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.—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

the cause of their fright. At no time did the eagle show any aggression toward the corvids.

The eagle stepped off her kill 22 minutes after securing it. Immediately the corvids converged on it, only to hop away as the eagle returned to it. After pulling at the remains a few times, she stepped away again. One crow took to the air with a pheasant wing but soon landed. Within a minute after stepping away the second time, the eagle rose into the air and flew to a tree 30 m away. As we drove up to examine the kill, she left the tree. Three crows gave chase and one was seen to stoop at her back. Upon examination of the pheasant remains we found the legs were still attached to the synsacrum. About 50 g of meat remained on the partly eaten legs. Feathers and a large blood spot in the snow were the only other remains. We had previously seen the eagle casting away the pheasant's intestines, and the corvids had eaten them. When we returned to the kill site an hour later, the corvids had stripped all the meat from the legs. Although the feathers had blown over a wide expanse, there were corvid tracks around all of them.

We consider this an example of protocooperation. The corvids appear to search out raptors that have killed and scavenge from them actively. The eagle seemed to benefit by using the reactions of the corvids as a warning of possible danger. It is common to see Marsh Hawks (*Circus cyaneus*) and Rough-legged Hawks (*Buteo lagopus*) try to rob other raptors that are feeding. The behavior of the crows and magpies could have warned the eagle of such an attack.—JOSEPH B. PLATT and STEVE K. SHERROD, *Department of Zoology, Brigham Young University, Provo, Utah 84601. Present address of first author: Laboratory of Ornithology, Cornell University, Ithaca, New York 14850.* Accepted 7 May 73.

Recent specimens of western vagrants at Fire Island National Seashore, Long Island, New York.—The autumn occurrence of typically western North American passerines along the Atlantic and Gulf seaboards—especially on barrier beach or other islands and promontories—is now a well-known phenomenon (see for example, Baird et al. 1958). Conversely many typically eastern species occur as vagrants on the Pacific coast in similar localities (see for example Austin 1971, DeBenedictis 1971). Most such vagrants on all coasts are immature (Drury and Keith 1962, Ralph 1971).

This paper records the occurrence of several western races or species (at least one represented by the first specimen from the East) captured in the course of extensive, practically year-round mist-netting on the barrier beach in Fire Island National Seashore, Suffolk County, New York, more precisely near Fire Island Lighthouse, 40° 38′ N, 73° 13′ W. Specimens are on deposit in the National Museum of Natural History (NMNH) in Washington, D. C., and in the American Museum of Natural History (AMNH) in New York City. I acknowledge the invaluable help of the following persons with mist-netting: D. B. Ford, T. H. Davis, H. Honig, F. Heath, R. O. Paxton, F. Schaeffer, L. Rems, and (also for MS comments) F. G. Buckley; J. Bull, A. Keith, and P. Post supplied information on certain specimens; N. K. Johnson, J. Weske and R. Laybourne provided other data.

BELL'S VIREO (*Vireo bellii bellii*). An immature female, skull 25% ossified, ovaries not enlarged, was netted 25 September 1970. Identified as the nominate race by R. Laybourne, it is now NMNH No. 566,493. It measures wing chord 55.8 mm, tail 43 mm, bill from nostril 7 mm, and tarsus 17.6 mm. The status of this