

fast in the thick high tules that it was a difficult matter to procure a few for specimens to show growth and development.

By June 15 the colony was greatly scattered, many of the young accompanying their parents abroad in search of food. Yet there were still some on the original ground which were too young to fly, as shown by the number of old birds carrying food to that particular spot. Those old enough for flight seemed to return to the tules every night, and often for the purpose of finding rest and shade in the daytime as well. By July 1 the colony was beginning to disintegrate, and even before that date small flocks of old and young together could be seen working toward the north, while but few were noticed returning from that direction.

San Francisco, California, July 2, 1914.

BIRD NOTES FROM THE SIERRA MADRE MOUNTAINS, SOUTHERN CALIFORNIA

By H. ARDEN EDWARDS

DURING a recent trip, in June, 1914, to Barley Flats, a section of the Big Tujunga Range, of the Angeles Forest Reserve, I had the pleasure of observing an instance where the communal spirit was highly exemplified; and although the conditions bringing about a cohesion of interests that were perfectly harmonious so far as I could see, were to a certain extent arbitrary, yet it is interesting to note that five out of the six species involved were constantly brought, in more or less degree, into active competition with one another; and that in a locality where timber conditions forced them into an area of restricted activities.

The scene of this interesting bit of bird life was the bare stub of an immense fir tree, about eighty feet high, and probably six feet through at the base. The sole means of ascending it was afforded by several jagged cracks in the body wood (the bark being entirely gone) and an occasional slippery knot or stub, that indicated where long ago some mighty branch had swept outward and downward, bearing rich masses of dark green foliage. The members of this community which were of greatest interest to me were a pair of White-throated Swifts (*Aeronautes melanoleucus*) that had, or seemed to have, a nest in a large crack about thirty feet up. As I had never before found these birds nesting in trees, and all the data I have seen refers their nesting sites to inaccessible cliffs, etc., I was very properly "fussed up" about it.

Climbing up to the fissure where the female had flown in and out several times, I tried to use my flashlight and mirror attachment, but found that the crack extended side-ways for several inches, and then ran at right angles again; so there was nothing left to do but to take my pocket axe and pry off a section of the wood. To those who have had similar experiences, I need not describe my disappointment when nothing met my eager eyes, save the nest itself, which appeared to be completely finished. Now if I had not seen any birds around here and had opened this cavity, I should have said "a swallow's nest" and gone my way with peace of mind; but that the swifts were interested in it, and that very closely, was made manifest, when they darted at me and

swung about my head in ceaseless flight, and with frightened twitterings. The nest was composed of dried grasses, several needles from the big-cone spruce, some dried leaves, and a few feathers of a dusky white, that were evidently from the birds themselves. The dry grass was the dominating material and was woven, or rather laid, the long way of the crack. The inside of the nest was about two and a half inches in diameter, not over one and a half in depth, and was a little longer one way than the other. The whole affair was rather loosely built and there was no finish at the upper edge of the nest proper except a few coiled grasses.

After I had replaced the slab of wood as carefully as possible I continued up the snag to the next crack, which was some five feet higher, and showed on inspection seven full-fledged young of the Western House Wren (*Troglodytes aedon parkmani*). The little mother of this brood continued to fly back and forth to the nest with food all of the time I was on the snag, usually with some small moth or butterfly in her bill, sometimes several. The next thing to engage my attention was a small hole just around the tree from the wren's nest. After several ineffectual attempts to reach it, I was about to give it up in spite of the fact that the surface below the entrance was polished clean from recent use, when my ear caught a subdued hissing. At first I thought it was the young wrens, but on placing my ear against the stub and tapping lightly I found it to proceed from the hole in front of me; now, my bump of curiosity bulging, I was determined to see what was inside that hole, risk neck or not. So off comes my belt, and looping it over a branch a few inches long just above me, I placed my arm through it, and using my stockinged feet as levers, slowly swung myself out, till by extreme rubber-necking and the use of my one free arm, my mirror disclosed a tangle of what looked at first sight like a lot of animated mushrooms. Later observations disclosed their identity when a female Cabanis Woodpecker (*Dryobates villosus hyloscopus*) flew to the nest cavity with food for her young.

The next hole to stand inspection after I had taken a much needed rest, was on the south side of snag, eight or nine feet higher up, and contained one egg of the Mountain Chickadee (*Penthestes gambeli baileyae*). Just around the tree again and about four feet higher up, a pair of Western Bluebirds (*Sialia mexicana occidentalis*) had a cozy nest in a large cavity which sheltered two handsome blue eggs, looking as if two stray bits of the summer sky had become entangled in the grasses of the nest. Continuing up the snag I examined a number of holes and cracks, some containing old nests, others empty, until, within three feet of the jagged top, a female Western Martin (*Progne subis hesperia*) flew out of a hole on the north side. She scolded me to such purpose, that, instead of using my axe to pry into her house-keeping secrets, I threw it to the ground below, and followed after it, as best I might, finding, by the way, that it is far easier to ascend a snag than it is to descend it.

This completed my tally for this apartment house, and showed six pairs of insect-eating birds. Only one of these made extended trips beyond the circle of investing trees. These formed an open wall about a little mountain meadow or park-like space, covered with flowers, and therefore forming a pre-eminently suitable place for the capture of winged insects. The Cabanis Woodpeckers invariably flew towards the deep canyons on the north slopes of the flats, where no doubt they found pickings more to their liking in the shape of fat grubs among the fallen logs and stumps. As near as I could judge without a watch they made trips at intervals of about four minutes, the male carrying

food as well as the female. The wrens were the only other members that left the open spaces around the tree, and usually it was only the female, who seemed to do all the feeding. The male spent most of his time on a stub above the nest singing, occasionally making short excursions after food. The other four species spent most of their time around the tree itself; the Chickadees in an untiring search for insects upon the trunk and on the fallen limbs and bark around the base; the Bluebirds and Martins using the higher limbs as stations from which to pursue butterflies, etc.; and the two Swifts taking the stump as a point to circle and dodge around in graceful flight.

I noticed that the Swifts had a habit of suddenly darting straight down, as on the angle of a long V, and, making a half turn at the lowest point, shooting up again, in an ascent of inconceivable rapidity. As this brings me back again to this interesting bird, I will confess that I am all at sea, as regards this particular instance of unusual nesting. To all appearances the nest which I examined, and which I had seen the Swifts enter a number of times (nine in all, to be exact), was typical of the Tree Swallow (*Iridoprocne bicolor*) of which I had previously noted several pairs upon the flats, but none around this particular stub. All of the time I was on the snag the Swifts would fly at me, keeping up an angry and protesting twittering; and after I had come down, first one and then the other would alight at the hole and either go inside, or would hang on the edge for awhile and then fly off again with more excited twitterings. When at rest the white wing patches were very noticeable and also the extra long narrow wings that were crossed scissor-fashion below the tail. As there was absolutely no question of identification in this case, the query presents itself, first, what causes had operated to force these birds to choose this unusual nesting site? And secondly, was this nest entirely of their own making? I say entirely, because I saw one of the birds carry a piece of grass into the hole after I had left the tree. Or had they pre-empted a swallow's nest, remodeling it to suit their own taste? Of one thing I am positive, there was no soft vegetable or gummy matter of any kind in the nest composition (I lifted the nest up expressly to see), such as I have seen mentioned by all writers on the subject before.

In answer to the first question, I can only note a few facts that may bear upon the subject. In an area of eight or ten miles around the flats, there are very few cliffs that would fill the needs of these birds, those which are of any extent presenting few cracks or fissures that would serve as nesting sites. One exception of which I have knowledge is, or rather was, until the winter just passed (when a rock slide shaved it absolutely bare), a large broken mass of granite, high up on the slopes of Strawberry Peak (in the Big Tujunga Range) situated a short mile or so to the northwest of the extreme western edge of Barley Flats. Here in previous years I have observed numbers of the Swifts during the breeding season, but the nature of the intervening country has prevented a closer investigation.

One other place where I have noted them in the breeding season is on the back slopes of San Gabriel Peak near the headwaters of the West Fork of the San Gabriel River. In preceding years the species has been fairly abundant along the rocky walls of the canyons here, but this year they have evidently been driven from their usual haunts by the heavy blasting which has been done, incidental to driving a new trail through the canyon. If our birds were some that were accustomed to nest in either of the places mentioned, or if an earlier nest in some more legitimate site had been by some cause destroyed, it might

easily be imagined that a dislike to leave this section would drive them to make their home upon the flats where, omitting the rocks and cliffs, other conditions would appear most favorable. Be that as it may, my untimely disturbance of the nest, must have destroyed all faith in its suitability, for after the first day they were never seen to enter it again, and in a couple of days left entirely.

