

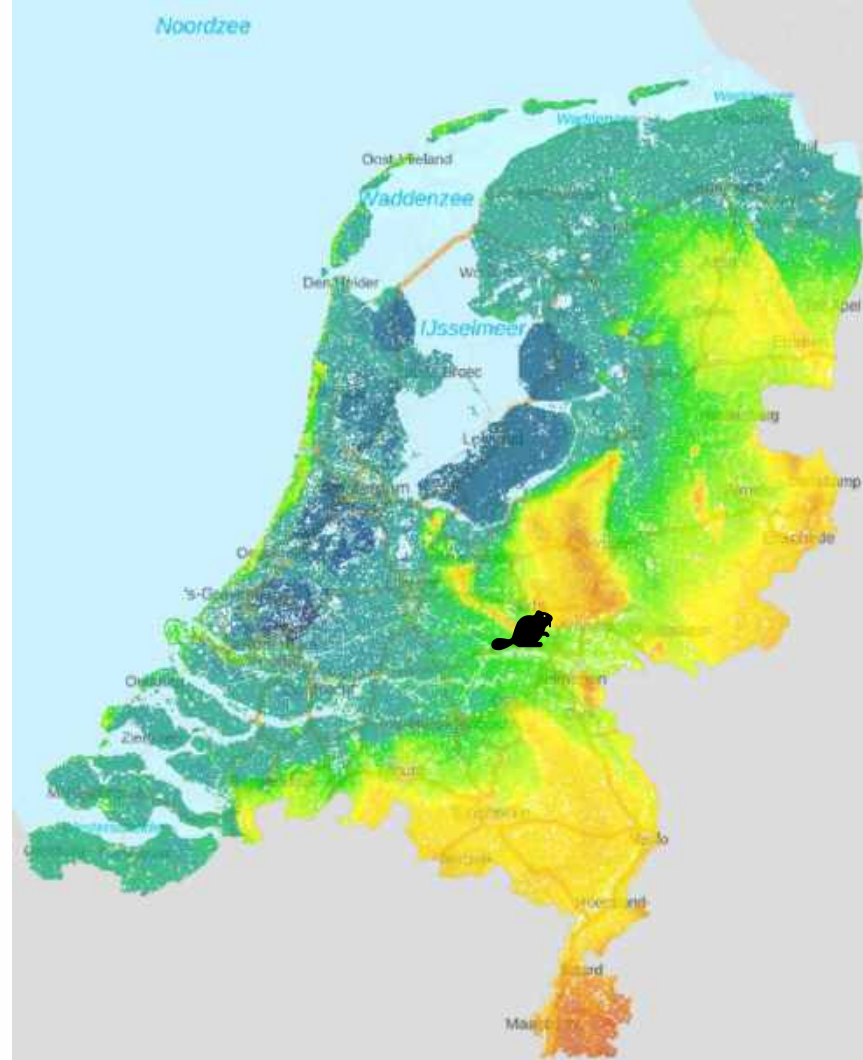
International meeting Beaver Burrowing in Infrastructure (IBBI)

