

Supplementary material 6. Cross-reference between low/tall willow and tussock tundra preliminary (n = 4–9) and provisional (n ≥ 10) Plant Associations and plant community types (n < 4) from the Ecological Land Survey Legacy Database (ELD) Arctic Plant Association Classification and existing classifications from the literature for Alaska.

ELD Code	ELD Title	N	Plant Association Title from Existing Literature	Citation
alnfru/betnan/erivag	<i>Alnus viridis</i> ssp. <i>fruticosa</i> / <i>Betula nana</i> / <i>Eriophorum vaginatum</i>	14	N/A	N/A
betnan–leddec/erivag	<i>Betula nana</i> – <i>Ledum palustre</i> ssp. <i>decumbens</i> / <i>Eriophorum vaginatum</i>	77	<i>Betula nana</i> / <i>Eriophorum vaginatum</i> (provisional)	Boggs et al. 2001
			<i>Vaccinium vitis-idaea</i> - <i>Cassiope tetragona</i> - <i>Betula nana</i> - <i>Salix planifolia</i> - <i>Ledum palustre</i> - <i>Eriophorum vaginatum</i> / <i>Hylocomium splendens</i> - <i>Dicranum</i> spp. - <i>Aulacomnium turgidum</i> - <i>sphagnum</i> spp. - <i>Peltigera</i> spp. - <i>Cladonia</i> spp.	Jorgenson et al. 1994
			<i>Betula nana</i> - <i>Eriophorum vaginatum</i>	Boggs et al. 2018
betnan–salgla/vacvit/carbig	<i>Betula nana</i> – <i>Salix glauca</i> / <i>Vaccinium vitis-idaea</i> / <i>Carex bigelowii</i>	5	N/A	N/A
betnan–salgla/vacvit/sauang	<i>Betula nana</i> – <i>Salix glauca</i> / <i>Vaccinium vitis-idaea</i> / <i>Saussurea angustifolia</i>	7	N/A	N/A
betnan–salpull/caraqu1–eriang1	<i>Betula nana</i> – <i>Salix pulchra</i> / <i>Carex aquatilis</i> – <i>Eriophorum angustifolium</i>	7	<i>Salix pulchra</i> - <i>Betula nana</i>	Boggs and Sturdy 2005
betnan–salpull/erivag	<i>Betula nana</i> – <i>Salix pulchra</i> / <i>Eriophorum vaginatum</i>	31	<i>Betula nana</i> / <i>Eriophorum vaginatum</i> (provisional)	Boggs et al. 2001
			<i>Betula nana</i> - <i>Eriophorum vaginatum</i>	Boggs et al. 2018
betnan–salpull/petfri	<i>Betula nana</i> – <i>Salix pulchra</i> / <i>Petasites frigidus</i>	10	<i>Salix planifolia</i> ssp. <i>pulchra</i> , <i>Betula nana</i> , <i>Calamagrostis lapponica</i> , <i>Petasites hyperboreus</i> , feather moss	Heebner 1982
			<i>Salix glauca</i> or <i>S. planifolia</i> - <i>Betula nana</i> - <i>Carex bigelowii</i> - <i>Petasites frigidus</i> / <i>Hylocomium splendens</i> - <i>Dicranum</i> spp. - <i>Polytrichum</i> spp. - <i>Rhytidium rugosum</i> - <i>Peltigera</i> spp.	Jorgenson et al. 1994
erivag/dryint	<i>Eriophorum vaginatum</i> / <i>Dryas integrifolia</i>	31	<i>Eriophorum vaginatum</i> - <i>Dryas integrifolia</i>	Jorgenson et al. 2003
erivag/leddec–vacvit	<i>Eriophorum vaginatum</i> / <i>Ledum palustre</i> ssp. <i>decumbens</i> – <i>Vaccinium vitis-idaea</i>	45	<i>Eriophorum vaginatum</i> - <i>Betula nana</i> - <i>Ledum decumbens</i> - <i>Vaccinium</i> spp.	Hanson 1953
			<i>Eriophorum vaginatum</i> - <i>Betula nana</i> - <i>Ledum decumbens</i> - <i>Vaccinium</i> spp. - <i>Carex bigelowii</i>	Hopkins and Sigafos 1951
			<i>Eriophorum vaginatum</i> - <i>Carex bigelowii</i> - <i>Ledum decumbens</i> - <i>Vaccinium vitis-idaea</i>	Hanson 1950
			<i>Eriophorum vaginatum</i> / <i>Rhododendron tomentosum</i>	Boggs et al. 2018
erivag/vaculi/sphag	<i>Eriophorum vaginatum</i> / <i>Vaccinium uliginosum</i> / <i>Sphagnum</i>	5	<i>Vaccinium uliginosum</i> - <i>Ledum palustre</i> / <i>Eriophorum vaginatum</i>	Boggs et al. 1999
			<i>Sphagno-Eriophoretum vaginati</i>	Walker et al. 1994
leddec/erivag	<i>Ledum palustre</i> ssp. <i>decumbens</i> / <i>Eriophorum vaginatum</i>	31	<i>Eriophorum vaginatum</i> - <i>Ledum decumbens</i>	Jorgenson et al. 2003
salala/arcrub1	<i>Salix alaxensis</i> / <i>Arctostaphylos rubra</i>	1	<i>Salix alaxensis</i> / <i>Arctostaphylos rubra</i>	Webber et al. 1979
salala/artbor	<i>Salix alaxensis</i> / <i>Artemisia campestris</i> ssp. <i>borealis</i> var. <i>borealis</i>	1	N/A	N/A
salala/astsib	<i>Salix alaxensis</i> / <i>Eurybia sibirica</i>	8	<i>Salix alaxensis</i> - <i>Aster sibiricus</i>	Jorgenson et al. 2009

