

Flora, Oregon; Grande Ronde River field trip. 26 April 2008.

(List modified from 6 May 1995 field trip list led by Doug Henderson)

Names changed to standard by Pam Brunsfeld (2008)

New entities added after 26 April 2008 trip.

(08 if noted on this trip)

Stop 1. Lewiston Grade (in 2008 Bill Rember talked about Columbia River Basalt; see websites)

http://vulcan.wr.usgs.gov/Volcanoes/PacificNW/AGU-T106/columbia_river_basalt_group.html

http://vulcan.wr.usgs.gov/Volcanoes/ColumbiaPlateau/summary_columbia_plateau.html

<i>Erodium cicutarium</i>	redstem storksbill	Geraniaceae (08)
<i>Balsamorhiza sagittata</i>	balsamroot	Asteraceae (08)

Stop 2. Palouse Prairie Remnant near Anatone (mile 20 on Hwy 129, prairie in good condition in 2008)

<i>Achillea millefolium</i>	common yarrow	Asteraceae (08)
<i>Balsamorhiza hookeri</i>	Hooker's balsamroot	Asteraceae (08, basal leaves)
<i>Balsamorhiza sagittata</i>	arrow-leaf balsamroot	Asteraceae
<i>Besseyea rubra</i>	red besseyea	Scrophulariaceae (08, bloom)
<i>Collinsia parviflora</i>	blue-eyed Mary	Scrophulariaceae (08, bloom)
<i>Dipsacus sylvestris</i>	teasel	Dipsacaceae (08, dried)
<i>Dodecatheon cusickii</i>	Cusick's shooting star	Primulaceae (08)
<i>Festuca idahoensis</i>	Idaho fescue	Poaceae (08)
<i>Fritillaria pudica</i>	yellow bells	Liliaceae (08, bloom)
<i>Geum triflorum</i>	prairie smoke	Rosaceae (08, bloom)
<i>Lomatium triternatum</i>	biscuitroot	Apiaceae (08, basal leaves)
<i>Lomatium cous</i>	cous	Apiaceae (08, bloom)
<i>Lomatium sp</i>	lomatium	Apiaceae (08, bloom)
<i>Mertensia longiflora</i>	bluebells	Apiaceae (08, bloom)
<i>Phlox viscida</i>	sticky phlox	Polemoniaceae
<i>Poa secunda</i>	Sandburg bluegrass	Poaceae (08)
<i>Pseudoroegnaria spicata</i>	bluebunch wheatgrass	Poaceae (08)
<i>Ranunculus glaberrimus</i>	sagebrush buttercup	Ranunculaceae (08)
<i>Salsola kali</i>	Russian thistle	Cheopodiaceae (08, dried)
<i>Senecio integerrimus</i>	groundsel	Asteraceae
<i>Triteleia douglasii</i>	wild hyacinth	Liliaceae (08, budded)
<i>Astragalus sp</i>	locoweed	Fabaceae

Stop 2. Field Springs State Park (Snow everywhere in 08, we only looked at trees)

<i>Abies grandis</i>	grand fir	Pinaceae (08)
<i>Acer glabrum</i>	Rocky Mountain maple	Aceraceae
<i>Berberis repens</i>	Oregon grape	Berberidaceae
<i>Calypso bulbosa</i>	fairy slipper	Orchiaceae
<i>Clintonia uniflora</i>	queen's cup bead-lily	Liliaceae
<i>Erythronium grandiflorum</i>	glacier lily	Liliaceae
<i>Fritillaria pudica</i>	yellow bells	Liliaceae
<i>Holodiscus discolor</i>	ocean spray	Rosaceae
<i>Larix occidentalis</i>	western larch	Pinaceae (08)
<i>Lonicera utahensis</i>	Utah honeysuckle	Caprifoliaceae
<i>Ribes cereum</i>	squaw currant	Grossulariaceae
<i>Ribes viscosissimum</i>	sticky currant	Grossulariaceae
<i>Physocarpus malvaceus</i>	nine-bark	Rosaceae
<i>Pinus ponderosa</i>	ponderosa pine	Pinaceae (08)
<i>Pseudotsuga menziesii</i>	Douglas fir	Pinaceae (08)
<i>Sambucus racemosa</i>	black elderberry	Caprifoliaceae
<i>Maianthemum stellatum</i>	starry solomon's seal	Liliaceae
<i>Maianthemum canadense</i>	false solomon's seal	Liliaceae
<i>Symporicarpos albus</i>	snowberry	Caprifoliaceae
<i>Thalictrum occidentale</i>	western meadowrue	Ranunculaceae
<i>Tonella floribunda</i>	tonella	Scrophulariaceae

