of winter and in the early spring. In 1906, I noted increases at Biloxi, Miss., on the following dates: Jan. 6, 20, 29; Feb. 1; March 10, 19, 24. Specimens in very good plumage are seen as early as April 1, and singing usually begins at this time or a little earlier and continues until the time of departure. While the singing is not infrequent, it cannot be called general.

277. **MAGNOLIA WARBLER** (*Dendroica magnolia*). Abundant fall transient; decidedly rare in spring in localities where I have made observations. Earliest arrival in fall, Sept. 13, 1899, Bay St. Louis, Miss.; usually arrives about Sept. 20; common at Covington, La., Oct. 1, 1899. Latest date of departure, Oct. 28, 1899, Covington. Usually common until about Oct. 20. In spring this species is more apt to be seen in the latter part of the season: May 5, 1897, New Orleans; May 11, 1902, Bay St. Louis, Miss.

278. **CERULEAN WARBLER** (*Dendroica cerulea*). May breed in the northern part of the State, but apparently only a transient in most localities. Seldom common, though small companies may sometimes be seen for a period of a few days in the migrations. Commoner in the mixed upland woods than in the southeastern section. Migrates very early in fall: July 12, 1897, Beauvoir, Miss., where small flocks were seen on this and succeeding days in pine, oak, magnolia, beech and hickory woods. Latest date in fall, Sept. 30, 1897, Ariel, Miss. Arrives at Gulf coast latitude about April 10; earliest, April 8, 1898, New Orleans.

279. **CHESTNUT-SIDED WARBLER** (*Dendroica pensylvanica*). In the southeastern part of the State, this is one of the rarer transients, especially in spring. Most apt to be seen in the latter part of the season (April 21, 1905, New Orleans). Sometimes common for a few days in fall. Noted many near New Orleans on Oct. 10, 1896, during a remarkable wave of transients, principally warblers, tanagers, and vireos. The earliest date of arrival in fall is Sept. 12, 1899, Bay St. Louis, Miss., and the latest date in fall is Oct. 19, 1897, Ariel, Miss.

280. **BAY-BREASTED WARBLER** (*Dendroica castanea*). Occasionally present for a day or so in fall, occurring singly or in small flocks. Earliest date of arrival, Sept. 23, 1896, Bay St. Louis, Miss. Latest date in fall, Oct. 18, 1897, Ariel, Miss. In spring it is rarer than in fall. Have noted it the first week in May at New Orleans, and at New Iberia: May 15, 1902.

281. **BLACK-POLL WARBLER** (*Dendroica striata*). A decidedly rare transient, though occasionally occurring in considerable numbers for a day or so at a time. Mr. W. B. Allison noted a good many at Bay St. Louis, Miss., May 13, 1906. I noted one at New Orleans, Sept. 21, 1897.

282. **BLACKBURNIAN WARBLER** (*Dendroica fusca*). While never very common, this is a species of rather more regular occurrence in fall than the several preceding. It is considerably rarer in spring. The earliest date of

arrival is April 8, 1900, Bay St. Louis, Miss. A specimen was noted by Mr. Andrew Allison, and, in fact, taken, at Bay St. Louis, Miss. on August 11, 1898. The next earliest record of arrival is Sept. 13, 1897, Ariel, Miss. The latest date of departure is Oct. 18, 1901, Bay St. Louis, Miss. As with most other warblers of this group, this species occurs more freely in mixed upland woods than in the fertile alluvial region of south-eastern Louisiana.

283. SYCAMORE WARBLER (*Dendroica dominica albilora*). Fairly common summer visitor, especially in brakes of tall cypress. Earliest arrival, Feb. 27, 1897, New Orleans. Usually arrives about March 10. Latest date of departure, Sept. 20, 1901, Bay St. Louis, Miss. Confined more or less closely to swampy woods in the breeding season.

