

## NOTES ON SOME BIRDS OF LOWER CALIFORNIA, MEXICO

WITH TWO ILLUSTRATIONS

By J. STUART ROWLEY

During the early summer of 1933, I had the pleasure of undertaking a rather extended trip through the peninsula of Baja California, Mexico, by automobile. This trip was made possible through the assistance of several institutions including the California Academy of Sciences, the San Diego Natural History Museum, and the Florida State Museum. I wish to express my gratitude to the several officials of these institutions and also to Vice-Governor Rodriguez and the Ruffo Brothers in La Paz, and to M. Marcel Réthaller of the Boleo Company at Santa Rosalía, all of whom were extremely hospitable and rendered valuable and appreciated service to us before and during our stay in Baja California.

Accordingly, with proper credentials, my companion, Mr. H. S. Kindrick, and I crossed the International border at Tijuana in early April. No attempt is made to record the observations of all the races of birds seen throughout the trip, but only of those concerning which noteworthy facts were obtained supplemental to the information given in Grinnell's paper entitled "A Distributional Summation of the Ornithology of Lower California" (Univ. Calif. Publ. Zool., 32, 1928, 300 pp., 24 figs.).

*Rallus beldingi*. Belding Clapper Rail. Through the cooperation of a native fisherman, an unusual Mexican who observed things in his daily routine other than fish, I was able to obtain, on May 3, a beautiful set of seven eggs, incubation commenced, from the mangroves near La Paz. This set is now in the collection of the Florida State Museum.

*Oreortyx picta confinis*. San Pedro Mártir Mountain Quail. Quite by accident, on June 11, a pack burro flushed a female from a nest containing ten eggs, incubation commenced, near La Grulla in the Sierra San Pedro Mártir.

*Lophortyx californica plumbea*. San Quintín California Quail. Several nests of eggs of this species were found, from near San Telmo to San Fernando. The nests were usually placed at the base of an agave, an abundant plant in that coastward strip, and many of the nests were found by carefully watching the exact spots whence the females flushed as we drove southward along the road. However, at San Fernando, where the vegetation is much different from that in the coastal country, nest locating was difficult. During our stay at San Fernando not one female quail was observed in the month of April, during our southward journey, with the exception of the individuals which were practically "kicked" off their nests. Males were plentiful, calling everywhere, but the females were apparently all commencing to incubate, and they remained on their eggs. I undoubtedly passed within a foot or two of many such incubating quail, completely unmindful of their presence as they would remain to the last second before flushing. Even a violent kicking of the brush under which a nest would later be found often failed to flush a sitting bird, as one nest containing twelve advanced eggs was found on a second "round" of such kicking.

Nests of the San Lucas California Quail (*Lophortyx californica achrustera*) were found at Miraflores in the Cape Region by this same "kicking" process, which is a tiring but effective procedure.

*Zenaidura macroura marginella*. Western Mourning Dove. According to Grinnell (p. 104) the breeding status of this species on the peninsula has been established as far south as Comondú, lat. 26°. I found this bird to be quite uncommon at Miraflores in the Cape Region during the month of May. While several pairs were observed at a watering place adjacent to camp, only one nest was located, that being typically constructed and placed in a low bush near fresh water. On May 12, the nest contained two fresh eggs, which were collected. Miraflores is approximately at lat. 23° 40', and this take proves that this species breeds to the extremity of the peninsula where fresh water is available.

*Cathartes aura septentrionalis*. Northern Turkey Vulture. Abundant visitors to our camp at Miraflores from dawn until dusk, patiently awaiting the opportunity to

seize flesh tossed from the skinning table. A nesting cavity located on a hill a few miles from our camp on May 17 contained two fresh eggs which I collected. This date, in comparison with breeding dates in southern California, is extremely late.

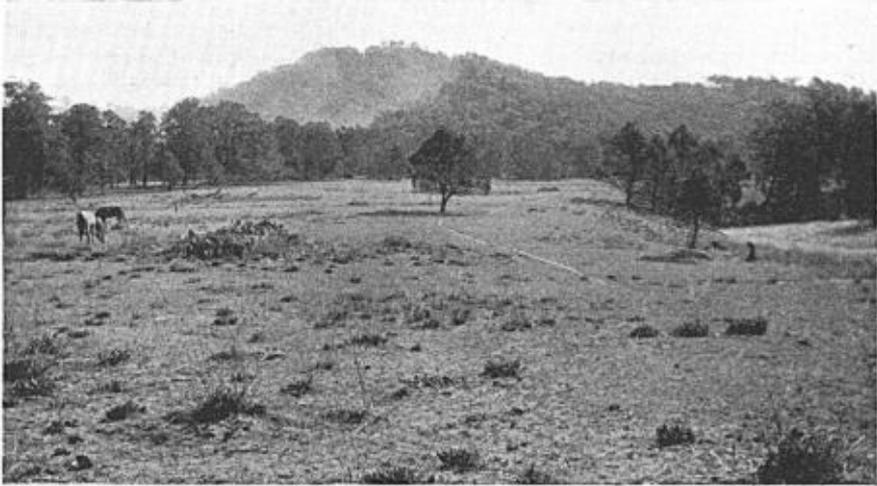


Fig. 32. La Laguna, Sierra de la Laguna, in the cape region of Lower California, Mexico.

**Parabuteo unicinctus harrisi.** Harris Hawk. While numbers of these hawks were seen throughout the peninsula, only three nests were located. One was thirty miles north of San Ignacio in a "joshua" tree and on April 24 contained two eggs slightly incubated; another near El Refugio, about lat.  $24^{\circ} 47'$ , in a cardon contained one slightly incubated egg on May 2; the third was found in a cardon at Miraflores and on May 17 contained three heavily incubated eggs.

**Falco sparverius peninsularis.** San Lucas Sparrow Hawk. While this hawk was seen rather abundantly, only five nesting cavities were located. Two held sets of two eggs, two of three eggs, and one of four eggs. All were in deserted woodpecker holes in cardons and in the topmost holes of each cactus. Also, each set represented a full complement, for incubation was well advanced. The sets were taken from May 11 to 15 in the neighborhood of Miraflores.

**Polyborus cheriway auduboni.** Audubon Caracara. Caracaras were well represented in the "carrion row" about our Miraflores camp. They had the vultures completely "cowed" and would often take a piece of meat away from a vulture. One caracara easily controlled the situation around a larger carcass where several vultures had been feeding, the vultures taking the background until the caracara had had his fill and departed. From May 8 to the 15th, inclusive, five nests were located near Miraflores, all containing eggs and all placed in crotches of cardons. No nests held more than two eggs and one contained only one; all were full complements.

**Pandion haliaëtus carolinensis.** American Osprey. Two recently occupied nests were found on the mainland, both placed in cardons about one-half mile inland from the sea-coast. One was located near San Xavier on Santa Rosalia Bay, and the other inland a bit from the shore of Concepción Bay, on the Gulf. These seemed of interest since cardons are apparently unusual nesting sites for this species. On the ground below these nests were quantities of fish remains.

**Genus Otus.** Screech Owls. Screech owls were noted from San Fernando, lat.  $30^{\circ}$ , south to lat.  $29^{\circ}$ . Two specimens collected June 8 at San Fernando seem referable to *Otus asio cardonensis* (according to H. O. Havemeyer, MS). One individual was heard calling at a point about forty-five miles north of Punta Prieta, lat.  $29^{\circ}$ . No more were heard or seen from this point southward until one was heard calling in the cardons of the mainland directly opposite San Marcos Island, at about lat.  $27^{\circ} 25'$ .

This occurred on the return trip and since our flashlight batteries were well exhausted, the pitiful flickering light was insufficient to catch a movement or object, and our bird was not secured.

In the Cape Region about Miraflores, Xantus Screech Owls (*Otus asio xantusi*) were rather plentiful. Elsewhere in the Cape Region none was seen, and it is my belief that they were locally abundant about our Miraflores camp because of the water there and therefore the food supply. Of over a dozen individuals collected, the coloration of plumage ranges from a light gray to a dark gray quite similar to the southern California form, *Otus asio quercinus*. Regarding body size in the specimens collected, I found that the females varied surprisingly, while the males were noticeably and more constantly smaller. Likewise, the egg measurements varied noticeably. Five sets of eggs, one of four, two of three, and two of two eggs, were taken near this camp May 8 to May 20 inclusive, from woodpecker holes in cardons. The sets were complete in each case; the smallest egg measured 27x32 mm., the largest 31x35 mm.

