



# A Long-Term Trend of Sea Turtle Success in Brazil

A loggerhead in Brazilian coastal waters. © TAMAR-IBAMA

Loggerheads have long been exploited in Brazil. Before 1980, nearly all loggerhead eggs laid along the Brazilian coast were poached, and most nesting females were taken for meat. This situation has vastly improved since the implementation of Projeto TAMAR-IBAMA, the Brazilian National Sea Turtle Conservation Program.

TAMAR's staff at each of its 22 stations maintains daily programs of beach monitoring during the austral summer nesting season. They are supported by an extensive, community-based beach monitoring program of local fishers, who are employed, trained, and supervised by TAMAR research program staff. Generating ecologically sound, socio-economic alternatives for the local population, TAMAR activities create approximately 1,300 direct jobs each year—such as t-shirt manufacturing, craft-making, paper recycling, and eco-tourism opportunities.

TAMAR's monitoring program began in 1982 at the major sea turtle nesting beach at Praia do Forte in the state of Bahia, which has one of the highest loggerhead nesting density in Brazil. The national turtle monitoring network expanded progressively over several years. By 1988, it included all nesting beaches across nine Brazilian states,

including the loggerhead nesting states of Rio de Janeiro, Espírito Santo, Bahia, and Sergipe, covering more than 1,100 kilometers (683.5 miles) of the Brazilian mainland and island coastlines.

By 1998, temporal and geographic data on nesting turtles were being gathered from 22 distinct sites—10 contiguous beaches in Bahia covering 93 kilometers (57.8 miles) and 12 contiguous beaches in Espírito Santo covering 162 kilometers (100.7 miles). Together, these sites account for more than 75 percent of loggerhead nesting in Brazil. Long-term trends for loggerheads have been derived using data from these 22 sites over a 16-year period leading up to the 2004–2005 season.

Following the cessation of direct take of turtles and their eggs in the 1980s, there has been a substantial long-term increase in nesting abundance of the once-depleted southern Atlantic loggerhead stock (see figure at right).

National conservation efforts have contributed significantly to the improved status of the Brazilian loggerhead stock, but emerging threats such as incidental capture in coastal and pelagic fisheries could limit

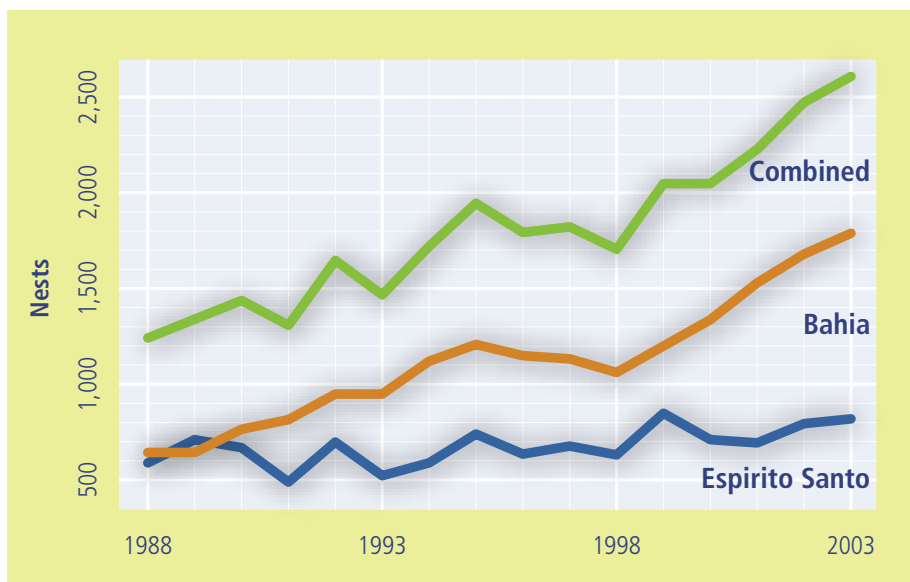


ABOVE: Projeto TAMAR scientists record the length of a loggerhead's shell. © TAMAR-IBAMA BELOW: A loggerhead turtle returns to the sea after nesting. © TAMAR-IBAMA

further recovery. In response to this threat, a national plan to reduce incidental capture was started in 2001, researching mitigation measures that can be implemented in the primary fisheries that affect sea turtles.

Long-term datasets illustrate that the Brazilian nesting population is one of the largest remaining loggerhead nesting populations in the world. Continued protection of the Brazilian loggerhead stock is of paramount importance for the global conservation of this species.

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Annual number of loggerhead nests recorded in the states of Bahia and Espírito Santo (individually and combined), 1988–2003. CHARTS AND DATA COURTESY OF MARCOVALDI AND CHALOUPKA