



Meet the Peat

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What is Peat?

- Accumulated remains of plant materials formed under waterlogged conditions.
- Organisms responsible for the decay of plants are suppressed.

How fast can it grow?

- Slowly!!
- 21-60cm per 1000 years (Walker 1970)

Meet the Family

Peatlands

Topogenous Peatland:
saturated conditions
maintained by
topography

- Open Water transitions
- Basin Mires
- Hover
- Floodplain Mire

Soligenous: saturated
because of lateral
groundwater
movement

- Valley Mire
- Spring Mire
- Track ways/ladder fens

Ombrogenous:
saturated by constant
rain

- Raised bogs
- Blanket bogs

What is Peat Made Of?

5 Main Components:

- *Sphagnum* (bog moss) - Bog peat
- Hypnoid moss (all the other moss) - Fen Peat
- Sedges and grasses - Fen peat
- Woody Plants - Brushwood Peat
- Humified peat - amorphous, decomposed, granular.

Tells us about origins and the environment they developed in.

What about condition

- Generally determined by degree of decomposition (humification) - Von Post Scale
 - H1 Plant structure unaltered, Undecomposed **Fibrous Peat**
 - H2 **Fibrous Peat**
 - H3 Plant structure distinct, most remains easily identifiable **Fibrous Peat**
 - H4 Plant structure distinct, most remains identifiable **Semi-fibrous Peat**
 - H5 **Semi-fibrous Peat**
 - H6 Plant structure indistinct, most remains unidentifiable. Well decomposed. **Semi-fibrous Peat**
 - H7 Plant structure indistinct but recognisable. Strongly decomposed. **Humified Peat**
 - H8 Plant structure very indistinct, only roots and wood recognisable. **Humified Peat**
 - H9 **Humified Peat**
 - H10 Plant structure completely unrecognisable. Completely Amorphous **Humified Peat**

Peat Chemistry

Very complex subject.

- Ombrotrophic (rain-fed peat) base poor, acid.
- Other peats reflect landscape history, geology and hydrology because they are sustained by catchment waters.