TERRESTRIAL INVASIVE WEEDS OF THE LAKE TAHOE BASIN



A Comparison Guide to Non-native Invasive Weeds & Common Look-alikes



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A Comparison Guide

to Non-native Invasive Weeds & Common Look-alikes

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Text The Lake Tahoe Basin Weed Coordinating Group

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WHAT ARE NON-NATIVE INVASIVE WEEDS

For the purpose of this booklet, a non-native invasive weed is a plant growing outside of its natural range and threatening native species diversity. In this book we use the term weed and non-native invasive weed interchangeably. Not all non-native plants are invasive. Weeds readily establish in desired vegetation and spread in a variety of settings, especially where lands have been disturbed.

When weeds displace desired native plants they:

- Disrupt wildlife habitat
- Reduce hunting and fishing potential
- Change habitat aesthetics
- Inhibit recreational activities and tourism
- Crowd out endangered species
- Reduce forage value
- Increase soil erosion
- Threaten lake clarity

For example, in the Lake Tahoe Basin, weeds that have coarse or shallow root systems, such as perennial pepperweed and Dalmatian toadflax, increase soil erosion and threaten lake clarity.

Due to the severity of these impacts, California and Nevada have designated many of the weeds featured in this book as noxious under state law, requiring actions to prevent the introduction, establishment and spread of these detrimental pests.

If you find a non-native invasive weed, please report the infestation to the appropriate county (see contact numbers on the inside back cover) or go online to **tahoeinvasiveweeds.org** and complete the reporting form.

HOW TO USE THE GUIDEBOOK

The guidebook will help you identify non-native invasive weeds threatening the Lake Tahoe Basin. Common "look-alikes" are also included to help you differentiate between desirable native plants and invasive weeds.

Each plant profile includes management information. Some invasive weeds may be controlled effectively by homeowners, while other require professional assistance.

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

- S = Non-native invasive weeds Report (pg. 87)
- 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.)

California and Nevada designate particularly troublesome non-native invasive weeds as noxious weeds. Both states use a rating system based on distribution and relative tenacity to assist in prioritizing noxious weed control and eradication efforts. The ratings below are provided for each species.

"A" rated: found in limited distribution throughout the state and considered top priority for eradication and control before they become widespread.

"B" rated: may be established in scattered populations in the state; treatment priority is determined on a caseby-case basis depending on the value of resources being compromised, local distribution and available resources.

"C" rated: generally established and widespread.

Relative abundance of each species is also provided.

Widespread:	Found at numerous locations in the Lake
	Tahoe Basin.
Moderate:	Found at several locations; large
	populations may occur at a few locations.
Infrequent:	Only at one or a few locations;
	no large populations.

PREVENTING THE SPREAD OF WEEDS

Prevention is the least expensive and most effective way to halt the spread of non-native 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.
- 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 weeds in your garden or landscape.
- Get advice for treatment on private property from your local county agriculture department or weed district. (See contact information on back page.)

WEED MAPPING

The Lake Tahoe Basin Weed Coordinating Group has been mapping weeds in the basin since 2002. Regular mapping and inventory helps us determine which species are present in the basin and implement appropriate management actions. We also track patterns of spread and plan preventive practices.

We welcome your mapping information. Go to **tahoeinvasiveweeds.org** and complete the reporting form. You'll also find additional photos and information about invasive weeds, plus maps showing locations of known infestations in the Lake Tahoe area.

When collecting data, please include:

- Date surveyed
- Weed name (preferably the scientific name)
- Latitude and longitude of the observation if available
- Thorough description of the location
- Number of plants
- Pictures if possible

Please do not take any management actions or remove plants until they have been positively identified. Consult your county weed contact for assistance. See page 87.

Free invasive weed mapping Apps available:

- Calflora Observer Pro calflora.org
- EDDMapS West eddmaps.org/west



LAKE TAHOE BASIN WEED COORDINATING GROUP tahoeinvasiveweeds.org

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linvasive		
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(\mathbf{i}) Invasive

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$\overline{\mathbf{i}}$ Invasive

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(R) Invasive

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(R) Invasive

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Invasive (Ξ)

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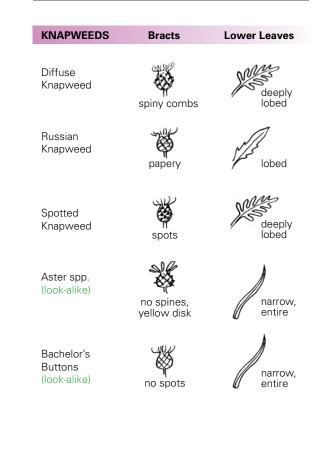
OTHERS

😊 Invasive		
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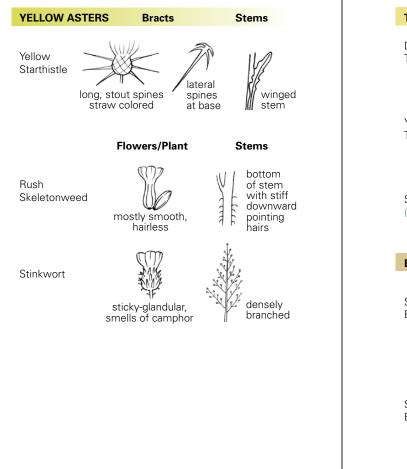
QUICK REFERENCE ID

THISTLES	Flower Head	Leaves
Bull Thistle	vase	prominent veins
Canada Thistle	drop	lobed, spiny
Musk Thistle	disk	midrib, hairless
Scotch Thistle	oval	cobweb hairy
Anderson's Thistle (look-alike)	cylinder	small flat hairs
Elk Thistle (look-alike)	no stems	long

