

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

August 8-9, 10-11, 2024

Middle Elevation Coniferous Woods and Riparian 4200'-4800'

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

Uses	Name	Notes	Seen
<b>Food: Roots</b>			
	Calochortus sp.	Cat's Ear's	
	Cirsium remotifolium (C. callilepis)	Mountain Thistle	
	Hypochaeris radicata	False dandelion	X
	Lilium columbianum	Tiger Lily	No Pick
	Lilium washingtonianum	Cascade Lily	No Pick
	Osmorhiza berteroi (O. chilensis)	Sweet Cicely	
	Platanthera dilatata (Habenaria d.)	White Rein Orchid	No Pick
	Platanthera stricta (Habenaria saccata)	Green Rein Orchid	No Pick
	Primula jeffreyi (Dodecatheon j.)	Shooting Star	X
	Xerophyllum tenax	Beargrass	X
<b>Food: Greens and Potherbs</b>			
	Acer circinatum	Vine Maple	
	Achlys triphylla	Vanilla Leaf	
	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	
	Claytonia perfoliata (Montia p.)	Miner's Lettuce	
	Claytonia sibirica (Montia s.)	Candyflower	
	Cornus unalaschkensis (C. canadensis)	Bunchberry	X
	Epilobium glandulosum	Willow Herb	Turions
	Erythranthe guttata (Mimulus g.)	Yellow Monkeyflower	
	Erythranthe moschata (Mimulus moschatus)	Musk Monkeyflower	
	Gallium oreganum	Bedstraw, Cleavers	
	Gallium triflorum	Bedstraw, Cleavers	
	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	
	Phacelia hastata	Phacelia	
	Plantago major	Plantain	

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

Uses	Name	Notes	Seen
Platanthera dilatata (Habenaria d.)	White Rein Orchid	No Pick	
Platanthera stricta (Habenaria saccata)	Green Rein Orchid	No Pick	X
Primula jeffreyi (Dodecatheon j.)	Shooting Star		X
Prunella vulgaris	Self Heal, Heal All		
Rosa sp.	Wild Rose		
Rumex acetosella	Sheep Sorrel		
Stachys cooleyae	Hedge Nettle		X
Trifolium longipes	Native Clover		
Trillium ovatum	Trillium	No Pick	X
Viola adunca	Field Violet		
Viola glabella	Woods Violet		
Viola orbiculata	Dark Woods Violet		X
Viola sp.	Violet		

### Food: Fruits

Amelanchier alnifolia	Serviceberry		X
Arctostaphylos nevadensis	Kinnikinnik		
Calochortus sp.	Cat's Ear's		
Chamaenerion angustifolium (Epilobium a.)	Fireweed		X
Chimaphila menziesii	Baby Pipsissewa	Unripe	
Chimaphila umbellata	Pipsissewa	Unripe	
Chrysolepis chrysophylla	Golden Chinquapin		
Cornus unalaschkensis (C. canadensis)	Bunchberry		X
Epilobium glandulosum	Willow Herb	Turions	
Fragaria vesca	Wild Strawberry		X
Gaultheria ovatifolia	Baby Salal		
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	Cathartic	X
Maianthemum stellatum (Smilacina stellata)	Small False Solomon's Seal	Cathartic	X
Orthilia secunda (Pyrola s.)	One-sided Pyrola		
Primula jeffreyi (Dodecatheon j.)	Shooting Star		X
Prosartes hookeri (Disporum h.)	Fairy Bells		
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		
Rubus leucodermis	Blackcap Raspberry		

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

Uses	Name	Notes	Seen
Rubus nutkanus (R. parviflorus)	Thimbleberry		
Rubus spectabilis	Salmonberry		X
Rubus ursinus	Blackberry		X
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

### Food: Spices/Teas

Achlys triphylla	Vanilla Leaf		
Angelica arguta	Angelica		
Angelica genuflexa	Angelica		
Asarum caudatum	Wild Ginger		
Fragaria vesca	Wild Strawberry		X
Heracleum maximum (H. lanatum)	Cow Parsnip	Strong	X
Ligusticum grayi	Oshala		
Osmorhiza berteroi (O. chilensis)	Sweet Cicely		
Prunella vulgaris	Self Heal, Heal All	Simple	
Rosa sp.	Wild Rose		
Rubus lasiococcus	Dwarf Bramble		
Rubus leucodermis	Blackcap Raspberry		
Rubus nutkanus (R. parviflorus)	Thimbleberry		
Rubus spectabilis	Salmonberry		X
Rubus ursinus	Blackberry		X
Trifolium longipes	Native Clover		

