

Duck Hawk. *Falco peregrinus anatum*. One seen.

Say Phoebe. *Sayornis sayus*. One seen.

Intermediate Sparrow. *Zonotrichia leucophrys gambeli*. A number, apparently winter residents, were seen. One shot.

San Clemente Song Sparrow. *Melospiza melodia clementae*. Several seen, two shot. Not very near breeding.

Rock Wren. *Salpinctes obsoletus*. Two seen.—FRANK STEPHENS, *Museum of Natural History, San Diego, California, March 15, 1921.*

Does the Wren-tit Sing a Scale?—I have so often met with differences of opinion regarding the notes of the Wren-tit (*Chamaea fasciata*), and these differences of opinion spring from the minds of such excellent bird students, that I am led to offer a word regarding my own impressions of the bird's vocalization. I had thought Dr. J. Grinnell's paper (CONDOR, xv, 1913, pp. 178-181) a pronouncement, almost, of the last word upon the subject; and as I review his excellent article, there appears but little for me to add. In his analysis of notes, under caption A, no. 1, he describes what is perhaps the most commonly recognized performance of this bird in these words: "Loud series of staccato notes all on the same pitch but with decreasing intervals, the last of the series run together to form a trill: pit-pit-pit-pit-pit-tr-r-r-r. Several counts gave from three to five of the first, distinctly-uttered notes." With this description of note no. 1, my impression agrees almost absolutely. Only very rarely have I heard the slightest degree of flattening from the original pitch as the interval of time diminishes. Yet again and again, during work with many academic generations of students, have I had the question asked, "What is the bird in the hills that sings down the scale?" I have long since ceased to suggest the Canyon Wren, but attempt instead the call of the Wren-tit (keeping at least on the pitch), and they at once recognize the bird. Just what is the psychology of interpreting this note as a descending scale, it is hard to state, except it be suggestion of falling bodies by the accelerated tempo. Certainly the average listener would not consider that flattening by less than a quarter of a tone could properly be considered as a descending scale.

The only marked decline in pitch that I have recognized for the Wren-tit is described in Grinnell's note no. 3 which he syllabifies as *keer-keer-keer-keer*, with slightly falling pitch. Here the decline in pitch does not exceed one and a half or two tones during the repetition of five to ten notes. Certainly such would constitute a pretty finely chromatic scale.

Perhaps I may be pardoned for adding a suggestion or two in regard to Grinnell's syllabification of note no. 1. The simple *pit-pit-pit*, etc., can be fairly well imitated by the human whistle, but the bird sometimes complicates the performance by a grace note that renders the syllabification more properly *plit-plit-plit*, or even *tupit-tupit-tupit*. I have never yet met the mere human who could reproduce this variant to any degree accurately. Then, again, this note is capable of a remarkable degree of ventriloquism and this fact is made use of by the bird, whether with intent to deceive or not, I can not say; but certainly it produces a deceptive effect.

I appreciate the fact that these remarks do not constitute any decided addition to our sum of knowledge; but it is hoped that they may serve as a corroboration of the previous observations referred to, on this unique bird.—LOYE MILLER, *Southern Branch, University of California, Los Angeles, February 17, 1921.*

Southern California Screech Owl in Western Orange County.—Although I had met with this owl in the live oak association of the Puente Hills, ten miles to the northeast, and in the Orange County Park, twenty miles to the east, it was not until 1913 that I observed it in the vicinity of Buena Park. Thirty years ago this vicinity was a treeless plain, but now some of the eucalyptus trees are quite large, especially those on our property. Screech Owls (*Otus asio quercinus*) first appeared in December, 1913, and have since been seen, and more often heard, during every month of the year. I have suspected them of nesting for several years, but as the only large trees are eucalyptus, which afford poor shelter for this purpose, I was rather doubtful until June 13, 1920, when my wife and I found two adults feeding three full-fledged young in some trees near our house. They appeared at dusk on the lower branches of the trees, and the old birds hunted by

flying to the ground and returning to feed the young. We were unable to find out what their prey was. This performance was repeated for several evenings; then they were not seen again, although their soft call-notes were heard frequently throughout the summer. These owls are a welcome addition to our fauna and I hope they will continue to favor us with their presence.—JOHN McB. ROBERTSON, *Buena Park, California, February 16, 1921.*