QUICK REFERENCE ID

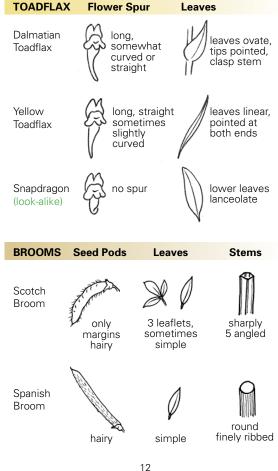


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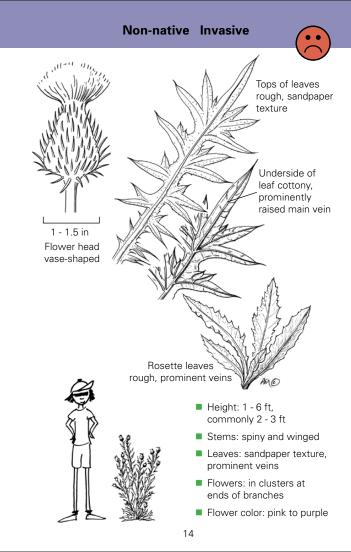
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BULL THISTLE Cirsium vulgare CIVU

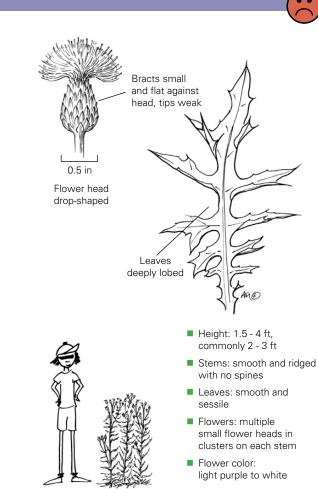


Also Known As	Common thistle
Origin	Eurasia
Habitat	Meadows, roadsides, disturbed sites
Life Cycle	Biennial
Flowering Time	Mid-July to fall
Relative Abundance	Widespread
Management	Dig, removing top 2 inches of root; herbicides are available
Noxious Weed List	Nevada NO; California C-rated



CANADA THISTLE Cirsium arvense CIAR4

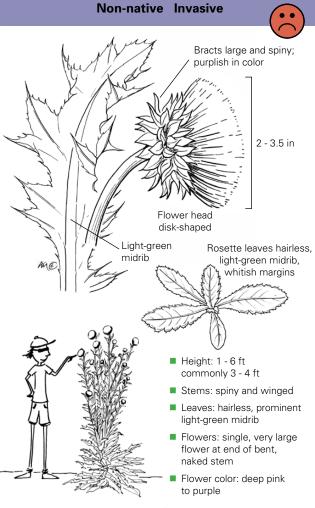
Also Known As	Field thistle
Origin	Europe
Habitat	Roadsides, rangelands, forests, lawns, gardens, moist and disturbed sites
Life Cycle	Perennial; reproduces from creeping roots and seeds
Flowering Time	Mid-July to fall
Relative Abundance	Infrequent
Management	Aggressive; pulling and burning favor root resprouting; chemical control is needed
Noxious Weed List	Nevada C-rated; California B-rated



MUSK THISTLE Carduus nutans CANU4



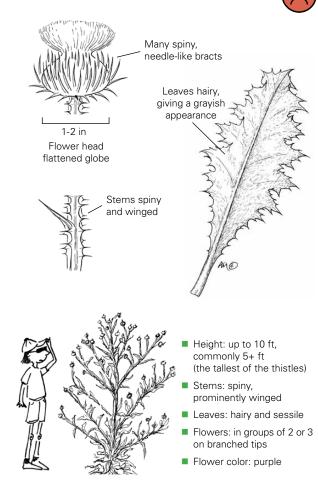
Also Known As	Nodding thistle
Origin	Europe
Habitat	Pastures, forest, rangelands, roadsides, waste areas, ditches
Life Cycle	Biennial
Flowering Time	Mid-July to fall
Relative Abundance	Infrequent
Management	Dig, removing top 2 inches of root; herbicides are available
Noxious Weed List	Nevada C-rated; California A-rated
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SCOTCH THISTLE Onopordum acanthium **ONAC**



Also Known As	Winged thistle
Origin	Europe
Habitat	Waste areas, roadsides, disturbed soils
Life Cycle	Biennial; rarely annual
Flowering Time	Mid-July to fall
Relative Abundance	Infrequent
Management	Dig, removing top 2 inches of root; herbicides are available
Noxious Weed List	Nevada C-rated; California A-rated

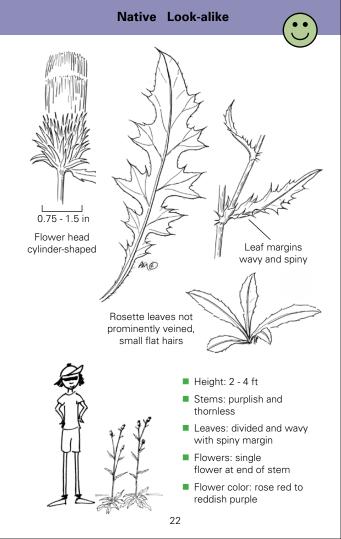


Non-native Invasive

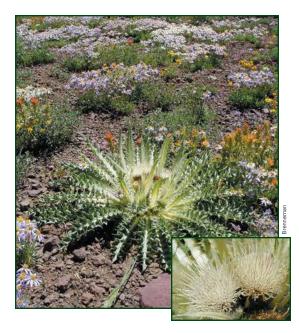
ANDERSON'S THISTLE Cirsium andersonii CIAN



