

Columbines School of Botanical Studies
 Second Year Apprenticeship Program
 Trip #9-10 Alpine Zone

Date: July 30-31, 2016
 Trip 9, 10

Subalpine to Alpine Zone 6225' to 8002'
<http://www.botanicalstudies.net/botany/plantlists.php>

| Family | Name | Ecosystem | Seen |
|-----------------------------------|---|----------------------------|--------------|
| Ophioglossaceae | | | |
| | Sceptridium multifidum (Botrychium silaifolium) | Grape Fern | H |
| Cyperaceae | | | |
| | Carex spp. | Sedge | |
| Liliaceae | | | |
| | Clintonia uniflora | Queen's Cup | lower H to T |
| | Erythronium grandiflorum | Glacier Lily | H to C |
| Asparagaceae (Liliaceae) | | | |
| | Maianthemum stellatum (Smilacina stellata) | Small False Solomon's Seal | lower H to T |
| Melanthiaceae (Liliaceae) | | | |
| | Trillium ovatum | Trillium | lower H,C,T |
| | Veratrum viride | False Hellebore | H X |
| Tofieldiaceae (Liliaceae) | | | |
| | Triantha occidentalis (Tofieldia occidentalis) | Tofieldia | H X |
| Orchidaceae | | | |
| | Platanthera dilatata (Habenaria dilatata) | White Rein Orchid | H to T X |
| | Platanthera stricta (Habenaria saccata) | Green Rein Orchid | H to T |
| | Spiranthes romanzoffiana | Twisted Sister | H to T |
| Salicaceae | | | |
| | Salix spp. | Willow | X |
| Polygonaceae | | | |
| | Eriogonum pyrolifolium | Alpine Buckwheat | H X |
| | Eriogonum umbellatum | Sulfur Flower | H to T X |
| | Polygonum bistortoides | Mountain Bistort | H to C |
| | Polygonum newberryi | Newberry's Knotweed | A to H X |
| Montiaceae (Portulacaceae) | | | |
| | Lewisia triphylla | Lewisia | A to H |
| | Montia perfoliata | Miner's Lettuce | H to C |
| | Spraguea umbellata | Pussy Paws | A to H X |

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| Ranunculaceae | | | |
| Aconitum columbianum | Monkshood | | |
| Anemone drummondii | Drummond's Anemone | H | X |
| Anemone lyallii | Small Windflower | H to T | |
| Anemone occidentalis | Mountain Pasque Flower | H | |
| Aquilegia formosa | Columbine | H to T | |
| Caltha leptosepala | Marsh Marigold | H | X |
| Delphinium menziesii | Larkspur | H to T | X |
| Delphinium sp. | Larkspur | | |
| Ranunculus alismaefolius | Marsh Buttercup | C to H | |
| Ranunculus sp. | Marsh Buttercup | | X |
| Papaveraceae (Fumariaceae) | | | |
| Dicentra formosa | Bleeding Heart | H to HT | |
| Brassicaceae (Cruciferae) | | | |
| Arabis sp. | Rock Cress | | |
| Draba sp. | Draba | | |
| Saxifragaceae | | | |
| Mitella breweri | Small Bishop's Cap | H to C | |
| Mitella pentandra | Five Point Mitrewort | H to C | X |
| Saxifraga oregana | Oregon Saxifrage | H to HT | X |
| Saxifraga tolmiei | Alpine Saxifrage | A and upper H | |
| Celastraceae | | | |
| Parnassia cirrata (intermedia) | Grass of Parnassus | H to C | |
| Rosaceae | | | |
| Fragaria spp. | Strawberry | lower H to T | |
| Leutkea pectinata | Partridge Foot | H to A | X |
| Potentilla breweri | Cinquefoil | lower H and C | X |
| Potentilla flabellifolia | Cinquefoil | H | X |
| Potentilla palustris | Swamp Potentilla | H to T | |
| Potentilla sp. | Potentilla | | |
| Sibbaldia procumbens | Creeping Sibbaldia | A | X |
| Sorbus occidentalis | Mountain Ash | H | |
| Fabaceae (Leguminosae) | | | |
| Lupinus andersonii | Lupine | H to AT | |
| Lupinus lepidus spp. lyallii | Lupine | A to H | X |
| Lupinus sp. | Lupine | | X |
| Trifolium longipes | Wild Clover | H to T | X |

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| | Trifolium spp. | Clover | |
| Celastraceae (Saxifragaceae) | | | |
| | Parnassia cirrata (intermedia) | Grass of Parnassus | H to C |
| Hypericaceae | | | |
| | Hypericum anagalloides | Bog St. John's Wort | H to HT |
| Violaceae | | | |
| | Viola sp. | Violet | |
| Onagraceae | | | |
| | Epilobium angustifolium | Fireweed | |
| | Epilobium sp. | Willow Herb | |
| Apiaceae (Umbelliferae) | | | |
| | Ligusticum grayi | Oshala | H to C X |
| | Lomatium martindalei | Biscuit Root | H X |
| | Osmorhiza chilensis | Sweet Cicely | H to T |
| | Unidentified white Umbelliferae | | |
| Cornaceae | | | |
| | Cornus canadensis | Bunch Berry | H to HT |
| Ericaceae | | | |
| | Arctostaphylos nevadensis | Kinnikinnik | H to C |
| | Cassiope mertensiana | Mountain Heather | A to lower H |
| | Chimaphila umbellata | Pipsissewa | lower H to C |
| | Gaultheria humifusa | Alpine Gaultheria | H |
| | Hypopitys fimbriata | Fringed Pine Sap | H to T |
| | Kalmia microphylla | Kalmia | H X |
| | Phyllodoce empetriformis | Pink Mountain Heather | A to H X |
| | Pterospora andromedea | Pine Drops | |
| | Pyrola secunda | One Sided Pyrola | H to C |
| | Vaccinium scoparium | Grouse Berry | H to C X |
| | Vaccinium spp. | Huckleberry | |
| Primulaceae | | | |
| | Dodecatheon jeffreyi | Shooting Star | H X |
| Polemoniaceae | | | |
| | Polemonium spp. | Polemonium | |

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| Hydrophyllaceae | | | |
| Phacelia sp. | Phacelia | | |
| Orobanchaceae (Scrophulariaceae) | | | |
| Castilleja arachnoidea | Native American Paintbrush | H | X |
| Castilleja miniata | Native American Paintbrush | H | X |
| Castilleja oreopola | Native American Paintbrush | A to H | X |
| Castilleja suksdorfii | Native American Paintbrush | H | X |
| Pedicularis attolens | Baby Elephant's Head | H to C | X |
| Pedicularis bracteosa | Cobra's Head | H to C | |
| Pedicularis groenlandica | Elephant's Head | H to C | X |
| Phrymaceae (Scrophulariaceae) | | | |
| Mimulus guttatus | Monkeyflower | | X |
| Mimulus lewisii | Great Purple Monkeyflower | H to C | X |
| Mimulus moschatus | Musk Monkeyflower | H to T | |
| Mimulus primuloides | Primrose Monekyflower | H to T | X |
| Plantaginaceae (Scrophulariaceae) | | | |
| Penstemon cinicola | Penstemon | H to mostly AT | X |
| Penstemon davidsonii | Penstemon | A to H | X |
| Veronica sp. | Veronica, Speedwell | | |
| Veronica wormskjoldii | Veronica, Speedwell | H | X |
| Adoxaceae (Caprifoliaceae) | | | |
| Sambucus sp. | Red Elderberry | H to HT | X |
| Linnaeaceae (Caprifoliaceae) | | | |
| Linnaea borealis | Twinflower | C | |
| Valerianaceae | | | |
| Valeriana sitchensis | Valerian | H | X |
| Asteraceae (Compositae) | | | |
| Achillea millefolium | Yarrow | H to T | |
| Agoseris aurantiaca | Orange Mountain Dandelion | H | X |
| Anaphalis margaritacea | Pearly Everlasting | H to T | X |
| Antennaria sp. | Everlasting | | X |
| Arnica mollis | Hairy Arnica | H | X |
| Aster alpigenus | Aster | A to H | |
| Aster shastensis | Shasta Aster | H | |
| Aster sp. | Aster | | X |
| Chrysanthemum leucanthemum | Ox Eye Daisy | | |

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| DYC | Damn Yellow Compositae | | |
| <i>Erigeron peregrinus</i> | Daisy | A to H | |
| <i>Hieracium albiflorum</i> | White Hawkweed | A to C | |
| <i>Hieracium gracile</i> | Alpine Hawkweed | H to A | |
| <i>Microseris alpestris</i> | Alpine Dandelion | H to A | X |
| <i>Raillardella scapesa</i> | Raillardella | H to A | |
| <i>Senecio</i> sp. | Groundsel | | X |
| <i>Senecio triangularis</i> | Arrow Leaf Groundsel | lower H to C | X |