

RECREATIONAL INTERPRETATIONS
Marion County, Kansas

Recreation

The soils of the survey area are rated in the following tables according to limitations that affect their suitability for recreation. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. Not limited indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. Slightly limited indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. Somewhat limited indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. Very limited indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the tables are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in this table can be supplemented by other information in this survey, for example, interpretations for building site development, construction materials, sanitary facilities, and water management.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas.

The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

RECREATIONAL INTERPRETATIONS--Continued
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Map symbol and soil name	Pct of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
017CS: Clime-----	47	Somewhat limited Slope Too clayey Restricted permeability	0.96 0.50 0.39	Somewhat limited Slope Too clayey Restricted permeability	0.96 0.50 0.39	Very limited Slope Too clayey Restricted permeability Depth to bedrock	1.00 0.50 0.39 0.20
Sogn-----	20	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.00
017IV: Ivan-----	85	Very limited Flooding	1.00	Not limited		Somewhat limited Flooding	0.60
017KA: Kahola-----	85	Very limited Flooding	1.00	Not limited		Somewhat limited Flooding	0.60
041CD: Clime-----	70	Somewhat limited Slope Restricted permeability	0.84 0.39	Somewhat limited Slope Restricted permeability	0.84 0.39	Very limited Slope Depth to bedrock Restricted permeability	1.00 0.71 0.39
Sogn-----	30	Very limited Depth to bedrock Slope	1.00 0.00	Very limited Depth to bedrock Slope	1.00 0.00	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.00
041HB: Hobbs-----	75	Very limited Flooding	1.00	Somewhat limited Flooding	0.40	Very limited Flooding	1.00
041SC: Sutphen-----	100	Very limited Flooding Restricted permeability	1.00 0.45	Somewhat limited Restricted permeability	0.45	Somewhat limited Flooding Restricted permeability	0.60 0.45
079CM: Clime-----	100	Somewhat limited Too clayey Restricted permeability Slope	0.50 0.39 0.04	Somewhat limited Too clayey Restricted permeability Slope	0.50 0.39 0.04	Very limited Slope Depth to bedrock Too clayey Restricted permeability	1.00 0.71 0.50 0.39
079RS: Rosehill-----	100	Somewhat limited Too clayey Restricted permeability	0.50 0.45	Somewhat limited Too clayey Restricted permeability	0.50 0.45	Somewhat limited Slope Too clayey Restricted permeability Depth to bedrock	0.72 0.50 0.45 0.16
113CB: Cass-----	100	Very limited Flooding	1.00	Not limited		Not limited	
113ED: Edalgo-----	100	Somewhat limited Restricted permeability Slope	0.45 0.04	Somewhat limited Restricted permeability Slope	0.45 0.04	Very limited Slope Restricted permeability Depth to bedrock	1.00 0.45 0.42
AED: Arents, Earthen Dam-	100	Not rated		Not rated		Not rated	
Ca: Cass-----	90	Very limited Flooding	1.00	Not limited		Somewhat limited Flooding	0.60
Ch: Chase-----	95	Very limited Flooding Restricted permeability	1.00 0.94	Somewhat limited Restricted permeability	0.94	Somewhat limited Restricted permeability Flooding	0.94 0.60
Cm: Clime-----	90	Somewhat limited Restricted permeability	0.39	Somewhat limited Restricted permeability	0.39	Somewhat limited Restricted permeability	0.39

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Map symbol and soil name	Pct of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Cp: Clime-----	90	Somewhat limited Restricted permeability	0.39	Somewhat limited Restricted permeability	0.39	Slope Somewhat limited Slope Depth to bedrock Restricted permeability	0.00 0.87 0.46 0.39
Cr: Clime, rocky-----	80	Very limited Slope Restricted permeability	1.00 0.39	Very limited Slope Restricted permeability	1.00 0.39	Very limited Slope Depth to bedrock Restricted permeability Content of large stones	1.00 0.95 0.39 0.00
Cs: Clime-----	65	Somewhat limited Slope Restricted permeability	0.96 0.39	Somewhat limited Slope Restricted permeability	0.96 0.39	Very limited Slope Depth to bedrock Restricted permeability	1.00 0.71 0.39
Sogn-----	20	Very limited Depth to bedrock Slope	1.00 0.04	Very limited Depth to bedrock Slope	1.00 0.04	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.00
Dw: Dwight-----	90	Very limited Sodium content Restricted permeability	1.00 0.45	Very limited Sodium content Restricted permeability	1.00 0.45	Very limited Sodium content Restricted permeability	1.00 0.45
Ed: Edalgo-----	90	Somewhat limited Restricted permeability Slope	0.05 0.00	Somewhat limited Restricted permeability Slope	0.05 0.00	Very limited Slope Depth to bedrock Restricted permeability	1.00 0.16 0.05
Fc: Florence-----	85	Somewhat limited Slope	0.04	Somewhat limited Slope	0.04	Very limited Slope Gravel content	1.00 0.04
Go: Goessel-----	90	Somewhat limited Too clayey Restricted permeability	0.50 0.45	Somewhat limited Too clayey Restricted permeability	0.50 0.45	Somewhat limited Too clayey Restricted permeability	0.50 0.45
HO: Hobbs-----	100	Very limited Flooding	1.00	Not limited		Somewhat limited Flooding Slope	0.60 0.00
Ib: Irwin-----	90	Somewhat limited Restricted permeability	0.45	Somewhat limited Restricted permeability	0.45	Somewhat limited Restricted permeability Slope	0.45 0.00
Ic: Irwin-----	90	Somewhat limited Restricted permeability	0.45	Somewhat limited Restricted permeability	0.45	Somewhat limited Slope Restricted permeability	0.87 0.45
IV: Ivan-----	80	Very limited Flooding	1.00	Somewhat limited Flooding	0.40	Very limited Flooding Slope	1.00 0.00
Kp: Kipson-----	90	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope Depth to bedrock Content of large stones Gravel content	1.00 1.00 0.20 0.08
La: Labette-----	90	Somewhat limited Restricted permeability	0.39	Somewhat limited Restricted permeability	0.39	Somewhat limited Restricted permeability Slope Depth to bedrock	0.39 0.13 0.06