Hosted at Wageningen University – 2-4 February 2025

Opening & welcome: Jakob Wallinga – Prof. Soil Geography & Landscape



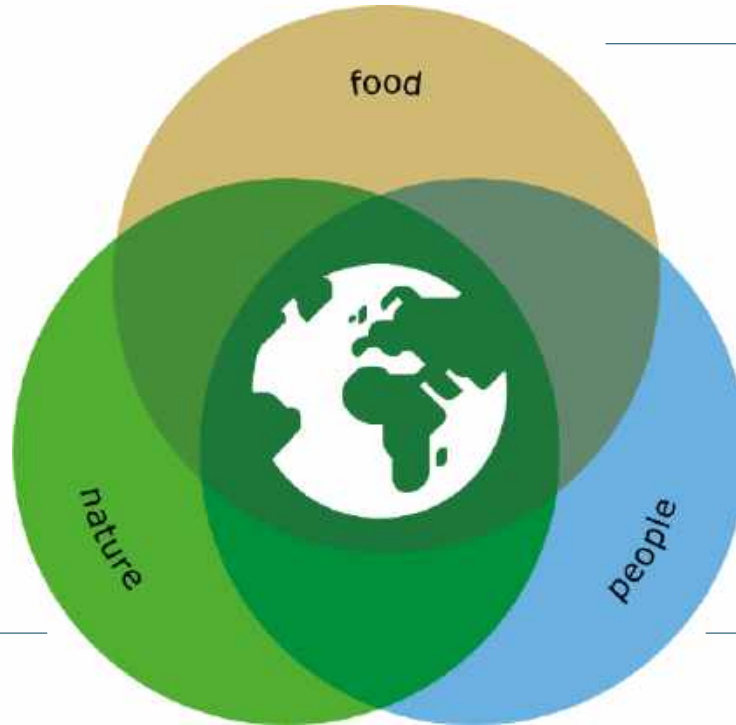
Welcome to Wageningen & the Netherlands





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Wageningen's domain: Food and Living Environment

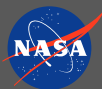
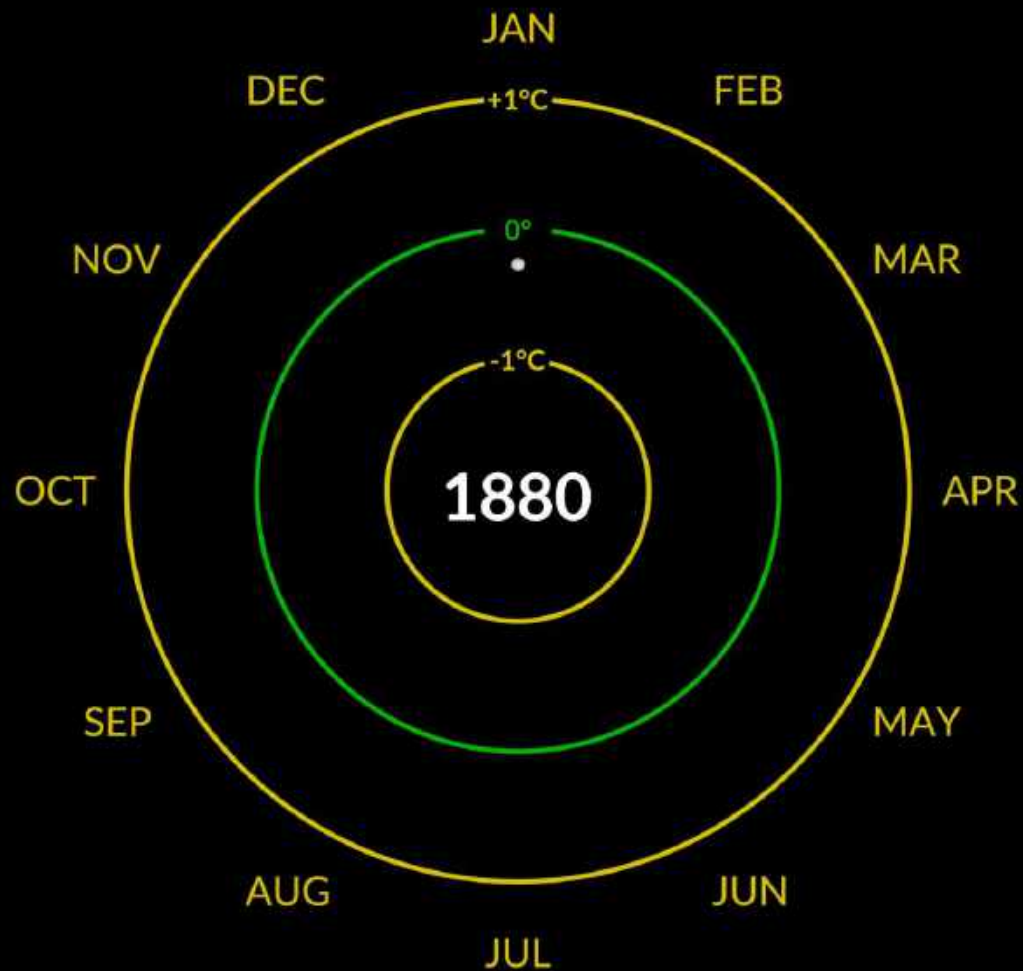


