Oleaster, Fumitory, Geranium, Grass, Currant, Waterleaf, Pea, Duckweed, Lily, Mistletoe, Evening Primrose, and Peony

Spring Flora
List 2
Biol 214

OLEASTER FAMILY
Elaeagnaceae
Russian Olive (I, C)

**Russian Olive**
*Elaeagnus angustifolia* L. (I, C)

- **Habit:**
  - Perennial, deciduous shrub or tree usually 12 to 45 feet tall
  - Stems often armed with thorns
  - Rapid growth

- **Leaves:**
  - Linear to lanceolate light green above, gray below, covered with scalelike, stellate pubescence, giving it the appearance of silvery scales

- **Flowers:**
  - Small, yellow, very fragrant, borne in the axils of the leaves

- **Fruit:**
  - A light grayish-green olive-shaped drupe
4 merous, inferior ovary, fruit a drupe

Russian Olive

*Elaeagnus angustifolia* L.

**Habitat:**
- Introduced from Europe
- Floodplains, riverbanks, stream courses, marshes, and irrigation ditches in the West
- Elevations from 4500 to 6000 feet
- Tolerant of considerable amounts of salinity or alkalinity, and can survive considerable droughts
- Russian olive sprouts from the root crown and sends up root suckers.

**Uses:**
- Wild fowl and game birds eat the fruit, and the tree is used for cover and protection.
- Beavers use Russian olive branches for dam-building material.
- It is often used in windbreaks.

**FUMITORY FAMILY**

*Steer’s Head (N)*

*Fumariaceae*

**Steer’s Head**

*Dicentra uniflora* Kell. (N) pg 177

**Habit**
- Low perennial herb, scapose, from clusters of club- to spindle-shaped tubers, small bulbets often present at proximal ends of tubers
**Steer’s Head**

*Dicentra uniflora* Kell. (N)

- **Leaves**
  - Leaves with 3-4 orders of leaflets and lobes
  - Surfaces pubescent near base, rarely sparsely pubescent throughout
  - Ultimate lobes variable in shape, often oblong to spoon-shaped, minutely apiculate, occasionally retuse

- **Flowers**
  - White or pink, nodding
  - 2 outer petals curve back like horns, and 2 inner petals taper forward making the ‘snout’ of the steer

- **Fruit**
  - Capsules ovoid
  - Seeds reniform

- **Inflorescence**
  - 1-flowered, barely exceeding to shorter than leaves; bracts 1 (rarely 2) per scape, lanceolate

- **Habitat**
  - Grows on well-drained slopes in foothills
  - Grows from early to mid-spring on rocky, sagebrush covered hillsides while there are still nearby patches of snow
  - 6000 – 7000 elevation
  - Montane and subalpine zones
  - Idaho, Wyoming, and Utah
  - Flower prior to the maples, oaks, and aspens leafing

- **Poisonous**
  - Isoquinoline and alkaloids

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**GERANIUM FAMILY**

*Geraniaceae*

**Crane’s-bill geranium** (I,N) (naturalized)

- **Habit**
  - Annual, winter annual or biennial
  - Fall rains sprout the seeds and the plant then lies dormant through the winter until spring warmth and moisture brings it into full leaf and flower
  - Deep roots have a strong pungent smell
Crane’s-bill, Filaree, Stork’s-bill

Erodium cicutarium (L.) L’Herm

• Leaves
  – prostrate basal rosette and upright, often leafy flowering stalks
  – Doubly pinnately dissected, deeply cleft, fern-like leaves
  – Stipules, lanceolate

• Flowers
  – flowers are about 1 cm across, pink or lavender, and borne on stalks in clusters of 2-12
  – Flowers open with the morning sun, and depending on how hot the day is, they close in the afternoon to reopen the next day

• Fruit
  – fruiting structure (consisting of the seeds, persistent bristly styles, and central placental axis) is 2-5 cm long and resembles a stork’s bill
  – At maturity, the developing fruit splits into 5 segments, each with a long, spirally twisting style with a seed attached at the base. The style twists hygroscopically, drilling the seed into the soil

• Habitat
  – Semi-desert, foothills, montane, Meadows, openings, shrublands, lawns. Spring, summer, fall.
  – Everywhere

• Notes
  – Linnaeus named this species Geranium cicutarium in 1753 and it was renamed Erodium cicutarium in 1789. The long, narrow, pointed Heron’s bill seed pods give rise to the genus name, “Erodios”, from the Greek for “Heron”. “Cicutarium” is for the resemblance of the leaves of Filaree to those of the poisonous Water Hemlock, Cicuta douglasii.

