

Table 8

Association Table

Arenario capillaris-Festucetum idahoensis ass. nov.

<div>Location</div> <div>Plot-Number</div> <div>Elevation [m/10]</div> <div>Aspect [°]</div> <div>Slope [°]</div> <div>Parent Material</div> <div>Rocks >6cm</div> <div>Rocks <6cm</div> <div>Mineral Soil <1mm</div> <div>Litter Cover [%]</div> <div>Vascular Plant Cover [%]</div> <div>Moss Cover [%]</div> <div>Lichen Cover [%]</div> <div>Vegetation Pattern</div> <div>Number</div>	Arenario capillaris-Festucetum idahoensis																				Festuca scabrella-Agropyron comm.								
	typicum		var. of Carex		Facies of Festuca scabrella					Facies of Festuca idahoensis										Agropyron comm.									
	ApV	ApV	Spo	SPP	SPP	ScW	ScW	AVN	Red	ScW	ApV	ApV	ApV	ApV	ApV	Spo	Red	BiW	ScW	ApC	Red	SpV	Eas	AkV	ApV	ApV	AIS	AIS	AIS
	25	26	220	34	150	131	129	86	293	130	489	260	255	256	24	283	306	641	642	500	288	105	160	81	463	462	477	475	482
	189	189	208	223	219	219	218	200	219	218	195	184	187	191	189	241	232	233	222	211	215	200	224	187	182	183	180	169	181
	90	90	90	98	90	100	100	180	210	100	70	90	40	35	100	160	190	105	98	155	210	80	96	32	240	240	215	195	205
	21	21	31	12	0	13	11	22	19	13	29	22	19	29	23	8	14	4	18	6	12	32	18	26	25	24	28	16	33
	GAM	GAM	GA	ArM	GAM	GAM	GAM	RAM	RAM	GAM	GAM	GAQ	GA	GAM	RGQ	GAM	RAQ	RG	GAQ	RGQ	RAM	GAM	GAM	RG	GA	GA	GA	RAM	RG
	.2	-	30	30	5	15	5	1	6	0	1	1	7	10	0	1	22	0	4	5	12	12	1	35	2	5	15	3	10
	.8	-	50	18	10	45	20	.2	2	1	2	.5	2	45	1	15	15	5	4	10	45	35	1	30	.5	.2	15	1	12
	.2	-	4	-	-	1	1	-	-	-	1	-	-	-	0	-	-	-	0	-	.5	2	0	0	0	0	<.2	2	<.5
	18	25	5	10	25	20	20	25	75	55	25	55	50	30	38	60	45	60	55	45	25	12	55	5	50	45	15	70	50
	45	52	35	48	18	20	45	45	80	75	30	45	30	25	60	-	-	70	85	55	55	40	60	70	60	55	35	70	35
	3	1	0	1	<.1	2	2	30	.1	.2	4	10	5	1	12	3	1	2	10	1	.1	<.1	1	0	5	5	3	1	1
	10	10	.5	17	20	10	4	3	2	1	6	15	40	.2	5	1	2	-	3	1	.1	<.1	2	0	2	2	.1	1	2
eve	eve	p/s	eve	eve	eve	eve	eve	eve	eve	e/r	eve	eve	e/r	eve	eve	eve	eve	eve	eve	eve	p/s	eve	vst	eve	eve	eve	eve	e/r	29
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

ASSOCIATION Diagnostic species															Constancy																			
(AC) Arenaria capillaris	+	+	+	1+	+	+	+	+	+	+	+	+	+	+	.	1	2	2	3	+	1	1	2	1	r	.	.	.	.	2	4	V	V	I
(AC) Arnica rydbergii	+	+	r	+	+	+	+	r	+	+	+	r	+	+	2	.	+	r	+	+	+	+	+	1	.	.	.	.	.	3	4	V	IV	.
(AC) Eriogonum flavum	+	+	+	.	r	r	+	+	+	r	+	1	+	+	+	r	1	2	1	+	+	+	.	.	+	+	r	.	.	3	3	V	IV	III
(AC) Cetraria islandica	p	p	.	.	.	.	.	p	.	.	p	p	p	p	p	p	p	p	.	p	.	.	.	.	.	.	.	.	.	2	.	IV	III	.
Festuca idahoensis	+	+	+	1	+	+	+	+	2	1	+	1	1	1	2	3	2	3	2	2	1	2	3	1	1	+	+	.	3	4	V	V	IV	
Festuca scabrella	.	.	+	+	+	+	1	3	3	3	2	2	3	2	.	.	.	.	+	+	r	+	+	+	4	3	2	3	1	1	4	V	III	V

