



Digital Conference
Biodiversity and Human Well-Being – Europe’s Role in Shaping Our Future
November 9th – 11th, 2022

Organized by FEaA
**(BMBF Forschungsinitiative zum Erhalt der Artenvielfalt/
BMBF Research Initiative for the Conservation of Biodiversity)**

Organizing-Committee: Volker Mosbrugger, Bernhard Misof, Josef Settele,
Christine Fürst, Johannes Vogel, Markus Fischer, Christian Wirth,
Julian Taffner, Philipp Sprenger, Vladimir Gross

Aims of the conference:

It is another inconvenient truth that the Aichi Biodiversity Targets 2011-2020 “living in harmony with nature” were completely missed and that the dramatic species loss of our times continues unchanged. High expectations are therefore linked to the “Post-2020 Global Biodiversity Framework (GBF)”. However, time is running out, as two years in this COP-15 process have already been lost by Corona compared to the original planning. The existing draft of the negotiations gives hope, but it remains open whether the final COP-15 negotiations, after three postponements now scheduled for December 2022, will finally lead to a timely conservation and sustainable use of biodiversity as the basis of our life. There is no doubt: we need action now! To demand exactly this, thousands of representatives from diverse disciplines of science, society and economy worldwide turned recently towards national and international leaders, in open letters, public statements, or policy briefs (e.g. [“A letter to fellow citizens of Earth”](#), [“Berlin Declaration”](#), [“Scientists warning Europe”](#), [“Business for Nature’s Call to Action”](#)).

In this global context, the EU is having the chance to lead the way, not least with its ambitious major project "Green Deal": "The European Green Deal should contribute to improving the well-being of citizens. Creating a climate-neutral Europe and protecting our natural habitat will have a positive impact on people, the planet and the economy. No one will be left behind". This approach is in the tradition of IPBES: "We cannot solve the threats of human-induced climate change and loss of biodiversity in isolation. We either solve both or we solve neither." (R. Watson, IPBES 2019).

But: Can we pin our hopes on the post-2020 GBF and the European Green Deal when all previous efforts and programs to conserve nature have failed so far to stop biodiversity loss?

What is the reason for this failure of previous concepts and activities to preserve biodiversity? What can we learn from this, what can and must be done to reverse the trend? How can we assure the effective implementation of the intended goals?

The comprehensively **transdisciplinary** conference "Biodiversity and Human Well-Being - Europe's Role in Shaping Our Future" will address these questions from a European perspective and against the background of the European Green Deal and the available draft of the Post-2020 Global Biodiversity Framework:

- **Lessons learnt and not learnt:** challenges, opportunities and risks of the Post-2020 Global Biodiversity Framework and the European Green Deal
- **Successful Transformations:** Innovative concepts, options for action and best-practice examples from the European area for system solutions that overcome conflicting goals and allow the protection and sustainable use of biodiversity
- **Synergies:** Europe-wide networking of promising activities and their stakeholders

These thematic priorities are also intended to ensure that the ambitious German "Research Initiative for the Conservation of Biodiversity" ([FEEdA](#))

- sees, positions and promotes itself as part of the global and European biodiversity framework,
- networks with successful European initiatives and actors, combining knowledge, efforts and ambitions.

Program (Short Version): All times in the program are CET (UTC+1)

Due to the Corona pandemic, busy schedules and unforeseeable necessities (UNFCCC COP 27, CBD COP 15, Ukraine/energy crisis etc.) changes to the program may be possible at short notice.