- Nature and landscape
- Land use
- Water, sea and natural resource management
- Biodiversity

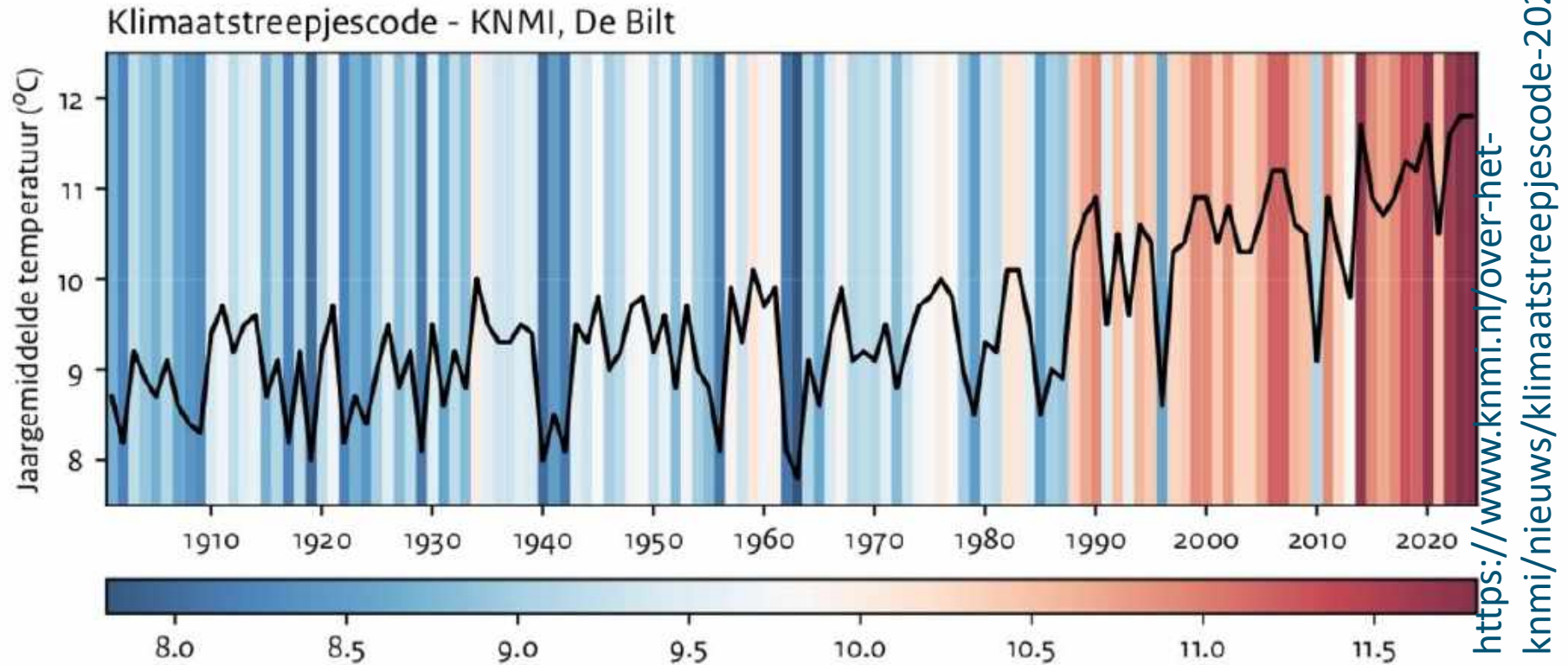
- Sustainable production and food processing
- Animal feed and biobased products
- International food chains and networks
- Food security and food health aspects
- Food and Living environment
- Lifestyle
- Perceptions
- Governance
- Market and chains
- Social innovations

