

Columbines School of Botanical Studies
 Summer Apprenticeship Program
 Trip #17 - 18 Economic Botanical Survey

Date: August 18-19, 20-21, 2016

Middle Elevation Coniferous Woods and Riparian 4800'

Food: Roots

Cirsium sp.
 Dodecatheon jeffreyi
 Lilium columbianum
 Osmorhiza chilensis
 Platanthera sp.
 Platanthera sp.
 Polygonum bistortoides
 Xerophyllum tenax

Thistle
Shooting Star
Tiger Lily No Pick
Sweet Cicely
Green Rein Orchid No Pick
White Rein Orchid No Pick
Mountain Bistort
Beargrass

Food: Greens and Potherbs

Achlys triphylla
 Caltha biflora
 Castilleja sp.
 Chrysanthemum leucanthemum
 Cirsium sp.
 Cornus canadensis
 Dodecatheon jeffreyi
 Epilobium angustifolium
 Gallium sp.
 Ligusticum grayi
 Lilium columbianum
 Mimulus guttatus
 Mimulus moschatus
 Montia sibirica
 Orthocarpus imbricatus
 Osmorhiza chilensis
 Phacelia sp.
 Plantago major
 Platanthera sp.
 Platanthera sp.
 Rosa sp.
 Stachys cooleyae
 Trifolium repens
 Trifolium wormsjoldii
 Trillium ovatum
 Viola glabella
 Viola orbiculata
 Xerophyllum tenax

Vanilla Leaf
Marsh Marigold Cooked
Paintbrush
Ox Eye Daisy
Thistle
Bunchberry
Shooting Star
Fireweed
Bedstraw, Cleavers
Oshala
Tiger Lily No Pick
Yellow Monkeyflower
Musk Monkeyflower
Candyflower
Owls Clover
Sweet Cicely
Phacelia
Plantain
Green Rein Orchid No Pick
White Rein Orchid No Pick
Wild Rose
Hedge Nettle
White Clover
Native Clover
Trillium No Pick
Woods Violet
Dark Woods Violet
Beargrass

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Food: Fruits

Amelanchier alnifolia	Serviceberry	
Chimaphila umbellata	Pipsissewa	Unripe
Cornus canadensis	Bunchberry	
Dodecatheon jeffreyi	Shooting Star	
Epilobium angustifolium	Fireweed	
Fragaria sp.	Wild Strawberry	
Lilium columbianum	Tiger Lily	No Pick
Lonicera involucrata	Twinberry	
Maianthemum racemosum (Smilacina racemosa)	Large False Solomon's Seal	
Maianthemum stellatum (Smilacina stellata)	Small False Solomon's Seal	
Nuphar polysepalum	Water lily	
Pyrola secunda	One-sided Pyrola	
Ribes lacustre	Swamp Currant	
Ribes sp.	Currant, Gooseberry	
Ribes viscosissimum	Sticky Currant	
Rosa sp.	Wild Rose	
Rubus lasiococcus	Dwarf Bramble	
Rubus parviflorus	Thimbleberry	
Rubus sp.(2)	Blackberry	
Rubus spectabilis	Salmonberry	
Sorbus sp.	Mountain Ash	
Trillium ovatum	Trillium	No Pick
Vaccinium membranaceum	Huckleberry	
Vaccinium sp. (2)	Huckleberry	
Xerophyllum tenax	Beargrass	

Food: Spices/Teas

Achlys triphylla	Vanilla Leaf	
Angelica arguta	Angelica	
Angelica genuflexa	Angelica	
Ceanothus velutinus	Red Root	Leaf
Fragaria sp.	Wild Strawberry	
Heracleum lanatum	Cow Parsnip	Strong
Ligusticum grayi	Oshala	
Osmorhiza chilensis	Sweet Cicely	
Rosa sp.	Wild Rose	
Rubus lasiococcus	Dwarf Bramble	
Rubus parviflorus	Thimbleberry	
Rubus sp.(2)	Blackberry	
Rubus spectabilis	Salmonberry	
Trifolium repens	White Clover	

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Trifolium wormskjoldii

Native Clover

Alteratives incl. Diaphoretics and Diuretics

Angelica arguta	Angelica	Reproductive
Angelica genuflexa	Angelica	Reproductive
Ceanothus velutinus	Red Root	Alterative
Chimaphila umbellata	Pipsissewa	Diuretic
Gallium sp.	Bedstraw	Diuretic
Hypericum formosum	St. John's Wort	
Hypericum perforatum	St. John's Wort	
Ligusticum grayi	Oshala	Anti-viral
Pyrola secunda	One-sided Pyrola	Diuretic
Rudbeckia sp.	Coneflower	Diuretic
Sambucus racemosa	Red Elder	Diaphoretic
Vaccinium membranaceum	Huckleberry	Diuretic
Vaccinium sp. (2)	Huckleberry	Diuretic