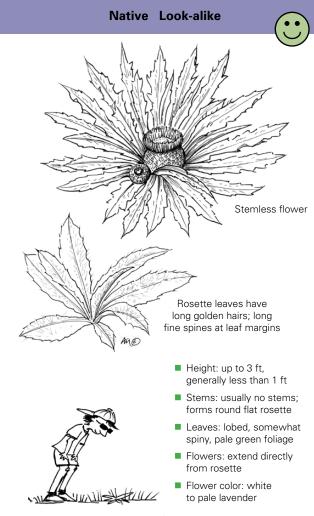
Also Known AsRose thistleOriginNativeHabitatOpen places, woodlands, forestsLife CycleBiennialFlowering TimeJuly to fallRelative AbundanceWidespreadManagementDesirable native plant; do not disturbNoxious Weed ListNone, Native



ELK THISTLE Cirsium scariosum CISC2

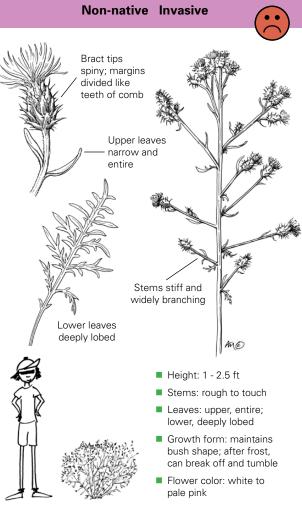


Also Known As	Drummond's thistle
Origin	Native
Habitat	Moist places at mid to high elevations
Life Cycle	Biennial
Flowering Time	June to August
Relative Abundance	Moderate
Management	Desirable native plant; do not disturb
Noxious Weed List	None, Native

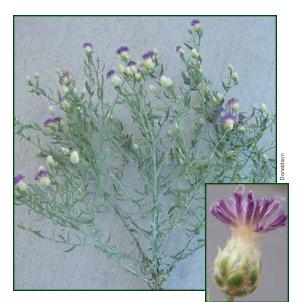


DIFFUSE KNAPWEED Centaurea diffusa CEDI3

Also Known As Tumble knapweed Southeastern Eurasia Origin Habitat Roadsides, waste areas, dry rangelands, disturbed sites Life Cycle Annual to short-lived perennial Flowering Time June to August Relative Abundance Infrequent Management Minimize seed production; pull or dig plants several times per year and monitor for several years; herbicides are available Noxious Weed List Nevada B-rated: California A-rated



RUSSIAN KNAPWEED Acroptilon repens ACRE



Also Known As	Creeping knapweed
Origin	Central Asia
Habitat	Roadsides, riverbanks, ditches, pastures, waste places
Life Cycle	Perennial; reproduces from creeping roots
Flowering Time	July to fall
Relative Abundance	Infrequent
Management	Cut or mow prior to seed set to reduce current year's growth; chemical control is needed
Noxious Weed List	Nevada C-rated; California B-rated

Bract margins papery, NOT spiny Upper leaves narrow and entire Stems openly branched Lower leaves lobed AME 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

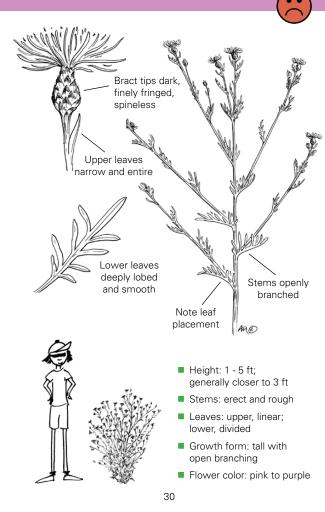
Non-native Invasive

SPOTTED KNAPWEED Centaurea stoebe CEST8

Non-native Invasive



Also Known As	Centaurea stoebe
Origin	Europe
Habitat	Disturbed soil, rangelands, pastures, meadows, roadsides, areas with summer rainfall
Life Cycle	Perennial; sometimes biennial, can reproduce vegetatively from roots
Flowering Time	July to early September
Relative Abundance	Moderate
Management	Chemical control is needed
Noxious Weed List	Nevada A-rated; California A-rated

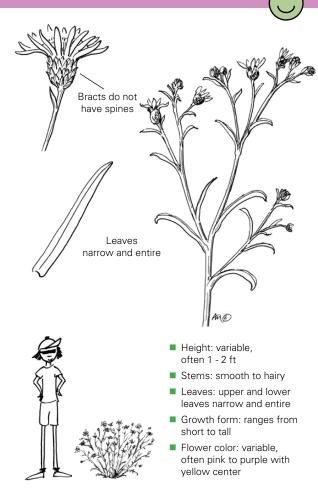


AMERICAN-ASTER Symphyotrichum spp.



Also Known As Various Origin Native Flowering Time Relative Abundance Noxious Weed List None, Native

Habitat Meadows, gardens Life Cycle Annual or perennial Late July to fall Widespread Management Desirable native plant; do not disturb



BACHELOR'S BUTTONS Centaurea cyanus CECY2



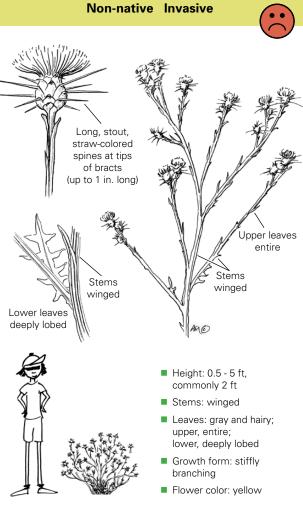
Also Known As	Cornflower
Origin	Southern Europe, can be invasive, has escaped from cultivation
Habitat	Disturbed grasslands, open woods, ornamental plantings
Life Cycle	Annual
Flowering Time	July to September
Relative Abundance	Widespread
Management	Mechanical controls (pull, dig, hoe); herbicides are available
Noxious Weed List	Nevada NO; California NO

