



Introduction of Plant Families and Common Wildflowers of the Wenatchee Watershed

Illustration used with permission by the author/publisher, Thomas J. Elpel's Wildflowers-and-weeds
http://www.wildflowers-and-weeds.com/Plant_Families/Patterns_in_Plants.htm

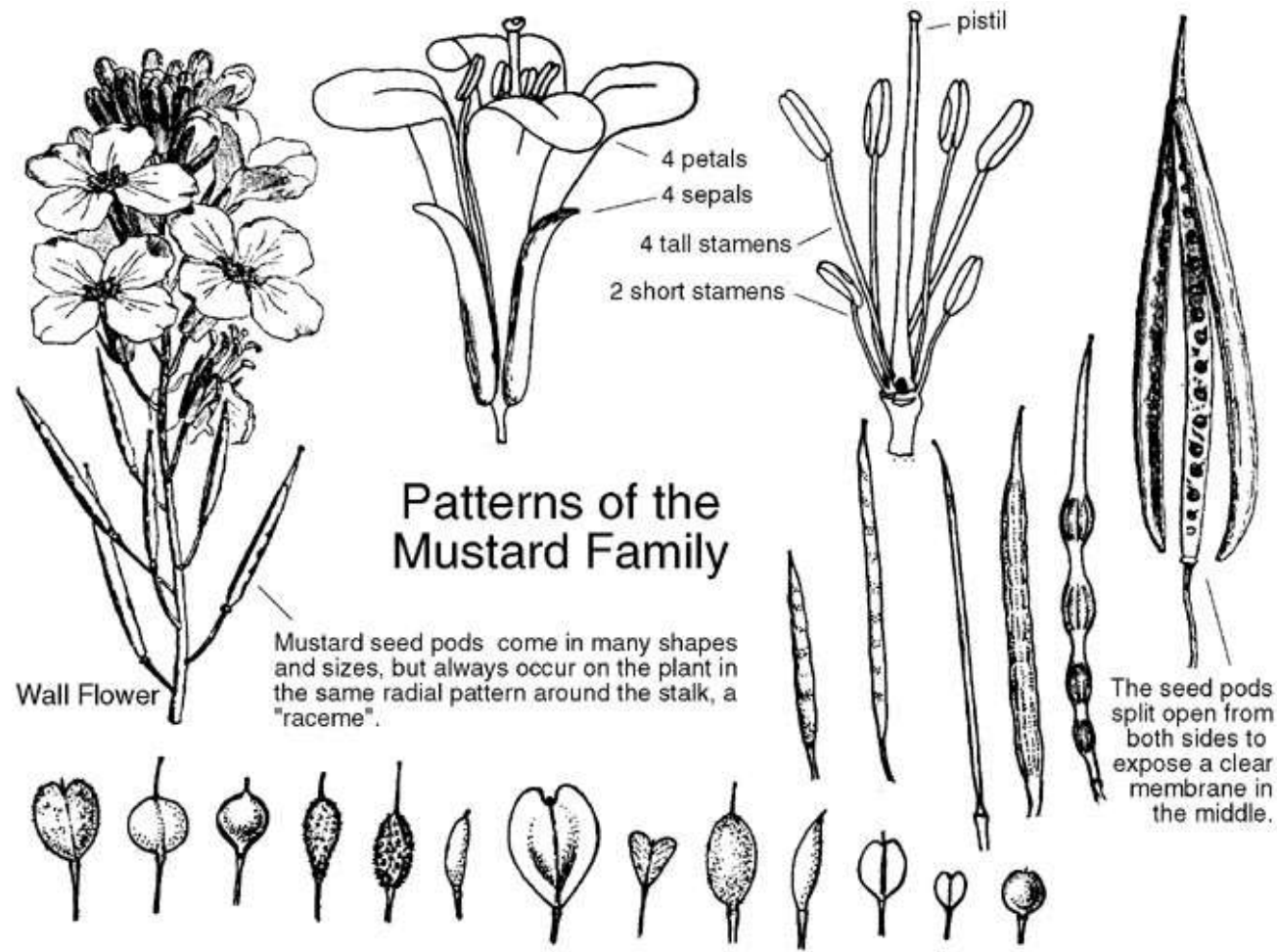
Other sources: *A Botanical Primer* by Joe Arnett and *Plants of Southern Interior British Columbia and the Inland Northwest* by Parish, Coupe, and Lloyd

Photos and text by Susan Ballinger

Radial
symmetry

Mustard Family, Brassicaceae (formerly Cruciferae)

Key Words: 4 petals and 6 stamens--4 tall and 2 short.



Mustard Family Brassicaceae

Phoenicaulis cheiranthoides dagger-pod

Radial
symmetry



4 tall stamens, 2 short

Family ID Traits:

- 4 sepals
- 4 petals – arranged like either “X” or “H”
- 4 tall stamens, 2 short stamens
- Seeds pods arranged like a spiral staircase – a raceme –
- Pods split open from both sides- with a clear membrane in the middle



Habitat: rocky, thin soils
(lithosols) in shrub-steppe.
Perennial. Early spring bloomer

Mustard Family Brassicaceae
***Erysimum aspernum* Cascade wallflower**

Radial
symmetry

Habitat: dry, rocky soils in shrub-steppe.
Plant biennial. Spring bloomer.

Family ID Traits:

- 4 sepals
- 4 petals – arranged like either “X” or “H”
- 4 tall stamens, 2 short stamens
- Seeds pods arranged like a spiral staircase – a raceme –
- Pods split open from both sides- with a clear membrane in the middle

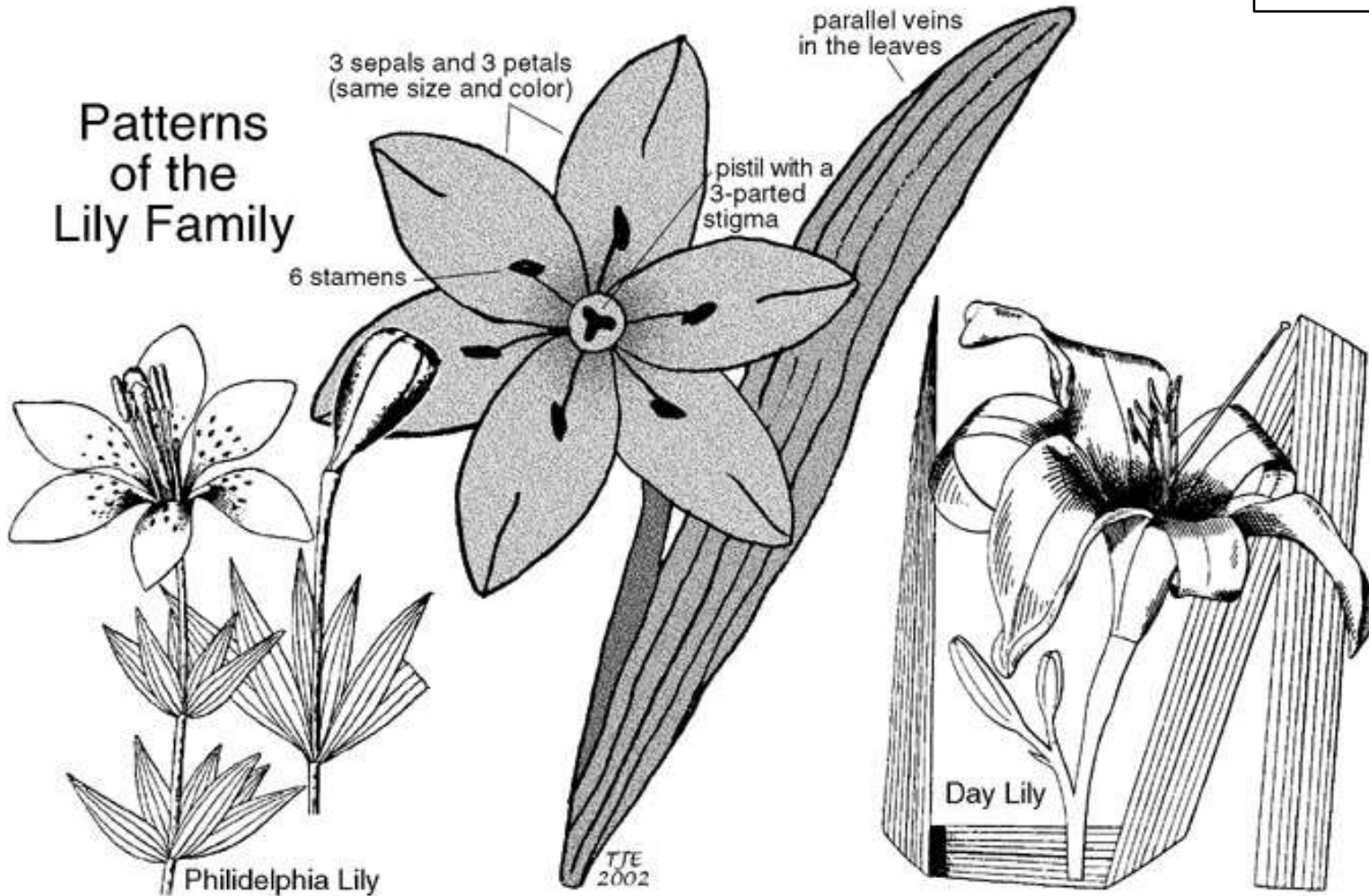


Liliaceae Lily Family

**Key Words: Flowers with parts in threes.
Sepals and petals usually identical.**

Radial
symmetry

Patterns of the Lily Family



Liliaceae **LILY Family**
Yellow bells *Fritillaria pudica*

Liliaceae family has flower parts in 3s, parallel veins in leaves, usually petals & stamens look the same, 6 stamens, 3—parted stigma

Stem: erect, unbranched.

Leaves: elongate, fleshy. Grow in pairs or in whorls of 3+ mid-height of stem.



