

Nature conservation as driver of biodiversity loss

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Secretary-General European Landowners' Organization



DRIVERS

INDIRECT DRIVERS

Values and behaviours

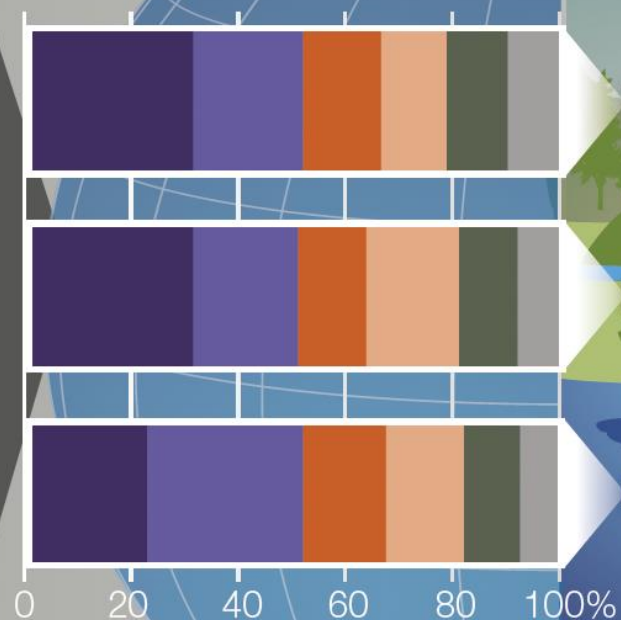
Demographic and sociocultural

Economic and technological

Institutions and governance

Conflicts and epidemics

DIRECT DRIVERS



Land/sea use change
 Direct exploitation
 Climate change
 Pollution
 Invasive alien species
 Others

EXAMPLES OF DECLINES IN NATURE

ECOSYSTEM EXTENT AND CONDITION

47%

Natural ecosystems have **declined by 47 per cent** on average, relative to their earliest estimated states.

SPECIES EXTINCTION RISK

25%

Approximately **25 per cent of species are already threatened with extinction** in most animal and plant groups studied.

ECOLOGICAL COMMUNITIES

23%

Biotic integrity—the abundance of naturally-present species—has **declined by 23 per cent** on average in terrestrial communities.*

BIOMASS AND SPECIES ABUNDANCE

82%

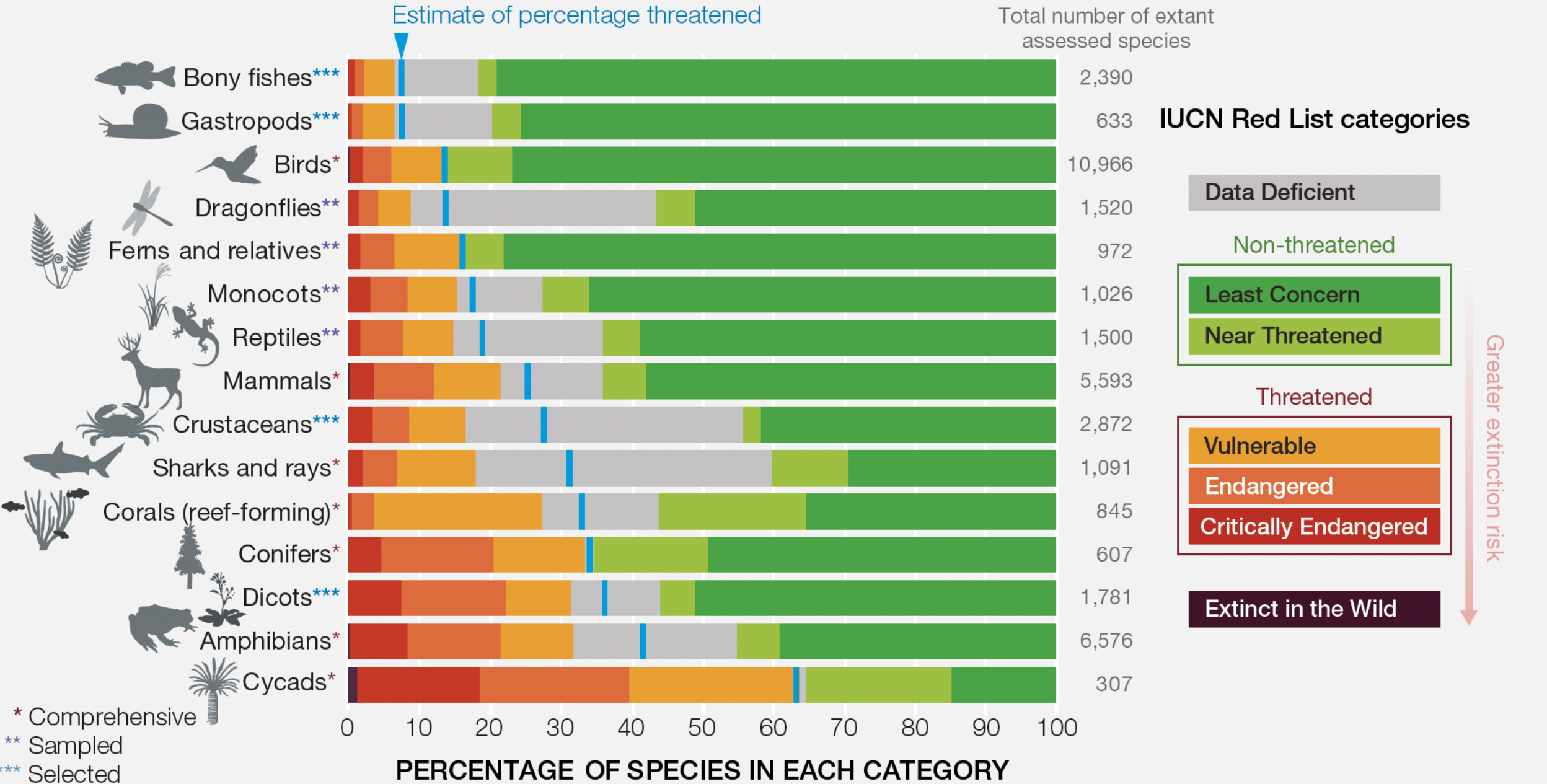
The global biomass of wild mammals has **fallen by 82 per cent**.* Indicators of vertebrate abundance have declined rapidly since 1970

NATURE FOR INDIGENOUS PEOPLES AND LOCAL COMMUNITIES

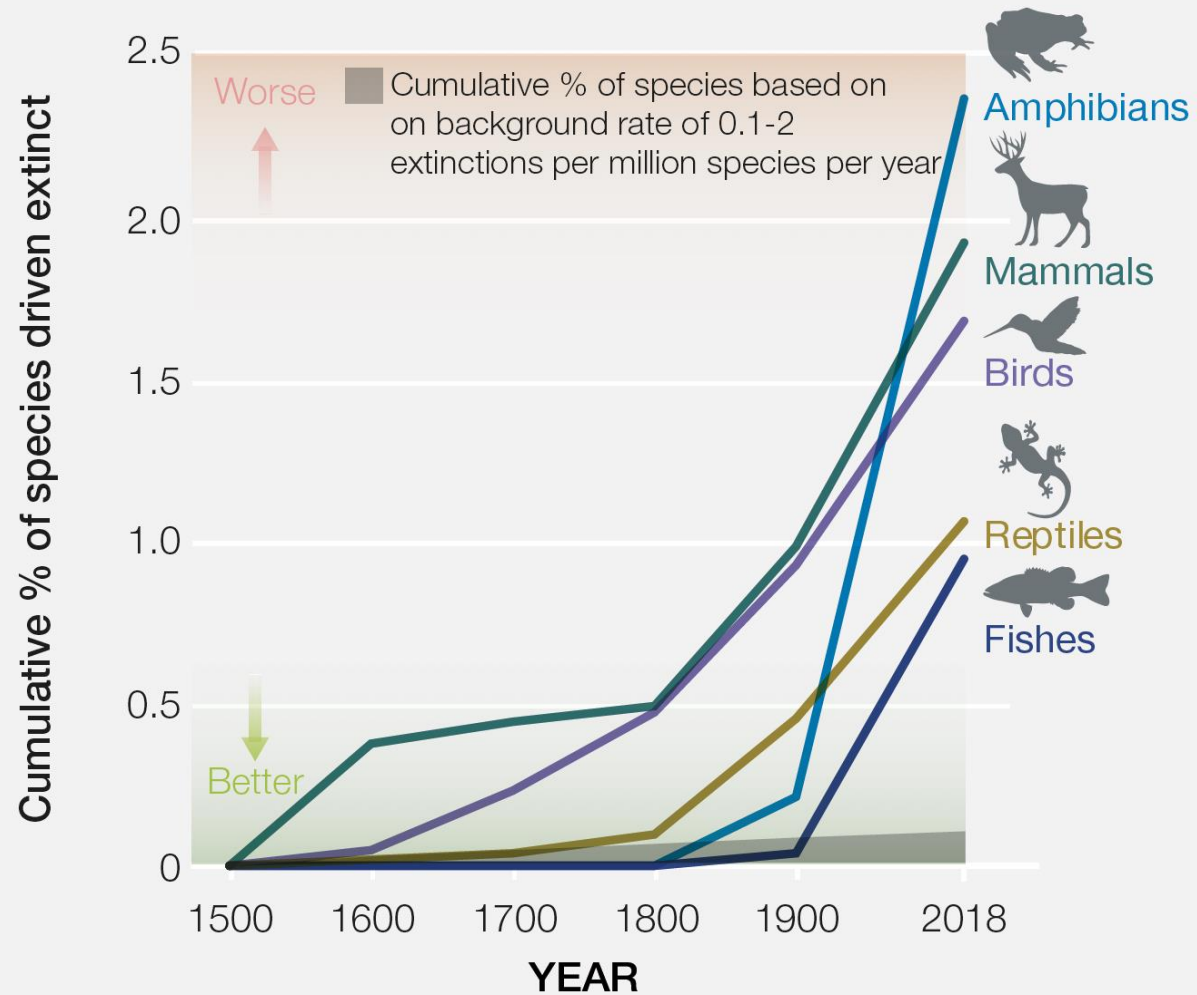
72%

72 per cent of indicators developed by indigenous peoples and local communities show **ongoing deterioration** of elements of nature important to them

