



# **THE EU BIODIVERSITY STRATEGY BEYOND 2020**

## **Research insights and needs for biodiversity and ecosystem services in Europe**

**A Conference organised by ALTER-Net and EKLIPSE**

**Augustinian Monastery, Ghent, Belgium**

**17 – 19 June 2019**

## **Programme**

## Monday 17 June 2019

### 11:00 – 13:30h Registration

### 12:30 – 13:30h Lunch

Possibility to exchange interest for collaboration on future/upcoming calls (coordinated by Mart Külvik)

### 13:30h Start of the Conference

### 13:30 - 15:40h Plenary session (Room Augustinus)

**Opening speeches** by Maurice Hoffmann (Chair ALTER-Net Council) and Juliette Young (EKLIPSE)

### **Introductory plenary on on-going political initiatives concerning biodiversity and ecosystem services (facilitated by Janine van Vessem)**

#### Keynotes:

- EU: Planning the post-2020 Biodiversity Strategy and targets (Stefan Leiner, , DG Environment, European Commission)
- Biodiversity in the EU: 2020 and beyond (Carlos Romao, European Environment Agency - EEA)
- “Investing in biodiversity for people and planet”. Beyond the Strategic Plan for Biodiversity and the Aichi targets - towards a post-2020 global biodiversity framework (Ines Verleye, CBD National Focal Point Belgium)
- IPBES (Intergovernmental Platform for Biodiversity and Ecosystem Services): European and Central Asian Assessment (ECA) (Mike Christie)
- The IPBES Global Assessment: transformative change for biodiversity conservation (Ingrid Visseren-Hamakers, Radboud University, Nijmegen,)
- Contribution to the post-2020 EU Biodiversity Strategy: the viewpoint from research programmers and funders (BiodivERSA) (Hilde Eggermont, Belgian Biodiversity Platform)

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### 15:40 – 16:10h Coffee break

### 16:10 – 18:10h Continuation of introductory plenary session (Room Augustinus)

**Keynotes:**

- Looking for evidence-based policy proposals – focusing on wetlands (Tobias Salathé, Ramsar Bureau)
- CMS (Convention on Migratory Species)/ AEWA (Agreement on the Conservation of African-Eurasian Migratory Waterbirds (Amy Fraenkel, UNEP/CMS)
- What for biodiversity after 2020? Some views from IUCN (Alberto Arroyo Schnell, IUCN European Regional Office)
- WWF: Secure a science-based New Deal for Nature and People (Sofie Luyten, WWF Belgium)
- The marine perspective on the European Biodiversity Strategy (Sheila Heymans, European Marine Board, EMB)

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**18:30 – 19:30h Optional social event (Boat trip in Ghent, meeting point at registration desk in Augustinian monastery)**

## **Tuesday 18 June 2019**

**8:30 - 9:00h Registration**

**9:00 – 9:30h Plenary session: contribution to the future European biodiversity strategy (facilitated by Ana Isabel Lillebo)**

**9:00 – 9:30 Plenary keynote presentations:**

- 1. Key Messages from the scientific community to the European Commission for the post 2020 EU Biodiversity Strategy: presentation of the Alter-Net/Eclipse science force around 'Key Messages' (Frédéric Gosselin);**
- 2. Introduction to the societal 'Key Messages' (Mari Carmen. Garcia)**

**9:30 - 11:30h Theme 1: Envisaging plausible futures**

(Theme leaders: Sonja Jähnig, Ute Jacob and Ana Isabel Lillebo)

The climate is rapidly changing towards an unknown new regime, bringing with it extreme events, changed weather patterns on land and, in the oceans, vastly different conditions of acidity, salinity, temperature and current. To help to plan long-term biodiversity policy and research strategy, it would be useful to have some shared ideas of possible futures. What small set of scenarios might be helpful to envisage plausible futures?

**9:30 - 10:00h Plenary keynote: Introduction to Theme 1**

Keynote speaker: Imagining positive futures for nature in a co-creative process – the new IPBES scenario's on nature.  
(Machteld Schoolenberg)

**10:00 – 10:30h Coffee break**

**10:30 - 12:00h Parallel workshops on Theme 1**

Envisaging plausible futures in Europe – up to four discussion groups will be set up. These workshops will have no speakers, only discussion groups.

