

from the eastward, for the skin seems identical in every respect with others from the Huachuca mountains, Arizona.

Psaltriparus minimus. California Bush-tit. Small scattering flocks were frequently seen in the pepper trees and cottonwoods close around the Springs.

Auriparus flaviceps. Verdin. A common bird, from a desert standpoint. Mr. Gilman has described its nesting in this vicinity elsewhere (CONDOR IV, 88).

Regulus c. cineraceus. Ashy Kinglet. Fairly common in the trees about the Springs, and also in brush along the ditches to the eastward.

Polioptila c. obscura. Western Gnatcatcher. Several were seen, and one shot for identification, close about the Springs. They were generally in the company of bush-tits.

Polioptila plumbea. Plumbeous Gnatcatcher. A common species, being found in pairs, or sometimes half-a-dozen within a few yards' radius, in mesquites, or any other sort of desert brush for that matter. The call-notes of this species are quite different from those of either of the others, but defy intelligible description. Mr. Gilman told me this species occurs to the westward about fifteen miles, beyond which he has not seen it. The black-tailed gnatcatcher is common at Banning and a few miles to the eastward. But he has never found the two species intermingling. There is apparently a hiatus of several miles left between their ranges where neither have been seen except for the single straggler recorded beyond.

Polioptila californica. Black-tailed Gnatcatcher. I secured a lone specimen, a female, on January first, two miles east of Palm Springs. I heard and recognized its call, and singled it out from among a scattered band of the plumbeous. The black-tail was being set upon and vindictively harried by a pair of plumbeous, which very plainly indeed resented its intrusion upon their domain. This bird was doubtless a straggler from the direction of Banning.

Hylocichla g. nana. Dwarf Hermit Thrush. Several observed in canyons along streams which make down from San Jacinto Peak.

Merula m. propinqua. Western Robin. A few, perhaps a dozen in all, were constantly present in the pepper trees about the Springs.

Sialia m. occidentalis. Western Bluebird. Found in flocks frequenting mesquite tracts where they were feeding on mistletoe berries. In Palm Canyon great numbers were in evidence among the giant palms. A dozen or more would be seen clinging to each pendant cluster of dates obviously attracted by the fruity outside pulp. While thus feeding upon the fruit of the palms, the noise made by the seeds dropping into the dry brush at the bases of the lofty trees was so great as to give the impression, before the true cause was discovered, that some large animal was trampling through the undergrowth.

Sialia arctica. Mountain Bluebird. Mr. Mailliard saw four near Palm Springs and secured two.

The Elf Owl in California

BY HERBERT BROWN

WITH the possible exception of rare stragglers I am of the belief that the Colorado river marks the western boundary line of the habitat of the elf owl (*Micropallas whitneyi*). I have reasons to think that this statement will hold good. In Arizona, during the nesting season, the natural home of the

elf owl is in the deserted woodpecker holes common to saguara or giant cactus of the desert region of the country. Strangely enough this plant (*Cereus giganteus*) also finds its western line of demarkation in the same stream. To the general observer the characteristics of the country, on either side of the river, are identical, but conditions, evidently, are different. On the Arizona side the saguara is widely distributed and is, frequently, of great growth, but in California it occurs only as stragglers in an unresponsive land. To locate the elf owl in California it became necessary to locate this cactus there also. For a time the location of one promised as many difficulties as the other. In reply to numerous inquiries, verbally and by letter, I learned that a few straggling specimens of the saguara were to be found in the Duncan Flats, or as it is known to some people, the Senator Mine Basin, between twenty and twenty-five miles north of here, on the California side of the river, and that others were to be found opposite Ehrenberg, also west of the river, about one hundred miles further north. So far as I now know there are none in the intermediate country.

