Organic Depressions, Bogs (M135A_530)

Ecoregion Classification

Section: Alaska Mountains (M135A)

Subsection(s): Toklat Basin Lowlands (M135A.M7)
Glaciated Lowlands (M135A.G1L)
Glaciated Uplands (M135A.G1)

Physiographic Features

	RV	Range
Elevation (meters):	548	448 to 788
Slope Gradient (percent):	1	0 to 2

Aspect (clockwise direction): non-influencing

Landform: bogs on hills; bogs on till plains; drainageways on plains on basins

	Frequency	Duration	Beginning Month	Ending Month	Depth (cm)
Flooding:	None				
Ponding:	Frequent	Very long	May	Sep	0 to 20

Climatic Features

	RV	Range
Annual Precipitation (millimeters):	488	452 to 577
Annual Air Temperature (°C):	-2.4	-2.8 to -2.2
Frost Free Days:	70	60 to 80

Soil Features

Parent Materials: grassy organic material over silty eolian deposits
mossy organic material and/or grassy organic material over silty loess over gravelly till

Rooting Depth (cm): *RV:* 101 *Range:* 37 to 150

Soil Layers and Properties within Representative Rooting Depth:

Layers are described from the surface downward. If more than one texture is listed, the predominant texture is listed first. AWC = available water capacity. CEC = cation exchange capacity.

Thickness (cm)	Texture	Permeability	AWC (cm/cm)	pH	Effective CEC (me/100g)	CEC (me/100g)
63 to 101	peat	moderately rapid	.34	4.2 to 6.2	30	80

Restrictive Features: permafrost at 63 to 150 cm or more
strongly contrasting textural stratification at 63 to 150 cm

Water Table (May to September): 0 cm

Drainage Class: very poorly drained

Vegetation Features

Common Vegetation Types:

Vegetation Type	Ecological Status
Sedge/sphagnum bog	Climax plant community

Ecological Status-Transition Description:

A single plant community with sedge/sphagnum bog is identified on this site. No transitional pathways to other communities have been identified for this site.

Vascular Plant Species Richness:

Vascular plant species richness is based on 1999-2002 field season data only. Data from 1997 and 1998 were not used in the calculations.

Vegetation Type	Total	Per Stand Min.	Per Stand Avg.	Per Stand Max.	Number of Stands
Sedge/sphagnum bog	36	7	13	23	5

Notable Plants:

Notable plants Include rare plants, range extensions, and plants little known from Denali National Park and Preserve.

Vegetation Type	Symbol	Scientific Name
Sedge/sphagnum bog	CACH5	Carex chordorrhiza

Characteristics of Sedge/sphagnum bog

Ecological Status: Climax plant community

Plant Species Cover, Constancy, and Importance:

Cover, constancy, and importance are based on 1997-2002 field season data. Number of stands sampled = 7. Only those vascular, lichen, and bryophyte species with average cover >=5% and constancy >=15% are listed.

Stratum	Symbol	Scientific Name	Percent Canopy Cover Min.	Percent Canopy Cover Avg.	Percent Canopy Cover Max.	Percent Constancy	Importance Value
SD-SL	SAFU	Salix fuscescens	3.0	8	15	57	21
GM-GT	CAAQ	Carex aquatilis	0.1	34	65	57	44
GM-GT	ERAN6	Eriophorum angustifolium	3.0	24	60	43	32
GM	CARO7	Carex rotundata	10.0	17	20	43	27
GM	CALI7	Carex limosa	5.0	13	30	43	24
GM	CAMAI2	Carex magellanica ssp. irrigua	0.1	8	20	57	21
GM	ERRU2	Eriophorum russeolum	1.0	6	15	43	16
GM	CACA11	Carex canescens	0.1	5	15	43	15
GM	ERSC2	Eriophorum scheuchzeri	1.0	8	15	29	15
FD-FM	COPA28	Comarum palustre	0.1	5	10	43	15
L	LICHEN	total lichens	0.0	0	0	100	0
M	MOSS	total bryophytes-mosses and liverworts	5.0	63	95	100	79
M1	SPHAG2	Sphagnum	5.0	56	90	100	75
M1	ZZMOSS	unknown-mosses	5.0	10	15	57	24
B	WATER	water	5.0	34	65	100	58
B	LITTER	litter-herbaceous, mulch, and woody debris <2.5 cm	0.0	26	60	100	51
B	LITTER2	litter-woody debris >2.5 cm	0.0	0	0	100	0
B	SOIL	mineral-bare soil	0.0	0	0	100	0
B	ROCK	mineral-surface rock fragments	0.0	0	0	100	0

Stratum Height:

Stratum height is based on 1997-2002 field season data. All plant species and ground layer records from all stands are included in the calculations.

Stratum Name	Included Strata	Height Min.	Height Avg.	Height Max.	Units	Number of Records
Low shrubs	SL	30.0	30.0	30.0	cm	3
Dwarf shrubs	SD	10.0	13.0	20.0	cm	5
Tall and medium grasses and grass-likes	GT, GM	6.0	40.2	100.0	cm	10
Tall and medium forbs	FT, FM	20.0	20.0	20.0	cm	1
Dwarf herbs, lichens, and bryophytes	GD, FD, L, M	4.0	7.0	10.0	cm	2

Mapunit Components

Common Name (Soils Name):

Alpine-sedge bog organic depressions, frozen (Terric Fibristels, loamy)

Boreal-sedge/sphagnum bog organic depressions (Cryofibrists, euic)

Soil Map Units

Only those map units in which the landtype is a major component are listed. The landtype also may occur as a minor component in other map units.

Symbol: Common Name (Soils Name):

11P1 Alpine Plains and Drainages with Continuous Permafrost
(Typic Histoturbels, coarse-silty-Glacic Folistels, dysic-Terric Fibristels, loamy Association, 0 to 5 percent slopes)

Geographically Associated Landtypes

M135A_358—Gravelly Slopes:

This site occurs on well drained soils that are very shallow to sand and gravel. The climax plant community is "Shrub birch-bog blueberry scrub."

M135A_400—Loamy Frozen Slopes:

This site occurs on loamy soils with permafrost at moderate depths. The climax plant community is "Black spruce/bog blueberry-Labrador tea woodland."

M135A_500—Pond Margins:

This site occurs on soils with a thin organic mat and less acid reaction. The climax plant community is "Sedge wet meadow."

Similar Landtypes

M135A_500—Pond Margins:

This site has a thin surface organic mat. The climax plant community is "Sedge wet meadow."