A Current global extinction risk in different species groups

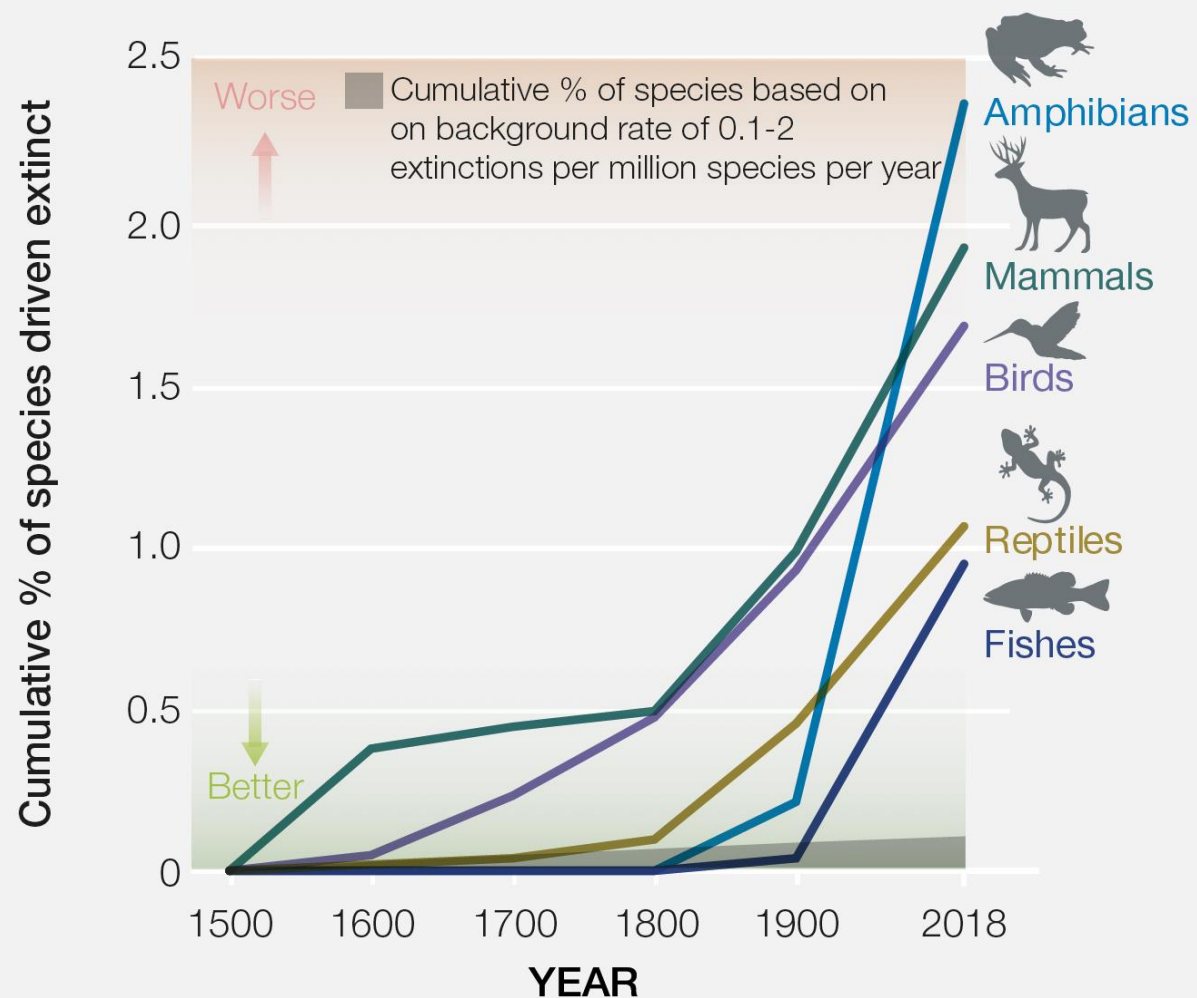


B Extinctions since 1500



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B Extinctions since 1500



- ? Agriculture: pesticides, herbicides, fertilizers
- ? Air pollution
- ? Water pollution
- ? ...

- Climate change
- Habitat fragmentation

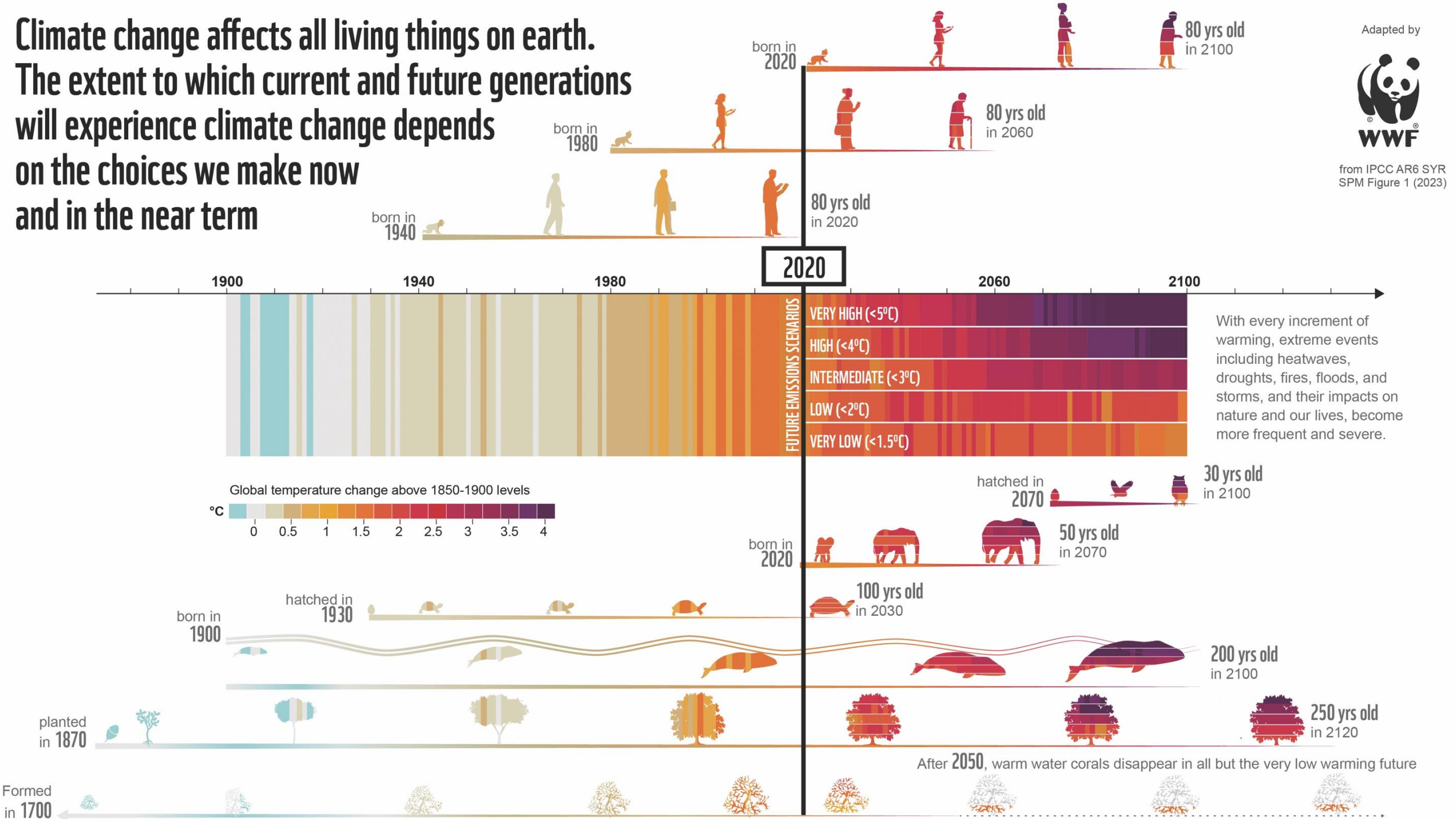
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Climate change affects all living things on earth.
The extent to which current and future generations
will experience climate change depends
on the choices we make now
and in the near term

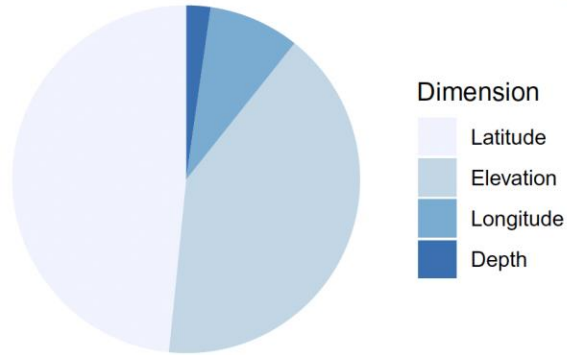
Adapted by



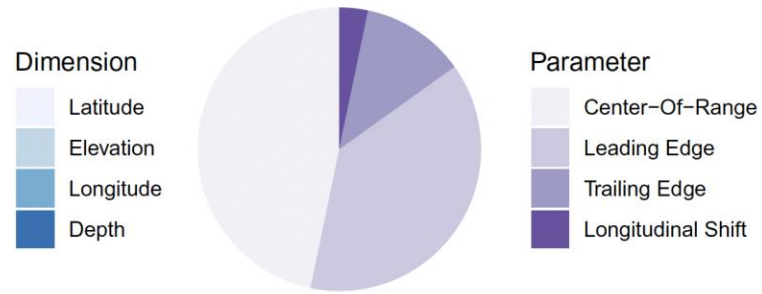
from IPCC AR6 SYR
SPM Figure 1 (2023)