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salala/chrpib	<i>Salix alaxensis/Tanacetum bipinnatum ssp. bipinnatum</i>	13	<i>Salix alaxensis-Chrysanthemum bipinnatum</i>	Jorgenson et al. 2003
salala/dryint	<i>Salix alaxensis/Dryas integrifolia</i>	1	N/A	N/A
salala/epilat	<i>Salix alaxensis/Chamerion latifolium</i>	8	<i>Salix alaxensis / Astragalus alpinus - Epilobium latifolium</i>	Webber et al. 1979
			<i>Salix alaxensis</i> Sparse (Floodplain)	Boggs et al. 2018
salala/equarv	<i>Salix alaxensis/Equisetum arvense</i>	11	N/A	N/A
salala/hedmac	<i>Salix alaxensis/Hedysarum boreale ssp. mackenziei</i>	1	N/A	N/A
salgla/arclat	<i>Salix glauca/Arctagrostis latifolia</i>	2	N/A	N/A
salgla/arcrub1	<i>Salix glauca/Arctostaphylos rubra</i>	8	<i>Salix glauca-Arctous rubra</i>	Jorgenson et al. 2003
			<i>Salix glauca - Arctostaphylos rubra - Vaccinium uliginosum - Arctagrostis latifolia</i>	Hettinger and Janz 1974
salgla/dryint/carbig	<i>Salix glauca/Dryas integrifolia/Carex bigelowii</i>	5	N/A	N/A
salgla/dryint/rhyrug	<i>Salix glauca/Dryas integrifolia/Rhytidium rugosum</i>	5	N/A	N/A
salgla/koeasi	<i>Salix glauca/Koeleria asiatica</i>	3	N/A	N/A
salgla/luparc	<i>Salix glauca/Lupinus arcticus</i>	3	N/A	N/A
salhas-salala/equvar	<i>Salix hastata-Salix alaxensis/Equisetum variegatum</i>	4	N/A	N/A
salnip1-salala/arcrub1	<i>Salix niphoclada-Salix alaxensis/Arctous rubra</i>	4	N/A	N/A
salpul1/caraqu1	<i>Salix pulchra/Carex aquatilis</i>	1	<i>Salix pulchra / Carex aquatilis</i> (provisional)	Boggs et al. 2014
			<i>Salix pulchra-Carex aquatilis</i>	Boggs et al. 2018
salpul1/caraqu1-eriang1	<i>Salix pulchra/Carex aquatilis-Eriophorum angustifolium</i>	4	N/A	N/A
salpul1/caraqu1-eriang1-saxhir	<i>Salix pulchra/Carex aquatilis-Eriophorum angustifolium-Saxifraga hirculus</i>	9	N/A	N/A
salpul1/caraqu1-eriang1/sphag	<i>Salix pulchra/Carex aquatilis-Eriophorum angustifolium/Sphagnum</i>	10	N/A	N/A
salpul1/caraqu1-potpal	<i>Salix pulchra/Carex aquatilis-Comarum palustre</i>	2	N/A	N/A
salpul1/carbig	<i>Salix pulchra/Carex bigelowii</i>	9	<i>Salix planifolia ssp. pulchra / Carex bigelowii</i>	Boggs et al. 1999
			<i>Salix pulchra / Carex bigelowii</i> (provisional)	Boggs et al. 2014
salpul1/equarv	<i>Salix pulchra/Equisetum arvense</i>	3	<i>Salix pulchra/Equisetum arvense</i>	
salpul1/eriang1	<i>Salix pulchra/Eriophorum angustifolium</i>	6	<i>Salix pulchra / Eriophorum angustifolium</i> (provisional)	Boggs et al. 2014
salpul1/erivag	<i>Salix pulchra/Eriophorum vaginatum</i>	27	<i>Salix pulchra / Eriophorum vaginatum</i> (provisional)	Boggs et al. 2014
			<i>Salix pulchra-Eriophorum vaginatum</i>	Boggs et al. 2018
salpul1/hylspl	<i>Salix pulchra/Hylocomium splendens</i>	1	<i>Salix pulchra/Hylocomium splendens</i>	Boggs et al. 2018
salpul1/petfri	<i>Salix pulchra/Petasites frigidus</i>	7	<i>Salix planifolia / Petasites frigidus - Sphagnum spp.</i>	Jorgenson 1984