Stop 3. Midway Rattlesnake Grade grassland slopes - Plants and Geology. Bill talked about goosenecks in river, incised in basalt , how vertical basalt columns erode faster, how red zone meant meteoric water rust, how oxidized iron causes red, yellow, orange colors and reduced iron causes blue, green colors.

<i>Amelanchier alnifolia</i>	serviceberry	Rosaceae (08, bloom)
<i>Arabis sp.</i>	rockcress	Brassicaceae (08, bloom)
<i>Balsamorhiza sagittata</i>	arrow-leaf balsamroot	Asteraceae (08, bloom)
<i>Castilleja sp</i>	paintbrush	Scrophulariaceae (08, bloom)
<i>Claytonia perfoliata</i>	miner's lettuce	Portulaceae (08, bloom)
<i>Dodecatheon pulchellum</i>	shooting star	Primulaceae(08, bloom)
<i>Draba verna</i>	spring draba	Brassicaceae (08, bloom)
<i>Erigeron pumilus</i>	shaggy daisy	Asteraceae (08, budded)
<i>Eriophyllum lanatum</i>	Oregon sunshine	Asteraceae (08, budded)
<i>Fritillaria pudica</i>	yellow bells	Liliaceae (08, nearly spent)
<i>Hydrophilum capitatum</i>	ballhead waterleaf	Hydrophyllaceae (08, bloom)
<i>Idahoa scapigera</i>	scale pod	Brassicaceae (08)
<i>Lithophragma sp (not parviflorum)</i>	prairie star	Saxifragaceae (08, bloom)
<i>Microsteris gracilis</i>	annual phlox	Polemoniaceae (08, bloom)
<i>Lomatium cous</i>	cous	Apiaceae (08, bloom)
<i>Poa secunda</i>	Sandburg bluegrass	Poaceae (08)

<i>Pseudoroegnaria spicata</i>	bluebunch wheatgrass	Poaceae (08)
<i>Saxifraga</i> sp.	saxifrage	Saxifragaceae (08, bloom)
<i>Symporicarpos albus</i>	snowberry	Caprifoliaceae (08)
<i>Triteleia douglasii</i>	wild hyacinth	Liliaceae (08, budded)
<i>Woodsia oregano</i>	woodsia	Polypodiaceae (08)
<i>Onopoesum Xnrhium</i>	Scottish thistle	Asteraceae (08, dried)

Stop 4. Bottom of Rattlesnake Grade near Grande Ronde River - Plants and Geology

Riparian Vegetation along stream

<i>Alnus rhombifolia</i>	white alder	Betulaceae (08)
<i>Betula occidentalis</i>	western birch	Betulaceae
<i>Cornus sericea</i>	red-osier dogwood	Cornaceae (08)
<i>Crataegus douglasii</i>	black hawthorn	Rosaceae (08, budded)
<i>Petasites frigidus</i>	Coltsfoot	Asteraceae (08)
<i>Philadelphus lewisia</i>	mock-orange	Hydrangeaceae (08)
<i>Populus trichocarpa</i>	black cottonwood	Salicaceae (08)
<i>Rhamnus purshiana</i>	cascara	Rhamnaceae
<i>Salix</i> sp.	willow species	(08)
<i>Urtica dioica</i>	stinging nettle	Urticaceae (08)

Grassland Slopes at same intersection (Bill talked about the dike, the origination site of the basalt flow)

