

to Monterey. Beechey then sailed for Monterey and spent five days (Jan. 1-5, 1827) at that port. On his second visit late in the same year, 1827, he remained three weeks (Oct. 29-Nov. 17) at Monterey, and two weeks (Nov. 19-Dec. 3) at San Francisco. It was during these two visits that the surgeon Dr. Collie collected the California birds which were brought back by the expedition. Thus Botta arrived at San Francisco just a month after Beechey had left that port the first time, and he was absent on his trip to Peru during Beechey's second visit.

The material obtained by Botta was important and formed the basis of the descriptions of several new species. Immediately upon his return to France in the summer of 1829 some of his birds evidently passed into the possession of the Duke of Rivoli as Lesson mentions that the specimens of the hummingbird and the roadrunner which he described that year were contained in the Rivoli collection and were brought back by Botta. These specimens were not labeled with the exact localities where they were obtained and consequently it is important to ascertain as accurately as possible where they were collected. The type localities of the Roadrunner and Anna Hummingbird are given simply as California in the A. O. U. 'Check-List' of 1910, but it is now possible to determine them more accurately. It is probable that the Roadrunner was collected in southern California, and, from the places mentioned above, the type locality may reasonably be assumed as the vicinity of Los Angeles or San Diego. Similarly, San Francisco may be accepted as the type locality of *Calypte anna* since Botta collected here longer than at other places and in the narrative of the voyage hummingbirds are especially mentioned among the birds obtained there in February, 1827.

The narrative of the voyage of the '*Heros*' by Capt. Duhaut-Cilly was published in Paris in 1834-35 under the title 'Voyage autour du Monde'. In 1837 an Italian translation in which were incorporated some notes by Botta was made by his father, Carlo Botta, the eminent Italian historian, and appeared under the title 'Viaggio intorno al Globo' in at least two editions, one published in Turin in 1841, and the other in Naples in 1842. A copy of the Turin edition of the 'Viaggio' is in the Library of Congress in Washington and a copy of the Naples edition is in the collection of Californiana in the Los Angeles Public Library. These works should be carefully examined to see whether they throw any further light on the California collections made by Botta.

Washington, D. C., July 8, 1917.

## SOME BIRDS OF THE DAVIS MOUNTAINS, TEXAS

By AUSTIN PAUL SMITH

THIS article deals with the more interesting of the hundred or more species of birds met with during a six weeks' trip (September 2 to October 16, 1916) to the Davis Mountains. This is the most accessible of the several small ranges which lie between the Pecos River and the Rio Grande, in western Texas. Leaving the Southern Pacific Railway at Marfa, Texas, one goes by auto-stage twenty-two miles to Fort Davis. This little town, charmingly situated at the very base of the mountains, at an altitude of slightly over 5000 feet, is distant about a mile from the opening of Limpia canyon, the principal

gateway into the Davis Mountains. Near the mouth of this canyon grow numbers of cottonwoods, flourishing by reason of the ever present moisture. Surface water is here flowing in goodly volume, although along the greater length of the course elsewhere Limpia Creek is, except during the rainy summer months, a creek in name only. A few water-holes generally persist, however, even in dry years.

About four miles up the canyon is the home of Mr. A. C. Prude, the owner of Limpia Ranch, including most of the lower half of the water course. It was here that I made my headquarters for the greater portion of my stay. It is a delightful spot in every way, and I was very loath to leave it. About twelve miles farther up, located in the oaks at an altitude of 6500 feet, is another large ranch named Highland Springs, where I stayed two weeks. Mount Livermore (8300 feet), the highest point in the range, is about ten miles distant from the ranch house. I experienced almost perfect weather during my visit in the mountains, while the protracted rains of the preceding summer had produced a maximum of vegetation.

I wish here to acknowledge my indebtedness to the Biological Survey, of the United States Department of Agriculture, for specific determination of many of the birds listed beyond.

**Helodromas solitarius cinnamomeus.** Western Solitary Sandpiper. Noted several times during the first half of September about the stock reservoirs at Limpia Ranch; also along Limpia Creek up to 6000 feet.

**Bartramia longicauda.** Bartramian Sandpiper. I have record of its occurrence September 2 and 4, in company with the preceding species.

