

these lines are a few tear shaped dots of black. In all these sets there is a resemblance to eggs of the Orchard Oriole. In several eggs there is a faint flush of subdued purplish stain.

The flight is swift and strong, accomplished with quick beating of the wings, there being a peculiar, pent-up energy in their movements. They will start from a perch with an almost bullet-like swiftness. Their sociable nature is marked. They even feed together during the nesting season, there seemingly being no ill will among them. The scattered breeding colonies extend far into the wilderness. The past season I located three colonies which were nesting, and they did not vary in the time chosen nor in the selection of a nesting site; always in wild, mountain places, and the nests well hidden in the high branches of pine trees.

The nest-building began about the 10th of July and finished about the 20th. In their late nesting they resemble the goldfinch which postpones the nesting duties until July and August. One might believe that this was simply a second nesting, but the large flocks do not break up until late in June, no young birds can be found until late in summer, there are no young birds in the summer colonies where they nest, and that they do not settle to work until July, has been my observation. I have worn out more than one pair of "mountain" shoes looking for February and March nests in this country, but have learned to stay away during that portion of the year. Another peculiarity of the Crossbill is its propensity for changing its place of abode. Where they are abundant one season they may be entirely wanting the next. While my climber was at one of the nests the mother bird tried a number of times to come back onto her eggs, even venturing within two feet of him. The male came very close also. There were several pairs near about, which did not scold as many birds do, but seemed almost stupid.

The birds of this region seem to be quite constant in size and in the brighter coloration, being larger than the eastern race and of brighter plumage. Adult males are bright enough to pass as "red birds", by which name they are known. As we came from the place when the twilight glow was fading and dim shadows shrouded the mountain world, we could hear the gentle twittering from the nests far above us.

MISCELLANEOUS BIRD NOTES FROM THE LOWER RIO GRANDE

By AUSTIN PAUL SMITH

THIRTY years can bring as many changes in a bird community as into one composed of men. You can have an instance of this by perusing the published observations of Merrill or Sennett, appearing approximately that number of years ago—and then visiting the lower Rio Grande Valley. Today you will find it necessary to make some careful search to locate the Chachalaca (*Ortalis vetula macalli*) near Brownsville, while it would be hopeless to expect to discover a Wild Turkey (*Meleagris gallopavo intermedia*), or a Fulvous Tree-duck (*Dendrocygna fulva*). However it should be balm for regret, to realize that while these several species have gone, or are disappearing from the Valley's avifauna, at least a corresponding number of forms, have appeared. To this latter class belongs the Chestnut-bellied Scaled Quail (*Callipepla squamata castanogastris*) that now roams within a few miles of town. Along with this instance could be cited the

cases of several small birds that I will not take the time to specify. Cultivation is, of course, the prime cause of this transformation. Most of the heavy brush for many miles up, and the few miles that are wooded, down the river, has been removed, to make way for cultivated fields, that are quite a net work of irrigating canals. Hundreds of settlers have come into the Valley of late, to take up these lands, generally with mistaken ideas of a very new country, and liberally provided with guns. Of course they were more or less disappointed, tho it has (or did have) as great a variety of feathered game as any part of the United States. Unfortunately, this very condition may lead to a partial extermination of many species, for many of the settlers have an idea that the number of ducks, plover, quail, etc., is so unlimited that no closed season is necessary. So the game laws are liberally interpreted—and as laxly enforced.

Nearing the Gulf Coast, going eastward from Brownsville, one approaches an open country comprising sand-dunes, and inundated flats, the latter caused by the seasonal overflow from the river. These swampy areas are the homes of many species of water-birds during the entire year; but especially so in winter when myriads of ducks, geese, herons, plovers and sandpipers resort to it. Near the mouth of the Rio Grande, along the coast, is a little fishing-village named Point Isabel, peopled principally by Mexicans. It is the terminus of a railroad from Brownsville, being twenty-six miles distant therefrom. I made this coast hamlet my headquarters for several months during the fall of 1908, and on several occasions, for brief periods since then.

I do not care to put an estimate on the number of species of birds that could be found at one season or another within the territory I have just referred to, tho I imagine it could produce a list greater than most Californian localities. Rather, I will in hap-hazard manner proceed to speak briefly of the characteristic species of the Valley; also of some of the more interesting migrants.

I believe, well I am sure—that the bird I wanted to find most of all, was the one, that as yet, I have failed to meet within our borders. It is the Jacana (*Jacana spinosa*). Many a time I have discovered a spot suitable to its requirements along the river, but no Jacana appeared. So I conclude, that we can only include it on our lists as a casual summer visitor; for I know of but one taken here during the past two seasons. This example was secured along the river, half way to the coast by an old Mexican gunner, who had never shot a bird like it previously, in the many years he had hunted here. He brought the bird to the city, and sold it to a local merchant who had it mounted. I examined this bird in the flesh, and recorded the date of its capture—June 2, 1908.

