

Cal-IPC Plant Assessment Form

For use with “[Criteria for Categorizing Invasive Non-Native Plants that Threaten Wildlands](#)”
by the California Invasive Plant Council and the Southwest Vegetation Management Association

Version February 2003, modified March 2009
California Invasive Plant Council (formerly CA Exotic Pest Plant Council)
Berkeley, CA www.cal-ipc.org, phone (510) 843-3902

Table 1. Species and Evaluator Information

Species name (Latin binomial):	<i>Erica lusitanica</i> Rudolphi
Synonyms:	
Common names:	Spanish heath, Portuguese heath, urze
Evaluation date (mm/dd/yy):	5/19/11
Evaluator #1 Name/Title:	Elizabeth Brusati, Program Manager
Affiliation:	Cal-IPC
Phone numbers:	510-843-3902
Email address:	edbrusati@cal-ipc.org
Address:	Cal-IPC, 1442-A Walnut St. #462, Berkeley, CA 94709
Evaluator #2 Name/Title:	Joseph M. DiTomaso, Specialist in Cooperative Extension
Affiliation:	Dept. of Plant Sciences, University of California-Davisre
Phone numbers:	530-754-8715
Email address:	jmditomaso@ucdavis.edu
Address:	Mail Stop 4, One Shields Ave., Davis CA 95616

Section below for list committee use—please leave blank

List committee members:	enter text here
Committee review date:	enter text here
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

Species: *Erica lusitanica* (Portuguese heath)

Region: California

1.1	Impact on abiotic ecosystem processes	U	No Information (0)
1.2	Impact on plant community	B	Other Pub. Mat'l
1.3	Impact on higher trophic levels	U	Other Pub. Mat'l
1.4	Impact on genetic integrity	D	Rev'd, Sci. Pub'n

<p>Impact</p> <p>Enter four characters from Q1.1-1.4 below:</p> <p>UBUD</p> <p>Using matrix, determine score and enter below:</p> <p>C</p>

<p>Plant Score</p> <p>Using matrix, determine Overall Score and Alert Status from the three section scores and enter below:</p> <p>Limited</p> <p>No Alert</p>

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

<p>Invasiveness</p> <p>Enter the sum total of all points for Q2.1-2.7 below:</p> <p>11</p> <p>Use matrix to determine score and enter below:</p> <p>B (11-16)</p>
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<p>Documentation</p> <p>Average of all questions</p> <p>2.4 out of 4.0</p>
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3.1	Ecological amplitude/Range	B	Observational (2)
3.2	Distribution/Peak frequency Wksht C	D	Observational (2)

<p>Distribution</p> <p>Using matrix, determine score and enter below:</p> <p>C</p>
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Table 3. Documentation (Scores are explained in the “[Criteria for Categorizing Invasive Non-Native Plants that Threaten Wildlands](#)”. Short citations may be used in this table. List full citations at end of PAF.)

Impact	
Question 1.1 Impact on abiotic ecosystem processes	U No Information back
Identify ecosystem processes impacted: None reported or known.	
Sources of information: enter text here	
Question 1.2 Impact on plant community composition, structure, and interactions	B Other Pub. Mat'l back
Identify type of impact or alteration: Forms large monocultures in coastal Humboldt County. Is capable of forming dense stands in forest lands, wild areas, pastureland and on right-of-ways and will be a troublesome weed to control, should it be allowed to spread in western Oregon. Spanish heath has infested large areas in Northern California (Humboldt, Del Norte Counties) and is demonstrating a capacity to infest similar habitat in Oregon and Washington. Shown to outcompete native vegetation in Australia. In parts of Australia and New Zealand, Spanish heath is a major environmental weed (State of Victoria, 2001). Impacts to parks, wildland and wildlife refuges result from the aggressive growth and competition provided by the plant. Other impacts can include reductions in native plant diversity, invasion of riparian areas, competition with conifer and broadleaf tree species and overall degradation of the land base. In California, Spanish heath is a weed of wild land and forest where it forms dense stands, especially in disturbed areas.	
Sources of information: Clare Golec, CalTrans, pers. comm. http://www.oregon.gov/ODA/PLANT/WEEDS/profile_spanishheath.shtml 2011http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0011/347159/awmg_spanish-heath.pdf	
Question 1.3 Impact on higher trophic levels	U Other Pub. Mat'l back
Identify type of impact or alteration: None known. Not considered palatable to stock. Erica provides limited forage for grazing animals and few insects so it grows rapidly with limited herbivore pressure.	
Sources of information: http://www.oregon.gov/ODA/PLANT/WEEDS/profile_spanishheath.shtml 2011http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0011/347159/awmg_spanish-heath.pdf	
Question 1.4 Impact on genetic integrity	D Rev'd, Sci. Pub'n back
Identify impacts: None. No native Erica species in California.	
Sources of information: Hickman, J. C. (ed.) 1993. The Jepson Manual, Higher Plants of California. University of California Press. Berkeley, CA	
Invasiveness	
Question 2.1 Role of anthropogenic and natural disturbance in establishment	C Observational back
Describe role of disturbance: 1) Inhabits disturbed, open, sandy areas	

2) Appears to get foothold and/or introduced via disturbance (may have some horticultural introduction) but spreads readily into open habitats.	
Sources of information: Hickman 1993 Jepson Manual 2) Clare Golec, CalTrans, pers comm	
Question 2.2 Local rate of spread with no management	A Other Pub. Mat'l back
Describe rate of spread: First established in Oregon in the 1970's, at a rare plant nursery near Langlois, it slowly spread for decades until recently, with it's population now increasing exponentially (Stansell, McKenzie 2008 pers. comm). Also appears to be spreading rapidly in California.	
Sources of information: Clare Golec, CalTrans, pers. comm.	
Question 2.3 Recent trend in total area infested within state	B Observational back
Describe trend: Spreading to new sites in North Coast	
Sources of information: Clare Golec, CalTrans, pers. comm.	
Question 2.4 Innate reproductive potential	A Other Pub. Mat'l back
Describe key reproductive characteristics: Perennial shrub. Produce many seeds? Flowers from winter to spring. Recovers quickly after fire.	
Sources of information: http://www.oregon.gov/ODA/PLANT/WEEDS/profile_spanishheath.shtml 2011 http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0011/347159/awmg_spanish-heath.pdf	
Question 2.5 Potential for human-caused dispersal	C Observational back
Identify dispersal mechanisms: Possibly could be spread along roadsides as that seems to be a major area of invasion? Horticultural species - listed in Sunset Garden Book.	
Sources of information: Brenzel 2001	
Question 2.6 Potential for natural long-distance dispersal	D Observational back
Identify dispersal mechanisms: Doesn't seem very likely.	
Sources of information: enter text here	
Question 2.7 Other regions invaded	C Other Pub. Mat'l back
Identify other regions: Native to France, Portugal, and Spain. Naturalized in Australia, New Zealand, Ireland,	

United Kingdom (USDA-GRIN)	
California is the only state listed for the U.S., although Clare Golec mentions it spreading in Oregon (USDA PLANTS database). Appears to have invaded similar habitats as it has invaded in Australia, New Zealand and Oregon.	
Sources of information: USDA-GRIN http://www.oregon.gov/ODA/PLANT/WEEDS/profile_spanishheath.shtml 2011 http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0011/347159/awmg_spanish-heath.pdf	
Distribution	
Question 3.1 Ecological amplitude/Range	B Observational back
Describe ecological amplitude, identifying date of source information and approximate date of introduction to the state, if known: 1) Inhabits disturbed, open, sandy areas 2) Large monoculture infestations in coastal Humboldt County, especially in the vicinity of the town of Trinidad (roadsides and forest openings), just south of Eureka (open fields) to Fortuna along the state Route 101 with spreading into adjacent grasslands and other openings. New occurrences being reported in Del Norte (Wendell Woods), Oregon (Ken French), and Mendocino County (Clare Golec).	
Sources of information: 1) Hickman 1993 Jepson Manual 2) Clare Golec, CalTrans, pers comm	
Question 3.2 Distribution/Peak frequency	D Observational back
Describe distribution: Invasion is concentrated in North Coast so probably a small percentage of these habitats statewide.	
Sources of information: enter text here	
References	
List full citations for all references used in the PAF (short citations such as DiTomaso and Healy 2007 may be used in table above). Websites should include the name of the organization and the date accessed. Personal communications should include the affiliation of the person providing the observation. Enter each reference on a separate line; the table will expand as needed.	
Examples:	
Mitich, L. W. 1995. Intriguing world of weeds: Tansy ragwort. Weed Technology. 9: 402-404.	
HEAR. Date unknown. <i>Emex spinosa</i> . Hawaiian Ecosystems at Risk. www.hear.org/pier/species/emex_spinosa.htm . Accessed March 17, 2009	
DiTomaso, J. M. Personal communication from Dr. Joe DiTomaso, Dept. of Plant Science, UC Davis. Email received 3/17/09.	

Brenzel, K. N, 2001. Sunset Western Garden Book. Sunset Publishing Corporation. Menlo Park, CA

Golec, Claire. Personal communication from Clare Golec, Caltrans, May 2008

Hickman, J. C. (ed.) 1993. The Jepson Manual, Higher Plants of California. University of California Press. Berkeley, CA

ODA 2011. Oregon Department of Agriculture Plant Division, Noxious Weed Control Spanish Heath (*Erica lusitanica*) http://www.oregon.gov/ODA/PLANT/WEEDS/profile_spanishheath.shtml [Accessed May 6, 2011]

USDA-GRIN. 2011 GRIN Taxonomy for Plants. United States Department of Agriculture, Germplasm Resources Information Network. http://www.ars-grin.gov/cgi-bin/npgs/html/tax_search.pl [Accessed May 18, 2011]

USDA, NRCS. 2011. The PLANTS Database (<http://plants.usda.gov>, 18 May 2011). National Plant Data Center, Baton Rouge, LA 70874-4490 USA

Worksheet A[back](#)

Reaches reproductive maturity in 2 years or less	Unknown: 0 pts
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	Yes: 1 pt
Seeds remain viable in soil for three or more years	Yes: 2 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	Yes: 1 pt
	7 pts 2 unknowns
	A (6+ 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	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	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	score
	piñon and juniper woodland	score
	Sonoran thorn woodland	score
Forest	broadleaved upland forest	score
	North Coast coniferous forest	D. presen
	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).