Transitional Horizons:

- Horizons dominated by properties of one master horizon but having subordinate properties of another.
- Two capital letter symbols are used as **EB**, **BE**, **BC**.
- Master horizon that is given first designates the kind of horizon whose properties dominate the transitional horizon.
- e.g. **EB** has characteristics of both an overlying **E** and an underlying **B** horizons, but is more like **E** than **B**.
  - AB – Like A – some of B.
  - BA – Like B – some of A.
  - A E – AC – BC,
  - E/B – Both E and B particles are present.
  - "B & E" used f or soils with Lamellae
  - thin bands of accumulating clay and iron in sandy soils.

- Major pedogenic subdivisions within **O**, **A**, and **B** horizons of mineral soils are indicated by a primary Arabic number e.g. **Ol**, **O2**, **Bl**, **B2** etc.
- Designations of common subdivisions of soil horizons are as follows:
  Oi, Oe, Oa, A, E, AB, E/B, AC, BA, BE, B/E, BC,CB, B, Bw.

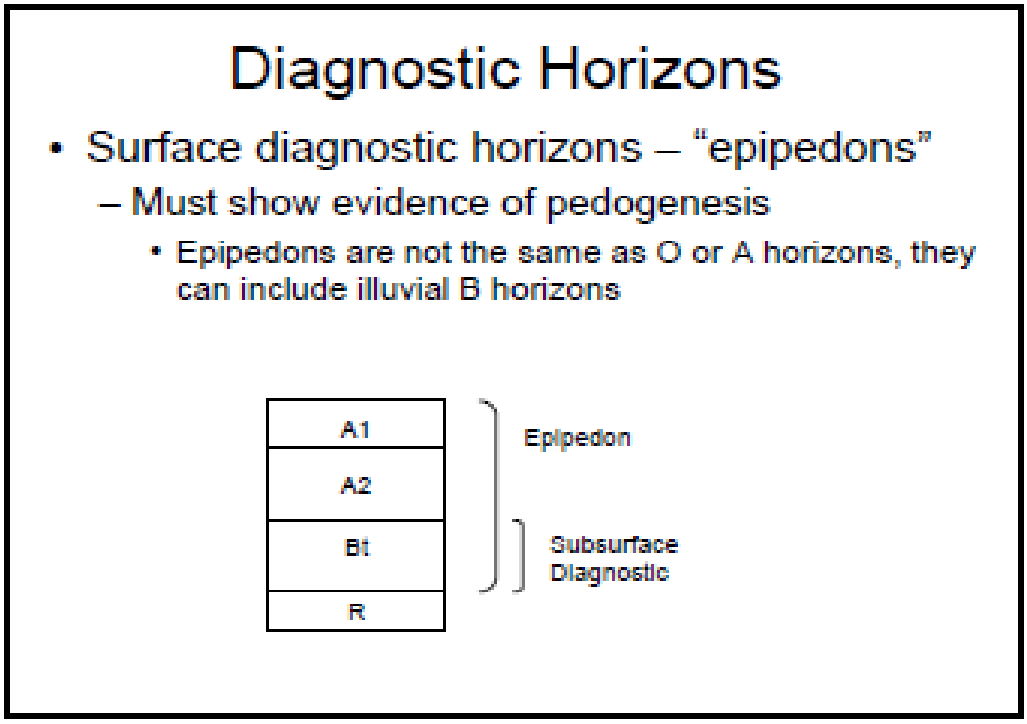
In mineral soils Arabic numerals are used as prefixes to indicate discontinuities;
If a discontinuity occurs so that a master horizon is comprised of two or more distinct parent materials, this can be designated as **1B** and **2B**. Normally "**1**" before the first **B** is understood, and is omitted resulting a **B** horizon, followed by a **2B** horizon. These special cases are not limited to **B** horizons.
If part of the slum formed in residuum, R is given the appropriate prefix: **Ap – Bt1 – 2Bt2 – 2Bt3 – 2C1 – 2C2 – 2R.**

Diagnostic Horizon

Diagnostic epipedons are surface indicators of soil properties.

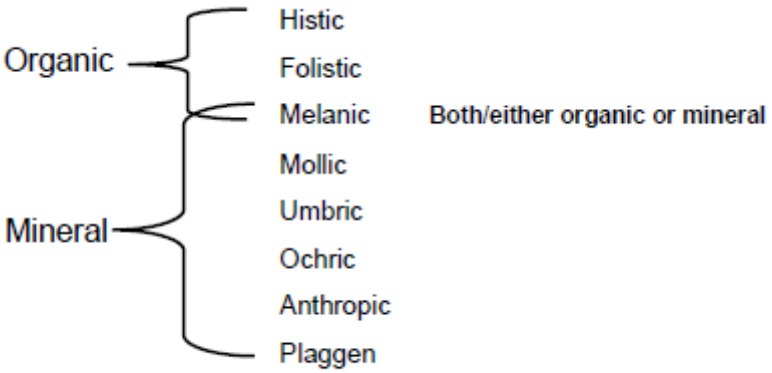
Epipedon: Are simply the uppermost soil horizons (top soils).

Epipedon is not synonymous with a horizon and may be thinner than the **A** horizon or include some of the **E** and/or the **B** horizon.



