

172Xy202AK - Shallow Drainages

Low shrub birch-willow/water sedge scrub

Part A: Description of Site

1.c. *Landscape Narrative:* This site consists of shallow, poorly defined drainages and upper margins of topographic depressions on glaciolacustrine uplands and occasionally on stream terraces. Slopes range from 0 to 8 percent. Elevation is generally 1850 to 2900 feet (564 to 884 m). Landscape position and soil hydrology and wetness appear to be the most important landscape features effecting this site.

This site is of minor occurrence throughout the Gulkana River area. It probably can be found on similar landscapes elsewhere in Copper River basin also.

MLRA (USDA 1981): 172X - Copper River Plateau

Ecological Unit (Nowacki and Brock 1995): 135A - Copper River Basin Section

1.d.(3). *Associated Water Features Narrative:* (BLM)

2.j. *Climate Narrative:* The subarctic continental climate of this site is characterized by long cold winters and short warm summers. Mean January temperature is -2 °F.; mean July temperature is 54 °F. Mean annual precipitation ranges from 15 to 21 inches. Annual snowfall ranges from 54 to 102 inches. The frost-free season is about 60 to 80 days (28 °F. base temperature). The growing season varies greatly from year to year and frosts can occur during any summer month.

3.s. *Soils Narrative:* In most places, the soils on this site are formed in loamy lacustrine deposits and alluvium. Surface organic mat ranges from 1 to 9 inches (2 to 23 cm). Standing and slow flowing water on the surface persists most of the growing season and the soils are poorly to very poorly drained. A reduced matrix and reduction mottles are found throughout the mineral portion of the soil to 60 inches (152 cm) or more.

4.e. *Vegetation Narrative:* Low shrub birch-willow/water sedge scrub is the correlated PNC on this site.

5.b. *Wildlife Narrative:* (BLM)

6. *Community Dynamics (Fire, etc.):* The composition of the vegetation on this site varies considerably. All stands are dominated by a low shrub layer, however, shrub composition ranges from nearly pure willow to mixed stands dominated by shrub birch. Stunted trees are common in most stands, occasionally forming a low woodland canopy. Wild fire is not likely to significantly impact this site due to persistently wet soils. Low shrub birch-willow/water sedge scrub would be expected to regenerate directly following a fire.

7. *List of Commonly Associated Sites (number and names):*

a. Upland:

172Xy107AK - Glaciolacustrine Uplands, Frozen

172Xy106AK - Glaciolacustrine Uplands

b. Riparian or Wetland:

172Xy105AK - Terraces, Wet

172Xy501AK - Wet Depressions

8. *List of Competing Sites (number and names):*

172Xy501AK - Wet Depressions: lower slope position and concave bottoms of shallow depressions, along the shore of ponds and lakes, and in abandoned stream channels and sloughs; organic soils; Sedge wet meadow vegetative potential.

172Xy205AK - Loamy Flood Plains, Wet: flood plains; soils formed in stratified fine textured alluvium over gravelly and sandy alluvium; Low willow/water scrub vegetative potential.

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Part B: Interpretations for Use and Management of the Site

1.a. *Plant Community Characteristics*: see attached summary tables for seral stages.

1.k. *Applicable Field Offices*: BLM, Glennallen District Office

Ecological Site: 172Xy202AK - Shallow Drainages
 Cover type: Low shrub birch-willow/water sedge scrub
 Seral status: PNC
 Number of stands: 6
 Source of data: Gulkana River Area
 Key: Con = % constancy; Avg = average % canopy cover;
 Min = minimum % canopy cover; Max = maximum %
 canopy cover; Imp = importance value
 Note: Avg, Min, and Max based only on stands in which a
 taxon occurred; Imp = sq root of (Con * Avg)
 : Only taxa with >10% constancy included.

Common_name	Stratum	Con	Avg	Min	Max	Imp
white spruce	T1	17	3	3	3	7
white spruce	T2	17	1	1	1	3
black spruce	TX	17	2	2	2	6
white spruce	TX	17	3	3	3	7
black spruce	T3	17	5	5	5	9
white spruce	T3	67	1	1	2	9
Labrador-tea	SS	100	3	1	5	16
black crowberry	SS	33	1	1	1	5
bog blueberry	SS	100	11	4	30	33
leatherleaf	SS	17	5	5	5	9
lowbush cranberry	SS	50	1	1	2	8
net vein willow	SS	33	9	3	15	17
red bearberry	SS	17	1	1	1	3
shrub birch	SS	100	28	5	55	52
shrubby cinquefoil	SS	67	4	1	10	17
small cranberry	SS	67	1	1	1	6
willow	SS	100	43	20	65	65
Canadian bunchberry	F	17	1	1	1	4
anemone	F	17	1	1	1	3
arctic dock	F	17	1	1	1	3
arctic sweet coltsfoot	F	50	5	1	10	16
cloudberry	F	17	2	2	2	6
common fireweed	F	17	2	2	2	6
dock	F	17	1	1	1	3
dwarf scouring-rush	F	17	1	1	1	3
felwort	F	17	1	1	1	4
horsetail	F	67	4	1	15	17
larkspur-leaf monkshood	F	17	1	1	1	4
marsh cinquefoil	F	33	14	3	25	22
northern blackberry	F	50	1	1	1	5
serpent-grass	F	17	1	1	1	3
tall Jacob`s-ladder	F	33	1	1	1	4
tall bluebells	F	17	1	1	1	3
violet	F	17	1	1	1	3
water horsetail	F	17	10	10	10	13
bluejoint reedgrass	G	33	4	3	4	11
cottongrass	G	50	1	1	3	8
polar grass	G	33	1	1	1	5
rough fescue	G	17	1	1	1	3
sedge	G	50	33	20	50	41
water sedge	G	50	43	10	85	47
Moss layer	M	100	43	20	65	66
Lichen layer	L	83	1	1	1	6
Bare soil	B	67	1	1	2	8
Litter and mulch	B	100	11	1	40	34
Surface water	B	100	12	1	30	35
Woody litter (>1" dia.)	B	50	7	5	10	19

