NAME OF SPECIES: Dipsacus laciniatus L.	
Synonyms:	
Common Name: Cut-Leaved Teasel	
A. CURRENT STATUS AND DISTRIBUTION	
I. In Wisconsin?	1. YES ☒ NO ☐
	2. Abundance: Locally abundant especially along some roadsides.
	3. Geographic Range: Vouchered in more than 7 counties in southern Wisconsin (1).
	4. Habitat Invaded: Roadsides, Prairie Disturbed Areas ☒ Undisturbed Areas ☒
	5. Historical Status and Rate of Spread in Wisconsin: Oldest herbarium specimen was collected in 1947 in Rock County (1). In Ashland the population is contained.
	6. Proportion of potential range occupied: Minimal.
II. Invasive in Similar Climate Zones	1. YES ☒ NO ☐ Where (include trends): New England. Introduced in the 1700s and expanded following a lag time (3). Rapid increase in IA particularly in South and East IA but moving north as well.
III. Invasive in Similar Habitat Types	1. Upland ☒ Wetland ☒ Dune ☐ Prairie ☒ Aquatic ☐ Forest ☐ Grassland ☒ Bog ☐ Fen ☐ Swamp ☐ Marsh ☐ Lake ☐ Stream ☐ Other: Savannas, roadsides, dumps, seeps, sedge meadows, ditches, fencelines, fields. More troublesome in wetland and wet prairie.
IV. Habitat Effected	1. Soil types favored (e.g. sand, silt, clay, or combinations thereof, pH): Prefers mesic mineral soils (4).
	2. Conservation significance of threatened habitats: Prairie and grassland communities provide ecosystem services (carbon sequestration) and habitat for arthropods and birds.
V. Native Habitat	1. List countries and native habitat types: Southern Europe and Southwestern Asia (5).
VI. Legal Classification	1. Listed by government entities? Yes. Noxious in CO, IA, MO. Regulated in OR (6).
	2. Illegal to sell? YES ☐ NO ☒ Notes:
B. ESTABLISHMENT POTENTIAL AND LIFE HISTORY TRAITS	
I. Life History	1. Type of plant: Annual ☐ Biennial ☒ Monocarpic Perennial ☒ Herbaceous Perennial ☐ Vine ☐ Shrub ☐ Tree ☐
	2. Time to Maturity: Often flowers in second year, but may remain in rosette stage for a few growing seasons (4).
	3. Length of Seed Viability: At least two years (7).
	4. Methods of Reproduction: Asexual ☐ Sexual ☒ Please note abundance of propagules and and other important information: Solecki (2) estimated that a single plant could produce 746 - 2292 seeds.
	5. Hybridization potential: Unknown.
II. Climate	1. Climate restrictions: Unknown.
	2. Effects of potential climate change: Unknown?

III. Dispersal Potential	1. Pathways - Please check all that apply: Intentional: Ornamental ☒ Forage/Erosion control ☐ Medicine/Food: Other: Unintentional: Bird ☐ Animal ☐ Vehicles/Human ☒ Wind ☐ Water ☒ Other: Improper disposal of dried teasel heads, also spread along roadsides via mower.
	2. Distinguishing characteristics that aid in its survival and/or inhibit its control: Dipsacus laciniatus is more aggressive than D. sylvestris (8). D. laciniatus can produce viable seed from heads that were cut before flowering was completed. Green seeds in immature seed heads can develop into viable seeds after mowing (2).
IV. Ability to go Undetected	1. HIGH ☐ MEDIUM ☐ LOW ☒
C. DAMAGE POTENTIAL	
I. Competitive Ability	1. Presence of Natural Enemies: Glass (8) reported that a lack of natural enemies allows teasel to proliferate. However, Wiedenmann and Parrish (5) reported five potential candidates for biological control, including a flea beetle (Longitarsus strigicollis), a leaf beetle (Galerucea pomonae), and three moths (Cochylis roseana, Endothenia gentianaeana, and Euphydryas aurenia).
	2. Competition with native species: Forms monocultures that exclude most native vegetation (4) (8).
	3. Rate of Spread: HIGH(1-3 yrs) ☐ MEDIUM (4-6 yrs) ☒ LOW (7-10 yrs) ☐ Notes: Crooks and Soule (3) attribute dispersal via the interstate highway system as a cause of the rapid spread of this species in the midwest. Glass (8) reported that seed is not dispersed far and most seedlings are located near the parent plant, but Musser and Parrish (9) reported 4.5 m dispersal distance in natural areas and 15 m dispersal distance along interstate highways. Mower can accelerate the rate of spread.
II. Environmental Effects	1. Alteration of ecosystem/community composition? YES ☒ NO ☐ Notes: Forms monocultures and reduces species richness and diversity (2).
	2. Alteration of ecosystem/community structure? YES ☒ NO ☐ Notes: Teasel monocultures are taller than most native vegetation communities they replace.
	3. Alteration of ecosystem/community functions and processes? YES ☒ NO ☐ Notes: Dense patches of teasel rosettes will not carry fire (8).
	4. Allelopathic properties? YES ☐ NO ☐ Notes: Unknown.
D. SOCIO-ECONOMIC Effects	
I. Positive aspects of the species to the economy/society:	Notes: Used in dried flower arrangements at farmer's markets and craft shows, and also in landscaping (4).
II. Potential socio-economic effects of restricting use:	Notes: Negligable.
III. Direct and indirect effects :	Notes: N/A

