

Invasive Weed Field Guide



Santa Monica Mountains
National Recreation Area
U.S. National Park Service



Park Location Codes

Use this location code key to find where each invasive weed is currently known to be present on SMMNRA land. Abutting California State Parks and Regional Parks are not listed in this guide, though weeds are known there. The codes are located on the upper right hand corner of the second page of each weed description.

Arroyo Sequit - **AS**

Cheeseboro Canyon - **CC**

Circle X Ranch - **CXR**

Deer Creek - **DC**

Franklin Canyon - **FC**

Gillette Ranch - **GR**

La Jolla Valley - **LV**

Palo Comado Canyon - **PCC**

Paramount Ranch - **PR**

Peter Strauss Ranch - **PSR**

Rancho Sierra Vista/Satwiwa - **RSV**

Rocky Oaks - **RO**

Runyon Canyon - **RC**

Seminole Hot Springs - **SHS**

Solstice Canyon - **SC**

Trancas Canyon - **TC**

Zuma Canyon - **ZC**

This field guide is not intended as a comprehensive reference to all of the weeds in the Santa Monica Mountains National Recreation Area (SMMNRA). We have selected particularly noxious invasive weeds to be represented in this guide. Early detection is a crucial step in the control of any weed. This guide is intended as an educational tool to aid park employees, volunteers and visitors in that process. Check for updates to this guide at our website listed below.

Should you find weeds listed in this guide where they are not already known to exist in the park, please inform the SMMNRA via email at: weeds@nps.gov/samo

If you would like more information about weed management and planting responsibly, please contact the California Invasive Plant Council (Cal-IPC) at their website: <http://www.cal-ipc.org> or by phone at (510) 843-3902.

This guide was compiled and published by:
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SMMNRA thanks the many photographers and organizations (Bugwood.org, Cal-IPC, Catalina Conservancy, Univ. of CA Regents, The Nature Conservancy, and others credited on their photos) for granting permission to use their weed photos in this guide.

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| | <i>Genista linifolia</i> | Mediterranean Broom |

Plants
Known in
the Region



Shizhao



Chris Evans

What does it look like?

Perennial member of the grass family 9-30 ft tall, growing in many-stemmed, cane-like clumps. **Stems:** Tough and hollow, divided by partitions like bamboo. **Leaves:** Pale green or blue green, alternately arranged, up to 2 ft long. Leaves clasp the stem with a heart-shaped base and taper to tip. **Flowers:** Feathery plumes, up to 2 ft long. **Roots:** Large and spreading horizontal rootstocks.

When does it flower?

Beginning late summer to fall.



Chris Evans

Where is it found?**FC, GR, PR, RC**

Occupies moist riparian areas, often taking over entire channels. Giant Reed is found in larger drainages of the Santa Monica Mountains, such as Malibu, Topanga and Conejo creeks. Eradication efforts are in progress in several areas.

***Why worry?***

Giant Reed monopolizes riparian habitat, displacing native plants and associated wildlife species. It also increases flood danger and changes stream dynamics by altering water flow and reducing groundwater availability. The large amount of dry vegetative matter it produces creates a fire hazard.



L. Mehrhoff, Univ. of Connecticut

What does it look like?

Annual grass 2-6 inches tall. **Leaves:** 1 to 5 mm wide, sheath generally densely covered with soft hairs but can be smooth. **Flowers:** Arranged on drooping spikelets 2 to 8 inches long up to 8 per plant; can have single or multiple florets.

When does it flower?

Typically in winter, but sometimes in spring if fall moisture is low.



Where is it found?

Open, disturbed areas. Cheatgrass can be found at Paramount Ranch.

***Why worry?***

Cheatgrass forms dense monocultures averaging 600 plants per square foot. It depletes soil moisture and nutrients before native plants break their dormancy. Native perennial grasses and coastal sage scrub plants have more physiological stress with Cheatgrass as a neighbor. Dry Cheatgrass is highly flammable.

Pampas Grass
Jubata Grass

Cortaderia selloana
Cortaderia jubata



John M. Randall, The Nature Conservancy

What does it look like?

Perennial grasses, growing in large clumps, 6 to 20 ft tall.

Leaves: 3 to 8 ft long and 1 to 4 inches wide, grouped in erect or spreading tussocks, edges of leaves sharp.

Flowers: Showy white, silvery or pinkish, arranged in a feathery plume at the end of a long stalk. Both species have the same general appearance.

When does it flower?

Late summer to early autumn.