Some big challenges in our domain



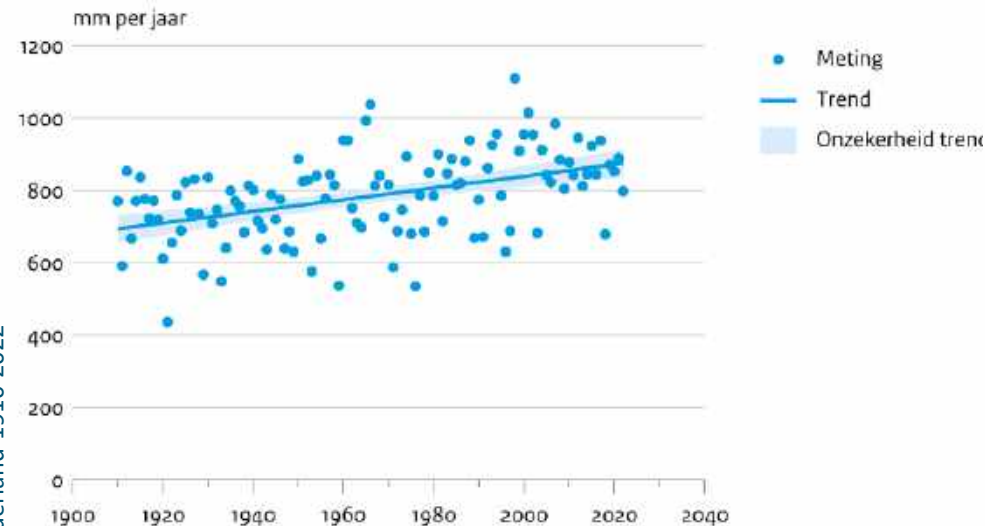


Climate change in the Netherlands



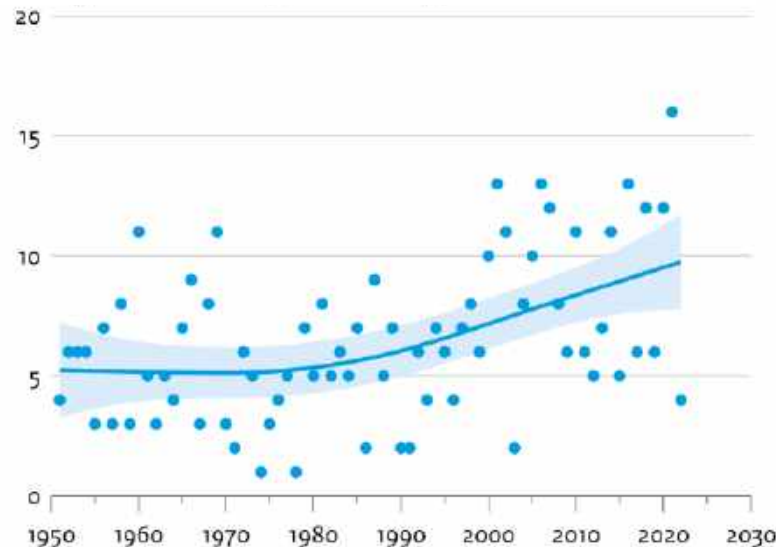
In the Netherlands: more drought & intense rain

Precipitation (mm/yr)



