quickly and thus enhance their survival rate. Since the Hooded Vulture usually is even quicker in finding food and yet is less common, it would seem that in the area studied at least, abundance alone, once achieved, is an influential factor in successfully competing for food.

Though wide-ranging in Africa, these species all show some differences in geographic distribution (see Mackworth-Praed and Grant, *op. cit.*) which must reflect differences in habitat tolerances and competitive relationships. From the standpoint of rates of possible population growth, Mackworth-Praed and Grant list all five species as usually laying one egg per clutch, but differences between species in length of breeding season and tendencies to renest are not available. Hence, average reproductive rates of the several species populations cannot be accurately compared. A more complete appraisal of interspecies competition within this group of vultures will require observations of feeding habits, habitat requirements, and reproductive rates in at least several parts of Africa.

This note is a portion of the ecological work carried out under a Fulbright Grant administered by the U. S. Educational Commission in the United Kingdom, the Uganda National Parks, Uganda Game Department, and their cooperators. My sincere appreciation is extended to the officials of these organizations and to Dr. Wendell Swank, my partner in study there.—GEORGE A. PETRIDES, *Departments of Fisheries and Wildlife and Zoology, Michigan State University, East Lansing, Michigan.*

A Previously Undescribed Recurvirostrid from the Eocene of Utah.—In 1953, Mr. Kurt E. Boker sent fossil fragments of the bones of the left wing of a bird to the Museum of Natural History of the University of Kansas for identification. The fossil is from Eocene deposits in Utah. Study of these fragments reveals that they represent the family Recurvirostridae, which has not previously been recorded from pre-Pleistocene deposits. The extinct bird was a giant in its family, having had a wing spread of more than three feet.

Elements present include the distal 39 millimeters of the humerus, the entire lengths of the radius and ulna, radiale, ulnare, and the proximal portion of the carpometacarpus including carpals II, III, and IV. With the exception of the carpometacarpus and the distal ends of the adjoining radius and ulna, the fragments are so poorly preserved as to be useless in any determinations.

The fragments now are embedded in three pieces of the matrix (see fig. 1). When the second piece was split away from pieces one and three, parts of the radius and ulna remained in the second piece; excepting the proximal part of the ulna and distal parts of radius and ulna, the bones split lengthwise. The distal part of the humerus probably is the outer surface. At least part of each element is compressed and in consequence somewhat distorted.

This Eocene bird differs so much from both of the living recurvirostrids in size and configuration as clearly to deserve designation as a new genus and species. It may be known as:

Coltonia recurvirostra new genus and new species

Type.—No. 10105 of the Museum of Natural History, University of Kansas; fragments of left humerus, radius, ulna, and carpometacarpus; from fine-grained limestone of the Colton Formation of the Eocene, mouth of Ephraim Canyon, Wasatch Plateau, Sanpete County, Utah; collected by Kurt E. Boker.

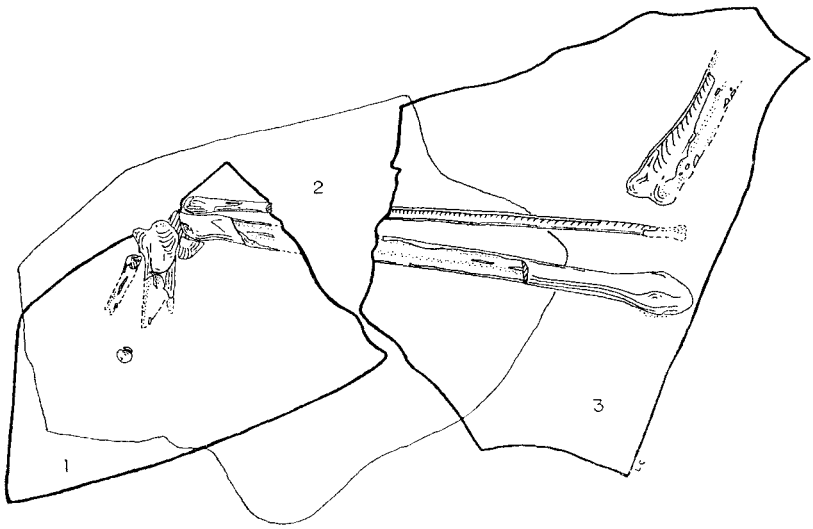

FIGURE 1. *Coltonia recurvirostra.* Drawing of type, K.U. 10105, × ½. Piece No. 1 of the matrix reveals the proximal parts of the left carpometacarpus, radiale, ulnare, and distal ends of radius and ulna. Piece No. 2 of the matrix reveals the proximal parts of the left radius and ulna and the distal end of the humerus. Piece No. 3 of the matrix, the edges of which are represented by the fine line, overlaid pieces 1 and 3 indicated by the heavy lines.

