

## **USE OF RINGING DATA TO UNRAVEL DEMOGRAPHIC STRATEGIES IN TROPICAL VS. TEMPERATE ROSEATE TERNS**

Monticelli David<sup>1</sup>, Jaime A. Ramos<sup>2</sup> and Jean-Louis Doucet<sup>1</sup>

<sup>1</sup> Laboratory of Tropical and Subtropical Forestry, Unit of Forest and Nature Management, Gembloux Agricultural University, 2 Passage des Déportés, 5030 Gembloux, Belgium  
E-mail: [monticelli.david@gmail.com](mailto:monticelli.david@gmail.com)

<sup>2</sup> Institute of Marine Research (IMAR), Department of Zoology, University of Coimbra, 3004-517 Coimbra, Portugal

Comparative studies of demographic parameters among seabird taxa have placed species on a slow-fast gradient expressing the trade-offs between fecundity (offspring productivity) and survival, where species with low fecundity but high rates of survival are considered 'slow'. Thus, life history theory predicts that the lower fecundity of tropical species – when compared to temperate ones – should be counterbalanced by relatively higher survival rates. This hypothesis, related to the lower productivity of tropical waters, has been rarely addressed between temperate and tropical populations of the same species. The roseate tern breeds both under temperate (e.g. Europe, North America) and tropical (e.g. Caribbean, Seychelles) systems, and thus offers the opportunity to test this prediction, although until recently there was a paucity of demographic information from tropical populations. In this communication, the results of a demographic study conducted between 1998-2007 on the tropical roseate tern population breeding on Aride Island (Seychelles) are presented. In particular, we estimated both reproductive parameters (including offspring productivity) and age-specific survival rates (from juveniles to adults). These estimates are further compared to published estimates available for temperate colonies, and discussed in relation to life history trade-offs between temperate vs. tropical roseate tern populations.