

Arizona (Pacific Coast Avifauna No. 10, 1914) leads me to believe that the following sight records, obtained during 1935, have sufficient interest to warrant publication. Most of these species were not reported by Stephens, and others were observed to be more numerous than Stephens' list would indicate.

Golden Eagle (*Aquila chrysaetos*). Two were flying over Hualpai Peak and other high peaks on May 24.

Band-tailed Pigeon (*Columba fasciata*). Russell found five in the yellow-pine forest near the county park headquarters on October 21, elevation 6500 feet.

Broad-tailed Hummingbird (*Selasphorus platycercus*). Quite common in the chaparral association near park headquarters in May.

Western Wood Pewee (*Myiochanes richardsoni*). Stephens mentions no records for the Wood Pewee in the Hualpais. Russell and I found the species to be fairly common in the mountains in May. Pewees were seen in yellow pines at the Lawe Ranch, adjoining the county park on the east, and near park headquarters, 6000 feet elevation. Two birds were observed in a walnut grove at the DW Ranch, elevation 4200 feet, on May 25.

Clark Nutcracker (*Nucifraga columbiana*). Several were seen by Russell on the higher slopes of the Park, October 21.

Violet-green Swallow (*Tachycineta thalassina lepida*). On May 24 we observed at least ten flying about the slopes of Hualpai Peak, elevation 7800 feet.

Purple Martin (*Progne subis subis*). A pair observed at a tank on the DW Ranch on May 24, and seen daily until May 30, may have been nesting in the vicinity. Four martins were seen at the Lawe Ranch, May 27, elevation 5800 feet.

Rocky Mountain Nuthatch (*Sitta carolinensis nelsoni*). A pair found in the yellow-pine forest on the Lawe Ranch, May 27, probably nested in this forest although definite evidence was not obtained. On October 21, Russell observed a single nuthatch near the county park headquarters.

Cedar Waxwing (*Bombycilla cedrorum*). Three were observed in a walnut tree on the Newberry Ranch at 4000 feet elevation, May 27. The species is rare and irregular in occurrence in Arizona.

Grace Warbler (*Dendroica graciae*). Stephens did not find this warbler when he visited these mountains in July, 1902. We were surprised to find it quite common in yellow pines near park headquarters. Several singing males were observed in the last week of May and the species was apparently nesting in the vicinity.

Painted Redstart (*Setophaga picta*). On May 30, Russell found seven adults in Wheeler Canyon, northeast of Hualpai Peak. Birds were observed in the oak and pine forest in the canyon at 6500 feet. Since Stephens did not find the species in these mountains in 1902, these birds probably represented a colony that had become established since that time. This record extends the known summer range of the species some distance northwest of the northern limits recorded near Prescott.

Lazuli Bunting (*Passerina amoena*). On May 27, a male bunting was discovered singing from a perch in a yellow pine on the Lawe Ranch.

Chipping Sparrow (*Spizella passerina arizonae*). Stephens did not list this species from the Hualpais and breeding records for western Arizona are few. Several chipping sparrows were found in May in the yellow-pine forest. On May 24, a nest containing four eggs was discovered in a small yellow pine in the county park, elevation 6200 feet.

Black-chinned Sparrow (*Spizella atrogularis*). Stephens (*op. cit.*, p. 103) established this species as a breeding bird of the Hualpai Mountains. He found both adult and immature birds at 6000 feet in July. Russell and I noticed that this species was common in *Ceanothus* and manzanita thickets in May. Birds were observed in the chaparral of the north slopes between 4200 and 6200 feet elevation. Male birds were in full song and were actively engaged in defending nesting territories against other individuals of the same species. No nests were discovered although females were evidently incubating eggs during this period.—JAMES O. STEVENSON, *Wildlife Division, National Park Service, Washington, D. C., August 3, 1936.*

**Habits of Lewis Woodpeckers in Winter.**—A detailed account of the winter behavior, especially the acorn-storing activities, of the Lewis Woodpecker (*Asyndesmus lewis*) was published recently by J. E. Law (Condor, vol. 31, 1929, pp. 233-238). His story dealt mainly with analysis of the mannerisms connected with the storing habit and the implications of them. This record of observations is remarkably complete, but the return of the bird to the store was not actually seen and Law pointed out that he had no evidence "that this [individual] woodpecker ever ate any acorns once stored."