GRASS FAMILY
Gramineae or Poaceae

Cheat Grass (I)
Common Reed Grass (N)
Bulbous Blue Grass (I)
Grass family (Poaceae or Graminae)

- **FAMILY CHARACTERISTICS:**
  - Leaves alternate, 2-ranked
  - Leaves narrow, parallel veined, entire leaf margins
  - Round or flattened stems
  - Definite nodes and internodes in stem
  - Flowers simple without showy petals or sepals
  - Seed a single caryopsis or grain

Cheat Grass, Downy Chess
*Bromus tectorum* L. (I)

- **Habit**
  - Annual (winter) germinating in the autumn, overwintering as a seedling, then *flowering* in the spring or early summer

Cheat Grass, Downy Chess
*Bromus tectorum* L. (I)

- **Leaves**
  - Leaves pubescent; blades flat, 1/8 inch to ¼ inch wide; leaves rolled in the bud; ligules 1/16 to 1/8 inch long, membranous, rounded to collar shaped, with long pointed teeth; auricles absent

Cheat Grass, Downy Chess
*Bromus tectorum* L. (I)

- **Inflorescence**
  - Open, drooping, much branched *panicle*; *spikelets* contain 5 to 8 florets; *glumes* and *lemmas* pubescent or downy; *lemmas* narrow with *awns* 5/8 inch long or longer.

Cheat Grass, Downy Chess
*Bromus tectorum* L. (I)

- **Habitat**
  - Introduced
  - grows on all exposures and all types of topography from desert valley bottoms to the tops of the highest mountain peaks, 2,500 to 13,000 feet in elevation; invades heavily grazed rangeland, roadsides, waste places, burned areas, and disturbed sites
Cheat Grass, Downy Chess
*Bromus tectorum* L. (I)

- **Uses:**
  - Seedheads have awns that may injure eyes and mouth of grazing animals, deer and pronghorn graze it in spring while it is actively growing; provides food for upland birds and rodents; chukars as well as partridges are uniquely adapted to cheatgrass infested range where it provides food and cover; Canada geese also use it heavily for feed in the fall immediately after it germinates; seed is also used by mourning dove and other upland game birds.

Common Reed, Giant Reed
*Pragmites communis* (L.) Trin. (N)

- **Habit**
  - perennial
  - Stems 2-3 m tall
  - Hairless
  - Rhizomatous and often stoloniferous

- **Leaves**
  - Broad leaves (1-4 cm wide)
  - Alternate and flat

- **Inflorescence**
  - Panicle of purplish to pale, plume like spikes
  - Mature lemma has long, silky hairs giving fluffy, feathery appearance

- **Habitat**
  - Native
  - Wet to moist
  - Open sites
  - Plains and foothills

- **Uses**
  - Used for mats, insulation,
  - Stems exude sweet, pasty substance, hardening into gum
  - Made into marshmallow like taffy
**Bulbous Bluegrass**

*Poa bulbosa* L. (I)

- **Habit**
  - Short lived perennial bluegrass

- **Leaves**
  - genus *Poa* have “boat-shaped” leaf tips

- **Flowering**
  - April - Jun
  - Florets produce bulbils with leafy shoots

- **Habitat**
  - Waste ground, railroads, cultivated fields
  - Native to Eurasia and North Africa

- **Uses**
  - The bulbils are high in starch and have a fair amount of fat so they are eaten by wildlife
  - first experimented with in the U.S. in 1907 and was soon after planted with alfalfa to retard the growth of weeds. It has since spread over much of the U.S. and is considered a noxious weed in many areas