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salpul1–vaculi	<i>Salix pulchra–Vaccinium uliginosum</i>	2	<i>Valeriano-Salicetum pulchrae vaccinium uliginosum</i>	Schickhoff et al. 2002
salric1/arcrub1	<i>Salix richardsonii/Arctostaphylos rubra</i>	16	<i>Salix richardsonii/Arctous rubra-Salix reticulata</i>	Boggs et al. 2018
salric1/caraqu1–eriang1	<i>Salix richardsonii/Carex aquatilis–Eriophorum angustifolium</i>	23	<i>Salix richardsonii / Eriophorum angustifolium</i> (provisional)	Boggs et al. 2014
			<i>Salix lanata - Carex aquatilis</i>	Webber and Walker 1975
			<i>Salix richardsonii/Eriophorum angustifolium</i>	Boggs et al. 2018
salric1/equarv	<i>Salix richardsonii/Equisetum arvense</i>	3	<i>Equiseto arvensis-Salicetum lanatae</i>	Cooper 1986
salric1/equarv–fesalt	<i>Salix richardsonii/Equisetum arvense–Festuca altaica</i>	5	N/A	N/A
salric1/equarv–petfri	<i>Salix richardsonii/Equisetum arvense–Petasites frigidus</i>	13	N/A	N/A
salric1/equvar	<i>Salix richardsonii/Equisetum variegatum</i>	9	<i>Salix lanata / Equisetum variegatum</i>	Boggs et al. 2001

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