Flowers: usually 1 (sometimes 2) at stem top. Nodding bell-shaped flower faces outward to hanging down. Color: clear yellow to orange to deep red (as it ages)



Habitat: low to high elevations in shrub-steppe and forests in soils that are moist in spring. Early spring bloomer.

Perennial plant, growing from a bulb.

Liliaceae Lily Family

Zigadenus venenosus common death camas

Radial
symmetry

Habitat: shrub-steppe and Ponderosa pine forest, where soil is moist in spring. Perennial. Spring bloomer

Family ID Traits:

- Parallel veins in leaves
- Regular flower with parts in “3s”
- Usually, petals & sepals look the same
- 6 stamens
- 3-parted stigma (tip of pistil)



Liliaceae Lily Family

***Calochortus* species mariposa lily**

Radial
symmetry

All *Calochortus* species have 3 broad lavender-to-white petals with a patch of hair-like filaments on inner surface near base a associated purple splotch or band.

Calochortus lyallii Lyall's mariposa

Habitat: Shrub-steppe and Ponderosa pine forest.
Perennial. Early spring bloomer

Family ID trait: 3-parted
stigma at tip of pistil



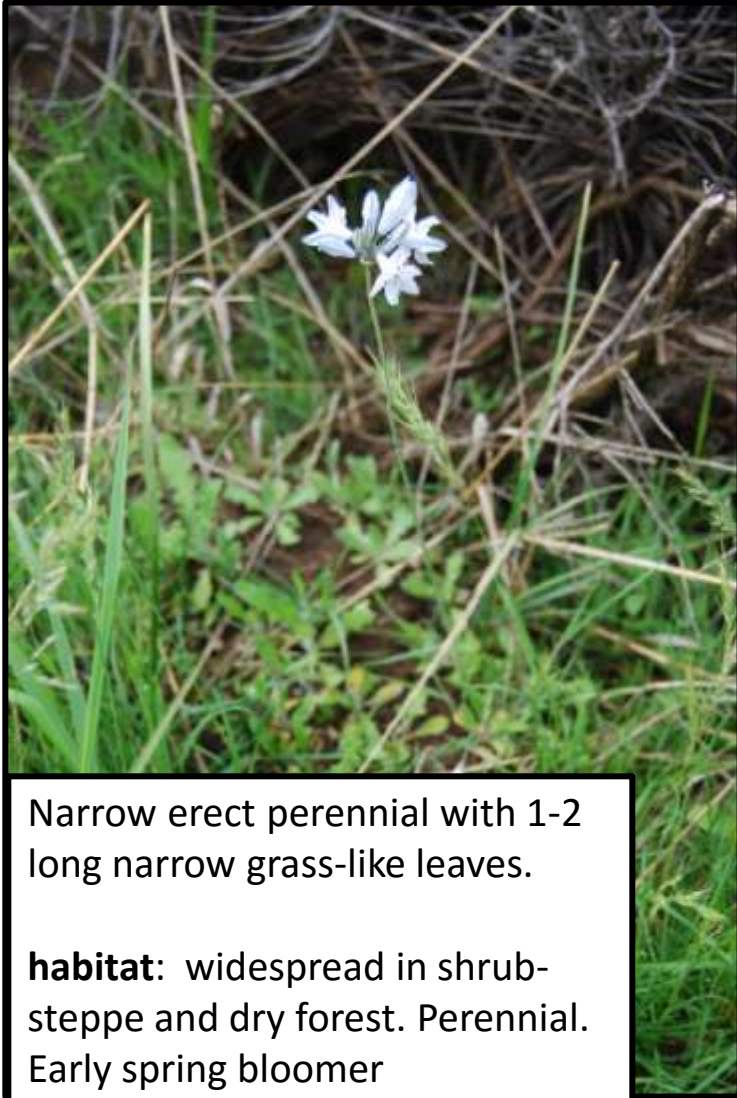
Calochortus macrocarpus sagebrush mariposa lily
Habitat: shrub-steppe. Perennial. Late spring bloomer

Liliaceae Lily Family

Triteleia grandiflora (formerly *Brodiaea douglasii*)

large-flower triteleia, Douglas' brodiaea

Radial
symmetry



Narrow erect perennial with 1-2 long narrow grass-like leaves.

habitat: widespread in shrub-steppe and dry forest. Perennial. Early spring bloomer

Family ID Traits:

- Parallel veins in leaves
- Bi-sexual (perfect) flower with parts in “3s”
- Usually, 6 tepals (petals & sepals) look the same
- 6 stamens
- Pistil: 3-parted stigma (tip of pistil)
- Grows from a bulb



flowers: in a 2-15 in a cluster at top of stem; Pale to dark blue, tubular, 6 tepals with wavy margins

Apiaceae Parsley or Carrot Family

(also known as the Umbel Family: Umbelliferae)

Key Words: Compound umbels.

Usually hollow flower stalks

Radial
symmetry

Family traits:

Leaves: basal & on stem, usually compound

Flowers: bi-sexual (perfect) in compound umbrellas

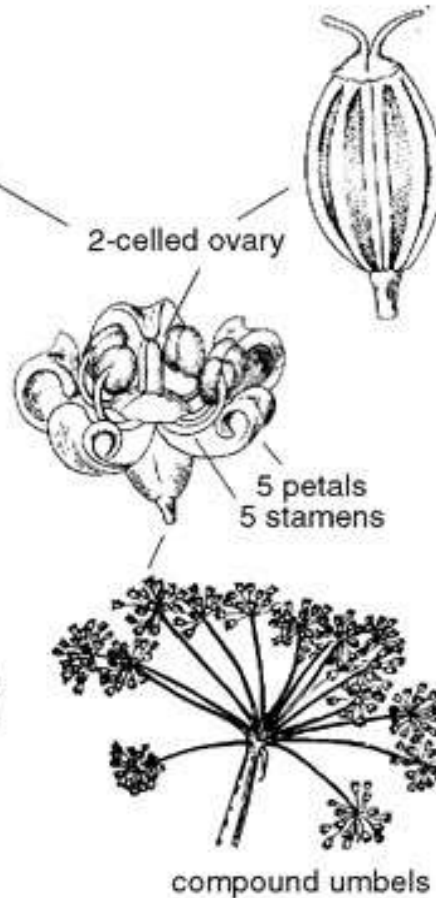
Sepals: 5, tiny **Petals:** 5, very tiny

Stamens: 5

Pistil: Inferior ovary; Fruits a dry schizocarp that splits into two 1-seeded segments



Water
Hemlock



2-celled ovary

5 petals
5 stamens

compound umbels



Creeping
Water
Parsnip

Apiaceae Parsley or Carrot Family

Lomatium geyeri Geyer's desert parsley

Radial
symmetry

Family ID Traits:

- Compound Umbel- all stems of the flower cluster radiate from a single point
- Stems usually hollow

Habitat: widespread in shrub-steppe. Perennial. One of earliest spring bloomers when soils are moist



Apiaceae Parsley or Carrot Family
Lomatium nudicaule barestem lomatium

Radial
symmetry

Family ID Traits:

- Compound Umbel- all stems of the flower cluster radiate from a single point
- Stems usually hollow



Green seeds still ripening



Habitat: common in dry open shrub-steppe. Perennial. Early spring bloomer.



Prior year's seeds have all been dispersed

Plants: –can be shrubs, herbs, trees

Leaves: Compound (pinnate or palmate)

Flower: Irregular shape unique family; Bi-sexual (perfect).

Sepals: 5 united

Petals: banner, 2 wings, keel (2 fused)

Stamens: 10 (sometimes 5)

Pistil: Superior ovary- pea-like pod

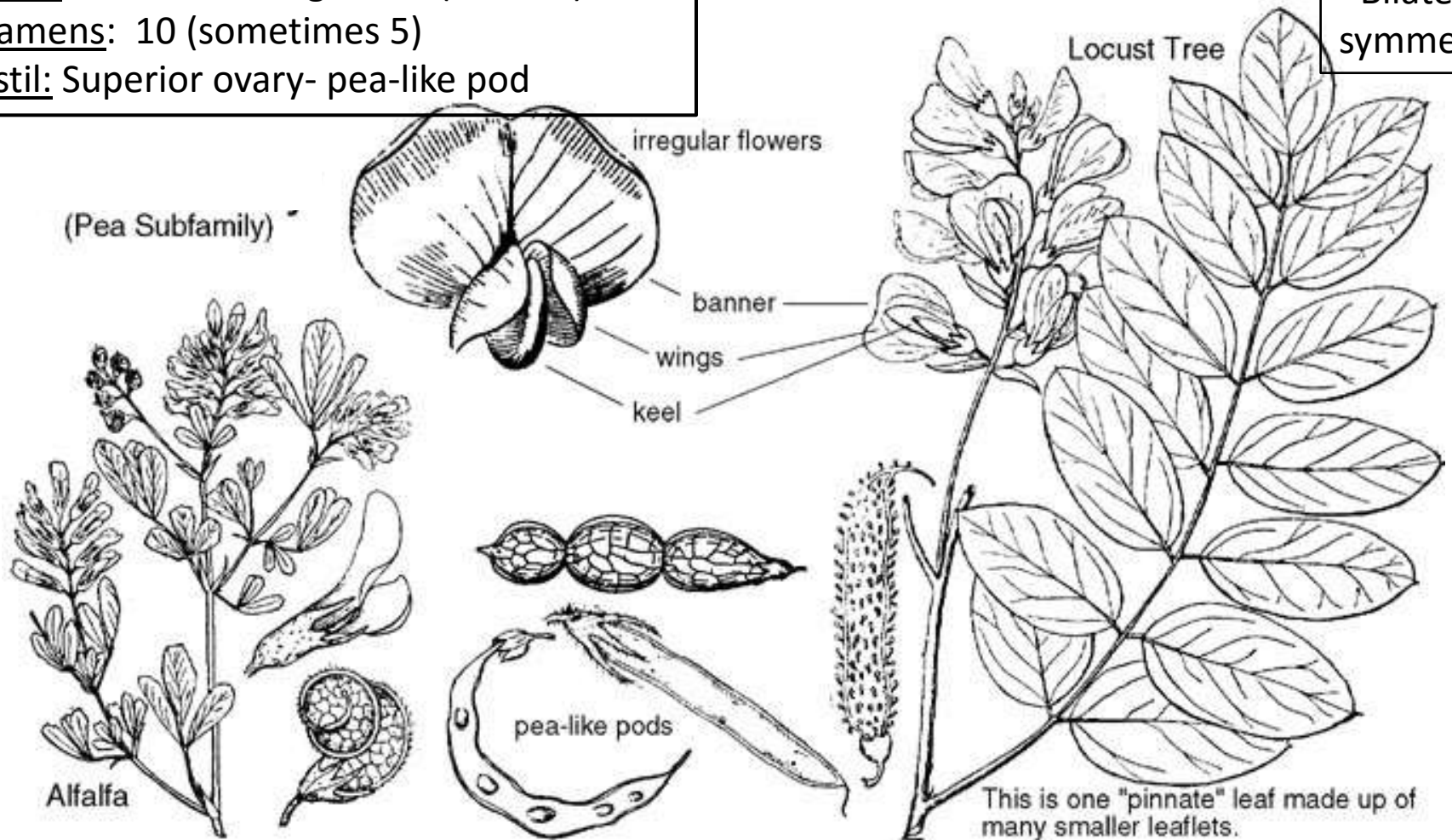
Fabaceae Pea Family

(Older: Legume Family: Leguminosae)

Key Words: "banner, wings, and keel".

Pea-like pods, often with pinnate leaves

Bilateral symmetry



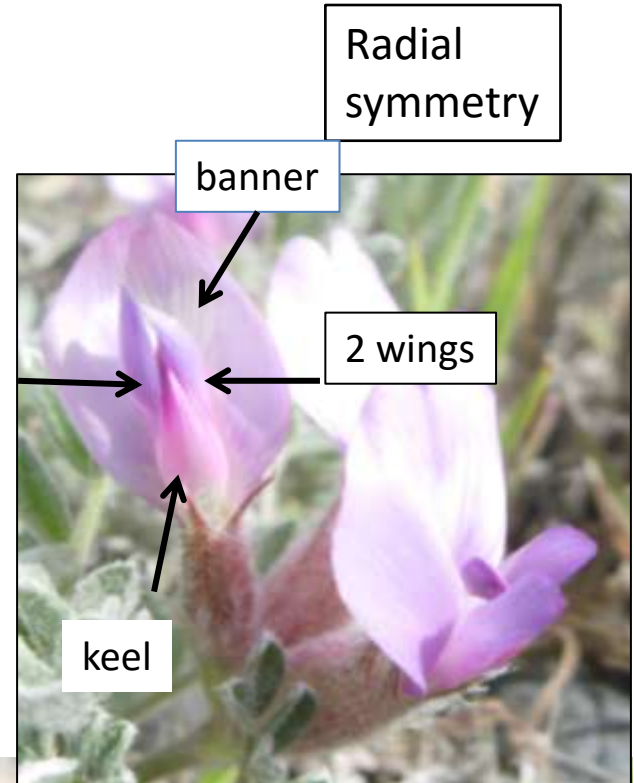
Fabaceae Pea Family

Astragalus purshii Woolypod milk-vetch

Habitat: shrub-steppe & low-elevation forests on sandy gravelly soils and dry ridges. Perennial. Spring bloomer



- Family ID Traits:
- Irregular flower (dissimilar petals)
 - Pea-like pods with seeds inside



Fabaceae Pea Family *Lupinus species* lupine

Difficult to distinguish species, but all have palmately-compound leaves (4-8 leaflets) from single point

Bilateral symmetry

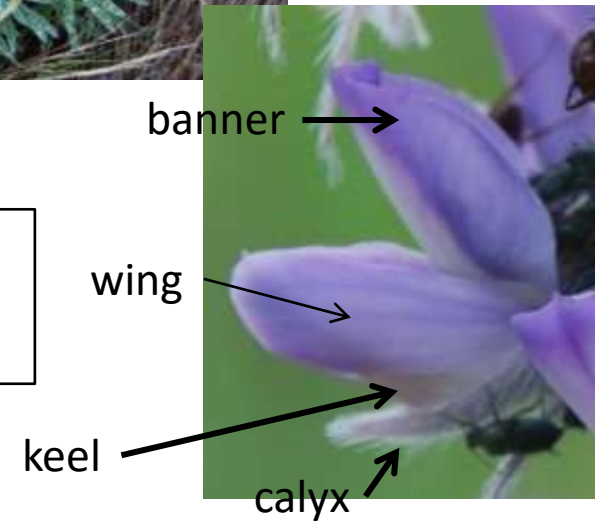


Habitat

Shrub-steppe & dry forests.
Perennial, spring bloomer.

Family ID Traits:

- Irregular flower (dissimilar petals)
- Pea-like pods with seeds inside

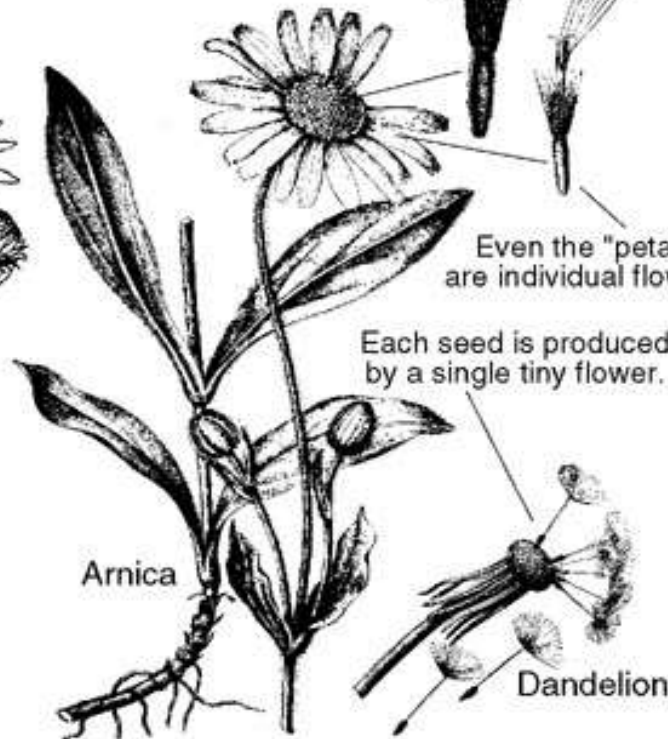


Asteraceae Aster or Sunflower Family
 (also known as the Composite Family: Compositae)
Key Words: Composite Flowers in disk-like heads

Patterns of the Aster or Sunflower Family

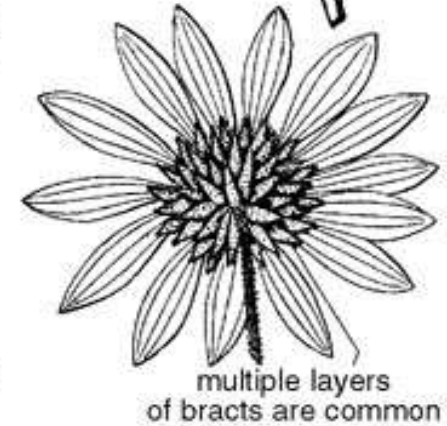
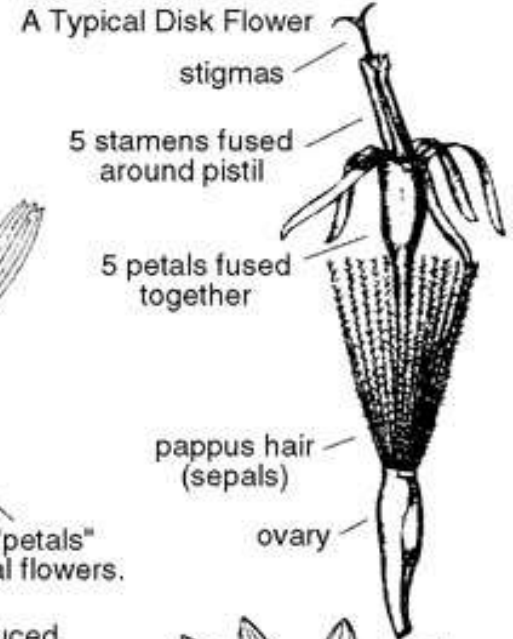
Plants of the Aster family are "composites" of many small flowers in a disk-like flowerhead.

Asters are often easy to recognize from a distance.



Even the "petals" are individual flowers.

Each seed is produced by a single tiny flower.



Asteraceae Aster or Sunflower Family

(also known as the Composite Family: Compositae)

Key Words: Composite Flowers in disk-like heads

Family ID traits:

- What seems to be a “flower” is really a bouquet of many flowers
- can have either DISK or RAY flowers, or both in a “flower head”
- Have green modified leaves – bracts – surrounding the flower head.



Crepis barbergia bearded hawkbeard

Habitat: dry open areas in shrub-steppe.
Perennial; spring bloomer



examples of only RAY FLOWERS

Asteraceae Aster or Sunflower Family
(also known as the Composite Family: **Compositae**)

Key Words: Composite Flowers in disk-like heads

Family ID traits:

- What seems to be a “flower” is really a bouquet of many flowers
- can have either DISK or RAY flowers, or both in a “flower head”
- Have green modified leaves – bracts – surrounding the flower head.

Achillea millefolium yarrow



habitat: widespread, low to high elevations, shrub-steppe & open forest. Perennial. Late spring bloomer

Heads have both RAY & DISK Flowers, ray flowers-white, pink, purple, red, or blue

Asteraceae Aster or Sunflower Family
(also known as the Composite Family: Compositae)
Key Words: Composite Flowers in disk-like heads

habitat: dry, open places, low to high elevations.
Perennial. Summer bloomer

Family ID traits:

- What seems to be a “flower” is really a bouquet of many flowers
- can have either DISK or RAY flowers, or both in a “flower head”
- Have green modified leaves – bracts – surrounding the flower head.



Antennaria microphylla rosy pussytoes



RAY flowers absent; pappus of hair or feather-like bristles

***Asteraceae* Aster or Sunflower Family**
(also known as the Composite Family: Compositae)
Key Words: Composite Flowers in disk-like heads

Family ID traits:

- What seems to be a “flower” is really a bouquet of many flowers
- can have either DISK or RAY flowers, or both in a “flower head”
- Have green modified leaves – bracts – surrounding the flower head.



Habitat: shrub-steppe to low montane forest.
Widespread. Perennial. Spring bloomer

Balsamorhiza saggitata balsamroot



Heads have both RAY & DISK Flowers, ray flowers-orange or yellow



Asteraceae Aster or Sunflower Family
(also known as the Composite Family: Compositae)

Key Words: Composite Flowers in disk-like heads

Irregular
symmetry

Family ID traits:

- What seems to be a “flower” is really a bouquet of many flowers
- can have either DISK or RAY flowers, or both in a “flower head”
- Have green modified leaves – bracts – surrounding the flower head.

Chaenactis douglasii dusty maidens



Habitat: dry, open shrub-steppe, often sandy or rocky places. Perennial. Late spring bloomer

Example of DISK flowers only, RAY Flowers absent , pappus of scales or sometimes absent

Lamiaceae Mint Family
(also known as Labiatae)

Key Words: Square stalks and opposite leaves, often aromatic.

Bilateral symmetry

Family traits:

Flowers: Bi-sexual (perfect)

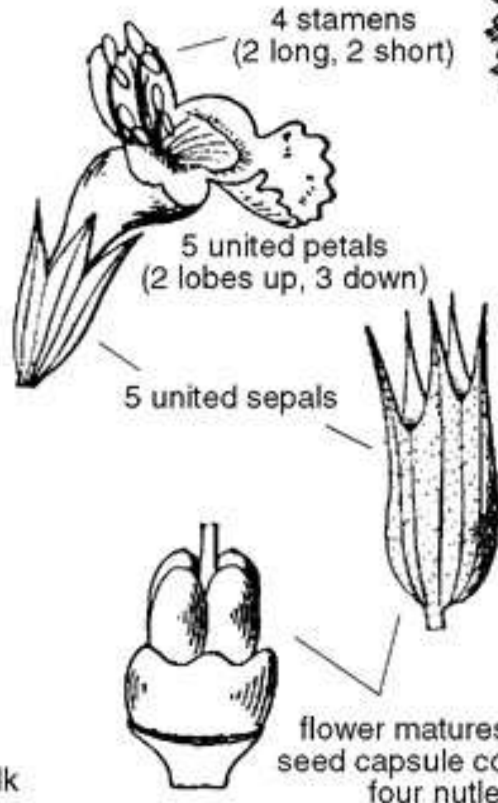
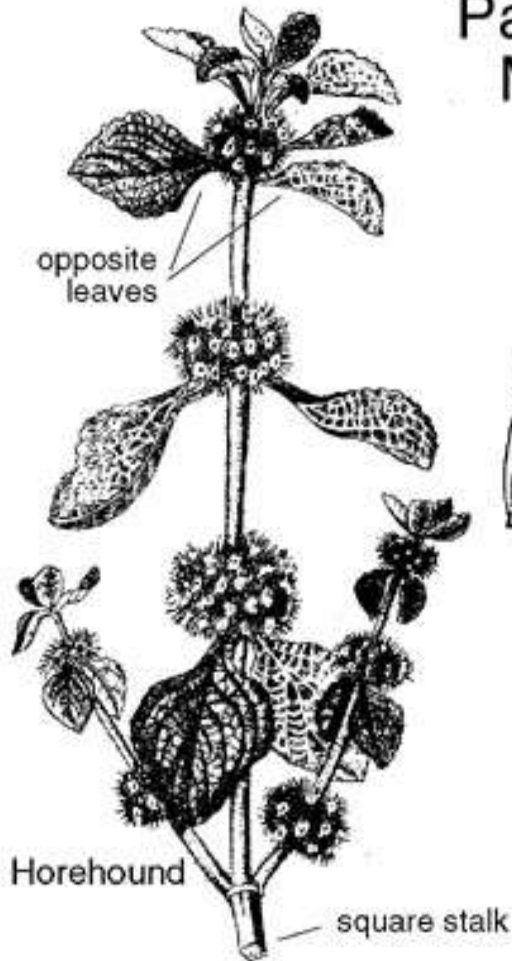
Sepals: 5 united & toothed, often 2-lipped

Petals: 5 united, 2 lobes up & 3 lobes down

Stamens: 4, 1 pair longer than other pair

Pistil: Superior ovary, Fruits- 4 nutlets

Patterns of the
Mint Family



***Lamiaceae* Mint Family**
***Salvia dorrii* purple sage**

Bilateral
symmetry

Family ID traits:

- Square stems
- Opposite leaves
- Usually aromatic
- Irregular flower (dissimilar petals)
- seeds- 4 nutlets in capsule



Small shrub, extensively branched

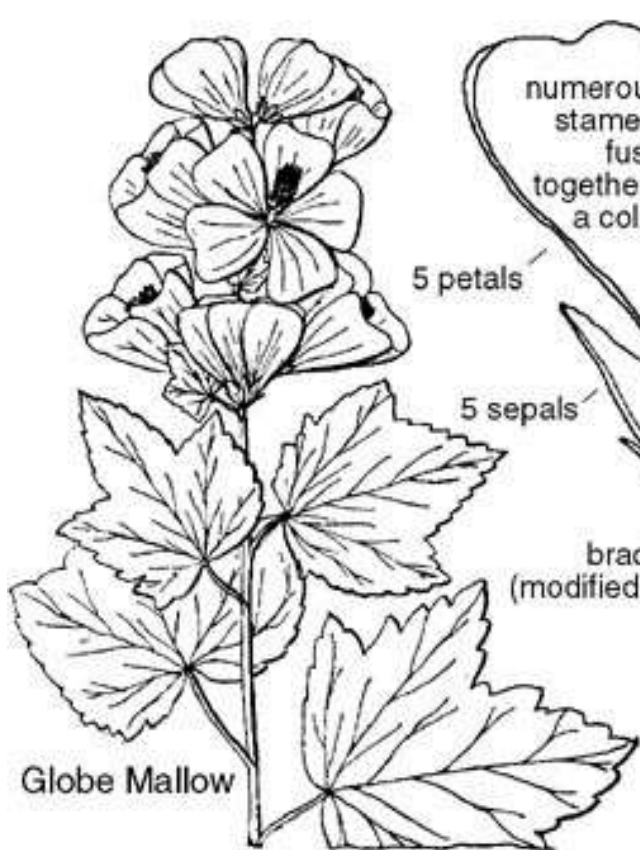


Habitat: along stable talus slopes or on rock outcrops or on rocky plains in shrub-steppe. Perennial, spring bloomer.

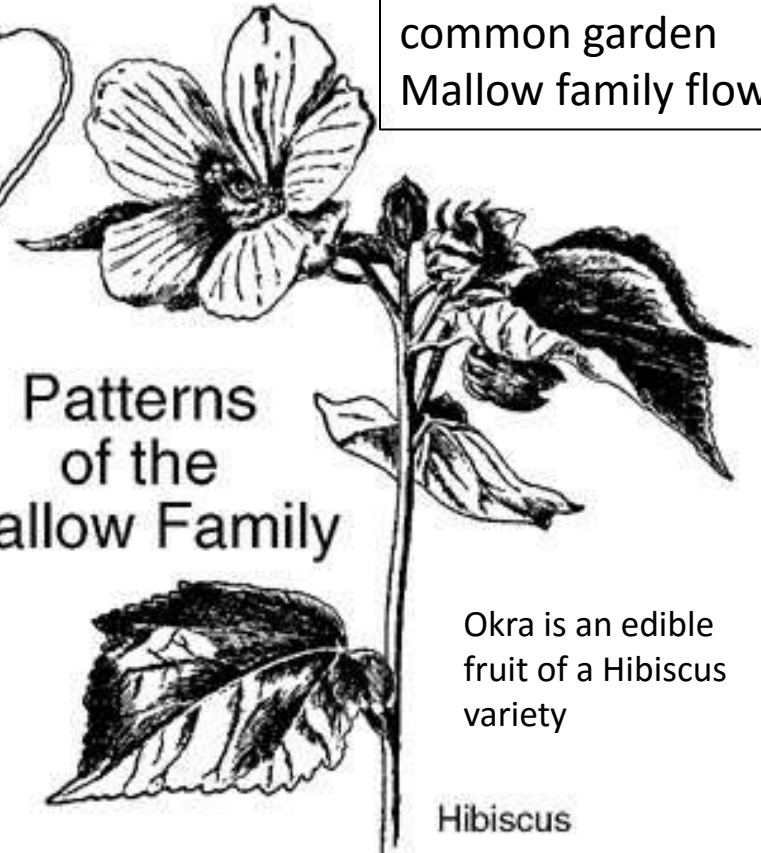
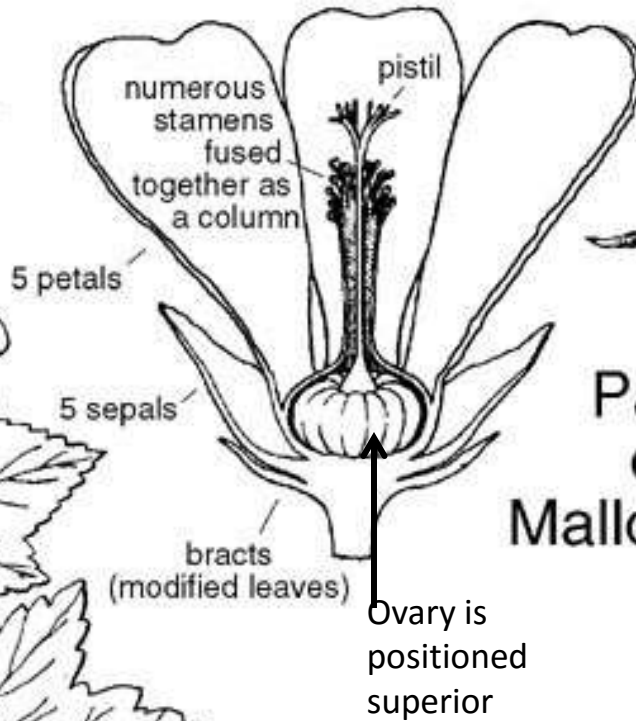
Malvaceae Mallow Family

Key Words: funnel-shaped flower, numerous stamens fused into a central column, plant contains natural gums (mucilage) making leaves & stems slimy when crushed

regular flower



Leaves alternate, usually palmately lobed



Hollyhock is a common garden Mallow family flower

Patterns of the Mallow Family

Okra is an edible fruit of a Hibiscus variety

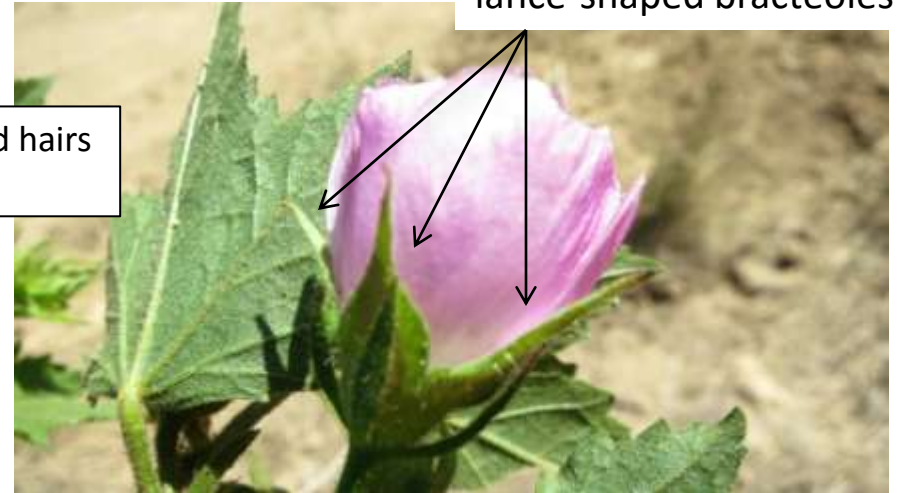
Malvaceae **Mallow Family**

Iliamna longisepala long-sepal globemallow

Habitat: shrub-steppe to low elevation ponderosa pine forest. summer-late fall bloomer. Perennial-endemic to central Washington

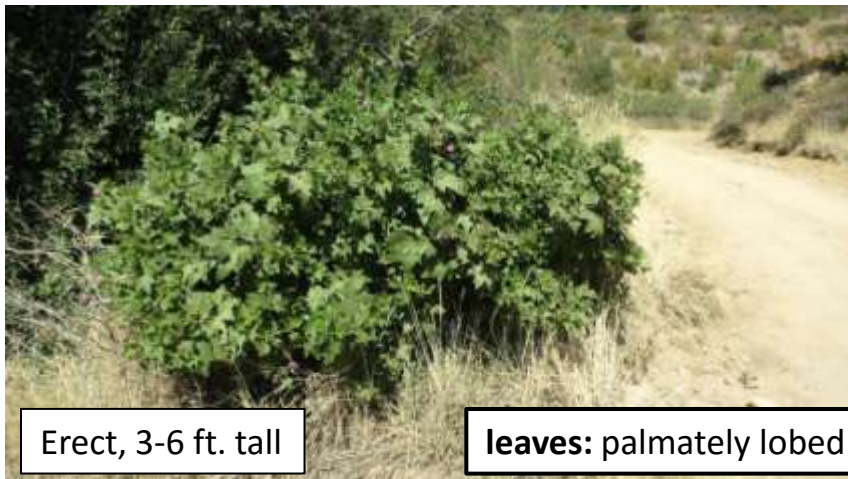


fine, star-shaped hairs on leaf surfaces



Calyx 3-parted with long lance-shaped bracteoles

flowers: rose to purplish; in leaf axils on slender pedicels (1-5 cm.)



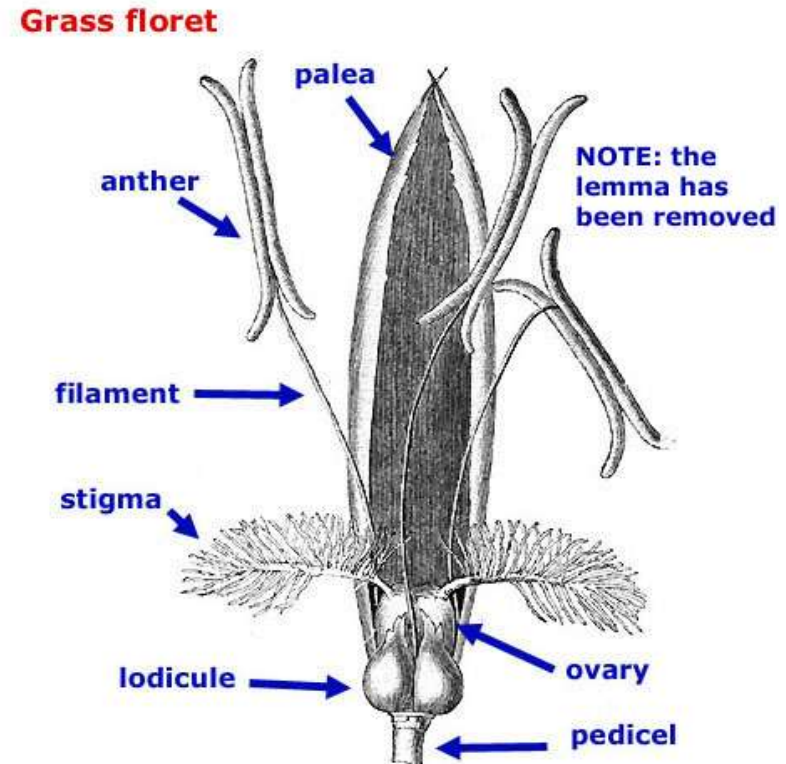
Erect, 3-6 ft. tall



leaves: palmately lobed into 5-7 triangular-shaped segments with rounded serrated teeth

Poaceae (Gramineae) Grass Family

- We do not normally think of the grasses as flowers, yet they are.
- They only lack the showy petals and sepals because they are wind pollinated and do not need to attract insects.
- The flowers typically have 3 (rarely 2 or 6) stamens. The ovary consists of 3 united carpels forming a single chamber.
- It matures as a single seed called a caryopsis (grain) or rarely an achene (a dry seed) or a berry.
- The flower is contained by modified leaves called bracts. These are the chaff that is later winnowed out of harvested grain.
- Worldwide, there are about 600 genera and 10,000 species of grass. About 230 genera and 1,000+ species appear in North America.

