

walked along under some tall cottonwoods we flushed a flock of Turkey Buzzards (*Cathartes aura septentrionalis*) which made them their roosting place. There were close to a hundred of them, and the air was black with their broad wings as they swung round and round over the tops of the trees.

We reached the machine just at dusk and after a hasty supper, loaded our baggage and started on the last ten miles of our trip, arriving in Tombstone at nine o'clock.

Our speedometer registered three hundred and seventy-five miles for the trip. While not up to my expectations as a collecting trip, it had been successful enough to be satisfactory, with variety enough to make it thoroughly enjoyable.

PASSERELLA STEPHENSI IN MARIN COUNTY, CALIFORNIA

By JOSEPH MAILLIARD

WITH THREE PHOTOS

UNTIL recently there has been no sufficiently large series of *Passerella* gotten together in California to permit of intelligent comparison of the various individuals a collector might obtain. This lack of material for comparison has left him in the dark as to subspecific determinations. But now, under the care of the Museum of Vertebrate Zoology, University of California, at Berkeley, there is a fine working series consisting of specimens belonging to the museum itself, and to the Grinnell, Swarth and Morcom collections. These contain specimens of *Passerella* taken in many places on the Pacific Coast, from Southern California to as far north as Kotzebue Sound, Alaska, many of them—notably the northern forms and *P. stephensi*—having been taken on their breeding grounds either actually during the breeding season or before the young were old enough to migrate.

Realizing this to be our opportunity, it seemed time for us to undertake the difficult task of identifying the various individuals of this group in our own collection (collection of J. & J. W. Mailliard, San Francisco), the majority of which were migrants or winter residents. Mr. Joseph Grinnell of the Museum of Vertebrate Zoology gave us most generous assistance in this work, and as he had personally collected many breeding specimens his assistance was especially valuable.

It happens that in very cold winters on the Rancho San Geronimo, Marin County, California, we have sometimes found, in a sort of rocky mesa covered with dwarfed cypress, ceanothus and low, scrubby manzanita bushes, on the top of the range, a form of *Passerella* that differed from the commonly found winter forms in having a very heavy bill and being of a much lighter and more grayish coloration. C. A. Allen of San Geronimo (postoffice formerly known as *Nicasio*) took quite a few of these in times past and sold them to eastern collectors as *P. i. megarhyncha*—Thick-billed Sparrow—and as far as we know they have always been so accepted. In fact this form is mentioned by the writer in "Land Birds of Marin County, Cal." (*CONDOR*, II, May, 1900, p. 62), under *megarhyncha* as "casual visitant," with no comment since, and is now in the Third Edition of the A. O. U. Check-List of North American Birds as such. There should be

some of these specimens collected by C. A. Allen now in the collections of William Brewster, Outram Bangs, Jonathan Dwight, Jr., and perhaps others.

Never having seen true *megarhyncha*, the very large bills of the Marin County individuals allayed all suspicion on our part as to their being anything else, or as to the name not being absolutely appropriate; and so sure had we been that these were of this form that they were not included in the lot taken over to Berkeley for comparison with the *Passerella* series in the museum there.