284. BLACK-THROATED GREEN WARBLER (*Dendroica virens*). Fairly common in the lowlands during fall waves; common throughout much of the fall migration in pine and other upland growths. Rarer in all sections in spring. I took a specimen at Beauvoir, Miss., July 30, 1897, and I am sure of having seen it the latter part of July in Madison Parish! Excluding these abnormally early transients, the earliest date of arrival is Sept. 18, 1897, Ariel, Miss. It was common at New Orleans, Oct. 20, 1896, and became common at Biloxi, Miss., Oct. 22, 1906. The last was seen at Covington, Oct. 28, 1899. In spring it occurs chiefly in the latter part of the season: April 14, 1902, Bay St. Louis, Miss., and May 9, 1903, Lobdell, La.

285. PINE WARBLER (*Dendroica vigorsi*). Abundant resident in pine forests; elsewhere a winter visitor only. Individuals wintering in regions of deciduous woodland do not appear in such localities until the early part of the winter as a rule, and they do not remain much after the middle of March, at least in the southern part of the State. In the pine woods, this warbler begins to sing with the first mild weather of January.

286. PALM WARBLER (*Dendroica palmarum*). A fairly common winter visitor, sometimes rather abundant, in open places in the lowlands and in flat pineries. I have been unable to trace the relation between the movements of this species and the Yellow Palm Warbler (*Dendroica palmarum hypochrysea*), and have assumed all data to refer to the Palm Warbler. Arrives about the middle of October and becomes common about Nov. 1. Remains until the early part of April: April 11, 1896, New Orleans.

[PRAIRIE WARBLER (*Dendroica discolor*). Though undoubtedly occurring in localities in the piney sections of the State similar to those frequented by it in southern Mississippi, this species has not been recorded by any observer in Louisiana so far as I know. While it does not appear to breed on the coast of Mississippi, it arrives there by the latter part of July, and is rather common in scrubby growths of pine and oak. I have no data on its movements in southern Mississippi in spring, and no record of its departure in fall.]

287. OVENBIRD (*Seiurus aurocapillus*). Fairly common transient for brief and occasional periods, found chiefly in mixed woodland undergrowth,

especially in moist localities. Earliest arrival, April 5, 1902, Bay St. Louis, Miss. Usually commonest about April 15. Latest date in spring, May 9, 1903, Lobdell, La. Earliest arrival in fall, August 28, 1899, Bay St. Louis, Miss. Latest departure, October 19, 1897, Ariel, Miss.

288. WATER-THRUSH (*Seiurus noveboracensis noveboracensis*). In south-eastern Louisiana, except in the pine woods, this species greatly outnumbered the following, which, in fact, is rather rare in the fertile alluvial section. In the pine woods the two species are about equally common in migration, the present species preferring the occasional sloughs and swampy strips among the pines, the Louisiana Water-Thrush frequenting sandy ravines and creek and small river banks, and on the Mississippi coast occurring even on the sandy shore. The Water-Thrush reaches Gulf coast latitude in fall the middle or latter part of August, remaining until Oct. 10 or 15 — latest, Oct. 17, 1896, New Orleans. In spring it arrives early in April, but is more apt to be common late in the season. Latest date of departure, May 7, 1897, New Orleans.

289. LOUISIANA WATER-THRUSH (*Seiurus motacilla*). Those sections of the State where the streams flow over sharp sandy beds are the pre-eminent habitat of this species, both as breeder and transient. As a breeder, it is found chiefly in the northern part of the State, but it reaches the latitude of the coast very early, having been noted at Bay St. Louis, Miss., July 4, 1906, and always commonly after the middle or latter part of July. As previously explained, it is not very common in the southeastern part of Louisiana; the earliest date of arrival in spring is March 19, 1904, at New Orleans. Records of the departure in fall are lacking.

290. KENTUCKY WARBLER (*Oporornis formosus*). Common summer visitor in undergrowth of flat, moist woods, such as the better drained swamps in the lowlands and the bottoms of the more elevated sections of the State. Arrives at Gulf coast latitude the last of March: earliest, March 26, 1905. Inconspicuous in fall; appears to leave about the end of September.