SC, ZC

Where is it found?

Common to disturbed sites, cut-over areas, eroded slopes, moist ditches and degraded coastal scrub communities. An ornamental escapee, this plant is often found adjacent to developed areas, and is commonly seen on coastal bluffs.



Mandy Tu, The Nature Conservancy

Why worry?

Pampas and Jubata Grass crowd-out native vegetation, especially in coastal areas. A buildup of dry leaves and stalks creates a fire hazard.

Harding Grass

Phalaris aquatica



<http://www.chariot.net.au>



2001 CDFA

What does it look like?

Stout, perennial grass, grows in clumps, 3 to 4 ft tall.

Leaves: Grayish to bluish green blades, 15 inches long.

Flowers: Arranged in dense cone-shaped heads, 2 to 5 inches long, at the end of a tall flowering stem.

When does it flower?

Flower heads turn green to creamy white from May to June.



LV, RO, RSV

Where is it found?

Coastal valleys, grasslands and disturbed sites such as roadsides. Often found in relatively moist areas but a deep root system allows it to survive in drier areas. It is common in parts of the western Santa Monica Mountains including Rancho Sierra Vista, Rocky Oaks and La Jolla Valley.



Bree Richardson, Courtesy of Cal-IPC

Why worry?

Hardpan Grass forms dense patches, displacing native plants by depriving them of water and nutrients. In the summer, dry foliage is a fire danger.

Russian Knapweed

Acroptilon repens



Steve Dewey, Utah State Univ.



Joe DiTomaso

What does it look like?

Perennial about 3 ft tall. **Stems:** Erect and openly branched, mostly covered in cobwebby gray hairs. **Leaves:** Lower leaves deeply lobed, 2 to 4 inches long; upper leaves narrowly linear, generally entire but sometimes toothed. Leaves lack hairs or are covered with short interwoven hairs. **Flowers:** Cone-shaped flowering heads, solitary at the tips of leafy branchlets. Pink to lavender in color.

When does it flower?

Blooms in the spring and dies back in the summer.



Steve Dewey

RO, RSV

Where is it found?

Forms dense stands in cultivated fields, pastures and along roadsides; can invade natural habitats, particularly riparian areas. Not yet widely found but has become established in the Rancho Sierra Vista and Rocky Oaks areas.



John M. Randall

Why worry?

Russian Knapweed degrades natural environments by displacing native vegetation. It also offers poor livestock forage and is toxic to horses.

Eupatory

Ageratina adenophora



What does it look like?

Perennial herb, shrub-like, 1.5 to 5 ft tall. **Stems:** Dark red with downy hairs, base woody. **Leaves:** Dark green, glossy, opposite, triangular to egg-shaped, 2 to 4 inches long, leaf margin toothed. **Flowers:** White, pink-tinged, arranged in clusters.

When does it flower?

Typically blooms in early spring.



Where does it grow?

Streambeds, woodland clearings and disturbed, steep slopes. Prefers moist habitats. This plant has become a common roadside pest in Griffith Park and Fryman Canyon, and is spreading into riparian areas in some cases.

***Why worry?***

Eupatory displaces native vegetation. It is a problematic agricultural weed as well as being toxic to livestock.

Onion Weed

Asphodelus fistulosus



What does it look like?

Annual to short-lived perennial herb, 1 to 2 ft in height.

Stems: Smooth, multiple and unbranched, growing close together. **Leaves:** Narrow, strap-like, 0.5 ft to 1.5 ft long and a quarter-inch wide - arranged around base of plant.

Flowers: Waxy white, six oblong petals (tepals) each having a reddish-brown mid-vein. Lower part of flower forms a slender tube. Six drooping stamens (male part of flower), tipped with brown pollen, emerging from flower tube. Flowers 0.5 to 1 inch wide alternately arranged on a stalk. Young flowers have a honey-like fragrance.

When does it flower?

Blooms from late winter through spring.



Where is it found?

Roadsides, fields and waste places - prefers sandy, well-drained soils, often growing on nutrient poor sites along the coast. Several Onion Weed populations have become established in the Malibu Bluffs area.

***Why worry?***

Onion Weed displaces native annuals. The fibrous roots allow the plant to quickly resprout if damaged.

Sahara Mustard or Asian Mustard

Brassica tournefortii



Mark Dimmitt

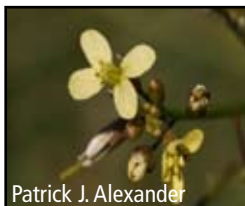
What does it look like?

