Peat Mounds (M135A_112)

Ecoregion Classification

Section: Alaska Mountains (M135A)

Subsection(s): Toklat Basin Lowlands (M135A.M7)
Teklanika Boreal Mountains & Plateaus (M135A.M6L)

Physiographic Features

	RV	Range
Elevation (meters):	548	448 to 788
Slope Gradient (percent):	1	0 to 3

Aspect (clockwise direction): non-influencing

Landform: mounds on basin floors

	Frequency
Flooding:	None
Ponding:	None

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: mossy organic material and/or woody organic material over silty alluvium

Rooting Depth (cm): *RV:* 54 *Range:* 51 to 57

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)
45	peat	moderately rapid	.34	4.7	30	

Restrictive Features: permafrost at 45 cm

Water Table (May to September): 80 cm

Drainage Class: well drained

Vegetation Features

Common Vegetation Types:

Vegetation Type	Ecological Status
Cloudberry/sphagnum moss wet meadow	Climax plant community

Ecological Status-Transition Description:

A single plant community with cloudberry/sphagnum moss wet meadow 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.

		Per Stand			
Vegetation Type	Total	Min.	Avg.	Max.	Number of Stands
Cloudberry/sphagnum moss wet meadow	18	18	18	18	1

Characteristics of Cloudberry/sphagnum moss wet meadow

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 = 2. Only those vascular, lichen, and bryophyte species

Stratum	Symbol	Scientific Name	Percent Canopy Cover			Percent Constancy	Importance Value
			Min.	*Avg.*	*Max.*		
SD-SL	BEGL	Betula glandulosa	5.0	5	5	100	22
SD	EMNI	Empetrum nigrum	5.0	6	7	100	24
SD	LEPAD	Ledum palustre ssp. decumbens	3.0	5	7	100	22
SD	VAUL	Vaccinium uliginosum	5.0	5	5	100	22
SD	ANPO	Andromeda polifolia	5.0	5	5	50	16
GM	ERVA4	Eriophorum vaginatum	20.0	20	20	50	32
GM	CARO7	Carex rotundata	10.0	10	10	50	22
FD	RUCH	Rubus chamaemorus	10.0	18	25	100	42
L	LICHEN	total lichens	3.0	16	30	100	40
L1	FLCU	Flavocetraria cucullata	15.0	15	15	50	27
L1	CLADO3	Cladonia	5.0	5	5	50	16
L1	CLMU60	Cladonia multiformis	5.0	5	5	50	16
L2	L2ALL	total lichens-crustose and soil crust	20.0	20	20	50	32
M	MOSS	total bryophytes-mosses and liverworts	50.0	72	95	100	85
M1	SPHAG2	Sphagnum	40.0	68	95	100	82
M1	ZZMOSS	unknown-mosses	10.0	10	10	50	22
B	LITTER	litter-herbaceous, mulch, and woody debris <2.5 cm	0.0	28	55	100	53
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
B	WATER	water	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				Number of Records
		Min.	*Avg.*	*Max.*	*Units*	
Low shrubs	SL	40.0	40.0	40.0	cm	1
Dwarf shrubs	SD	10.0	16.0	20.0	cm	5
Dwarf herbs, lichens, and bryophytes	GD, FD, L, M	2.0	6.0	10.0	cm	2

Mapunit Components

Common Name (Soils Name):

Alpine-scrub organic mounds, frozen (Glacic Folistels, dysic)

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_175 — Loamy Frozen Wet Terraces, High Elevation:

This site occurs on adjacent, unmounded basin floors. The climax plant community is "Tussock cottongrass/mixed ericaceous shrub meadow."

M135A_530 — Organic Depressions, Bogs:

This site occurs on drainages and micro-lows surrounding peat mounds. The climax plant community is "Sedge/sphagnum bog."