

thought she had me going, and I humored her to the point of absolute personal satisfaction. There was never trace of fur or feathers or gore on the deserted stage. The distress cries, always convincing, were never overdone, but ceased, as they should, after the first onslaught; yet if I did not yield a prompt obedience to the lure, the Owl looked about reproachfully, and then redoubled her demonstrative wrestle with her alleged quarry. It was noteworthy in this connection that while other birds usually paid little heed to the notes of this Owl, however terrifying in volume or tone, this distress cry commanded instant attention throughout the woods. The small birds began to chatter sympathetically, while Crows and Magpies rallied as though at the blast of a bugle. In fact, some nimble Magpie, as often as not, interrupted the play before it was half finished. This was the clew, if clew were needed, to the explanation. Your humble servant was a big Magpie, who at the sound of conflict might be expected to rush forward and snatch the prize from the victor's grasp. Clever, wasn't it! And, parenthetically, your Magpie is evidently exactly up to that game, even if the stupid man failed to play to his lead.

The illusion of this decoy ruse (whose further psychology I leave who will to explicate) was most complete; and even inside knowledge of the facts could not lessen the wonder how this Owl could so perfectly reproduce the shrieks of former victims.

Possibly,—though the writer suggests this in all modesty, not knowing the full circumstances attendant upon the other episode,—possibly, Mrs. Bailey's Owl also carried her wood mouse in her throat.

Santa Barbara, California, January 8, 1914.

SOME DISCOVERIES IN THE FOREST AT FYFFE

By MILTON S. RAY.

WITH EIGHT PHOTOS BY THE AUTHOR

AS PLANS for a sea-island trip allowed but a very short and early visit to Sierran territory this year (1913), I selected Fyffe, at an elevation of 3700 feet in El Dorado County, in preference to points of higher altitudes. Fyffe has become rather famous, ornithologically, from the work of Barlow, Carriger, Welch and others, and in fact in this respect it is one of the best known sections of the great Sierran chain. While the fact of the region having been so well worked rather suggested the advisability of going to less known localities, I relied on the chance that here, no doubt, as elsewhere in the Sierras, the bird-life would be found varying from year to year in both abundance and variety; and owing, too, to the fact that each worker afield possesses methods peculiarly his own, that one might still be able, perhaps, to add something new to the region's fund of accumulated bird-knowledge. Besides this, too, I was desirous of treading in reality those well worn paths of fellow workers, that I had already followed on printed page and in tantalizing photograph. My previous acquaintance with Fyffe was limited to glimpses of the region while passing en route to Lake Tahoe, and to a few hours afield on June 2, 1901. On this occasion, while about all I located was a nest with four eggs of the Western Tanager (*Piranga ludoviciana*) fifty feet up in a lofty pine, nevertheless I gained an insight into the

possibilities of the region; for the few hours afield showed a wealth and variety of bird-life that few sections of the great woodland can equal.

If I lacked personal familiarity with the region and its bird-life, I was fully acquainted with the work that had been done by others. Besides Barlow's famous paper, "The Birds of the Placerville-Lake Tahoe Stage Road", I had carefully perused all other available bird literature on the region, and through the kindness of Mr. Henry W. Carriger I had also the opportunity of studying the daily field notes of Pemberton and Carriger covering a considerable period. A decided disappointment, however, was Carriger's parting injunction as I left San Francisco on May 12: "You're too early, Ray, I think, for nests of the Hermit Warbler. I wouldn't advise spending much time in search of them"; for I frankly admit the quest of avian rarities has always held for me a peculiar attraction.

It is a rather long trip to Placerville, and I had ample time to read and re-read Fyffe bird literature on the way. In glad surprise I stumbled upon this note on the Hermit Warbler, previously overlooked in Barlow's paper: "A nest containing young about four days old at Fyffe on June 11, 1897", and I saw a chance existed, although rather remote, that after all I might still be in proper season to find a nest of that famous *rara avis* of Fyffian woodlands.

The train had now left the Sacramento Valley far to the west and by a tortuous route was toiling slowly through the winding canyons of the foothills. On gaining a sparsely wooded summit we were afforded a rare view of the distant and heavily timbered Sierran ranges, with Pyramid and other dazzling, snow-covered peaks towering in the back-ground.

