RECREATIONAL INTERPRETATIONS
Johnson 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
Johnson County, Kansas

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

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
CA:							
Chase	90	Very limited		Not limited		Somewhat limited	
		Flooding	1.00			Flooding	0.60
EA:							
Eudora	90	Very limited		Not limited		Not limited	
		Flooding	1.00				
EB:							
Eudora	85	Very limited		Not limited		Not limited	
		Flooding	1.00				
EC:							
Eudora	60	Very limited		Not limited		Not limited	
		Flooding	1.00				
Kimo	30	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Depth to saturated zone	0.19	Depth to saturated zone	0.39
		Depth to saturated zone	0.39				
ED:							
Eudora	75	Very limited		Not limited		Not limited	
		Flooding	1.00				
Kimo	25	Very limited		Not limited		Not limited	
		Flooding	1.00				
GA:							
Grundy	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
KA:							
Kennebec	95	Very limited		Not limited		Somewhat limited	
		Flooding	1.00			Flooding	0.60
KB:							
Kennebec	90	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.40	Flooding	1.00
						Slope	0.12
KC:							
Kimo	90	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Depth to saturated zone	0.19	Depth to saturated zone	0.39
		Depth to saturated zone	0.39				
LA:							
Ladoga	90	Not limited		Not limited		Very limited	
						Slope	1.00
LB:							
Ladoga	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
MA:							
Martin	90	Not limited		Not limited		Somewhat limited	
						Slope	0.50
MB:							
Martin	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
Vinland	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Depth to bedrock	1.00
						Gravel content	0.04
MC:							
Morrill	85	Not limited		Not limited		Very limited	
						Slope	1.00
						Gravel content	0.06
OA:							
Orthents	100	Not Rated		Not Rated		Not Rated	
		Not Rated; Surface clay percent or taxonomic class		Not Rated; Surface clay percent or taxonomic class		Not Rated; Ksat or taxonomic class	
		Not Rated; Ksat or taxonomic class		Not Rated; Taxonomic or texture class		Not Rated; Surface clay percent or taxonomic class	
		Not Rated; Taxonomic or texture class		Not Rated; Ksat or taxonomic class		Not Rated; Taxonomic or texture class	
						Slope	0.50
OB:							
Oska	88	Not limited		Not limited		Somewhat limited	
						Slope	0.88
						Depth to bedrock	0.01
OC:							
Oska	50	Not limited		Not limited		Very limited	
						Slope	1.00
						Depth to bedrock	0.29
Martin	30	Somewhat limited		Somewhat limited		Very limited	

RECREATIONAL INTERPRETATIONS--Continued
Johnson County, Kansas

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

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
		Depth to saturated zone	0.44	Depth to saturated zone	0.22	Slope	1.00
						Depth to saturated zone	0.44
PA:							
Pawnee	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.39	Depth to saturated zone	0.19	Slope	0.88
						Depth to saturated zone	0.39
PC:							
Polo	100	Not limited		Not limited		Somewhat limited	
						Slope	0.50
QA:							
Pits, Quarries	100	Not rated		Not rated		Not rated	
RA:							
Reading	90	Very limited		Not limited		Not limited	
		Flooding	1.00				
SA:							
Sharpsburg	85	Not limited		Not limited		Very limited	
						Slope	1.00
SB:							
Sharpsburg	55	Not limited		Not limited		Very limited	
						Slope	1.00
Urban Land	45	Not Rated		Not Rated		Not Rated	
		Not Rated; Slope		Not Rated; Surface Fragments > 75mm		Not Rated; Ksat or taxonomic class	
		Not Rated; pH		Not Rated; Surface clay percent or taxonomic class		Not Rated; Surface Fragments > 75mm	
		Not Rated; Sieve size, 3 to 10", > 10"		Not Rated; % surface sand or clay		Not Rated; Sieve size, 3 to 10", > 10"	
		Not Rated; Surface Fragments > 75mm		Not Rated; Taxonomic or texture class		Not Rated; Slope	
		Not Rated; Unified		Not Rated; Slope		Not Rated; Slope	
SC:							
Sibleyville	100	Not limited		Not limited		Somewhat limited	
						Slope	0.88
						Depth to bedrock	0.54
SD:							
Sibleyville	45	Not limited		Not limited		Somewhat limited	
						Slope	0.88
						Depth to bedrock	0.54
Vinland	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
						Slope	0.88
						Gravel content	0.04
SE:							
Sogn	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Restricted permeability	0.55	Restricted permeability	0.55	Slope	1.00
		Slope	0.16	Slope	0.16	Restricted permeability	0.55
						Content of large stones	0.00
Vinland	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.84	Slope	0.84	Slope	1.00
						Gravel content	0.04
VA:							
Rock Outcrop	60	Not rated		Not rated		Not rated	
Vinland	26	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
						Gravel content	0.04

RECREATIONAL INTERPRETATIONS--Continued
Johnson County, Kansas

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

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
WA:							
Wabash	88	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Flooding	1.00 0.60
WB:							
Woodson	100	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.94	Very limited Depth to saturated zone	1.00

RECREATIONAL INTERPRETATIONS--Continued
Johnson County, Kansas

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

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
CA:					
Chase	90	Not limited		Somewhat limited Flooding	0.60
EA:					
Eudora	90	Not limited		Not limited	
EB:					
Eudora	85	Not limited		Not limited	
EC:					
Eudora	60	Not limited		Not limited	
Kimo	30	Not limited		Somewhat limited Depth to saturated zone	0.19
ED:					
Eudora	75	Not limited		Not limited	
Kimo	25	Not limited		Not limited	
GA:					
Grundy	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
KA:					
Kennebec	95	Not limited		Somewhat limited Flooding	0.60
KB:					
Kennebec	90	Somewhat limited Flooding	0.40	Very limited Flooding	1.00
KC:					
Kimo	90	Not limited		Somewhat limited Depth to saturated zone	0.19
LA:					
Ladoga	90	Not limited		Not limited	
LB:					
Ladoga	85	Not limited		Somewhat limited Slope	0.63
MA:					
Martin	90	Not limited		Not limited	
MB:					
Martin	45	Very limited Water erosion	1.00	Somewhat limited Slope	0.04
Vinland	40	Not limited		Very limited Depth to bedrock Slope	1.00 0.63
MC:					
Morrill	85	Not limited		Not limited	
OA:					
Orthents	100	Not Rated Not Rated; Surface clay percent or taxonomic class Not Rated; Taxonomic or texture class		Not Rated Not Rated; Taxonomic Great Group	
OB:					
Oska	88	Not limited		Somewhat limited Depth to bedrock	0.01
OC:					
Oska	50	Not limited		Somewhat limited Depth to bedrock	0.29
Martin	30	Not limited		Somewhat limited Depth to saturated zone	0.22
PA:					
Pawnee	85	Not limited		Somewhat limited Depth to saturated zone	0.19
PC:					
Polo	100	Not limited		Not limited	
QA:					
Pits, Quarries	100	Not rated		Not rated	
RA:					
Reading	90	Not limited		Not limited	
SA:					
Sharpsburg	85	Not limited		Not limited	
SB:					
Sharpsburg	55	Not limited		Not limited	

RECREATIONAL INTERPRETATIONS--Continued
Johnson County, Kansas

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

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
Urban Land----------	45	Not Rated		Not Rated	
		Not Rated; Surface Fragments > 75mm		Not Rated; Surface clay percent	
		Not Rated; Sieve size, 3 to 10", > 10"		Not Rated; Slope	
		Not Rated; Slope		Not Rated; Surface Fragments > 75mm	
		Not Rated; Unified		Not Rated; Sieve size, 3 to 10", > 10"	
		Not Rated; % surface sand or clay		Not Rated; pH	
SC:					
Sibleyville---------	100	Not limited		Somewhat limited	
				Depth to bedrock	0.54
SD:					
Sibleyville---------	45	Not limited		Somewhat limited	
				Depth to bedrock	0.54
Vinland-------------	35	Not limited		Very limited	
				Depth to bedrock	1.00
SE:					
Sogn----------------	55	Not limited		Very limited	
				Depth to bedrock	1.00
				Droughty	0.80
				Slope	0.16
				Content of large stones	0.00
Vinland-------------	30	Not limited		Very limited	
				Depth to bedrock	1.00
				Slope	0.84
				Droughty	0.09
VA:					
Rock Outcrop--------	60	Not rated		Not rated	
Vinland-------------	26	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
				Slope	1.00
				Droughty	0.11
WA:					
Wabash--------------	88	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
				Flooding	0.60
WB:					
Woodson-------------	100	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.94