

OBSERVATIONS ON THE MARINE TURTLES OF
PULAU TIGA PARK, SABAH

By

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EXECUTIVE SUMMARY

Observations

- 1) Small numbers of marine turtles are reported to nest on the beaches of both Pulau Tiga and Pulau Kalampunian Besar.
- 2) Egg clutches deposited in the beaches of these islands are likely to be killed by sea water inundation caused by the following factors:
 - a) Pulau Kalampunian Besar is apparently sinking. Its beaches become completely inundated at high tide; and
 - b) The beach platforms on Pulau Tiga are poorly developed. At high tide little sand surface is left exposed and sand at nest depth becomes flooded.
- 3) Both hawksbill and green turtles probably forage in the vicinity of the Pulau Tiga Park.
- 4) Accidental capture of turtles in fishing gear may be a serious problem in the area.

Recommendations

The problem of accidental capture of marine turtles in fishing gear should be further investigated, to determine:

- 1) The extent of the problem; and
- 2) Whether illegal fishing activities may be responsible for the capture of turtles.

ACKNOWLEDGMENTS

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Mr. Sampoladon Pilik and Encik Abdullah both of the Wildlife Department accompanied me to the Park. The Sabah Park staff residing on Pulau Tiga were very helpful to me during my visit.

Introduction

On 23-24 October 1990, on the invitation of the Ministry of Tourism and Environmental Development of Sabah, I visited Pulau Tiga Park in order to evaluate the importance of the Park as habitat for marine turtles.

Suitability of the Beaches as Turtle Nesting Habitat

Each of the three islands in the Park (Figure 1) were visited and the following observations were made.

Pulau Kalampunian Besar

This small island is actually a sand cay, apparently in the process of sinking. At the north end of the island are the remains of large trees that have died and fallen, probably in response to inundation by sea water. Flocks of terns utilize the island.

According to our boatman, when the elevation of the island was higher, turtles occasionally nested on the island. Nowadays, however, nesting rarely occurs. Because the island is covered by water at high tide, any egg clutches deposited in the sand would be killed by sea water.

Pulau Kalampunian Damit

There are no beaches on this small island.

Pulau Tiga

I examined the beaches on the south and east sides of the island (Figure 1). The elevation of the beach platforms was so low that during high tide very little sand was exposed. The sand at the depth to which turtle egg clutches would be deposited (50-80 cm) would surely be swamped during high tide.