After the Jacana, it was the Chachalaca that reigned in my thoughts—and I had better fortune in this case, meeting it possibly a month after my arrival. Working thru some heavy brush one cloudy day, I was startled by a prodigious flapping of wing, accompanied by chuckling, turkey-like notes, all issuing from above. Lo, behold!—sitting not fifteen feet over my head, in a patriarchal ebony tree, were ten or more of as stupid looking aves as ever I gazed upon. My presence had caused this commotion, but no flight was resorted to, until I had shot into the flock. As already stated, the Chachalaca is no longer a common bird near here; and one may ride the country roads for many an evening, before its nocturnal notes sound in the ear. It is now seldom brought into market in numbers for sale, as was the case at the time Dr. Merrill wrote. The few that we do find for barter are live birds, mostly having been hatcht under a domestic hen—that being the fate of the eggs of any nest of the kind discovered here. Indeed, there must be more domesticated Chachalacas, varying in degrees of intermixture, than wild

ones, in the Valley today. It is a mystery what the inducements are for their domestication. I would prefer Mudhen at any time as food. The farmyard fowl and Chachalaca interbreed freely, at least in the first instance, and the resultant hybrids surprise one by their variety. The Chachalaca keeps close to brush most of the time. A favorite location is heavy growth surrounding a resaca (old river-bed ponds) where water can be found easily. The muddy edge of the resaca usually yields ample proof of the past presence of the birds in the countless imprints of feet. Old residents claim that the cold wave of 1898 had something to do with the present scarcity of the Chachalaca. On that fated day in February, when the temperature fell to 11 degrees above zero, and snow covered the ground for the entire day, thousands of Chachalacas perished, along with unnumbered other wild and domesticated animals.

The Bobwhite of the region (*Colinus virginianus texanus*) is common thruout the Valley, even entering the city limits when the bottoms are flooded; but it is not sought after as game to the extent that the pigeons and doves are. Six species of *Columbae* are represented, and their great abundance is subject for comment. Immense flocks of Mourning Doves (*Zenaidura macroura carolinensis*) arrive from the north, in late fall, to winter. The Ground Dove (*Chamæpelis passerina pallescens*), and the White-winged Dove (*Melopelia asiatica*) also winter in greater or less abundance. But the White-fronted Dove (*Leptotila fulviventris brachyptera*) appears to be absent during the months of November, December and January. This dove approaches the true pigeons in bulk, but is more eminently terrestrial than any of the several pigeons, I am acquainted with. The White-fronted Dove is a slow moving bird on the ground and quite unsuspecting; and as it generally prefers to feed under growth of some sort, proves an easy target for the pot-hunter. They seldom flock, rather preferring to remain in pairs at all times. They feed almost entirely on small herb and grass seed, rarely partaking of the mesquite or ebony bean. I have found them to breed only during May.

The Green Jay (*Xanthoura luxuosa glaucescens*) ranks above all its North American cousins in plumage, tho not in bearing. I have yet to find a species of crestless jay that is free of cowardly disposition or sneaky manner. It is born in them. The crested members of this group, as most of us well know, are no disciples of uprightness, but they can hide their faults, in large degree, by a dignified appearance. Unluckily, for the Green Jay, his feathers seem to accentuate his sins. It is a common bird west of Brownsville, but to the east of town is quite scarce—and I have never heard of it at the coast. Northward it extends to the Rio Colorado in limited numbers. It is another resident species, most at home in heavy growth along the river; altho from there it will often wander on foraging expeditions, even inspecting rural barnyards when hunger be pressing. The Green Jay is the worst gourmand in its family; and this failing often causes it to lose its liberty. Its plumage makes it very attractive as a cage bird, and to secure one only requires a wicker cage, set in a conspicuous place and baited with meat of some kind; fitted with a trap door worked by a string held by some hidden Homo, who possesses the instinct to pull the string at the opportune moment. Captivity does not curtail the Jay's appetite, and they have been known to accept food immediately after being trapt. Indeed, this bird will eat all the time if food be accessible; and the indulgent owner finds it a matter of difficulty to keep the bird alive more than a week, but such individuals as are fed with discretion, live to make interesting, altho noisy pets. In a wild state, the Green Jay is suspicious as becomes the tribe, tho as a rule it falls to a ruse quite easily. If one be shot, the balance set up a din that can ordinarily only be stopt, either by shooting them all or decamping from the

