

SDG – Year 4 – Life on Land – Why is biodiversity important?

Prior Learning (What we already know?):

1. To have knowledge of the environment and land pollution.
2. To understand wild animals and their habitats
3. To understand Basic understanding of forest ecosystems, freshwater
4. To understand ecosystems, ecosystem health and consequences of human impact.
5. To understand the dangers of extinction: Individually endangered species, how extinction is forever, the long time needed to form species, and the six mass extinctions

Key Questions:

What does it mean when a species is 'endangered'?
Do you know of any animals that are endangered?
What do you think the word 'deforestation' means?
Why do you think deforestation happens?
What effect could deforestation have?
What animals do you think might live in the mountains?
What kind of animals do you think you could spot in a forest?
What do you think a wetland is and what creatures might live there?
What could we all do to protect wildlife?
What do you think poaching is?
What animals do you think could be at risk of poaching?

Key Facts:

Forests: Around **1.6 billion** people depend on forests for their livelihood. Forests are home to more than **80%** of all terrestrial species of animals, plants and insects.

Desertification: **2.6 billion** people depend on agriculture, but **52%** of the land used for agriculture is moderately or severely affected by soil degradation. Due to drought and desertification, each year **12 million** hectares are lost (**23 hectares** per minute), where **20 million** tons of grain could have been grown. Globally, **74%** of the poor are directly affected by land degradation.

Biodiversity: Of the **8,300** animal breeds known, **8%** are extinct and **22%** are at risk of extinction. Of the over **80,000** tree species, less than **1%** have been studied for their potential use.

New Learning:

1. To have understanding of wild animals and their habitats
2. To have basic understanding of forest ecosystems, freshwater ecosystems, ecosystem health and consequences of human impact.
3. To Understand the importance of biodiversity and threats to biodiversity, habitat loss; concept of endangered species.
4. To understand ecology: competition, predator-prey, community dynamics, energy flow through food webs, dispersal and ranges. Specific ecosystems – local and global native ecosystems and also human-made ones, e.g. managed forestry plantations
5. To understand threats to biodiversity: habitat loss, deforestation, fragmentation, invasive species and overexploitation (caused by unsustainable production and consumption practices, unsustainable technologies, etc.)
6. To understand the dangers of extinction: Individually endangered species, how extinction is forever, the long time needed to form species, and the six mass extinctions
7. To understand soil and its formation and structure
8. To understand desertification, deforestation and efforts to combat them



Key Resources:

<https://www.globalgoals.org/15-life-on-land>

https://www.youtube.com/watch?v=ADuiMF_TVH0

New Skills:

1. To have the ability to communicate the importance of terrestrial ecosystems.
2. To Analyse impacts and risks associated with biodiversity loss and ecosystem degradation
3. To be able to argue against destructive environmental practices that cause biodiversity loss.
4. To be able to question the dualism of human/nature and realizes that we are a part of nature and not apart from nature.
5. To participating in school gardening

Vocabulary:

endangered, deforestation, poaching, protect, wetlands, protect, species

Can I do this?

Be able to ability to communicate the importance of terrestrial ecosystems.
Be able to Analyse impacts and risks associated with biodiversity loss and ecosystem degradation
Be able to argue against destructive environmental practices that cause biodiversity loss.
Be able to question the dualism of human/nature and realizes that we are a part of nature and not apart from nature.
Be able to participating in school gardening