[CONNECTICUT WARBLER (*Oporornis agilis*). Has not been recorded yet for Louisiana. I noted either this species or the Mourning Warbler at Biloxi, Miss., on August 27, 1906.]

291. MOURNING WARBLER (*Oporornis philadelphia*). I have never found this bird in the State, but Mr. Andrew Allison noted what he was reasonably sure was a specimen of this species early in October, 1896, at New Orleans. I have noted either this species or the Connecticut Warbler at Biloxi, Miss. (August 27, 1906). In any event, it is a decidedly rare bird in all sections of both States.

292. MARYLAND YELLOW-THROAT (*Geothlypis trichas trichas*). Common winter visitor, all breeding birds being doubtless referable to the next form. At the Gulf coast, there is always a decided influx of Yellow-throats about Sept. 1, but whether this form alone is represented in this movement, I am unable to say.

293. FLORIDA YELLOW-THROAT (*Geothlypis trichas ignota*). An abundant resident in all suitable locations.

294. YELLOW-BREASTED CHAT (*Icteria virens virens*). Abundant summer visitor, at least in the lowlands, occurring in tangled growths in old fields, etc. More or less common in such situations throughout the State. Arrives about April 15. Earliest, April 11—Lobdell, 1903; New Orleans, 1905. Usually becomes common April 20 or shortly after. Disappears more or less completely in the fall: Sept. 24, 1897, Ariel, Miss.; Sept. 26, 1898, Bay St. Louis, Miss. Appears to avoid the fertile alluvial lands of southeastern Louisiana entirely in fall.

295. HOODED WARBLER (*Wilsonia citrina*). Common summer visitor in all swampy localities, especially the southeastern section, where, in fact, it is extremely abundant. Arrives usually March 12–15. Earliest, March 8, 1896, and March 9, 1897. Becomes common about March 20. It should be observed, however, that these dates refer to the fertile alluvial section of the southeastern part of the State. In the river bottoms of the more elevated part of the State it is seldom seen before April. Remains at least until the latter part of October. Latest, Nov. 2, 1902, New Iberia, La.

[WILSON'S WARBLER (*Wilsonia pusilla pusilla*). Not yet recorded for Louisiana.]

[CANADIAN WARBLER (*Sylvania canadensis*). Although noted in southern Mississippi—Amite county: Ariel; Hancock county: Bay St. Louis—this species has never been noted in Louisiana by any of the observers with whom I have compared records.]

296. AMERICAN REDSTART (*Setophaga ruticilla*). Abundant fall transient in all sections, less common in spring, especially in the southeastern part of the State, where, on the whole, it is decidedly rare at this season. Possibly breeds in the northern part of the State. Returns from the north very early: July 30, 1897, Beauvoir, Miss.; July 21, 1899, Bay St. Louis, Miss.; Becomes common early in August. Latest date of departure, Oct. 27, 1899, Covington, La. Earliest in spring, April 1, 1899, Bay St. Louis, Miss.; latest, May 15, 1902, New Iberia, La.

297. AMERICAN PIPIT (*Anthus rubescens*). Common winter visitor in all suitable locations, especially abundant in the southeastern part of the State, occurring in great flocks on the plantations and other cleared land. Usually arrives shortly after Oct. 20; earliest, Oct. 19, Ellisville, Miss. Becomes common early in November. Remains common until April 15 or 20, and the last has been seen May 2 in southern Louisiana on several occasions.

298. SPRAGUE'S PIPIT (*Anthus spraguei*). Said to be rather common in winter in western Louisiana; rather uncommon and irregular in the southeastern part of the State. Earliest, Nov. 5, 1902, Lobdell; latest, April 19, 1902, New Orleans.

299. MOCKINGBIRD (*Mimus polyglottos polyglottos*). Uniformly abundant resident throughout the State.

300. CATBIRD (*Dumetella carolinensis*). Most abundant as a fall transient. Reaches the southern part of the State about Sept. 10, and

becomes abundant shortly after Sept. 20. Disappears more or less completely by the early part of November, though seen occasionally in winter near the coast. Transients appear near the coast the latter part of March, and continue present until about the middle of May. Breeds in the northern part of the State.

