in every case he had found the wounds neatly dressed with down plucked from the feathers, and arranged evidently by the long bill of the bird. In some instances a solid plaster was thus formed, and in others "bandges" had been applied to wounds or broken limbs. One bird shot had been severely wounded at some recent period, and had been protected by a sort of net work of feathers taken from the bird's own body, so arranged as to completely cover the wound. The feathers were fairly netted together, passing alternately under and above each other, forming about the broken limb a textile fabric of strong binding power.

Might it not be more reasonable to conclude, in the case of the swallow, that the young bird had entangled itself with some horse hairs that were used in the nest and had broken its leg, while the Cleveland citizen happened too bserve the bird's condition and regarded it as a piece of wonderful animal intelligence? A case similar to that of the wounded woodcock has come under my personal observation. This bird was a female valley partridge (*Lophortyx californicus*). As I was coming down a ridge one November day of 1901 this quail fluttered along almost under the horse's feet, and then escaped into the tall, dry weeds where I captured her. She had been in some way hurt above and below the knee, from



either a shot or a trap. The bird, on getting away into the thick brush naturally drew her wounded leg up under the flank feathers. The oozing blood would cause the soft downy

parts of the feathers to adhere and dry onto it. Then as the bird felt the need of food or was obliged to move, she would lower the leg to use it, when off would come a few feathers adhering to the wound. This would also cause some parts of the wound to bleed afresh, and more soft down with bits of fine dry grass and dirt would be added as the bird crouched down, forming a regular cast or bandage. This seems to be the explanation of many cases of natural surgery, and was certainly what happened to the quail.

I recall also the case of a male Brewer blackbird (*Euphagus cyanocephalus*) taken one winter. The leg had been broken midway above the knee and the ends of the bones had slipped by each other and healed, the muscles holding them in place. Another specimen had no toes on one leg, there being a stump.

This brings me back to the bone picked up on the beach. A cut is here given showing the overlap, between the two dotted lines, where the healing has taken place. The bone had been broken in some manner, had turned half way around, slipped together about an inch, where by some means or other it had been kept until it had grown together. On the lower side the splintered bone may be seen in wedge-shaped form. The humerus is three inches long as healed and some four inches long in its natural condition.

Haywards, California.

A List of Summer Birds of the Piute Mountains, California

BY C. H. RICHARDSON, JR.

URING the summer of 1903, I spent a month's vacation in the Piute Mts. These mountains consist of a single range, lying between the Tehachapi Hills and the Sierra Nevada mountains. My headquarters was a small cabin about six miles northwest of the Piute post-office. The hills which surround Sept., 1904

the higher mountains at this point (elevation 6000 feet) support a scattering growth of digger pine (*Pinus sabiniana*), juniper (*Juniperus occidentalis*), nut pine (*Pinus monophylla*), and one species of oak, while the intervening space is occupied by a thick though not impenetrable growth of chaparral. The higher mountains, from 6000 to 7500 feet in elevation, are clothed with heavy forests of yellow pine (*Pinus ponderosa*) and silver fir (*Abies concolor*), with an occasional grove of mountain live oak (*Quercus chrysolepis*) or a patch of wild cherry brush mingling with them. The water, in the foot hills, comes in the form of small streams found in oak-lined canyons, while in the higher mountains, the supply is confined chiefly to springs, there being few streams of any size.

A number of species whose identification was uncertain, were omitted. Although this list is by no means complete, I think it will give a comprehensive idea of the summer birds of this region. I here wish to extend my thanks to Mr. Joseph Grinnell for the identification of specimens and help in general.

Dendragapus o. sierræ. Sierra Grouse. Seen several times in the pines. One was taken.

Oreortyx p. plumiferus. Plumed Quail. Common in the higher mountains and often seen in the foothills.

Columba fasciata. Band-tailed Pigeon. Seen on several occasions in the high mountains.

Zenaidura macroura. Mourning Dove. Frequently found about springs in the foothills.

Accipiter cooperi. Cooper Hawk. Common. They are a terror to the quail and smaller birds of this section.

Buteo b. calurus. Western Red-tail. Tolerably common over entire country. Falco s. phalœna. Sparrow Hawk. Seen occasionally, though not common. Otus a. bendirei. California Screech Owl. One flew into the cabin at night.

This was the only one seen.

Asio m. pacificus. Pacific Horned Owl. Quite common. A pair roosted in a dense oak not far from the cabin.

Glaucidium gnoma. Pigmy Owl. One specimen was taken about nine thirty in the morning.

Geococcyx californianus. Roadrunner. One was seen in some fallen timber at an elevation of 7500 feet.

Dryobates v. hyloscopus. Cabanis Woodpecker. Common in the coniferous forests.

Dryobates p. turati. Willow Woodpecker. Abundant throughout the timber districts.

Xenopicus albolarvatus. White-headed Woodpecker. Common among the pines. Colaptes c. collaris. Red-shafted Flicker. Abundant everywhere.

Phalænoptilus n. californicus. Dusky Poorwill. Common in the foothills and among the rocks on the exposed ridges of the higher mountains.

