

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

August 8-9, 10-11, 2019

Middle Elevation Coniferous Woods and Riparian 4800'-5200'

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

Uses	Name	Notes	Seen
Food: Roots			
	Calochortus sp.	Cat's Ear's	
	Cirsium remotifolium (C. callilepis)	Mountain Thistle	x
	Dodecatheon jeffreyi	Shooting Star	x
	Hypochaeris radicata	False dandelion	x
	Lilium columbianum	Tiger Lily	No Pick
	Lilium washingtonianum	Cascade Lily	No Pick
	Osmorhiza berteroi (O. chilensis)	Sweet Cicely	x
	Platanthera dilatata (Habenaria d.)	White Rein Orchid	No Pick
	Platanthera stricta (Habenaria saccata)	Green Rein Orchid	No Pick
	Xerophyllum tenax	Beargrass	x
Food: Greens and Potherbs			
	Achlys triphylla	Vanilla Leaf	x
	Calochortus sp.	Cat's Ear's	
	Caltha biflora	Marsh Marigold	Cooked
	Castilleja miniata	Paintbrush	Concentrates Toxins
	Chamaenerion angustifolium (Epilobium a.)	Fireweed	x
	Cirsium remotifolium (C. callilepis)	Mountain Thistle	x
	Claytonia sibirica (Montia s.)	Candyflower	
	Cornus unalaschensis (C. canadensis)	Bunchberry	x
	Dodecatheon jeffreyi	Shooting Star	x
	Epilobium glandulosum	Willow Herb	Turions
	Erythranthe guttata (Mimulus g.)	Yellow Monkeyflower	x
	Erythranthe moschata (Mimulus moschatus)	Musk Monkeyflower	
	Gallium oreganum	Bedstraw, Cleavers	
	Gallium triflorum	Bedstraw, Cleavers	x
	Hydrophyllum tenuipes	Waterleaf	
	Hypochaeris radicata	False dandelion	x
	Leucanthemum vulgare (Chrysanthemum l.)	Ox Eye Daisy	x
	Ligusticum grayi	Oshala	
	Lilium columbianum	Tiger Lily	No Pick
	Lilium washingtonianum	Cascade Lily	No Pick
	Osmorhiza berteroi (O. chilensis)	Sweet Cicely	x
	Phacelia sp.	Phacelia	x

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Uses	Name	Notes	Seen
Plantago major	Plantain		x
Platanthera dilatata (Habenaria d.)	White Rein Orchid	No Pick	
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 longipes	Native Clover		x
Trillium ovatum	Trillium	No Pick	x
Viola adunca	Field Violet		
Viola glabella	Woods Violet		x
Viola orbiculata	Dark Woods Violet		
Viola sp.	Violet		
Xerophyllum tenax	Beargrass		x
Food: Fruits			
Amelanchier alnifolia	Serviceberry		x
Calochortus sp.	Cat's Ear's		
Chamaenerion angustifolium (Epilobium a.)	Fireweed		x
Chimaphila menziesii	Baby Pipsissewa	Unripe	
Chimaphila umbellata	Pipsissewa	Unripe	x
Cornus unalaschensis (C. canadensis)	Bunchberry		x
Dodecatheon jeffreyi	Shooting Star		x
Epilobium glandulosum	Willow Herb	Turions	
Fragaria sp.	Wild Strawberry		x
Gaultheria ovatifolia	Baby Salal		x
Lilium columbianum	Tiger Lily	No Pick	
Lilium washingtonianum	Cascade Lily	No Pick	
Lonicera involucrata	Twinberry	Edible	x
Maianthemum racemosum (Smilacina racemosa)	Large False Solomon's Seal	Cathartic	x
Maianthemum stellatum (Smilacina stellata)	Small False Solomon's Seal	Cathartic	x
Orthilia secunda (Pyrola s.)	One-sided Pyrola		
Prosartes hookeri (Disporum h.)	Fairy Bells		x
Pyrola picta	White-veined Pyrola		
Ribes bracteosum	Stinking Black Currant		
Ribes lacustre	Swamp Currant		
Ribes sp.	Currant, Gooseberry		
Ribes viscosissimum	Sticky Currant		
Rosa sp.	Rosehips		
Rubus lasiococcus	Dwarf Bramble		x

