

2nd - 6th June. Pontevedra, Galicia, Spain



Abstract Book

Another science is possible:

diversity, degrowth, and sustainability in ecological research

III SIBECOL & XVII AEET Meeting 2025

2nd - 6th June 2025

Pazo da Cultura, Pontevedra, Galicia (Spain)

Edited by: Asociación Española de Ecología Terrestre (AEET)

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WELCOME

We welcome all participants to the III SIBECOL & XVII AEET Meeting, which will take place from June 2nd to 6th, 2025, at the Pazo da Cultura in Pontevedra, Galicia, Spain.

The III meeting of the Iberian Ecological Society (SIBECOL) is held jointly with the XVII National Conference of the Spanish Association of Terrestrial Ecology (AEET). This event is highly anticipated by both associations, expecting participation from over 850 people. Many of these attendees are early-career researchers who will have the opportunity to present their work, network with peers, and establish professional connections that will be valuable for their scientific careers.

The conference will take place in Pontevedra from June 2nd to 6th, 2025. Pontevedra is a city known for its commitment to urban pedestrianization and has received various awards for its sustainable mobility policies. Leveraging the unique location, the conference has adopted a theme that encourages reflection on our profession and the tasks ahead to improve our daily practices: **“Another science is possible: diversity, degrowth, and sustainability in ecological research”**. This theme underscores the importance of fostering a diverse scientific community and adopting sustainable practices within ecological research. It invites participants to explore how ecological science can evolve by embracing principles of diversity and sustainability. The conference aims to inspire discussions and collaborations that will drive positive change in the field of ecology, promoting a more inclusive and sustainable future for scientific research.

Promoting societies

The Iberian Society of Ecology groups together professionals who are dedicated to the study of all areas of the science of Ecology (theoretical, terrestrial, marine, continental waters and border ecosystems). Established in July 2018, SIBECOL also includes the members of the Iberian Association of Limnology (AIL), the Spanish Association of Terrestrial Ecology (AEET), the Portuguese Society of Ecology (SPECO) and the Spanish Society of Ethology and Evolutionary Ecology (SEEEE), as well as professionals in marine ecology.



The Spanish Association of Terrestrial Ecology (AEET) is a society founded in 1989, at the dawn of scientific production in ecology in Spain. Its field of work is ecology *sensu lato*. Although the association originally focused on terrestrial ecosystems, it currently brings together scientists from different areas of ecology and environmental study into a society with a significant critical mass that covers research of broad geographical scope and great thematic diversity. It counts with more than 1,000 members, including researchers, teachers, students, technicians, ecology professionals, and natural space managers. Our ranks include 4 *Alejandro Malaspina* National Research Awards, 7 *Rei Jaume I* Environmental Protection Awards, 3 Ramon Margalef Ecology Awards, and a BBVA Foundation Award for biodiversity conservation.



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[TSA.1-O-8]

Thursday 5, after lunch (third): 16:00

Room: Cova dos libros

From talk to thought: The power of dialogic interactions in science education**Fernández Aragón, Cristina¹**; Cano Pérez, Lidia²

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Science education often disproportionately emphasizes the transmission of concepts and the development of technical skills, while undervaluing the importance of dialogic interactions between teachers and students, as well as among students themselves. These interaction-based teaching strategies, centered on argumentation, deliberation, and both guided and unguided exchange of ideas, are crucial for fostering scientific thinking and constructing meaningful knowledge.

In this presentation, we underscore the significance of dialogic strategies in the classroom as fundamental tools for enriching the learning experience and promoting scientific literacy, and specifically, ecological and evolutionary literacy. We present results from educational initiatives spanning different levels, from primary school to university. For instance, in primary education, we observed that engaging students in dialogic processes fostered collective sensemaking and co-construction of core ideas about the living organisms. Additionally, these dialogic strategies enhanced the understanding of scientific practices and the emergence of aspects of the nature of science in children's discourse, compared to a control group. At the university level, a game-based initiative focused on learning biological evolution revealed that students participating in collaborative activities emphasizing argumentation and deliberation exhibited greater conceptual understanding than those who worked individually.

These findings highlight that dialogic interactions not only improve the comprehension of biological concepts but also enhance critical skills such as reasoning and collaborative problem-solving. Practical cases will be presented to illustrate how these dynamics can be effectively integrated into diverse educational contexts, emphasizing their role in cultivating scientific citizenship from early childhood to advanced academic stages.

[TSA.1-O-9]

Thursday 5, after lunch (third): 16:15

Room: Cova dos libros

Nestled in plastic: public perceptions and the conservation of white storks**Varela, Zulema¹**; Vila Tojo, Sergio²

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Plastic pollution is a widespread problem affecting ecosystems around the globe and poses a serious threat to biodiversity and the sustainability of countless species. Understanding how society perceives this problem is crucial to developing effective species conservation strategies. Significant evidence of plastic pollution was identified in white stork nests. This finding underlines the detrimental impact of plastic pollution on birds and highlights the urgent need for society to commit to addressing this challenge. To better understand public attitudes and perceptions towards this environmental problem, an online survey was conducted using the snowball sampling method (n = 198). The main results indicate strong positive attitudes towards storks, with participants describing them as good, necessary, beneficial and nice. While awareness of the problem of plastic pollution in stork nests was high, personal responsibility was perceived as relatively low. Participants also expressed strong negative emotional reactions to this plastic pollution, such as anger, worry and sadness. Most respondents were willing to support plastic regulations to protect birds and to adjust their daily behaviour for better plastic management. However, there was less willingness to donate money to stork conservation organisations. When survey respondents were asked to allocate hypothetical funds to help different species, storks were preferred to gulls and cormorants but ranked lower than iconic species such as wolves and oak trees. All of this leads to the need to increase personal responsibility for plastic pollution and channel negative emotions into responsible plastic use in order to have a greater impact on species conservation.