### Alteratives incl. Diaphoretics and Diuretics

Achillea millefolium	Yarrow	Diaphoretic
Angelica arguta	Angelica	Reproductive
Angelica genuflexa	Angelica	
Arctostaphylos nevadensis	Kinnikinnik	Diuretic
Asarum caudatum	Wild Ginger	Diaphoretic
Ceanothus velutinus	Red Root	
Chimaphila menziesii	Baby Pipsisewa	Diuretic
Chimaphila umbellata	Pipsisewa	Diuretic
Gallium oreganum	Bedstraw, Cleavers	Diuretic
Gallium triflorum	Bedstraw, Cleavers	Diuretic
Ligusticum grayi	Oshala	
Oplopanax horridus (O. horridum)	Devil's Club	Alterative
Orthilia secunda (Pyrola s.)	One-sided Pyrola	Diuretic

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

Uses	Name	Notes	Seen
Pyrola picta	White-veined Pyrola	Diuretic	
Rudbeckia occidentalis	Coneflower	Diuretic	X
Sambucus racemosa	Red Elder	Diaphoretic	
Vaccinium membranaceum	Mountain Huckleberry	Diuretic	X
Vaccinium ovalifolium	Oval-Leaf Huckleberry	Diuretic	X
Vaccinium uliginosum	Bog Huckleberry	Diuretic	X

### Aromatic/Bitters

Achillea millefolium	Yarrow		
Angelica arguta	Angelica		
Angelica genuflexa	Angelica		
Artemisia douglasiana	Mugwort		X
Asarum caudatum	Wild Ginger		
Heracleum maximum (H. lanatum)	Cow Parsnip	Strong	X
Ligusticum grayi	Oshala		
Osmorhiza berteroi (O. 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		X
Arctostaphylos nevadensis	Kinnikinnik		
Artemisia douglasiana	Mugwort		X
Bistorta bistortoides (Polygonum b.)	Mountain Bistort		
Ceanothus velutinus	Red Root		
cf. Potentilla sp.	Potentilla		
Chamaenerion angustifolium (Epilobium a.)	Fireweed		X
Chimaphila menziesii	Baby Pipsissewa		
Chimaphila umbellata	Pipsissewa		
Cornus unalaschkensis (C. canadensis)	Bunchberry		X
Fragaria vesca	Wild Strawberry		X
Gaultheria ovatifolia	Baby Salal		
Geum macrophyllum	Geum, Avens		
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		

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

Uses	Name	Notes	Seen
Rubus leucodermis	Blackcap Raspberry		
Rubus nutkanus (R. parviflorus)	Thimbleberry		
Rubus spectabilis	Salmonberry		X
Rubus ursinus	Blackberry		X
Salix sp.	Willow		
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
Mertensia sp.	Oregon Bluebells	External (PA's)	
Penstemon sp.	Penstemon	Emollient	
Plantago major	Plantain		
Viola adunca	Field Violet		
Viola glabella	Woods Violet		
Viola orbiculata	Dark Woods Violet		X
Viola sp.	Violet		

