

2/28/90 3/17/99 Rev.
4/01/92 Rev. 3/01/00 Rev.
4/01/93 Rev. 3/05/02 Rev.
4/04/94 Rev. 1/22/13 Rev.
3/21/96 Rev.

Maine Association of Professional Soil Scientists

KEY FOR THE IDENTIFICATION OF SOIL DRAINAGE CLASS

Use this key starting at the first drainage class (Very Poorly Drained). If the soil being evaluated does not exhibit the soil morphological features for that drainage class, go to the next drainage class. Continue through each drainage class until the soil being evaluated meets the soil morphological features for a particular drainage class.

DRAINAGE CLASS

SOIL MORPHOLOGICAL FEATURES KEY

VERY POORLY DRAINED (VPD)

1) Has organic soil material that extends from the ground surface¹ to a depth of 40 cm (16 inches) or more. Refer to Histosols in *Keys to Soil Taxonomy, 11th Edition, 2010*²;

or

2) Has organic soil material that extends from the ground surface to a depth of 20 to 40 cm (8 to 16 inches) (Histic Epipedon)³ **and** is directly underlain by a horizon that has a depleted or gleyed matrix;

or

3) Has organic soil material that extends from the surface to a depth of 10 to 20 cm (4 to 8 inches) **and** is directly underlain by a horizon that has a depleted or gleyed matrix;

or

4) Mineral soils with sulfidic materials within 50 cm (20 inches) of the mineral soil surface; alluvial soils with an umbric epipedon;

or

POORLY DRAINED (PD)

1) Has dominant textures in the upper 50 cm (20 inches) (below the A-horizon if present) of loamy fine sand or coarser **and** has redoximorphic features within 18 cm (7 inches) of the mineral soil surface;

or

Has dominant textures in the upper 50 cm (20 inches) (below the A-horizon if present) of loamy fine sand or coarser **and** has a Bh- or Bhs-horizon with value/chroma of 3/3 or less that begins within 18 cm (7 inches) of the mineral soil surface **and** is directly underlain by a horizon that has redoximorphic features;

or

2) Has an A-horizon that is 18 cm (7 inches) thick or greater with value/chroma of 3/2 or less **and** a textures in all sub-horizons within 50 cm (20 inches) of the mineral soil surface of loamy fine sand or coarser **and** has redoximorphic features directly below the A-horizon;

or

3) Has a depleted or gleyed matrix within 50 cm (20 inches) of the mineral soil surface **and** redox depletions with value of 4 or more and chroma of 2 or less in ped interiors that are less than 18 cm (7 inches) below the mineral soil surface;

or

4) Has an A-horizon that is 18 cm (7 inches) thick or greater with value/chroma of 3/2 or less **and** has a depleted or gleyed matrix within 50 cm (20 inches) of the mineral soils surface **and** has redox depletions with value of 4 or more and chroma of 2 or less in ped interiors **or** a depleted or gleyed matrix directly beneath the A-horizon;

or

¹ Surface excludes loose leaves, needles, and twigs.

² Organic soil excludes FOLISTS in this key.

³ Refer to *Keys to Soil Taxonomy, 11th Edition, 2010*, "Histic Epipedon, Required Characteristics".