



The future of biodiversity: rethinking conservation and science

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- The IPBES Global Assessment
- Key conclusion: biodiversity conservation is failing
- The future of biodiversity: beyond conservation
- The future of biodiversity science: inclusiveness

What is IPBES?



IPBES-1 (Jan 2013, Bonn)



IPBES-5 (Dec 2017, Bonn)

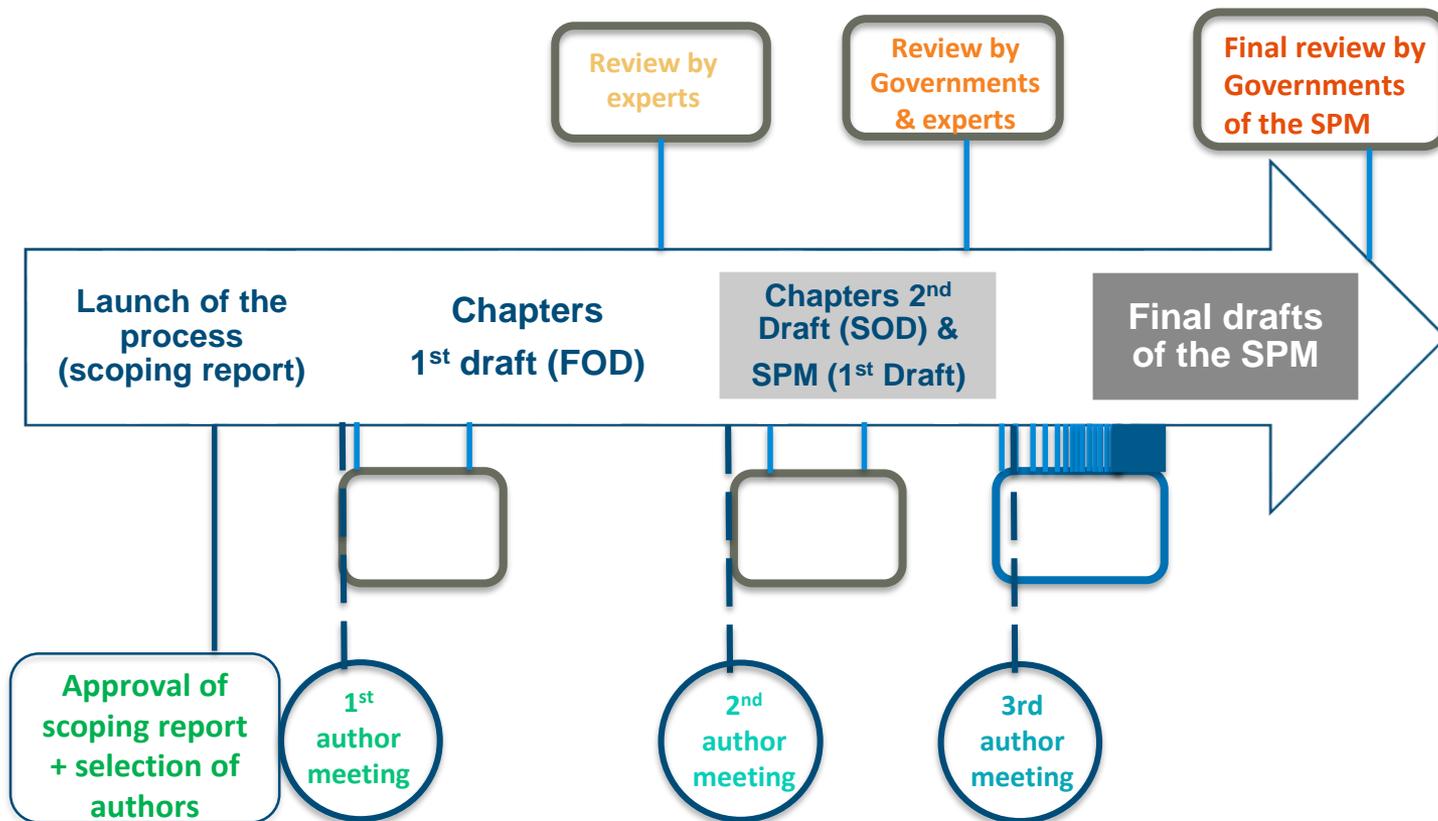


IPBES-7 (May 2019, Paris)

