

the strong impression that the Gray Titmouse is set off much more sharply from the *inornatus-murinus* titmouses than has hitherto been supposed. In spite of statements and implications to the effect that intergradation between *inornatus* and *griseus* occurs in the region of the southern Sierra Nevada, I have failed to find even one fair intermediate. It is true that specimens of *inornatus* from the southern Sierras and the vicinity of Walker Pass, in Fresno, Tulare, and Kern counties, are decidedly paler in tone of color than typical *inornatus* from west-central California. But this paleness consists merely in lightening of the tone of brown dorsally and a whitening of the lower surface; it does not tend toward the leaden hue both above and below characteristic of *griseus*.

Griseus has other characters, too: relatively longer tail, longer wings, and larger bill, just as pointed out by Ridgway (Birds N. and Mid. Amer., III, 1904, p. 390). These increases in certain dimensions do not, however, accompany a general increase of body size; for ascertained weights (of 19 individuals of *griseus* and of 39 individuals of *inornatus*) show no difference of moment. After all, the leaden color, involving the whole bird including the surfaces of the wings and tail, is the impressive feature; and I will again state that I fail to find any specimen that I would call an intergrade between either *inornatus* or *murinus* and *griseus*.

Furthermore, as shown in the accompanying map (fig. 45), information so far available indicates a geographic hiatus between the range of *griseus* and the range of *inornatus*. I know the territory on the east flank of the Sierra Nevada north from Kern County to Mono County, and I think it very unlikely that there is any well-marked continuity of favorable conditions there, such as would have to be present to permit of free intergradation. It will be recalled that all of these races of *Baeolophus* are rather strictly confined to the Upper Sonoran life-zone. *Griseus* belongs to the piñon-juniper association; *inornatus* to the analogous digger-pine and oak association.

It may be remarked here that the differences characterizing *murinus* are slight and that they are inconstant; also that blending between *inornatus* and *murinus* is complete by way of both geographic and individual variation—which, again, is not the case between either of those forms and *griseus*. *Griseus* parallels *plumbeus* in the bush-tits. I am almost tempted to propose full specific status for the Gray Titmouse. But I do not know enough about the geographic behaviour of the titmouses in the Rocky Mountain region and in Lower California.

To summarize: The Gray Titmouse is a very distinct form, separated sharply from the Plain Titmouse geographically as well as on the basis of phylogenetic characters. No intergradation between these two titmouses is known to take place. The Gray Titmouse in California is a rare bird. It has been found to exist only in small numbers and at a few widely scattered points. The general territory in which it occurs lies east of the Sierran divide, in the arid Great Basin faunal division. The life-zone occupied is the Upper Sonoran, and the association the piñon-juniper.—J. GRINNELL, *Museum of Vertebrate Zoology, University of California, Berkeley, March 20, 1923.*

Pine Siskins as 'Foliage-feeders'.—On February 22, 1923, I noticed one of the oak trees (*Quercus agrifolia*) in Washington Park, Alameda, California, swarming with a continually moving flock of birds which, after approaching closer, I found to be Pine Siskins (*Spinus pinus pinus*). Judging that they were enjoying an afternoon meal I decided to watch them. It was not long before I noticed a green substance adhering to the sides of their bills, which they would occasionally wipe off on the branches. Catching some of this as it fell to the ground I discovered that it was green leaf material and concluded (prematurely) that the rascals were nipping the newly formed leaf buds. Further observation proved this to be erroneous, for the birds were procuring their food from the lower surfaces of the leaves. Examining the leaves I found a great many of them afflicted with the gall of a saw-fly (*Callirhytis bicornis*). The galls were attached to the midrib or a lateral vein on the lower surfaces of the leaves. They were composed of leaf material, light green in color (lighter than the leaf), from two to four millimeters long and shaped somewhat like a miniature saddle, being depressed in the middle and rising to an apex at both ends. Each contained a minute milky-white grub and many close views revealed the birds 'shelling' the galls and devouring the contents exactly as a domestic canary shells its seeds.

The flock contained about one hundred birds and as they moved from tree to tree I was struck by the resemblance to the movement of a flock of bush-tits. First one or two birds flew to a neighboring tree. In a few seconds they were followed by several more and so on until the entire flock had moved.

I am indebted to Professor E. O. Essig of the Department of Entomology, University of California, for the identification of the galls.—FRANK N. BASSETT, *Alameda, California, March 24, 1923.*

The Horned Puffin on the Coast of Oregon.—On March 7, 1916, while collecting birds on the Netarts Sandspit, Netarts Bay, Oregon, two of these puffins (*Fratercula corniculata*) were found washed up on the ocean beach. Both had been considerably mutilated by gulls and were partly decomposed. The head and neck of one specimen was preserved, however, and the identification has recently been verified by Dr. H. C. Oberholser, of the Bureau of Biological Survey.

Inasmuch as this species has never been recorded from the State of Oregon, I am hereby offering the record for what it is worth.—STANLEY G. JEWETT, *Portland, Oregon, March 27, 1923.*

The Mexican Cliff Swallow in Cochise County, Arizona.—In August, 1915, I was located at Fort Huachuca, Cochise County, Arizona, and was much interested to find a somewhat numerous colony of Cliff Swallows nesting in scattered locations all over the fort. I shot several of the birds and found that they were the Mexican subspecies (*Petrochelidon lunifrons melanogastra*). Eight pairs were first observed with nests under the eaves of the railroad station and of the section foreman's house. This was on August 1. Five of the nests contained young and three were in process of construction. Judging from the remains of other nests and the looks of the buildings, several broods of young had already left their nests and were on the wing. A few days later the nests on the station were destroyed by painters.

On August 3, a set of five fresh eggs was collected from a nest under the roof of the open coal storage shed. This shed was in the fort proper and was over a mile from the railroad station. Two other nests were under this shed and held incomplete sets. Unfortunately, they were knocked down by troopers before the sets were completed. Several single nests were noticed under the eaves of the officers' quarters. Some new quarters were being built and were nearly completed, but the windows had not been put in place. On August 8 I found four nests in one room of the second story. One held a set of four eggs in which incubation had begun. One was occupied by a brood of half-grown young. The third held an incomplete set and the fourth was not yet finished. On the 10th, in a second-story room of another unfinished building, I collected a set of four eggs in which the incubation was varying, one egg being infertile. Another nest in this room was still unfinished, and another contained young.

I estimated the total number of the colony at twenty-five pairs. Many of their nests were destroyed by the workmen and others as I have already mentioned, but the end of the season saw a very sizable flock gathered for migration. This flock moved down to Huachuca Siding in September and joined forces with a large flock of Barn Swallows (*Hirundo erythrogastra*) which had been nesting there during the summer. This siding is about eight miles from the fort and several hundred feet lower in altitude. The combined flock of several hundred birds stayed there for some time, and I did not learn just when it left.

With the exception of the pairs nesting in the new quarters, all the nests were attached to well painted woodwork. In the quarters, they were attached to the plastered walls close up against the ceilings. They were the usual gourd-shaped nests of mud pellets, with a few bits of grass for lining and a very few feathers. In the dry atmosphere of the mountains, the pellets of mud dried very quickly and it was surprising to see how fast a pair of birds could build up the walls of their abode. Both birds took part in the building. On arriving at the nest with a pellet of wet mud, the bird would press it into its appointed place and hold it there for several seconds until it was 'set.' I never saw a pellet thus held in place drop off when the bird loosened its hold.