

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

Date: August 22-23, 24-25, 2019

Middle Elevation Coniferous Woods and Riparian 4800'

**Food: Roots**

|                                   |                          |         |
|-----------------------------------|--------------------------|---------|
| Cirsium sp.                       | <b>Thistle</b>           |         |
| Dodecatheon jeffreyi              | <b>Shooting Star</b>     |         |
| Lilium columbianum                | <b>Tiger Lily</b>        | No Pick |
| Osmorhiza berteroi (O. chilensis) | <b>Sweet Cicely</b>      |         |
| Platanthera sp.                   | <b>Green Rein Orchid</b> | No Pick |
| Platanthera sp.                   | <b>White Rein Orchid</b> | No Pick |
| Xerophyllum tenax                 | <b>Beargrass</b>         |         |

**Food: Greens and Potherbs**

|   |                            |                     |
|---|----------------------------|---------------------|
| Achlys triphylla                          | <b>Vanilla Leaf</b>        |                     |
| Caltha biflora                            | <b>Marsh Marigold</b>      | Pot Herb            |
| Castilleja sp.                            | <b>Paintbrush</b>          | Concentrates Toxins |
| Chamaenerion angustifolium (Epilobium a.) | <b>Fireweed</b>            |                     |
| Cirsium sp.                               | <b>Thistle</b>             |                     |
| Claytonia sibirica (Montia s.)            | <b>Candyflower</b>         |                     |
| Cornus unalaschkensis (C. canadensis)     | <b>Bunchberry</b>          |                     |
| Dodecatheon jeffreyi                      | <b>Shooting Star</b>       |                     |
| Erythranthe guttata (Mimulus g.)          | <b>Yellow Monkeyflower</b> |                     |
| Erythranthe moschata (Mimulus moschatus)  | <b>Musk Monkeyflower</b>   |                     |
| Gallium sp.                               | <b>Bedstraw, Cleavers</b>  |                     |
| Leucanthemum vulgare (Chrysanthemum l.)   | <b>Ox Eye Daisy</b>        |                     |
| Ligusticum grayi                          | <b>Oshala</b>              |                     |
| Lilium columbianum                        | <b>Tiger Lily</b>          | No Pick             |
| Orthocarpus imbricatus                    | <b>Owls Clover</b>         |                     |
| Osmorhiza berteroi (O. chilensis)         | <b>Sweet Cicely</b>        |                     |
| Phacelia sp.                              | <b>Phacelia</b>            |                     |
| Plantago major                            | <b>Plantain</b>            |                     |
| Platanthera sp.                           | <b>Green Rein Orchid</b>   | No Pick             |
| Platanthera sp.                           | <b>White Rein Orchid</b>   | No Pick             |
| Rosa sp.                                  | <b>Wild Rose</b>           |                     |
| Stachys cooleyae                          | <b>Hedge Nettle</b>        |                     |
| Trifolium repens                          | <b>White Clover</b>        |                     |
| Trifolium wormskjoldii                    | <b>Native Clover</b>       |                     |
| Trillium ovatum                           | <b>Trillium</b>            | No Pick             |
| Viola glabella                            | <b>Woods Violet</b>        |                     |
| Viola orbiculata                          | <b>Dark Woods Violet</b>   |                     |

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Xerophyllum tenax

**Beargrass**

**Food: Fruits**

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

**Food: Spices/Teas**

|                                   |                        |        |
|-----------------------------------|------------------------|--------|
| Achlys triphylla                  | <b>Vanilla Leaf</b>    |        |
| Angelica arguta                   | <b>Angelica</b>        |        |
| Angelica genuflexa                | <b>Angelica</b>        |        |
| Ceanothus velutinus               | <b>Red Root</b>        | Leaf   |
| Fragaria sp.                      | <b>Wild Strawberry</b> |        |
| Heracleum maximum (H. lanatum)    | <b>Cow Parsnip</b>     | Strong |
| Ligusticum grayi                  | <b>Oshala</b>          |        |
| Osmorhiza berteroi (O. chilensis) | <b>Sweet Cicely</b>    |        |
| Rosa sp.                          | <b>Wild Rose</b>       |        |
| Rubus lasiococcus                 | <b>Dwarf Bramble</b>   |        |
| Rubus nutkanus (R. parviflorus)   | <b>Thimbleberry</b>    |        |

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|                        |                      |
|------------------------|----------------------|
| Rubus sp.(2)           | <b>Blackberry</b>    |
| Rubus spectabilis      | <b>Salmonberry</b>   |
| Trifolium repens       | <b>White Clover</b>  |
| Trifolium wormskjoldii | <b>Native Clover</b> |

**Alteratives incl. Diaphoretics and Diuretics**

|                              |                              |              |
|------------------------------|------------------------------|--------------|
| Angelica arguta              | <b>Angelica</b>              | Reproductive |
| Angelica genuflexa           | <b>Angelica</b>              | Reproductive |
| Ceanothus velutinus          | <b>Red Root</b>              | Alterative   |
| Chimaphila umbellata         | <b>Pipsissewa</b>            | Diuretic     |
| Gallium sp.                  | <b>Bedstraw</b>              | Diuretic     |
| Ligusticum grayi             | <b>Oshala</b>                |              |
| Orthilia secunda (Pyrola s.) | <b>One-sided Pyrola</b>      | Diuretic     |
| Rudbeckia occidentalis       | <b>Coneflower</b>            | Diuretic     |
| Sambucus racemosa            | <b>Red Elder</b>             | Diaphoretic  |
| Vaccinium membranaceum       | <b>Mountain Huckleberry</b>  | Diuretic     |
| Vaccinium ovalifolium        | <b>Oval Leaf Huckleberry</b> | Diuretic     |

**Aromatic/Bitters**

|                                   |                        |        |
|-----------------------------------|------------------------|--------|
| Angelica arguta                   | <b>Angelica</b>        |        |
| Angelica genuflexa                | <b>Angelica</b>        |        |
| Heracleum maximum (H. lanatum)    | <b>Cow Parsnip</b>     | Strong |
| Ligusticum grayi                  | <b>Oshala</b>          |        |
| Osmorhiza berteroi (O. chilensis) | <b>Sweet Cicely</b>    |        |
| Pedicularis bracteosa             | <b>Cobrahead</b>       | Bitter |
| Pedicularis groenlandica          | <b>Elephant's Head</b> | Bitter |
| Pedicularis racemosa              | <b>Parrot's Beak</b>   | Bitter |

**Astringents**

|   |                           |
|---|---------------------------|
| Amelanchier alnifolia                     | <b>Serviceberry</b>       |
| Anaphalis margaritacea                    | <b>Pearly Everlasting</b> |
| Bistorta bistortoides (Polygonum b.)      | <b>Mountain Bistort</b>   |
| Ceanothus velutinus                       | <b>Red Root</b>           |
| cf. Potentilla sp.                        | <b>Potentilla</b>         |
| Chamaenerion angustifolium (Epilobium a.) | <b>Fireweed</b>           |
| Chimaphila umbellata                      | <b>Pipsissewa</b>         |
| Cornus unalaschkensis (C. canadensis)     | <b>Bunchberry</b>         |
| Fragaria sp.                              | <b>Wild Strawberry</b>    |
| Geum macrophyllum                         | <b>Geum, Avens</b>        |
| Orthilia secunda (Pyrola s.)              | <b>One-sided Pyrola</b>   |
| Populus trichocarpa                       | <b>Cottonwood Buds</b>    |
| Ribes lacustre                            | <b>Swamp Currant</b>      |
| Ribes viscosissimum                       | <b>Sticky Currant</b>     |

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|                                 |                              |
|---------------------------------|------------------------------|
| Rosa sp.                        | <b>Wild Rose</b>             |
| Rubus lasiococcus               | <b>Dwarf Bramble</b>         |
| Rubus nutkanus (R. parviflorus) | <b>Thimbleberry</b>          |
| Rubus sp.(2)                    | <b>Blackberry</b>            |
| Rubus spectabilis               | <b>Salmonberry</b>           |
| Salix sp.                       | <b>Willow</b>                |
| Sorbus sp.                      | <b>Mountain Ash</b>          |
| Spirea sp.                      | <b>Spirea</b>                |
| Stachys cooleyae                | <b>Hedge Nettle</b>          |
| Vaccinium membranaceum          | <b>Mountain Huckleberry</b>  |
| Vaccinium ovalifolium           | <b>Oval Leaf Huckleberry</b> |