TABLE 1

MEASUREMENTS IN MILLIMETERS OF RECURVIROSTRIDS

Species	*Width of carpo-metacarpus**	*Length of Radius*	*Length of Ulna*	*Width of Radius***	*Width of Ulna***
Recurvirostra americana (KU 23135)	9.0	76.0	80.0	3.0	4.5
Himantopus himantopus (KU 23379)	8.5	71.0	75.0	3.0	4.5
Coltonia recurvirostra (KU 10105)	12.0	131.5	136.5	3.5	6.5

* Measured from posterior edge of anconal rim of trochlea to outermost point of process of metacarpal I.

** Measured at a point 3/8 of the length of the ulna from its distal end (more precisely, 30 mm. from distal end in *Recurvirostra;* 28 mm. in *Himantopus;* and 50 mm. in *Coltonia).*

Diagnosis.—All known bones approximately 1.7 times as long as corresponding bones in the Avocet *(Recurvirostra americana)* and approximately 1.8 times as long as in the Black-necked Stilt *(Himantopus himantopus)* (see Table 1). Carpometacarpus more nearly like that of the stilt than that of the avocet, the anconal rim of the trochlea being nearly rounded instead of possessing a bluntly pointed edge. Metacarpal I resembling that of extant forms of family, but process protruding less prominently; distal end of ulna curving much as in living kinds, but having less abrupt junction of outer condylar rim and posterior edge of shaft.

Remarks.—Although the elements of the fossil show some signs of having been flattened in preservation, as mentioned, measurements of width (taken where little distortion seems to have occurred) indicate that the bird was similar in body proportions to living recurvirostrids. The measurements of the radius and ulna suggest that the bones were slenderer than in the two living genera of the family.

I wish to acknowledge the kindness of Mr. Kurt E. Boker, Kellys Island, Ohio, who provided the fossil material upon which the preceding discussion is based, and the helpful advice of Dr. Alexander Wetmore of the United States National Museum, who examined the fossil critically, aiding greatly in its identification and description.—JOHN WILLIAM HARDY, *Museum of Natural History, University of Kansas.*

The correct specific name of the Quetzal, *Pharomachrus mocinno*.—The most beautiful and legendary bird of Middle America was named by Pablo de la Llave *"Pharomachrus Mocinno,"* in honor of José Mariano Mociño, an early Mexican naturalist and participant in a scientific expedition to Guatemala (Registro Trimestre, 1, no. 1: 48, 1832). Until recently authors followed the original describer in spelling the specific name *mocinno,* with "nn" (see synonymy, Ridgway, Birds of North and Middle America, vol. 5: 738, 1911; Cory, Catalogue of Birds of the Americas, pt. 2, no. 2: 319, 1919; Dickey and van Rossem, Birds of El Salvador: 284, 1938). In 1945 Peters (Check-list of Birds of the World, vol. 5: 148) listed the specific name as *"mocino,"* with a single "n," and (erroneously) cited de la Llave as having named the bird *"Pharomachrus Mocino."* Zimmer (Amer. Mus. Novit., no. 1380: 50, 1948) thought Peters purposely emended de la Llave's name on the assumption that the Spanish letter "ñ" in Mociño's name was better transliterated into "n" than into "nn," and added, "I prefer to revert to De la Llave's original spelling." As Peters' spelling has been copied in influential recent works (Blake, Birds of Mexico, 1953; Miller *et al.,* Distributional Check-list of the Birds of Mexico, Pt. 2: 11, 1957), it seems advisable to call attention to the fact that no emendation was warranted. The International Rules provide: "The original orthography of a name is to be preserved unless an error of transcription, a *lapsus calami,* or a typographical error is evident." De la Llave's original spelling was both intended and correct. He used the same form in a later paper (La Naturaleza, 2: 17, 1874). Latin words with "nn" generally softened in Spanish into "ñ," and the "ñ" sound was formerly written "nn." The *tilde* represents the suppressed extra "n" of the older orthography. Transliteration into Latin of the Spanish "ñ" by "nn" was standard scientific usage—recommended by the A.O.U. Code of Nomenclature: 65, 1892. As de la Llave's spelling, *mocinno,* was in no sense an error, it should be retained.—E. EISENMANN, *American Museum of Natural History, New York, N. Y.*