Day 1, Nov. 9, 2022 (09:00 – 13:00)

Moderation: Dr. Tanja Busse

09:00 Opening Ceremony and Welcome

- Prof. Dr. Volker Mosbrugger (Spokesman of FEEdA, Senckenberg Society for Nature Research, Germany): Introduction to the Conference
- Mario Brandenburg (Parliamentary State Secretary, German Federal Ministry of Education and Research): Welcome Address
- Prof. Dr. Eystein Jansen (Member of the ERC Scientific Council, University of Bergen, Norway): Welcome Address

09:30 Keynotes

- Virginijus Sinkevičius (European Commissioner for Environment, Oceans and Fisheries)
"The European Green Deal"
- Dr. Humberto Delgado Rosa (Director for Biodiversity, DG Environment, European Commission)
"The EU Biodiversity Strategy to 2030: Context, Achievements, Risks and Expectations"

10:00 Plenary Workshop 1 – Part 1: *"Lessons learnt and not learnt: The Post-2020 Global Biodiversity Framework, the European Green Deal and Business"*

- Prof. Dr. Josef Settele (IPBES Global Assessment Co-Chair; Helmholtz Centre for Environmental Research – UFZ, Germany) & Prof. Dr. Markus Fischer (IPBES Europe and Central Asia Assessment Co-Chair; University of Bern, Switzerland)
"From IPBES to CBD"
- Christian Heller (CEO, Value Balancing Alliance, Germany)
"Risk – Return – Impact: The new Business Doctrine"

11:00 Coffee Break

11:15 Plenary Workshop 1 – Part 2: *"Lessons learnt and not learnt: The Post-2020 Global Biodiversity Framework, the European Green Deal and Business"*

- Prof. Dr. Martina Brockmeier (President, Leibniz Association, Germany)
"Biodiversity Research and the Science System"
- Prof. Dr. Ingrid Visseren-Hamakers (Radboud University, the Netherlands)
"The Urgency of Transforming Biodiversity Governance"

12:15 Summary of the Day

- Prof. Dr. Alexandra Klein (University of Freiburg, Germany)

12:30 Networking-Event & Lunch

Side Events Day 1, Nov. 9, 2022:

Side Event 1 (13:30 – 15:00)

Moderation: Dr. Tanja Busse, Organisation: Dr. Thomas Jahn

13:30 [Stakeholder Forum](#)

Keynote:

- Frédéric Lemaître (Science-Policy-Society Interface Manager, BiodivERSA)

Panel Discussion:

- Prof. Dr. Veronika von Messling (Director-General for Life Sciences, German Federal Ministry of Education and Research)
- Georg Hoffmann (Sustainability Manager, Alfred Ritter GmbH & Co. KG, Germany)
- Edwin Ogar (Program Coordinator, Wise Administration of Terrestrial Environment and Resources (WATER), Nigeria)
- Dr. Alexandra Lux (ISOE – Institute for Social-Ecological Research, Germany)

Side Event 2 (14:00 – 16:45; only invited participants)

Organisation: Prof. Dr. Nina Farwig

14:00 **Internal Synthesis Workshop**

“Reaching Biodiversity Targets: Lessons to be Learned from Conservation Programs”

Day 2, Nov. 10, 2022 (09:00 – 13:45 and evening program)

Moderation: Emily Whigham

09:00 Welcome and Introductions to Workshops 2a and 2b by the Chairpersons

- Prof. Dr. Vassiliki Kati (University of Ioannina, Greece)
- Dr. Lynn Dicks (University of Cambridge, United Kingdom)

09:15 Parallel Workshops on “Successful Transformations and System Solutions I”

Workshop 2a: [The Biodiversity-Energy Nexus or Solving the Green-Green Conflict](#)

- Prof. Dr. Vassiliki Kati, Dr. Finn Rehling, Prof. Dr. Jürgen Geist, Hannah Montag

Workshop 2b: [Conserve Biodiversity, Protect Health, Ensure Food Security](#)

- Dr. Lynn Dicks, Prof. Dr. Urs Niggli, Hien Ngo, Julia Heinz

10:45 Coffee Break

11:00 Introductions to Workshops 3a and 3b by the Chairpersons

- Prof. Dr. Mariana Meerhoff (Universidad de la República de Uruguay)
- Dr. Stefanie Eichiner (Chairwoman, Biodiversity in Good Company)