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**CURRANT OR GOOSEBERRY FAMILY**

*Grossulariaceae*

*Golden Current (N)*
Golden Current
Ribes aureum Pursh (N)

- **Habit**
  - Perennial shrub
  - Stems not spiny or bristly (currents)

- **Leaves**
  - Leaf lobes rounded
  - Alternate or fascicled, simple, margins orbiculate or cuneate-ovate with 3-5 lobes, glabrous
  - Leaves are light green and glossy

- **Flowers**
  - Bright yellow, hairless
  - Short racemes of 5-10, with the strong fragrance of cloves

- **Fruits**
  - Berry, 8-10 mm (0.3-0.4 in) diameter, globose to ellipsoid, gold-orange, with numerous seeds, matures June to August

- **Habitat**
  - Well-drained sites
  - Sandy habitats, or rocky slopes and ravines
  - Often along streams
  - Plains and foothills
  - Alberta to New Mexico

Horsechestnut or Buckeye
Family
Hippocastanaceae

Horsechestnut (I, C)
Horse-chestnut
*Aesculus hippocastanum* L.

- **Habit:**
  - Tree 50-75 ft tall, spread 40-65 ft wide

- **Leaves**
  - Palmately compound, each with 7 (less frequently 5) spreading ovate-oblong leaflets to 4-10” long; fall color usually shades of yellow and brown
  - Opposite

- **Flowers**
  - Showy white flowers with red or yellow markings appear in upright terminal panicles in mid-spring

- **Fruit**
  - Nut like capsule consisting of 1-2 horsechestnut(s) encased by a leathery light brown husk covered with sharp spines

Horse-chestnut
*Aesculus hippocastanum* L.

- **Habitat:**
  - Horsechestnut is native to the Balkans and grown as cultivated species in our area

- **Information:**
  - Chestnuts and horsechestnuts are in totally different families. Chestnuts (*Castanea*) are in the beech family (*Fagaceae*) and produce edible nuts. Horsechestnuts and buckeyes (*Aesculus*) are in the horsechestnut family (*Hippocastanaceae*) and produce poisonous nuts. Horsechestnut is closely related to Ohio buckeye, being most easily distinguished from the latter by having spiny sharp fruits and sticky buds.

Common Horse-chestnut
*Aesculus hippocastanum* L.

- **Fruit**
  - Nut like capsule consisting of 1-2 horsechestnut(s) encased by a leathery light brown husk covered with sharp spines
**PEA FAMILY**  
Fabaceae or Leguminosae

Wooly-pod Milkvetch (N)  
Locoweed (N)  
Eastern Redbud (I, C)

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**Pea or Legume family (Fabaceae or Leguminosae)**

- Leaves alternate  
  - Mostly compound (trifoliate, palmate or pinnate)  
  - Mostly bearing a pair of stipules at base of leaf petiole  
- Flowers irregular  
  - Petals 5, sepals 5 and united in a tube  
- Fruit a single-celled pod opening along 2 sutures  
- Stamens 10, usually united into a tube, or 9 stamens in one bundle and one single stamen

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**Wooly-pod Milkvetch, Pursh’s Milkvetch**  
*Astragalus purshii* Dougl. (N) pg 171

- **Habit**  
  - Perennial herb  
  - Small plant - less than 13 cm tall (~ 4 inches)

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**Wooly-pod Milkvetch, Pursh’s Milkvetch**  
*Astragalus purshii* Dougl. (N)

- **Leaves**  
  - Alternate  
  - Pinnately compound  
  - 5-17  
  - Round tipped leaflets  
  - Densely villous on both sides

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**Wooly-pod Milkvetch, Pursh’s Milkvetch**  
*Astragalus purshii* Dougl. (N)

- **Flowers**  
  - Yellowish-white, (sometimes pinkish) showy flowers 19-26mm long

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**Wooly-pod Milkvetch, Pursh’s Milkvetch**  
*Astragalus purshii* Dougl. (N)

- **Fruit**  
  - Silky-woolly pods
Wooly-pod Milkvetch, Pursh’s Milkvetch  
*Astragalus purshii* Doug.  (N)

- **Habitat**
  - Native
  - Dry, open sites
  - Plains and foothills
  - Southern Canada to New Mexico

Milkvetch, Locoweed  
*Astraguls spp.* (N)

- **Habit**
  - erect to prostrate forb, with stems that are mostly hairy and leafy

Milkvetch, Locoweed  
*Astraguls spp.* (N)

- **Leaves**
  - Odd-pinnate leaves (a leaflet at the terminal end of the leaf), usually pubescent.

