

Organic Moderately Wet Depressions, Bogs (131B_533)

Ecoregion Classification

Section: Yukon-Kuskokwim Bottomlands (131B)

Subsection(s): Minchumina Basin Lowlands (131B.V2)

Physiographic Features

Elevation (meters): *RV* 185 *Range* 165 to 236

Slope Gradient (percent): 0 0 to 0

Aspect (clockwise direction): non-influencing

Landform: bogs on alluvial flats

	<i>Frequency</i>	<i>Duration</i>	<i>Beginning Month</i>	<i>Ending Month</i>	<i>Depth (cm)</i>
Flooding:	None				
Ponding:	None				

Climatic Features

Annual Precipitation (millimeters): *RV* 392 *Range* 336 to 565

Annual Air Temperature (°C): -2.7 -3.0 to -2.5

Frost Free Days: 100 80 to 110

Soil Features

Parent Materials: mossy organic material and/or herbaceous organic material

Rooting Depth (cm): *RV*: 150 *Range*: 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)
34 to 116	peat; mucky peat	moderately rapid	.33	6.1 to 6.2		80

Water Table (May to September): 0 cm

Drainage Class: very poorly drained

Vegetation Features

Common Vegetation Types:

Vegetation Type

Tamarack/bog rosemary/water horsetail woodland

Ecological Status

Climax plant community

Ecological Status-Transition Description:

A single plant community with tamarack/bog rosemary/water horsetail woodland 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>	
Tamarack/bog rosemary/water horsetail woodland	25	15	18	20	2

Notable Plants:

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

Vegetation Type

Tamarack/bog rosemary/water horsetail woodland

Symbol

CACH5

PEMA

SACA4

Scientific Name

Carex chordorrhiza

Pedicularis macrodonta

Salix candida

Characteristics of Tamarack/bog rosemary/water horsetail woodland

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 with average cover >=5% and constancy >=15% are listed.

Stratum	Symbol	Scientific Name	Percent Canopy Cover			Percent Constancy	Importance Value
			Min.	Avg.	Max.		
TM	LALA	Larix laricina	15.0	15	15	50	27
TS	LALA	Larix laricina	10.0	10	10	50	22
SM	BEGL	Betula glandulosa	5.0	8	10	100	28
SL	ANPO	Andromeda polifolia	25.0	30	35	100	55
SL	CHCA2	Chamaedaphne calyculata	20.0	28	35	100	53
GM	CAMA12	Carex magellanica ssp. irrigua	0.1	8	15	100	28
GM	CALI7	Carex limosa	15.0	15	15	50	27
GM	CATE5	Carex tenuiflora	4.0	7	10	100	26
GM	CACH5	Carex chordorrhiza	10.0	10	10	50	22
FT	EQFL	Equisetum fluviatile	20.0	22	25	100	47
FM	COPA28	Comarum palustre	10.0	10	10	100	32
L	LICHEN	total lichens	0.1	0	0	100	0
M	MOSS	total bryophytes-mosses and liverworts	45.0	58	70	100	76
M1	SPHAG2	Sphagnum	5.0	22	40	100	47
M1	ZZMOSS	unknown-mosses	10.0	18	25	100	42
M1	TONI70	Tomentypnum nitens	10.0	12	15	100	35
M1	HYSP70	Hylocomium splendens	10.0	10	10	50	22
B	WATER	water	25.0	38	50	100	62
B	LITTER	litter-herbaceous, mulch, and woody debris <2.5 cm	10.0	15	20	100	39
B	LITTER2	litter-woody debris >2.5 cm	1.0	2	2	100	14
B	SOIL	mineral-bare soil	0.1	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			Units	Number of Records
		Min.	Avg.	Max.		
Trees	TT, TM, TS	2.5	3.8	5.0	m	2
Tree regeneration	TR	2.5	2.5	2.5	m	1
Medium shrubs	SM	1.2	1.5	1.8	m	2
Low shrubs	SL	30.0	35.0	40.0	cm	2
Dwarf shrubs	SD	1.0	9.5	18.0	cm	2
Tall and medium grasses and grass-likes	GT, GM	20.0	36.7	50.0	cm	3
Tall and medium forbs	FT, FM	50.0	100.0	130.0	cm	3
Dwarf herbs, lichens, and bryophytes	GD, FD, L, M	2.0	4.7	8.0	cm	3

Mapunit Components

Common Name (Soils Name):

Boreal-taiga scrub bog organic depressions (Typic Cryohemists, euic)

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):

1STW Boreal Terraces with Continuous Permafrost, Wet
(Typic Histoturbels, coarse-silty-Typic Historthels, coarse-loamy Association)

Geographically Associated Landtypes

131B_104—Loamy Frozen Terraces:

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

131B_105—Loamy Frozen Terraces, Wet:

This site occurs on slightly higher terrace positions with wetter, moderately deep soils over permafrost. The climax plant community is "Black spruce-tamarack/tussock cottongrass woodland."

131B_501—Organic Depressions, Fens:

This site occurs on wetter, very deep soils in cutoff meanders. The climax plant community is "Sedge wet meadow."