

# Module 11: Ecology

## Topic 1 Content: Biomes on Earth Notes

### Introduction

#### Biomes on Earth

Introduction

Earth has six major biomes that support life on the planet. Click on each of the bars in this interactivity to learn facts about each biome.



Tropical Rainforest

Grassland

Desert

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## Topic 1 Content: Biomes on Earth Notes

### Tropical Rainforest

#### Biomes on Earth

- Introduction
- Tropical Rainforest**

The tropical rainforest biome is typically found near the equator, and includes thick forests. The forests can be so thick that very little sunlight reaches the forest floor. Rainfall is very common there, and the temperatures are typically warm. Tropical rainforests are very diverse, as many as half of the entire world's animal species are found in rainforests.



*Image: A tropical rainforest in Malaysia*
- Grassland
- Desert
- Temperate

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*Image: A tropical rainforest in Malaysia*

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### Grassland

#### Biomes on Earth

- Introduction
- Tropical Rainforest
- Grassland**
- Desert
- Temperate

Grassland biomes are found in many regions of the world; their defining factor is grass. It is the primary plant found in grasslands. Tropical grasslands experience contrasting seasons of heavy rain and then very little rain, and they are found in tropical climates. Temperate grasslands are found have less variation in moisture, but can experience very hot, arid seasons.



*Image: Hilly grassland in South Dakota's Black Hills*

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*Image: Hilly grassland in South Dakota's Black Hills*

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### Desert

#### Biomes on Earth

- Introduction
- Tropical Rainforest
- Grassland
- Desert**
- Temperate
- Taiga

Desert biomes receive less than 25 centimeters of rain each year. Deserts are categorized as hot and dry, semiarid, coastal, or cold. Plants and animals that live in these biomes must develop ways of retaining water or surviving with smaller amounts of water.

*Image: The Sahara desert in Africa*



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*Image: The Sahara desert in Africa*

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### Temperate

#### Biomes on Earth

- Grassland
- Desert
- Temperate**

Temperate biomes have temperatures that are seasonal in nature. Temperate deciduous forests have hot summers and cool winters, with consistent rainfall. Their main plant species are trees that lose their leaves in the winter. Temperate deciduous forests have a well-developed understory, or area of the forest that grows at the lowest height level beneath the forest canopy. Temperate rainforests have an extremely long wet season and a short dry season. They contain conifers and broadleaf trees.



*Image: A temperate deciduous forest in Great Falls, Virginia*

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*Image: A temperate deciduous forest in Great Falls, Virginia*

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## Topic 1 Content: Biomes on Earth Notes


### Taiga

#### Biomes on Earth

- Grassland
- Desert
- Temperate
- Taiga**
- Tundra

Typically found in high northern latitudes, the taiga biome experiences very cold winters and short, moderate summers. Like the temperate rainforest, this biome's main trees are conifers, as well as spruces. Animals in this biome must protect themselves from the snow and ice of the winters.

*Image: A taiga hillside in eastern Russia*



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*Image: A taiga hillside in eastern Russia*

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### Tundra

#### Biomes on Earth

- Grassland
- Desert
- Temperate
- Taiga
- Tundra**

The tundra is one of the most inhospitable areas for life on Earth. The tundra has an extremely cold climate and a short season for growth. Because of this, there is very little vegetation and little biological diversity.

*Image: The tundra of the Arctic National Wildlife Refuge in Alaska*



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