Placerville was reached in the afternoon, but old friends luring me to a hammock swung in the shade of cherry trees, the bird-life out in the hot sun on the adjacent hillsides was left unmolested and unchronicled. Early next morning, however, bird-song and balmy air without, had me abroad at four o'clock, and before the stage left at 6:45 A. M. I had time to venture some distance out of the town itself, to cross a number of grassy fields, wet with dew, to ford a small stream and reach a group of scattered oaks, and later a thicket of pines on a steep hillside. Altogether, I noted fifteen different species; among them and exceeding all others in interest and rarity was a flock of ten Cedar Waxwings (*Bombicilla cedrorum*) in a line of thorny roadside trees.

While waiting for the stage I noted the old-time colony of Western Martins (*Progne subis hesperia*) circling about the eaves of the Cary House, or sweeping through the village streets melodiously twittering, just as I have seen them in numerous seasons before, just as Barlow, with graphic pen, describes them, and, perhaps, just as they did in the golden days of '49 when this little mountain town was the cynosure of all eyes.

By one day I had missed the through stage, which goes at this season as far as Echo, at the base of the main Sierran summit; but I was enabled by another line to go on to Camino from where, leaving my equipment to be forwarded, I walked on leisurely to Fyffe. Arriving at 10:15 A. M., I registered at that famous hostelry of Welch's "Sierran Echoes", Sportsman's Hall; and, as it was still some time until noon, I had opportunity before lunch to take a short walk in the immediate vicinity. A Western Lark Sparrow (*Chondestes grammacus strigatus*) flushed from her nest in an apple tree, and disclosing three scrawly-marked eggs, led off the season's tale, while near at hand was a newly built nest of the Western Chipping Sparrow (*Spizella socialis arizonae*), and one of the Western Robin (*Planesticus migratorius propinquus*) with three eggs. Homely finds, rather savoring of youthful experiences, yet still of value as indicative of

seasonal conditions. At a forest edge a Red-breasted Nuthatch (*Sitta canadensis*) was noted drilling well up in a lofty dead tree trunk, while a Spurred Towhee (*Pipilo maculatus megalonyx*) fluttered off from an unfindable nest in a patch of mountain misery, that softest and greenest of all Sierran carpets.

It was not my original intention in the afternoon, in a sort of preliminary survey, to climb in traveling clothes the pitchy pines or charred dead tree trunks, but the ornithological temptations proved stronger than my resolutions. Edging on the road I noted four rich buffy eggs of the Mountain Partridge (*Oreortyx*



Fig. 25. IN THE FOREST AT FYFFE. THIS RATHER OPEN VIEW WAS POSSIBLE ONLY BECAUSE OF THE CLEARING ALONG THE DITCH; ELSEWHERE THE FOREST WAS GENERALLY SO DENSE AS TO PRECLUDE PHOTOGRAPHY. ON MAY 20 A NEST OF THE SIERRA JUNCO WAS LOCATED CLOSE TO THE LOG SPANNING THE STREAM.

picta plumifera) lying in a grass and leaf-lined hollow which a dead pine-branch and surrounding weeds partially concealed. As I headed northeast into the great forest the rich melody of Thick-billed Sparrows (*Passerella iliaca megarhyncha*) came floating from the brush-covered clearings, while from all sides came a maze of warbler songs, incessant, varied and low.

I had now gone a number of miles, and had visited, though without result, several particular points mapped and described with great care by Carriger. The

nesting site of a Northern Pileated Woodpecker (*Ceophloeus pileatus abieticola*), in a lofty naked tree trunk, was found deserted; cobwebs covered the former nesting holes of White-headed Woodpeckers (*Xenopicus albolarvatus*) in a much-chopped dead tree; and the Townsend Solitaires (*Myadestes townsendi*) had wilfully departed from the region that Carriger had specifically assigned to them. Although bird-life was abundant, I soon learned that nests of any sort were difficult to find, owing to the density of the foliage. Even when located they were often next to impossible to reach, for here the pines, firs and cedars spear cloudward to such heights that one gazes up at them in wonder, like Gulliver in the gigantic woods of Brobdingnag.

At various times could be heard the rare song of the Sierra Hermit Thrush (*Hylocichla guttata sequoiensis*) which, strangely enough, while previously unrecorded here, I found quite abundant. A Western Tanager was noted nest-building in a tall conifer, and both purple finches, Cassin and California (*Carpodacus cassinii* and *C. purpureus californicus*), were in evidence, and singing, I thought, distinctive songs. Some days later I noted the third member of the group (*C. mexicanus frontalis*), so this genus is well represented here. Of ground-loving birds the Spurred Towhee was by far the most common, with the Sierra Junco (*Junco hyemalis thurberi*) a poor second, for it is only in the higher altitudes that the latter is found in such great numbers.

