

Sunday 15 July 2012

Hike Onion Camp to Whetstone Butte

Leaders: Lee Webb (retired Forest Service Wildlife Biologist) and Karen McCullough (Retired Forest Service Botanist).

Difficulty: Moderate, on trail. **Altitude Gain:** 300'

Altitude: Starting elevation approximately 4,100'.

Description: We will drive south on Hwy 199 to FS Road 4201 on the south side of Eight Dollar Mtn. If folks have not seen the *Darlingtonia* boardwalk (Howell's fen) at the BLM/NF boundary at the base of 8 \$ Mountain, we will make a stop. Then 14 miles on Rd 4201 to the top of the ridge – soon after we cross the bridge over the Illinois River, we will be within the perimeter of the 2002 Biscuit Fire. After a short detour to the Babyfoot Lake trailhead to see *Lupinus tracyi* and *Picea breweriana* we will drive to the parking area at the restroom near Onion Camp, and then hike approximately 1 mile or so each way along the ridge between the Illinois and Chetco Rivers. Much of the area is open serpentine – great vistas. The impact of the Biscuit Fire will be apparent, as well as vegetative recovery. *Lilium bolanderi* and *Xerophyllum tenax* are common, along with *Quercus sadleriana* and *Pinus jeffreyi*.

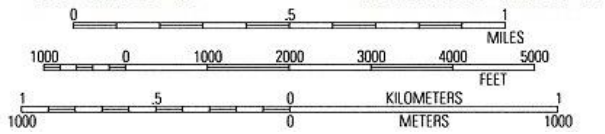
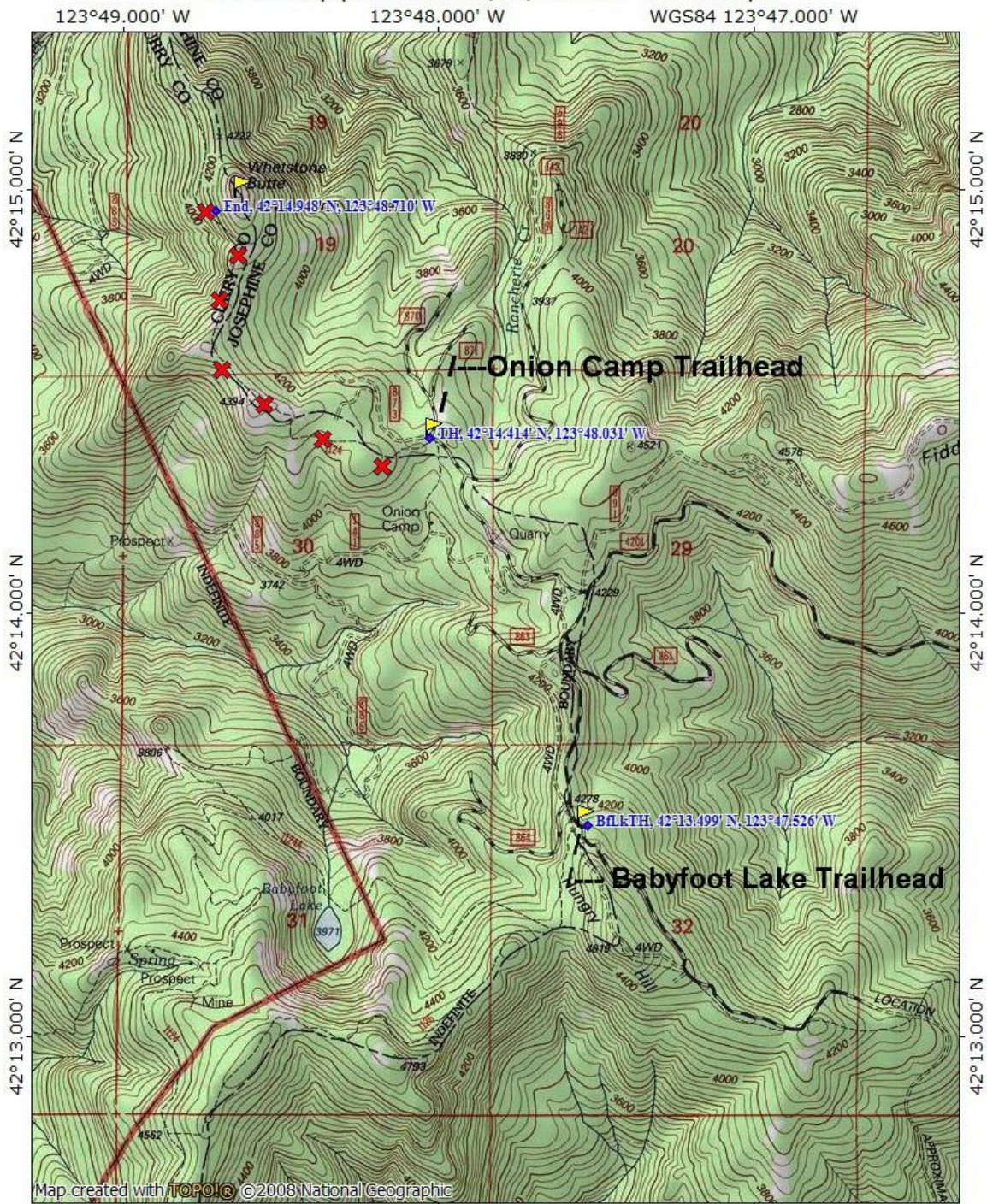
Appropriate Gear: Shoes with ankle support. Bring sunscreen, water, lunch. Trekking poles would be useful.

