

Columbines School of Botanical Studies
 Summer Apprenticeship Program
 Trip #15, 16 Economic Botanical Survey

August 4-5, 6-7, 2016

Middle Elevation Coniferous Woods and Riparian 4800'-5200'

<http://www.botanicalstudies.net/botany/plantlists.php>

Uses	Name	Notes	Seen
Food: Roots			
	Cirsium callilepis	Mountain Thistle	X
	Dodecatheon jeffreyi	Shooting Star	X
	Hypochaeris radicata	False dandelion	
	Lilium columbianum	Tiger Lily	No Pick
	Lilium washingtonium	Cascade Lily	No Pick
	Osmorhiza chilensis	Sweet Cicely	X
	Platanthera dilatata (Habenaria dilatata)	White Rein Orchid	No Pick
	Platanthera stricta (Habenaria saccata)	Green Rein Orchid	No Pick
	Polygonum bistortoides	Mountain Bistort	
	Xerophyllum tenax	Beargrass	X
Food: Greens and Potherbs			
	Achlys triphylla	Vanilla Leaf	X
	Caltha biflora	Marsh Marigold	Cooked
	Castilleja miniata	Paintbrush	
	Chrysanthemum leucanthemum	Ox Eye Daisy	X
	Cirsium callilepis	Mountain Thistle	X
	Cornus canadensis	Bunchberry	
	Dodecatheon jeffreyi	Shooting Star	X
	Epilobium angustifolium	Fireweed	
	Epilobium glandulosum	Willow Herb	Turions
	Gallium oreganum	Bedstraw, Cleavers	X
	Gallium triflorum	Bedstraw, Cleavers	
	Hydrophyllum tenuipes	Waterleaf	
	Hypochaeris radicata	False dandelion	
	Ligusticum grayi	Oshala	
	Lilium columbianum	Tiger Lily	No Pick
	Lilium washingtonium	Cascade Lily	No Pick
	Mimulus guttatus	Yellow Monkeyflower	X
	Mimulus moschatus	Musk Monkeyflower	
	Montia sibirica	Candyflower	
	Osmorhiza chilensis	Sweet Cicely	X
	Phacelia sp.	Phacelia	X
	Plantago major	Plantain	X
	Platanthera dilatata (Habenaria dilatata)	White Rein Orchid	No Pick

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Uses	Name	Notes	Seen
Platanthera stricta (Habenaria saccata)	Green Rein Orchid	No Pick	X
Prunella vulgaris	Self Heal, Heal All		X
Rosa sp.	Wild Rose		
Rumex acetosella	Sheep Sorrel		
Stachys cooleyae	Hedge Nettle		X
Trifolium sp.	Native Clover		X
Trillium ovatum	Trillium	No Pick	X
Viola adunca	Field Violet		
Viola glabella	Woods Violet		
Viola orbiculata	Dark Woods Violet		X
Viola sp.			
Xerophyllum tenax	Beargrass		X
Food: Fruits			
Amelanchier alnifolia	Serviceberry		X
Chimaphila menziesii	Baby Pipsissewa	Unripe	
Chimaphila umbellata	Pipsissewa	Unripe	X
Cornus canadensis	Bunchberry		
Dodecatheon jeffreyi	Shooting Star		X
Epilobium angustifolium	Fireweed		
Epilobium glandulosum	Willow Herb	Turions	
Fragaria sp.	Wild Strawberry		X
Gaultheria ovatifolia	Baby Salal		
Lilium columbianum	Tiger Lily	No Pick	
Lilium washingtonium	Cascade Lily	No Pick	
Maianthemum racemosum (Smilacina racemosa)	Large False Solomon's Seal		X
Maianthemum stellatum (Smilacina stellata)	Small False Solomon's Seal		X
Pyrola picta	White veined Pyrola		X
Pyrola secunda	One-sided Pyrola		X
Ribes bracteosum	Stinking Black Currant		X
Ribes lacustre	Swamp Currant		
Ribes sp.	Currant, Gooseberry		
Ribes viscosissimum	Sticky Currant		X
Rosa sp.	Wild Rose		
Rubus lasiococcus	Dwarf Bramble		X
Rubus leucodermis	Blackcap Raspberry		
Rubus parviflorus	Thimbleberry		X
Rubus spectabilis	Salmonberry		X
Rubus ursinus	Blackberry		
Sorbus scopulina	Mountain Ash		