neighborhood. What do they forage on? Well, during the nesting time for small birds I judge upon Thrashers, Orioles, Sparrows, Wrens, Chats, Mockingbirds, etc., both in the embryo and down; at other seasons, mostly on seeds and insects. In winter the seeds of the Ebony (*Siderocarpus*) is the main reliance; also in less quantity the fruit of the Palmetto, to secure which they will travel far into the open. The only other bird of doubtful scruple here is the generally but sparsely distributed White-rumped Shrike (*Lanius ludovicianus excubitorides*). Its presence is only conspicuous during the winter months—when bird life has reached a low ebb; a condition that should be comprehended as referring to a section, where aggregate numbers at minimum, at least equal the maximum of a northern area, excluding therefrom the migratory element. This shrike shows the usual characteristics of its tribe, altho there can be small doubt that it destroys fewer birds at the southern edge of its habitat than at its northern extension, because, even in winter insects in numbers are active here—and bug provendor is much preferred.

While yet a boy I came into possession of a copy of "Coues' Key" in which, as you may be aware, he alludes to the Audubon Oriole (*Icterus m. auduboni*) as distinguished by superiority of voice, and wealth of plumage. For many years I could recall the description there given of the species, but eventually as the years crept on, the account grew dim. Several years spent in the southwest and Mexico failed to bring the bird to light; so it remained a stranger to my eye until one breezy day last January, when it whistled announcement of its presence from a tall hackberry—and then it was, that I could count a personal experience with all of our American orioles. A student with limited time for observation, might include it in a list as "not common"—and yet, with adequate opportunity to gain a knowledge of its habits, one may uncover the bird in its haunts at any time. A thick mesquite growth is the ideal location here; failing that, any grove that contains a number of hackberry trees, the fruit of which all Orioles seem to like. The mesquite harbors several insects—moths and beetles, dependent for substance and life on this tree alone; and these furnish an ample and agreeable food for the Audubon Oriole, both in winter and summer months. Several times I have discovered seeds of mesquite in this bird's stomach; and in winter the plumage of the head is much smeared by nectar from some flower (perhaps mesquite). They visit the Ash, (*Fraxinus*) frequently when the tree is flowering. The Audubon Oriole is somewhat difficult to approach out of the mesquite, but within it, quite otherwise. They are usually seen in pairs, and if one be shot and but wounded, its mate generally comes hurriedly to the call of distress, and evinces such devotion that, if one be disposed, it can easily be secured. As yet I have no basis upon which to eulogize their singing. True, they have a whistle that is clear and penetrating, like a majority of the Icteridæ, but few real vocal attempts have been witnessed. It is claimed to be a favorite cage bird—maybe so, altho I would like to know just where. I think I can recall seeing several in captivity in Mexico, and a few more in and about Brownsville, but there are twenty other species of birds found in the native's homes more often than the Audubon Oriole. Sennett has pretty well described its breeding, tho I have found it usually to be nesting in early April, and the mesquite is selected as a nesting site.

The Sennett Hooded Oriole (*Icterus cucullatus sennetti*) is an intrepid little bird, with a fondness for both urban and rural conditions, which is very fortunate, as allowing our townspeople daily opportunity to appreciate the handsome creature. After arriving, which is about March 13, they spend five or six weeks enjoying life, before settling down to housebuilding. They prove conscientious parents, raising at least two, and sometimes, three broods during the season. The palmetto

usually holds the nesting site, and wherever there is one growing within town, it is pretty sure to be drafted as a Hooded Oriole's domicile. During the period between May and October, they are the most conspicuous, and among the commonest birds of town. To raise eight to twelve young during a season, means hustling for parent birds, and I attribute the scarcity of 'bugs' in our city garden to a pair of these Orioles.

A word or two of the other three Orioles that can be listed from here. The Baltimore (*Icterus galbula*) is strictly a migrant, appearing for a few days only—this year, on April 24 to 27. The Orchard Oriole (*Icterus spurius*) arrived ten days earlier, and was very abundant for two weeks; then the majority past on. Examples taken of the Orchard Oriole were in all conditions of plumage; and it is worthy of note that some extremely small males were secured in adult plumage. These may possibly have been birds that would have nested here. The Bullock Oriole (*Icterus bullocki*) is rare at Brownsville, tho fairly common at Hidalgo, and from there up the river.

