

The bird's plumage was so brilliant and in such perfect condition that it seemed unlikely to be an escape from captivity. This belief was further confirmed when we turned the bird over to Pauline James, head of the Biology Department at Pan American University in Edinburg, Texas. She reported that, on placing the bird in a cage, it fought its captivity and gave every indication of being a wild specimen. The bird remains in captivity.—FRANK O. NOVY, *Saginaw, Michigan 48601*, and ALBERT D. MCGREW, *McAllen, Texas 78501*. Accepted 13 Apr. 73.

**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 internal distal angle (mm)	Anterior margin of glenoid facet to internal distal angle (mm)
" <i>Palaeophoyx columbiana</i> " type	47.0	44.9
" <i>Palaeophoyx columbiana</i> " paratype	—	46.2
<i>Botaurus lentiginosus</i> (n = 27)	47.7–59.6 (54.3)	45.4–56.6 (51.9)
<i>Botaurus pinnatus</i> (n = 1)	52.8	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 *Palaeophox* 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 "*Palaeophox*" in his collections and for providing the facilities to study them.—STORRS L. OLSON, *National Museum of Natural History, Smithsonian Institution, Washington, D. C. 20560*. Accepted 30 Apr. 73.

#### **Interactions between corvids and a Golden Eagle on a pheasant kill.—**

On 27 January 1973 we saw an adult female Golden Eagle (*Aquila chrysaetos*) make a stoop from 10 m above the ground at three hen Ring-necked Pheasants (*Phasianus colchicus*) that were feeding at the edge of a snow-covered field 10 miles south of Provo, Utah. The pheasants flushed ahead of the eagle and she did not pursue. The eagle continued flying over the fields for 200 m. Upon crossing a fencerow overgrown with tall grass, she again stooped into the grass from about 10 m up. This time she did not rise, although three hen pheasants flushed from the cover. Immediately two Black-billed Magpies (*Pica pica*) approached and landed on fence posts near the eagle. We moved closer to determine if, indeed, a kill had been made, and we found the eagle beginning to remove feathers from a hen pheasant.

Carrying the pheasant with no real difficulty, the eagle took flight, crossed two fencerows, and landed in a snow-covered plowed field another 200 m away, where she was at once surrounded by 13 Common Crows (*Corvus brachyrhynchos*) and 3 magpies. Some of the crows perched in a nearby tree while others stood calmly 5 m from the feeding eagle. As the eagle resumed plucking her prey, 2 magpies and 4 to 6 crows tried to forage from her. The magpies were markedly more active, working in close to the eagle to pick up pieces of flesh that adhered to the plucked feathers, but were manifestly submissive to the crows. Three times crows gave chase to magpies that succeeded in securing morsels the eagle cast off. The crows did not fight among themselves over food, but they threatened one another as they worked back and forth around the eagle.

Whenever a crow landed in the group, those on the ground acted startled. Some jumped into the air, others squawked. Each time the corvids became agitated the eagle stopped feeding and looked around. Four or five times the eagle extended a wing to help maintain her balance. Each time she did so, the nearest corvids jumped away, and each time she stopped feeding and looked around for