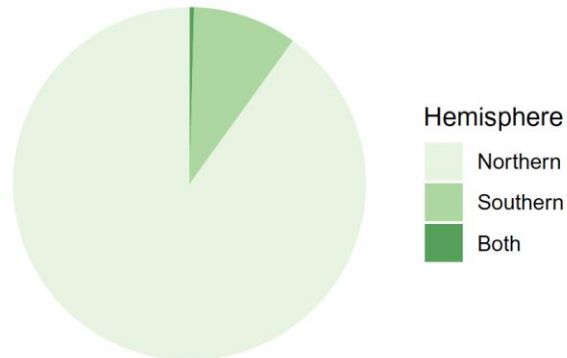
Dimension



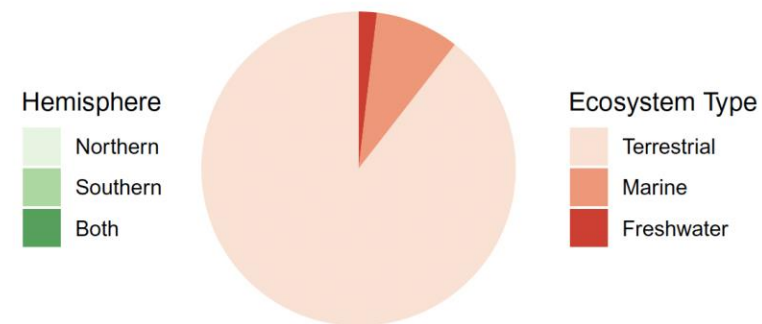
Parameter



Hemisphere



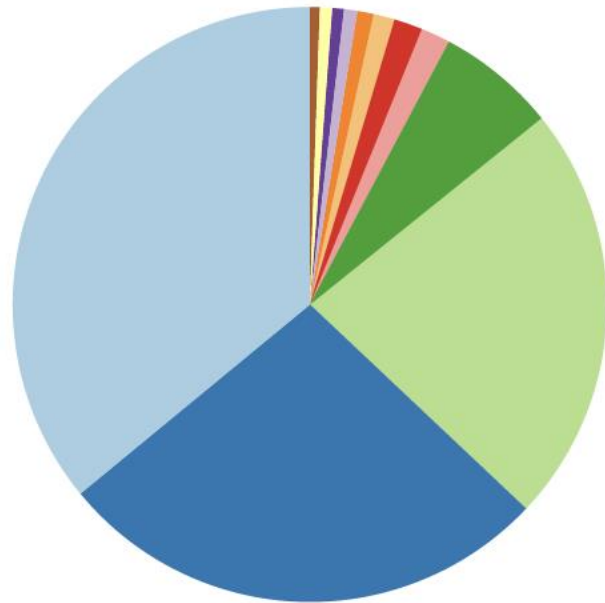
Ecosystem Type



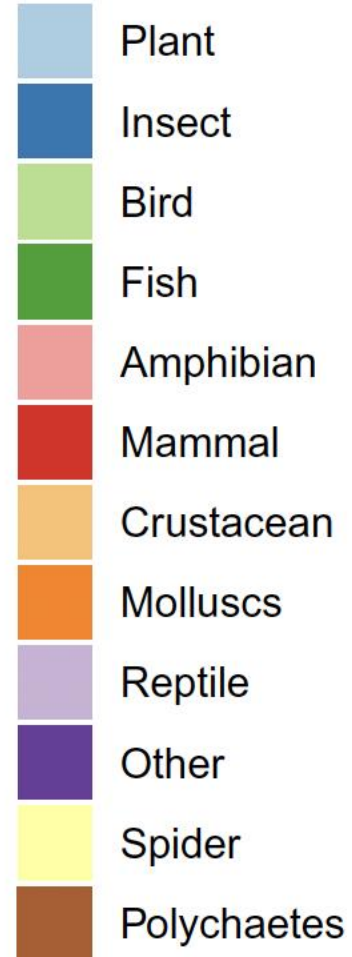
Rubenstein et al. Environmental Evidence (2023) 12:7

315 articles included in the final database reported 32,632 range-shift estimates across 12,009 species

Taxonomic Group



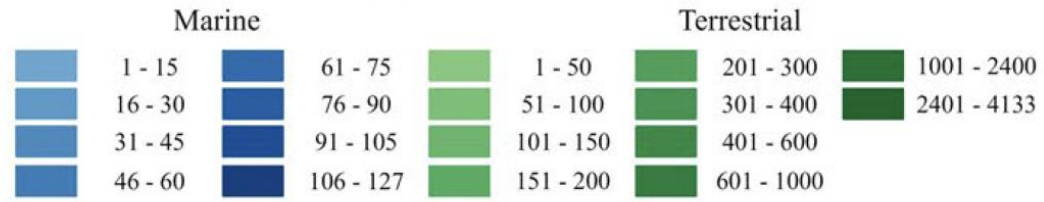
Taxonomic Group



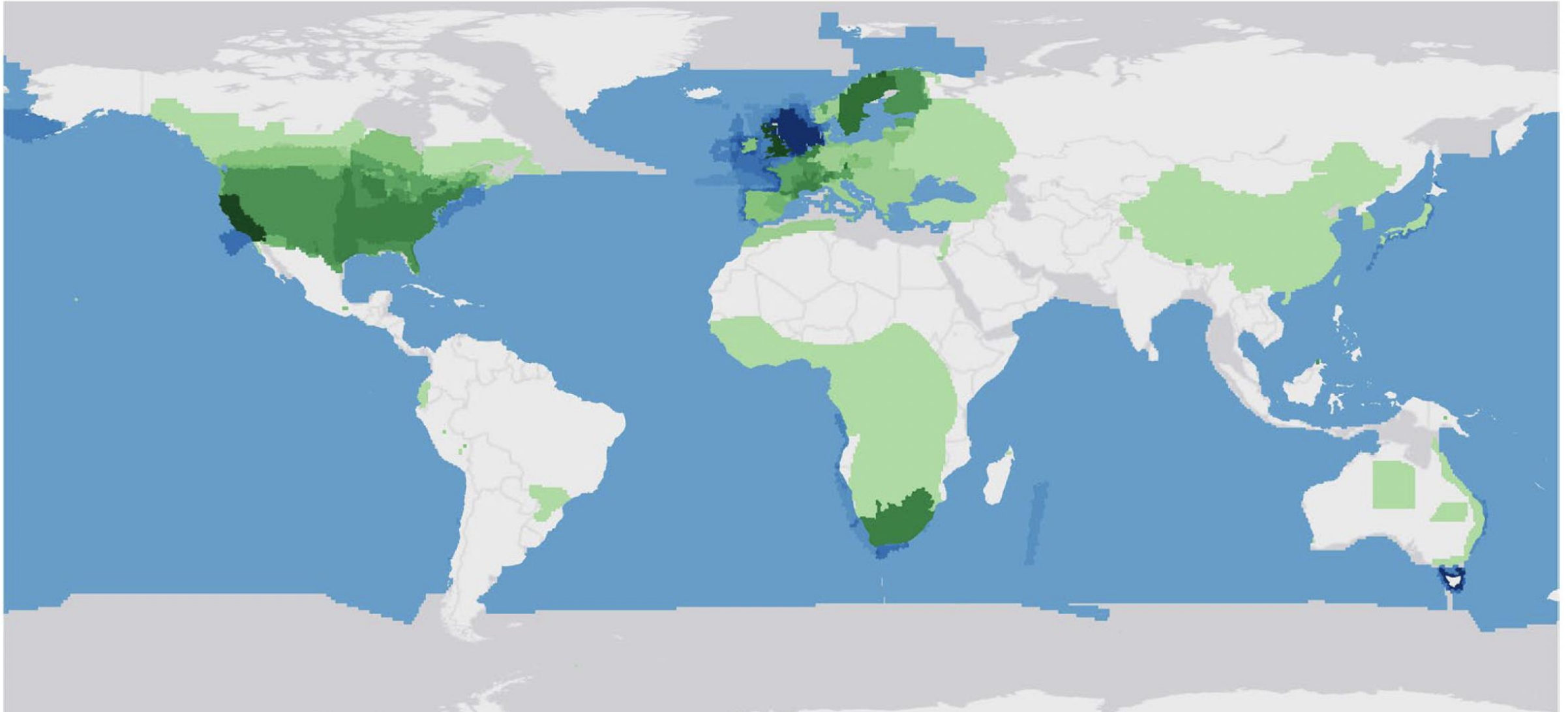
Rubenstein et al. Environmental Evidence (2023) 12:7

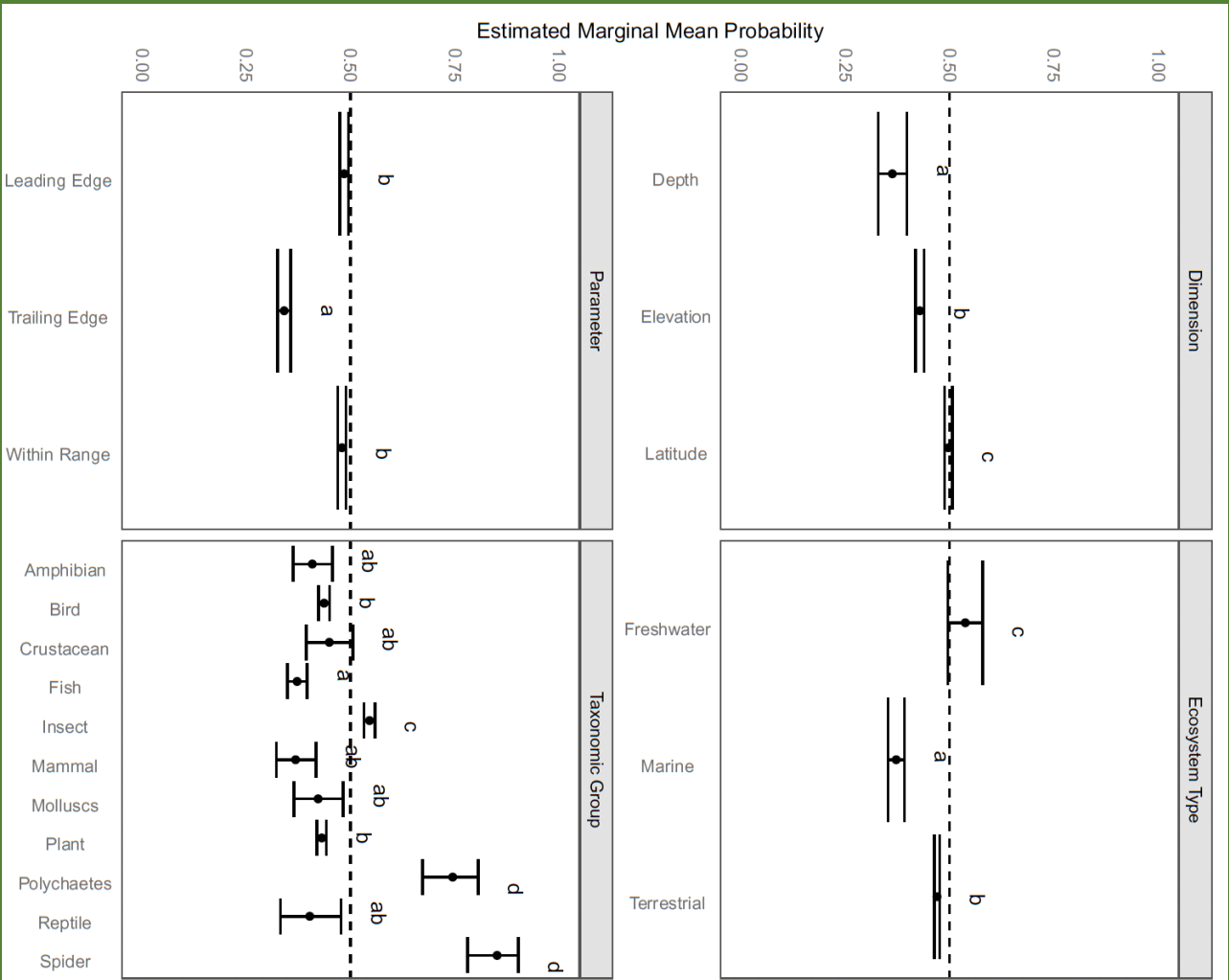
315 articles included in the final database reported 32,632 range-shift estimates across 12,009 species

Number of Species Assessed

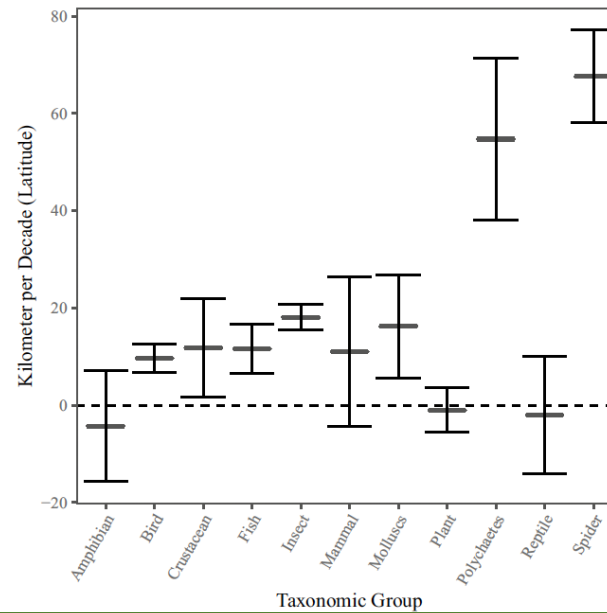
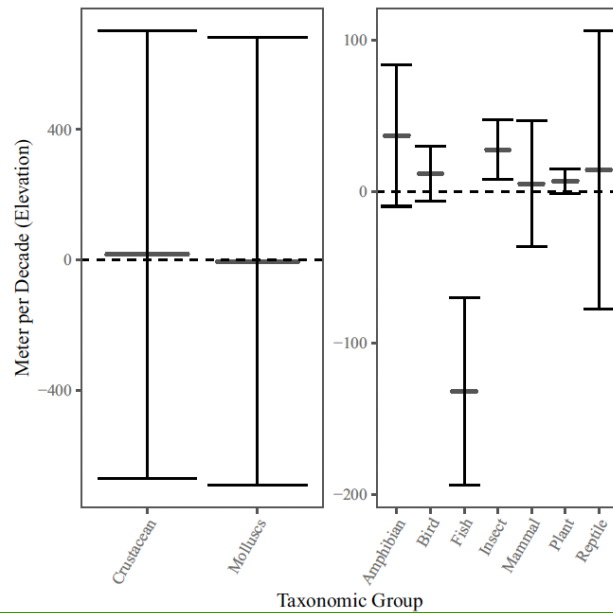
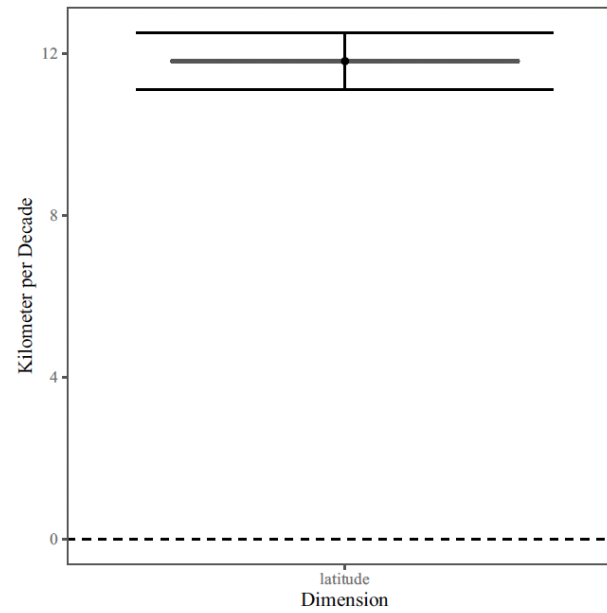
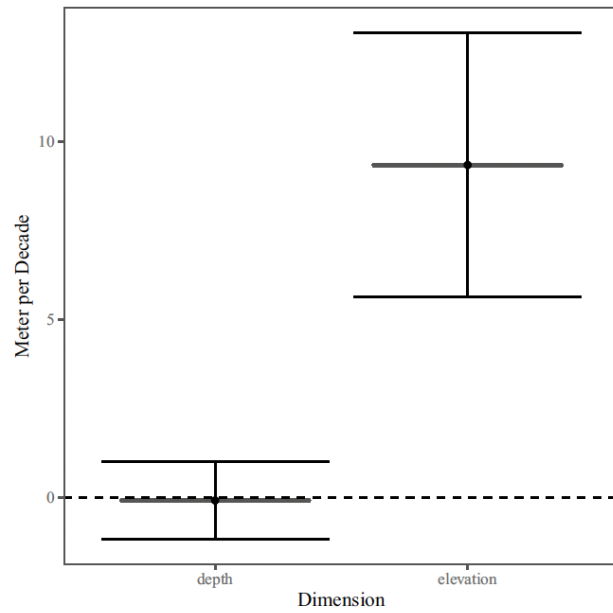


*Rubenstein et al. Environmental
Evidence (2023) 12:7*

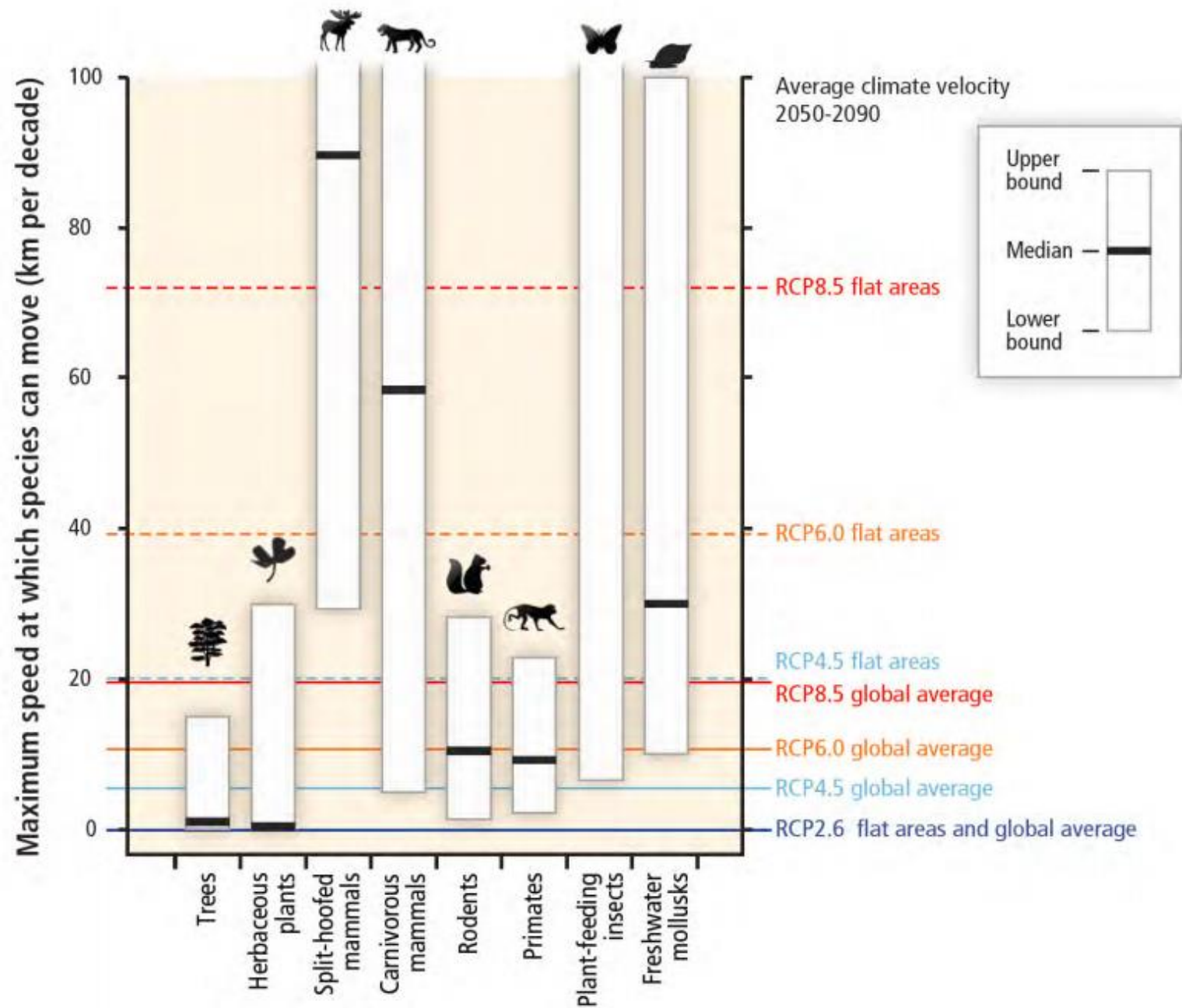




Rubenstein et al. *Environmental Evidence* (2023) 12:7

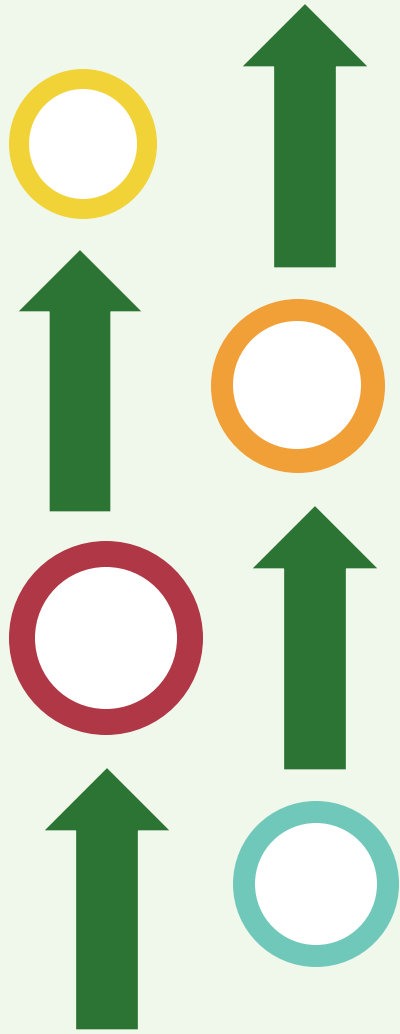


Rubenstein et al. Environmental Evidence (2023) 12:7



IPCC, 2014

25 – 27 April 2025, Doha, Qatar



**habitats provide food
but habitats do not move**

**animals move
and arrive at new habitats
adapt to new food sources
or go extinct**

Strict protection regulations

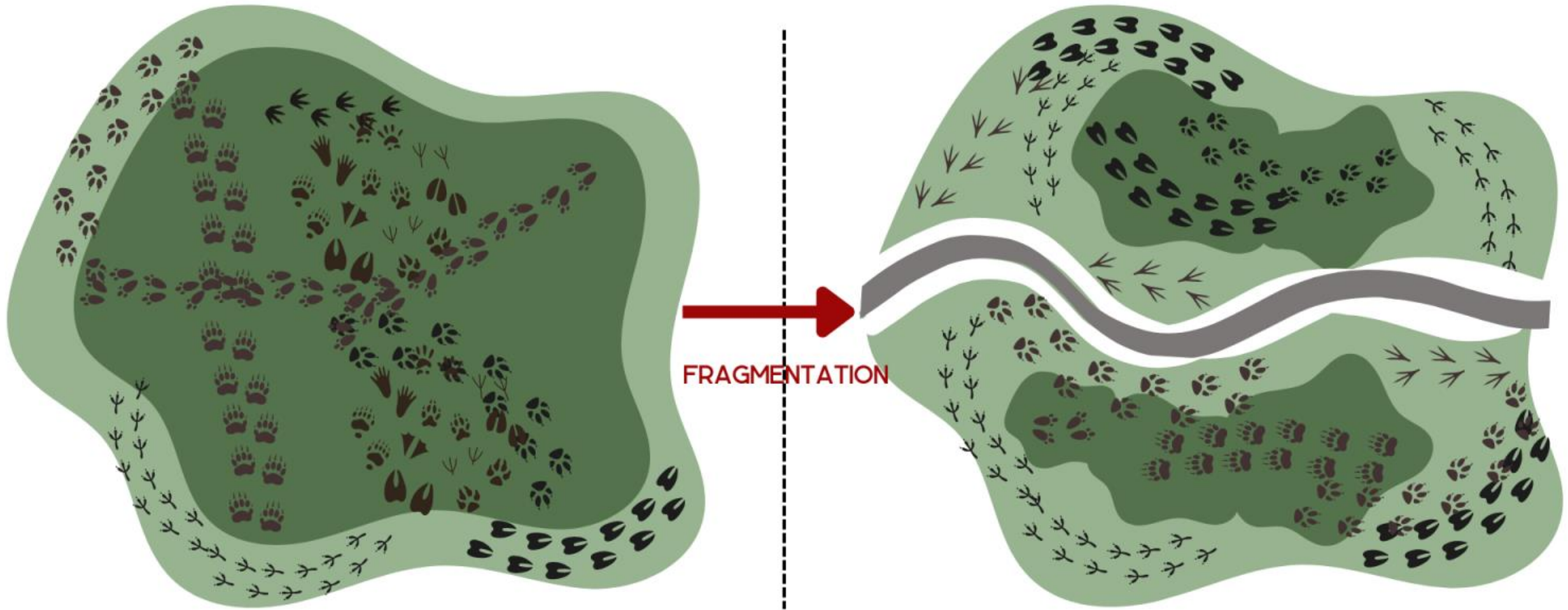
- EU - **Habitats Directive & Birds Directive** → **Nature Restoration Regulation**
- United States – **Endangered Species Act (ESA)**
- Australia – **Environment Protection and Biodiversity Conservation Act (EPBC Act)**
- Canada – **Species at Risk Act (SARA)**
- India – **Wildlife Protection Act**
- South Africa – **National Environmental Management: Biodiversity Act (NEMBA)**
- China – **Wild Animal Protection Law**

→ Species extinction due to strict protection

→ Needed:

→ Active conservation

→ Assisted migration

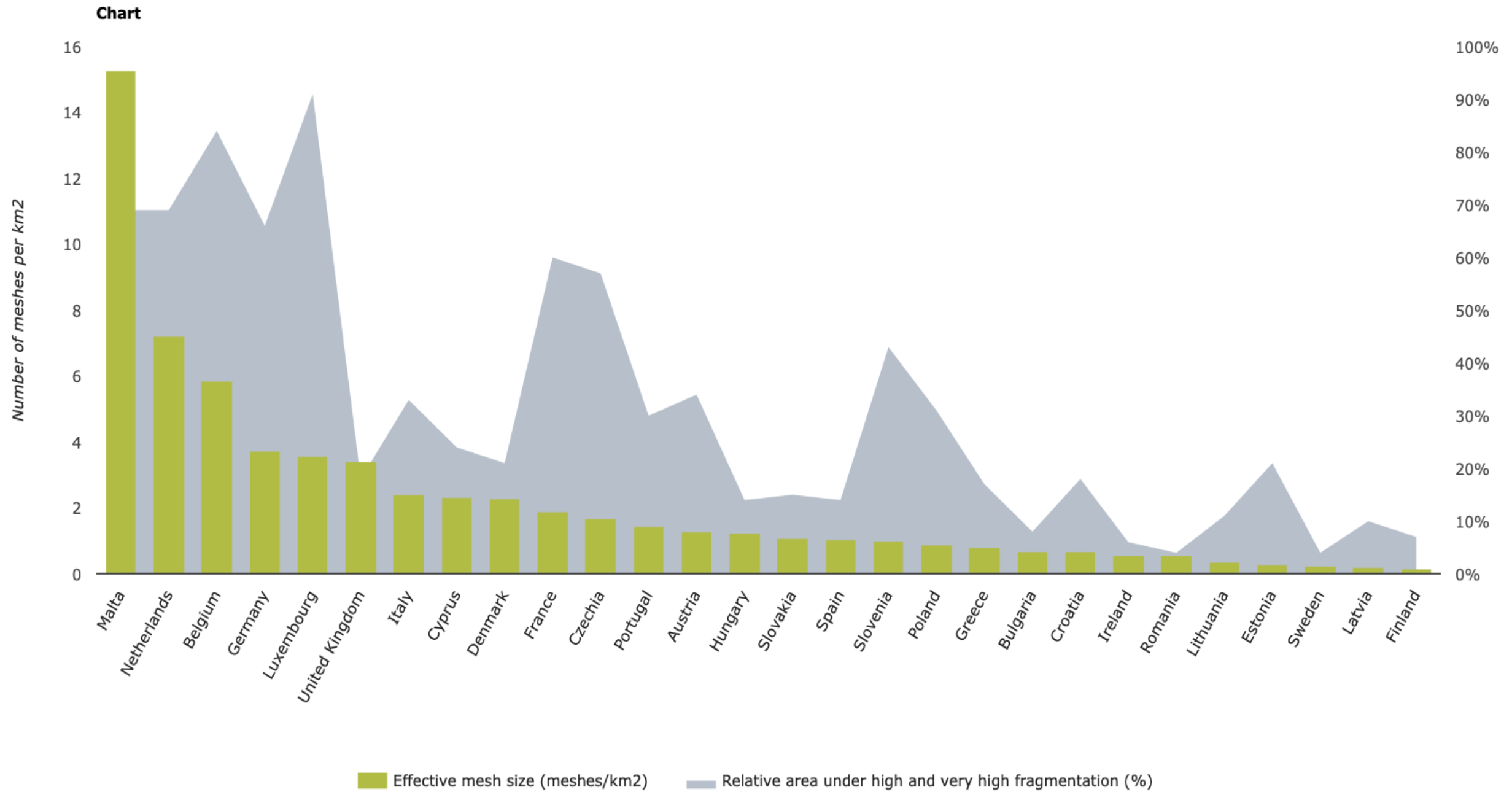


Interior habitat with interior species

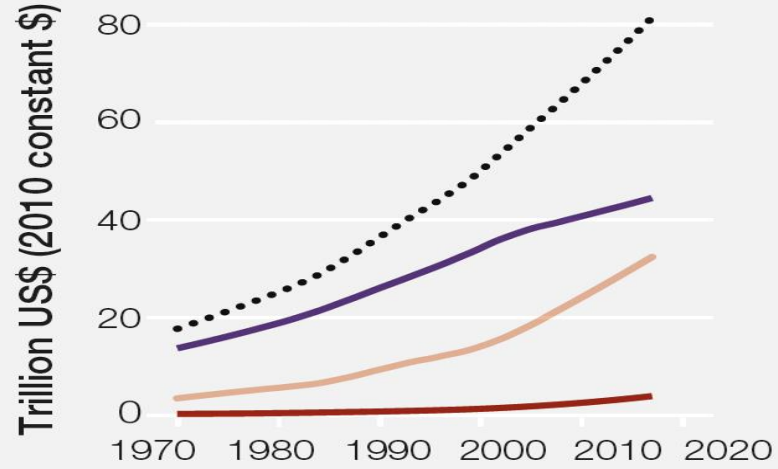
Edge habitat with edge species

Interior habitat with interior species decline

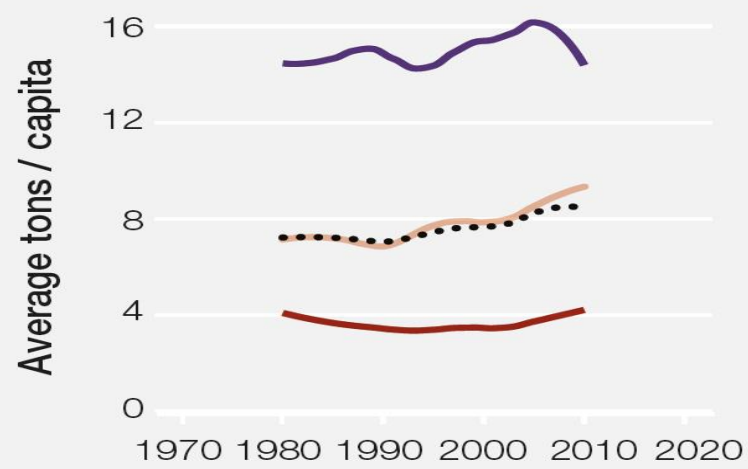
Edge habitat with edge species increase



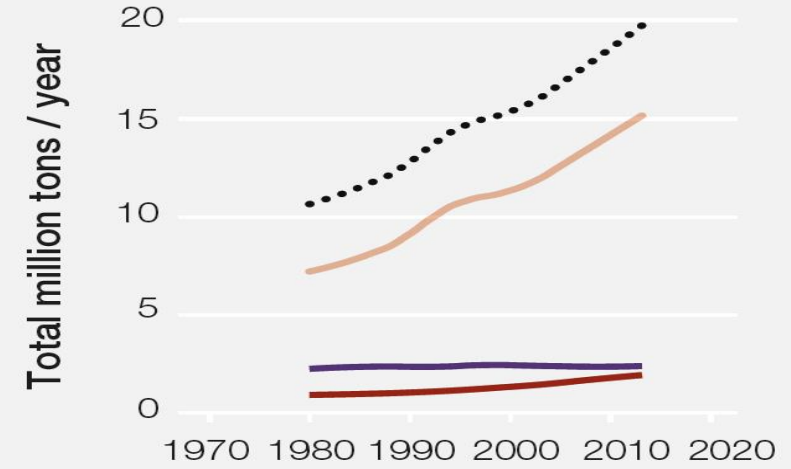
A Gross domestic product (GDP)



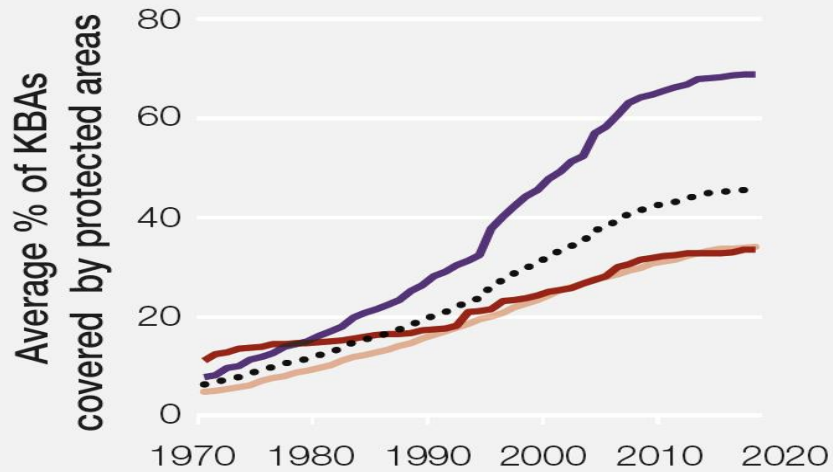
B Domestic material consumption



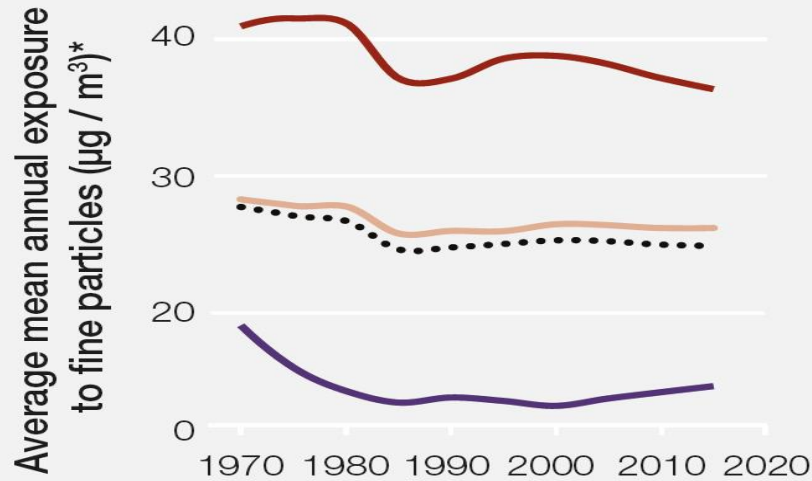
C Extraction of living biomass (domestic consumption and exports)



D Protection of Key Biodiversity Areas (KBAs)

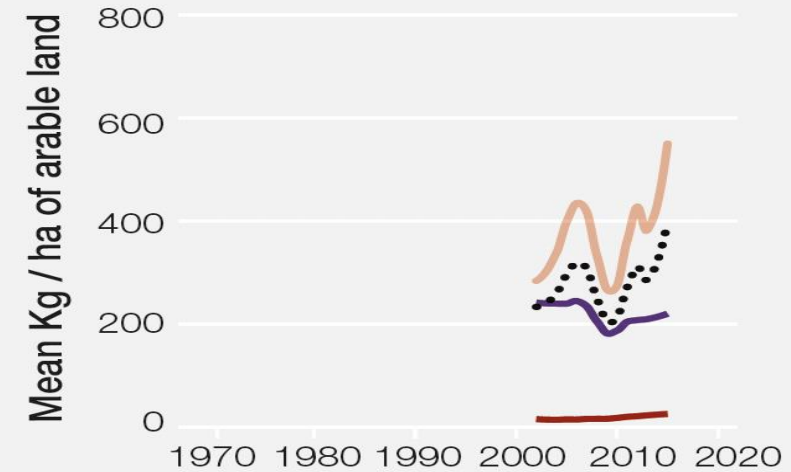


E Air pollution



*Fine particles: < 2.5 micrograms

F Fertilizer use



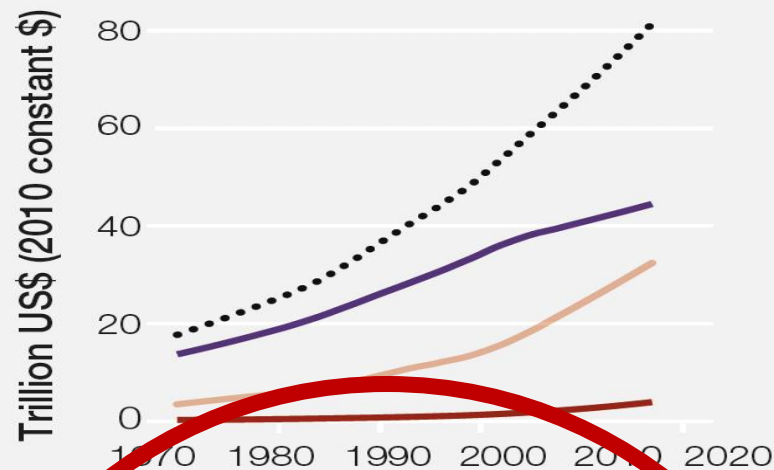
— Developed

— Developing

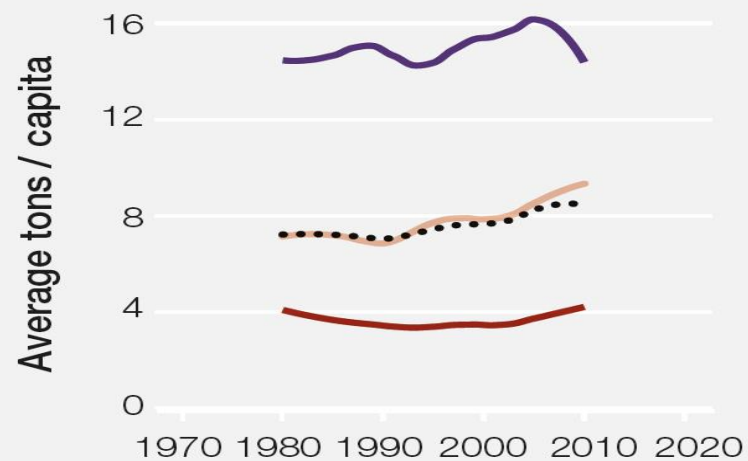
— Least developed

..... World

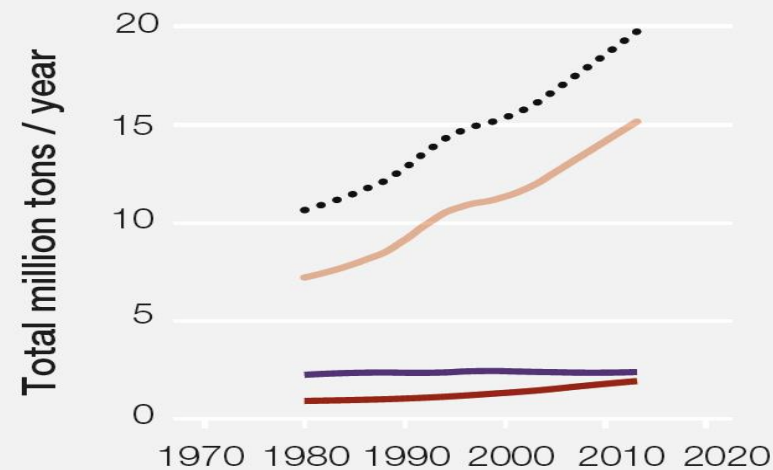
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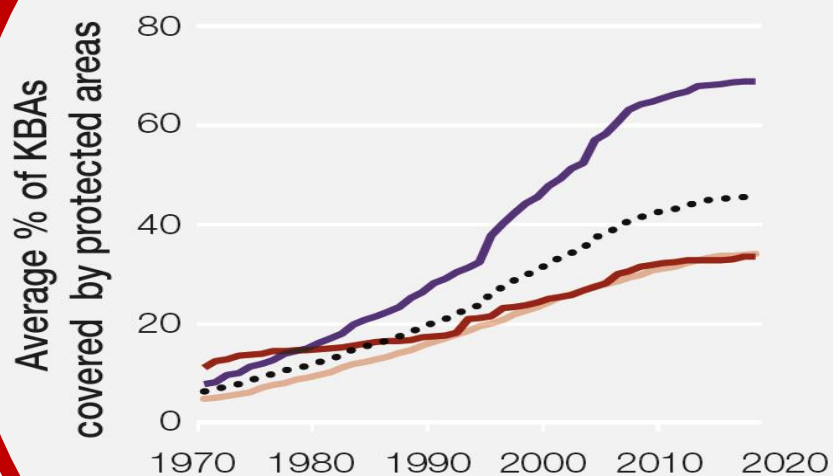
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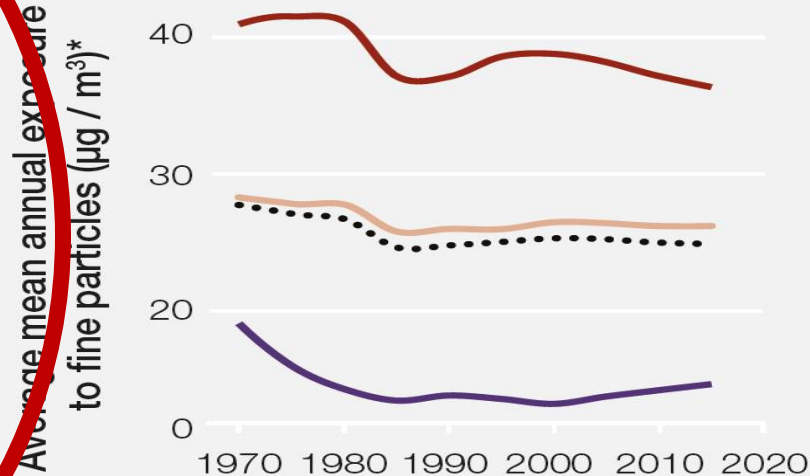
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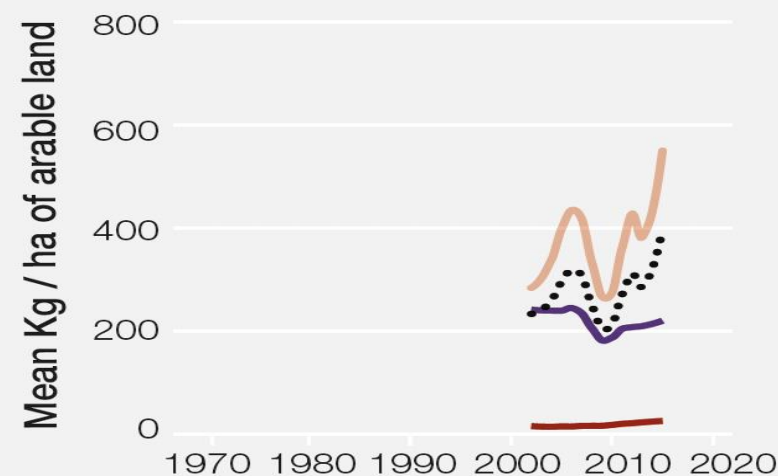
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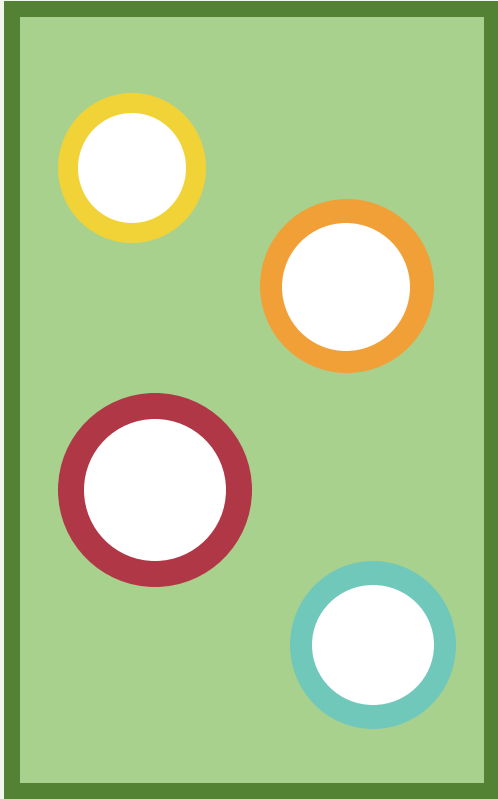
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— Developing