American Crossbill Eating Elm Aphis.—Opportunity for close observation on the feeding habits of the American Crossbill (*Loxia curvirostra minor*) were afforded the writer on the University of Washington campus at Seattle on June 17, 1920. In the mid-morning I heard the *chup, chup, chup* of some Crossbills, and shortly a dozen or more of the birds alighted on the lower branches of some cork elms, within ten feet or less of the ground. The birds were not disturbed by my close approach and it was possible to get within three to five feet of them. Red plumaged males, other individuals of greenish yellow coloration, and one or two with streaking indicative of juveniles were noted in the flock which was scattered through half a dozen adjacent trees.

The birds seemed to prefer to feed while hanging inverted; in a majority of cases this was the position taken even when suitable forage could have been obtained from an upright posture. When climbing from one branch to another a few of the Crossbills were seen to use their bills, after the manner of parrots, but only in making a slight change of position while a bird was hanging upside down, or when regaining an upright position.

No buds were to be seen on the trees and for a short time I was puzzled to know what the birds were feeding upon. They were attacking certain of the leaves which were curled up on one edge, cutting these rolls open and getting something from within. Gathering a few similar leaves from a tree and picking up some that had fallen after being cut open by the birds, it became evident that a woolly aphis, which had caused the curling of the leaf margin was the item of food being sought by the Crossbills. The attack of this insect causes the blade of the leaf to curl over, forming a cylindrical roll within which the aphids can feed and multiply unmolested by most of their enemies.

Further watching of the Crossbills showed that the birds had learned the haunt of these particular aphids and also a method for obtaining them. The roll-like cases were cut open lengthwise, but in rather irregular fashion, as well as could be expected of a species with such an unhandy pair of "scissors"; then the tongue would be inserted and the aphids withdrawn. The process was not as efficient as it would have been with a typical insect-eating species possessed of a slender bill, and many of the insects adhered to the outside of the birds' mandibles. From time to time a bird would cease feeding and wipe the adhering bugs and "juice" from its bill.

That this method is not an entirely novel one with the birds observed by me is indicated by the fact that Visher (*Auk*, xxvi, 1909, p. 150) records briefly similar behavior of Crossbills in taking aphid galls on petioles of cottonwood in South Dakota. Still other observers have reported the taking of insect food by Crossbills. "Worms" [probably borers] have been eaten in South Carolina (Wayne, *Auk*, v, 1888, p. 208), and hairy caterpillars, the larvae of *Clisiocampa distria* at Brandon, Vermont (M. M. Miller, *Auk*, xvi, 1899, p. 362), while in California lepidopterous pupae have been found in the crop of *Loxia curvirostra bendirei* near Lake Tahoe (L. H. Miller, *CONDOR*, xxii, 1920, p. 78.—TRACY I. STORER, *Museum of Vertebrate Zoology, Berkeley, California, March 15, 1921.*

Further Notes on the Harlequin Duck's Food Habits.—The following may be of interest, with reference to Dr. Bryant's note, "The Harlequin Duck in the Yosemite Valley" (*CONDOR*, xxiii, p. 35), in which he says, that "apparently the Harlequin does not procure all of its food by diving . . .". On May 14, 1914, I was making my way up St. Leon Creek, British Columbia, when I saw a pair of Harlequin Ducks (*Histrionicus histrionicus*) sitting out on a sand-bar, busily engaged in preening. A thick undergrowth enabled me to get very close to them. I had been watching them for several minutes, when another male flew down the creek and settled close to the pair. The first male resented this intrusion, and drove the new arrival into the water, and he was at once carried away by the swift water and lost to sight. The pair soon followed him into the creek, and I fully expected to lose sight of them, too; but they immediately com-