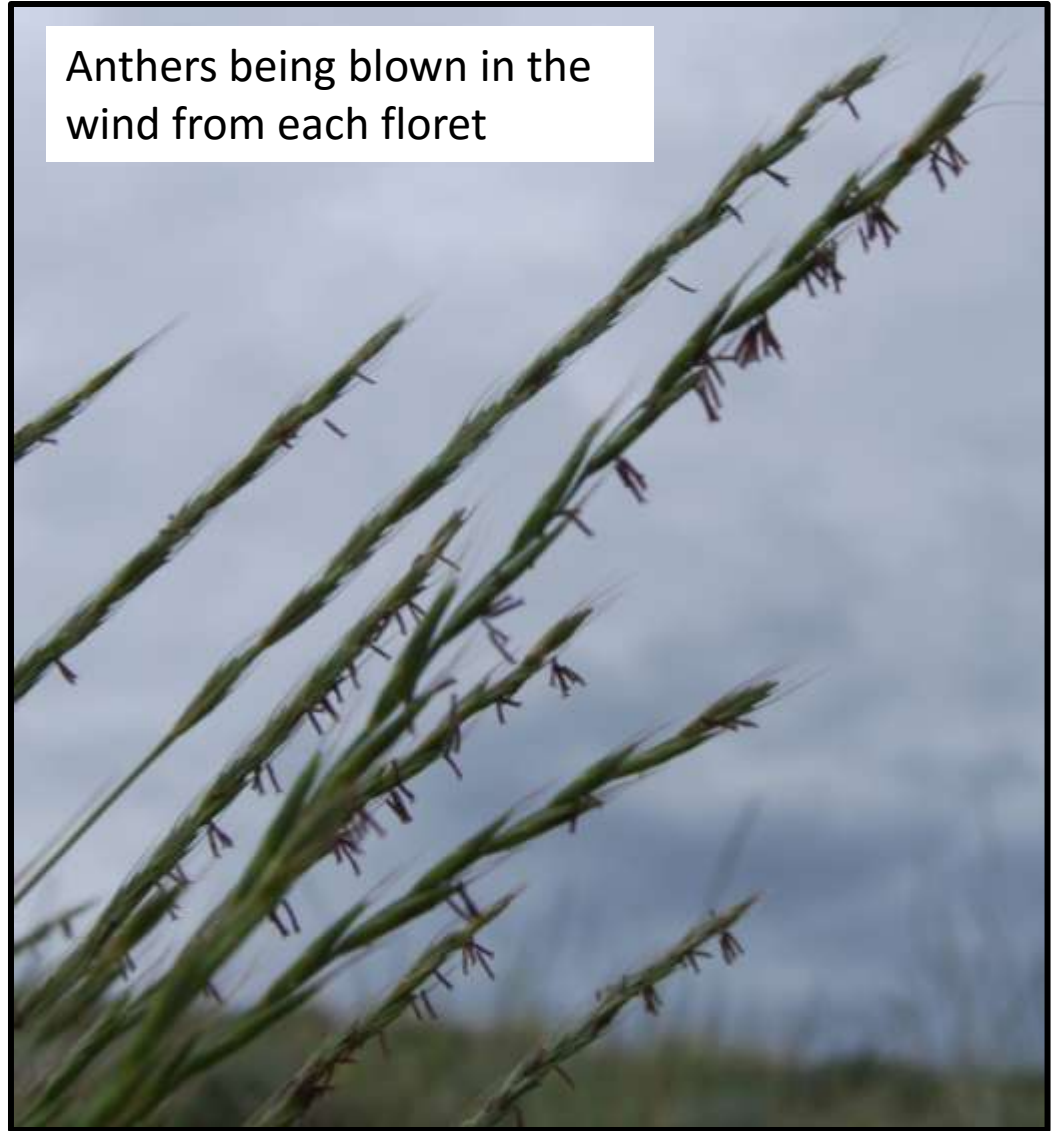


Poaceae (Gramineae) **Grass Family**

Pseudoregnaria spicatum Blue-bunch wheatgrass



Anthers being blown in the
wind from each floret



Grossulariaceae Gooseberry Family

Radial
Symmetry

- **Shrubs** with erect stems (with & without spines)
- **Leaves:** Simple, Deciduous, Palmate(3-5 lobed)
- **Flowers:** Regular, bi-sexual (perfect). Usually hang down in clusters.
 - Sepals: 5 united; showy
 - Petals: 5 separate, fused at the base
 - Stamens: 5 that alternate with petals
 - Pistil: 2 styles & 2 united carpels forming a single chamber. Inferior over. Berries have many seeds



***Ribes cereum* wax current (older name, squaw current) CURRANT Family**

Habitat: lowest zone of dry forest in open, hot, & rocky sites. **Up to 6 feet tall**



Stems: new branches finely hairy, becoming gray-brown with age

Very branched, no prickles (un-armed) deciduous.



Fruits: small red berries

Leaves: numerous & small, fan-shaped, weakly 3-5 lobe. Sparsely hairy and often glandular on both sides. At branch tips



***Ribes aureum* golden current**

Current Family

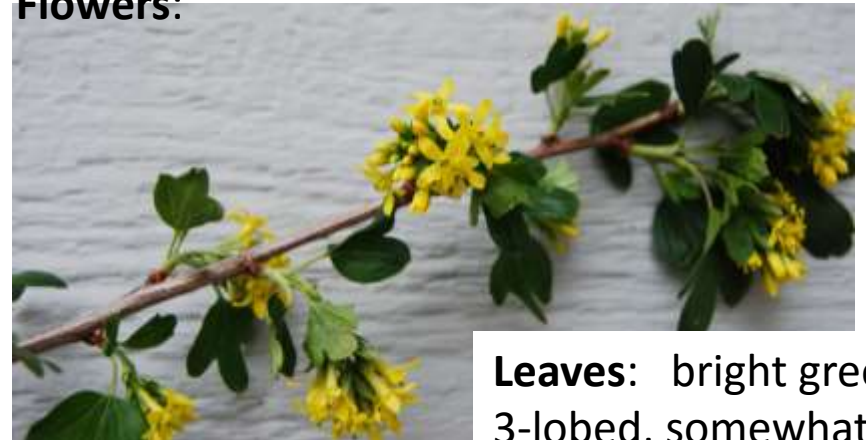
Habitat: shrub-steppe floodplains of rivers & streams, talus slopes. ___ feet tall



Deciduous
multi-stemmed



Flowers:



Fruits:

Leaves: bright green,
3-lobed, somewhat
leathery

Family ID traits: Mostly small plants adapted to arid environments

- **Leaves:** Simple , narrow- opposite or alternate
- **Flowers:** regular bi-sexual (perfect), tubular with flat face
 - Sepals: 5 united (part-way)
 - Petals: 5 united; twisted in bud stage.
 - Stamens: 5 attached to corolla & alternate w/ petals
 - Pistil: Style- usually 3-parted; superior ovary

Polemoniaceae **Phlox Family**

Phlox species phlox

Habitat: widespread in shrub-steppe. Perennial, Spring bloomer.

Radial symmetry



Showy Phlox (*Phlox speciosa*) is a similar species, often found in the same habitat.

Differences include

- usually notched petal tips that look heart-shaped
- wider & larger lance-shaped leaves
- Very short style



Longleaf phlox (*Phlox longifolia*) is the most common phlox in the shrub-steppe.

Leaves: linear, narrow, and long (1-2 inches)

Flowers: pink, with very long style



Boraginaceae Borage Family

Key Words: radially symmetrical with 4 nutlets

Radial
symmetry

Family ID traits:

Plant: Entire plant may be hairy, prickly, or sticky overall.

Flower: Bi-sexual (perfect) Flower structure often coiled like a scorpion tail.

Inner throat of tubular corolla marked by fornicies (protruding structure)

Sepals: 5, separate

Petals: 5 united

Stamens: 5 attached to corolla tube, alternate with petals.

Pistil: Superior ovary Fruit 4 nutlets around base of style.



***Hackelia diffusa* spreading stickseed**



habitat:

common in shrub-steppe and low elevation dry forest. Perennial. Spring bloomer.



Boraginaceae Borage Family

Key Words: radially symmetrical with 4 nutlets

Radial
Symmetry

Family ID traits:

Plant: Entire plant may be hairy, prickly, or sticky overall.

Flower: Bi-sexual (perfect) Flower structure often coiled like a scorpion tail.

Inner throat of tubular corolla marked by fornicies (protruding structure)

Sepals: 5, separate

Petals: 5 united

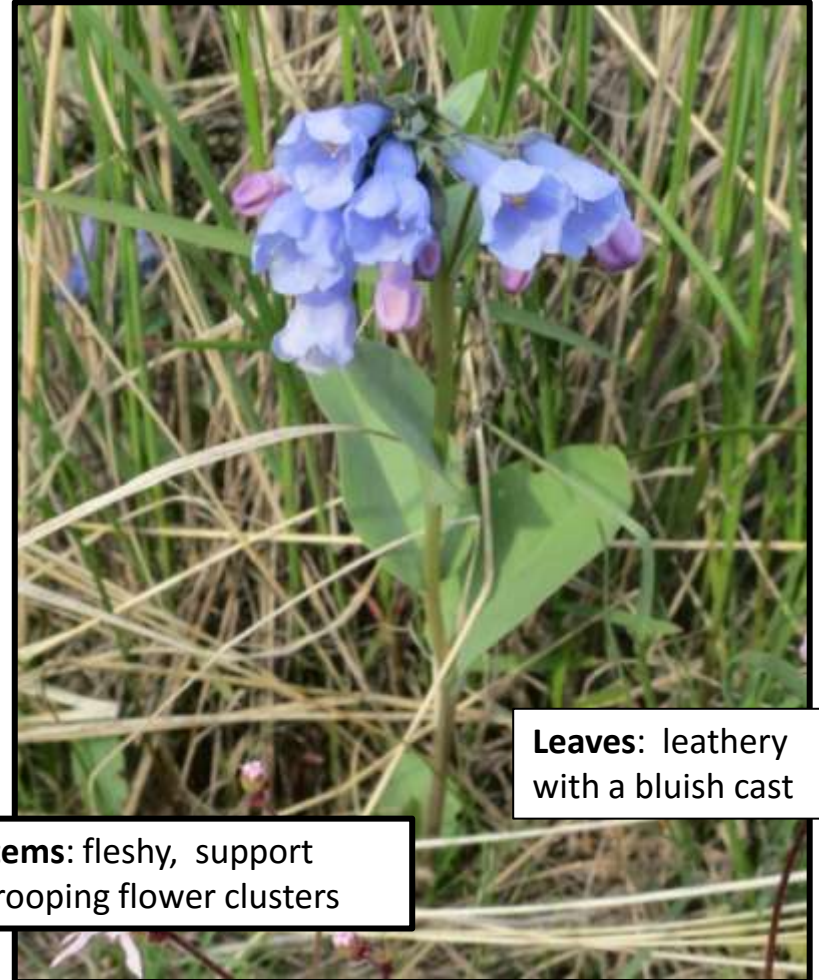
Stamens: 5 attached to corolla tube, alternate with petals.

Pistil: Superior ovary Fruit 4 nutlets around base of style.



Habitat: common in shrub-steppe, often under a shrub canopy. Perennial. Early spring bloomer

Mertensia longiflora sagebrush (small) bluebells



Leaves: leathery with a bluish cast

stems: fleshy, support drooping flower clusters

Boraginaceae Borage Family

Key Words: radially symmetrical
with 4 nutlets

Radial
Symmetry

Family ID traits:

Plant: Entire plant may be hairy, prickly, or sticky overall.

Flower: Bi-sexual (perfect) Flower structure often coiled like a scorpion tail.

Inner throat of tubular corolla marked by fornicies (protruding structure)

Sepals: 5, separate

Petals: 5 united

Stamens: 5 attached to corolla tube, alternate with petals.

Pistil: Superior ovary Fruit 4 nutlets around base of style.



Lithospermum ruderale

Columbia puccoon, western gromwell



Hydrophyllaceae Waterleaf Family

Radial
symmetry

Key words: Small hairy plants with parts in 5,
united. Petals fused; stamens born on the petals.

Family ID traits:

- **Leaves** usually hairy or with glands
- **Flowers** bi-sexual (perfect), small, clustered, and born on a cyme (scorpion-tail like)
- Sepals: 5 united usually hairy
- Petals: 5 united
- Stamens: 5, attached to the petals & filaments extend far out of the flower.
- Pistil: Superior ovary, single chamber
- Fruit: is a capsule containing many seeds.



Habitat: shrub-steppe to low montane forest, often under shrubs. Perennial. Early spring bloomer.