Group Size Limit: No limit. Car pooling encouraged.

Time: Meet 8:00 am, and return by 2:00 pm.

RT Mileage: Approximately 45 miles round trip from DCC.

TOPO! map printed on 02/26/12 from "Untitled.tpo"



The following Plant List is for Days Gulch Fen and Babyfoot Lake Botanical Area, but should include much of what we might discover on our field trip.

**Plant list for Days Gulch Fen and Babyfoot Lake Botanic Area
(With Selected Taxa from the Road Up)
Josephine County, Oregon--missing 2008 updates!**

List compiled by Linda Ann Vorobik & Veva Stansell
with reference to previous lists of many fellow botanists

Note: Order is alphabetical by scientific name under the following major groups:

I. Ferns, II. Gymnosperms, III. Dicots, IV. Monocots;

Family	Scientific Name	Common Name
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DG = Days Gulch BF = Babyfoot Lake RU = Road en route

I. FERNS AND FERN ALLIES - Reproduction by spores; JM Key to Families, Group 2, p. 62

Dennstaedtiaceae

	RU	<input type="checkbox"/>	<i>Pteridium aquilinum</i>	Braken Fern
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Dryopteridaceae

		BF	<input type="checkbox"/>	<i>Cystopteris fragilis</i>	Fragile Fern
	DG RU	BF	<input type="checkbox"/>	<i>Polystichum imbricans</i>	Imbricated Sword Fern

Polypodiaceae

		BF	<input type="checkbox"/>	<i>Polypodium glycyrrhiza</i>	Licorice Fern
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Pteridaceae

	RU	<input type="checkbox"/>	<i>Adiantum aleuticum</i>	Maidenhair Fern	
	DG RU	BF	<input type="checkbox"/>	<i>Aspidotis densa</i>	Indian Dream
	RU	BF	<input type="checkbox"/>	<i>Cheilanthes gracillima</i>	Lace Fern
		BF	<input type="checkbox"/>	<i>Cryptogramma acrosticoides</i>	Parsley Fern
		BF	<input type="checkbox"/>	<i>Pellaea brachyptera</i>	

Selaginellaceae

		<input type="checkbox"/>	<i>Selaginella</i> spp.	Little Clubmoss
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Thelypteridaceae

		BF	<input type="checkbox"/>	<i>Thelypteris</i> sp.	
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II. GYMNOSPERMS - Seeds not enclosed in ovaries; JM Key to Group 7, p.68

Cupressaceae - leaves scale-like, opposite or whorled, cones woody or with fleshy covering, cone scales fused to bracts

	DG RU	BF	<input type="checkbox"/>	<i>Calocedrus decurrens</i>	Insence Cedar
	DG		<input type="checkbox"/>	<i>Cupressus lawsoniana/alaskensis</i>	Port Orford Cedar
		BF	<input type="checkbox"/>	<i>Juniperus communis</i>	Juniper

Pinaceae - leaves needles, alternate or whorled, seeds in woody cones, cone-scales with subtending bracts free

		BF	<input type="checkbox"/>	<i>Abies amabilis?</i> (tangerine smell)	
	RU	BF	<input type="checkbox"/>	<i>A. concolor</i> var.	White Fir
		BF	<input type="checkbox"/>	<i>A. magnifica</i> var. <i>shastensis</i>	Red Fir
		BF	<input type="checkbox"/>	<i>Picea breweriana</i>	Brewer's Spruce
	DG RU	BF	<input type="checkbox"/>	<i>Pinus jeffreyi</i>	Jeffrey Pine
	RU	BF	<input type="checkbox"/>	<i>P. lambertiana</i>	Sugar Pine
	DG RU	BF	<input type="checkbox"/>	<i>P. monticola</i>	Western White Pine

- DG RU BF *Pseudotsuga menziesii* Douglas Fir
 BF *Tsuga mertensiana* Mountain Hemlock

Taxaceae

- BF *Taxus brevifolia* Western Yew

II. Dicots

ANGIOSPERMS: DICOTS - Plants with ovules in ovaries, 2 cotyledons, pinnate or palmate primary leaf veins, flower parts in multiples of (3's) 4's and 5's

Aceraceae - K 4-5 C 4-5 A 4-10 G 2, ovary superior, fruit = samara, leaves opposite, usually simple and palmately lobed, stipules lacking. Z. lumps Acereaceae w/Hippocastinaceae = Sapindaceae, p.153-160.

- RU *A. macrophyllum* Bigleaf Maple
 BF *A. glabrum* Douglas Maple

Anacardiaceae - K 5 C 5 A 10 G 3: sup ovary, fr = drupe, lvs alt, oft. pinn. comp., oft succulent, poisonous! Z. p.150-153.

- RU *Toxicodendron diversilobum* Poison Oak

Apiaceae (Umbelliferae) - K 0 (5) C 5 A 5 G 2, inferior ovary, fruit a schizocarp w/stylopodium and oil glands, pls w/ (freq. deeply divided to compound) leaves with sheathing stipules. Z. p.193-198.

- BF *Lomatium nudicaule* Pestle Parsnip
 BF *Lomatium triternatum*
 DG *Perideridia* sp.
 BF *Sanicula* sp.

Apocynaceae-

- BF *Apocynum androsaceum* Dogbane

Aristolochiaceae-

- RU *Asarum marmoratum* Wild Ginger

Asteraceae - ray and disk fls or ligulate fls, +/- chaff, fls in heads w/involucre bracts, K=pappus (absent or) of bristles, scales, etc. fr = achene), florets 5-merous, w/inferior, 2-carpellate ovary; style branches various. Z. 203-211.

- DG RU BF *Achillea millefolium* Yarrow
 BF *Antennaria rosea*
 BF *A. suffrutescens*
 BF *Arnica spp.*
 DG RU BF *Arnica cernua*
 BF *Arnica spathulata*
 DG *Balsamorhiza deltoidea* Balsamroot
 DG *Balsamorhiza sericea*
 BF *Blepharipappus* sp.
 BF *Cacaliopsis nardosmia*
 RU *Cirsium occidentale*
 BF *Erigeron (cervinus)*
 BF *Erigeron foliosus* Erigeron
 BF *Erigeron perigrinus* Erigeron
 DG RU BF *Eriophyllum lanatum* Oregon Sunshine
 DG *Helenium bigelovii/H. puberula*
 DG RU BF *Hieracium albiflorum* White-flowered Hawkweed
 RU *Hieracium ?scouleri* (yellow heads) Hawkweed

	BF	<input type="checkbox"/> <i>Luina hypoleuca</i>	Silverleaf
	RU	<input type="checkbox"/> <i>Senecio macounii</i>	Groundsel
	RU	<input type="checkbox"/> <i>S. hesperius</i>	Groundsel
	RU	<input type="checkbox"/> <i>S. integerrimus</i>	Groundsel
	DG	<input type="checkbox"/> <i>Wyethia</i> sp.	Mule's ears

Berberidaceae - K 3 + 3 C 3 + 3 A 4 - 18 G 2-3, ovary superior, unicarpellate, unilocular, fr=berry, anthers dehiscing by flaps; *Berberis* spp., mahonia, barberry (and *Achlys*, vanilla leaf, and *Vancouveria*, insideout flower).

	BF	<input type="checkbox"/> <i>Achlys triphylla</i> ssp. <i>triphylla</i>	Vanilla Leaf
	BF	<input type="checkbox"/> <i>Berberis nervosa</i>	Oregon Grape
	BF	<input type="checkbox"/> <i>B. repens</i>	Oregon Grape

Betulaceae - plants monoecious, flowers reduced to catkins, fruit a nut or samara, leaves alternate, simple, stipulate. Z. p.176-179.

