

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

August 11-12, 2018

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 callilepis	Mountain Thistle	X
	Dodecatheon jeffreyi	Shooting Star	X
	Hypochaeris radicata	False dandelion	
	Lilium columbianum	Tiger Lily	No Pick
	Lilium washingtonianum	Cascade Lily	No Pick
	Osmorhiza chilensis	Sweet Cicely	
	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
	Calochortus sp.	Cat's Ear's	
	Caltha biflora	Marsh Marigold	Cooked
	Castilleja miniata	Paintbrush	
	Chrysanthemum leucanthemum	Ox Eye Daisy	X
	Cirsium callilepis	Mountain Thistle	X
	Cornus canadensis	Bunchberry	X
	Dodecatheon jeffreyi	Shooting Star	X
	Epilobium angustifolium	Fireweed	
	Epilobium glandulosum	Willow Herb	Turions
	Gallium oreganum	Bedstraw, Cleavers	
	Gallium triflorum	Bedstraw, Cleavers	X
	Hydrophyllum tenuipes	Waterleaf	
	Hypochaeris radicata	False dandelion	
	Ligusticum grayi	Oshala	
	Lilium columbianum	Tiger Lily	No Pick
	Lilium washingtonianum	Cascade Lily	No Pick
	Mimulus guttatus	Yellow Monkeyflower	
	Mimulus moschatus	Musk Monkeyflower	
	Montia sibirica	Candyflower	
	Osmorhiza chilensis	Sweet Cicely	
	Phacelia sp.	Phacelia	X
	Plantago major	Plantain	

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

Uses	Name	Notes	Seen
Platanthera dilatata (Habenaria dilatata)	White Rein Orchid	No Pick	
Platanthera stricta (Habenaria saccata)	Green Rein Orchid	No Pick	X
Prunella vulgaris	Self Heal, Heal All		
Rosa sp.	Wild Rose		
Rumex acetosella	Sheep Sorrel		
Stachys cooleyae	Hedge Nettle		X
Trifolium cf. longipes	Native Clover		
Trillium ovatum	Trillium	No Pick	X
Viola adunca	Field Violet		
Viola glabella	Woods Violet		X
Viola orbiculata	Dark Woods Violet		X
Viola sp.	Violet		
Xerophyllum tenax	Beargrass		X
Food: Fruits			
Amelanchier alnifolia	Serviceberry		X
Calochortus sp.	Cat's Ear's		
Chimaphila menziesii	Baby Pipsissewa	Unripe	
Chimaphila umbellata	Pipsissewa	Unripe	X
Cornus canadensis	Bunchberry		X
Dodecatheon jeffreyi	Shooting Star		X
Epilobium angustifolium	Fireweed		
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	
Maianthemum racemosum (Smilacina racemosa)	Large False Solomon's Seal		
Maianthemum stellatum (Smilacina stellata)	Small False Solomon's Seal		X
Prosartes hookeri (Disporum hookeri)	Fairy Bells		
Pyrola picta	White veined Pyrola		
Pyrola secunda	One-sided Pyrola		
Ribes bracteosum	Stinking Black Currant		X
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

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

Uses	Name	Notes	Seen
Rubus parviflorus	Thimbleberry		X
Rubus spectabilis	Salmonberry		X
Rubus ursinus	Blackberry		X
Sorbus scopulina	Mountain Ash		
Streptopus lanceolatus (S. roseus)	Twisted Stalk		
Trillium ovatum	Trillium	No Pick	X
Vaccinium membranaceum	Mountain Huckleberry		X
Vaccinium ovalifolium	Huckleberry		X
Vaccinium uliginosum	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		
Prunella vulgaris	Self Heal, Heal All	Simple	
Rosa sp.	Wild Rose		
Rubus lasiococcus	Dwarf Bramble		X
Rubus leucodermis	Blackcap Raspberry		X
Rubus parviflorus	Thimbleberry		X
Rubus spectabilis	Salmonberry		X
Rubus ursinus	Blackberry		X
Trifolium cf. longipes	Native Clover		
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	
Gallium triflorum	Bedstraw, Cleavers	Diuretic	X
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	

