



Biodiversitetskrisen og klima

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Danmarks
Grundforskningsfond
Danish National
Research Foundation

Center for Macroecology, Evolution and Climate
Natural History Museum of Denmark

University of Copenhagen



Science and Policy
for People and Nature

Global assessment on biodiversity and ecosystem services

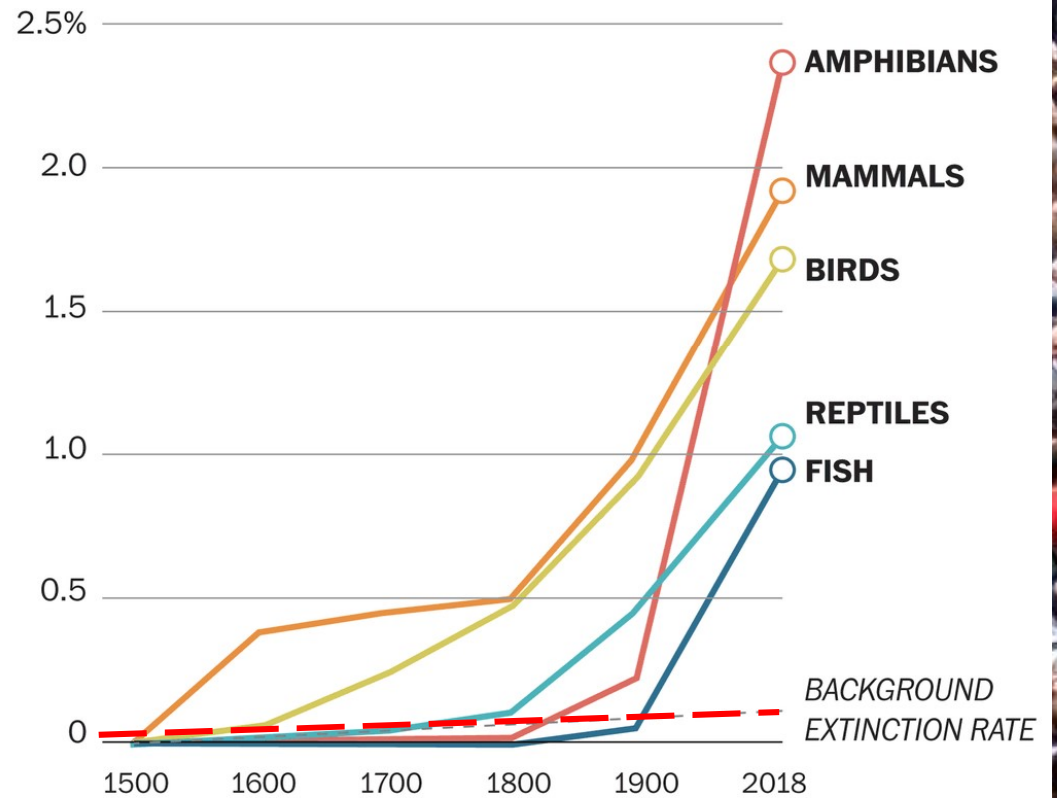


Food and Agriculture
