Third Leatherback Turtle Stranding in Belgium

Jan Haelters[1], Francis Kerckhof[1] & Thierry Jauniaux[2]
[1]*Management Unit of the North Sea Mathematical Models, Royal Belgian Institute of Natural Sciences,(E-mail: J.Haelters@mumm.ac.be) [2]Veterinary pathologist, University of Liège, Belgium*

On the 19th of December 2000, a male leatherback turtle (*Dermochelys coriacea*) stranded near Oostende (51°13.4'N; 002°53'E), Belgium. The animal measured 194 cm (total body length) and weighed 370 kg. It was alive when it stranded, but in a very weak condition. It died within a few hours. The animal was subject to necropsy on the 22nd of December at the University of Liège. The necropsy revealed two parallel wounds, penetrating through the plastron, with the underlying muscles showing necrosis. It is thought that the wounds were caused by a ship's propeller some days before the stranding.

This was only the third recorded stranding of a leatherback turtle in Belgium. The first concerned a decomposed animal with a carapace length of 135 cm that washed ashore on 24 December 1988 at Middelkerke (51°12'N; 002°49'E) (Van Gompel 1989).

The second record concerned an animal of a similar size that we presume was cut in two by a ship's propeller. One part was fished up by a fisherman on 10 September 1998 near De Haan (51°17'N; 003°02'E), and the larger part of the animal washed ashore the next day (Haelters & Kerckhof 1999). From the animals that stranded in 1998 and 2000 a number of *Stomatolepas dermochelys* (Crustacea, Cirripedia) were collected.

HAELTERS, J. & KERCKHOF, F., 1999. Een waarneming van de lederschildpad *Dermochelys coriacea* (L.) en de eerste waarneming van *Stomatolepas dermochelys* Monroe & Limpus 1979 aan de Belgische kust. De Strandvlo 19(1): 30-39.

VAN GOMPEL, J., 1989. Eerste waarneming aan de Belgische kust van de lederschildpad *Dermochelys coriacea* (Linnaeus, 1758). De Strandvlo 9(4): 102

MEETING REPORTS

Population Dynamics Workshop - Analysis of Nesting Beach Data for Application to Population Models

Selina Heppell, Bill Kendall & Rhema Kerr Bjorkland
[1]*Oregon State University (E-mail:selina.heppell@orst.edu) [2]US Geological Service, Patuxent Wildlife Research Center (E-mail:william_kendall@usgs.gov) [3]WIDECAST (E-mail:rhemaker@hotmail.com)*

We conducted a workshop on analysis of census data and tagging data from nesting beaches at the 21st Annual Symposium on Sea Turtle Biology and Conservation, Philadelphia, 2001. The goal of our workshop was to introduce participants to a range of data analysis techniques, explain how the data can be used in population models, and discuss the potential problems that can arise from incomplete data and sampling error. Nesting beaches provide the first data needed for demographic models: reproduction parameters, remigration interval, recruitment to the nesting population, and survival rates of adult females. Trends in nest numbers or female counts can give an indication of whether the adult female segment of the population is increasing or decreasing. However, the high variability of nest counts makes trend estimation difficult - often, the data are too variable to detect a trend with statistical significance, and sampling error can result in incorrect assessments. A program by Tim Gerrodette of the National Marine Fisheries Service is available to determine how many years of surveys are required to detect a trend, given a measured amount of variance in the data <http://mmdshare.ucsd.edu/trends.html>. With tagging programs, researchers can estimate nests per female, remigration interval, adult female survival, and population trends that are much more accurate than nest counts alone. Dr. Kendall discussed some of the problems with nest counts and the importance of mark-recapture studies to improve population assessment. He presented methods and a computer program to estimate survival and remigration rates, and Dr. Bjorkland showed how the program was used to analyze tagging data for hawksbill turtles in Antigua. The program is still under development, but may become "user friendly" for sea turtle researchers soon.