

New documented records for the Black-collared Hawk (*Busarellus nigricollis*, Latham 1790) (Aves: Accipitridae) in Rio Grande do Sul state

Novos registros documentados para o gavião-belo (Busarellus nigricollis, Latham 1790) (Aves: Accipitridae) no estado do Rio Grande do Sul

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ABSTRACT

The Black-collared Hawk (*Busarellus nigricollis*) is a buteonine with a wide distribution through neotropical region. It has preference for aquatic habitats, where it feeds on fishes. It has few records for southern Brazil. In Rio Grande do Sul (RS) State, it is rare, and the only documented record is a collected specimen in Santa Cruz do Sul, more than seventy years ago. Here we report new documented records for western and central region of RS. The first one was a juvenile observed in December 2020 at the Wetland of Butuí-mirim. The second one was an immature observed on April 2021 at Butuí River. Both observations were made in São Borja, and reaffirm its occurrence in the Butuí River Basin. The third record was in the central region of RS in June 2022, and its occurrence may be associated to the low Jacuí River. The regional status of the Black-collared Hawk is unclear. It was considered threatened in the past, but now it is regarded as not applicable for evaluation. The Butuí River Basin has many wetlands in the course of its rivers, although some were drained and converted into rice fields. Future actions should be considered regarding the conservation of the wetlands of Butuí River Basin.

Keywords: Biological Reserve of São Donato; birds of prey; Butuí-mirim Wetland; Butuí River; raptors.

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RESUMO

Foram documentados novos registros de gavião-belo (*Busarellus nigricollis*) para o Rio Grande do Sul. O gavião-belo (*Busarellus nigricollis*) é um buteonino com ampla distribuição pelo neotrópico. A espécie prefere habitats aquáticos, onde se alimenta principalmente de peixes. Possui poucos registros no sul do Brasil. No estado do Rio Grande do Sul, ele é raro, e a única documentação é um espécime coletado em Santa Cruz do Sul, há mais de 70 anos. Aqui, relatamos novos registros para a região oeste e central do RS. O primeiro foi um juvenil observado em dezembro de 2020 no banhado do Butuí-mirim; o segundo, um imaturo observado em abril de 2021 no Rio Butuí. As observações ocorreram em São Borja e confirmam a presença da espécie na Bacia do Rio Butuí. O terceiro registro ocorreu na região central, em junho de 2022, e sua ocorrência pode estar associada ao baixo Rio Jacuí. O status regional do gavião-belo é pouco esclarecido. Anteriormente foi considerado ameaçado, mas agora é tido como não aplicável para avaliação. A Bacia do Rio Butuí possui muitas áreas úmidas, embora algumas delas tenham sido drenadas e convertidas em arrozais. Ações futuras devem ser consideradas para a conservação dos banhados da bacia do Rio Butuí.

Palavras-chave: aves de rapina; Banhado do Butuí-mirim; rapinantes; Reserva Biológica do São Donato; Rio Butuí.

