

4 ECOSYSTEM

PROCESSES

Energy Flow



Energy flow is all about solar energy or photosynthesis. Unlike the water cycle and mineral cycle, solar energy does not cycle. It flows from the sun to the earth. It is necessary for everything on the planet to survive. Leaving enough plant material behind for its process to occur is crucial to all life.

Water Cycle



When rain or snow falls on our land, we are responsible for its fate from that point forward. Will it infiltrate and be retained? Will it pond and pool and evaporate or runoff? Will it cause erosion and harmful runoff to others? Can we keep it or do we lose it?

Mineral Cycle



The three phases of an effective mineral cycle are: 1. moving minerals from below to above the soil surface; 2. placing those minerals on the soil surface; and 3. moving minerals from above the soil surface back into the soil. This is a crucial part of a larger carbon cycle and is enabled by a highly functioning water cycle. Grazing foraging and browsing animals are an important part of this process.

Diversity



This is also sometimes called biological succession. It involves the changes in the development of all living things. There is a fundamental rule of succession that is defined by the statement from the Bruce Ward Legacy Trust, "A species will move into an environment when the conditions are suitable for its establishment and will move out of that environment when conditions become unsuitable for its reproduction."



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