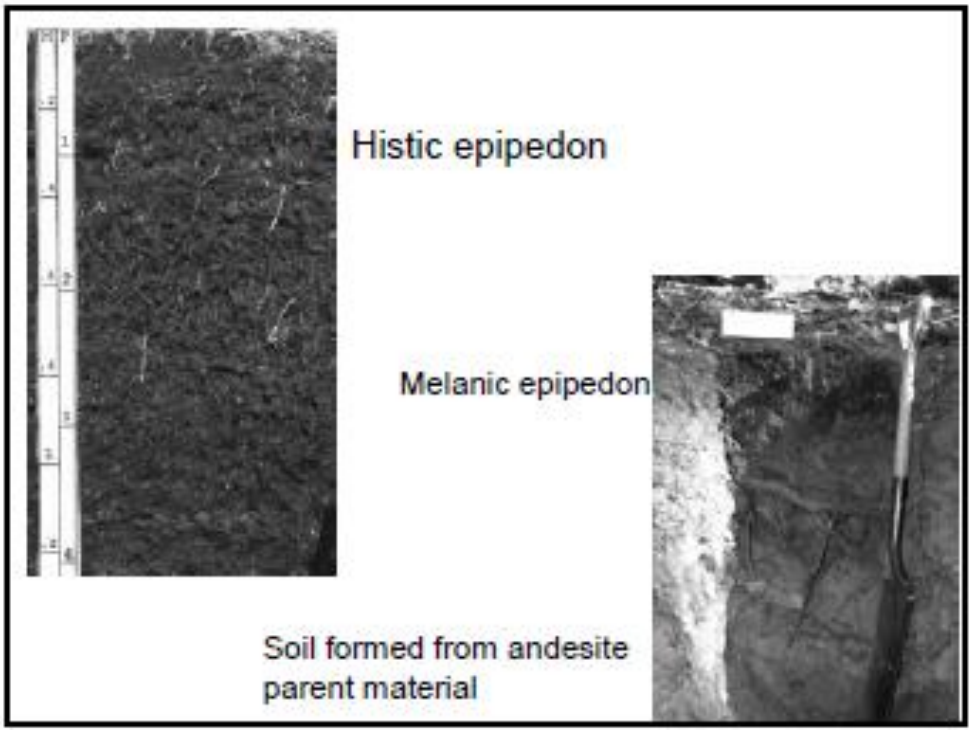
Types of epipedons (top soil):

There are 8 types of epipedons:



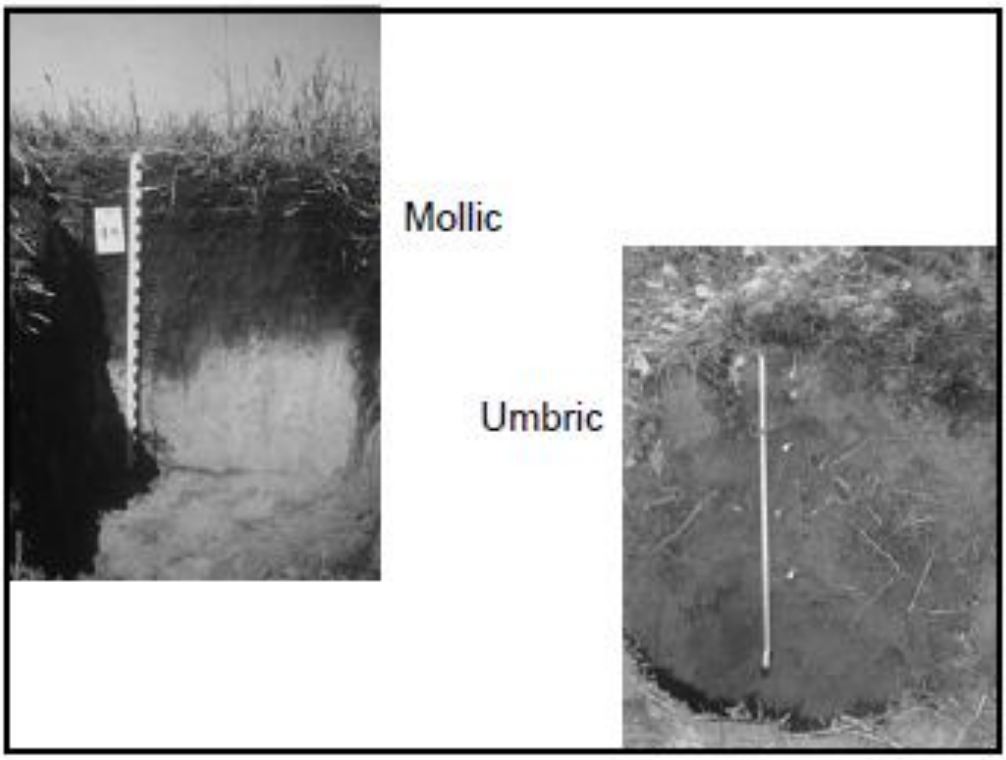
- ***Anthropic epipedon:*** A surface horizon like the mollic epipedon but contains over 250 ppm of citric acid soluble P_2O_2 (phosphate).

- ***Histic epipedon:*** A surface horizon that contains more than 20 to 30 percent organic matter, depending on clay content, and is water saturated for 30 days at some season of the year unless artificially drained. It is thinner than 30 cm if drained or 45 cm if not drained. This type not common but important for wetlands and other special cases.



- ***Mollic epipedon:*** A surface horizon that when mixed to a depth of 17.5 cm contains 1percent or more organic matter, with color values darker than 5.5 dry and 3.5 moist and chroma less than 3.5 moist. This type of epipedon common in grasslands.

  Structure can not be massive and hard when dry. Base saturation is over 50 percent and the epipedon is not naturally dry in all parts more than 9 month/year.



- ***Ochric epipedon:*** A surface horizon that is light in color, color values > 5.5 dry or > 3.5 moist, contains less than 1percent organic matter, or is hard or very hard and massive when dry or dry more than 3 month/year. This type common in arid lands.