- **I**ntergovernmental **P**latform on **B**iodiversity and **E**cosystem **S**ervices
- Overall objective: *To provide policy relevant knowledge on biodiversity and ecosystem services to inform decision making*
- Established in April 2012, Panama
- **132 member countries**
- collaborative partnership agreement with FAO, UNDP, UNEP, UNESCO
- Secretariat hosted in Bonn, Germany
- Implementing its **first Work Programme** (2014-2018)



The production of an IPBES assessment



FIRST GLOBAL ASSESSMENT to ever systematically examine and include **INDIGENOUS and LOCAL KNOWLEDGE, ISSUES and PRIORITIES**

 150 leading international experts	 from 50 countries	 15000 expert references	 50 years of observations
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 **MAY 2019 PARIS #IPBES7**




Hien Ngo



Max Gueze



Eduardo Brondízio

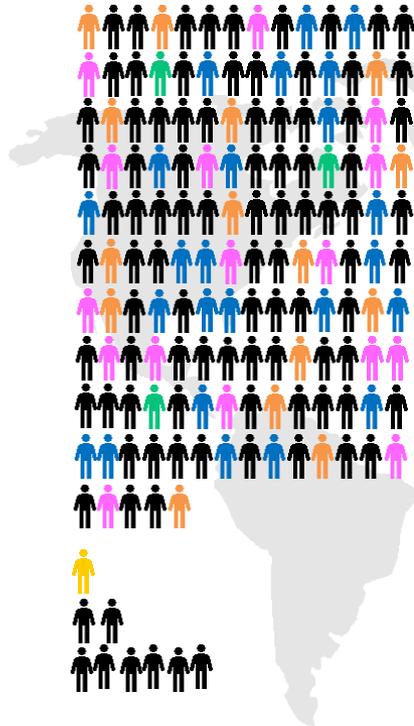


Sandra Díaz



Josef Settele

The Author Team



**~156,000 Hours of
Voluntary Hours =
~17 years**

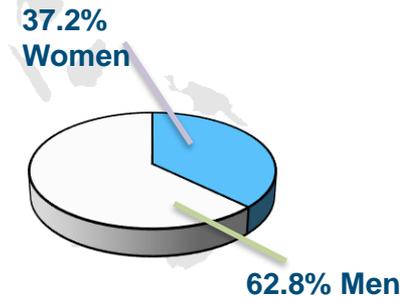
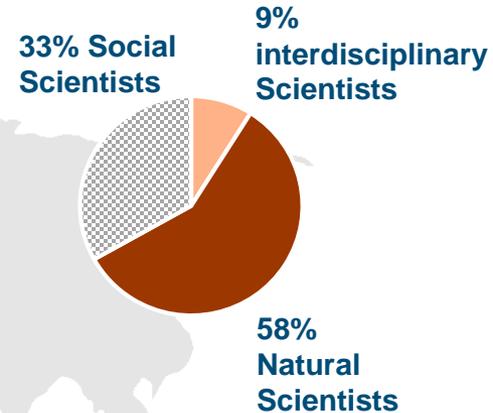
**145 experts:
3 co-chairs**

