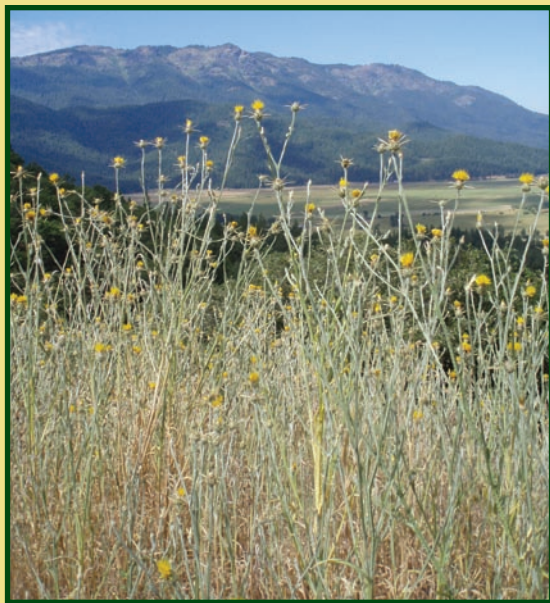




United States Department of Agriculture

INVASIVE PLANTS of the Plumas National Forest



A Comparison Guide to
Non-native Invasive Plants and Common Look-alikes



Forest
Service

Plumas
National Forest

Publication
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Invasive Plants of the Plumas National Forest

A Comparison Guide to Non-native Invasive Plants and Common Look-alikes

Non-native invasive plants are aggressive plants that have been introduced into an environment outside of their native range. Sometimes referred to as alien species, these invasive weeds have been separated from the natural enemies that help control them in their homeland.

They grow rapidly, reproduce profusely, and compete with native plants for water, light and nutrients. Some of these invasive weeds have been designated as noxious by California law, requiring control efforts by property owners.

Non-native invasive plants tend to outcompete native plants, especially where lands have been disturbed. When they displace native plants and animals, they lower diversity, reduce hunting and fishing potential, change the aesthetics of a habitat, inhibit recreational activities and tourism, crowd out endangered species, and reduce forage value. For example, tall whitetop, which grows along the Wild and Scenic Middle Fork of the Feather River, outcompetes other riparian species, creating dense monocultures. Tall whitetop also has extensive but easily-broken root systems, which cause soil destabilization, streambank erosion, and can threaten water quality.

If you find an invasive weed, please report the infestation to the appropriate Plumas National Forest Ranger District office or County Agriculture Department. (See contact information on back page.)

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Preventing the Spread of Weeds

Prevention is the least expensive and most effective way to halt the spread of noxious and invasive weeds.

This requires:

- Educating workers and the public about the importance of managing weeds on an ongoing basis
- Properly identifying weed species
- Avoiding or treating existing weed populations
- Preventing weed seeds or other plant parts from establishing new or bigger populations

Steps you can take:

1. Use this book to identify invasive weeds in your area.
2. Inspect your work or play area. Identify any invasive weeds; map the location of the weeds.
3. Clean vehicles, shovels and other soil-disturbing equipment prior to entering a site to avoid introducing weeds.
4. Don't introduce weed-contaminated soil, fill, or other materials to new sites. Use certified weed-free products.
5. Check shoes, clothing, bicycles and vehicles regularly for weed seeds or other plant parts. Carefully remove and dispose of weedy materials.
6. Pressure-wash vehicles and equipment after driving in weedy areas. Periodically monitor and treat areas to prevent weedy plants from establishing.
7. Establish a decontamination area such as a tarp for cleaning clothing and equipment.
8. Don't walk, ride or drive through infestations. When operating vehicles, stay on established roads or trails.
9. If dogs accompany you, check their paws and coats for weed seeds and other plant parts and remove them.
10. Don't plant invasive weeds in your garden or landscape.
11. Get advice for treatment on private property from your local county agriculture department. *(See contact information on back page.)*

How to Use the Guidebook

This guidebook will help you identify the invasive plant species threatening the Plumas National Forest. Compare invasive plants with common "look-alikes" to help you differentiate between desirable native plants and non-native invasive plants.

Look for these face icons at the top of the page.

☹️ = Non-native invasive plants

😊 = Desirable look-alikes (native and non-invasive)

😬 = Plants that could potentially become invasive.

(You may choose to avoid planting species that may become invasive on your property.)

The California Invasive Plant Council (Cal IPC) has assigned overall threat rankings to weed species: High, Moderate, and Limited. These rankings, as well as California's state noxious weed ratings below, are provided for each species.

"A" rated: very invasive, but have a limited distribution throughout the state and are considered top priority for control before they become widespread.

"B" rated: very invasive and more widespread. Priority of "B" rated weed treatment is decided on a case-by-case basis depending on the local value of resource being compromised, local distribution, and funds available.

"C" rated: generally spread beyond the point where the state of California can justify spending limited resources, but the private citizen may control them on their own.

Relative abundance of each species is also provided.

Common: Found at numerous locations in the area

Moderate: Found at several locations; large populations may occur at a few locations

Infrequent: Only at one or a few locations; no large populations

INDEX COMMON NAME *Scientific Name* CODE Page

THISTLES AND LOOK-ALIKES

☹ Invasive				
BULL THISTLE	<i>Cirsium vulgare</i>	CIVU	10-11	
CANADA THISTLE	<i>Cirsium arvense</i>	CIAR4	12-13	
ITALIAN THISTLE	<i>Carduus pycnocephalus</i>	CAPY2	14-15	
MUSK THISTLE	<i>Carduus nutans</i>	CANU4	16-17	
SCOTCH THISTLE	<i>Onopordum acanthium</i>	ONAC	18-19	
😊 Look-alike				
ANDERSON'S THISTLE	<i>Cirsium andersonii</i>	CIAN	20-21	
SNOWY THISTLE	<i>Cirsium occidentale</i> var. <i>candidissimum</i>	CIOCC	22-23	

KNAPWEEDS AND LOOK-ALIKES

☹ Invasive				
DIFFUSE Knapweed	<i>Centaurea diffusa</i>	CEDI3	24-25	
RUSSIAN Knapweed	<i>Acroptilon repens</i>	ACRE	26-27	
SPOTTED Knapweed	<i>Centaurea stoebe</i> ssp. <i>micranthos</i>	CESTM	28-29	
😊 Look-alike				
AMERICAN-ASTER	<i>Symphytotrichum</i> spp.		30-31	

YELLOW ASTERS

☹ Invasive				
MALTA STARThistle	<i>Centaurea melitensis</i>	CEME2	32-33	
YELLOW STARThistle	<i>Centaurea solstitialis</i>	CESO3	34-35	
RUSH SKELETONWEED	<i>Chondrilla juncea</i>	CHJU	36-37	
STINKWORT	<i>Dittrichia graveolens</i>	DIGR3	38-39	
😊 Look-alike				
TARWEED	<i>Madia</i> spp.		40-41	

BLACKBERRIES

☹ Invasive				
HIMALAYAN BLACKBERRY	<i>Rubus armeniacus</i>	RUAR9	42-43	
😊 Look-alike				
CALIFORNIA BLACKBERRY	<i>Rubus ursinus</i>	RUUR	44-45	

INDEX COMMON NAME *Scientific Name* CODE Page

MUSTARDS AND LOOK-ALIKES

☹ Invasive				
DYER'S WOAD	<i>Isatis tinctoria</i>		ISTI	46-47
HOARY CRESS	<i>Lepidium draba</i>		LEDR	48-49
TALL WHITETOP	<i>Lepidium latifolium</i>		LELA2	50-51
😊 Look-alike				
YARROW	<i>Achillea millefolium</i>		ACMI2	52-53

TOADFLAXES AND LOOK-ALIKES

☹ Invasive				
DALMATIAN TOADFLAX	<i>Linaria dalmatica</i> ssp. <i>dalmatica</i>		LIDAD	54-55
YELLOW TOADFLAX	<i>Linaria vulgaris</i>		LIVU2	56-57
😊 Look-alike				
SNAPDRAGON	<i>Antirrhinum majus</i>		ANMA3	58-59

BROOMS

☹ Invasive				
FRENCH BROOM	<i>Genista monspessulana</i>		GEMO3	60-61
SCOTCH BROOM	<i>Cytisus scoparius</i>		CYSC4	62-63
SPANISH BROOM	<i>Spartium junceum</i>		SPJU2	64-65















GRASSES

☹ Invasive				
BARBED GOATGRASS	<i>Aegilops triuncialis</i>		AETR	66-67
JOINTED GOATGRASS	<i>Aegilops cylindrica</i>		AECY	68-69
MEDUSAHEAD	<i>Elymus caput-medusae</i>		ELCA13	70-71
😊 Look-alike				
SQUIRRELTAIL	<i>Elymus elymoides</i>		ELEL5	72-73









OTHERS

☹ Invasive				
TREE OF HEAVEN	<i>Ailanthus altissima</i>		AIAL	74-75
SULFUR CINQUEFOIL	<i>Potentilla recta</i>		PORE5	76-77
😊 Look-alike				
SLENDER CINQUEFOIL	<i>Potentilla gracilis</i>		POGR9	78-79




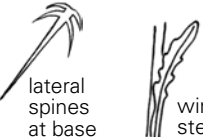
QUICK REFERENCE ID







THISTLES	Flower Head	Leaves
Bull Thistle	 vase	 rough, prominent veins
Canada Thistle <i>similar to Italian thistle, bracts without spines</i>	 drop	 lobed, spiny
Italian Thistle <i>similar to Canada thistle, bracts with spines</i>	 elliptical	 lobed, spiny hairy underneath
Musk Thistle	 disk	 midrib, hairless
Scotch Thistle	 oval	 cobwebby hairy
Anderson's Thistle <i>(look-alike)</i>	 cylinder	 small flat hairs
Snowy Thistle <i>(look-alike)</i>	 reflexed bracts	 woolly hairs

QUICK REFERENCE ID






KNAPWEEDS	Bracts	Lower Leaves
Diffuse Knapweed	 spiny combs	 deeply lobed
Russian Knapweed	 papery	 lobed
Spotted Knapweed	 spots	 deeply lobed
American-aster spp. <i>(look-alike)</i>	 no spines, yellow disk	 narrow, entire