VARIANT of Carex scirpoidea															Constancy																			
Carex scirpoidea	.	.	.	+	+	+	r	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	r	+	.	.	.	.	4	I	.	II
Hedysarum sulphurescens	.	.	+	r	r	r	r	.	+	+	.	.	.	.	r	.	.	.	.	r	.	.	.	.	+	+	.	.	.	1	4	II	I	II
Dodecatheon pulchellum	.	.	.	+	+	.	+	.	.	+	+	.	.	.	+	+	+	3	I	II	II	
Zigadenus elegans	.	.	.	r	.	r	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	+	.	.	.	.	2	.	.	II
Polygonum bistortoides	.	.	.	+	+	+	+	.	+	+	+	+	4	II	I	.	
Pohlia sp.	.	.	.	p	p	p	p	.	.	.	.	.	.	.	.	.	.	.	p	.	.	.	.	.	.	.	.	.	.	4	.	+	.	

Facies of Festuca idahonensis															Constancy																			
Astragalus bourgovii	.	r	.	.	r	.	r	r	.	r	.	+	.	+	+	+	+	+	1	2	I	IV	.

Festuca scabrella-Agropyron spicatum community															Constancy																			
Agropyron spicatum	.	.	+	1	+	1	+	2	1	.	.	.	V
Sedum stenopetalum	.	.	r	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	+	.	.	.	r	r	r	.	r	1	.	.	I	IV
Amelanchier alnifolia	ad	.	+	+	+	.	.	.	.	IV
Calochortus apiculatus	+	.	ad	.	r	.	.	.	III	
Aster foliaceus	r	.	+	+	.	.	.	.	III	
Antennaria microphylla	.	.	.	r	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.	.	r	r	+	.	1	I	.	III
Penstemon confertus	r	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	r	.	.	I	.	III
Gentianella amarella	r	.	+	.	.	.	.	II
Castilleja hispida	r	.	r	.	.	.	.	II
Fragaria virginiana	r	+	.	.	.	.	.	II
Epilobium angustifolium	r	+	.	.	.	.	.	II
Carex geyeri	1	+	.	.	.	.	II

Bupleurum americanum group															Constancy																				
Bupleurum americanum	r	r	.	+	r	+	+	.	.	+	+	r	+	.	r	r	2	4	III	+	I
Senecio canus	.	.	.	.	.	.	+	.	.	+	+	+	+	+	.	.	.	.	.	+	.	.	.	.	+	r	.	+	.	.	1	IV	+	III
Cerastium arvense	+	+	+	+	+	+	+	+	+	+	+	.	.	+	+	+	.	r	.	.	.	.	.	+	+	+	+	+	+	3	4	IV	II	V
Arabis nuttallii	+	+	+	+	+	+	+	+	+	r	+	.	.	.	+	r	.	+	+	+	.	.	.	.	+	+	.	+	+	3	4	III	III	IV
Campanula rotundifolia	+	+	.	+	+	+	+	+	+	+	.	.	+	+	.	+	+	.	+	.	r	+	+	+	+	+	+	+	+	2	4	V	IV	V	
Antennaria umbrinella	3	2	+	+	1	+	1	+	2	1	1	2	+	.	3	+	+	2	2	1	1	+	2	+	+	r	+	.	.	3	4	V	V	II	
Achillea millefolium	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	r	+	+	+	+	3	4	V	V	V	
Galium boreale	+	+	+	+	.	.	+	+	+	+	+	+	+	+	.	.	+	.	+	+	+	+	+	+	+	+	+	+	+	3	2	V	III	V	
Pedicularis contorta	r	r	ad	+	+	+	+	+	r	+	+	+	+	.	r	+	+	r	+	+	1	+	r	r	+	r	+	.	.	3	4	V	V	III	
Anemone patens	r	+	+	+	r	+	+	+	+	.	r	+	+	.	r	.	.	.	r	.	r	.	.	.	+	+	r	.	.	3	4	IV	II	III	
Agoseris glauca	+	+	r	.	+	r	+	.	.	+	+	.	+	+	+	+	+	1	1	+	+	+	1	.	.	+	+	.	.	3	3	III	V	II	
Silene parryi	+	+	r	+	+	+	+	+	+	+	+	+	+	+	+	+	1	1	+	+	+	+	1	+	.	.	.	.	.	3	4	V	V	.
Eriogonum ovalifolium	+	+	r	+	.	+	.	.	.	+	.	.	.	.	+	.	.	.	r	.	r	1	+	.	.	.	.	.	.	3	2	I	III	.

