

namely, height of bill from the ventral surface of the maxillaries to the midpoint of the nasal bridge, solved the problem. In twelve bills *pinus* ranged from 2.5 to 2.9 mm. and *tristis* from 2.8 to 3.2 mm. One of the fossils with the straight culmen characteristic of *pinus* measures 2.5 mm. and one with the convex culmen of *tristis* measures 3.0 mm. The third has the convex profile of *tristis* but falls within the region of overlap, with a bill height of 2.8 mm.

The genus *Spizella* is also easily recognized, but again similarity of species in the group complicates the identification of the fossil. *Spizella arborea* is much larger than the fossil and *S. breweri* is smaller in all proportions. *S. pusilla*, *S. pallida* and *S. wortheni* are not considered because their ranges today are so far to the east. This eliminates all but *S. passerina*, with which the fossil agrees in all respects, and *S. atrogularis* of which there are no skeletons available. Comparison of skins reveals that *atrogularis* has a broader, stubbier bill than *passerina* which is relatively slender and acuminate. The tomial profile of *atrogularis* is straight, whereas *passerina* has slightly concave tomia. The fossil exhibits the characters of *passerina* and I refer it tentatively to that species but withhold final designation until skeletons of *atrogularis* are available.

Thus the following fringillids are presented as new to the Pleistocene avifauna of Rancho La Brea.

Subfamily Carduelinae

Spinus pinus
Spinus tristis

Subfamily Emberizinae

Amphispiza bilineata
Amphispiza belli
Spizella cf. *passerina*

In reconstructing the climatic and biotic complexions of the past, it is the zonally and ecologically restricted plants and animals that furnish the best clues. If only the birds are used to interpret the ecology of Rancho La Brea in the Pleistocene, it is those species whose habitats are distinctly defined that yield the keys to the associations. The presence of Sage Sparrows and Desert Sparrows indicates a fairly arid climate. On the assumption that the habitat predilections of the Sage Sparrow have not changed, it is safe to suppose that chamise and artemisia grew near-by. The Desert Sparrow also fits well into the chamisal association. Even today it is occasionally found near the La Brea pits. Willett (Pac. Coast Avifauna No. 21, 1933, p. 172) gives the range of the species in southwestern California as, "... occasional on Pacific coast in fall, winter and spring, north and west to Los Angeles County." The nomadic goldfinches are poor zonal and ecologic indicators and either Chipping or Black-chinned sparrows would fit into the association.

The previous evidence relating to the ecology of Rancho La Brea in the Pleistocene, as interpreted from the birds, has been well discussed by A. H. Miller (Condor, vol. 39, 1937, pp. 248-252) who concluded that the general aspect was more arid in the Pleistocene than today. Some of the plants and animals were desert inhabitants. The additional species reported here corroborate this conclusion and lend more detail to the already well defined picture of the La Brea Pleistocene.

I gratefully acknowledge the counsel of Dr. Alden H. Miller throughout the preparation of this paper.—CHARLES SIBLEY, *Museum of Vertebrate Zoology, University of California, Berkeley, April 22, 1939.*

Snowy Plover from Colorado.—We wish to record a specimen of the Western Snowy Plover (*Charadrius nivosus nivosus*) which we collected at Barr, Adams County, Colorado, on April 26, 1939 (no. 20014, Colo. Mus. Nat. Hist.). The plover, a female, was the only shore bird on the extensive bar of Clarkson Lake at the Mile High Duck Club. Its dorsal coloration is similar to specimens from Oregon and California; the bird is rather large, with a wing measurement of 106 mm., so although we rather expected it to be *tenuirostris*, we have concluded that it belongs to the western race. The taking of this specimen adds another species to the list of Colorado birds.—ALFRED M. BAILEY and ROBERT J. NIEDRACH, *The Colorado Museum of Natural History, Denver, Colorado, April 28, 1939.*

NOTES AND NEWS

Plans are nearing completion for the Fifty-seventh Stated Meeting of the American Ornithologists' Union to be held in the San Francisco Bay region in June of this year. On Monday, June 19, business meetings will be held at the Durant Hotel in Berkeley. The regular sessions open on Tuesday morning, June 20, with registration at 9:00 a.m., in Life Sciences Building,

University of California campus. After two days of scientific program in Berkeley, the meetings will continue on Thursday, June 22, in San Francisco at the California Academy of Sciences. Field excursions are planned for both Friday and Saturday, June 23 and 24, including a trip to Marin County. Tuesday evening there will be open house at the Museum of Vertebrate Zool-