Aeronautes melanoleucus. White-throated Swift. Swifts were seen quite often flying about the hillsides and a few were noticed in the higher mountains. One specimen was secured.

Selasphorus alleni. Allen Hummer. Humming birds were numerous wherever flowering plants were found. Undoubtedly S. rufus and Stellula calliope occur with this species.

Contopus borealis. Olive-sided Flycatcher. One specimen of this species was secured and others were seen the same day. These were the only ones noted.

Contopus richardsoni. Western Wood Pewee. Juveniles of this species were taken in the pines where they were plentiful.

Empidonax difficilis. Western Flycatcher. Common everywhere. Cyanocitta s. frontalis. Blue-fronted Jay. Quite common among the pines. Aphelocoma californica. California Jay. Abundant in the foothills. Carpodacus cassini? Purple Finch. A purple finch was seen in the pines. Carpodacus m. frontalis. House finch. Common about springs in the foothills.

Astragalinus ps. hesperophilus. Arkansas Goldfinch. Frequently'seen near springs in the hills.

Astragalinus lawrencei. Lawrence Goldfinch. Seen occasionally flying overhead. Spizella socialis arizonæ. Western Chipping Sparrow. Abundant and in flocks among the pines.

Junco h. thurberi. Sierra Junco. Very common.

Amphisphiza b. nevadensis. Sage Sparrow. By far the commonest bird in the foothills. Usually most numerous near water.

Aimophila ruficeps. Rufous-crowned Sparrow. These sparrows were occasionally seen about brush patches both in foothills and higher mountains but were rather shy.

Pipilo m. megalonyx. Spurred Towhee. Common in foothills.

Pipilo crissalis. California Towhee. Common though not so numerous as the spurred towhee.

Zamelodia melanocephala. Black-headed Grosbeak. Seen on one occasion in the pines.

Piranga ludovciana. Western Tanager. Quite common everywhere. Tachycineta t. lepida. Northern Violet-green Swallow. Very common in the higher mountains.

Phainopepla nitens. Phainopepla. Seen once.

Lanius 1. excubitorides? White-rumped Shrike. A shrike which was undoubtedly of this species was seen on a fence near the Piute post office.

Vireo s. cassini. Cassin Vireo. One specimen was taken and several others were seen.

Helminthophila c. lutescens. Lutescent Warbler. One specimen of this species was taken. No others were seen.

Dendroica auduboni. Audubon Warbler. Very common among the pines. Many juveniles were seen.

Dendroica nigrescens. Black-throated Gray Warbler. Frequently seen among the oaks over the entire country.

Geothlypis tolmiei. Tolmie Warbler. Common everywhere.

Wilsonia p. chryseola. Golden Pileolated Warbler. Common about springs in the foothills.

Mimus p. leucopterus. Western Mockingbird. Only seen once.

Toxostoma redivivum. California Thrasher. Common in the foothills.

Salpinctes obsoletus. Rock Wren. Often seen about large piles of boulders in the foothills.

Catherpes m. punctulatus. Dotted Canyon Wren. Only a few seen in the foothills. Thryomanes b. eremophilus. Desert Wren. Numerous about brush patches in

foothills. A specimen taken appears to closely resemble this form.

Certhia a. zelotes. Sierra Creeper. Abundant in the timber.

Sitta c. aculeata. Slender-billed Nuthatch. Numerous in the conifers.

Sitta canadensis. Red-breasted Nuthatch. Not so plentiful as aculeata or pygmæa.

Sitta pygmæa. Pygmy Nuthatch. Common.

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Bæolophus inornatus. Plain Titmouse. Abundant about oaks in the foothills. **Parus gambeli**. Mountain Chickadee. Very common in higher mountains and occasionally met in the foothills.

Chamæa f. henshawi. Pallid Wrentit. Quite common about brush-covered hills. Psaltriparus m. californicus. California Bush-tit. Numerous in oak regions, both in foothills and higher mountains.

Polioptila c. obscura. Western Gnatcatcher. Common in foothills.

Merula m. propinqua. Western Robin. Quite plentiful in higher mountains. Sialia m. occidentalis. Western Bluebird. Common everywhere but most numerous among the pines and firs.



MRS. FLORENCE MERRIAM BAILEY

There are probably few writers who have exerted a more wholesome influence on the trend of popular ornithology than Mrs. Florence Merriam Bailey, whose "Birds Through an Opera Glass" (1889) has been one of the most successful and effective books of its class. Mrs. Bailey has had the advantage of a wide and varied field experience throughout the West, as well as in the eastern states, and her "A-birding on a Bronco," like all of her works, reflects an intimate acquaintance with the live bird. She has been a frequent contributor to ornithological magazines and has written, besides the two books already mentioned, "Birds of Village and Field," and the well-known "Handbook of Birds of the Western United States," deservedly characterized as "the most complete text-book of regional ornithology which has ever been published." "As an observer, Mrs. Bailey is unmistakably keen, discriminating, and accurate; as a writer, always simple and true, at times highly vigorous and original."