Non-native Look-alike Bract tips pale, finely fringed, spineless Leaves narrow and entire; generally not toothed except lower leaves AME Height: up to 3 ft Stems: erect and branching Leaves: grayish and hairy; upper and lower leaves narrow and entire Growth form: tall, bushy Flower color: multicolored (white, blue, purple, pink, red) 34

YELLOW STARTHISTLE Centaurea solstitialis CESO3

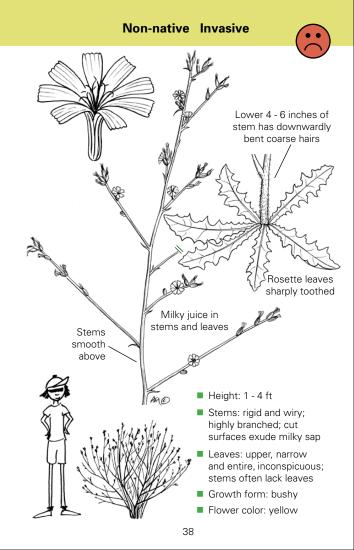


Also Known As	None
Origin	Southern Europe
Habitat	Roadsides, waste areas, grasslands
Life Cycle	Annual
Flowering Time	Late June to September
Relative Abundance	Infrequent
Management	Pull, dig or mow at first sign of yellow flowers; herbicides are available
Noxious Weed List	Nevada A-rated; California C-rated



RUSH SKELETONWEED Chondrilla juncea CHJU

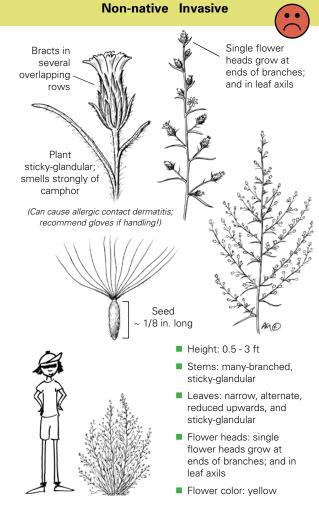
Also Known As	Skeleton weed, hogbite
Origin	Southern Europe
Habitat	Roadsides, rangelands, pastures, disturbed soils
Life Cycle	Perennial with extensive, deep root system
Flowering Time	Mid-July through frost
Relative Abundance	Infrequent
Management	Digging and pulling will favor root sprouting and regrowth; herbicides available
Noxious Weed List	Nevada A-rated; California A-rated 37



STINKWORT Dittrichia graveolens **DIGR3**



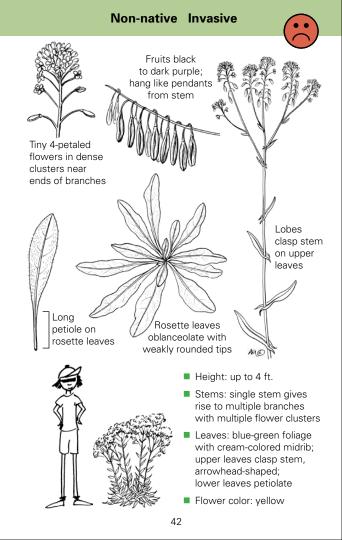
Also Known As	None
Habitat	Meadows, roadsides, waste places, gardens
Origin	Southern Europe
Life Cycle	Annual
Flowering Time	September to November
Relative Abundance	Moderate
Management	Dig or hand pull (wear protective clothing to avoid contact with skin); herbicides available
Noxious Weed List	Nevada NO; California B-rated



DYER'S WOAD Isatis tinctoria ISTI

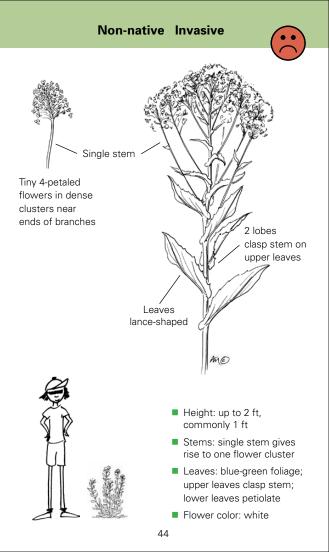


Also Known As	Marlahan mustard
Origin	Europe
Habitat	Meadows, roadsides, streambanks, rangelands
Life Cycle	Biennial to short lived perennial
Flowering Time	June to July
Relative Abundance	Infrequent
Management	Dig, removing top 2 inches of root; observe site yearly to look for sprouting rosettes; herbicides are available
Noxious Weed List	Nevada A-rated; California B-rated



HOARY CRESS Lepidium draba LEDR

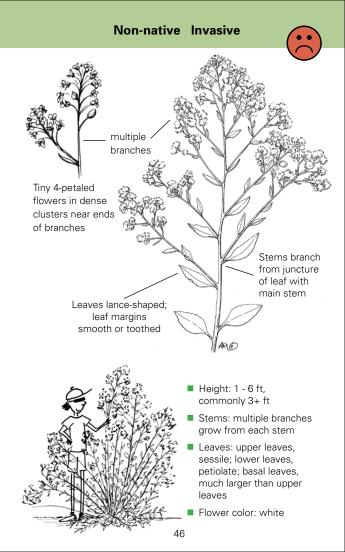
Also Known As	Whitetop, short whitetop	
Origin	Eurasia	
Habitat	Meadows, fields, roadsides, ditches, streambanks, rangelands	
Life Cycle	Perennial; reproduces from creeping roots	
Flowering Time	May to June	
Relative Abundance	Infrequent	
Management	Do not pull as plants will grow from root fragments; chemical control is needed	
Noxious Weed List	Nevada C-rated: California B-rated	



