

DIPARTIMENTO DI SCIENZE E TECNOLOGIE AGRO-ALIMENTARI

## Attachment 1

# Student Projects+ re(de)fining student field work CERES International Project

The Student Projects+ is an innovative approach to student field work creating added value for students, supervising researchers and the local community. Your BSc, MSc, PhD field project, practical training or work placement becomes a vital part of current research to help protect, conserve and make sense of the natural world. Your work will make a difference (...and you will receive 4 ECTS + a Certificate).

Science depends on field work. Environmental research in areas such as geography, ecology, geology, environmental and land sciences, and biology focuses on data collected in the field. It is fundamental for your career that you acquire the practical skills to collect relevant data or to evaluate adequately the quality of data collected by peers. The experience gained during the SP+ is recognized for professional accreditation in geology, ecology, geography and environmental sciences and often counts as required work experience by universities.

#### The academic and cultural benefits

Working or studying abroad leads to academic, cultural, intercultural, linguistic, personal and professional benefits and confers a competitive advantage when it comes to finding a first or subsequent job. The professional networks built during SP+ are ways to build long-term relationships with mutual benefits. You will learn how to communicate your findings effectively to academic and non-academic audiences.

The most significant advances in science come from the realization that complex modern problems cannot be adequately addressed by researchers in a single discipline. Transdisciplinary study allows the synthesis of ideas from many disciplines.

Community engagement, close inclusion of local stakeholders in the transdisciplinary process ensures solution-oriented research, transferable knowledge and implementation of new scientific evidence in management practice. You will be involved in the development of virtual materials using a range of media such as drone video/footage and VR and AR assisted 3D models.

### **Long-term vision**

While federal and foundation grant support typically lasts for two to three years, the aim of the SP+ is to collect **long-term ecological datasets**. Coordinating individual student projects and managing data from different academic subject areas with EpiCollect5 allows for meta-analysis, increasing spatial and temporal scale as well as improving data quality.

#### Format of the Student Project+

The SP+ are a vibrant mix of **challenge-based learning**, **interactive sessions and site visits**. You will carry out an individual field project of your choice as part of an **international**, **multidisciplinary team of students** with academic backgrounds in earth, life and social sciences. Team members help and learn from each other in the field with the **support and guidance from scientists** from CERES.

Where and when: in 2024 will be held in Aljezur, Portugal in January and September.



# ALMA MATER STUDIORUM UNIVERSITÀ DI BOLOGNA DIPARTIMENTO DI SCIENZE E TECNOLOGIE AGRO-ALIMENTARI

**Costs**: funding is available for EU university students through Erasmus+ KA131. Accommodation, onsite travel and all meals with tasty bio-regional food are covered by the grant. Additional subsidies are available for green travel, but otherwise travel will be a cost and a responsibility of the students.

#### Location and focus topics

The Project Weeks take place in the <u>Parque Natural do Sudoeste Alentejano e Costa Vicentina</u>. The PNSACV is Portugal's <u>largest protected coastal zone</u> (IUCN category V), is part of the <u>Nature 2000</u> network, an <u>Important Bird Area</u> and includes a <u>Marine Protected Area</u>. It is one of <u>Europe richest</u> regions in terms of aquatic and terrestrial animal and plant biodiversity and offers superb coastal geology. You will work in teams to follow one of the <u>thematic blocks</u>:

- 1. Coastal science, management and policy
- 2. Science and management of water resources
- 3. Rewilding Southwest: Sustainable forest management

### Coastal science, management and policy

The Portuguese Southwest coast is one of the **best-preserved littoral systems of Europe**. A 130 km long and 2 km wide protected marine zone has been designated along the coast of the natural park with oceanic **sandy beaches**, extensive **rocky shores**, small **estuaries**, **cliffs**, recent and Pleistocene **dune systems**. Local stakeholders identified **tourism**, **invasive species and pollution** as the two main threats to the coastal system.

#### Water resources management

Ribeira de Aljezur is a **rich ecological area**. It is classified as an ecological target area that requires specific conservation actions and belongs to the Natura 2000 network. In the Aljezur area are some of the main centres of **temporary ponds** (Habitats Directive 3170) at national level. Misguided **riverine management strategies, invasive species, water abstraction** and **climate change** increasingly put this resource under pressure.

### **Rewilding Southwest**

Native forests in Portugal have been gradually **replaced by exotic eucalyptus and pine plantations**. Most recently invasive Australian acacia species spread widely. Exotic trees have been referred as a major factor of **ecosystem disturbance**. A conservation priority is to recreate a **healthy, functioning landscape**, restored after decades of habitat loss and degradation by "rewilding" with **native tree species**.

### **Individual project topics**

Each focus topic describes an area of study from which you can **develop your own research questions**. CERES provides a **project database** that contains a number of interesting, interdisciplinary project suggestions. Yet, we encourage you to **formulate your own ideas** together with your supervisor. You will have access to previous research and we will put you in **contact with the network** of SP+ alumni, researchers working on your focus topic and local stakeholders. **Comparative studies** where data from the Algarve are compared with results from your home country are also welcome.