

times to her dead mate which had been shot, before finally being killed herself; during this time she alighted a little distance away and, swimming up to the dead male, kept continually honking and calling to him. As there were at the time several flocks of these Ducks not far distant, resting on the water, and as in flying about she had passed quite close to them, she might have joined them had she been so disposed, but she would not. The incident stands out alone in my experience, a most unusual exhibition of attachment on the part of the female for the male, it almost invariably being the other way with sea fowl.

Oldsquaws are also very numerous in October in some of the great inland lakes (Ontario). I have also a record of shooting five from a flock of six on October 24, 1869, at Missisquoi Bay, Lake Champlain, Vermont, near the boundary line of Canada.

LIST OF BIRDS OBSERVED IN THE VICINITY OF SAN ANTONIO, BEXAR COUNTY, TEXAS.

BY H. P. ATTWATER.

[Concluded from p. 238.]

118. *Spinus tristis*. AMERICAN GOLDFINCH.—Common migrant, and winter resident.

119. *Spinus psaltria arizonæ*. ARIZONA GOLDFINCH.—Rare migrant and winter resident.

120. *Spinus psaltria mexicanus*. MEXICAN GOLDFINCH.—Rare winter resident, but more numerous than *arizonæ*. It is also a rare summer resident among the hills twenty-five miles northwest of San Antonio; a male, shot June 8, 1890, which was feeding its young, is said to be "probably as typical as any United States specimens." I have taken all three forms (*tristis*, *arizonæ* and *mexicanus*) in winter, feeding together in the same flock, inside the city limits of San Antonio.

121. *Calcarius ornatus*. CHESTNUT-COLLARED LONGSPUR.—Common migrant.

122. *Rhynchophanes mccownii*. MCCOWN'S LONGSPUR.—Rare winter resident.

123. *Pooecetes gramineus*. VESPER SPARROW.—Common migrant and winter resident.

124. *Pooecetes gramineus confinis*. WESTERN VESPER SPARROW.—Abundant migrant and winter resident.

125. *Ammodramus sandwichensis alaudinus*. WESTERN SAVANNA SPARROW.—Abundant migrant, and common winter resident. I have no record of the eastern form, which I think probably occurs during migration.

126. *Ammodramus savannarum passerinus*. GRASSHOPPER SPARROW.—Abundant migrant, and rare summer resident. Found nesting a few miles west of the city.

127. *Ammodramus savannarum perpallidus*. WESTERN GRASSHOPPER SPARROW.—Abundant migrant.

128. *Chondestes grammacus*. LARK SPARROW.—Common migrant.

129. *Chondestes grammacus strigatus*. WESTERN LARK SPARROW.—Common winter resident, very abundant during migration, and also an abundant summer resident. The greater portion of the migrating birds are intermediate or the Mississippi Valley form. The western form breeds here. They always nest in trees, probably for protection against snakes. One nest with three eggs also contained a Mockingbird's egg.

130. *Zonotrichia querula*. HARRIS'S SPARROW.—Common winter resident, more abundant during migration.

131. *Zonotrichia leucophrys*. WHITE-CROWNED SPARROW.—Very abundant migrant and winter resident.

132. *Zonotrichia albicollis*. WHITE-THROATED SPARROW.—Common winter resident.

133. *Spizella socialis*. CHIPPING SPARROW.—Rare summer resident, not noticed during migration; found nesting twenty miles west of San Antonio among the hills.

134. *Spizella socialis arizonæ*. WESTERN CHIPPING SPARROW.—Rare winter resident.

135. *Spizella pallida*. CLAY-COLORED SPARROW.—Abundant migrant.

136. *Spizella pusilla*. FIELD SPARROW.—Abundant winter resident and migrant. There is a paler form (not *S. p. arenacea*) which can easily be distinguished from typical eastern birds, which is common here in summer and breeds among the hills. A nest, taken April 22, 1889, contained four fresh eggs.

137. *Junco hyemalis*. SLATE-COLORED JUNCO.—Common migrant.