QUICK REFERENCE ID

YELLOW ASTERS	Bracts	Stems
Malta Starthistle	 short, weak spines purple tipped	 lateral spines midway winged stem
Yellow Starthistle	 long, stout spines straw colored	 lateral spines at base winged stem

YELLOW ASTERS	Flowers/Plant	Stems
Rush Skeletonweed	 mostly smooth, hairless	 bottom of stem with stiff downward pointing hairs
Stinkwort	 sticky-glandular, smells of camphor	 densely branched
Tarweed (look-alike)	 sticky-glandular	 open, less dense branches

QUICK REFERENCE ID

BROOMS	Seed Pods	Leaves	Stems
French Broom	 hairy	 3 leaflets, evergreen	 round 8-10 ridged
Scotch Broom	 only margins hairy	 3 leaflets, sometimes simple	 sharply 5 angled
Spanish Broom	 hairy	 simple	 round finely ribbed



Plant: Brenneman; Flower: Donaldson

Also Known As	Common thistle
Habitat	Meadows, roadsides, disturbed sites
Life Cycle	Biennial
Flowering Time	Mid-July to fall
Relative Abundance	Common
Plumas NF Distribution	Throughout; all ranger districts
Noxious Weed List	California C-rated; Cal IPC: Moderate



1 - 1.5 in
Flower head
vase-shaped



Tops of leaves
rough, sandpaper
texture

Underside of
leaf cottony,
prominently
raised main vein



Rosette leaves
rough, prominent veins

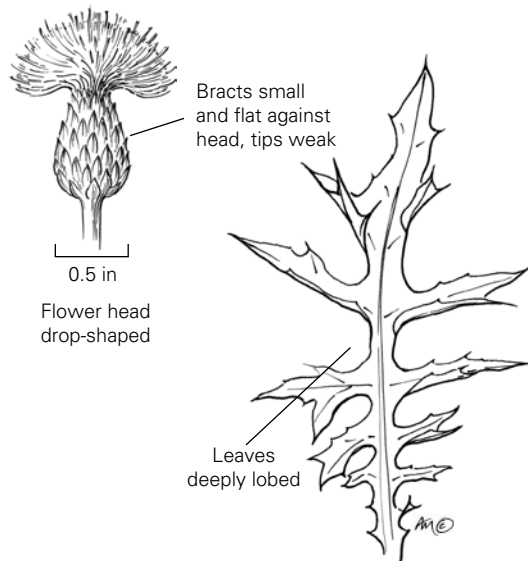


- Height: 1 - 6 ft commonly 2 - 3 ft
- Stems: spiny and winged
- Leaves: sandpaper texture, prominent veins
- Flowers: in clusters at ends of branches
- Flower color: pink to purple



Donaldisson

Also Known As	Field thistle
Habitat	Roadsides, rangelands, forests, lawns, gardens, moist and disturbed sites
Life Cycle	Perennial
Flowering Time	Mid-July to fall
Relative Abundance	Common
Plumas NF Distribution	Widespread, most abundant in north; also in Little Grass Valley Reservoir area
Noxious Weed List	California B-rated; Cal IPC: Moderate

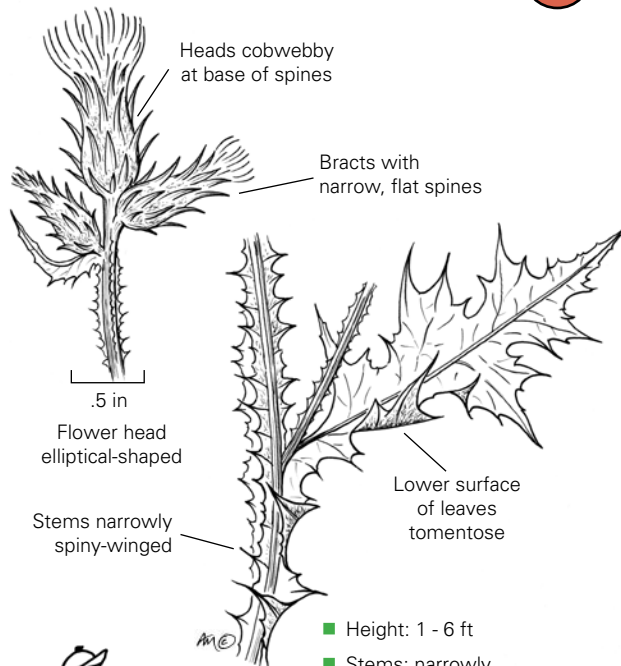


- Height: 1.5 - 4 ft, commonly 2 - 3 ft
- Stems: smooth and ridged with no spines
- Leaves: smooth and sessile
- Flowers: multiple small flower heads in clusters on each stem
- Flower color: light purple to white



T. Hansen

Also Known As	<i>C. pycnocephalus</i> ssp. <i>pycnocephalus</i>
Habitat	Roadsides, rangelands, forests, lawns, gardens, disturbed sites
Life Cycle	Annual
Flowering Time	March to July
Relative Abundance	Infrequent
Plumas NF Distribution	Feather River Ranger District, lower elevations on west side
Noxious Weed List	California B-rated; Cal IPC: Moderate

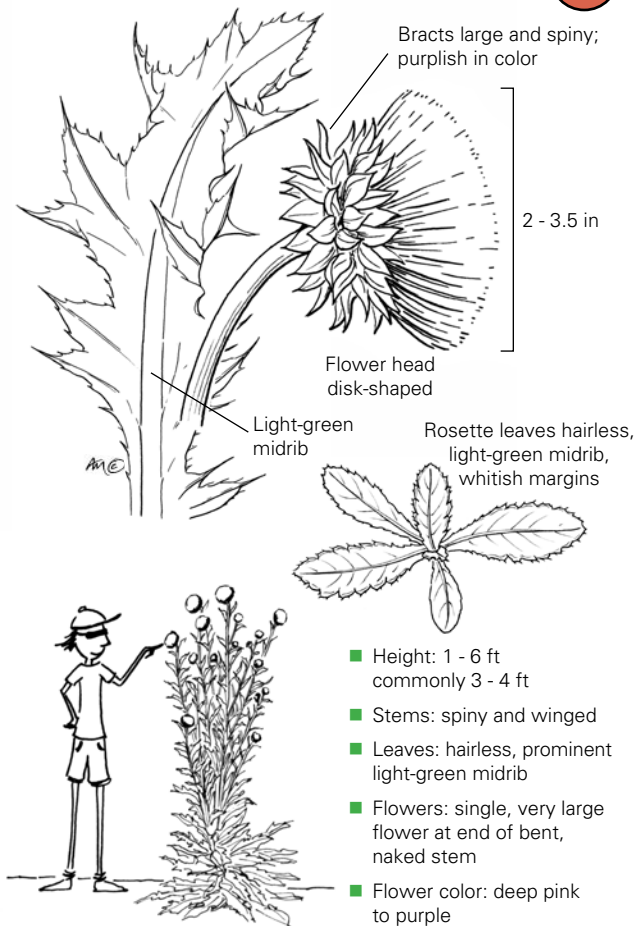


- Height: 1 - 6 ft
- Stems: narrowly spiny-winged
- Leaves: deeply lobed, spine-tipped; upper leaves hairless, lower leaves tomentose/flatly hairy
- Flowers: 2 - 5 flower heads per stem
- Flower color: pink to purple



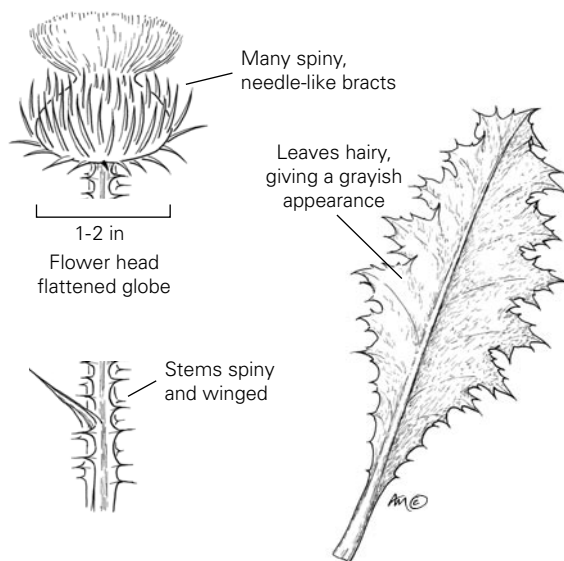
Plant: Miller, Flower, Donaldson

Also Known As	Nodding thistle
Habitat	Pastures, forest, rangelands, roadsides, waste areas, ditches
Life Cycle	Biennial
Flowering Time	Mid-July to fall
Relative Abundance	Infrequent
Plumas NF Distribution	Limited east of Lee Summit on Beckwourth Ranger District
Noxious Weed List	California A-rated; Cal IPC: Moderate





Donaldson



Also Known As	Winged thistle
Habitat	Waste areas, roadsides, disturbed soils
Life Cycle	Biennial; rarely annual
Flowering Time	Mid-July to fall
Relative Abundance	Infrequent
Plumas NF Distribution	Beckwourth Ranger District; extreme east side
Noxious Weed List	California A-rated; Cal IPC: High

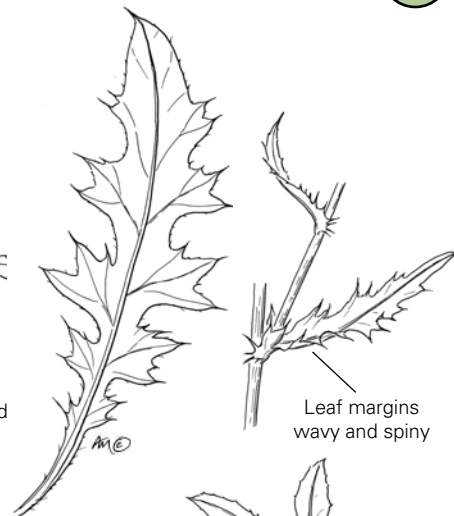


- Height: up to 10 ft, commonly 5+ ft (the tallest of the thistles)
- Stems: spiny, prominently winged
- Leaves: hairy and sessile
- Flowers: in groups of 2 or 3 on branched tips
- Flower color: purple