**87 lead authors
310 contributing authors
15 review editors
16 fellows**

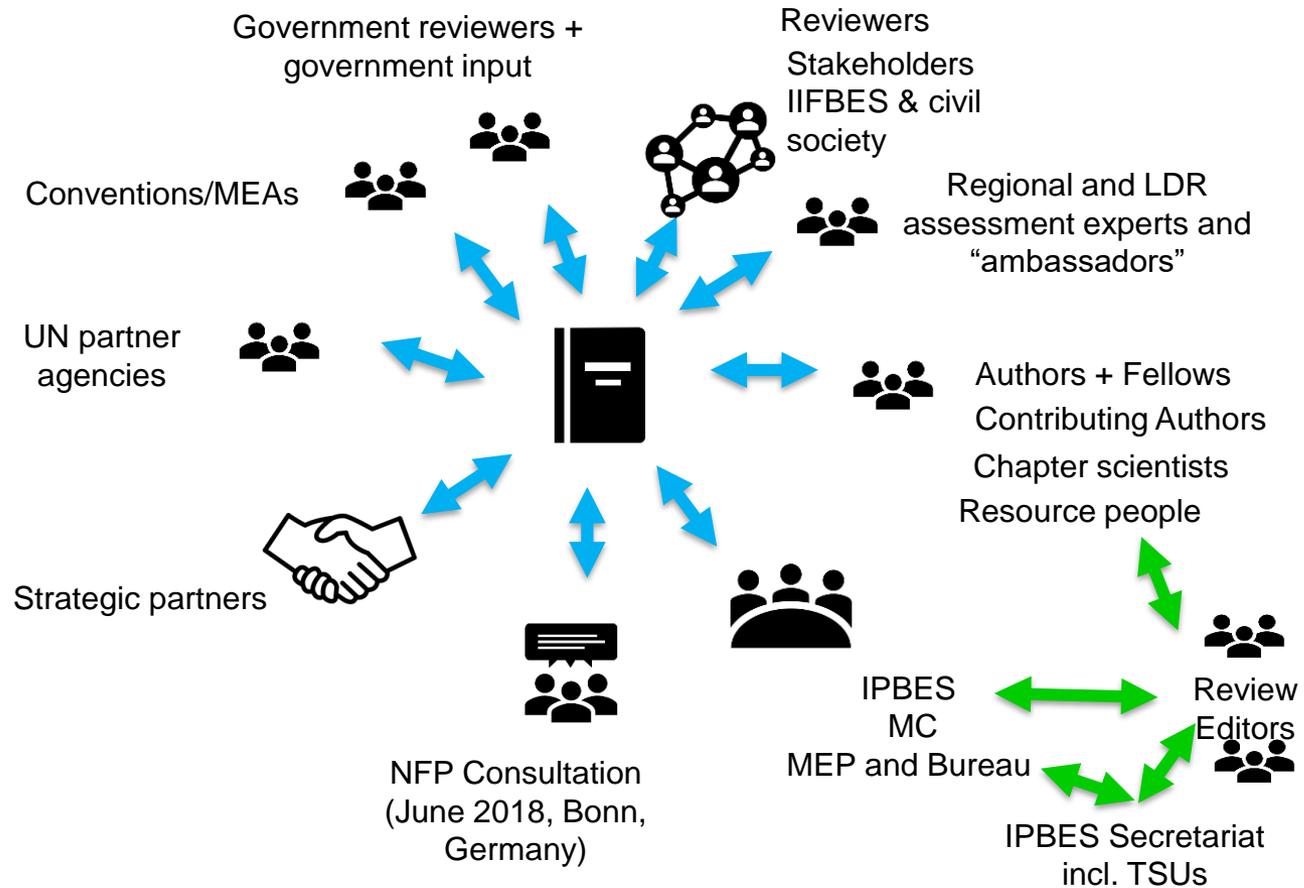
From 51 countries

**Supported by:
The Global TSU
6 Chapter scientists
1 resource person**

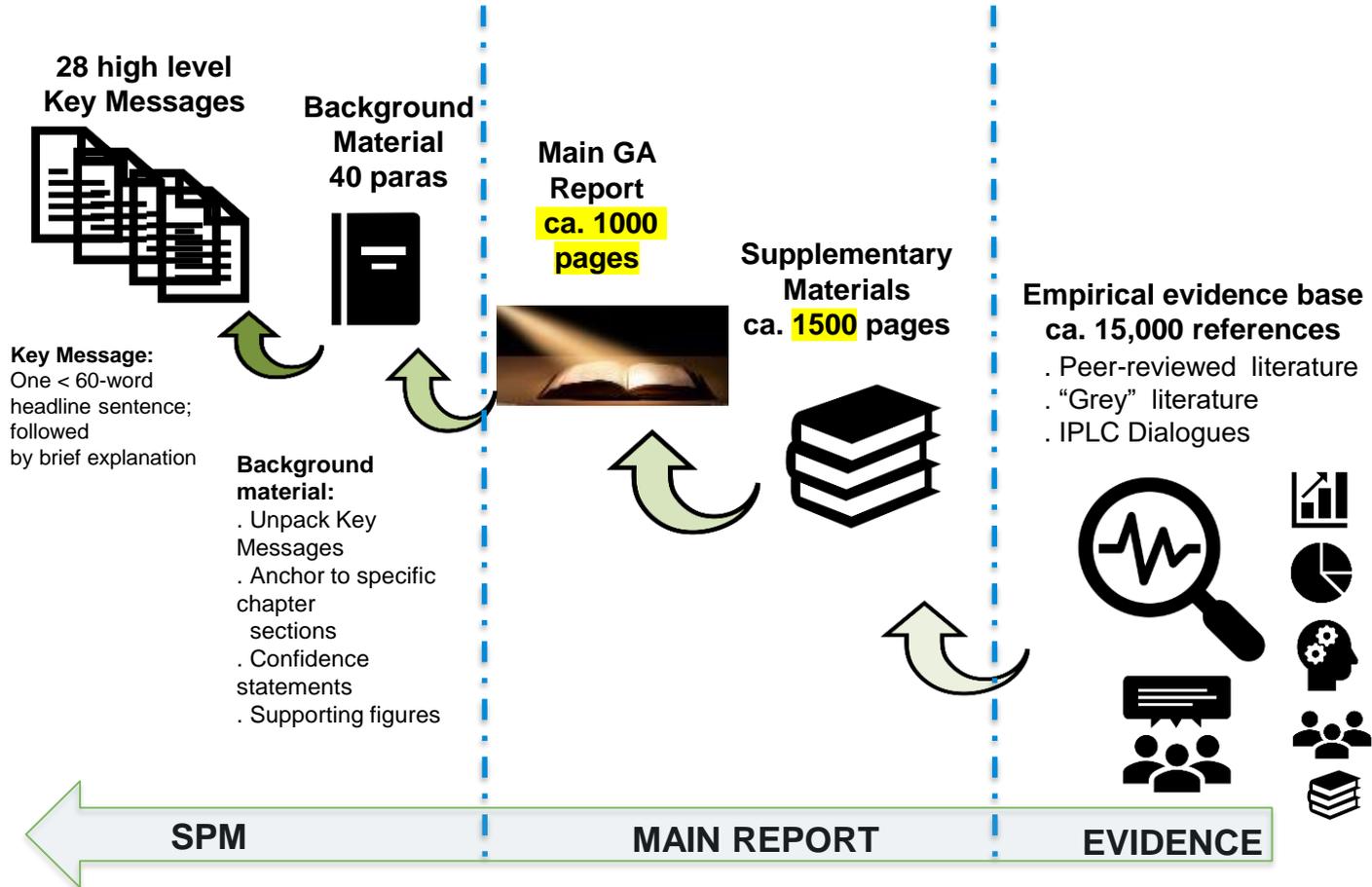
**Other supporting TSUs:
Indigenous and local
Knowledge, Scenarios,
Values, Knowledge & Data,
Capacity Building
Management Committee**



A co-produced Summary for Policymakers



