

Part IV. Plant Assessment Form

For use with “Criteria for Categorizing Invasive Non-Native Plants that Threaten Wildlands”
by the California Exotic Pest Plant Council and the Southwest Vegetation Management Association

Electronic version, February 28, 2003

Table 1. Species and Evaluator Information

Species name (Latin binomial):	Cotula coronopifolia L.
Synonyms:	Lancisia coronopifolia
Common names:	common brassbuttons
Evaluation date (mm/dd/yy):	3/21/05
Evaluator #1 Name/Title:	Elizabeth Brusati, project manager
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Evaluator #2 Name/Title:	Joseph M. DiTomaso
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Section below for list committee use—please leave blank

List committee members:	Jake Sigg, Peter Warner, Bob Case, John Knapp, Elizabeth Brusati
Committee review date:	7/8/05
List date:	enter text here
Re-evaluation date(s):	enter text here

<p>General comments on this assessment: enter text here</p>
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Table 2. Criteria, Section, and Overall Scores

1.1	Impact on abiotic ecosystem processes	U	No Information
1.2	Impact on plant community	C	Observational
1.3	Impact on higher trophic levels	U	No Information
1.4	Impact on genetic integrity	D	Other Pub. Mat'l

Impact

Enter four characters from Q1.1-1.4 below:

UCUD

Using matrix, determine score and enter below:

C

2.1	Role of anthropogenic and natural disturbance	B (2 pts)	Observational
2.2	Local rate of spread with no management	B (2 pts)	Observational
2.3	Recent trend in total area infested within state	C (1 pt)	Observational
2.4	Innate reproductive potential Wksht A	A (3 pts)	Other Pub. Mat'l
2.5	Potential for human-caused dispersal	D (0 pts)	Other Pub. Mat'l
2.6	Potential for natural long-distance dispersal	C (1 pt)	Other Pub. Mat'l
2.7	Other regions invaded	C (1 pt)	Other Pub. Mat'l

Invasiveness

Enter the sum total of all points for Q2.1-2.7 below:

10

Use matrix to determine score and enter below:

C

Plant Score

Using matrix, determine Overall Score and Alert Status from the three section scores and enter below:

Low

No Alert

3.1	Ecological amplitude/Range	A	Other Pub. Mat'l
3.2	Distribution/Peak frequency Wksht C	C	Other Pub. Mat'l

Distribution

Using matrix, determine score and enter below:

B

Table 3. Documentation

Question 1.1 Impact on abiotic ecosystem processes	U No Information back
Identify ecosystem processes impacted: Unknown	
Rationale: enter text here	
Sources of information: enter text here	
Question 1.2 Impact on plant community composition, structure, and interactions	C Observational back
Identify type of impact or alteration: . Common in coastal freshwater and brackish marsh (1). Possible impacts to vernal pool species (2).	
Rationale: enter text here	
Sources of information: 1. Peter Warner, California State Parks, Mendocino, pers. obs. 2. Jake Sigg and Bob Case, California Native Plant Society, pers. obs.	
Question 1.3 Impact on higher trophic levels	U No Information back
Identify type of impact or alteration: Unknown	
Rationale: enter text here	
Sources of information: enter text here	
Question 1.4 Impact on genetic integrity	D Other Pub. Mat'l back
Identify impacts: None	
Rationale: No native Cotula in California.	
Sources of information: Hickman, J. C. (ed.) 1993. The Jepson Manual, Higher Plants of California. University of California Press. Berkeley, CA enter text here	
Question 2.1 Role of anthropogenic and natural disturbance in establishment	B Observational back
Describe role of disturbance: Prefers disturbed aquatic or wet sites, but can move into undisturbed sites as well.	
Rationale: enter text here	

Sources of information: DiTomaso, observational.	
Question 2.2 Local rate of spread with no management	B Observational back
Describe rate of spread: Seems to spread slowly.	
Rationale: enter text here	
Sources of information: DiTomaso, observational.	
Question 2.3 Recent trend in total area infested within state	C Observational back
Describe trend: Movements in state appears to be fairly static.	
Rationale: enter text here	
Sources of information: enter text here	
Question 2.4 Innate reproductive potential	A Other Pub. Mat'l back
Describe key reproductive characteristics: Wetland or terrestrial perennial. Reproduces by seed and vegetatively from stems that root at nodes. Most seeds germinate after the first winter rains. Seeds survive one to two years under field conditions.	
Rationale: enter text here	
Sources of information: DiTomaso and Healy. 2006. Weeds of California. UC DANR Publ. #3488.	
Question 2.5 Potential for human-caused dispersal	D Other Pub. Mat'l back
Identify dispersal mechanisms: Inhabits relatively inaccessible areas, so transport by humans is unlikely.	
Rationale: enter text here	
Sources of information: Alaska Natural Heritage Program. 2005. Non-native plant species of Alaska: Common brassbuttons, <i>Cotula coronopifolia</i> L. Environment and Natural Resources Institute, University of Alaska - Anchorage. Available: akweeds.uaa.alaska.edu/pdfs/species_bios_pdfs/Species_bios_COCO7.pdf	
Question 2.6 Potential for natural long-distance dispersal	C Other Pub. Mat'l back
Identify dispersal mechanisms: Can be transported by water, but dispersal was recorded as only 350-450 m per year. Dispersal by birds has been recorded but is rare.	

