





# SISS International "Antonio Berlese" Summer School Soil Fauna: Applied Ecology and Systematics – First Edition – September 1<sup>st</sup>-5<sup>th</sup>, 2025

CREA Experimental Farm, Scarperia e San Piero (FI), Via Fagna 1 – 50038 Gps coordinates: 43.983456, 11.346821

where a long-term soil experiment is ongoing for more than 30 years and Italy's most important soil sample library is located

The recent evolution to soil health concept poses a hot topic to the soil scientists, monitoring programme stakeholders and policy makers. How to quantify soil health, and the effects of soil threats, including climate change, without an insightful and complete assessment of soil fauna? And their resilience once the causes for soil degradation are removed? This school aims at filling these gaps, harmonizing, and updating information with scientific-technical support.

The benefits of this programme will lead to a more comprehensive improvement and thorough assessment of soil fauna status, distribution, and systematics. The ABS will co-operate with other institutions, including Universities, Museums and Environmental Protection Agencies, to widen the network of collaborations.

Potential students are PhD, master students or professional experts. The summer school is designed to obtain 3 European Academic Credit in Transfer and Accumulation System (ECTS =3 Italian CFU), check it with your University before registration, providing this program. Moreover, we will contact professional registers to obtain credits.

A roster of experts will collaborate existing international networks to design a comprehensive and engaging curriculum, deepening the complex and diverse challenges of soil quality, health, and resilience, both on spatial and temporal scales. The school covers the basics of soil fauna natural history and distribution, their taxonomy, ecological interactions, and conservation. It also will incorporate practical direct experiences, sampling, extraction, identification, monitoring, and research projects to provide students with real-world application of their learning.







PROGRAMME

- 5 days from 9 AM to 19 PM
- Front lessons: 17 hours
- Practical Activities: 14 hours
- Guided Study: 17 hours
- Final exam to obtain credits

#### Monday: Overview

Soil taxonomy, Soil ecology, Experimental design, Habitat, sampling and extraction methodologies in soil arthropod research Welcome party

#### Tuesday: Microfauna

focus on *Protozoa*, *Nematoda*, *Rotifera* and *Tardigrada*, Microfauna habitat, sampling, extraction and identification methodologies

#### Wednesday: Mesofauna

focus on Microarthropods, QBS-ar methods, *Anellida Enchytraeidae*, Mesofauna habitat and practical QBS calculation test

#### Thursday: Macrofauna and Megafauna

focus on Insecta, Arachnida, Myriapoda, Anellida Lumbricidae, Vertebrata, Macrofauna habitat and extraction field trip

#### Friday: Identification practice

Practical Nematode and Earthworm laboratory identification test, practical microarthropods biological forms laboratory identification test final exam

Prestigious international scientific committee: to be completed

Preregistration before June 16<sup>th</sup> (June15<sup>th</sup> 11:59 PM) application form at https://forms.office.com/e/eDvTeL8CKh



#### PLACES AVAILABLE FOR 24 ATTENDEES

(Minimum for start the school:12 attendees)

Welcome coffee, lunch and coffee break are included

12 free tent places, or accommodation costs at your charge. Transfers from the school site can be facilitated for students residing within a 5 km radius including San Piero a Sieve train station.







Suggested hotel in Scarperia and San Piero a Sieve:

Appartamento Giglio rosso, *via Alcide De Gasperi 18, Scarperia*  Mugello vacanze, via Senni Figliano 11e, Scarperia Hotel Ebe, via Le Mozzete 1a, San Piero a Sieve

Locanda San Barnaba, Viale J.F. Kennedy 15/17, Scarperia

Payment within 15 days of acceptance by email,

Early registration: before April16<sup>th</sup> (15<sup>th</sup> 11:59 PM) Students: 340 € Professionals: 450 € Late registration : before June16<sup>th</sup> (15<sup>th</sup> 11:59 PM) Students: 450 € Professionals: 550 €

### ORGANIZING COMMITTEE

Lorenzo D'Avino (Secretary), Carlo Jacomini (Proposer), Giuseppe Corti (Chair), Filiberto Altobelli, Claudia Becagli, Gaia Bigiotti, Miguel Angel Gambelli, Fabio Gatti, Federico Gavinelli, Maria Grazia Piazza, Malayka Samantha Picchi, Elena Tondini

## CONTACTS

abs\_school@scienzadelsuolo.org only if necessary, lorenzo.davino@crea.gov.it, carlo.jacomini@isprambiente.it