Map Scale: 1:3,540 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- CyU: Clayey upland
- GNS: Generally not suited
- GrO: Gravelly overflow
- GrP: Gravelly pan
- GrU: Gravelly upland
- LyO: Loamy Overflow
- LyP: Loamy pan
- LyU: Loamy upland
- MDU: Moderately deep upland
- ShU: Shallow upland
- SyO: Sandy overflow
- WCB: Wet clayey bottom
- WCU: Wet clayey upland
- WLB: Wet loamy bottom
- WLO: Wet loamy overflow
- WtP: Wet pan
- Not rated or not available

Soil Rating Lines

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Soil Rating Points

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Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Polk County, Missouri
Survey Area Data: Version 27, Sep 6, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 5, 2020—Mar 6, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Pasture hayland (MO)

Map unit symbol	Map unit name	Rating	Component name (percent)	Acres in AOI	Percent of AOI
40001	Bolivar loam, 3 to 8 percent slopes	GNS: Generally not suited	Bolivar (90%)	0.6	1.5%
			Basehor (3%)		
			Cedargap (3%)		
			Viraton (2%)		
			Ocie (2%)		
73000	Pomme silt loam, 3 to 8 percent slopes	LyU: Loamy upland	Pomme (90%)	15.2	36.2%
73008	Viraton silt loam, 2 to 5 percent slopes	LyP: Loamy pan	Viraton (95%)	1.0	2.3%
73226	Ocie-Gatewood complex, 3 to 15 percent slopes, stony	GrU: Gravelly upland	Ocie (50%)	19.9	47.4%
76008	Cedargap gravelly silt loam, 1 to 3 percent slopes, frequently flooded	GrO: Gravelly overflow	Cedargap (90%)	5.3	12.5%
Totals for Area of Interest				**42.1**	**100.0%**

Description

DESCRIPTIONS OF PASTURE SUITABILITY GROUPS

NOTE: Due to the wide range in characteristics of a suitability group, some areas within a group may not fit all of the description.

CyU - Clayey Upland

This group consists of upland soils that have slopes of less than 35 percent and a potential rooting depth of more than 40 inches. Due to the fine particle size, these soils tend to remain wet during periods of rainfall and throughout winter. They may be moderately droughty during periods of low rainfall. These soils are well suited to most commonly grown forages. They are best suited to species that are tolerant of wetness because of the slow permeability during wet periods. The production of deep-rooted legumes is limited because of the wetness, a perched water table, and a restricted rooting depth. Timely seeding is essential because of the slow rate of seedling establishment. In eroded areas, clods may form and inhibit good seedbed preparation. There are no tillage limitations due to rock fragments.

GNS - Generally Not Suited

This group consists of soils not suited to forage crops. These soils have very steep slopes, stony surfaces, or rock outcrops that can severely limit the adaptability and productivity of plant species and the efficiency of forage harvesting.

GrO - Gravelly Overflow

This group consists of flood-prone, gravelly soils in narrow bottoms along streams. These soils are moderately suited to all commonly grown forages. Deep-rooted, drought-tolerant species should be selected for planting to avoid stand losses. Because of seasonal droughtiness, timely planting is needed to ensure an adequate stand. Rock fragments on the surface may limit tillage and other machinery operations. Grazing systems must be designed around possible flooding hazards.

GrP - Gravelly Pan

This group consists of upland soils that have slopes of less than 35 percent and a fragipan that restricts rooting depth to about 20 inches. Due to the restrictive layer, these soils can be seasonally wet in winter and during periods of normal rainfall. They are very droughty during periods of low rainfall due to the limited water-holding capacity. They are moderately suited to all commonly grown forages. Shallow-rooted species that tolerate droughtiness should be selected for planting. Because of seasonal droughtiness, timely planting is needed to ensure an adequate stand. Rock fragments on the surface may limit tillage and other machinery operations. Broadcast seeding is the most common seeding method.

GrU - Gravelly Upland

This group consists of upland soils that have slopes of less than 35 percent, are subject to erosion and droughtiness, and have a potential rooting depth of more than 40 inches. These soils are generally not suited to cultivated systems. They are moderately well suited to all commonly grown forages. Deep-rooted, drought-tolerant species should be selected for planting to avoid stand losses. Because of the droughtiness, timely planting is needed to ensure an adequate stand. Rock fragments on the surface may limit tillage and other machinery operations.