Rationale: enter text here	
Sources of information: Alaska Natural Heritage Program. 2005.	
Question 2.7 Other regions invaded	C Other Pub. Mat'l back
Identify other regions: Native to South Africa. Also present in Oregon, Washington, Nevada, Arizona, Alaska, Massachusetts (1) and England (2). Widely distributed around the world (3).	
Rationale: Scoring as C because already inhabits many plant communities in California (see 3.1).	
Sources of information: 1. USDA, NRCS. 2004. The PLANTS Database, Version 3.5 (http://plants.usda.gov). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.	
2. Burton, R. M. 1993. Botanical records for 1992. London Naturalist 0(72): 113-121.	
3. Alaska Natural Heritage Program 2005	
Question 3.1 Ecological amplitude/Range	A Other Pub. Mat'l back
Describe ecological amplitude, identifying date of source information and approximate date of introduction to the state, if known: Present in north, central, and south coast, San Francisco Bay, Central Valley, South Coast ranges, to 300m (1, 2). Inhabits freshwater and salt marshes (1, 3), wetlands, vernal pools, ditches, seasonally wet places, such as the edge of rivers, lakes and ponds, in many plant communities. Does not tolerate significant frost (1).	
Rationale: enter text here	
Sources of information: 1. DiTomaso and Healy in prep.	
2. USDA, NRCS. 2004. The PLANTS Database, Version 3.5 (http://plants.usda.gov). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.	
3. Noe, G. B. and J. B. Zedler 2000. Differential effects of four abiotic factors on the germination of salt marsh annuals. American Journal of Botany 87(11): 1679-1692.	
Question 3.2 Distribution/Peak frequency	C Other Pub. Mat'l back
Describe distribution: Common in saline and freshwater marshes along coast.	
Rationale: enter text here	
Sources of information: Hickman 1993	

Worksheet A[back](#)

Reaches reproductive maturity in 2 years or less	Yes: 1 pt
Dense infestations produce >1,000 viable seed per square meter	Yes: 2 pts
Populations of this species produce seeds every year.	Yes: 1 pt
Seed production sustained over 3 or more months within a population annually	No: 0 pt
Seeds remain viable in soil for three or more years	No: 0 pts
Viable seed produced with <i>both</i> self-pollination and cross-pollination	Unknown: 0 pts
Has quickly spreading vegetative structures (rhizomes, roots, etc.) that may root at nodes	Yes: 1 pt
Fragments easily and fragments can become established elsewhere	Yes: 2 pts
Resprouts readily when cut, grazed, or burned	Yes: 1 pt
	8 pts 1 unknown
	A (6+ pts)
Note any related traits: enter text here	

Worksheet C - California Ecological Types

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(*sensu* Holland 1986)

Major Ecological Types	Minor Ecological Types	Code*
Marine Systems	marine systems	score
Freshwater and Estuarine Aquatic Systems	lakes, ponds, reservoirs	score
	rivers, streams, canals	score
	estuaries	score
Dunes	coastal	score
	desert	score
	interior	score
Scrub and Chaparral	coastal bluff scrub	score
	coastal scrub	score
	Sonoran desert scrub	score
	Mojavean desert scrub (incl. Joshua tree woodland)	score
	Great Basin scrub	score
	chenopod scrub	score
	montane dwarf scrub	score
	Upper Sonoran subshrub scrub	score
	chaparral	score
Grasslands, Vernal Pools, Meadows, and other Herb Communities	coastal prairie	score
	valley and foothill grassland	score
	Great Basin grassland	score
	vernal pool	D. presen
	meadow and seep	D. presen
	alkali playa	score
	pebble plain	score
Bog and Marsh	bog and fen	score
	marsh and swamp	D. presen
Riparian and Bottomland	riparian forest	score
	riparian woodland	score
	riparian scrub (incl. desert washes)	score
Woodland	cismontane woodland	score
	piñon and juniper woodland	score
	Sonoran thorn woodland	score
Forest	broadleaved upland forest	score
	North Coast coniferous forest	score
	closed cone coniferous forest	score
	lower montane coniferous forest	score
	upper montane coniferous forest	score
	subalpine coniferous forest	score
Alpine Habitats	alpine boulder and rock field	score
	alpine dwarf scrub	score

* A. means >50% of type occurrences are invaded; B means >20% to 50%; C. means >5% to 20%; D. means present but ≤5%; U. means unknown (unable to estimate percentage of occurrences invaded).