While breaking my way through dense undergrowth, the wild cries of a pair of hawks as they swept through and above the timber attracted my attention. Their conspicuously white underparts proclaimed them American Ospreys (*Pandion carolinensis*), and while they seemed strangely out of place so far inland, I remembered that Barlow had previously recorded them from a point not far from here on the American River. I was now on the floor of a wide canyon to which the wooded mountains on both sides gradually sloped, while above, the leafy pavilions towered so close and high that only glimpses of the surrounding country could be had, with but small patches of sky above. On working up the south slope the Ospreys became still more wildly excited, but as they remained in the air continuously I was unable to learn the cause of their extreme displeasure. Several likely-looking, bulky affairs of sticks and twigs burdened lofty boughs above, but feeling unable to accomplish anything in Raptorian collecting here without equipment (or perhaps even with it!), and as it was, too, nearly dusk I was about to start back to the "Hall" when a small warbler, by its continued presence in the immediate vicinity arrested my attention.

The individual, which looked dangerously (and gloriously!) like a female Hermit Warbler, remained about twenty-five feet up, and although it flitted from bough to bough and branch to branch, it never wandered far away. To untrained eyes it would have appeared unconcerned, but to another than a novice its actions were decidedly suspicious, and called for narrow and patient watching. After a time, however, the bird disappeared, but a slow, laborious, and careful search revealed a small warbler-like nest woven to a slender, overhanging yew branch fourteen and a half feet up. On reaching a point above the nest I was able to see it held a complement of five eggs, but as my bird had not returned, and as it was almost dark, I decided to postpone further investigation until the next morning.

When I reached the locality early in the forenoon of the next day (May 14), the noisy pair of Ospreys were nowhere in sight. A sitting bird slid off as I approached the warbler nest, and lit on a branch close-by. To me it was an anxious moment, but my guess of the day before proved correct. The bird, a fe-

male, was none other than the rarest of all Sierran Mniotiltidae, the Hermit Warbler (*Dendroica occidentalis*), whose eggs remained so long undescribed, and whose recorded nests, even at the present time, can easily be counted on the fingers of two hands.

The nest was saddled halfway out on a slender yew branch fourteen and a half feet up. From the nature of the foliage the situation was somewhat open, but partial concealment was given by branches above and below. The tree itself was one of wide spreading branches, about thirty feet in height, and standing in the almost perpetual shade of the lofty firs and cedars, which in endless numbers cover the gradual slope of the canyon's southern wall. Dark and damp,



Fig. 26. THE MAZE OF FOLIAGE WHERE THE NEST OF THE HERMIT WARBLER WAS FOUND. THE NEST IS SITUATED IN THE CENTER OF THE PICTURE BUT IS TOO SMALL TO DISTINGUISH READILY.

with the ground littered with dead brush and decaying vegetation, the locality was hardly the place where one would expect to find the sun-loving Hermit Warbler nesting. Usually the bird frequents the edges of clearings with other feathered sun-worshippers; and Carriger informs me the nests recorded from Fyffe were in, or not far distant from, such localities.

The nest itself very closely resembles those recorded by Barlow, except that the inner lining, instead of projecting, is woven into the rim. It is round in shape, compactly built, and a little wider and more shallow than the nests of most other species of the genus *Dendroica*. It measures $3\frac{1}{4}$ inches across over

all, by $1\frac{7}{8}$ inches deep, with a cavity $2\frac{1}{4}$ inches in diameter, by $1\frac{1}{2}$ inches in depth. A rather pretty affair, made outwardly in part of brownish rootlets and a few pine needles, both of which strikingly contrast with the bleached bark strips and light-colored vegetable fibers which are also used. Strips of red cedar bark, horsehair, with here and there a scattered feather, form the lining. The five eggs, fortunately fresh, measure in inches: .66x.49, .67x.48, .67x.50, .67x.50, .69x.49. They are ovate in shape and have a very faintly tinged white ground color. The markings consist of well defined spots and blotches, which predominate around the larger end, where they form rough wreaths, and in color vary from mars brown to burnt umber, and, in a few places, even black. Equally as well distributed are the washy blotches of light violet-gray. This description is based on a comparison with the plates in "Color Standards and Color Nomenclature", by Robert Ridgway, 1912 edition.

While I remained in the vicinity the female flitted anxiously about, much as a Yellow Warbler would do; but although I waited patiently for hours, the male did not appear. It was almost noon before I completed my work at the nesting tree, and with notes, specimens and photos tramped triumphantly back to Fyffe, for although I had succeeded in locating a nest of the Hermit Warbler on my first day, it must not be thought I underestimated their extreme rarity. I may add that during my stay of ten days, in which I covered over one hundred miles afield, not only were no further nests located, but the birds themselves proved extremely scarce. Though countless scores of various other warblers were noted, but a very few birds that appeared referable to this species were seen, and these being well up in conifers, could not be positively identified.

In the afternoon, in the burnt district east of Fyffe, I noted a nest of the Western Bluebird (*Sialia mexicana occidentalis*) in a cavity of a pine stump ten and a half feet up. The nest was noteworthy in that it formed part of a nest of small black ants, which gained entrance through crevices below. The ever wandering hordes and countless numbers of their eggs were amid the material of the bluebird's nest. The latter, made of grasses and lined with bark strips, held three fresh eggs. On May 15 these were increased to four and on the 18th I noted five, slightly incubated. Nearby, a White-headed Woodpecker was flushed from a nesting hole seven feet up in a burnt stub, containing four badly incubated eggs. A week later the nest held three young and an infertile egg. Close to this nest was also one of the Cabanis Woodpecker (*Dryobates villosus hyloscopus*), with four small young, fifteen feet up in a slender dead tree.

On taking a road that led in the direction of Webber Creek I came upon a large rattler stretched full-length across the road, with a mouse in its mouth. The reptile, which boasted eight rattles, quickly coiled and showed fight. Although it was promptly dispatched, the incident caused me for some little time afterward instinctively to tread very gingerly through the brush-covered rocky tracts: Later, along the main road half a mile west of the "Hall", the nest of a new breeding bird for Fyffe was found, that of a Sierra Hermit Thrush. This was openly placed three feet up in the crotch of a small dead tree, which afforded but scant concealment. The nest, of grasses, stems, leaves and bark strips, lined with fine rootlets and grasses, held a single fresh egg. Later visits showed as follows: May 15, two eggs; 16th, three eggs; 17th, four eggs; 18th, four eggs, with bird sitting closely.

For a second time at dusk a puzzling nest was located. This was at the very end of a pine bough, thirty feet up; from the nest a bird took wing and disappeared before I had opportunity to identify it. The nest I could see, from above,

held two eggs, and while I was unable to reach it I felt quite sure of being able to do so next day with proper equipment.

With a long rope swung from a bough above I succeeded in getting within a few feet of my unknown nest next morning (May 15), but closer proximity to the eggs, which now numbered three, was unnecessary. The owner lit close by and proved to be that most common bird of these altitudes, the Western Chipping Sparrow, which usually, however, nests in very low situations. Chester Barlow and other writers relate, too, how they have had similar and rather laughable experiences endeavoring to reach nests, almost inaccessible and of apparent rarity, which afterwards turned out to be of this exceedingly common species.

Most of the day was spent in Webber Canyon, where a number of Western



Fig. 27. NEST AND EGGS OF THE HERMIT WARBLER, THE RAREST OF THE SIERRAN WARBLERS. THIS NEST WAS SITUATED IN A YEW GROWING IN THE DENSE FOREST NORTH OF FYFFE. THE SET SHOWN IS THE FIRST TO BE FOUND CONTAINING FIVE EGGS.

Winter Wrens (*Nannus hiemalis pacificus*) were noted. Two Band-tailed Pigeons (*Columba fasciata*), flying high in an easterly direction, were also seen. Two nests of the Black-headed Grosbeak (*Zamelodiu melanocephala capitalis*), a bird which is very abundant here, were also noted, one with three fresh eggs and one building. Along the south bank of Webber Creek, six and a half feet up in a small cedar that was half hidden amid a number of clumpy-foliaged pine saplings, I came across a nest of the Blue-fronted Jay (*Cyanocitta stelleri frontalis*). The sitting bird quietly slid off the nest, a bulky affair of coarse twigs, pine-needle lined, disclosing four eggs very slightly incubated. The parent showed the characteristic wariness of the species, for although I waited three-quarters of an hour, she did not return, nor did I hear the distinctive call-note within the nesting pre-

cincts. Seven feet up in a small pine nearby I found another nest of this jay, apparently one of the previous season.