Hydrophyllum capitatus ballhead waterleaf



Hydrophyllaceae Waterleaf Family

Radial
symmetry

Key words: Key words: Small hairy plants with parts in 5, united. Petals fused; stamens born on the petals

Family ID traits:

Leaves usually hairy or with glands

Flowers bi-sexual (perfect), small, clustered, and born on a cyme (scorpion-tail like)

Sepals: 5 united usually hairy

Petals: 5 united

Stamens: 5, attached to the petals & filaments extend far out of the flower.

Pistil: Superior ovary, single chamber Fruit: is a capsule containing many seeds.

Perennial

Stem: erect, often branched, covered with stiff hairs

Leaves covered with stiff hairs (glandless). Mostly basal, long, narrow, oblong

Flowers: in dense tightly coiled clusters.

Habitat: Grows widely throughout shrubs-steppe to forest



Phacelia hastata silverleaf phacelia

Hydrophyllaceae Waterleaf Family

Radial
symmetry

Key words: Key words: Small hairy plants with parts in 5, united. Petals fused; stamens born on the petals

Family ID traits:

- **Leaves** usually hairy or with glands
- **Flowers** bi-sexual (perfect), small, clustered, and born on a cyme (scorpion-tail like)
- Sepals: 5 united usually hairy
- Petals: 5 united
- Stamens: 5, attached to the petals & filaments extend far out of the flower.
- Pistil: Superior ovary, single chamber
- Fruit: is a capsule containing many seeds.



Annual

Stem: erect that may be branched at top

Leaves narrowly linear to lance-shaped.

Habitat: sandy soils, dry open shrubs-steppe to forest



Phacelia linearis threadleaf phacelia

Portulacaceae Purslane Family

spring beauty

Claytonia lanceolata

Radial
symmetry

flowers: White to pink, often with deep pink veins. 5 petals, 2 sepals. Often in clusters of 3-20 flowers.

habitat: Widely scattered, mid-to-high elevations in open, moist grassy areas often under conifers or shrubs. Often in large patches. Perennial. Early spring bloomer.



Flowering stalks have a single pair of stalk-less leaves below the flower.



Leaves: 1-several lance-shaped basal leaves. Somewhat fleshy. Largely have underground stalks.

Portulacaceae Family ID traits:

- **Plants** often succulent with fat stems & small fat leaves (fleshy & juicy). Often grow in intense sunlight
- **Flowers:** bi-sexual (perfect)
- Sepals usually 2
- Petals: usually 4-6; some have 18
- Stamens: often = or double petal #
- Pistil: Superior (or ½-inferior ovary)
- **Fruits:** A dry capsule with many seeds

Scrophulariaceae- Figwort or Snapdragon Family

Bilateral
symmetry

Keywords: Irregular flowers w/ 3 lobes down & 2 lobes up. Capsules with numerous seeds.

Family Traits:

Plants: generally glandular. Leaves alternate

Flowers: bi-sexual (perfect) Either in spike or cluster with bracts, or in axils.

Sepals: 4 or 5, at least partly united

Petals: 4 or 5 united as a tube, usually 2-lipped with 2 lobes above and 3 lobes below

Stamens: Usually 4 in 2 pairs; A 5th stamen present in one subfamily

Pistil: Superior ovary, 2-chambered.

Seeds: inside a capsule, many in number. Sometimes a berry



blue-eyed Mary *Collinsia parviflora*

Mimulus alsinoides
Chickweed monkeyflower



Penstemon eriantherus Fuzzy-tongue penstemon



Scrophulariaceae- Figwort or Snapdragon Family

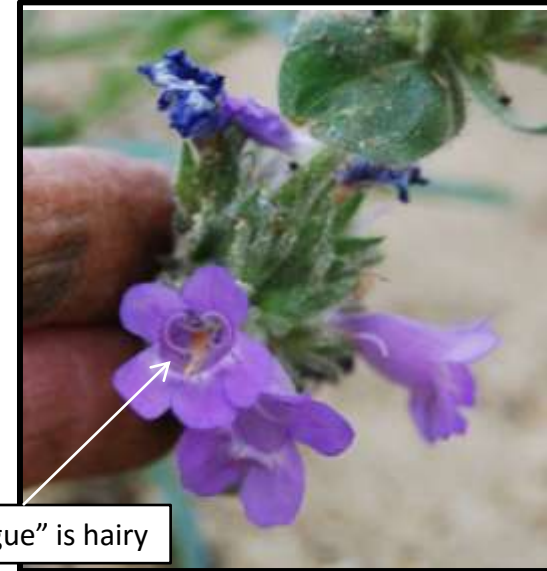
Keywords: Irregular flowers w/ 3 lobes down & 2 lobes up. Capsules with numerous seeds.

Bilateral
symmetry

11 different penstemon species are found in North Central Washington, so a technical key is required to ID each species.



Penstemon eriantherus
Fuzzy-tongue penstemon



Flower "tongue" is hairy



Flowers are large- 20-40 mm
Only the flower inflorescence are "sticky"

Orobanchaceae- broomrape family

Bilateral
symmetry

Key words: Parasitic plant w/ figwort-like flowers

Family Traits:

Plants: annual or perennial herbs, shrubs

Root parasites: Either fully or partly parasitic on roots of other plants .

Pollinators: hummingbirds & insects

Flowers: bi-sexual (perfect)

Sepals: tubular, 2-5 united

Petals: 5 united w/ upper and lower lip

Stamens: 4, in pairs

Pistil: Superior ovary

Seeds: Many, in a single-chambered capsule

Fully parasitic family members, like *Orobanche* sp., have no chlorophyll, no leaves, and do not make any of their own food, gaining it all from haustoria (root-like attaching structures) connect to the roots of a neighboring plant.



Orobanche uniflora Naked broomrape



Orobanchaceae- broomrape family

Key words: Parasitic plant w/ figwort-like flowers

Bilateral
symmetry

Castilleja (Paintbrush) recently moved out of the Schrophulariaceae Family

Castilleja are partial root parasites on the root of grasses, forbs, and shrubs.

Paintbrush flowers are tucked inside the many leaf-like colored bracts



Castilleja thompsonii Thompson's paintbrush

Ranunculaceae – **Buttercup Family**
Ranunculus glaberrimus
sagebrush buttercup

Radial
symmetry

habitat: shrub-steppe & conifer forest & rocky ridges, mid- to high elevation. Perennial. One of earliest spring bloomers

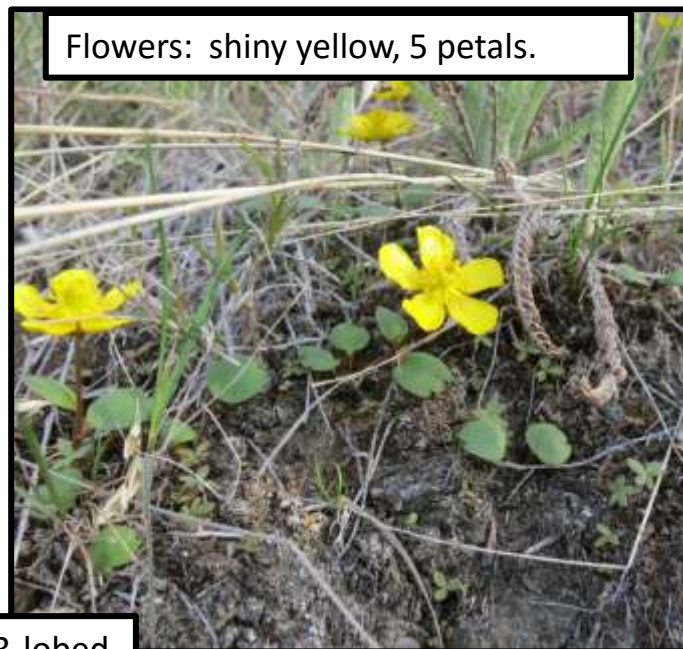
- Family ID traits:
- All floral parts *all independently attached* & all of an indefinite number (Primitive, ancestral)
 - Sepals and Petals- all separate from one-another, 3 to numerous in number.
 - Stamens & Pistils: Spirally inserted into cone-like receptacle (hard to see)
 - Pistil: Multiple pistils at center of flower w/ hooked tips. Superior ovary.
 - Other family with many pistils is Rose, but Rose lacks hooked tips



Low perennial w/ fleshy roots



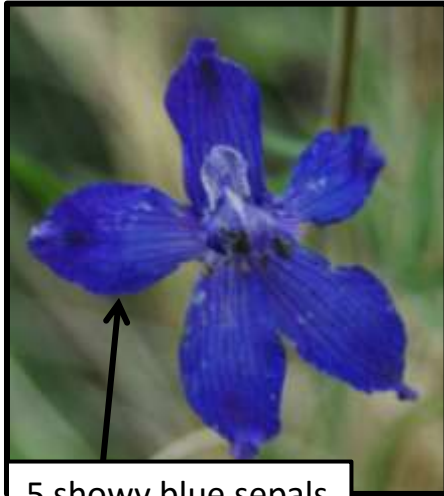
Leaves mainly basal; stem leaves often 3-lobed



Flowers: shiny yellow, 5 petals.

