

# 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

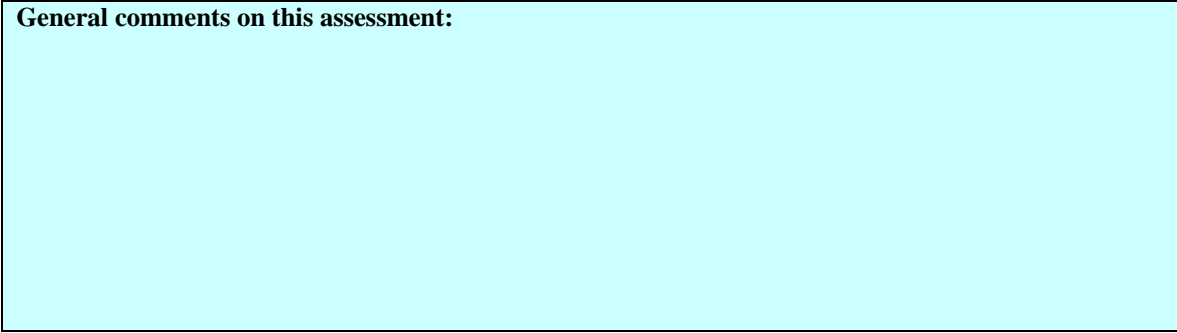
**Table 1. Species and Evaluator Information**

<b>Species name (Latin binomial):</b>	Plantago lanceolata L.
<b>Synonyms:</b>	
<b>Common names:</b>	buckhorn plantain, English plantain, buck plantain, black-jacks, narrowleaf plantain, lanceleaf plantain, ribbed plantain, ribgrass, ribwort
<b>Evaluation date (mm/dd/yy):</b>	3/23/05
<b>Evaluator #1 Name/Title:</b>	Elizabeth Brusati, project manager
<b>Affiliation:</b>	California Invasive Plant Council
<b>Phone numbers:</b>	510-843-3902
<b>Email address:</b>	edbrusati@cal-ipc.org
<b>Address:</b>	1442A Walnut St. #462, Berkeley, CA 94709
<b>Evaluator #2 Name/Title:</b>	Joseph DiTomaso
<b>Affiliation:</b>	University of California-Davis
<b>Phone numbers:</b>	530-754-8715
<b>Email address:</b>	jmditomaso@ucdavis.edu
<b>Address:</b>	Dept. Plant Sci., Mail Stop 4, Davis, CA 95616

Section below for list committee use—please leave blank

<b>List committee members:</b>	Joe DiTomaso, Joanna Clines, Cynthia Roye, Doug Johnson
<b>Committee review date:</b>	7/8/05
<b>List date:</b>	enter text here
<b>Re-evaluation date(s):</b>	enter text here

**General comments on this assessment:**



**Table 2. Criteria, Section, and Overall Scores**

<a href="#">1.1</a>	Impact on abiotic ecosystem processes	<b>U</b>	<b>No Information</b>
<a href="#">1.2</a>	Impact on plant community	<b>C</b>	<b>Observational</b>
<a href="#">1.3</a>	Impact on higher trophic levels	<b>U</b>	<b>No Information</b>
<a href="#">1.4</a>	Impact on genetic integrity	<b>U</b>	<b>No Information</b>

**Impact**

*Enter four characters from Q1.1-1.4 below:*

**UCUU**

*Using matrix, determine score and enter below:*

**C**

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

**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**

<a href="#">3.1</a>	Ecological amplitude/Range	<b>A</b>	<b>Other Pub. Mat'l</b>
<a href="#">3.2</a>	Distribution/Peak frequency <a href="#">Wksht C</a>	<b>D</b>	<b>Observational</b>

**Distribution**

*Using matrix, determine score and enter below:*

**B**

**Table 3. Documentation**

<b>Question 1.1</b> Impact on abiotic ecosystem processes	U No Information <a href="#">back</a>
Identify ecosystem processes impacted: Unknown	
Rationale: enter text here	
Sources of information: enter text here	
<b>Question 1.2</b> Impact on plant community composition, structure, and interactions	C Observational <a href="#">back</a>
Identify type of impact or alteration: Can form fairly dense infestations in forested areas, but generally investigations are not dense.	
Rationale: enter text here	
Sources of information: DiTomaso, observational	
<b>Question 1.3</b> Impact on higher trophic levels	U Doc'n level <a href="#">back</a>
Identify type of impact or alteration: Unknown	
Rationale: enter text here	
Sources of information: enter text here	
<b>Question 1.4</b> Impact on genetic integrity	U No Information <a href="#">back</a>
Identify impacts: There are seven native species of Plantago. No information on hybridization.	
Rationale: enter text here	
Sources of information: Hickman, J. C. (ed.) 1993. The Jepson Manual, Higher Plants of California. University of California Press. Berkeley, CA enter text here	
<b>Question 2.1</b> Role of anthropogenic and natural disturbance in establishment	B Other Pub. Mat'l <a href="#">back</a>
Describe role of disturbance: Inhabits disturbed places such as roadsides, right of ways, and pastures, but can invade open forested areas and riparian sites.	
Rationale: enter text here	

