**Extinction: The Facts**

<https://www.bbc.co.uk/iplayer/episode/m000mn4n/extinction-the-facts>

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***00.00 – 08.35 Introduction***

1. What is the abundance of life on Earth known as?
2. What is happening to biodiversity today?
3. How many plant and animal species are at risk of extinction?
4. What have scientists linked our destruction of nature to the emergence of?
5. True or false? All groups in the natural world are in decline.
6. How much have vertebra animals (birds, mammals, amphibians, reptiles etc.) declined by since 1970?
7. Large mammals have disappeared from how much of the range (area) they are historically found?
8. How many species of plants and animals are at risk of extinction?
9. How many species of insects are at risk of extinction?
10. True or false? Extinction is a natural process, however, the rate of extinction has rapidly increased.
11. According to fossil records, over how many years did rates of extinction usually occur?
12. Since 1500 how many species of plants have become extinct?
13. Since 1500 how many species of animals have become extinct?
14. How much faster is the rate of extinction compared to the natural evolutionary rate?
15. From the graph showing rates of extinction how would you describe the rate of extinction from 1900?
16. How many northern white rhinos are left on the planet?
17. Why are northern white rhinos set to become extinct?

***08.35 - 13.20 Consequences of losing biodiversity***

1. True or false? All biodiversity is interlocked on a global scale.
2. The security of two resources, essential for human life, are under threat due to the loss of biodiversity. Identify them.
3. What proportion of insects are under threat of extinction?
4. Why are insects so important to life on earth?
5. What proportion of the world’s food crops rely on insects for pollination?
6. What proportion of the world’s surface has been degraded and has low levels of soil biodiversity? (30%)
7. Why is biodiversity important for soil? (break down organic matter for plant growth)
8. What has been the impact of soil degradation and climate change?
9. Who is most likely to be affected by soil degradation and climate change?
10. What proportion of the plant species, that have been assessed, are at risk of extinction?
11. Why are plants important to life on Earth?
12. Identify a hazard caused by deforestation.
13. Identify the ecosystem being lost in the UK that once helped protect us from flooding.

* 1. ***- 41.32 How are we destroying the ecosystems we depend on?***

1. Identify the multi-billion dollar global industry that is having a negative impact on biodiversity.
2. How many rhinos are lost on the African continent due to poaching each day?
3. Identify one factor driving the increase in the illegal wildlife trade?
4. What is the most trafficked animal in the world?
5. What are the benefits of pangolins to an ecosystem?
6. Why are pangolins highly sought?
7. In 2019 how many pangolins were killed for the scale trade?
8. Of the 8 species of pangolins, how many are threatened with extinction?
9. What has happened to the scale of global fishing over the last 40 years?
10. What is the impact of removing an increased number of adult fish from the sea?
11. Identify a strategy what allows fish stocks to recover.
12. What issues are there with fish quotas being set in some parts of the world?
13. What proportion of trawler caught fish is left in British waters compared to the turn of the 20th Century?
14. Why is there a growing demand for natures resources?
15. Where is population growth the highest?
16. In which area of the world is the growth in consumption levels putting the greatest strain on natural resources?
17. How much more does the average person in the UK consume compared to India?
18. How much more does the average person in the USA consume compared to India?
19. True or false? Pollution is a major cause of biodiversity loss.
20. How are developed nations moving their footprint of destroying nature to another country?
21. What are PCBs?
22. Where are PCBs used?
23. Why were they banned in the 1980s?
24. How can PCBs enter the environment?
25. Why do marine animals have a higher concentration of PCBs than smaller ones?
26. What has been the impact of PCBs on the last remaining pod of in-shore killer whales off the coast of north-west Scotland?
27. True or false? Climate change is causing biodiversity loss.
28. According to which agreement should all countries try to limit climate change warming to no more than 2°C?
29. What do calculations suggest temperatures will increase by?
30. What is the escalator to extinction?
31. What will be the greatest threat to biodiversity in the future?
32. What is currently the greatest threat to biodiversity?
33. What % of wetlands have been lost around the world?
34. What % of the Earth’s surface, that is not covered by ice, has been converted by humans?
35. True or false? Mono-culture agriculture reduces biodiversity.
36. How much forest is estimated to be cleared every year?
37. Identify the main causes of forest clearance?
38. Demand for which products are driving rainforest forest clearance?
39. What proportion of the total mass of animals on Earth are livestock, humans and wild animals?
40. Which country has one of the largest cattle herds in the world?
41. What product does the UK buy that is contributing to rainforest deforestation in Brazil?
42. What is the majority of soy used to produce?
43. What is the Cerrado in Brazil?
44. Why is the Cerrado important?
45. How much of the Cerrado has been transformed to agricultural landscape?
46. Where is most of the soy grown in the Cerrado exported to?
47. How much does roadkill reduce the population growth rate of giant ant eaters?
48. How are humans contributing to the rise of pandemics?
49. What proportion of emerging diseases have originated from the process of land use change?
50. Why are smaller species likely to increase the risk of spreading diseases when land use change happens?
51. Where is COVID19 said to be likely to have originated?
52. How many new emerging diseases is it estimated there will be each year?

***41.30 – 44.55 How did it come to this?***

1. When was the UN Earth Summit?
2. What was done to protect the environment at the UN Earth Summit?
3. In 2010 how many targets were agreed to protect biodiversity by world leaders in Japan?
4. How many of these are likely to be met?
5. What are the main challenges in implementing agreements to protect biodiversity?

***44.55 – 51.42 What can we do to slow the decline in biodiversity?***

1. Identify two ways to overcome the current financial crisis that also has a positive impact on the environment.
2. In the future, what needs to be a priority to improve biodiversity?
3. Identify one global success in making a positive change in the environment.
4. What changes can individual make to improve biodiversity?

**51.42 – 56.69 Nature can bounce back – Poppy and the mountain gorillas**

1. Why were mountain gorillas under threat in the Virunga mountains in East Africa during the 1970s?
2. Why did agriculture expand from the 1970s?
3. What has been done to protect mountain gorillas in the Virunga mountains in East Africa?
4. Why is this a good example of sustainable development?
5. What has been the impact of the above?