Annual herb, widely branched, 4 inches to 3.5 ft in height.

Leaves: Well-developed around base of plant, 3 to 12 inches long, deeply lobed and finely toothed. Stem leaves greatly reduced or non-existent. **Flowers:** Small (about 0.5 inches wide), four petals and dull yellow. Flowers inconspicuous compared to other mustard species. **Fruits:** Cylindrical, beaked, pod-like structure containing 7 to 15 seeds.

When does it flower?

Blooms and fruits as early as December and sets seed by February.



Patrick J. Alexander

Where is it found?

Annual grassland, coastal scrub, roadside and abandoned fields; common in open, dry areas with wind-blown sand deposits. This plant is found in a few small areas near Pt. Dume. Larger populations are established to the north and south of the region, particularly in the desert areas of Palm Springs and Anza-Borrego.



Why worry?

Sahara Mustard grows early in the season, monopolizing soil moisture before native wildflowers appear. Because Sahara Mustard does well under dry conditions, it spreads easily when drought suppresses other non-native species. Standing, dead material increases fire danger.

Yellow Star Thistle

Centaurea solstitialis



Justin Smith



Joe DiTomaso

What does it look like?

Annual to short-lived perennial herb, ankle to shoulder height (usually 1 to 5 ft when in flower) and generally mounded with many branching stems - particularly when tall. **Leaves:** Gray-green, slightly downy (minute hairs on surface), alternate and either simple or partially lobed. **Flowers:** Yellow; characterized by having sharp, rigid spines around flower heads.

When does it flower?

Generally blooms during the summer months.

Only reproduces by seed.



Where is it found?

PR, PSR, SHS

Grasslands, overgrazed pastures and range lands. Yellow Star Thistle prefers drier, well-drained upland soils. Established populations of Yellow Star Thistle are found in several dispersed locations including Paramount Ranch and upper Las Virgenes Canyon. This plant has caused serious problems in the northern half of the State. A similar but less noxious weed, *Centaurea melitensis*, is widespread throughout the area; this plant is characterized by smaller, more abundant spines around the flower head and is generally smaller in overall size.



Centaurea solstitialis



Neal Kramer

Centaurea melitensis

Why worry?

Yellow Star Thistle out-competes native grasses and herbs by depleting soil moisture. Sharp spines discourage wildlife and livestock foraging as well as deterring people from using recreational areas.

Poison Hemlock

Conium maculatum



Joe DiTomaso

Richard Old, XIDservices.com

What does it look like?

Biennial herb, 3 to 8 ft tall. **Stems:** Stout, hollow and purple spotted with distinct ridges and extensive branching.

Leaves: Bright green, opposite and finely divided into segments (fern-like leaflets). Crushed leaves have a strong, unpleasant odor.

Flowers: White and arranged in an umbrella-like shape (umbel).

When does it flower?

Blooms from late spring to early summer, during its second season of growth.



Steve Dewey

RSV, ZC

Where is it found?

Moist fields, meadows, along roadsides and scattered in riparian areas. It is common along water courses and drainages in the Santa Monica Mountains. Extensive infestations are found in the Rancho Sierra Vista and Big Sycamore Canyon areas.



Joe DiTomaso

Why worry?

Poison Hemlock grows rapidly, shading out native plants. All parts are poisonous to ingest, can cause death to wildlife and livestock.

Artichoke Thistle

Cynara cardunculus



John M. Randall



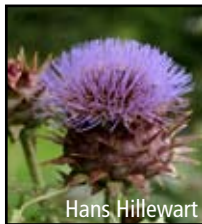
Joe DiTomaso

What does it look like?

Perennial herb, up to 5 ft tall. **Stems:** Leafy, branched, stout, generally erect but heavy flower heads can cause bending. **Leaves:** Alternate, silver to grayish green, 1 to 4 ft long, deeply lobed or divided, very spiny. Upper surface of leaf cobwebby, lower surface covered with soft, wooly hairs (cobwebby material can easily be rubbed off). **Flowers:** Large, pinkish-purple to blue flower heads. Each flower head has a round shape and is protected by a series of spiny, overlapping scales.

When does it flower?

Blooms from April to July.



Hans Hillewart

AS, RSV, ZC

Where does it grow?

Disturbed places, grasslands or abandoned agricultural fields (particularly rangelands). It can colonize riparian woodlands and natural openings in scrub communities, especially near the coast. This plant is found in the Arroyo Sequit preserve and La Jolla Valley, usually on clay soils. In the Santa Ana Mountains, this weed has become a common pest.



