



SEA TURTLE NESTING BEACH INDICATOR TOOL

ANDREA D. PHILLOTT

FLAME University, Pune, Maharashtra, India

andrea.phillott@flame.edu.in

The *Sea Turtle Nesting Beach Indicator Tool* was developed by Bluedot Associates in partnership with the Centre for Ecology & Conservation, University of Exeter. Its simplicity means that data can be collected by non-scientists, which may allow rapid data collection to be achieved through the use of local networks. Free at www.bluedotassociates.com, an online form requiring your name, email address and organisation must be completed before download of the tool, which is an excel spreadsheet; a pdf describing the tool and its use is available to download adjacent to the form. The tool comprises two sheets, the first is the main tool that requires user completion and provides output, the second is a datasheet that can be printed and then completed in the field for later use within the tool or printed complete to create a permanent record of the data record. The developers are in discussions to make the tool available in other formats and to develop a platform to manage data.

The developers drew upon current knowledge about the preferred nesting habitat of different sea turtle species worldwide to develop a *Beach Suitability* score in the tool's first section. Users choose from among drop down boxes to enter information about beach sediment composition (fine sand to gravel), elevation (<0.5m to >2m above high

tide), width (0 to >15m above high tide), slope (low to steep), and length (<200m to >1km). This information may be available from geological surveys or other reports from the area. The resulting score indicates the potential of the beach to support regular sea turtle nesting. The second section of the tool predicts the potential *Human Impacts* on nesting activity using a rating scale (0-5) to assess the degree of fixed or semi-fixed development behind the beach, obstructions on the beach, disturbance on the beach, and evidence of light pollution.

The *Sea Turtle Nesting Beach Indicator Tool* may be used as a rapid assessment to identify possible sea turtle nesting habitat without any biological data (usually un-surveyed areas). The tool results are only meant to be indicative, i.e. indications of poor suitability for nesting should not be used as conclusive evidence of no nesting; and where nesting potential is identified it is expected that these beaches would then have to be surveyed during the appropriate season to confirm nesting events. The outcomes may be used to identify priority areas for study and inform decision-making during the early stage of conservation planning and academic research.