## Suffix symbol in soil morphology

Lower case letters are used as suffixes to designate specific kinds of master horizons and layers. The term "accumulation" is used in many of the definitions of such horizons to indicate that these horizons must contain more of the material in question than is presumed to have been present in the parent material.

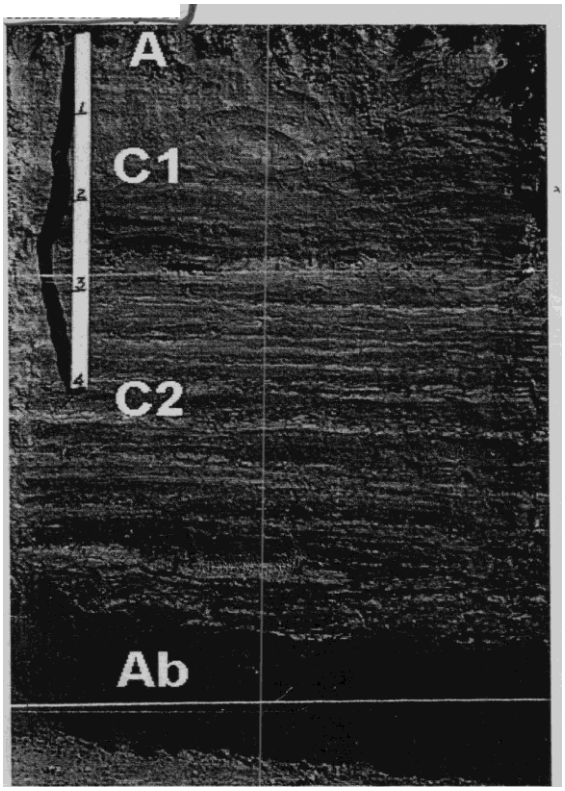
The suffix symbols and their meanings are as follows:

**a. Highly decomposed organic material**

This symbol is used with O to indicate the most highly decomposed organic materials, which have a fiber content of less than 17 percent (by volume) after rubbing.

**b. Buried genetic horizon**

This symbol is used in mineral soils to indicate identifiable buried horizons with major genetic features that were developed before burial Genetic horizons may or may not have formed in the overlying material, which may be either like or unlike the assumed parent material of the buried soil. This symbol is not used in organic soil, nor is it used to separate an organic layer from a mineral layer.



### c. Concretions or Nodules

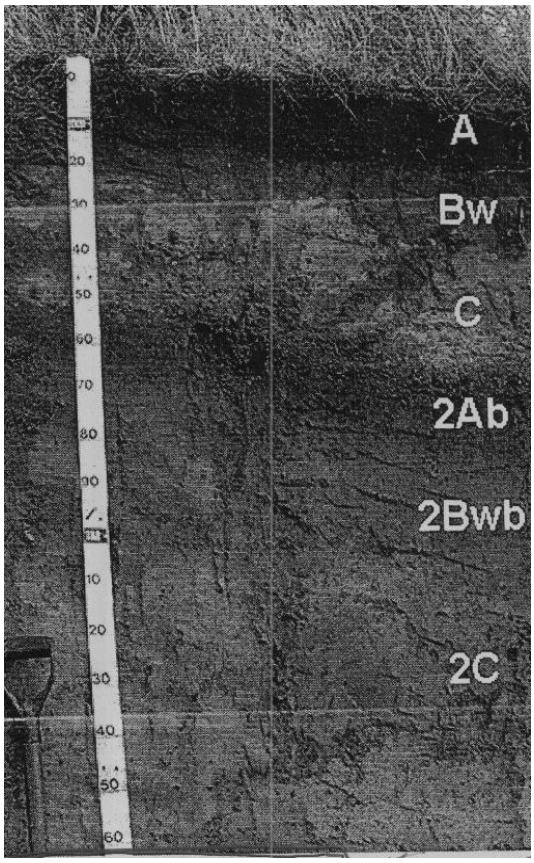
This symbol indicates a significant accumulation of concretions or nodules. Cementation is required. The cementing agent commonly is iron, aluminum, manganese, or titanium. It cannot be silica, dolomite, calcite or more soluble salts.

### d. Physical root restriction

This symbol indicates non cemented, root-restricting layers in naturally occurring or human-made sediments or materials. Examples are dense basal till, plow pans, and other mechanically compacted zones.

