

Appendix C

Botanical Resources

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PURPOSE OF THIS APPENDIX

This appendix is designed to provide detailed information about habitat, lifeform, status, distribution, and habitat grouping for the Threatened, Proposed, Candidate, and Sensitive (current and proposed) plant species found on the Sawtooth National Forest. The detailed information is provided to enable managers to more efficiently direct the implementation of Botanical Resources goals, objectives, standards, and guidelines.

Additionally, this appendix provides detailed information about the rare plant communities located on the Sawtooth National Forest and should provide additional support of Forest-wide objectives. Species of cultural importance for the Ecogroup have been identified and should be considered in project-level implementation where possible.

Table C-1. Federal and State Status, Current and Proposed Forest Service Status, Global Distribution of the TEPCS Plant Species for the Sawtooth National Forest

Species Name	Common Name	Global ¹	State ²	Forest Service Status ³		Global Distrib. ⁴
				Current	Proposed	
<i>Botrychium lineare</i>	slender moonwort	C -G1	SH	Candidate for federal listing		sd
<i>Castilleja christii</i>	Christ's Indian paintbrush	C -G1	S1	Candidate for federal listing		le
<i>Spiranthes diluvialis</i>	Ute ladies'-tresses	T - G2	S1	Fed. listed		sd
				Current	Proposed	
<i>Arabis falcatoria</i>	Grouse Creek rockcress	G1	S1	N	S	le
<i>Argemone munita</i> ssp. <i>rotundata</i>	armed prickly-poppy	G4/T4	S1	N	S	w
<i>Artemisia campestris</i> ssp. <i>borealis</i> var. <i>purshii</i>	northern sagewort	G5/T5	S1	W	S	le
<i>Astragalus amblytropis</i>	Challis milkvetch	G3	S3	N	W	le
<i>Astragalus anserinus</i>	Goose Creek milkvetch	G2	S1	S	S	le
<i>Astragalus aquilonius</i>	Lemhi Milkvetch	G3	S3	N	W	le
<i>Astragalus leptaleus</i>	park milkvetch	G4	S3	N	W	le
<i>Astragalus vexilliflexus</i> var. <i>nubilus</i>	White Cloud milkvetch	G4/T2	S2	S	S	le
<i>Botrychium campestre</i>	prairie moonwort	G3	S1	W	S	w
<i>Botrychium simplex</i>	least moonwort/grapefern	G5	S2	W	S	w
<i>Bryum calobryoides</i>	beautiful bryum	G3	SH	N	W	sd
<i>Carex breweri</i> ssp. <i>paddoensis</i>	Brewer's sedge	G4T4	S2	W	S	d
<i>Carex bubaumii</i>	Buxbaum's sedge	G5	S3	W	W	w
<i>Carex incurviformis</i> var. <i>incurviformis</i>	Shasta sedge	G4G5T4	S1	N	W	d
<i>Carex livida</i>	pale sedge	G5	S2	W	S	cb
<i>Carex straminiformis</i>	Mt. Shasta sedge	G4	S2	N	S	d
<i>Cryptantha propria</i>	Malheur cryptantha	G4	SR	N	S	le
<i>Cymopterus davisii</i>	Davis' wavewing	G3	S3	S	S	le
<i>Douglasia idahoensis</i>	Idaho Douglasia	G2	S2	N	W	le
<i>Draba globosa</i>	pointed/rockcress draba	G3	S2	N	S	d
<i>Draba incerta</i>	Yellowstone draba	G5	S2	N	S	re
<i>Draba trichocarpa</i>	Stanley's whitlow-grass	G2	S2	S	S	le
<i>Drosera intermedia</i>	spoon-leaved sundew	G5	S1	W	S	d
<i>Epipactis gigantea</i>	giant helleborine orchid	G3	S3	W	S	sd
<i>Eriogonum desertorum</i>	desert buckwheat	G3	S1	S	S	sd
<i>Eriogonum meledonum</i>	guardian buckwheat	G2	S2	S	S	le
<i>Haplopappus insecticicurus</i>	bugleg goldenweed	G3	S3	S	S	le
<i>Helodium blandowii</i>	Blandow's helodium	G5	S2	N	S	cb
<i>Lewisia kelloggii</i>	Kellogg's bitterroot	G4	S2	N	S	re
<i>Pediocactus simpsonii</i>	Simpson's hedgehog cactus	G4	S3	N	W	sd
<i>Penstemon idahoensis</i>	Idaho penstemon	G2	S2	S	S	le
<i>Phacelia minutissima</i>	least phacelia	G3	S2	S	S	re
<i>Poa abbreviata</i> ssp. <i>marshii</i>	Marsh's bluegrass	G5/T2	S1	S	S	re
<i>Polystichum krukebergii</i>	sword fern	G4	S2	N	S	sd
<i>Potentilla cottami</i>	Cottam cinquefoil	G1	S1	S	S	le

Table C-1. Federal and State Status, Current and Proposed Forest Service Status, Global Distribution of the TEPCS Plant Species for the Sawtooth National Forest (continued)

Species Name	Common Name	Global ¹	State ²	Forest Service Status ³		Global Distrib. ⁴
				Current	Proposed	
<i>Primula incana</i>	silvery/Jones' primrose	G4G5	S1	W	S	sd
<i>Salix farriae</i>	Farr's willow	G4	S1	N	S	d
<i>Saxifraga adscendens</i> ssp. <i>oregonensis</i>	wedge-leaf saxifrage	G5T4	S2	N	S	le
<i>Saxifraga cernua</i>	nodding saxifrage	G4	S2	N	S	cb
<i>Silene uralensis</i> ssp. <i>Montana</i>	petal-less campion	G4T? ⁵	S1	N	S	cb
<i>Thlaspi aileeniae</i>	Stanley thalspi	G3G4T3	S3	S	S	le
<i>Viola lathion</i>	violet	G1	S1	N	W	le

¹**Global** - Global ranking as assigned by Natural Heritage Program and Idaho Native Plant Society. **T** = Threatened, **C** = Candidate.

²**State** = Idaho State ranking, Idaho Native Plant Society Rare Species list 2000; * = Utah State ranking, Utah Natural Heritage Program, 2000.

³**Forest Service Status** - **S** = Region 4 Sensitive, **W** = Forest Watch plants, **N** = No current status.

⁴**Global Distribution** - **d** = disjunct, **le** = local endemic (< 100 square miles), **re** = regional endemic (distribution 100-10,000), **sd** = sparsely distributed (isolated populations), **p** = peripheral, **w** = widespread, **cb** = circumboreal, circumpolar.

Table C-2. Habit, Lifeform, Population Trend, and Habitat Grouping of the TEPCS Plant Species for the Sawtooth National Forest

Species Name	Common Name	Habit	Lifeform	Trend ¹	Habitat Group
<i>Botrychium lineare</i>	slender moonwort	Perennial	Fern	U	Forest understory, meadow
<i>Castilleja christii</i>	Christ's Indian paintbrush	Perennial	Herb	S	Grassland, subalpine
<i>Spiranthes diluvialis</i>	Ute ladies'-tresses	Perennial	Herb	U	Aquatic/riparian
<i>Arabis falcatoria</i>	Grouse Creek rockcress	Perennial	Herb	U	Rock outcrops, talus
<i>Argemone munita</i> ssp. <i>rotundata</i>	armed prickly-poppy	Perennial	Herb	U	Woodland, open gap
<i>Artemisia campestris</i> ssp. <i>borealis</i> var. <i>purshii</i>	northern sagewort	Perennial	Shrub	S	Alpine
<i>Astragalus amblytropis</i>	Challis milkvetch	Perennial	Herb	S	Shrublands
<i>Astragalus anserinus</i>	Goose Creek milkvetch	Perennial	Herb	D	Woodland, open gap
<i>Astragalus aquilonius</i>	Lemhi milkvetch	Perennial	Herb	U	Rock – shale, gravel banks
<i>Astragalus leptaleus</i>	park milkvetch	Perennial	Herb	S	Riparian - meadows
<i>Astragalus vexilliflexus</i> var. <i>nubilus</i>	White Cloud milkvetch	Perennial	Herb	D	Subalpine -rock
<i>Botrychium campestre</i>	prairie moonwort	Perennial	Fern	U	Grassland, high elev.
<i>Botrychium simplex</i>	Least moonwort/grapefern	Perennial	Fern	S	Grassland, high elev.
<i>Bryum calobryoides</i>	beautiful bryum	N/A	Moss	U	Riparian – spring, moist, seep
<i>Carex breweri</i> ssp. <i>paddoensis</i>	Brewer's sedge	Perennial	Sedge	S	Grassland, high elev.
<i>Carex bubaumii</i>	Buxbaum's sedge	Perennial	Sedge	S	Riparian - meadows
<i>Carex incurviformis</i> var. <i>incurviformis</i>	Shasta sedge	Perennial	Sedge	S	Alpine
<i>Carex livida</i>	pale sedge	Perennial	Sedge	S	Riparian – bog, fen
<i>Carex straminiformis</i>	Mt. Shasta sedge	Perennial	Sedge	S	Alpine
<i>Cryptantha propria</i>	Malheur cryptantha	Perennial	Herb	U	Grassland, low elev.
<i>Cymopterus davisii</i>	Davis' wavewing	Perennial	Herb	S	Subalpine, grassland
<i>Douglasia idahoensis</i>	Idaho Douglasia	Perennial	Herb	S	Subalpine, open
<i>Draba globosa</i>	pointed/rockcress draba	Perennial	Herb	S	Alpine
<i>Draba incerta</i>	Yellowstone draba	Perennial	Herb	U	Shrubland, open

Table C-2. Habit, Lifeform, Population Trend, and Habitat Grouping of the TEPCS Plant Species for the Sawtooth National Forest (continued)

Species Name	Common Name	Habit	Lifeform	Trend ¹	Habitat Group
<i>Draba trichocarpa</i>	Stanley's whitlow-grass	Perennial	Herb	D	Rock, talus
<i>Drosera intermedia</i>	spoon-leaved sundew	Perennial	Herb	S	Riparian - bog fen
<i>Epipactis gigantea</i>	giant helleborine orchid	Perennial	Herb	D	Riparian - streamside
<i>Eriogonum desertorum</i>	desert buckwheat	Perennial	Herb	U	Rock - outcrops
<i>Eriogonum meledonum</i>	guardian buckwheat	Perennial	Herb	D	Rock – talus/scree
<i>Haplopappus insecticruris</i>	bugleg goldenweed	Perennial	Herb	S	Shrubland
<i>Helodium blandowii</i>	Blandow's helodium	N/A	Moss	S	Riparian, forest
<i>Lewisia kelloggii</i>	Kellogg's bitterroot	Perennial	Herb	S	Rock - outcrops
<i>Pediocactus simpsonii</i>	Simpson's hedgehog cactus	Perennial	Cactus	S	Shrubland, grassland
<i>Penstemon idahoensis</i>	Idaho penstemmon	Perennial	Herb	S	Woodland - open gap
<i>Phacelia minutissima</i>	least phacelia	Annual	Herb	D	Shrubland, riparian
<i>Poa abbreviata</i> ssp. <i>marshii</i>	Marsh's bluegrass	Perennial	Grass	U	Alpine
<i>Polystichum krukebergii</i>	sword fern	Perennial	Fern	U	Rock, subalpine
<i>Potentilla cottami</i>	Cottam cinequefoil	Perennial	Herb	S	Alpine, rock, talus
<i>Primula incana</i>	silvery/Jones' primrose	Perennial	Herb	S	Riparian - meadow
<i>Salix farriae</i>	Farr's willow	Perennial	Shrub	D	Subalpine/riparian
<i>Saxifraga adscendens</i> ssp. <i>oregonensis</i>	wedge-leaf saxifrage	Perennial	Herb	S	Alpine, rock
<i>Saxifraga cernua</i>	nodding saxifrage	Perennial	Herb	S	Alpine, rock
<i>Silene uralensis</i> ssp. <i>montana</i>	petal-less campion	Perennial	Herb	U	Alpine, rock-talus
<i>Thlaspi aileeniae</i>	Stanley Thalspi	Perennial	Herb	S	Shrubland/alpine
<i>Viola lithion</i>	violet	Perennial	Herb	S	Rock talus

¹ **Trend - D** = declining on National Forest lands, **S** = stable on National Forest Lands, **I** = increasing on National Forest lands, and **U** = unknown at this time.

Table C-3. Rare Communities, Federal and State Status, Rarity Class, Threats, Trends, and Research Natural Area Distribution for the Sawtooth National Forest

Community	Global ¹	State ²	Rarity Class ³	Threats ⁴	Trend ⁵	RNA Distribution
<i>Alnus sinuata</i>	G3	S3	I	None	S	Redfish Lake Moraine
<i>Artemisia arbuscula</i> ssp. <i>thermopola/Festuca idahoensis</i>	G2Q	SQS2	B	DV, GZ, MN, RD	D	
<i>Artemisia nova/Poa secunda</i>	G4	S2	I	Unknown	S	Trapper Creek
<i>Artemisia rigida/Poa secunda</i>	G4	S2	I	Unknown	U	
<i>Artemisia tridentata</i> <i>xericensis/Agropyron spicatum</i>	G2	S1	I	Unknown	U	Trapper Creek
<i>Atriplex confertifolia/Oryzopsis hymenoides</i>	G3? ⁶	S1	M	SC, GZ	U	
<i>Betula occidentalis/Mesic Forb</i>	G3	S3	M	GZ, RD	D	
<i>Cerocarpus ledifolius/Festuca idahoensis</i>	G3	S2	B	GZ, FI	S	
<i>Juniperus occidentalis/Artemisia arbuscula/Fetusca idahoensis</i>	G? ⁶	S2	I	Unknown	U	
<i>Juniperus osteosperma/</i> <i>Artemisia tridentata vaseyana/Festuca idahoensis</i>	G? ⁶	S2	I	Unknown	U	Trapper Creek
<i>Juniperus osteosperma/</i> <i>Artemisia arbuscula arbuscula/Festuca idahoensis</i>	? ⁶	? ⁶	I	Unknown	U	
<i>Juniperus osteosperma/Stipa comata</i>	G1Q	S?	I	Unknown	U	
<i>Pinus contorta/Vaccinium occidentale</i>	G4	S2	M	Unknown	U	Sawtooth Valley Peatlands
<i>Pinus flexilis/Cercocarpus ledifolius</i>	G3	S1S2 Q	M	Unknown	U	Mt. Harrison
<i>Pinus flexilis/Purshia tridentata</i>	G1	S2	I	EX, RC	S	
<i>Salix geyeriana/Mesic Forb</i>	G3	S2	M	GZ	U	
<i>Salix wolfii/Swertia perennis-Pedicularis groenlandica</i>	G2	S2	B	GZ, EX,	D	
<i>Scirpus americanus</i>	G2Q	S1	I	GZ, EX, RP, AG	D	
<i>Scirpus cespitosus-Carex livida</i>	G1	S1	I	GZ	S	Sawtooth Valley Peatlands
<i>Tanacetum nuttallii-Artemisia frigida/Poa secunda</i>	G2	S2	I	Unknown	U	

¹**Global** - Global ranking as assigned by Natural Heritage Program and Idaho Native Plant Society.

²**State** - Idaho State ranking, Idaho Native Plant Society Rare Species list 2000.

³**Rarity Class** - **I** = intrinsically rare, **M** = managed rare, **B** = both, intrinsically rare communities that are also affected by management.

⁴**Threats** - **AG** = agriculture, **DV** = development, **EX** = exotic plant species, **FI** = fire increased frequency, **FS** = Fire, stand replacing, **FX** = fire exclusion, **GZ** = livestock grazing, **LO** = logging, **MN** = mining, **RC** = recreation, **RD** = road construction.

⁵**Trend** - **D** = declining on National Forest System lands, **S** = stable on National Forest System lands, **I** = increasing on National Forest lands, and **U** = unknown at this time.

Table C-4. Plant Species of Cultural Importance for the Sawtooth National Forest

Scientific Name	Common Name
<i>Abies spp.</i> Mill.	fir
<i>Achillea millefolium</i> L.	yarrow
<i>Alectoria spp.</i> Ach.	pine moss
<i>Allium accuminatum</i> Hook.	wild onion
<i>Allium geyeri</i> Wats.	wild onion
<i>Allium spp.</i> L.	wild onions
<i>Alnus incana</i> (L.) Moench	alder
<i>Alnus sinuata</i> (Regel) Rydb.	alder
<i>Amalanchier alnifolia</i> Nutt.	serviceberry
<i>Apocynum cannabinum</i> L.	dogbane
<i>Arcostaphylos nevadensis</i> Gray	manzanita
<i>Arcostaphylos uva-ursi</i> (L.) Spreng.	kinnikinnick
<i>Artemisia ludoviciana</i> Nutt.	prairie sage
<i>Artemisia tridentata</i> Nutt.	sagebrush
<i>Asclepias spp.</i> L.	milkweed
<i>Atriplex confertifolia</i> (Torr. & Frem.) Wats.	shadscale
<i>Balsamorhiza hookeri</i> Nutt.	Hooker's balsamroot
<i>Balsamorhiza sagittata</i> (Pursh) Nutt.	arrow-leaf balsamroot
<i>Berberis repens</i> Lindl.	Oregon grape
<i>Brodiaea douglassii</i> Wats.	brodiaea
<i>Bryoria fremontii</i> (Tuck) Brodo & Hawksw.	tree lichen
<i>Calochortus macrocarpus</i> Dougl.	Mariposa lily
<i>Calochortus nuttallii</i> T. & G.	sego lily
<i>Calocottus spp.</i> Pursh	lilies
<i>Camassia quamash</i> (Pursh) Greene	camas
<i>Chenopodium spp.</i> L.	goosefoot, pigweed
<i>Celtis leavigata</i> var. <i>reticulata</i> Torr.	hackberry
<i>Cercocarpus spp.</i> H.B.K.	mountain mahogany
<i>Claytonia lanceolata</i> Pursh	spring beauty
<i>Cornus stolonifera</i> Michx.	red-osier dogwood
<i>Chenophila umbellata</i> (L..) Bart.	pipsissewa
<i>Chrysanthemus nauseosus</i> (Pall.) Britt.	rubber rabbit-brush
<i>Cirsium scariosum</i> Nutt.	elk thistle
<i>Cirsium spp.</i> Mill.	thistle
<i>Crateus douglasii</i> Lindl.	black hawthorn
<i>Delphinium spp.</i> L..	larkspur
<i>Descuraria spp.</i> Webb & Berth.	tansy mustard
<i>Dicentra uniflora</i> Kell.	steer's head
<i>Elymus cinerius</i> Scribn. & Merr.	giant wild rye
<i>Erythronium grandiflorum</i> Pursh	glacier lily
<i>Evernia vulpina</i> (L.) Ach.	pine moss
<i>Fragaria vesca</i> L.	strawberry