138. *Amphispiza bilineata*. BLACK-THROATED SPARROW. Common resident.

139. *Peucæa cassini*. CASSIN'S SPARROW. Common migrant and summer resident.

140. *Peucæa ruficeps eremæca*. ROCK SPARROW.—Common summer resident, and may winter, in the rocky country among the hills north and northwest of San Antonio. A nest with three young, found May 14, 1891, was placed on the ground in a tuft of grass near a running stream, and was composed of fine grass and lined with a few horse-hairs. It was very similar to the nest of the Vesper Sparrow. The note or short song of this bird is unlike that of any other Sparrow I know of.

141. *Melospiza fasciata*. SONG SPARROW.—Common winter resident.

142. *Melospiza lincolni*. LINCOLN'S SPARROW.—Abundant migrant, and common winter resident.

143. *Melospiza georgiana*. SWAMP SPARROW.—Rare migrant. A few probably winter here.

144. *Passerella iliaca*. FOX SPARROW.—Common winter resident.

145. *Pipilo erythrophthalmus*. TOWHEE.—Rare migrant.

146. *Pipilo maculatus arcticus*. ARCTIC TOWHEE.—Common winter resident.

147. *Pipilo chlorurus*. GREEN-TAILED TOWHEE.—In the spring of 1885, during the last week in February, I shot several of these birds at a place near the Medina River, fifteen miles south of San Antonio, and saw others. I have not met with it since. They were scratching among the leaves in the thick underbrush, and were extremely shy. They may possibly occur regularly in this particular locality, but I have not been there since the occasion referred to.

148. *Cardinalis cardinalis*. CARDINAL.—Common resident, much more abundant in summer than in winter. During the migration they are particularly numerous, passing by in flocks. On Feb. 3, 1890, I shot a male the plumage of which is peculiar; it resembles a caged bird which Mr. Ridgway says he once saw. I saw another similar to the one taken, at the same time, but was unable to get a shot at it. They were in company with other Cardinals.

149. *Pyrrhuloxia sinuata*. TEXAN CARDINAL.—Common resident, but very rare north of San Antonio. The eggs of this bird cannot be distinguished from those of the common Cardinal, except perhaps that the brown markings are as a rule much clearer and of a deeper shade, and cluster more thickly toward the larger end. In regard to size, I have been unable to discover any difference. The nest, however, of the Texan Cardinal is always built of much finer material than that used in the construction of nests of *C. cardinalis*.

150. *Habia ludoviciana*. ROSE-BREADED GROSBREAK.—Rare migrant.

151. *Guiraca cærulea eurhyncha*.—WESTERN BLUE GROSBREAK. Rare summer resident.

152. *Passerina cyanea*. INDIGO BUNTING.—Tolerably common migrant.

153. *Passerina ciris*. PAINTED BUNTING.—Common summer resident.

154. *Spiza americana*. DICKCISSEL.—Very abundant migrant, and common summer resident. They begin to arrive about the middle of April, and within a week after their first appearance their monotonous notes may be heard from daylight till dark, while hundreds of flocks are to be seen passing continually. At this time they play particular havoc among the oats, which begin to ripen at this season. A farmer on the Medina River told me last year that he considered one fourth of his crop (about twenty acres) was taken by these birds.

155. *Calamospiza melanocorys*. LARK BUNTING.—Common winter resident.

156. *Piranga erythromelas*. SCARLET TANAGER.—Rare migrant.

157. *Piranga rubra*. SUMMER TANAGER.—Common summer resident. They are commonly known as 'Bee Birds' here, from their habit of catching honey bees, of which they seem extremely fond.