Organization of the
United Nations



A manmade catastrophe

Cumulative percent of vertebrate species driven to extinction by human activity



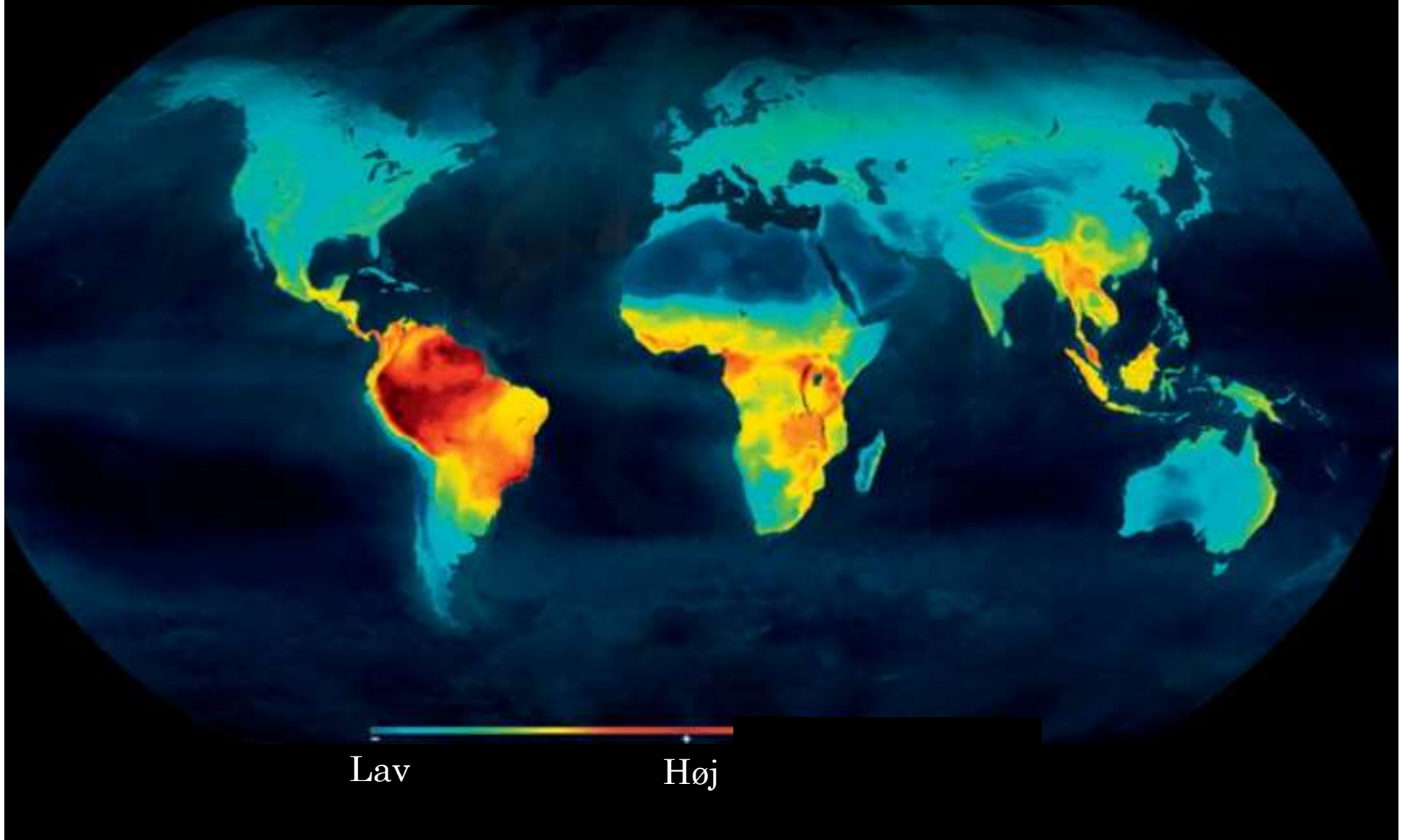
Source: IPBES Global Assessment

**Vi taber arter 1,000-10,000 gange hurtigere
end den normale baggrundsrate**

Vi lever i den 6. periode med masseuddøen



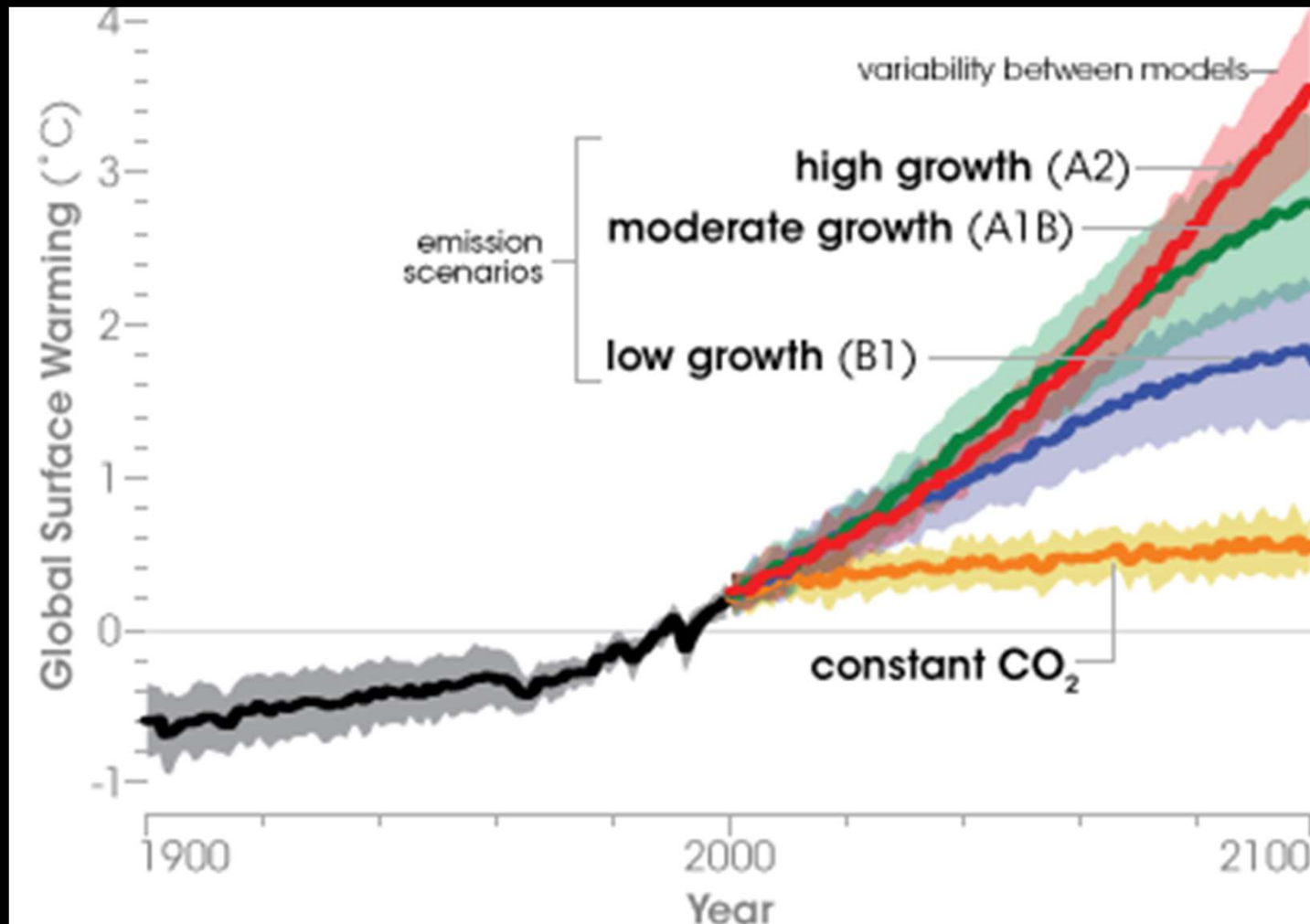
Fordelingen af biodiversitet på jorden



Klima og liv på jorden



Klimaforandringer

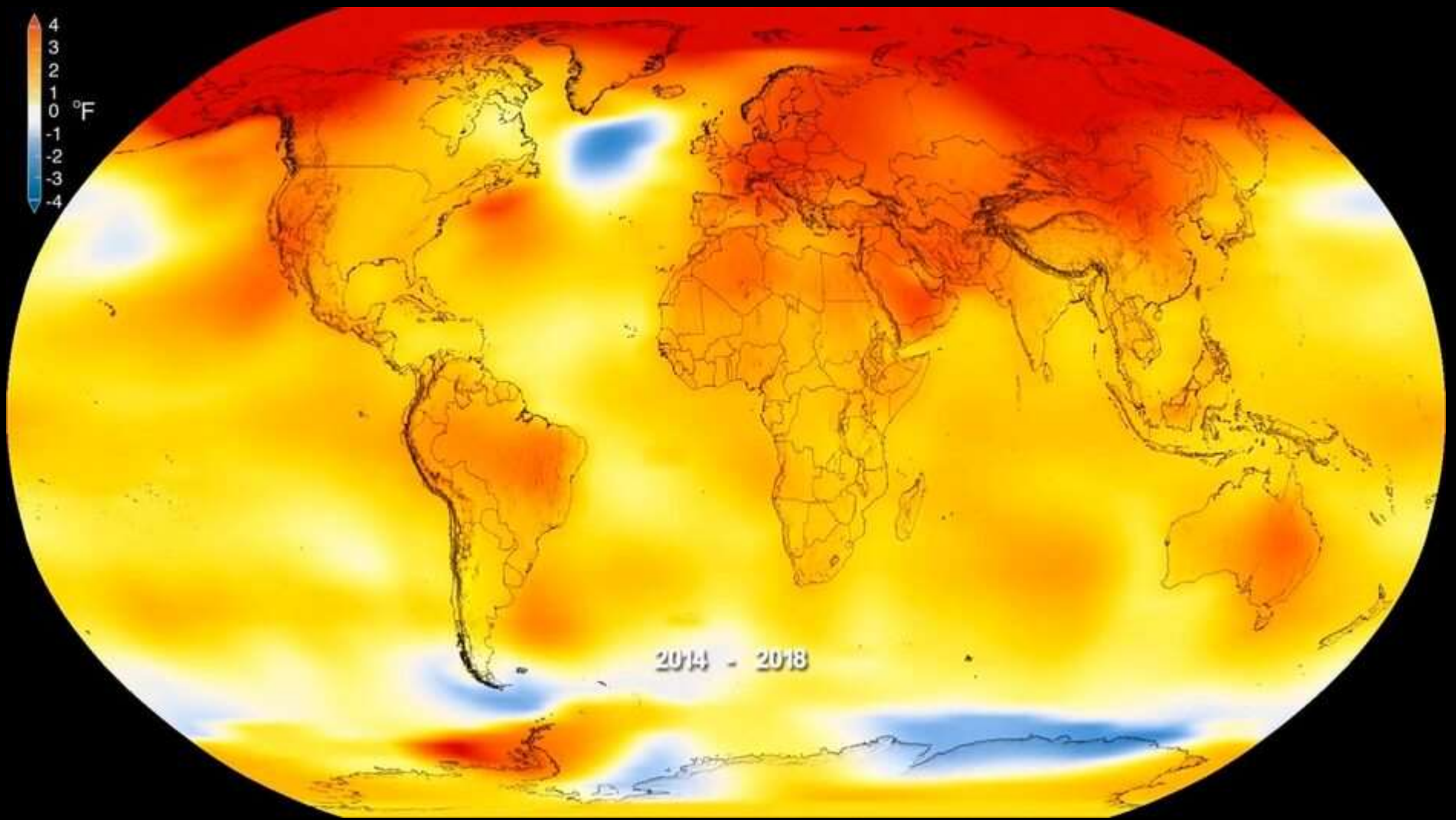


Klimaforandringer og arters forekomster

Når klimaet forandre sig – så kan en art....

- adapterer (blive)
- flytte sig (migrerer)
- uddø

Hvor er klimaforandringerne størstog hvad med effekten på biodiversitet?





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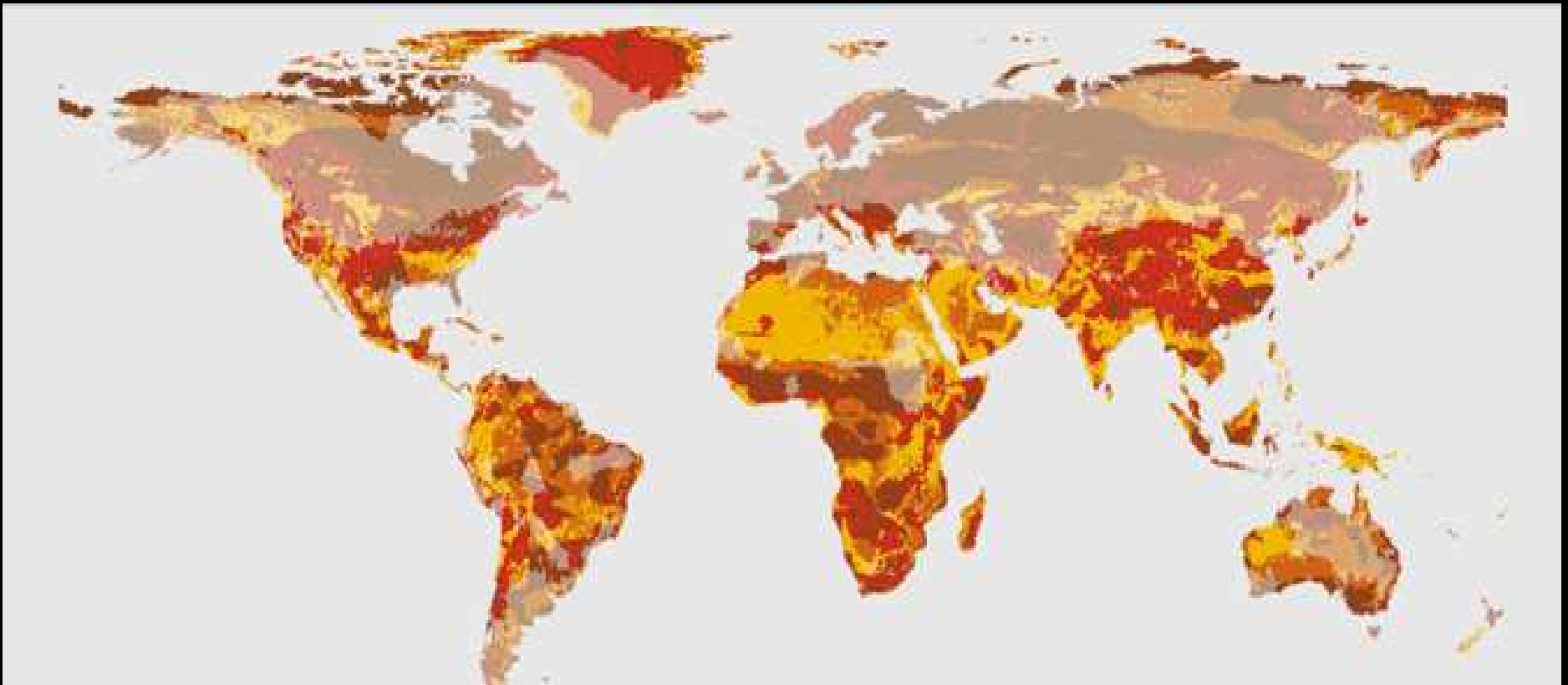
REVIEW SUMMARY

Multiple Dimensions of Climate Change and Their Implications for Biodiversity

Raquel A. Garcia,* Mar Cabeza, Carsten Rahbek, Miguel B. Araújo*

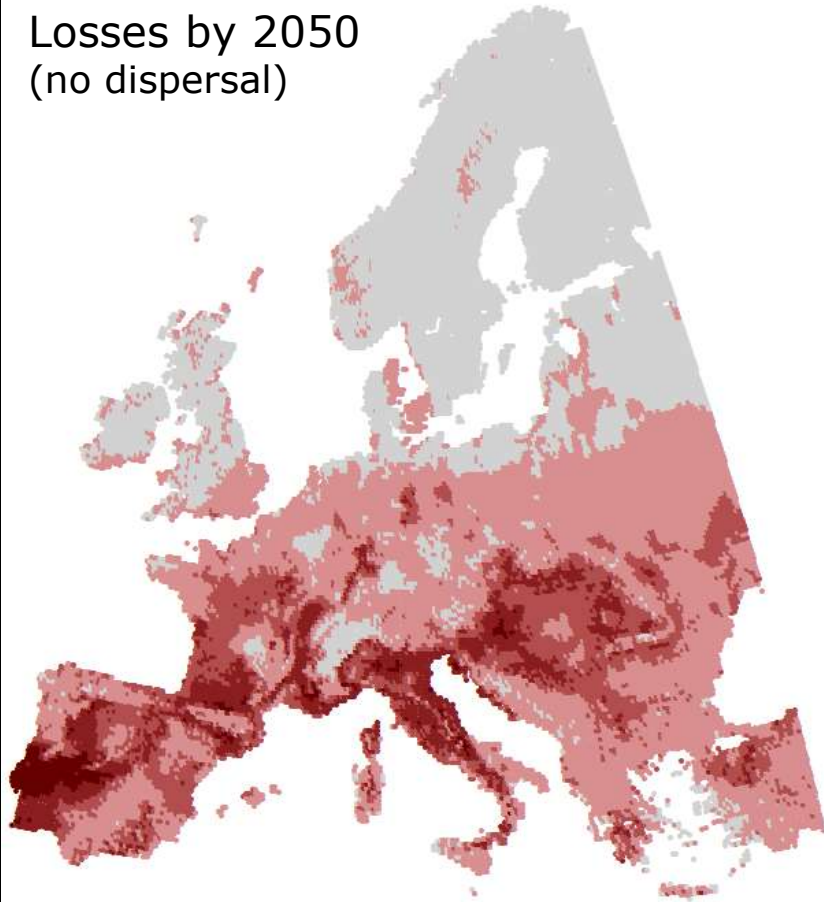


Science **344**, (2014);
DOI: 10.1126/science.1247579

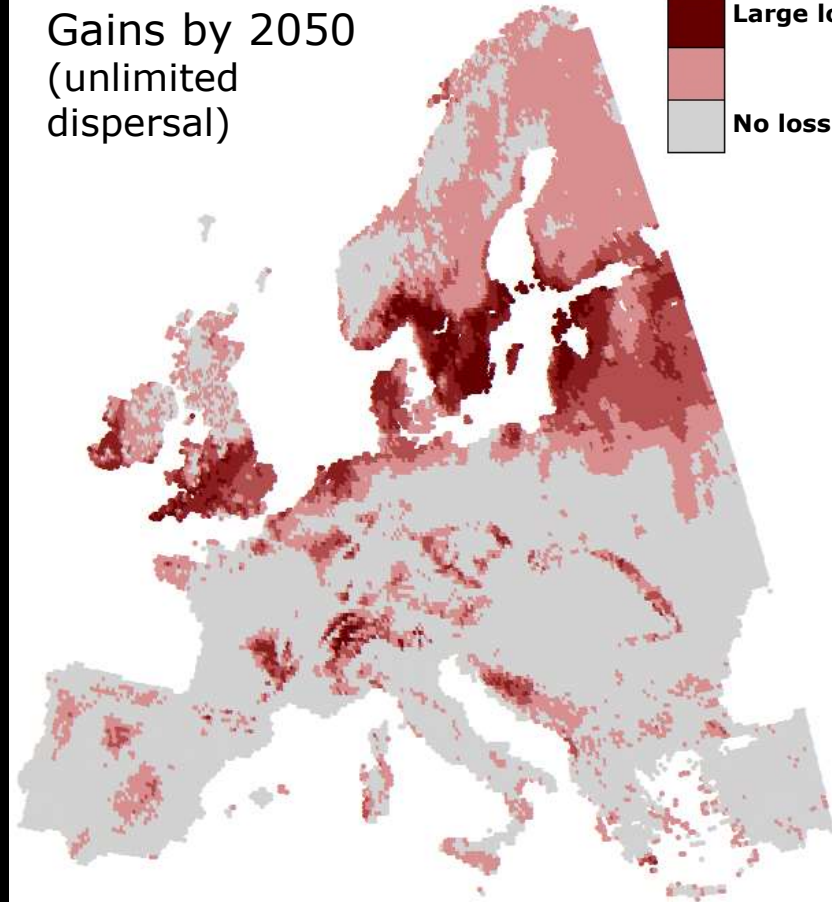


Forekomsten af 42 paddearter i 2050 givet klimaforandringer

Losses by 2050
(no dispersal)



Gains by 2050
(unlimited dispersal)

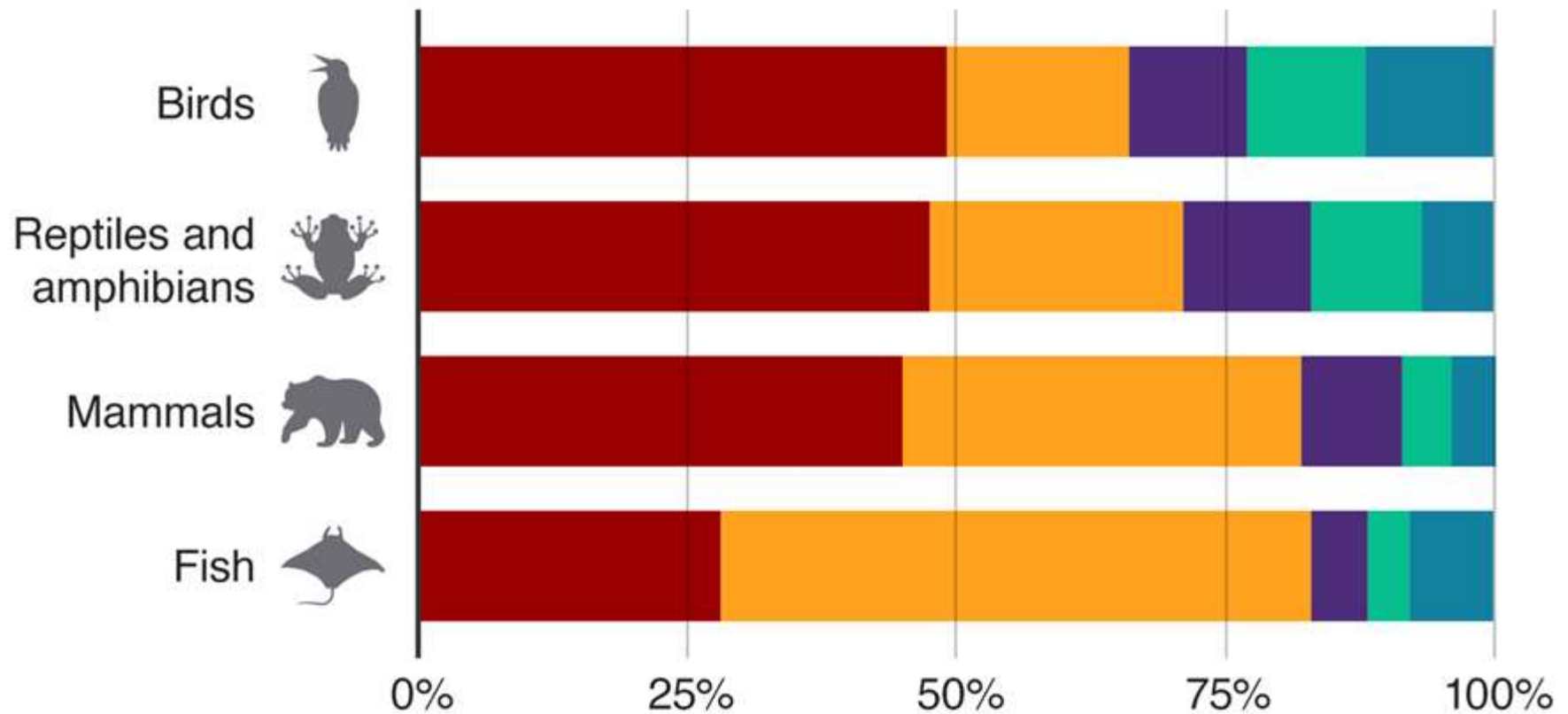
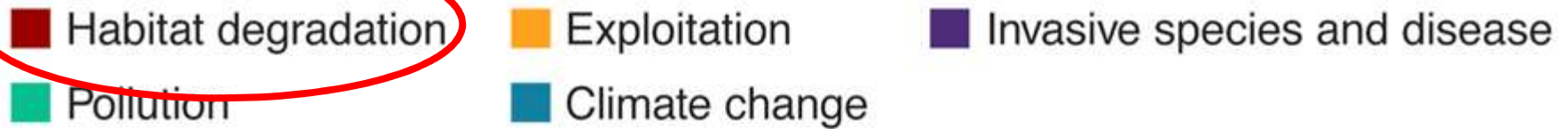


Hvad er den primære faktor som
forårsager tab af arter

...og hvor vigtig er klimaforandringer?

Habitat loss is a major threat to biodiversity

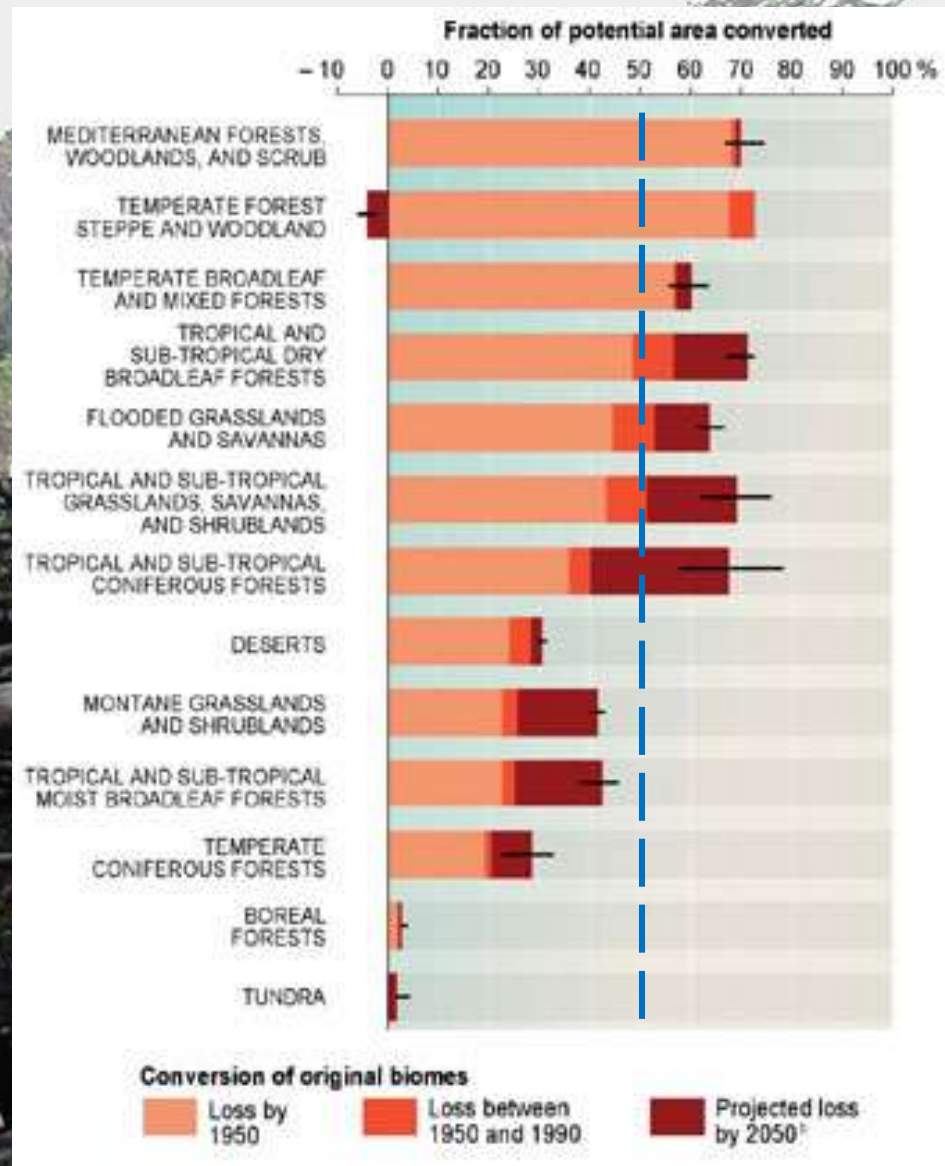
The Living Planet Report assesses key drivers of species decline