### Analgesics, Anesthetics

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

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

Uses	Name	Notes	Seen
<b>Misc.</b>			
<i>Achillea millefolium</i>	Yarrow	Hemostatic	
<i>Anaphalis margaritacea</i>	Pearly Everlasting	Pretty	X
<i>Arctostaphylos nevadensis</i>	Kinnikinnik	Smoke	
<i>Arnica cordifolia</i>	Heart Leaf Arnica	Injury	X
<i>Artemisia douglasiana</i>	Mugwort	Beer, Dreams, Smoke	X
<i>Ceanothus velutinus</i>	Red Root	Soap	
<i>Chimaphila menziesii</i>	Baby Pipsissewa	Root Beer, Smoke	
<i>Chimaphila umbellata</i>	Pipsissewa	Root Beer, Smoke	
<i>Gallium oreganum</i>	Bedstraw, Cleavers	Burns	
<i>Gallium triflorum</i>	Bedstraw, Cleavers	Burns	
<i>Hypericum anagalloides</i>	Bog St. John's Wort	Anti-viral	X
<i>Hypericum perforatum</i>	St. John's Wort	Anti-viral	X
<i>Hypericum scouleri</i> (H. formosum)	St. John's Wort	Anti-viral	X
<i>Leucanthemum vulgare</i> ( <i>Chrysanthemum</i> l.)	Ox Eye Daisy	Allergies	X
<i>Pedicularis bracteosa</i>	Cobrahead	Smoke	X
<i>Pedicularis groenlandica</i>	Elephant's Head	Smoke	X
<i>Pedicularis racemosa</i>	Parrot's Beak	Smoke	X
<i>Plantago major</i>	Plantain	Drawing Poultice, Burns	
<i>Prunella vulgaris</i>	Self Heal, Heal All	Salve	
<i>Trillium ovatum</i>	Trillium	No Pick, Uterine	X
		Astringent	
<i>Vaccinium membranaceum</i>	Mountain Huckleberry	Blood Sugar	X
<i>Vaccinium ovalifolium</i>	Oval-Leaf Huckleberry	Blood Sugar	X
<i>Vaccinium uliginosum</i>	Bog Huckleberry	Blood Sugar	X
<b>Topics of Botanical Interest</b>			
<i>Aconitum columbianum</i>	Monkshood	Very Poison	X
<i>Actaea rubra</i>	Baneberry		
<i>Boykinia major</i>	Boykinia	Possible Valerian	X
		Indicator	
<i>Cicuta douglasii</i>	Water Hemlock	Very similar to other umbels	
<i>Lysichiton americanus</i> (L. americanum)	Skunk Cabbage	Very Big Leaves	X
<i>Monotropa hypopitys</i> ( <i>Hypopitys</i> m.)	Hairy Pinesap	Mycotroph	
<i>Senecio triangularis</i>	Arrow Leaf Groundsel	PA's	X
<i>Veratrum californicum</i>	Veratrum	Very Poison	X
<i>Veratrum</i> sp.	Veratrum	Very Poison	
<i>Veratrum viride</i>	Veratrum	Very Poison	X
<b>Animal Interactions</b>			
<i>Aplodontia</i> Haying	Mountain Beaver Haying		X

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

Uses	Name	Notes	Seen
Aplodontia Holes	Mountain Beaver Holes		X
Bear Scat			
Brown Frogs, Big and Little			
Calliope Hummingbird			
Caterpillar			
Cinnabar Moths eating Senecio triangularis			
Deer Bed			
Deer Prints			
Deer Scat			
Deer Trails			
Dissosteira carolina	Carolina Grasshopper	Clickity-clickity	X
Doe			
Elk Bed			X
Elk moving in shrubs			X
Elk Prints			
Elk Scat			X
Elk Trails			X
Grouse			
Mazama pocket gopher mounds			X
Raven			
Red Tailed Hawk			
Red Tailed Hawk Tail Feather	Red Tailed Hawk Tail Feather		
Scat in Veratrum			

# Columbines School of Botanical Studies

## Summer Apprenticeship

### Class Highlights Trip #15-16

#### Places Visited

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

#### Topics Covered

- Plant Family Characteristics
- Economic Botanical Survey
- Onagraceae: Flowers 4-merous, inferior ovary
- Keyed out *Veratrum viride* and *Chamaenerion angustifolium* (*Epilobium a.*)
- *Aplodontia rufa* ssp. *rainieri* 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* or other wetland species.
- How much to harvest? Learn to limit the harvest to specific amounts to fit the processing time and supplies. For 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

- *Vaccinium membranaceum*, huckleberry
- *Vaccinium ovalifolium*, huckleberry
- *Gaultheria ovatifolia*, baby salal
- *Rubus ursinus*, dewberry
- *Amelanchier alnifolia*, service berry
- *Rubus spectabilis*, salmonberry
- *Fragaria* sp., wild strawberry