Ranunculaceae **Buttercup Family**
Delphinium nuttallianum upland larkspur

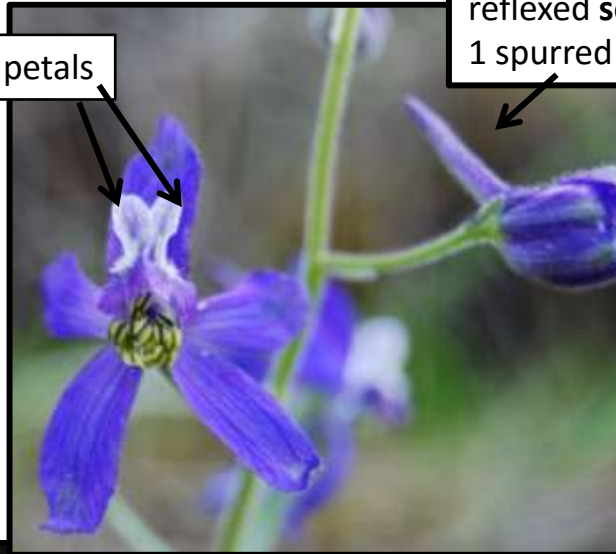
Bilateral
symmetry
perennial



5 showy blue sepals

flowers: irregular, petals
white to bluish
3-15 flowers on the stalk

petals



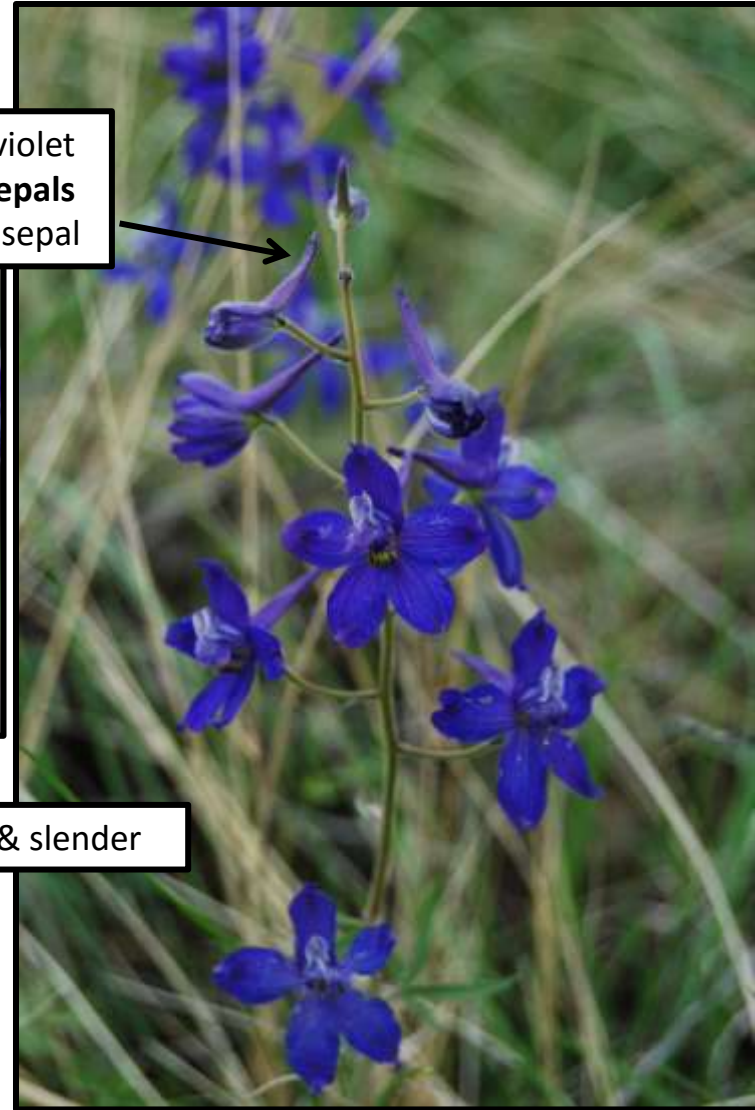
5 blue to violet
reflexed **sepals**
1 spurred sepal

Habitat: widespread in
shrub-steppe and moist low
elevation montane forests.
Low-to mid elevations.
Perennial. Spring bloomer.



stem: very erect, hairless, & slender

leaves: mostly on lowest
part of stem, divided or
lobed into 6-25 narrow
lobes, hairless.



Rosaceae Rose Family

Key words: 5 sepals & 5 petals with usually numerous stamens. Oval, serrated leaves

Radial
Symmetry

Family Traits: NOTE: This family has a wide variety of forms!

Plants: Trees, shrubs, herbs

Leaves: Many have oval, serrated leaves or leaflets. Usually pinnately or palmately compound leaves that alternate with stipules (appendage) at the base of the leaf

Flower: Bi-sexual (perfect) Can be in groups, or solitary

Sepals: 5 separate

Petals: 5 separate

Stamens: Numerous, a minimum of 5 and often many more, in multiples of 5

Pistils: Three patterns in Rose Family:

- 1-several to many simple pistils (example- raspberry, rose, strawberry)
 - 2- several to many pistils with styles separated, but united at their bases (spirea)
 - 3—a single simple pistil (Plum, cherry, apricot, peach, nectarine, almond)
- Some superior ovary (Prunus genus) and some inferior ovary (Apple, Rose

***Rosa nutkana* nootka rose ROSE Family 3-7 feet tall**

Habitat: Open habitats, seepage areas, along waterways & in floodplains at low to mid-elevations.



Flowers: usually solitary (sometimes in groups of 2-3). Our largest common rose: flowers 2-3 inches across



Leaves: Alternate & pinnately compound with an odd number of leaflets (5-7). Leaf edges both single & double serrated & often gland-tipped. Green above, paler below.



Stems armed with large pair of straight (to somewhat curved) thorns at each branch node.



Fruits: round, purplish-red, with persistent sepals

Amelanchier alnifolia serviceberry (Saskatoon)

ROSE Family

Habitat: In moister shrub-steppe gullies and ravines and at edge of talus slopes, up to dry open forests and rocky sites from low to subalpine elevations. Up to 30 feet tall



Leaves:

Deciduous, thin, round to oval, and toothed above the middle. Finely hairy on underside



Flowers: 5 petals, white, showy, linear to oblong petals. In short leafy clusters of 3-20 flowers at branch tips



Stems: Smooth with bark grey to red. Spreads with underground stems forming dense colony



Fruits: purple to nearly black, apple-like, with a whitish film (glaucous).



***Purshia tridentata* bitterbrush**

ROSE Family

Habitat: in hot dry environments. Most abundant on sandy soils up to 4,000 feet.
2-6 feet tall



Leaves: Deciduous, alternate. Wedge-shaped with 3-toothed tip. Hairy to wooly. Silver-green on upper leaf, grey-wooly below. Commonly, edges rolled under

Flowers: Bright yellow & numerous. Funnel-shaped. Solitary on short, leafy branches. 5 petals.



Fruits: Seeds are pyramid-shaped. Small rodents cache seeds for later food use



Stems: Rigidly branched with grey or brown bark and twigs covered in dense hairs.



Saxifragaceae- Saxifrage Family

Key words: small plants w/ small flowers,
parts in 5s, plus an oblong ovary with 2 styles

Family traits:

Plants: –mostly perennial herbs.

Leaves: most have round, variously lobed, basal.
Leaves on stem are alternate.)

Flower: bi-sexual (perfect), very small

Sepals:: 5 separate

Petals: 5 (rarely 0) separate

Stamen: 5 or 10

Pistil: superior 2-chambered oblong ovary
(usually) with 2 separate styles.

Radial
Symmetry

Western
Saxifrage
Saxafraga
Occidentalis

WA Habitat:
moist to
dry openings,
sea-level to
alpine.



Prairie star *Lithophragma* Genus :
several locally common species

Primulaceae **PRIMROSE Family**
shooting star *Dodecatheon conjugens*

Primulaceae Primrose family traits: flower parts in 5s, sepals united at base, stamens aligned in middle of petals, plants in moist soils, leaves usually basal or opposite

Leaves: all basal, elliptical, strap-like, non-toothed.

Flowers: 5 sepals & 5 petals reflexed backwards away from colorful stamensl.
Color: purplish-lavender to white



Stamens fused into a tube surrounding the style



Perennial

habitat: montane forest & shrub-steppe flat areas with poor drainage where moisture persists. Perennial Early spring bloomer.

***Polygonaceae* Buckwheat Family**

Key words: small flowers with colored sepals,
no petals, often triangular seeds

Family Traits:

Plants: Simple toothless leaves

often swollen joints- nodes- on stems

Flowers: Many small flowers in clusters or spikes

Sepals: 5 or 6 sometimes colored & often in 2 layers

Petals: NONE

Stamens: 3-9

Pistil: Superior ovary with 3 styles.

Fruit: triangular or lens-shaped dry seed, sometimes with wings

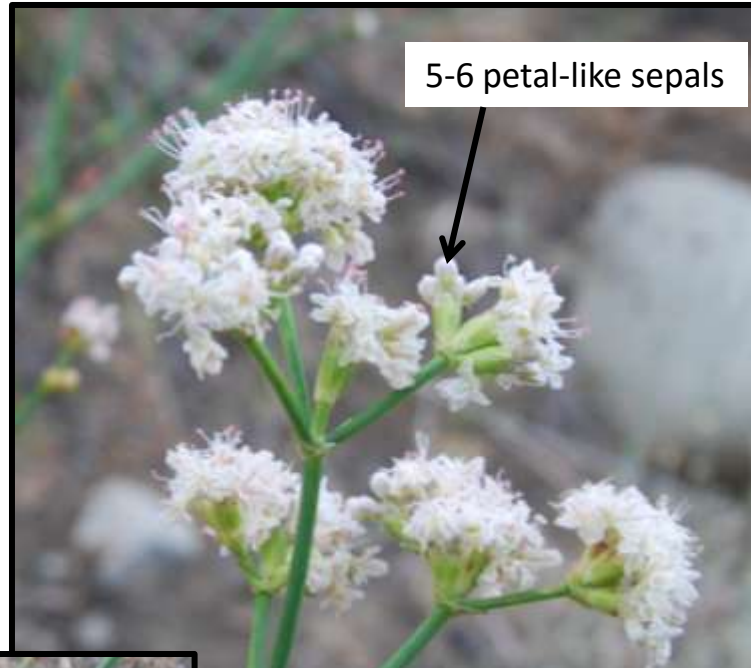


Eriogonum heracleoides



***Polygonaceae* Buckwheat Family *Eriogonum elatum* Tall buckwheat**

Key words: small flowers with colored sepals, no petals, often triangular seeds



habitat: common in shrub-steppe sandy or gravel soils & dry rocky places .
Perennial, summer bloomer

Big buckwheat,
Eriogonum elatum



Simple, toothless leaves



Swollen nodes (joints)

