

CARBON CYCLE



Soils

What am I?

I am all the carbon in soils

In what form do I hold carbon?

Carbon in soils is found in plant, root, and animal material containing organic hydrocarbons, and to a lesser degree, in carbonate minerals and rock fragments.

How does carbon get in and out of me?

Soil accumulates carbon as forest "litter" when plants and animals die. Root structures also hold considerable carbon. The process of decomposition releases water and CO_2 .

How much carbon do I store?

1580 Gigatons of carbon (GtC) are stored in soils.

How much carbon moves in or out of me (flux)?

Soil releases 60 GtC/yr into the atmosphere. Today, soils may be temporarily holding on to more carbon due to enhanced plant and root growth when CO_2 levels are high in the atmosphere (CO_2 fertilization).