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Uses	Name	Notes	Seen
Rubus leucodermis	Blackcap Raspberry		x
Rubus nutkanus (R. parviflorus)	Thimbleberry		x
Rubus spectabilis	Salmonberry		x
Rubus ursinus	Blackberry		
Sorbus scopulina	Mountain Ash		x
Streptopus lanceolatus (S. roseus)	Rosy Twisted Stalk		
Trillium ovatum	Trillium	No Pick	x
Vaccinium membranaceum	Mountain Huckleberry		x
Vaccinium ovalifolium	Oval-Leaf Huckleberry		x
Vaccinium uliginosum	Bog 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 maximum (H. lanatum)	Cow Parsnip	Strong	x
Ligusticum grayi	Oshala		
Osmorhiza berteroi (O. 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		x
Rubus nutkanus (R. parviflorus)	Thimbleberry		x
Rubus spectabilis	Salmonberry		x
Rubus ursinus	Blackberry		
Trifolium longipes	Native Clover		x

Alteratives incl. Diaphoretics and Diuretics

Angelica arguta	Angelica	Reproductive	
Angelica genuflexa	Angelica		
Asarum caudatum	Wild Ginger	Diaphoretic	x
Chimaphila menziesii	Baby Pipsisewa	Diuretic	
Chimaphila umbellata	Pipsisewa	Diuretic	x
Gallium oreganum	Bedstraw, Cleavers	Diuretic	
Gallium triflorum	Bedstraw, Cleavers	Diuretic	x
Ligusticum grayi	Oshala		
Oplopanax horridus	Devil's Club	Alterative	x
Orthilia secunda (Pyrola s.)	One-sided Pyrola	Diuretic	
Pyrola picta	White-veined Pyrola	Diuretic	

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Uses	Name	Notes	Seen
Rudbeckia occidentalis	Coneflower	Diuretic	x
Sambucus racemosa	Red Elder	Diaphoretic	x
Vaccinium membranaceum	Mountain Huckleberry	Diuretic	x
Vaccinium ovalifolium	Oval-Leaf Huckleberry	Diuretic	x
Vaccinium uliginosum	Bog Huckleberry	Diuretic	x

Aromatic/Bitters

Angelica arguta	Angelica		
Angelica genuflexa	Angelica		
Asarum caudatum	Wild Ginger		x
Heracleum maximum (H. lanatum)	Cow Parsnip	Strong	x
Ligusticum grayi	Oshala		
Osmorhiza berteroi (O. 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		x
Bistorta bistortoides (Polygonum b.) cf. Potentilla sp.	Mountain Bistort Potentilla		x
Chamaenerion angustifolium (Epilobium a.)	Fireweed		x
Chimaphila menziesii	Baby Pipsissewa		
Chimaphila umbellata	Pipsissewa		x
Cornus unalaschkensis (C. canadensis)	Bunchberry		x
Fragaria sp.	Wild Strawberry		x
Gaultheria ovatifolia	Baby Salal		x
Geum macrophyllum	Geum, Avens		x
Orthilia secunda (Pyrola s.)	One-sided Pyrola		
Pyrola picta	White-veined Pyrola		
Ribes bracteosum	Stinking Black Currant		
Ribes lacustre	Swamp Currant		
Ribes sp.	Currant, Gooseberry		
Ribes viscosissimum	Sticky Currant		
Rosa sp.	Wild Rose		
Rubus lasiococcus	Dwarf Bramble		x
Rubus leucodermis	Blackcap Raspberry		x
Rubus nutkanus (R. parviflorus)	Thimbleberry		x
Rubus spectabilis	Salmonberry		x
Rubus ursinus	Blackberry		
Salix sp.	Willow		

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Uses	Name	Notes	Seen
Sorbus scopulina	Mountain Ash		x
Spirea douglasii	Spirea		x
Stachys cooleyae	Hedge Nettle		x
Vaccinium membranaceum	Mountain Huckleberry		x
Vaccinium ovalifolium	Oval-Leaf Huckleberry		x
Vaccinium uliginosum	Bog Huckleberry		x

Calming Herbs, Nervines

Corallorhiza maculata	Spotted Coral Root	No Pick	
Corallorhiza mertensiana	Western or Purple Coral Root	No Pick	x
Hypericum anagalloides	Bog St. John's Wort		x
Hypericum perforatum	St. John's Wort		x
Hypericum scouleri (H. formosum)	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

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	Emollient	x
Plantago major	Plantain		x
Viola adunca	Field Violet		
Viola glabella	Woods Violet		x
Viola orbiculata	Dark Woods Violet		
Viola sp.	Violet		

Analgesics, Anesthetics

Heracleum maximum (H. lanatum)	Cow Parsnip	Nerve Pain	x
Salix sp.	Willow		
Spirea douglasii	Spirea		x

Misc.