## **12:00 – 13:00h Lunch**

## **13:00 – 15:00h Theme 2: Probable changes in nature**

(Theme leaders: Philip Roche, Sonja Jähnig and Alan Watt)

Socially and ecologically significant timescales post 2020 range from the short term (measured in decades), through the medium (centuries), to the long (millennial) term. Important changes are bound to occur everywhere on Earth, in all biomes (ocean, fresh water, forest, agriculture...). Changed biodiversity will itself create new conditions. What might we expect, either immediately (e.g. phenology, migration), or by adaptation (range shifts, genetics) or failure (local extinction or global extirpation)?

## **13:00 – 13:30h Keynotes: Introduction to theme 2**

Keynote speaker 1: Probable changes in nature: climate and phenology  
(Steve Thackeray)

Keynote speaker 2: Conserving nature now and in the future: meeting the policy challenge  
(Des Tompson).

## **13:30 - 15:00h Parallel workshops on Theme 2**

### **Workshop 1: Expected changes in freshwater biodiversity (Astrid Schmidt-Kloiber and Koen Martens)**

Speakers:

- Climate change in estuaries: sensitivity analysis and adaptation strategies for biodiversity in the Scheldt estuary (Belgium) (Gunther Van Rykegem)
- Large-scale scenarios for future freshwater biodiversity (Jan Janse)
- Why should we care about biodiversity of microorganisms in freshwater? (Hans-Peter Grossart)

### **Workshop 2: Expected changes in biodiversity and the policy challenge (Philip Roche)**

Speakers:

- Biodiversity in the Scottish Uplands (Rob Brooker)
- Seagrass meadows Status and Restoration at Ria de Aveiro (Portugal): Nature Based-Solutions to mitigate loss of Biodiversity and ES provisioning (Ana I. Sousa)
- How evident are evidence-based policies for the realisation of the Sustainable Development Goals in the EU and globally? (Mario Giampietro)
- Working across science-policy interfaces: lessons learnt from the EKLIPSE Expert Working Group on the IPBES Global Assessment (Zuzana Harmáčková)

### **Workshop 3: Merging diverse perspectives into the post 2020 EU Biodiversity Strategy (Liisa Varuma)**

No speakers, only discussion group.

#### **15:00 – 15:30h Coffee break**

#### **15:30 – 17:30h Theme 3: New relationships**

(Theme leaders: Jiska van Dijk, Philip Roche and Eszter Keleman)

Rapid climate change is far from being the only major driver of change of biodiversity, ecological and social systems. The continuous growth of human population and its consumptive economies; the induced changes of land cover, land use, water availability and nutrient supply; the spread of (invasive) species disrupting and disturbing biodiversity; and the foreseen shift in energy supply away

from fossil fuels is putting the planet boundaries and its capacity to support life at risk. What new forms of human-nature relationships could be envisioned for a better and more sustainable future?

How can humankind achieve a smooth transition of human-nature relationships from existing ones to new forms?

Theme 3 aims to identifying intervention potentials, which requires us to look beyond direct drivers (e.g. land use, water availability, nutrient supply, human induced biodiversity and ecosystem change) and their interplay, and will address the in-depth characteristics of current human-nature relationships, such as consumption patterns, worldviews, value systems, and rights.

During Theme 3 the following questions and issues will be addressed:

- What new relationships between humans and the rest of nature are envisioned and what is their expected impact on biodiversity, ecosystems and ecosystem services?
- What options do we have to counteract a further detachment of humans from the rest of nature?
- How do we realize new mind-sets for humans to be aware of the dependency on biodiversity, ecosystems and ecosystem services?
- How to foster new consumption patterns, including our relationship to the food and energy sources of current societies?
- Can we achieve a high level of well-being while preserving nature? If so, how and within what limits?
- Proofs from within the scientific and professional community for community-based conservation and stewardship initiatives, as well as other approaches, which foster shared (plural) values and reconnection to nature.
- Research gaps – where do we have insufficient knowledge regarding mind-set changes and reconnecting to nature?
- Proposals on how to operationalize these scientific findings into policy. Way forward for the post 2020 Biodiversity Strategy when it comes to new relationships.