Milkvetch, Locoweed  
*Astraguls spp.* (N)

- **Fruit**
  - pea pod (legume) with a papery, leathery, or woody cover

Milkvetch, Locoweed  
*Astraguls spp.* (N)

- **Habitat**
  - harmful to livestock which produce teratogenisis (birth defects) and embryonic death
  - known as locoweeds
  - foothills and plains and in semiarid desert regions
  - Because they belong to the legume family, they are capable of fixing nitrogen in the soil, thus building soil fertility.

Eastern Redbud, Judas Tree  
*Cercis canadensis* L.  (I, C)

- **Habit**
  - Perennial, deciduous tree
  - Form is usually dense, round 6-12m tall
Eastern Redbud, Judas Tree
*Cercis canadensis* L.  (I, C)

- **Leaves**
  - alternate, simple, cordate in shape with an entire margin, 7-12 cm (3-5 inches) long and wide, thin and papery, and may be slightly hairy below.
  - leaves quickly turn from bronzy to bright green, then to yellow in fall.

- **Flowers**
  - showy, light to dark pink in color, 1.5 cm (½ inch) long, appearing in clusters from March to May, on bare stems before the leaves.
  - The flowers are pollinated by long-tongued bees such as blueberry bees and carpenter bees. Short-tongued bees apparently cannot reach the nectaries.

- **Fruit**
  - flattened, dry, brown, pea-like pods, 5-10 cm (2-4 inches) long that contain flat, elliptical, brown seeds 6 mm (¼ inch) long, maturing in August to October.

- **Habitat**
  - native to eastern and south-central US, southern Europe, and Asia.
  - cultivated for their showy early-spring flowers and interesting branch patterns.
  - Occurs in forest understory, banks of streams, open rocky woods.

DUCKWEED FAMILY
Lemnaceae

Water Lentil, Duckweed
*Lemna minor* L.  (N) pg 269

- **Habit**
  - Tiny, floating, aquatic
  - Perennial, herb
  - Native
  - Not differentiated into stems and leaves
  - Small green disc fronds (fern leaf) each with a single rootlet.
Water Lentil, Duckweed
*Lemma minor* L (N)

- **Flowers**
  - Tiny, inconspicuous
  - Lacks petals and sepals
  - 2 male and 1 female flower per plant

- **Fruit**
  - Small, thin-walled bladder-like utricle
  - 1-7 seeds

Habitat
- Still, fresh water
- Plains to montane
- Southern Yukon to New Mexico

LILY FAMILY
*Liliaceae*

- Tapertip Onion (N)
- Textile Onion (N)
- Douglas' Brodiaea (N)
- Sego-lily (N)
- Common Camas (N)
- Warbavey Fairy-bell (N)
- Pale Faen-lily (N)
- Yellow Bell (N)
- Checker Lily (N)
- Paniced Death-camas (N)

Lily family (Liliaceae)

- Leaves linear, simple, parallel veined
- Flowers 3 sepals and 3 petals that look alike (tepals)
- 6 stamens
- Single pistil
- Ovary superior, sometimes inferior
- Fruit a capsule or berry
- Underground storage organs (rhizomes, bulbs, corms or tubers)

Tapertip Onion, Hooker Onion
*Allium acuminatum* Hook. (N)

- **Habit**
  - Scapose, perennial herbs from bulbs, the bulbs nearly spherical, usually clustered, the outer coats brownish and with a net-like pattern, the mesh equally long and broad
Tapertip Onion, Hooker Onion  
*Allium acuminatum* Hook.