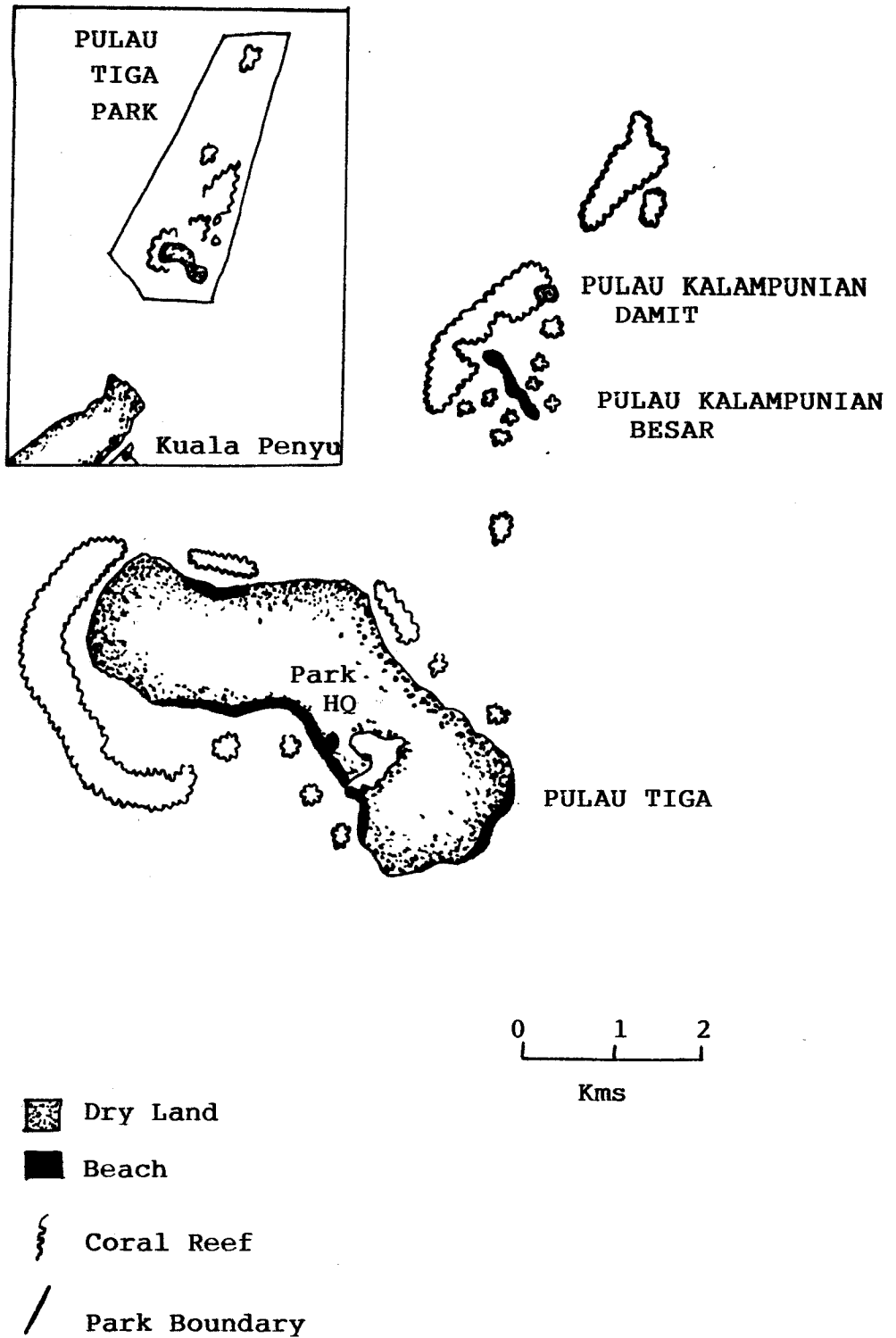


FIGURE 1. Map of Pulau Tiga Park. (Adapted from Phillipps (1988).)

I saw no evidence of either tracks or body pits left by nesting turtles. According to a member of the Pulau Tiga Park staff who had previously been posted at Turtle Islands Park, very few turtles nest at Pulau Tiga--perhaps only 1 or 2 per month at the most. Because the beach platforms are so poorly developed, any eggs laid by these turtles would be unlikely to survive.

Marine Turtles in the Offshore Habitat

There is much coral reef within the boundaries of Pulau Tiga Park (Figure 1) that would provide good foraging habitat for the hawksbill turtle (Eretmochelys imbricata). Although the availability of sea grass pastures in the area has not been documented, it is possible that foraging habitat for the green turtle (Chelonia mydas) does occur.

During her coral reef surveys in the area, Wood (1979) did not report seeing any marine turtles. But, just prior to my own visit to the island, two juvenile sea turtles had washed ashore dead. The Park staff identified them as a green turtle and a hawksbill. (I did not see the specimens and so was unable to verify these identifications.)

The strandings of these turtle corpses on the beach indicate that:

- 1) Marine turtles do inhabit the waters adjacent to the Park, probably using them as foraging grounds; and
- 2) Accidental capture of turtles in fishing gear may well be a serious problem in the area.

The possibility that turtles are being captured in fishing gear warrants further investigation to determine the extent of the problem and whether illegal fishing activities may be responsible for the mortality observed.

REFERENCES

Phillipps, A. 1988. A Guide to the Parks of Sabah. Sabah Parks Publication No. 9. 63 pages. Sabah Parks Trustees, Kota Kinabalu, Sabah.

Wood, E. 1979. Ecological study of coral reefs in Sabah. Report to World Wildlife Fund, Project Malaysia: 15. 163 pp.