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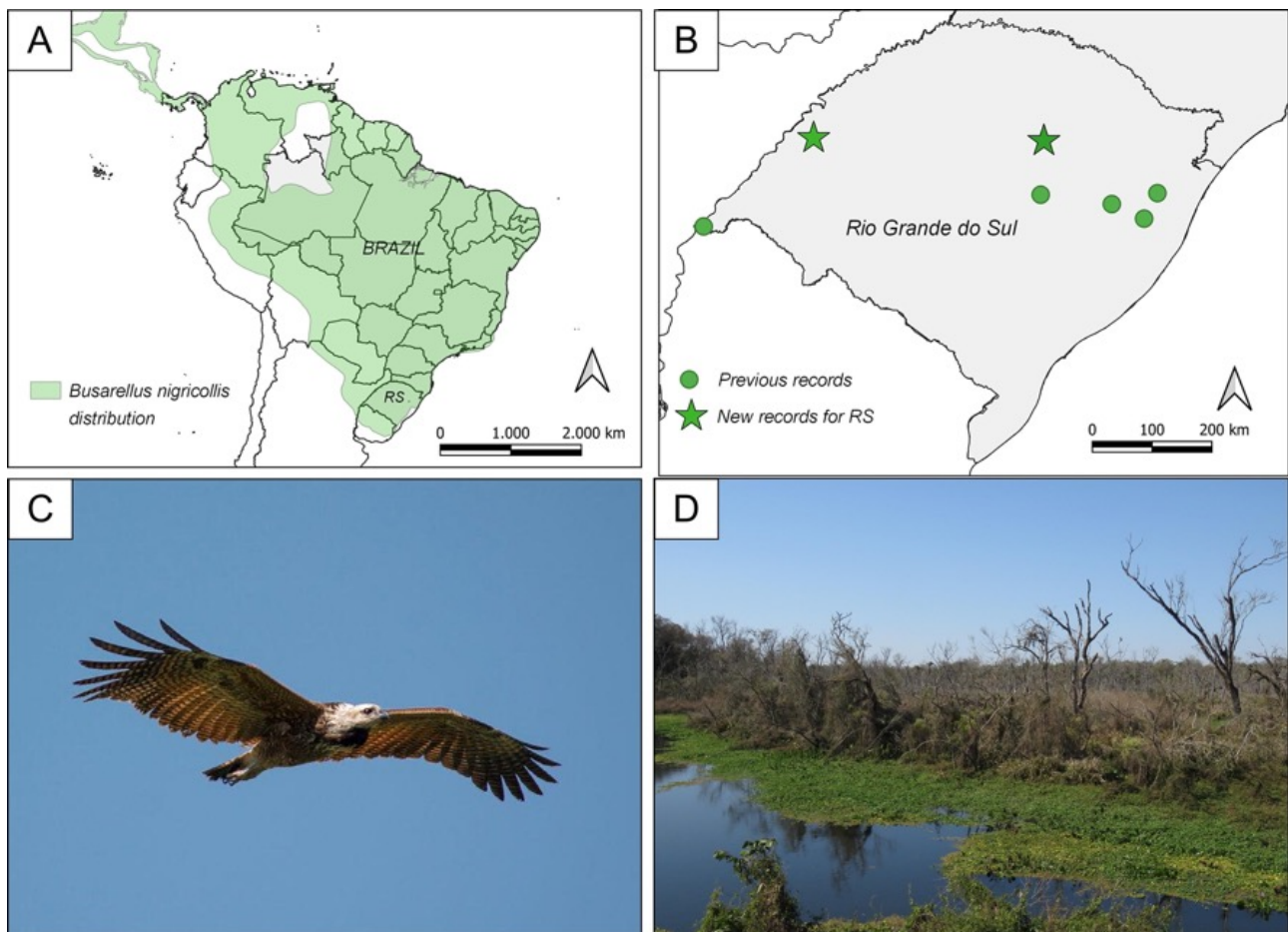
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The Black-collared Hawk (*Busarellus nigricollis*, Latham 1790) is a large, bulky buteonine with a wide distribution throughout the Neotropics, from Mexico to northern Argentina, Uruguay and throughout Brazil (FERGUSON-LEES & CHRISTIE, 2001). The species is always found close to water, where it feeds mainly on fish (BROWN & AMADON, 1968). It can be located in a number of tropical aquatic habitats, such as swamps, mangroves, rice fields, forest rivers, lakes and ponds (FERGUSON-LEES; CHRISTIE, 2001).

There are few records of the Black-collared Hawk from southern Brazil. For example, it was discovered in Santa Catarina in 1999 (AMARAL, 2002), and documented a few years later by Zilio (2009). In Rio Grande do Sul State (RS), there are some records dispersed in time and space, represented by few locations (BENCKE *et al.*, 2003).

The oldest record for RS – and also the only previous one documented – is represented by a Black-collared Hawk shot near Santa Cruz do Sul more than seventy years ago; this specimen is preserved in the Museu do Colégio Mauá in that city (BENCKE, 1997; BENCKE *et al.*, 2003). After that, it was observed in 1977 in Espinilho State Park, in Barra do Quaraí (BELTON, 1994). The third locality is an area in Triunfo, where W. Voss reported observations of this hawk in 1989 and 1990 (BELTON, 1994, BENCKE *et al.*, 2003). Finally, between 1999 and 2001, Accordi & Barcellos (2006) observed the species in two locations, close to each other, in the municipalities of Viamão and Santo Antônio da Patrulha.

In addition to the record made in Triunfo, there is also an observation of a Black-collared Hawk made in that same location in September 2009 by the Club of Birdwatchers of Porto Alegre (COA-POA), this being the last observation of the species in the state (BENCKE, G. A. personal communication). In this article, we report new documented observations for the species in western and central RS (figure 1AB).



to be continued...