0.75 - 1.5 in

Flower head
cylinder-shaped



Leaf margins
wavy and spiny

Rosette leaves not
prominently veined,
small flat hairs



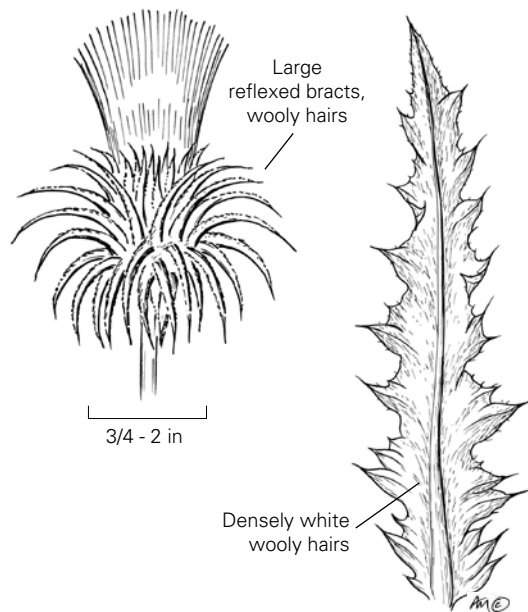
- Also Known As Rose thistle
- Habitat Open places, woodlands, forests
- Life Cycle Biennial
- Flowering Time July to fall
- Relative Abundance Common
- Plumas NF Distribution Throughout; above 3000 ft elevation



- Height: 2 - 4 ft
- Stems: purplish and thornless
- Leaves: divided and wavy with spiny margin
- Flowers: single flower at end of stem
- Flower color: rose red to reddish purple



Plant, Urie; Flower, Monroe Calphotos



Also Known As	None
Habitat	Disturbed areas, shrubby areas, open woodlands
Life Cycle	Biennial
Flowering Time	July to September
Relative Abundance	Common in Northern California
Plumas NF Distribution	Throughout; below 6000 ft elevation

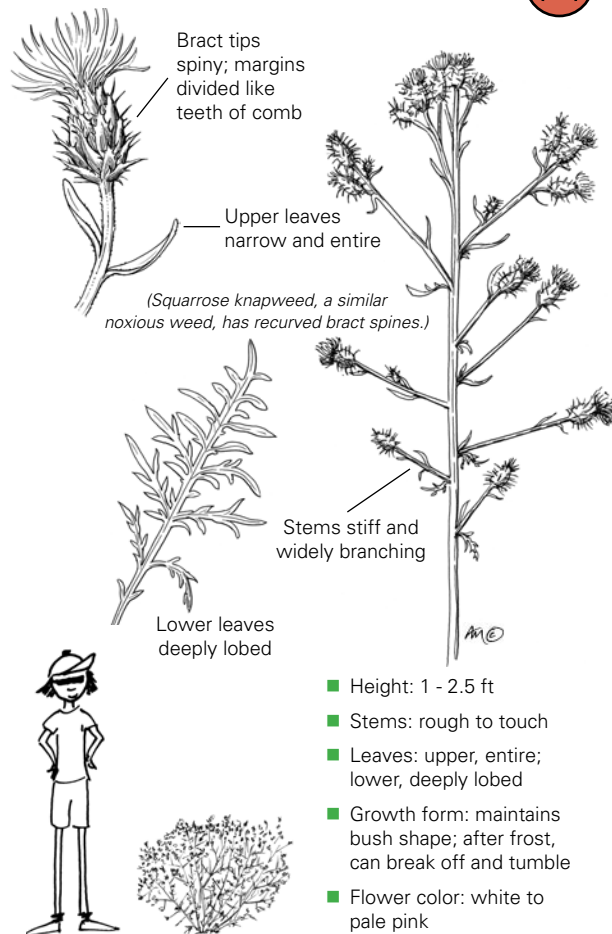


- Height: 1.5 to 6.5 ft
- Stems: densely white woolly hairs
- Leaves: densely white woolly hairs on both surfaces
- Flowers: single or in clusters at the end of branches
- Flower color: pink to red



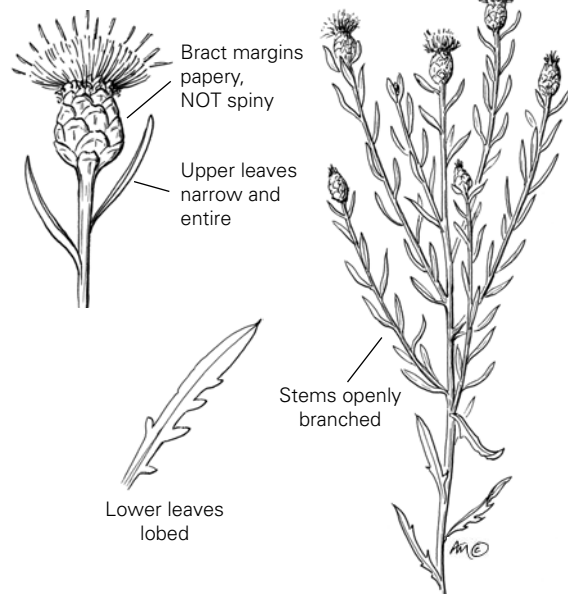
Donaldson

Also Known As	Tumble knapweed
Habitat	Roadsides, waste areas, dry rangelands, disturbed sites
Life Cycle	Annual to short-lived perennial
Flowering Time	June to August
Relative Abundance	Infrequent
Plumas NF Distribution	Not currently known on PNF lands, but occurs nearby and may invade
Noxious Weed List	California A-rated; Cal IPC: Moderate

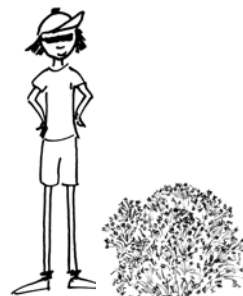




Donaldson



Also Known As	Creeping knapweed
Habitat	Roadsides, riverbanks, ditches, pastures, waste places
Life Cycle	Rhizomatous perennial
Flowering Time	July to fall
Relative Abundance	Infrequent
Plumas NF Distribution	Not currently known on PNF lands, but occurs adjacent to the extreme east side
Noxious Weed List	California B-rated; Cal IPC: Moderate

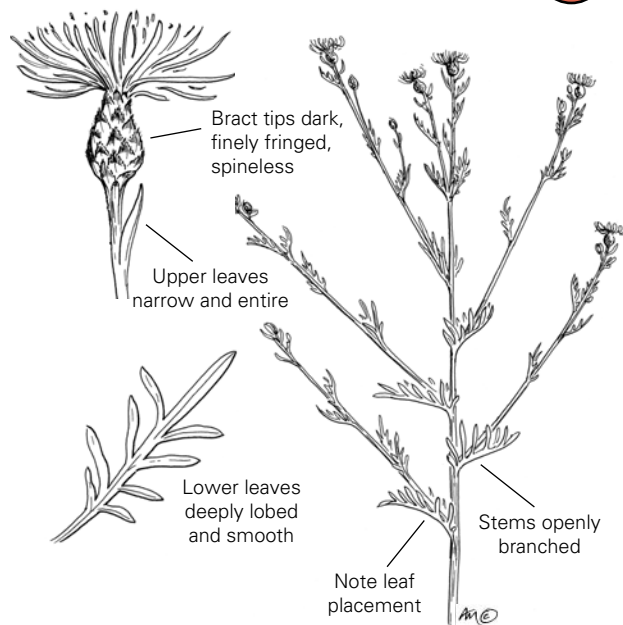


- Height: 1 - 3 ft, generally 2 - 3 ft
- Stems: erect, cobwebby
- Leaves: upper, entire; lower and rosette, lobed
- Growth form: thick rounded clumps with drooping branches
- Root: black below crown
- Flower color: pink to purple



Plant: Breckenridge CDPA; Flower: Donaldson

- Also Known As** *Centaurea maculosa*
- Habitat** Disturbed soil, rangelands, pastures, meadows, roadsides, areas with summer rainfall
- Life Cycle** Perennial; sometimes biennial
- Flowering Time** July to early September
- Relative Abundance** Moderate
- Plumas NF Distribution** Throughout; scattered sites on all ranger districts.
- Noxious Weed List** California A-rated; Cal IPC: High

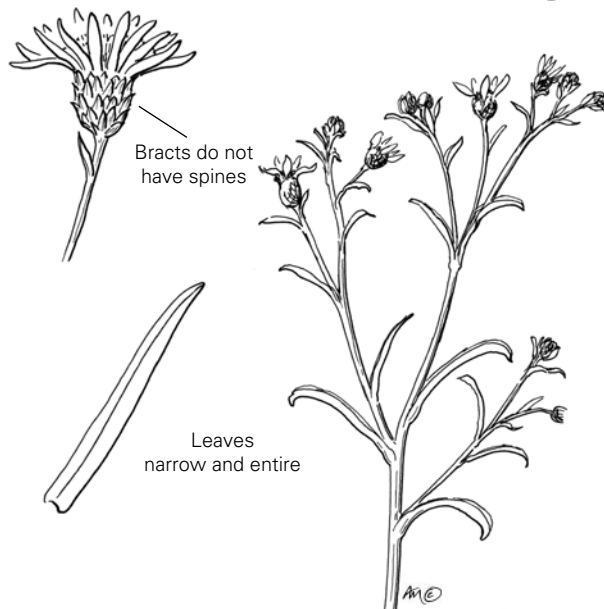


- Height: 1 - 5 ft; generally closer to 3 ft
- Stems: erect and rough
- Leaves: upper, linear; lower, divided
- Growth form: tall with open branching
- Flower color: pink to purple



Donaldson

Also Known As	Most species formerly in the genus <i>Aster</i>
Habitat	Meadows, gardens
Life Cycle	Annual or perennial
Flowering Time	Late July to fall
Relative Abundance	Common
Plumas NF Distribution	Different species found throughout area



