in excellent position with binoculars. Except for a dubious early record (Bailey, Birds of New Mexico, 1928, p. 538), the species apparently has not been found in New Mexico heretofore.

A Catbird appeared in Roswell on June 6, 1951. I saw it well at a distance of twelve feet. I believe this is the first time a Catbird has been recorded in southern New Mexico (see Bailey, *op. cit.*, p. 554).—VESTER MONTGOMERY, *Roswell, New Mexico, February 1, 1952.*

The Validity of the Fossil Crane Grus nannodes.—Recently, while making a comparative osteological study of the crane genera *Grus, Balearica,* and *Anthropoides,* some attention was directed toward fossil representatives. Wetmore and Martin (Condor, 32, 1930:62-63) described a fragmentary carpometacarpus from the Pliocene deposits of Sherman County, Kansas, as *Grus nannodes.* The setting up of a new species for this bone, to distinguish the bird from the Recent species *G. canadensis,* as now construed, was entirely on the basis of size; the fossil appeared to be very small. No differences in conformation were noted by the authors; indeed, in the absence of the entire proximal end, the bone would seem to have little "character" remaining.

I examined the type specimen (Univ. Kansas Mus. Vert. Paleo. No. 3757) and compared it with a series of 17 carpometacarpi of Recent Little Brown Cranes, *Grus canadensis canadensis.* Confirming the statement of Wetmore and Martin (*loc. cit.*), I found no qualitative features of diagnostic value. The larger series of Recent material now at hand permits more detailed statistical treatment, as given in table 1. Small differences in certain measurements of the fossil, between those in the table and in the original description, are seemingly the result of slight variations in the method of measuring.

The handling of single specimens in a statistical analysis poses certain problems; the standard deviation is not known and the usual procedure is impossible. One may, however, assume that the coefficient of variation of the same linear measurement made in the same way on two related species will be nearly the same, if each sample is homogeneous. In the present instance, the coefficient of variation for a measurement in *G. c. canadensis* may be used for the same measurement in *G. nannodes,* and thus the probable standard deviation may be obtained from the known relationship existing between coefficients of variation and standard deviations. These interpolated data are included in table 1.

Table 1

Measurements of *Grus nannodes* and *Grus canadensis canadensis* (in millimeters)

	Length from proximal end intermetacarpal space to distal end of bone		Width just proximal to intermetacarpal space	Greatest distal width	Depth, middle of metacarpal two	Width, middle of metacarpal two
	anconal side	palmar side				
G. nannodes (type)	60.8	56.2	7.0	11.1	5.7	4.8
Theoretical range						
(M± 2 σ)	52.6–69.0	49.0–63.4	6.2–7.8	10.0–12.2	5.2–6.2	4.3–5.3
(M± 3 σ)	48.6–73.0	45.4–67.0	5.9–8.1	9.5–12.7	5.0–6.4	4.0–5.6
Assumed standard deviation	4.08	3.61	0.38	0.53	0.24	0.25
G. c. canadensis (17 specimens)						
Mean	72.4	67.9	8.2	13.7	6.5	5.6
Observed range	65.0–81.3	60.5–74.8	7.6–9.1	12.5–14.2	6.0–6.8	5.0–6.1
Calculated range						
(M± 2 σ)	62.5–82.3	59.2–76.6	7.3–9.1	12.4–15.0	6.0–7.0	5.0–6.2
(M± 3 σ)	57.8–87.0	54.8–81.0	6.9–9.5	11.8–15.6	5.7–7.3	4.7–6.5
Standard deviation	4.86	4.36	0.44	0.65	0.27	0.29
Coefficient of variation	6.71	6.42	5.36	4.74	4.15	5.17

On the basis of normal distribution, 99 per cent of all individuals may be expected to be included in a range indicated by the mean, plus or minus three standard deviations, and 95 per cent in plus or minus two standard deviations. Thus, the theoretical range of each set of measurements of *G. nannodes* may be set up. To indicate the greatest possible range, the mean should be set up: (1) as three standard deviations below the single measurement; or (2) three standard deviations above the measurement; or (3) as the single known measurement. This method sets up three possible curves to represent the fossil population, and each curve is based on the single measurement used in different positions.

