

[seaturtle.org](http://seaturtle.org) : [MTN](#) : [ARCHIVES](#) : [INDEX](#) : [Sign In](#)

*Marine Turtle Newsletter* 117:11, © 2007

# Marine Turtle Newsletter

## Incidental Capture of a Leatherback Along the Coast of Ceara, Brazil

**Eduardo H.S.M. Lima<sup>1</sup>, Maria Thereza D. Melo<sup>1</sup> & Matthew H. Godfrey<sup>2</sup>**

<sup>1</sup>*Fundação Pró-TAMAR, Acesso Projeto TAMAR 151, Almofala - CE, 62592-000 Brazil (E-mail: [tamarce@tamar.org.br](mailto:tamarce@tamar.org.br))*

<sup>2</sup>*NC Wildlife Resources Commission, Beaufort, NC USA*

On 13 November 2006, a live leatherback was observed stranded on Mundaú Beach, in the municipality of Trairí, in the state of Ceará, Brazil (3°17'6" S, 39°37'94" W). The turtle measured 149cm curved carapace length and 106cm curved carapace width. The proximal end of the turtle's left front flipper was tightly entangled in approximately 30m of monofilament nylon fishing line, apparently for some time, as the majority of this flipper was suffering necrosis from lack of blood supply. The turtle died <120min after it was found on the beach, likely from infection associated with the wound. We performed a necropsy on this animal and found that her reproductive tract contained several sets of eggs at different stages of development. The fishing line as identified as being similar to the secondary line used by pelagic long-line fisheries targetting albacore tuna (*Thunnus alalunga*). A fleet of pelagic long-line boats is based in Recife, Pernambuco (Coluchi *et al.* 2005), which lies adjacent to Ceará.

The waters off the coast of Ceará is important for foraging, development and migration of sea turtles in Brazil (Marcovaldi 1993; Lima *et al.* 1999; Lima *et al.* 2003; Godley *et al.* 2003). Projeto TAMAR-IBAMA, the national sea turtle project in Brazil, operates a research station in Almofala, Ceará. Long-term monitoring in Almofala has revealed that all five species of sea turtles that occur in Brazil, including leatherbacks, interact with fisheries in this region (principally fishing weirs, gillnets and hook and line). Stranded leatherbacks have been observed in nearly all states in Brazil, with greater numbers of strandings being reported in recent years (Barata *et al.* 2004). Interactions between long-line fisheries and leatherbacks (in addition to other species) are most commonly observed in waters off of more southern states in Brazil (Kotas *et al.* 2004). Interestingly, there have been several stranded leatherbacks in Brazil that were missing one or both front flippers (Projeto TAMAR-IBAMA, unpub. data). The confirmed link between a long-line interaction and flipper injury in the leatherback observed in Ceará suggests that at least some of the other stranded leatherbacks could have suffered interactions with pelagic long-lines. Onboard observers in long-line fisheries off the Brazilian coast also report that leatherback turtles tend to be foul-hooked in the flipper rather than the mouth (Kotas *et al.* 2004; Pinedo & Polacheck 2004).

The source rookery of this leatherback remains speculative. Leatherback nests have never been recorded in Ceará. The primary nesting beaches for leatherbacks in Brazil are in Espírito Santo, in the southeastern region (Thome *et al.* 2007). The closest known rookeries are to the north in French Guiana (Girondot & Fretey 1996), although to date no post-nesting female leatherbacks from French Guiana have been observed moving south of the equator (Ferraroli *et al.* 2004). The reproductive state of this stranded leatherback overlaps more with the nesting season in Espírito Santo than in French Guiana, although it is possible that there is unobserved nesting by leatherbacks in northeastern Brazil. Genetic analyses of tissue taken from this turtle may help resolve this issue, and further monitoring for other reproductively active female leatherbacks in the waters of Ceará is warranted.

*Acknowledgements:* The TAMAR/Ceará trainees Ligia Santanna, Marcello Spiandorin, André Meneses helped with the response and necropsy. Thanks to Max Rondon Werneck and Cecilia Baptistotte, veterinarians of Projeto TAMAR for their help in the initial treatment of the animal. Thanks to Bruno Giffoni of Projeto TAMAR Ubatuba for help in identifying the entangled fishing gear. Projeto TAMAR is part of the Ministry of Environment, is co-administered by Fundação Pró-TAMAR and is officially sponsored by Petrobrás.

BARATA, P.C.R., E.H.S.M. LIMA, M. BORGES-MARTINS, J.T. SCALFONI, C. BELLINI & S. SICILIANO. 2004. Records of the leatherback sea turtle (*Dermochelys coriacea*) on the Brazilian coast, 1969-2001. *Journal of the Marine Biological Association UK* 84: 1233-1240.

COLUCHI, R., B.B. GIFFONI, G. SALES, C.E.N. CONSULIM, F.N. FIEDLER, N.O.L. LEITE Jr. & F. PEPPE. 2005. Caracterização das pescarias com espinhel pelágico que interagem com tartarugas marinhas no Brasil. In *Livro do Resumos, 2nd Jornada de Conservação e Pesquisa de Tartarugas Marinas no Atlântico Sul Ocidental*. Núcleo de Educação e Monitoramento Ambiental, Rio Grande do Sul, Brazil, pp. 80-83.

FERRAROLI S., J.-Y. GEORGES, P. GASPAR & Y. LE MAHO 2004. Where leatherbacks meet fisheries. *Nature* 429: 521-522.

GIRONDOT M. & J. FRETEY. 1996. Leatherback turtles, *Dermochelys coriacea*, nesting in French Guiana, 1978-1995. *Chelonian Conservation & Biology* 2:204-208.

GODLEY, B.J., E.H.S.M. LIMA, S. ÅKESSON, A.C. BRODERICK, F. GLEN, P. LUSCHI & G.C. HAYS. 2003. Movement patterns of green turtles in Brazilian coastal waters described by satellite tracking and flipper tagging. *Marine Ecology Progress Series* 253: 279-288.

KOTAS, J.E., S. dos SANTOS, V.G. de AZEVEDO, B.M.G. GALLO & P.C.R. BARATA. 2004. Incidental capture of loggerhead (*Caretta caretta*) and leatherback (*Dermochelys coriacea*) sea turtles by the pelagic longline fishery off southern Brazil. *Fishery Bulletin* 102: 393-399.

LIMA, E.H.S.M., C.J. LAGUEUX, P.C.R. BARATA & M.Â. MARCOVALDI. 2003. Second Record of a green turtle (*Chelonia mydas*) tagged in Brazil and captured in Nicar  gua. [Marine Turtle Newsletter 101:27](#).

LIMA, E.H.S.M., C.J. LAGUEUX, D. CASTRO & M.Â. MARCOVALDI. 1999. From one feeding ground to another: green turtle migration between Brazil and Nicar  gua. *Marine Turtle Newsletter*. 85: 10.

MARCOVALDI, M.Â. 1993. A new initiative to protect green turtles at an important foraging ground in Cear  , Brazil. *Marine Turtle Newsletter* 63: 13-14.

PINEDO M.C. & T. POLACHECK. 2004. Sea turtle by-catch in pelagic longline sets off southern Brazil. *Biological Conservation* 119: 335-339.

THOME, J.A., C. BAPTISTOTTE, L.M.P. MOREIRA, J.T. SCALFONI, A.P. ALMEIDA, D.B. RIETH and P.C.R. BARATA. 2007. Nesting biology and conservation of the leatherback sea turtle (*Dermochelys coriacea*) in the state of Espirito Santo, Brazil, 1988-1989 to 2003-2004. *Chelonian Conservation & Biology* 6: 15-27.