

First record of the Stygian Owl, *Asio stygius*, from the Brazilian state of Sergipe: a 320 km extension of the known range of the species in South America

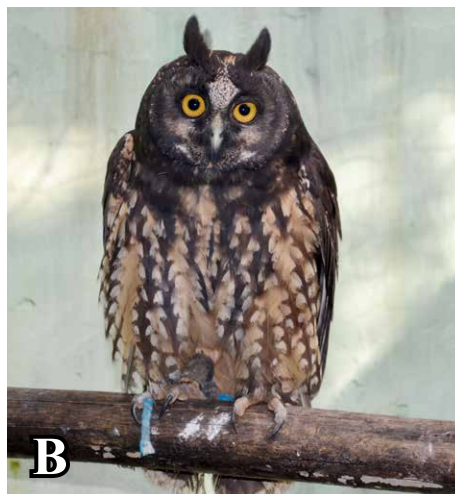


Figure 1. Captive Stygian owls (*Asio stygius*) at Falcon Park (“Parque dos Falcões”) in Itabaiana, Sergipe (Brazil): (A) male dorsal view, (B) female frontal view. Photography: Juan Ruiz-Esparza.

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The Stygian Owl, *Asio stygius* (Wagler, 1832), is a medium to large-sized “horned” owl that occurs in the Neotropics between Mexico and southern Brazil, although the available data on its geographic distribution are scant, patchy, and almost certainly incomplete¹. In Brazil, records are available from the central Amazon basin, and in the southern third of the country^{2,3,4}, but there are very few records for the vast northern region.

Asio stygius is classified as least concern by the IUCN⁵, although Stotz *et al.*⁶ consider that the species requires attention, especially given the paucity of data on its geographic distribution and the potential existence of vulnerable populations within this range. The present study contributes to this discussion by documenting a considerable extension of the species’ known range, with the first record of the occurrence of *A. stygius* in the Brazilian state of Sergipe.

On September 15th, 2011, local residents encountered two white, rounded eggs, similar in size and shape to table tennis balls, lying on the ground on top of some stones, in the area surrounding the raptor conservation and breeding facility known as “Parque dos Falcões” or Falcon Park (10°44’25.76” S, 37°22’28.17” W), located in the rural zone of the municipality of Itabaiana, Sergipe (Brazil). Each egg was incubated by a domestic pigeon, and after

10 days, two *A. stygius* chicks hatched. The two animals – now aged 3 years – are housed in a standard raptor enclosure at the park (Figure 1), where they are fed mice and chicken chicks. The animals have been registered at IBAMA, the Brazilian federal environment agency, under ring numbers 026 (male) and 027 (female).

This record of *A. stygius* from Itabaiana (Figure 2) represents the first evidence of the occurrence of the species in the Brazilian state of Sergipe and is an extension of the known distribution of the species of at least 320 km to the northeast and east of the nearest localities in the state of Bahia^{7,8}. Recent records of *A. stygius* in Brazil indicate that its distribution is less patchy than was previously thought^{9,10}, and it seems likely that the species is found throughout the intervening area. It seems equally likely that the species is either rare or patchily distributed within this area, especially as the original forest cover has been reduced and fragmented significantly in recent decades¹¹. This would obviously contribute to the paucity of records from this region, and throughout most of southern Brazil.

The exclusion of *A. stygius* from the most recent review of endangered Brazilian fauna¹² reflects the overall lack of data available on the biogeography and ecology of the species in this country. The present report reinforces the need for new data on the occurrence of the species, which is a fundamental step in the understanding of its natural history and, ultimately, its vulnerability to anthropogenic impacts and its conservation status at regional or global levels. This study also emphasizes the

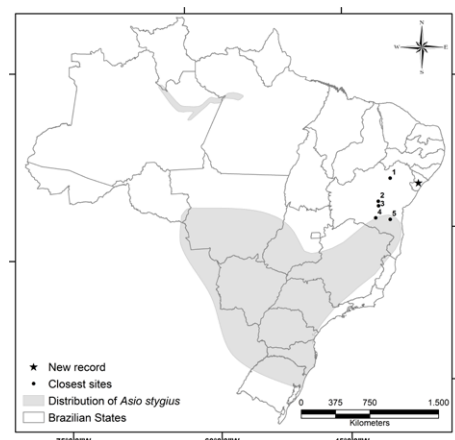


Figure 2. New record (star) of *Asio stygius* from northeastern Brazil in comparison with the distributional polygon presented (in gray) by Ridgely *et al.* (2007), and closest sites at Bahia state (dots) (WikiAves 2015), municipalities of (1) Jaguarari; (2) Lençóis; (3) Mucugê; (4) Brumado; and (5) Boa Nova.

potential role of breeding facilities, such as Falcon Park in Itabaiana, as a potential source of scientific data on the occurrence of species with a given local area, in addition to their important contribution to the conservation of these species.

References

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