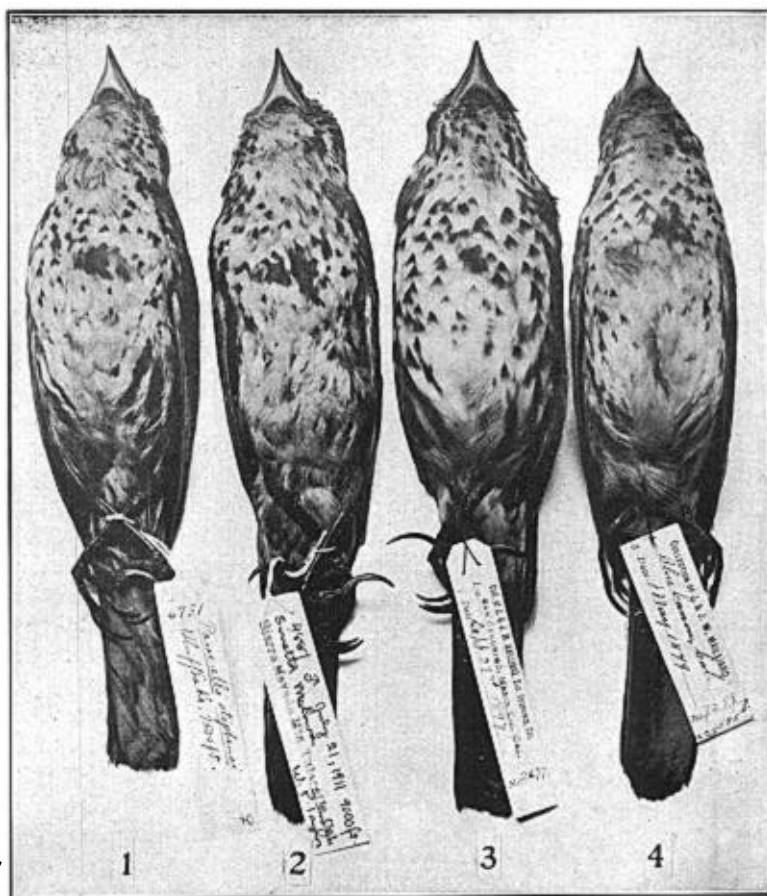


Fig. 20. SPECIMENS OF STEPHENS AND THICK-BILLED SPARROWS: NO. 1, *Passerella stephensi* FROM THE SAN BERNARDINO MOUNTAINS; NO. 2, *P. stephensi* FROM THE SOUTHERN SIERRA NEVADA; NO. 3, *P. stephensi* FROM MARIN COUNTY; NO. 4, *P. i. megarhyncha* FROM PLACER COUNTY
PHOTO BY JOS. MAILLIARD

Our specimens from the Sierra Nevadas and foothills we had called *schistacea*; but on account of the subspecific differences being so entirely relative one must have a starting point for comparison, as bald descriptions often fail to convey the proper ideas. On making comparison with the University of California series we found that while some of our Sierra specimens taken in the fall or winter were actually *schistacea*, the breeding birds were *megarhyncha*.

Upon ascertaining this we compared our heavily billed winter visitants with those in our own collection which were now properly identified, and while the resemblance to *stephensi* came into mind, it was dismissed in accordance with the rule that migrating birds winter south of their breeding grounds (with one or two exceptions, apparently).

Hence we came to the conclusion for the moment that there must be an undiscovered form breeding somewhere to the north of us. Our breeding birds from the Sierras were taken east of us and were true *megarhyncha*, as above mentioned. So we could not look in that direction for anything to correspond. Now, after taking these to Berkeley and going over them most carefully with Mr. Grinnell, we are compelled to place them with *stephensi*, this, so far as at present known, making another exception to the rule cited above.

The accompanying photograph is intended to show the similarity of the



Fig. 21. WINTER HOME OF STEPHENS FOX SPARROW IN MARIN COUNTY, CALIFORNIA. ROUGH HILLS COVERED WITH DWARFED CYPRESS AND CEANOTHUS AND MANZANITA BRUSH.
PHOTO BY JOS. MAILLIARD

bills of *stephensi* taken on their breeding grounds and one of the examples from Marin County. Also it shows the difference in size between *stephensi* and *megarhyncha*. No. 1 was taken on July 15, 1905, by Mr. Grinnell, at an altitude of 7,500 feet, in the San Bernardino Mountains, and is in rather worn plumage, but is *stephensi* without any manner of doubt. No. 2, taken by W. P. Taylor, July 21, 1911, also in worn plumage, comes from an altitude of 9,000 feet in the mountains of southern Tulare County, where these birds were found breeding on the west side of the Sierras, and which constitutes the northernmost breeding station of *stephensi*. No. 3 is from Marin County, and is in fresh fall plumage.

These three specimens were selected for photographing on account of the bills being very nearly the same size, and the makeup of the skins being such that the bills lie in almost the same position in all. No. 3 I have fair reason to

believe was raised on the spot where it was taken, being one of a small flock I saw while out deer hunting about the beginning of September. These late summer birds were, in my opinion, a family whose parents had been crippled by either C. A. Allen or myself in the previous winter, and apparently had bred there. They were not discovered early enough in the season to make this certain, but all our other specimens, and all those taken by Allen, were winter specimens, found on the range after heavy, cold storms in the mountains, and especially during cold, snowy weather in Marin County. We have only nine of these in all, and for some reason all are females.

No. 4 in this photograph is a breeding bird from Blue Canyon, Placer County, California, and is true *megarhyncha*. While the bill of this form is larger than any other *Passerella* except *stephensi*, it does not make much of a

