

reproductive ecology of the turtle, hatching success and survival of nests and how these variables can help to establish a conservation plan that benefits the species with the participation of local communities, who make a direct use of the resource and are the only ones who can ensure the conservation of *L. olivacea* in El Valle. During the 2008 (from August to December) nesting season, we documented several aspects of the colony of *Lepidochelys olivacea* from El Valle beach on the Colombian Pacific coast. In addition, we evaluated the results of a management program, which transferred and protected nests during this season, and compared them to previous years. The range of incubation temperatures was 26.9 °C and 27.6°, with a mean of 27.3°C, yielding 65 days of incubation and the estimated hatching success rate based upon 25 of the 164 transferred nest was 77.6%. The results from the management program indicated that although the emergence success of the nests in high in comparison to others reported for sea turtles, the program's installations have probably produced skewed sex ratios, at least in the three years in which this has been evaluated.

GREEN TURTLE (*CHELONIA MYDAS*) NESTING ON ATOL DAS ROCAS, BRAZIL

Claudio Bellini¹, Armando J. B. Santos², and Paulo C. R. Barata³

¹ Projeto Tamar-ICMBio, Natal – RN, Brazil

² Fundação Pró-Tamar, Fernando de Noronha – PE, Brazil

³ Fundação Oswaldo Cruz, Rio de Janeiro - RJ, Brazil

Five sea turtle species nest in Brazil: green (*Chelonia mydas*), olive ridley (*Lepidochelys olivacea*), loggerhead (*Caretta caretta*), hawksbill (*Eretmochelys imbricata*) and leatherback (*Dermochelys coriacea*). All of them nest on the mainland coast, but only green turtles nest on oceanic islands. Trindade Island in eastern Brazil is their main nesting site in the country; nesting also occurs in north-eastern Brazil on Atol das Rocas (Rocas Atoll), the second largest green turtle rookery in the country, and in the Fernando de Noronha Archipelago. Green turtle nesting on the mainland are sparse and occur in relatively small numbers. Atol das Rocas (3°51'50"S, 33°48'20"W), the single atoll in the South Atlantic, and a surrounding area of the sea are protected since 1979, when the Federal Marine Biological Reserve of Atol das Rocas was created. In 1989/1990 Projeto TAMAR-ICMBio, the Brazilian sea turtle conservation program, started monitoring green turtle nesting on Atol das Rocas, where about 1.5 km of nesting beaches are located. Here we present data concerning the nesting seasons between 1989/1990 and 2007/2008. In that period, two nesting seasons were not monitored (1997/1998 and 1998/1999), and five seasons (1989/1990, 1990/1991, 1991/1992, 1999/2000 and 2006/2007) were only partially temporally monitored. The other twelve seasons were entirely monitored. The main objectives of this study were: (1) to measure the annual number of green turtle nests on Atol das Rocas, taken as an index of the population size; (2) to obtain estimates of biological parameters regarding the nesting process. Data are presented on the annual number of nests during the study period, curved carapace length of nesting females, temporal distribution of nesting in each season, clutch frequency, internesting interval, remigration period, and, only for the seasons between 1992/1993 and 1996/1997, clutch size, hatching success and incubation period.

NESTING BEACH SELECTION OF LOGGERHEADS (*CARETTA CARETTA*) IN MAPUTALAND, SOUTH AFRICA

Wayne Brazier and Ronel Nel

Nelson Mandela Metropolitan University, Port Elizabeth, Eastern Cape, South Africa

Loggerheads, like other marine turtles, are philopatric returning to nest on the same stretch of beach from which they hatched. They migrate thousands of kilometres from their foraging grounds to these nesting beaches. In Maputaland, South Africa, there are clear high and low density nesting areas and over 80% of nesting loggerhead females return within 5 km of their previous nest site. If this is compared to the available 56km of nesting beach used by these loggerheads, then it is evident that these nest site selections are not random. Once in the general vicinity of the nesting beaches, another more precise cue is thought to be used for specific nesting beach selection. These more precise cues are the focus of this study. Morphodynamic features of the nesting beaches are relatively homogenous within the