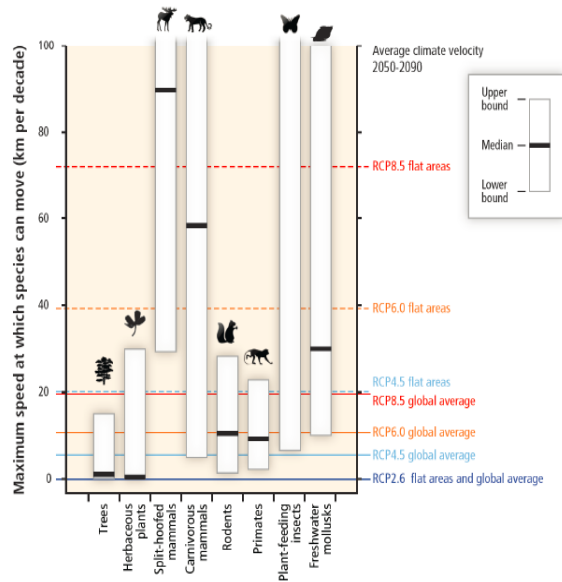




ENDANGERED SPECIES originally developed by Charlotte Woolliscroft

It has been estimated that there are 8.7 million species worldwide and it has taken nature millions of years to evolve each of these animals and plants in their own individual way. Naturally plants and animals evolve slowly over many generations, in order to adapt to the changing environments, as the world temperature fluctuates. In 2011, 19,232 newly discovered species were added to the 'species list', half of which were insects. As humans are exploring more remote areas of the world, through the advances in technology; copious amounts of species are being discovered and recognised, increasing our understanding of the world we live in.



The speed species can move in response to atmospheric and terrestrial changes. (IPCC AR5 WG2)

Climate change, however, threatens the existence of some of these species significantly.

Firstly, the increase of temperatures may go beyond that which some of these species can live within, for example corals.

The increase in temperature may also change migratory patterns of species and their ability to pro-create effectively, as seen with the Hawksbill turtle.

The change in environments that these plants and animals live within could also add strain onto a delicate system, which has evolved without the changing climatic and terrestrial systems.

Changes to the seasons can mean that food is not available when it is needed

most—for example when animals or birds are raising young.

However, the biggest threat that faces species is the speed at which these changes have occurred. In the past species adapt to these changes over significant periods of time; with human interference, species do not have the time to adapt and evolve, meaning that the species may face extinction. Habitat loss makes the problem far worse.

<http://www.bbc.co.uk/news/science-environment-14616161>– Species count (2011)

<http://www.sciencedaily.com/releases/2012/01/120118173248.htm>– Newly discovered species (2012)



FUTURE PREDICTIONS (below)

(above) DISTRIBUTION OF HAZARD

- Many terrestrial, freshwater, and marine species have shifted their geographic ranges seasonal activities, migration patterns, abundances, and species interactions in response to on-going climate change (*high confidence*)
- Some unique and threatened ecosystems, are already at risk from climate change (*high confidence*). If the temperature increases by 2°C, this number increases significantly



(Left) The polar bear is an animal that is facing very real threats through the loss of sea ice. (Centre) The Irrawaddy Dolphin that requires freshwater ecosystems to live in is also threatened. (Right) The hawksbill turtle is particularly sensitive to temperature changes.