DRAMATIC IMPACT OF ARMY ANTS ON *DERMOCHELYS CORIACEA* NESTS AT PONGARA NATIONAL PARK (GABON, CENTRAL AFRICA)

Maite Ikaran\ Yves Braetl, Jacques Fretey3, Luis Felipe López.Jurado\ and Dominique Roumet[4] [1] Universidad de Las Palmas de Gran Canaria, Canary Islands, Spain [2] Faculté Universitaire des Sciences Agronomiques, Gembloux, Belgium [3] IUCN-France, Paris, France [4] Gabon Environnement, Gabon

Insect underground predation was found to be one of the main hazards to leatherback nests in Pongara, with 67 % of the marked nests affected in some extent. Such predation rates appear to be highly dramatic considering that this area is one of the hotspots in the world for the nesting of *Dermochelys coriacea.* Our research was carried out at Pongara National Park in Gabon, Central Africa during the *2005/2006* nesting season. The study area spreads over six kilometers of beach where natural nests were marked with wooden sticks to allow daily survey and nest exhumation after hatching occured. During exhumation of the nest, yolkless eggs, egg shells and unhatched eggs were counted. Unhatched eggs were first classified as predated and nonpredated and then opened to examine their contents. We found a high variety of unidentified contents in predated eggs which ranged from plain sand to possibly rotten pigmented embryos. Predated eggs showed several types of holes on the shell that were attributed to ants as they were found dead in huge amounts inside predated eggs and sometimes alive in the nest incubation chamber. Ants collected and preserved in eppendorf tubes with 96° alcohol were identified as *Dorylus spininodis* Emery, 1901 belonging to the Dorylinae subfamily commonly known as "Army ants". It is a pan-african species so the hipotesis of an introduced species is eliminated. Their activities are mainly underground; that is why, no signs of predation activity were recorded above sand during daily surveys of the nests. Doryline ants are known to exploit large sources of food, such as termite nests, during long periods of time, which leads us to think
that they could have speeialised on feeding on turtle nests. Moreover. their feeding regime is eomposed on foods rieh in lipids. the only known way to study these subterranean ants being using palm oil baits (Berghoff. 2002). Predation by *Dorylus* spp. has already been signaled in South Africa for *Caretta caretta* nests (Maxwell, 1998). Results eould be biased by the faet that there was a tedeney to mark nests near vegetation. Further researeh should be done on this topie so as to elucidate if ants have a spatial or temporal preference and to confirm their predation mechanism. This work was made posible thanks to a research grant from the Basque Government and the logistics provided by Gabon Environnement. a local NGO. It is also part of the PROTOMAC network.