Note: A sample of 3,789 populations evaluated by the Living Planet Index

Source: WWF, Living Planet Report 2018

Tab af levesteder



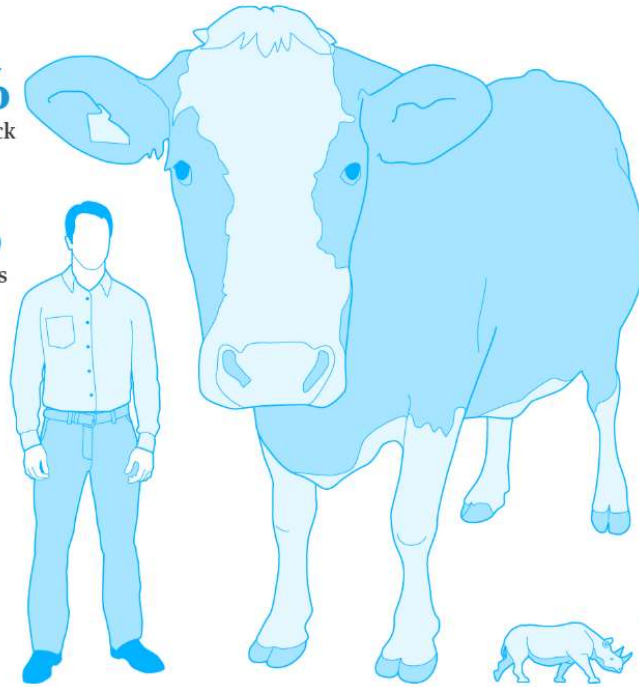
**60% of Global Biodiversity Loss
Due to Land Cleared for Meat-Based Diets**



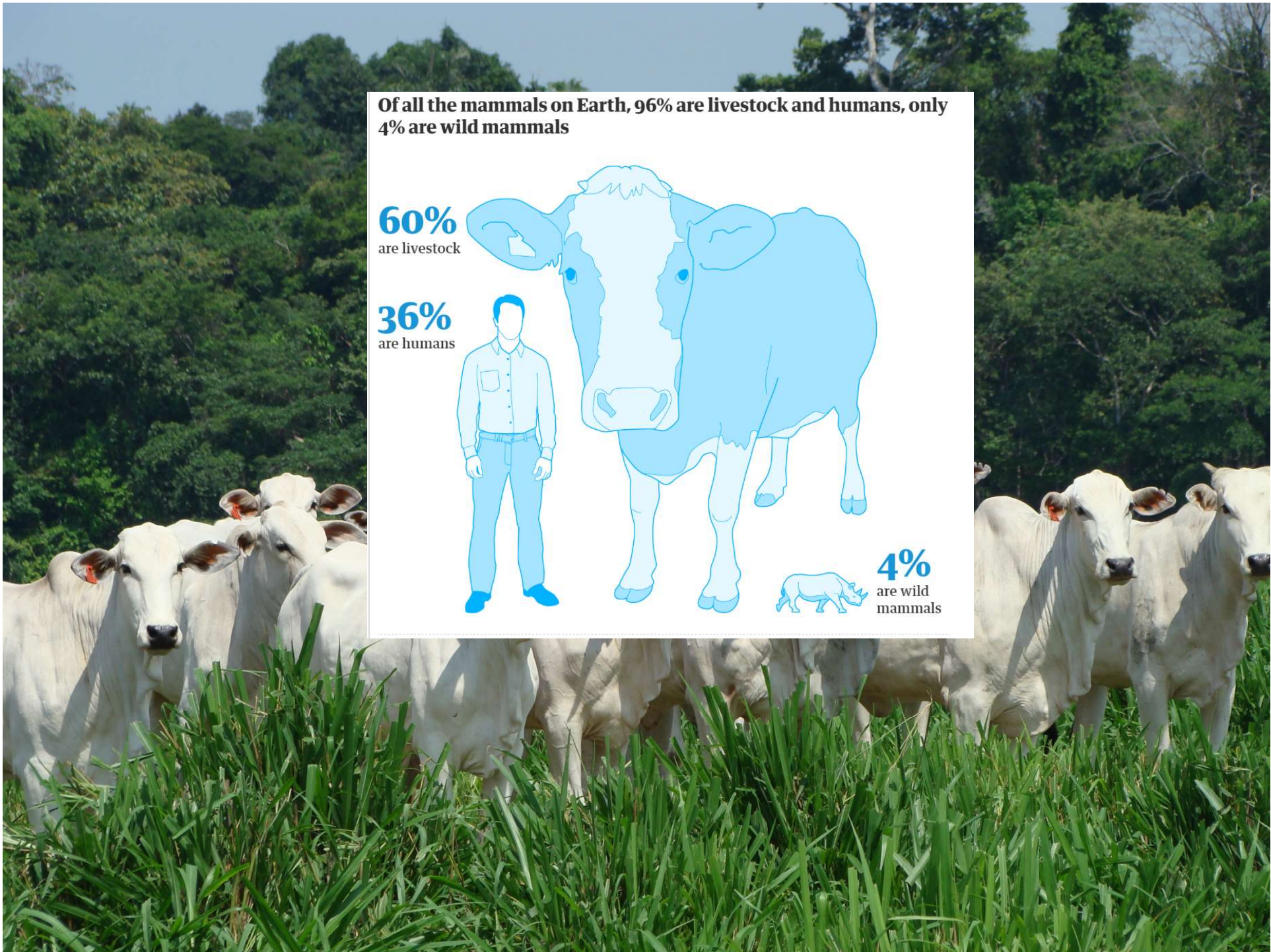
Of all the mammals on Earth, 96% are livestock and humans, only 4% are wild mammals

