

NITROGEN CYCLE

The circulation of substances necessary for the continuation of life (carbon, water, nitrogen, oxygen and phosphorus) between living and non-living environments in an ecosystem is called ecological matter cycles.

The stages of the nitrogen cycle, which is one of ecological matter cycles, are as follows:

- Free nitrogen gas is produced by volcanic activities, atmospheric events such as thunderbolt and lightning.
- When free nitrogen gas combines with oxygen, it turns into nitrite or nitrate.
- Nitrogen gas, which turns into nitrite or nitrate, mixes with the soil with rains.
- There are nitrogen-fixing bacteria in the soil or in the roots of some plants. These bacteria transmit nitrate in the soil to plants.
- Nitrogen in the structure of plants first passes to herbivores, and then to carnivores that feed on herbivores.
- When plants and animals die, living things called decomposers break down the dead and convert nitrogen into ammonia.
- Microorganisms first convert this ammonia to nitrite and then to nitrate. This process is called Nitrification.
- While some of the nitrogen in nitrate form is reabsorbed by the plants, some of it passes into the atmosphere and the nitrogen cycle phases are completed.