

**Global biodiversity mechanisms:
a thematic review of recent developments and future evidence needs**

Strand Palace Hotel, London 20th May 2009

MEA Presentations

Climate change and biodiversity
Colin Galbraith, Science Director, Scottish Natural Heritage

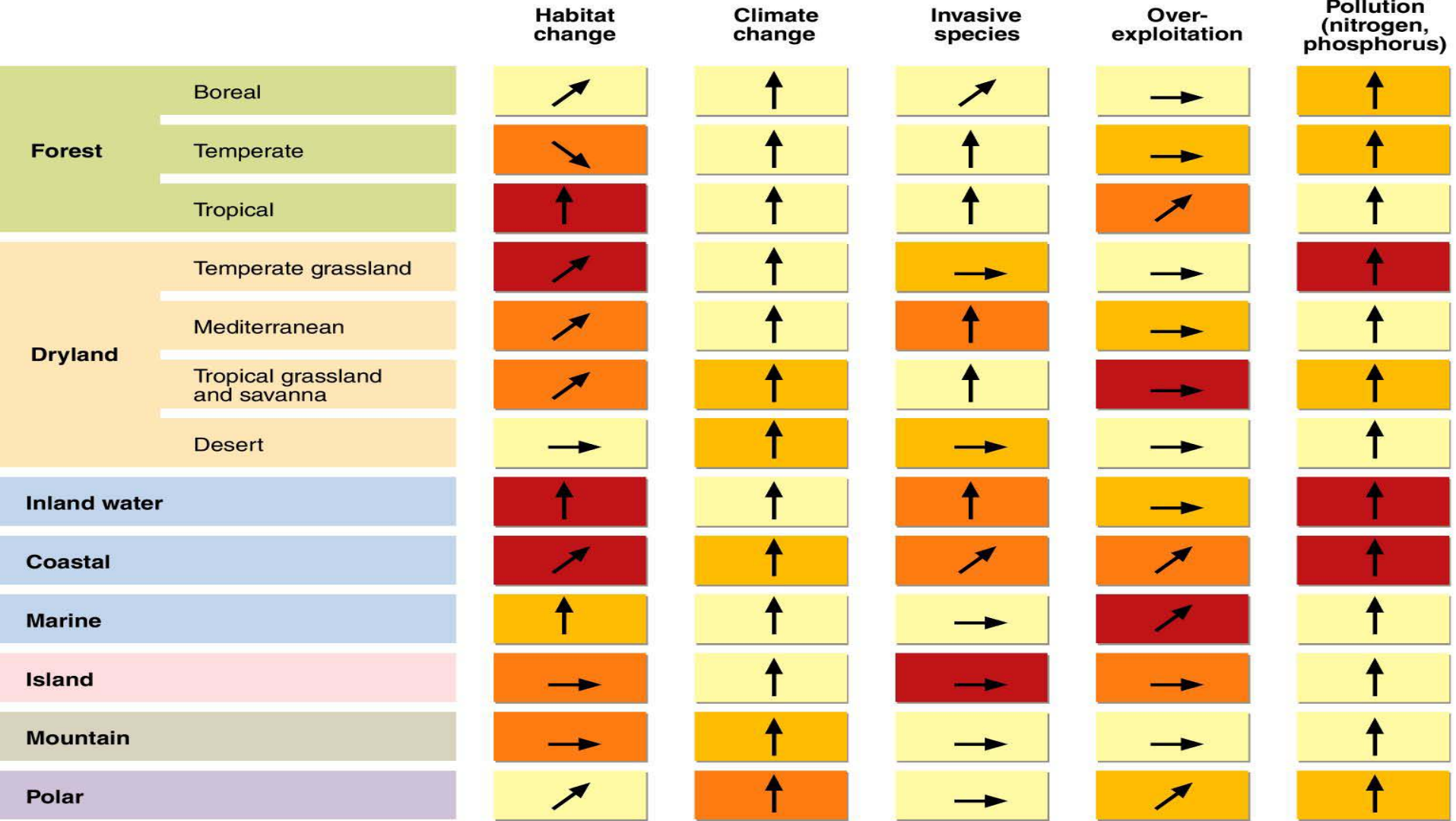
May 2009

Visit: <http://www.jncc.gov.uk/MEA-event>

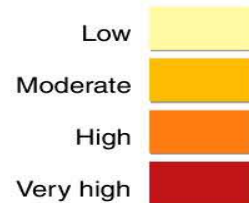


A satellite-style map of North America, showing the continent's topography and surrounding oceans. The text is overlaid in a bright red color. Three dark, vertical, tapered shapes are positioned behind the text, extending from the top and bottom edges of the frame towards the center. The text reads:

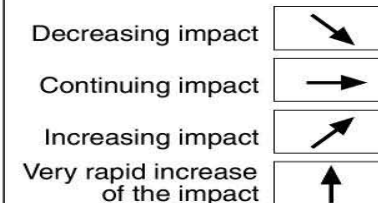
Correlates with increase in
breathing related illness in
North America



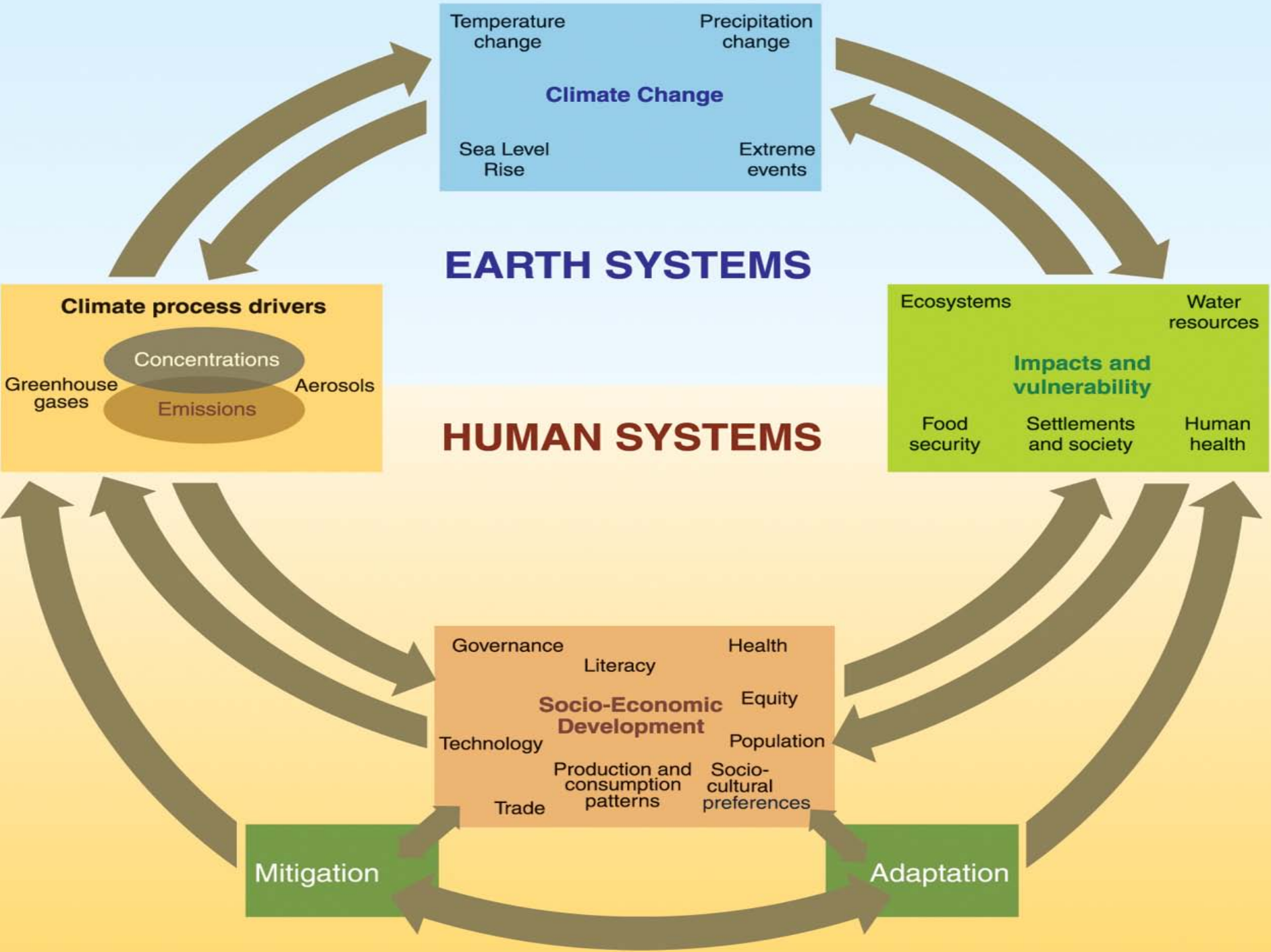
Driver's impact on biodiversity over the last century