	RU	<input type="checkbox"/> <i>Alnus rhombifolia</i>	White Alder
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Boraginaceae - K 5 C 5 A 5 G 2 ,ovary superior, fr = nutlet, 4/flower, mainly herbs

		<input type="checkbox"/> <i>Cryptantha</i> spp.	
	RU	<input type="checkbox"/> <i>Lithospermum ruderale</i>	

Brassicaceae - K 4 C 4 A 4+2 G 2 ,ovary superior, fr = silicle or silique, mainly herbs, many weeds

	DG	RU	<input type="checkbox"/> <i>Arabis aculeolata</i>	
		RU	BF	<input type="checkbox"/> <i>Arabis koehleri</i> ssp. <i>koehleri</i>
			BF	<input type="checkbox"/> <i>Cardamine</i> spp.
			BF	<input type="checkbox"/> <i>Streptanthus tortuosus</i>

Campanulaceae - K 5 C 5 (z) A 5 G 3 (2, 5), fr = capsule, dehiscing at tip by pores or short valves.

Caprifoliaceae - K 5 C 5 A 5 G 1-5 , ovary inferior, fr = berry, drupe, or capsule, herbs and shrubs w/ opposite lvs. Z. p.198-203.Z. p.211-213.

	BF	<input type="checkbox"/> <i>Linnaea borealis</i>	
	BF	<input type="checkbox"/> <i>Lonicera ciliosa</i>	
	BF	<input type="checkbox"/> <i>Symphoricarpos albus</i>	Snowberry

Caryophyllaceae - K 5 C 5 A 10 G 2-5 , ovary superior, free-central placentation, fr = capsule, petals often notched or lobed, herbs w/ opposite lvs and swollen nodes. Z. p.54-56.

	BF	<input type="checkbox"/> <i>Moerhingia macrophylla</i>	Bigleaf Sandleaf
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Convolvulaceae - K 5 C 5 A 5 G 2 superior ovary, vines with alternate, hastate leaves. Z. p.215-7. *Calystegia soldanella*, beach morning glory

Crassulaceae - leaf succulents w/ 5-merous flowers, K 5 C 5 A 10 G 5 , ovary superior, fr = follicle. *Dudleya farinosa*, live-forever

Sedum spp., stonecrop

	BF	<input type="checkbox"/> <i>Sedum laxum</i>	Stonecrop
	BF	<input type="checkbox"/> <i>S. spathulifolium</i>	

Ericaceae - K 5 C 5 A 10 G 3-5, ovary sup or inf., fr = berry or capsule. mainly shrubs or woody perennials (often w/ leathery leaves), (saprophytes), micorhizal associations, anthers w/porricidal dehiscence and appendages. Z. p.77-81.

RU	<input type="checkbox"/>	<i>Arbutus menziesii</i>	Madrone
RU BF	<input type="checkbox"/>	<i>Arctostaphylos nevadensis</i>	Pine Mat
RU BF	<input type="checkbox"/>	<i>A. patula</i>	Greenleaf Manzanita
DG RU	<input type="checkbox"/>	<i>A. viscida</i>	
BF	<input type="checkbox"/>	<i>Chimophila menziesii</i>	Little Prince's Pine
BF	<input type="checkbox"/>	<i>C. umbellata</i>	Prince's Pine
BF	<input type="checkbox"/>	<i>Gaultheria ovatifolia</i>	
BF	<input type="checkbox"/>	<i>G. shallon</i>	Salal
DG	<input type="checkbox"/>	<i>Ledum glandulosum</i>	Labrodor Tea
BF	<input type="checkbox"/>	<i>Orthila secunda</i>	
BF	<input type="checkbox"/>	<i>Pyrola asarifolia</i>	
BF	<input type="checkbox"/>	<i>P. picta</i>	
BF	<input type="checkbox"/>	<i>Rhododendron macrophyllum</i>	Wesern Rhododendron
DG RU	<input type="checkbox"/>	<i>R. occidentale</i>	Western Azalea
BF	<input type="checkbox"/>	<i>Sarcodes sanguineum</i>	Snow Plant
BF	<input type="checkbox"/>	<i>Vaccinium myrtillus</i>	
BF	<input type="checkbox"/>	<i>V. parvifolium</i>	Huckleberry
BF	<input type="checkbox"/>	<i>V. scoparium?</i>	Huckleberry

Fabaceae - K 5z C 5z A 9+1 G 1, ovary sup, fr = legume or loment, lvs w/stipules, oft compound, nitrogen fixers, (Papilionoideae, Caesalpinoideae, Mimosoideae). Z. p.160-166.

RU	<input type="checkbox"/>	<i>Lotus crassifolius</i>	
RU	<input type="checkbox"/>	<i>L. purshianus</i>	
BF	<input type="checkbox"/>	<i>Lupinus sp.</i>	Lupine
BF	<input type="checkbox"/>	<i>Thermopsis macrophyllum</i>	

Fagaceae- plants monoecious, flowers minute, female flowers in leaf axils, male flowers in catkins, fruit a nut, leaves simple, alternate, stipulate. Z. p.179-181.

RU BF	<input type="checkbox"/>	<i>Chrysolepis chrysophylla</i>	Chinquapin
RU BF	<input type="checkbox"/>	<i>Lithocarpus densiflorus</i>	Tanoak
RU BF	<input type="checkbox"/>	<i>Quercus chrysolepis</i>	Canyon Live Oak
BF	<input type="checkbox"/>	<i>Q. sadleriana</i>	Deer Oak
RU BF	<input type="checkbox"/>	<i>Q. vaccinifolia</i>	Huckleberry Oak

Fumariaceae: see **Papaveraceae**

Garryaceae- Shrubs with male and female catkins and thick, elliptic to ovate, leathery leaves

DG	<input type="checkbox"/>	<i>Garrya buxifolia</i>	Garrya, Silk-Tassel Bush
BF	<input type="checkbox"/>	<i>G. fremontii</i>	Fremont's Silk-Tassel Bush

Gentianaceae - opposite leaves, 4- or 5-merous.

DG	<input type="checkbox"/>	<i>Gentiana setigera</i>	
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Geraniaceae - K 5 C 5 A 10 G 5 , ovary superior, fr = schizocarp w/ "drill seeds", often palmately lobed to compoud leaves (*Erodium* spp., *Geranium* spp.). Z. p.139-141.

Grossulariaceae - K 5 C 5 A 5 G 2, ovary inf, fr = berry. sepals more showy than petals, lvs palm lobed, berries spiny (gooseberries) or not (currants)

RU BF	<input type="checkbox"/>	<i>Ribes roezlii</i> var. <i>cruentum</i>	Currant
RU	<input type="checkbox"/>	<i>Ribes sanguineum</i>	Currant

Hydrophyllaceae - K 5 C 5 A 5 G 2 , ovary superior, fr = capsule. herbs w/exserted stamens, parietal placentation, alt or basal lvs (often lobed - compound), scorpioid cymes.

Phacelia, Hydrophyllum spp., various habitats including alpine

- RU *Eriodictyon californicum*
 DG RU *Phacelia corymbosa*
 BF *Romanzoffia* sp.

Lamiaceae - K 5z C 5z (4z) A 4(2) G 2 , ovary sup w/ gynobasic style, fr = nutlet (4/fl), opposite lvs, aromatic foliage. Z. p.265-270.

- DG *Monardella* spp.
 DG *Prunella vulgaris*

Lauraceae- simple, alternate, aromatic leaves, small, yellow-green, bisexual flowers in umbels, fruit a drupe. Z. p.35-37.

- RU BF *Umbellularia californica* Oregon Myrtle, California Bay

Lentibulariaceae-similar to Scroph.

- DG *Pinguicula macroseris*

Linaceae-regular 5-merous blue flowers

- DG *Linum* sp.

Malvaceae - K 5 C 5 A num G 1-num , ovary superior, fr = schizocarpous capsule, filament tube, stellate hrs, lvs stipulate, often palmately lobed (to compound!). Z. p.90-94.

- DG *Sidalcea malvaeflora* ssp. *asprella*

Onagraceae - K 4 C 4 A 8 G 4 , ovary inferior (hypanthium), fr = capsule, berry or small nut, seeds commose. Z. p.229-232.

- DG *Epilobium minutum*

Orobanchaceae - floral formula like that of Scrophulariaceae, but plants non-photosynthetic

- BF *Orobanche uniflora* Broomrape

Papaveraceae - K fused C 4 A num G 1 , ovary superior, fr = capsule. Z. p.45-49.

