

Allopreening behavior between Black Vulture (*Coragyps atratus*) and Southern Caracara (*Caracara plancus*) in the Brazilian Pantanal

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RESUMO: Alisamento mútuo de plumagem entre o urubu-de-cabeça-preta (*Coragyps atratus*) e o carcará (*Caracara plancus*) no Pantanal Brasileiro. O alisamento mútuo de plumagem é um comportamento mutualístico que ocorre entre as aves durante o ato de alisamento das penas, pode ser intraespecífico ou interespecífico e é, particularmente, comum quando os indivíduos convivem próximos uns dos outros. Observei por meio do método *ad libitum* um urubu-da-cabeça-preta (*Coragyps atratus*) e um carcará (*Caracara plancus*) alisando a plumagem um do outro, durante um encontro fortuito com diversos indivíduos dessas duas espécies agrupados na grama das margens do Rio Miranda, Hotel Pesqueiro do Tadashi (19°34'32"S; 57°02'05"W), Corumbá, Mato Grosso do Sul, Brasil. O urubu realizava o alisamento de penas na cabeça do carcará que estava visivelmente excitado e retribuía o ato fazendo o alisamento das penas no peito do urubu. Ambos assumiam, claramente, uma postura cooperativa favorecendo a interação. Portanto, são necessárias pesquisas detalhadas para se determinar sob quais condições ocorre essa interação. Em adição, ainda faltam muitas informações sobre o comportamento interespecífico de alisamento de plumagem entre as aves.

PALAVRAS-CHAVE: carcará, *Caracara plancus*, *Coragyps atratus*, Pantanal, urubu.

KEY-WORDS: caracara, *Caracara plancus*, *Coragyps atratus*, Pantanal, vulture.

Allopreening, also called mutual preening (preening of the feathers of one bird by another) (Cullen 1963), is a widespread phenomenon among birds and is particularly prevalent in species where individuals are forced into close proximity (Radford and Du Plessis 2006).

Intraspecific allopreening has frequently been recorded for vultures, owls, cowbirds, penguins, parrots, woodhoopoes and other species (Haverschmidt 1977, Forsman and Wight 1979, Webber 1983, Brooke 1985, Waltman and Beissinger 1992, Radford and Du Plessis 2006). In addition, very few observations have shown interspecific allopreening among birds and most of them have involved cowbird species (Selander and La Rue 1961, Dow 1968, Verbeek *et al.* 1981, Post and Wiley 1992, Hunter 1994, Garrett and Molina 2005). On this note, I report an observation of interspecific allopreening between two scavenging bird species during a fortuitous encounter in a field expedition in the Pantanal Wetlands.

On November 04, 2000, at around 2 pm, I recorded by *ad libitum* method an instance of allopreening between a Black Vulture and a Southern Caracara on the grass by the Miranda River at the Tadashi Fisheries Hotel (19°34'32"S and 57°02'05"W), Corumbá, Mato Grosso do Sul, Central-Western Brazil.

The vulture was in thermoregulation position with its wings out and preening the caracara on the top of the head and neck region (Figure 1). Simultaneously, the caracara was preening the vulture on the chest feathers. Also, the caracara was with its yellow cere on the face and the full crop indicating that was excited (Sick 1997). Preening solicitation was only common by the caracara. The soliciting caracara lowered its head and assumed a ruffled appearance. The caracara performed head-down display (or preening-invitation); after that it preened the vulture. The vulture did not lower its head, but it showed its chest and wings vigorously. Clearly, both assumed a cooperative posture to facilitate the interaction. There were still 12 Southern Caracaras and three Black Vultures that were looking around and sunbathing. Apparently all observed individuals were adults. I observed the phenomenon during 5 min, and when I got close to take better pictures, all of them flew away.

Only a couple of allopreening observations between caracara (Falconidae) and vulture (Cathartidae) have been recorded across their sympatric distributions. In 1982, allopreening between a Southern Caracara (*Caracara plancus*) and a Black Vulture (*Coragyps atratus*) was ob-



FIGURE 1: Allopreening between a Black vulture (*Coragyps atratus*) and a Southern Caracara (*Caracara plancus*) in the Brazilian Pantanal.

served in Texas, United States (Ng and Jasperson 1984). In 2006, allopreening between a Northern Caracara (*Caracara cheriwa*) and a Black Vulture was recorded in Tlacotalpan, Veracruz, Mexico (D. McCauley pers. comm. 2006).

Ng and Jasperson (1984) also reported a similar head-down display of the Southern Caracara to the Black Vulture during allopreening. In addition, Caracaras were generally dominant during competitive interactions with Black Vultures (Wallace and Temple 1987). Observations of marked individuals among Black Vultures showed that allopreening, feedings, and intercessions in fights occur almost exclusively within families. Adults known to breed within the study area (neighbors) associated more strongly than nonneighbors (Rabenold 1986).

In general, allopreening is usually performed as part of courtship for a large number of monogamous birds or pair bond maintenance (Harrison 1965). It also occurs in other social groupings such as between a parent and its offspring. In green woodhoopoes (*Phoeniculus purpureus*), allopreening of the inaccessible to the recipient itself (head and neck region) seems to be primarily for hygienic purposes; in contrast, allopreening of the rest of the body may serve a primarily social function (Radford and Du Plessis 2006). The Brown-headed Cowbird's use of the head-down display was related to the maintenance of dominance relationships (Scott and Grumstrun-Scott 1983).

This observation in the Brazilian Pantanal confirms that allopreening between vultures and caracaras should occur frequently across their distribution as previously suspected (Ng and Jasperson 1984). Therefore, further detailed researches are needed to determine the conditions under that allopreening between vultures and caracaras occur. Also, there is still an information lack on interspecific allopreening among birds.

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