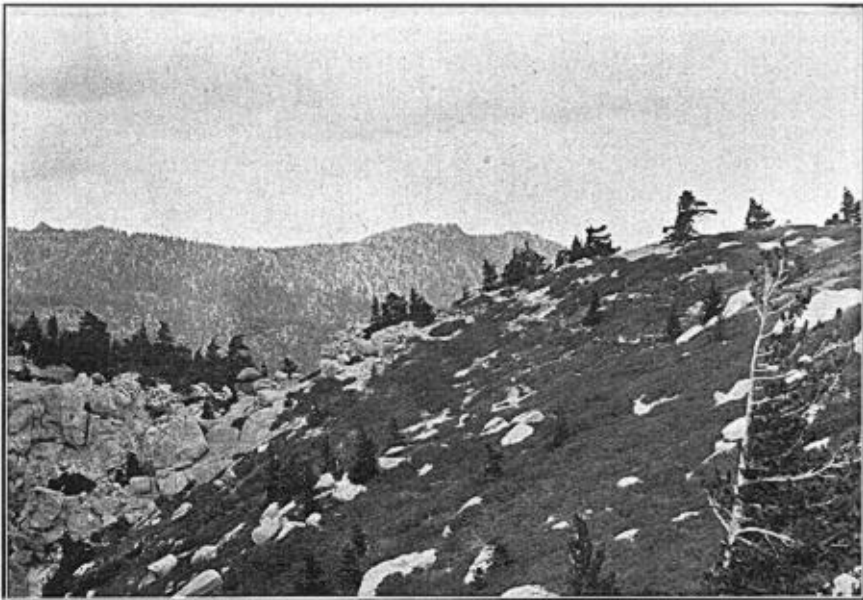


Fig. 22. SUMMER HOME OF STEPHENS FOX SPARROW; NORTH SIDE OF TAHQUITZ PEAK, 8500 FEET, SAN JACINTO MOUNTAINS, SOUTHERN CALIFORNIA. MOUNTAIN SLOPES, COVERED WITH MANZANITA AND CHINQUAPIN; THE SCATTERED TREES ARE LODGE-POLE PINES AND SMALL SILVER FIRS. PHOTO FROM COLLECTION OF UNIVERSITY OF CALIFORNIA MUSEUM OF VERTEBRATE ZOOLOGY.

showing alongside the latter, and is introduced into the picture to show how great the difference is.

Up to last summer the range of *stephensi* as known was restricted to the higher altitudes in the southern parts of the state—San Jacinto, San Bernardino, San Gabriel and Tejon mountains, while some fall specimens have been taken in Santa Barbara County. In the latter county Mr. J. H. Bowles thinks they may possibly breed, as he secured some specimens early in September on Little Pine Mountain. But this date is too late to prove that they breed there. During this last summer, however, Mr. Grinnell came across this form breeding, greatly to his surprise, on the west side of the Sierras in Tulare County, his northernmost take being not far from the southern boundary of the Sequoia National Park, and in

about the latitude of southern Monterey County. On the east side of the Sierras there were none, nor was any *Passerella* found as far as the Museum expedition went to the north of this limit. We know that *megarhyncha* comes in still farther north, but between Mt. Whitney and the southern half of Tulare County there seems to be a hiatus as far as *Passerella* is concerned.

The situation now is that *stephensi* has been found breeding as far north as above outlined in Tulare County, possibly wintering in Santa Barbara County, and an occasional winter visitor to Marin County, very much farther north. The distance from its next most northern record to Marin County is something like 175 or 200 miles, at least, with plains, lowlands, rivers or bays to cross, and with absolutely no records between these extremes, making this situation an extremely interesting one, and proving that there is room for a lot of investigating in this line. It also apparently shows another exception to the rule that birds do not winter north of their breeding grounds.

The two photographs herewith presented are to show the similarity of the ground occupied by *stephensi* in its breeding range in the San Jacinto Mountains and in its wintering place in Marin County. Both localities are rocky, waste areas, covered with cypress in Marin County—which is replaced by chinquapin on the breeding ground, though a little of this is found in Marin County also, and with ceanothus and manzanita in both places. In Marin the elevation at which these birds are found is about 1500 feet while in their southern breeding grounds it varies from 7000 to 9000 feet. Singularly to state they are found in Marin County only upon the very tops of the ranges, and never even such a small matter as two or three hundred feet below the tops, although the conditions may seem absolutely the same.

NESTING OF THE CANADA GOOSE AT LAKE TAHOE

By MILTON S. RAY

WITH FOUR PHOTOS BY THE AUTHOR

MICHAEL RYAN, an old settler of Lake Valley, has assured me that he has noted geese nesting at Rowland's Marsh almost every spring since he first came, thirty years ago. Be this as it may, I failed to record the bird on trips through the marsh in 1901, 1902, 1903 and 1906; and while a large, noisy bird like the Canada Goose could hardly be overlooked. I must acknowledge not visiting some of the sections of the marsh where I have since found it rather common.

My first acquaintance with the goose was made on the first of June, 1909, when I came upon a pair at the north end of the marsh. The birds were very wild and kept well out of gun range. I searched the vicinity but failed to locate any nest. Some days later I learned that the keeper of a nearby resort had a short time previously collected a nest of eggs of the goose. These he had hatched beneath a domestic hen, and the young were successfully reared. I feel quite sure it was the parents which I observed, and also feel rather certain it was the only pair in the marsh that year.

On arriving at Bijou, May 20, 1910, I was informed that geese had become more abundant than ever in the marsh, and that residents who lived close by had