*Bubo virginianus elachistus*. Dwarf Horned Owl. Mention is made of this species for the fact that a set of two eggs, heavily incubated, was taken from a cliff at San Fernando on April 19. This date seems exceedingly late for horned owl eggs, and might have meant a second attempt at nesting for the year. A nestling was taken from a nest at Miraflores on May 8.

*Glaucidium gnoma hoskinsii*. Hoskins Pigmy Owl. Only one individual was met with, this being an adult female taken from a cardon at Miraflores on May 7. This bird is now number 63307 in the Museum of Vertebrate Zoology. While observers in past years have considered it rather common, I consider this owl to be a difficult one to secure and am of the opinion that it is a rare bird now.

*Micropallas whitneyi sanfordi*. Sanford Elf Owl. Locally quite common near Miraflores and around Santa Anita, in the Cape district. Being quite noisy during the early evenings, it was easy to secure a good series by means of very light shot cartridges at close range. No nests were located.

*Geococcyx californianus*. California Road-runner. Road-runners were noted everywhere at the lower elevations. Numerous nests with eggs or young were found, particularly in the Cape district. Three eggs usually constituted a full set. The average egg size was 29x39 mm.

*Dryobates scalaris lucasanus*. San Lucas Woodpecker. Two nesting cavities of this bird were found in cardons. One, found April 30 at the south end of Concepción Bay, contained five slightly incubated eggs; the other, taken on the same day near Comondú contained three eggs advanced in incubation. These two sets are now in the Florida State Museum and the W. C. Hanna collections, respectively.

*Centurus uropygialis cardonensis*. San Fernando Gila Woodpecker. Five eggs, fresh, taken April 22, and three eggs, slightly incubated, taken April 21, both in cardons, at San Fernando, are the only entries of consequence in my notes. These sets are in the above mentioned collections, respectively.

*Centurus uropygialis brewsteri*. San Lucas Gila Woodpecker. Eggs were found at San Bruno on the Gulf side in late April; at El Refugio on the Pacific side in early May; at Miraflores in the Cape Region in the middle and latter part of May. Of interest in comparing the breeding activities of the two mentioned races of Gila Woodpeckers was the fact that the birds to the northward as far as San Fernando seemed to start breeding earlier than those to the southward. At El Refugio on the Pacific side, adults of *brewsteri* were noted feeding half-grown young in the nest on the first of May, while at Miraflores the majority of birds had not even laid when we left there May 21. According to comparative climatic conditions, this seems strange.

*Phalaenoptilus nuttallii* subsp. Poor-will. Four specimens of Poor-will were collected. They are now in the collection of Dr. Louis B. Bishop, who comments on them as follows: "The poor-wills I compared with two *hueyi* I have and found a strange state of affairs. Your no. 1126, female, from Miraflores, and no. 1196, female, (from) La Laguna, I refer to *hueyi*. . . Number 1228 female (from) San Fernando is quite different and must be *dickeyi*, and, strangely, no. 1182, male, (from) Miraflores, belongs with the last and not with the other two. This is not at all according to Grinnell's distribution."

Specimen no. 1126 was taken on May 7, and no. 1196 was taken on May 24; no. 1228 was collected on June 8, and no. 1182 was collected on May 16. All the birds were

paired off preparatory to nesting but the sexual organs in each were not developed sufficiently to indicate breeding.

According to Grinnell (*op. cit.*) the race *dickeyi* belongs to practically the entire southern territory of the peninsula from the Cape district northward to about lat. 30°; and *hueyi* is stated to be restricted apparently to the Colorado delta region. According to the occurrences of these two races now cited, at dates just a few weeks prior to actual nesting, the case is somewhat confused; more actual specimens must be collected to determine definitely their relative distribution.

