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Cover: A bag worm with its beautiful heap of junk. Acrylics on 300 GSM paper by Dupati Poojitha based on a picture by Sanjay Molur.



New sighting and conservation implications of the endemic Sulu Boobook *Ninox reyi* Oustalet, 1880 at Bolobok Rock Shelter, a key archaeological site in the Sulu Archipelago, southern Philippines

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The Sulu Hawk-owl *Ninox reyi*, also known as the Sulu Boobook, a member of the Strigidae family, is endemic to the Sulu Archipelago in the southern Philippines. Formerly classified as a subspecies of the Philippine Hawk-owl, it was reclassified as a distinct species in 2012 based on distinctive vocalizations and other evidence (Rasmussen et al. 2012). Kennedy et al. (2000) describes the Sulu Boobook as a modestly-sized owl, standing 20 cm tall, which places it between the larger Philippine Hawk-owl complex species and the smaller Luzon & Mindanao Boobooks in terms of size. Its plumage is characterized by brown stripes on the upper body, a warmer orange-brown hue on the underside, and noticeable white spots on the wings. A white throat mark and pale yellow eyes are its distinguishing traits. Unlike its congeners, the Sulu Boobook's call is a distinctive rattling sequence, not the usual hoots associated with Philippine owls.

Scientific research on Philippine Hawk-owls is generally scarce. Available studies indicate that they typically inhabit tropical moist lowland primary and secondary forests up to 700 m, and can also be found along forest edges, in glades, and on plantations. For the Sulu Boobook in Tawi-Tawi, its presence have been recorded in mature mangroves and large trees near villages (Rasmussen et al. 2012). It has also been documented in various places within Tawi-Tawi, such as Sibutu municipality, Bongao & Sanga-Sanga islands in Bongao municipality, and Tarawakan, Balimbing, & Batu-Batu in Panglima Sugala municipality (Allen 2001; Rasmussen et al. 2012; BirdLife International 2016) (Figure 1).

Although initially documented in the late 19th century, scientific data on the Sulu Boobook remain limited (Allen 2001; van de Ven et al. 2019). The most

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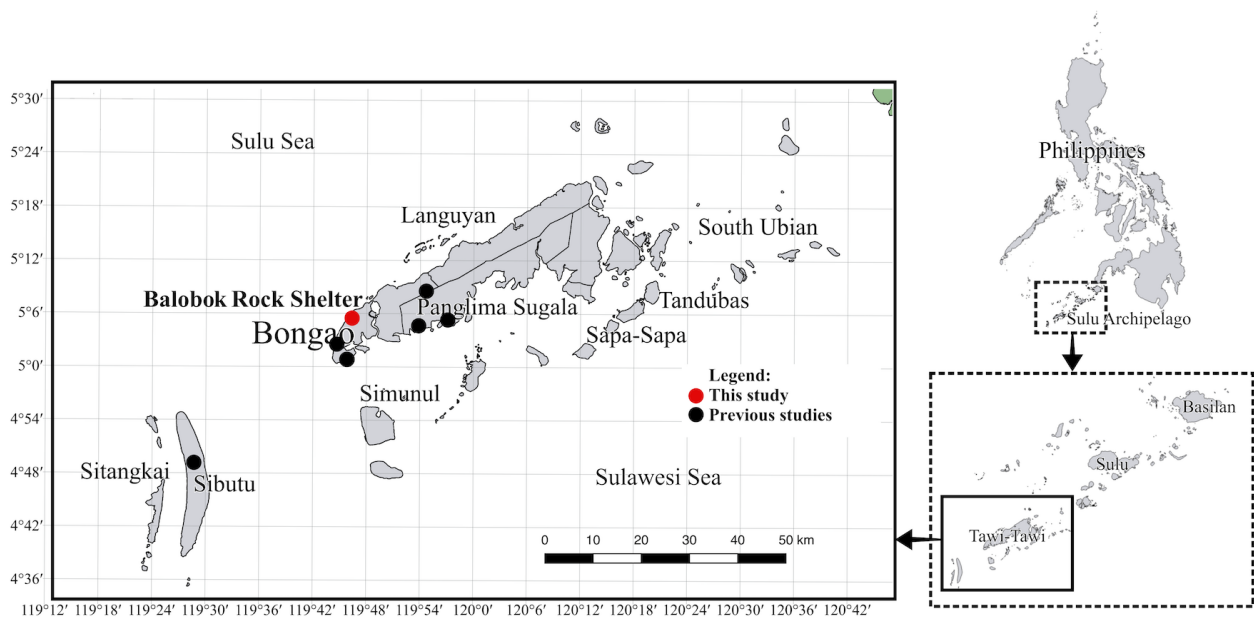


Figure 1. Map of the Philippines showing the location of Bolobok Rock Shelter and other locations of previous sightings of Sulu Boobook from others studies.



