World Peat lands Day is celebrated on the 2nd of June each year.

Wetland is a landscape experiencing high amounts of water at the surface, either permanently or for considerable periods in the year. Water logging can be by fresh or saline water and in extreme cases the surface can be inundated. Wetlands are dynamic systems, which form part of the hydroseral continuum from open water to dry land a process that takes place over thousands of years and all stages of which may not be evident in every location. Mires and peatlands are specific types of interrelated wetland with the unique potential to accumulate dead organic matter as peat, often to considerable thickness.

Peatlands are terrestrial wetland ecosystems in which waterlogged conditions prevent plant material from fully decomposing. Consequently, the production of organic matter exceeds its decomposition, which results in a net accumulation of *peat*. In cool climates, peatland vegetation is mostly made up of *Sphagnum* mosses, sedges and shrubs and are the primary builder of peat, whereas in warmer climates graminoids and woody vegetation provide most of the organic matter.

Peatlands occur in every climatic zone and continent and cover 2.84% of the Earth's terrestrial surface. Peatlands include landscapes that are still actively accumulating peat (mires), others that are no longer accumulating and do not support the principal peat forming plants (e.g.Sphagnum), and peatlands used for economic uses such as agriculture, forestry and excavation for energy & heat generation, horticulture and a other uses. About 84% of the world's peatlands are considered to be in natural, or near-natural state.Drained peatlands make up about 16% of the world's peatlands . Due to the process of peat accumulation, peatlands are **carbon rich ecosystems that store and sequester more carbon than any other type of terrestrial ecosystem**, exceeding thereby even the global above-ground carbon stock of forest ecosystems. When peatlands are drained, the carbon from organic matter contained in peat dries and oxidizes gradually to CO_2, and is permanently lost from the system. Over time, this process also results in soil compaction and subsidence, making it difficult to restore proper hydrology without water table management.