

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

Table 1. Species and Evaluator Information

Species name (Latin binomial):	<i>Ononis alopecuroides</i>
Synonyms:	
Common names:	Foxtail restharrow
Evaluation date (mm/dd/yy):	August 1, 2003
Evaluator #1 Name/Title:	Joe DiTomaso
Affiliation:	UC Davis
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Address:	Weed Science Program, Robbins Hall, Univ. California, Davis CA 95616
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 review committee use—please leave blank

Review committee members:	Jake Sigg, Peter Warner, Doug Johnson, Joe DiTomaso, Brianna Richardson
Committee review date:	August 1, 2003
List date:	enter text here
Re-evaluation date(s):	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	B	Other Pub. Mat'l
1.3	Impact on higher trophic levels	U	No Information
1.4	Impact on genetic integrity	D	Observational

“Impact”
 Enter four characters from Q1.1-1.4 below:
UBUD
 Use matrix determine the score; enter below:
C

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

“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:
Low
No Alert

3.1	Ecological amplitude	B	Other Pub. Mat'l
3.2	Distribution	D	Other Pub. Mat'l

“Distribution”
 Use matrix determine the score; enter below:
C

Worksheet A. Complete this worksheet to answer Question 2.4.

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	Yes: 2 pts
Viable seed produced with <i>both</i> self-pollination and cross-pollination	Yes: 1 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
Total Pts 7 Total Unknowns 0	
A (6+ pts)	

Table 3. Documentation

Question 1.1 Impact on abiotic ecosystem processes
Identify ecosystem processes impacted: Unknown
Rationale:
Sources of information:
Question 1.2 Impact on plant community composition, structure, and interactions
Identify type of impact or alteration: Forms dense stands that are capable of excluding other vegetation.
Rationale:
Sources of information: Tu, M. 2002. <i>Ononis alopecuroides</i> . The Nature Conservancy. Weed Alert! http://tncweeds.ucdavis.edu/alert/alrtonon.html
Question 1.3 Impact on higher trophic levels
Identify type of impact or alteration: Unpalatable to horses and burros. No information on wildlife palatability.
Rationale:
Sources of information: Tu, M. 2002. <i>Ononis alopecuroides</i> . The Nature Conservancy. Weed Alert! http://tncweeds.ucdavis.edu/alert/alrtonon.html
Question 1.4 Impact on genetic integrity
Identify impacts: Probably none.
Rationale: No other species of <i>Ononis</i> in California.
Sources of information:
Question 2.1 Role of anthropogenic and natural disturbance in establishment
Describe role of disturbance: Can move into disturbed areas but also expands into adjacent grassland and dry rocky areas.
Rationale: Weed of agricultural areas and disturbed fields.
Sources of information: Tu, M. 2002. <i>Ononis alopecuroides</i> . The Nature Conservancy. Weed Alert! http://tncweeds.ucdavis.edu/alert/alrtonon.html ; DiTomaso, J.M. and E. A. Healy. 2005. Weeds of California. Div. Nat. Agr. Res. Univ. California (in press)
Question 2.2 Local rate of spread with no management
Describe rate of spread: Spreads rapidly when established.
Rationale: San Luis Obispo County reported rapid spread with led to Q listing by CDFA.
Sources of information: Tu, M. 2002. <i>Ononis alopecuroides</i> . The Nature Conservancy. Weed Alert! http://tncweeds.ucdavis.edu/alert/alrtonon.html ; DiTomaso, J.M. and E. A. Healy. 2005. Weeds of California. Div. Nat. Agr. Res. Univ. California (in press)
Question 2.3 Recent trend in total area infested within state
Describe trend: Nearly eradicated from state due to County and CDFA control efforts.
Rationale:
Sources of information: Tu, M. 2002. <i>Ononis alopecuroides</i> . The Nature Conservancy. Weed Alert! http://tncweeds.ucdavis.edu/alert/alrtonon.html ; SLO County reports
Question 2.4 Innate reproductive potential
Describe key reproductive characteristics: Has self pollinated in greenhouse, annual legume with long-lived seed.
Rationale:
Sources of information: Tu, M. 2002. <i>Ononis alopecuroides</i> . The Nature Conservancy. Weed Alert! http://tncweeds.ucdavis.edu/alert/alrtonon.html ; DiTomaso, J.M. and E. A. Healy. 2005. Weeds of California. Div. Nat. Agr. Res. Univ. California (in press)
Question 2.5 Potential for human-caused dispersal
Identify dispersal mechanisms: Probably seed contaminant in pasture species, presumably <i>Trifolium</i> seed.
Rationale:
Sources of information: Tu, M. 2002. <i>Ononis alopecuroides</i> . The Nature Conservancy. Weed Alert! http://tncweeds.ucdavis.edu/alert/alrtonon.html ; SLO County report
Question 2.6 Potential for natural long-distance dispersal
Identify dispersal mechanisms: Does not seem to have a well developed long distance dispersal mechanism.
Rationale:
Sources of information: Observational, DiTomaso
Question 2.7 Other regions invaded
Identify other regions: Also weedy in northern and central Europe.
Rationale:

Sources of information: Tu, M. 2002. <i>Ononis alopecuroides</i> . The Nature Conservancy. Weed Alert! http://tncweeds.ucdavis.edu/alert/alrtonon.html
Question 3.1 Ecological amplitude
Describe ecological amplitude, identifying date of source information and approximate date of introduction to the state, if known: First introduced in about the 1990s. Only found in grasslands and woodland-savannas of San Luis Obispo County.
Rationale:
Sources of information: Tu, M. 2002. <i>Ononis alopecuroides</i> . The Nature Conservancy. Weed Alert! http://tncweeds.ucdavis.edu/alert/alrtonon.html ; DiTomaso, J.M. and E. A. Healy. 2005. Weeds of California. Div. Nat. Agr. Res. Univ. California (in press)
Question 3.2 Distribution
Describe distribution: Very uncommon, close to eradicated.
Rationale:
Sources of information: DiTomaso, J.M. and E. A. Healy. 2005. Weeds of California. Div. Nat. Agr. Res. Univ. California (in press); observational by CDFA and SLO County

Complete the worksheet that corresponds to your state using the letter codes and instructions in Section 3.

Worksheet C - California Ecological Types

(*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
Grasslands, Vernal Pools, Meadows, and other Herb Communities	coastal prairie	score
	valley and foothill grassland	D. present
	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. present
	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).