

Remarks.—The differences in coloration between this new form and *plumbeus* have already been noted by van Rossem (*op. cit.*). To review these characters, *plumbeus* possesses an olivaceous back which contrasts with the ashy gray pileum, whereas in *providentialis* the dorsum and pileum are concolor. The vinaceous wash seen on the flanks of *plumbeus* is, in fresh-plumaged birds, not seen in *providentialis* to any great extent. Two characters not previously noted are the lighter throat in *plumbeus* and the darker auricular feathers in *providentialis*.

In comparison with *cecaumenorum*, *providentialis* is a larger bird in all measurable characters. The true coloration of *cecaumenorum* is subject to doubt, as no winter-taken individuals are available. The head and auriculars of the topotypes of *cecaumenorum*, even though worn, seem too light to be equivalent to *providentialis*.

The following are the average measurements (in millimeters) of the three races of bush-tits in question. Males and females are combined, as no significant differences in the averages of the sexes has been found.

	Number	Wing	Tail	Bill length from nostril
<i>plumbeus</i>	42	50.3 σ 1.01	56.5 σ 2.78	6.12 σ .24
<i>cecaumenorum</i>	9	48.9 σ 1.30	54.7 σ 1.32	5.90 σ .28
<i>providentialis</i>	44	51.3 σ 1.42	59.0 σ 2.28	6.43 σ .24

In a series of skins from Inyo and Mono counties, California, contained in the Museum of Vertebrate Zoology, coloration on the back is similar to *providentialis* and the flanks lack the vinaceous wash; but the throat is lighter than the belly and in this they are similar to *plumbeus*. The auriculars are intermediate between the two forms. On the whole, however, these birds are closer to the new form than they are to *plumbeus*. The birds from the Charleston Mountains are similar to those of the Providence Mountains (see van Rossem, *op. cit.*)—M. DALE ARVEY, *Boise Junior College, Boise, Idaho, November 29, 1940.*

Unusual Behavior of the Florida Gallinule.—At Lindo Lake, Lakeside, San Diego County, California, I was fortunate in observing some peculiar actions of the Florida Gallinule (*Gallinula chloropus*). On April 6, 1940, one was noticed paddling among the tules. It was frightened and hid in the thick growth, when I tried to show it to my companion. Soon after we moved away it showed itself on the other side of the narrow neck of water.

A Dr. Beale and his party from San Diego arrived and we searched the area for the bird, without locating it. When we returned to the car, the gallinule appeared on the shore and, as we watched, proceeded to climb a willow tree to a height of about twenty feet. The wings were used only slightly to assist in balancing as the bird walked up the sloping trunk. The gallinule stayed on the trunk or large branches. Another bird came out of the tules and followed the first up the tree. Both gallinules remained in the tree about five minutes, apparently feeding on the willow catkins. An effort was made to photograph them, but the tree was too dense. One bird flew down into the reeds, and the other was flushed by throwing a stick. Both hid again and were seen no more. No notes were heard during the entire episode.—JAMES G. PETERSON, *Descanso, California, November 1, 1940.*

The Columbian Sharp-tailed Grouse in Lake County, Oregon.—Gabrielson and Jewett (*Birds of Oregon, 1940, pp. 216-217*) mention the Columbian Sharp-tailed Grouse (*Pedioecetes phasianellus columbianus*) as now being scarce and apparently in danger of early extinction in Oregon. Since Jewett does not record it from the Hart Mountain Antelope Refuge (U. S. D. A. Misc. Publ. no. 355, 1939) as late as 1939, the following note may be worthwhile.

While with a paleontological field party from the California Institute of Technology in 1940, the author spent several days at Beatty Butte, Lake County, Oregon. Here, on July 29, a band of four Sharp-tailed Grouse was flushed on the western side of the Butte, high up among dry lava rocks and grasses. The birds were seen in the evening, just before sunset. In flight they moved more rapidly and were noticeably smaller than Sage Hens, which were numerous in this region. Uttering sharp cries, they passed up and over the brow of a small hill, to rise again and disappear at our approach.—JOHN E. CUSHING, JR., *California Institute of Technology, Pasadena, California, October 9, 1940.*

Creepers and Sequoias.—I was much interested by the Rankins' recent paper (*British Birds, 34, 1940:56-60*) on the roosting habits of the Tree Creeper (*Certhia familiaris britannica*) in sequoias introduced to Great Britain. Of 17 *Sequoia gigantea* and 12 *S. sempervirens* under observation, 12 and 4 held creeper roosting holes, totalling 139 and 6 in number, respectively. Kennedy (*British Birds, 30, 1936:2-13*) also discusses this matter and on page 2 advises that some of the trees were probably

planted as early as 1853. The older trees have thick, fissured bark and are favored by creepers for roosting over the younger ones with less furrowed bark.