- BF *Dicentra formosa* var. *formosa* Bleeding Heart
 RU *D. formosa* var. *oregana*

Plantaginaceae - flowers 4-merous, brown, in scapose spikes; leaves all basal

- RU *Plantago lanceolata*. Plantain

Philadelphaceae

- BF *Whipplea modesta* Modesty, Yerba de Selva

Polemoniaceae - K 5 C 5 A 5 (i) G 3 , ovary superior w/3 style branches, fr = capsule, placentation axile. herbs w/salverform flowers, various pollination schemes. lvs usually simple, alternate, w/o stipules. Z. p.220-222.

- RU *Gilia capitata*
 BF *Microseris gracilis?*
 RU *Phlox speciosa* Phlox

Polygalaceae

- RU *Polygala californica*

Polygonaceae - P 3-6 A 6-9 G 2-4 , ovary sup, fr = achene, nut; papery, sheathing stipules (ochrea).
Z. p.86-87.

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|----|--------------------------|-----------------------------|--|
| RU | <input type="checkbox"/> | <i>Eriogonum compositum</i> | |
| RU | <input type="checkbox"/> | <i>E. nudum</i> | |
| BF | <input type="checkbox"/> | <i>E. ternatum</i> | |

Portulacaceae - K 2 C 5 (10, num) A 5 G 3 , ovary superior, fr = capsule, free central placentation.
2-sepalaceae, herbs. Z. p.56-58.

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|----|--------------------------|--------------------------------|-----------|
| BF | <input type="checkbox"/> | <i>Calyptridium umbellatum</i> | Pussypaws |
| BF | <input type="checkbox"/> | <i>Lewisia cotyledon</i> | |
| BF | <input type="checkbox"/> | <i>Montia parvifolia</i> | |

Primulaceae - K 5 C 5 A 5 G 1 , ovary superior, fr = capsule, stamens opp. petals! herbs

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|----|--------------------------|------------------------------|---|
| BF | <input type="checkbox"/> | <i>Dodecatheon ?jeffreyi</i> | Shooting Stars |
| DG | BF | <input type="checkbox"/> | <i>Trientalis latifolia</i>
Starflower |

Ranunculaceae - K 5 to num C 5 to num A num G num, pistils simple, fr = achene, berry, follicle.
herbs w/alternate lvs, fls actinomorphic or zygomorphic, perfect or unisexual. Z. p.42-45.

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|----|--------------------------|--------------------------------|----------------------------------|
| DG | <input type="checkbox"/> | <i>Caltha</i> sp. | Marsh Marigold |
| | | <input type="checkbox"/> | <i>Delphinium (nuttallianum)</i> |
| DG | <input type="checkbox"/> | <i>Ranunculus occidentalis</i> | Western Buttercup |

Rhamnaceae - K 5 C 5 A 5 G 3 , ovary sup, fr = capsule, berry, petals clawed, stamens opposite petals; lvs entire, nitrogen fixers. Z. p.105-107.

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|----|----|--------------------------|--|-----------------|
| FM | | <input type="checkbox"/> | <i>Ceanothus cordulatus/C. cuneatus</i> | |
| | RU | <input type="checkbox"/> | <i>Ceanothus integerrimus</i> | Deer Brush |
| DG | | <input type="checkbox"/> | <i>C. prostratus</i> | |
| DG | | <input type="checkbox"/> | <i>C. pumilus</i> | Dwarf Ceanothus |
| | RU | <input type="checkbox"/> | <i>C. velutinus</i> | |
| DG | | <input type="checkbox"/> | <i>Rhamnus californicus</i> ssp. <i>occidentalis</i> | |
| | | <input type="checkbox"/> | <i>R. purshiana</i> | Cascara |

Rosaceae - five-merous flowers with hypanthium and numerous stamen, lvs alternate with stipules.
Z. p.181-185.

