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# SALTWATER CROCODILE RESOURCES

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#### INTRODUCTION

Crocodiles were reported from the Andaman and Nicobar Islands as early as 1870 (Stoliczka, 1870). Later, Smith (1939) and Mathur (1969) recorded their occurrence from various islands. However, detailed study on the species including its habitat, population, nesting habits and conservation received attention only very recently (Whitaker and Daniel, 1978; Whitaker and Whitaker, 1978; Bustard and Choudhury, 1981).

The saitwater crocodile, Crocodylus porosus, had a wide range of distribution from south-west coast of India eastwards to South China, extending southwards through Malaysia, Indonesia, Philippines to New Guinea and Northern Australia (Bustard and Choudhury, 1981). It is found along the coast of Tamil Nadu, Andhra Pradesh, West Bengal and Andaman and Nicobar Islands. In the mainland of India, the species is now restricted to an area of 176 sq. km, Bhitar Kanika sanctuary in Orissa and in Sunderbans (FAO, 1974). In North Andaman, C. porosus has been reported from the offshore islands such as North Reef and Landfall Island. They are found in Kalara creek (Fig. 1),



Fig. 1. A habitat of the saltwater crocodile in Kalara river near Kalighat, North Andaman.

Balmi creek, Parangara creek, Kalpang river and its tributaries, Casuarina and Hudson Bay. In the Middle Andaman, crocodiles have been reported from Betapur, Bakultala, Papitadera and Kadantulla creeks. In the South Andaman, crocodiles have been reported from Baratang. Jackson creek of Little Andaman has a population of crocodiles. In Nicobar Islands the Galathea river, Alexandria river and Dagmar river are reported to have crocodiles. The species has been reported from Teressa, Bompoka, Comorta, Trinkat, Katchall, Nancowri, Little Nicobar and Great Nicobar Islands (Whitaker and Whitaker, 1978).

### NESTING SITES

Nests of crocodiles were located in the tidal cane fringes, creeping cane and evergreen vegetation and cultivable land. In the tidal cane fringes the nests were made of standing canes. The nests were found with a higher elevated base. In the creeping cane and evergreen vegetation zone, the nests were made of creeping cane and dry fallen leaves of evergreen trees. The nest in the cultivated land was made of grass and miscellaneous shrubs without mud. The nests were close to water though the distance between the high tide mark and the nest may vary. Choudhury and Bustard (1980) observed that 66.6% of the nests were found in the creeping cane and evergreen vegetation, 26.0% in tidal cane fringes and 6.6% in cultivated land. The nesting areas of crocodiles in Andaman Islands were found to be in and around Kalighat, Kalpang river and Kalara creek (Whitaker and Whitaker, 1978). Choudhury and Bustard (1980) reported nests from Kalara, Balmi, Parangara creek, Kalpang river and also along the banks of the streams emptying into the Casuarina and Hudson Bay.

#### **CONSERVATION**

Bustard and Choudhury (1981) listed commercial hide hunting, loss of habitats due to massive depletion

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of mangrove forests, reclamation of alluvial soil built by the mangrove ecosystem for cultivation, human apathy towards the crocodile due to its size and behaviour, robbing of eggs and consumption of its meat for its medicinal value as the reasons for the decline of crocodile population in its range of distribution. They observed very high level of nest predation (84%) by the settlers in North Andaman. Nests were also destroyed by the monitor Varanus salvator and the wild pigs (Sus andamanicus). It is further reported that 7% of the nesting females were killed by the settlers in a single season. All these factors contribute greatly to the decline of crocodile population in Andaman and Nicobar Islands.

Bustard and Choudhary (1981) suggested establishment of crocodile farms in Andaman Island as a part of the conservation measures to safeguard the population. The number of breeding females in Andaman and Nicobar Islands was estimated to be 80 among the total crocodile population of 170-330 (Whitaker and Whitaker, 1978). Choudhury and Bustard (1980) located 30 nests after an exhaustive survey of the islands and estimated the breeding females to be 36 in North Andaman Island. The saltwater crocodile is a valuable resource and should be conserved by establishing crocodile sanctuaries and taking up husbandry work as suggested by Bustard and Choudhury (1981).

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