Presumably none of these trees developed thick enough bark to provide attractive roosting sites until about 40 years ago. Hence, since that time creepers have come to use them freely. This indicates that an inherent relationship exists between the bird and tree species and also shows the rapidity with which the bird species may take advantage of a favorable addition to its habitat. We in California well know the close relationship that exists between our races of *Certhia familiaris* and the two sequoias, also with the incense cedar (*Libocedrus decurrens*) which has similar bark. Yet this relationship is in no wise critical to creepers, for they are found commonly in our mountains at elevations above which any of these trees grow. In fact the Holarctic species *Certhia familiaris* as a whole covers an enormous range which includes the temperate and sub-arctic regions of the entire northern hemisphere. Trees with sequoia-like bark grow over only a relatively small part of this area and there is nothing to indicate that creepers are relatively more abundant in areas of sequoias than elsewhere. Still, the Rankins' and Kennedy's observations prove a decided proclivity of creepers for these trees. The creeper is no doubt a highly successful form with a wide tolerance of ecological conditions, and it may be that sequoia and cedar forests provide about the acme of successful habitat. Naturally many other factors are involved to determine the success, that is, numerical abundance per unit area, of a species in any environment. With other factors being relatively equal, I would expect greater creeper concentration in forests of rough-barked trees than elsewhere. The question might be answered by censuses over areas of similar size in Great Britain where sequoias have and have not been planted. Results of such observations would be highly interesting to me.—JAMES MOFFITT, *California Academy of Sciences, San Francisco, September 20, 1940.*

The Fourth Record of the Brown Thrasher in California.—Last March a neighbor told me that she had several times observed a bird at her bird bath which she believed to be an eastern Brown Thrasher (*Toxostoma rufum*). On April 17, 1940, the bird entered my trap, and was given band number 39-253372. It was not observed in the neighborhood after that date.

So far as I can ascertain, there have been but three previous published records of *Toxostoma rufum* in California: one seen by Dr. J. G. Cooper at Clear Lake in September, 1870 (Baird, Brewer and Ridgway, *A History of North American Birds*, 3, 1874:500), which van Rossem (Condor, 35, 1933:161-162) thinks probably is a valid record; one photographed in Altadena in 1933 by van Rossem (*loc. cit.*); and another banded by Mr. C. V. Duff in Hollywood in January, 1939 (Duff, Condor, 41, 1939:121).—ETHEL C. AYER, *Pomona, California, October 18, 1940.*

Lewis Woodpecker Migration.—While engaged in field work near the town of Mt. Shasta, Siskiyou County, California, on September 10, 1940, the writer noticed a large mass movement of Lewis Woodpeckers (*Asyndesmus lewis*) traveling south in an irregular but continuous stream. The birds had been passing over for an undetermined time prior to 9:25 a.m. when first noticed, and the flight was still in progress when the writer left at 10:45 a.m. No further flight was seen in the area until September 14. Resident birds remained in the area for at least another month.

During the half hour from 9:25 to 9:55 a.m., 1,018 birds, by actual count, crossed over a fixed line, and many others undoubtedly escaped notice because of being too far away to be seen. Although at times only one or two individuals were in sight, on several occasions the numbers crossing the line were so great as to make it difficult to count them all. The speed of flight was typical of their manner on and about foraging grounds, and averaged about the same throughout the period of observation. Well over 5,000 birds must have passed within sight during that time. Some of the birds seemed tired, and took advantage of the proximity of several snags (relics of an old fire) to rest for a short time. Probably no one bird remained perched for more than a minute or two, and there were rarely more than two birds on a snag at any one time.

The line of flight was between Mt. Shasta and Black Butte (Wintoon Butte). At this point an extensive brush field of manzanita (*Arctostaphylos patula*), ceanothus, and other chaparral covers a fairly level area about two miles wide, at an average altitude of about 4,300 feet above sea level. The flight probably extended over the whole two-mile front. The woodpeckers flew at heights of from 10 feet above ground to those at which they were barely discernible.

The flight was quiet and no vocal sound was heard, although many birds passed within earshot. None of the birds was seen to feed, and they seemed indifferent to my movements, even when close by. Smaller flights passed over the same area on September 14 and 17. These later flocks flew by in groups of as many as 78 birds, but there were intervals of a half hour or more during which none was seen. Except for this difference in numbers, the three flights were all alike.—CLARENCE F. SMITH, *Fish and Wildlife Service, Mount Shasta, California, October 10, 1940.*