



# Memory Geogger

Define ecosystem

Describe the nutrient cycle

Annotate the image to show the characteristics of the deciduous forest ecosystem



Evaluate the impact of deforestation on the nutrient cycle in the tropical rainforest.

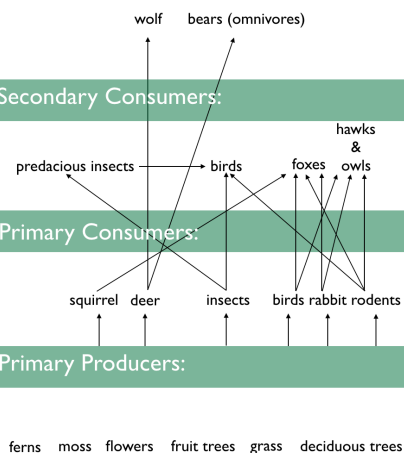
Tertiary Consumers:

Explain the importance of the tree in the food web below

Secondary Consumers:

Primary Consumers:

Primary Producers:



Simple Food Web



# Memory Geogger

## Define ecosystem

An ecosystem is a community of plants and animals sharing an environment with non-living things such as soil and water.

## Annotate the image to show the characteristics of the deciduous forest ecosystem

The soil type is brown earth. This is a fertile soil. In the autumn the leaves fall from the trees. The leaves decompose and help to give the soil its nutrients.

As some light can get through, the vegetation is layered.

The tree roots are deep and so help to break up the rock below.

Deciduous are trees that shed their leaves at the approach of a cool or dry season and later grow new leaves.



The trees have typically large broad leaves, such as oak, beech and elm.

Grass, bracken or bluebells can be found in the ground layer.

## Describe the nutrient cycle

The **nutrient cycle** describes the use, movement, and recycling of **nutrients** in the environment. Leaves fall to the forest floor and form a layer of litter. Decomposers, such as bacteria and fungi, break down the layer of litter, returning nutrients to the soil. Nutrients are then taken up by the roots of plants and trees.

## Evaluate the impact of deforestation on the nutrient cycle in the tropical rainforest.

Deforestation has a negative impact on the nutrient cycle because removing vegetation means there are no leaves falling on the forest floor, which means there is no litter being decomposed and nutrients being added to the soil. This leads to the soil becoming infertile and vegetation not growing back. Also, as the soil is exposed there is an increase in soil erosion and the leaching of nutrients.

## Explain the importance of the tree in the food web.

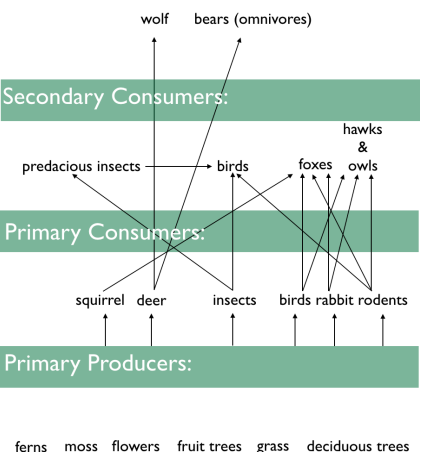
The tree makes its own food via photosynthesis and so is a producer whereas other insects, birds etc rely on the tree either directly as eat them – herbivores or indirectly – as eat things that eat animals that eat plants – carnivores. These are consumers. The tree underpins the food web. Without the tree there would be no food web.

### Tertiary Consumers:

### Secondary Consumers:

### Primary Consumers:

### Primary Producers:



### Simple Food Web