158. *Progne subis*.—PURPLE MARTIN.—Common summer resident.
159. *Petrochelidon lunifrons*. CLIFF SWALLOW.—Abundant summer resident.
160. *Chelidon erythrogaster*. BARN SWALLOW.—Common migrant; I have seen it early in June, but have found no nests here.
161. *Tachycineta bicolor*. TREE SWALLOW.—Common migrant.
162. *Clivicola riparia*. BANK SWALLOW.—Rare migrant.
163. *Stelgidopteryx serripennis*. ROUGH-WINGED SWALLOW.—Common migrant.
164. *Ampelis cedrorum*. CEDAR WAXWING.—Abundant migrant, and common winter resident.
165. *Lanius ludovicianus*. LOGGERHEAD SHRIKE.—Rare migrant; probably a few remain during winter.
166. *Lanius ludovicianus excubitorides*.—WHITE-RUMPED SHRIKE.—Common winter resident.
167. *Vireo olivaceus*. RED-EYED VIREO.—Common migrant, and rare summer resident.
168. *Vireo flavifrons*. YELLOW-THROATED VIREO.—Common migrant. On June 8, 1891, I found a nest, and shot the male bird, about thirty miles northwest of San Antonio.
169. *Vireo solitarius*. BLUE-HEADED VIREO.—Common migrant.
170. *Vireo atricapillus*. BLACK-CAPPED VIREO.—Rare during migration at San Antonio, but found tolerably common and nesting in the hilly country west and northwest of San Antonio.
171. *Vireo noveboracensis*. WHITE-EYED VIREO.—Common migrant and summer resident.
172. *Vireo bellii*. BELL'S VIREO.—Abundant summer resident.
173. *Mniotilta varia*. BLACK-AND-WHITE WARBLER.—Common migrant.
174. *Helminthophila pinus*. BLUE-WINGED WARBLER.—Tolerably common migrant.
175. *Helminthophila ruficapilla*. NASHVILLE WARBLER.—Tolerably common migrant.
176. *Helminthophila ruficapilla gutturalis*. CALAVERAS WARBLER.—Common migrant, much more numerous than the Nashville Warbler.
177. *Helminthophila celata*. ORANGE-CROWNED WARBLER.—Abundant migrant and rare winter resident.
178. *Helminthophila peregrina*. TENNESSEE WARBLER.—Rare migrant.
179. *Compsothlypis americana*. PARULA WARBLER.—Tolerably common migrant and rare summer resident. Found nesting in localities where the 'Spanish,' or 'hanging,' 'moss' covers the trees.
180. *Dendroica æstiva*. YELLOW WARBLER.—Common migrant.
181. *Dendroica coronata*. MYRTLE WARBLER.—Abundant migrant, and common winter resident.
182. *Dendroica maculosa*. MAGNOLIA WARBLER.—Rare migrant. One male, taken May 12, 1891, is my only record of this species.

183. *Dendroica blackburniæ*. BLACKBURNIAN WARBLER. — Rare migrant.

184. *Dendroica dominica albilora*. SYCAMORE WARBLER. — Common migrant, and rare summer resident. On May 22, 1889, I shot a female which was picking up nest material. I have observed them on several occasions in the month of June, in the sandy, black oak region, and I shot a male singing on June 7, 1891. I have no doubt I shall find their nests.

185. *Dendroica chrysoparia*. GOLDEN-CHEEKED WARBLER. — The nearest point to San Antonio that I have observed this bird, is about twenty miles west of the city. I have also taken them in Medina, Banderá, Kerr, Kendall, and Comal Counties. They are nowhere abundant, and only to be met with in the thickest cedar brakes, and as these are fast being cut and burnt out, the bird will no doubt become still more rare. They breed in all the counties I have named, as I have observed them feeding young birds at localities in all of them, but I was too late to get eggs both in 1890 and 1891. I can give no account of the migration of this species; the nearest approach to a migratory movement that I have observed was on May 13, 1891, when I obtained a male, ten miles from thick cedar, in company with Redstarts, Blue-headed Vireos, and a Wilson's Warbler. (The migration of birds in 1891 was unusually late.) In 1889 I obtained them in the middle of April.

