## BENDING THE CURVE OF BIODIVERSITY DECLINE FOR NATURE AND PEOPLE

Nature underpins our wellbeing and economies but we are pushing nature to the brink. How to provide a growing population with food, feed, fibre and fuel, while maintaining biodiversity and ecosystem integrity? This requires new thinking, values, actions and leadership.

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<th>Time</th>
<th>Event</th>
<th>Speaker(s)</th>
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<tr>
<td>09.00</td>
<td>Registration</td>
<td>Monique Grooten (WNF)</td>
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<td>09.15</td>
<td>Welcome &amp; opening</td>
<td>Kirsten Schuijt (CEO, WNF)</td>
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<td>09.30</td>
<td>Key findings from the 2018 Living Planet Report</td>
<td>Robin Freeman (ZSL)</td>
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<td>09.50</td>
<td>Putting the Living Planet Index in context</td>
<td>Pierro Visconti (IIASA)</td>
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<td>10.00</td>
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<td>10.15</td>
<td>Economy for the common good</td>
<td>Christian Felber (ECG)</td>
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<td>10.45</td>
<td>Coffee</td>
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<td>11.00</td>
<td>Break out sessions (the coloured dot on your badge tells you which room you are in)</td>
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<td>Making the case why nature matter: Convincing the inconvincible</td>
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<td>The economy for the common good: from theory to reality</td>
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<tr>
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<td>Future scenarios: Setting the scene</td>
<td>Detlef van Vuuren (UU)</td>
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<td>13.40</td>
<td>Exploring the impacts of land-use change on biodiversity</td>
<td>David Leclère (IIASA)</td>
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<td>14.00</td>
<td>A values approach</td>
<td>Klaas van Egmond (UU)</td>
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<td>14.15</td>
<td>Fairness and limits</td>
<td>Colin Hickey (UU)</td>
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<tr>
<td>14.30</td>
<td>Questions to the speakers</td>
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<td>14.45</td>
<td>Coffee break</td>
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<tr>
<td>15.00</td>
<td>Break out sessions (go to the same room as the morning)</td>
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<td>Fairness, limits and values</td>
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<td>Leadership for bending the curve (from policy and research)</td>
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<td>16.15</td>
<td>Return to plenary for wrap-up and closure</td>
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<td>16.30</td>
<td>Drinks reception</td>
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A bird’s eye view of the day

Nature underpins our wellbeing and economies. It provides food, feed, fibre, shelter and is the home of millions of other species than our own. The Living Planet Report paints a gloomy picture about the health of our planet. But is it possible to bend the curve of biodiversity decline? Can we restore in a generation what we have lost in one generation? What does that entail, what type of new thinking, values, actions and leadership will it require to halt further loss and restore nature in our rapidly changing world?

We are looking forward to a rich program that brings food for thought from different perspectives. In the breakout groups we will stimulate lively discussion about outcomes that inspire us, generating new ideas and setting priorities. How can everyone - researchers, policy and decision makers and businesses – become inspired to take action so that people and nature can thrive?

Marieke Harteveld, the Chief Conservation Officer at WNF, will chair the morning session, focused on Making the case for people and nature.

Our first two speakers will draw on the 2018 Living Planet report and their own research to explore this.

Robin Freeman is the Head of Indicators and Assessments Unit, Zoological Society of London and he will provide a bird’s eye view of the Living Planet Report, particularly focusing on using trends in the Living Planet Index to track changes in biodiversity and the need to ‘aim higher’ when setting future biodiversity goals and targets.

Piero Visconti is now based at the International Institute for Applied Systems Analysis (IIASA), Vienna, Austria and he will put the Living Planet Index in a broader context and look at trends in indicators tracking trends in other facets of biodiversity

Christian Felber will then will present his thinking and use his experience as the founder of the Economy for the Common Good and author of a.o. ‘Change everything’, to catalyse a discussion about how to create more ethical economic model in which the wellbeing of people and the environment become the ultimate goal of businesses.

The audience will be divided into four breakout groups and will explore two topics related to these talks - making the case for nature and economies for the common good – and how these will work is explained on the next page.