Why worry?

Artichoke Thistle competes with native plants for moisture and nutrients. Because of the formidable spines, thick stands of thistle hinder the movement of wildlife.

Cape Ivy

Delairea odorata



What does it look like?

Perennial vine, climbs and sprawls over other vegetation.

Leaves: Smooth, shiny green with pointed lobes, 1 to 3 inches long. Both leaves and stems are succulent (store water). **Flowers:** Yellow, arranged in groups of 20 or more. Each flower head is round, about the size of a dime.

When does it flower?

Typically blooms in winter with rapid vegetation growth in spring. During summer months some die back occurs.



Joe DiTomaso

Where is it found?

Coastal and riparian areas, often disturbed moist sites. However, Cape Ivy is an adaptable plant and is beginning to appear in a wide range of habitats. It is especially prevalent in the eastern half of the Santa Monica Mountains, including the Topanga Canyon watershed.



All photos Forest & Kim Starr

Why worry?

Cape Ivy can form dense, continuous mats, smothering native plants. The weight of an Ivy mass has been known to cause trees to fall. Compounds in the foliage are toxic to fish. Because it reproduces vegetatively, small fragments easily spread the plant to new locations.

Terracina Spurge or
Geraldton Carnation Weed

Euphorbia terracina



What does it look like?

Perennial, shrub-like herb, 3 ft tall. **Stems:** Green to reddish, leafy, branching at top to produce 4 or 5 flowering stems.

Leaves: Alternate, light green, averaging 0.5 to about 1 inch in length. Leaf-like structure on the flowering stems are opposite and round in appearance. **Flowers:** Yellow/green cup-like structure, small, not showy but distinct from bright, green leaves. Broken stems produce a milky sap.

When does it flower?

Late February through April.



SC, ZC

Where is it found?

Roadsides, beach areas and open slopes at low elevations. It is presently in Malibu, and has invaded portions of Solstice Canyon as well as coastal fire clearance areas.



Why worry?

Terracina Spurge grows rapidly and is a prolific seed producer, easily invading coastal scrub lands and out-competing native species for space. Milky sap is irritating to the skin and especially the eyes.

Fennel

Foeniculum vulgare



Carsten Neihaus

What does it look like?

Perennial herb, 4 to 10 ft tall. **Stems:** Stout, grayish-green, and marked with long vertical grooves. The stems are jointed and sheathed by leaves. **Leaves:** Finely dissected into feathery divisions, each division up to 5 inches long. **Flowers:** Clustered in a round umbrella shape (compound umbel), about 4 inches across. Each individual flower is small and yellow. Fennel is characterized by a strong anise or licorice smell.

When does it flower?

Blooms from spring to mid-summer. Stands of Fennel usually include a mixture of living and dead material (dead stems are hollow).



Where is it found?

Grasslands, scrub communities, watercourses and disturbed areas, especially abundant along roadsides and abandoned pastures. Fennel is widely distributed in the Santa Monica Mountains, especially in the coastal portion of the range.

***Why worry?***

Fennel is a prolific seed producer, reproducing by both seed and taproot (resprouts). It forms dense, difficult to control stands that inhibit the growth of other plants.

Perennial Pepperweed

Lepidium latifolium



Steve Dewey

What does it look like?

Perennial, multi-stemmed herb, 1 to 8 ft in height. **Leaves:** Green to dull gray-green, 4 to 12 inches long and 1 to 2 inches wide (lower leaves are larger). Both leaf and stem have a waxy coating. Leaves are alternate and have either a smooth or toothed edge. **Flowers:** Tiny and white, forming dense clusters near ends of branches.



Richard Old

When does it flower?

Generally blooms from May to July with each plant producing thousands of seeds.

Where is it found?

Waste places, roadsides and croplands; particularly in wet areas where the soil is salty or alkaline. Can grow in native, relatively undisturbed plant communities. A severe Perennial Pepperweed infestation is present in the Paramount Ranch area.



Steve Dewey

Why worry?

Perennial Pepperweed is distributed by seeds or fragments of underground stems. A vigorous root system makes it difficult to control. Once established, it competes with native plants for water and nutrients, especially in wetland habitats. Pepperweed also increases erosion.

Russian Thistle or Tumbleweed

Salsola australis



What does it look like?