301. BROWN THRASHER (*Toxostoma rufum*). Rare as a breeder, fairly common in winter and common transient in the southern part of State. Common breeder in the central and northern parts. In migration in the southern part of the State, it occurs chiefly at the same time as the Catbird.

302. CAROLINA WREN (*Thryothorus ludovicianus ludovicianus*). Abundant resident in all wooded or shrubby localities except those within reach of the tide. Sings throughout the year, and nests from March to July.

303. BEWICK'S WREN (*Thryomanes bewicki bewicki*). Chiefly a winter visitor, but may breed occasionally north of the extreme southern part of the State. Movements rather irregular; sometimes seen rather early in the fall. Commoner in upland localities than in the coastal section even in winter. Begins singing in the latter part of the winter or early in the spring.

304. HOUSE WREN (*Troglodytes aëdon aëdon*). Common winter visitor. Reaches the coast the last week in September (earliest, Sept. 21, 1899, Bay St. Louis, Miss.). Leaves the southern part of the State about April 18; latest, April 23, 1898, New Orleans. Sings more or less freely for three weeks or more preceding its departure.

305. WINTER WREN (*Nannus hiemalis hiemalis*). Winter visitor; not very common at least in the southern part of the State. Earliest arrival in fall, Oct. 15, 1901, New Iberia. Departs in March.

306. SHORT-BILLED MARSH WREN (*Cistothorus stellaris*). Winter visitor, not common. Arrives Oct. 10-15; earliest, Oct. 8, 1905, Biloxi, Miss. Remains late: April 19, 1902, Bay St. Louis, Miss.; May 12, 1903, Lobdell, La. Found usually in wet weedy places.

307. LONG-BILLED MARSH WREN (*Telmatodytes palustris palustris*). Resident; abundant in the coast marshes, especially in summer. Usually found along the bayous and the more protected shores.

308. BROWN CREEPER (*Certhia familiaris americana*). Fairly common winter visitor, except in the coast section, where it is decidedly uncommon. The time of its arrival, however, is very regular, the first having been noted on three occasions in southern Louisiana on Oct. 14, and once on Oct. 15. The only date of departure recorded is March 18, 1902, Bay St. Louis, Miss.

309. WHITE-BREASTED NUTHATCH (*Sitta carolinensis carolinensis*). Resident in pineries and regions of mixed upland woods. Unknown in prairie and fertile alluvial regions. The Florida White-breasted Nuthatch is no doubt the regular breeding form in the more southern part of the State. Rather commoner in winter in most localities where it occurs.

[RED-BREASTED NUTHATCH (*Sitta canadensis*). While there is no record, so far as I know, of the occurrence of this species in Louisiana, it has been

noted by Mr. Andrew Allison in Mississippi (Bay St. Louis, April 1, 1902), and no doubt it occurs occasionally in Louisiana.]

310. BROWN-HEADED NUTHATCH (*Sitta pusilla*). Confined apparently to the pine flats and long-leaved pine hill regions, where it is an abundant resident.

311. TUFTED TITMOUSE (*Bæolophus bicolor*). Common resident in all wooded localities.

312. CAROLINA CHICKADEE (*Penthestes carolinensis carolinensis*). Common resident throughout the State. Starts nesting early in March in the southern part of the State.

313. GOLDEN-CROWNED KINGLET (*Regulus satrapa satrapa*). Common winter visitor, showing a decided preference for evergreen growths. In the fertile alluvial region of the southeastern part of the State it frequents live oaks almost exclusively. It arrives at Gulf coast latitude about Oct. 15-20. Latest date of departure, April 5, 1906, Biloxi, Miss.

314. RUBY-CROWNED KINGLET (*Regulus calendula calendula*). Common winter visitor in all mixed woods, as well as in groves and high shrubbery. Earliest date of arrival, Oct. 6, 1897, Ariel, Miss. Becomes common Oct. 20 or shortly after. Becomes very abundant with first cold weather in November. Usually departs about April 10. Latest date of departure, April 25, 1903, Lobdell. Sings rather freely for a few weeks before its departure.