Within a few weeks after the appearance of Law's article I had opportunity to watch a large group of Lewis Woodpeckers and to see at least one eat acorns that had been stored. This time, however, I failed to learn how the acorns had reached their storage places. The birds were watched on February 15 and 16, 1930, close to Butte Slough, one mile west of West Butte, Sutter County, in the Sacramento Valley, California.

One hundred or more of the woodpeckers were active on the ground and among valley oaks in a grove in which Yellow-billed Magpies were being studied. A considerable amount of jealousy was exhibited by various members of the company. Once, two individuals in flight overhead each in turn flew at the other, and then both lit. On several occasions a Lewis Woodpecker flew after and chased a California Woodpecker or a Red-shafted Flicker. Other birds pursued were the Yellow-billed Magpie and Downy Woodpecker. At 8 a.m. on the second morning, I heard a Lewis Woodpecker several times utter alarm notes near a particular girder of the bridge in that vicinity. At that point I discovered a Screech Owl perched on the girder. Only once was the order reversed and a Lewis Woodpecker was driven from the neighborhood of a tree by California Woodpeckers. Not only did the Lewis Woodpecker seem to be the most numerous bird species in the vicinity, but also these birds were conspicuously noisy. One of their notes seemed to have much of the quality of the bark of the Douglas ground squirrel.

Late in the morning and about noon certain individuals were seen a great many times to make long and apparently aimless flights into the air over the trees. Sometimes they appeared definitely to fly after and catch insects in the air. They spent much time about the trunks of the oaks and on the ground about the bases of the trees where they picked at objects.

Each morning at about 8 a.m. a Lewis Woodpecker was watched as it flew to a telephone pole (fig. 41) at the side of the road. Here the bird settled before a large crack in the pole ten or fifteen feet above the ground and proceeded to pick into the cracks. Once an object was dislodged which fell to the ground. The woodpecker paused in its probing and watched the object fall. When this spot on the pole was examined, pieces of acorns of valley oak were pried out from storage places one to four inches back from the surface. At two places the cracks showed fresh evidence of digging where the bird had enlarged the crevice. On the ground beneath, many halves of shells of acorns were scattered within six or eight feet of the base of the pole, but none was seen farther from it. All of them appeared freshly broken. The nearest oak trees were about thirty yards distant. On the second morning the Lewis Woodpecker drove a California Woodpecker from this pole before it started to feed there. Movements of the mandibles could be seen plainly as the bird picked at the acorns.

One valley oak in the vicinity had crannies in its bark filled with pieces of meats of acorns, but no shells were found. There was no evidence of hole drilling here. Some whole acorns placed six feet above the ground on top of wooden bridge supports may have been stored there by woodpeckers.

It was not possible to determine which species of woodpecker had placed the acorns in the storage places, but the situation was remarkably like the one described by Law. There was no question but that the Lewis Woodpeckers not only had possession of the supply when these records were made, but that also they were making regular use of it. Evidently storage activities sometimes may have definite value for these birds in their late-winter feeding.—JEAN M. LINSDALE, *Museum of Vertebrate Zoology, University of California, Berkeley, February 20, 1936.*

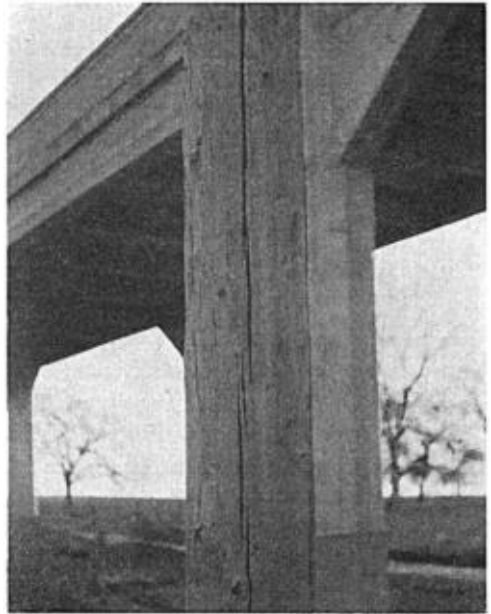


Fig. 50. Telephone pole near West Butte, Sutter County, California, where a Lewis Woodpecker fed on stored acorns. Photographed on February 16, 1930.