

Loamy Slopes, High Elevation (M135A_253)

Ecoregion Classification

Section: Alaska Mountains (M135A)

Subsection(s): Alpine Flood Plains & Terraces & Fans (M135A.V1)

Alpine Mountains (M135A.M2)

Physiographic Features

	<i>RV</i>	<i>Range</i>
Elevation (meters):	797	620 to 1,077

Slope Gradient (percent):	4	2 to 8
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Aspect (clockwise direction): non-influencing

Landform: fan terraces on alluvial fans on mountains

	<i>Frequency</i>
Flooding:	None

Ponding:	None
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Climatic Features

	<i>RV</i>	<i>Range</i>
Annual Precipitation (millimeters):	783	497 to 1,229

Annual Air Temperature (°C):	-4.3	-8.3 to -2.5
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Frost Free Days:	60	50 to 70
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Soil Features

Parent Materials: silty eolian deposits over sandy and gravelly alluvium

Rooting Depth (cm): *RV:* 26 *Range:* 4 to 51

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)
7	slightly decomposed plant material	moderately rapid	.34	4.2	30	
19	silt loam	moderate	.40	5.8	15	

Restrictive Features: strongly contrasting textural stratification at 41 cm

Water Table (May to September): 0 to 30 cm

Drainage Class: somewhat poorly drained

Vegetation Features

Common Vegetation Types:

Vegetation Type	Ecological Status
Diamondleaf willow scrub, moist	Climax plant community

Ecological Status-Transition Description:

A single plant community with diamondleaf willow scrub 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
		<i>Min.</i>	<i>Avg.</i>	<i>Max.</i>	
Diamondleaf willow scrub, moist	63	14	28	42	6

Characteristics of Diamondleaf willow scrub, moist

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

Stratum	Symbol	Scientific Name	Percent			Importance Value
			Canopy Cover	Constancy		
			Min.	Avg.	Max.	
SL-ST	SAPU15	Salix pulchra	60.0	79	90	89
SL-SM	SPST3	Spiraea stevenii	1.0	12	20	26
GT	CACA4	Calamagrostis canadensis	0.1	23	55	48
FD	RUAR	Rubus arcticus	0.1	6	15	21
FD	ANRI	Anemone richardsonii	0.1	5	10	19
FD	COCA13	Cornus canadensis	5.0	6	7	13
L	LICHEN	total lichens	0.0	0	0	0
M	MOSS	total bryophytes-mosses and liverworts	15.0	60	80	77
M1	POCO38	Polytrichum commune	15.0	22	30	35
M1	ZZMOSS	unknown-mosses	10.0	16	30	34
M1	PLSC70	Pleurozium schreberi	7.0	15	30	33
M1	HYSP70	Hylocomium splendens	15.0	28	40	28
B	LITTER	litter-herbaceous, mulch, and woody debris <2.5 cm	15.0	48	90	69
B	LITTER2	litter-woody debris >2.5 cm	0.0	5	10	22
B	SOIL	mineral-bare soil	0.0	0	0	0
B	ROCK	mineral-surface rock fragments	0.0	0	0	0
B	WATER	water	0.0	0	0	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.		
Tall shrubs	ST	4.0	4.0	4.0	m	2
Medium shrubs	SM	1.0	1.4	1.8	m	6
Low shrubs	SL	20.0	54.0	100.0	cm	5
Dwarf shrubs	SD	10.0	12.5	15.0	cm	2
Tall and medium grasses and grass-likes	GT, GM	70.0	123.3	150.0	cm	6
Tall and medium forbs	FT, FM	20.0	42.0	80.0	cm	5
Dwarf herbs, lichens, and bryophytes	GD, FD, L, M	2.0	6.3	10.0	cm	13

Mapunit Components

Common Name (Soils Name):

Alpine-scrub silty fan terraces (Oxyaquic Eutrogelepts, coarse-silty over sandy-skeletal)

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):

7AF Alpine Alluvial Fans
(Oxyaquic Eutrogelepts, coarse-silty over sandy-skeletal-Typic Haplogelods, sandy-skeletal Association, 2 to 8 percent slopes)

Geographically Associated Landtypes

M135A_150—Loamy Flood Plains, High Elevation:

This site occurs on slightly higher positions with well drained soils. The climax plant community is "Riparian low diamondleaf willow-feltleaf willow scrub."

M135A_257—Gravelly Low Flood Plains, High Elevation:

This site occurs on gravelly surface texture soils. The climax plant community is "Feltleaf willow scrub, cool."

M135A_258—Gravelly Flood Plains, Cool:

This site occurs on flood plains with excessively drained soils and gravelly surface textures. The climax plant community is "Feltleaf willow-mixed shrub/herbaceous scrub."

M135A_352—Gravelly and Sandy Terraces, High Elevation:

This site occurs on higher terrace positions with somewhat excessively drained and flooded soils that have a thin loamy surface layer over sand and gravel. The climax plant community is "Shrub birch-bog blueberry/lichen scrub."

Similar Landtypes

M135A_420—Swales, High Elevation:

This site occurs in upland swales and has wetter soils. The climax plant community is "Diamondleaf willow-mixed willow scrub mosaic."

M135A_502—Loamy Drainages, Frozen:

This site has wetter soils. The climax plant community is "Diamondleaf willow-green alder-leatherleaf scrub."

M135A_505—Loamy Drainages, High Elevation:

This site has wetter soils in drainages. The climax plant community is "Diamondleaf willow-green alder scrub."