

WP7- National monitoring system for genetic, species and ecosystem diversity and environmental quality status

Inês Rosário, Patrícia Tiago, Sergio Chozas

Jorge Palmeirim, Rui Rebelo & Margarida Santos-Reis CSES, TMB e ESFE - cE3c

PORBIOTA (E-Infrastructure for Information and Research on Biodiversity) is the Portuguese e-infrastructure created to manage biodiversity and ecosystem data, which will be integrated in the European e-Science infrastructure for biodiversity and ecosystem research LIFEWATCH. Overall, PORBIOTA aims to promote a national agenda on biodiversity survey and research, to provide services to the scientific community, policy makers and managers, and to raise biodiversity awareness and public engagement with science through citizen science and other outreach programs.

In the context of the PORBIOTA project, the Centre for Ecology, Evolution and Environmental Changes (cE3c) is responsible for Work Package 7, which aims to devise, develop and test a national monitoring system to assess status and trends of genetic, species and ecosystems diversity and hotspots of biodiversity. This WP comprises six tasks: 1- Identification and characterization of ongoing monitoring programs and monitoring gaps; 2- Definition of essential biodiversity and environmental indicators; 3-Design and test of long-term monitoring and ecological observation networks; 4- Development and deployment of new data acquisition equipment; 5- Integration of LTER and ICOS dataflow into PORBIOTA and 6- Development of a blueprint for designing and testing the national monitoring system.

Following the identification and characterization of the current situation of biodiversity monitoring programs in Portugal, six participatory workshops were held to gather input from national experts in the main taxonomic groups. For each workshop we tried to be as broad as possible in selecting stakeholders including researchers, state agencies, NGOs, companies. From the 349 specialists invited, about 45% attended the workshops, 75 women and 81 men, out of 156 participants.

The thematic workshops will help to finish task 1 and 2, by identifying the main gaps in the information already collected, and to produce the final blueprint (task 6), that will be develop with the contribution of stakeholders in an interactive way.

Additionally, new approaches for cost-effective collection of biodiversity and environmental data are been developed and tested to integrate the e-infrastructure, namely acoustic stations and camera-trapping for monitoring population trends (task 3) as well as data collected by LTER and ICOS networks (task 5). Currently, aiming to provide a continuous flow of information to the e-infrastructure, cE3c team has acquired a very complete set of new technological tools (task 4), namely climate, soil and water sensors, phenocams, acoustic stations, open to any cE3c researcher who wants to get involve with the PORBIOTA project.

Thursday, October 31, 2019

FCUL (Building C2), 12h00-13h00, room 2.2.14