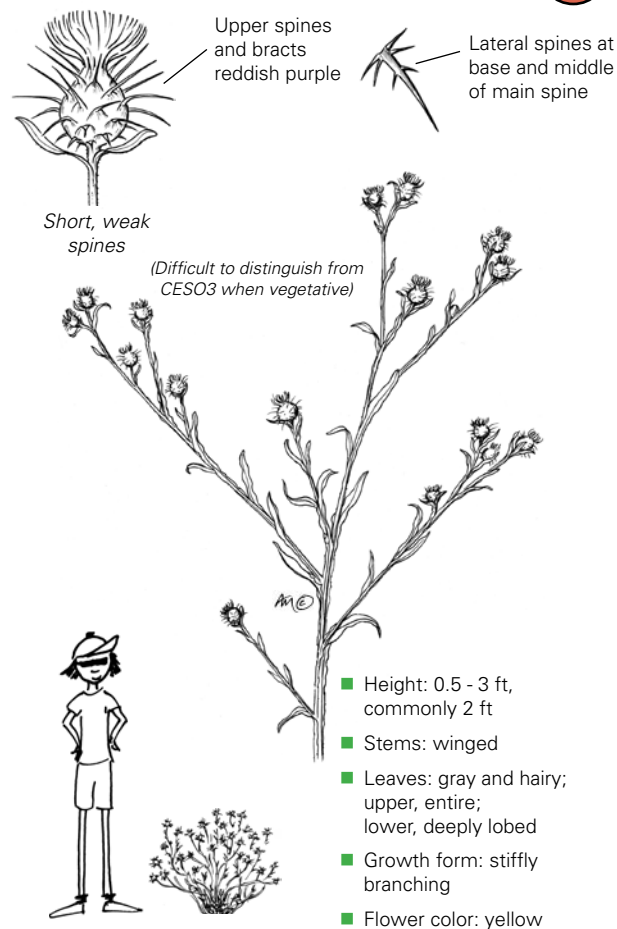
- Height: variable, often 1 - 2 ft
- Stems: smooth to hairy
- Leaves: upper and lower leaves narrow and entire
- Growth form: ranges from short to tall
- Flower color: variable, often pink to purple with yellow center



T. Hanson

Also Known As	Tocalote
Habitat	Roadsides, disturbed areas, grasslands
Life Cycle	Annual
Flowering Time	April to August
Relative Abundance	Infrequent
Plumas NF Distribution	Known from western side of Feather River Ranger District; could be more widespread, but misidentified as yellow starthistle
Noxious Weed List	California C-rated; Cal IPC: Moderate

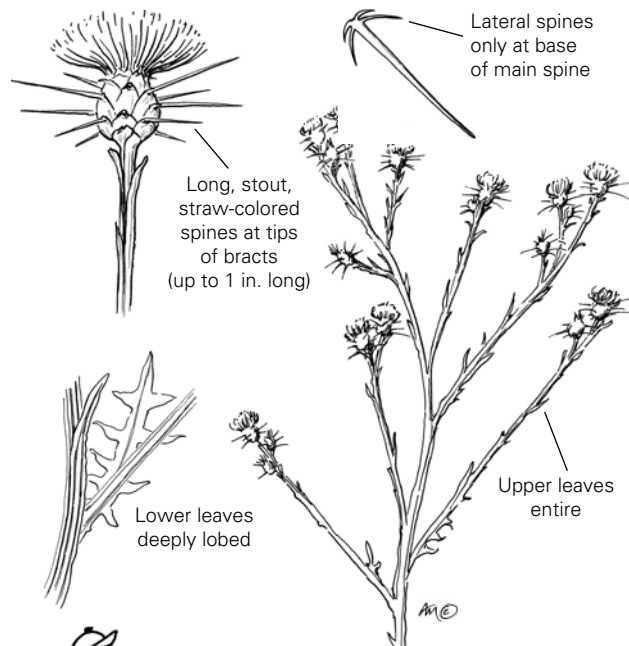
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Donaldson

Also Known As	None
Habitat	Roadsides, waste areas, grasslands
Life Cycle	Annual
Flowering Time	Late June to September
Relative Abundance	Common
Plumas NF Distribution	Throughout, especially abundant along highways and near development
Noxious Weed List	California C-rated; Cal IPC: High



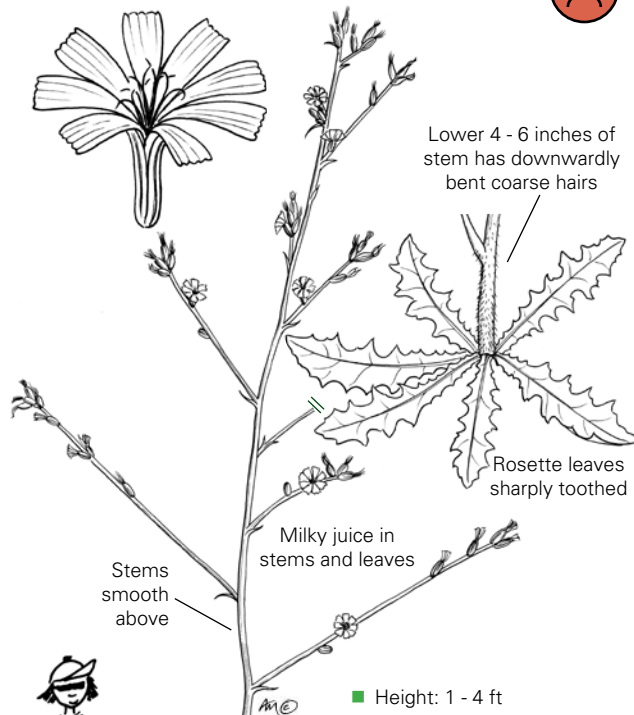
- Height: 0.5 - 5 ft, commonly 2 ft
- Stems: winged
- Leaves: gray and hairy; upper, entire; lower, deeply lobed
- Growth form: stiffly branching
- Flower color: yellow



Difomaso



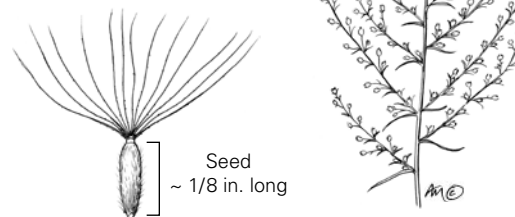
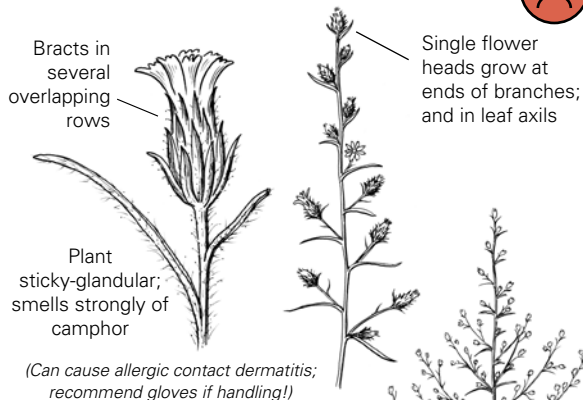
Also Known As	Skeleton weed, hogbite
Habitat	Roadsides, rangelands, pastures, disturbed soils
Life Cycle	Perennial with extensive, deep root system
Flowering Time	Mid-July through frost
Relative Abundance	Infrequent
Plumas NF Distribution	Widely scattered but increasing on west side of Feather River Ranger District. Also known near Lee Summit and town of Graeagle.
Noxious Weed List	California A-rated; Cal IPC: Moderate



- Height: 1 - 4 ft
- Stems: rigid and wiry; highly branched; cut surfaces exude milky sap
- Leaves: upper, narrow and entire, inconspicuous; stems often lack leaves
- Growth form: bushy
- Flower color: yellow



Williams



Also Known As	None
Habitat	Meadows, roadsides, waste places, gardens
Life Cycle	Annual
Flowering Time	September to November
Relative Abundance	Moderate
Plumas NF Distribution	Increasing in the North Fork Feather River canyon, also scattered on west side of Feather River Ranger District
Noxious Weed List	California-NO; Cal IPC: Moderate



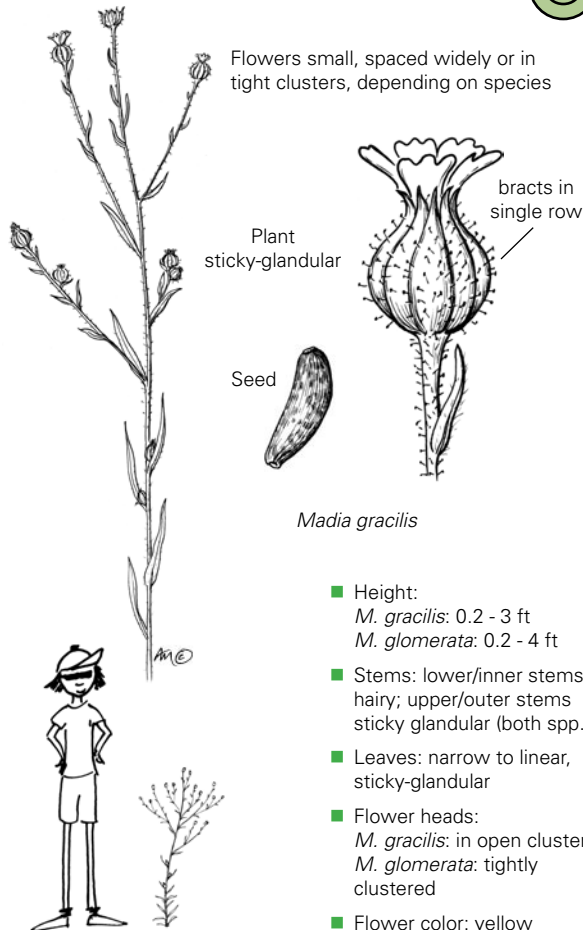
- Height: 0.5 - 3 ft
- Stems: many-branched, sticky-glandular
- Leaves: narrow, alternate, reduced upwards, and sticky-glandular
- Flower heads: single flower heads grow at ends of branches; and in leaf axils
- Flower color: yellow



M. gracilis; Huhndorf; M. glomerata; Jenevay

M. gracilis

Also Known As	<i>Madia</i> (several common species)
Habitat	Meadows, open and disturbed places
Life Cycle	Annual
Flowering Time	<i>M. gracilis</i> : April - July <i>M. glomerata</i> : June - August
Relative Abundance	Common
Plumas NF Distribution	Throughout; common on all ranger districts