Most of May 16 was spent in canyons north of Fyffe. Leaving the latter place, which by the way is not a hamlet but merely a hotel and postoffice, I came upon my first pair of Mountain Chickadees (*Penthestes gambeli*). Judging from the records of previous workers, these birds were unusually rare here the present season. Several times during the day I noted California Woodpeckers (*Melanerpes formicivorus bairai*) as not uncommon, although Barlow does not record them for Fyffe. Two days before, I observed a pair of Red-breasted Sapsuckers (*Sphyrapicus varius ruber*) hollowing out a home in a lofty dead branch overhanging a ditch. Passing the spot now I found them still engaged in the work. While not rare anywhere I found Western Wood Pewees (*Myio-*



Fig. 28. NEST OF THE SIERRA HERMIT THRUSH, THE FIRST TO BE RECORDED FROM THE VICINITY OF FYFFE. NOTE THE LACK OF CONCEALMENT, A COMMON FEATURE OF THIS BIRD'S NESTING.

chanes richardsoni richardsoni) particularly abundant in a tract that forest fires had swept, leaving only charred tree trunks standing in dense undergrowth.

Though I saw in all about a dozen birds during my stay, it was here, near Blair's Old Mill, that I saw my first Northern Pileated Woodpecker at close range. Approaching the small stream that courses through the canyon, I heard a loud hammering in the distance, so loud that the whole ravine resounded with the echo, and which I took to be from men at work on some fence or bridge. As I neared the spot from which the sound came I was surprised to come upon two of these immense woodpeckers, of jet plumage and flaming crest, without doubt among the most remarkable and interesting of all Sierran aves. The two birds were to all appearances on a foraging expedition, and unseen I watched them for

a considerable time. After prospecting one dead tree they would alight at the foot of another and work upward. Flying thus from tree to tree, with a rather crow-like flight, they gradually disappeared from view down the canyon.

Nearing Fyffe, along the irrigation stream, a rather favorite haunt of bird-life, I found two nests. The first, one of the Sierra Junco, held four fairly well incubated eggs, and was made of rootlets, moss and grasses, and lined with wild animal hair. It was entirely concealed by the overhanging foliage of a small cedar and alder. The second nest, one of the Spurred Towhee, held four fresh eggs, and was completely concealed amid mountain misery and dead brakes. It was composed of bark strips, grasses, stems, leaves and brake, and lined with fine grasses.

Towards evening, in company with a friend who kindly volunteered to aid me in searching a wide patch of mountain misery for a nest of the Calaveras Warbler (*Vermivora ruficapilla gutturalis*), now my particular desideratum, I journeyed down Webber Canyon about a mile southwest of Fyffe. While rounding a rather open hillside covered with mountain misery, I spied a tell-tale feather adhering to the edge of a cavity-entrance in a dead tree-trunk fourteen feet up. I thought it probably the home of some bluebird or chickadee, and my surprise can well be imagined when inspection showed it to contain a brood of Saw-Whet Owls (*Cryptoglaux acadica acadica*) whose breeding here was not only a record for Fyffe, but for California. As it was now almost nightfall I postponed further investigation until I would have opportunity, with returning daylight, to make use of the camera.

The weather, which had been sunny and pleasant since my arrival, turned cloudy next day (May 17), and for a time a mist-like rain fell. While en route to the owl's nest I noticed a flock of eleven Band-tailed Pigeons in a thick grove of lofty pines. Farther on I met with a pair of Blue-fronted Jays, whose nest eight feet up in a manzanita, on a steep hillside, proved to be just completed. Although I did not approach within several feet of this nest, the birds abandoned it, for on revisiting the tree on May 20, I found it had been deserted.