Continuation of figure 1

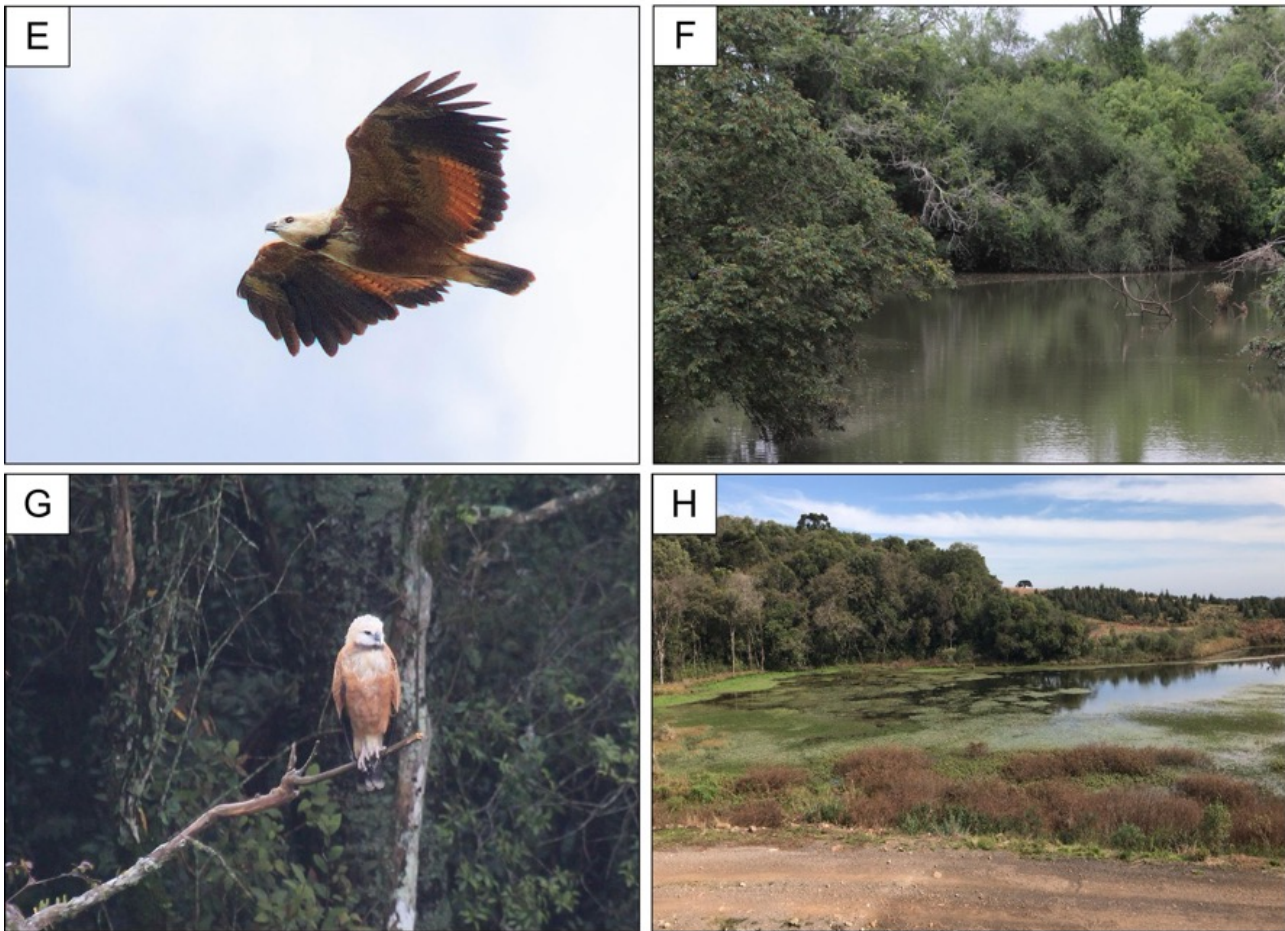


Figure 1 – (A) Distribution of the species through neotropical region – polygon area drawn by BirdLife International (2020). (B) Known records of the Black-collared Hawk (*Busarellus nigricollis*) for Rio Grande do Sul – records according to Belton (1994), Bencke (1997), Bencke *et al.* (2003), Accordi & Barcellos (2006) and this study. (C and D) A juvenile Black-collared Hawk recorded at the Wetland of Butuí-mirim in São Borja – photos by R. P. Rödel and D. A. Meller. (E and F) A second year immature Black-collared Hawk recorded at Butuí River in the limits of São Borja and Maçambará – photos by D. A. Meller. (G and H) An adult Black-collared Hawk recorded at a lake in Fontoura Xavier – photos by P. Sessegolo and D. A. Meller.

Our first record is represented by a juvenile Black-collared Hawk observed by the first and second authors on December 5, 2020 in the Pantanal de Butuí-mirim in São Borja (28°52'S, 55°50'W). The hawk was seen for the first time after taking off from the ground (figure 1CD). For more than 10 minutes, we observed it, both in flight and perched on Espinillo bushes [*Vachellia caven* (Molina) Seigler and Ebinger]. The hawk was being mobbed by some songbirds, namely the forked-tailed flycatcher (*Tyrannus savanna*, Vigors 1825), the tropical kingbird (*T. melancholicus*, Vieillot 1819) and the yellow-rumped bushbird (*Pseudoleites guirahuro*, Vieillot 1819). At this point, we could also hear it emitting some vocalizations, which we describe as a whistled scream. Early in the morning, the next day, the hawk was sighted again in this area. On this occasion, it was perched on a dead tree above a stream, probably looking for fishes. After spotting it, it flew over the riparian forest, disappearing from our sight. By mid-morning, he was soaring a thermal and then glided towards the middle of the wetland. The species ended up being sighted in this same area in the following years (MELLER, D. A. personal observation).