Rosoideae: K 5 C 5 A num G num, a, ovaries sup, fr = achene, drupelets, hip. ex: *Rosa*

Prunoideae: K 5 C 5 A num G 1 (2), ovary sup, fr = drupe. Ex: *Prunus*

Spiroideae: K 5 C 5 A num G 5a, ovary sup, fr = follicle. Ex: *Spiranthes*

Maloideae: K 5 C 5 A num G 5, ovary inf, fr = pome. Ex: *Malus*

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|----|----|--------------------------|----------------------------------|-------------------|
| DG | BF | <input type="checkbox"/> | <i>Amelanchier</i> spp. | Service Berry |
| | BF | <input type="checkbox"/> | <i>Fragaria vesca</i> | Wild Strawberry |
| | BF | <input type="checkbox"/> | <i>Holodiscus discolor</i> | Ocean Spray |
| DG | | <input type="checkbox"/> | <i>Horkelia congesta/sericea</i> | |
| | BF | <input type="checkbox"/> | <i>Potentilla (glandulosa)</i> | Sticky Cinquefoil |
| | BF | <input type="checkbox"/> | <i>Rosa gymnocarpa</i> | Wild Rose |
| | RU | <input type="checkbox"/> | <i>Rubus parviflorus</i> | Thimbleberry |
| | BF | <input type="checkbox"/> | <i>R. ursinus</i> | Blackberry |
| DG | | <input type="checkbox"/> | <i>Sanguisorba (officinale?)</i> | |
| | BF | <input type="checkbox"/> | <i>Sorbus sitchensis</i> | Mountain Ash |

Rubiaceae - ours dioecious 4-merous herbs with inferior ovaries and whorled leaves

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| | <input type="checkbox"/> | <i>Galium</i> spp. | Bedstraw |
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Salicaceae- alternate, simple, stipulate leaves, plants dioecious, flowers in catkins, fruit a capsule, seeds comose. Z. p.114-116.

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| RU | <input type="checkbox"/> | <i>Salix</i> spp. | Willow |
|----|--------------------------|-------------------|--------|

Sarraceniaceae - Pitcher Plants!

DG RU *Darlingtonia californica* California Pitcher Plant

Saxifragaceae - (lab only) K (4) 5 C (4) 5, A (4) 5, 10 G 2 (3) fr = caps or berry, ex. *Tellima*, herbaceous often woodland plants with palmately lobed (compound) leaves.

RU *Heuchera (micrantha)* Alumroot
 BF *Mitella pentandra* Mitre's cup
 DG *Parnassia palustris*
 BF *Saxifraga ferruginea*
 BF *S. howellii*
 BF *S. mertensiana*

Scrophulariaceae - K 5 (4) z C 5 (4) z A 4 (5 or 2) G 2, ovary superior, fr = capsule or berry, axile placentation, herbs or shrubs w/ alt or opp lvs, stamens often didymous. Z. p.250-254.

DG *Castilleja brevilibata* Indian Paintbrush
 DG *C. miniata* ssp. *elata* Indian Paintbrush
 RU *C. pruinosa*
 DG RU *Collinsia (linearis)*
 DG *Mimulus guttatus* Monkeyflower
 DG *Orthocarpus bracteata*
 DG RU BF *Penstemon azureus/parvulus*
 BF *P. davidsonii*
 BF *P. rupicola*

Solanaceae - K 5 C 5 A 2-5 G 2, ovary sup, fr = berry or capsule, axile placentation. pls w/exstipulate, alt, simple lvs. Z. p.213-315.

Violaceae - K 5 C 5z A 5z G 3, fr = caps, plac. parietal, *Viola* only. Z. p.112-114.

BF *Viola cuneata*
 BF *V. hallii* Hall's Violet
 BF *V. sempervirens*

IV. ANGIOSPERMS: MONOCOTS - Plants with ovules in ovaries, 1 cotyledon, primary leaf veins mostly parallel, flower parts in multiples of 3's (4's)

Cyperaceae - lvs 3-ranked and stems (mostly) triangular, stems solid, nodes not swollen, bracts single below fl, infl of 1-sev. spikes (spikelets), preanth parts bristle-like or sac-like (perigynium), fr = achene, mostly aquatic or semiaquatic herbs. "graminoid". Z. p.347-350.

DG BF *Carex (mendocinensis)* Sedge
 DG *Eriophorum* sp.

Iridaceae - P 3+3 A 3 G 3, ovary inferior, fr = capsule or berry. Z. p.273, 276-280.

RU *Iris (bracteata-short tube)* Iris
 DG *Iris (inominata-long tube)* Iris
 DG *Sisyrinchium bellum* Blue-eyed Grass

Juncaceae - P 3+3 A 3 OR 6 G 3, ovary superior, fls minute, green or brown, fr = capsule, lvs 2-ranked, sheaths not obvious, lvs often round and stem-like, stems round, mostly solid, nodes not swollen, infl a panicle or cymose, pls usually aquatic to semiaquatic. "graminoid". Z. p.345-347.