- **Leaves**
  - 2-3 grooved leaves
  - Wither early
  - Leaves 2 or more, concave-convex in cross section, 1-3 mm. broad, shorter than the scape, withering by flowering; scape 1-3 dm. tall, cylindrical.

- **Flowers**
  - Rose-purple flowers
  - Umbel few- to several-flowered; pedicels of equal length, 1-2 times the length of the tepals
  - Outer 3 tepals usually 10-12 mm. long, lanceolate, acuminate, entire, the tips widely spreading, pink or rose-purple to white
  - Inner 3 tepals similar but shorter, narrower and serrulate; stamens 6, two-thirds the length of the tepals; style capitate

- **Fruit**
  - Capsule 3-celled, 6-seeded

- **Habitat**
  - Sagebrush step

Textile Onion  
*Allium textile* Nels. & Macbr. (N)

- **Habit**
  - Perennial
  - Bulbs covered in net-like fibrous layers
  - Plants grow from bulbs, having several grass-like leaves
  - Height to 25 cm
Textile Onion
*Allium textile* Nels. & Macbr. (N)

- **Leaves**
  - 2 leaves per stalk
  - Fleshy with strong onion odor

- **Flowers**
  - Umbels of small white flowers borne on leafless flower stalks
  - Erect clusters

- **Fruit**
  - Reproduces from bulbs, aerial bulblets and seed
  - Fruit a capsule

- **Habitat**
  - Native
  - Dry open sites
  - Plains to montane
  - Canada to New Mexico
  - The juice of the plant is used as a moth repellent. The whole plant is said to repel insects and moles

Douglas’ Brodiaea
*Brodiaea douglasii* Wats. (N)

- **Habit**
  - Perennial herb
  - Stems 20-60 cm tall
  - From scaly, bulbous stem bases

- **Leaves**
  - Basal, linear
  - Flat but keeled beneath
**Douglas’ Brodiaea**
*Brodiaea douglasii* Wats. (N)

- **Flowers**
  - Bloom time: April to June
  - Deep to light blue
  - Bell shaped
  - 3 inner tepals with ruffled edges

- **Inflorescence**
  - Flat-topped umbel

- **Fruit**
  - Rounded capsules

**Habitat**
- Range: British Columbia to Wyoming
- Grassy prairies, sagebrush steppe and open ponderosa pine forests

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**Sego-lily, Nuttall’s Sego Lily**
*Calochortus nuttallii* T. & G.

- **Habit**
  - Perennial herb
  - Also called mariposa-lily

- **Leaves**
  - Single, flat, grass-like
**Sego-lily, Nuttall’s Sego Lily**  
*Calochortus nuttallii* T. & G.

- **Flowers**
  - Ivory-white, with large, dark spot at the base of each petal, below a broad, reddish-brown band

- **Habitat**
  - Grows in dry sites
  - Foothills to montane
  - Idaho and Montana to New Mexico

- **Uses**
  - Bulbs are sweet and nutritious, raw or cooked

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**Common Camas, Blue Camas Lily**  
*Camassia quamash* (Pursh) Greene (N)

- **Habit**
  - Scapose perennial from a deep-seated bulb, the scape 2-7 dm. tall

- **Leaves**
  - Leaves several, all basal, 8-20 mm. broad, considerably shorter than the scape.

- **Flowers**
  - Inflorescence a raceme
  - many-flowered, 5-30 cm. long; pedicels 10-20 mm. long, spreading, arched or ascending in flower
  - incurved-erect in fruit
  - flowers pale to deep blue or violet, somewhat irregular; tepals 6

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*Utah State Flower: Sego Lily
©Thomas G. Barnes @ USDA-NRCS PLANTS Database*
**Common Camas, Blue Camas Lily**
*Camassia quamash* (Pursh) Greene  (N)

- **Fruit**
  - Capsule ovoid, 3-celled, 1-2.5 cm. long

**Habitat**
- native
  - Open, moist areas, often where dry by late spring, at low to mid-elevations in the mountains
  - Both sides of the Cascades, British Columbia to California, east to Montana and Utah

