



Abstract book

**1st Meeting of the Iberian
Ecological Society &
XIV AEET Meeting**

Ecology: an integrative science
in the Anthropocene

February 4-7, 2019, Barcelona (Spain)



SIBECOL
Sociedad Ibérica Ecología

EDITORIAL INFORMATION

Title: *Abstract book of the 1st Meeting of the Iberian Ecological Society (SIBECOL) & XIV AEET meeting.*

Barcelona, Spain, 4th – 7th February 2019

Editorial deadline: 21th January, 2019

Issued in Open Access, under the terms of Commons attribution Non Commercial License

Doi.: 10.7818/SIBECOLandAEETmeeting.2019

Publisher: © Asociación Española de Ecología Terrestre (AEET)
C/ Tulipán s/n, 28399, Móstoles, Madrid, Spain

Layout: Perfil Gráfico. Madrid, Spain

TS.02-P-12

External pavilion, Poster session 1: Monday 4th - Tuesday 5th Feb.

A contribution for the management and conservation of the coastal/lowland habitats of MadeiraMartins, Anabela¹

(1) w/o

Correspondence e-mail: [anabelamartins323@gmail.com]

Madeira archipelago harbours a high heterogeneity of environments and vegetation belts where bryophytes occur, ranging from the sea level to the highest peaks. In particular, the coastal/lowland habitats include about 230 bryophyte species (circa 40% of the Madeiran bryoflora). A significant fraction of this flora is under threat, reflecting human pressures such as the loss and degradation of habitats as a result of construction and leisure/touristic infrastructures, the effects of climate change, and the emergence and spread of invasive alien plant species. As examples, the mosses *Acaulon muticum* and *A. triquetrum* show very restricted area of occurrence (Ponta de São Lourenço), and their main threat include "Human intrusions & disturbance-Recreational activities". Another example is the liverwort *Riccia atlantica*, an endemic taxon restricted to the lowlands. In the present study, 15 and 18 sites and a total of 30 and 35 plots, previously sampled in 2007, were recently sampled in 2018 across the coastal habitat/lowland habitats in Madeira Island and Porto Santo aiming to: (i) analyze the potential changes in bryophyte diversity and species composition in a sequence of 11 years, with a special focus on the endemic and threatened groups; and (ii) investigate the impact of the intervention type, including agriculture, grazing, fire, landslide, construction and invasive alien plants. Our findings contribute to the effective management and conservation of coastal/lowland non-vascular and vascular plants biodiversity on Madeira. In the near future, we may extend this study to other habitats of Madeira and across the Macaronesia region.

TS.02-P-13

External pavilion, Poster session 1: Monday 4th - Tuesday 5th Feb.

Compilation and analysis of fauna data for Iberian arthropods: the IberArtro projectMillán Sánchez, Andrés¹; Sánchez Fernández, David²; García Barros, Enrique³; Hortal, Joaquín⁴; Guisande, Castor⁵; Miguel Lobo, Jorge⁶; Munguira, Miguel L.⁷; Romo, Helena⁸; Torralba, Antonio⁹; Yela, José Luis¹⁰

(1) Universidad de Murcia; (2) Universidad de Castilla-La Mancha; (3) Universidad Autónoma de Madrid; (4) Museo Nacional de Ciencias Naturales (MNCN-CSIC); (5) Universidad de Vigo; (6) Museo Nacional de Ciencias Naturales (MNCN-CSIC); (7) Universidad Autónoma de Madrid; (8) Universidad Autónoma de Madrid; (9) Universidad de Oviedo; (10) Universidad de Castilla-La Mancha

Correspondence e-mail: [acmillan@um.es]

Arthropods constitute the most diverse metazoan phylum on the planet: they comprise around 63% of all living organisms in any terrestrial region and 86% of all animal species; that is, four out of five known animal species are arthropods. It seems therefore difficult to address a global study of biodiversity, or its conservation, without taking into account this biological group. When we face with the challenge of describing biodiversity patterns in the Iberian Peninsula (one of the global hotspots of biodiversity), we find an insurmountable limitation to date: the scarcity of distributional data available for most species of arthropods (known as the "Wallacean shortfall"). The IberArtro project aims to overcome this limitation, and represents an unprecedented advance both in our knowledge on the distribution of Iberian arthropod biodiversity and on its conservation. The specific objectives of this project are: i) to continue with the management and development of the Iberian arthropod distribution database and the GeoBrink platform, improving its functionality and expanding the number of records and taxonomic groups included; ii) to develop new freely available tools allowing the analyses of biological databases; and (iii) to apply these tools to the already compiled database (containing 820000 records for almost 1700 invertebrate species). This will allow us to advance on our understanding of the distribution of biodiversity, generating reliable species distribution models and identifying priority areas for conservation, to finally assess the effectiveness of the current network of protected spaces in representing these high and interesting arthropod biodiversity.