

## WEED RISK ASSESSMENT FORM

Botanical name:	<i>Centaurea solstitialis</i> L.	
Common name:	yellow starthistle	
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**Outcome score:**

A. Climatic Comparison		
This species is present or may potentially establish in the following eco-geographic regions:		
1 South Coastal		No
2 Interior-Boreal		No
3 Arctic-Alpine		No

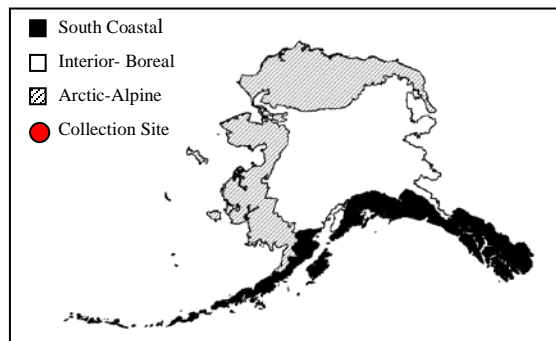
B.	Invasiveness Ranking	Total (Total Answered*) Possible	Total
1	Ecological impact	40 (40)	
2	Biological characteristic and dispersal ability	25 (25)	
3	Ecological amplitude and distribution	25 (25)	
4	Feasibility of control	10 (10)	
	Outcome score	100 (100) <sup>b</sup>	
	Relative maximum score <sup>†</sup>		rejected from consideration

\* For questions answered "unknown" do not include point value for the question in parentheses for "-Total Answered Points Possible."

<sup>†</sup> Calculated as <sup>a</sup>/<sub>b</sub>.

**A. CLIMATIC COMPARISON:**

	1.1. Has this species ever been collected or documented in Alaska?
	Yes – continue to 1.2
No	No – continue to 2.1
	1.2. Which eco-geographic region has it been collected or documented (see inset map)? <i>Proceed to Section B. Invasiveness Ranking.</i>
	South Coastal
	Interior-Boreal
	Arctic-Alpine



Documentation: *Centaurea solstitialis* has not been documented in Alaska (AK Weed Database 2004, Hultén 1968, UAM 2004).

Sources of information:

AK Weeds Database. 2004. Database of exotic vegetation collected in Alaska. University of Alaska, Alaska Natural Heritage Program – US Forest Service – National Park Service Database. Available: <http://akweeds.uaa.alaska.edu/>

Hultén, E. 1968. Flora of Alaska and Neighboring Territories. Stanford University Press, Stanford, CA. 1008 p.

University of Alaska Museum. University of Alaska Fairbanks. 2004.

<http://hispidamuseum.uaf.edu:8080/home.cfm>

2.1. Is there a 40% or higher similarity (based on CLIMEX climate matching) between climates any where the species currently occurs and

a. Juneau (South Coastal Region)?

Yes – record locations and similarity; proceed to Section B.  
Invasiveness Ranking

No

No

b. Fairbanks (Interior-Boreal)?

Yes – record locations and similarity; proceed to Section B.  
Invasiveness Ranking

No

No

c. Nome (Arctic-Alpine)?

Yes – record locations and similarity; proceed to Section B.  
Invasiveness Ranking

No

No

– If “No” is answered for all regions, reject species from consideration

Documentation: Yellow starthistle is believed to be native of the Mediterranean region. Today, it can be found in most temperate areas of Europe, North and South America, but not in Arctic (Lid and Lid 1994, Maddox et al. 1985, Elven Reidar – pers. com., USDA 2002). This weed occurs in nearly every American state, with the most severe infestations in California, Idaho, Oregon, and Washington. It has also expanded into Canada from British Columbia to Ontario. The CLIMEX climate matching program indicates the climatic similarity between Juneau, Fairbanks, and Nome and areas where the species is documented is low. Thus establishment of *Centaurea solstitialis* in Alaska is unlikely. The species is rejected from consideration for ranking.

Sources of information: CLIMEX for Windows, Version 1.1a. 1999. CISRO Publishing, Australia.

Lid, J. and D. T. Lid. 1994. Flora of Norway. The Norske Samlaget, Oslo. Pp. 1014.

Maddox, D.M., A. Mayfield, and N.H. Poritz. 1985. Distribution of yellow starthistle (*Centaurea solstitialis*) and Russian knapweed (*Centaurea repens*). Weed Science 33: 315-327.

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USDA (United States Department of Agriculture), NRCS (Natural Resource Conservation Service). 2002. The PLANTS Database, Version 3.5 (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

## References:

AK Weeds Database. 2004. Database of exotic vegetation collected in Alaska. University of Alaska, Alaska Natural Heritage Program – US Forest Service – National Park Service Database. Available: <http://akweeds.uaa.alaska.edu/>

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