<i>Amsinckia lycopsoides</i>	fiddleneck	Boraginaceae (08, bloom)
<i>Balsamorhiza sagittata</i>	balsamroot	Asteraceae (08, bloom)
<i>Bromus tectorum</i>	cheatgrass	Poaceae
<i>Celtis reticulata</i>	hackberry	Ulmaceae (08)
<i>Collomia grandiflora</i>	large-flowered collomia	Polemoniaceae
<i>Delphinium</i> sp	wild delphinium	Ranunculaceae (08, bloom)
<i>Fragaria</i> sp	strawberry	Rosaceae
<i>Hydrophilum capitatum</i>	ballhead waterleaf	Hydrophyllaceae (08, bloom)
<i>Lithophragma</i> sp	prairie star	Saxifragaceae (08, bloom)
<i>Lomatium dissectum</i>	biscuitroot	Apiaceae (08, bloom)
<i>Mimulus guttatus</i>	monkey flower	Scrophulariaceae
<i>Nemophila kirtleyi</i>	nemophila	Hydrophyllaceae
<i>Philadelphus lewisi</i>	mock-orange	Hydrangeaceae (08)
<i>Phlox colubrina</i>	Salmon River phlox	Polemoniaceae
<i>Poa secunda</i>	Sandberg bluegrass	Poaceae (08)
<i>Pseudoroegnaria spicata</i>	bluebunch wheatgrass	Poaceae (08)
<i>Rhus glabra</i>	smooth sumac	Anacardiaceae
<i>Rhus radicans</i>	poison ivy	Anacardiaceae
<i>Ribes velutinum</i>	gooseberry	Grossulariaceae (08)
<i>Rubus</i> sp	currant type	Rosaceae (08)
<i>Symporicarpos albus</i>	snowberry	Caprifoliaceae (08)
<i>Tonnella floribunda</i>	tonella	Scrophulariaceae (08)

<i>Triteleia douglasii</i>	wild hyacinth	Liliaceae (08)
<i>Verbascum thapsus</i>	common mullein	Scrophulariaceae (08)

Stop 5 Multiple stops along the Grande Ronde River

<i>Achillea millefolium</i>	yarrow	Asteraceae (08)
<i>Amsinckia intermedia</i>	amsinckia	Boraginaceae
<i>Amsinckia lycopoides</i>	bugloss fiddleneck	Boraginaceae (08, bloom)
<i>Artemisia tridentata tridentata</i>	big sagebrush	Asteraceae
<i>Celtis reticulata</i>	hackberry	Ulmaceae (08)
<i>Ceanothus sanguineus</i>	red-stem ceonathus	Rhamnaceae (08)
<i>Chrysothamnus nauseosus</i>	rabbitbrush	Asteraceae
<i>Chrysothamnus viscidiflorus</i>	green rabbitbrush	Asteraceae
<i>Cichorium intybus</i>	blue sailors, chicory	Asteraceae
<i>Cirsium arvense</i>	Canada thistle	Asteraceae
<i>Cirsium vulgare</i>	common or bull thistle	Asteraceae
<i>Collomia grandiflora</i>	large-flowered collomia	Polemoniaceae
<i>Crataegus douglasii</i>	black hawthorn	Rosaceae (08)
<i>Cynoglossum officinale</i>	common hound's tongue	Boraginaceae
<i>Delphinium sp</i>	wild delphinium	Ranunculaceae (08, bloom)
<i>Dipsacus sylvestris</i>	teasel	Dipsacaceae (08, dried)
<i>Geranium viscosissimum</i>	sticky geranium	Geraniaceae
<i>Hydrophyllum capitatum</i>	ball-head waterleaf	Hydrophyllaceae (08, bloom)
<i>Hypericum perforatum</i>	St. John's wort	Clusiaceae
<i>Lithophragma sp</i>	prairie star	Saxifragaceae (08, bloom)
<i>Lithospermum ruderale</i>	Columbia pucooon	Boraginaceae
<i>Lomatium dissectum</i>	fernleaf lomatium	Apiaceae (08, bloom)
<i>Lomatium grayi</i>	Grays desert parsley	Apiaceae (08, bloom)
<i>Mimulus guttatus</i>	monkey flower	Scrophulariaceae (08, bloom)
<i>Onopordum acanthium</i>	Scotch cottontistle	Asteraceae
<i>Opuntia polyacantha</i>	prickly pear cactus	Cactaceae
<i>Penstemon deustus</i>	hot rock penstemon	Scrophulariaceae
<i>Penstemon glandulosus</i>	sticky stem beardstongue	Scrophulariaceae
<i>Pinus ponderosa</i>	ponderosa pine	Pinaceae (08)
<i>Phacelia hastata</i>	phacelia	Hydrophyllaceae
<i>Phamnus purshiana</i>	cascara	Rhamnaceae
<i>Physaria oregano</i>	Oregon twinpod	Brassicaceae
<i>Physocarpus malvaceus</i>	ninebark	Rosaceae (08)
<i>Prunus virginiana</i>	chokecherry	Rosaceae (08)
<i>Rhus glabra</i>	smooth sumac	Anacardiaceae
<i>Rhus radicans</i>	poison ivy	Anacardiaceae
<i>Salix exigua</i>	coyote willow	Salicaceae
<i>Salix scouleriana</i>	Scouler's willow	Salicaceae
<i>Scutellaria austrofolia</i>	skullcap	Lamiaceae
<i>Sisymbrium altissimum</i>	tumble mustard	Brassicaceae