Bron: KNMI; bewerking PBL

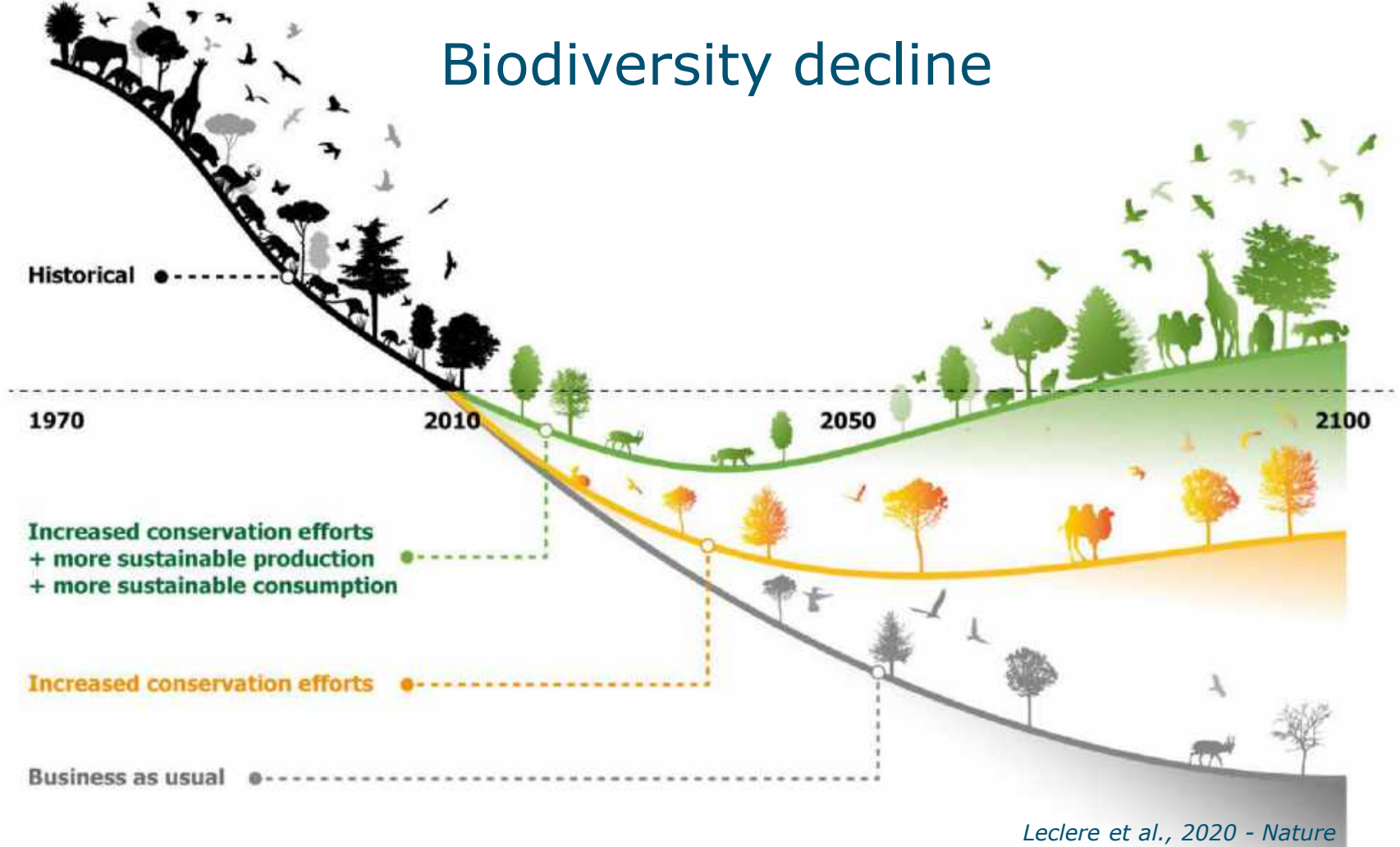
Number of days with heavy precipitation (> 50mm)



Bron: KNMI; bewerking PBL

PBL/aug23
www.dlo.nl/nlo50809

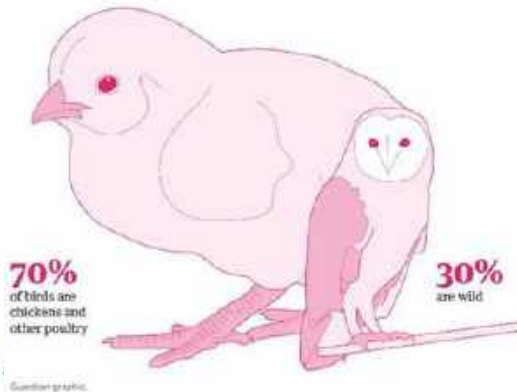
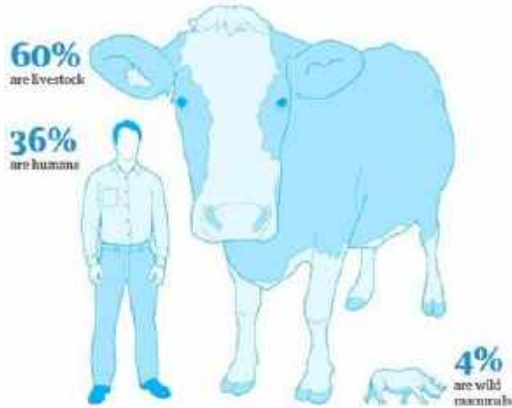
Biodiversity decline



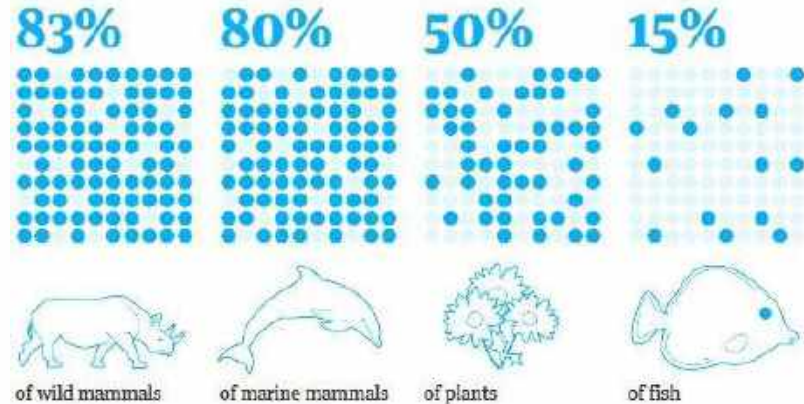
Leclere et al., 2020 - Nature

Some more numbers on biodiversity decline

Of all the mammals on Earth, 96% are livestock and humans, only 4% are wild mammals.



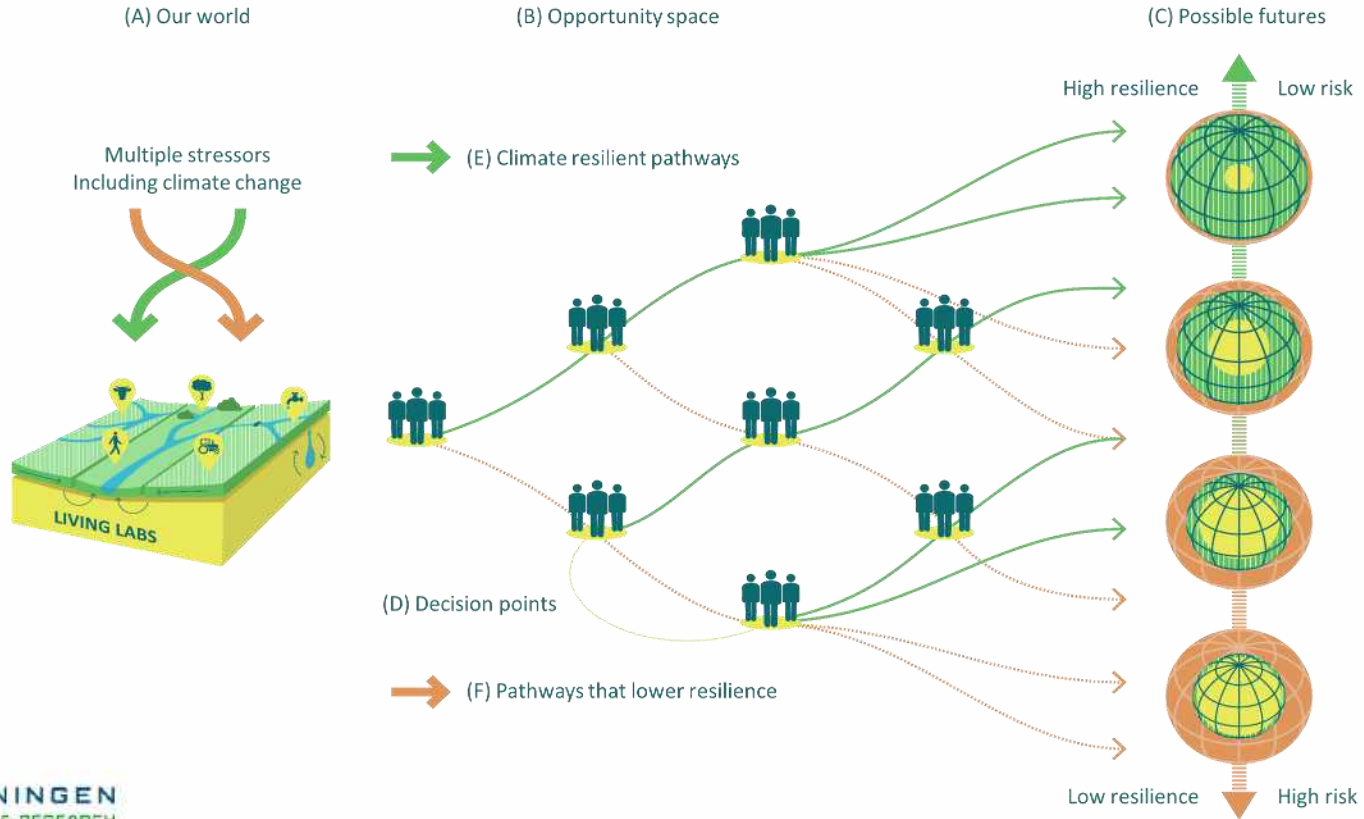
Since the rise of human civilisation 83% of wild mammals have been lost




Guardian graphic,

Bar-On et al., 2018
<https://doi.org/10.1073/pnas.1711842115>

Continuation no option; transformation needed



Wageningen mission



To explore
the potential
of nature to
improve the
quality of life

Nature-based solutions

(Rewilding, Building with Nature)

'The intentional alignment of natural and engineering processes to efficiently and sustainably deliver economic, environmental and social benefits.' (Engineering with Nature; USACE)



Baptist et al., 2019

2120



Beavers

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Fascinating animal
Climate adaptation
Climate mitigation
Biodiversity
Water quality
Etc.



Beavers

But also.....

Safety
Damage
Etc.

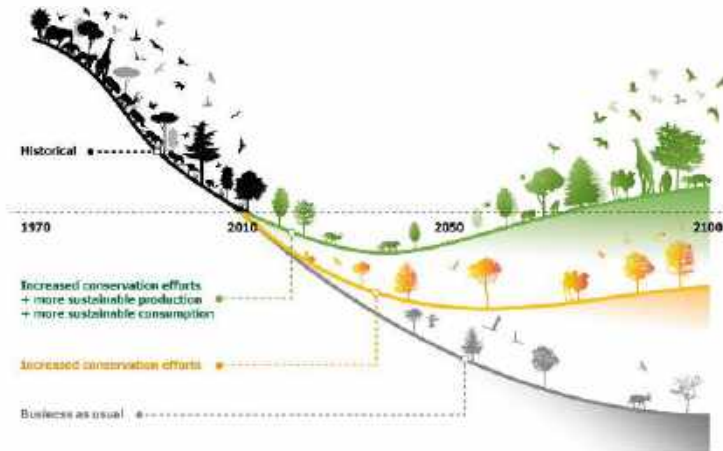
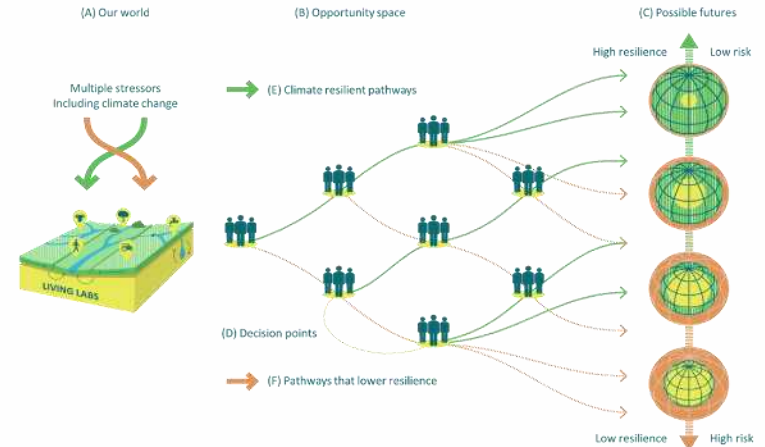
<https://www.infrasite.nl/waterbeheer/2025/01/27/bevers-zijn-allergrootste-risico-voor-dijken-in-rivierengebied-zegt-waterschap>






Int. Beaver Burrowing in Infrastructure meeting

'The intentional alignment of natural and engineering processes to efficiently and sustainably deliver economic, environmental and social benefits.' (Engineering with Nature, USACE)



I wish you a great meeting!



To explore
the potential
of nature to
improve the
quality of life