**Calming Herbs, Nervines**

|                                  |                        |         |
|----------------------------------|------------------------|---------|
| Corallorhiza sp.                 | <b>Coral Root</b>      | No Pick |
| Hypericum perforatum             | <b>St. John's Wort</b> |         |
| Hypericum scouleri (H. formosum) | <b>St. John's Wort</b> |         |
| Pedicularis bracteosa            | <b>Cobrahead</b>       |         |
| Pedicularis groenlandica         | <b>Elephant's Head</b> |         |
| Pedicularis racemosa             | <b>Parrot's Beak</b>   |         |
| Stachys cooleyae                 | <b>Hedge Nettle</b>    | Mild    |
| Valeriana sitchensis             | <b>Valerian</b>        |         |

**Demulcents, Emollients**

|  |                                   |                 |
|--|-----------------------------------|-----------------|
| Goodyera oblongifolia                      | <b>Rattlesnake Plantain</b>       | No Pick         |
| Maianthemum racemosum (Smilacina racemosa) | <b>Large False Solomon's Seal</b> |                 |
| Maianthemum stellatum (Smilacina stellata) | <b>Small False Solomon's Seal</b> |                 |
| Mertensia paniculata                       | <b>Oregon Bluebells</b>           | External (PA's) |
| Penstemon sp.                              | <b>Penstemon</b>                  | Emollient       |

**Analgesics, Anesthetics**

|                                |                        |            |
|--------------------------------|------------------------|------------|
| Heracleum maximum (H. lanatum) | <b>Cow Parsnip</b>     | Nerve Pain |
| Populus trichocarpa            | <b>Cottonwood Buds</b> |            |
| Salix sp.                      | <b>Willow</b>          |            |
| Spirea sp.                     | <b>Spirea</b>          |            |

**Misc.**

|                        |                           |                  |
|------------------------|---------------------------|------------------|
| Anaphalis margaritacea | <b>Pearly Everlasting</b> | Pretty           |
| Ceanothus velutinus    | <b>Red Root</b>           | Soap             |
| Chimaphila umbellata   | <b>Pipsissewa</b>         | Root Beer, Smoke |
| Gallium sp.            | <b>Bedstraw</b>           | Burns            |

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|   |                              |                             |
|---|------------------------------|-----------------------------|
| Hypericum perforatum                    | <b>St. John's Wort</b>       | Anti-viral                  |
| Hypericum scouleri (H. formosum)        | <b>St. John's Wort</b>       | Anti-viral                  |
| Leucanthemum vulgare (Chrysanthemum l.) | <b>Ox Eye Daisy</b>          | Allergies                   |
| <br>                                    |                              |                             |
| Pedicularis bracteosa                   | <b>Cobrahead</b>             | Smoke                       |
| Pedicularis groenlandica                | <b>Elephant's Head</b>       | Smoke                       |
| Pedicularis racemosa                    | <b>Parrot's Beak</b>         | Smoke                       |
| Plantago major                          | <b>Plantain</b>              | Drawing Poultice, Burns     |
| Trillium ovatum                         | <b>Trillium</b>              | No Pick, Uterine Astringent |
| Vaccinium membranaceum                  | <b>Mountain Huckleberry</b>  | Blood Sugar                 |
| Vaccinium ovalifolium                   | <b>Oval Leaf Huckleberry</b> | Blood Sugar                 |
| Xerophyllum tenax                       | <b>Beargrass</b>             | Fiber                       |

**Topics of Botanical Interest**

|                                       |                             |                             |
|---------------------------------------|-----------------------------|-----------------------------|
| Aconitum columbianum                  | <b>Monkshood</b>            | Very Poison                 |
| Actaea rubra                          | <b>Baneberry</b>            |                             |
| Boykinia major                        | <b>Boykinia</b>             | Possible Valerian Indicator |
| Lysichiton americanus (L. americanum) | <b>Skunk Cabbage</b>        | Very Big Leaves             |
| Senecio triangularis                  | <b>Arrow Leaf Groundsel</b> | PA's                        |
| Veratrum viride                       | <b>Veratrum</b>             | 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

Keyed: *Heracleum maximum*, *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.

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

Special lecture on wild edibles by Heron Brae