

## Abundance and distribution of sea snakes in Sri Lanka

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Sea snakes are mostly found in warm tropical waters and play a vital role in the marine food web. There are not much studies done concerning sea snakes in Sri Lanka. Therefore, the objective of this research was to assess abundance, distribution and diversity of sea snakes in Sri Lanka. The data was obtained during an ecosystem survey conducted by RV Dr Fridtjof Nansen Ecosystem Survey from June – July, 2018. During this survey, 85 bottom trawl stations (minimum depth 20 m) were conducted in six coastal regions i.e. North East, Central East, South East, South, South West and North West. The sea snakes caught in trawls were identified, counted and weighed. The results showed that, a total number of 164 sea snakes belonging to 9 species have been recorded in 33 trawl stations with depths of 20-100 m. The highest number (50% of the total) and abundance (403 number/NM<sup>2</sup>) of sea snakes were recorded in the South East. *Hydrophis* was the most abundant genus (239 number/NM<sup>2</sup>) and the highest percentage (86.25%) of *Hydrophis* was recorded in South East. In addition, the study revealed that *Hydrophis* was recorded in both day and night while others were present in the trawls either in the day or night. Furthermore, the highest biomass (128.0 kg/ NM<sup>2</sup>) of sea snakes was also reported in South East. Importantly, the aggressive species *Astrotia stokessi* was recorded in North East while *Hydrophis ornatus* was found in all other regions except in the North. The results of Shannon Diversity Index to assess the species diversity, showed that South West had the prominent genus diversity ( $H' = 1.21$ ). The study concluded that *Hydrophis* as the most abundant species and South West region as an important area with high sea snake diversity. These aspects may be considered in formulating marine environmental management plans.

Keywords: sea snakes, RV Dr. Fridtjof Nansen Ecosystem Survey, abundance

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