If a visitor arrives in the Rio Grande country during the late fall or winter, or even in early spring, he will find blackbirds the most conspicuous feature of the landscape. In Brownsville he will early notice the Great-tailed Grackle (*Megaquiscalus major macrourus*) or Jackdaw, as the populace calls it, in possession of the streets, competing with the somewhat awed, and as yet, not numerous English Sparrow, as scavengers of the roadway. It is a very noisy bird, but with most amusing actions at times. I can recall nothing in bird life appearing more ridiculous than a male Grackle strutting about on a windy day, with his super-abundant length of tail blown to right angles with the body. They do much damage to the agriculturalist, but they also work him a great deal of good. He is similar in habits to the Crow of the north, but possesses considerable more bravery, and shows not the least fear of man. During the breeding season the Grackles are almost entirely absent from the city, but at the date of writing (October 1) have returned in numbers. Just now, several are sharing with us the nuts of a pecan tree growing in our yard. They are able to crack the nuts easily by hammering them against the trunk of the tree. They also love figs, and about country homes take heavy toll. Corn too, falls within their bill of fare. However, I would allow them to go free on this charge, as they balance up accounts by following the plow of the farmer and destroying the many dormant insects then uncovered, that might prove destructive later in the year. We have Grackles by the thousand, but Red-winged Blackbirds by the tens of thousands. This assemblage might be supposed to breed in this section. I have made it a point during the past year to secure a series of Redwings, which were forwarded to the U. S. National Museum for identification, and all were returned labeled (*Agelaius phoeniceus richmondi*). The breeding range of this subspecies within our boundaries comprises only this valley and adjacent coast so it is very possibly a case of reversion of the usual direction of migration which brings many of these birds to us each winter from Tamaulipas, and other parts of eastern Mexico. The great majority have disappeared by the middle of April.

Many Cowbirds join with these hordes of Redwings, and are mostly composed of the common eastern species (*Molothrus ater*) and its western subspecies (*M. a. obscurus*); but about March, such individuals of Red-eyed Cowbird (*Tangavius aeneus involucratus*) as have remained are heavily reinforced by southern immigrants, and a month later it becomes the most abundant Cowbird. The Red-eyed Cowbird haunts corrals and barnyards much as other cowbirds do but they make a finer appearance with their erectile neck-ruff. Sometimes, in early spring morn-

ings, before the dew condensed on the roofs of the city buildings has been dissipated by the sun, I have observed them searching for the minute insects that the moisture held confined.

Meadowlarks (*Sturnella*) are fairly numerous during the warm season, and very abundant in winter months. During the cold season, both Western (*S. neglecta*) and the Texan (*S. magna hoopesi*) Meadowlarks occur in large flocks, but as a rule, the species remain separate. Most of the Western Meadowlarks disappear in April, as also does a good percentage of the Texan variety, but the individuals of the latter species that remain outnumber the other twenty to one. Three or four crippled Meadowlarks, that were taken last winter all showed a condition of semi-melanism.

An intense interest is aroused in studying the giant flycatcher of our North American list, the Derby (*Pitangus sulphuratus derbianus*)—firstly because it is a really imposing bird, and brightly adorned for a flycatcher; and secondly, a bird possessing a large degree of individuality. While not ultra-pugnacious like the Kingbird, still they do not particularly prize a peaceful atmosphere, sometimes taking the offensive for the sole pleasure of it. They rarely quarrel among themselves, but maybe this is only on account of their being too thinly dispersed within our territory to impinge upon each other's rights. On one occasion this year, a Derby Flycatcher was noticed far from timber, pursuing insects from a fence running parallel with the public road—but such instances are rare. Apparently it is the only flycatcher that breeds in heavy brush or timber within this Valley, unless certain of the Empidonaces are found to be local breeders. Preliminary attempts at nest-building consume a month in time before the real work begins; which must nearly exhaust their energies, judging from the size of nest they build. The Derby Flycatcher is another of our perennially mated species, noisy during the breeding season, but rather quiet thereafter. Generally speaking, whenever I have come upon them it was to find them with head feathers erected. They appear no more suspicious of man's presence than the smaller tyrants; and when disturbed are likely to seek a new perch but a few feet distant from their former position.