60%
are livestock

36%
are humans



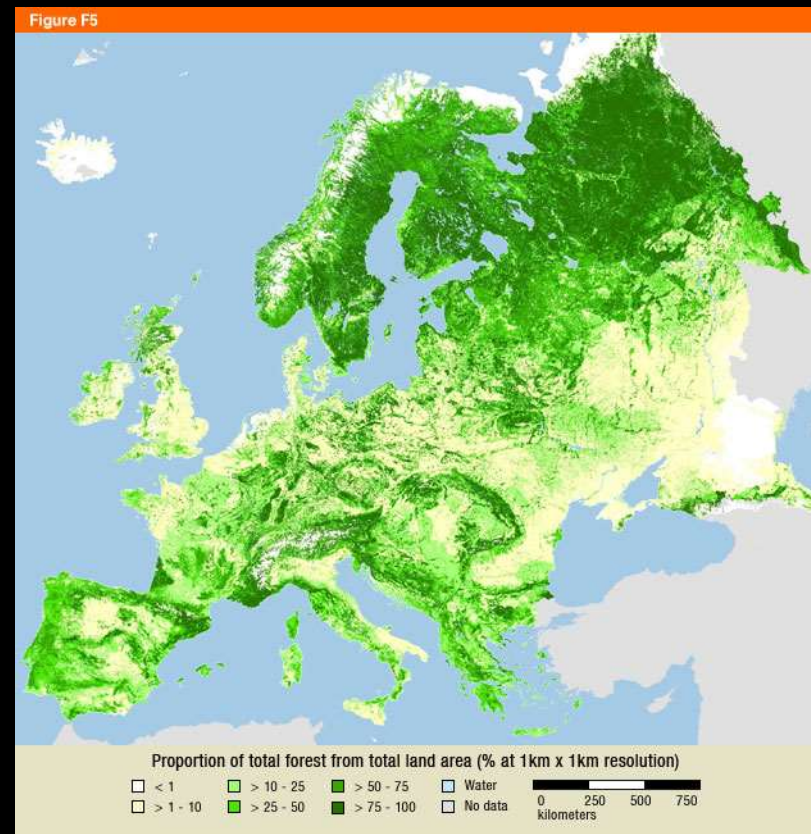
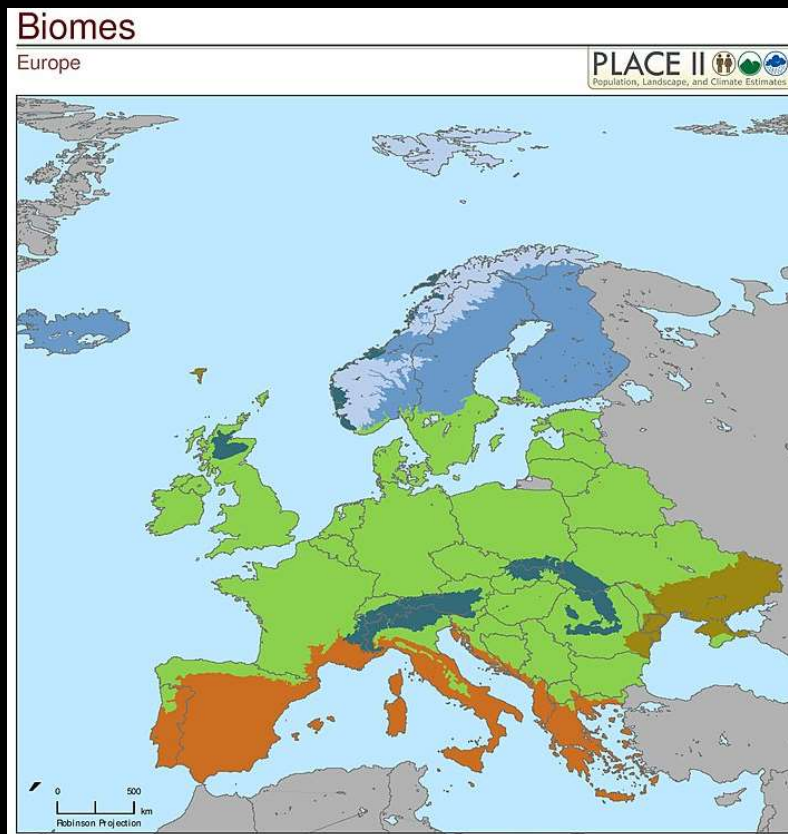
4%
are wild
mammals