After lunch, we will change our perspective to Looking ahead: Future scenarios, fairness and limits, and the talks will be chaired by Dascha During, a Lecturer at the Department of Philosophy and Religious Studies at the University of Utrecht.

What does the future hold? This is not only a question about how biodiversity is changing but also about putting those trends in context by using models to run different scenarios – future pathways – which combine together the best available scientific, indigenous and local knowledge in order to support decision-making.

Detlef van Vuuren, Professor at Utrecht University and David Leclère, a Research Scholar at the International Institute for Applied Systems Analysis (IIASA), Vienna, Austria will help us to think about how these models are created and building different scenarios related to climate change, development pathways and the impacts of our choices about how much and what we consume.

The last two speakers of the day will explore concepts related to fairness and limits. In a future where we bend the curve of biodiversity loss and create pathways that enable us to sustainably use and equally share scarce resources, what can be considered as ‘fair’ in a world that has ecological limits (carrying capacity) and what implications does that have for our value base? These challenging questions go beyond the technical solutions and modeling approaches to consider our values and our personal leadership.

Klaas van Egmond is Emeritus Professor of Environmental Science and Sustainability at the Utrecht Sustainability Institute, at the University of Utrecht. During his talk, he will provide a value based perspective and draw on his a long career in different roles in research and government as director of the Netherlands Environmental Assessment Agency (formerly known as MNP) and as a royal member – a government representative - on the National Socio-Economic Council (SER).

Colin Hickey is a postdoctoral researcher on the Fair Limits project at Utrecht University and he will use his research on moral and political philosophy, climate ethics, global justice, and bioethics to further unpack the concepts of fairness and limits in the context of sustainability.

The breakout sessions will build on the themes of these talks by discussing fairness and limits and the research, policies and personal leadership needed to bend the curve of biodiversity loss.
Break-out sessions

For the break-out sessions:
- Everyone will be divided into four groups, each with around 25 people in it.
- A colour dot will be added to their name badge and these will tell them which room to go to.
- To give everyone a chance to talk about all four topics, each hour will be divided into two 30 minute slots.
- People will therefore cover two topics in the morning and two in the afternoon.
- The facilitators and ‘experts’ will move between rooms and the participants will stay in the same place.

The groups are shown on the next page and each one will have:
- A facilitator, who will chair the discussion.
- One or two people who work in that area – ‘experts for shorthand’ to help stimulate the discussion.
- A note-taker (students), who will then write up the key conclusions from the discussion to feed in paper.

The starting point for all the discussions is to ask:

1) What are the gaps in what we know about this area?
2) What are the burning questions that need to be addressed and actions to be taken to bend the curve – for policy, business and individuals?

When we were putting this agenda together, some questions which sprang to our mind are these but they are not set in stone:

- **Making the case why nature matters**: With all the information we have and all the insights, why is it so difficult to change the role of nature from a ‘nice to have’ to an integral part of our day-to-day life? When thinking about how to approach this, we can fall into a trap of preaching to the converted – those who are already interested and willing to change – so how do we convince the inconvincible?

- **Economy for the common good**: What does an economy for the common good mean in practice for businesses and can science-based target setting help make progress towards this goal?

- **Fairness, limits and values**: In a future where we are bending the curve of biodiversity loss and create pathways that enable us to sustainably use and equally share scarce resources, what can be considered as ‘fair’ in a world that has ecological limits (carrying capacity) and what are the implications for our value base?

- **Leadership for bending the curve**: What leadership is required for bending the curve – from researchers and from policymakers?

Although pairs of discussions have the same or similar titles – for example two in the morning are about making the case for nature – each group will naturally explore different aspects of it, depending on what areas the facilitators and the ‘experts’ are interested in.