PERENNIAL PEPPERWEED Lepidium latifolium LELA2



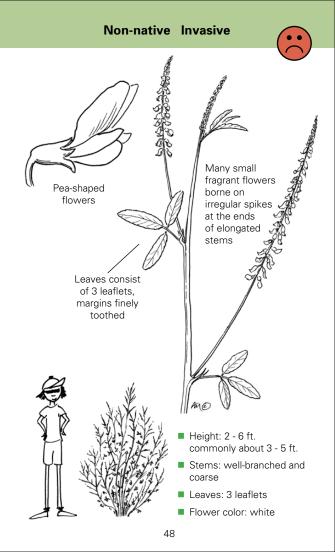
Also Known As	Tall Whitetop
Origin	Eurasia
Habitat	Riparian areas, floodplains, meadows, seasonally wet areas, roadsides
Life Cycle	Perennial; reproduces from creeping roots and root fragments
Flowering Time	Late June to August
Relative Abundance	Moderate
Management	Do not pull, dig, or cut the roots, as this may stimulate new growth; chemical control is needed
Noxious Weed List	Nevada C-rated; California B-rated
	45



WHITE SWEETCLOVER Melilotus albvus MEAL12

Also Known As None Origin Non-native, used in soil stabilization mixes Habitat Roadsides, waste areas Life Cycle Annual to biennial Flowering Time June to August Relative Abundance Widespread Management Hand pull wearing gloves; dig or mow Noxious Weed List Nevada NO; California NO

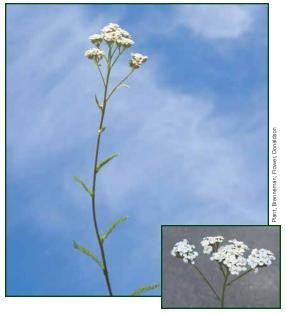




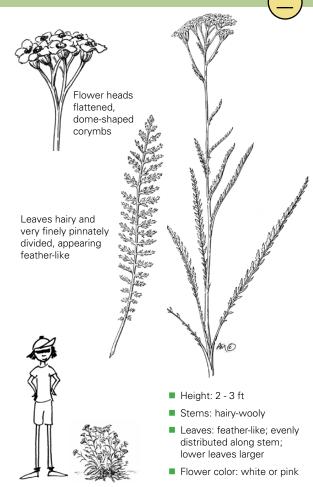
YARROW Achillea millefolium ACMI2

Native Look-alike

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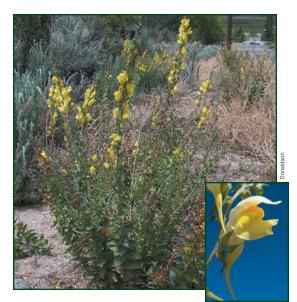


Also Known As Common yarrow, milfoil Origin Native and introduced, can be invasive Habitat Gardens, meadows, grasslands, forests Life Cycle Perennial Flowering Time June to September Relative Abundance Widespread Dig, removing as much root as Management possible; forms dense mat if mowed; chemical control is available Noxious Weed List None, Native



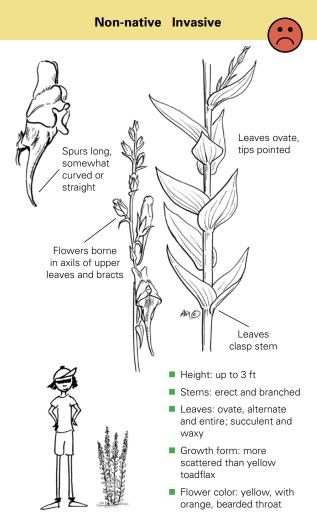
50

DALMATIAN TOADFLAX Linaria dalmatica LIDA



Also Known As Wild snapdragon, Linaria genistifolia ssp. dalmatica Origin Mediterranean Habitat Roadsides, pastures, rangelands, cultivated fields Life Cycle Perennial Flowering Time July to fall Relative Abundance Moderate Management Pull or dig for several years, removing as much root as possible; do not mow; chemical control is available

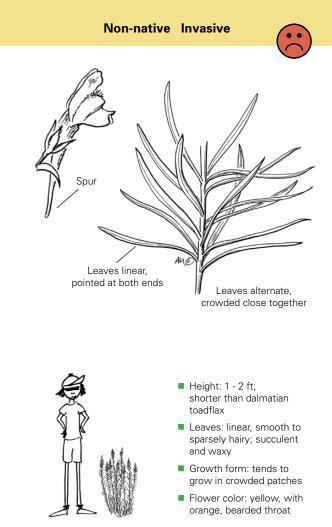
Noxious Weed List Nevada B-rated; California A-rated



YELLOW TOADFLAX Linaria vulgaris LIVU2



Also Known As	Butter and eggs	
Origin	Mediterranean	
Habitat	Rangelands, roadsides, waste places, cultivated fields	
Life Cycle	Perennial	
Flowering Time	July to fall	
Relative Abundance	Moderate	
Management	Pull or dig for several years, removing as much root as possible; do not mow; chemical control is available	
Noxious Weed List	Nevada A-rated; California NO	