### **15:30 – 16:00h Plenary keynotes: Introduction to Theme 3:**

Keynote speaker 1: Ingrid Visseren-Hamakers

Keynote speaker 2: Re-diversifying agri-food system in Europe legumes as agents of change (Pietro Lannetta).

### **16:00 – 17:30h Parallel workshops on Theme 3**

#### **Workshop 1: Understanding human-freshwater biodiversity relationships (Sami Domisch).**

Speakers:

- Potential strategies for reconciling stakeholder-based water management with sound ecological science to balance water security with biodiversity conservation (Charles B. van Rees)
- Freshwater culturomics (Ivan Jaric)
- Social-Ecological Analysis of Biodiversity Conflicts - A Concept for Research (Thomas Fickel)
- Hyperbenthos in the upper reaches of the Scheldt estuary (Belgium): re-establishment of an indispensable trophic link (Liesbeth De Neve)

#### **Workshop 2: Relational values and active citizenship for nature (Wessel Ganzevoort, Riyan van den Born and Thomas Mattijssen).**

Speakers:

- Relational Values: what are they and do they do work? (Wouter de Groot & Luuk Knippenberg).
- A sets perspective on relational values of nature: how new media and technologies influence the relation between people and nature (Bas Breman).
- Connectedness with nature in citizen science (Wessel Ganzevoort & Riyan van den Born).
- Bonding by doing: (feeling) ownership of self-organizing groups of citizens taking charge of their living environment (Rosalie van Dam).
- The meaning of active citizenship for green space governance (Thomas Mattijssen).
- Biodiversity loss as a problem of amnesia and hubris (Luuk Knippenberg).

#### **Workshop 3: Development cooperation and biodiversity for sustainable development (Luc Janssens de Bisthoven, Jean Hugé and Marteen Van Hove)**

The topic of discussion and brain storming of this workshop is development cooperation in the EU, both at the level of the Commission as well as at the national levels. It will be an open discussion centered around – but not exclusively – modalities and tools to integrate biodiversity and development cooperation, including

capacity building, best practices and synergies. Some of the questions discussed will include: Are the European actors (providers of aid on biodiversity) each doing their own thing with or without harmonization, are redundancies avoided and synergies fostered (in line with e.g. the Paris Declaration on efficiency of Aid, Accra, Busan)? Do we refer enough to the (post -) Aichi targets and the SDGs? Etc...

**Workshop 4: New forms of human-nature relationships for a better and more sustainable future (Philip Roche and Jiska van Dijk).**

Speakers:

- Portuguese E-Infrastructure for Information and Research on Biodiversity (Ana Isabel Lillebø)
- A science-based opportunity to reconcile food security, biodiversity conservation and sustainable development between the land and the sea - opportunities and challenges beyond 2020 (Olga Ameixa)
- An accounting framework for the biophysical profiling of the European agricultural system (Juan José Cadillo Benalcazar)

**17:30 – 18:00 Poster session**

**18:00 – 19:00 Networking Reception** (at the Monastery)



## Wednesday 19 June 2019

### 8:30 – 9:00h Registration

### 9:00 – 9:30h Theme 4: Policy responses

(Theme leaders: Jorge Ventocilla, Onno Knol and Györgyi Bela)

The achievement of any post 2020 biodiversity targets as part of an EU Strategy will require sound policies and their implementation, in order for it to be effective. This session will look at:

- What has worked and didn't work in the current EU strategy for biodiversity and ecosystem services?
- What new policy responses are needed?
- How could the scientific community contribute?
- What are the research needs, required to inform evidence-based policy for the next 10 years?
- How can the new European biodiversity strategy also contribute to the realisation of the SDGs in Europe and globally?
- How can the EU play a leadership role in the new CBD-post 2020 global biodiversity framework that will be agreed in 2020?

