

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

Maine Association of Professional Soil Scientists

KEY FOR THE IDENTIFICATION OF SOIL DRAINAGE CLASS

Use this key starting at the first drainage class listed (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	COMMON SITE INDICATORS
VERY POORLY DRAINED	<p>1) Has organic soil material that extends from the surface¹ to a depth of 16 inches (40 cm) or more. (Histosols)²; <i>or</i></p> <p>2) Has organic soil material that extends from the surface to a depth of 8 to 16 inches (20 to 40 cm) (Histic Epipedon)³ and is directly underlain by a horizon that has a depleted or gleyed matrix; <i>or</i></p> <p>3) Has organic soil material that extends from the surface to a depth of 4 to 8 inches (10 to 20 cm) and is directly underlain by a horizon that has a depleted or gleyed matrix; <i>or</i></p> <p>4) Mineral soils with sulfidic materials within 20 inches (50 cm) of the mineral soil surface; Alluvial soils with an umbric epipedon; <i>or</i></p>	<p>Level or nearly level; occupies lowest landscape position in the landscape. Commonly in the depressions and is seasonally ponded or flooded.</p> <p>Common plant species include: rushes, cattails, sedges, sphagnum moss, tamarack, willow, black spruce, northern white cedar, and red maple</p>
POORLY DRAINED	<p>1) Has dominant textures in the upper 20 inches (50 cm) (below the "A" or "Ap" horizon if present) of loamy fine sand or coarser and has redoximorphic features or has a Bh or Bhs horizon that is value 3 or less and chroma 2 or less, which is directly underlain by a horizon with redoximorphic features, within 7 inches (18 cm) of the mineral soil surface; <i>or</i></p> <p>2) Has an Ap horizon that is 7 inches (18 cm) thick or greater with a value of 3 or less and chroma of 2 or less and a texture in all subhorizons within 20 inches (50 cm) of the mineral soil surface of loamy fine sand or coarser and have redoximorphic features directly beneath the Ap horizon; <i>or</i></p> <p>3) Has a depleted or gleyed matrix within 20 inches (50 cm) of the mineral soil surface and redox depletions with value 4 or more and chroma 2 or less in ped interiors that are less than 7 inches (18 cm) below the mineral soil surface; <i>or</i></p> <p>4) Has an Ap horizon that is 7 inches (18 cm) thick or greater with value of 3 or less and chroma of 2 or less and has a depleted or gleyed matrix within 20 inches (50 cm) of the mineral soil surface and has redox depletions with value 4 or more and chroma 2 or less in ped interiors or a depleted or gleyed matrix directly beneath the Ap horizon; <i>or</i></p>	<p>Level to gently sloping; sideslopes, toe slopes, depressions, and seepage areas.</p> <p>Common plant species include: sedges, alders, willow, red maple, gray birch, and aspen</p>

¹ Surface excludes loose leaves, needles and twigs.

² Twenty-four inches (60 cm) or more if 75 percent or more of the volume is sphagnum fibers. Organic soil excludes Folists in this key.

³ Eight to 24 inches (20 to 60 cm) if 75 percent or more of the volume is sphagnum fibers.