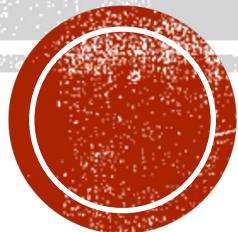


HOW BIODIVERSITY KEEPS THE EARTH ALIVE

Group 11



WHAT IS BIODIVERSITY ?

“Without biodiversity there would be no humans or animals alive”

-David Biello, 2012.

Biodiversity refers to the wide variety of living organisms, including plants, animals, and microorganisms, as well as the ecosystems in which they interact. The balance of life on Earth is fundamentally maintained by biodiversity. It encompasses the genetic diversity within species, the diversity of species within a particular habitat or region, and the diversity of ecosystems across the planet.

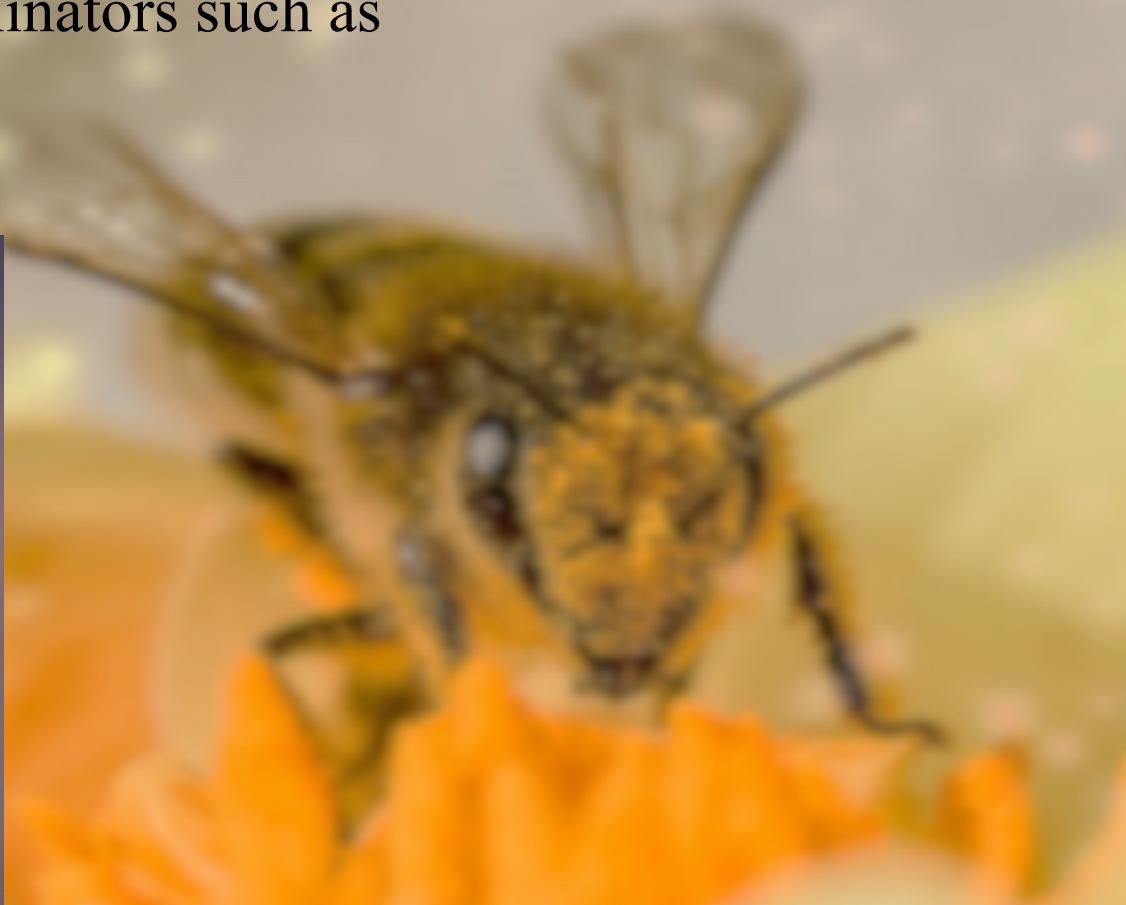
BUT HOW DOES BIODIVERSITY KEEP THE EARTH ALIVE ?

- **Soil Fertility and Nutrient Cycling:** There are a wide range of organisms in the soil and other ecosystems. They play an important role in breaking down organic matter and recycling nutrients like phosphorus, nitrogen and potassium.



CONT'D

- **Pollination;** Biodiversity helps ensure a wide range of plant species are available to support pollinators such as bees, butterflies and birds.



CONT'D

- **Pest control;** Natural enemies of pest (insects, fungi, bacteria) are present in the ecosystem. A diverse range of plant species provides habitat and food for natural enemies to ensure they are present in sufficient numbers to control pest populations.



CONT'D

- **Water Purification;** Water bodies are greatly affected by pollutants, be it chemical or physical. Different plant and animal species absorb and break down these pollutants into less harmful compounds.



KEY STONE SPECIES

- Key stone species are organisms that hold the ecosystem together. They have a disproportionately larger effect on its natural environment relative to its abundance.



THREATS TO BIODIVERSITY

- Habitat destruction
- Invasive species
- Pollution
- Population
- Overexploitation



CONCLUSION

- Rich biodiversity is a sign of a healthy environment. Conservation of biodiversity is vital for the survival of humans as well as other living beings on earth. We can secure a healthier Earth for both current and future generations by protecting biodiversity. Let's all take a proactive approach to preserving biodiversity and preserving the health of our planet.

REFRENCES

1. Biello, D. (2012). How Biodiversity Keeps Earth Alive. *Scientific American*, 3.
2. Philpott, S. M. (2013). Biodiversity and Pest Control Services. *Encyclopedia of Biodiversity: Second Edition*, 1, 373–385. <https://doi.org/10.1016/B978-0-12-384719-5.00344-0>
3. Swift, M. J., Andrén, O., Brussaard, L., Briones, M., Couteaux, M. M., Ekschmitt, K., Kjoller, A., Loiseau, P., & Smith, P. (1998). Global change, soil biodiversity, and nitrogen cycling in terrestrial ecosystems: three case studies. *Global Change Biology*, 4(7), 729–743. <https://doi.org/10.1046/j.1365-2486.1998.00207.x>
4. Adams LW, Dove LE. 1989. Wildlife reserves and corridors in the urban environment: a guide to ecological landscape planning and resource conservation. Columbia MD: National Inst Urban Wildlife.

THANK YOU

Questions ?