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A reappraisal of the fossil heron Palaeophoyx columbiana McCoy.—In a study of a collection of Upper Pleistocene bird fossils from the Itchtucknee River, Columbia County, Florida, McCoy (1963, Auk 80:335) described and named a new genus and species of heron, Palaeophoyx columbiana. This was based on a nearly complete type coracoid, a less complete paratype coracoid, and a referred complete left ulna (the type is from the left side and the paratype from the right—not vice versa as stated by McCoy in the description and the figure caption). The genus was said to be "referable to the subfamily Ardeinae due to greater rounding and internal projection of the internal surface of the coraco-humeral area than found in the Botaurinae" (p. 337). The alleged differences in the coraco-humeral areas of the two subfamilies are not apparent to me, and the type and paratype of Palaeophoyx exhibit several distinctive features that are characteristic of Botaurus.

The long and quite slender shaft of the coracoid separates Palaeophoyx from all the Ardeinae except the night herons (Nycticorax and Nyctanassa), to which McCoy felt Palaeophoyx most similar. This slenderness is characteristic also of Botaurus. In the following characters, the type and paratype of Palaeophoyx differ from the Ardeinae, including the night herons, and agree exactly with Botaurus: the distinctive bulging of the shaft below the head, the presence of a groove along the ventral external edge of the shaft immediately above the sterno-coracoidal process, the lip of the sternal facet placed higher on the shaft and extending only a little over halfway across the distal expansion. All of these characters are well shown in McCoy's illustration of the type of Palaeophoyx (p. 338).

The referred ulna was said to differ from modern herons "because of the external cotyla being more narrow and projected" (p. 339). It differs in several other respects as well, and I found on comparison that this specimen is from a Barn Owl, Tyto alba, a species not reported by McCoy from the Itchtucknee. The error is not quite as egregious as at first might seem. Several skeletal elements

TABLE 1
CORACOID MEASUREMENTS OF "PALAEOPHOYX COLUMBIANA" COMPARED TO NEW WORLD BITTERNS

|   | Head to<br>internal distal angle<br>(mm) | Anterior margin of<br>glenoid facet to<br>internal distal angle<br>(mm) |
|---|--|---|
| "Palaeophoyx columbiana" type "Palaeophoyx columbiana" paratyp Botaurus lentiginosus (n = 27) Botaurus pinnatus (n = 1) | 47.0<br>47.7–59.6 (54.3)<br>52.8         | 44.9<br>46.2<br>45.4–56.6 (51.9)<br>50.4                                |

show a superficial resemblance between herons and owls; these are: the humerus, ulna, distal coracoid, proximal tibia, and femur. The two groups are easily separable on comparison, and it is unlikely that these superficial similarities are indicative of any relationship. Nevertheless, it is a pitfall that the avian paleontologist should be aware of.

The genus Palaeophoyx is clearly untenable and must now be considered synonymous with Botaurus. Apart from size, I could find no characters to separate columbianus from Botaurus lentiginosus. Size variation is considerable in B. lentiginosus (Table 1) but the type of columbianus is smaller (by less than a millimeter, however) than the smallest of 27 specimens of B. lentiginosus and one of B. pinnatus examined. B. stellaris of the Old World is a larger species than lentiginosus. The paratype of columbianus falls within the lower ranges of lentiginosus, only 3 of the 27 specimens of the latter being smaller. It would seem that B. lentiginosus may have been smaller during the Pleistocene than its modern representative. Unless further analysis of fossil material should indicate otherwise, columbianus may be regarded as a somewhat smaller temporal form of Botaurus lentiginosus.

I am deeply grateful to Pierce Brodkorb for allowing me to examine the specimens of "Palaeophoyx" in his collections and for providing the facilities to study them.—Storks L. Olson, National Museum of Natural History, Smithsonian Institution, Washington, D. C. 20560. Accepted 30 Apr. 73.