I have found only three species of flycatchers here during the winter months, the Derby Flycatcher, the eastern Phoebe (*Sayornis phæbe*) and its western congener the Say Phoebe (*Sayornis saya*). Both species arrive almost simultaneously during the last days of October; and each take to their particular type of hunting ground—the Say Phoebe to the open semi-arid tracts, while the common Phoebe hovers about edges of copses and gardens. The Say Phoebe while here proves the shyer of the two species, and is also the least numerous. Both leave quite early, the departing dates this year being February 19 for the Say, and March 29 for the eastern species. It is possible that the Vermilion Flycatcher (*Pyrocephalus rubinus mexicanus*) and Least Flycatcher (*Empidonax minimus*) may also be found in winter, especially the last named bird, as a record exists of its having been taken at Point Isabel on February 7, 1880. But my careful search for it as such has as yet proved fruitless; in fact I find the genus entirely unrepresented here for more than six months of the year. The Green-crested Flycatcher (*E. virescens*) the first representative to appear in spring, did not appear this year until May 7. The Valley is a meeting ground for both Pewees (*Myiochanes*) but the eastern species (*M. virens*) is the prevailing type, and the only one to breed, I believe. *M. virens* appeared this year on April 8. Pewees, however, are seemingly not numerous at any time, outside of a few weeks in April. One of the tardiest migrants this past spring was the Olive-sided Flycatcher (*Nuttallornis borealis*) which crossed the Rio Grande into our country on May 12. The number of them was consider-

able, every tree with a dead top, quartering one or two for the two days they spent with us. The genus *Myiarchus* opened the present season on March 12, when the Great-crested Flycatcher (*M. crinitus*) appeared. A single individual was seen, that died to verify a record that would otherwise have been open to doubt, owing to the Valley also being within the habitat of the Mexican Crested Flycatcher (*M. magister nelsoni*). This species was not recorded until April 24, tho there appears good reason to suspect that it really was present before this, but owing to the abundance of Great-crests by that date, was lost sight of. By the first of May the prevailing *Myiarchus* was clearly *M. m. nelsoni*, tho a few *M. crinitus* undoubtedly remain to breed. Regarding the Couch Kingbird (*Tyrannus melancholicus couchi*) I have not much to state. It quite resembles the other western kingbirds in appearance and habits, tho perhaps is more noisy than either, if that be possible. It arrives here before the middle of March and immediately disperses over the country, tho generally returning to a somewhat secluded location to build its nest. The elegant Scissor-tailed Flycatcher (*Muscivora forficata*) arrives with the Couch Kingbird, and thereafter is a most conspicuous object about cultivated fields and roadways. It has the somewhat unusual trait, among flycatchers, of feeding much on the ground; and in some instances after capturing its prey in the air will descend to the ground rather than to a perch to consume it. The plumage is renewed in late summer, and early fall specimens are the most perfect of the year.

Vireos are quite a feature of every grove—that is the Small White-eyed Vireo (*Vireo griseus micrus*) can claim to be, for it is a permanent resident; and its cheery note is a familiar sound in woodland strolls during the winter and spring. At least a pair domicile in every grove or group of trees, and nidification starts in March; but they do not always succeed in raising progeny on first attempt, as the piratical Green Jay seems ever at hand, ready to swoop down on the unguarded nest. It seems strange that to date I have taken no examples of the eastern form (*V. g. griseus*) but perhaps this is another instance where a northern and eastern species migrates across, rather than around the Gulf. The Solitary Vireo (*Laniivireo solitarius*) stays with us during the period included between December 1 and April 15. Their numbers are limited and never more than three or four are to be found at a time. They are most frequent in low brush or on partly cleared land.

Last year the autumnal migration reached a maximum on October 28, after a "norther" lasting several days. Both land and water birds seemed to have been forced south in a hurry. And that the storm must have been severe, even in central Texas, seems evident by the immense flocks of Texas Pyrrhuloxia (*Pyrrhuloxia s. texana*), Gray-tailed Cardinal (*Cardinalis c. canicaudus*), Cassin Sparrow (*Peucaea cassini*), and even Golden-fronted Woodpecker (*Centurus aurifrons*),—true southerners, none of which are common north of Texas, that suddenly appeared. It was on that date I secured my only example of the Western Tree Sparrow (*Spizella m. arenacea*) feeding among the marsh grass, so abundant near the coast, in company with a medley of sparrows. Other noteworthy initial fall records taken at Point Isabel were: Belted Piping Plover (*Ægialitis m. circumcincta*), Nashville Warbler (*Vermivora rubricapilla*), Orange-crowned Warbler (*Vermivora c. orestera*) all on October 28; Hermit Thrush (*Hylocichla g. pallasii*), Black-throated Green Warbler (*Dendroica virens*), and Lark Sparrow (*Chondestes grammacus*), on October 29; and Franklin Gull (*Larus franklini*), during the week beginning with October 21. While here this fine species was much in the company of the several species of Terns represented, hunting in their company over the coast marshes. The Western Sandpiper (*Ereunetes mauri*), and Magnolia Warbler (*Dendroica maculosa*) were taken on the 22d, the Redstart (*Setophaga ruticilla*)

and Snowy Plover (*Ægialitis nivos*a) on the 24th, the Red-backed Sandpiper (*Pelidna a. sakhalina*) and Sharp-shinned Hawk (*Accipiter velox*) on November 3, the Chestnut-collared Long-spur (*Calcarius ornatus*), on November 6, the Sprague Pipit (*Anthus spraguei*), and Nighthawk (*Chordeiles virginianus*) on the 8th; while a flock of about fifty Mountain Plover (*Podasocys montana*), the only ones seen during the entire year, was observed on November 11.