LyO - Loamy Overflow

This group consists of flood-prone, loamy soils on large bottoms. These soils have a potential rooting depth of more than 40 inches. They are very productive and well suited to all commonly grown forages. Scour erosion from flooding is the only tillage limitation. Grazing systems must be designed around possible flooding hazards.

LyP - Loamy Pan

This group consists of upland soils that have slopes of less than 35 percent and a fragipan that restricts rooting depth to about 24 inches. Due to the restrictive layer, these soils can be seasonally wet in winter and during periods of normal rainfall. They are droughty during periods of low rainfall due to the limited water-holding capacity. They are moderately suited to most commonly grown forages. Shallow-rooted species that tolerate droughtiness should be selected for planting. There are no tillage limitations due to rock fragments.

LyU - Loamy Upland

This group consists of upland soils that have slopes of less than 35 percent and a potential rooting depth of more than 40 inches. These soils are very productive and well suited to all commonly grown forages. There are no serious limitations to pasture and hayland management.

MDU - Moderately Deep Upland

This group consists of upland soils that have slopes of less than 35 percent and a rooting depth of 20 to 40 inches. The amount of rock fragments on the surface varies and can limit machinery operation. These soils are droughty during periods of low rainfall. Shallow-rooted species that are tolerant of droughtiness should be selected for planting. Erosion is a serious hazard in newly seeded areas.

ShU - Shallow Upland

This group consists of shallow upland soils that have slopes of less than 35 percent and a rooting depth of less than 20 inches. Most areas are used to support forages that require little input. These soils are best suited to shallow-rooted species. Because of seasonal droughtiness, timely planting is needed to ensure an adequate stand. Broadcast seeding may be necessary. The slope and rock outcrop can hinder mowing. Productivity is low.

SyO - Sandy Overflow

This group consists of soils that are moderately suited to most commonly grown forages. Droughtiness and flooding are the main management concerns. Because of seasonal doughtiness, timely planting is needed to ensure an

adequate stand. Grazing systems must be designed around possible flooding hazards.

WCB - Wet Clayey Bottom

This group consists of poorly drained soils on bottoms and terraces. These soils have a potential rooting depth of more than 40 inches. They are well suited to most commonly grown forages. Due to their slow internal drainage, they are best suited to species that are very tolerant of wetness, including alsike clover, reed canarygrass, and switchgrass. These soils are too wet for alfalfa and Caucasian bluestem. They are poorly suited to hay production because of delayed access and slow curing. In depressional areas, maintaining stands of desirable species is difficult. Grazing systems must be designed around possible flooding hazards.

WCU - Wet Clayey Upland

This group consists of deep, poorly drained upland soils that have slopes of less than 35 percent and a potential rooting depth of more than 40 inches. Wetness is the main management concern. These soils are well suited to most commonly grown forages. They are also well suited to wetness-tolerant, shallow-rooted legumes. They are generally too wet for alfalfa and Caucasian bluestem. In depressional areas, maintaining stands of desirable species is difficult.

WLB - Wet Loamy Bottom

This group consists of flood-prone, poorly drained soils on bottoms and terraces. These soils have a potential rooting depth of more than 40 inches. A seasonal high water table and flooding are the main management concerns. The soils are well suited to most commonly grown forages. Because of the seasonal high water table and flooding, they are best suited to species that are tolerant of wetness. They are too wet for alfalfa and Caucasian bluestem. Seedbed preparation is easy. The soils are poorly suited to hay production because of delayed access and slow curing. Grazing systems must be designed around possible flooding hazards.

WLO - Wet Loamy Overflow

This group consists of soils on bottoms and terraces. These soils have a potential rooting potential of more than 40 inches. They may be poorly drained in some areas. Wetness and flooding are the main management concerns. The soils are well suited to most commonly grown forages. They are best suited to species that are tolerant of wetness. They are generally marginally suited to alfalfa and Caucasian bluestem. Seedbed preparation is easy. Grazing systems must be designed around possible flooding hazards.

WtP - Wet Pan

This group consists of upland soils in flat to depressional areas that have slopes of less than 25 percent. These soils have a fragipan that restricts rooting depth to about 24 inches. Wetness and a shallow rooting depth are the main management concerns. Due to the restrictive layer, the soils can be seasonally wet in winter and during periods of normal rainfall and droughty during periods of low rainfall. Because of a perched water table, they are best suited to species that are tolerant of wetness. They are generally not suited to alfalfa and Caucasian bluestem.

Rating Options

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower