Oral Presentation

Title: Evaluating the population of the hawksbill turtle (*Eretmochelys imbracata*) in the Blue Bay Marine Protected Area, Republic of Mauritius.

Vasisht Seetapah, Hanista Jhumun, Sydney Perrine, Pramod Kumar Chumun*

* Corresponding author: shashi.chumun@gmail.com

Lagon Bleu, Eco-sud, Blue Bay 50802, Republic of Mauritius

Abstract

The Hawksbill turtles are critically endangered and face the possibility of drastic population drop worldwide which could lead to regional extinction of the species. Population estimation of the hawksbill turtle, like other marine turtles, are largely estimated through nesting females. The species as for its other marine turtles’ counterparts, has been actively hunted for its meat and shell prized as ornaments. Whilst commercialisation of hawksbill turtle has decline globally, the species still shows difficulty in recovery due mostly anthropogenic factors that have destroyed most of its foraging and nesting sites. Despite the knowledge of the prevalence of hawksbill turtles in coastal waters of Mauritius, confirming their population status has proven difficult due to the lack of nesting attempts. In this context an in-water monitoring programme was developed to determine the fluctuation of the population of hawksbill turtle within the Blue Bay Marine Protected Area (BBMPA). The monitoring was initially done due to several accounts of resident hawksbill turtle in the marine park. Through the use of the photo-identification method, the degree the of residency and gender of these individual turtles was determined as well as the nature of the usage of BBMPA for these individuals. After 10 months of monitoring, the output results proved that the marine park, despite a relatively small size, had harboured a total of 25 turtles, quarter of which were identified as juveniles and the rest were assumed females. Each turtle spent various amount of time in the BBMPA with one individual present in all the months of monitoring and some individuals observed only for 1 outing. Behavioural observations demonstrate high foraging activity, mostly centred around coral rubbles. Whilst this study is still at the preliminary stage, the density of hawksbill turtle suggests that the area of focus sustains a substantial population of turtles. Further comparison with previous studies may suggest through foraging behaviour that the females may be stocking upon calcium carbonate (coral rubbles) for possible impendent nesting attempts.

Keywords: Hawksbill turtle, photo-identification, Blue Bay Marine Protected Area