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)**:**	Cytisus striatus (Hill)Rothm.
Synonyms:	Cytisus patens L., Cytisus pendulinus, Cytisus welwitschii, Genista striata, Sarthamnus eriocarpus, Sarothamnus patens sensu Webb
Common names:	Portugese broom, hairy-fruited broom
Evaluation date (mm/dd/yy)**:**	March 18, 2005
Evaluator #1 Name/Title:	Carla Bossard
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Evaluator #2 Name/Title:	Elizabeth Brusati
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Section below for list committee use—please leave blank

List committee members:	Carla Bossard, John Randall, Carri Pirosko, Dan Gluesenkamp, Gina Skurka, Brianna Richardson
Committee review date:	7/8/05
List date:	enter text here
Re-evaluation date(s):	enter text here

General comments on this assessment:
enter text here

Table 2. Criteria, Section, and Overall Scores

1.1	Impact on abiotic ecosystem processes	**B**	**Other Pub. Mat'l**
1.2	Impact on plant community	**A**	**Other Pub. Mat'l**
1.3	Impact on higher trophic levels	**C**	**Other Pub. Mat'l**
1.4	Impact on genetic integrity	**D**	**Other Pub. Mat'l**

"Impact"

Enter four characters from Q1.1-1.4 below:

BACD

Use matrix determine the score; enter below:

B

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

"Invasiveness"

For questions at left, recall that an A gets 3 points, a B gets 2, a C gets 1, and a D or U gets=0. Enter the sum total of all points for Q2.1-2.7 below:

11

Use matrix to determine score and enter below:

B

"Plant Score"

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

Medium

No Alert

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

"Distribution"

Use matrix determine the score; enter below:

B

Table 3. Documentation

Question 1.1 Impact on abiotic ecosystem processes B Other Pub. Mat'l back
Identify ecosystem processes impacted: Soil N content increased somewhat not as nodulated as some other brooms. Can carry fire to the tree canopy.
Rationale:
Sources of information: 1. Alvarez, M. 2000. Cytisus striatus. pp. 150-154 in Bossard, C., J. Randall, and M. Hochovsky. Invasive Plants of California's Wildlands. University of California Press, Berkeley, CA.
Question 1.2 Impact on plant community composition, structure, and interactions A Other Pub. Mat'l back
Identify type of impact or alteration: Displaces native species and forms monospecific stands of one mature shurb per two square meters.
Rationale: Native communities are not monospecific
Sources of information: 1. Alvarez, M. 2000. Cytisus striatus. pp. 150-154 in Bossard, C., J. Randall, and M. Hochovsky. Invasive Plants of California's Wildlands. University of California Press, Berkeley, CA.
Question 1.3 Impact on higher trophic levels C Other Pub. Mat'l back
Identify type of impact or alteration: Displaces forage species; toxic to ungulates. Not as widely distributed as C. scoparius so does not have the same impact.
Rationale: Less food for native species of animals
Sources of information: Alvarez 2000
Question 1.4 Impact on genetic integrity D Other Pub. Mat'l back
Identify impacts: none
Rationale: No native Cytisus species.
Sources of information: Hickman, J. C. (ed.) 1993. The Jepson Manual, Higher Plants of California. University of California Press. Berkeley, CA
Question 2.1 Role of anthropogenic and natural disturbance in establishment B Other Pub. Mat'l back
Describe role of disturbance: Soil disturbance from road and home construction; timber harvest; road side machinery

Rationale: These increase establishment of brooms
Sources of information: LeBlanc, ANR Publication 8049,bossard et al. 2000
Question 2.2 Local rate of spread with no management B Observational back
Describe rate of spread: Can spread, but not at the rate of Scotch broom.
Rationale:
Sources of information: DiTomaso, observational.
Question 2.3 Recent trend in total area infested within state C Observational back
Describe trend: Possibly slightly spreading, but may be static or outcompeted by other brooms.
Rationale: Other brooms have occupied best sites for this broom
Sources of information: Carla Bossard, St. Mary's College of California. Personal observation.
Question 2.4 Innate reproductive potential B Other Pub. Mat'l back
Describe key reproductive characteristics: Long-lived shrub that can survive 12 years in California. Becomes reproductive at two to three years of age. Flowers March through May on the coast, producing copious seeds that mature in June and July. Can repsrout from root crown when cut. Number of seeds variable, usually several per pod.
Rationale: enter text here
Sources of information: Alvarez 2000
Question 2.5 Potential for human-caused dispersal B Other Pub. Mat'l back
Identify dispersal mechanisms: Escaped from ornamental plantings in Marin County. Can be dispersed by road equipment.
Rationale:
Sources of information: Alvarez 2000

Question 2.6 Potential for natural long-distance dispersal	C Other Pub. Mat'l back
Identify dispersal mechanisms: Ballistic and rainwash dispersal for short distances.	
Rationale:	
Sources of information: Alvarez 2000	
Question 2.7 Other regions invaded	C Observational back
Identify other regions: Native to Mediterranean. Other areas of invasion not known.	
Rationale: enter text here	
Sources of information: Alvarez 2000	
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 the Marin Headlands, Marin County. Found occasionally in other parts of the Bay Area. Reported from Mendocino and San Diego counties. Can invade coastal prairies, coastal scrub, oak savannah, and open-canopy woodlands. In Bay Area is particularly common on non-calcareous soils.	
Rationale: enter text here	
Sources of information: Alvarez 2000.	
Question 3.2 Distribution/Peak frequency	D Observational back
Describe distribution: Scored as D based on Carla Bossard's information. Not a widespread species.	
Rationale: enter text here	
Sources of information: enter text here	

Worksheet A

back

Reaches reproductive maturity in 2 years or less	**No: 0 pt**
Dense infestations produce >1,000 viable seed per square meter	**Unknown: 0 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	**Yes: 2 pts**
Viable seed produced with *both* self-pollination and cross-pollination	**No: 0 pt**
Has quickly spreading vegetative structures (rhizomes, roots, etc.) that may root at nodes	**No: 0 pt**
Fragments easily and fragments can become established elsewhere	**No: 0 pts**
Resprouts readily when cut, grazed, or burned	**Yes: 1 pt**
	3 pts **1 unknown**
	B (4-5 pts)

Note any related traits: enter text here

Worksheet C - California Ecological Types

back

(*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	**D. presen**
	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	**D. presen**
	valley and foothill grassland	**score**
	Great Basin grassland	**score**
	vernal pool	**score**
	meadow and seep	**score**
	alkali playa	**score**
	pebble plain	**score**
Bog and Marsh	bog and fen	**score**
	marsh and swamp	**score**
Riparian and Bottomland	riparian forest	**score**
	riparian woodland	**score**
	riparian scrub (incl.desert washes)	**score**
Woodland	cismontane woodland	**D. presen**
	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).