<i>Maianthemum canadense</i>	false solomon's seal	Liliaceae
<i>Thelypodium laciniatum</i>	thelypody	Brassicaceae
<i>Thermopsis montana</i>	buckbean	Fabaceae (08, bloom)
<i>Tonella floribunda</i>	tonella	Scrophulariaceae
<i>Tragopogon dubius</i>	salsify	Asteraceae
<i>Verbascum thapsus</i>	common mullein	Scrophulariaceae (08)

Stop 6. Grand Ronde River near Troy (didn't go here 4/26/08)

<i>Acer glabrum</i>	Rocky Mountain maple	Aceraceae
<i>Alnus rhombifolia</i>	white alder	Betulaceae
<i>Amelanchier alnifolia</i>	serviceberry	Rosaceae
<i>Arabis suffrutescens</i>	woody rockcress	Brassicaceae
<i>Berberis repens</i>	Oregon grape	Berberidaceae
<i>Betula occidentalis</i>	water birch	Betulaceae
<i>Cerastium arvense</i>	chickweed	Caryophyllaceae
<i>Cornus sericea</i>	red-osier dogwood	Cornaceae
<i>Cystopteris fragilis</i>	bladder fern	Polypodiaceae
<i>Heuchera cylindrica</i>	alum root	Saxifragaceae
<i>Holodiscus discolor</i>	ocean spray	Rosaceae
<i>Lithophragma sp.</i>	prairie star	Saxifragaceae
<i>Mitella stauropetala</i>	side-flowered mitrewort	Saxifrageaeceae
<i>Montia arenicola</i>	sand montia	Portulacaceae
<i>Paeonia brownii</i>	Brown's peony	Paeoniaceae
<i>Philadelphus lewisii</i>	mock orange	Hydrangeaceae
<i>Physocarpus malvaceus</i>	ninebark	Rosaceae
<i>Populus trichocarpa</i>	black cottonwood	Salicaceae
<i>Prunus virginiana</i>	chokecherry	Rosaceae
<i>Rubus parviflorus</i>	thimbleberry	Rosaceae
<i>Maianthemum stellatum</i>	starry false Solomon's seal	Liliaceae
<i>Maianthemum canadense</i>	false Solomon's seal	Liliaceae
<i>Spiraea betulifolia</i>	white Spiraea	Rosaceae
<i>Woodsia oregano</i>	woodsia	Polypodiaceae
<i>Mertensia sp</i>	bluebells	Boraginaceae
<i>Ribes velutinum</i>	gooseberry	Grossulariaceae

Stop 7. Midway Troy to Flora grade.

<i>Allium sp</i>		
<i>Balsamorhiza hookeri</i>	Hooker's balsamroot	Asteraceae (08, basal leaves)
<i>Balsamorhiza sagittata</i>	arrow-leaf balsamroot	Asteraceae (08) bloom
<i>Balsamorhiza hybrid</i>	balsamroot hyb (hookeri, sagittata)	Asteraceae (08, basal leaves)
<i>Festuca idahoensis</i>	Idaho fescue	Poaceae (08)
<i>Juniper occidentalis</i>	western juniper	Cupressaceae (08)
<i>Lomatium macrocarpum</i>	biscuitroot	Apiaceae (08, bloom)

<i>Lupinus saxosus</i>	rock lupine	Fabaceae (08, bloom)
<i>Trifolium macrocephalum</i>	big-head clover	Fabaceae (08, bloom)
<i>Triteliea douglasii</i>	wild hyacinth	Liliaceae (08, budded)

Stop 8. Near Flora, Oregon (a lot of snow still around Flora, didn't look for plants here in 08)

<i>Allium</i> spp	onion	Liliaceae
<i>Besseyea rubra</i>	red besseyea	Scrophulariaceae
<i>Clematis hirsutissima</i>	sugar bowls	Ranunculaceae
<i>Erythronium grandiflorum</i>	dog-tooth violet, glacier lily	Liliaceae
<i>Lomatium</i> couss	biscuitroot, couss	Apiaceae
<i>Mertensia</i> sp	bluebells	Boraginaceae
<i>Paeonia brownii</i>	peony	Paeoniaceae
<i>Pinus ponderosa</i>	Ponderosa pine	Pinaceae
<i>Veratrum viride</i>	false hellebore	Liliaceae
<i>Viola nuttalii</i>	Nuttall's violet	Violaceae

Stop 9. Rim of Grande Ronde Canyon including Mima Mounds on Hwy 3(Bill Rember talked about formation as ice wedges in permafrost not under glaciation)

<i>Balsamorhiza hookeri</i>	Hooker's balsamroot	Asteraceae
<i>Balsamorhiza sagittata</i>	arrow-leaf balsamroot	Asteraceae
<i>Claytonia lanceolata</i>	spring beauty	Portulacaceae (08, bloom)
<i>Lomatium macrocarpum</i>	biscuitroot	Apiaceae
<i>Lupinus saxosus</i>	rock lupine	Fabaceae
<i>Paeonia brownii</i>	peony	Paeoniaceae (08, 3" high)
<i>Pinus ponderosa</i>	ponderosa pine	Pinaceae (08)
<i>Poa secunda</i>	Sandburg bluegrass	Poaceae
<i>Pseudoroegnaria spicata</i>	blue-bunch wheatgrass	Poaceae
<i>Ranunculus glaberrimus</i>	sagebrush buttercup	Ranunculaceae (08, bloom)
<i>Trifolium macrocephalum</i>	big-head clover	Fabaceae
<i>Triteleia douglasii</i>	wild hyacinth	Liliaceae
<i>Viola</i>	yellow violet	Violaceae

Stop 10. Canyon Grassland Slope (various stops, at one, midway, Bill talked about buried timber in formations)

<i>Artemesia rigida</i>	stiff sagebrush	Asteraceae (08)
<i>Balsamorhiza hookeri</i>	Hooker's balsamroot	Asteraceae (08, bloom)
<i>Crataegus douglasii</i>	black hawthorn	Rosaceae
<i>Crepis</i> sp.	crepis	Asteraceae
<i>Dicentra cucullaria</i>	Dutchman's breeches	Fumariaceae (08, bloom)
<i>Dodecatheon</i> sp.	shooting star	Primulaceae(08, bloom)
<i>Hydrophilum capitatum</i>	ballhead waterleaf	Hydrophyllaceae (08, bloom)
<i>Mertensia</i> sp.	blue bells	Boraginaceae (08, bloom)
<i>Mimulus nanus</i>	dwarf monkeyflower	Scrophulariaceae

<i>Pinus ponderosa</i>	ponderosa pine	Pinaceae (08)
<i>Populus tremuloides</i>	quaking aspen	Salicaceae (08)
<i>Populus trichocarpa</i>	black cottonwood	Salicaceae (08)
<i>Pseudoroegnaria spicata</i>	blue-bunch wheatgrass	Poaceae (08)
<i>Scutellaria austifolia</i>	skullcap	Lamiaceae
<i>Symporicarpos albus</i>	snowberry	Caprifoliaceae
<i>Verbascum thapsus</i>	common mullein	Scrophulariaceae (08)

Returning to Lewiston above Asotin (Salmon River rocks in roadbed, ash from Mt Mazama)

<i>Opuntia polyacantha</i>	prickly pear cactus	Cactaceae (08)
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