SNAPDRAGON Antirrhinum majus ANMA3

Also Known AsNoneOriginNon-nativeHabitatOrnamental gardensLife CycleAnnual to perennialFlowering TimeJune to fallRelative AbundanceWidespreadManagementNone; recommended garden flowerNoxious Weed ListNevada NO; California NO

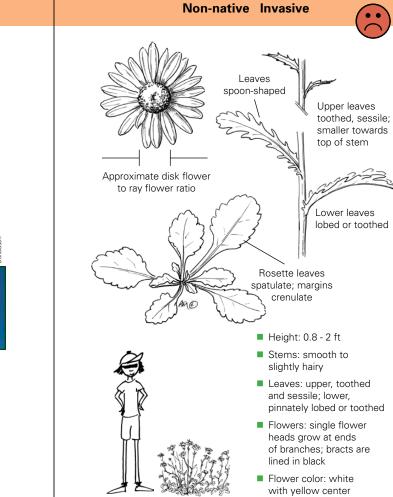
Flowers in terminal racemes No spur Upper leaves long and narrow Lower leaves lanceolate AME Height: 0.5 - 3 ft Leaves: upper, long and narrow; lower, lanceolate; soft, not waxy Flowers: fuzzy-hairy Flower color: yellow, but

Non-native Look-alike

other colors are available

OXEYE DAISY Leucanthemum vulgare LEVU

Also Known As	White daisy
Origin	Europe
Habitat	Meadows, roadsides, waste places, gardens
Life Cycle	Perennial
Flowering Time	June to August
Relative Abundance	Widespread
Management	Pull or dig before seed production; herbicides are available
Noxious Weed List	Nevada NO; California NO
	F7



SHASTA DAISY Leucanthemum maximum LEMA8

Non-native Look-alike



 Also Known As
 None

 Origin
 Non-native, naturalized

 Habitat
 Well-drained soil, full sun, ornamental gardens

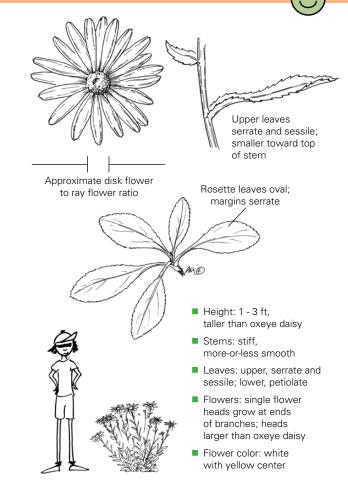
 Life Cycle
 Perennial

 Flowering Time
 July to September

 Relative Abundance
 Widespread

 Management
 None; recommended garden flower

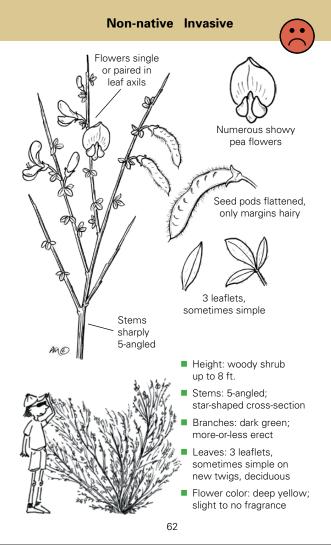
 Noxious Weed List
 Nevada NO; California NO



SCOTCH BROOM Cytisus scoparius CYSC4

The Andreas

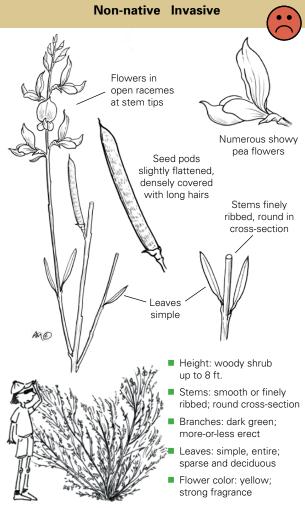
Also Known As Common broom, English broom Origin Europe and north Africa Habitat Pastures, forests, waste areas Life Cycle Long lived perennial **Flowering Time** May to July Relative Abundance Moderate Management Pull with heavy-duty weed wrench removing as much root as possible: observe site yearly and pull seedlings; chemical control most effective treatment Noxious Weed List Nevada NO; California C-rated



SPANISH BROOM Spartium junceum SPJU2

Also Known As Weaver's broom Origin Mediterranean Habitat Roadsides, forests and rangelands Life Cycle Long lived perennial Flowering Time May to July **Relative Abundance** Moderate Management Pull with heavy-duty weed wrench removing as much root as possible: observe site yearly and pull seedlings; chemical control most effective treatment Noxious Weed List Nevada NO; California C-rated

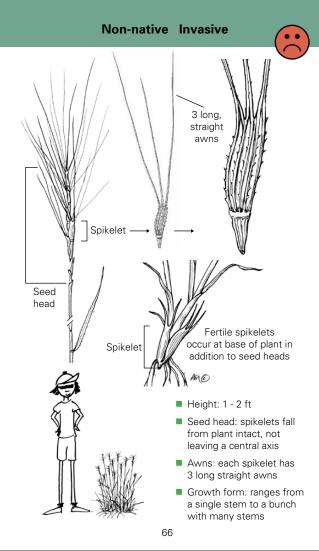




BARBED GOATGRASS Aegilops triuncialis AETR



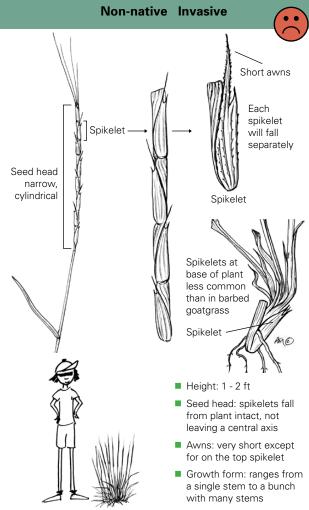
Also Known As	None	
Habitat	Rangelands, roadsides, disturbed places	
Origin	Mediterranean, Europe, western Asia	
Life Cycle	Annual	
Flowering Time	May to July	
Relative Abundance	Moderate	
Management	Handpull; herbicides available	
Noxious Weed List	Nevada A-rated; California B-rated	