Arenario-Festucetalia species															Constancy																			
OC Arenaria obtusiloba	r	+	+	+	.	+	+	r	+	+	+	.	.	+	+	.	r	.	+	+	.	.	+	.	r	.	.	.	.	3	3	III	III	I
OC Sedum lanceolatum	+	r	+	+	+	+	+	+	+	+	+	+	+	+	+	r	+	r	+	+	+	+	.	r	.	r	+	+	r	1	4	V	V	IV
OC Luzula spicata	.	.	r	+	+	+	+	r	+	+	+	+	+	.	+	+	+	r	+	+	+	+	.	+	+	+	+	.	.	1	4	V	IV	III
OC Selaginella scopulorum	1	1	x	r	1	1	1	+	+	+	+	2	3	.	+	+	2	.	+	+	+	r	1	.	r	r	+	.	++	3	4	V	IV	IV
OC Selaginella standleyi	+	+	+	.	.	.	x	.	1	.	.	.	.	.	.	+	.	.	.	+	.	.	.	.	.	.	x	.	.	3	2	I	I	I
OC Erigeron simplex	.	.	.	.	+	+	+	.	.	+	.	.	.	.	.	+	.	+	+	r	.	.	+	.	r	+	.	.	.	3	I	III	II	
OC Saxifraga occidentalis	.	r	r	+	.	r	.	+	+	r	r	.	.	.	.	.	.	.	.	.	.	.	.	.	+	+	.	.	.	2	2	III	.	II
OC Erigeron compositus	.	r	r	.	.	r	.	+	.	r	.	.	.	.	.	.	+	.	.	+	.	.	.	.	.	r	.	.	.	2	1	II	I	I
OC Lupinus lepidus	.	.	ad	.	.	.	r	.	.	r	.	+	+	.	.	.	.	r	.	+	.	r	.	.	.	.	.	.	.	1	1	III	II	.
OC Calamagrostis purpurascens	r	r	.	.	.	+	+	.	.	.	r	+	.	.	+	.	.	.	.	+	.	.	.	.	.	.	.	.	.	2	2	II	I	.
SOC Oxytropis campestris	+	r	r	+	+	+	+	.	+	+	+	.	.	.	+	+	.	.	.	+	.	.	.	+	.	.	.	.	.	3	4	III	II	.
Solidago multiradiata	.	.	+	+	+	+	+	.	+	+	+	.	.	.	.	+	r	r	+	+	r	+	.	+	+	ad	+	.	r	1	4	III	IV	IV
Besseyia wyomingensis	+	.	+	+	.	+	+	.	.	+	+	.	+	+	+	+	.	r	.	.	.	.	+	.	.	.	.	.	.	2	3	IV	III	.

Other species															Constancy														
Potentilla fruticosa	1	+	+	1	.	1	+	+	2	3	+	r	.	r	r	+	+	.	r										

Minor species:

Carex rupestris 1:r, 2:r, 4:r, 6:r, 9:r, 25:r, 26:r; *Juniperus communis* 2:r, 3:ad, 8:r, 11:ad, 26:ad, 28:r; *Saxifraga bronchialis* 2:r, 3:r, 11:r, 14:r, 15:r, 22:r, 24:r; *Poa interior* 6:r, 7:r, 10:r, 17:r, 20:r, 28:r; *Gaux triflorum* 1:r, 11:r, 13:r, 14:r, 15:r, 26:r; *Poa cusickii* 5:r, 9:r, 17:r, 21:r, 22:r; *Douglasia montana* 1:r, 2:r, 11:r, 15:r, 20:r; *Polemonium pulcherrimum* 2:r, 11:r, 15:r, 20:r, 21:r; *Silene acaulis* 4:r, 6:r, 7:r, 20:r; *Heuchera cylindrica* 3:r, 14:r, 24:r, 27:r, 29:r; *Anemone multifida* 3:r, 10:r, 14:r, 24:r, 29:r; *Hieracium albertinum* 5:r, 14:r, 22:r, 29:r; *Potentilla concinna* 9:r, 16:ad; *Myosotis alpestris* 8:r, 11:r, 15:r; *Botrychium paradoxum* 8:r, 10:r; *Allium* sp. 2:r; *Festuca rydbergii* 1:r, 2:r, 4:r, 11, 15:2; *Comandra umbellata* 1:r, 3:r; *Townsendia parryi* 3:r; *Arenaria rubella* 4:r, 6:r; *Antennaria alpina* 4:r, 11:r, 20:x; *Erigeron lanatus* 4:r; *Antennaria aromatica* 4:r; *Agrostis thurberiana* 4:r; *Sibbaldia procumbens* 5:r; *Trisetum spicatum* 6:x; *Agrostis scabra* 6:r; *Potentilla hippiana* 8:r; *Antennaria anaphaloides* 10:r; *Linum perenne* 10:r; *Carex patensata* 12:x 27:r; *Valeriana sitchensis* 14:r; *Senecio megacephalus* 14:r; *Mertensia viridis* 14:ad; *Potentilla* sp. 15:r; *Hieracium* sp. 15:r; *Carex obtusata* 16:1, 28:r; *Senecio cymbaralis* 10:17:r; *Carex albionga* 16:r, 17:r; *Arenaria nuttallii* 17:r; *Dodecatheon conjugens* 20:r; *Arabis* sp. 20:r; *Bromus pulchellianus* 15:r, 22:r; *Aster sibiricus* 22:r; *Phacelia sericea* 1:r, 22:r; *Valeriana sitchensis* cf. 22:r; *Phacelia hastata* 22:r; *Pinus* sp. 22:r; *Astragalus aboriginum* 23:r, 26:r; *Penstemon albertinus* 22:r, 24:r; *Smelowskia calycina* 6:r, 24:r; *Clematis columbiana* 24:r; *Cirsium hookerianum* 25:r, 28:r; *Carex rossii* 4:r, 25:r, 26:r; *Lomatium macrocarpon*; 2:r, 25:r, 26:r; *Apiaceae* sp. 25:r; *Carex elynoides* 20:r, 26:r; *Cystopteris fragilis* 26:r; *Hieracium albiflorum* 27:r; *Spiraea betulifolia* 27:r; *Koeleria cristata* 20:r, 27:r, 29:r; *Aster* sp. 27:r; *Taraxacum* sp. 27:r, 28:r; *Berberis repens* 28:r; *Balsamorhiza sagittata* 28:r; *Spiraea densiflora* 28:r; *Erigeron peregrinus* 13:r, 28:r; *Lithospermum ruderales* 28:r; *Arenaria lateriflora* 28:r; *Castilleja X rhexifolia* 28:r; *Lomatium triternatum* 28:r; *Symphoricarpos albus* 28:r; *Apocynum androsaemifolium* 29:r; *Polygonum engelmannii* 29:r; *Collinsia parviflora* 29:r; *Castilleja rhexifolia* 29:r; *Arabis hoelboellii* 1:r; **Bryophytes:** *Desmatodon latifolius* 2:p, 10:p, 23:p, 26:p, 29:p; *Hepaticae* sp. 1:p, 2:p; *Eurhynchium pulchellum* 2:p; *Bryum* sp. (Pohlia?) 