Chopping out the Saw-Whet Owl's nest revealed five almost full-fledged young and a freshly killed mouse. The cavity was fourteen feet from the ground, and the entrance so small that it seemed the parent birds could have gained admittance only with difficulty. Offering little resistance beyond clicking their bills, the five diminutive owlets were carried nearly a mile before I found a suitable place wherein to photograph them. Never have I met with more willing subjects; for although they could fly a short distance, they made no attempt to escape but sat wondrous wise, staring out across the wide expanse of Webber Canyon. Besides taking the group, one of the birds, apparently the oldest, and there was considerable difference in this respect, was photographed perched on a near-by stump. The breeding of this owl here being a state record, I deemed it advisable to send one of the birds to Mr. Joseph Grinnell at the University of California (now no. 23463, Museum of Vertebrate Zoology), while another I kept in captivity and brought back with me to San Francisco. This bird was about the most interesting pet I ever possessed. It would perch contentedly for a half hour or more at a time on one's shoulder or finger or upon some point of vantage, apparently wisely conscious of all that was transpiring around it. The bird had a curius habit of bobbing its head rapidly up and down, in addition to the usual movement sideways. Only at night did I hear the curious, wild, and rather grating cry, for during the day the bird was silent save for clicking its bill off and on like a pair of castanets. In all, it was about the dearest little pet I ever owned

and I felt the loss keenly when it died shortly after my return home. This specimen was given to the California Academy of Sciences. At no time on the several visits I made to the nest of the Saw-Whet Owls were the parent birds seen, although on several occasions I waited patiently for them to appear.

While returning to Fyffe, after my work at the owl nest, I noted an *Empidonax*, either *hammondi* or *wrighti*, a Cassin Vireo (*Lanivireo solitarius cassini*), which was engaged in nest building, and a Red-breasted Nuthatch drilling in a lofty and practically inaccessible nesting site.

It rained hard during the night, and continued intermittently the next day (May 18), making the woods so wet that field work was not only unpleasant but



Fig. 29. NESTING SITE OF THE SAW-WHET OWL ON A RATHER OPEN HILL SLOPE IN WEBBER CANYON, SOUTHWEST OF FYFFE. THE CAVITY OCCUPIED WAS FOURTEEN FEET ABOVE THE GROUND IN THE LARGE STUB IN CENTER OF PICTURE. "MOUNTAIN MISERY" CARPETS THE FOREGROUND.

dangerous, on account of the slippery condition of the tree trunks. After covering several miles through the dripping forest I confined my work to the more open hillsides and to those sections that edged along the high road. Among the bird-homes found during the day, two were curiously an exact repetition of what I had found two days previously. The first, one of the Sierra Junco, held four eggs well along in incubation, and was hidden under a fallen pine log on the edge of a corral. It was made of stems, and lined with fine light-colored grasses and animal hair. The second nest, as before, was a Spurred Towhee's, and was hidden in mountain misery along the irrigation ditch. The bird was flushed from its nest of stems and grasses, lined with fine grasses, disclosing four fresh eggs.

Later, near the State Road, I stole up on a Red-breasted Nuthatch that was industriously hewing out its modest dwelling in a very slender dead tree-trunk only six feet up. In fact this trunk was so narrow in diameter that I drilled a small hole into the nesting cavity from the opposite side of the trunk, and on later visits, by taking out a close fitting plug, I was able to see just what progress was being made. The nest was about completed the day before I left.

The most agreeable surprise of the day was finding a nest of the Audubon Warbler (*Dendroica auduboni auduboni*) with two fresh eggs, in an apple tree eight feet up and close to the hotel. On May 21 this held four typical eggs, they being heavily and richly marked. In fact I believe the eggs of no other Californian warbler can show coloring as rich or markings as varied and heavy as those of this species. The nest was of rootlets, string (an indication of its nearness to the habitations of man), bark strips, and plant fibers, and was profusely lined



Fig. 30. YOUNG SAW-WHET OWLS FOUND MAY 20, 1913, IN WEBBER CANYON NEAR FYFFE. THIS CONSTITUTES THE FIRST DEFINITE BREEDING RECORD FOR THIS OWL IN CALIFORNIA.

with feathers and horsehair.

The weather became clear and pleasant again next morning (May 19), and I decided on Webber Canyon for my day's ramble. While not as heavily timbered as the canyons north and east of Fyffe, it nevertheless supports a wider variety of bird-life, owing to the diversified character of the country. In addition to the predominant coniferous woods there are also vast forests of oak, brush-covered rocky tracts, open fields and, to me not the least important, the wide patches of mountain misery, where I continued my long, and so far unsuccessful, search for a nest of the Calaveras Warbler.