Sources of information: DiTomaso, J., and E. Healy, in prep. Weeds of California and Other Western States.	
<b>Question 2.2</b> Local rate of spread with no management	C Observational <a href="#">back</a>
Describe rate of spread: Populations in the state appear to be fairly stable.	
Rationale: enter text here	
Sources of information: DiTomaso, observational.	
<b>Question 2.3</b> Recent trend in total area infested within state	C Other Pub. Mat'l <a href="#">back</a>
Describe trend: Buckhorn plantain is in all contiguous states and nearly worldwide.	
Rationale: Scoring as C because widespread in California.	
Sources of information: DiTomaso and Healy in prep.	
<b>Question 2.4</b> Innate reproductive potential	A Other Pub. Mat'l <a href="#">back</a>
Describe key reproductive characteristics: Annual, biennial, or perennial. Self-incompatible (1). Reproduces by both seed and lateral crown shoots (2). Some buried seeds survive for up to 20 years (1).	
Rationale: enter text here	
Sources of information: 1. DiTomaso and Healy in prep. 2. Wilken, D. and L. Hannah. 1998. Plantago.	
<b>Question 2.5</b> Potential for human-caused dispersal	C Other Pub. Mat'l <a href="#">back</a>
Identify dispersal mechanisms: Seeds become sticky with mucilage when moistened. Seeds fall near the parent plant and disperse to greater distances with water, soil movement, mud, as a seed contaminant, vehicle tires, landscape and agricultural equipment.	
Rationale: enter text here	
Sources of information: DiTomaso and Healy. 2006. Weeds of California. UC DANR Publ. #3488.	
<b>Question 2.6</b> Potential for natural long-distance dispersal	D Other Pub. Mat'l <a href="#">back</a>
Identify dispersal mechanisms: Seeds become sticky with mucilage when moistened. Seeds fall near the parent plant and disperse to greater distances with water, soil movement, mud, as a seed contaminant, vehicle tires, landscape and agricultural equipment.	

Rationale: enter text here	
Sources of information: DiTomaso and Healy. 2006. Weeds of California. UC DANR Publ. #3488.	
<b>Question 2.7</b> Other regions invaded	C Other Pub. Mat'l <a href="#">back</a>
Identify other regions: Widespread in a number of different habitats, probably similar to other areas.	
Rationale: enter text here	
Sources of information: DiTomaso and Healy. 2006. Weeds of California. UC DANR Publ. #3488.	
<b>Question 3.1</b> Ecological amplitude/Range	A Other Pub. Mat'l <a href="#">back</a>
Describe ecological amplitude, identifying date of source information and approximate date of introduction to the state, if known: Present in a variety of disturbed sites and some undisturbed sites throughout California.	
Rationale: enter text here	
Sources of information: DiTomaso and Healy. 2006. Weeds of California. UC DANR Publ. #3488.	
<b>Question 3.2</b> Distribution/Peak frequency	D Observational <a href="#">back</a>
Describe distribution: Not common in any locations.	
Rationale: enter text here	
Sources of information: DiTomaso, observational.	

**Worksheet A**[back](#)

Reaches reproductive maturity in 2 years or less	<b>Yes: 1 pt</b>
Dense infestations produce >1,000 viable seed per square meter	<b>Yes: 2 pts</b>
Populations of this species produce seeds every year.	<b>Yes: 1 pt</b>
Seed production sustained over 3 or more months within a population annually	<b>No: 0 pt</b>
Seeds remain viable in soil for three or more years	<b>Yes: 2 pts</b>
Viable seed produced with <i>both</i> self-pollination and cross-pollination	<b>No: 0 pt</b>
Has quickly spreading vegetative structures (rhizomes, roots, etc.) that may root at nodes	<b>No: 0 pt</b>
Fragments easily and fragments can become established elsewhere	<b>No: 0 pts</b>
Resprouts readily when cut, grazed, or burned	<b>Yes: 1 pt</b>
	<b>7 pts      Total Unknowns</b>
	<b>A (6+ pts)</b>
<b>Note any related traits:</b> enter text here	

## Worksheet C - California Ecological Types

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(*sensu* Holland 1986)

Major Ecological Types	Minor Ecological Types	Code*
<b>Marine Systems</b>	marine systems	score
<b>Freshwater and Estuarine Aquatic Systems</b>	lakes, ponds, reservoirs	score
	rivers, streams, canals	score
	estuaries	score
<b>Dunes</b>	coastal	D. presen
	desert	score
	interior	score
<b>Scrub and Chaparral</b>	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
<b>Grasslands, Vernal Pools, Meadows, and other Herb Communities</b>	coastal prairie	D. presen
	valley and foothill grassland	D. presen
	Great Basin grassland	D. presen
	vernal pool	score
	meadow and seep	score
	alkali playa	score
	pebble plain	score
<b>Bog and Marsh</b>	bog and fen	score
	marsh and swamp	score
<b>Riparian and Bottomland</b>	riparian forest	D. presen
	riparian woodland	D. presen
	riparian scrub (incl. desert washes)	score
<b>Woodland</b>	cismontane woodland	score
	piñon and juniper woodland	score
	Sonoran thorn woodland	score
<b>Forest</b>	broadleaved upland forest	score
	North Coast coniferous forest	D. presen
	closed cone coniferous forest	score
	lower montane coniferous forest	D. presen
	upper montane coniferous forest	score
	subalpine coniferous forest	score
<b>Alpine Habitats</b>	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).