315. BLUE-GRAY GNATCATCHER (*Polioptila caerulea caerulea*). Common summer visitor in all more or less wooded localities. May be noted occasionally in winter near the Gulf coast and I saw one at Shreveport, La., Feb. 23, 1915. First migrant usually seen March 12-15. Usually common March 20-22. Disappears more or less completely by the middle or latter part of August.

316. WOOD THRUSH (*Hylocichla mustelina*). Common summer visitor, though breeding only sparingly in the immediate vicinity of the coast, being found in close, moist woods, but never in the heavy swamps. Commonest as a fall transient, from about Sept. 15 to Oct. 15. Arrives the last week in March near the coast; earliest, March 25, 1900, Covington. Becomes common April 5-10. Latest date in fall, Oct. 19, 1897, Ariel, Miss. Prefers shady bottoms in the higher parts of the State.

317. VEERY (*Hylocichla fuscescens fuscescens*). Fairly common transient, frequenting mixed woodland generally. Spring migration performed chiefly between April 15 and May 15. May be heard in night migration almost to the end of May; latest, May 25, 1911. On June 4, 1907, I saw one of this species on Last Island, and noted that it was "obviously off its reckoning and showing signs of fear to the point of confused stupidity. It made short nervous flights among the "mangle" bushes (*Avicennia nitida*) and about the sand on the spit. Earliest date of arrival in fall, Sept. 7, 1900, Bay St. Louis, Miss.; latest date of departure, Oct. 24, 1914, New Orleans.

318. GRAY-CHEEKED THRUSH (*Hylocichla aliciae aliciae*). Common transient at times in spring, especially in the latter part of the season; less

common in fall, occurring chiefly in the early part of October. Recorded somewhat doubtfully at New Orleans, March 27, 1897; earliest authentic arrival, April 14, 1902, Bay St. Louis, Miss. Latest, May 9, 1903, Lobdell. Noted in remarkable abundance at New Orleans the first week in May, 1897, occurring in situations of practically every character, but seen mostly in weedy fields. Earliest arrival in fall, Sept. 22, 1897, Ariel, Miss.

319. OLIVE-BACKED THRUSH (*Hylocichla ustulata swainsoni*). Common transient, especially in fall. Earliest arrival in spring, April 5, 1903, Covington; latest in spring, May 4, 1897, New Orleans. Waves of this species, with Gray-checked Thrushes and Veeries, are most apt to be present shortly before and after May 1. Earliest arrival in fall, Sept. 12, 1897, Ariel, Miss. Usually becomes common about Sept. 22. Latest in fall, Oct. 31, 1900, Bay St. Louis, Miss.

320. HERMIT THRUSH (*Hylocichla guttata pallasii*). Common winter visitor. Earliest, Oct. 10, 1912, New Orleans; average arrival in southern Louisiana and Mississippi, Oct. 15. Latest date of departure, April 13, 1895, New Orleans. Usually leaves first week in April.

321. AMERICAN ROBIN (*Planesticus migratorius migratorius*). Numbers vary decidedly from year to year, especially in the coastal section. Earliest arrival, Oct. 9, 1897, Ariel, Miss.; earliest at New Orleans, Oct. 12, 1913. Average date of the first at the coast, Oct. 15. Usually becomes common with first cold weather in November. Few remain at coast latitude after March 15, and the last is usually seen the last week in March. Latest fully authenticated date of departure, April 4, 1906, Biloxi, Miss.

322. WHEATEAR (*Saxicola ananthe*). The capture of a specimen in the outskirts of New Orleans, Sept. 12, 1888, is recorded by Prof. Geo. E. Beyer, in a list of the birds of Louisiana published in the "Proceedings of the Louisiana Society of Naturalists."

323. BLUEBIRD (*Sialia sialis sialis*). Common resident except in the fertile alluvial region of the southeastern section of the State, where it is commonest in winter and where its occurrence in the breeding season is limited principally to its presence in occasional colonies about the sugar plantations.