If we assume the actual mean of each dimension of the fossil population lies at a position three standard deviations above the recorded measurement, the upper limits of the ranges of all dimensions of the fossil fall within the 99 per cent limits of *canadensis*. Use of each single measurement in *nannodes* as a simple mean indicates that in all dimensions, except distal width, the fossil falls within the expected range of 99 per cent of the *canadensis* specimens. If the mean for each measurement of the fossil is assumed to lie three standard deviations below the recorded measurement, all mean dimensions of *nannodes* are outside the 99 per cent limits of *canadensis*.

If the ranges are calculated on a 95 per cent limit ($M \pm 2\sigma$, table 1) all dimensions of *nannodes* fall outside the 95 per cent limits of *canadensis*. Thus the probability that measurements of *nannodes* are part of the variability of *canadensis* is less than five per cent. All indications are that the measurements of *nannodes* reflect means which are different from those of *canadensis*.

Therefore, it is likely that *Grus nannodes* is actually a different and smaller crane. This is of interest, for in many instances of close relationship between fossil and Recent species of birds of the same genus the fossil form is larger.—HARVEY I. FISHER, *Department of Zoology, University of Illinois, Urbana, Illinois, January 4, 1952.*

Status of the California Gull Colony at Mono Lake, California.—Mono Lake, which lies just east of the Sierra Nevada in California, has for many years been the site of a large colony of the California Gull (*Larus californicus*). Dawson (Birds Calif., 1924:1398ff), who visited the lake in 1919, describes colonies on two islands in the lake, the north and south islands, but the latter has since been abandoned. In 1950 and 1951 I visited the colony on the north island to obtain some birds for life history studies of their parasites. The present colony occupies a restricted area, possibly 600 by 80 meters in extent, on the southeast side of the island. While I had not time for a careful census, I estimated the number of birds in the colony at about 1500. In an area of about 2000 square meters in the most populous part of the colony I counted some 40 nests. Dawson estimated the number of nests in the south colony only at 850, while Grinnell and Storer (Animal Life in the Yosemite, 1924:248) believed the total number of birds in this colony to be close to 1000 pairs. Nichols (Condor, 40, 1938:262) estimated the number of birds in the north colony at 3000, so it is evident that their number is decreasing. Why this is so is uncertain, as the gulls have no apparent enemies, with the possible exception of an occasional predatory bird, and there is nothing to disturb them on the nesting grounds at Mono Lake.

The food of the young birds is mainly the larvae and pupae of the brine fly (*Ephydra*), but some fish remains were found, and judging from the numerous tapeworms present, the brine shrimp (*Artemia*), which occurs in countless numbers in the lake, forms an added article of diet.

Grinnell and Storer (p. 250) state that the diet of the young gulls "consists exclusively of brine shrimp. Birds 3 or 4 days old had . . . a considerable number of these crustaceans in their stomachs" which they disgorge while the adults pour down similar disgorgements. I have had a similar unpleasant experience with the young but not with the old birds. In my own experience, however, these disgorgements apparently consisted entirely of fly pupae. Why there should have been a change in the food habits of these birds since Grinnell and Storer observed them is difficult to explain.

Behle (Condor, 37, 1935:24-35), writing of the bird colonies of Great Salt Lake, says (p. 28) "I have frequently seen flocks of gulls floating on the surface of the water feeding on brine shrimps." He mentions no stomach examinations to support his statement, and it is possible that the gulls were eating fly pupae, rather than shrimps, for I have similarly observed gulls on Mono Lake feeding, as I supposed, on shrimps only to find upon dissecting two of them that their stomachs were full of fly pupae.

The fish which the young birds had eaten must have been brought into the colony by the parent