I append a list of the birds observed upon the Flats.

- Band-tailed Pigeon. *Columba fasciata*. Several seen.
 Sharp-shinned Hawk. *Accipiter velox*. One pair.
 Cooper Hawk. *Accipiter cooperi*.
 Western Red-tailed Hawk. *Buteo borealis calurus*. One seen.
 Golden Eagle. *Aquila chrysaetos*. Examined a this-year's nest.
 Long-eared Owl. *Asio wilsonianus*. Two young shot before our arrival.
 Pacific Horned Owl. *Bubo virginianus pacificus*. Seen in the evening.
 Cabanis Woodpecker. *Dryobates villosus hyloscopus*. Nest with young.
 Red-breasted Sapsucker. *Sphyrapicus ruber*. One seen.
 California Woodpecker. *Melanerpes formicivorus bairdi*. Breeding.
 Red-shafted Flicker. *Colaptes cafer collaris*. Breeding.
 Dusky Poor-will. *Phalaenoptilus nuttalli californicus*.
 Texas Nighthawk. *Chordeiles acutipennis texensis*. Several seen.
 White-throated Swift. *Aeronautes melanoleucus*. One pair, breeding?
 Black-chinned Hummingbird. *Archilochus alexandri*. Young in nest.
 Anna Hummingbird. *Calypte anna*. Breeding.
 Rufous Hummingbird. *Selasphorus rufus*. One male.
 Arkansas Kingbird. *Tyrannus verticalis*.
 Ash-throated Flycatcher. *Myiarchus cinerascens*. Breeding.
 Black Phoebe. *Sayornis nigricans*.
 Olive-sided Flycatcher. *Nuttallornis borealis*. In wooded canyons, among the pines.
 Western Wood Pewee. *Myiochanes richardsoni*. Full grown young in nest.
 Western Flycatcher. *Empidonax difficilis*. Breeding.
 Wright Flycatcher. *Empidonax wrighti*. A pair seen carrying nesting material to outer limb, high in a pine tree.
 Blue-fronted Jay. *Cyanocitta stelleri frontalis*. Nests found containing young and eggs.
 California Purple Finch. *Carpodacus purpureus californicus*. Quite tame about the camp.
 Lawrence Goldfinch. *Astragalinus lawrencei*. Breeding.
 Sierra Junco. *Junco oreganus thurberi*. Breeding.
 San Diego Song Sparrow. *Melospiza melodia cooperi*.
 Spurred Towhee. *Pipilo maculatus megalonyx*. Breeding.
 Green-tailed Towhee. *Oreospiza chlorura*. Breeding.
 Western Tanager. *Piranga ludoviciana*. Nests found with eggs and with young.
 Western Martin. *Progne subis hesperia*. Breeding.
 Tree Swallow. *Iridoprocne bicolor*. Several pairs seen.
 Northern Violet-green Swallow. *Tachycineta thalassina lepida*.
 Western Warbling Vireo. *Vireosylva gilva swainsoni*. Breeding.
 Hutton Vireo. *Vireo huttoni*. Breeding.
 Lutescent Warbler. *Vermivora celata lutescens*. One pair around camp.
 Black-throated Gray Warbler. *Dendroica nigrescens*. Three noted at camp.
 Golden Pileolated Warbler. *Wilsonia pusilla chryseola*. One pair at camp.
 Rock Wren. *Salpinctes obsoletus*.
 Dotted Canyon Wren. *Catherpes mexicanus punctulatus*. With full-fledged young.
 Western House Wren. *Troglodytes aedon parkmani*. Nests found with eggs and with young.
 Slender-billed Nuthatch. *Sitta carolinensis aculeata*. Several seen. Found breeding here in 1913.
 Bailey Mountain Chickadee. *Penthestes gambeli baileyae*. Breeding.
 Pallid Wren-tit. *Chamaea fasciata henshawi*. Breeding.
 Western Bluebird. *Sialia mexicana occidentalis*. Nests found with eggs and with young.

Los Angeles, California, July 4, 1914.