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Journal of the Marine Biological Association of the United Kingdom  
Volume 100, Issue 4, 1 June 2020, Pages 645-650

## Reproductive seasonality and environmental effects in green turtle (*Chelonia mydas*) nesting at Penang Island, Malaysia (Article)

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### Abstract

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For species with environmental sex determination, understanding the relationship between reproduction and environmental factors is important for predicting their reproductive output. Here, we study intra-annual variation in green turtle nesting during the 2010–2016 seasons at Penang Island (5°16'28"–5°28'15"N 100°10'52"–100°11'55"E), Malaysia. The additive modelling on a monthly-basis number of nests shows that fluctuation in the number of nests relates to temperature in addition to month of year, rather than precipitation. The number of nests tended to be higher in response to higher temperature during March–July, whereas the lower temperature during August–February also tended to result in a relatively higher number of nests. Concentration of nests during March–July resulted from a shorter inter-nesting interval during warm temperatures, whereas relatively low temperatures may homogenize the temporal distribution of the number of nests. This study provides fundamental information for green turtle nesting seasonality in response to environmental change. Copyright © Marine Biological Association of the United Kingdom 2020.

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#### Funding text

The first author's scholarship is sponsored by MyBrain15 (MyPhD) from the Ministry of Education Malaysia and Postdoctoral Fellowship from the Universiti Sains Malaysia (2020–2021). Research was financially supported by a Postgraduate Research Grant Scheme (PGRS) from the Universiti Sains Malaysia, a grant from the Ministry of Education Malaysia (Grant no: 6711134) to S.A.M.S. The authors are also grateful to the Research Management Centre, International Islamic University Malaysia for partially funding through Post-Doctoral Fellow Research Initiative Grant Scheme (RPDF:18-003-0003).

ISSN: 00253154

CODEN: JMBAA

Source Type: Journal

Original language: English

DOI: 10.1017/S0025315420000399

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