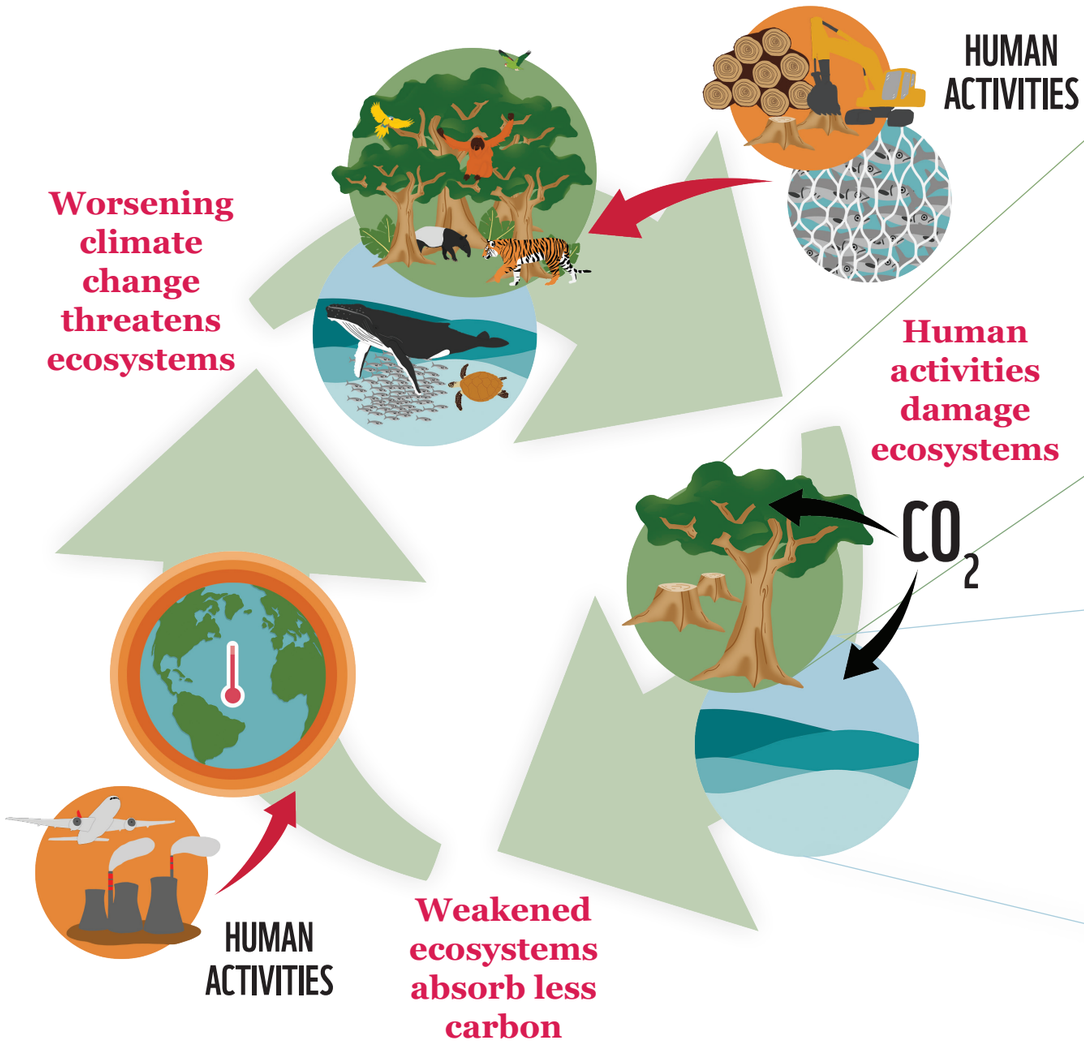
TURNING UP THE HEAT: CLIMATE CHANGE & BIODIVERSITY

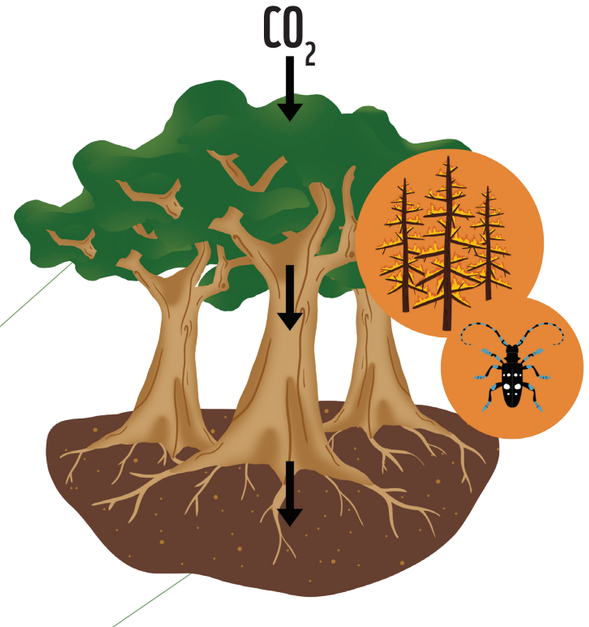
Climate change has not been a big factor in the decline of biodiversity up to this point, but scientists are now seeing the effects of rising temperatures on wildlife and it is clear that many species will face problems in the years ahead as temperatures rise. Species that are used to certain conditions are shifting their ranges, with knock-on effects on other ecosystems, and in some cases where they are unable to do this species are struggling to survive the changes to their habitat.



FORESTS

Healthy forests draw carbon from the atmosphere as CO_2 and lock it into trees and soil.

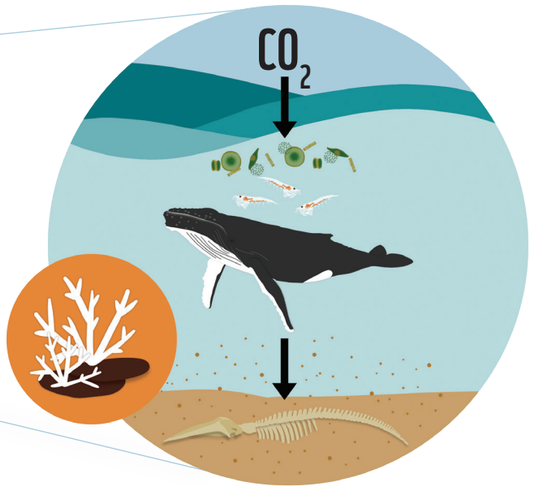
Climate change increases the risks from forest fires and invasive pests, which are especially damaging for forests that are fragmented by human activities.



OCEANS

In a thriving ocean ecosystem carbon is drawn from the atmosphere by phytoplankton, stored in wildlife biomass, then sinks to the ocean floor as poo and debris.

Climate change threatens key habitats that are vital for sustaining ocean ecosystems – such as coral reefs.



In Australia, tens of thousands of flying foxes recently died in a single heat wave, and in 2016 Australian rodent **Bramble Cay Melomys** was the first mammal known to become extinct as a direct result of climate change. A rise in frequency and intensity of storm surges wiped out vegetation and caused a lack of food on its island home.

Bramble Cay Melomys

10%

of the world's greenhouse gas emissions are attributed to wildfires annually.

WORLD ON FIRE

Every year more wildfires are reported around the world, destroying huge areas of natural habitat including the Amazon rainforest and the Australian bush, and posing threats to humans and wildlife. 10% of the world's greenhouse gas emissions are attributed to wildfires annually, and the number, scale and duration of fires is being increased by climate change. Fires pose a threat to the survival of endangered species and could upset the balance of ecosystems when species that cannot adapt to fires are lost.