

**NAME OF SPECIES: Dipsacus fullonum L. subsp. sylvestris (Huds.) Clapham**

**Synonyms: Dipsacus sylvestris Huds.**

**Common Name: Common Teasel, Wild Teasel**

**A. CURRENT STATUS AND DISTRIBUTION**

I. In Wisconsin?	1. YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
	2. <u>Abundance</u> : Locally abundant, especially along highways.
	3. <u>Geographic Range</u> : Vouchered in more than 7 counties in south and southeastern Wisconsin (1).
	4. <u>Habitat Invaded</u> : Roadsides and Prairies. Disturbed Areas <input checked="" type="checkbox"/> Undisturbed Areas <input checked="" type="checkbox"/>
	5. <u>Historical Status and Rate of Spread in Wisconsin</u> : Oldest herbarium specimen was collected in 1937 in Milwaukee County (1).
	6. <u>Proportion of potential range occupied</u> : Minimal.
II. Invasive in Similar Climate Zones	1. YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> <u>Where (include trends)</u> : Midwestern and southwestern United States (3). Rapid increase in populations throughout IA, especially along row and wetlands. Currently more abundant in south and east, but moving north as well.
	III. Invasive in Similar Habitat Types
III. Invasive in Similar Habitat Types	1. Upland <input checked="" type="checkbox"/> Wetland <input type="checkbox"/> Dune <input type="checkbox"/> Prairie <input checked="" type="checkbox"/> Aquatic <input type="checkbox"/> Forest <input type="checkbox"/> Grassland <input checked="" type="checkbox"/> Bog <input type="checkbox"/> Fen <input type="checkbox"/> Swamp <input type="checkbox"/> Marsh <input type="checkbox"/> Lake <input type="checkbox"/> Stream <input type="checkbox"/> Other: Savannas, roadsides, dumps, seeps, sedge meadows, ditches, fencelines, and fields. Common along roadsides.
IV. Habitat Effected	1. <u>Soil types favored (e.g. sand, silt, clay, or combinations thereof, pH)</u> : Prefers mesic mineral soils (4).
	2. <u>Conservation significance of threatened habitats</u> : Prairie and grassland communities provide ecosystem services (carbon sequestration) and habitat for arthropods and birds.
V. Native Habitat	1. <u>List countries and native habitat types</u> : Southern Europe and Southwestern Asia (5).
VI. Legal Classification	1. <u>Listed by government entities?</u> Yes. Noxious in CO, IA, MO, NM (3).
	2. <u>Illegal to sell?</u> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> Notes:

**B. ESTABLISHMENT POTENTIAL AND LIFE HISTORY TRAITS**

I. Life History	1. <u>Type of plant</u> : Annual <input type="checkbox"/> Biennial <input checked="" type="checkbox"/> Monocarpic Perennial <input checked="" type="checkbox"/> Herbaceous Perennial <input type="checkbox"/> Vine <input type="checkbox"/> Shrub <input type="checkbox"/> Tree <input type="checkbox"/>
	2. <u>Time to Maturity</u> : Often flowers in second year, but may remain in rosette stage for a few growing seasons like a short-lived perennial (4).
	3. <u>Length of Seed Viability</u> : At least two years (6).
	4. <u>Methods of Reproduction</u> : Asexual <input type="checkbox"/> Sexual <input checked="" type="checkbox"/> <u>Please note abundance of propagules and other important information</u> : A single plant can produce between 2,600 and 3,000 seeds (2) (6). Seeds do not require cold stratification, scarification, or photoperiod to germinate (7) (8). 96.6% seedling emergence was reported in Michigan (8).
	5. <u>Hybridization potential</u> : Unknown?
II. Climate	1. <u>Climate restrictions</u> : Unknown.
	2. <u>Effects of potential climate change</u> : Unknown?



III. Dispersal Potential	<p>1. <u>Pathways - Please check all that apply:</u>  <u>Intentional:</u> Ornamental <input checked="" type="checkbox"/> Forage/Erosion control <input type="checkbox"/>  Medicine/Food: _____ Other: _____</p> <p><u>Unintentional:</u> Bird <input type="checkbox"/> Animal <input type="checkbox"/> Vehicles/Human <input checked="" type="checkbox"/>  Wind <input type="checkbox"/> Water <input checked="" type="checkbox"/> Other: Improper disposal of dried teasel heads, also spread along roadsides via mower.</p>
	<p>2. <u>Distinguishing characteristics that aid in its survival and/or inhibit its control:</u> Green seeds in immature seed heads can develop into viable seeds after mowing (2).</p>
IV. Ability to go Undetected	<p>1. HIGH <input type="checkbox"/> MEDIUM <input type="checkbox"/> LOW <input checked="" type="checkbox"/></p>