Aromatic/Bitters

Angelica arguta	Angelica	
Angelica genuflexa	Angelica	
Heracleum lanatum	Cow Parsnip	Strong
Ligusticum grayi	Oshala	
Osmorhiza chilensis	Sweet Cicely	
Pedicularis bracteosa	Cobrahead	Bitter
Pedicularis groenlandica	Elephant's Head	Bitter
Pedicularis racemosa	Parrot's Beak	Bitter

Astringents

Amelanchier alnifolia	Serviceberry
Anaphalis margaritacea	Pearly Everlasting
Ceanothus velutinus	Red Root
Chimaphila umbellata	Pipsissewa
Cornus canadensis	Bunchberry
Epilobium angustifolium	Fireweed
Fragaria sp.	Wild Strawberry
Geum macrophyllum	Geum
Polygonum bistortoides	Mountain Bistort
Populus trichocarpa	Cottonwood Buds
Potentilla sp.	Potentilla
Pyrola secunda	One-sided Pyrola
Ribes lacustre	Swamp Currant
Ribes viscosissimum	Sticky Currant
Rosa sp.	Wild Rose
Rubus lasiococcus	Dwarf Bramble

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Rubus parviflorus
 Rubus sp.(2)
 Rubus spectabilis
 Salix sp.
 Sorbus sp.
 Spirea sp.
 Stachys cooleyae
 Vaccinium membranaceum
 Vaccinium sp. (2)

Thimbleberry
Blackberry
Salmonberry
Willow
Mountain Ash
Spirea
Hedge Nettle
Huckleberry
Huckleberry

Calming Herbs, Nervines

Corallorhiza sp.
 Hypericum formosum
 Hypericum perforatum
 Pedicularis bracteosa
 Pedicularis groenlandica
 Pedicularis racemosa
 Stachys cooleyae
 Valeriana sitchensis

Coral Root No Pick
St. John's Wort
St. John's Wort
Cobrahead
Elephant's Head
Parrot's Beak
Hedge Nettle Mild
Valerian

Analgesics, Anesthetics

Heracleum lanatum
 Populus trichocarpa
 Salix sp.
 Spirea sp.

Cow Parsnip Nerve Pain
Cottonwood Buds
Willow
Spirea

Demulcents, Emollients

Goodyera oblongifolia
 Maianthemum racemosum (Smilacina racemosa)
 Maianthemum stellatum (Smilacina stellata)
 Mertensia paniculata
 Penstemon sp.

Rattlesnake Plantain No Pick
Large False Solomon's Seal
Small False Solomon's Seal
Oregon Bluebells External (PA's)
Penstemon Soothing to lips, skin, etc.

Misc.

Anaphalis margaritacea
 Ceanothus velutinus
 Chimaphila umbellata
 Chrysanthemum leucanthemum
 Gallium sp.
 Pedicularis bracteosa
 Pedicularis groenlandica
 Pedicularis racemosa

Pearly Everlasting Pretty
Red Root Soap
Pipsissewa Root Beer
Ox Eye Daisy Allergies
Bedstraw Burns
Cobrahead Smoke
Elephant's Head Smoke
Parrot's Beak Smoke

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Plantago major
 Trillium ovatum
 Vaccinium membranaceum
 Vaccinium sp. (2)
 Xerophyllum tenax

Plantain
Trillium
Huckleberry
Huckleberry
Beargrass

Drawing Poultice
 No Pick, Uterine Bleeding
 Blood sugar
 Blood sugar
 Fiber

Topics of Botanical Interest

Aconitum columbianum
 Actaea rubra
 Boykinia major
 Lysichiton americanus (L. americanum)
 Senecio triangularis
 Veratrum viride

Monkshood
Baneberry
Boykinia
Skunk Cabbage
Arrow Leafed Grounel
Veratrum

Very Poison

 Possible Valerian Indicator
 Very Big (3-4' leaves)
 PA's
 Very Poison

Animal Interactions

Caterpillar

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Class Highlights Trip 17-18

Places Visited:

Middle elevation coniferous woods, meadows, clearcuts, riparian
Low elevation roadside

Topics covered:

Apiaceae (Umbelliferae) taxonomy review

Keyed: *Heracleum lanatum*, *Ligusticum grayi*, *Daucus carota*

Poisons: *Conium maculatum*, *Aconitum columbianum*, *Cicuta douglasii*

Wildcrafting Principle: If you find an undisturbed meadow with harvestable herbs, look for a nearby clearcut for the same plants without the competition of a mature meadow. This is safer for root harvests. This leaves the meadow undisturbed to enjoy and study.

Located, harvested, processed the roots of *Valeriana sitchensis*

Located, harvested, processed the roots of *Ligusticum grayi*

Root washing: You can filter out dirt but you can't filter out poisons. Be 100% sure of identification and cleanliness when washing wildcrafted roots. Poisonous plant seeds or *Aconitum columbiana* bulbils and roots can hide in cracks in the wild roots.

Root Identification: We learned to identify a variety of our meadow flora by their roots.

Pharmacy: Ratios for diluting pure grain alcohol to specific percentages

Tasted the berries from 3 different kinds of *Vaccinium* spp.

Special lecture on wild edibles by Heron Brae