2:pcf; *Pohlia cruda* 2:p; *Barbilophozia attenuata* 2:p, 11:pcf; *Polytrichum* sp. 4:p; *Bryum* sp. 4:p; *Barbilophozia barbata* 5:p; *Pogonatum urnigerum* 6:p; *Mniun arizonicum* 7:p, 11:p; *Ecnalypa* sp. 10:p, 29:p; *Brachythecium albicans* 11:p, 14:p; *Racomitrium canescens* 11:p, 13:p, 20:p, 28:p; *Brachythecium* sp. 11:p, 13:p, 14:p; *Racomitrium* sp. 11:p; *Barbilophozia hatcheri* 12:p, 13:p; *Dicranum spadicum* 12:p; *Dicranum* sp. 13:p; *Dicranaceae* sp. 13:p; *Bryum capillare* 13:p; *Tortula norvegica* 22:p; *Moss* sp. 23:p; *Eurhynchium pulchellum* 25:p, 29:p; *Ecnalypa rhabdocarpa* 6:p, 25:p, 26:p; *Tortella fragilis* 4:p, 25:p, 26:p; *Tortella tortuosa* 25:p; *Ditrichum flexicaule* 26:p; *Ditrichum capillaceum* 26:p; *Grimmia* sp. 27:p, 28:p; *Orthotrichum* sp. 28:p; **Lichens:** *Lecidea wulfenii* 1:p, 4:p, 6:p; *Caloplaça* sp. 1:p, 5:p, 7:p; *Cladonia borealis* 1:p, 5:p, 6:p, 10:p, 12:p; *Buellia* sp. 4:p, 5:p, 7:p, 12:p, 13:p; *Rinodina* sp.1 5:p, 6:p, 7:p; *Rinodina* sp. 2:p, 3:p, 4:p, 7:p, 15:p, 23:p; *Peltigera praetextata* 1:p, 3:p, 15:pcf; *Candelariella* sp. 3:p, 4:p, 7:p, 19:p; *Peltigera lepidophora* 2:p, 3:p, 6:p, 10:p, 25:p, 29:p; *Psoroma hypnorum* 5:p, 6:p, 11:p, 13:p; *Lecideine epilithic crust* 4:p, 6:p, 3:p, 7:p, 15:p, 17:p, 22:xc, 23:p; *Caloplaça stillicidiorum* 3:p, 10:p, 11:p; *Bryoranca castanea* 5:p, 6:p, 7:p, 10:p, 11:p, 17:p, 25:p; *Megaspora verrucosa* 3:p, 6:p, 7:p, 11:p, 15:p, 26:p; *Peltigera kristinssonii* 2:p, 11:p, 13:p, 15:p; *Lichen* sp. 1:p; *Psora* sp. 2:pcf; *Lecanora* sp. 2:p; *Lecidea umbonata* 3:pcf; *Caloplaça sinapisperma* 3:pcf; *Lepraria* sp. 5:p, 6:p, 12:p, 17:p, 19:p, 23:p; *Xanthoria elegans* 4:p; *Cladonia chlorophaea* 9:p, 11:p, 16:p, 29:p; *Rinodina fuscescens* 1:p, 10:pcf, 26:p; *Caloplaça tetraspora* 5:p, 6:p; *Cladonia* sp.2:5:p; *Lecanora behringii* 4:p, 6:p, 7:p, 20:p, 26:p, 28:p; *Candelariella terrigena* 6:p; *Cladonia jungermanniae* 11:p, 11:p, 15:p, 17:p, 25:p; *Aspicilia contorta* agg. 6:p, 12:p, 17:p, 20:p, 26:p; *Bacidia* sp. 6:p; *Lecidea auriculata* 6:p, 23:p; *Caloplaça fraudans* 7:pcf, 15:p, 23:p; *Peltigera* sp.2 8:p; *Leptogium* sp. 10:p; *Peltigera aphthosa* 11:p; *Cladonia phylophora* 11:p; *Peltigera ponosensis*10:pcf, 22:p; *Rinodina mniaranea* 5:p, 11:p, 12:p, 13:p, 23:p; *Cladonia gracilis* 12:p; *Cladonia mitis* 12:p, 13:p; *Cladonia phyllopora/ecmocyna* 13:p; *Peltigera elisabethae* 14:p; *Cladonia parmelia* wyomingica 1:p, 15:p, 26:p; *Peltigera diactyla* 11:p, 15:p, 17:p, 27:p, 28:p; *Lecanora rupicola* 12:p, 17:p, 25:p, 26:p; *Cetraria nivalis* 15:p; *Acarospora fuscata* 15:p; *Ochrolechia uppsalensis* 16:p; *Umbilicaria krascheninnikovii* 16:p, 26:p; *Cladonia cariosa* 17:p; *Rinodina* sp.2 17:p; *Pannaria* sp. 19:p; *Rhizoplaça melanophthalma* 9:p, 23:p, 27:p, 28:p; *Staurothele testudinea* 25:p, 26:p; *Catapyrenium daedaleum* 26:p; *Rinodina archaea* 26:p; *Cladonia parmelia* sp. 6:p, 26:p; *Rhizocarpon* sp. 27:p; *Peltigera canina* 28:p; *Cladonia fibrariata* 29:p; *Rinodina* sp.37:p, 17:p