11:15 Parallel Workshops on “Successful Transformations and System Solutions II”

Workshop 3a: [Aquatic Biodiversity and People - Challenges and Opportunities](#)

- Dave Tickner, Dr. Astrid Schmidt-Kloiber, Dr. Ángel Borja, Twan Stoffers

Workshop 3b: [Conserving Biodiversity – The Role of Economy and the Private Sector](#)

- Martin Lok, Dr. Stefanie Eichiner, Adrien Portafaix, Charlott Hübner

12:45 Funding Opportunities

- Dr. Frank Dreger (NCP Bioeconomy and Environment, Project Management Jülich, Germany):
“European Funding Opportunities for Biodiversity (Horizon Europe)”

13:00 Summary of the Day

- Dr. Marion Mehring (ISOE – Institute for Social-Ecological Research, Germany)
- Prof. Dr. Bernd Hansjürgens (Helmholtz Centre for Environmental Research – UFZ, Germany)

13:15 Networking-Event & Lunch

20:00 Digital Social Event: “FEaA Science Slam – Clear the Stage for Biodiversity!”

- Competition with contributed Science Slams
- Dr. Sebastian Lotzkat (Professional Science Slammer)

Side Event Day 2, Nov. 10, 2022:

Side Event 3 (14:30 – 16:00)

Moderation: Dr. Amber Scholz, Organisation: Prof. Dr. Jörg Overmann

14:30 **Workshop:** [Digital Sequence Information](#)

“The increasing significance of digital sequence information for a successful construction and implementation of the Global Biodiversity Framework”

Keynote:

- Prof. Dr. Jörg Overmann (Scientific Director, DSMZ-German Collection of Microorganisms and Cell Cultures, Germany)

Panel Discussion:

- Prof. Dr. Bernhard Misof (Director, Leibniz Institute for the Analysis of Biodiversity Change, Germany)
- Prof. Dr. Dirk Steinke (Centre for Biodiversity Genomics, University of Guelph, Canada)
- Dr. Kim Pruitt (National Centre for Biotechnology Information – NCBI, USA)

Day 3, Nov. 11 (09:00 – 15:00)

Moderation: Dr. Tanja Busse

09:00 Welcome and Introductions to Workshops 4a and 4b by the Chairpersons

- Prof. Dr. Bernhard Misof (Director, Leibniz Institute for the Analysis of Biodiversity Change, Germany)
- Dr. Tobias Schulz (Swiss Federal Institute for Forest, Snow and Landscape Research - WSL)

09:15 Parallel Workshops on “Successful Transformations and System Solutions III”

Workshop 4a: [Society – How to Live in Harmony with Biodiversity](#)

- Prof. Dr. Berta Martín-López, Prof. Dr. Diana Mangalagiu, Edwin Ogar, Dr. Gisela Wachinger

Workshop 4b: [Is Governance the Key in Preserving Biodiversity?](#)

- Prof. Dr. Martin Quaas, Prof. Dr. Insa Theesfeld, Dr. Tobias Schulz, Dr. Marion Mehring

10:45 Coffee Break

11:00 Plenary Workshop 5: “Horizon Scanning – Challenges for the Future”

- Prof. Dr. Mark Chesney (Professor of Quantitative Finance, Zurich University, Switzerland)
“The Current Financial Sector is Incompatible with Biodiversity Protection”
- Prof. Dr. Bram Büscher (Professor for the Sociology of Development and Change, Wageningen University and Research, the Netherlands)
“Saving Biodiversity in a World on Fire: Towards a Convivial Alternative”
- Eckardt M.P. Dauck (Chairman, Impact Building Solutions Foundation, Uganda)
“Zero Carbon Buildings with Straw - a Sustainable Solution for Africa and Beyond!”
- Marvin Huber (Advisory Board, European Youth Parliament, Austria)
“Youth & Science: The Amplifiers of Reason”