### e. Organic material of intermediate decomposition

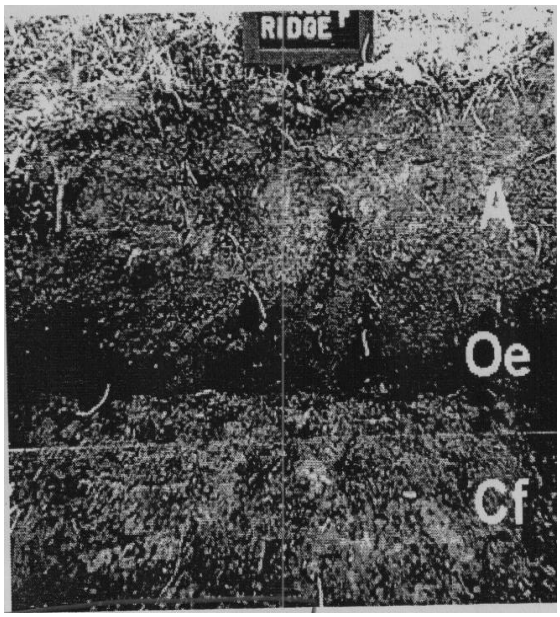
This symbol is used with O to indicate organic materials of intermediate decomposition. The fiber content of these materials is 17 to 40 percent (by volume) after rubbing.

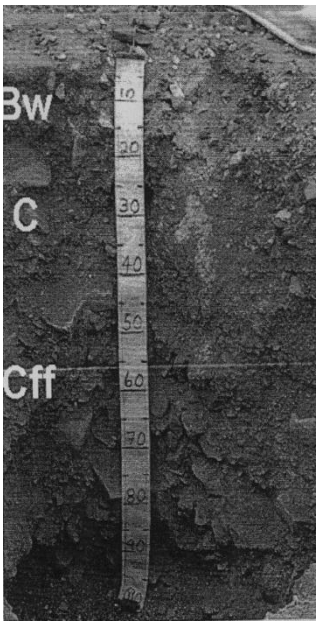


### f. Frozen soil or water

This symbol indicates that a horizon or layer contains permanent ice. The symbol is not used for seasonally frozen layer or for dry permafrost.

***Dry permafrost:*** this symbol indicates a horizon or layer that is continually colder than 0 °C and does not contain enough ice to be cemented by ice. This suffix is not used for horizons or layers that have a temperature warmer than 0 °C at some time of the year.

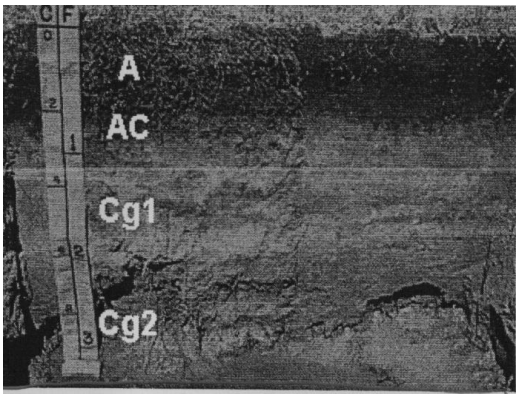



### g. Strong gleying

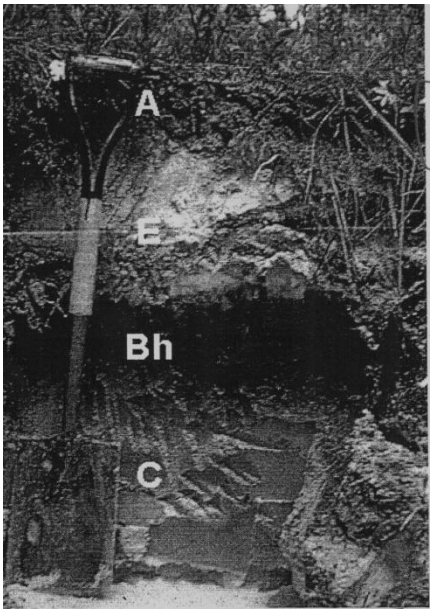
This symbol indicates either that iron has been reduced and removed during soil formation or that saturation with stagnant water has reserved it in a reduced stat. Most of the affected layers have chroma of 2 or less, and many have redox concentrations.

The low chroma can represent either the color of reduced iron or the color of uncoated sand and silt particles from which iron has been removed. The symbol g is not used for materials of low chroma that have no history of wetness, such as some shales or E horizons. If g is used with B, pedogenic change in addition to gleying is implied. If no other pedogenic change besides gleying has taken place, the horizon is designated Cg.



## h. Illuvial accumulation of organic matter

This symbol is used with **B** to indicate the accumulation of illuvial. Amorphous, dispersible complexes of organic matter and sesquioxides if the sesquioxide component is dominated by aluminum but is present only in very small quantities. The organosesquioxid material coats sand and silt particles. In some horizons coatings have coalesced, filled pores, and cemented the horizon. The symbol h is also used in combination with s as "Bhs" if the amount of the sesquioxide component is significant but the color value and chroma, moist, of the horizon are 3 or less.




## i. Slightly decomposed organic material

This symbol is used with **O** to indicate the least decomposed of the organic materials. The fiber content of these materials is 40 percent or more (by volume) after rubbing.