

NON-TECHNICAL SOILS DESCRIPTIONS
Lost River Site 16

Map unit: BkC Berks channery silt loam, 8 to 15 percent slopes

Description Category: AGR

This soil is strongly sloping and well drained. It is mostly on ridge tops and benches. This Berks soil has low or very low available water capacity, and it is droughty. Permeability is moderate or moderately rapid. Runoff is rapid, and natural fertility is low. Where unlimed, this soil is strongly acid or very strongly acid. Root growth is restricted by bedrock at a depth of 20 to 40 inches. This soil is suited to cultivated crops and to hay and pasture. Because of droughtiness during summer, however, the soil is better suited to early-maturing small grains than to late-maturing crops such as corn. The hazard of erosion is severe in unprotected areas and is a major management concern. If the soil is cultivated, conservation tillage, cultivating on the contour, using hay in the crop sequence, maintaining sod in shallow drainageways, and using crop residue on and in the soil will help to control erosion and maintain fertility and tilth. Proper stocking rates and rotation grazing are the main pasture management needs.

Map unit: BkE Berks channery silt loam, 25 to 35 percent slopes

Description Category: AGR

This soil is steep and well drained. It is on hillsides. This Berks soil has low or very low available water capacity, and it is droughty. Permeability is moderate or moderately rapid. Runoff is very rapid, and natural fertility is low. This soil is strongly acid or very strongly acid. Root growth is restricted by bedrock at a depth of 20 to 40 inches. This soil generally is not suited to cultivated crops or hay, but it is suited to pasture. The hazard of erosion is very severe in unprotected areas. Overgrazing of pasture and the hazard of erosion are the major management concerns. Proper stocking rates, rotation grazing, and seeding bare areas to establish a permanent plant cover are the major pasture management needs.

Map unit: BkF Berks channery silt loam, 35 to 65 percent slopes

Description Category: AGR

This soil is very steep and well drained. It is on hillsides. This Berks soil has low or very low available water capacity, and it is droughty. Permeability is moderate or moderately rapid. Runoff is very rapid, and natural fertility is low. This soil is strongly acid or very strongly acid. Root growth is restricted by bedrock at a depth of 20 to 40 inches. This

soil generally is not suited to cultivated crops or hay and is difficult to manage for pasture.

Map unit: BrD Berks-Weikert shaly silt loams, 15 to 25 percent slopes

Description Category: AGR

This unit consists of moderately steep, well drained soils on ridge tops, benches, and hillsides. The available water capacity is low or very low in the Berks soils and very low in the Weikert soils. Both soils are droughty. Permeability is moderate or moderately rapid in the Berks soils and moderately rapid in the Weikert soils. Runoff is rapid on both soils, and natural fertility is low. Where unlimed, both soils are strongly acid or very strongly acid. Root growth is restricted by bedrock at a depth of 20 to 40 inches in the Berks soils and 10 to 20 inches in the Weikert soils. The soils in this unit are not suited to cultivated crops but are suited to pasture or hay. The hazard of erosion is severe in unprotected areas and is a major management concern. Proper stocking rates and rotation grazing are the major pasture management needs.

Map unit: BrF Berks-Weikert shaly silt loams, 25 to 65 percent slopes

Description Category: AGR

This unit consists of very steep or steep, well drained soils on hillsides. The available water capacity is low or very low in the Berks soils and very low in the Weikert soils. Both soils are droughty. Permeability is moderate or moderately rapid in the Berks soils and moderately rapid in the Weikert soils. Runoff is very rapid on both soils, and natural fertility is low. The soils are strongly acid or very strongly acid. Root growth is restricted by bedrock at a depth of 20 to 40 inches in the berks soils and 10 to 20 inches in the Weikert soils. The soils in this unit generally are not suited to cultivated crops or hay and are difficult to manage for pasture. The hazard of erosion is very severe in unprotected areas.

Map unit: BvC Buchanan stony loam, 3 to 15 percent slopes

Description Category: AGR

This soil is strongly sloping or gently sloping and is moderately well drained. It is on foot slopes, in coves, and along drainageways. Stones cover 1 to 3 percent of the surface of this soil. The available water capacity of this Buchanan soil is moderate. Permeability is moderate above the firm part of the subsoil and slow in the firm part. Runoff is medium or rapid, and natural fertility is low. Where unlimed, the soil is extremely acid to strongly acid. A seasonal high water table about 1.5 to 3 feet below the surface restricts the root growth of plants. The depth to bedrock is more than 60 inches. The

stones on the surface limit the use of farm machinery and make this soil generally unsuitable for cultivated crops or hay, but the soil is suited to pasture. The hazard of erosion is moderate or severe in unprotected areas and is a management concern. Proper stocking rates, deferred grazing until the soil is firm, and rotation grazing are the main pasture management needs.