Steps in distilling policy-relevant information from original sources to a Summary for Policymakers (SPM)



The Global Relevance of Indigenous Peoples and Local Communities to biodiversity and ecosystem conservation and management

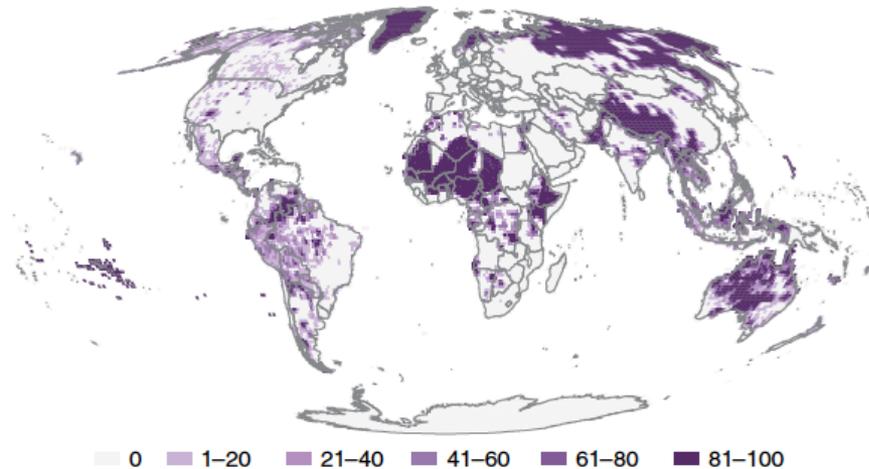


Fig. 1 | Global map of lands managed and/or controlled by Indigenous Peoples (percentage of each degree square mapped as Indigenous in at least one of 127 source documents; Supplementary Information section 2).

