

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):	Picris echioides L.
Synonyms:	Helminthia echidoides, Helmintheca echioides
Common names:	bristly ox-tongue, bugloss, bugloss-picris
Evaluation date (mm/dd/yy):	4/6/05
Evaluator #1 Name/Title:	Elizabeth Brusati, project manager
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Evaluator #2 Name/Title:	Joseph DiTomaso
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Section below for list committee use—please leave blank

List committee members:	Carla Bossard, John Randall, Carri Piroso, 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:

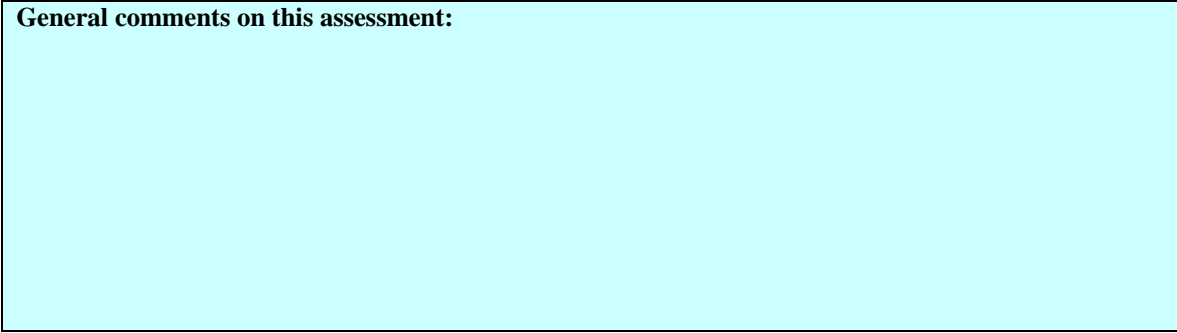


Table 2. Criteria, Section, and Overall Scores

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)	Other Pub. Mat'l
2.2	Local rate of spread with no management	B (2 pts)	Other Pub. Mat'l
2.3	Recent trend in total area infested within state	B (2 pts)	Other Pub. Mat'l
2.4	Innate reproductive potential Wksht A	B (2 pts)	Other Pub. Mat'l
2.5	Potential for human-caused dispersal	C (1 pt)	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:

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:

**Low
No Alert**

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

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	B Observational back
Identify type of impact or alteration: Can become dense stands in coastal areas. Often confused with yellow starthistle from a distance and can form infestions slightly less in density. However, mostly a trailside plant that occasionally forms patches in grasslands.	
Rationale: enter text here	
Sources of information: DiTomaso, observational. Dan Gluesenkamp, Audubon Canyon Ranch, pers. obs. Brianna Richardson, Acterra, pers. obs.	
Question 1.3 Impact on higher trophic levels	D 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 other species of Picris 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 Other Pub. Mat'l back
Describe role of disturbance: Inhabits disturbed places such as roadsides, fields, pastures, etc.	

Rationale: enter text here	
Sources of information: DiTomaso, J., and E. Healy. in prep. Weeds of California and Other Western States.	
Question 2.2 Local rate of spread with no management	B Other Pub. Mat'l back
Describe rate of spread: Common throughout most of state, but can spread when it gets into a new site.	
Rationale: enter text here	
Sources of information: 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	B Other Pub. Mat'l back
Describe trend: Probably still increasing in the state. Main areas of expansion appear to be in the Central Valley.	
Rationale: enter text here	
Sources of information: DiTomaso, J., and E. Healy. in prep. Weeds of California and Other Western States.	
Question 2.4 Innate reproductive potential	B Other Pub. Mat'l back
Describe key reproductive characteristics: Winter or summer annual or biennial. Plants exist as basal rosettes until flower stems develop at maturity. Flowers May to September or October. Reproduces by seed. Seeds germinate in fall after the rains begin or in the spring depending on location and climate.	
Rationale: enter text here	
Sources of information: DiTomaso, J., and E. Healy. in prep. Weeds of California and Other Western States.	
Question 2.5 Potential for human-caused dispersal	C Other Pub. Mat'l back
Identify dispersal mechanisms: Some seeds disperse with soil movement, or by clinging to tools, tires, and machinery.	
Rationale: enter text here	
Sources of information: DiTomaso, J., and E. Healy. in prep. Weeds of California and Other Western States.	
Question 2.6 Potential for natural long-distance dispersal	C Other Pub. Mat'l back
Identify dispersal mechanisms: Seeds disperse short distances with wind and disperse longer distances with water.	

Rationale: enter text here	
Sources of information: DiTomaso, J., and E. Healy. in prep. Weeds of California and Other Western States.	
Question 2.7 Other regions invaded	C Other Pub. Mat'l back
Identify other regions: Native to Europe. Present in Oregon, Washington, the midwest, and the northeastern U.S. (1).	
Rationale: Scoring as C because already common throughout most of California.	
Sources of information: USDA, NRCS. 2005. The PLANTS Database, Version 3.5 (http://plants.usda.gov). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.	
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 coastal counties from Sonoma to San Diego, and also Glenn, Butte, and Riverside counties (1). Common throughout most of California, except deserts and Great Basin, to 450m. Most common in seasonally wet places. Thrives on clay soils, especially those high in calcium (2).	
Rationale: The habitats invaded are a guess based on distribution.	
Sources of information: 1. USDA, NRCS. 2005. The PLANTS Database, Version 3.5 (http://plants.usda.gov). National Plant Data Center, Baton Rouge, LA 70874-4490 USA. 2. DiTomaso, J., and E. Healy. in prep. Weeds of California and Other Western States.	
Question 3.2 Distribution/Peak frequency	C Observational back
Describe distribution: Very common along the coast prairie areas in the central portion of the state.	
Rationale: enter text here	
Sources of information: DiTomaso, observational.	

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	Unknown: 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	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 2 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	D. presen
	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	C. 5-20%
	valley and foothill grassland	D. presen
	Great Basin grassland	score
	vernal pool	score
	meadow and seep	D. presen
	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	D. presen
	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).