Klimaforandringer forstærker den negative effekt af fragmenteringen af natur

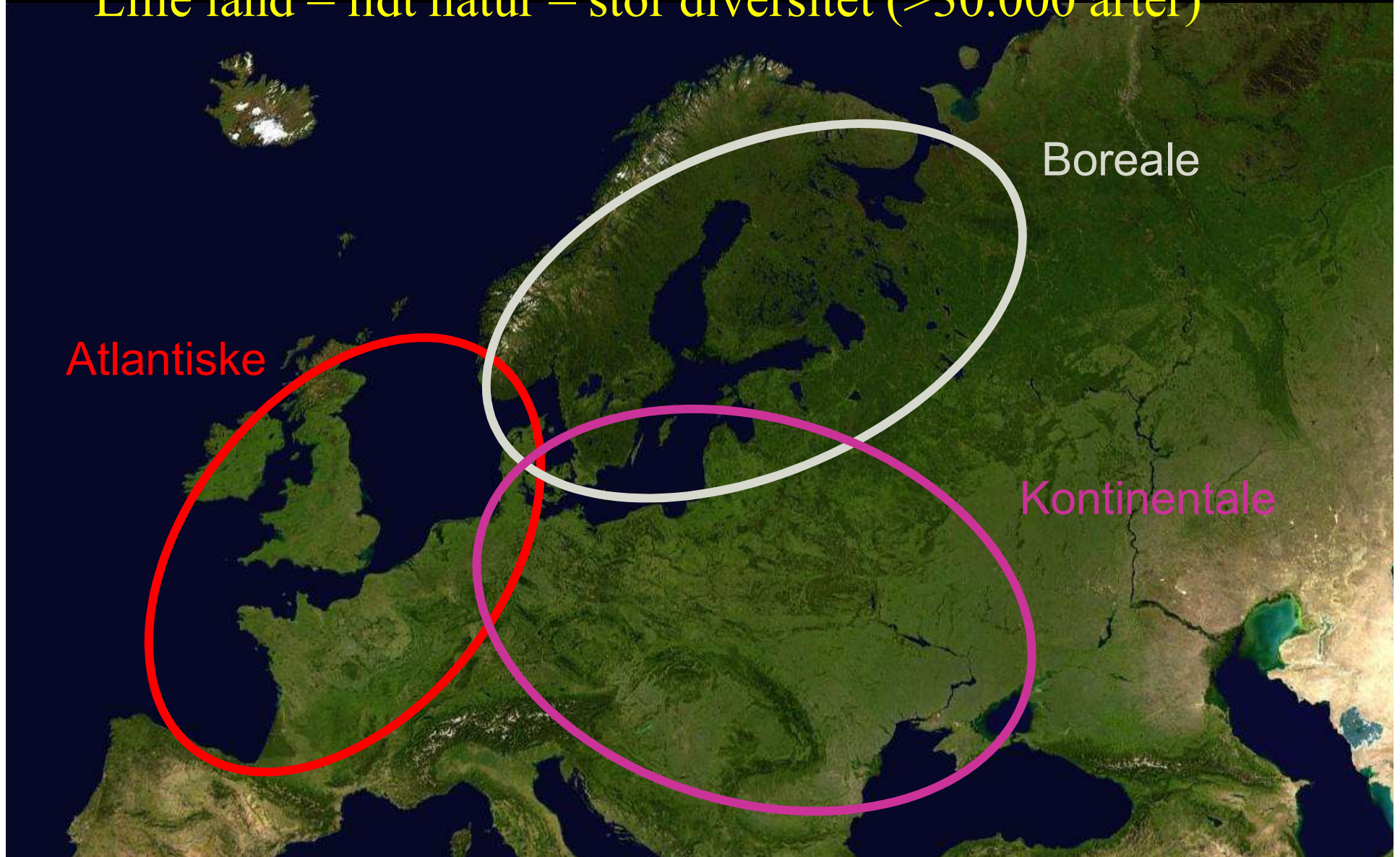
 Blandet løvskov

Andel af natur (tilbage) 



Danmark og biodiversitet

Lille land – lidt natur – stor diversitet (>30.000 arter)



Danmark og biodiversitet

Arters potentielle vandringer pga klimaforandringer



Ændringer i arters udbredelse: ederfugl

Nuværende

2050-2100

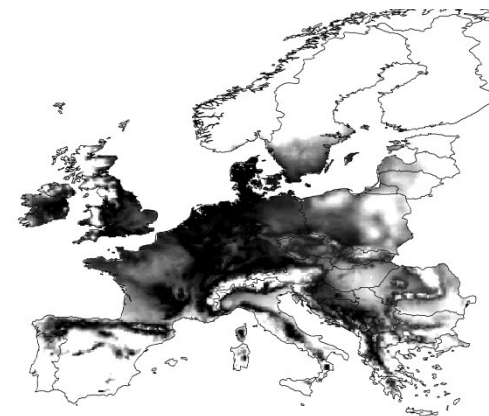
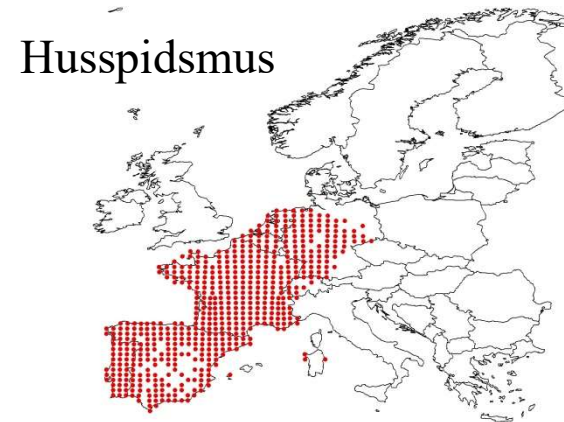
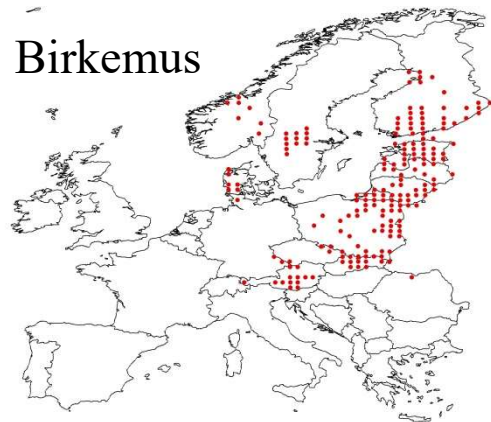


Den danske fuglefauna i 2050-2100

En udskiftning af op til 20% i artssammensætning
– flest blandt de danske rødlistede arter

Den danske pattedyrsfauna i 2050-2100

Op mod 50% flere pattedyrarter i Danmark



Hvordan tilpasser dansk natur sig klimaforandringer?

**Store uforstyrrede naturområder
– hvor naturen får lov til at være natur**



Hvordan tilpasser dansk natur sig klimaforandringer?

Større randzoner til fri succession



Hvordan tilpasser dansk natur sig klimaforandringer?

Et landskab med store og små områder,
der tillader spredning

Plads

Plads

Plads



Spørgsmål



"My question is: Are we making an impact?"