***Chordeiles acutipennis inferior.*** San Lucas Nighthawk. This bird was rather abundant near our camp at Miraflores, where several specimens were taken. Nowhere else in the Cape region were we able to secure specimens, although some were seen flying high in the Sierra de la Laguna. At San Fernando, to the northward, two specimens were taken on June 8. These, according to Mr. H. S. Swarth (MS), are referable to the race *inferior*. Apparently there has been some doubt as to the form occurring at this locality. These specimens (on which I carelessly switched the two respective labels) are now in the collection of the California Academy of Sciences.



Fig. 33. Summit of grade near San Fernando, Lower California. Note extension ladder for use in exploring holes in cardons. Cardons and cirios in background.

***Basilinna xantusii.*** Xantus Hummingbird. Four nests of this species were found, three from the vicinity of San Bartolo, about lat. 23° 45', and the other at Miraflores. Three contained eggs, the other held young about a week old. The three having eggs were placed on branches overhanging water, but the one with young was overhanging a dry wash, with no water for a good half-mile. A number of individuals were noted in the canyon toward the Pacific a few miles from Comodú, but no nests were found there.

***Sayornis saya quiescens.*** San José Say Phoebe. A full grown juvenal was collected on June 7, fifteen miles south of Punta Prieta, which settlement is exactly on lat. 29°. A nest containing three young was found in the ruins of the mission at San Fernando on June 8.

*Otocoris alpestris enertera*. Magdalena Horned Lark. A nest containing three fresh eggs was found at Santa Rosalía Bay on April 23. The bird was flushed by the roadside as we drove past. Horned Larks were rather abundant there.

*Aphelocoma californica hypoleuca*. Xantus California Jay. My notes show that on the last of April along the shore of Concepción Bay on the Gulf, many nests of this jay were found, and without exception all contained newly hatched young. Then, after crossing the peninsula to the Llano de Yrais on the Pacific slope, no nests were found occupied, but young were flying about in nearly full plumage (specimen of such juvenal collected there). When we reached Miraflores, in the Cape district, nesting activities were just beginning and from May 10 to 19, inclusive, at this locality eight sets of two eggs each and five sets of three eggs were taken. Two eggs seemed the more common "full set," with three eggs rather uncommon, while no nests were found to contain more than three eggs or young anywhere the species was observed. Upward of fifty occupied nests were located. To the northward, at San Ignacio, only one nest was found to hold even eggs, three fresh being taken on April 27; the majority of birds were apparently just building here.

Thus, in summing up my observations upon these jays, the nesting season along the shore of Concepción Bay on the Gulf around lat. 26° 45' was well advanced in comparison with nesting dates at both San Ignacio, near lat. 27°, and at Miraflores in the Cape Region at lat. 23° 30', while on the more temperate and cooler Pacific side near El Refugio (slightly below lat. 25°) the breeding activities were far advanced over those observed in any of the other localities. This seems the reverse of what one would expect; with warmer climatic conditions, nesting usually commences earlier. The same general conclusion was drawn with regard to the Gila Woodpeckers of the peninsula.

The most northerly point of observation of this jay was approximately twenty miles north of Punta Prieta, which is on lat. 29°. The smallest egg measured 20x27 mm., the largest 23x30 mm.

*Pipilo maculatus magnostris*. Large-billed Spotted Towhee. Two specimens, both males, were collected near camp at Miraflores on May 13. Later, at La Laguna in the Sierra de la Laguna, this bird was found to be very common, but no nests were in evidence.

*Passerina versicolor pulchra*. Beautiful Varied Bunting. Locally well represented about our camp at Miraflores the middle of May. Specimens were taken there.

*Vireo solitarius lucasanus*. San Lucas Solitary Vireo. One nest found contained four slightly incubated eggs on May 6. This was on San Bernardo Mountain on the Gulf slope of the Sierra de la Laguna. Strangely, young flying about were noted at La Laguna on the top of the range, while this set was taken at a lower elevation and on the warmer Gulf side.

*Vireo huttoni cognatus*. San Lucas Hutton Vireo. A nest containing three eggs, incubation commenced, was found on the sierra above Miraflores on May 10. Both this and the precedingly mentioned set of eggs are now in the Florida State Museum collection.