Hereabouts the nesting season of *Micropallas whitneyi* may be said to commence about the end of the first week in May, and to continue at intervals throughout the month. Knowing this I had arranged to examine the cactus on the Duncan Flats on or about May tenth, (1903), but was delayed till the seventeenth. At that time the Colorado river was over-running its banks and travel was both difficult and dangerous, the intersecting sloughs being full of water and their bottoms slippery and uncertain. All told there are probably a dozen saguaras in the flats, and they are scattered over a radius of several miles. The large ones contained numerous woodpecker holes and because of their apparently worn exterior had the appearance of being occupied. The first one examined stood at the intersection of several small gulches; it was set with numerous arms, all woodpecker bored, and offered an ideal nesting place for numerous small owls, but to my surprise, the only life it contained was a nest of gilded woodpeckers (*Colaptes chrysoides*.) Although I cut into and carefully examined every promising hole I did not find even a feather of the bird I was looking for. Because of my long familiarity with this owl and its ways I generally know where to expect it, but here the best of indications went for nothing. Such a tree in southern central Arizona would have been richness itself. Although I examined everything in that direction I found nothing till I reached the last cactus in the upper end of the Basin. In this one, at an elevation of about twenty feet, I found four partially incubated eggs of an elf owl. They were black and apparently cold. From a hole on the other side of the cactus an owl flew to the opposite bank of the wash in which the cactus was standing, gave one of the characteristic cries, then flew to a bush further up the gulch where it was taken. It proved to be a nesting female and was, undoubtedly, the mother of the four eggs. This was my first find of the bird and its eggs in California. In the topmost hole of the same cactus I found five eggs of a sparrow hawk. They were partially incubated but not sufficiently so as to injure them. In another cactus some three hundred yards north and in the same wash, I found a second nest of the elf owl. It also contained four partially incubated eggs, and, in this case, the female was on the nest. High up in the same cactus, was the nest of a woodpecker. The young in it were very noisy. I did not see the parent birds and did not interfere with them. In still another cactus I came across a Mexican screech owl (*M. a. cineraceus*,) and four young ones. The latter were about ten days old. A nest of Gila woodpeckers (*Melanerpes uropygialis*) completed my day's work in the field, but not in getting home. I could not find a male owl although I looked high and low for them.

That the elf owl is a resident of California is now settled beyond doubt, but I seriously question their being far west of the Colorado river. On the Arizona side, immediately opposite Duncan Flate, is an extensive growth of saguaras, and in them scores of favorable nesting sites. These conditions in southern central Arizona would produce at least twenty to one on the Colorado. I am not very familiar with the desert flora west of the river, although I crossed the country twice, once by stage and once by horseback, but that was so long ago that I may be pardoned for forgetting. I do know, however, that the upper reaches of the desert have a heavier growth than the middle lower. Furthermore its character is such that if the elf owl goes far west of the Colorado river it must be by way of the Mojave desert and not by way of the Colorado. As Mr. Frank Stephens is better informed on that subject than I am, I pass the question up to him.

The two elf owl skins I sent to the Academy of Sciences in San Francisco, but the eggs I still have, two beautiful sets of four each. Even the five hawk eggs turned out first class. The family of Mexican screech owls I brought home with me. I kept them for two months and then sent them to Central Park, New York. As they were the first lot of young, of their kind, ever taken in California I offered them to the Park Commissioners, San Francisco, but they declined the proffered gift with thanks. The mother, of course, went with them. They certainly were a beautiful lot if such expression can be used to describe a family of owls.

Yuma, Arizona.

Nevada Notes

BY WILSON C. HANNA

DURING the late spring and early summer months of last year (1903) work on the Central Pacific Reconstruction brought me to that part of Humboldt county, Nevada, lying between Golconda and Battle Mountain. This division of the railroad lies in the valley of the Humboldt River, which here varies in width from a few hundred yards to many miles; while the river itself containing a good volume of water flows slowly through its very winding channel, in some places dividing into several branches. This condition of the river causes many shallow alkaline ponds and a considerable amount of marshy meadow land which in most places is covered with coarse wild grasses.

The valley is bounded by rocky mountains, the height of which varies from several hundred to several thousand feet above the floor of the valley. Upon the highest of these snow lies during most of the year. Their sides are sparsely covered with low chaparral. The soil is more or less alkaline which is probably the cause of the absence of trees, but willow and wild rose bushes thrive along the river banks and in some places form almost impenetrable thickets. The elevation of the railroad through the valley is about 4300 to 4500 feet above sea level.

During May and June I had a chance to see many of the birds of this section, and when possible I spent my time along the river collecting birds and eggs. There are very few birds here compared to the many found in California, and collecting has to be done while you are enduring torments from the mosquitos that breed in great numbers along the banks of the stream.