Upon examining the stomachs of a number of young birds which were being fed, I found they all contained (with other insects), a number of small black lice (*Aphis* sp.) which I watched the old birds collecting from the green cedar limbs.

The adult female must be an extremely shy bird, as I have met with it only when feeding its young. The actions of the male Golden-cheeked Warbler are similar to those of most Warblers, flying from tree to tree in search of insects, and at short intervals uttering its note, which when once heard is not easily forgotten, nor easily described. It consists of four parts, and is unlike any other Warbler's note I have heard. In addition to this there is the usual alarm note common to so many other Warblers and small birds.

Breeding in the same localities with the Golden-cheeked Warblers I found Rock Sparrows, Black-capped Vireos, and Mexican Goldfinches.

186. *Dendroica virens*. BLACK-THROATED GREEN WARBLER. — Common migrant.

187. *Dendroica vigorsii*. PINE WARBLER. — Rare migrant. Only two specimens noticed, both in 1890, a female Feb. 8, shot in a huisache tree, and a male on March 10 in a willow tree close to the river.

188. *Seiurus aurocapillus*. OVENBIRD. — Common migrant. Abundant in 1890.

189. *Seiurus noveboracensis*. WATER-THRUSH. — Common migrant.

190. *Seiurus noveboracensis notabilis*. GRINNELL'S WATER-THRUSH. — Rare migrant. Only one specimen recorded, a male, shot May 17, 1889, fifteen miles south of San Antonio.

191. *Seiurus motacilla*. LOUISIANA WATER-THRUSH.—Rare migrant. A male obtained on April 9, 1889, is the only one I have taken. It was shot close to the Medina River, eighteen miles southwest of San Antonio.

192. *Geothlypis formosa*. KENTUCKY WARBLER.—Tolerably common summer resident. They make their nests among the tall weeds in the river bottom lands. One of the few birds whose nests are made on the ground in this region.

193. *Geothlypis philadelphia*. MOURNING WARBLER.—Rare migrant.

194. *Geothlypis macgillivrayi*. MACGILLIVRAY'S WARBLER.—Rare migrant. Probably occurs regularly, though I did not meet with it till 1891, when I procured several specimens, all females. It must be a late migrant, as the first were taken May 18 and again on May 20.

195. *Geothlypis trichas*. MARYLAND YELLOWTHROAT.—Yellowthroats are very common during migration, the greater number of them being intermediate between *trichas* and *occidentalis*. A few remain all winter among the rushes along the river.

196. *Geothlypis trichas occidentalis*. WESTERN YELLOWTHROAT.—Common migrant. Two late records in 1891 are May 16, male, and May 20, female.

197. *Icteria virens*. YELLOW-BREASTED CHAT.—Common summer resident.

198. *Sylvania mitrata*. HOODED WARBLER.—Rare migrant, common in 1890.

199. *Sylvania pusilla*. WILSON'S WARBLER.—Tolerably common migrant.

200. *Sylvania canadensis*. CANADIAN WARBLER.—Rare migrant.

201. *Setophaga ruticilla*. AMERICAN REDSTART.—Common migrant.

202. *Anthus pensilvanicus*. AMERICAN PIPIT.—Common winter resident, and abundant during migrations.

✓ 203. *Anthus spragueii*. SPRAGUE'S PIPIT.—Rare migrant.

204. *Oroscoptes montanus*. SAGE THRASHER.—Rare migrant. I took one of these birds in 1884, and observed another with it, but have never come across it since.

205. *Mimus polyglottos*. MOCKINGBIRD.—Abundant resident, and a great nuisance around vineyards. Mr. Toudouze shot and poisoned nearly five hundred of these grape robbers among his vines in 1890.

206. *Galeoscoptes carolinensis*. CATBIRD.—Migrant; tolerably common.

207. *Harporhynchus rufus*. BROWN THRASHER.—Rare migrant and winter resident.

208. *Campylorhynchus brunneicapillus*. CACTUS WREN.—Common resident.