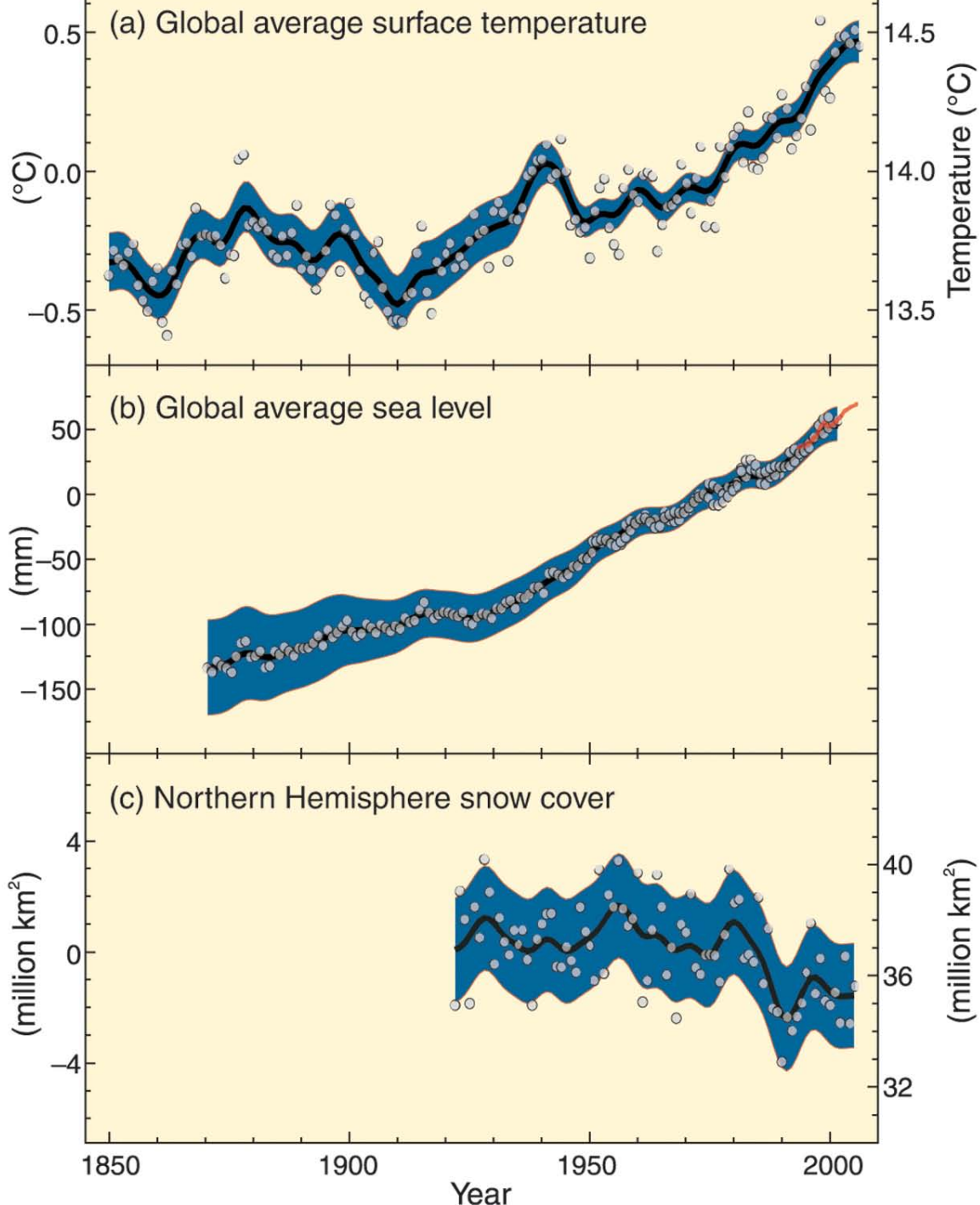
Driver's current trends

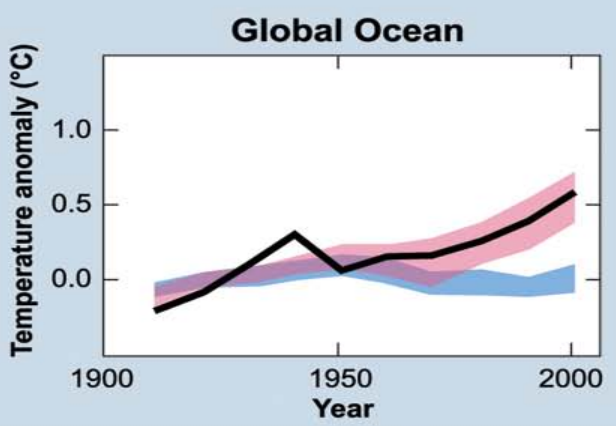
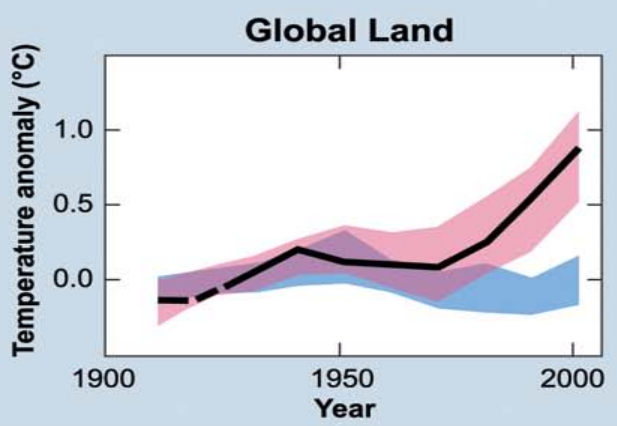
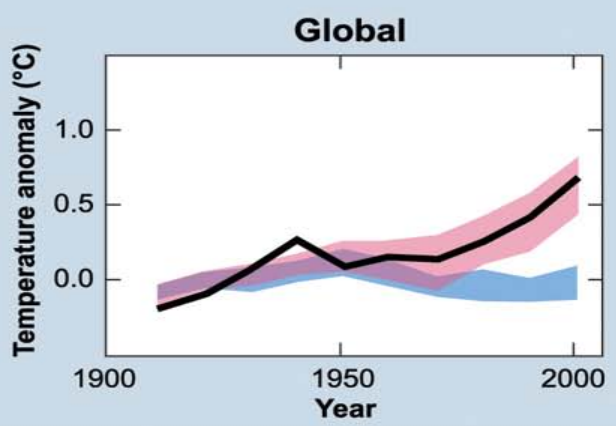
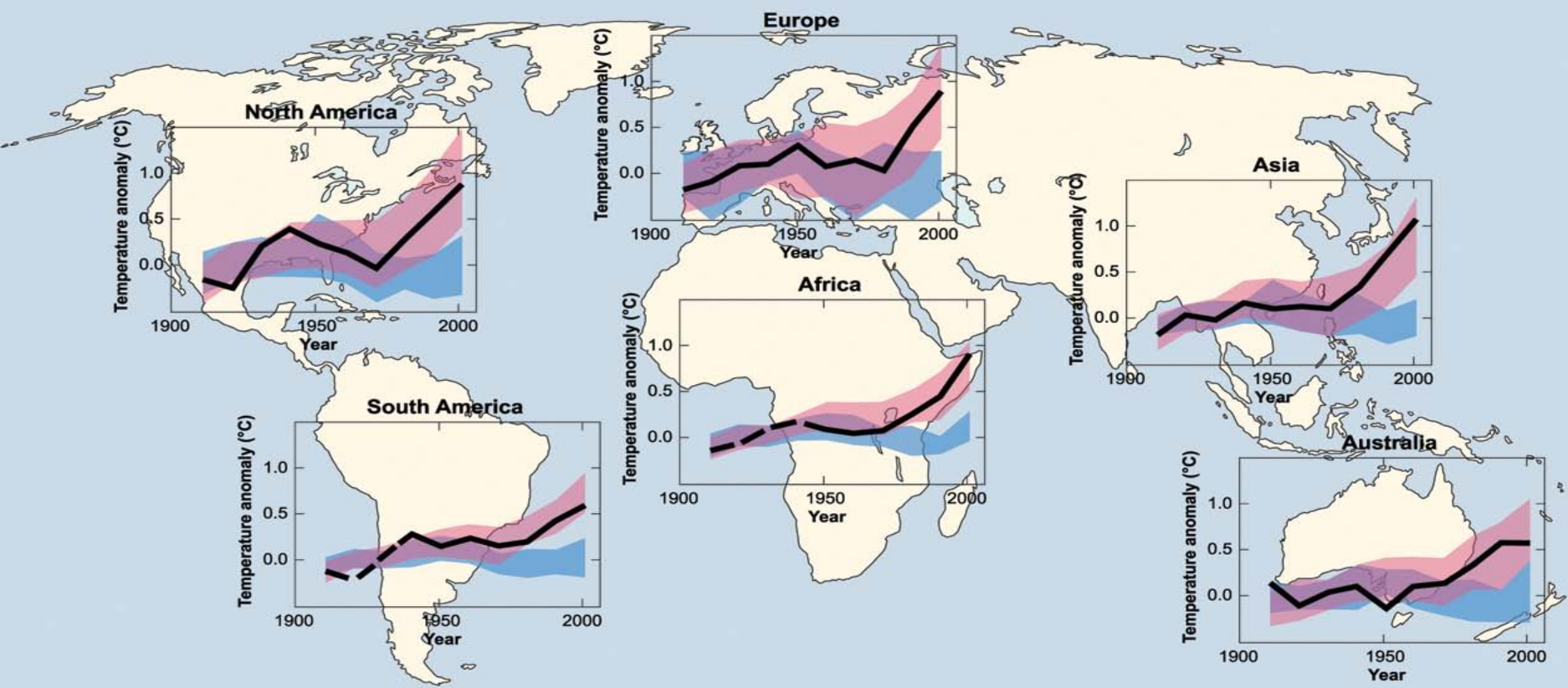