**Cyrtonyx montezumae mearnsi.** Mearns Quail. People long resident in the mountains claim that up to within a few years it had been a common species. Several successive dry years, ending in 1916, had greatly reduced its numbers. I flushed a single bird September 26 while it was drinking at a tiny stream flowing in a deep canyon, at an altitude of 6500 feet.

**Columba fasciata fasciata.** Band-tailed Pigeon. This species was found in abundance in the oak region of the mountains. The acorn of a dwarf oak was its principal, if not entire, food source. Adults were molting during the period under observation (September 10 to October 6), and young, two-thirds grown but barely able to fly, were found October 3.

**Buteo borealis calurus.** Western Red-tail. The most common bird of prey of the higher mountains; recorded almost daily at Highland Springs Ranch.

**Aquila chrysaetos.** Golden Eagle. Texas records for this notable species are few. I sighted a bird overhead, October 2, at Highland Springs Ranch. I was told that it was of frequent occurrence in winter.

**Falco mexicanus.** Prairie Falcon. Several pairs dwelt on the cliffs bordering Limpia Canyon, hunting along the course of the stream.

**Speotyto cunicularia hypogaea.** Burrowing Owl. Locally common in foothill pastures on the south slope of the mountains, ranging up to 5500 feet.

**Geococcyx californianus.** Roadrunner. About the base of the range it was present in numbers; I found it occasionally at Limpia Ranch, ranging up to 6000 feet.

**Coccyzus americanus occidentalis.** California Cuckoo. An individual, several times sighted as it passed from tree to tree, was recorded September 12, along Limpia Creek at 5500 feet.

**Streptoceryle alcyon alcyon.** Belted Kingfisher. This species was not unusual at Limpia Ranch, but it is probable that the individuals noted were transients. The Limpia contains few, if any, fish, although tadpoles are plentiful, particularly in the stock reservoirs.

**Dryobates scalaris symplectus.** Texas Woodpecker. The most generally distributed, and most numerous, woodpecker in the mountains. It ranged into the pines, at least to 7300 feet altitude.

**Phalaenoptilus nuttalli nuttalli.** Poorwill. Seen almost daily during my stay at Limpia Ranch. Several times heard in early October at Highland Springs Ranch, at an altitude of 7000 feet.

**Aeronautes melanoleucus.** White-throated Swift. There are some rugged cliffs near the ranch house at Highland Springs Ranch, at the base of which several large springs issue. This produces an abundant growth of trees and shrubs, within limited areas, upon otherwise barren hillsides. About these cliffs on October 5, a large flock of Swifts was flying, descending at intervals to feed upon the minute insects swarming above the water's surface. They seemed to be frolicing, chasing one another high and low, through the foliage of the trees even, and were uttering strident calls every few moments.

**Selasphorus rufus.** Rufous Hummingbird. This was the only hummingbird present in any numbers during my visit. Of general distribution. Very few adult males were seen. Present at 6500 feet altitude October 3.

**Tyrannus vociferans.** Cassin Kingbird. Next to the Western Chipping Sparrow, this was the most abundant bird I encountered. It was everywhere at Limpia Ranch, and ascended to 6500 feet, at which altitude it was present October 6. Practically all were molting during September.

**Empidonax minimus.** Least Flycatcher. Occurred as a transient, September 2 to 18. Usually flushed from some low perch in the brush lining the Limpia.

**Empidonax wrighti.** Wright Flycatcher. Met with in the pine zone; also in cool brushy groves in the deeper canyons above 6500 feet. Last seen October 4. Individuals displayed great variation in the shade and amount of yellow on the underparts.

**Otocoris alpestris leucolaema.** Desert Horned Lark. Congenial situations for Horned Larks occurred on the many flat-topped hills of the range, but it was only during a trip from Fort Davis to Marfa that any were met with.

**Cyanocitta stelleri diademata.** Long-crested Jay. The numbers of this species are limited owing to the circumscribed area of the pine zone. Only once or twice was it found in the dwarf oaks that border the pines. Molt completed late in September.

**Aphelocoma texana.** Texas Jay. **Aphelocoma woodhousei.** Woodhouse Jay. The distribution of the several forms of *Aphelocoma* accredited to Texas is perplexing. *Texana* is reported as occurring west to this group of mountains, and should presumably be the breeding form, yet all specimens in the series I took seem typical *woodhousei*. They are very common and noisy in the oak regions from 5000 to 7000 feet. The molt was completed between September 15 and 30.

**Corvus cryptoleucus.** White-necked Raven. This species occasionally approached Fort Davis, and on the road between that place and Marfa it was to be seen any day. No ravens were seen in the mountains.

**Nucifraga columbiana.** Clarke Nutcracker. On September 10, near the base of Mount Livermore at an altitude approximating 7000 feet, I came upon a pair feeding in a leisurely manner in a scattered growth of yellow pine. I watched them for several minutes and was at times not more than sixty feet from them. I found them quite as noisy as is usual. This is perhaps the first record for the state.

**Astragalinus psaltria psaltria.** Arkansas Goldfinch. I never met with Goldfinches in greater numbers than about the corrals at Highland Springs Ranch. They were frequent at lower elevations as well. Young barely able to fly were recorded September 19, at Limpia Ranch. The breeding birds approached the form *mexicanus* in having dark backs, but nearly all individuals composing flocks at higher levels had the top of the head much darker than the mantle.

**Spizella pallida.** Clay-colored Sparrow. Mixed with the large flocks of Western Chipping Sparrow, that could be continually flushed from brushy coverts, were a number of the present species. It was not found after September, nor at an altitude greater than 5500 feet.

**Junco montanus.** Montana Junco. Found October 1 in Wahoo Canyon, one of the deepest and roughest ravines in the mountains, at an altitude of perhaps 6500 feet, feeding about loose piles of brush. The Biological Survey identified specimens taken as of this form.

**Aimophila ruficeps scotti.** Scott Sparrow. Oftener heard than seen. Quite vigorous in its nuptial song, until the middle of September. The nesting season must cover a

long period as on September 26 I flushed a parent from its nest containing four young with eyes not yet opened. On that same date there were birds of the year about, which retained only traces of the spotting on the breast indicative of the juvenile plumage. The adults, however, were just beginning to acquire new body and tail feathers when I left.

**Pipilo maculatus montanus.** Mountain Towhee. Fairly common above 6500 feet. Young, barely able to fly, were taken September 10.

**Guiraca caerulea lazula.** Western Blue Grosbeak. A conspicuous breeding species along the Limpia up to 6000 feet. Young able to fly only a few feet were found September 20. Departs by October 1.

**Spiza americana.** Dickcissel. A lone bird, perching in a low oak near the ranch house on Limpia Ranch, was secured on September 16.

**Piranga hepatica hepatica.** Hepatic Tanager. Not less attractive and far more abundant than either of its two relatives occurring in these same mountains. This species characterizes the lower edge of the pine zone. Its center of abundance was the site of the old government saw mill at 7000 feet altitude. The number of individuals present at times suggested that they were, perhaps, transients from the Guadalupe Mountains to the northwestward. On the last visit I paid to its haunts, September 6, it was still in evidence, but in diminished numbers. I recall seeing no males alive that had mixed plumage, and in the series taken there are none. It is possible that the immature birds had departed from the region before my first meeting with the species.

**Piranga rubra cooperi.** Cooper Tanager. Fairly numerous among the cottonwoods at the mouth of Limpia Canyon and occasionally ascending along the course of that stream to 6000 feet. An adult male taken September 20 had completed the molt into the fall plumage. This was the last record for the species.

**Lanivireo solitarius cassini.** Cassin Vireo. The heavy arborescent growth made possible by the spring on the hill slope above Highland Springs Ranch was a haven for several species of vireos. On October 6 a bird, noticeably different from the prevailing form (*plumbeus*) was secured. It was identified as *cassini* by the Biological Survey.

**Vireo huttoni stephensi.** Stephens Vireo. In the situation given for the preceding I found a few individuals of this small vireo on October 5 and 6.

**Dendroica aestiva sonorana.** Sonora Yellow Warbler. A tolerably numerous transient along the lower course of the Limpia from September 4 to 16. It favored thickets composed of desert willow and walnut.

**Dendroica townsendi.** Townsend Warbler. By far the most abundant member of the warbler family over the entire mountains during my stay.

**Icteria virens longicauda.** Long-tailed Chat. Due to constant moisture, a vigorous composite undergrowth covered the ground under much of the area of the cottonwood groves. Here Chats and Yellowthroats were at home. I shot an example of the former on September 20 with most of the feathers of the head and throat in sheaths and almost minus a tail.

**Mimus polyglottos leucopterus.** Western Mockingbird. Occasionally ventured by way of the Limpia Canyon up to an altitude of 5700 feet, but not abundant even about Fort Davis.

**Toxostoma curvirostre curvirostre.** Curved-billed Thrasher. Considerable interest is attached to the finding of this thrasher in the Davis Mountains owing to its altitudinal range. It was observed daily about the buildings at Limpia Ranch, its favorite retreat being the woodpiles and nearby vegetable gardens. Aside from this, I met with it only where patches of nopal (*opuntia*) grew. This cactus ascends nearly to 6000 feet and the Curve-bill does likewise. Adults were in ragged condition, with new body feathers appearing in patches, in September and early October.

**Thryomanes bewicki eremophilus.** Desert Wren. Common throughout the oak regions. Its actions and notes were not distinguishable from the other forms of this genus.

**Sitta carolinensis nelsoni.** Rocky Mountain Nuthatch. Another oak zone frequenter, likewise abundant. Occasionally enters the pines. Molt completed in September.

**Baeolophus atricristatus atricristatus.** Black-crested Titmouse. Often found with the nuthatches, but descending to a lower altitude.

**Penthestes gambeli gambeli.** Mountain Chickadee. Rather plentiful resident of the pine zone. While not shy it appeared to me as a more active bird than *P. carolinensis agilis* of central Texas; also possessing more penetrating call notes.

***Psaltriparus plumbeus*.** Lead-colored Bush-tit. ***Psaltriparus melanotis lloydi*.** Lloyd Bush-tit. The relative distribution of these two species in the mountains under discussion has not been well determined. The Lead-colored Bush-tit is much the commoner species, and ranges over the entire mountain range, wherever cover exists, up to the edge of the pines. Limpia Canyon is given as the type locality for *lloydi*, but, excepting perhaps in winter, that species rarely descends below 6000 feet. It is partial to the willow-like oaks on the more shaded slopes just below the pines. During September few bush-tits possessed full complements of tail feathers and some had none.

***Hylocichla guttata auduboni*.** Audubon Hermit Thrush. Three, possibly four, forms of this species are transients or winter visitants in western Texas. The above named form is the first to arrive, and was the only one met with during my stay. It was very common in suitable situations above 6000 feet.

*High Island, Texas, February 1, 1917.*

## A NEW RACE OF FOX SPARROW, FROM THE VICINITY OF MONO LAKE, CALIFORNIA

By JOSEPH GRINNELL and TRACY I. STORER

(Contribution from the Museum of Vertebrate Zoology of the University of California)

THE collections obtained in the Yosemite region in 1914-16 for the Museum of Vertebrate Zoology include series of breeding Fox Sparrows from both slopes of the Sierra Nevada. Examination of this summer material shows that two recognizable races are represented, the habitats of which are separated by the Hudsonian and Alpine-Arctic territory of the Sierran crest. Furthermore, the east-slope race is not referable to the Great Basin form *schistacea*, as might have been expected.

### ***Passerella iliaca monoensis*, new subspecies** Mono Fox Sparrow

TYPE.—Male adult, no. 26930, Mus. Vert. Zool.; Mono Lake Post Office, altitude 6500 feet, Mono County, California; May 21, 1916; collected by Joseph Dixon; original no. 4644.



Fig. 54. BILLS OF FOUR SUBSPECIES OF FOX SPARROW (*Passerella iliaca*); ALL NATURAL SIZE.

- a. *P. i. stephensi*, ♂ ad.; no. 20505, Mus. Vert. Zool.; Taylor Meadow, 7000 feet alt., Tulare Co., Calif.; July 19, 1911.
- b. *P. i. megarhyncha*, ♂ ad.; no. 25693, Mus. Vert. Zool.; ridge near Chinquapin, 7000 feet alt., Yosemite National Park, Mariposa Co., Calif.; June 10, 1915.
- c. *P. i. monoensis*, ♂ ad.; no. 26930, Mus. Vert. Zool.; Mono Lake P. O., 6500 feet alt., Mono Co., Calif.; May 21, 1916.
- d. *P. i. schistacea*, ♂ ad.; no. 9055, Mus. Vert. Zool.; head of Big Creek, 8000 feet alt., Pine Forest Mts., Humboldt Co., Nevada; June 24, 1909.