209. *Salpinctes obsoletus*. ROCK WREN.—Rare migrant and summer resident. In a rock quarry a mile north of the city several pairs of these birds breed every year.

210. *Catherpes mexicanus conspersus*. CAÑON WREN.—These birds are common among the hills west and northwest of the city, where they

breed. Several pairs also build nests in the large lumber yards in San Antonio, and also in the buildings on the Fair Ground. I have noticed them in November, but am not sure that they remain all winter.

211. *Thryothorus ludovicianus*. CAROLINA WREN.—Common resident.

212. *Thryothorus bewickii bairdi*. BAIRD'S WREN.—Abundant migrant and resident. The resident birds are much lighter in color, and easily distinguished from those which pass through during the spring migrations. In 1889 I paid particular attention to the nesting habits of this species. I placed about two dozen old tin cans in brush heaps and crotches of trees on the outskirts of the city, and in every case they were occupied by these birds. In some instances I took the eggs, shook out the nest, and placed the can in a fresh place close by, when they soon built another nest. In one particular case two nests and two sets of eggs of six each, were taken from an old coffee pot, and then another nest was made in the same pot, and a brood raised, by the same parents. It was noticed that, in order to get them to start again in the same can, it was always necessary to put it in a fresh place, which was sometimes only a few steps away; when the nest was taken, and the can left in the same position, they would not commence a new nest.

213. *Troglodytes ædon*. HOUSE WREN.—Rare migrant.

214. *Troglodytes ædon parkmanii*. PARKMAN'S WREN.—Rare migrant.

215. *Troglodytes ædon aztecus*. WESTERN HOUSE WREN.—Common migrant, and rare winter resident.

216. *Cistothorus stellaris*. SHORT-BILLED MARSH WREN.—Rare migrant. Taken in 1884, but not observed since.

217. *Cistothorus palustris*. LONG-BILLED MARSH WREN.—Tolerably common migrant. A specimen taken on November 14, 1890, is marked "intermediate,—*C. palustris* as to bill, *paludicola* as to coloration."

218. *Certhia familiaris americana*. BROWN CREEPER.—Common migrant. All specimens I have taken have throats more or less glossy white, and are marked "approaching *mexicana*."

219. *Sitta canadensis*. RED-BREASTED NUTHATCH.—Rare migrant.

220. *Parus bicolor texensis*. TEXAN TUFTED TITMOUSE.—Common in winter.

221. *Parus atricristatus*. BLACK-CRESTED TITMOUSE.—Common resident. The favorite food of the Black-crested Titmouse during winter is the pecan nut; they hold them on the horizontal limbs, or place them in the cracks of the bark, and break them open by knocking with their bills, like Woodpeckers. They make their nests in hollow trees as a rule, but on two occasions I have found them nesting in Wren boxes close to houses, and once in the roof of a house occupied by a family with whom I was staying.

The habitat of *P. bicolor texensis*, given in Ridgway's 'Manual of North American Birds' is "Southeastern Texas (Bee County)." Now as Bee County is about south of Bexar County, it would more properly be said to be in southwestern Texas. The character of the country surrounding

both points, and between the two counties, is similar, and the result of my observations thus far goes to show that both birds are liable to be found together over a considerable portion of southwestern Texas.

222. *Parus carolinensis agilis*. PLUMBEOUS CHICKADEE.—Common resident, more numerous in winter than in summer.

223. *Auriparus flaviceps*. VERDIN.—Common resident. As winter approaches, the nests of these birds, which have been used to sleep in, like all other nests become worn out, decayed, and often considerably damaged by the wind. When this occurs, new nests are immediately built in the place of the old ones. These winter nests, however, are not nearly as bulky or as nicely made as the ones in which the broods are raised in the spring. In regard to the number of eggs laid by this bird in this locality, I once took a set of five, but this is the only instance that has come under my notice, four eggs in a set, and occasionally three, being the usual number here.

224. *Regulus satrapa*. GOLDEN-CROWNED KINGLET.—Common migrant. Not observed in winter earlier than the first week in February.