*Toxostoma cinereum mearnsi*. Mearns San Lucas Thrasher. In the vicinity of San Telmo where a number of nests were found, these were usually placed in cholla cactus. On April 15, nests were found with eggs; sets were of two and rarely three, from slightly incubated to well advanced in incubation. No nests were found with young. The smallest egg measured 20x25 mm., the largest 21x32 mm.

*Toxostoma cinereum cinereum*. Cape San Lucas Thrasher. I believe that this bird is by far the most commonly met with as a breeding species at the lower altitudes of the Cape region. Dozens of occupied nests were found, from San Ignacio southward, but only one was found to contain more than three eggs, this being a set of four from San Ignacio. The smallest egg measured 20x26 mm., and the largest 27x31 mm.

*Toxostoma lecontei arenicola*. Santa Rosalía Leconte Thrasher. My notes record the taking of a badly worn male of this race on June 7 at a point forty miles north of Punta Prieta and decidedly interiorly from the coast. This is forty miles northward of lat. 29° and is of interest as extending the range from a narrow coastal strip to half way across the peninsula interiorly. This specimen is now in the collection of Dr. Louis B. Bishop.

*Heleodytes brunneicapillus affinis*. San Lucas Cactus Wren. While this form

was extremely common throughout its range, of interest was the fact that of some thirty-five nests examined, none contained more than three eggs or young, with the majority holding two. The same held true for *H. b. bryanti* to the northward, particularly at San Fernando and at San Telmo. Two nests of *H. b. affinis* were placed in old woodpecker holes, one in a cardon about twelve feet up, and the other in a partly fallen "joshua tree" about four feet from the ground. Both contained eggs.

*Psaltriparus minimus grindae*. Grinda Bush-tit. Only one nest found; contained three slightly incubated eggs on May 9; on the sierra, back of Miraflores. While this bird has been reported as being commonly distributed, I was unfortunate enough to run across but few individuals in these southern mountains.

In conclusion, I found that for a goodly part of the mainland of Lower California (1) very little is apparently known about the actual nesting of most of the land birds; (2) and that breeding dates and localities are variable with seasonal climatic changes, depending upon the supply of fresh water, and this, in turn, regulates the food supply. For example, the case of Xantus Screech Owls just commencing to nest in the middle of May in the Cape region, I attribute solely to the matter of ample food supply. If early rains are sufficiently heavy to provide an abundance of water during the early spring, I believe these owls would be found breeding correspondingly earlier, in direct parallel with the other bird and animal life locally.

Furthermore, I think that this dry season of 1933 bore directly upon the fact that so many species of birds laid so few eggs per nest, simmering down to the all-important matter of food for sustenance per individual, plus more or less restricted breeding area and scarcity of nesting sites. This is proven at Miraflores where, while water was far from abundant, there were numbers of pools and springs. Within a radius of two miles from this water, birds were well distributed, as for instance again, the Screech Owls. But when one went ten miles from this water supply, even the Screech Owls were absent in the choicest looking cardon "stands."

In other words, the season of 1933 was a dry one, while the season to come might be a wet one; while I found screech owl eggs in the middle of May in 1933, one might be entirely too early or too late at this particular locality in another year.

(3) Acknowledging this uncertainty of dates and localities from season to season, successful collecting of eggs in this country is extremely difficult when coupled with the natural obstacles of travel and heat.

(4) Where water in any quantity exists, utilization of the soil is rapidly expanding by the natives. With the bird life naturally centering about the watered spots, it is inevitable that certain races of birds will become scarcer, or even decrease to the vanishing point as is apparently the case with the San Lucas Ani now. Every native we encountered in the rural sections was armed with a "sling shot," a weapon with which they are quite expert marksmen, using small round stones as missiles. By the word "natives," I mean youngsters of a few years up to men of fifty. On the list of persecuted birds are the smaller owls, cardinal, pyrrhuloxia, and brightly colored birds for which the youngsters, in particular, have an ever open eye. Also, I found that the Xantus Hummingbird is considered the target which elevates the "amateur" to that of "expert," and much pride is taken in "lifting" these little animated gems off branches.

*Alhambra, California, November 26, 1934.*