Annual to short-lived perennial herb, many-branched, rounded, bushy shape, 1 to 4 ft tall. **Stems:** Usually red or purpled striped. **Leaves:** Initially, long, string-like and soft. Mature leaves are short, scale-like, sharp-pointed to spiny. **Flowers:** Inconspicuous, greenish, growing where the leaf branches off the stem. Plant dries into a ball that breaks off at the base and blows in the wind – forming the ubiquitous tumbleweed.



When does it flower?

Blooms May to October. Seeds are dispersed in the fall when the dead plant breaks away and starts to roll.

Where does it grow?

Disturbed conditions: agricultural fields, vacant lots, roadside shoulders and ditches - thrives in salty and alkaline soils. There are thistle populations throughout the Santa Monica Mountains and Simi Hills, particularly along roads and disturbed grassland areas.



All photos: Forest & Kim Starr

Why worry?

Russian Thistle exploits disturbed natural ecosystems, making it difficult for native plants to become reestablished. Fortunately, it is generally out-competed by natives in undisturbed habitats.

Cotton Fireweed

Senecio quadridentatus



What does it look like?

Spindly, annual to short-lived perennial herb, 2 to 3 ft tall. **Stems:** Whitish-green and wooly. **Leaves:** Silvery, very narrow, 1 to 5 inches long, covered (at least on the lower surface) with soft, matted hairs. **Flowers:** Yellow, cylindrical, arranged in branched groupings.

When does it flower?

Typically in the spring.



Where does it grow?

Disturbed sites. Cotton Fireweed has been found along Topanga fireroad. This plant has not yet become a problem in the Santa Monica Mountains but should be tracked for potential problems in the future.



All photos: Lotte von Richter, www.rbgsyd.nsw.gov.au

Why worry?

Cotton Fireweed competes with native species.

Periwinkle

Vinca major



Forest & Kim Starr



What does it look like?

Spreading, perennial vine, grows close to the ground.

Leaves: Opposite, glossy (waxy coating), dark green, 2 to 3 inches long. **Flowers:** Purplish-blue, five petals, fused at the base into a funnel-shaped tube. Each flower solitary, 1 to 2 inches across.

When does it flower?

Blooms between March and July.



Barry Rice

GR, FC, PR, PSR, RO

Where is it found?

Prefers damp, shaded locations, often thrives along tree-covered drainages. Because it is commonly used in landscaping, periwinkle is associated with development. It is often seen along coastal stream courses, particularly in the eastern half of the Santa Monica Mountains. It is abundant in the Upper Malibu Creek drainage.



Nancy Lowenstein, Auburn Univ.

Why worry?

Periwinkle forms dense carpets, rapidly spreading by vigorous roots and stem fragments. Once established, it disrupts the growth of native plants, particularly in riparian communities. Periwinkle contributes to streambank erosion.

Tree of Heaven

Ailanthus altissima



Paul Wray, Iowa State Univ.

What does it look like?

Deciduous, spindly tree 30 to 60 ft tall with a broad, dome-shaped crown. **Bark:** Gray and smooth, becoming darker and more scarred with age. **Leaves:** Alternate and compound, 1 to 3 feet long. Each compound leaf is comprised of 11-25 smaller lance-shaped leaflets. Crushed foliage has an unpleasant odor. **Flowers:** Small, yellow-green. Female flowers produce conspicuous clusters of winged fruits.

When does it flower?

Blooms in late spring.



Where is it found?

Widely dispersed in urban areas, especially along roadways and wastelands. Occasionally occurs in riparian habitats. Tree of Heaven can often be seen along the primary and secondary roads transecting the Santa Monica Mountains, and is occasionally found in riparian areas such as Malibu Creek. In Northern California, this tree has become a serious problem in some riparian areas.

***Why worry?***

Tree of Heaven displaces native vegetation by creating dense thickets.

Swamp Saltbush

Atriplex amnicola



What does it look like?

Shrub, up to 5 ft tall. **Leaves:** Narrowly rounded or narrowly arrowhead-shaped, 0.5 to 1 inch long. **Flowers:** Arranged in clustered spikes, small, inconspicuous (male and female flowers on separate plants).

When does it flower?

Generally during the summer months.



Where does it grow?

Alkaline to saline soils, usually along the coast. Now established at Malibu Lagoon.



Why worry?

Displaces native vegetation.

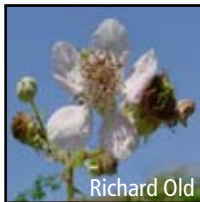


What does it look like?