**Table C-4. Plant Species of Cultural Importance for the Sawtooth National Forest
(continued)**

Scientific Name	Common Name
<i>Fragaria virginiana</i> Duchesne	strawberry
<i>Fritillaria pudica</i> (Pursh) Spreng.	yellow bell
<i>Helianthus annuus</i> L.	sunflower
<i>Heracleum lanatum</i> Michx.	cow parsnip
<i>Huechera cylindrica</i> Dougl.	alumroot
<i>Iris missouriensis</i> Nutt.	wild iris
<i>Juniperus scopulorum</i> Sarg.	Rocky Mountain juniper
<i>Juniperus</i> spp. L.	junipers
<i>Ledum glandulosum</i> Nutt.	Labrador tea
<i>Lewisia rediviva</i> Pursh	bitterroot
<i>Ligusticum canbyi</i> Coulter. & Rose	lovage
<i>Lomatium coulteri</i> (Wats.) Coulter. & Rose	biscuitroot
<i>Lomatium canbyi</i> Coulter. & Rose	biscuitroot
<i>Lomatium dissectum</i> (Nutt.) Math. & Const.	fern-leaf desert parsley
<i>Lomatium grayi</i> Coulter. & Rose	Gray's desert parsley
<i>Lomatium macrocarpum</i> (Nutt.) Coulter. & Rose	large-fruited biscuitroot
<i>Lomatium nudicaule</i> (Pursh) Coulter. & Rose	bare-stem desert parsley
<i>Lomatium salmoniflorum</i> (Coulter. & Rose) Math. & Const.	salmon-flower desert parsley
<i>Lomatium</i> spp. Raf.	desert parsley, biscuitroot
<i>Lygodesmia juncea</i> (Pursh) D. Don	rush skeletonweed
<i>Matricaria matricarioides</i> (Less.) Porter	pineapple weed
<i>Mentha arvensis</i> L.	Canada mint
<i>Mentzelia albicaulis</i> Dougl.	blazing star
<i>Mimulus guttatus</i> DC.	yellow monkey-flower
<i>Mushrooms</i>	a variety of edible mushrooms
<i>Nicotiana attenuata</i> Torr.	wild tobacco
<i>Nuphar variegatum</i> Engelm.	yellow pond lily
<i>Orobanche uniflora</i> L var. <i>purpurea</i> (Heller) Achey	broomrape
<i>Oryzopsis hymenoides</i> (R. & S.) Ricker	Indian rice grass
<i>Opuntia</i> spp. Mill.	prickly pear cactus
<i>Penstemon wilcoxii</i> Rydb.	Wilcox's penstemon
<i>Perideridia bolanderi</i> (Gray) Nels. & Macbr.	yampah
<i>Perideridia gairdneri</i> (H. & A.) Math.	yampah
<i>Phragmites australis</i> L.	reed grass
<i>Picea</i> spp. A. Dietr.	spruce
<i>Pinus albicaulis</i> Engelm.	whitebark pine
<i>Pinus contorta</i> Dougl.	lodgepole pine

**Table C-4. Plant Species of Cultural Importance for the Sawtooth National Forest
(continued)**

Scientific Name	Common Name
<i>Pinus monophylla</i> Torr. & Frem.	single leaf pinyon
<i>Pinus ponderosa</i> Dougl.	ponderosa pine
<i>Poa sandbergii</i> Vasey	Sandberg's bluegrass
<i>Rhamnus purchiana</i> DC.	cascara
<i>Rhus glabra</i> L.	smooth sumac
<i>Ribes aureum</i> Pursh	golden currant
<i>Ribes lacustre</i> (Pers.) Poir.	swamp gooseberry
<i>Ribes viscosissimum</i> Pursh	sticky currant
<i>Rosa gynocarpa</i> Nutt.	wild rose
<i>Rosa</i> spp. L.	wild rose
<i>Rubus idaeus</i> L.	raspberry
<i>Rubus</i> spp. L.	bramble, blackberry
<i>Rumex crispus</i> L.	curly-leaved dock
<i>Salix</i> spp. L.	willow
<i>Sambucus cerulea</i> Raf.	blue elderberry
<i>Sambucus racemosa</i> L.	red elderberry
<i>Sarcobatus vermiculatus</i> (Hook.) Torr.	black greasewood
<i>Scirpus</i> spp. L.	bulrush
<i>Sheperdia canadensis</i> (L.) Nutt.	russet buffaloberry
<i>Smilacina stellata</i> (L.) Desf.	false Solomon's seal
<i>Symporicarpos albus</i> (L.) Blake	snowberry
<i>Typha latifolia</i> L.	cattail
<i>Urtica dioica</i> L.	stinging nettle
<i>Vaccinium caespitosum</i> Michx.	dwarf huckleberry
<i>Vaccinium globule</i> Rydb.	blue huckleberry
<i>Vaccinium membranaceum</i> Dougl.	mountain bilberry
<i>Vaccinium scoparium</i> Leiberg	grouse whortleberry
<i>Valeriana edulis</i> Nutt.	tobacco root
<i>Veratrum viride</i> Ait.	false helleborine
<i>Wyethia amplexicaulis</i> Nutt.	mule's ears
<i>Zigadenus</i> spp. Michx.	death camas