

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/289671514>

Twenty Years of Nest Monitoring of *Caretta caretta* in Fethiye, Turkey. First Conservation Efforts or Prognosed Decline in Nest Numbers?

Conference Paper · April 2015

CITATIONS

0

READS

135

11 authors, including:



Marie Lambropoulos

University of Natural Resources and Life Sciences Vienna

3 PUBLICATIONS 15 CITATIONS

SEE PROFILE



Michael Stachowitsch

University of Vienna

175 PUBLICATIONS 3,341 CITATIONS

SEE PROFILE



Kerem Yekta Atatunç

Mehmet Akif Ersoy University

2 PUBLICATIONS 4 CITATIONS

SEE PROFILE



Oğuz Türkozan

Aydın Adnan Menderes University

106 PUBLICATIONS 2,483 CITATIONS

SEE PROFILE



35TH ANNUAL SYMPOSIUM ON
SEA TURTLE
BIOLOGY AND CONSERVATION

DALAMAN - SARIGERME- DALYAN (ORTACA)- MUĞLA- TÜRKİYE

18-24 APRIL 2015

Book of Abstracts

COMPILERS:

Yakup Kaska, Bektaş Sönmez, Onur Türkecan, Çisem Sezgin



Abstract ID: 6230 **Type:** Poster **Subject:** Conservation, Management and Policy **Country:** Austria
Submitted By: Marie Lambropoulos

TWENTY YEARS OF NEST MONITORING OF *CARETTA CARETTA* IN FETHIYE, TURKEY. FIRST CONSERVATION EFFORTS OR PROGNOSSED DECLINE IN NEST NUMBERS?

Marie Lambropoulos¹, Christine Fellhofer-Mihcioglu¹, Evelyn Rameder¹, Michael Stachowitsch¹, Kerem Y. Atatunç², Ali F. Canbolat², Oğuz Türkozan³, Adem Özdemir⁴, Cetin Ilgaz⁴, Eyüp Başkale⁵ and Yakup Kaska⁵

¹ University of Vienna, Vienna, Austria

² Hacettepe University, Ankara, Turkey

³ Adnan Menderes University, Aydin, Turkey

⁴ Dokuz Eylül University, Izmir, Turkey

⁵ Pamukkale University, Denizli, Turkey

Since 1994 the University of Vienna, in collaboration with Hacettepe University, Adnan Menderes University, Dokuz Eylül University and Pamukkale University, has conducted a field course to protect, maintain and gain a better understanding of *Caretta caretta*. The study area Fethiye is a key nesting beach in the Mediterranean and was declared a SPA (Specially Protected Area) "Fethiye-Göcek". Based on a 12-year trend analysis (Ilgaz *et al.* 2006), the number of nests here was predicted to decline by 2015 to about 25% of the peak value in 1993. In fact, the number now appears to have leveled off at a higher value. However, more closely examining the two different beach sections – Çalış, a touristic area, and Yanıklar, containing natural beach sections – reveals different trends. Yanıklar always had more nesting activity in the last 20 years, with an average of 80 nests, while Çalış had an average of 20 nests. The new data show a continuous decline of nests in Yanıklar, whereas in Çalış the number reached a new peak of 35 nests in 2013 and 2014, a value last documented in 1994. In the touristic Çalış area, the upward trend could potentially be interpreted to reflect the long-term conservation and monitoring program. In the Yanıklar sections, however, increased conservation efforts are apparently needed in order to avoid losing the natural beach area as a nesting site for *Caretta caretta*, especially in the light of ongoing and proposed major construction projects. This underlines the importance of examining beaches and their subsections separately, and developing tailored management strategies for each.

Abstract ID: 6233 **Type:** Poster **Subject:** Conservation, Management and Policy **Country:** Reunion
Submitted By: Mayeul Dalleau

INTERNATIONAL COOPERATION FOR INCREASED KNOWLEDGE AND BETTER MANAGEMENT OF LOGGERHEAD POPULATIONS IN THE WESTERN INDIAN OCEAN: THE COCA-LOCA PROJECT

Mayeul Dalleau¹, Jérémie Bossert¹, Jérôme Bourjea², Philippe Gaspar³, Laure Carassou⁴, Suaad Al Harthi⁵, Ronel Nel⁶, Marco A. M. Pereira⁷, Raquel Fernades⁷, Berthin Rakotonirina⁸, Claire Jean¹ and Stéphane Ciccione¹

¹ Kelonia, l'observatoire des tortues marines de La Réunion, Saint Leu, La Réunion, France

² Ifremer, Délégation Océan Indien, Le Port, La Réunion, France

³ CLS, Direction Océanographie Spatiale, Ramonville, France

⁴ Sultan Qaboos University, Fisheries research laboratory, Muscat, Sultanate of Oman

⁵ Environment Society of Oman, Musact, Sultanate of Oman

⁶ Nelson Mandela Metropolitan University, Zoology Department, Port Elizabeth, South Africa

⁷ Centro Terra Viva, Maputo, Mozambique

⁸ Institut des Sciences Halieutiques et Marines, Toliara, Madagascar

The COCA-LOCA project (Connectivity of Loggerhead turtle *Caretta caretta* in the Western Indian Ocean: Implementation of local and regional management) started in 2013 and will be spread over a three years period. The objective of the project is to increase knowledge and awareness about the ecology of the loggerhead sea turtle (*Caretta caretta*) in the Indian Ocean, including the oceanic migrations and the connectivity between populations of the main identified breeding sites of the western Indian Ocean. The ultimate purpose is to implement effective management measures at the local and regional level. To achieve these goals, scientists and conservationists from all over the region are working together as this project gathers people and institutions from Reunion Island, Mayotte Island, the Sultanate of Oman, South-Africa, Mozambique and Madagascar.

The scientific approach of the project focuses on three complementary axes involving multidisciplinary methods such as satellite tracking, genetics, stable isotopes and modeling. The first approach aims to increase the tracking effort with twenty-two additional satellite tags being deployed on individual accidentally captured by fishermen around Reunion Island. Secondly, genetic and isotopic analyses are conducted on nesting populations of the Western Indian Ocean (Oman, South-Africa, Mozambique and Madagascar) as well as on juvenile loggerhead turtles from Reunion and Mayotte waters. Finally, hatchlings dispersal models are conducted considering active movement behavior.

The project also clearly has an immediate conservation goal. Awareness actions are undertaken across the region. Long-line fishing boats from Reunion Island have been equipped with sea turtle release kits. The feasibility of a sea turtle care center in Mayotte Island is also under consideration. In the medium term, the project should also allow the optimization of the means dedicated to conservation of this species thanks to a largely improved knowledge of the areas occupied during the different life stages. This knowledge is required and will be used to complement the mitigations measures already put in place and to direct the conservation effort where they are most needed.

The COCA-LOCA project is the first of its scale regarding this species in the region and an excellent example of international cooperation for the benefit of sea turtles conservation.