Image 1. Sulu Boobook *Ninox reyi* perched on a bare, slender vine at the Bolobok Rock Shelter.

recent comprehensive surveys in Tawi-Tawi, which documented the Sulu Boobook in its natural habitat, were carried out by Allen in the late 1990s. In 2016, Birdlife International classified the Sulu Boobook as Vulnerable, citing its declining population, estimated at fewer than 1,000 individuals, and threats from

deforestation, and other anthropogenic disturbances. In 2019, the Department of Environment and Natural Resources (DENR) Administrative Order No. 2019-09 also listed the species as Vulnerable, highlighting the critical need for updated field observations.

This article reports a new sighting of the Sulu Boobook



Image 2. Varied landscapes, flora and fauna at Bolobok Rock Shelter, showcasing karst formations and potential habitats within the ecological niche of the Sulu Boobook *Ninox reyi*.

at the Bolobok Rock Shelter, an unrecorded location for this species situated along the coast overlooking the Sulu Sea in Barangay Lakit-Lakit, Bongao, Tawi-Tawi (Figure 1). An individual was observed at noon on 10 July 2023, perched quietly but alertly on the limestone ceiling at the entrance of Bolobok Rock Shelter at an elevation of 13.41 m (Image 1).

The immediate environment was characterized by a karstic limestone formation with an irregular and rugged surface (Image 2). The texture of the rock behind the owl was rough and pitted with erosion features, which are common in limestone that has been subjected to dissolution by acidic rainwater over time. Vegetation around the perch was sparse. The owl was perched on a bare, slender vine. The surrounding rock served as a microhabitat that likely supported various forms of wildlife, including this owl, which seemed well adapted to blend into the grayish-brown palette of the rock face. The crevices and fissures in the rocks could have provided shelter and nesting spots for the owl and other avian species. The shaded location of the rock

shelter, coupled with its humid and quiet ambiance, are conditions that are often preferred by owls for roosting (Rebollo et al. 2023).

The owl exhibited a sense of undisturbed tranquility in the presence of observers, providing an opportunity to document and confirm its identification. It was confirmed as a Sulu Boobook based on key morphological features: prominent uniformly barred on crown and breast, distinctive mustard-yellow eyes, prominent white “X” markings around the bill, and a noticeable white patch on its throat, which match the characteristics of the species as described in Kennedy et al. (2000) and Rasmussen et al. (2012).

Bolobok Rock Shelter, located in Barangay Lakit-Lakit, Bongao, Tawi-Tawi—the southernmost province of the Sulu Archipelago—is an Important Cultural Property (National Museum Declaration No. 24-2016). It holds significant prehistoric artifacts, including polished shell adzes from *Tridacna gigas*, showcasing early tool-making (Faylona 2010; Bautista 2022; Muallil et al. 2024). Radiocarbon dating places these artifacts

between 6810–3190 BCE (8,760–5,140 years ago), making Bolobok one of the Philippines' earliest known human settlements.

On the other hand, Lakit-Lakit is a remote barangay in Bongao, located along the Sibutu Passage in the northern part of the municipality. It has a population of about 1,500 and a coastal length of 2.72 km. The majority of its residents rely on farming, making Lakit-Lakit a primary source of agricultural produce in Bongao, which is the capital and commercial center in the province of Tawi-Tawi. Lakit-Lakit was once densely forested but suffered severe deforestation due to extensive logging and farming expansion, particularly in the 1990s (Sansawi et al. 2020). The local residents identified the species as 'lukluk' in Tausug and 'mongkok' in Sinama. They reported hearing the calls of the bird early in the evening and sometimes spotting the birds in trees near residential areas.

The discovery of the Sulu Boobook at Bolobok Rock Shelter not only provides a new locality record for Lakit-Lakit but also underscores the species' adaptability to varied microhabitats, suggesting that the Sulu Boobook may have a wider range than previously documented. A single sighting of the species in a new locality does not necessarily confirm a resident population, as its high mobility suggests it may be transient. To establish a sustained population at Bolobok Rock Shelter, multiple sightings over time, evidence of breeding pairs, or juveniles are necessary (Pradel & Sanz-Aguilar 2012). Nevertheless, this finding underlines the urgency for comprehensive field surveys and conservation efforts to ensure the survival of this vulnerable owl. Additionally, our research highlights the critical need to protect the Bolobok Rock Shelter, not only as a cornerstone of cultural heritage but also as an essential habitat for this species.

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