## NESTING PINE GROSBEAKS IN PLUMAS COUNTY, CALIFORNIA

## By RICHARD HUNT

N THE SUMMER of 1920 I went camping with a party of people, ten miles south of Blairsden, Plumas County, in the yellow pine and silver fir bolt at an elevation of 6300 feet. The country was attractive from the point of view of the vacationist, with good hiking in all directions and many beautiful little Sierran lakes within easy "striking distance" of camp. My own main idea, like that of the rest, was merely to have a good time, and no ornithological thoughts were uppermost in my mind; but I had not been in camp two minutes before I realized that we were in a region of California Pine Grosbeaks (Pinicola enucleator californica).

The first Grosbeak was pointed out to me as I arrived in camp with grip in hand. The bird was a male in red plumage, sitting motionless on a pine branch about 20 feet up, where it remained unconcerned while several of us walked round freely under the tree viewing our visitor from all sides.

Early next morning I woke in my sleeping bag (see editorial note in Condor, xxII, 1920, p. 161) and lay there scrutinizing the tree top world above me for bird life. I saw two Pine Grosbeaks fly to a lodge-pole pine sapling, and there was something business-like in their manner of flight that suggested nesting birds. When I was dressed I investigated and found the nest exactly where the birds had flown. They had not approached it by a "trick" route as some birds do. The nest was 20 feet up, and contained three young almost ready to fly. This was on July 12.

Since there were people in the party who would not have appreciated my motives if I had "collected" the grosbeak family together with the nest, and since I myself felt that more might be learned by gathering what little "life history" material I could between hikes and other activities on the camp program, I adopted the "life history" policy. I began by putting in a good deal of spare time trying to get some photographs with the only "camera" I had, a "Brownie 1A Folding". I climbed a neighboring sapling to a level with the nest, and waited for the parent birds to come and feed their young. Two facts made this business harder than it sounds: first, the branches of the tree grew downward so sharply that my feet slipped off, and I had to remain in place by main hug of legs; second, the young were fed only about every twenty minutes. After much waiting and leg discomfort I snapped my kodak at an instant when both parents were perched on the rim of the nest feeding the young. It was a wonderful picture, the only trouble being that it never "came out"! I "took" some more pictures too that were wonderful barring the fact that they did not come out afterwards. As a photographer I later realized that I was registering about zero percent.

Three days later, July 15, the young left the nest. One of them disappeared for good. Another was heard peeping in some alders bordering the camp for two days. The third fell into the hands of the philistines and more or less stayed in camp as general property for two days. For this I was responsible, for I discovered the youngster about ten feet up in a small pine, and climbed up with my kodak, hoping that the parent birds would come with food. The female ventured near, but did not quite dare feed her baby, with me six feet away. So I caught the young bird, who made no effort to elude

me and showed no fear, and placed it on a favorable perch near the ground in camp, where I again waited a long time for the old birds to come. Although they did not seem concerned because I had their offspring, they nevertheless were cautious about venturing too near. Just once the female did come out into the open where the youngster was, and I snapped my kodak at the two side by side on the branch. This picture, like all my others, was excellent, in itself and as it existed in nature irrespective of my attempt to take it.

There were several children in our party and they all wanted to take turns "having" the young bird. And so for two days it was passed from hand to hand, and was made to perch, peeping plaintively, on wrists and arms and shoulders and hats. Even the older members of the party had to have their turns. One member, a better photographer than I, who also, however, had only a kodak, actually took pictures (that "came out" afterwards!) of the bird as it perched on various peoples' hands, heads, etc. During all this handling the little bird remained utterly fearless.

On July 17 it had disappeared. After this date the parent birds were no longer in evidence round camp, our only intimation of their existence being very occasional call notes sounding from well outside the limits of camp. On July 23 I sawed down the empty nest.

Whatever information of interest concerning the California Pine Grosbeak I may have collected during my few days of observation ought to make itself known to the reader as I compare my own experiences with those of some other observers or collectors, especially with the facts recorded by Milton S. Ray (Condor, xiv, 1912, pp. 157-187).

