

New locality records of the Turtle-headed Seasnake (*Emydocephalus annulatus*) in the Bohol Sea, Philippines

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Observer: Abner A. Bucol.
Photograph by: Abner A. Bucol.
Subject identified by: Abner A. Bucol.

Location: Bitaug, Enrique Villanueva, Siquijor, Philippines (9.302555°N, 123.608498°E)
Depth: 2-3 metres.
Habitat: coral reef crest with extensive macroalgae (*Sargassum* sp.).
Date and time: 05 May 2015, 15:30 hrs.

Identity of subject: Turtle-headed Seasnake, *Emydocephalus annulatus* (Reptilia: Serpentes: Elapidae).

Description of record: While conducting a fish survey on the coral reef of Bitaug, Enrique Villanueva, Siquijor a single Turtle-headed Seasnake *Emydocephalus annulatus* was observed and photographed (Fig. 1). The seasnake rested for about 10 minutes, after which it started foraging the coral reef bottom. In addition to this record, the species is now documented from other locations (see Site Summary below).



Fig. 1. *Emydocephalus annulatus* from Bitaug, Enrique Villanueva, Siquijor.

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Site Summary:

Based on the author's records, and images from other unpublished sources (mainly from underwater surveys made by staff of Silliman University Angelo King Center for Research and Environmental Management [SUAKCREM]), *Emydocephalus annulatus* is now known from the following sites :

- 1) Snake Reef near Pamilacan Island, Bohol (see Alcala et al., 2000)
- 2) Banilad, Mangnao Oct 14, 2013, and Bantayan reefs (now declared as marine reserves) off Dumaguete City, March 09, 2012
- 3) Apo Island Protected Landscape and Seascape off Dauin, Negros Oriental, December 2014
- 4) Tag-ulo and Carang marine reserves, off Dapitan City, Zamboanga del Norte, Oct 2006,
- 5) Plaridel, Misamis Occidental, 2006
- 6) Cang-alwang Reef near Tongo Point, Siquijor Island, Feb 26, 2011
- 7) Bitaug, Enrique Villanueva, Siquijor Island, May 05, 2015
- 8) Can-uba Marine Sanctuary, Jagna, Bohol, April 28, 2016

Remarks: *Emydocephalus annulatus* can be readily distinguished from other seasnakes in having wavy, irregular, pale (creamy white to yellowish) and black banding, a black head, and enlarged scales on top of the head. Close up, one can easily observe its conical rostral scale and enlarged supralabial scales (which the snake uses to scrape demersal fish eggs).

Outside of the Philippines, *Emydocephalus annulatus* can be found in the seas of the New Guinea-Australian region (Timor Sea, Northwest Shelf, Arafura Sea, Gulf of Carpentaria, Gulf of Papua, Timor Sea) and Vietnam (Alcala et al. 2000; Lukoschek et al. 2010). In the Philippine waters, this species has been historically documented to occur only in the Bohol Sea (Alcala, 1986), where it has been known in only two locations (i.e. off the Dumaguete and Snake reefs, near Pamilacan Island which lies 13 km to the south of Bohol) (Alcala et al. 2000).

The site locations listed in the Site Summary above confirm that this species has a broader range in the Philippines than was once recognised. Distribution of sea snakes in the Bohol Sea may be affected by the Bohol Sea Jet, a strong, prevailing current entering from the Pacific Ocean through the Surigao Strait which exits to the Sulu Sea. Since 2008, I also conducted intermittent surveys in other areas such as the Visayan Sea and Ticao Pass in the North, Semirara Island in between Mindoro and Panay islands, Tañon Strait, and around Samal Island and other sites in Davao Oriental but never found this species.

There is a need to protect the foraging areas of this species (Alcala et al., 2000), in order to provide them with a stable source of food (i.e. demersal fish eggs) This would ensure the safety of its short foraging range through the absence of bottom-set fish nets that could entangle foraging individuals (Shine et al., 2004). The generally low numbers (1-3 individuals) observed at those reef sites which were explored may indicate a decreasing population size probably due to food limitations, however further surveys should be done to determine population trends of *E. annulatus* in the Bohol Sea.

References:

- Alcala, A.C. (1986) Guide to Philippine Flora and Fauna: Vol. 10: Amphibians and Reptiles. Natural Resources Management Center, Ministry of Natural Resources and University of the Philippines, Quezon City, Philippines: JMC Press, Inc. 195pp.
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- Lukoschek, V., Guinea, M., Rasmussen, A., Courtney, T., Read, M. and Gatus, J. (2010). *Emydocephalus annulatus*. The IUCN Red List of Threatened Species 2010: e.T176720A7290209. <http://dx.doi.org/10.2305/IUCN.UK.2010-4.RLTS.T176720A7290209.en>. Downloaded on 31 January 2019.
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