Invasive non-native plant Early Detection and Rapid Response (EDRR) targets in western San Diego County

Report <u>new</u> sightings of these plants to Jason Giessow: jgiessow@cox.net or EDRRSD@gmail.com

Regional level maps are available for sixteen of the species, as well as site level maps for most occurrences. Invasive plant ID sheets are available for seven of the species currently. Version 6-22-15

	Scientific name	Common name	Growth form	Habitat	Status	Populations (eradicated)	ID Sheet
1	Ageratina adenophora	Eupatory	Perennial forb	Riparian	Active EDRR target	3	Yes
2	Aegilops triuncialis	Barbed goat grass	Annual grass	Grassland	Active EDRR target	1	
3	Carrichtera annua	Ward's weed	Annual forb	Uplands (shrub & grass)	Active EDRR target	2	
4	Centaurea solstitialis	Yellow star thistle	Annual forb	Grassland	Active EDRR target	21	
5	Centaurea stoebe	Spotted knapweed	Annual forb	Uplands	Active EDRR target	1 (3)	
6	Cytisus scoparius	Scotch broom	Perennial shrub	Uplands (shrub & grass)	Eradicated: monitoring	(1)	
7	Elymus caput-medusae	Medusahead	Annual grass	Grassland	Active EDRR target	7	
8	Enchylaena tomentosa*	Ruby saltbush	Perennial sub- shrub	Uplands (shrub & grass)	Assessing	3+	
9	Euphorbia terracina	Carnation spurge	Annual forb	Uplands	Eradicated: monitoring	(1)	
10	Euphorbia virgata*	Leafy spurge	Annual forb	Uplands	Active EDRR target	1	
11	Genista monspessulana	French broom	Perennial shrub	Riparian or uplands	Active EDRR target	5	Yes
12	Heliotropium supinum*	Dwarf heliotrope	Annual forb	Vernal pools	Active EDRR target	1	
13	Hypericum canariense	Canary Island St. John's wort	Perennial shrub	Shrublands	Active EDRR target	12	
14	Iris pseudacorus	Yellow flag iris	Perennial monocot	Wetlands (fresh)	Assessing	9+	Yes
15	Limonium duriusculum*	European sea lavender	Perennial forb	Wetlands (salt & fresh) & uplands	Active EDRR target	7	Yes
16	Limonium ramosissimum*	Algerian sea lavender	Perennial forb	Wetlands (salt & fresh) & uplands	Active EDRR target	16	Yes
17	Lythrum salicaria	Purple loosestrife	Perennial forb	Wetlands (fresh)	Active EDRR target	2	Yes
18	Pentameris airoides*	Annual pentaschistis	Annual grass	Grasslands?	Active EDRR target (DoD)	1	
19	Retama monosperma	Bridal broom	Perennial shrub	Uplands (shrub & grass)	Active EDRR target	5	
20	Senecio quadrdentatus*	Cotton burnweed	Annual forb	Grasslands	Active EDRR target (DoD)	1	
21	Sesbania punicea*	Rattlebox	Perennial shrub	Wetlands (fresh)	Active EDRR target	1	Yes

* Species is being reviewed and added to SDMMP program or being assessed.



Invasive Non-Native: Crofton Weed, Eupatory (*Ageratina adenophora*)

Description: perennial herb or subshrub, woody base, 2-5 ft (.6-1.5m) tall. Opposite leaves 1-4" (3-10cm). Stems: purple, glandular hairy. Flowers: composite, flower head all discoid flowers (<u>no ray flowers</u>) ¹/₄" (6mm) across, clustered in groups, individual flowers 1/16-1/8 " (<5mm) across, <u>white or pink tinged.</u>

Ecology: disturbed areas, wetland/riparian edges, canyons, hillsides.

Similar to: no common natives or non-natives. Mule-fat has discoid ray flowers, but thinner leaves.



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Invasive Non-Native: French Broom (Genista monspessulana)

Description: large, evergreen, woody shrub up to 9 feet (3m) tall. Leaves: small $< \frac{1}{2}$ " (1cm), compound leaflets in groups of three. Flower: small, $< \frac{1}{4}$ " (6mm), <u>yellow</u>, 1-2 per axil.

Ecology: occurs in a variety of habitats from disturbed to undisturbed areas, coastal scrub, oak woodlands, riparian corridors and open

Similar to (see back): Spanish broom (non-native) large shrub with deciduous leaves and 1" (3cm) yellow flowers. Scotch broom (nonnative) large shrub with deciduous leaves and 1" (3cm) yellow flowers. <u>Deerweed</u> (native) short-lived perennial < 2 ft (.6m) tall with smaller yellow-orange-red flowers.







Invasive Non-Native: Yellowflag Iris (Iris pseudacorus)

Description: perennial, 2-5 ft (.5-1.5m) tall with flat sword-like leaves $\frac{1}{2}$ -1" (1-3cm) wide. Leaves are flat in cross-section with prominent mid-vein. Flower: up to 2" (5cm) across, <u>yellow to cream colored</u>.

Ecology: thrives in wet soils near pond margins, irrigation ditches, and wetland/riparian areas.

Similar to (see back): during blooming period (spring/summer), plant is distinct and stands out because of its large showy yellow flowers. During dormant period (fall/winter), often confused with cattails (native *Typha* species) or bulrushes (native *Scirpus/Schoenoplectus* species). <u>Cattails:</u> leaves < $\frac{3}{4}$ " (2cm) wide and distinctly "C" shaped in cross-section. <u>Bulrushes:</u> dark green leaves < $\frac{1}{2}$ " (1cm) wide and triangular shaped in cross-section.



PhotosCJoe DiTomaso Seed pods 2-4 inches long

Plants <u>SIMILAR TO</u>: Yellowflag Iris (*Iris pseudacorus*)

<u>Cattails (*Typha* spp.):</u> (native) in flower plant has distinct 'corn dog' like flower, when dormant (no flower) plants are similar to yellowflag iris but cattail leaves are generally narrower $< \frac{3}{4}$ " (2cm) and distinctly "C" shaped in cross-section.

Bulrushes (*Scirpus* or *Schoenoplectus* spp.): (native) has similar appearance when dormant (no flower), leaves are $< \frac{1}{2}$ " (1cm) wide, triangular in cross-section, and color is dark green.

Cattails

Left to right: Cattails, Yellowflag Iris, and Bulrushes

Left to right (cross sections): Cattails, Yellowflag Iris, and Bulrushes

Bulrushes

Invasive Non-Native: European Sea Lavender (*Limonium duriusculum*)

Description: perennial herb 6-12" (20-30 cm) tall in flower, lower leaves in dense rosettes $\frac{1}{2}$ - 1 $\frac{1}{2}$ " (1-4 cm) long, 1/8 - $\frac{1}{4}$ " (5-9 mm) wide, rounded. Flower: evenly distributed at branch tip, small < $\frac{1}{4}$ " (7mm), pale pink.

Ecology: salt tolerant, coastal salt marsh as well as riparian habitat (even grassland & disturbed areas).

Similar to (see back): <u>Algerian sea lavender</u> (non-native) has narrower leaves and flowers are closer together. <u>Perez's sea lavender</u> (common non-native used in landscaping) is a larger species with wider, longer, bright green leaves. <u>California sea lavender</u> (native) has longer leaves and stouter taproot.

> Native monium

Photo © Gavin Archibaid







Algerian sea lavender

Photo C Gavin Archibald

Plants <u>SIMILAR TO</u>: European Sea Lavender (*Limonium duriusculum*)

<u>Algerian sea lavender (*L. ramosissimum*):</u> (non-native) has spoon shaped leaves and flowers are tightly clustered along inflorescence tip (see other ID sheet: PLEASE MAP).

<u>Perez's sea lavender or statice (*L. perezii*):</u> (common non-native used in landscaping) <u>large plants</u> with longer, wider, & bright green leaves $1\frac{1}{2}$ -6" (4–15 cm) long, 1–3" (2.5–7 cm) wide, large showy flower clusters.

<u>California sea lavender (*L. californicum*):</u> (native) overall about twice the size of Algerian SL, has <u>larger longer leaves</u>, blade 2-6" (5–15 cm) long, $\frac{1}{2}$ -2" (1.5–6 cm) wide, and <u>very spatulate</u> (narrow then abruptly wider). Flowers small and delicate like Algerian sea lavender, but corolla blue.

California sea lavender (native)

Perez's sea lavender or statice

Invasive Non-Native: Algerian Sea Lavender (*Limonium ramosissimum*)

Description: perennial herb 6-12" (20-50 cm) tall in flower, lower leaves in dense rosettes 1-4" (3-10 cm) long, $\frac{1}{4}-\frac{3}{4}$ " (7-20 mm) wide, spoon shaped, tip acute to rounded. Flower: <u>delicate multi-branched</u>, <u>tight clusters</u>. Flower: calyx (outer flower part) white < $\frac{1}{4}$ " (4-6mm), corolla (inner flower part) <u>pale pink</u> to purple < $\frac{1}{4}$ " (5-7 mm).

Ecology: salt-tolerant, coastal salt marsh as well as riparian habitat (even grassland & disturbed areas).

Similar to (see back): <u>European sea lavender</u> (non-native) has rounded leaves and flowers are evenly spaced. <u>Perez's sea lavender</u> (common non-native used in landscaping) is a larger species with wider, longer, bright green leaves. <u>California sea lavender</u> (native) has longer leaves and stouter taproot.



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Plants <u>SIMILAR TO</u>: Algerian Sea Lavender (*Limonium ramosissimum*)

European sea lavender (*L. duriusculum*): (non-native) has smaller more rounded leaves and flowers are evenly spaced along branch (see other ID sheet: PLEASE MAP).

<u>Perez's sea lavender or statice (*L. perezii*): (common non-native used in landscaping) <u>large plants</u> with longer, wider, & bright green leaves $1\frac{1}{2}$ -6" (4–15 cm) long, 1–3" (2.5–7 cm) wide, large showy flower clusters.</u>

<u>California sea lavender (*L. californicum*):</u> (native) overall about twice the size of Algerian sea lavender, has <u>larger longer leaves</u>, blade 2-6" (5–15 cm) long, $\frac{1}{2}$ – 2" (1.5–6 cm) wide, and <u>very spatulate</u> (narrow then abruptly wider). Flowers small and delicate like Algerian sea lavender, but <u>corolla blue</u>.

> California sea lavender (native)



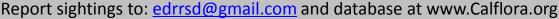
Invasive Non-Native: Purple Loosestrife (Lythrum salicaria)

Description: perennial herb 2-5 ft (.6-1.5m) tall. Leaf 1-5" (2.5-5cm) long, truncate at base, lanceolate to ovate. Flower: dense flower spikes, red-pink-purple each flower about 1/2" (1cm).

Ecology: marshes, ponds, wetlands, riparian areas.

Similar to: no similar species are commonly encountered.









Invasive Non-Native: Red Sesbania, Rattlebox (Sesbania punicea)

Description: shrub to small tree that can grow up to 10 ft (3 m) tall. Leaflets: 20-34 per branch (always an even number), elliptic to elliptic-oblong. Flower: **Orange-red pea-like flowers**, 5-15 per group. Fruits: 1-3" (2.5-7 cm) long.

Ecology: wetlands/riparian areas, other moist sites, roadsides, cultivated as an ornamental plant.

Similar: looks a bit like: black locust (*Robinia pseudoacacia*), an uncommon non-native tree with white flowers and obvious spines on the stem and *Cassia occidentalis*, yellow flowered, 8 leaflets.



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All PhotoseJoe DiTomaso