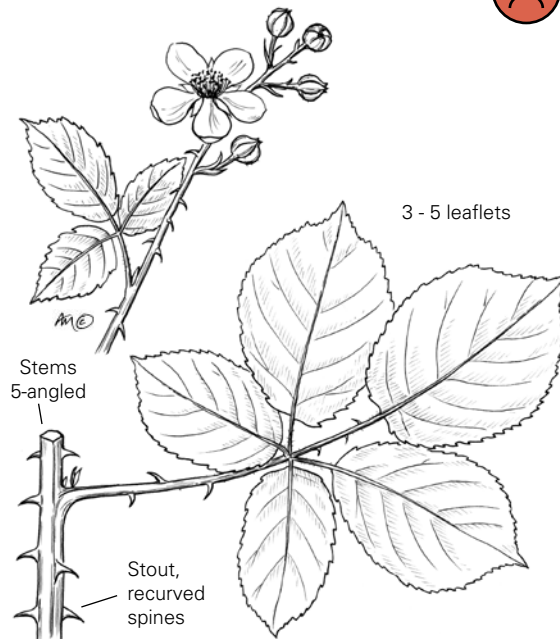


Madia gracilis

- Height:
M. gracilis: 0.2 - 3 ft
M. glomerata: 0.2 - 4 ft
- Stems: lower/inner stems hairy; upper/outer stems sticky glandular (both spp.)
- Leaves: narrow to linear, sticky-glandular
- Flower heads:
M. gracilis: in open clusters,
M. glomerata: tightly clustered
- Flower color: yellow



Also Known As	<i>Rubus discolor</i>
Habitat	Roadsides, riparian areas, and disturbed sites
Life Cycle	Perennial, each cane lives 2 years
Flowering Time	April to July
Relative Abundance	Common
Plumas NF Distribution	Throughout, very common along the North Fork Feather River, its tributaries, and Portola area
Noxious Weed List	California B-rated; Cal IPC: High

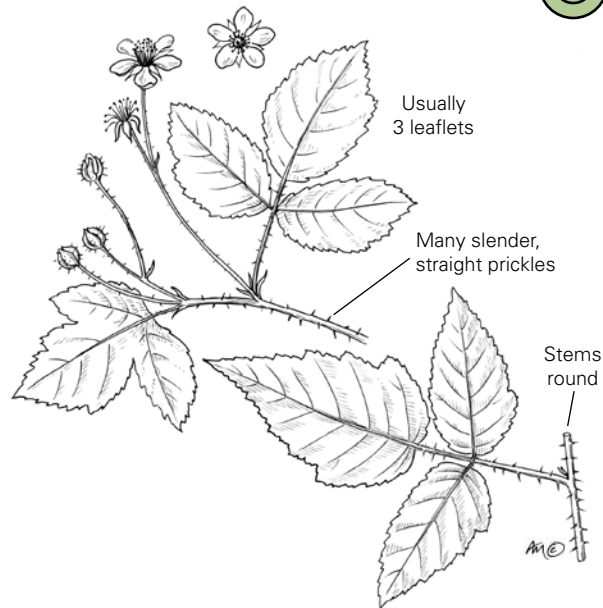


- Height: up to 8 ft, especially when mounded on old canes
- Stems: 5-angled, with stout, recurved spines
- Leaves: 3 - 5 leaflets, white underneath
- Flowers: large clusters at the end of branches
- Flower color: pink



Plant, Humidorf; Flower, Callahan; Leaf, Humidorf

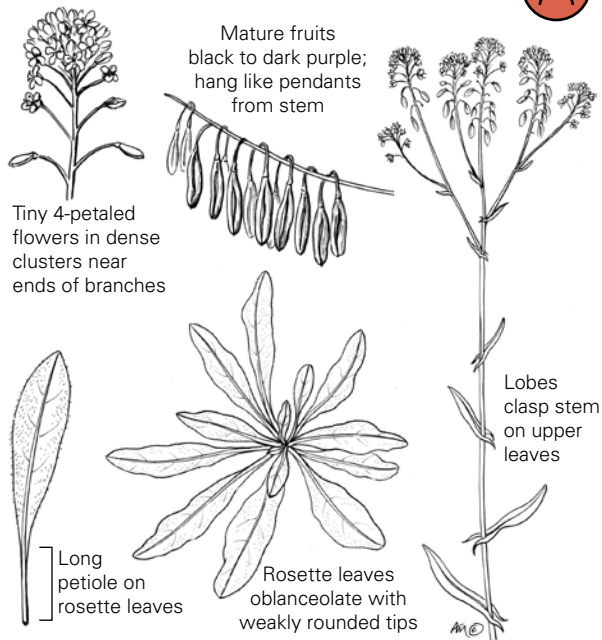
Also Known As	Pacific blackberry
Habitat	Forests, openings, disturbed areas
Life Cycle	Perennial, each cane lives 2 years
Flowering Time	March to July
Relative Abundance	Common
Plumas NF Distribution	Throughout; all ranger districts



- Height: generally up to 1 ft; stems longer but low-growing
- Stems: round, with many slender, straight prickles
- Leaves: Usually 3 leaflets, green underneath
- Flowers: 1 - 5 flowers per cluster
- Flower color: white



Plant, Weech; Flower, Balsher-Howe



Mature fruits black to dark purple; hang like pendants from stem

Tiny 4-petaled flowers in dense clusters near ends of branches

Long petiole on rosette leaves

Rosette leaves oblanceolate with weakly rounded tips

Lobes clasp stem on upper leaves



- Height: up to 4 ft
- Stems: single stem gives rise to multiple branches with multiple flower clusters
- Leaves: blue-green foliage with cream-colored midrib; upper leaves clasp stem, arrowhead-shaped; lower leaves petiolate
- Flower color: yellow

Also Known As	Marlahan mustard
Habitat	Meadows, roadsides, streambanks, rangelands
Life Cycle	Biennial to short lived perennial
Flowering Time	June to July
Relative Abundance	Infrequent
Plumas NF Distribution	Mt Hough and Beckwourth Ranger Districts. Known from near Cooks Creek, Indicator Peak, Doyle Crossing, and occasional along Hwy 70.
Noxious Weed List	California B-rated; Cal IPC: Moderate

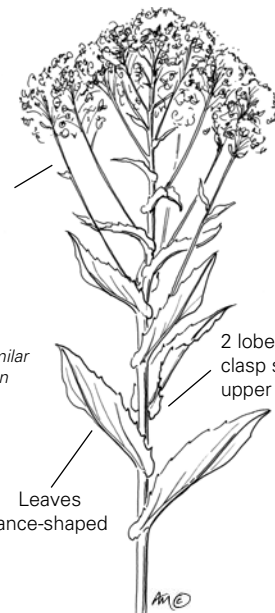


One branch

Tiny 4-petaled flowers in dense clusters near ends of branches

Note: There are three very similar noxious weed species that can only be distinguished in fruit.

- L. draba* = heart pod
- L. appelianum* = globe pod
- L. chalepense* = lens pod



2 lobes clasp stem on upper leaves

Leaves lance-shaped

Also Known As	Whitetop, short whitetop, <i>Cardaria draba</i>
Habitat	Meadows, fields, roadsides, ditches, streambanks, rangelands
Life Cycle	Rhizomatous perennial
Flowering Time	May to June
Relative Abundance	Infrequent
Plumas NF Distribution	Scattered on Mount Hough Ranger District and around Portola, but not on Beckwourth Ranger District
Noxious Weed List	California B-rated; Cal IPC: Moderate

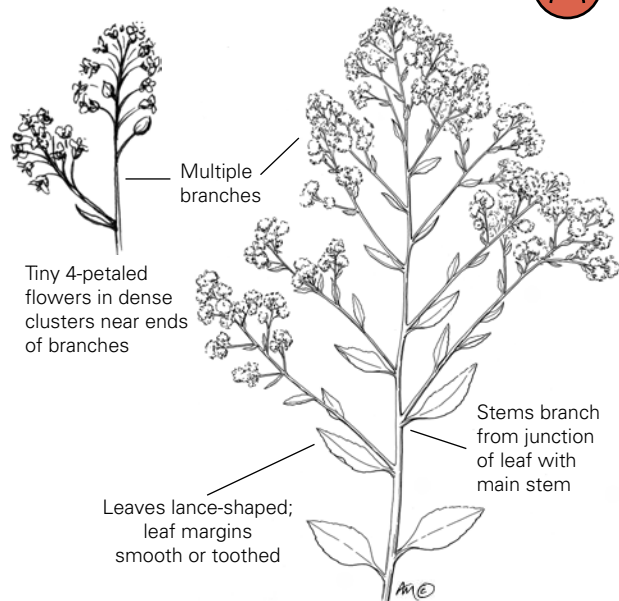


- Height: up to 2 ft commonly 1 ft
- Stems: many stems give rise to multiple branches with one flower cluster
- Leaves: blue-green foliage; upper leaves clasp stem; lower leaves petiolate
- Seed shape: round
- Flower color: white



Donaldson

Also Known As	Perennial pepperweed
Habitat	Riparian areas, floodplains, meadows, seasonally wet areas, roadsides
Life Cycle	Rhizomatous perennial
Flowering Time	Late June to August
Relative Abundance	Moderate
Plumas NF Distribution	Throughout; scattered on all ranger districts
Noxious Weed List	California B-rated; Cal IPC: High



- Height: 1 - 6 ft commonly 3+ ft
- Stems: each stem gives rise to multiple branches with multiple flower clusters
- Leaves: upper leaves, sessile; lower leaves, petiolate; basal leaves, much larger than upper leaves
- Seed shape: round
- Flower color: white



Plant: Brenneman; Flower: Donaldson

Also Known As	Common yarrow, milfoil
Habitat	Gardens, meadows, grasslands, forests
Life Cycle	Perennial
Flowering Time	June to September
Relative Abundance	Common
Plumas NF Distribution	Throughout; common on all ranger districts



