

The Oxygen Cycle

Oxygen is an element that is very important to living organisms. Oxygen plays a role in both the carbon and hydrologic cycles; however, they are not the only ways in which oxygen moves through an ecosystem. Like nitrogen, oxygen passes through an ecosystem through a biogeochemical cycle. The oxygen cycle is the cycle that helps move oxygen through three main spheres of the Earth, the Atmosphere, the Biosphere, and the Lithosphere. The Atmosphere is one of the largest reservoirs of free oxygen on Earth. The Biosphere also has some free oxygen. Animals inhale oxygen from the atmosphere during respiration and plants release oxygen into the atmosphere during photosynthesis. The largest reservoir of oxygen is the lithosphere. The lithosphere "takes in" oxygen from the atmosphere when certain metals become oxidized, or rust, and returns it to the atmosphere during the process of weathering, which breaks down oxygen-containing compounds present in the lithosphere. In short, instead of one big cycle, you can think of the oxygen cycle as being several mini-cycles, with the element oxygen being moved between the, atmosphere, biosphere, and lithosphere.