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Uses	Name	Notes	Seen
Streptopus lanceolatus (S. roseus)	Twisted Stalk		
Trillium ovatum	Trillium	No Pick	X
Vaccinium membranaceum	Mountain Huckleberry		X
Vaccinium ovalifolium	Huckleberry		X
Xerophyllum tenax	Beargrass		X
Food: Spices/Teas			
Achlys triphylla	Vanilla Leaf		X
Angelica arguta	Angelica		
Angelica genuflexa	Angelica		
Asarum caudatum	Wild Ginger		X
Fragaria sp.	Wild Strawberry		X
Heracleum lanatum	Cow Parsnip	Strong	X
Ligusticum grayi	Oshala		
Osmorhiza chilensis	Sweet Cicely		X
Prunella vulgaris	Self Heal, Heal All	Simple	X
Rosa sp.	Wild Rose		
Rubus lasiococcus	Dwarf Bramble		X
Rubus leucodermis	Blackcap Raspberry		
Rubus parviflorus	Thimbleberry		X
Rubus spectabilis	Salmonberry		X
Rubus ursinus	Blackberry		
Trifolium sp.	Native Clover		X
Alteratives incl. Diaphoretics and Diuretics			
Angelica arguta	Angelica	Reproductive	
Angelica genuflexa	Angelica		
Asarum caudatum	Wild Ginger		X
Chimaphila menziesii	Baby Pipsissewa	Diuretic	
Chimaphila umbellata	Pipsissewa	Diuretic	X
Gallium oreganum	Bedstraw, Cleavers	Diuretic	X
Gallium triflorum	Bedstraw, Cleavers	Diuretic	
Hypericum anagalloides	Bog St. John's Wort		X
Hypericum formosum	St. John's Wort		X
Hypericum perforatum	St. John's Wort		X
Ligusticum grayi	Oshala		
Oplopanax horridus	Devil's Club		X
Pyrola picta	White veined Pyrola	Diuretic	X
Pyrola secunda	One-sided Pyrola	Diuretic	X
Rudbeckia occidentalis	Coneflower		X
Sambucus racemosa	Red Elder	Diaphoretic	X

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Uses	Name	Notes	Seen
Vaccinium membranaceum	Mountain Huckleberry	Diuretic	X
Vaccinium ovalifolium	Huckleberry		X
Aromatic/Bitters			
Angelica arguta	Angelica		
Angelica genuflexa	Angelica		
Asarum caudatum	Wild Ginger		X
Heracleum lanatum	Cow Parsnip	Strong	X
Ligusticum grayi	Oshala		
Osmorhiza chilensis	Sweet Cicely		X
Pedicularis bracteosa	Cobrahead	Bitter	X
Pedicularis groenlandica	Elephant's Head	Bitter	X
Pedicularis racemosa	Parrot's Beak	Bitter	X
Astringents			
Anaphalis margaritacea	Pearly Everlasting		
Chimaphila menziesii	Baby Pipsissewa		
Chimaphila umbellata	Pipsissewa		X
Cornus canadensis	Bunchberry		
Epilobium angustifolium	Fireweed		
Fragaria sp.	Wild Strawberry		X
Gaultheria ovatifolia	Baby Salal		
Geum macrophyllum	Geum, Avens		X
Polygonum bistortoides	Mountain Bistort		
Potentilla sp.	Potentilla		
Pyrola picta	White veined Pyrola		X
Pyrola secunda	One-sided Pyrola		X
Ribes bracteosum	Stinking Black Currant		X
Ribes lacustre	Swamp Currant		
Ribes viscosissimum	Sticky Currant		X
Rosa sp.	Wild Rose		
Rubus lasiococcus	Dwarf Bramble		X
Rubus leucodermis	Blackcap Raspberry		
Rubus parviflorus	Thimbleberry		X
Rubus spectabilis	Salmonberry		X
Rubus ursinus	Blackberry		
Salix sp.	Willow		
Sorbus scopulina	Mountain Ash		
Spirea douglasii	Spirea		
Stachys cooleyae	Hedge Nettle		X
Vaccinium membranaceum	Mountain Huckleberry		X
Vaccinium ovalifolium	Huckleberry		X

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Uses	Name	Notes	Seen
Calming Herbs, Nervines			
	Corallorhiza maculata	Spotted Coral Root	No Pick
	Corallorhiza mertensiana	Purple Coral Root	No Pick X
	Hypericum anagalloides	Bog St. John's Wort	X
	Hypericum formosum	St. John's Wort	X
	Hypericum perforatum	St. John's Wort	X
	Pedicularis bracteosa	Cobrahead	X
	Pedicularis groenlandica	Elephant's Head	X
	Pedicularis racemosa	Parrot's Beak	X
	Stachys cooleyae	Hedge Nettle	Mild X
	Valeriana sitchensis	Valerian	X
Analgesics, Anesthetics			
	Heracleum lanatum	Cow Parsnip	Nerve Pain X
	Salix sp.	Willow	
	Spirea douglasii	Spirea	
Demulcents, Emollients			
	Goodyera oblongifolia	Rattlesnake Plantain	No Pick
	Maianthemum racemosum (Smilacina racemosa)	Large False Solomon's Seal	X
	Maianthemum stellatum (Smilacina stellata)	Small False Solomon's Seal	X
	Mertensia paniculata	Oregon Bluebells	External (PA's)
	Penstemon sp.	Penstemon	Soothing to lips, skin, etc.
	Plantago major	Plantain	X
	Viola adunca	Field Violet	
	Viola glabella	Woods Violet	
	Viola orbiculata	Dark Woods Violet	X
	Viola sp.		
Misc.			
	Anaphalis margaritacea	Pearly Everlasting	Pretty
	Arnica cordifolia	Arnica	Injury X
	Chimaphila menziesii	Baby Pipsissewa	Root Beer, Smoke
	Chimaphila umbellata	Pipsissewa	Root Beer X
	Chrysanthemum leucanthemum	Ox Eye Daisy	Allergies X
	Gallium oreganum	Bedstraw, Cleavers	Burns X
	Gallium triflorum	Bedstraw, Cleavers	Burns
	Pedicularis bracteosa	Cobrahead	Smoke X
	Pedicularis groenlandica	Elephant's Head	Smoke X
	Pedicularis racemosa	Parrot's Beak	Smoke X
	Plantago major	Plantain	Burns X