The Black-collared Hawk was sighted again by the first author on April 4, 2021. On this occasion, a two-year-old Hawk was flying over the riparian forests of the Butuí River on the limits of São Borja and Maçambará (28°57'S, 55°52'W). After a few turns, the hawk headed north, and was no longer seen (figure 1EF). These are the first records for the Butuí River Basin.

The Black-collared Hawk was also recorded in a lake near a forest patch in the municipality of Fontoura Xavier, central region of RS (28°54'53"S, 52°23'20"W) (figure 1GH). The species was recorded for the first time by P. Sessegolo on June 25, 2022, being recorded on other occasions until July 17 of the same year (SESSEGOLLO, 2022a; AGNE, 2022). On June 21, 2023, the species was sighted again in that same lake, indicating that this could be an established territory (MELLER, D. A. personal observation; SESSEGOLLO, 2022b).

These records are the only recent ones documented for RS and confirm the current occurrence of the Black-collared Hawk in this state. Although the records elucidate the occurrence of the collared hawk in the Butuí River Basin, Belton (1994) had already established its presence in the west, in Espinilho State Park. Composed mostly of savannahs, this park is also bordered by the confluence of the Quaraí-mirim river with the Uruguay river, and it was precisely in this location that Belton (1994) sighted the species. As most birdwatchers and ornithologists exclusively visit the park's savannas rather than the riverbanks, the species has not been recorded since then and it is unknown if it still exists.

The occurrence of the Black-collared Hawk in an isolated lake in Fontoura Xavier is the only record for the central plateau of Rio Grande do Sul, and we consider that its occurrence in this area may be linked to the lower Jacuí river of the central depression. Despite the historical occurrence of the species in the Santa Cruz do Sul region, it can still occur in the oxbow lakes of the Jacuí River, in the Pardo River, where appropriate habitat still exists (BENCKE, G. A. personal communication).

Although some wetlands are still preserved, many of the floodplains in the western and central depression regions have been drained and converted to rice fields, and this could have reduced the number of black-collared hawks in the state over time (BENCKE *et al.*, 2003). The construction of dams could represent another threat to the species, as it floods potential habitat on the banks of rivers (BENCKE *et al.*, 2003). An exception to this could be the new niches formed in areas without suitable habitat for the species, allowing its expansion, something that Zilio (2009) already pointed out for the highlands of southern Brazil. However, in the lowlands of central RS – where most of the records for the state occur (see figure 1A) – the natural habitat would certainly be impoverished by the creation of artificial lakes.

Two subspecies are recognized for the Black-collared Hawk, the nominal form and *Busarellus nigricollis leucocephalus* (Vieillot, 1816); the first occurs in the north of the species' geographic range, while the second occurs in areas to the south (FERGUSON-LEES & CHRISTIE, 2001). In RS, the southern subspecies would be expected, however, only through photos and without analysis of specimens or genetic material, we cannot infer which taxon it refers to. On the other hand, the difference between the forms is quite subtle, possibly representing a cline and the subspecies not being valid.

The current regional status of the black-collared hawk is unclear. Bencke *et al.* (2003) first considered the species as endangered, mainly because its main habitat was lost over the decades in RS. However, in an update of the regional Red List, the species was considered not applicable for evaluation (RIO GRANDE DO SUL, 2014). This was based on the assumption that the population that inhabits the state is very small and that the lack of recurrent records in any specific area makes it difficult to establish protective actions (BENCKE, G. A. personal communication).

The Butuí River Basin has large floodplains along its course, resulting in extensive wetlands along its tributaries. Although many of these wetlands have been drained in the past, at least one of them is protected as a State Conservation Unit: the Biological Reserve of São Donato (BENCKE *et al.*, 2006). Another wetland in this basin that still maintains a large part of its area as natural is the Butuí-mirim Wetland – where we saw the Black-collared Hawk for the first time – which is formed by the Butuí-mirim River, a tributary of the Butuí River (MELLER, D. A. personal observation). Due to its location and habitat characteristics, the Butuí River Basin may be today the most important area for the occurrence of the species in RS. Actions regarding the conservation of the wetlands mentioned above should be considered in future evaluations of the status of the Black-collared Hawk.

In conclusion, birdwatching by amateur observers is one of the activities that has contributed most to the knowledge of the distribution and composition of avifauna today, especially through the increase of citizen science platforms. Thus, we strongly recommend birdwatchers to share their records in those platforms in order to contribute to a better understanding of how species like the Black-collared Hawk are distributed in space and time, and to elucidate aspects about their populations and status.

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