

The EU Biodiversity Strategy beyond 2020

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

A conference organized by ALTER-Net and EKLIPSE

**Augustinian Monastery, Ghent, Belgium
17 – 19 June 2019**

Programme



Monday 17 June 2019

11:00-13:30h Registration

12:00-13:30h Lunch

12:30 - 13:30h Possibility to exchange interest for collaboration on future/upcoming calls (Led by **Mart Klvik**, Estonian University of Life Sciences, Estonia) (Room Monika)

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**, Research Institute for Nature and Forest (INBO), Belgium)

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**, Federal Public Service for the Environment, Belgium; National Focal Point for the Convention on Biological Diversity -)
- IPBES European and Central Asia Assessment) (**Mike Christie**, Aberystwyth University, UK; co-author ECA Assessment)
- The IPBES Global Assessment: transformative change for biodiversity conservation) (**Ingrid Visseren-Hamakers**, Radboud University, The Netherlands; co-author Global Assessment)
- Contribution to the post-2020 EU Biodiversity Strategy: the viewpoint from research programmers and funders (BiodivERsA) (**Hilde Eggermont**, Belgian Biodiversity Platform)

15:40-16:10h Coffee break

16:10-17:50h Continuation of introductory plenary session
(Room Augustinus)

Keynotes:

- Looking for evidence-based policy proposals – focusing on wetlands (**Tobias Salathé**, Ramsar Bureau)
- The Convention on Migratory Species, its Family of Agreements and the EU Biodiversity Strategy (**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)

18:15-20:15h 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 Lillebø**, Centro de Estudos do Ambiente e do Mar (CESAM), Portugal)

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**, IRSTEA, France);
2. Introduction to the societal 'Key Messages' (**Mari Carmen Garcia Mateo**, MCG Research & Innovation Sustainability Architecture/Urban Planning, Spain)

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

(Theme leaders: **Sonja Jähnig** (Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB), Germany, **Ute Jacob** (Helmoltz Institute for Functional Marine Biodiversity (HI FMB), Germany and **Ana Isabel Lillebø** (CESAM, Portugal)

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 Keynote: Introduction to Theme 1

Keynote: Imagining positive futures for nature in a co-creative process – the new IPBES scenario's on nature (**Machteld Schoolenberg** – PBL Netherlands Environmental Assessment Agency)

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** (IRSTEA, France), **Sonja Jähnig** (IGB, Germany) and **Alan Watt** (NERC – Centre for Ecology & Hydrology, CEH, UK))

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: Probable changes in nature: climate and phenology (**Stephen Thackeray**, Centre for Ecology and Hydrology, CEH, UK)

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

Workshop 1: Expected changes in freshwater biodiversity

(Chairs: **Astrid Schmidt-Kloiber**, University of Natural Resources and Life Sciences, Austria and **Koen Martens**, Royal Belgian Institute of Natural Sciences, RBINS, Belgium)

Speakers:

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

Workshop 2: Expected changes in biodiversity and the policy challenge

(Chair: **Philip Roche**, IRSTEA, France)

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 Isabel 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

(Chair: **Liisa Varumo**, Finnish Environment Institute, SYKE, Finland)

No speakers, only discussion groups.

15:00-15:30h Coffee break

15:30-17:30h Theme 3: New relationships

(Theme leaders: **Jiska van Dijk** (Norwegian Institute for Nature Research, NINA, Norway), **Philip Roche** (IRSTEA, France) and **Eszter Keleman** (ESSRG, Hungary))

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 identify 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 Keynotes: introduction to Theme 3

Keynote 1: Recognizing the individual animal in biodiversity governance and sustainable development. (**Ingrid Visseren-Hamakers**, Radboud University, The Netherlands)

Keynote 2: Re-diversifying agri-food system in Europe legumes as agents of change (**Pete Iannetta**, James Hutton Institute (JHI), UK).

16:00-17:30h Parallel workshops on Theme 3

Workshop 1: Understanding human-freshwater biodiversity relationships

(Chair: **Gregor Kalinkat**, Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB), Germany)

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

(Chairs: **Wessel Ganzevoort** (Radboud University, NL), **Riyan van den Born** (Radboud University, NL) and **Thomas Mattijssen** (Wageningen Economic Research, NL).

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

(Chairs: **Luc Janssens de Bisthoven** (Royal Belgian Institute for Natural Sciences), **Jean Hugé** (UCL, Leuven University and Hasselt University, Belgium) and **Maarten Vanhove** (Hasselt University, Belgium)

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

(Chairs: **Philip Roche** (IRSTEA, France) and **Jiska van Dijk** (NINA, Norway)

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**)

17:30-18:00h Poster session

18:00-19:00h Networking Reception (at the Monastery)

Wednesday 19 June 2019

8:30-9:00h Registration

Facilitator for the day: Juliette Young, NERC Centre for Ecology & Hydrology, CEH, UK.

9:00-9:30h Theme 4: Policy responses

(Theme leaders: **Jorge Ventocilla** (Royal Belgian Institute for Natural Sciences, RBINS), **Onno Knol** (PBL Netherlands Environmental Assessment Agency) and **Györgyi Bela** (Environmental Social Science Research Group, ESSRG, Hungary))

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 Keynote: Introduction to Theme 4

Keynote: Democratizing biodiversity expertise: diversity and pluralism at the science – policy – society interface (**Esther Turnhout**, Forest & Nature Conservation Policy Group, Wageningen University, The Netherlands)

9:30-11:00h Parallel workshops on Theme 4

Workshop 1: Innovations in biodiversity policy

(Chair: **Onno Knol**, PBL Netherlands Environmental Assessment Agency)

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

(Chair: **Charles van Rees**, Estacion Biologica De Donana, Spain)

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 Geijzendorffer**)
- Conservation and large-scale restoration of wetlands is key for future nature and climate change policies in the EU (**Kris Decler**)
- Time for action: EU conservation policy needs a boost as 2020 nears (**Virgilio Hermoso**)

Workshop 3: Green Infrastructure

(Chair: **Francis Turkelboom**, Research Institute for Nature and Forest, INBO, Belgium))

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

(Chair: Jorge Ventocilla, Royal Belgian Institute for Natural Sciences, RBINS, Belgium)

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

(Chairs: Györgyi Bela (Environmental Social Science Research Group, ESSRG, Hungary) and **Miklos Ban**, University of Debrecen, Dept. of Evolutionary Zoology, Hungary)

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

14:30-16:30h Plenary session (facilitated by **Juliette Young**, NERC Centre for Ecology & Hydrology, CEH, UK)

14:30-16:10h Plenary keynotes and discussion on the contributions to the future of the European Biodiversity Strategy: Key Messages from the scientific community
(co-ordinated by **Frédéric Gosselin** (IRSTEA, France) , **Anne Gerdien Prins** (PBL Netherlands Environmental Assessment Agency) and **Allan Watt**, NERC Centre for Ecology & Hydrology, CEH, UK)

14:30-14:50h Keynote: Societal Engagement Key Messages (**Mari Carmen Garcia Mateo**, MCG Research & Innovation Sustainability Architecture/Urban Planning, Spain)

14:50-15:10h Keynote: Scientific Key Messages (**Frédéric Gosselin**, IRSTEA, France)

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

16:00h 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

If you consider consortium partnership, please contact: *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>