In regard to date of breeding, Ray quotes W. W. Price (p. 159) as follows: "They breed late, as attested by two nestlings brought to me July 29 . . .". The first nest that Ray found contained two eggs on June 17, and the second contained three eggs on June 18 (pp. 180 and 182). The Misses Alexander and Kellogg, collecting at Independence Lake, Nevada County, took six full-grown and nearly full-grown young (and four moulting adults) on August 9 and 10 (nine of these in 1910, and one the previous year). My nest, as already stated, contained three young nearly ready to fly on July 12.

As to elevation, Price (as quoted by Ray, p. 158) stated that the bird "is strictly an alpine species; I have never seen it below 7000 feet and I have taken it near the timber-line. It is peculiar to the belt of tamarack pine (Pinus murrayana), and the beautiful red alpine fir (Abies magnifica), and most of the specimens were taken in groves of this latter tree." nestlings mentioned by Price (p. 159) were found "at about 9000 feet elevation." Chester Barlow (as quoted by Ray, p. 161) said that he found Pine Grosbeaks among red firs, and that the bird is "seemingly a species of irregular distribution, not occurring below 6.000 or 7.000 feet." Ray found his first Grosbeak nest at 8500 feet well up toward "the limit of the timber which is at about 9250 feet elevation" and well into the snow belt at the season when found (pp. 177-178). His second nest was also among snow (p. 182) between 7000 and 7600 feet (see table, p. 187), and, I gather (p. 182), among firs and hemlocks. The birds taken by the Misses Alexander and Kellogg, already referred to and comprising in all six full-grown young and four adults (now nos. 10456 and 17113-17121 in the collection of the University of California Museum of Vertebrate Zoology) were collected at 7000 feet. J. Grinnell (pp. 106-107 of his "Distributional List") says, "The lowest elevation in the state at which the species has been found at any season is Cisco Butte, 6500 feet, Placer County, October 6, 1913 (Mus. Vert. Zool.)." In comparison with all of this, my birds were found at 6300 feet well below the lowest snow patches among lodgepole pines and silver firs and not far above the highest sugar pines.

The ten birds collected at Independence Lake, Nevada County, constituted the northernmost record of range for this species till my own birds were recorded from the locality already herein referred to in Plumas County.

Various field observers have remarked the Pine Grosbeak's tameness. Price (as quoted by Ray, p. 159) observed that this bird, when visiting salt licks, "was at all times exceedingly fearless and unsuspicious." Ray found his nesting birds so tame that they had to be "urged" off the nest (pp. 180 and 182). In getting pictures of one of the nests (p. 182) "it was necessary in all to flush the bird forty-one times. No photographer could wish for a more willing subject, for she promptly returned on each occasion. The bird was utterly fearless, coming at times very close to us and seeming rather puzzled than alarmed or angered by our aggressive operations." I did not find my nesting birds so tame as all this. Though they never seemed much excited or perturbed, they nevertheless at all times remained prudently at a distance from me when I approached or stayed near the nest or the nestlings.

Price is quoted by Ray (p. 160) in regard to the food of the Pine Grosbeak. "The crop and stomach of an adult contained the soft leaf ends of *Pinus murrayana* and *Abies magnifica*, besides seeds and portions of various insects." I observed my birds nipping off tender buds of fir, and doubtless it was this food, with an admixture perhaps of other material, that I saw them feeding to their young, by regurgitation.

My Pine Grosbeak nest (now no. 1831, Mus. Vert. Zool.) is in a general way like the nests described by Ray (pp. 184-185). It is an outside construction of twigs, lined with small crinkly roots. The outside measurements are 8 inches across by  $3\frac{1}{2}$  deep; the inside,  $3\frac{1}{4}$  diameter by  $1\frac{3}{4}$  deep. The nest was placed on a horizontal forked branch about 3 inches from the main trunk (at this height  $1\frac{3}{8}$  inches in diameter), and supported laterally by branches growing on a level with the rim. It was not attached to its support, but was fairly well crammed between the supporting branches and was reasonably firm. The eggs could have been seen through the bottom. It was, as already stated, 20 feet up in a lodge-pole pine: this in comparison to the three heights mentioned by Ray; namely, "on the lower branches of a fir" (p. 159), "sixteen feet up" in a fir (p. 178), and "35 feet up, eight feet from the trunk of" a hemlock (p. 184).

Finally, as to the utterances of the California Pine Grosbeak. The "peculiar melodious twittering" mentioned by Ray (pp. 178 and 183) I do not remember having heard.

The call note I remember well and made records of it on the spot. It most decidedly reminded me of the Western Tanager's note, which I would never think of spelling "churtig" as Ray does (p. 183), but which has at all times sounded to me so nearly like "pretty" that it seems strange that anybody could hear it much differently. The Pine Grosbeak's call so closely resembles this tanager note, in my estimation, that one not knowing otherwise might well conclude that it indicated a family relationship. The Grosbeak's call has still another non-family or "accidental" counterpart in the call of the California Thrasher—the brisk "qui-lit" so well known to most observers. The Gros-

beak note, however, resembles the tanager call more closely than it does the thrasher call. I spelled it *prilly* or *prilleh*. There is something musical or pleasing-to-the-ear in its timbre, as suggested in the letters "r" and "l". The vowel sounds are easily determinable. In manner of delivery it is rather lively, and the expression is somewhat querulous or enquiring.

As to the song, which I had opportunity to hear for many successive days, as sung both by "my" Grosbeak and by others in the same general vicinity: never, by any possible stretch of the imagination did I hear a song in the slightest degree bringing to mind the song of the Black-headed Grosbeak, which Ray (p. 178) says it resembles. It is utterly different in timbre, in form, in pitch—in every essential. The timbre of the Black-headed's song is round and smooth and mellow; that of the Pine's is vibrant and musically rough, or "burred" in a silvery-toned sort of way. The song of the Black-headed is easy and fluent; that of the Pine is forced and fricative. In form I have found the song of the Pine Grosbeak far from the elaborate affair described by Ray. The very longest songs I heard were not "varied" to any notable extent, nor were they prolonged enough to contain a "series" of anything, let alone "trills, warblings and mellow flute-like notes." The typical song, so far as I have been able to discover, is a comparatively short "set song", in general form not unsuggestive of the warble of the Cassin Purple Finch. One song. recorded "from life", ran pree-pr-pr, pr-pr-pree? This is perhaps shorter than the usual song, yet not much so. I think. One bird ended its song always with a brave pree-veur! in perfect imitation of the Olive-sided Flycatcher, this note standing forth when the rest of the song was damped out by distance. I do not know whether this appropriation of the Olive-sided Flycatcher's call was peculiar to this one individual Pine Grosbeak or whether others do the same thing. Finally, the pitch of the Black-headed's song is comparatively low, with a preponderance of mellow "eu" sounds and others from the same general region. The pitch of the Pine's is comparatively high, and is characterized throughout with long-e and short-i tonals, perpetuating themselves forcibly as if made to go with great pressure through a musically vibrating small orifice.

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## FROM FIELD AND STUDY

The Speed of a Flying Dove.—The automobile has, ere this, been the means of determining the approximate speed of birds (see CONDOR, XXII, p. 186), and once again it comes into play for the same purpose.

The Western Mourning Dove (Zenaidura macroura marginella) is considered a fast-flying bird by sportsmen, and it has been said to attain the speed of sixty or seventy miles an hour. This has always seemed an extravagant speculation to me and I firmly believe it so now. That the bird is a difficult wing-shot is due to its erratic flight and small size (feathers not counted) more than to its speed.

This was fairly demonstrated when, on July 28, 1921, I rounded a curve on the boulevard between San Jose and Oakland and almost ran onto a dove. The sudden appearance of the car and noise of the motor frightened the bird so that it crouched for a moment and did not flush until I was almost on top of it. At the moment it flew I slowed down a bit, but the bird was evidently frightened and confused for when it started off to the right, the approaching machine drove it back straight ahead, and an attempt to break to the left resulted likewise. The bird then settled down to the