



## Annotated checklist and distribution of the Socotran Archipelago Herpetofauna (Reptilia)

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## Abstract

We update the knowledge on the 30 terrestrial reptile species of Socotra, an archipelago well known for its highly endemic flora and fauna. We use the records obtained during several surveys throughout all the islands of the archipelago, carried out between 2007 and 2010, as well as the bibliographic records. We recorded all the known species of terrestrial reptiles for the islands (*Chamaeleo monachus*, *Haemodracon riebeckii*, *Haemodracon trachyrhinus*, *Hemidactylus dracaenacolus*, *H. granti*, *H. homoeolepis*, *H. flaviviridis*, *H. forbesi*, *H. inintellectus*, *H. oxyrhinus*, *H. robustus*, *H. pumilio*, *Pristurus abdelkuri*, *P. guichardi*, *P. obsti*, *P. insignoides*, *P. insignis*, *P. sokotranus*, *P. samhaensis*, *Mesalina balfouri*, *M. kuri*, *Hakaria simonyi*, *Trachylepis socotrana*, *Pachycalamus brevis*, *Leptotyphlops filiformis*, *L. macrurus*, *L. wilsoni*, *Typhlops socotranus*, *Dityopphis vivax*, *Hemerophis socotrae*). We report for the first time the occurrence of *Hemidactylus robustus* in Samha Island. *H. homoeolepis* is excluded from the fauna of Abd al-Kuri Island.

**Key words:** Socotra, Yemen, reptiles, distribution

## Introduction

The Socotran Archipelago (12°30'N; 54°00'E; Fig. 1) is part of the Yemen Republic and it is well known for its highly endemic flora and fauna. The main island is a fragment of Gondwana, isolated in the Indian Ocean during Eocene-Oligocene (34–41 MYBP), when Arabia moved northward into Eurasia (Braithwaite, 1987; Girdler & Styles, 1974).

In 2008 it was recognized as a World Natural Heritage site by the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2010). The main island, Socotra, is situated in the northern part of the Indian Ocean, 230 km off the Horn of Africa and 350 km south of Ras Fartak, on the Arabian coast. It stretches about 130 km East to West, and 25–40 km North to South, with a 3,625 km<sup>2</sup> surface area, and with about 50,000 inhabitants. The archipelago includes three smaller islands: Darsa, located 35 km South-West of Socotra, a small uninhabited island of about 16 km<sup>2</sup>, Samha, located 17 Km west of Darsa, with a surface of 40 km<sup>2</sup> and a small village of about 100 fishermen. Samha and Darsa are collectively known as “*Al Ikhwān*” (“The Brothers”). Abd al-Kuri, the westernmost island of the archipelago is situated approximately 100 km from the main island and 90 km from the Horn of Africa. It measures 130 km<sup>2</sup> and is populated by about 300 people.

The Socotran Archipelago is completely void of amphibians (Forbes, 1903: 107) but it is rich in reptile species, most of which are endemic. Despite the numerous accounts on the herpetofauna of Socotra (Balfour, 1881; Blanford, 1881; Günther, 1881; Peters, 1882b; Steindachner, 1899, 1903; Boulenger, 1899, 1903; Forbes, 1903; Hahn, 1978; Arnold, 1986b; Schätti & Desvoignes, 1999; Wranik, 1998a, 1998b; Rösler, 1998; Rösler & Wranik, 1998, 1999, 2003, 2004, 2006a; Joger & Mayer, 2002; Sindaco *et al.*, 2008), the distribution and habitat preference of Socotran reptiles is still weakly defined, and most of their phylogenetic relationships are poorly understood. Most taxa are known only from old records and from a very limited number of sites, most of them in the surroundings of Hadiboh, the main settlement of the island (Forbes, 1903; Wranik, 1998b; Schätti & Desvoignes, 1999). The remote small islands of Darsa, Samha, and especially Abd al-Kuri have been only scantily visited and cursorily by herpetologists. The first herpetological records for Samha were published by Steindachner (1903) and for Darsa by Rösler & Wranik (2000b). Abd al-Kuri was surveyed by both the Austrian (Steindachner, 1903) and British expeditions (Forbes, 1899; Boulenger, 1903). Original herpetological records for these islands were also collected in 1967 by K.M. Guichard (see Arnold, 1986b), and twice in 1999 (Joger, 2000; Joger & Mayer, 2002; Rösler & Wranik, 2004).

In this paper we define the taxonomic status and the distribution and ecology of the terrestrial reptiles of the Socotran Archipelago. We summarize the results of four surveys, accomplished from 2007 to 2010 throughout the entire archipelago, as well as from all the available bibliographic records.