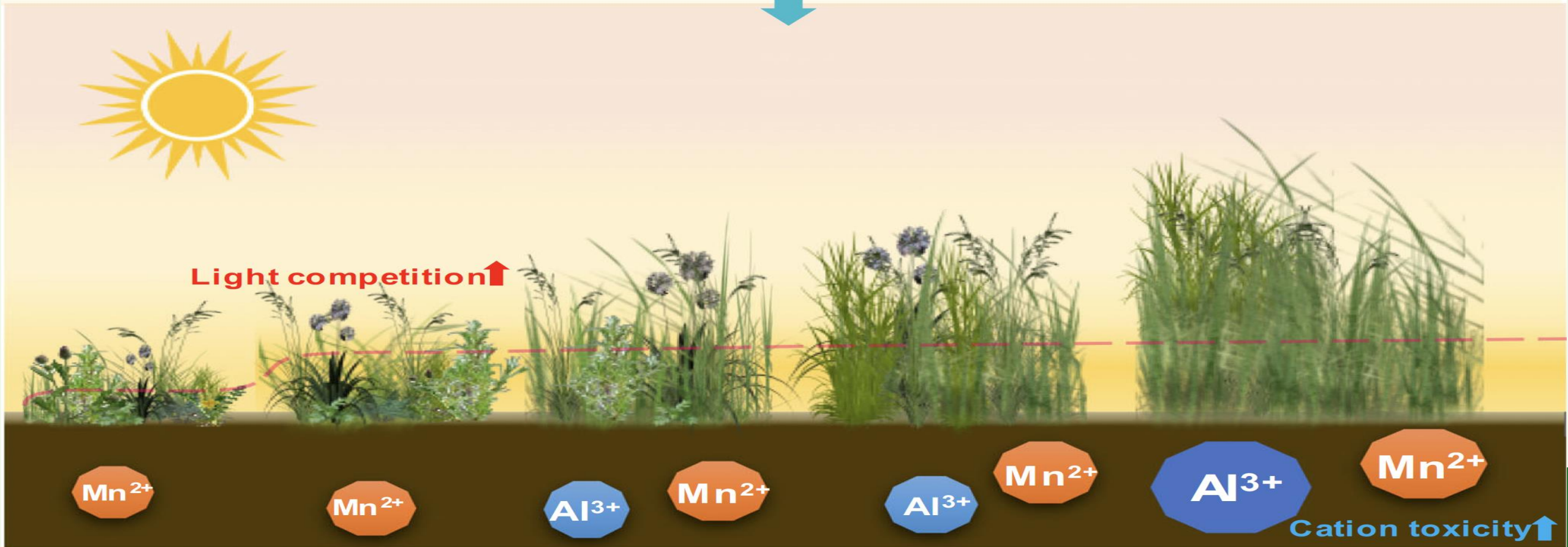
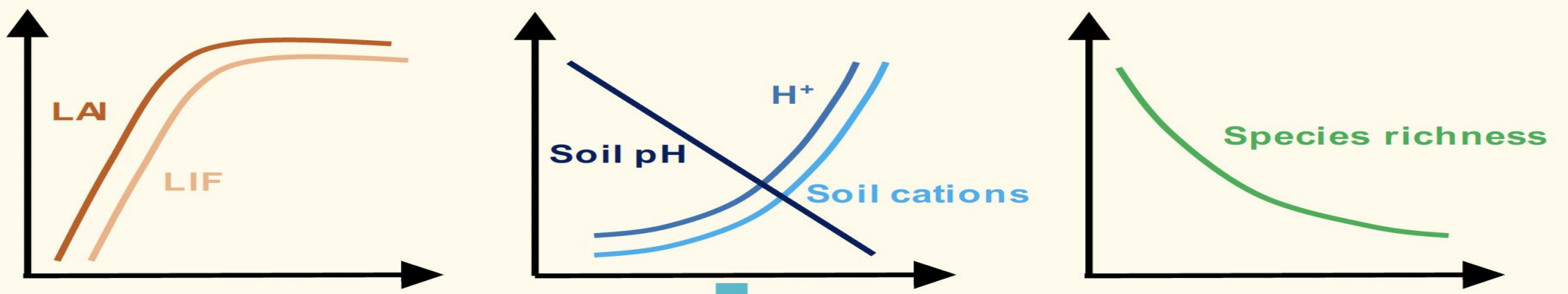
— Least developed

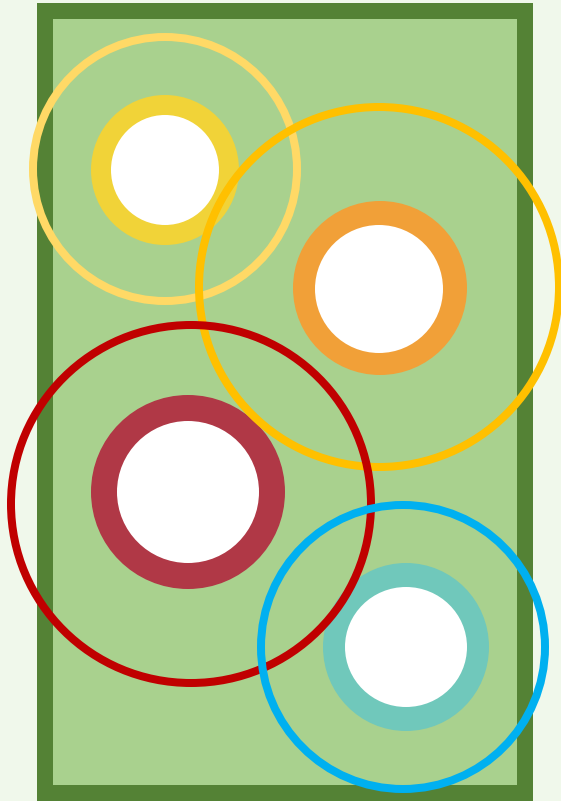
..... World



Nature conservation organisations:

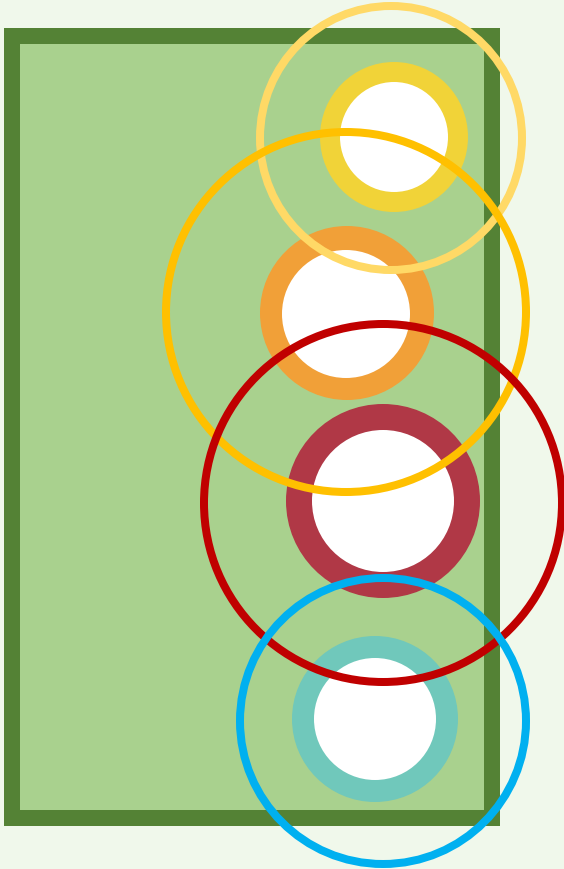
- Opportunistic land buys
- No strategy
- Belgium: average size nature reserve: 40 ha





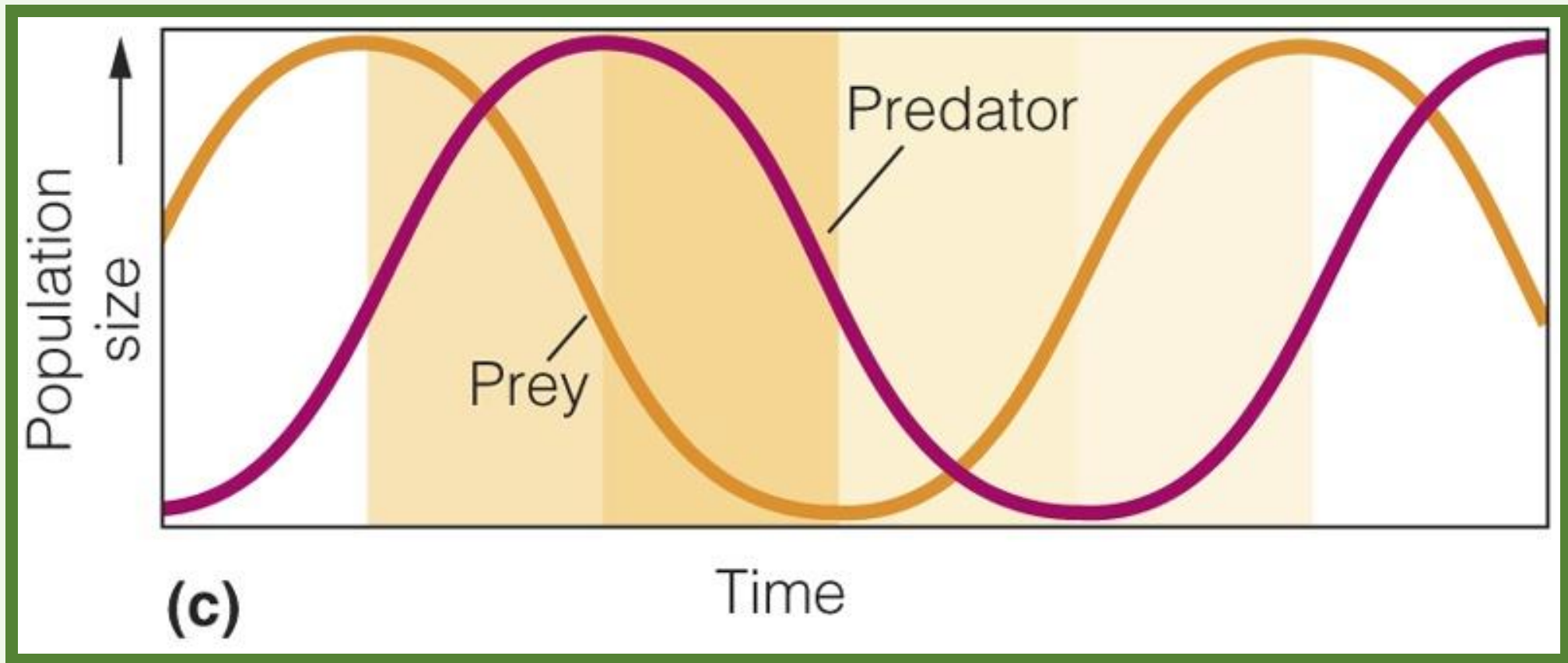
Nature conservation organisations:

- Buffer zones
- Belgium:
 - Average size nature reserve: 40 ha
 - 500 m buffer: 191 ha
 - 3000 m buffer: 3500 ha

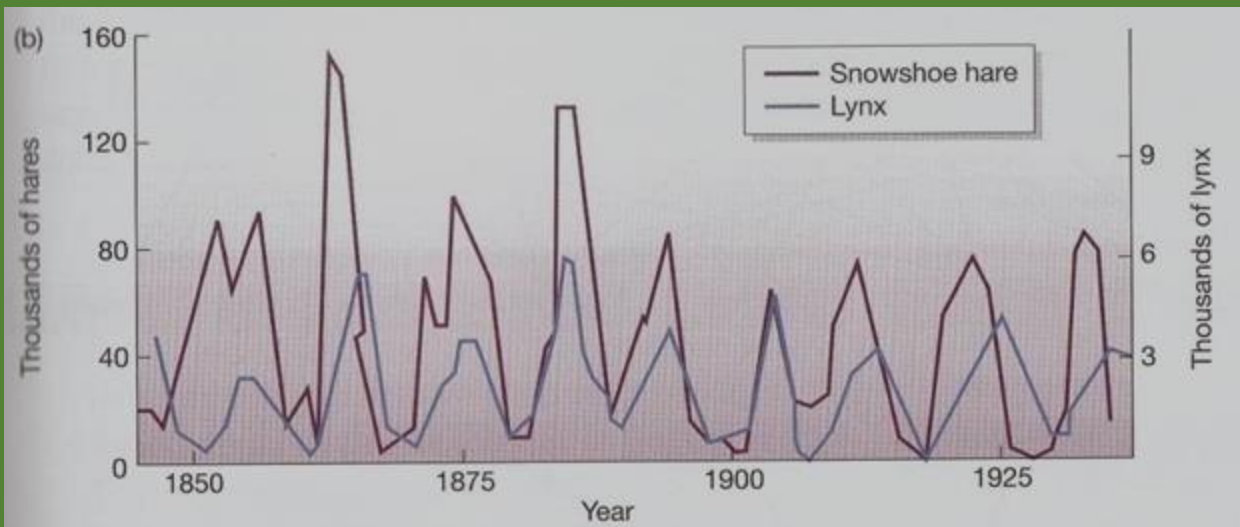


Nature conservation organisations:

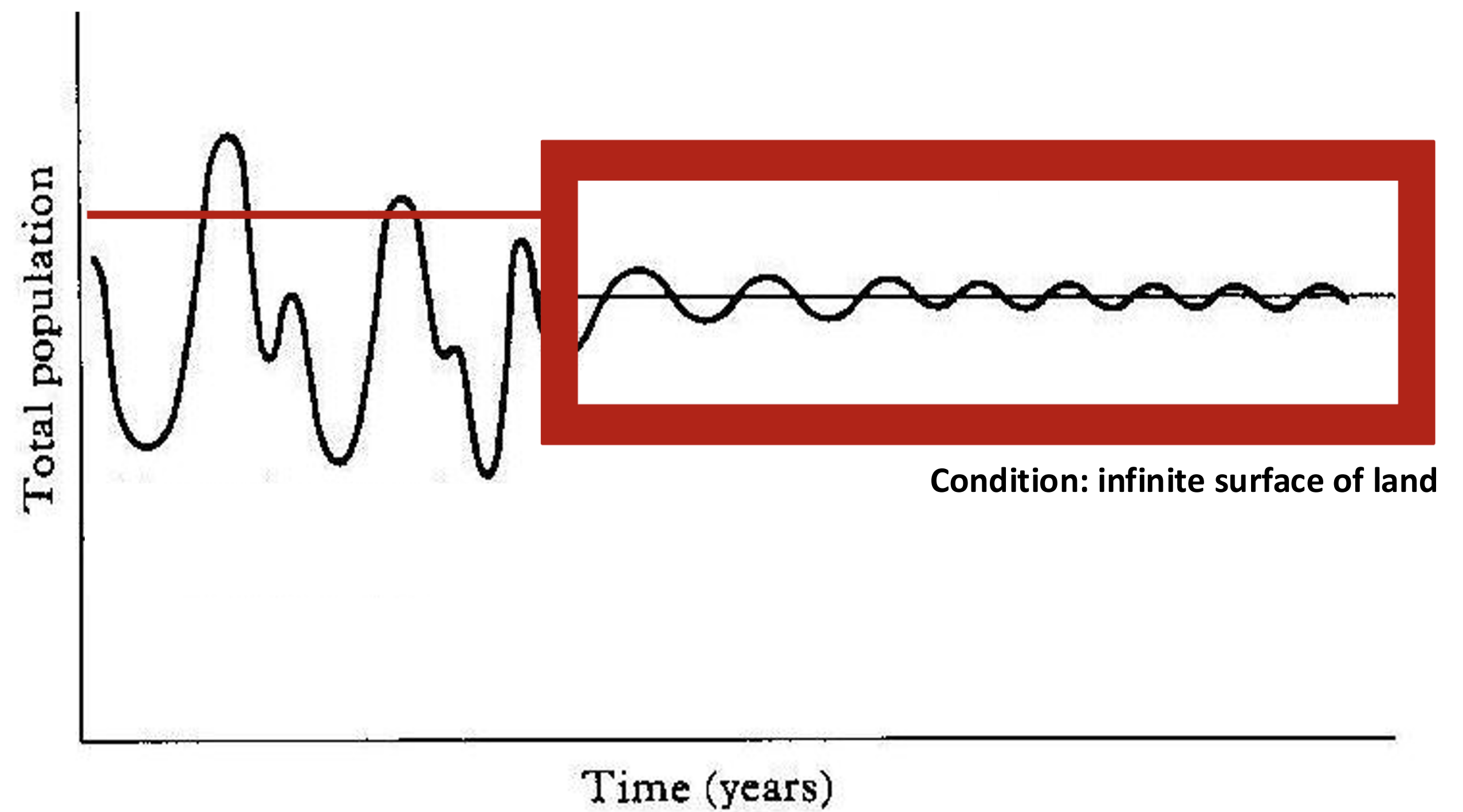
- National parks replacing present nature reserves
- Belgium:
 - Factor: 11x

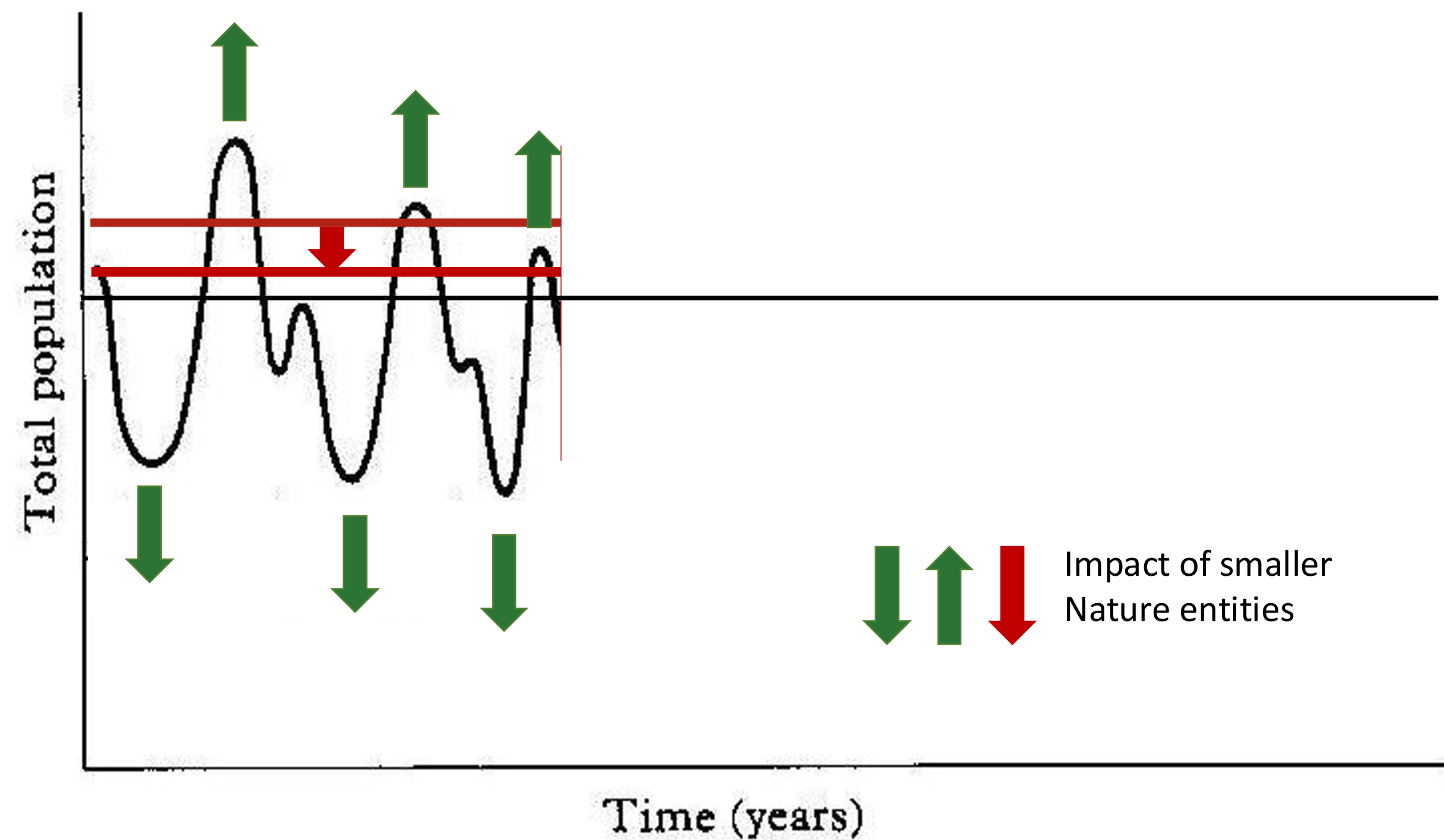


Idealized predator-prey coupled dynamics.



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Conclusion

Nature conservation based on strict protection is having a negative impact on biodiversity

Fragmentation of nature conservation efforts is having a negative impact on biodiversity, agriculture and other land uses

Hunting is an effective nature conservation tool to mitigate the effect of decreasing habitat sizes

Thank you

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