Flower heads flattened, dome-shaped corymbs

Leaves hairy and very finely pinnately divided, appearing feather-like

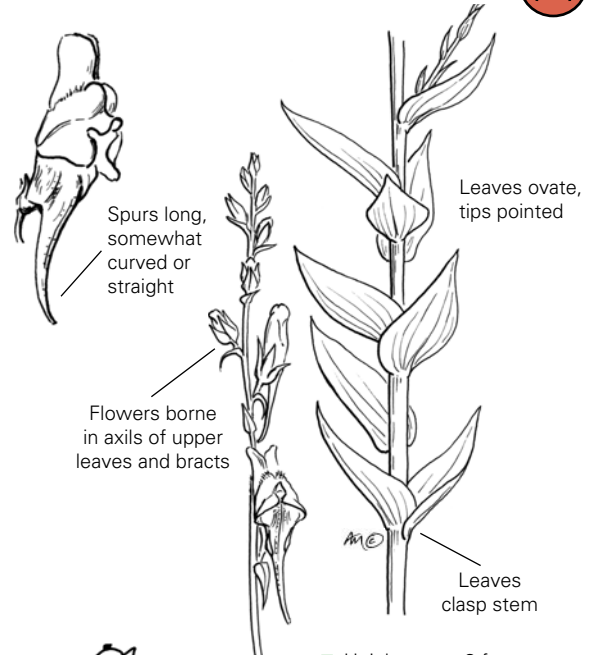


- Height: 2 - 3 ft
- Stems: hairy-wooly
- Leaves: feather-like; evenly distributed along stem; lower leaves larger
- Flower color: white or pink



Donaldson

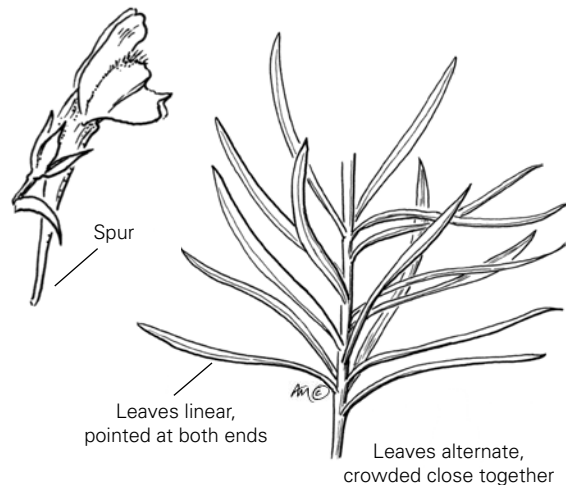
Also Known As	Wild snapdragon, <i>Linaria genistifolia</i> ssp. <i>dalmatica</i>
Habitat	Roadsides, pastures, rangelands, cultivated fields
Life Cycle	Perennial
Flowering Time	July to fall
Relative Abundance	Infrequent
Plumas NF Distribution	Known from Murdock Crossing on Beckworth Ranger District and near Wolf Creek on Mt Hough Ranger District
Noxious Weed List	California A-rated; Cal IPC: Moderate



- Height: up to 3 ft
- Stems: erect and branched
- Leaves: ovate, alternate and entire; succulent and waxy
- Growth form: more scattered than yellow toadflax
- Flower color: yellow, with orange, bearded throat



Plant: Bremner, Flower, Charles Webber © CA Academy of Sciences



Also Known As	Butter and eggs
Habitat	Rangelands, roadsides, waste places, cultivated fields
Life Cycle	Perennial
Flowering Time	July to fall
Relative Abundance	Moderate
Plumas NF Distribution	Not currently known on PNF lands
Noxious Weed List	California-NO; Cal IPC: Moderate

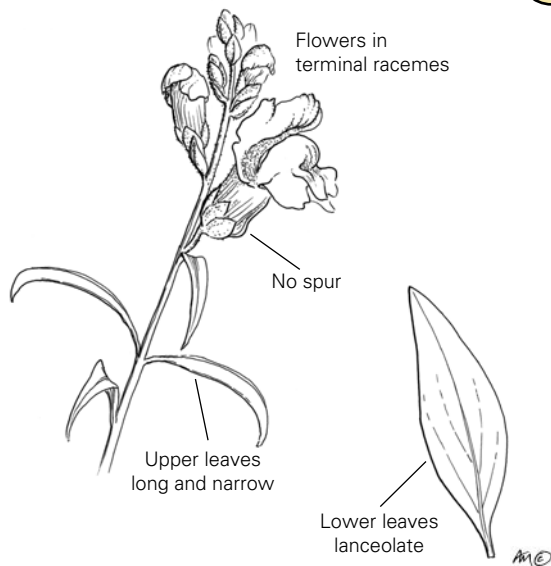


- Height: 1 - 2 ft; shorter than dalmatian toadflax
- Leaves: linear, smooth to sparsely hairy; succulent and waxy
- Growth form: tends to grow in crowded patches
- Flower color: yellow, with orange, bearded throat



Plant, Bremner, Flower, Donaldson

Also Known As	None
Habitat	Ornamental gardens
Life Cycle	Annual to perennial
Flowering Time	June to fall
Relative Abundance	Occasionally escaped from cultivation
Plumas NF Distribution	Not naturalized on PNF lands; common garden flower



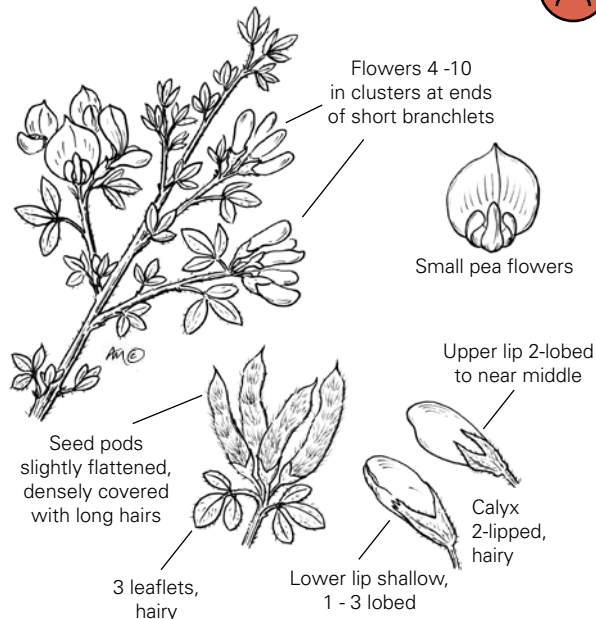
- Height: 0.5 - 3 ft
- Leaves: upper, long and narrow; lower, lanceolate; soft, not waxy
- Flowers: fuzzy-hairy
- Flower color: yellow, but other colors are available



Plant, Huhndorf; Flower, Belsler-Howe



Also Known As	Soft broom, canary broom, Montpellier broom
Habitat	Roadsides, forests and rangelands
Life Cycle	Long lived perennial
Flowering Time	May to July
Relative Abundance	Infrequent
Plumas NF Distribution	Feather River and Mt Hough Ranger Districts; abundant on far west side and occurs in North Fork Feather River canyon
Noxious Weed List	California C-rated; Cal IPC: High

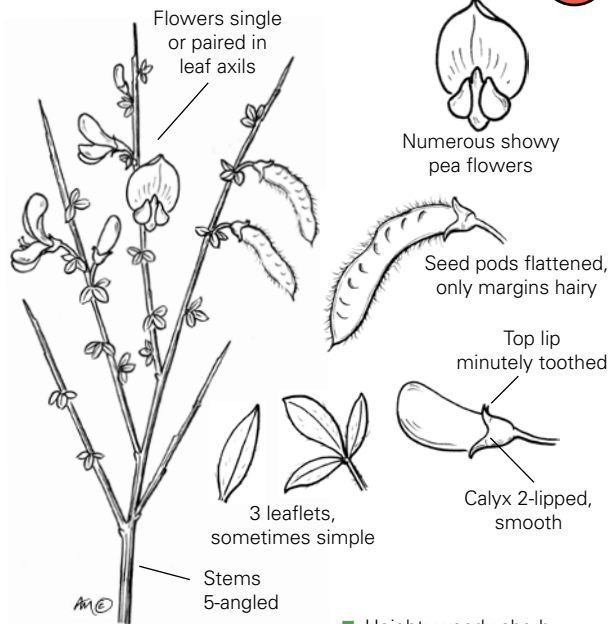


- Height: woody shrub, up to 8 ft
- Stems: 8 - 10 ridges; round cross-section
- Branches: dark green, twigs silvery-silky-hairy
- Leaves: 3 leaflets, usually dense; evergreen
- Flower color: yellow; slight fragrance



Plant: VanZuuk; Flower: Morse

Also Known As	Common broom, English broom
Habitat	Pastures, forests, disturbed areas
Life Cycle	Long lived perennial
Flowering Time	May to July
Relative Abundance	Moderate
Plumas NF Distribution	Known on all ranger districts; abundant on far west side, occurs in North Fork Feather River canyon, scattered on far east side
Noxious Weed List	California C-rated; Cal IPC: High

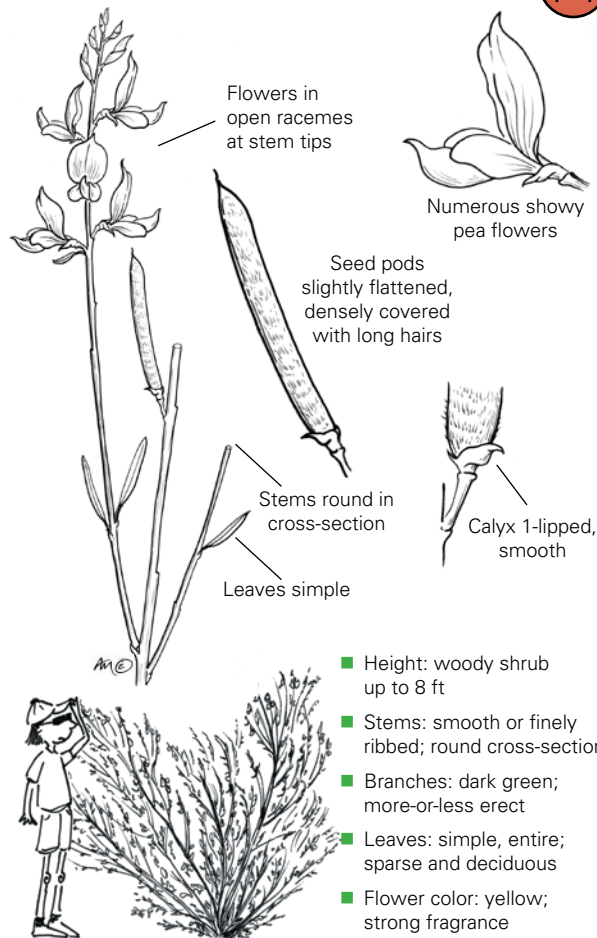


- Height: woody shrub up to 8 ft
- Stems: 5-angled; star-shaped cross-section
- Branches: dark green; more-or-less erect
- Leaves: 3 leaflets, sometimes simple on new twigs, deciduous
- Flower color: deep yellow; slight to no fragrance