Four feet up in a cedar I found a deserted nest of the Black-throated Gray Warbler (*Dendroica nigrescens*) with a single fresh egg. A White-crowned Sparrow (*Zonotrichia leucophrys leucophrys*), evidently a straggler, was noted in a patch of deer brush, and a Red-breasted Nuthatch was seen nest-excavating

twenty feet up; but the triumph of the day's work was the finding of a Thick-billed Sparrow's nest with four partly incubated eggs. Locating nests of this bird is without a doubt one of the most difficult problems presented to the field worker at Fyffe. Barlow relates how his long search was unrewarded, and I deemed myself quite fortunate in finding one. While working through a patch of very thick brush I came upon the sparrow on her nest. The bird rose reluctantly, flew a short distance but soon returned, and became very solicitous for the safety of her abode and its contents. I have watched Thick-billed Sparrows hour after hour, endeavoring to gain some clue to the location of a hidden nest, and yet the birds would continue unconcernedly feeding or singing or idling their time away, apparently unconscious that such a thing as a nest existed. But now what a difference when the nest was located! Oh, you wise Thick-bills! The



Fig. 31. "TOMMY", THE OLDEST OF THE FIVE SAW-WHET OWLS. THIS INDIVIDUAL WAS KEPT CAPTIVE, BUT LIVED ONLY A SHORT TIME AFTER ITS REMOVAL TO SAN FRANCISCO. IT PROVED ITSELF A GENTLE AND PLAYFUL PET.

nest, of coarse twigs lined with fine bark strips and fibers, was placed three feet up in a tangle of cedar and fir saplings, on a dead bare branch that lay across them and adjacent deer brush. The eggs well exhibit that wide diversity of coloration which prevails in the eggs of this species, for not only are they entirely different from three other sets I have from higher altitudes, but two of them show striking individual variation.

Principally to obtain an index to conditions, I climbed to a nest of the Red-shafted Flicker (*Colaptes cafer collaris*), twenty feet up in a dead black oak on a hillside. The bird flushed, but re-entered the cavity while I was ascending the tree. I had no climbers and twice I slid back down the limbless trunk, but on the third attempt I succeeded in reaching a solitary limb that hospitably gave me foothold. In the cavity, on a bed of wood chips, lay six eggs whose glossy, semi-

transparent shells showed traces of incubation, slight in four and well-marked in two. No other new nests were found during the day except those of the ever abundant Western Robin, Black-headed Grosbeak and Western Chipping Sparrow.

Photography took up most of the following day (May 20). While engaged in this work along the ditch, I located a nest of the Sierra Junco close to where a fallen log crosses the stream (see fig. 25). The nest held four well-incubated eggs; well hidden in mountain misery just above the flowing water, it was only found by watching the birds from the opposite bank. The nest is rather unusual, being made almost entirely of cedar bark, in addition to which are some few weed stems and a lining of fine grasses and animal hair. While using the camera later in Webber Canyon, I spied a Western Yellow Warbler (*Dendroica*

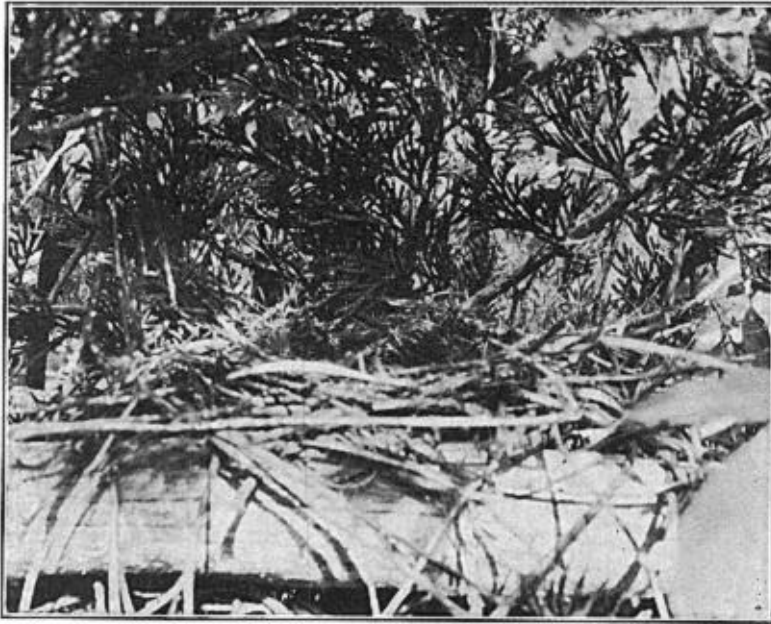


Fig. 32. NEST OF THE THICK-BILLED FOX SPARROW. IT WAS LOCATED IN AN ALMOST IMPENETRABLE THICKET AND HELD FOUR EGGS. NESTS OF THIS BIRD HAVE PROVEN EXTREMELY DIFFICULT TO FIND ALTHOUGH THE BIRDS THEMSELVES ARE COMMON IN APPROPRIATE LOCALITIES.

aestiva brewsteri) weaving its light-colored, hempen, cup-like nest in a small sapling.