**C. DAMAGE POTENTIAL**

I. Competitive Ability	<p>1. <u>Presence of Natural Enemies:</u> Glass (6) reported that a lack of natural enemies allows teasel to proliferate. However, Wiedenmann and Parrish (5) recently reported five potential candidates for biological control, including a flea beetle (<i>Longitarsus strigicollis</i>), a leaf beetle (<i>Galerucea pomonae</i>), and three moths (<i>Cochylis roseana</i>, <i>Endothenia gentianaeanae</i>, and <i>Euphydryas aurenia</i>).</p> <p>2. <u>Competition with native species:</u> Forms monocultures that exclude most native vegetation. Very competitive in riparian and mesic habitats.</p> <p>3. <u>Rate of Spread:</u>  HIGH(1-3 yrs) <input type="checkbox"/> MEDIUM (4-6 yrs) <input checked="" type="checkbox"/> LOW (7-10 yrs) <input type="checkbox"/>  Notes: Glass (6) reports that seed is not dispersed far and most seedlings are located near the parent plant. Musser and Parrish (9) reported 4.5 m dispersal distance in natural areas and 15 m dispersal distance along interstate highways of <i>D. laciniatus</i>, a related species. Mower decks can increase dispersal range.</p>
II. Environmental Effects	<p>1. <u>Alteration of ecosystem/community composition?</u>  YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>  Notes: Forms monocultures and reduces species richness and diversity (2).</p> <p>2. <u>Alteration of ecosystem/community structure?</u>  YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>  Notes: Teasel monocultures are taller than most native species they replace.</p> <p>3. <u>Alteration of ecosystem/community functions and processes?</u>  YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>  Notes: Dense patches of teasel rosettes will not carry fire (6).</p> <p>4. <u>Allelopathic properties?</u> YES <input type="checkbox"/> NO <input type="checkbox"/>  Notes: Unknown.</p>

**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 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: Spines.
<b>E. CONTROL AND PREVENTION</b>	
I. Costs of Prevention (including education; please be as specific as possible):	Notes: N/A
II. Responsiveness to prevention efforts:	Notes: Most populations are relatively easy to control within a couple of growing seasons, especially if detected early.
III. Effective Control tactics:	Mechanical <input checked="" type="checkbox"/> Biological <input type="checkbox"/> Chemical <input checked="" type="checkbox"/> Times and uses: Mowing just prior to flowering, 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 and when it is coupled to spring prescribed burns (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 non-target damage.
VIII. Efficacy of monitoring:	Notes: It is easier to control initial invasions than established stands. Subsequent monitoring is 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 ( <a href="http://www.botany.wisc.edu/wisflora/">http://www.botany.wisc.edu/wisflora/</a> ). Dept. Botany, Univ. Wisconsin, Madison, WI 53706-1381 USA.
2	Solecki, M.K. 1989. The Viability of Cut-Leaved Teasel ( <i>Dipsacus laciniatus</i> L.) Seed Harvested From Flowering Stems-Management Implications. <i>Natural Areas Journal</i> 9(2):102-105.
3	USDA, NRCS. 2007. The PLANTS Database ( <a href="http://plants.usda.gov">http://plants.usda.gov</a> , 16 March 2007). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
4	WDNR. 2007. DNR Invasive Species Facts ( <a href="http://www.dnr.state.wi.us/invasives/fact/teasel.htm">www.dnr.state.wi.us/invasives/fact/teasel.htm</a> ). Wisconsin DNR, Madison, WI.
5	Weidenmann, R., and J.A.D. Parrish. 2004. Prospects for Biological Control of Teasel in Illinois. <i>Natural History Survey Reports</i> 379:1-12.
6	Glass, W.D. 1991. Vegetation Management Guideline: Cut-Leaved Teasel ( <i>Dipsacus laciniatus</i> L.) and Common Teasel ( <i>D. sylvestris</i> Huds.). <i>Natural Areas Journal</i> 11(4):213-214.
7	Werner, P.A. 1975. Prediction of Fate from Rosette Size in Teasel ( <i>Dipsacus fullonum</i> L.) <i>Oecologia</i> 20:197-

	201.
8	Werner, P.A. 1975. The Effects of Plant Litter on Germination in Teasel, <i>Dipsacus sylvestris</i> Huds. <i>American Midland Naturalist</i> 94:470-476.
9	Musser, A. and J. Parrish. 2002. Differences in <i>Dipsacus laciniatus</i> seed dispersal along an interstate corridor versus a state natural area. <i>Proceedings of the 2002 ESA Conference</i> .
10	Forrest, J., L. Zimmerman, and J. Parrish. 2006. The Effects of Three Different Herbicides on Cut and Uncut Teasel, <i>Dipsacus laciniatus</i> . <i>Proceedings of the 2006 ESA Conference</i> .

**Author(s), Draft number, and date completed:** Craig A. Annen, Draft 1, April 27, 2007

**Reviewer(s) and date reviewed:** Jerry Doll, August 21, 2007.

**Approved and Completed Date:**