**Wart-berry fairybells, Rough-fruit Fairybells**
*Disporum trachycarpum* (Wats.) Benth. & Hook., *Prosartes trachycarpa* S. Wats (N)

- **Habit**
  - Sparingly branched perennial herbs from rhizomes, the leafy stem 3-6 dm. tall

- **Leaves**
  - Leaves ovate to ovate-oblong, pointed, sub-cordate or rounded, somewhat pubescent below and glabrous above, the margins with spreading hairs

- **Flowers**
  - Flowers 1-2 on stout, pubescent pedicels
  - narrowly bell-shaped
  - creamy white
  - tepals 6, alike, distinct
  - narrowly lanceolate

- **Fruit**
  - 1-3 lumpy berries
  - Bright orange-yellow to scarlet, velvet-warty skinned
  - 4-18 seeded
Wart-berry fairybells, Rough-fruiting Fairybells

- Habitat
  - native
  - Rich, moist sites
  - Plains to subalpine
  - Canada to New Mexico

Pale Fawn-lily, Yellow Fawn-lily

- Habit
  - Herbaceous,
  - scapose
  - perennial from a deep-seated corm, the scape 1-2 dm. tall
  - Not abundant so do not collect

Pale Fawn-lily, Yellow Fawn-lily

- Leaves
  - Leaves 2, basal, not mottled, oblong-elliptic, 10-20 cm. long, narrowed to short, broad petioles

Pale Fawn-lily, Yellow Fawn-lily

- Flowers
  - Bright yellow, nodding
  - Solitary
  - Reflexed perianth

Pale Fawn-lily, Yellow Fawn-lily

- Fruits
  - Erect, 3-sided, club-shaped capsules

Pale Fawn-lily, Yellow Fawn-lily

- Habitat: native
  - British Columbia, south in the Olympic and Cascade Mountains to northern Oregon, east to Colorado
  - Sagebrush slopes to near timberline in the mountains, often blooming near snow fields
  - Meriwether Lewis collected the first specimen of this plant in present-day Idaho near the Clearwater River in 1806. Frederick Pursh named it in 1814.
Yellow Bell, Yellow Fritillary
Fritillaria pudica (Pursh) Spreng. (N)

- **Habit**
  - Perennial herb
  - Stems 10-30 cm tall
  - From small, scaly, bulb-like corms

- **Leaves**
  - Nearly opposite to whorled
  - Usually 2, linear

- **Flowers**
  - Yellow fading to orange to brown
  - Narrowly bell-shaped
  - Nodding
  - Solitary
  - April to May

- **Fruit**
  - Erect, egg-shaped capsules

Yellow Bell, Yellow Fritillary
Fritillaria pudica (Pursh) Spreng. (N)

- **Habitat - native**
  - Moderately dry, open or wooded, grassy sites
  - Plains to montane
  - Canada to Colorado

Checker Lily, Chocolate Lily, Leopard Lily,
Fritillaria atropurpurea Nutt. (N)

- **Habit**
  - Bulb-like corms grow below ground and produce tiny offsets the size of rice grains
  - Produces an unpleasant odor thought to attract fly pollinators
Checker Lily, Chocolate Lily, Leopard Lily, *Fritillaria atropurpurea* Nutt. (N)

- **Leaves**
  - 5-22 narrow, scattered leaves

- **Flowers**
  - 1-4 nodding, brown flowers with yellow or white blotches

- **Fruit**
  - Bulb-like corms
  - capsules

- **Habitat - native**
  - Grassy slopes
  - Plains, foothills and montane
  - Southern Idaho to New Mexico

Panicled Death-camas, Foothills Death-camas *Zigadenus paniculatus* (Nutt.) Wats.