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Map symbol and soil name	Pct of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Ld: Labette-----	60	Somewhat limited Restricted permeability	0.39	Somewhat limited Restricted permeability	0.39	Somewhat limited Restricted permeability	0.39
Dwight-----	35	Very limited Sodium content Restricted permeability	1.00 0.45	Very limited Sodium content Restricted permeability	1.00 0.45	Very limited Sodium content Restricted permeability Slope	0.00 1.00 0.45
Lg: Labette-----	65	Somewhat limited Restricted permeability	0.39	Somewhat limited Restricted permeability	0.39	Somewhat limited Slope	0.87
Sogn-----	25	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to bedrock Slope	1.00 0.63	Restricted permeability Depth to bedrock Very limited Slope Depth to bedrock Content of large stones	0.39 0.06 1.00 1.00 0.00
Lm: Ladysmith-----	90	Somewhat limited Restricted permeability	0.45	Somewhat limited Restricted permeability	0.45	Somewhat limited Restricted permeability	0.45
Ls: Lancaster-----	90	Not limited		Not limited		Somewhat limited Slope	0.00
Lt: Lancaster-----	90	Not limited		Not limited		Somewhat limited Slope Depth to bedrock	0.87 0.10
Lv: Lancaster-----	60	Somewhat limited Slope	0.00	Somewhat limited Slope	0.00	Very limited Slope Depth to bedrock	1.00 0.10
Hedville-----	25	Very limited Depth to bedrock Slope Gravel content	1.00 0.63 0.08	Very limited Depth to bedrock Slope Gravel content	1.00 0.63 0.08	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
M-W: Miscellaneous Water-	100	Not rated		Not rated		Not rated	
Os: Osage-----	90	Very limited Depth to saturated zone Flooding Ponding Restricted permeability Too clayey	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Restricted permeability Too clayey	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Restricted permeability Too clayey Flooding	1.00 1.00 1.00 1.00 0.60
Pt: Pits, Quarries-----	100	Not rated		Not rated		Not rated	
Re: Reading-----	90	Very limited Flooding	1.00	Not limited		Not limited	
Rh: Rosehill-----	90	Somewhat limited Too clayey Restricted permeability	0.50 0.45	Somewhat limited Too clayey Restricted permeability	0.50 0.45	Somewhat limited Too clayey Restricted permeability Slope	0.50 0.45 0.00
So: Sogn-----	95	Very limited Depth to bedrock Slope	1.00 0.00	Very limited Depth to bedrock Slope	1.00 0.00	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.00
TO: Tobin-----	100	Very limited Flooding	1.00	Not limited		Somewhat limited Flooding	0.60
Tu: Tully-----	90	Somewhat limited Restricted permeability	0.39	Somewhat limited Restricted permeability	0.39	Somewhat limited Slope	0.87

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Map symbol and soil name	Pct of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
						Restricted permeability Gravel content	0.39 0.06
Vb: Verdigris-----	90	Very limited Flooding	1.00	Not limited		Somewhat limited Flooding	0.60
Vc: Verdigris-----	95	Very limited Flooding	1.00	Somewhat limited Flooding	0.40	Very limited Flooding	1.00
W: Water-----	100	Not rated		Not rated		Not rated	
Wb: Wells-----	90	Not limited		Not limited		Somewhat limited Slope	0.00
Wc: Wells-----	90	Not limited		Not limited		Somewhat limited Slope	0.87
Wd: Wells, eroded-----	90	Not limited		Not limited		Somewhat limited Slope	0.87

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Map symbol and soil name	Pct of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
017CS: Clime-----	47	Somewhat limited Too clayey	0.50	Very limited Too clayey Slope Depth to bedrock	1.00 0.96 0.20
Sogn-----	20	Not limited		Very limited Depth to bedrock Droughty Slope Content of large stones	1.00 1.00 0.63 0.00
017IV: Ivan-----	85	Not limited		Somewhat limited Flooding	0.60
017KA: Kahola-----	85	Not limited		Somewhat limited Flooding	0.60
041CD: Clime-----	70	Not limited		Somewhat limited Slope Depth to bedrock	0.84 0.71
Sogn-----	30	Not limited		Very limited Depth to bedrock Droughty Slope Content of large stones	1.00 0.63 0.00
041HB: Hobbs-----	75	Somewhat limited Flooding	0.40	Very limited Flooding	1.00
041SC: Sutphen-----	100	Not limited		Somewhat limited Flooding	0.60
079CM: Clime-----	100	Somewhat limited Too clayey	0.50	Very limited Too clayey Depth to bedrock Slope Droughty	1.00 0.71 0.04 0.00
079RS: Rosehill-----	100	Somewhat limited Too clayey	0.50	Very limited Too clayey Depth to bedrock	1.00 0.16
113CB: Cass-----	100	Not limited		Not limited	
113ED: Edalgo-----	100	Not limited		Somewhat limited Depth to bedrock Slope	0.42 0.04
AED: Arents, Earthen Dam-	100	Not rated		Not rated	
Ca: Cass-----	90	Not limited		Somewhat limited Flooding	0.60
Ch: Chase-----	95	Not limited		Somewhat limited Flooding	0.60
Cm: Clime-----	90	Not limited		Somewhat limited Depth to bedrock	0.46
Cp: Clime-----	90	Not limited		Somewhat limited Depth to bedrock	0.46
Cr: Clime, rocky-----	80	Somewhat limited Slope	0.92	Very limited Slope Depth to bedrock Content of large stones	1.00 0.95 0.00
Cs: Clime-----	65	Not limited		Somewhat limited Slope Depth to bedrock	0.96 0.71
Sogn-----	20	Not limited		Very limited Depth to bedrock Droughty Slope Content of large stones	1.00 1.00 0.04 0.00

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Map symbol and soil name	Pct of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Dw: Dwight-----	90	Not limited		Very limited Sodium content	1.00
Ed: Edalgo-----	90	Not limited		Somewhat limited Depth to bedrock Slope	0.16 0.00
Fc: Florence-----	85	Not limited		Somewhat limited Slope	0.04
Go: Goessel-----	90	Somewhat limited Too clayey	0.50	Very limited Too clayey	1.00
HO: Hobbs-----	100	Not limited		Somewhat limited Flooding	0.60
Ib: Irwin-----	90	Not limited		Not limited	
Ic: Irwin-----	90	Not limited		Not limited	
IV: Ivan-----	80	Somewhat limited Flooding	0.40	Very limited Flooding	1.00
Kp: Kipson-----	90	Somewhat limited Slope	0.18	Very limited Slope Carbonate content Depth to bedrock Content of large stones Droughty	1.00 1.00 1.00 0.20 0.04
La: Labette-----	90	Not limited		Somewhat limited Depth to bedrock	0.06
Ld: Labette-----	60	Not limited		Somewhat limited Depth to bedrock	0.06
Dwight-----	35	Not limited		Very limited Sodium content	1.00
Lg: Labette-----	65	Not limited		Somewhat limited Depth to bedrock	0.06
Sogn-----	25	Not limited		Very limited Depth to bedrock Droughty Slope Content of large stones	1.00 1.00 0.63 0.00
Lm: Ladysmith-----	90	Not limited		Not limited	
Ls: Lancaster-----	90	Not limited		Somewhat limited Depth to bedrock	0.10
Lt: Lancaster-----	90	Not limited		Somewhat limited Depth to bedrock	0.10
Lv: Lancaster-----	60	Not limited		Somewhat limited Depth to bedrock Slope	0.10 0.00
Hedville-----	25	Not limited		Very limited Depth to bedrock Droughty Slope Gravel content	1.00 0.99 0.63 0.08
M-W: Miscellaneous Water-	100	Not rated		Not rated	
Os: Osage-----	90	Very limited Depth to saturated zone Ponding Too clayey	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Too clayey Flooding	1.00 1.00 1.00 0.60
Pt: Pits, Quarries-----	100	Not rated		Not rated	

RECREATIONAL INTERPRETATIONS--Continued
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Map symbol and soil name	Pct of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Re: Reading-----	90	Not limited		Not limited	
Rh: Rosehill-----	90	Somewhat limited Too clayey	0.50	Very limited Too clayey Depth to bedrock Droughty	1.00 0.65 0.15
So: Sogn-----	95	Not limited		Very limited Depth to bedrock Droughty Slope Content of large stones	1.00 1.00 0.00 0.00
TO: Tobin-----	100	Not limited		Somewhat limited Flooding	0.60
Tu: Tully-----	90	Not limited		Not limited	
Vb: Verdigris-----	90	Not limited		Somewhat limited Flooding	0.60
Vc: Verdigris-----	95	Somewhat limited Flooding	0.40	Very limited Flooding	1.00
W: Water-----	100	Not rated		Not rated	
Wb: Wells-----	90	Not limited		Not limited	
Wc: Wells-----	90	Not limited		Not limited	
Wd: Wells, eroded-----	90	Not limited		Not limited	

