

## SESSION DESCRIPTION

ID: T8c

### Non-Monetary Values of Insect Pollinators and Beyond

#### Hosts:

	Name	Organisation	E-mail
Host (s):	Agata Warchalska-Troll	Jagiellonian University, Faculty of Biology, Institute of Environmental Sciences	<a href="mailto:agata.warchalska-troll@uj.edu.pl">agata.warchalska-troll@uj.edu.pl</a>
Co-host(s):	Joanna Tusznió	Jagiellonian University, Faculty of Biology, Institute of Environmental Sciences	<a href="mailto:joanna.tusznio@uj.edu.pl">joanna.tusznio@uj.edu.pl</a>

#### Abstract:

Over the past few decades, evidence has mounted of a profound ecological crisis affecting insects worldwide. Long-term monitoring projects in Europe, the Americas, Asia, and other regions reveal dramatic population declines and local extinctions across diverse taxa, from beetles and moths to aquatic insects. These trends—driven by habitat loss, pesticide use, climate change, and invasive species—threaten not only ecological functions such as nutrient cycling and food-web stability but also the intricate relationships between humans and the multitude of insect species with which we share our environments (Hallmann et al., 2017; Wagner, 2020). While public concern has grown around the decline of charismatic pollinators like bees and butterflies, the broader crisis affecting less visible or less “beloved” insects remains largely unrecognized in both research and public discourse.

This session invites interdisciplinary perspectives to explore the socio-cultural and relational values of insects within and beyond the pollination narrative. Although ecosystem-services frameworks have drawn attention to the instrumental roles insects play—pollination, pest control, decomposition—the relational and spiritual dimensions of our interactions with insects are far less studied. Anthropological, philosophical, and humanities-based scholarship has only recently begun to examine how insects shape local identities, inspire art and spirituality, and provoke both fascination and discomfort in human societies (Duffus et al., 2021, IPBES 2016, Klein and Brosius 2022). Yet the majority of this work continues to privilege pollinators or emblematic species, leaving a vast diversity of insect life underexplored.

By assembling scholars from various social sciences, environmental humanities and conservation science, this session will highlight the multiple ways in which insects—whether beetles in traditional folklore, aquatic insects in indigenous cosmologies, or decomposers in agro-ecological systems—contribute to human sense-making and well-being. We welcome presentations exploring questions such as:

- How do cultural perceptions of insects influence conservation priorities?
- How to make insects more ‘visible’ to the public and policymakers?
- How can policy better address global decline of non-pollinating insects and pollinators other than bees?
- How can innovative approaches such as storytelling, art, and performative research shift public and policymakers’ attitudes toward the less celebrated members of the insect world?

We encourage focus on Europe and other Global North societies, where often technocratic and bureaucratized conservation of nature overlooks cultural and relational underpinning of current ecological crises. In this context, we would like to discuss how specific opportunities, laws, projects and policy approaches can benefit from experiences of human-insects interactions from other regions and indigenous knowledge systems.

Duffus, N. E., Christie, C. R., & Morimoto, J. (2021). Insect cultural services: How insects have changed our lives and how can we do better for them. *Insects*, 12(5), 377.

Hallmann, C. A., et al. (2017). More than 75 percent decline over 27 years in total flying insect biomass in protected areas. *PLOS ONE*, 12(10), e0185809.

IPBES (2016). The assessment report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services on pollinators, pollination and food production. S.G. Potts, V. L. Imperatriz-Fonseca, and H. T. Ngo, (eds). Secretariat of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, Bonn, Germany. 552 pages.

Klein, B. A., & Brosius, T. (2022). Insects in art during an age of environmental turmoil. *Insects*, 13(5), 448.

Wagner, D. L. (2020). Insect declines in the Anthropocene. *Annual Review of Entomology*, 65, 457–480.

### **Goals and objectives of the session:**

The session aims to foreground three interrelated gaps. First, the ecological urgency: global insect declines are accelerating, but conservation action often targets a narrow set of species, neglecting the majority of insects that perform critical but less visible ecological roles (Cardoso et al., 2020). Second, the research gap: socio-cultural and relational values of insects other than pollinators remain a peripheral concern in conservation and social sciences. Third, the awareness gap: public understanding of insect significance rarely extends beyond honeybees or butterflies, limiting the scope of citizen engagement and policy advocacy (Samways et al., 2020).

Cardoso, P., et al. (2020). Scientists' warning to humanity on insect extinctions. *Biological Conservation*, 242, 108426.

Samways, M. J., et al. (2020). Solutions for humanity on how to conserve insects. *Biological Conservation*, 242, 108427.

### **Planned output / Deliverables:**

The session will conclude with a moderated dialogue aimed at identifying pathways for research, outreach, and policy that embrace the full socio-cultural richness of insect-human relationships. By broadening the conversation beyond pollinators, we seek to reframe insect conservation as not only a biological imperative but also a cultural and relational one. In doing so, we hope to foster a more inclusive appreciation of the myriad insects that sustain ecosystems and enrich human societies.

Depending on the participants' interest, we may consider submitting a special issue proposal to a relevant journal

### **Session format:**

We propose a standard session format: brief introduction + 5 standard presentations of up to 10 min followed by 5 min discussion after each presentation + 15 min moderated dialogue after all presentations = 90 min in total

### **Voluntary contributions accepted:**

Yes, I allow any abstract to be submitted to my session for review

### **Related to ESP Working Group:**

TWG 8 – Cultural services & Values