F. REFERENCES USED:

IV. Increased cost to a sector:	Notes: N/A
V. Effects on human health:	Notes: Stems have short spines.
E. CONTROL AND PREVENTION	
I. Costs of Prevention (including education; please be as specific as possible):	Notes: N/A
II. Responsiveness to prevention efforts:	Notes: If detected early, D. laciniatus can be eradicated.
III. Effective Control tactics:	Mechanical ☒ Biological ☐ Chemical ☒ Times and uses: Mowing just prior to flowering (clippings MUST be removed if flowers are present), herbicides, and burning, alone or in combination (4). Spring, summer, and autumn applications have been tested. Chemical control is most effective when teasel is in the rosette stage (10).
IV. Minimum Effort:	Notes: Two growing seasons, if detected early.
V. Costs of Control:	Notes: Variable and site-specific.
VI. Cost of prevention or control vs. Cost of allowing invasion to occur:	Notes: N/A
VII. Non-Target Effects of Control:	Notes: Spot treatment with selective herbicide should cause minimal nontarget damage.
VIII. Efficacy of monitoring:	Notes: If detected early, D. laciniatus can be eradicated. Subsequent monitoring is usually necessary.
IX. Legal and landowner issues:	Notes: N/A

☒ UW Herbarium
☒ WI DNR
☐ TNC
☐ Native Plant Conservation Alliance
☐ IPANE
☒ USDA Plants

Number	Reference
1	Wisconsin State Herbarium. 2007. WISFLORA: Wisconsin Vascular Plant Species (http://www.botany.wisc.edu/wisflora/). Dept. Botany, Univ. Wisconsin, Madison, WI 53706-1381 USA.
2	Solecki, M.K. 1989. The Viability of Cut-Leaved Teasel (Dipsacus laciniatus L.) Seed Harvested From Flowering Stems-Management Implications. Natural Areas Journal 9(2):102-105.
3	Crooks, J.A., and M.E. Soule. 1999. Lag Times in Population Explosions of Invasive Species: Causes and Implications. Pgs. 103-125 in Sandlund et al. (eds.) Invasive Species and Biodiversity Management, Kluwer Academic Publishers, Netherlands.
4	WDNR. 2007. DNR Invasive Species Facts (www.dnr.state.wi.us/invasives/fact/teasel_cut.htm). Wisconsin DNR, Madison, WI.
5	Weidenmann, R., and J.A.D. Parrish. 2004. Prospects for Biological Control of Teasel in Illinois. Natural History Survey Reports 379:1-12.
6	USDA, NRCS. 2007. The PLANTS Database (http://plants.usda.gov, 16 March 2007). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

7	Werner, P.A. 1975. Prediction of Fate from Rosette Size in Teasel (Dipsacus fullonum L.) Oecologia 20:197-201.
8	Glass, W.D. 1991. Vegetation Management Guideline: Cut-Leaved Teasel (Dipsacus laciniatus L.) and Common Teasel (D. sylvestris Huds.). Natural Areas Journal 11(4):213-214.
9	Musser, A. and J. Parrish. 2002. Differences in Dipsacus laciniatus Seed Dispersal Along an Interstate Corridor ersus a State Natural Area. Proceedings of the 2002 ESA Conference.
10	Forrest, J., L. Zimmerman, and J. Parrish. 2006. The Effects of Three Different Herbicides on Cut and Uncut Teasel, Dipsacus laciniatus. Proceedings of the 2006 ESA Conference.

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Approved and Completed Date: