

RECREATIONAL INTERPRETATIONS
Dunn County, North Dakota

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.

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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.

RECREATION DEVELOPMENT--Continued
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Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
3: CHANNEL-----	---	---	---	---	---
STRAW-----	Severe: flooding	Moderate: flooding	Slight	Moderate: flooding	Severe: flooding
4: ARNEGARD-----	Slight	Slight	Moderate: slope	Slight	Slight
4B: ARNEGARD-----	Slight	Slight	Moderate: slope	Slight	Slight
5: TONKA-----	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding
7: STRAW-----	Severe: flooding	Slight	Slight	Slight	Moderate: flooding
RHOADES-----	Severe: excess sodium flooding	Severe: excess sodium	Severe: excess sodium	Slight	Severe: excess sodium
8C: CABBA-----	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Slight	Severe: depth to rock
CHAMA-----	Slight	Slight	Severe: slope	Slight	Moderate: area reclaim thin layer
9D: AMOR-----	Moderate: slope	Moderate: slope	Severe: slope	Slight	Moderate: area reclaim slope thin layer
CABBA-----	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Slight	Severe: depth to rock
9E: CABBA-----	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock
10D: CABBA-----	Severe: large stones slope	Severe: large stones	Severe: large stones slope	Slight	Moderate: area reclaim slope thin layer
11F: CABBA-----	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock
BADLAND-----	Severe: excess salt slope depth to rock	Severe: excess salt slope depth to rock	Severe: excess salt slope depth to rock	Severe: erodes easily slope	Severe: excess salt slope depth to rock

RECREATION DEVELOPMENT--Continued
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Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
12: BANKS-----	Severe: flooding	Moderate: too sandy	Moderate: flooding too sandy	Moderate: too sandy	Moderate: flooding droughty
13D: WABEK-----	Severe: small stones	Severe: small stones	Severe: slope	Slight	Severe
15: BELFIELD-----	Severe: excess sodium	Severe: excess sodium	Severe: excess sodium	Slight	Severe: excess sodium
FARLAND-----	Slight	Slight	Moderate: slope	Slight	Slight
16B: BELFIELD-----	Severe: excess sodium	Severe: excess sodium	Severe: excess sodium	Severe: erodes easily	Severe: excess sodium
SAVAGE-----	Slight	Slight	Moderate: slope	Severe: erodes easily	Slight
18: BELFIELD-----	Severe: excess sodium	Severe: excess sodium	Severe: excess sodium	Severe: erodes easily	Severe: excess sodium
GRAIL-----	Slight	Slight	Moderate: slope	Severe: erodes easily	Slight
19B: BELFIELD-----	Severe: excess sodium	Severe: excess sodium	Severe: excess sodium	Slight	Severe: excess sodium
MORTON-----	Slight	Slight	Moderate: area reclaim slope thin layer	Slight	Moderate: area reclaim thin layer
21B: CHERRY-----	Slight	Slight	Moderate: slope	Severe: erodes easily	Slight
21C: CHERRY-----	Slight	Slight	Severe: slope	Severe: erodes easily	Slight
22: COLVIN-----	Severe: excess salt flooding wetness	Severe: excess salt wetness	Severe: excess salt flooding wetness	Severe: wetness	Severe: excess salt flooding wetness
24: DIMMICK-----	Severe: percs slowly too clayey ponding	Severe: percs slowly too clayey ponding	Severe: percs slowly too clayey ponding	Severe: too clayey ponding	Severe: too clayey ponding
25F: BAAHISH-----	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
ROCK OUTCROP----	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock droughty

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Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
27: FARLAND-----	Slight	Slight	Moderate: slope	Slight	Slight
27B: FARLAND-----	Slight	Slight	Moderate: slope	Slight	Slight
29B: FARLAND-----	Slight	Slight	Moderate: slope	Slight	Slight
RHOADES-----	Severe: excess sodium	Severe: excess sodium	Severe: excess sodium	Slight	Severe: excess sodium
30E: COHAGEN-----	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Moderate: slope	Severe: slope depth to rock
VEBAR-----	Severe: slope	Severe: slope	Severe: slope	Moderate: slope	Severe: slope
31F: COHAGEN-----	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock
VEBAR-----	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
ROCK OUTCROP----	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock droughty
32B: FLAXTON-----	Slight	Slight	Moderate: slope	Slight	Slight
WILLIAMS-----	Slight	Slight	Moderate: slope	Slight	Slight
32C: FLAXTON-----	Slight	Slight	Severe: slope	Slight	Slight
WILLIAMS-----	Slight	Slight	Severe: slope	Slight	Slight
33: GRAIL-----	Slight	Slight	Moderate: slope	Severe: erodes easily	Slight
33B: GRAIL-----	Slight	Slight	Moderate: slope	Severe: erodes easily	Slight
35: LAWTHER-----	Moderate: too clayey	Moderate: too clayey	Moderate: slope too clayey	Slight	Severe: too clayey
35B: LAWTHER-----	Moderate: too clayey	Moderate: too clayey	Moderate: slope too clayey	Slight	Severe: too clayey

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Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
37: TREMBLES VARIANT	Severe: flooding ponding	Severe: ponding	Severe: flooding ponding	Severe: ponding	Severe: flooding ponding
39: HAVRELON-----	Severe: flooding	Slight	Slight	Slight	Moderate: flooding
40: HAVRELON-----	Severe: flooding	Moderate: flooding	Severe: flooding	Moderate: flooding	Severe: flooding
CHANNEL-----	---	---	---	---	---
41: HEIL-----	Severe: percs slowly ponding	Severe: excess sodium ponding	Severe: percs slowly ponding	Severe: ponding	Severe: excess sodium ponding
42B: LEFOR-----	Slight	Slight	Moderate: area reclaim slope thin layer	Slight	Moderate: area reclaim thin layer
42C: LEFOR-----	Slight	Slight	Severe: slope	Slight	Moderate: area reclaim thin layer
43B: HAVRELON-----	Severe: flooding	Slight	Moderate: slope	Slight	Moderate: flooding
44B: LIHEN-----	Moderate: too sandy	Moderate: too sandy	Moderate: slope too sandy	Moderate: too sandy	Moderate: droughty
44D: LIHEN-----	Moderate: slope too sandy	Moderate: slope too sandy	Severe: slope	Moderate: too sandy	Moderate: slope droughty
45B: RUSO-----	Slight	Slight	Moderate: slope	Slight	Moderate: droughty
45C: RUSO-----	Slight	Slight	Severe: slope	Slight	Moderate: droughty
46: BOWDLE-----	Slight	Slight	Moderate: slope	Slight	Slight
46B: BOWDLE-----	Slight	Slight	Moderate: slope	Slight	Slight
47: MOREAU-----	Moderate: too clayey	Moderate: too clayey	Moderate: slope too clayey	Moderate: too clayey	Severe: too clayey

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Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
47B: MOREAU-----	Moderate: too clayey	Moderate: too clayey	Moderate: slope too clayey	Moderate: too clayey	Severe: too clayey
47C: MOREAU-----	Moderate: too clayey	Moderate: too clayey	Severe: slope	Moderate: too clayey	Severe: too clayey
48B: TEMVIK-----	Slight	Slight	Moderate: slope	Slight	Slight
49: MORTON-----	Slight	Slight	Moderate: area reclaim slope thin layer	Slight	Moderate: area reclaim thin layer
49B: MORTON-----	Slight	Slight	Moderate: area reclaim slope thin layer	Slight	Moderate: area reclaim thin layer
49C: MORTON-----	Slight	Slight	Severe: slope	Slight	Moderate: area reclaim thin layer
51C: AMOR-----	Severe: large stones	Severe: large stones	Severe: large stones	Slight	Moderate: large stones thin layer
52B: MORTON-----	Slight	Slight	Moderate: area reclaim slope thin layer	Slight	Moderate: area reclaim thin layer
RHOADES-----	Severe: excess sodium	Severe: excess sodium	Severe: excess sodium	Slight	Severe: excess sodium
52C: MORTON-----	Slight	Slight	Severe: slope	Slight	Moderate: area reclaim thin layer
RHOADES-----	Severe: excess sodium	Severe: excess sodium	Severe: excess sodium slope	Slight	Severe: excess sodium
53B: WATROUS-----	Slight	Slight	Moderate: slope depth to rock	Slight	Moderate: depth to rock
54B: PARSHALL-----	Slight	Slight	Moderate: slope	Slight	Slight
55: PITS-----	Severe: slope small stones	Severe: slope too sandy	Severe: slope small stones	Severe: slope too sandy	Severe: slope small stones droughty

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58: REGENT-----	Slight	Slight	Moderate: slope	Severe: erodes easily	Moderate: thin layer
58B: REGENT-----	Slight	Slight	Moderate: slope	Severe: erodes easily	Moderate: thin layer
58C: REGENT-----	Slight	Slight	Severe: slope	Severe: erodes easily	Moderate: thin layer
61B: REGENT-----	Slight	Slight	Moderate: slope	Severe: erodes easily	Moderate: thin layer
RHOADES-----	Severe: excess sodium	Severe: excess sodium	Severe: excess sodium	Slight	Severe: excess sodium
61C: REGENT-----	Slight	Slight	Severe: slope	Severe: erodes easily	Moderate: thin layer
RHOADES-----	Severe: excess sodium	Severe: excess sodium	Severe: excess sodium slope	Slight	Severe: excess sodium
62B: RHOADES-----	Severe: excess sodium	Severe: excess sodium	Severe: excess sodium	Slight	Severe: excess sodium
62D: RHOADES-----	Severe: excess sodium	Severe: excess sodium	Severe: excess sodium slope	Slight	Severe: excess sodium
CABBA-----	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Slight	Severe: depth to rock
64: BADLAND-----	Severe: excess salt slope depth to rock	Severe: excess salt slope depth to rock	Severe: excess salt slope depth to rock	Severe: erodes easily slope	Severe: excess salt slope depth to rock
67: SAVAGE-----	Slight	Slight	Moderate: slope	Severe: erodes easily	Slight
67B: SAVAGE-----	Slight	Slight	Moderate: slope	Severe: erodes easily	Slight
68: VANDA-----	Moderate: percs slowly too clayey	Moderate: excess salt too clayey	Moderate: slope too clayey	Severe: erodes easily	Severe: too clayey
69B: SAVAGE-----	Slight	Slight	Moderate: slope	Severe: erodes easily	Slight
RHOADES-----	Severe: excess sodium	Severe: excess sodium	Severe: excess sodium	Slight	Severe: excess sodium

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Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
70C: SEARING-----	Slight	Slight	Severe: slope	Slight	Slight
71B: SEN-----	Slight	Slight	Moderate: slope depth to rock	Slight	Moderate: depth to rock
71C: SEN-----	Slight	Slight	Severe: slope	Slight	Moderate: depth to rock
73C: CHERRY-----	Slight	Slight	Severe: slope	Severe: erodes easily	Slight
VANDA-----	Moderate: percs slowly too clayey	Moderate: excess salt too clayey	Severe: slope	Severe: erodes easily	Severe: too clayey
75: STRAW-----	Severe: flooding	Slight	Slight	Slight	Moderate: flooding
79: VELVA-----	Severe: flooding	Slight	Moderate: flooding slope	Slight	Moderate: flooding
81B: VEBAR-----	Slight	Slight	Moderate: area reclaim slope thin layer	Slight	Moderate: area reclaim thin layer
PARSHALL-----	Slight	Slight	Moderate: slope	Slight	Slight
81C: VEBAR-----	Slight	Slight	Severe: slope	Slight	Moderate: area reclaim thin layer
PARSHALL-----	Slight	Slight	Severe: slope	Slight	Slight
81D: VEBAR-----	Moderate: slope	Moderate: slope	Severe: slope	Slight	Moderate: area reclaim slope thin layer
82D: VEBAR-----	Severe: large stones	Severe: large stones	Severe: large stones slope	Slight	Severe: large stones
83E: BAAHISH-----	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
84: HIDATSA-----	Slight	Slight	Moderate: slope	Slight	Slight

RECREATION DEVELOPMENT--Continued
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Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
84B: HIDATSA-----	Slight	Slight	Moderate: slope	Slight	Slight
86F: BRANDENBURG----	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope droughty
CABBA-----	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock
87F: LAKOA-----	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
88: WILLIAMS-----	Slight	Slight	Moderate: slope	Slight	Slight
88B: WILLIAMS-----	Slight	Slight	Moderate: slope	Slight	Slight
88C: WILLIAMS-----	Slight	Slight	Severe: slope	Slight	Slight
90C: WILLIAMS-----	Slight	Slight	Severe: large stones	Slight	Moderate: large stones
91B: WILLIAMS-----	Slight	Slight	Moderate: slope	Slight	Slight
NOONAN-----	Severe: excess sodium	Severe: excess sodium	Severe: excess sodium	Slight	Severe: excess sodium
91C: WILLIAMS-----	Slight	Slight	Severe: slope	Slight	Slight
NOONAN-----	Severe: excess sodium	Severe: excess sodium	Severe: excess sodium slope	Slight	Severe: excess sodium
93C: WILLIAMS-----	Slight	Slight	Severe: slope	Slight	Slight
ZAHL-----	Slight	Slight	Severe: slope	Slight	Slight
93D: WILLIAMS-----	Moderate: slope	Moderate: slope	Severe: slope	Slight	Moderate: slope
ZAHL-----	Moderate: slope	Moderate: slope	Severe: slope	Slight	Moderate: slope
93E: ZAHL-----	Severe: slope	Severe: slope	Severe: slope	Moderate: slope	Severe: slope

RECREATION DEVELOPMENT--Continued
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Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
WILLIAMS-----	Severe: slope	Severe: slope	Severe: slope	Moderate: slope	Severe: slope
94B: MOREAU VARIANT--	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Slight	Severe: depth to rock
94E: WAYDEN-----	Severe: area reclaim slope thin layer	Severe: area reclaim slope thin layer	Severe: area reclaim slope thin layer	Moderate: slope	Severe: area reclaim slope thin layer
101B: AMOR-----	Slight	Slight	Moderate: area reclaim slope thin layer	Slight	Moderate: area reclaim thin layer
101C: AMOR-----	Slight	Slight	Severe: slope	Slight	Moderate: area reclaim thin layer
102: SHAMBO-----	Slight	Slight	Moderate: slope	Slight	Slight
102B: SHAMBO-----	Slight	Slight	Moderate: slope	Slight	Slight
105: HARRIET-----	Severe: flooding percs slowly wetness	Severe: excess sodium percs slowly wetness	Severe: percs slowly wetness	Severe: wetness	Severe: excess sodium wetness
106B: DAGLUM-----	Severe: excess sodium	Severe: excess sodium	Severe: excess sodium	Slight	Severe: excess sodium
107: AQUENTS-----	Severe: too clayey ponding	Severe: too clayey ponding	Severe: too clayey ponding	Severe: too clayey ponding	Severe: too clayey ponding
109B: EKALAKA-----	Severe: excess sodium	Severe: excess sodium	Severe: excess sodium	Slight	Severe: excess sodium
207F: ARIKARA-----	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
209E: CHERRY-----	Moderate: slope	Moderate: slope	Severe: slope	Severe: erodes easily	Moderate: slope
CABBA-----	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Moderate: slope	Severe: slope depth to rock

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Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
211F: BADLAND-----	Severe: excess salt slope depth to rock	Severe: excess salt slope depth to rock	Severe: excess salt slope depth to rock	Severe: erodes easily slope	Severe: excess salt slope depth to rock
CABBA-----	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock
ARIKARA-----	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
W: WATER-----	---	---	---	---	---

