

second for the Pacific coast of North America. The specimen is now number 48238 of the Bishop collection.—A. J. VAN ROSSEM, *California Institute of Technology, Pasadena, California, May 2, 1933.*

Behavior of Birds during the Long Beach Earthquake, March 10, 1933.—The first shock, and the only really severe one, came at approximately 5:55 p. m. Minor shocks followed at such short intervals for twenty hours that it seemed to me as if the earth was in continual motion. Although it was about sunset at the time of the first shock, and not yet dark, a flock of a hundred Brewer Blackbirds (*Euphagus cyanocephalus*) had retired to their roost in some nearby medium-height trees. While we felt no preliminary shocks, these birds became uneasy just before the severe shock. During the shock, the birds began leaving the roost, rising slowly into the air above the trees, and milling about uncertainly in twenty-foot ascending spirals. The first severe shock lasted about eleven seconds, but the blackbirds continued to rise for about ten seconds longer. Then, they had reached the height of about one hundred feet above the trees, and perhaps one hundred and forty feet above the ground. From that elevation they descended slowly to their roost, and settled rather noisily. During the minor shocks that came all night long, there was no noticeable disturbance, either among these birds or among other birds in my neighborhood. Apparently all birds remained asleep, or at least quietly on their roosts, or in their usual sleeping places. At the usual time near dawn, meadowlarks and mockingbirds began to sing. They kept up their morning songs in spite of the tremors that were occurring practically every minute.—M. P. SKINNER, *1316 Harding St., Long Beach, California, April 24, 1933.*

Relationships of Coues and Olive-sided Flycatchers.—In the fourth edition of the A. O. U. Check-list, as in the third, the Olive-sided Flycatcher occupies the monotypic genus *Nuttallornis*, while Coues Flycatcher and the several wood pewees are placed together in *Myiochanes*. At an earlier date they were all together in the one genus *Contopus*. In the *Auk* for October, 1899 (xvi, pp. 330-337), Dr. H. C. Oberholser published "A synopsis of the genus *Contopus* and its Allies," in which he proposed an arrangement essentially similar to the one now in use, the Olive-sided Flycatcher in the genus *Nuttallornis*, the others in *Horizopus*. It was, I suppose, Ridgway's procedure in his "Birds of North and Middle America" (iv, 1907, pp. 509-529) that inaugurated the substitution of *Myiochanes* for *Horizopus*.

It is stated by Oberholser that "*Nuttallornis* Ridgway, proposed in subgeneric sense for *Contopus borealis*, is, by reason of very pronounced characters, without doubt of generic rank." These characters (which I do not dispute) are given as follows: "Resembling *Horizopus*, but tarsi shorter than middle toe with claw; wing exceeding tail by about one-half the length of latter; rictal bristles less developed (actually as well as comparatively shorter than in *Horizopus virens*); first primary longer than the fourth." Ridgway (*op. cit.*, p. 504) characterizes *Nuttallornis* as: "With tail only one-third as long as wing, tarsus only one-seventh as long as wing and decidedly shorter than middle toe with claw, and with a conspicuous patch of white silky feathers on each side of rump." *Myiochanes* (pp. 509-510) is characterized in minute detail but mostly in comparison with *Blacicus*. *Nuttallornis*, obviously, is dismissed as clearly distinct without question.

The Olive-sided Flycatcher is a common bird over much of North America. Most observers are in some measure familiar with it, if not on the breeding grounds at least as a migrant. Coues Flycatcher is of more southern distribution, extending northward in summer only as far as the mountains of Arizona and New Mexico, and relatively few American ornithologists have seen the living bird. I think that I would be safe in asking those few if they did not agree with me that the Olive-sided Flycatcher and Coues Flycatcher, like "the Colonel's lady and Judy O'Grady," are sisters under their skins. Every action proclaims the close relation of the two and their similar un-likeness to the wood pewees. The clear, ringing note of the Olive-sided Flycatcher ("Give me beer," it has been rendered) is slightly varied in Coues Flycatcher (the Mexicans call the bird "José Maria"); the intonation is exactly the same. Both habitually perch on towering tree tops,

they nest in similar situations, usually at the end of a spreading limb high in a tall conifer, and details of nest structure and eggs are closely similar. It will be noted, too, that in their geographical distribution they are complementary, the Olive-sided northern, Coues Flycatcher southern, but both of the Transition zone or higher.

Most of the minor structural peculiarities of *Nuttallornis borealis* may be conceded, though it should be pointed out that that species and Coues Flycatcher are of similarly large size as compared with the small wood pewees, and that the tufts of silky white feathers upon the thighs of the Olive-sided are also present in Coues Flycatcher. My contention is that the characteristics of habits, actions and call notes that are common to both species, and peculiar to them, are sufficiently indicative of close relationship to outweigh the differences in structure. I should say that without question the Olive-sided and Coues Flycatchers are northern and southern representatives of one group, the wood pewees in another group, and I would divide the genera accordingly. Whether this involves any nomenclatural changes beyond shifting the forms of *pertinax* into the genus *Nuttallornis* I leave to others who have knowledge of the South American species that might be affected.

Dr. Oberholser has recently suggested generic separation of Coues Flycatcher (*Myiochanes*) and the wood pewees (*Horizopus*) (Sci. Publ. Cleveland Mus. Nat. Hist., 1, 1930, p. 91), which brings up the subject of monotypic genera. This has been discussed at length recently and need not detain us now. Obviously there are some species taxonomically isolated so as to require such systematic treatment, but, just as clearly, it seems to me if separate genera are erected for a large proportion of species and merely to indicate differences, we arrive at a needless duplication of terms that is the reverse of helpful. Generic grouping should indicate resemblances. The question I wish to raise here concerns the proper basis for such grouping.

Recently, upon the Galapagos Islands, I was happily able to make first-hand observations on living representatives of that remarkable avifauna. I was impressed with the way in which certain family traits—habits and mannerisms apparently useless in themselves—had persisted in some species, surviving unchanged although the bird itself had altered so as to be accorded specific or generic distinction from its mainland relatives.

On the other hand, as an example of the kind of structural differences that are often used in classification, consider the following, extracted from Ridgway's long, detailed, and unquestionably accurate definition of *Myiochanes*: "Wing-tip longer (the longest primaries exceeding secondaries by at least combined length of tarsus and half the middle toe, usually by more than tarsus and whole middle toe)." Such criteria may be useful in the skilfully constructed "key" to species or genera with which we are all familiar, and they may be tolerated in studies that, through lack of field observations, are necessarily restricted to prepared specimens, but they should not weigh heavily against the sort of evidence I have cited as obtainable from the living bird. I could not concede that they indicated "without doubt generic rank" if the bird itself said otherwise.—H. S. SWARTH, *California Academy of Sciences, San Francisco, May 1, 1933.*

Further Notes on the Birds of Big Bear Valley, San Bernardino Mountains, California.—The writer spent the time from June 20 to September 10, 1932, at Big Bear Valley, and the following observations of interest were noted:

On July 12, a pair of Spotted Sandpipers (*Actitis macularia*) with four small young was found in the grass and weeds on the edge of a little bay near Windy Point on the south shore of Big Bear Lake. When disturbed, both adults were noisy as they flew about the locality where the young were hidden. The young were near the water's edge and they took readily to the water, where they were able to swim about like small ducks. The day following, which was cold and windy, I flushed one of the adults from the weeds in the same locality, where it seemed to be brooding two of the little ones. This seems to be the first breeding record for this species in Big Bear Valley. Another pair of these birds was noted several times at the east end of Bear Lake and by their actions I thought that they had young, though I was unable to locate them.