13:00 Networking Event & Lunch

14:00 Concluding Discussion

- Prof. Dr. Katrin Böhning-Gaese (Senckenberg Biodiversity and Climate Research Centre – SBIK-F, Germany)

15:00 End

Detailed Program for the Parallel Workshops: Successful Transformations and System Solutions

Workshop 2a: “The Biodiversity-Energy Nexus or Solving the Green-Green Conflict”

(Chairs: Prof. Dr. Christian Wirth, Prof. Dr. Vassiliki Kati)

Mankind faces two major threats to the stability and the well-being of our human societies, the climate and the biodiversity crisis. Human activities are predicted to lead to a climate warming of up to 4°C until 2100 under business as usual associated with an increase of the likelihood of experiencing climate extremes; they may also induce a loss of 1 million species by the end of the century. A recent IPBES workshop report emphasizes win-win effects of measures combatting the two crises, i.e. climate protection slowing biodiversity loss and biodiversity protection mitigating climate impacts. However, at the level of individual regional measures tradeoffs between climate and biodiversity protection may emerge – or in other words, the UN sustainable development goals (SDG) 7 (“Clean Energy”) and 13 (“Climate Action”) may compromise SDG 14 and 15 (“life below water” and “life on land”) by rapid expansion of renewable energy sources. Biofuel production and the construction of windfarms, hydropower plants, photovoltaic systems come with significant negative impacts on ecosystems and their biodiversity – sparking intense debates. These impacts can be direct, e.g. collision mortality of birds and bats, barriers to fish migration or deteriorating habitats by intense shading and rain-sheltering, or indirect by causing road sprawl, noise pollution or meso-climate alteration. This session presents and discusses advances in the development of new technologies as well as land-use and planning tools to alleviate the consequences of inevitable tradeoffs between clean energy production and biodiversity protection. Managing these tradeoffs well may help to prevent unnecessary pressures on biodiversity and futile conflicts from slowing us down on our way to reach the SDGs.

Workshop 2a (Day 2: 09:15 – 10:45)

09:15 **Talk 1**

- Prof. Dr. Vassiliki Kati (University of Ioannina, Greece)
“Where to Sit Windfarms? Resolving the Biodiversity-Windfarm-Road Nexus”

09:30 **Talk 2**

- Dr. Finn Rehling (Philipps-University Marburg, Germany)
“Wind Turbines in Managed Forests Partially Displace Common Birds”

09:45 **Talk 3**

- Prof. Dr. Jürgen Geist (Technical University of Munich, Germany)
“Effects of Hydropower Use on Freshwater Biodiversity”

10:00 **Talk 4**

- Hannah Montag (Clarkson & Woods Ltd., United Kingdom)
“The Ecology of Ground Mounted Solar Farms in the UK”

10:15 **Panel Discussion**

with the speakers (moderated by the chairs)

Workshop 2b: “Conserve Biodiversity, Protect Health, Ensure Food Security”

(Chairs: Prof. Dr. Johannes Vogel, Dr. Lynn Dicks /
Co-Organizers: Prof. Dr. Alexandra-Maria Klein, Dr. Nike Sommerwerk)

Biodiversity is the foundation of human health: humanity depends on healthy ecosystems for food and freshwater, biodiversity provides access to medicinal and genetic resources as to recreational opportunities, and biodiversity is an aesthetic and spiritual asset. Agriculture and food production have so far been faced with the dilemma of either achieving maximum yields through intensive cultivation on a small area, or cultivating in a more biodiversity-friendly way and on large areas with often lower yields. This can only be remedied if cultivation methods, production methods and consumer behavior change. The nexus between biodiversity, nutrition and human health is multi-faceted and requires interdisciplinary research to develop a deeper understanding of the essential connections. Important questions in this context are:

- What exactly do we know about the links between biodiversity, functional processes and human health and what do we not?
- How can biodiversity conservation, health and food supply goals be better integrated, i.e. thought and addressed together? What specific investments, incentives and efforts are needed, e.g. in the areas of technology research, education, voluntary commitment?