The Texas Horned Lark (*Otocoris a. giraudi*) is a characteristic bird of the coast strip, and very abundant at all seasons of the year around Point Isabel, but I have rarely noted it straying more than half a mile inland. Its usual habitat is a sandy stretch along the bay, of perhaps five hundred feet breadth. They molt in September, and wear the complete new plumage by October 15. No other variety of Horned Lark seems to occur here. Many Black-throated Sparrows (*Amphispiza bilineata*) are to be seen within the Lark's restricted range, dwelling contentedly among the Opuntia cactus and marsh-grass. I mention their presence, because some doubt appears to exist relative to their actual presence along the coast, where really they are more numerous than about Brownsville. The Cactus Wren (*Heleodytes b. couesi*) too, adds its presence to this littoral, and is not a well distributed species outside of it. Most Cactus Wrens had the molt unfinished, even at as late a date as December 1.

The heavy growth of the marsh-grass near the mouth of the river proves very congenial to the Cassin Sparrow, and it is an ever present species, particularly after September. My previous acquaintance with this species was in Arizona. In that territory they were met with only now and then, when they kept persistently to the high grass in arroyo bottoms. Here tho the grass is high, it is in thinly scattered bunches, allowing a much easier observation of the bird as it passes from one clump to another. Many Grasshopper Sparrows mingle with the species just mentioned, but are equally as numerous up the Valley. All taken thus far proved to be *C. savannarum bimaculatus*. In fall many Savannah Sparrows join in populating these stretches of coast, and of them we have both the eastern (*Passerculus s. savanna*) and western (*P. s. alaudinus*), tho the last named is the prevailing type. I have looked in vain for the Texas Seaside Sparrow (*Ammodramus m. sennetti*). Mr. Frank P. Armstrong informs me that it does occur within our scope however, as he found it on two or three grass-covered islets near the mouth of the river. This fall however, I am positive none could have existed thereon, as the locality was entirely inundated for some weeks.

No Texas Sparrows (*Arremonops rufivirgata*) dwell along the coast—none until a point ten miles inland is reached. The superficial resemblance of this species to the Green-tailed Towhee (*Oreospiza chlorura*) is particularly noticeable where individuals of the Texas Sparrow are found with the dark-brown stripes of the crown more or less coalescing with the median olive-yellow stripe. In actions too they are much alike. The Texas Sparrow is a quiet bird that passes nearly all its time on the ground, within cover of some sort. The click-like call note resembles that of the Cardinal.

It is hard to see why the Texas Pyrrhuloxia should be so meagerly represented in the Valley inland, when it is so abundant at the coast. Fifty of these birds may be observed in a morning walk near the Gulf, while it is no unusual occurrence for two or three days to pass, without seeing one while collecting in the vicinity of Brownsville. They are naturally a shyer bird than the Gray-tailed Cardinal, tho more communistic, going about in small flocks, at least during the winter months. The male is the more suspicious; and there seems to be markedly fewer of them than the duller-colored females. They are rather hard to follow up when

disturbed, on account of considerable flights taken at short intervals. Tho often found feeding upon the ground, they are much less terrestrial in habit than the Cardinal. Mesquite beans form a favored food during a portion of the year. A bird with a beak resembling *Pyrrhuloxia*, tho copied on a miniature scale, is the Morelett Seedeater (*Sporophila moreletti*). I have had much pleasure and some disappointment in the study of this species, for at present it does not seem to be as generally distributed in the Valley, as in former years. I found no individuals until the early days of spring—about March 26, when a few arrived. Their distribution here is sporadic and I discovered several locations which they resorted to generally, while the intervening sections were entirely avoided. In the spots they favor a small bush grows which produces a small round fruit with a seed in the center that bears considerable resemblance to flax. This seed the Seedeater is extremely fond of, and in a dozen or more stomachs examined hardly anything else was found. The Seedeater as a rule, keeps in small flocks up to the nesting season, which is indefinite, and must cover at least three months. I have not succeeded in finding a single specimen of the male bird with any considerable quantity of black in the plumage, within the State, tho a number of the males secured, were sexually fully developed. *Sporophila* deserves systematic study for, as Dr. C. W. Richmond states, in a letter recently received,—“they (Texas and Tamaulipas examples) are now supposed to represent a form different from those (*S. moreletti*) of Central America and southern Mexico, in not having the black back and black pectoral collar; but exist in a plumage not to be distinguisht from the immature plumage of the southern form.”

