or by reputation, the owners of the names in question, they should at once convey a knowledge of the geographical areas in which the bird so named is found. Even this, however, is not always the case. Birds are often named as a compliment to others who have worked on special groups, though the bird itself may only be found in an area never visited by the person after whom it is called. I have, therefore, eliminated these names altogether. In giving the bird a new trivial name I have tried to find some character in each species which differentiates it from other species of the same genera. This character I use throughout as the specific name, qualified by geographical additions to the names of the subspecies.

"Thus the species *Stachyridopsis rufifrons* I call the Red-fronted Babbler, the red forehead being the specific character separating it from its nearest ally, the Red-headed Babbler. Then its geographical subspecies I call the Burmese Red-fronted Babbler, instead of Harrington's Babbler. In this way the trivial name at once conveys to the hearer its important specific character and the area where it is found."

I select to illustrate Stuart Baker's system, from his volume I, vernacular names as follows: The Sikkim Yellow-billed Magpie, The Western Yellow-billed Magpie, The Hooded Racket-tailed Magpie, The Western Himalayan Red-crowned Jay, The Western Cinnamon-bellied Nuthatch, The Eastern Himalayan White-crested Laughing-Thrush, The Simla Streaked Laughing-Thrush, The Ceylon Yellow-eyed Babbler, The Shan States Short-tailed Wren-Babbler, The Assam Red-headed Babbler, The Assam Red-throated Tit-Babbler, The Bengal Red-whiskered Bulbul, The Malay Bluebellied Bulbul, The Manipur Brown-throated Tree-Creeper, The Nepal Scaly-breasted Wren.

It looks to me as though Stuart Baker's way of forming common names of birds, so as to be really informative to the amateur type of bird student, might well be studied seriously by the committee who has in charge preparation of the next edition of the A. O. U. Check-list. The article "The" could be omitted, perhaps. But the replacement of personal names, meaningless to most amateurs, with descriptive or geographic terms, would alone quite surely be welcomed by most of the young generation.

As examples, among the Paridae in the last Check-list (pp. 229-235), I suggest emendations as follows. The four main groups of chickadees could be called the Black-capped Chickadees, the White-browed Chickadees, the Brown-capped Chickadees, and the Cheştnut-backed Chickadees. Then the combinations for some of the subspecies would be: Oregon Black-capped Chickadee (for "Oregon Chickadee" in the current A. O. U. Check-list), Idaho White-browed Chickadee (for "Grinnell's Chickadee"), Southern California White-browed Chickadee (for "Bailey's Chickadee"), Rocky Mountain White-browed Chickadee (for "Mountain Chickadee"), Columbian Brown-capped Chickadee (for "Columbian Chickadee"), Santa Cruz Chestnut-backed Chickadee (for "Barlow's Chickadee"), etc.

Then these names would mean something intrinsically to the user of checklists just as those vernaculars of Indian birds cited from Stuart Baker instantly gave me information as to chief features of the races and as to the places of main occurrence. May it not prove possible for the next A. O. U. Committee thus to contribute more helpfully toward the needs of the beginner in bird-study?—J. GRINNELL, Museum of Vertebrate Zoology, Berkeley, California, May 7, 1934.

The Black Pigeon Hawk in Santa Clara County, California.—A Black Pigeon Hawk (*Falco columbarius suckleyi*) was secured by the writer about eight miles west of Gilroy on February 13, 1934. This bird was a female and there was a male present which seemed to be of the same form but unfortunately it could not be secured.

Thanks are due to Dr. Joseph Grinnell for the identification of the skin and for the suggestion that it be recorded. There are very few records for California and this appears to be the first record for the San Francisco Bay counties.—W. E. UNGLISH, Giloy, California, April 10, 1934.

Fossil Bird Remains from the Manix Lake Deposits of California.—In cataloging the collections of the University of California Museum of Paleontology, Mr. C. J. Hesse recently discovered five unidentified fossil bird bones in the vertebrate remains from the Manix beds in San Bernardino County, California. These have been turned July, 1934

over to me for description. Since little has been written concerning the beds in which these bird bones were found a brief history of them is in point.

In the summer of 1913, J. P. Buwalda examined a series of mammal-bearing lake beds in the eastern Mohave Desert. For these beds he proposed the name *Manix Beds* and referred to the lake in which they were deposited as Manix Lake (Buwalda, J. P., Univ. Calif. Publ. Dept. Geol., 7, 1914, p. 444). In addition to the evidence furnished by their geologic nature they are further demonstrated to be of lacustral origin by the presence, at several horizons, of fish vertebrae and four species of fresh water mollusks. The greatest exposed thickness of the beds is 75 feet. The lake basin is about 120 miles northeast of Los Angeles and 20 to 40 miles east of Barstow. Its area is irregular in outline; it is 20 to 25 miles in length, and covers 200 to 300 square miles. Expressed roughly, it occupies the area between the Calico and Cady mountains in an east-west direction, and between the Alvord Mountains and Kane Mountain in a north-south direction.

The Manix Lake must have come into existence by the impounding of the water furnished mainly by the Mohave River, since the topography of this region has not changed sufficiently since Manix time to suggest that some other stream was the principle source of water. The present lower channel of the Mohave River is dry throughout most of the year and the sink at its end contains water only during a few weeks of each year. It is evident that the climate of the Manix Lake time was characterized by considerably more precipitation than occurs in this region today. The disappearance of the lake was due to the increasing aridity of the climate, the partial filling of the basin with sediments, and the lowering of the outlet.