### 9:00- 9:30h Plenary keynote: Introduction to Theme 4

Democratizing biodiversity expertise: diversity and pluralism at the science – policy – society interface (Esther Turnhout)

### 9:30 – 11:00h Parallel workshops on Theme 4

#### Workshop 1: Innovations in biodiversity policy (Onno Knol)

Speakers:

- Policy streamlining for biodiversity and ecosystem services (Lawrence Jones-Walters and Rob Bugter)
- Is science responsive to policy, and policy responsive to science? (Theo vander sluis)
- Setting regional conservation targets in relation to a changing climate and environment (Maud Raman)
- Metrics and tools for evaluating ecological representation in the Natura 2000 network (Kerstin Jantke)
- Is Natura 2000 large enough? - Evaluating and improving the European Union's nature protection network towards current and potential post-2020 biodiversity representation targets (Anke Müller)

### **Workshop 2: Freshwater and Wetlands (Charles van Rees)**

Speakers:

- Ecosystem-based management planning across aquatic realms at a coastal socio-ecologic Natura 2000 territory (Ana Isabel Lillebø)
- Introducing ecosystem services and biodiversity into management planning with the River Ecosystem Service Index (RESI) (Martin Pusch)
- European leadership in the Mediterranean – does it stop at the borders? (Ilse Geijzenborffer)
- Conservation and large-scale restoration of wetlands is key for future nature and climate change policies in the EU (Kris Declerck)
- Time for action: EU conservation policy needs a boost as 2020 nears (Virgilio Hermoso)
- Salt marsh Blue Carbon storage and plants biodiversity: spatio-temporal changes due to environmental and anthropogenic drivers (Ana I. Sousa)

### **Workshop 3: Green Infrastructure (Francis Turkelboom)**

Speakers:

- Green Infrastructure: How to brand the need for green infrastructure? (Wouter Van Reeth & Anik Schneiders)
- Feedback from a systematic review on the role of verges of transport infrastructure as habitat and corridor for fauna (Sylvie Vanpeene)
- Nature Outlook 2050: different perspectives on green infrastructure? (Helen Michels)
- How to manage multifunctionality - The European concept of Green Infrastructure (Marion Mehring)
- Social aspects of Green Infrastructure governance: role of stakeholder analysis and social valuation of ecosystem services (Monika Suskevics)
- Protecting nature: The zero-sum game or surfing the waves? (Francis Turkelboom)

### **Workshop 4: Monitoring, indicators and implementation (Jorge Ventocilla)**

Speakers:

- Re-conceptualising monitoring and evaluation for post-2020 Biodiversity strategy (Kerry Waylen)
- Exploring linkages between biodiversity indicators through network analysis (André Mascarenhas)
- Enforcing the Biodiversity Strategy through legal action (An Cliquet)
- Drivers of Conservation Success in the EU – identifying the main success factors underpinning the protection of species and habitats under the EU nature directives (Gustavo Becerra Jurado)

**Workshop 5: The policy implications of citizen science. How citizen science could support better policy formulation, implementation and assessment (Györgyi Bela and Miklos Ban)**

Speakers:

- Incorporation of the My Natura 2000 citizen science mobile application into biodiversity related assessments in Hungary (Györgyi Bela)
- "Sharing is nice." Community consequences of self organised collections of biodiversity data in Central and Eastern Europe: the role of citizens, professionals and open tools (Miklos Ban)

**11:00 – 11:30h Coffee break**

**11:30 – 13:30 Plenary session**

**Reporting back from the workshops of the 4 themes, including discussions.**

**13:30 – 14:30h Lunch**

**14:30 – 16:30 Plenary session (facilitated by Juliette Young)**

**14:30 – 16:10: Plenary keynotes and discussion on the contributions to the future of the European Biodiversity Strategy: Key Messages from the scientific community**  
(by Frédéric Gosselin, Anne Gerdien Prins and Alan Watt)