Donaldson

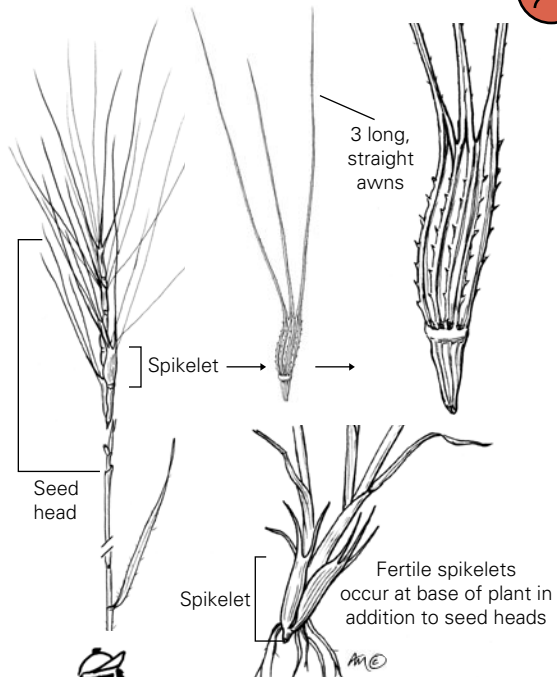
Also Known As	Weaver's broom
Habitat	Roadsides, forests and rangelands
Life Cycle	Long lived perennial
Flowering Time	May to July
Relative Abundance	Infrequent
Plumas NF Distribution	Occasional on western edge of Feather River Ranger District
Noxious Weed List	California C-rated; Cal IPC: High



- Height: woody shrub up to 8 ft
- Stems: smooth or finely ribbed; round cross-section
- Branches: dark green; more-or-less erect
- Leaves: simple, entire; sparse and deciduous
- Flower color: yellow; strong fragrance



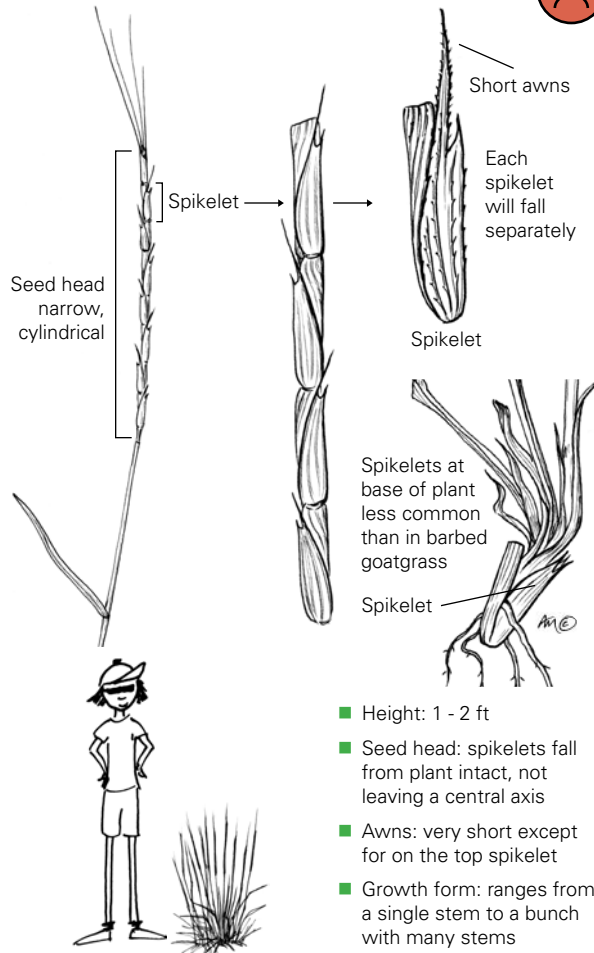
Also Known As	None
Habitat	Rangelands, roadsides, disturbed places
Life Cycle	Annual
Flowering Time	May to July
Relative Abundance	Moderate
Plumas NF Distribution	Feather River and Mount Hough Ranger Districts; roadsides; North Fork Feather River canyon and occasional on far west side
Noxious Weed List	California-NO; Cal IPC: High



- Height: 1 - 2 ft
- Seed head: spikelets fall from plant intact, not leaving a central axis
- Awns: each spikelet has 3 long straight awns
- Growth form: ranges from a single stem to a bunch with many stems



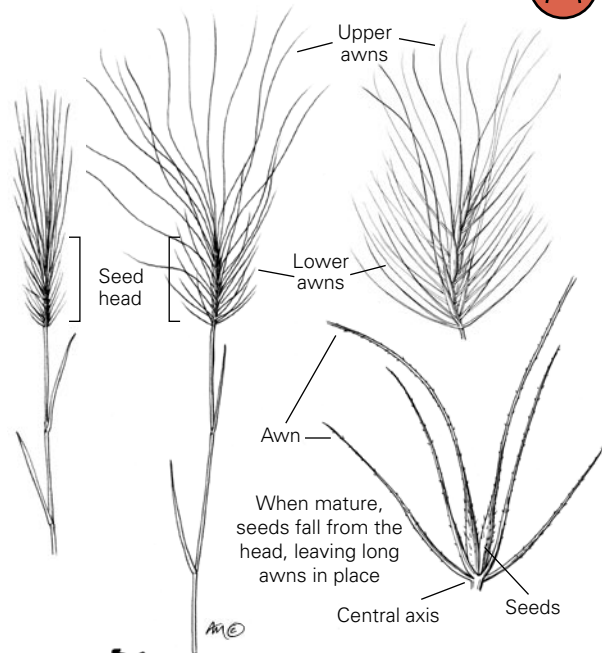
Also Known As	None
Habitat	Roadsides, disturbed, dry places, cultivated fields
Life Cycle	Annual
Flowering Time	May to July
Relative Abundance	Infrequent
Plumas NF Distribution	Mount Hough and Feather River Ranger Districts; known along Hwy 70 corridor and suspected in Sierra Valley near Beckwourth Ranger District
Noxious Weed List	California-NO; Cal IPC: None



- Height: 1 - 2 ft
- Seed head: spikelets fall from plant intact, not leaving a central axis
- Awns: very short except for on the top spikelet
- Growth form: ranges from a single stem to a bunch with many stems



Also Known As	<i>Taeniatherum caput-medusae</i>
Habitat	Rangelands, roadsides, disturbed places
Life Cycle	Annual
Flowering Time	April to July
Relative Abundance	Common
Plumas NF Distribution	Throughout; common in disturbed areas of all ranger districts
Noxious Weed List	California-NO; Cal IPC: High

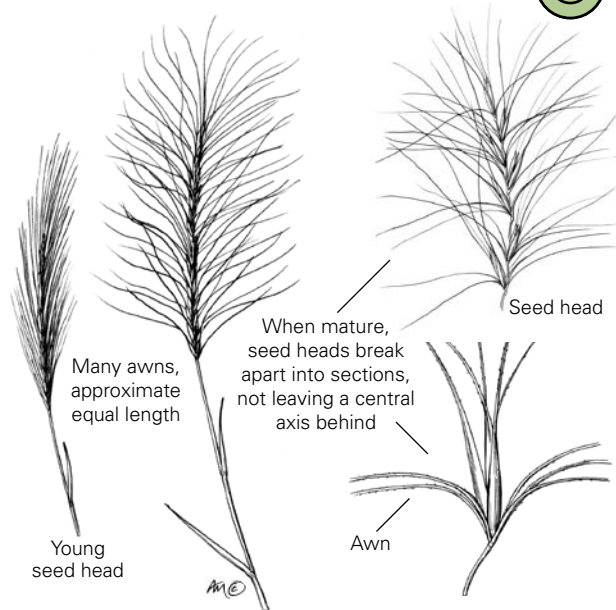


- Height: 1 - 2 ft
- Seed head: central axis with awns persists into winter
- Awns: upper are long and wavy; lower are shorter
- Growth form: ranges from a single stem to a bunch with many stems
- Key feature: very long, upward-pointing, wavy awns

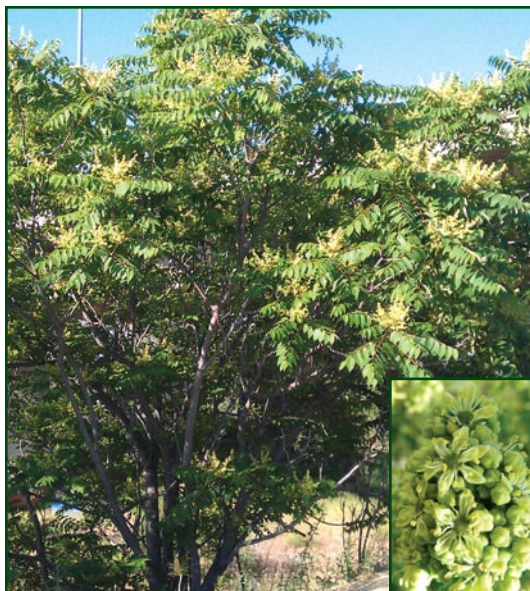


Huhndorf

Also Known As	Bottlebrush
Habitat	Forests, grasslands, most plant communities
Life Cycle	Perennial
Flowering Time	June to August
Relative Abundance	Common
Plumas NF Distribution	Throughout; common in all ranger districts

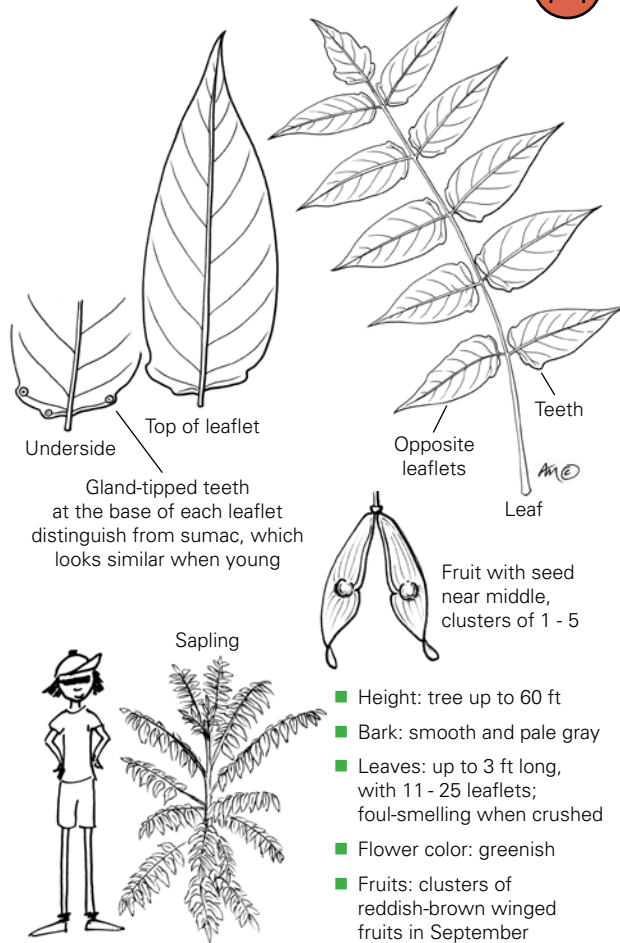


- Height: 1 - 2 ft
- Seed head: spikelets fall from plant intact, not leaving a central axis
- Awns: approx. equal length; often reddish when young, straw-colored when mature
- Growth form: generally in bunches with several to many stems
- Key feature: awns bent to nearly horizontal when mature



Plant, Williams; Flower, T. Hanson

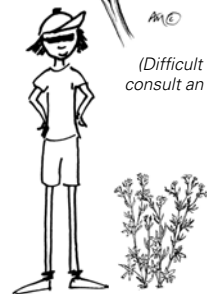
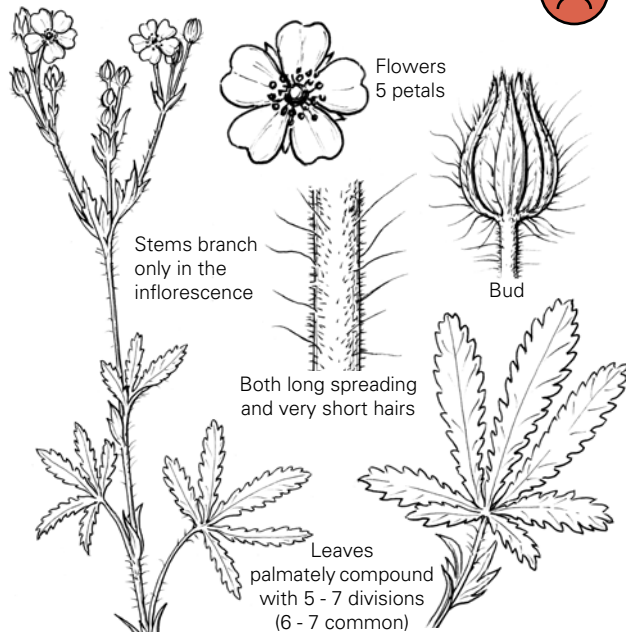
Also Known As	Stink tree
Habitat	Disturbed areas, riparian areas, often near old habitations
Life Cycle	Tree; perennial
Flowering Time	June
Relative Abundance	Infrequent
Plumas NF Distribution	Feather River and Mount Hough Ranger Districts; occasional in the North Fork Feather River canyon
Noxious Weed List	California C-rated; Cal IPC: Moderate





D.Tomaso

Also Known As	Roughfruit cinquefoil
Habitat	Roadsides, pastures, rangeland, wildlands, disturbed areas
Life Cycle	Tap-rooted perennial
Flowering Time	May to July
Relative Abundance	Infrequent
Plumas NF Distribution	Occasional throughout but not well documented
Noxious Weed List	California-NO; Cal IPC: None

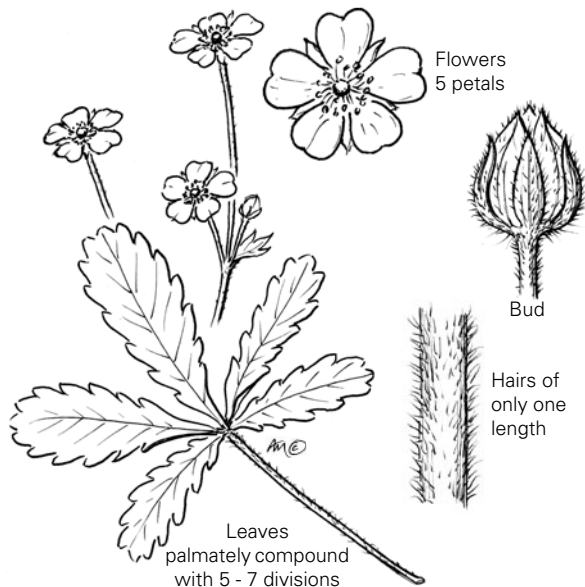


(Difficult to ID, consult an expert)

- Height: 2 ft
- Stems: hairs glandular, almost appearing shiny
- Leaves: upper and lower surfaces stiff-hairy; undersides green (not silvery like most potentillas); hairs glandular, almost appearing shiny
- Growth form: shrub
- Flower color: light yellow



Plant, Charlene, CalPhotos, Flower, D.Tromas



Also Known As	Graceful cinquefoil, western cinquefoil
Habitat	High mountain meadows, open forests
Life Cycle	Perennial
Flowering Time	June to August
Relative Abundance	Common
Plumas NF Distribution	Throughout; all ranger districts



- Height: up to 2.5 ft
- Stems: have hairs of only one length
- Leaves: hairy, especially below; undersides gray-green, silvery; leaf margins evenly toothed
- Flower color: yellow

GLOSSARY

Alternate: Borne singly and changing sides at each node, such as leaves.

Awn: A thin, bristle-like extension, often part of a grass seed head.

Axil: The angle formed between the stem and any part, such as a leaf, attached to it.

Bract: A modified leaf at the base of a flower.

Corymb: A flat-topped or round-topped arrangement of flowers where the lower flower stalks are longer than the upper stalks.

Cyme: A branched inflorescence in which the terminal flower blooms first.

Disk flower: The tiny, tubular flower of the Asteraceae that forms the center disk of the flowerhead.

Divided: Deeply lobed leaf in which lobes are indented to the base or the midrib.

Elliptic: Shaped like an ellipse or a narrow oval, broadest in the middle.

Entire: The margins are smooth, without teeth or lobes.

Inflorescence: A flower cluster.

Linear: Narrow and flat with sides or edges parallel, as in a leaf.

Lobed: Bearing lobes cut less than halfway to base or midvein.

Margin: The outer edge of the leaf, which may be smooth, serrated, lobed, etc.

Midrib: The middle vein of a leaf.

Oblanceolate: leaf shape in which the length is at least 3x longer than wide, but broadest above middle.

Oblong: Leaf shape in which the leaf is two to four times longer than it is wide, with nearly parallel sides.

Opposite: Leaves or other structures borne across from each other at the same node.

GLOSSARY

Ovate Leaf: Egg-shaped leaf that is attached at the broad end.

Palmate: Having three or more veins or lobes radiating from a central point, similar to the fingers on a hand.

Panicle: A branched inflorescence in which the flowers bloom from the bottom up.

Petiole: The stalk of a leaf.

Pinnate: A compound leaf with leaflets arranged on opposite sides of the axis.

Raceme: A simple, elongated arrangement of flowers.

Ray flower: Long, narrow flower that radiates outward from central disk flowers in the Asteraceae family. Each ray flower resembles a single petal.

Rhizomatous: Having rhizomes, or horizontal underground stems that produce shoots above and roots below.

Rosette: A dense, basal cluster of leaves arranged in a circular fashion around one point, usually at ground level.

Serrate: With sharp teeth directed forward; generally refers to leaf edges.

Sessile: Without a stalk of any kind; for example, a leaf directly attached to a stem.

Spike: An unbranched, long flower stalk in which the flowers attach directly to the stem and mature from the bottom upwards.

Spikelet: in grasses, the basic unit of the seed head, sometimes falling intact from plant.

Toothed: Having sharp points or lobes along a margin, as on a leaf.

Tomentose: Covered with dense, generally flattened and matted hairs.

Umbel: A flat-topped flower cluster with all branches attached at the same point.

Winged stem: A stem with one or more thin, flat margins protruding along the length of the stem.

WEED MAPPING

The Plumas-Sierra Weed Management Group and the Plumas National Forest have been mapping weeds since 2001. Regular mapping and inventory helps us determine which species are present in the area, what management methods are appropriate, and whether management has been a success. We can also track patterns of spread and plan preventive practices.

We welcome your mapping information, for the species in this guide and/or any other species rated as “High” by Cal-IPC or “A” by California.

Please include:

- the date surveyed
- the weed name and code (preferably the scientific name)
- the location of the observation using UTM's if available. If using a global positioning system (GPS) unit, set your meter to datum NAD83.
- a thorough description of the location
- the size of the infestation in square feet or acres
- the density of the infestation (number of plants or estimated percent cover)
- any control methods you employed

Please do not take any management actions or remove plants until they have been positively identified. Consult your county or Plumas National Forest weed contact for assistance.

Forward the data to the appropriate contact. See listings on next page.

CONTACT INFORMATION

For weed information and mapping on the Plumas National Forest, contact District Botanists:

Beckwourth Ranger District (Blairsden):
(530) 836-7167

Mount Hough Ranger District (Quincy):
(530) 283-7657

Feather River Ranger District (Oroville):
(530) 532-7417

For weed control information on private land contact:

Butte County Agriculture Department
(530) 538-7381

Plumas/Sierra County Agriculture Department
(530) 283-6365

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