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Uses	Name	Notes	Seen	
	Prunella vulgaris	Self Heal, Heal All	Salve	X
	Trillium ovatum	Trillium	No Pick, Uterine Astringent	X
	Vaccinium membranaceum	Mountain Huckleberry	Blood sugar, flavonoids	X
	Vaccinium ovalifolium	Huckleberry		X
	Xerophyllum tenax	Beargrass	Fiber	X

Topics of Botanical Interest

Aconitum columbianum	Monkshood	Very Poison	X
Actaea rubra	Baneberry		X
Boykinia major	Boykinia	Possible Valerian Indicator	X
Cicuta douglasii	Water Hemlock	Very similar to other umbels	
Hypopitys monotropa	Hairy Pinesap	Saprophyte	
Lysichiton americanus (L. americanum)	Skunk Cabbage		
Pyrola aphylla	Leafless Pyrola	No Pick	
Senecio triangularis	Arrow Leafed Groundsel	PA's	X
Veratrum californicum	Veratrum	Very Poison	X
Veratrum sp.	Veratrum	Very Poison	
Veratrum viride	Veratrum	Very Poison	X

Animal Interactions

Aplodontia holes	Mountain Beaver Holes		
Brown Frogs, Big and little			
Calliope Hummingbird			
Caterpillar			
Cinnabar Moths eating Senecio triangularis			
Deer Bed			
Deer Prints			
Deer Scat			
Deer Trails			
Dissosteira carolinus	Mourning Cloak Grasshopper	Clickity-clickity	
Doe			
Elk Bed			X
Elk Prints			X
Elk Scat			
Elk Trails			X
Grouse			
Raven			
Red Tailed Hawk			
Turd in Veratrum			
Vole mounds			X

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Class Highlights Trip #15-16
August 4-5, 6-7, 2016

Places Visited

Middle Elevation Coniferous Woods, Meadows, Clearcuts, and Riparian

Topics Covered

- Plant Family Characteristics
- Economic Botanical Survey
- Apiaceae (Umbelliferae) taxonomy
- Araliaceae: Racemes or panicles of umbels
- Onagraceae: Flowers 4-merous, inferior ovary
- Keyed out *Veratrum viride*, *Heracleum lanatum*, and *Epilobium angustifolium*
- Apodonia lifestyles
- Meadow locating from the *Xerophyllum*, through the *Vaccinium*, past the *Rudbeckia*, and turn right at the *Pedicularis groenlandica*. We used the water gradient for locating.
- Areas with water in spring may dry up in the summer. Use the plants as indicators of water.
- *Pedicularis groenlandica* leaves are harvestable even now, and the stands are easy to locate. The stand blooms at different times making the true population size hard to assess. The full population size is apparent now that the basal growth had thickened and the flower stems are senescent. Noticed that the plants that were foraged when flowering had thicker basal leaf growth.
- Harvesting near poisons. *Actea rubra* berries and *Aconitum columbianum* bulbils were plentiful. Use extra caution when eating berries and harvesting and processing *Pedicularis groenlandica* and other species.
- How much to harvest? Learning to limit the harvest to specific amounts to fit the processing time and supplies. This trip it wasn't critical, but other times one can harvest more than they are able to process or use.
- Harvesting herbs for ornamental use vs. for edible or medicinal use.

Herbs Harvested

- Located, harvested, processed *Pedicularis racemosa* above ground parts for tincture.
- Processed *Arnica mollis* above ground parts for oil.
- Located, harvested, processed *Pedicularis groenlandica* leaf for tincture.
- Located, harvested, processed *Heracleum lanatum* seeds for tincture.
- Located, harvested, processed *Anaphalis margaritacea* above ground parts for bundles.

Berries Tasted

- *Amelanchier alnifolia*, serviceberry
- *Vaccinium membranaceum*, mountain huckleberry
- *Vaccinium ovalifolium*, huckleberry
- *Vaccinium parvifolium*, tall red huckleberry
- *Rubus parviflorus*, thimbleberry
- *Rubus leucodermis*, blackcap raspberry
- *Rubus lasiococcus*, dwarf bramble
- *Rubus spectabilis*, salmonberry
- *Fragaria sp.*, strawberry
- *Ribes bracteosum*, stinking black currant
- *Ribes lacustre*, swamp currant
- *Gaultheria ovatifolia*, baby salal