## Caching of food by the Australian Crow

The hiding of food items is well known in several species of *Corvus* outside Australia (Goodwin 1976, Crows of the World) but so far the only recorded instance in Australia for wild birds is that cited by Rowley (1973, CSIRO Wildl. Res. 18: 25-65) for the Australian Raven *C. coronoides*. All five species of Australian *Corvus* were seen to hide food under aviary conditions.

In 1973 while visiting Ayer's Rock in central Australia, I stopped at Mount Olga and on 11 April, while having lunch at the small parking area in the Valley of the Winds, I noticed that the local Crows C. orru were obviously waiting for scraps; so I began to feed them a loaf of bread in an endeavour to lure them closer for photography. Three birds, an adult pair plus a brown-eyed juvenile, all greedily devoured the bread offered until it seemed they could eat no more. Then I noticed that the juvenile and one of the adults were carrying the bread away. They flew a hundred metres or so up the almost sheer rock face and poked the morsels into holes in the rock. I made no effort to count the number of trips each bird made (certainly the juvenile was the more active bird) but the three birds either consumed or carried away one kilogramme of bread in less than half an hour.

No doubt these individuals have frequent experience of food gluts because bus-loads of tourists picnic in the area. Close observation of Australian Crows competing for food from more usual sources such as carcases may reveal that such behaviour is more widespread and not restricted to such specialized circumstances.

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Sarus Cranes dominant over Brolgas in captivity

During twenty-three hours of watching a mixed flock of non-breeding cranes in a four-hectare compound at the International Crane Foundation, Baraboo, Wisconsin, from 30 June to 15 July 1975, I recorded forty-four interspecific interactions between three male Sarus Cranes *Grus antigone sharpii* and three male Brolgas *Grus rubicundus*. The Sarus were

generally taller and heavier than the Brolgas. Thirtyone of these interactions occurred near water or food dispensers. In nineteen occurrences, a Sarus approached a feeding or drinking Brolga. The Brolga assumed a submissive posture (head down, neck feathers erected) and moved slowly away fourteen (73.7%) times. During the twelve occurrences in which a Brolga approached a Sarus, eleven (91.6%) times, the Brolga paused 2.0-2.5 m from the dispenser, then walked rapidly to another feeding or watering site. On the single occasion when a Brolga displaced a Sarus from food, the birds were approximately the same size. I recorded thirteen interspecific interactions away from food or water. These took place in the shaded area peripheral to a 1.5-hectare woodlot where most of the flock assembled during the hottest part of the day (13:00-17:00). On five of seven occasions when a Sarus approached a Brolga the latter ran two or three metres with wings folded and then stopped. In contrast, four of the six Brolgas approaching a Sarus changed their direction and stopped eight to ten metres from the Sarus. Sixteen times, I noted individuals of both species standing about two metres apart without avoidance or aggression. This pacific behaviour occurred as the birds went to the night-roosting site. I witnessed no interspecific fights.

This matter of interactions between captive Sarus and Brolgas has important implications. Since the discovery of Sarus Cranes in Australia in 1966 (Bravery, 1969; Emu 69: 49-53) and the subsequent reports of interbreeding and hybrid fertility (Archibald, in press; Crane Research Round the World, Univ. Wisc. Press), much speculation has focused on the possibilities of introgression between the species or of displacement of Brolgas from traditional wintering and breeding grounds to sub-optimal habitats by the larger Sarus Cranes. This report shows that, at least, in captivity Sarus Cranes tend to dominate Brolgas, lending credence to the idea that the Sarus are a potential threat to the success of the Brolgas. Confirmation awaits field studies.

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