

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):	Polypogon monspeliensis (L.) Desf.
Synonyms:	Agrostis alopecuroides Lam., Alopecurus aristatus var. monspeliensis (L.) Huds., Alopecurus monspeliensis L., Phleum crinitum Schreb., Phleum monspeliense Koel., Polypogon crinitus (Schreb.) Nutt., Polypogon flavescens J. Presl, Santia monspeliensis (L.) Parl.
Common names:	rabbitfoot polypogon, annual beardgrass, rabbitfootgrass, rabbitsfoot grass, tawny beardgrass
Evaluation date (mm/dd/yy):	3/23/05
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 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	D	No Information
1.2	Impact on plant community	C	Rev'd, Sci. Pub'n
1.3	Impact on higher trophic levels	D	No Information
1.4	Impact on genetic integrity	D	Other Pub. Mat'l

Impact

Enter four characters from Q1.1-1.4 below:

DCDD

Using matrix, determine score and enter below:

C

2.1	Role of anthropogenic and natural disturbance	C (1 pt)	Observational
2.2	Local rate of spread with no management	C (1 pt)	Observational
2.3	Recent trend in total area infested within state	C (1 pt)	Observational
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	B (2 pts)	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:

9

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	D	Observational

Distribution

Using matrix, determine score and enter below:

B

Table 3. Documentation

Question 1.1 Impact on abiotic ecosystem processes	D Observational back
Identify ecosystem processes impacted: None	
Rationale: enter text here	
Sources of information: Dan Gluesenkamp, Audubon Canyon Ranch, and John Randall, The Nature Conservancy, pers. obs.	
Question 1.2 Impact on plant community composition, structure, and interactions	C Rev'd, Sci. Pub'n back
Identify type of impact or alteration: May be allelopathic. In India, <i>P. monspeliensis</i> did not interfere chemically with the crops cultivated during the same season, but interfered with the following season's crop through its accumulated straw (1). Often found in moist areas. Probably does not have a significant impact on other vegetation.	
Rationale: enter text here	
Sources of information: Inderjit and K. M. M. Dakshini. 1995. Allelopathic potential of an annual weed, <i>Polypogon monspeliensis</i> , in crops in India. <i>Plant & Soil</i> 173(2): 251-257.	
Question 1.3 Impact on higher trophic levels	D Observational back
Identify type of impact or alteration: In Australia, polypogon sometimes carries bacteria that cause livestock poisoning, but no effect in wildland areas of California.	
Rationale: enter text here	
Sources of information: DiTomaso, J. M., and E. A. Healy. 2003. Aquatic and Riparian Weeds of the West. University of California. Agriculture and Natural Resources. Publication 3421. Oakland, CA Dan Gluesenkamp, Audubon Canyon Ranch, and John Randall, The Nature Conservancy, pers. obs.	
Question 1.4 Impact on genetic integrity	D Other Pub. Mat'l back
Identify impacts: None	
Rationale: No native <i>Polypogon</i> 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	C Observational back
Describe role of disturbance: Generally required disturbance.	
Rationale: enter text here	
Sources of information: DiTomaso, observational.	
Question 2.2 Local rate of spread with no management	C Observational back
Describe rate of spread: Rarely forms large and dense patches.	
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: Appears to be fairly static in the state.	
Rationale: enter text here	
Sources of information: DiTomaso, observational.	
Question 2.4 Innate reproductive potential	B Other Pub. Mat'l back
Describe key reproductive characteristics: Winter annual in regions with a mild climate and a summer annual at higher elevations or in cold-winter areas. Plants sometimes spread by stolons and may appear perennial. Reproduces by seed.	
Rationale: enter text here	
Sources of information: DiTomaso, J. M., and E. A.Healy. 2003. Aquatic and Riparian Weeds of the West. University of California. Agriculture and Natural Resources. Publication 3421. Oakland, CA	
Question 2.5 Potential for human-caused dispersal	C Other Pub. Mat'l back
Identify dispersal mechanisms: Seeds can be spread by agricultural activities or as a seed impurity in hay, but this is probably very uncommon.	
Rationale: enter text here	
Sources of information: DiTomaso, J. M., and E. A.Healy. 2003. Aquatic and Riparian Weeds of the West.	

University of California. Agriculture and Natural Resources. Publication 3421. Oakland, CA	
Question 2.6 Potential for natural long-distance dispersal	B Other Pub. Mat'l back
Identify dispersal mechanisms: Seeds can disperse with water or by clinging to the fur, feet, and feathers of animals.	
Rationale: Dispersal by water seems likely given that this species grows near streams.	
Sources of information: DiTomaso, J. M., and E. A.Healy. 2003. Aquatic and Riparian Weeds of the West. University of California. Agriculture and Natural Resources. Publication 3421. Oakland, CA	
Question 2.7 Other regions invaded	C Other Pub. Mat'l back
Identify other regions: Present in most contiguous states except Illinois, Indiana, Iowa, Kentucky, Missouri, Ohio, West Virginia (1). Present in Australia, India, many other places.	
Rationale: Scoring as C because already widespread in California.	
Sources of information: 1. DiTomaso, J., and E. Healy in prep. Weeds of California and Other Western States.	
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: Inhabits moist to wet places, stream and pond margins, seasonally wet sites, ditches, and moist sites in agricultural areas (1). Common throughout California to 2100m (2). Reported from coastal dunes in northern California (3).	
Rationale: enter text here	
Sources of information: 1. DiTomaso, J. M., and E. A.Healy. 2003. Aquatic and Riparian Weeds of the West. University of California. Agriculture and Natural Resources. Publication 3421. Oakland, CA 2. DiTomaso, J., and E. Healy in prep. Weeds of California and Other Western States. 3. Meyers-Rice B., Randall J. 1999. Weed Report: Polypogon monspeliensis, Annual Rabbitsfoot Grass, Beardgrass. The Nature Conservancy Wildland Weeds Management and Research 1998-99 Weed Survey.	
Question 3.2 Distribution/Peak frequency	C Observational back
Describe distribution: Most common in meadows or alongside streams and canals.	
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	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	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 1 unknown
	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	D. presen
	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	D. presen
	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	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).