**Output**

The output from the workshop will be a ‘think piece’ drawing on key conclusions and questions generated over the course of these discussions. Depending on the final output, we could consider to publish this via a website or to develop it into the format of a paper to be submitted to a scientific journal.
### Break-out groups

#### Morning: Making the case for people and nature

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<tr>
<th>Time</th>
<th>Green Room</th>
<th>Yellow Room</th>
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| **Session 1** | 11:00 – 11:30 | Making the case for why nature matters.  
Facilitator: Pita Verweij  
David Leclère | Economy for the common good: Taking a landscape perspective  
Facilitator: Jerry van Dijk  
Sarah Doornbos |
| **Session 2** | 11:30 – 12:00 | Economy for the common good: Taking a landscape perspective  
Facilitator: Jerry van Dijk  
Sarah Doornbos | Making the case for why nature matters  
Facilitator: Pita Verweij  
David Leclère |

#### Afternoon: Looking ahead – future scenarios, fairness and limits

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<th>Time</th>
<th>Green Room</th>
<th>Yellow Room</th>
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| **Session 1** | 3:00 – 3:30 | Fairness, limits and values  
Facilitator: Jos Philips  
Detlef van Vuuren & Pita Verweij | Policy leadership to bend the curve  
Facilitator: Jolande van der Veen  
Klaas van Egmond |
| **Session 2** | 3:30 – 4:00 | Policy leadership to bend the curve  
Facilitator: Jolande van der Veen  
Klaas van Egmond | Fairness, limits and values  
Facilitator: Jos Philips  
Detlef van Vuuren & Pita Verweij |

#### Note-takers

**Thomas Arévalo Valderrama**, an MSc student in Environmental Biology at the University of Utrecht  
**Loes Verkuil**, an MSc student in Environmental Biology at the University of Utrecht (morning only)  
**Savriel Dilling**, a student on the Masters in Applied Ethics course at the University of Utrecht  
**Lotte Welling**, a student on the Masters in Applied Ethics course at the University of Utrecht  
**Manon van Balen**, a student on the Masters in Applied Ethics course at the University of Utrecht  
**Vincent De Leijster**, a PhD researcher at the Copernicus Institute of Sustainable Development
## Biographies of the speakers and chairs of each session

### Making the case for people and nature

#### Robin Freeman

Head of Indicators and Assessments Unit, Zoological Society of London

Robin’s research spans many disciplines from understanding the status and trends of global biodiversity, the creation of new kinds of technology for monitoring and tracking animals in the wild, to remote fieldwork utilising those technologies and new methods for analysing and interpreting the data we are now able to collect. He currently leads the development of the Living Planet Index, first published in the Living Planet Report in 1998. In collaboration with Microsoft Research, he also launched Mataki, an open, programmable, tracking technology to enables the collection of new kinds of movement data. With the Zoological Society of London, we have recently run a call for collaborations to get these devices into some exciting conservation projects.

#### Piero Visconti

Research Scholar in the Ecosystems Services and Management Programme, International Institute for Applied Systems Analysis (IIASA), Vienna, Austria

Piero has just joined IIASA, having been a Research Fellow jointly affiliated to the Centre for Biodiversity and Environment Research at University College London and ZSL since 2016. His research focuses on understanding how ecosystems functions and structure change with habitat loss, and whether we can predict, for a given system, the existence of tipping points in loss of native vegetation beyond which the ecosystem cannot recover to their original state. While at UCL and ZSL, he worked on Biodiversity Planetary Boundaries as well as investigating biodiversity scenarios under alternative socio-economic pathways. He is also interested in predictive models of population dynamics, in particular, using models to inform conservation management decisions.

#### Christian Felber

Author, Lecturer of at the Vienna University of Economics and Business and Founder of The Economy for the Common Good

Christian is an internationally renowned speaker, university lecturer and a contemporary dancer. He has authored several bestsellers: „50 Suggestions for a fairer World“, „New Values for the Economy“, „Let’s save the Euro!“, „Change everything. Creating an Economy for the Common Good“, and „Money. The new rules of the game“, which was awarded the getAbstract International Book Award 2014. The Economy for the Common Good received the Zeit-Wissen Award in 2017. He is the initiator of the „Economy for the Common Good“ and the project „Bank for the Common Good“. Felber was born in 1972, studied Spanish, Psychology, Sociology and Political Sciences in Madrid and Vienna, where he lives and works as an independent writer. From early 2018 he's Fellow at the Institute for Advanced Sustainability Studies in Potsdam (IASS).

