

Pond Margins (M135A_500)

Ecoregion Classification

Section: Alaska Mountains (M135A)

Subsection(s): Glaciated Lowlands (M135A.G1L)

Glaciated Uplands (M135A.G1)

Physiographic Features

Elevation (meters): *RV* 666 *Range* 471 to 1,471

Slope Gradient (percent): 0 0 to 1

Aspect (clockwise direction): non-influencing

Landform: kettles; fens on till plains

Frequency

Flooding: None

Ponding: None

Climatic Features

Annual Precipitation (millimeters): *RV* 582 *Range* 506 to 758

Annual Air Temperature (°C): -2.8 -3.5 to -2.4

Frost Free Days: 60 50 to 80

Soil Features

Parent Materials: grassy organic material over gravelly drift

grassy organic material over silty eolian deposits

Rooting Depth (cm): *RV:* 58 *Range:* 13 to 100

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)
38 to 58	mucky peat	moderately rapid	.34	5.0 to 6.2	30	80
20	very gravelly sandy loam	moderately rapid	.10	5.4	6	

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

Water Table (May to September): 0 to 50 cm

Drainage Class: very poorly drained

Vegetation Features

Common Vegetation Types:

Vegetation Type

Sedge wet meadow

Ecological Status

Climax plant community

Ecological Status-Transition Description:

A single plant community with sedge 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.

Vegetation Type	Total	Per Stand			Number of Stands
		Min.	Avg.	Max.	
Sedge wet meadow	32	16	19	22	2

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 wet meadow	VESC2	Veronica scutellata

Characteristics of Sedge 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 = 4. Only those vascular, lichen, and bryophyte species with average cover >=5% and constancy >=15% are listed.

Stratum	Symbol	Scientific Name	Percent Canopy Cover			Percent Constancy	Importance Value
			Min.	Avg.	Max.		
SL	SAFU	Salix fuscescens	7.0	9	10	50	21
SL	BEGL	Betula glandulosa	5.0	5	5	50	16
GM-GT	CASAL2	Carex saxatilis ssp. laxa	30.0	38	50	75	53
GM-GT	CAAQ	Carex aquatilis	30.0	53	75	50	51
GT	CARO6	Carex rostrata	10.0	10	10	25	16

Stratum	Symbol	Scientific Name	Percent Canopy Cover			Percent Constancy	Importance Value
			Min.	Avg.	Max.		
GM	ALAE	Alopecurus aequalis	2.0	31	60	50	39
GM	CAAR2	Carex arcta	20.0	20	20	25	22
GM	JUFI	Juncus filiformis	15.0	15	15	25	19
GM	CAREX	Carex	10.0	10	10	25	16
GM	ARFU2	Arctophila fulva	5.0	5	5	25	11
FD	RUAR	Rubus arcticus	0.1	13	25	50	25
FD	VIEPR	Viola epipsila ssp. repens	15.0	15	15	25	19
L	LICHEN	total lichens	0.0	0	1	100	0
M	MOSS	total bryophytes-mosses and liverworts	5.0	21	35	100	46
M1	POLYT5	Polytrichum	2.0	11	20	75	29
M1	SPHAG2	Sphagnum	1.0	10	25	75	27
M1	ZZMOSS	unknown-mosses	0.1	8	15	50	20
B	WATER	water	5.0	36	80	100	60
B	LITTER	litter-herbaceous, mulch, and woody debris <2.5 cm	1.0	28	80	100	53
B	SOIL	mineral-bare soil	0.0	1	3	100	10
B	LITTER2	litter-woody debris >2.5 cm	0.0	0	1	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			Units	Number of Records
		Min.	Avg.	Max.		
Low shrubs	SL	30.0	56.0	100.0	cm	5
Tall and medium grasses and grass-likes	GT, GM	40.0	92.5	130.0	cm	4
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	4.0	4.0	cm	1

Mapunit Components

Common Name (Soils Name):

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

Alpine-wet meadow gravelly pond margins (Histic Cryaquepts, loamy-skeletal)

Soil Map Units

This landtype is a minor component in the map units listed. It does not occur as a major component in any map units.

Symbol: Common Name (Soils Name):

- 7P2 Boreal Glaciated Plains and Hills
(Typic Eutrocryepts, sandy-skeletal-Typic Eutrocryepts, coarse-silty over sandy-skeletal Association, 0 to 30 percent slopes)
- 7P4 Boreal Glaciated Plains and Hills with Discontinuous Permafrost
(Typic Haplocryods, loamy-skeletal-Typic Historthels, coarse-loamy-Typic Eutrocryepts, sandy-skeletal Association, 0 to 20 percent slopes)
- 7TP Alpine Till Plains with Discontinuous Permafrost
(Typic Historthels, loamy-skeletal-Oxyaquic Eutrogelepts, coarse-loamy-Ruptic-Histic Aquiturbels, coarse-loamy Association, 0 to 16 percent slopes)
- 7TP2 Alpine Till Plains and Hills with Discontinuous Permafrost
(Typic Haplogelods, loamy-skeletal-Typic Eutrogelepts, loamy-skeletal-Typic Historthels, loamy-skeletal Association, 2 to 50 percent slopes)
- 7TP3 Boreal and Alpine Hills with Discontinuous Permafrost
(Typic Haplogelods, loamy-skeletal-Oxyaquic Eutrocryepts, coarse-loamy-Typic Historthels, loamy-skeletal Association, 0 to 35 percent slopes)
- 7TP8 Alpine Glaciated Diorite Plains and Hills
(Typic Haplogelods, loamy-skeletal-Typic Dystrogelepts, sandy-skeletal-Oxyaquic Eutrogelepts, loamy-skeletal Association, 2 to 35 percent slopes)

Geographically Associated Landtypes

M135A_180—Gravelly Frozen Slopes:

This site occurs on adjacent uplands with soils that have permafrost at moderate depths. The climax plant community is "Shrub birch-mixed ericaceous shrub/sedge scrub."

M135A_356—Gravelly Slopes, High Elevation:

This site occurs on somewhat excessively drained soils that are very shallow to sand and gravel. The climax plant community is "Shrub birch-dwarf ericaceous scrub mosaic."

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_405—Swales:

This site occurs on swales with seasonally wet soils. The climax plant community is "Green alder scrub mosaic."

Similar Landtypes

M135A_530—Organic Depressions, Bogs:

This site has soils with a thick surface organic mat. The climax plant community is "Sedge/sphagnum bog."