

BIODIVERSITY AND RISK MANAGEMENT

Online sessions

23-27 JUNE 2025

On-site - IPV, Portugal

7-21 JULY 2025

**APPLY BEFORE
16 MAY**

4
ECTS CREDITS



Co-funded by
the European Union

**CONSERVATION | ENVIRONMENTAL RISK MANAGEMENT |
RESTORATION ECOLOGY | FORESTRY & LAND
MANAGEMENT | SUSTAINABLE LAND-USE PLANNING**



ONLINE SESSIONS
23-27 June 2025

ON SITE WEEKS
7-21 July 2025

PRE-REQUISITES

- EUNICE student
- English: B2 level

NUMBER OF PARTICIPANTS

- 18 (2 per institution)

HOW TO APPLY & ENROL

- In order to apply and guarantee Erasmus+ funding, contact the International Office (IRO) of your institution.
- Each IRO will establish their own internal application call and inform IPV about the selected participants (deadline: 16 May).
- The IRO of IPV will send all the participants information about the enrolment.

PARTICIPANT PROFILES

- This volunteering camp is particularly beneficial for participants interested in applied conservation, environmental risk management, restoration ecology, forestry & land management and sustainable land-use planning. A background in environmental science is recommended but not mandatory.

Biodiversity and Risk Management VOLUNTEERING CAMP

Biodiversity & European Policies and Concepts of Risk Management in Natural Ecosystems

Civil Protection Structure and Organisation

Wildfire Mitigation Strategies and Ecosystem Restoration

The Role of Fungi in Ecosystems and Freshwater Ecosystem Threats

Invasive Woody Plant Species

The Asian Hornet (*Vespa velutina*) Invasion & Pollinator Conservation

Impacts of Biodiversity on Viticulture

Ecosystem Conservation Project

COORDINATOR Hélder Viana, Polytechnic Institute of Viseu

VENUE: Bombeiros Mangualde, Tv. dos Combatentes 21, Mangualde

<https://eunice-university.eu/student-research-clubs/opportunities-students/>



Online sessions Week 1: June 23-27

Day 1 - Presentation

- Presentation of the BIP, participants and programme objectives
- Fundamentals of biodiversity and risk management
- What to know about forest surveillance, fire prevention and fauna and flora protection?
- Reading articles and watching videos on Biodiversity and Risk Management

Day 3 - Thematic presentations

- Biodiversity and importance of fungi in ecosystems, forest biodiversity, fire prevention and post-fire recovery - José Manuel Costa, IPV
- Freshwater fish biodiversity monitoring and conservation - José Manuel Costa, IPV
- The endemic flora of the Peloponnese (Greece) and especially about Taygetos mountain - Epaminondas Kartsonas, UoP
- Remote Sensing Technologies (Drones, Satellite Imagery, Sensors) for mapping Biotic & Abiotic Risks - Helder Viana, IPV

Day 2 - Thematic presentations

- Risk behaviour and effects of forest fires in Mediterranean regions in light of new climatic conditions - Sérgio Lopes, IPV
- Civil protection responses in case of emergency - Filipa Rodrigues Pereira, IPV
- "Learning from the past? Fires, forest grazing and biological diversity" in a Swedish context - Eva Svensson, KAU
- Changes in fire regimes and lessons learned. Case study of forest fire in Västmanland (Sweden) in 2014 - Magnus Johansson, KAU

Day 4 - Thematic presentations

- Cardoon as endogenous resource for valorisation of the territory - Paulo Barracosa, IPV
- Conservation and restoration projects. Life Nieblas and Life Landscape Fire - André Mota, CIM VDL

Onsite sessions Week 2: July 7-11

Day 1 - 7th July

Welcome session & Programme Introduction

- Institutional Presentations
- Overview of Objectives & Schedule -
- Icebreaker Activity: Meet Your Peers & Team Assignments
- Introduction to Group Projects & Case Studies
- Networking & Social Event

Day 2 - 8th July

Civil Protection Structure and Organization

• 10h - Forest Surveillance and Firefighting

- National Civil Protection System - Miguel Ângelo David, Sub-Regional Commander of Emergency and Civil Protection of Viseu Dão Lafões
 - Emergency Protection and Relief Unit of Republican National Guard (UEPS - GNR) - Lieutenant Colonel Adriano Resende, Commander of the GNR Territorial Command of Viseu
 - The role of the Republican National Guard (GNR) of Mangualde in the civil protection - André Batista, Commander of the Mangualde Territorial Detachment
 - Civil Protection Unit and Volunteer Firefighters of Mangualde - Márcio Teles, Commander of Mangualde Volunteer Firefighters
- **12h30-14h** - Lunch Break
 - **14h** - Simulation of firefighters' actions in case of emergencies



Day 3 - 9th July

Biodiversity and Risk Management in Natural Systems

- **10h - EU Biodiversity, Ecosystem Risks and Services**
 - EU Biodiversity Strategy 2030 & Key Legal Frameworks (Habitats & Birds Directives, CBD)
 - Biodiversity Loss: Causes & Consequences
 - The Importance of Risk Management in Biodiversity Conservation
 - Principles of Risk Management in Ecology
 - Field work - Identifying Ecosystem Risks and Services
- **12h30-14h** - Lunch Break
- **14h30** - Trip to a cartoon biogenetic reserve. Serra da Estrela cheese tasting experience

Day 4 - 10th July

Wildfire Mitigation Strategies and Biodiversity Conservation

- **09h - Prescribed Burning and Grazing as Fire Mitigation Strategies**
 - Field Visit to areas treated by prescribed burning (Serra da Estrela)
 - Fire Ecology & Mediterranean Landscapes
 - Prescribed Burning: Benefits & Challenges
 - Grazing in mountain areas
- **12h30-14h** - Lunch Break
- **14h - Biodiversity, Endemics and Protected Species**
 - Trip to Protected Areas & Natura 2000 Sites (Serra da Estrela)

Day 5 - 11th July

The Role of Fungi in Ecosystems and Freshwater Ecosystems Threats

- **10h - Departure from Mangualde to fieldwork (Vila Nova de Paiva/Viseu)**
 - Identifying fungal biodiversity and its ecological importance
 - The ecological importance of fungi
 - The role of fungi in decomposition and nutrient recycling.
 - Mycorrhizal networks, carbon sequestration and bioremediation
 - How fungi help prevent forest fires and their role in water retention and flood prevention
 - Freshwater ecosystems: threats & conservation policies (EU Water Framework Directive)
- **12h30-14h** - Lunch Break
- **15h** - Visit to the city of Viseu
- **20h** - Dinner in Viseu
- **00h** - Return to Mangualde

Onsite sessions Week 3: July 14-19

Day 6 - 14th July

Biological Invasions: Causes & Impacts

- **09h - Invasive Woody Plant Species**
 - Fieldwork: Control of *Acacia dealbata* invasive species
 - Management Strategies and removal techniques
- **12h30-14h** - Lunch Break
- **14h30 - Ecosystem Restoration**
 - Field visit to projects aimed at mitigating biotic and abiotic factors and promoting biodiversity
 - Visit to a forest watch tower (Caramulo)



Day 7 - 15th July

The Asian Hornet (*Vespa velutina*) Invasion & Pollinator Conservation

- **09h - The Impact of Asian Hornet on European Pollinators**
 - Field Observation: Asian hornet Nest Detection, Monitoring Strategies & Control
- **12h30-14h** - Lunch Break
- **14h00 - Understanding the Role of Biodiversity in Vineyard Ecosystems**
 - Discussion on how biodiversity contributes to soil health, pest control, and grape quality.
 - Field Visit to a Vineyard in Dão Region and Cellar of Adegas Cooperativas de Mangualde
 - Tasting of wines produced with sustainable practices

Day 9 - 17th July

Ecosystem conservation project

- **09h - Workgroup**
 - Development of an ecosystem conservation project
- **12h30-14h** - Lunch Break
- **14h00 - Final Project Presentations**

Note:

Weekends (days 12, 13 and 19, 20) will be free time for students to relax, explore, and socialise.

Day 8 - 16th July

Forest Surveillance and Firefighting

- **09h - Departure to Viseu**
 - Visit to the Municipal Civil Protection Command Centre of Viseu
 - Visit to the Regional command of civil protection in Viseu Aerodrome
- **12h30-14h** - Lunch Break
- **14h00 - Forest defense against biotic and abiotic agents**
 - Visit to ICNF Structure for Forest Defense against Fire
 - Field visit to nematode monitoring and control sites

Day 10 - 18th July

Open Day Activities and Farewell Session

- **09h - Environmental alert strategies**
 - Developing an educational brochure on fire safety and prevention / designing a media campaign for environmental awareness (e.g., social media posts & call-to-action)
- **12h30-14h** - Lunch Break
- **14h00 - Reflective Activity**
 - Feedback Collection
 - Certificate Distribution
 - Closing Remarks
 - Group Photo Session