Anaphalis margaritacea	Pearly Everlasting	Pretty	x
Arnica cordifolia	Heart Leaf Arnica	Injury	x

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Uses	Name	Notes	Seen
Chimaphila menziesii	Baby Pipsissewa	Root Beer, Smoke	
Chimaphila umbellata	Pipsissewa	Root Beer, Smoke	x
Gallium oreganum	Bedstraw, Cleavers	Burns	
Gallium triflorum	Bedstraw, Cleavers	Burns	x
Hypericum anagalloides	Bog St. John's Wort	Anti-viral	x
Hypericum perforatum	St. John's Wort	Anti-viral	x
Hypericum scouleri (H. formosum)	St. John's Wort	Anti-viral	x
Leucanthemum vulgare (Chrysanthemum l.)	Ox Eye Daisy	Allergies	x
Pedicularis bracteosa	Cobrahead	Smoke	x
Pedicularis groenlandica	Elephant's Head	Smoke	x
Pedicularis racemosa	Parrot's Beak	Smoke	x
Plantago major	Plantain	Drawing Poultice, Burns	x
Prunella vulgaris	Self Heal, Heal All	Salve	x
Trillium ovatum	Trillium	No Pick, Uterine Astringent	x
Vaccinium membranaceum	Mountain Huckleberry	Blood Sugar	x
Vaccinium ovalifolium	Oval-Leaf Huckleberry	Blood Sugar	x
Vaccinium uliginosum	Bog Huckleberry	Blood Sugar	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	
Lysichiton americanus (L. americanum)	Skunk Cabbage	Very Big Leaves	x
Monotropa hypopitys (Hypopitys m.)	Hairy Pinesap	Mycotroph	x
Senecio triangularis	Arrow Leaf Groundsel	PA's	x
Veratrum californicum	Veratrum	Very Poison	
Veratrum sp.	Veratrum	Very Poison	x
Veratrum viride	Veratrum	Very Poison	x
Animal Interactions			
Aplodontia holes	Mountain Beaver Holes		x
Brown Frogs, Big and Little			
Calliope Hummingbird			
Caterpillar			
Cinnabar Moths eating Senecio triangularis			

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Uses	Name	Notes	Seen
Deer Bed			
Deer Prints			
Deer Scat			
Deer Trails			
Dissosteira carolina	Mourning Cloak Grasshopper	Clickity-clickity	
Doe			
Elk Bed			x
Elk Prints			x
Elk Scat			x
Elk Trails			x
Grouse			
Raven			
Red Tailed Hawk			
Turd in Veratrum			
Vole mounds			x

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Class Highlights Trip #15-16
August 8-9, 10-11, 2019

Places Visited

- Middle Elevation Coniferous Woods, Meadows, Clearcuts, and Riparian

Topics Covered

- Plant Family Characteristics
- Economic Botanical Survey
- Araliaceae: Racemes or panicles of umbels
- Onagraceae: Flowers 4-merous, inferior ovary
- Keyed out *Chamaenerion angustifolium* (*Epilobium a.*)
- Apodontia 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 plants that were foraged when flowering had thicker basal leaf growth.
- Harvesting near poisons. Unidentified umbels 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.

Herbs Harvested

- Located, harvested, processed *Pedicularis racemosa* above ground parts for tincture.
- Located, harvested, processed *Pedicularis groenlandica* leaf for tincture.
- Located, harvested, processed *Heracleum maximum* (*H. lanatum*) seeds for tincture.

Berries Tasted

- *Amelanchier alnifolia*, serviceberry
- *Vaccinium membranaceum*, mountain huckleberry

- *Vaccinium ovalifolium*, huckleberry
- *Vaccinium parvifolium*, tall red huckleberry
- *Rubus nutkanus* (*R. parviflorus*), thimbleberry
- *Rubus leucodermis*, blackcap raspberry
- *Rubus spectabilis*, salmonberry
- *Rubus ursinus*, blackberry
- *Gaultheria ovatifolia*, baby salal
- *Ribes lacustre*, swamp currant