

Columbines School of Botanical Studies
Summer Apprenticeship
Class Highlights Trip #15-16
August 3-4, 2023

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
- *Fragaria* sp., wild strawberry

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 Summer Apprenticeship Program
 Trip #15, 16 Economic Botanical Survey

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Middle Elevation Coniferous Woods and Riparian 4200'-4800'

<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
	Hypochaeris radicata	False dandelion	
	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
	Primula jeffreyi (Dodecatheon j.)	Shooting Star	X
	Xerophyllum tenax	Beargrass	X
Food: Greens and Potherbs			
	Acer circinatum	Vine Maple	
	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	
	Cirsium remotifolium (C. callilepis)	Mountain Thistle	X
	Claytonia perfoliata (Montia p.)	Miner's Lettuce	
	Claytonia sibirica (Montia s.)	Candyflower	X
	Cornus unalaschkensis (C. canadensis)	Bunchberry	X
	Epilobium glandulosum	Willow Herb	Turions
	Erythranthe guttata (Mimulus g.)	Yellow Monkeyflower	X
	Erythranthe moschata (Mimulus moschatus)	Musk Monkeyflower	
	Gallium oreganum	Bedstraw, Cleavers	X
	Gallium triflorum	Bedstraw, Cleavers	
	Hydrophyllum tenuipes	Waterleaf	X
	Hypochaeris radicata	False dandelion	
	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 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	X
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	
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
Arctostaphylos nevadensis	Kinnikinnik		
Calochortus sp.	Cat's Ear's		
Chamaenerion angustifolium (Epilobium a.)	Fireweed		
Chimaphila menziesii	Baby Pipsissewa	Unripe	
Chimaphila umbellata	Pipsissewa	Unripe	X
Chrysolepis chrysophylla	Golden Chinquapin		
Cornus unalaschkensis (C. canadensis)	Bunchberry		X
Epilobium glandulosum	Willow Herb	Turions	
Fragaria virginiana	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	
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		

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		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	
Vaccinium membranaceum	Mountain Huckleberry		
Vaccinium ovalifolium	Oval-Leaf Huckleberry		X
Vaccinium uliginosum	Bog Huckleberry		
Xerophyllum tenax	Beargrass		X

Food: Spices/Teas

Achlys triphylla	Vanilla Leaf		X
Angelica arguta	Angelica		
Angelica genuflexa	Angelica		
Asarum caudatum	Wild Ginger		X
Fragaria virginiana	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	
Rosa sp.	Wild Rose		
Rubus lasiococcus	Dwarf Bramble		
Rubus leucodermis	Blackcap Raspberry		
Rubus nutkanus (R. parviflorus)	Thimbleberry		X
Rubus spectabilis	Salmonberry		X
Rubus ursinus	Blackberry		
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	X
Ceanothus velutinus	Red Root		
Chimaphila menziesii	Baby Pipsissewa	Diuretic	
Chimaphila umbellata	Pipsissewa	Diuretic	X
Gallium oreganum	Bedstraw, Cleavers	Diuretic	X
Gallium triflorum	Bedstraw, Cleavers	Diuretic	
Ligusticum grayi	Oshala		

Columbines School of Botanical Studies
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Uses	Name	Notes	Seen
Oplopanax horridus (O. horridum)	Devil's Club	Alterative	X
Orthilia secunda (Pyrola s.)	One-sided Pyrola	Diuretic	
Pyrola picta	White-veined Pyrola	Diuretic	
Rudbeckia occidentalis	Coneflower	Diuretic	X
Sambucus racemosa	Red Elder	Diaphoretic	
Vaccinium membranaceum	Mountain Huckleberry	Diuretic	
Vaccinium ovalifolium	Oval-Leaf Huckleberry	Diuretic	X
Vaccinium uliginosum	Bog Huckleberry	Diuretic	

Aromatic/Bitters

Achillea millefolium	Yarrow		
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		
Arctostaphylos nevadensis	Kinnikinnik		
Bistorta bistortoides (Polygonum b.)	Mountain Bistort		X
Ceanothus velutinus	Red Root		
cf. Potentilla sp.	Potentilla		
Chamaenerion angustifolium (Epilobium a.)	Fireweed		
Chimaphila menziesii	Baby Pipsissewa		
Chimaphila umbellata	Pipsissewa		X
Cornus unalaschkensis (C. canadensis)	Bunchberry		X
Fragaria virginiana	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		X
Rubus spectabilis	Salmonberry		X
Rubus ursinus	Blackberry		
Salix sp.	Willow		X
Sorbus scopulina	Mountain Ash		X
Spirea douglasii	Spirea		
Stachys cooleyae	Hedge Nettle		X
Vaccinium membranaceum	Mountain Huckleberry		
Vaccinium ovalifolium	Oval-Leaf Huckleberry		X
Vaccinium uliginosum	Bog Huckleberry		

Calming Herbs, Nervines

Corallorhiza maculata	Spotted Coral Root	No Pick	X
Corallorhiza mertensiana	Western or Purple Coral Root	No Pick	
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		
Mertensia sp.	Oregon Bluebells	External (PA's)	X
Penstemon sp.	Penstemon	Emollient	
Plantago major	Plantain		
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		X
Spirea douglasii	Spirea		

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

Uses	Name	Notes	Seen
Misc.			
<i>Achillea millefolium</i>	Yarrow	Hemostatic	
<i>Anaphalis margaritacea</i>	Pearly Everlasting	Pretty	
<i>Arctostaphylos nevadensis</i>	Kinnikinnik	Smoke	
<i>Arnica cordifolia</i>	Heart Leaf Arnica	Injury	
<i>Ceanothus velutinus</i>	Red Root	Soap	
<i>Chimaphila menziesii</i>	Baby Pipsissewa	Root Beer, Smoke	
<i>Chimaphila umbellata</i>	Pipsissewa	Root Beer, Smoke	X
<i>Gallium oreganum</i>	Bedstraw, Cleavers	Burns	X
<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 Astringent	
<i>Vaccinium membranaceum</i>	Mountain Huckleberry	Blood Sugar	
<i>Vaccinium ovalifolium</i>	Oval-Leaf Huckleberry	Blood Sugar	X
<i>Vaccinium uliginosum</i>	Bog Huckleberry	Blood Sugar	
<i>Xerophyllum tenax</i>	Beargrass	Fiber	X
Topics of Botanical Interest			
<i>Aconitum columbianum</i>	Monkshood	Very Poison	X
<i>Actaea rubra</i>	Baneberry		X
<i>Boykinia major</i>	Boykinia	Possible Valerian Indicator	X
<i>Cicuta douglasii</i>	Water Hemlock	Very similar to other umbels	
<i>Lysichiton americanus</i> (L. americanum)	Skunk Cabbage	Very Big Leaves	
<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	
<i>Veratrum</i> sp.	Veratrum	Very Poison	
<i>Veratrum viride</i>	Veratrum	Very Poison	X
Animal Interactions			
<i>Aplodontia</i> Haying	Mountain Beaver Haying		

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Uses	Name	Notes	Seen
Aplodontia Holes	Mountain Beaver Holes		
Bear Scat			X
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			
Elk Prints			X
Elk Scat			
Elk Trails			
Gopher mounds			
Grouse			
Raven			
Red Tailed Hawk			
Red Tailed Hawk Tail Feather	Red Tailed Hawk Tail Feather		
Turd in Veratrum			