With this session, we are pursuing the clear goal of closing gaps in research, but also to provide policy advice, and are aiming for a joint position paper as a result.

Workshop 2b (Day 2: 09:15 – 10:45)

09:15 **Talk 1**

- Dr. Lynn Dicks (University of Cambridge, United Kingdom)
“What are the Impacts of Pollinator Decline on Human Well-Being?”

09:30 **Talk 2**

- Prof. Dr. Urs Niggli (Institute for Agroecology, Aarau, Switzerland)
“Incentives for Food and Farming Systems that Benefit Biodiversity”

09:45 **Talk 3**

- Hien Ngo (Biodiversity and Pollination Specialist, Regional Office for Latin America and the Caribbean, FAO)
“Scaling up and Scaling down and the Role of Science-Policy Interfaces in Nature Conservation”

10:00 **Talk 4**

- Julia Heinz (University of Applied Sciences Osnabrück, Wuppertal Institute, Germany)
“The Biodiversity Impact of Food: A Conceptual Framework for the Selection of Out-of-Home Catering Indicators”

10:15 **Panel Discussion**

with the speakers (moderated by the chairs)

Workshop 3a: “Aquatic Biodiversity and People – Challenges and Opportunities”

(Chairs: Prof. Dr. Sonja Jähnig, Prof. Dr. Mariana Meerhoff /
Co-Organizer: Prof. Dr. Markus Fischer)

Aquatic ecosystems and their biodiversity contribute manifold ecosystem services to people, providing food, materials, drinking water, irrigation; regulating flooding and climate; and contributing recreational and other non-material services. However, marine and freshwater ecosystems are under massive pressure and many of their species are threatened by extinction. Stress from “old” (such as overfishing, excess nutrients, agrochemical cocktails, other pollution, morphological degradation, invasive species and climate change) and “new” threats (including effects of novel pollutants, such as microplastics, pharmaceuticals and their degradation products, as well as their interaction with old and novel pollutants). Global as well as European biodiversity targets have been missed for marine and freshwater decade after decade. This persistent loss of aquatic biodiversity is happening below the surface in a double sense, often unnoticed by society, economy and politics. With this workshop we aim to highlight and discuss challenges, risks, and opportunities for the relationship of aquatic biodiversity and people. In this context new global, European and associated national regulations will be discussed. Crucial questions include how (a) to establish a coherent trans-European Nature Network, (b) to identify priority areas for conservation and restoration, (c) to achieve the objectives of the WFD, (d) how to make the use of aquatic ecosystems sustainable, and (e) to evaluate progress towards goals. We will further look at innovative concepts, options for action and best-practice examples from the European area for system solutions that overcome conflicting goals and allow the protection, promotion, and sustainable use of biodiversity. Moreover, we discuss synergies between marine and freshwater initiatives.

Workshop 3a (Day 2: 11:15 – 12:45)

11:15 **Talk 1**

- Dave Tickner (WWF, United Kingdom)
“Think like a River: What Scientists Should Do Differently to Save the World’s Freshwater Biodiversity”

11:30 **Talk 2**

- Dr. Astrid Schmidt-Kloiber (University of Natural Resources and Life Sciences Vienna, Austria)
“No Data, no Stride – On the Relevance of Freshwater Biodiversity Data”

11:45 **Talk 3**

- Dr. Ángel Borja (Marine and Coastal Environmental Management, AZTI, Spain)
“The Need of Healthy Ocean and Marine Biodiversity for Human Health and Well-Being”

12:00 **Talk 4**

- Twan Stoffers (Wageningen University and Research, the Netherlands)
“Restoring Floodplain Nurseries to Increase Fish Biodiversity is Not a “One-Size-Fits-All” Approach”

12:15 **Panel Discussion**

with the speakers (moderated by the chairs)

Workshop 3b: “Conserving Biodiversity – The Role of Economy and the Private Sector”

(Chairs: Prof. Dr. Volker Mosbrugger, Dr. Stefanie Eichiner /
Co-Organizer: Prof. Dr. Josef Settele)

Economy and the private sector, including bioeconomy in its broadest sense, are key factors in the development of human well-being and have played a decisive role in ensuring that the “Historical Index of Human Development” has risen substantially worldwide for more than 100 years: humanity is doing better than ever before! At the same time, economic activities are also the most important factor in the overexploitation of natural resources and natural capital and thus in the progressive destruction of the foundations of human life, including biodiversity. Therefore, economic actors, in particular the private sector, have a key role to play in preserving these livelihoods through a transformation to a sustainable economic model and in enabling the maintenance and further growth of human well-being. In fact, there are different ideas in science, economy and politics how this goal can be achieved, although in the European context there is broad agreement that this requires the transition from a mainly market-based economy to a social-ecologically driven economy. The session will critically discuss various proposals from business and academia on how this transformation could take place.

Workshop 3b (Day 2: 11:15 – 12:45)

11:15 **Talk 1**

- Martin Lok (Executive Director, Capitals Coalition, the Netherlands)
“Redefining Value Through a Radical Collaboration in an Interconnected Landscape”

11:30 **Talk 2**

- Dr. Stefanie Eichiner (Chairwoman, Biodiversity in Good Company)
“Business Know-How for Biodiversity: Insights from the ‘Biodiversity in Good Company’ Initiative”

11:45 **Talk 3**

- Adrien Portafaix (Associate Director in Social Impact Practice, Boston Consulting Group, France)
“Biodiversity Risk is a Business Risk”

12:00 **Talk 4**

- Charlott Hübel (Center for Sustainable Leadership - ZNU, University Witten/Herdecke, Germany)
“Business and Biodiversity - An Extended Framework for Managing Biodiversity Impacts”

12:15 **Panel Discussion**

with the speakers (moderated by the chairs)

Workshop 4a: “Society – How to Live in Harmony with Biodiversity”

(Chair: Prof. Dr. Bernhard Misof)

Our daily life does not necessarily offer apparent consequential impediments due to the loss of biodiversity. It is an obvious issue that the biodiversity crisis is hardly ever recognized and felt despite multiple and ambitious efforts of governmental and non-governmental organizations to change this. We are aware of starving polar bears or extreme droughts but do not draw the connection to our own personal future. Nor do we realize the clear interdependence of climate change, biodiversity crisis and human activities. We have to ask what can be done, in order to promote effective cultural transformations and nourish biodiversity awareness. We do have many grass root initiatives to raise an awareness of the dramatic effects of climate change and the biodiversity crisis on our well-being which are contrasted or counteracted by the logic of global political developments. In general, we can recognize a major uncertainty promoting or induced by ongoing cultural transformations. In order to understand and assume an active role in these cultural transformations for the good of biodiversity and our own personal future, it is vitally important to study these cultural transformations and develop clear ways of closing the knowledge action gap. The session will deal with these questions from a transformational stand point and will critically discuss diagnoses and potential solutions.

Workshop 4a (Day 3: 09:15 – 10:45)

09:15 **Talk 1**

- Prof. Dr. Berta Martín-López (Leuphana University, Germany)
“Relational Paradigms in Social-Ecological Research: Contributions for Living in Harmony with Nature”

09:30 **Talk 2**

- Prof. Dr. Diana Mangalagiu (Environmental Change Institute, University of Oxford, United Kingdom)
“The Role of Narratives in Reframing Human-Nature Relations and Cultural Transformations”

09:45 **Talk 3**

- Edwin Ogar (Program Coordinator, Wise Administration of Terrestrial Environment and Resources (WATER), Nigeria)
“Indigenous Knowledge of Nigeria’s Ekuri Community in Conservation of Biodiversity and Tackling Climate Change Crisis”

10:00 **Talk 4**

- Dr. Gisela Wachinger (DIALOGIK gGmbH, Germany)
“BioWaWi-Citizen Science: Monitoring Biodiversity by Use of Crowd-Sourced Sound Data”

10:15 **Panel Discussion**

with the speakers (moderated by the chair)

Workshop 4b: “Is Governance the Key in Preserving Biodiversity?”