Indigenous Peoples manage or have tenure rights over at least ~38 million km² in 87 countries or politically distinct areas on all inhabited continents.

Representing over > 1/4 of the world's land surface.

16/11/2019

nature
sustainability

ANALYSIS

<https://doi.org/10.1038/s41893-018-0100-6>

A spatial overview of the global importance of Indigenous lands for conservation

Stephen T. Garnett^{1*}, Neil D. Burgess^{2,3}, John E. Fa^{4,5}, Álvaro Fernández-Llamazares⁶, Zsolt Molnár⁷, Cathy J. Robinson^{8,9}, James E. M. Watson^{10,11}, Kerstin K. Zander⁸, Beau Austin¹, Eduardo S. Brondizio¹², Neil French Collier¹, Tom Duncan¹, Erle Ellis¹³, Hayley Geyle¹, Micha V. Jackson¹⁴, Harry Jonas¹⁵, Pernilla Malmer¹⁶, Ben McGowan¹, Amphone Sivongxay¹ and Ian Leiper¹

An unprecedented global interest in biodiversity



Justin Trudeau @JustinTrudeau
 According to a new report by the @UN, nature is in more trouble now than at any other time in human history. But there's still time to take action. That's why we're:

- ✓ Putting a price on pollution
- ✓ Protecting our lands & oceans
- ✓ Investing in clean tech & public transit

10:32 PM · May 6, 2019 · Twitter for iPhone



Papa Francisco @Pontifex_es
 Cada criatura tiene una función y ninguna es superflua. Todo el universo es un lenguaje del amor de Dios, de su desmesurado cariño hacia nosotros. El suelo, el agua, las montañas, todo es caricia de Dios. #Biodiversity



Greta Thunberg @GretaThunberg · May 7
 A new UN report concludes that 1mn species risk extinction because of human activity. And that the destruction of nature threatens humanity. And yet, this is not top news. As long as it continues like this, as long as the media fails to take responsibility, we stand no chance.



Social media:

- 30,000+ articles in the press
- 163 countries
- 49 languages
- Total potential impressions 26.1 billion
- 30 million+ exposure for #IPBES7 and #GlobalAssessment
- 500,000+ visitors to ipbes.net



Biodiversity centre stage

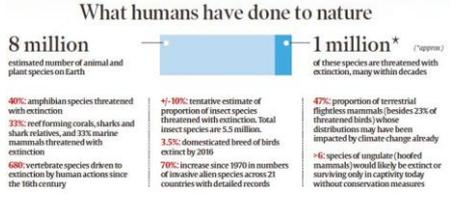


editorial

The IPBES global assessment has brought biodiversity prominently to the attention of policymakers and the public, and researchers should seize this critical opportunity to engender change toward sustainability.



Subscribe



Humans are driving one million species to extinction

Landmark United Nations-backed report finds that agriculture is one of the biggest threats to Earth's ecosystems.

Landmark analysis documents the alarming global decline of nature

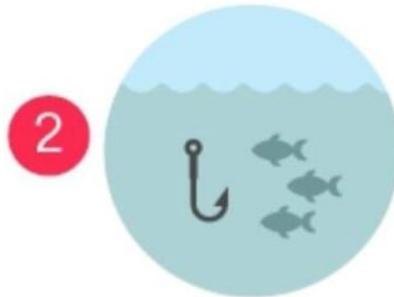
5 main drivers of species loss



1

Changes in land and sea use

Humans have altered **75%** of land and **66%** of marine environments since pre-industrial times.



2

Direct exploitation of organisms

In 2015, a **third** of marine stocks were being fished at unsustainable levels.



3

Climate change

Global warming has already impacted almost **half** of threatened mammals and **one quarter** of birds.



4

Pollution

Marine plastic pollution has increased tenfold since 1980, with an average **300-400M** tons of waste dumped annually into the world's waters.



5

Invasive alien species

The numbers of invasive alien species per country have risen by about **70%** since 1970.