Salix spp. includes: SAMO2 SAPL2

Ecological Site: 172Xy202AK - Shallow Drainages

Cover type: Spruce/water sedge woodland

Seral status: similar_to_PNC

Number of stands: 3

Source of data: Gulkana River Area

Key: Con = % constancy; Avg = average % canopy cover;

Min = minimum % canopy cover; Max = maximum %

canopy cover; Imp = importance value

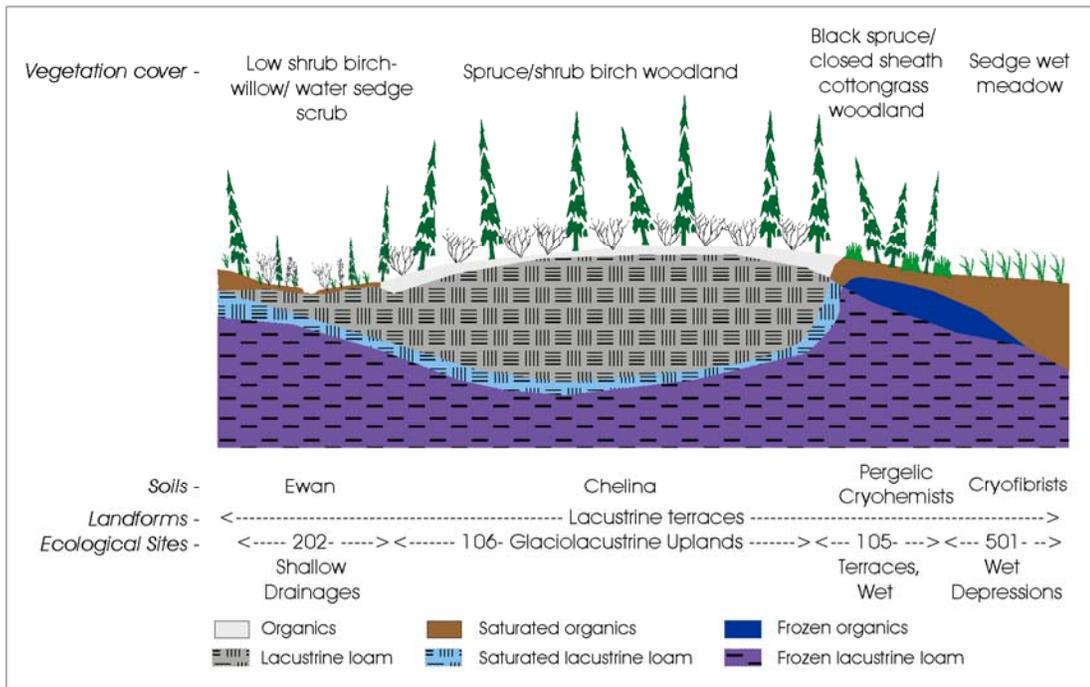
Note: Avg, Min, and Max based only on stands in which a

taxon occurred; Imp = sq root of (Con * Avg)

: Only taxa with >10% constancy included.

Common_name	Stratum	Con	Avg	Min	Max	Imp
black spruce	T1	33	10	10	10	18
spruce	T2	33	30	30	30	32
white spruce	TX	33	10	10	10	18
black spruce	T3	33	5	5	5	13
Labrador-tea	SS	67	3	1	5	14
black crowberry	SS	33	3	3	3	10
bog blueberry	SS	100	4	2	5	19
leatherleaf	SS	67	1	1	1	8
lowbush cranberry	SS	33	3	3	3	10
red bearberry	SS	33	3	3	3	10
shrub birch	SS	100	21	3	35	46
shrubby cinquefoil	SS	33	10	10	10	18
small cranberry	SS	33	1	1	1	4
willow	SS	100	32	25	40	56
Labrador lousewort	F	33	1	1	1	4
anemone	F	33	1	1	1	4
arctic dock	F	33	2	2	2	8
arctic sweet coltsfoot	F	67	3	1	5	14
cloudberry	F	67	2	1	3	11
horsetail	F	100	15	1	41	39
marsh cinquefoil	F	67	6	2	10	20
marsh willowherb	F	33	3	3	3	10
marsh-marigold	F	33	1	1	1	4
northern golden-saxifrage	F	33	1	1	1	4
single delight	F	33	1	1	1	4
starwort	F	33	2	2	2	8
wintergreen	F	33	1	1	1	4
polar grass	G	67	7	4	10	22
russet sedge	G	33	3	3	3	10
sedge	G	33	1	1	1	4
tall cottongrass	G	33	20	20	20	26
water sedge	G	100	50	40	60	71
Moss layer	M	100	33	5	50	58
Lichen layer	L	33	1	1	1	4
Bare soil	B	67	11	1	20	26
Litter and mulch	B	100	10	1	15	32
Surface water	B	100	27	2	50	52
Woody litter (>1" dia.)	B	67	1	1	1	6

Salix spp. includes: SAPL2



Representative cross section in the glaciolacustrine uplands above the Main Stem.



Ecological site 172Xy201AK - Shallow drainages commonly occurs as shallow, weakly developed drainageways throughout glaciolacustrine uplands. Low shrub birch-willow/water sedge scrub on this site contrasts sharply with the surrounding spruce woodlands and open forest.