The finches are so extensively represented here, that it will not be practical to dwell upon additional species; but better to pass to a brief review of the warblers that occur almost entirely as migrants. Several species, however, do breed, and of these we choose to speak of the Sennett Warbler (*Compsothlypis pitiayumi nigrilora*) which appears early in March, when its cheery song helps to add to the already considerable volume of vernal music. Even with the assistance of the oft repeated notes as a clue, the Sennett Warbler is difficult to discover, for like nearly all of the family it is very active, keeping to the highest parts of trees, and playing a hide and seek game among the hanging moss (*Ramalina*) that drapes most of the arborescent growth. Therefore, it usually involves tiring use of one's neck muscles to locate any. Directly after appearing here, they commence building the nest which is tucked within the strands of moss. At as early a date as March 15 I have observed them at the work. The completion of the nest is coincident with a decline in the song which soon after practically ceases, making the apprehension of the bird's presence more difficult than ever.

Some of the warbler tribe winter with us, as the Audubon Warbler (*Dendroica auduboni*), Myrtle Warbler (*D. coronata*), and Nashville Warbler, and probably the Black and White (*Mniotilta varia*), which abounds in the earliest days in March. The two first named species winter by thousands, the mesquite at that time always swarming with them; while the Nashville Warbler, in somewhat limited numbers, resorts to the scraggy undergrowth composed of Ebony and Acacia. April is the month here, for warbler variety. May, however, furnisht several interesting records this year such as Bay-breasted Warbler (*Dendroica castanea*), a species that seems to have been overlookt by previous observers in the Valley. It appeared on May 7 in company with the Blackburnian (*D. blackburniae*), Magnolia, Wilson (*Wilsonia pusilla*), and Canadian (*W. canadensis*) Warblers. The Blackburnian Warbler first arrived on May 4, seemingly a very late date in view of the fact that its appearance has been noted in the Great Lakes region, at an earlier date (May 2).

A single specimen of Mourning Warbler (*Oporornis philadelphia*) was taken on the same day. I should have included the Yellowthroats (*Geothlypis*) among wintering species, but I am not certain but that at least one of the forms that winters can also be claimed as a summer resident. A number of Yellowthroats taken between December and May, have been identified as belonging to *G. trichas trichas*, and *G. t. brachidactyla* by Dr. Richmond.

Wrens are well represented—winter and summer. The Lomita Wren (*Thryothorus lomitensis*) favors the dense woods of large growth, foraging among lianas, and the basal portions of trees; the Texas Bewick Wren (*Thryomanes b. cryptus*) prefers low scrub or chaparral, and the eastern House Wren (*Troglodytes ædon*), while wintering here, chooses the immediate vicinity of dwellings and hedgerows. Southern Texas rivals Arizona in affording congenial conditions to thrashers, and our two species, the Sennett (*Toxostoma longirostre sennetti*) and Curve-billed (*T. curvirostre*) are common residents. The Sennett Thrasher dwells in whatever section of the Valley supports sufficient arborescent growth; while the Curve-billed lays claim only to open spots, cactus grown or otherwise. Thus both have their territorial rights well defined. The Western Mockingbird (*Mimus p. leucopterus*) ranges over the domain of both thrashers, which is the cause of some strife about nesting-time, and much rivalry for vocal superiority. The Mockingbird hesitates not at all to snatch many strains from the original efforts of the thrashers. Thrashers are very early nesters, and during wet years, raise three broods during the season. Both species dwell along the coast, but owing to lack of any considerable growth there, the number of Sennett Thrashers is limited.

Having but one true Titmouse, the Black-crested (*Bæolophus atricristatus*), we especially appreciate him, tho he is omnipresent, even into the heart of the city. They inspect any object of size, that may arouse suspicion of harboring caterpillars or other insects. They are very fond of the caterpillar of the butterfly (*Libythea bachmanni*) which so persistently attacks our hackberry trees, as to have surely defoliated them this summer, but for the combined efforts of the Titmouse and Sennett Oriole. The Black-crested Tit is rarely silent, the usual notes being a continuation of sounds like "pete-chee-chee-chee; more rarely "peter-peter". By April the young have appeared on the scene. The Verdin (*Auriparus flaviceps*) adds another to our resident list, but is not very numerous until the coast country is reached; or in the opposite direction, until one arrives a considerable distance up the river. Our Gnatcatcher is the Blue-gray (*Polioptila caerulea*), a well distributed resident, preferring the mesquite and ebony growth.