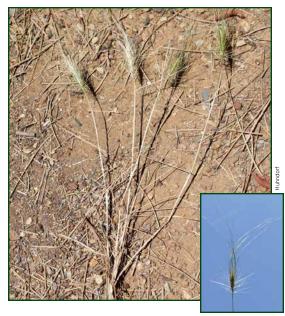
JOINTED GOATGRASS Aegilops cylindrica AECY



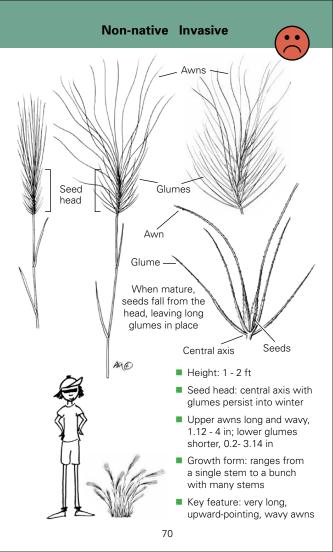
Also Known AsNoneHabitatRoadsides, disturbed, dry places,
cultivated fieldsOriginMediterranean, Europe, western AsiaLife CycleAnnualFlowering TimeMay to JulyRelative AbundanceInfrequentManagementHandpull; herbicides availableNoxious Weed ListNevada A-rated; California B-rated



MEDUSAHEAD Elymus caput-medusae ELCA13



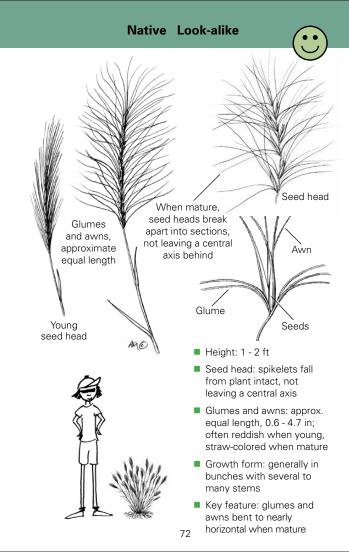
Also Known As	Taeniatherum caput-medusae
Habitat	Rangelands, roadsides, disturbed places
Origin	Europe
Life Cycle	Annual
Flowering Time	April to July
Relative Abundance	Common
Management	Rake and remove existing thatch, handpull small infestations; herbicides available
Noxious Weed List	Nevada B-rated; California C-rated
	69



SQUIRRELTAIL Elymus elymoides ELEL5

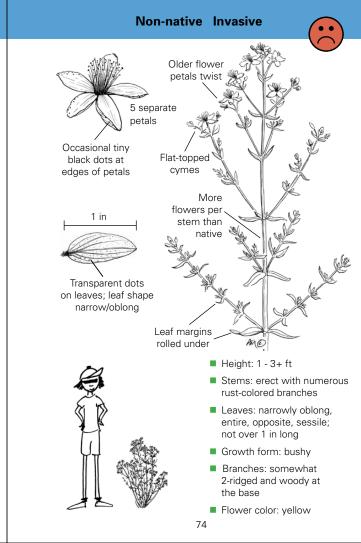


Also Known As	Bottlebrush
Habitat	Forests, grasslands, most plant communities
Origin	Native
Life Cycle	Perennial
Flowering Time	June to August
Relative Abundance	Common
Management	None
Noxious Weed List	None, Native



KLAMATHWEED Hypericum perforatum **HYPE**

Also Known As	St. John's Wort
Origin	Europe
Habitat	Pastures, meadows, roadsides, waste areas
Life Cycle	Perennial
Flowering Time	June to late September
Relative Abundance	Moderate
Management	Pull or dig repeatedly; use biocontrol insects; chemicals are available
Noxious Weed List	Nevada A-rated; California C-rated
	70

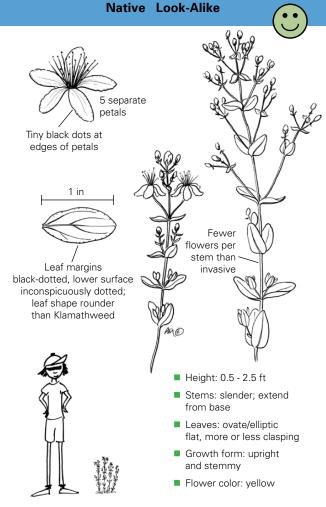


Hypericum SCOULER'S ST. JOHNSWORT scouleri HYSC5

ion Calpho Mat Calphotos ; Flower,

Also Known As None Origin Native Life Cycle Flowering Time Relative Abundance Noxious Weed List None, Native

Habitat Streambanks, meadows Tap-rooted perennial Summer Moderate Management Desirable native plant; do not disturb



SULFUR CINQUEFOIL Potentilla recta PORE5 Non-native Invasive Flowers 5 petals Stems branch only in the inflorescence Bud Both long spreading and very short hairs Leaves palmately compound with 5 - 7 divisions (6 - 7 common) Height: 2 ft Also Known As Roughfruit cinquefoil AMC Stems: hairs glandular, Origin Eurasia almost appearing shiny Habitat Roadsides, pastures, rangeland, wildlands, disturbed areas Leaves: upper and lower surfaces stiff-hairy; Life Cycle Tap-rooted perennial undersides green (not Flowering Time May to July silvery like most potentillas); Relative Abundance hairs glandular, almost Infrequent appearing shiny Management Dig, removing as much root as possible; herbicides are available Growth form: shrub Noxious Weed List Nevada A-rated; California A-rated Flower color: light yellow 77 78