The remains of six species of mammals were collected from these beds but it is impossible to specifically identify any of them because they are either fragmentary or represent non-diagnostic elements. The fauna was originally considered to be of Pleistocene age (op. cit., p. 451) but the presence of the metapodial elements of a small horse indicate that the beds may be Pliocene in age. It is safe to say that they are either Lower Pleistocene or Upper Pliocene.

In contrast to the nature of the mammal remains, all but one of the bird bones are well preserved and identifiable. The two species represented are the White Pelican (*Pelecanus erythrorhynchos*) and the Western Grebe (*Aechmophorus occidentalis*).



Fig. 28. a, Left femur of Pelecanus erythrorhynchos, U. C. Mus. Paleo. no. 21855. b, Right tarsometatarsus of Aechmophorus occidentalis, U. C. Mus. Paleo. no. 21859.  $\times$  1.

Pelecanus erythrorhynchos. Complete left femur (fig. 28, a), Univ. Calif. Mus. Paleo., no. 21855, loc. 676, Manix Beds, San Bernardino County, California, collected by J. P. Buwalda, 1913. This bone was broken into three parts, but it has been repaired and is now complete except for a few chips from the dorsal surface of the shaft. All of the finer details of the bone are preserved and agree minutely with specimens of the present day White Pelican. The measurements of the fossil are about .5 mm. larger than the average of four recent specimens, while one of the latter is larger than the fossil in most measurements. Measurements: greatest length, 112.3 mm.; width of proximal end, 29.4 mm.; width of distal end, 31.9 mm.; smallest transverse diameter of shaft, 13.0 mm.

In addition to the femur there are two phalanges that are referable to this species. These are the basal phalanx of the 2nd digit (inner toe), U. C. Mus. Paleo., no. 21857, and the basal phalanx of the 3rd digit (middle toe), U. C. Mus. Paleo., no. 21858. They are both of the left foot and have been carefully compared with articulated and disarticulated skeletons. There are no data as to whether or not these toe bones were associated with the femur but the circumstantial evidence points to this conclusion.

Aechmophorus occidentalis. Complete right tarsometatarsus, U. C. Mus. Paleo., no. 21859. This bone was compared with a series of six tarsometatarsi of the present day Western Grebe and was found to be identical with these bones and near the average of their sizes. The length from intercotylar tuberosity to middle cotyla is 71.8 mm.

Indeterminate: Phalanx, U. C. Mus. Paleo., no. 21856. This toe bone is from a young individual and is so badly worn that I am unable to identify it. It is long and relatively slender, and apparently a basal phalanx. Length, 44.2 mm.

It is interesting to observe that both the White Pelican and the Western Grebe have been found in the Pleistocene lake deposits of Fossil Lake, Oregon. The Manix Beds offer a worthwhile opportunity for further collecting which might produce sufficient material for a comparison of the avifaunas of these two prehistoric lakes.

Comparative material was loaned through the courtesy of Dr. J. Grinnell of the Museum of Vertebrate Zoology, University of California. The drawings were made by Mr. Owen Poe.—LAWRENCE V. COMPTON, Museum of Paleontology, University of California, Berkeley, California, March 1, 1934.

Some Shore-birds in the Humboldt Bay Region of California.—Stilt Sandpiper (*Micropalama himantopus*). An immature female was taken on September 10, 1933, at a small pond near the mouth of Clark's Slough, within the town limits of Eureka. Dr. J. Grinnell writes of the above capture: "There is not even a hint, that I know of, in the literature to date, of the presence of the Stilt Sandpiper on our California coast."

American Knot (*Calidris canutus rufus*). On September 14, 1924, three knots in winter plumage were scattered among a large flock of Long-billed Dowitchers on a small island in Humboldt Bay. On May 8, 1927, two knots were seen flying over the surf across the bay from town, and a female was taken. On September 8, 1929, a lone knot was found on the ocean beach. On August 27, 1932, twelve knots were found in a large flock of dowitchers on the ocean beach across the bay from Eureka.

Pectoral Sandpiper (*Pisobia melanotos*). On October 18, 1931, three pectorals were found in a small pond of stagnant water within the town limits. November 7, 1931, there was one bird. September 18, 1932, there were five pectorals, and on September 23, the same year, six. In 1933, on October 8 there were seven pectorals, on October 15, ten, and on October 22, five.

Lesser Yellow-legs (*Totanus flavipes*). On August 17, 1924, seven of these birds were found in a pond on Indian Island in Humboldt Bay; a male was taken. In 1932, five birds were found in Eureka limits on August 16; on August 28 there were four birds, on August 31, four, and on September 4, three birds. In 1933, on August 26 there were three birds, on September 3, six, and on October 15, four birds. All the birds within the town limits of Eureka were found in the same pond, near Clark's Slough.

Long-billed Curlew (Numenius americanus). On August 8, 1925, nine of these curlews were found on a small island in Humboldt Bay. On August 15, 1924, there were four on the same island. Weekly, from January 3, 1926, to April 10, 1927, I saw a Long-billed Curlew either on the ocean beach, or the Bay shore near the mouth of Elk River.

Specimens of the above birds were identified for me by Dr. J. Grinnell at the Museum of Vertebrate Zoology, University of California.—JOHN M. DAVIS, Eureka, California, January 14, 1934.

Costa Hummers Wintering in the California Deserts.—During several midwinter collecting trips to the Colorado River above Potholes (December, 1924, December, 1925), some species of small hummer was repeatedly seen among the desert scrub