(Chairs: Prof. Dr. Christine Fürst, Dr. Tobias Schulz)

The regional reports of the Intergovernmental Panel for Biodiversity and Ecosystem Services (IPBES) showcased a high diversity of governance instruments to protect and enhance biodiversity. For the region Europe-Central Asia (ECA), context-specific mixes of governance instruments that include legal and regulatory instruments, economic, financial, social and information-based instruments were considered to be effective to protect biodiversity. Further progress toward improved strategies for implementing subsidies in sectors such as agriculture and fisheries and more emphasis on rights-based instruments for building the capacities of local communities are recommendable.

Knowledge on BES is not yet available or not broadly perceived by many societal actors. Challenges consist in mainstreaming BES for more biodiversity-friendly policies and biodiversity governance. Grass-root initiatives, cooperatives among primary-producers or producer-consumer-alliances can be operationalized in support of regulative or financial governance instruments. Opportunities to contribute to biodiversity protection and enhancement of key ES by adjusted lifestyles and consumer behaviour are not sufficiently used. Participation in protecting biodiversity through own behaviour, through networking and contributing actively to initiatives, is still limited to few societal actors.

Coherence between environmental and sectoral policies and their specific governance is key. Biodiversity has multiple spatial dimensions of which only few are taken into account by existing policies. BES are not yet implemented as decision criteria in instruments for assessing the impact of policies, plans, programs or projects. Financial instruments (subsidies) from different sectors such as energy, agriculture or water might act as conflicting stimuli in how to manage natural resources in the most biodiversity-affine way, taking wind-power as example.

The aim of this workshop is to present and discuss the state and effectiveness of existing governance approaches, added-values from more coherent and smart policy and governance mixes, and open questions considering the future design and operationalization of a holistic biodiversity governance including multiple decision and intervention scales.

Workshop 4b (Day 3: 09:15 – 10:45)

09:15 **Talk 1**

- Prof. Dr. Martin Quaas (University of Leipzig, iDiv, Germany)
“Economic Instruments and Incentives”

09:30 **Talk 2**

- Prof. Dr. Insa Theesfeld (Martin-Luther-University Halle-Wittenberg, Germany)
“Tipping Points in the Governance Subsystem”

09:45 **Talk 3**

- Dr. Tobias Schulz (Swiss Federal Institute for Forest, Snow and Landscape Research - WSL)
“Success and Failure in Forest Biodiversity Conservation Governance”

10:00 **Talk 4**

- Dr. Marion Mehring (ISOE - Institute for Social-Ecological Research, Germany)
“Transformative Governance Instruments: Acceptance from Agriculture and Forestry - A Case Study from Germany”

10:15 **Panel Discussion**

with the speakers (moderated by the chairs)

Detailed Program for the Side Events:

Stakeholder Forum

(Chair: Dr. Thomas Jahn, Moderation: Dr. Tanja Busse)

The key topics of the stakeholder forum will be the questions "What do stakeholders add to scientific projects?" and "What do stakeholders expect and what is feasible?". The opening statement will be given by Frédéric Lemaître, who is Science-Policy-Society Interface Manager at BiodivERsA, and will be based on the BiodivERsA "Stakeholder Engagement Handbook". Following the opening, there will be a panel discussion of four high-level representatives each from politics, business, society and science. The leading questions will be as follows:

1. For what purposes do you look for stakeholders respectively scientific partners? (Reasons for participation in collaborative settings)
2. Are there any specific qualities or criteria you use to find a partner? (Formation of project team)
3. What role do you see for yourself as a partner of a collaborative project? (Reflection on shared responsibilities and legitimacy of results)

Side Event 1 (Day 1: 13:30 – 15:00)

13:30 Opening Statement

- Frédéric Lemaître (Science-Policy-Society Interface Manager, BiodivERsA)

13:45 Panel Discussion

- Prof. Dr. Veronika von Messling (Director-General for Life Sciences, German Federal Ministry of Education and Research)
- Georg Hoffmann (Sustainability Manager, Alfred Ritter GmbH & Co. KG)
- Edwin Ogar (Program Coordinator, Wise Administration of Terrestrial Environment and Resources (WATER), Nigeria)
- Dr. Alexandra Lux (ISOE – Institute for Social-Ecological Research, Germany)

14:45 Questions from the Audience

Workshop: Digital Sequence Information: “The Increasing Significance of Digital Sequence Information for a Successful Construction and Implementation of the Global Biodiversity Framework”

(Chair: Prof. Dr. Jörg Overmann, Moderation: Dr. Amber Scholz)

Any solution to the global biodiversity crisis needs to consider national sovereign rights and the need for effective benefit sharing. One major challenge is the access to Digital Sequence Information (DSI) and how to fairly share benefits from DSI. This key issue must be solved in order to reach an agreement during the ongoing international negotiations of the Global Biodiversity Framework (GBF). Different policy options have been put forward and are currently discussed, ranging from bilateral, to so-called “hybrid”, decoupled, and multilateral benefit-sharing approaches. Considering the scientific facts, the need for international collaboration, as well as the previous experience with the Nagoya Protocol, a multilateral approach may emerge as the most effective solution from the scientific perspective.

However, the political debate has so far largely centered around the alleged conflict between maintaining open access to DSI for the basic life sciences on the one hand, and tightly controlling the access to DSI in order to prevent biopiracy and ensure fair and equitable benefit sharing for the Global South on the other hand. It has thus been argued that the long-existing, highly successful open access database system for DSI may have to be abandoned for the sake of reaching a global agreement for the GBF. Yet, a central aspect that has not been considered sufficiently in the debate, is to which extent open access to DSI will actually be indispensable for the GBF and hence is simply mandatory. Sequence technologies continue to improve very rapidly, database contents are growing exponentially, and researchers experience an avalanche of bioinformatic tools and workflows. This has massively affected the use of DSI in biodiversity assessments, monitoring, ecosystem restoration, the control of invasive species, One Health, and ecosystem modeling. While biodiversity researchers agree on a generally decisive role of DSI for these key tasks, it is unclear what the specific consequences and implications of a restricted access to DSI would be.

The workshop seeks to provide scientific rationale to narrow down the broad spectrum of policy options and to pinpoint likely routes to the most efficient, practicable approach for sharing DSI and benefits. Furthermore, knowledge gaps and research requirements for DSI will be captured to support an efficient, effective, and DSI-empowered implementation of the Global Biodiversity Framework.

Side Event 3 (Day 2: 14:30 – 16:00)

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| 14:30 | Opening and Welcome <ul style="list-style-type: none">• Prof. Dr. Mosbrugger (Spokesman of FEEdA, Senckenberg Society for Nature Research, Germany) |
| 14:45 | Keynote Talk <ul style="list-style-type: none">• Prof. Dr. Jörg Overmann (Scientific Director, DSMZ-German Collection of Microorganisms and Cell Cultures, Germany) |
| 15:10 | Panel Discussion – open to audience
Leading questions: <ul style="list-style-type: none">• How can we enable both open access DSI as well as fair access and benefit sharing?• Which of the debated policy options can offer the best cost-benefit ratio, especially from a scientific point of view? |
| 15:50 | Conclusion – Remaining questions and closing of the workshop |