

NAME OF SPECIES: <i>Hesperis matronalis</i> L.	
Synonyms:	
Common Name: Dame's Rocket, Dame's Violet	
A. CURRENT STATUS AND DISTRIBUTION	
I. In Wisconsin?	1. YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
	2. <u>Abundance:</u> Widespread distribution in Wisconsin (1)
	3. <u>Geographic Range:</u> Found in 27 counties in Wisconsin (1).
	4. <u>Habitat Invaded:</u> Southern Lowland Forest Disturbed Areas <input checked="" type="checkbox"/> Undisturbed Areas <input checked="" type="checkbox"/>
	5. <u>Historical Status and Rate of Spread in Wisconsin:</u> Earliest herbarium specimen was collected in 1919 in Sheboygan County (1).
	6. <u>Proportion of potential range occupied:</u> Potential to expand.
II. Invasive in Similar Climate Zones	1. YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
	<u>Where (include trends):</u> Invasive across temperate North America (2).
III. Invasive in Similar Habitat Types	1. Upland <input type="checkbox"/> Wetland <input type="checkbox"/> Dune <input type="checkbox"/> Prairie <input checked="" type="checkbox"/> Aquatic <input type="checkbox"/> Forest <input checked="" 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: Habitat margins, roadsides, railroad rights-of-way, disturbed ground and waste places, thickets, open woods, gardens (cultivated).
IV. Habitat Effected	1. <u>Soil types favored (e.g. sand, silt, clay, or combinations thereof, pH):</u> Moist, well-drained soils (2).
	2. <u>Conservation significance of threatened habitats:</u> Southern Lowland Forests provide habitat for threatened and endangered species of plants and birds.
V. Native Habitat	1. <u>List countries and native habitat types:</u> Native to Europe (2) (3).
VI. Legal Classification	1. <u>Listed by government entities?</u> Yes. Noxious in CO. Regulated in MA, CT. (4).
	2. <u>Illegal to sell?</u> YES <input checked="" type="checkbox"/> NO <input 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 type="checkbox"/> Herbaceous Perennial <input checked="" type="checkbox"/> Vine <input type="checkbox"/> Shrub <input type="checkbox"/> Tree <input type="checkbox"/>
	2. <u>Time to Maturity:</u> Two growing seasons.
	3. <u>Length of Seed Viability:</u> N/A
	4. <u>Methods of Reproduction:</u> Asexual <input type="checkbox"/> Sexual <input checked="" type="checkbox"/> <u>Please note abundance of propagules and and other important information:</u> Prolific self-seeder (3).
	5. <u>Hybridization potential:</u>
II. Climate	1. <u>Climate restrictions:</u> Primarily distributed in temperate climates.

	2. <u>Effects of potential climate change</u> : Unknown.
III. Dispersal Potential	<p>1. <u>Pathways - Please check all that apply</u>:</p> <p><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 checked="" type="checkbox"/> Vehicles/Human <input checked="" type="checkbox"/> Wind <input type="checkbox"/> Water <input checked="" type="checkbox"/> Other: _____</p> <p>2. <u>Distinguishing characteristics that aid in its survival and/or inhibit its control</u>: Deep taproot (3). Superficially, resembles some Phlox spp.</p>
IV. Ability to go Undetected	1. HIGH <input type="checkbox"/> MEDIUM <input type="checkbox"/> LOW <input checked="" type="checkbox"/>
C. DAMAGE POTENTIAL	
I. Competitive Ability	<p>1. <u>Presence of Natural Enemies</u>: Unknown?</p> <p>2. <u>Competition with native species</u>:</p> <p>3. Rate of Spread: HIGH(1-3 yrs) <input type="checkbox"/> MEDIUM (4-6 yrs) <input type="checkbox"/> LOW (7-10 yrs) <input checked="" type="checkbox"/> Notes: _____</p>
II. Environmental Effects	<p>1. <u>Alteration of ecosystem/community composition?</u> YES <input type="checkbox"/> NO <input type="checkbox"/> Notes: NA</p> <p>2. <u>Alteration of ecosystem/community structure?</u> YES <input type="checkbox"/> NO <input type="checkbox"/> Notes: NA</p> <p>3. <u>Alteration of ecosystem/community functions and processes?</u> YES <input type="checkbox"/> NO <input type="checkbox"/> Notes: _____</p> <p>4. <u>Allelopathic properties?</u> YES <input type="checkbox"/> NO <input type="checkbox"/> Notes: _____</p>
D. SOCIO-ECONOMIC Effects	
I. Positive aspects of the species to the economy/society:	Notes: Ornamental plant.
II. Potential socio-economic effects of restricting use:	Notes: N/A
III. Direct and indirect effects :	Notes: N/A
IV. Increased cost to a sector:	Notes: N/A

F. REFERENCES USED:

V. Effects on human health:	Notes: N/A
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: Difficult to control. All pest-plant invasion problems need to develop site-specific control protocols.
III. Effective Control tactics:	Mechanical <input checked="" type="checkbox"/> Biological <input type="checkbox"/> Chemical <input checked="" type="checkbox"/> Times and uses: Spot or broadcast application of glyphosate to plants in the rosette stage. Use a sticker-spreader to ensure adequate coverage. Mowing or hand pulling at anthesis are also effective on small infestations.
IV. Minimum Effort:	Notes: Two growing seasons.
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: Broad-spectrum herbicides can harm or eliminate desired vegetation. Mowing in mid-summer can be detrimental to nesting birds.
VIII. Efficacy of monitoring:	Notes: If detected early, <i>H. matronalis</i> can be eradicated. Subsequent monitoring is usually necessary for 4-6 years.
IX. Legal and landowner issues:	Notes: Chemical control on public lands may require permits and/or DATCP certification.

- 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	University of Wisconsin - Botany Department (http://www.botany.wisc.edu/garden/db/speciesdetails)
3	Missouri Plants Database (http://www.missouriplants.com/Bluealt/Hesperis_matronalis_page.html).
4	USDA, NRCS. 2007. The PLANTS Database (http://plants.usda.gov , 16 March 2007). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

Author(s), Draft number, and date completed: Craig Annen, 21 August 2007.

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Approved and Completed Date: