

Scientific Note

Record of opportunist predation of Marine Catfish *Genidens genidens* Valenciennes, 1839 (Siluriformes, Ariidae) by the Crested-Carcara *Caracara plancus* Miller, 1777 (Falconiformes, Falconidae) in estuary of Jucu River, Espirito Santo, Brazil

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Abstract. Record of Crested-Carcara *Caracara plancus* preing three catfishes *G. genidens*. It's the first record published of fishes in a diet of this specie and probable fishing habits.

Key words: Caracaras plancus, feeding behavior, fishing, Genidens genidens

Resumo. Registro da predação oportunista do Bagre-urutu (*Genidens genidens* Valenciennes, 1839, Siluriformes, Ariidae) pelo Carcará (*Caracara plancus* Miller, 1777, Falconiformes, Falconidae), no estuário do Rio Jucu, Espírito Santo, Brasil. Registro de predação de três bagre-urutu *Genidens genidens* pelo Carcará *Carcara plancus*. Esse é provavelmente o primeiro registro publicado de peixes na dieta dessa espécie, inclusive possíveis hábitos de pesca.

Palavras-chave: Caracara plancus, comportamento alimentar, pesca, Genidens genidens

The Ariidae family is widely distributed and is represented by about 150 species, including the Marine Catfish *Genidens genidens*. Most of Ariidae species is associated to temperate and tropical coastal areas, estuaries and rivers. (Figueiredo and Menezes 1978, Marceniuk 2005). The catfish *Genidens genidens*, is medium sized and has a robust and elongated body (Figueiredo and Menezes 1978). Catfihes are common in coastal and estuarine waters being an abundant fishery resource with great economic importance and great contribution for the artisanal fisheries being the second group of fish that is most caught by fishermen on the brazilian coast (Reis, 1986).

On 10 July 2008, at 10 am, during field works in Barra do Jucu, precisely on the west part of "Morro da Concha" (20°25'27,4"/40°19'19,7"), in Vila Velha, ES, two individuals of *Caracara plancus* (Crested Carcara) were observed feeding opportunism on some catfish (Fig. 1). When the observers approached the area, the two birds flew to a mangrove vegetation island, when then it could be observed that a G. genidens individual was almost all eaten, lasting only part of the head and spine (Fig. 2 a). A second catfish (175 mm) were partially eaten, lasting part of it's head and spine with the caudal fin (Fig. 2 b), and a third one (150 mm) was broken in the half with it's anterior part allready eaten by one of the birds (Fig. 2 c). After this observation, another G. genidens specimen (148 mm) was seen floating dead just below the spot where the were feeding on the catfishes, which is near Morro da Concha's shore, at about 15 meters (Fig. 2 d), an estuary formed at the mouth of the Jucu River. Despite the fact that there is no report of fishing habits to C. plancus, it is likely that at least one of them had fished the dead catfishes. The catfishes death was probably caused by gillnets placed along the Jucu River and it's estuary and along the Congo Canal. G. genidens individuals were small to medium sized, what may have promoted their escape from the gillnets, what probably injured and killed them.

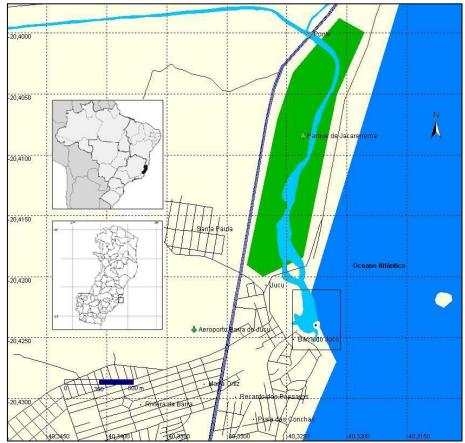


Figure 1. Localization of the estuary of the River Jucu, where the predation was observed, Parque Municipal de Jacarenema, Vila Velha city, Espirito Santo, Brazil. Fonte: GoogleEarth.

The Crested Carcara, C. plancus is a a bird of prey of the family Falconidae associated open habitats occurring from the southern United States to Tierra Del Fuego, Argentina (Sick, 1997). It is a generalist predator, feeding also on dead animals, and it can be seen close to vultures or other scavengers or alone as well (Souto, 2008). It is common to observe it flying agricultural areas and pastures, searching a big variety of vertebrates and invertebrates preys, and on highways, looking for road-killed animals (Glazener 1963, Whitacre et al, 1982). By the fact this species feed mainly on small rodents, birds and insects, fishes are not cited as a part of C. Plancus's diet (Glazener, 1963, Whitacre et al, 1982, Vargas et. al 2007). There are records of predation on D'orbigny's slider (Trachimys *dorbigini*) nests (Gonçalves et al, 2007), records as a *Attalea phalerata* (bacuri palm) seed disperser in Pantanal (Galetti & Guimarães, 2004), and of eventual attacks to domestic creations like goats and sheep as well (Bellati and Thungen, 1990).

