Web Ecol., 16, 7–8, 2016
www.web-ecol.net/16/7/2016/
doi:10.5194/we-16-7-2016

Editorial: *Web Ecology* special issue "Ecology at the Interface"

A. Basset[1,*]

[1]Università del Salento, Department of Life Sciences and Biological and Environmental Technologies, Centro Ecotekne Pal, B – S.P. 6, Lecce – Monteroni – LECCE (LE), Italy
[*]President of the European Ecological Federation

Correspondence to: A. Basset (alberto.basset@unisalento.it)

Published: 21 January 2016

The European Ecological Federation (EEF) and the Italian Society of Ecology (SItE) organized their 13th and 25th conferences, respectively, in September 2015 in Rome, Italy (http://www.ecologyatinterface.eu). The conference "Ecology at the Interface: Science-based Solutions for Human well Being" aimed to present the most advanced achievements of ecological research, discussing with scientists from interrelated fields their impacts on the problems faced by our societies, and transferring the main ideas stemming from these discussions to the different stakeholders working and interested in services and societal benefits based on ecologically relevant interfaces.

Life is a process that occurs and is maintained at multiple interfaces via a complex network of interactions at different hierarchical levels of organisation and scale, most of which lie within the realm of ecology. Interacting organisms and populations, such as the land–water–atmosphere, sediment–water–atmosphere, and deep-water–surface-water ecotones nested within the biosphere, are just a few examples of interfaces where ecology is specifically invoked to describe and decode system organisation and processes, from populations up to the biosphere. Due to the pervasive effects of human activities at the global level, including climate, ecology is also interested in interfaces between different, but potentially interacting, fields of knowledge (e.g. sociology, economy, law, technology) concerning daily human life. In this expanded field of interest, ecology serves to boost exchanges at the interfaces of fields of knowledge, defining the contexts and thresholds of both *development* and *sustainability*.

Consequently, "Ecology at the Interface" focuses on interactions at all biological levels: membrane exchanges to food web dynamics, in addition to physical ecotones; deep sediment–bottom water to land–atmosphere; and disciplinary ecotones linking ecology to sociology, economics, law, technology, and other fields of knowledge concerning daily human life.

During the conference, we were also honoured to hear the plenary session by this years (2015) EEF annual Haeckel Price, Riccardo Valentini, from Tuscia University, Italy, revered for his outstanding contributions to European ecology.

The conference commenced with plenary sessions focused on five main topics, i.e., climate change and sustainability, urban ecosystems and resilience, science policy interface, biodiversity and ecosystems, and nutrition and resources, developed with a trans-disciplinary approach and contributions from very diverse scientific areas including a broad range of ecological specialisations, e.g. sociology, economy, engineering technology or architecture. The trans-disciplinary approach was characteristic of the four round tables held at the conference as well as many of the symposia and contributed sessions, also highlighting the views of top scientists from different fields on the frontiers and future perspectives for the ecological research, opening the room for drafting a new road map for ecology and approaching its 150th anniversary from the first formalisation of the concept (Haeckel, 1866). The interface between the various fields of ecology and disciplinary views of ecological issues was also characteristic of the breaks between sessions, the discussions among participants of the conference coming from more than 50 countries, and an appropriate equilibrium between INNGE (International Network of Next Generation Ecologists) and senior members as well as between genders.

A similar diversity of subjects was found among the contributions of the hundreds of scientists attending the confer-

ence from all over the world. This special issue is, therefore, as multi-disciplinary in nature as *nature* itself.

References

Haeckel, E. H. P. A.: Generelle Morphologie der Organismen, Allgemeine Grundzüge der organischen Formen-Wissenschaft, mechanische Begründet durch die von Charles Darwin reformirte Descendenz-Theorie, Volume I: Allgemeine Anatomie der Organismen, pp. 32 574, volume II: Alllgemeine Entwickelungsgeschichte der Organismen, pp. 140, 462, Georg Reimer, Berlin, Germany, 1866.