



LOSS OF BIODIVERSITY

NATURAL RATE OF EXTINCTION

If the Earth was in equilibrium, the natural extinction rate (i.e. normal evolution) would be around 1 species for every million species per year. This means that around 12 species would disappear every year. However, this does not always happen!

MASS EXTINCTIONS

Evidence of mass extinctions of species on the planet can be found through the analysis of fossils. Five distinct mass extinction episodes have been identified:

1. The Ordovician Extinction, about 435 million years ago
2. The Devonian Extinction, about 360 million years ago
3. The Permian Extinction, about 240 million years ago, end of trilobites, placoderms
4. The Triassic Extinction, about 200 million years ago, 96 % of all marine species
5. The Mesozoic Extinction, about 65 million years ago, dinosaurs, ammonites



These mass extinctions were probably caused by natural factors such as large meteors, volcanic activity, evolution of insects, etc..

6th MASS EXTINCTION

Today we are experiencing the 6th Mass Extinction.

The current loss of species is estimated at between 15,000 and 30,000 a year!

Over the last 50 years hundreds of thousands of species have been lost.

This time the causes behind drastic environmental changes are not all natural but driven by:

- Increased human population
- Destruction and fragmentation of habitats
- Farming practices
- Invasion of exotic species
- Pollution
- Climate change



CONCLUSIONS

Without some control, by 2099 we will have reduced the number of species on the planet by 50-60%! Is this the greatest risk to life on Earth as we know it?