#### Kirsten Schuijt

Chief Executive Officer, WWF Netherlands

Kirsten Schuijt became the CEO of WNF in 2016. Before then, she was Head of Nature Conservation at the organisation and she held various positions in WWF-International, of which the WWF is a part. Kirsten Schuijt graduated in the environmental economy and held various management positions during her career and carried out research in Africa.

#### Marieke Harteveldt

Chief Conservation Officer, WWF Netherlands

Before joining WNF, she worked as a consultant within the Biomass & Bioenergy Unit at Ecofys, supporting both policy development as the development of corporate strategies regarding the sustainable sourcing and use of biomass. She also spent five years at NL-Agency, the Dutch Governmental Agency for Climate and Innovation, working on sustainability issues related to bioenergy and biofuels, including preparing the Dutch input for the development of the sustainability criteria within the Global Bioenergy Partnership (GBEP).
Pita Verweij

Assistant Professor of Geosciences at the Copernicus Institute of sustainable development, Utrecht University

Throughout the years, Pitaj’s principal field of research has been land use and biodiversity in the context of natural resource management. She has worked in a wide range of tropical and temperate ecosystems. In her work, she tries to develop ecological knowledge in support of policy-making and nature conservation. She is co-founder and coordinator of the Academy of Ecosystem Services, in which WNF participates.

Eva Gladek, CEO Metabolic

CEO and founder Metabolic

Eva is the founder and CEO of Metabolic, a leading consulting and venture building company that uses systems thinking to tackle critical sustainability challenges. Eva originally trained as a molecular biologist and industrial ecologist. In her years of consulting work and concept development, Eva has advised over 300 companies and industry leaders. She is an expert in technical environmental management techniques and has developed leading frameworks for systems thinking, the circular economy and sustainable design. She is consistently listed among the top influencers in sustainability in the Netherlands, a country recognised as leading the transition to the circular economy.

Monique Grooten

Director of Science and Learning, WNF

Monique has been working for WNF for more than seventeen years in various functions; from Forest Stewardship Council (FSC) certification to policy communication, footprint leader of WWF International and Chief Editor of the Living Planet Report. In addition, she works as an Management Team member and is responsible for the themes of Market Change and Footprint and Innovation Within Nature Conservation. Grooten studied history at Utrecht University and she is now a part time student on the Masters course in Applied Ethics at the University of Utrecht.

Looking ahead: Future scenarios, fairness and limits

Detlef van Vuuren

Professor of Geosciences at the Copernicus Institute of Sustainable Development at the University of Utrecht and a senior researcher at PBL, the Netherlands Environmental Assessment Agency

Detlef’s research concentrates on response strategies to global environmental problems using integrated assessment models and other tools. As such, he participates as part of the IMAGE integrated assessment modelling team. He is a member of the board of the Integrated Assessment Modelling Consortium (IAMC) and member of the Working Group on Coupled Models of the World Climate Research Programme (WCRP). He participates in the editorial board of Climatic Change and Earth System Dynamics. He had a coordinating role in the development of the Representative Concentration Pathways (RCPs) now used in the IPCC’s assessments. He has also participated as (Coordinating) Lead Author in various assessments such the Millennium Ecosystem Assessment, UNEP’s Global Environmental Outlook, the International Assessment on Agricultural Science and Technology Development, and the OECD Environmental Outlook.

David Leclère

Research Scholar in the Ecosystems Services and Management Programme, International Institute for Applied Systems Analysis (IIASA), Vienna, Austria

David obtained his PhD from AgroParisTech (France) in 2012, on the role farm-scale adaptations in the response of European agriculture to climate change. In the same year, he joined the Ecosystems Services and Management (ESM) Program of the International Institute of Applied System Analysis (IIASA) as a research scholar. Using large-scale models and datasets, his research focuses on the interaction between anthropogenic land use, the climate, terrestrial biodiversity and policies.
Azwin Ressang
Trainer coach at Red Zebra Group
For more than 20 years Azwin Ressang (1957) has developed leadership in profit and non-profit organizations. His focus is leadership under pressure and high performing teams. He is an expert and author on the subject of personality and emotional intelligence. Currently he is a partner at the RedZebra Group and a faculty member of the Dutch Police Academy and the Semco Style Institute.

