

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):	Lactuca serriola L.
Synonyms:	Lactuca scariola
Common names:	prickly lettuce, china lettuce, common wild lettuce, compass plant, English thistle, horse thistle, whip thistle. Lance-leaved prickly lettuce refers to a variety with leaves that lack lobes.
Evaluation date (mm/dd/yy):	5/17/05
Evaluator #1 Name/Title:	Elizabeth Brusati, project manager
Affiliation:	California Invasive Plant Council
Phone numbers:	510-843-3902
Email address:	edbrusati@cal-ipc.org
Address:	1442A Walnut St. #462, Berkeley, CA 94709
Evaluator #2 Name/Title:	enter text here
Affiliation:	enter text here
Phone numbers:	enter text here
Email address:	enter text here
Address:	enter text here

Section below for list committee use—please leave blank

List committee members:	Joe DiTomaso, Jake Sigg, Cyndi Roye, Peter Warner
Committee review date:	6/30/05
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	U	No Information
1.2	Impact on plant community	D	Observational
1.3	Impact on higher trophic levels	D	Rev'd, Sci. Pub'n
1.4	Impact on genetic integrity	D	Rev'd, Sci. Pub'n

Impact

Enter four characters from Q1.1-1.4 below:

UDDD

Using matrix, determine score and enter below:

D

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

Invasiveness

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 Overall Score and Alert Status from the three section scores and enter below:

Not listed

No Alert

3.1	Ecological amplitude/Range	C	Other Pub. Mat'l
3.2	Distribution/Peak frequency Wksht C	A	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. Does not occur in high enough density in wildlands to cause much of a problem.	
Rationale: enter text here	
Sources of information: enter text here	
Question 1.2 Impact on plant community composition, structure, and interactions	D Observational back
Identify type of impact or alteration: Densities in wildland are not high, although the plant is nearly always found in grasslands. Does not seem to be very competitive.	
Rationale: enter text here	
Sources of information: DiTomaso, observational.	
Question 1.3 Impact on higher trophic levels	D Rev'd, Sci. Pub'n back
Identify type of impact or alteration: Young plants can cause pulmonary emphysema in cattle, although older plants are nontoxic. Eaten by grouse. No information on impacts to wildlife.	
Rationale: enter text here	
Sources of information: Weaver, S.E., and M. P. Downs. 2003. The biology of Canadian weeds. 122. <i>Lactuca serriola</i> L. Canadian Journal of Plant Sciences. 83:619-628	
Question 1.4 Impact on genetic integrity	D Rev'd, Sci. Pub'n back
Identify impacts: One native species of <i>Lactuca</i> in California, <i>L. tatarica</i> ssp. <i>puchella</i> (1). However, as <i>L. serriola</i> is mostly self-compatible and cross-pollination among <i>Lactuca</i> rarely occurs (2), hybridization seems unlikely.	
Rationale: enter text here	
Sources of information: 1. Hickman, J. C. (ed.) 1993. The Jepson Manual, Higher Plants of California. University of California Press. Berkeley, CA 2. Seaver and Downs 2003	
Question 2.1 Role of anthropogenic and natural disturbance in establishment	C Rev'd, Sci. Pub'n back
Describe role of disturbance: Prolific colonizer of disturbed sites in California (1). Also listed as a colonizer of	

disturbed sites in other parts of the world (2).	
Rationale: enter text here	
Sources of information: 1. DiTomaso, J., and E. Healy. in prep. Weeds of California and Other Western States. 2. Weaver and Downs 2003	
Question 2.2 Local rate of spread with no management	C Other Pub. Mat'l back
Describe rate of spread: Already widespread in state, so probably not spreading much.	
Rationale: enter text here	
Sources of information: 1. DiTomaso, J., and E. Healy. in prep. Weeds of California and Other Western States.	
Question 2.3 Recent trend in total area infested within state	C Other Pub. Mat'l back
Describe trend: Already widespread in state, so probably not spreading much.	
Rationale: enter text here	
Sources of information: 1. DiTomaso, J., and E. Healy. in prep. Weeds of California and Other Western States.	
Question 2.4 Innate reproductive potential	B Rev'd, Sci. Pub'n back
Describe key reproductive characteristics: Winter or summer annuals, sometimes biennials. Self-compatible and mostly self-pollinated. Cross-pollination is rare in natural populations. Can produce up to 100,000 seeds per plant. Capitula ripen and produce seeds over a period of several months. Seed bank lasts one to three years.	
Rationale: enter text here	
Sources of information: Seaver and Downs 2003	
Question 2.5 Potential for human-caused dispersal	B Other Pub. Mat'l back
Identify dispersal mechanisms: Seeds can be spread by road equipment, agricultural equipment, and other human activities.	
Rationale: enter text here	
Sources of information: 1. DiTomaso and Healy. in prep	

Question 2.6 Potential for natural long-distance dispersal	A Other Pub. Mat'l back
Identify dispersal mechanisms: Seeds can disperse with wind, water, and soil, but unsure how far this carries them. Wind probably moves the seed long distances.	
Rationale: enter text here	
Sources of information: 1. DiTomaso and Healy. in prep	
Question 2.7 Other regions invaded	C Rev'd, Sci. Pub'n back
Identify other regions: Native to Eurasia. Present in all contiguous US states and every province of Canada except Newfoundland. Occurs throughout Europe, in north Africa, western and central Asia, and Australia. In all places, is a colonizing species of disturbed ruderal habitats and roadsides.	
Rationale: Scoring as C because already common in California, in the same types of habitats it inhabits elsewhere.	
Sources of information: Seaver and Downs 2003 Lebeda, A., I. Dolezalova, E. Kristkova, and B. Mieslerova. 2001. Biodiversity and ecogeography of wild Lactuca spp. in some European countries. Genetic Resources and Crop Evolution. 48: 153-164	
Question 3.1 Ecological amplitude/Range	C Other Pub. Mat'l back
Describe ecological amplitude, identifying date of source information and approximate date of introduction to the state, if known: Present throughout California, to 2000m. Inhabits annual grasslands, seasonal wetlands, fields, and disturbed sites such as waste places and roadsides.	
Rationale: I'm guessing on the scores based on the fact that it's widespread in grasslands.	
Sources of information: DiTomaso and Healy in prep.	
Question 3.2 Distribution/Peak frequency	A Other Pub. Mat'l back
Describe distribution: Present throughout California, particularly common in valley and foothill grasslands.	
Rationale: enter text here	
Sources of information: DiTomaso and Healy in prep	

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	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	No: 0 pt
	4 pts Total Unknowns
	B (4-5 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	A. >50%
	Great Basin grassland	B. 21-50
	vernal pool	score
	meadow and seep	D. present
	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	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).