Source: IPBES Report
Graphic: Wafaa Ayish, CNN

Figure 5 The 5 Main Causes of Species Loss. Source: CNN cited IPBES (2019)

Beyond Conservation: transformative change

- Agriculture
- Taxes and subsidies
- Production and consumption
- Finance and trade
- Justice and rights

- How we think about nature





26-09-19,

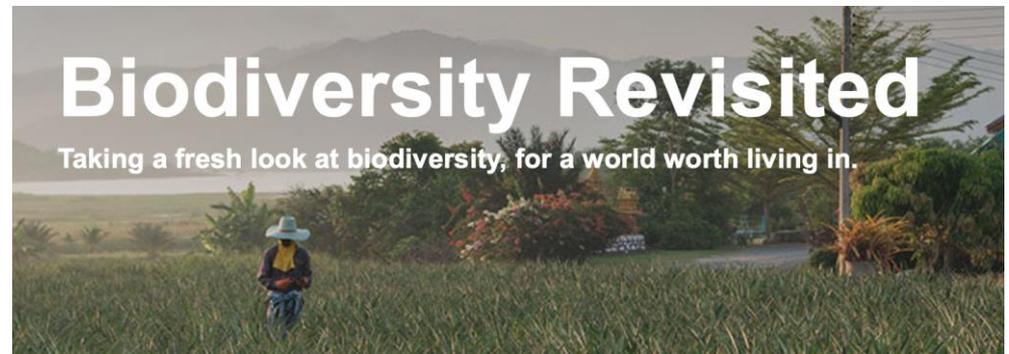
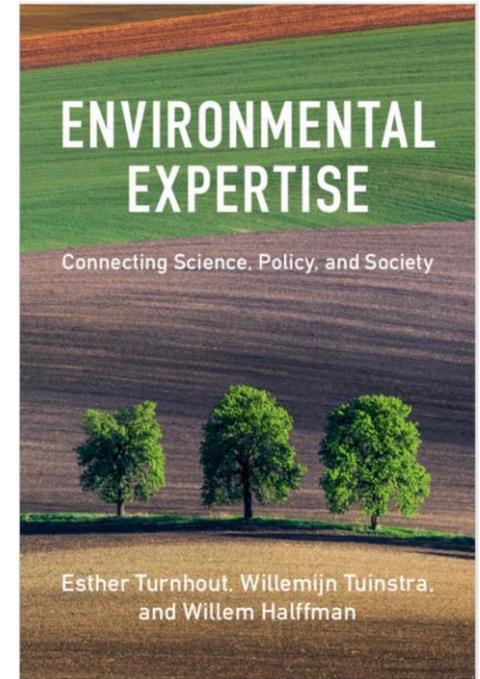
Zo ziet ons platteland eruit ná de stikstofcrisis

De ommezwaai die nodig is op het platteland zal echter geen einde maken aan de industriële veehouderij, zegt Rabbinge. Integendeel. De professor ziet voor zich hoe agro-industriële bedrijventerreinen zullen ontstaan. „Een groot deel van de natuurbelasting wordt veroorzaakt door de versnippering van veehouderijen. Die rommelige structuur zorgt ook voor veel andere hinder, zoals stank. Dat voorkom je door ze op verschillende plaatsen in het land te clusteren op bedrijventerreinen waar de beste innovaties worden toegepast om ze milieu- en diervriendelijk te maken. Vergelijk het met de clusters van chemische bedrijven of de glazen stad, het tuinbouwcluster in het Westland. De grond die zo vrijkomt, kan worden teruggegeven aan de natuur.”