Klaas van Egmond
Emeritus Professor of Environmental Science and Sustainability at the Utrecht Sustainability Institute, University of Utrecht
At the University of Utrecht, Klaas lectures on sustainability and environmental issues, in particular air quality and climate change. Between 1989 and 2004, he was Director Environment at RIVM, the National Institute for Health and Environment. From 2004 to 2008, he was the Director of the Netherlands Environmental Assessment Agency (MNP). As director of RIVM and MNP, he was advisor to the Dutch Cabinet of Ministers and members of parliament and has been responsible for many studies on all aspects of environment and sustainability, including environmental outlooks and studies on climate and global change. Currently, he is an expert on sustainability issues at Triodos Bank (Zeist, the Netherlands) and in 2011 he was one of the initiators of the Sustainable Finance Lab, a think tank of leading economists focused on finding solutions to the financial crisis. He also chairs the scientific council of the Netherlands Meteorological Institute and in 2012 he became a royal member (government representative) on the National Socio-Economic Council (SER).

Colin Hickey
Researcher at the Ethics Institute at the University of Utrecht
Colin is a postdoctoral researcher on the Fair Limits project at Utrecht University. He received his Ph.D. from Georgetown University in Washington, D.C. where he wrote a dissertation that develops an account of climate morality titled, “Global Climate Justice and Individual Duties.” Broadly, his research focuses on moral and political philosophy, climate ethics, global justice, and bioethics. Colin’s work has been published in journals such as The Journal of Value Inquiry, Social Theory and Practice, and Bioethics. Within the Fair Limits project, he works on a range of methodological issues in non-ideal political philosophy and questions about the agents who are responsible for realizing justice.

Dascha During
Lecturer at the Ethics Institute, University of Utrecht
In her research, Dascha bridges ways in which Chinese and Western traditions approach fundamental practical questions. Her PhD thesis ‘Of Dragons and Owls: rethinking Chinese and Western narratives of modernity’ (successfully defended in June 2018) analyzed what are often seen to be fundamental disparities in how China and the West think about the modern world, and attempts to show that differences are often grossly exaggerated and that Chinese and Western views on how modern institutions can and should be organized show much more congruence than tends to be assumed. She is currently working on a variety of questions regarding Chinese and Western views on individuality and human dignity.

Jos Philips
Assistant Professor in Political Philosophy and Ethics at the Ethics Institute
Jos Philips works on global justice (esp. human rights, poverty) and sustainability. Jos holds a PhD in philosophy from Radboud University Nijmegen (2007). He is coordinator of the Master Applied Ethics. Jos has published in journals such as Ethics and Economics, Ethics and Politics.
Jolande van der Veen
Trainer, coach at & Commons
For more than 17 years, Jolanda has worked in profit and non profit organizations as a trainer and consultant. Her experience is in leadership, sustainability and change management. She has her own company &Commons and is associate of the Baak and Semco Style Institute.

Jerry van Dijk
Assistant Professor Restoration Ecology and Biodiversity Conservation at the Copernicus Institute of Sustainable Development at Utrecht University
Jerry graduated as an environmental scientist and holds a PhD in wetland restoration ecology. His research and teaching focus on the impact of environmental change on ecosystems and community dynamics in the context of nature conservation. The organisms that generally feature in his research are plants and humans, because he believes that nature conservation is as much about humans as it is about nature. Recognizing that in many cases the cause of environmental change is related to unsustainable agriculture, he also works on enhancing the sustainability of our food system. This work includes modeling land use change and the impact thereof on nature in rural areas, transdisciplinary projects empowering sustainable farming initiatives, and advising the Dutch government on transitions towards sustainable food systems.