Map unit: CkB Clarksburg channery silt loam, 3 to 8 percent slopes

Description Category: AGR

This soil is gently sloping and moderately well drained. It is along foot slopes, in coves, and along drainageways. The available water capacity of this Clarksburg soil is moderate. Permeability is moderate above the firm part of the subsoil and moderately slow or slow in the firm part. Runoff is medium, and natural fertility is medium. Where unlimed, the soil is strongly acid to slightly acid. A seasonal high water table about 1.5 to 3 feet below the surface restricts the root growth of some plants. The depth to bedrock is more than 60 inches. This soil is suited to cultivated crops and to hay and pasture. It is used mainly for hay and pasture. The hazard of erosion is moderate in cultivated areas and is a management concern. If this soil is cultivated, cultivating on the contour, using hay in the crop sequence, and using crop residue on and in the soil will help to control erosion and maintain fertility and tilth. Proper stocking rates, deferred grazing until the soil is firm, and rotation grazing are the main pasture management needs.

Map unit: CIC Clarksburg stony silt loam, 3 to 15 percent slopes

Description Category: AGR

This soil is strongly sloping or gently sloping and is moderately well drained. It is along foot slopes, in coves, and along drainageways. Stones cover 1 to 3 percent of the surface of this soil. The available water capacity of this Clarksburg soil is moderate. Permeability is moderate above the firm part of the subsoil and moderately slow or slow in the firm part. Runoff is rapid, and natural fertility is medium. Where unlimed, the soil is strongly acid to slightly acid. A seasonal high water table about 1.5 to 3 feet below the surface restricts the root growth of some plants. The depth to bedrock is more than 60 inches. The stones on the surface limit the use of farm machinery and make this soil generally unsuitable for cultivated crops or hay, but the soil is suited to and used for pasture. The hazard of erosion is moderate or severe in unprotected areas and is a management concern. Proper stocking rates, deferred grazing until the sod is firm, and rotation grazing are major pasture management needs.

Map unit: DiF Dekalb, Hazleton and Lehew stony soils, 35 to 65 percent slopes

Description Category: AGR

This unit consists of very steep, well drained soils on hillsides. Stones cover 1 to 3 percent of the surface of these soils. The available water capacity of the Dekalb and Lehigh soils is very low or low. The available water capacity of the Hazleton soils is low or moderate. Permeability of the three soils is moderately rapid or rapid. Runoff is very rapid, and natural fertility is low. Where unlimed, the Dekalb and Hazleton soils are strongly acid to extremely acid and the Lehigh soils are strongly acid or very strongly acid. Root growth is restricted by bedrock at a depth of 20 to 40 inches in the Dekalb and Lehigh soils. The depth to bedrock in the Hazleton soils is at least 40 inches. The stones on the surface limit the use of farm machinery and make these soils generally unsuitable for cultivated crops or hay, but the soils are suited to pasture. The hazard of erosion is moderate or severe in unprotected areas and is a management concern. Proper stocking rates and rotation grazing are the main pasture management needs.

Map unit: Du Dunning silty clay loam

Description Category: AGR

This soil is nearly level and very poorly drained to poorly drained. It is on floodplains. Slopes range from 0 to 3 percent. If adequately drained, this soil is suited cultivated crops and to hay and pasture, especially water-tolerant grasses and legumes. Draining the soil is difficult, however, because of the clayey subsoil. If the soil is cultivated, conservation tillage, cultivating on the contour, using hay in the crop sequence, delaying tillage until the soil is dry, and using crop residue on and in the soil will help to maintain fertility and tilth. Proper stocking rates, rotation grazing and deferred grazing until the soil is firm are the main pasture management needs.

Map unit: EaC Edom silt loam, 8 to 15 percent slopes

Description Category: AGR

This soil is strongly sloping and well drained. It is mostly on ridge tops and benches. The available water capacity of this Edom soil is moderate or high. Permeability is moderately slow or moderate. Runoff is rapid, and natural fertility is high. This soil is strongly acid to neutral in the surface layer and upper part of the subsoil and in the substratum. The depth to bedrock ranges from 40 to 60 inches. This soil is suited to cultivated crops and to hay or pasture. It is used mainly for hay and pasture. The hazard of erosion is severe in unprotected areas and is the major management concern. If this soil is cultivated, conservation tillage, cultivating on the contour, using hay in the crop sequence, keeping sod in shallow drainageways, and using crop residue on and in the soil will help to control erosion and maintain fertility and tilth. Proper stocking rates and rotation grazing are the major pasture management needs.

Map unit: EcE Edom channery silt loam, 25 to 35 percent slopes

Description Category: AGR

This Edom soil is deep, well-drained, and moderately steep to very steep. They are moderately fertile and are good to fair suppliers of moisture for tree growth. These are very good soils for growing high value hardwoods such as yellow poplar, black walnut and oaks. They will also produce good yields of pine. Management problems are erosion hazard and equipment limitations of moderate to severe with increasing slope; and severe plant competition to hardwoods from unwanted woody plants, grasses and weeds. It is on hillsides. The available water capacity is moderate or high. Permeability is moderately slow or moderate. Runoff is rapid, and natural fertility is high. This soil is strongly acid to neutral in the surface layer and upper part of the subsoil and medium acid to mildly alkaline in the lower part of the subsoil and in the substratum. The depth to bedrock ranges from 40 to 60 inches. This soil generally is not suited for to cultivated crops or hay, but it is suited to pasture. The hazard of erosion is very severe in unprotected areas. Overgrazing of pasture is a major management concern. Proper stocking rates, rotation grazing, and establishing a permanent plant cover are the major pasture management needs.

Map unit: LbE Laidig stony loam, 15 to 35 percent slopes

Description category: AGR

This soil is steep or moderately steep and is well drained. It is along foot slopes, in coves and along drainageways. Stones cover 1 to 3 percent of the surface of this soil. The available water capacity of this Laidig soil is moderate. Permeability is moderate or moderately rapid above the firm part of the subsoil and moderately slow in the firm part. Runoff is rapid or very rapid, and natural fertility is low. This soil is strongly acid to extremely acid. The depth to bedrock is more than 60 inches. The stones on the surface limit the use of farm machinery and make this soil generally unsuitable for cultivated crops or hay, but the soil is suited to pasture. The hazard of erosion is severe or very severe in unprotected areas and is a major management concern. Proper stocking rates and rotation grazing are major pasture management needs.

Map unit: LcF Laidig very stony loam, 35 to 50 percent slopes

Description Category: AGR

This soil is very steep and well drained. It is on foot slopes. Stones cover 3 to 15 percent of the surface of this soil. The available water capacity of this Laidig soil is moderate. Permeability is moderate or moderately rapid above the firm part of the subsoil and moderately slow in the firm part. Runoff is very rapid, and natural fertility is low. This soil is

strongly acid to extremely acid. The depth to bedrock is more than 60 inches. Slope and the stones on the surface restrict the use of farming and timber equipment and make this soil generally unsuited to cultivated crops, hay or pasture.

Map unit: Ln Lindside and Lobdell soils

Description Category: AGR

This unit consists of nearly level, moderately well drained soils on floodplains. The available water capacity of these Lindside and Lobdell soils is high. Permeability is moderate. Runoff is slow and natural fertility is moderate or high. A seasonal high water table about 1.5 to 3 feet below the surface restricts the root growth of some types of plants. The Lindside soils are medium acid to mildly alkaline, and the Lobdell soils are medium acid to neutral. The depth to bedrock is more than 60 inches. These soils are suited to cultivated crops and to hay and pasture. Some small wet areas need artificial drainage if desirable crops are to be grown, and crops are subject to damage from flooding. Cultivated crops can be grown continuously on these soils, but the soil needs the protection of a cover crop. Delaying tillage until the soils are reasonably dry and mixing the residue from the cover crop into the soils will help to improve fertility and tilth. Proper stocking rates, rotation grazing, and deferred grazing in the spring until the soils are reasonably firm are major pasture management needs.

Map unit: Me Melvin silt loam

Description Category: AGR

This soil is nearly level and poorly drained. It is on floodplains. Slopes range from 0 to 3 percent. The available water capacity of this Melvin soil is high. Permeability is moderate. Runoff is slow, and natural fertility is high. A seasonal high water table at or near the surface restricts root growth of plants. This soil is medium acid to mildly alkaline in the surface layer and upper part of the subsoil and slightly acid to mildly alkaline in the lower part of the subsoil and in the substratum. The depth to bedrock is more than 60 inches. If adequately drained, this soil is suited to cultivated crops and to hay and pasture, especially water-tolerant grasses and legumes, but flooding is a hazard for crops in some areas of this soil. If this soil is cultivated, conservation tillage, delaying tillage until the soil is reasonably dry, and using crop residue on or in the soil help to maintain fertility and tilth. Proper stocking rates, rotation grazing, and deferred grazing in the spring until the soil is reasonably firm are major pasture management needs.

Map unit: MhA Monongahela silt loam, 0 to 3 percent slopes

Description Category: AGR

This soil is nearly level and moderately well drained. It is on stream terraces that are above overflow. The available water capacity of this Monongahela soil is moderate. Permeability is moderate above the firm part of the subsoil and moderately slow or slow in the firm part. Runoff is slow, and natural fertility is low. A seasonal high water table about 1.5 to 3 feet below the surface restricts the root growth of some types of plants. Where unlimed, this soil is strongly acid or very strongly acid. The depth to bedrock is more than 60 inches. This soil is suited to cultivated crops and to hay and pasture. Small wet areas need drainage if crops are to be grown. Cultivated crops can be grown continuously, but the soil needs the protection of a cover crop. Delaying tillage until the soil is dry and mixing the residue of the cover crop into the soil helps improve fertility and tilth. Proper stocking rates, deferred grazing until the soil is firm, and rotation grazing are the main pasture management needs.

Map unit: MhB Monongahela silt loam, 3 to 8 percent slopes

Description Category: AGR

This soil is gently sloping and moderately well drained. It is on stream terraces that are above overflow. The available water capacity of this Monongahela soil is moderate. Permeability is moderate above the firm part of the subsoil and moderately slow or slow in the firm part. Runoff is medium, and natural fertility is low. A seasonal high water table about 1.5 to 3 feet below the surfaces restricts the root growth of some types of plants. Where unlimed, this soil is strongly acid or very strongly acid. The depth to bedrock is more than 60 inches. This soil is suited to cultivated crops and to hay and pasture. Small wet areas need drainage if crops are to be grown. The hazard of erosion is moderate in cultivated areas and is a management concern. If this soil is cultivated, cultivating on the contour, using hay in the crop sequence, using crop residue on and in the soil, and delaying tillage until the soil is dry will help to control erosion and maintain fertility and tilth. Proper stocking rates, deferred grazing until the soil is firm, and rotation grazing are the main pasture management needs.

Map unit: MhC Monongahela silt loam, 8 to 15 percent slopes

Description Category: AGR

This soil is strongly sloping and moderately well drained. It is on stream terraces that are above overflow. The available water capacity of this Monongahela soil is moderate. Permeability is moderate above the firm part of the subsoil and moderately slow or slow in the firm part. Runoff is rapid, and natural fertility is low. A seasonal high water table about 1.5 to 3 feet below the surface restricts the root growth of some types of plants. Where unlimed, this soil is strongly acid or very strongly acid. The depth to bedrock is more than 60 inches. This soil is suited to cultivated crops and to hay and pasture. The hazard of erosion is severe in unprotected areas and is a major management concern. If

this soil is cultivated, conservation tillage, cultivating on the contour, using hay in the crop sequence, keeping sod in shallow drainageways, and using crop residue on and in the soil will help to control erosion and maintain fertility and tilth. Proper stocking rates, deferred grazing until the soil is firm and rotation grazing are major pasture management needs.

Map unit: Pc Potomac cobbly loam

Description Category: AGR

This soil is nearly level and somewhat excessively drained. It is on floodplains. Slopes range from 0 to 3 percent. The available water capacity of this Potomac soil is very low or low. Permeability is rapid or very rapid. Runoff is slow, and natural fertility is medium. This soil is strongly acid to neutral. The depth to bedrock is more than 60 inches. This soil is not suited to cultivated crops and hay, but it is suited to pasture. The rock fragments in the surface layer restrict the use of farm machinery, and crops are subject to occasional damage from flooding. Proper stocking rates and rotation grazing are major pasture management needs.

Map unit: Ta Tioga fine sandy loam

Description Category: AGR

This soil is nearly level and well drained. It is on floodplains. Slopes range from 0 to 3 percent. The available water capacity of this Tioga soil is moderate or high. Permeability is moderate to moderately rapid. Runoff is slow, and natural fertility is high. This soil is strongly acid to neutral in the surface layer and subsoil and medium acid to neutral in the substratum. The depth to bedrock is more than 60 inches. This soil is suited to cultivated crops and to hay and pasture. It is used mainly for cultivated crops. They can be grown continuously, but the soil needs the protection of a cover crop. Mixing the residue of the cover crop into the soil helps to improve fertility and tilth. Flooding damages crops in some areas. Proper stocking rates and rotation grazing are the main pasture management needs.