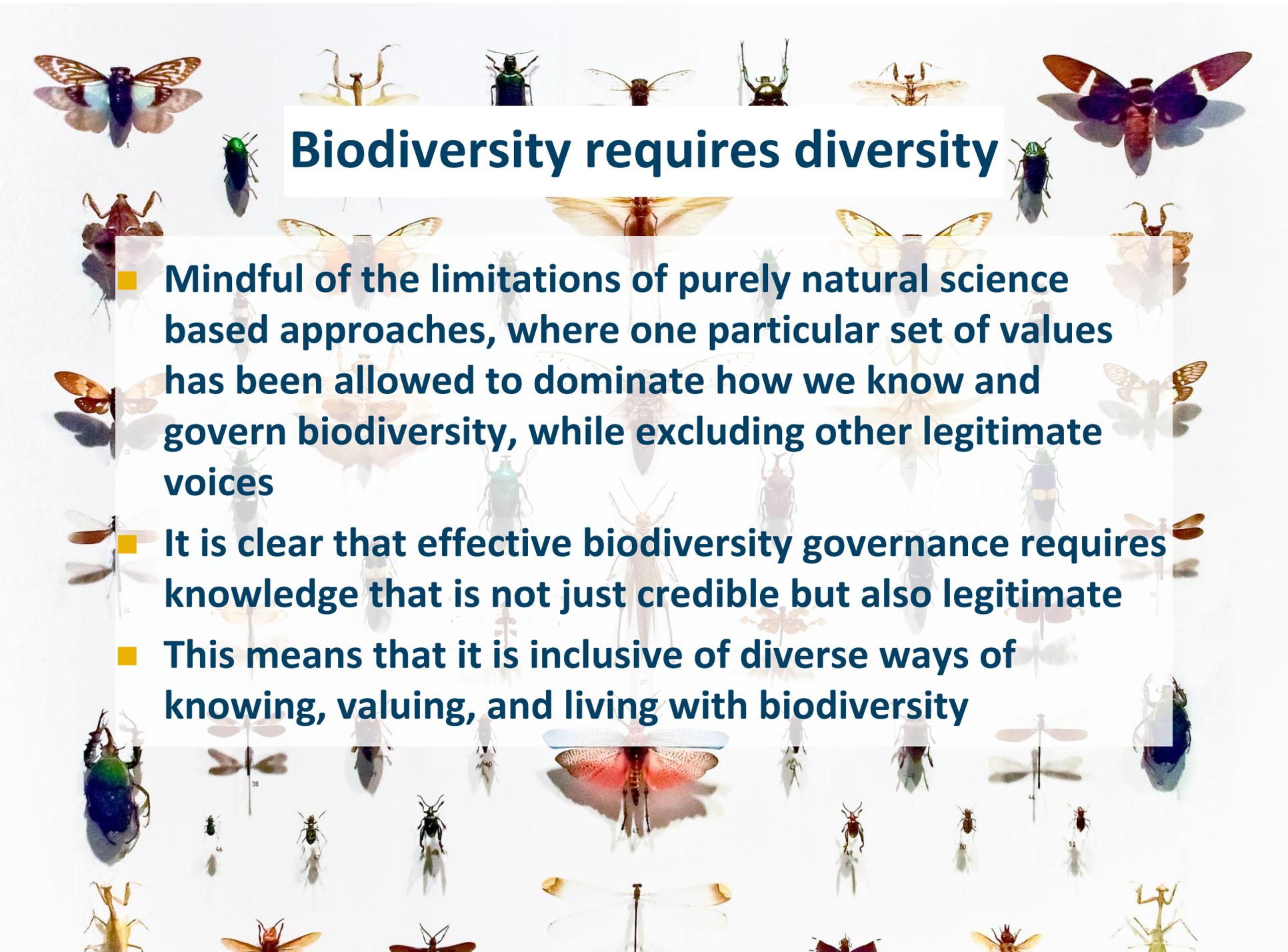
Zien we straks dan geen varkens, kippen en koeien meer op het platteland? Jawel. Misschien zelfs wel meer dan nu, zegt Roep. „Er zijn in Nederland nauwelijks varkens en kippen meer die in de wei komen. Maar boeren kunnen er ook voor kiezen om grondgebonden te worden.” Dat betekent dat ze de kringloop van voer en mest op hun eigen land, of samen met andere boeren in hun directe omgeving, sluiten. In plaats van veevoer te importeren verbouwen ze het zelf. En in plaats van kunstmest gebruiken ze de poep van hun eigen dieren. „We zullen zien dat steeds meer agrariërs gaan boeren mét de natuur. Die trend is al ingezet: er zijn steeds meer biologische boeren en boeren die zich inzetten om de biodiversiteit te herstellen en het landschap te onderhouden. Het platteland wordt zo weer meer ingebed in de natuur.”

Transforming science

- Concepts, definitions and narratives of nature
- Interconnections between humans, culture, economies, biodiversity
- The values, worldviews and knowledge systems that underlie these connections
- Collaborative and inclusive methodologies



<https://www.biodiversity-revisited.earth>



Biodiversity requires diversity

- Mindful of the limitations of purely natural science based approaches, where one particular set of values has been allowed to dominate how we know and govern biodiversity, while excluding other legitimate voices
- It is clear that effective biodiversity governance requires knowledge that is not just credible but also legitimate
- This means that it is inclusive of diverse ways of knowing, valuing, and living with biodiversity



Thank you