SLENDER CINQUEFOIL Potentilla gracilis POGR9



Also Known As	Graceful cinquefoil, western cinquefoil	
Origin	Native	
Habitat	High mountain meadows, open forests	
Life Cycle	Perennial	
Flowering Time	July to August	
Relative Abundance	Widespread	
Management	Desirable native plant; do not disturb	
Noxious Weed List	None, Native	

Native Look-Alike Flowers 5 petals Bud Hairs of only one length AME Leaves palmately compound with 5 - 7 divisions Height: to 2.5 feet tall Stems: have hairs of only one length Leaves: hairy, especially below; undersides gray-green, silvery; leaf margins evenly toothed Flower color: yellow

80

TEASEL Dipsacus fullonum **DIFU2**

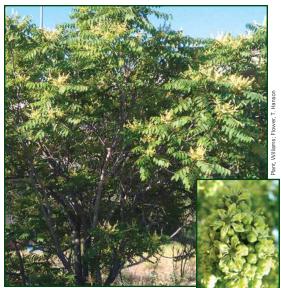


Also Known As	Common teasel, wild teasel	
Origin	Europe	
Habitat	Irrigation ditches, canals, wetlands, riparian areas, disturbed sites	
Life Cycle	Tap-rooted biennial	
Flowering Time	July to fall	
Relative Abundance	Infrequent	
Management	Dig or hand-pull, removing as much root as possible; herbicides are available	
Noxious Weed List	Nevada NO; California NO	

Non-native Invasive Flowers in dense egg-like heads with large, spine-like bracts **Ridges** lined with stiff prickles Leaves paired, fused at base Stiff prickles around stem on lower midrib Height: to 7 feet tall, commonly 3+ feet Stems: branched, rough and spiny Leaves: conspicuously veined; stem leaves lanceolate and up to 10 inches long Growth form: erect Flower color: lavender to purple, rarely white

82

TREE OF HEAVEN Ailanthus altissima AIAL



Also Known As	Stink tree
Habitat	Disturbed areas, riparian areas, often near old habitations
Origin	China
Life Cycle	Tree; perennial; reproduces from creeping roots and seeds
Flowering Time	June
Relative Abundance	Infrequent
Management	Hand pull seedlings; weed wrench saplings, but must extract entire root; herbicides available
Noxious Weed List	Nevada NO; California C-rated 83

Non-native Invasive Teeth Top of leaflet Underside Opposite leaflets AME Gland-tipped teeth at the base of each leaflet Leaf distinguish from sumac, which looks similar when young Fruit with seed near middle, clusters of 1 - 5 Sapling Height: tree up to 60 ft Bark: smooth and pale gray Leaves: up to 3 ft long, with 11 - 25 leaflets; foul-smelling when crushed Flower color: greenish Fruits: clusters of reddish-brown winged fruits in September 84

GLOSSARY

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

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

Axil: The point 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.

Crenulate: Having very small, rounded teeth on the leaf margin.

Cyme: A flat-topped or round-topped arrangement of flowers 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.

Glume: Sterile bract or bracts at the base of a grass spikelet. **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: The long, narrow flower that radiates outward from the disk flower in the Asteraceae family. Each ray flower resembles a single petal.

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

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.

Spatulate: Shaped like a spatula, with a rounded blade that tapers to the base.

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.

Umbel: A flat-topped flower arrangement.

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

ADDITIONAL RESOURCES

State and Federal Noxious Weed Lists

Nevada Department of Agriculture agri.nv.gov/Plant/Noxious_Weeds/Noxious_Weeds_Home

California Department of Food & Agriculture cdfa.ca.gov/plant/ipc/encycloweedia/encycloweedia_hp.html

U.S. Department of Agriculture - Federal Noxious Weed List plants.usda.gov/java/noxious

Plant Photos, Plant Distribution, Smartphone Mapping Applications

Lake Tahoe Basin Weed Coordinating Group tahoeinvasiveweeds.org

Calflora calflora.org

CalWeedMapper calweedmapper.cal-ipc.org

EDDMapS West eddmaps.org/west

California Invasive Plant Council cal-ipc.org

Plant Ecology and Treatment Information

University of California Weed Research & Information Center wric.ucdavis.edu

Techline Invasive Plant News techlinenews.com

Aquatic Invasive Weeds

Tahoe Resource Conservation District tahoercd.org

Tahoe Regional Planning Agency trpa.org

League to Save Lake Tahoe keeptahoeblue.org

REPORTING & CONTACT INFORMATION

To report a weed sighting online, or to contact the Lake Tahoe Basin Invasive Weed Coordinating Group, go to tahoeinvasiveweeds.org.

To report weeds or for control recommendations: Nevada

Douglas County Weed District	(775) 782-9835
Washoe County Weed Reporting washoeweeds.org	(775) 784-4848

California

Placer County Agriculture Department	(530) 889-7372

El Dorado County Agriculture Department (530) 621-5520

For homeowner site visits:

Tahoe Resource Conservation District	(530) 543-1501
(California)	Ext. 113

Nevada Tahoe Conservation District (775) 586-1610

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Tahoe Resource Conservation District



University of Nevada Cooperative Extension



Nevada Department of Agriculture



US Forest Service, State and Private Forestry Program