Twenty-nine Palms and Virginia Dale, as well as others toward Palo Verde and the Colorado River, is found this quail.

They range upward to at least 4000 feet and at favorable points are found in proximity to the Plumed Partridge (*Oreortyx pictus plumiferus*). At other places the Valley Partridge (*Lophortyx californicus vallicola*) joins in and the three species occupy the same territory. At Snow Creek at the north base of San Jacinto Peak I have shot the three species and carried them home in the same bag. Near Banning mixed flocks of *gambeli* and *vallicola* have been seen and the Plumed, or Mountain Quail as it is more commonly called, only a short distance away. In canyons at Palm Springs the three can be found, and on Pinyon Flats, altitude of 4,000 feet, lying about fifteen miles south of Palm Springs, I have seen the three species drink from the same spring in course of half an hour.

I have heard of hybrids between *gambeli* and *vallicola* being shot near Whitewater but know nothing positive about it. I have shot Valley Quail at Whitewater and at Palm Springs very light in color and with top of head approaching the red of *gambeli* but with none of the distinctive breast markings. Desert surroundings might account for the variation from type. Or perhaps a cross between the two would not be a true hybrid and by mating with the California side of its parentage most of the *gambeli* markings would be lost. I should like expert opinions as to the possibility of a cross between *L. gambeli* and *L. vallicola* proving fertile instead of hybrid. The structural differences seem slight or *nil*, and coloration so much a matter of environment. The same question has been discussed in THE CONDOR concerning hybrid Flickers and no conclusion arrived at. But it seems to me that experiments with the partridges could be easily made and something definite learned. I have had Valley Partridges lay eggs in captivity; and with big enough enclosures, experiments with the two species should yield results.

Shiprock, New Mexico.

NESTING OF THE BI-COLORED BLACKBIRD

By H. F. DUPREY

EVERY collector living near a tule marsh is well acquainted with one of our most common birds, *Agelaius gubernator californicus*. Seven miles west of Santa Rosa, California, lies the Lagoon, grown with tules, weeds, water lilies, willows, etc., a tangled mass of swamp. For several years past I have paid this swamp a visit to gather tribute in the way of the eggs of the Bi-color. While Davie in his "Nests and Eggs" says that the nesting habits of Bi-color "are exactly the same as the eastern Redwing" (*Agelaius phœniceus*) the nests being placed in water-cress or rushes along running streams, ditches and swamps, in this lagoon I speak of I have in most cases found the nest fastened to three or four stalks of tule 18 to 24 inches above the surface of the water. Then again I have found the nests fastened to young willows growing along the banks of the lagoon. In Solano County I have found a great many nests attached to wild mustard growing in the grain fields several miles from any body of water. This wild mustard grows in patches in the fields, and in a space of 40 or 50 feet square grown up with mustard it is quite common to find seven or eight pairs nesting. It is also common to find nests in low swales in the fields that carry water in the winter and spring and

grow up with wire grass in April and May. Where nests are found here they are usually lower down, sometimes within ten or twelve inches of the ground.

I was fortunate on May 5, 1903, to find two nests of the Bi-colored Blackbird in oak trees, both southwest of Santa Rosa. The first one was in a large oak on the bank of a small creek in a grain field. Tho the usual wire grass and a few tules were growing along the edge of the water, this pair of birds built their nest on one of the lower limbs of the oak, seven feet above the ground out at the very end of the limb on a small crotch and fastened to the small growth and leaf stems. The nest was built of the usual material and lined the same. There were four eggs, the female was flushed from the nest, and the male bird was in another part of the tree.

About three miles more to the southwest and at the southern extremity of the same lagoon I mentioned before, I found another nest of Bi-color in an oak tree. This was a more interesting nest even than the other. It was situated in the very top of the tree; in fact the nest was fastened in the uppermost fork of the main part of the tree, 2½ feet from the very top point of the tree and 20 feet from the ground. It was a mass of tree moss and well concealed. The nest was of the usual material, eggs four in number and typical of Bi-color. The flushing of the female was what located the nest. The tree was at the very edge of the water, and was leaning over the water so that when I was in the top of the tree I could have dropped into the water three feet from the bank. After taking the eggs, I cut the top of the tree off about twelve inches below the nest. I still have this nest and set, and also have had it photographed. [Reproduced herewith.]

