

Biodiversity and Climate Change Adaptation

United Nation Convention on Biological Diversity



Achieving the
2010
Biodiversity Target



CBD



UNFCCC Objective

to achieve...stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change...

The Impacts of Climate Change on Species

Increased Mortality



Within the next 30 to 50 years coral bleaching could become an annual event in SIDS

Extinctions



20-30% of assessed species face increased risk of extinction if temperatures increase 1.5-2.5°C

Changes in Life Cycles

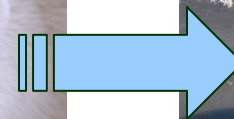
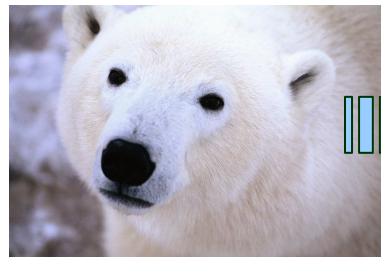


Marmots from the Rockies stop hibernation about one month earlier than 30 years ago

Changes in Physiology



The average weight of female polar bears decreased by 20% in the last 25 years





International Policy on Climate Change Adaptation and Biodiversity



Ramsar



Convention on Migratory Species



CBD

Convention on Biological Diversity

Ramsar Convention on Wetlands

Resolution VIII.3 recognizes the potentially important role of wetlands in adapting and mitigating climate change



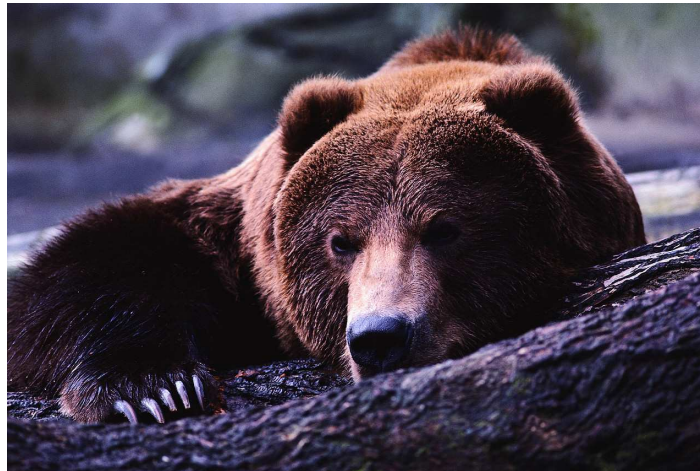
Convention on Migratory Species of Wild Animals

Resolution 8.13 – Climate change and Migratory Species



Convention on Biological Diversity

- Cross-cutting issue on biodiversity and climate change (VII/15 and VIII/30)
- Climate change considerations in the programmes of work of the Convention (COP-5 to COP-8)





Contribution of Biodiversity to Climate Change Adaptation

- providing a '**safety net**' for genetic resources,
- providing **protection (bio-shields)** against the negative impacts of climate change such as floods, coastal erosion, etc.
- contributing to biodiversity-based **livelihoods**



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A € 1 investment in wetland management in the Danube basin yields € 2.5 - € 4.2 in benefits from flood protection



In Malaysia, the value of mangroves for coastal protection is estimated at US\$300,000 /km



Following the degradation of a reef in the Maldives, the cost of installing artificial breakwaters was US\$10 million/ km