DG *Juncus (reigelii)*
 BF *Luzula comosa* Woodrush

Liliaceae - P 3+3 A 6 G 3 , ovary superior (inferior in Agave), fr = capsule or berry, mostly herbs or leaf succulents. Z. p.270-273.

	DG?	<input type="checkbox"/>	<i>Allium amplexans</i>	
	DG	<input type="checkbox"/>	<i>A. falcifolium</i>	Onion
FM		BF	<input type="checkbox"/>	<i>A. siskiyouense</i>
	DG		<input type="checkbox"/>	<i>Camasia howellii</i>
		BF	<input type="checkbox"/>	<i>Clintonia uniflora</i>
	DG	RU	<input type="checkbox"/>	<i>Hastingsia bracteosa</i>
		BF	<input type="checkbox"/>	<i>Lilium (columbianum)</i>
		BF	<input type="checkbox"/>	<i>Lilium (pardilinum?)</i>
	DG		<input type="checkbox"/>	<i>Nartheceum californicum</i>
		BF	<input type="checkbox"/>	<i>Smilacina racemosa</i>
		BF	<input type="checkbox"/>	<i>Stenanthium occidentale</i>
	DG		<input type="checkbox"/>	<i>Tofieldia glutinosa</i>
		BF	<input type="checkbox"/>	<i>Trillium ovatum</i>
	DG		<input type="checkbox"/>	<i>Tritelaea hyacinthina</i>
		BF	<input type="checkbox"/>	<i>Xerophyllum tenax</i>
	DG	BF	<input type="checkbox"/>	<i>Zygadenus venenosus (Z. micranthus)</i>

Orchidaceae - P 3 + 3 z A pollinia G column, herbs w/specialized flowers (lip, pollinia, column). Z. p.293-297.

		BF	<input type="checkbox"/>	<i>Calypso bulbosa</i>	Fairyflipper Orchid
		BF	<input type="checkbox"/>	<i>Cephalanthera austineae</i>	Phantum Orchid
		BF	<input type="checkbox"/>	<i>Corallorhiza (maculata)</i>	Coralroot Orchid
FM			<input type="checkbox"/>	<i>C. mertensiana</i>	Coralroot Orchid
	DG?		<input type="checkbox"/>	<i>Cypripedium californicum</i>	
FM			<input type="checkbox"/>	<i>Disporum hookeri</i>	
		BF	<input type="checkbox"/>	<i>Goodyera oblongifolia</i>	Rattlesnake Plantain
		BF	<input type="checkbox"/>	<i>Listera caurina</i>	Twayblade
		BF	<input type="checkbox"/>	<i>(L. cordata)</i>	
FM			<input type="checkbox"/>	<i>Piperia unalaskensis</i>	
	DG		<input type="checkbox"/>	<i>Platanthera sparsiflora</i>	

Poaceae - leaves 2-ranked, stems round, hollow except at swollen nodes, infl of numerous specialized bracts (glumes, lemmas, paleas) arranged in spike or panicle, perianth inconspicuous (lodicles), fr = grain, mostly ubiquitous (grow in many environments) herbs. Z. p.350-356.

	DG		<input type="checkbox"/>	<i>Agrostis/Calamagrostis</i>	
	DG		<input type="checkbox"/>	<i>Aira caryophylla</i>	
	DG		<input type="checkbox"/>	<i>Danthonia californica</i>	
		RU	<input type="checkbox"/>	<i>D. (intermedia)</i>	
	DG		<input type="checkbox"/>	<i>Deschampsia cespitosa</i>	
		RU	<input type="checkbox"/>	<i>Elymus glaucus</i>	
FM		RU	<input type="checkbox"/>	<i>E. elymoides</i>	Squirrel Tail
		BF	<input type="checkbox"/>	<i>Festuca sp.</i>	
	DG	RU	<input type="checkbox"/>	<i>Festuca californica</i>	
	DG	RU	<input type="checkbox"/>	<i>F. idahoensis</i>	
	DG		<input type="checkbox"/>	<i>Melica (geyeri)</i>	
	DG		<input type="checkbox"/>	<i>Nassella lemmonii</i>	
	DG		<input type="checkbox"/>	<i>Panicum capillare</i>	
	DG	RU	<input type="checkbox"/>	<i>Poa sp.</i>	

Final disclaimer: draft copy - list to be edited and improved as needed.