- **Habit**
  - Grey-green, perennial herb
  - Often with whitish waxy coating
  - Stems erect, 15-75 cm tall
  - All parts are poisonous
  - No onion smell

- **Leaves**
  - Mainly basal, grass-like
  - Keeled
  - Stem leaves few and small
Panicled Death-camas, Foothills

**Death-camas** *Zigadenus paniculatus* (Nutt.) Wats.

- **Flowers**
  - Greenish-white to yellowish-white with 6 dark green, heart-shaped glands near center
  - Panicle like clusters

- **Fruit**
  - Erect, 3-lobed capsules
  - Egg-shaped to oblong

**Habitat** - native
- Moist, open sites
- Foothills to alpine
- Alaska to New Mexico

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**MISTLETOE FAMILY**

**Loranthaceae**

**Western Dwarf Mistletoe (N)**

**Habit**
- Olive-green or brown plant
- Short stout branches
- Parasitic on conifers
- Stems yellowish to green

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**Western dwarf mistletoe**

*Arceuthobium campylopodum* Engelm. (N)

- **Leaves**
  - Opposite, scale like
Western dwarf mistletoe
*Arceuthobium campylopodum* Engelm. (N)

- **Flowers**
  - Flowers in late autumn
  - Few to several flowers in whorls (female)
  - Branched cluster (male)

- **Fruit**
  - Sticky, egg shaped berries
  - Bluish-green
  - Nodding
  - Eject 1 sticky seed

- **Habitat - native**
  - Hosts
    - Firs, junipers, larches, spruces and pines
  - Canada to New Mexico

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**EVERNING-PRIMROSE**
*Onagraceae*

*Desert Evening-primrose* (N)

- **Habit**
  - Low, tufted (clump)
  - Perennial herb
  - Stems very short or absent
**Desert Evening-primrose, Rock-rose** *Oenothera caespitosa* Nutt. (N)

- **Leaves**
  - Basal, lance-shaped
  - Pinnately lobed, slender stalked
  - Toothed to toothless

- **Flowers**
  - White, pinkish with age
  - 4 heart-shaped petals
  - 4 large, backward-bent sepals at tip of flared hypanthium
  - May to August

- **Fruit**
  - Woody capsules with bumpy angles
  - Stalkless
  - At the base of leaves

**Habitat**
- Native
- Dry, open sites, often on clay flats and roadsides
- Plains to subalpine
- Canada to Colorado

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**SANDALWOOD FAMILY**
**SANTALACEAE**

- (N) Bastard Toad-flax
- Family characteristics
  - Only one species in the sagebrush steppe

**Bastard Toad-flax (N)**
*Comandra umbellata* (L.) Nutt.

- **Habit**
  - Perennial, herb
  - Unattractive, less than 12” tall
  - *Comandra umbellata* is hemiparasitic, attaching itself to the roots of other plants and deriving at least some nourishment from them
**Bastard Toad-flax (N)**
*Commandra umbellate* (L.) Nutt.

- **Leaves**
  - Leaves are short and somewhat thick, resembling those of a succulent
  - Has green leaves so it photosynthesizes
  - Spreads by underground roots and can form large colonies in meadows and along roadides or insert itself into rock crevices

- **Flowers**
  - Star-shaped flowers are white to pink, tiny, and massed

**Habitat**
- Native
- "Comandra" is from the Greek for "male hairs" and refers to hairs on the stamens. "Umbellata", "umbrella-like", refers to the shape of the flower clusters -- though we now call this shape a "corymb".

**PEONY FAMILY**
*Paeoniaceae*

**Brown’s Peony (N)**
*Paeonia brownii* Dougl.

- **Habit**
  - Perennial, subshrubs;
  - Roots generally in fleshy clusters;
  - Stems simple, from root crown

- **Leaves**
  - 5-8 per stem, glaucous (waxy coating) (especially beneath)
  - Basal and cauline, alternate, large, deeply (generally ternately)
  - Dissected to compound, ± fleshy; stipules 0
Brown’s Peony, Western Peony

*Paeonia brownii* Dougl.

**Flowers**
- sepals generally 5, free, leathery, persistent
- rounded, maroon to bronze, margins yellowish or greenish

**Fruit**
- follicles, 2–5, thick-walled, subtended by persistent calyx
- Seeds, large, generally several per follicle, generally black, with an aril.

**Inflorescence**
- flowers solitary or few in a terminal cluster

**Habitat**
- East of the Cascades, Chelan County, Washington, to California, east to Utah and Wyoming
- Sagebrush deserts to ponderosa pine forests