Legend for Atlas 2 (Council and Quartz Creek) environmental site factors

Table 10 in Raynolds et al. 2002[1], Key to codes & scalars

(Revised L. Druckenmiller 2015)

Landform (code)

1 Hills (including kames and moraines)
2 Talus slope
3 Colluvial basin
4 Glaciofluvial and other fluvial terraces
5 Marine terrace
6 Floodplains
7 Drained lakes and flat lake margins
8 Abandoned point bars and soughs
9 Estuary
10 Lake or pond
11 Stream
12 Sea bluff
13 Lake bluff
14 Stream bluff
15 Sand dunes
16 Beach
17 Disturbed

Surficial Geology-parent material (code)

1 Glacial tills
2 Glaciofluvial deposits
3 Active alluvial sands
4 Active alluvial gravels
5 Stabilized alluvium (sands & gravels)
6 Undifferentiated hill slope colluvium
7 Basin colluvium and organic deposits
8 Drained lake or lacustrine deposits
9 Lake or pond organic, sand, or silt
10 Undifferentiated sands
11 Undifferentiated clay
12 Road and gravel pads

Surficial Geomorphology (code)

1 Frost scars
2 Wetland hummocks
3 Turf hummocks
4 Gelifluction features
5 Srangmoor or aligned hummocks
6 High-or flat-centered polygons
7 Mixed high- and low-centered polygons
8 Sorted and non-sorted stripes
9 Palsas
10 Thermokarst pits
11 Featureless or with less 20% frost scars
12 Well-developed hillslope water tracks and small streams >50 cm deep
13 Poorly developed hillslope water tracks, < 50 cm deep
14 Gently rolling or irregular microrelief
15 Stoney surface
16 Lakes and ponds
17 Disturbed

Microsites (code)

1 frost-scar element
2 inter-scar element
3 strang or hummock
4 flark, interstrang, or inter-hummock
5 polygon center
6 polygon trough
7 polygon rim
8 stripe element
9 inter-stripe element
10 point bar (raised element)
11 Slough (wet element)

Site moisture (scalar) modified from Kormárková (1983)

1.0 extremely xeric – almost no moisture
2.0 very xeric - very little moisture
3.0 xeric – little moisture
4.0 subxeric - noticeable moisture
5.0 subxeric to mesic very noticeable moisture
6.0 mesic moderate moisture
7.0 mesic to subhygric considerable moisture
8.0 subhygric <5% standing water, <10 cm deep
9.0 hygric -10-50 cm deep
10.0 hydric- 50-150 cm deep

Soil moisture (scalar) from Kormárková (1983)

1.0 very dry
2.0 dry
3.0 damp
4.0 damp to moist
5.0 moist
6.0 moist to wet
7.0 wet
8.0 very wet
9.0 saturated
10.0 very saturated

Glacial geology (code)

1 till
2 outwash
3 bedrock

Topographic position (code)

1 hill crest or shoulder
2 side slope
3 footslope or toeslope
4 flat
5 drainage channel
6 depression
7 lake or pond

Legend for environmental site factors (continued)

Soil Units
1 Pergelic Cryorthent, acid
2 Pergelic Cryosamment
3 Pergelic Cryohemist, euic
4 Pergelic Cryosaprist, euic
5 Lithic Pergelic Cryosaprist
6 Pergelic cryofibrist, euic
7 Histic Pergelic Cryoquept, acid
8 Histic Pergelic Cryoquept, nonacid
9 Pergelic Cryaquept, acid
10 Pergelic Cryochrept, nonacid
11 Pergelic Cryochrept
12 Pergelic Crumbrept
13 Rubptic-Lithic Cryumbrept
14 Pergelic Cryaquoll
15 Histic Pergelic Cryaquoll
16 Pergelic Cryoboroll
17 Pergelic cryohemist dysic
Pergelic Sphagnohemist
Pergelic Sphagnum fibrist
Histic Pergelic Cryaquept

Exposure (scalar)
1.0 protected from winds
2.0 moderate exposure
3.0 exposed
4.0 very exposed

Estimated snow duration (code)
1 snow free all year
2 snow free most of winter
3 snow free prior to melt out
4 snow free immediately after melt out
5 snow bank persists 1-2 weeks after melt out
6 snow bank persists 3-4 weeks after melt out
7 snow bank persists 4-8 weeks after melt out
8 snow bank persists 8-12 weeks after melt out
9 very short snow free period
10 deep snow all year

Animal and Human Disturbance (scalar)
0.0 none
1.0 some sign present; no disturbance
2.0 minor disturbance or extensive sign
3.0 moderate disturbance; small dens or light grazing
4.0 major disturbance; multiple dens or noticeable trampling
5.0 very major disturbance; very extensive tunneling or large pit

Stability (code)
1 stable
2 subject to occasional disturbance
3 subject to prolonged but slow disturbance
4 annually disturbed
5 disturbed more than once annually

[1]Raynolds, M. K., C. R. Martin, D. A. Walker, A. Moody, D. Wirth, and C. Thayer-Snyder. 2002. Atlas Vegetation Studies: Seward Peninusla, Alaska, 2000. Vegetation, Soil, and Site Information with Seward Vegetation Map. ARCSS-ATLAS-AGC data report, Alaska Geobotany Center, University of Alaska Fairbanks, Fairbanks, Alaska USA.