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

Uses	Name	Notes	Seen
	Pyrola secunda	One-sided Pyrola	
	Rudbeckia occidentalis	Coneflower	X
	Sambucus racemosa	Red Elder	Diaphoretic X
	Vaccinium membranaceum	Mountain Huckleberry	Diuretic X
	Vaccinium ovalifolium	Huckleberry	X
	Vaccinium uliginosum	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	
	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	X
	Epilobium angustifolium	Fireweed	
	Fragaria sp.	Wild Strawberry	X
	Gaultheria ovatifolia	Baby Salal	X
	Geum macrophyllum	Geum, Avens	
	Polygonum bistortoides	Mountain Bistort	
	Potentilla sp.	Potentilla	
	Pyrola picta	White veined Pyrola	
	Pyrola secunda	One-sided Pyrola	
	Ribes bracteosum	Stinking Black Currant	X
	Ribes lacustre	Swamp Currant	
	Ribes viscosissimum	Sticky Currant	
	Rosa sp.	Wild Rose	
	Rubus lasiococcus	Dwarf Bramble	X
	Rubus leucodermis	Blackcap Raspberry	X
	Rubus parviflorus	Thimbleberry	X
	Rubus spectabilis	Salmonberry	X
	Rubus ursinus	Blackberry	X
	Salix sp.	Willow	
	Sorbus scopulina	Mountain Ash	
	Spirea douglasii	Spirea	X

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

Uses	Name	Notes	Seen
Stachys cooleyae	Hedge Nettle		X
Vaccinium membranaceum	Mountain Huckleberry		X
Vaccinium ovalifolium	Huckleberry		X
Vaccinium uliginosum	Huckleberry		X
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
Demulcents, Emollients			
Goodyera oblongifolia	Rattlesnake Plantain	No Pick	X
Maianthemum racemosum (Smilacina racemosa)	Large False Solomon's Seal		
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		
Viola adunca	Field Violet		
Viola glabella	Woods Violet		X
Viola orbiculata	Dark Woods Violet		X
Viola sp.	Violet		
Analgesics, Anesthetics			
Heracleum lanatum	Cow Parsnip	Nerve Pain	X
Salix sp.	Willow		
Spirea douglasii	Spirea		X
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	

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

Uses	Name	Notes	Seen
Gallium triflorum	Bedstraw, Cleavers	Burns	X
Pedicularis bracteosa	Cobrahead	Smoke	X
Pedicularis groenlandica	Elephant's Head	Smoke	X
Pedicularis racemosa	Parrot's Beak	Smoke	X
Plantago major	Plantain	Burns	
Prunella vulgaris	Self Heal, Heal All	Salve	
Trillium ovatum	Trillium	No Pick, Uterine Astringent	X
Vaccinium membranaceum	Mountain Huckleberry	Blood sugar, flavonoids	X
Vaccinium ovalifolium	Huckleberry		X
Vaccinium uliginosum	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	
Cicuta douglasii	Water Hemlock	Very similar to other umbels	
Hypopitys monotropa	Hairy Pinesap	Saprophyte	
Lysichiton americanus (L. americanum)	Skunk Cabbage		X
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 carolina	Mourning Cloak Grasshopper	Clickity-clickity	
Doe			
Elk Bed			X
Elk Prints			X

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

Uses	Name	Notes	Seen
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 11-12, 2018

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 *Veratrum viride* and *Epilobium angustifolium*
- 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 the 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 lanatum* seeds for tincture.

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 spectabilis*, salmonberry
- *Rubus ursinus*, blackberry
- *Gaultheria ovatifolia*, baby salal
- *Ribes lacustre*, swamp currant