

regarded the whales as serious enemies and took evasive action. Those near the whales swam quickly away at right angles to the whales' path and seemed to take pains to remain inconspicuous. However, when they reached a distance of 200 to 300 m from the whales, their behavior changed abruptly and they began porpoising. Those shoreward of the whales raced all the way to the beach and came ashore in great haste; those to the seaward raced away until lost from sight.

Conway (1971, *Anim. Kingdom* 74(4): 2) saw South American sea lions (*Otaria byronia*) capture Magellanic Penguins at Punta Tombo, as did Prytherch (Boswall 1972, *Bull. Brit. Ornithol. Club* 92(5): 129). Boswall (op. cit.) also reviewed evidence that pinniped predation on several species of penguins is greater than is currently realized. Because of the distance, I was unable to see whether the killer whales actually caught and ate any penguins, but it would indeed be surprising if these predators did not occasionally feed on such an abundant and available food supply.

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A record of allopreening in the Barred Owl.—During the summer of 1972 I witnessed and photographed an incident between two Barred Owls (*Strix varia*) that appears to represent the first reported allopreening between Strigiformes in the wild. In his comprehensive review of allopreening in birds Harrison (1965, *Behaviour* 24: 161) reported one interspecific case between captive owls (*Strix aluco* and *Athene noctua*). Later (1969, *Avicult. Mag.* 75: 97) he described allopreening between sibling Barn Owls (*Tyto alba*) in the London Zoo. Indeed most reports of allopreening have been of captive individuals, and these may or may not correctly indicate the potential occurrence of the behavior in wild populations of the respective species. As behavior in natural situations provides more reliable information on its role in a species' social life, the context in which the Barred Owl behavior occurred is described here in detail.

The sequence occurred at the National Audubon Society's Corkscrew Swamp Wildlife Sanctuary in southwestern Florida. At approximately 1500 on the sunny afternoon of 19 July 1972, two apparently adult Barred Owls were perched midway up two large cypress trees, separated by a water lettuce pond about 60 feet wide. Owl A initiated a period of vocal duetting by uttering the rhythmic eight-hoot call typical of this species. Owl B responded immediately with a rapid series of hoots ending in a downward slur, described by Bent (1938, *U.S. Natl. Mus. Bull.* 170: 193) as "ho-ho-ho-to-hoo-ah, ending in a loud, harsh note" (referred to hereafter as the series-hoot). After a short pause owl A eight-hooted again and this gave rise to the rapid, simultaneous exchange of hoots and sharp cries that is particularly common in the southern race of the Barred Owl. This exchange slowed and finally ceased after about 1 min. For 4 to 5 subsequent min owl B series-hooted at regular intervals of about 20 sec. It then flew across the clearing, landed 3 feet from owl A, and immediately moved to within 1 foot. The mutual preening then commenced; for about 4 min each bird alternated picking with its bill about the head region of the other. Most preening was directed at the edges of the facial discs and the feathers surrounding the bill. Each bird appeared to stretch its neck in efforts to offer parts of its head to the other for preening.

Periodically owl A gave thin, high-pitched whines reminiscent of those of a small dog while preening and, more consistently, while being preened. Following this exchange owl B moved several feet away for about 3 min and began series-hooting, again at roughly 20-sec intervals. It returned to owl A for another brief allopreening session, then moved away again. Thereafter both sat 3 feet apart and preened themselves, paying little or no attention to each other. Owl B gave infrequent series-hoots during this period. The birds continued in this manner until we left them 10 min later.

Neither at the time, nor on subsequent examination of color slides, could the sex or age class of either individual be determined unequivocally, but both appeared to be in full adult plumage. The vertical stripes on the underparts of B were thicker and heavier than those of A. This difference shows up as individual variation between adult specimens of both sexes examined at the Museum of Comparative Zoology. The impression of all three observers present was that owl A may have been larger (suggesting it to be female), but if present, the size difference was very slight.

Allopreening has been recorded in over 40 families of birds (Harrison 1965, op. cit.). Harrison's review indicates that agonistic tendencies between individuals may be appeased through allopreening in many species, but the reciprocal, entirely peaceful nature of the Barred Owl encounter gave no evidence of agonistic behavior. Allopreening also appears to function as a means of sex recognition in some monomorphic species, and it may, in addition, provide a ritualized mechanism for pair bond maintenance in species that pair for extended periods. Thus allopreening could clearly benefit owl pairs, which spend much of their time separated by dense foliage within large territories. Emlen (1973, *Condor* 75: 126) noted that the frequency of temporally coordinated singing in owls is related to the "reduced effectiveness of visual communicatory mechanisms" in most species, thus increasing their dependence on auditory display. The intense vocal duet that preceded the Barred Owl's mutual preening may have been related to pair recognition and maintenance, and offers some evidence that allopreening may serve this function as well.

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Foraging associates of White Ibis.—In estuarine habitats in the Tampa Bay region of Florida, White Ibises (*Eudocimus albus*) commonly forage by probing actively with their bill in soft mud. On 21 November 1972 Courser noted Snowy Egrets (*Egretta thula*) closely associated with White Ibises while the two foraged in Upper Old Tampa Bay, Hillsborough County, Florida. Both of us have since watched for White Ibis feeding associates on numerous occasions throughout 1973 and report here our observations.

Although numerous instances of species of Ciconiiformes using other animals as beaters are reported in the literature (Christman 1957, Parks and Bressler 1963, Heatwole 1965, Emlen and Ambrose 1970, Leck 1971, Dinsmore 1973), the