On May 21 I ran across a very puzzling set of eggs. The nest, three feet up in deer brush, was in every respect a typical one of the Western Chipping Sparrow, being composed of rootlets and grasses and lined with horsehair. The four eggs it held, however, were short ovate in shape and unspotted, pale bluish-green in color. I hastily concealed myself some distance off to watch, if need be, the whole afternoon for the owner of these most remarkable looking specimens. The parent was fashionably late in appearing, and when she did so I learned the eggs were simply a unique set of that ever-present species, the Western Chipping Sparrow. On close examination I could just discern on one of the eggs some dim

pin-point dots of reddish at the larger end. The set was very tender shelled, and was prepared for the cabinet with considerable difficulty.

During the day I noted a pair of Slender-billed Nuthatches (*Sitta carolinensis aculeata*), which Barlow has not recorded, and also my first Turkey Vulture (*Cathartes aura septentrionalis*). This, however, Barlow has listed as not uncommon. In deer brush eight feet up, I found a nest of the California Bush-tit (*Psaltriparus minimus californicus*), with eight well-incubated eggs.

Some distance away I flushed a Calaveras Warbler (*Vermivora ruficapilla gutturalis*), but on reaching the spot, after a careful search, I was unable to locate any nest. When almost half an hour had elapsed the bird returned, and after many roundabout flights, finally flew to, and disappeared in, a thick patch of weeds. Advancing very slowly, I succeeded in flushing the bird almost at my feet, from a nest that was placed at the foot of a small deer-brush shrub and completely arched over by pine needles. The nest held five eggs in an advanced stage of incubation, and was made outwardly and almost entirely of cedar bark, mixed with a few pine needles and with a lining of fine rootlets, fine wire-like grasses and hair. It is worthy of note that it contains no soap-root fibre, which Barlow mentions as being usually the principal material.

Next day, May 22, I found but one nest of particular interest, beside the usual number of common ones. This, a Thick-billed Sparrow's, was three feet up in deer brush, newly completed, made of twigs and rootlets, and lined with bark strips. Towards evening I flushed a Tolmie Warbler (*Oporornis tolmiei*) from an extensive patch of brush, but it grew dark before I could locate the nest.

The following morning, May 23, I excavated, near the hotel, a nest of the Red-breasted Nuthatch that I had noted the birds drilling on May 13. Now, though ten days had passed, it contained no eggs, although the nest proper was completed. The call of this bird resembles nothing so much as that to which Mr. J. R. Pemberton has compared it, those little toy Christmas horns or bugles the note of which is not over loud and rather mellow. The bird's call note is almost identical with this, and the striking similarity serves to readily identify it.

My short stay had now drawn to a close, and it was very reluctantly that I packed for departure, for never had Fyffe, this outpost on the frontier of the great Sierran forest, appeared more fair. May streams wandered through banks of wild flowers and grass-carpeted woods, where dog-wood trees with their profusion of snowy-petaled blossoms were everywhere conspicuous amid the giant pines, firs and cedars. And, too, unlike the oppressive warmth of late June or July, the weather now was cool and pleasant.

Nor was it Fyffe alone that I regretted leaving, for to the east lay a region that offered even greater temptation. Every day now automobile parties, campers or trampers were heading along this famous pioneer road to higher altitudes, to Slippery Ford, Echo, Summit and Lake Tahoe. Resort keepers, or cattlemen with their herds, went by, old time friends among them who offered the use of saddle-horse or a seat in some slow-moving caravan to make the journey eastward; but unfortunately my way lay in the opposite direction. Nor was it long before my conveyance rolled up to the door. Grips aboard, a few hasty farewells given, and we were soon bowling along the park-like road to Placerville.

San Francisco, California, December 12, 1913.