The success of this species in disturbed areas and in urban environments is explained by it's adaptation to different types of food. Fishes are not included in *C. plancus*'s diet, as there are no reports of fishing habits too. It is an extremely important species, with a remarkable adaptation to altered environments, coexisting with other birds and animals such in the countryside as in the cities. This study confirms the first occurrence of fihes in the *C. plancus*'s diet, this consumption is a possible opportunism of fishing dead catfishes.

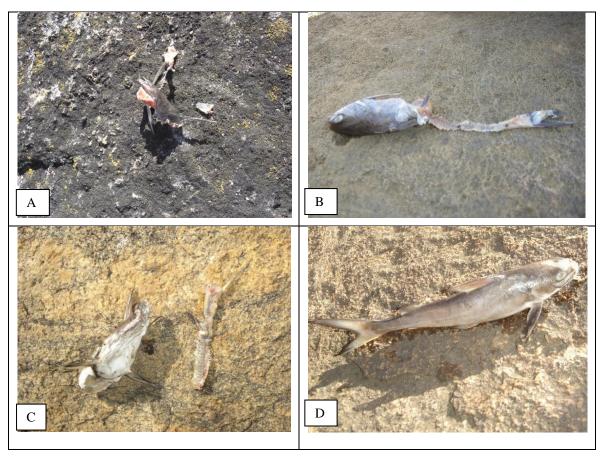


Figure 2. A, B e C, Preys Individuals of Marine Catfish (*Genidens genidens*) that Crested-Carcara, *Caracara plancus* was eating. D, Intact Marina Catfish observed floating near "Morro da Concha".

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References

- Azevedo, M. C. C., Araòjo, F. G., Cruz-Filho, A. G., Gomes, I. D. E & Pessanha, A. L. M. 1999.
 Variação espacial e temporal de bagres marinhos (Siluriformes, Ariidae) na Baía de Sepetiba, Rio de Janeiro. Revista Brasileira de Biologia. 59(3): 443-454.
- Bellati, J. & Thungen J. 1990. Lamb predation in patagonian ranches. Vertebrate Pest Conference Proceedings collect. University of Nebraska. 262-268.
- Figueiredo J. L. & Menezes, N. A. 1978. Manual de peixes marinhos do sudeste do Brasil II: Teleostei (1). São Paulo,USP/Museu de

Zoologia, 110 p.

- Galetti, M & Guimarães Jr, P. R. 2004. Seed dispersal of Attalea phalerata (Palmae) by Crested caracaras (*Caracara plancus*) in the Pantanal and a review of frugivory by raptors. Ararajuba 12(2): 133-135.
- Glazener, W. C. 1963. Note on the Feeding Habits of the Caracara in South Texas. The Condor. 66: 162.
- Gonçalves, F. A., Cechin, S. Z. & Bager, A. 2007. Predação de ninhos de *Trachemys dorbigni* (Duméril & Bibron) (Testudines, Emydidae) no extremo sul do Brasil. **Revista Brasileira** de Zoologia. 24(4): 1063–1070.
- Marceniuk, A. P. 2005. Chave para identificação das espécies de bagres marinhos (Siluriformes, Ariidae) da costa brasileira. **Boletim do Instituto de Pesca**, São Paulo, 31(2): 89-101.
- Reis, E. G. 1986. A pesca artesanal de bagres marinhos (Siluriformes, Ariidae) no Estuário da Lagoa dos Patos (RS). Documentos Técnicos 05, FURG, Rio Grande do Sul, 22p.
- Sick, H. (1997) **Ornitologia Brasileira**. Nova Fronteira, Rio de Janeiro, RJ.
- Souto, H. N., 2008. Ecologia de interações entre Coragyps atratus (Bechstein, 1793) e

Caracara plancus (Miller, 1777) no município de Uberlândia (MG). **Dissertação de mestrado**. Universidade Federal de Uberlândia. 47 p.

Vargas, R. J., Bó, M. S., Favero, M., Morrison, J. L. 2007. Diet of the southern Caracara (*Caracara plancus*) in Mar Chiquita Reserve, southern Argentina. Journal of Raptor Research. 41(2): 113-121.

Whitacre, D., Ukrain, D. & Falxa, G. 1982. Notes on the hunting behavior and diet of the Crested Caracara in northeastern Chiapas and Tabasco, Mexico. **Wilson Bulletin**, 94(4): 565-566.

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