225. *Regulus calendula*. RUBY-CROWNED KINGLET.—Abundant migrant, and common in winter in suitable localities.

226. *Polioptila cærulea*. BLUE-GRAY GNATCATCHER.—Abundant migrant; a few remain all winter in sheltered spots. It is also a rare summer resident. I have taken several nests.

227. *Turdus fuscescens*. WILSON'S THRUSH.—Rare migrant. The only specimen I have taken was in company with Olive-backed Thrushes, on May 18, 1891.

228. *Turdus aliciaæ*. GRAY-CHEEKED THRUSH.—Common migrant.

229. *Turdus ustulatus swainsonii*. OLIVE-BACKED THRUSH.—Migrant. Not as common as the Gray-cheeked Thrush.

230. *Turdus aonalaschkæ*. DWARF HERMIT THRUSH.—Migrant. Tolerably common.

231. *Turdus aonalaschkæ auduboni*. AUDUBON'S HERMIT THRUSH.—Migrant. Typical specimens are rare. A few probably winter here, as I have taken them early in February. The Hermit Thrushes that are most abundant are an intermediate form between *auduboni* and *pallasii*; these are quite common in winter, and numerous during migration.

232. *Turdus aonalaschkæ pallasii*. HERMIT THRUSH.—Rare migrant and winter resident. The following notes on the migration of the different forms of Hermit Thrush for 1890 will prove interesting from the fact that all the twenty-five specimens were taken in the same place, a small patch of under-growth, among the tall pecan trees on the river, about two miles south of the city.

T. aonalaschkæ, first taken Feb. 3; next March 4, 18, 19, 24; last April 2; total, 6 specimens.

T. a. auduboni, first taken Feb. 8; next, March 24, 28; last April 8; total, 4 specimens.

Intermediates between *auduboni* and *pallasii*, first Feb. 3; next Feb. 4, 10, 14, 20, 25, March 10, 13, 14; last March 19; total, 12.

T. a. pallasii, first January 31; next and last, Feb. 10; total, 3.

233. *Merula migratoria*. AMERICAN ROBIN. — Abundant migrant; occasionally seen, but not common, in winter.

234. *Sialia sialis*. BLUEBIRD. — Common migrant and rare summer resident.

Since this list was prepared last winter I am able to record the following birds from this locality, all of which (with the exception of the Ibis) no doubt occur regularly during migration in Bexar County.

235. *Podilymbus podiceps*. PIED-BILLED GREBE.

236. *Gelochelidon nilotica*. GULL-BILLED TERN.

237. *Aythya marila nearctica*. BLUEBILL. SCAUP DUCK.

238. *Eristatura rubida*. RUDDY DUCK.

239. *Anser albifrons gambeli*. WHITE-FRONTED GOOSE.

240. *Plegadis guarauna*. WHITE-FACED GLOSSY IBIS.

241. *Macrorhamphus scolopaceus*. LONG-BILLED DOWITCHER.

242. *Tringa bairdii*. BAIRD'S SANDPIPER.

SUMMARY.—The total number of birds I have myself observed, exclusive of Swans, Grebes, Gulls, Terns and others which have been seen but not identified, is two hundred and forty-two. Of these eighty-four are known to breed within thirty miles of San Antonio. About thirty species may be considered as common residents all the year round. Of the total number about one half occur as regular migrants. It would be a difficult matter to classify the whole, with any degree of satisfaction, as so many of the migrants are also winter or summer residents more or less numerous. Then there are the regular summer residents, which leave in the fall, and are not counted with the transients, though many of them pass on further north. Lastly there are the rare stragglers and occasional visitors which have appeared at different times of the year.

HABITS OF THE HUDSONIAN CURLEW IN MASSACHUSETTS.

BY GEORGE H. MACKAY.

OF THE various shore birds which are visitants to New England during migration the most difficult to take, on account of its extreme vigilance, is the Hudsonian Curlew (*Numenius hud-*