**14:30-14:50: Keynote: Societal Engagement Key Messages** (Liisa Varumo)

**14:50-15:10: Keynote: Scientific Key Messages** (Frédéric Gosselin)

**15:10- 16:00: Discussion of the proposed Key Messages and formulation of new messages in preparation for the Post 2020 Biodiversity Strategy in Europe.**

**16:00 Closing of the conference**

## What is ALTER-Net ?

ALTER-Net, also known as Europe's Ecosystem Research Network, brings together 24 leading scientific institutes from 16 European countries. They share the goal of integrating their research capability to assess changes in biodiversity, analyse the effect of those changes on ecosystem services and inform the public and policy makers on the issues at a European scale. Originally funded by the European Union's Framework VI programme to stimulate a collaborative approach, ALTER-Net is presently operating independently. Today's consortium partners are:

- Biology Centre, Academy of Sciences of the Czech Republic (BC-CAS) (Czech Republic)
- Centro de Estudos do Ambiente e do Mar (CESAM) (Portugal)
- Ecological and Forestry Application Research Centre (CREAF) (Spain)
- Danish Centre for Environment and Energy, Aarhus University (DCE) (Denmark)
- Delbaere Consulting (DC) (The Netherlands)
- Department of Systems Ecology, University of Bucharest (UNIBUC) (Romania)
- Environmental Social Science Research Group (ESSRG) (Hungary)
- Environment Agency Austria / Umweltbundesamt (EAA) (Austria)
- European Regional Centre for Ecohydrology under the auspices of UNESCO, International Institute of the Polish Academy of Sciences (ERCE-UNESCO) (Poland)
- Helmholtz Centre for Environmental Research (UFZ) (Germany)
- Institute of Life, Earth and Environment, University of Namur (ILEE) (Belgium)
- Institut de Recherche en Sciences et Techniques pour l'Environnement et l'Agriculture (Irstea) (France)
- Institute for Social-Ecological Research (ISOE) (Germany)
- Institute of Agricultural and Environmental Sciences of Estonian University of Life Sciences (IAES) (Estonia)
- Institute of Landscape Ecology, Slovak Academy of Sciences (ILE-SAS) (Slovakia)
- James Hutton Institute (JHI) (United Kingdom)
- Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB) (Germany)
- MTA Ökologiai, Institute of Ecology and Botany, Hungarian Academy of Sciences (MTA OK) (Hungary)
- NERC Centre for Ecology & Hydrology (NERC-CEH) (United Kingdom)
- Netherlands Environmental Assessment Agency (PBL) (the Netherlands)
- Norwegian Institute for Nature Research (NINA) (Norway)
- Research Institute for Nature and Forest (INBO) (Belgium)
- Swedish University of Agricultural Sciences (SLU) (Sweden)
- The Finnish Environment Institute (SYKE) (Finland)
- Wageningen Environmental Research (WENR) (the Netherlands)

For more information, visit [www.alter-net.info](http://www.alter-net.info)

If you consider consortium partnership, please contact: [tessa.vansanten@inbo.be](mailto:tessa.vansanten@inbo.be)

## What is EKLIPSE ?

EKLIPSE is a very unique Horizon2020 project; it is setting up a permanent European Science-Policy-Society interface on biodiversity related issues. Its vision is to create a self-sustained, flexible, durable but innovative, challenging but ethical, mechanism for evidence-informed decision-making affecting biodiversity and ecosystem services in Europe. The project partners are:

- NERC Centre for Ecology and Hydrology (NERC-CEH)
- Helmholtz Centre for Environmental Research (UFZ)
- Finnish Environment Institute (SYKE)
- Royal Belgian Institute of Natural Sciences (RBINS)
- Institut für sozial-ökologische Forschung (ISOE)
- Fondation pour la Recherche sur la Biodiversité (FRB)
- Environmental Social Science Research Group (ESSRG)
- Foundation for Applied Information Technology in Environment, Agriculture and Global Changes (TIAMASG)
- Centro Interdisciplinar de Investigação Marinha e Ambiental - Universidade do Porto (U.PORTO)
- University of East Anglia (UEA)

For more information, visit: <http://www.eclipse-mechanism.eu/home>