



Project Title: ECOPOTENTIAL: IMPROVING FUTURE ECOSYSTEM BENEFITS THROUGH EARTH OBSERVATIONS

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Science School(3)

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1. Executive summary

In this deliverable, we describe the ECOPOTENTIAL schools held in 2017: La Palma School...

The third science school of the ECOPOTENTIAL project was held from 17th February until 3rd of March 2017 on La Palma, the North-Western Island of the Canaries, Spain. The island and its protected areas is one of the sites of interest of the project.

A combination of 22 students and 7 lecturers gathered to conduct field work and teaching courses, combined to discuss highly important concerns in the face of global change. The deliverable contains a short description of the activities carried on by the school participants.

2. Ecopotential Science School (La Palma)

2.1 General description

The Science School organized by the University of Bayreuth in the frame of ECO POTENTIAL Project, was offered this year on La Palma, the North-Western Island of the Canaries. The science school took place from 17th February until 3rd of March 2017.

The Science School offers students the opportunity to get an exclusive view of the diverse ecosystems of the island. The field experience challenged the students to address ecological issues while dealing with variable environmental conditions. Field work and teaching courses are combined to discuss highly important concerns in the face of global change.



Students of La Palma Science School during the first day island excursion

2.2 Participation

A total of 22 students from 5 different countries (Germany, Italy, China, Peru, USA) attended the Science School.

A total of 7 lecturers participated to the science school:

- Prof. Dr. Anke Jentsch (University of Bayreuth, Germany),
- Prof. Dr. Carl Beierkuhnlein (University of Bayreuth, Germany),
- Dr. Severin Irl (University of Bayreuth, Germany),
- Prof. Richard Field (University of Nottingham, UK),
- Prof. Alessandro Chiarucci (Università di Bologna, Italy),
- Prof. José-Maria Fernandez-Palacios (Universidad de La Laguna, Tenerife, Spain),
- Prof. Dr. Ole R. Vetaas (University of Bergen, Norway).

2.3 Project developed during the Science School

Students organized themselves in groups of 3 people each, and conducted research on their own about one of the following Topics:

- Pine forest and fire,
- Beta diversity,
- Invasive species,
- Representativeness of protected areas,
- Isolation and endemism,
- Leaf traits and resources availability,
- Inaccessibility and remote sensing.

Data collected during the La Palma summer school also resulted in 2 Bachelor's thesis ("Temporal development of plant traits on the lava flows of La Palma, Canary Islands" and "A time-altitude survey characterizing soil- and vegetation development of lava-flows on a Canary Island"), on-going master thesis, and two PhD projects.



The presence of *Pennisetum setaceum*, an invasive specie in La Palma, was investigated by a group of students.

Preparation for the fieldwork was carried out before the science school, starting in November 2016; this included literature review, and the formulation of a hypothesis to be validated during field work for each group and development of sampling methods.

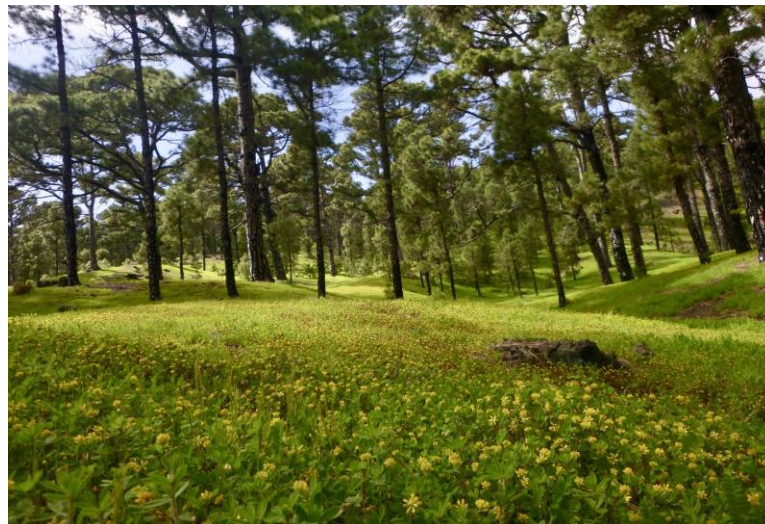
On the first two days, the entire group travelled across the island together to get a primary understanding of the island ecosystems and particularities, and a presentation of the projects of the other groups. After that, each group conducted their own research to answer their hypothesis. In turn, groups reported to the professors for feedback on the methodology applied and suggestions on the research.



Student during data collection

During the time on La Palma the first part of a Scientific Writing Course offered in combination with the Science School also took place.

Data gathered during the Science School was analysed during February-May, with the constant supervision of the professors involved. Finally, on June 28th, each group presented their results in form of a PPT and a manuscript, at the University of Bayreuth.



Regrow after forest fire



Students presenting their research during the last day of the Summer School

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