Source: Millennium Ecosystem Assessment



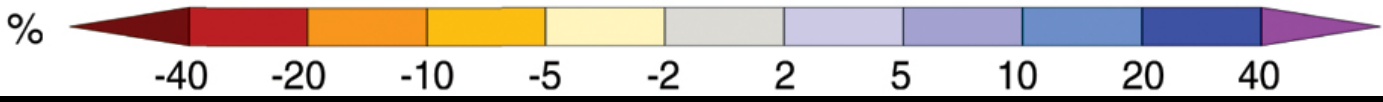
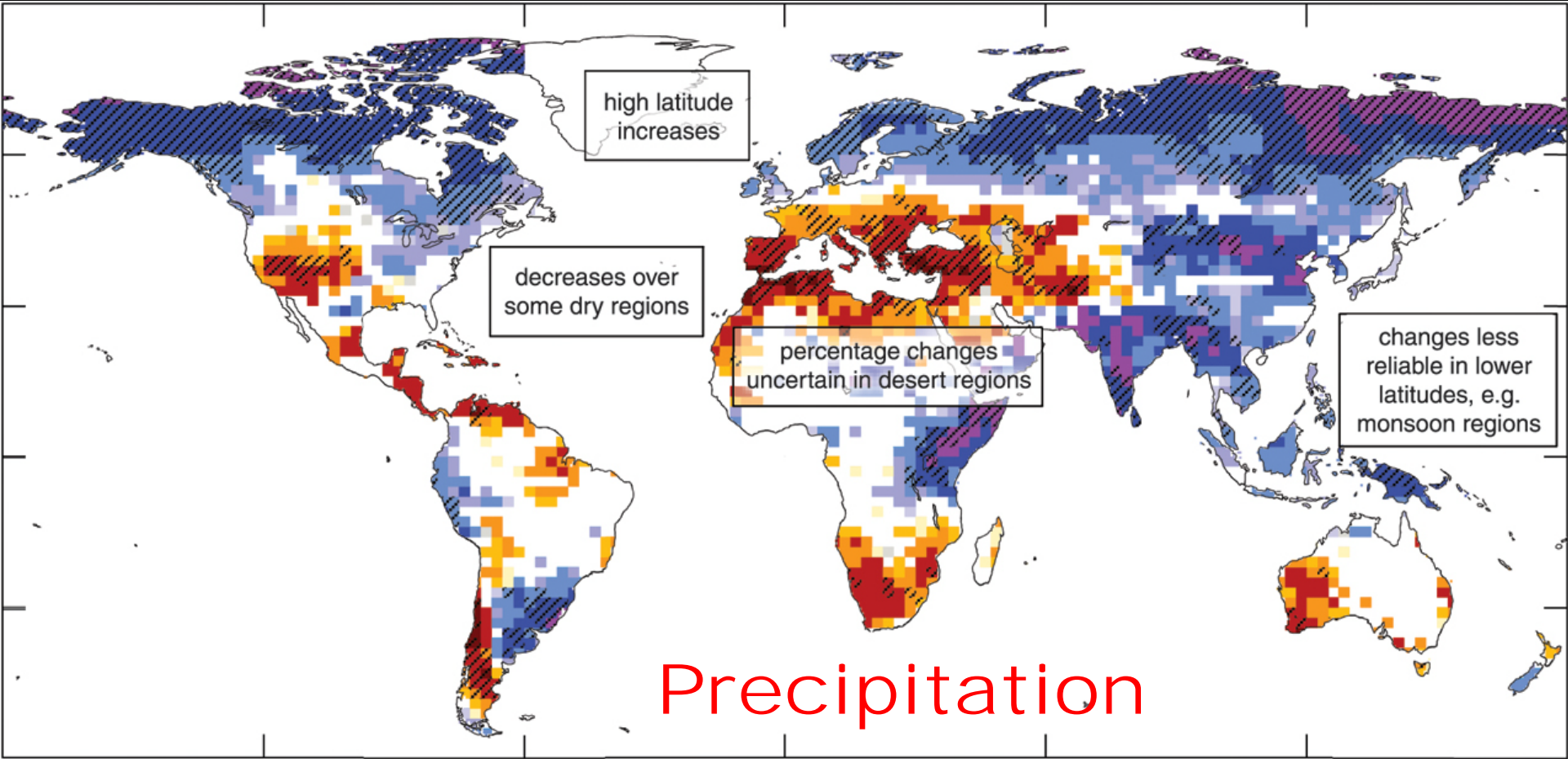
Difference from 1961–1990





models using only natural forcings
 models using both natural and anthropogenic forcings

observations



QuickTime™ and a TIF (Uncompressed) decompressor are needed to see this picture.





The Challenge:

Mitigation— reducing emissions

Monitoring, modelling and understanding
change

Adaptation—developing co-ordinated actions

Adapting to climate change:

Technology---reduction in the use of practices leading to emissions

Storage of CO₂

“Natural adaptation”

---Habitat management

---Species management

---Patterns of exploitation

Complexity has not limited policy development



- Global action to limit threats
- At CMS climate change has been addressed explicitly since 1997
- But also indirectly, through addressing invasive species and pathogen transmission

Climate change working group established

- CMS Recommendation 5.5 (1997)
- CMS Resolution 8.13 (2005)
- AEWAs Resolution 3.17 (2005)



Developments during the last triennium



- Popular publication based on BTO report “Climate change and migratory species”, commissioned by UK Defra (Inf.8.19)

MIGRATORY SPECIES AND CLIMATE CHANGE

Impacts of a Changing Environment
on Wild Animals



Recommendations to Parties (1)



- Despite the uncertainty surrounding the impact of climate change not to delay their action and decision-making
- Promote sufficient research to monitor changes in order to assess the impact of climate change
- Consider the establishment of multi-disciplinary workgroups to assess the impact of climate change and potential remedies
- Target populations with maximum adaptation potential, which tend to be the largest ones, recognising that not all populations can be cost-effectively conserved

Climate change: The challenge for MEAs

- 1 Developing a common understanding of the science (Research, monitoring and modelling).
- 2 Developing co-ordinated action between Conventions.
- 3 Implementation at the national level- penetration into practices on the ground.