NEST OF BI-COLORED BLACKBIRD IN TOP OF OAK HUNG WITH LICHENS

Davie speaks of Mr. I. E. Hess of Philo, Ill., finding the nest of Redwing in a wild cherry tree and of unusual material; also a half mile from open water. The two nests I speak of were both built of the usual material, and both very close to where the Bi-colors most always nest. In fact the water and the nesting sites were there in both instances, but the birds selected the oak in preference. Why? I have come to the conclusion that it was to elude that enemy of most nesting birds, the California Jay, as in both instances the grass and tules at the water's edge were quite sparingly grown up and very open. I have also noticed that in the thick tules the nests were mostly placed in those growing at the edge of the little avenues of water running thru them. On same date as finding the two sets in the oak trees I also found one set of four eggs the nest of which was fastened to the tall grain stalks in a large grain field ¾ of a mile from the place where I found the first nest of Bi-color in the oak, which was the nearest water and 200 yards from the road. I located the nest by seeing the female settle down, and on going to investigate found the nest and eggs.

Davie's "Nests and Eggs" and Bendire's "Life Histories" both make only one description of the eggs of the Bi-color; namely, light blue or bluish white, marked around the larger end with waving lines of dark brown, lighter in shade than the markings on the eggs of the common Red-wing (Davie). "The eggs are two to four in number (very rarely more), and resemble those of the Red-wing Blackbird excepting that they are a trifle smaller and perhaps on an average less heavily marked, but otherwise the same description will answer for both" (Bendire); also only two types given on Plate VI.

I have in my collection a set which is typical of the Bi-colored Blackbird. Also a set of four eggs, which are not marked at all, only plain ground color showing, and another with plain ground color, at larger end quite a bit darker, and with only one or two very faint and small dark lines showing. On the whole I think that this blackbird is a very interesting subject ot study, and tho it is somewhat common much can be learned by studying the common birds, as well as those that are less familiar.

Santa Rosa, California.

NOTES ON THE PALLID WREN-TIT

By WRIGHT M. PIERCE

THE Pallid Wren-Tit (*Chamæa fasciata henshawi*), a little bird with a brown-colored back and wings, and a buffy colored breast, lightly streaked with gray, so common on the brush-covered slopes below the foot-hills and even well up into the mountainous districts about here, has always seemed a very interesting little subject of bird life to me. With his long tail, common to members of the tit family, and his wren-shaped body, he is unique, showing some characteristics of both wren and tit families. The lower foot-hills and the mesa regions are the favorite haunts of this bird, altho we meet with him at higher altitudes but with somewhat less frequency the farther up we go. But even tho the lower haunts of this bird are very accessible, this little fellow seldom appears to the casual observer of bird life, for usually the moment you approach he hops off into the surrounding sombre-colored sage which is in exact harmony with his plumage. Then very likely in a moment, from some bush or tree not far away, you hear again his call; but on drawing near to the latest retreat of this unobtrusive little bird, the song suddenly ceases and by the time you have arrived the source has likely disappeared again. However I do not wish to have it understood by these remarks that this bird is especially wild or wary; quite the opposite, for he seems to slip away in no hurry and in such a matter of fact way, simply going slowly from branch to branch of some bush, diligently seeking small insects, seeds and grubs that are his food. Then by a short quick flight he is away to the next bush. He, without doubt, relies upon the protective color of his plumage for his escape from his enemies, and incidentally from those who wish to observe his actions.

Chamæa fasciata henshawi, as the scientist calls him, must nest commonly about here, for the birds are met with as frequently during the nesting season as at other times of the year; in fact, they are more in evidence during the mating season than at other times because of their distinctive whistle-like song, which is uttered then with more frequency. This song or whistle, tho perhaps not very musical, seems very fitting and appropriate with the surroundings, from which it is uttered: the lonely chaparral-covered canyons and gulches of our foot-hills and lower ranges, or the broad expanse of brown-colored brush, or, perhaps, farther up in the higher