

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):	Acacia dealbata Link
Synonyms:	Acacia decurrens var. dealbata
Common names:	silver wattle
Evaluation date (mm/dd/yy):	1/4/07
Evaluator #1 Name/Title:	Joseph M. DiTomaso, UC Specialist
Affiliation:	University of California
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Evaluator #2 Name/Title:	Andrea Williams
Affiliation:	enter text here
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Email address:	Andrea_Williams@nps.gov
Address:	enter text here

Section below for list committee use—please leave blank

List committee members:	Joe DiTomaso, Peter Warner, Joanna Clines
Committee review date:	2/14/2007
List date:	enter text here
Re-evaluation date(s):	enter text here

General comments on this assessment:

There is very little information available on this species. For more information, contact Andrea Williams, Stassia Samuels (Stassia_Samuels@nps.gov) or Bobbi Simpson (Bobbi_Simpson@nps.gov)

Table 2. Criteria, Section, and Overall Scores

1.1	Impact on abiotic ecosystem processes	B	Observational
1.2	Impact on plant community	B	Observational
1.3	Impact on higher trophic levels	B	Other Pub. Mat'l
1.4	Impact on genetic integrity	D	Rev'd, Sci. Pub'n

Impact

Enter four characters from Q1.1-1.4 below:

BBCD

Using matrix, determine score and enter below:

B

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

Invasiveness

Enter the sum total of all points for Q2.1-2.7 below:

15

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:

Medium

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

<p>Question 1.1 Impact on abiotic ecosystem processes</p>	<p>B Observational back</p>
<p>Identify ecosystem processes impacted: Nitrogen fixation and possibly allelopathic litter. Species is fire-adapted but has not appeared to change fire regime any more than current land management practices. Nitrogen-fixing especially detrimental in serpentine areas as it allows other invasives to establish. Some evidence from South Africa that it can alterbank stability in riparian areas.</p>	
<p>Rationale: enter text here</p>	
<p>Sources of information: Andrea Williams, observational</p>	
<p>Question 1.2 Impact on plant community composition, structure, and interactions</p>	<p>B Observational back</p>
<p>Identify type of impact or alteration: Appears to displace many natives, possibly due to allelopathic effects. This includes <i>Danthonia californica</i>, <i>Festuca rubra</i>, <i>Umbellularia californica</i>, <i>Ceanothus pumilis</i>, <i>Frangula purshiana</i> and <i>F. californica</i>, <i>Eschscholzia californica</i>, <i>Rhododendron occidentale</i>, etc.</p>	
<p>Rationale: enter text here</p>	
<p>Sources of information: Andrea Williams and Peter Warner, observational</p>	
<p>Question 1.3 Impact on higher trophic levels</p>	<p>B Other Pub. Mat'l back</p>
<p>Identify type of impact or alteration: Threatens habitat of rare and endangered Mount Hermon June beetle by blocking sunlight. Possibly displaces good forage species for deer and small mammals. Stands lack structure preferred by songbirds.</p>	
<p>Rationale: enter text here</p>	
<p>Sources of information: Horowitz, M. 2003. Alternatives to chemical stump treatment of <i>Acacia dealbata</i>. Proc., Cal-IPC. 7:54-56. Andrea Williams, observational</p>	
<p>Question 1.4 Impact on genetic integrity</p>	<p>D Rev'd, Sci. Pub'n back</p>
<p>Identify impacts: None.</p>	
<p>Rationale: No native <i>Acacia</i> in areas where this species occurs.</p>	
<p>Sources of information: Hickman, J. C. (ed.) 1993. The Jepson Manual, Higher Plants of California. University of California Press. Berkeley, CA enter text here</p>	

Question 2.1 Role of anthropogenic and natural disturbance in establishment	B Observational back
Describe role of disturbance: Inhabits roadsides and other disturbed places and areas with little or no human disturbance. While it originally established in disturbed areas, in less than 20 years it has spread into intact grassland and woodland areas.	
Rationale: enter text here	
Sources of information: Andrea Williams, observational	
Question 2.2 Local rate of spread with no management	B Observational back
Describe rate of spread: Populations are expanding, but not rapidly yet. Spreading locally (<1 mile) along riverbanks and roadsides, plus new patches from seed and rhizomes into intact areas.	
Rationale: enter text here	
Sources of information: DiTomaso, observational Andrea Williams, observational	
Question 2.3 Recent trend in total area infested within state	B Observational back
Describe trend: Populations are expanding, but not rapidly yet. Some management has begun in Redwood National Park starting in 2003.	
Rationale: enter text here	
Sources of information: DiTomaso, observational	
Question 2.4 Innate reproductive potential	A Other Pub. Mat'l back
Describe key reproductive characteristics: Perennial tree. Reproduces by seeds and can spread by rhizomes. Also readily sprouts after cutting or damage.	
Rationale: enter text here	
Sources of information: DiTomaso, J. M., and E. A. Healy. 2007. Weeds of California and Other Western States. University of California Agriculture and Natural Resources Publication 3488. Oakland, CA.	
Question 2.5 Potential for human-caused dispersal	A Other Pub. Mat'l back
Identify dispersal mechanisms: Still widely planted in California as an ornamental.	

Rationale: enter text here	
Sources of information: DiTomaso, J. M., and E. A. Healy. 2007. Weeds of California and Other Western States. University of California Agriculture and Natural Resources Publication 2488. Oakland, CA.	
Question 2.6 Potential for natural long-distance dispersal	C Observational back
Identify dispersal mechanisms: Seeds may be explosively dispersed from parent plant and also moved by animals, but this is not long distance movement. Could move long distance by water when near a stream.	
Rationale: enter text here	
Sources of information: DiTomaso, observational.	
Question 2.7 Other regions invaded	B Other Pub. Mat'l back
Identify other regions: Native to the southeastern Australia. In California, it has invaded Del Norte County, near Hiouchi, spreading from old homesites into river bar, grassland, mixed conifer, and Jeffrey pine serpentine woodland. It is also considered invasive in South Africa. Can be found in the bushland in Australia and may invade such areas of California in addition to riparian and coast sites.	
Rationale: enter text here	
Sources of information: DiTomaso, J. M., and E. A. Healy. 2007. Weeds of California and Other Western States. University of California Agriculture and Natural Resources Publication 3488. Oakland, CA. Wells, M.J. et al. 1979. Woody plant invaders of the central Transvaal. Proc. 3 rd National Weeds Conf of S. Afr. pp. 11-23. Observational, Andrea Williams	
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: Commonly planted as an ornamental, but has been reported to escape cultivation along the coast from north to south. Found in riparian areas, mixed conifer forest, woodlands, and coast grasslands.	
Rationale: enter text here	
Sources of information: Andrea Williams, observational	
Question 3.2 Distribution/Peak frequency	D Observational back
Describe distribution: Only an occasional escape in California.	
Rationale: enter text here	

Sources of information: DiTomaso, observational

Worksheet A[back](#)

Reaches reproductive maturity in 2 years or less	No: 0 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	Unknown: 0 pts
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	Yes: 1 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

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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	D. prese
	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	D. prese
	riparian woodland	D. prese
	riparian scrub (incl. desert washes)	score
Woodland	cismontane woodland	D. prese
	piñon and juniper woodland	score
	Sonoran thorn woodland	score
Forest	broadleaved upland forest	score
	North Coast coniferous forest	D. prese
	closed cone coniferous forest	D. prese
	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).