Shrubby, perennial vine, essentially evergreen, grows in arching or trailing branches, sprawling mounds often 10 ft tall. **Stems:** Green to deep red, angular, turning woody with age, bearing curved thorns (prickles). **Leaves:** Divided into 3 to 5 leaflets, edges strongly toothed or serrated. **Flowers:** White or rose tinted, 5 petals, solitary, about 1 inch across. **Fruits:** Blackberries (resembling the commercial variety).



Richard Old



Richard Old

When does it flower?

Blooms from the middle spring through summer.
Berries ripen during the late summer and early fall.

Where is it found?

Riparian woodlands and along streams. Can grow in open disturbed places but requires adequate soil moisture. It is occasionally found in drainages in the area; a large population is found in Topanga Canyon.



John M. Randall

Why worry?

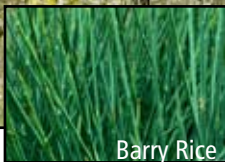
Himalayan Blackberry displaces native vegetation by shading out light. It degrades habitat, reducing wildlife access to water and impeding recreational activities in natural areas.

Spanish Broom

Spartium junceum



David Gaya



Barry Rice

What does it look like?

Perennial shrub, 6 to 15 ft tall. **Stems:** Green, cylindrical, not angled (rush-like). **Leaves:** Small, less than a half inch, shed during summer drought – giving plant a stick-like appearance. **Flowers:** Yellow, pea-like and fragrant, about an inch in size. **Fruit:** Pod, 2 to 4 inches long.

When does it flower?

From early spring to the beginning of summer.

Pods generally start to appear in June and July.



GR, RO, TC, ZC

Where is it found?

Common in disturbed sites, particularly road cuts, trail sides, stream banks, abandoned lands, eroded slopes and post-burn areas. It is also planted as an ornamental. Spanish Broom is especially common along Kanan Dume Road and a large patch is found on the summit of Saddle Peak.



John M. Randall

Why worry?

Spanish Broom rapidly invades disturbed habitat preventing native shrubs from re-colonizing an area. Mature stands generate large amounts of deadwood contributing to fire hazards. Broom is poor forage for native wildlife.

Plants
Not
Known
in the
Region

Annual Veldt Grass

Ehrharta longiflora



What does it look like?

Annual, sprawling grass. **Stems:** Generally erect but spread widely at maturity. **Leaves:** Flat blade, about 8 inches long and less than 0.5 inches wide, wrinkled partway along margin, sides purplish. Membrane-like structure (ligule) at the leaf/stem junction is toothed. **Flowers:** Arranged on a branched stalk. Flowering stems are covered with short, soft hairs.

When does it flower?

During the rainy season, December through April.



Where does it grow?

Coastal dunes and dry, sandy areas. This plant has not yet been found in the Santa Monica Mountains.



All photos: <http://tchester.org/plants/analysis/ehrharta/longiflora.html>

Why worry?

Annual Veldt Grass is a new arrival to Southern California (presently in the San Diego area). It spreads rapidly, crowding out native forbs.

Purple Star Thistle

Centaurea calcitrapa



Joe DiTomaso

What does it look like?

Annual to short-lived perennial herbs, ankle to shoulder height (usually 1 to 5 ft when in flower) and generally mounded with many branching stems - particularly when tall. **Leaves:** Gray-green, slightly downy (minute hairs on surface), alternate and either simple or lobed, sometimes deeply lobed. **Flowers:** Purple to pink with sharp, rigid spines around flower heads.

When does it flower?

Generally blooms during the summer months.

Only reproduces by seed.



Where is it found?

Grasslands, overgrazed pastures and range lands. Purple Star Thistle is partial to bottomland areas with heavier soils. This species is rare in the area but has been treated in Upper Las Virgenes Canyon. This species has caused serious problems in the northern half of the state.



Steve Dewey

Why worry?

Purple Star Thistle out-competes native grasses and herbs by depleting soil moisture. Sharp spines discourage wildlife and livestock foraging as well as deterring people from using recreational areas.

Centaurea stoebe

Spotted Knapweed



Bernd Haynold

Joe DiTomaso

What does it look like? Biennial or short-lived perennial forb. The first year plant is a rosette; mature plant is 1 to 3 feet tall with one or more stems. **Leaves:** Alternate, pinnately divided up to 6 inches long with smooth margins. **Flowers:** Solitary on the ends of stems, pink to lavender (occasionally cream colored), with black spots on stiff bracts.

When does it flower?

Early to late spring.



Joe DiTomaso

Where is it found?

Spotted Knapweed invades disturbed places but can quickly spread to intact native habitat once a colony has established. It now infests several million acres in Northwest America and Canada. It has caused considerable economic, rangeland and natural system damage. Though it prefers a moister climate, a few plants have been seen in the Santa Monica Mountains along fire roads.



Why worry?

Spotted Knapweed is highly competitive for resources and is a prolific seed producer. It displaces natives, forming dense monocultures. It is easily spread by infested seed, hay and broken stems carried by vehicle undercarriages.

Saffron Thistle

Carthamus lanatus



Joe DiTomaso

What does it look like?

Annual herb, erect, branching stems and up to 3.5 ft tall.

Leaves: Alternate, very stiff, clasping stem, deeply toothed with sharp spines along the edges and at the tip. Leaves and stems are glandular, cobwebby hairs present. **Flowers:** Bright yellow, surrounded by a spiny floral head.

When does it flower?

Blooms in winter.



Where is it found?

Disturbed open areas, grasslands, pastures and agricultural fields. It is not yet in the area but is present in the Northwestern and Central-Western regions of the State.



B. Warrick, Texas A&M Univ.

Why worry?

Saffron Thistle competes with food crops for space. Because of the sharp spines, it is seldom eaten by livestock.

Stinkwort

Dittrichia graveolens



Dennis Smith

What does it look like?

Annual, erect, branching, up to 3 ft tall. **Stems:** Leaves and branches covered with sticky hairs. **Flowers:** Yellow, each branch bearing a flower head (leaf-like structure at base of each branch). When crushed, this plant has a strong, unpleasant odor.

When does it flower?

Late summer to fall.



Joe DiTomaso

Where does it grow?

Disturbed areas, particularly annual grasslands.



Eric Wylde, Courtesy of Cal-IPC

Why worry?

Stinkwort alters physical processes, displaces native species and provides poor forage for both wildlife and domesticated livestock; causes digestive irritation.

Cutleaf Fireweed
Australian Fireweed

Erechtites glomerata
Erechtites minima



Photos: Don Tate



What does it look like?

Both are annuals to short-lived perennials, 4 to 8 ft tall.

Stems: Slightly hairy (particularly in Cutleaf Fireweed).

Leaves: Alternate, oblong shape to long and narrow, 3 to 6 inches long (can be longer in Australian Fireweed). Cutleaf Fireweed has lobed, sharply toothed leaves while Australian Fireweed has sharp, finely toothed (not lobed or cleft) leaves.

Flowers: Dull, yellow, arranged in flat-topped clusters.

When does it flower?

Both species bloom during the summer months.



Joe DiTomaso

Where is it found?

Both occur in coastal regions at low elevations, primarily in disturbed areas, such as roads, stream banks and post-burn sites.



Richard Old

Why worry?

Cutleaf Fireweed and Australian Fireweed are serious plant pests, quickly dominating grasslands and fields, and interfering with the reestablishment of native seedlings after an area burns.

Banana Poka or
Banana Passion Fruit

Passiflora tarminiana



What does it look like?

Vigorous, climbing vine. **Leaves:** Three-lobed, serrated edges, soft, downy underside, always hairless on top, 6 inches wide. **Flowers:** Showy, light pink to bright pink, petals bent back, around 2 inches long, floral tube greenish, 2 to 4 inches long. Flowers are solitary and drooping (hanging from the point of attachment). **Fruits:** Sausage-shape, yellow to yellow orange when mature, 5 to 6 inches long. Pulp is orange with numerous black seeds.

**When does it
flower?**

Spring to early
summer.



Where is it found?

Generally disturbed habitats adjacent to developed areas, but can creep into natural woodlands and shrub communities. Banana Poka is on the State of Hawaii's noxious weed list. It has the potential to become established along the immediate Malibu coastline.



All photos: Forest & Kim Starr

Why worry?

Banana Poka is a tropical, light-loving vine that sprawls over forest and shrub canopies, smothering native species by shading them out.

Japanese Knotweed

Polygonum cuspidatum



What does it look like?

Perennial, shrub-like herb, 4 to 10 ft in height. **Stems:** Smooth, stout, reddish-brown, and swollen at joints where leaf meets the stem (bamboo-like in appearance). **Leaves:** Broadly rounded to somewhat triangular, pointed at tip, 2 to 6 inches long and 3 to 4 inches wide on a short leaf stalk. **Flowers:** Tiny, greenish white to cream color, arranged in large plume-like clusters at the ends of the stems (plumes originating from the leaf/stem junction). **Seeds:** Brownish to black, shiny, three-sided and .1 inch long.

When does it flower?

Blooms in summer followed shortly after by small winged fruits. Dies back in winter (woody shoots remain) only to vigorously resprout in spring.



Where is it found?

Disturbed locations: roadsides, pastures and waste places. Typically found near water sources: along streams and low-lying areas. It can tolerate full shade, high temperatures, soil salinity and drought. Japanese Knotweed is not yet reported in the region but has caused problems elsewhere, especially in the Pacific Northwest.



Why worry?

Japanese Knotweed primarily reproduces by creeping root stocks and stem fragments. It forms dense, tall thickets that exclude native plants, posing a significant threat particularly to riparian areas. Knotweed creates a fire hazard during its dormant period.

Gum Rockrose

Cistus ladanifer



What does it look like?

Evergreen shrub, 5 to 10 ft tall. **Stems:** Erect and sticky.

Leaves: Linear shape, up to 4 inches long, 3 main veins, sticky, often fragrant, wooly hairs on underside. **Flowers:** Showy, white with yellow centers, 3 to 4 inches wide, papery petals with or without a purple spot at the base of each petal.

When does it flower?

Blooms from spring to early summer – may flower sporadically at other times.



Where does it grow?

Disturbed locations, does well in poor, dry soils. In the past, the Forest Service planted Gum Rockrose for post-fire revegetation purposes, and some remnant populations can still be found near Castro Crest and Will Rogers State Park. It also can be seen as a landscape ornamental.



Why worry?

Gum Rockrose produces a resin that inhibits competition, displacing native herbaceous communities.

Cotoneaster

Cotoneaster pannosus



What does it look like?

Evergreen shrub, usually spreading but sometimes erect, up to 10 ft tall. **Leaves:** Dull gray-green above, white and "felty" beneath, about an inch long. **Flowers:** White with fully opened petals. **Fruits:** Red berries.

When does it flower?

Blooms in summer followed by berries in the autumn and winter.



Where is it found?

An escaped ornamental, grows in both moist and relatively dry habitats. It is frequently encountered in cool, damp coastal regions. It has been recorded growing in Franklin Canyon. Cotoneaster populations have been reported north of our area in Ventura County.



All photos: Forest & Kim Starr

Why worry?

Cotoneaster displaces native plants through rapid growth, competitive roots and abundant seed production.

Single-Seed Hawthorn
or Whitethorn

Crataegus monogyna



What does it look like?

Deciduous shrub or small tree, up to 30 ft tall. **Stems:** Branches have stout, straight spines. Trunk is gray with smooth bark. **Leaves:** Small (.5 to 1.5 inches long) with 3 to 7 deep, smooth-edge lobes (can be slightly serrated). **Flowers:** White, small, 5 petals, arranged in flat-topped clusters. **Fruit:** Red berries, .5 inches wide, single seeded.

**When does it
flower?**

Blooms in the spring
with prolific fruit
production in the fall.



Where is it found?

Riparian areas, oak woodlands, forests, abandoned fields and pastures - grows best in humid to somewhat humid temperatures areas. It does well on most soil types. Single-Seed Hawthorn is not yet in this region except for a few planted ornamentals; however, it has caused significant problems in the Bay Area of Northern California.



Why worry?

Single-seed Hawthorn displaces native plants, particularly altering the structure of woodlands. It crowds out understory vegetation and makes it difficult for large animals to move. Birds readily eat the fruits and disperse the seeds.

Mediterranean Broom

Genista linifolia



Bill Bushing, Catalina Conservancy



What does it look like?

Erect, evergreen shrub, 6 to 7 ft tall. **Stems:** Silvery, silky hairs. **Leaves:** Groups of three; each leaflet, narrow elliptic shape, .5 to 2 inches long, upper surface sparsely white hairy, lower surface densely hairy, margins of leaflets rolled under. **Flowers:** Yellow, half-inch in size (familiar pea flower shape), clustered on tips of branch, 5 to 20 individual flowers. **Fruit:** Hairy pods, about one inch long.

When does it flower?

Blooms from spring to early summer.



Where does it grow?

Disturbed areas but can encroach into shrub communities. It has been documented growing near the region.



Bill Bushing, Catalina Conservancy

Why worry?

Mediterranean Broom out-competes native vegetation and creates a fire hazard. Because it is a nitrogen-fixing plant, broom enriches the soil, which unfortunately promotes the growth of other weeds.