## OCCURRENCE OF <u>CHELONIA MYDAS</u> ON THE ISLAND OF TRINDADE, BRAZIL

From observations made to date, it is certain that the island of Trindade is the main nesting ground for the green sea turtle, <u>Chelonia mydas</u>, in all of Brazil. The island receives some 1,800 nests per year on 3 km of sandy beach.

Trindade (20°30' S, 29°49' W) is located at the eastern edge of a range of guyots and volcanos, 1200 km offshore from the city of Victoria in the state of Espirito Santo, Brazil. Its geological history began in the Cretaceous period and there is evidence of volcanic activity until the Holocene (5000 B.P.) (Almeida 1961). Trindade has a total area of 8.2 km<sup>2</sup>, and is surrounded by a shelf which is 2-4 km wide and close to 200 m in depth. The island bottom has a length of 50 km and a depth between 3000-5000 m. The climate is tropical oceanic, with an annual mean temperature of 25°C (77°F), March being the warmest month of the year and June the coolest (Almeida 1961). Daily rain showers, locally called *pirajá*, usually last for only five minutes. From April to October seasonal cold air masses from the South Pole invade the island. Island beaches vary in grain, texture and sediment color. <u>Geocarcinus lagostoma</u> land crabs are abundant and can be observed throughout the island, from the beaches to "Pico do Desejado", the highest point (620 m). Local flora is marked by the presence of <u>Cyathea coelandii</u>, an endemic arboreal fern that reaches 6 m in height.

With periodic logistical support from the Brazilian Navy since 1982, Brazil's national Marine Turtle Protection and Research Program (TAMAR-IBAMA Project) has evolved to include the island. Green turtles are the only species to nest on the island; peak season is January-March. Field work has been conducted during the following nesting periods: December 1982-February 1983, February-March 1986, March 1990, and December 1991-May 1992. Since April 1994, a permanent staff has been maintained on the island, with personnel alternating through two month shifts. Tagging and measuring of adult females has been done by technicians. Beach patrols are used to observe nesting ecology, the distribution and abundance of nesting females, and hatch success rates. Between December 1982 and April 1995, the TAMAR-IBAMA Project documented 7,292 nesting crawls (successful and unsuccessful nests) and tagged 1,669 nesting females. Mean curved carapace length has been 116.8 cm (range: 101.0-143.0 cm, n=465) and mean curved width 107.5 cm (range: 92.0-127.0 cm, n=431). Hatchling predators include crabs (G. lagostoma, Grapsus grapsus) and fishes (e.g., Mycteroperca sp., Epinephlus sp., Caranx lugubrix, Hynnis cubensis, Sphyrraena barracuda).

Almeida, F. F. M. 1961. Geologia e Petrologia da Ilha de Trindade. Monografia. Rio de Janeiro, Ministério das Minas e Energia, Dept. Nacional de Produçao Mineral, Div. de Geologia e Mineralogia. 192 pp.

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