In lower Texas at least, the application of Texas would be better applied to the Golden-fronted Woodpecker, than to the bird (*Dryobates scalaris bairdi*) bearing that name. The former is a much more conspicuous, as well as more numerous species, withal showing indifference to man's presence that throws even the unsuspecting little *D. s. bairdi* into the background in this respect. The Golden-fronted Woodpecker is often to be seen within city limits, even nesting there. Just as these lines are being written several are sharing a pecan tree in our yard with the Grackles—each producing plenty of noise. They also search roofs and porches, sometimes persisting in a vigorous tattoo upon such objects, until the disturbed owner finds it necessary to dislodge them. At Point Isabel where trees are scarce they follow habits of the Flicker, feeding on the ground upon the multitudes of ants. Like the Gila Woodpecker (*Centurus uropygialis*) they have a failing for the ripe fruits of *Opuntia* cactus; and in late fall, it is difficult to secure specimens free from the fruit's purple stain. The Texas Woodpecker is well known to us also, but as it rarely ventures into the city, is of little import to the casual observer.

The hummingbirds listed by me have been the Ruby-throat (*Archilochus colubris*), a migrant of the last few days in March, and again toward the end of September; and the Buff-bellied (*Amizilis cerviniventris chalconota*) that arrives a week later and remains thru the warm season. A beautiful native tree, the Anacahuita (*Cordia boissieri*), with large white flowers, is a favorite with both of these species. Also, I find that the Buff-bellied Hummingbird is a frequent visitor to the scarlet blossoms of a bush (*Erythrina*), a shrub found here as an undergrowth. When searching for hummingbirds in such localities I have frequently disturbed the diurnal slumbers of the Parauque (*Nyctidromus albicollis merrilli*). As a rule, the Parauque will not seek flight until approacht within a yard or so; then only to circle about several times and alight within a hundred feet radius. Few are to be seen during the first two months of the year, when their presence can only be voucht for by my having on a few occasions detected the familiar notes. Notwithstanding this scarcity early in the season I have taken fully feathered juveniles during the last week in March. Outside of town they are the most frequently observed of the Goatsuckers. Within the city, hundreds of Texas Nighthawks (*Chordeiles a. texensis*) are found nearly thruout the year; and in proper season nest upon the flat roofs of which there are many here. The Chuck-will's-widow (*Antrostomus carolinensis*) is well known as a migrant, and a few may even remain to breed, as a bird was secured on August 23 of last year.

Roadrunners (*Geococcyx californianus*) will be found where conditions suit, but the number that one will find in a given period is much less than farther west. The custom of using certain portions of the body of the Roadrunner as a palliative in fevers, by the Mexicans is not rare.

Harris Hawk (*Parabuteo u. harrisi*) is the commonest of the diurnal birds of prey within the Valley. Next in numbers are the Sennett White-tail (*Buteo a. sennetti*) and the Sparrow-hawk (*Falco sparverius*). The Zone-tailed Hawk (*Buteo abbreviatus*) is fairly well distributed as a summer visitant, but none have been seen during the winter time. Its preference for heavy timber exceeds that of any other species of hawk found here. On rare occasions an Aplomado Falcon (*Falco fusco-carulescens*) will appear about the city; and more often at Point Isabel. At a locality half way between the two points they are quite common among the tree yuccas that grow on the sandy ridge comprising the section. Here lizards, snakes, and locusts abound upon which they feed. The coast is where to look for the Duck Hawk (*Falco p. anatum*) especially in late autumn, when they arrive in the wake of the waterfowl. The Osprey (*Pandion carolinensis*) and the Caracara (*Polyborus cheriway*) are residents of the maritime section but more of the last named species are seen as we proceed up the river. The usual roosting place of the Caracara here, is in the Palmetto, where they also generally breed; but those that can be found nesting are small in number compared to the birds present. Fish forms a greater percentage of their food than anything else. Our commonly present owls are the Texas Screech (*Otus a. maccalli*) and the Ferruginous Pigmy (*Glaucidium phalaenoides*); the former the more generally seen. Nests of the Screech Owl have been found only during the first half of May.

As this article has already stretcht beyond reasonable bounds mention of a number of interesting water-birds must be deferred until another time, tho in closing, I cannot resist making mention of the exquisite plumaged Roseate Spoonbill (*Ajaja ajaja*). It is to be seen at times in large flocks in the vicinity of Point Isabel, particularly during the months of August and September, and is termed "flamingo" by the people of that place who can speak the English language.