NAME OF SPECIES: Torilis japonica (Houtt.) DC. (1)	
Synonyms: Torilis anthriscus C.C.Gmel. non Gaertn.; Torilis rubella Moench; (1). Caucalis anthriscus (Linn.) C.B. Clarke; Caucalis japonica Houtt.; Anthriscus vulgaris Bernhardi; Caucalis anthriscus (Linnaeus) Hudson; Caucalis coniifolia Wallich ex de Candolle; Caucalis elata D. Don; Caucalis praetermissa (Hance) Franchet; Tordylium anthriscus Linnaeus; Torilis anthriscus var. japonica (Houttuyn) H. de Boissieu; Torilis praetermissa Hance; (5)	
Common Name: erect hedge-parsley, Japanese hedge-parsley (1). upright	
A. CURRENT STATUS AND DISTRIBUTION	
I. In Wisconsin?	1. YES ☒ NO ☐
	2. Abundance: 21 recorded occurrences in WI (1) Likely to occur in many more sites.
	3. Geographic Range: southern counties as of 2007
	4. Habitat Invaded: Roadsides, Oak Forests, Rich Maple Woods, Wet ditch, Sandstone ridge, Degraded Woods. Disturbed Areas ☒ Undisturbed Areas ☒
	5. Historical Status and Rate of Spread in Wisconsin: 21 occurrences recorded from 8 southern counties in WI (1). Spreading incredibly fast and persistent.
	6. Proportion of potential range occupied: Torilis japonica is not yet a major invasive species in Wisconsin, but it has shown that it is capable of spreading rapidly and in the few locations so far infested it has formed large populations. (3). High potential to spread in North Central Counties.
II. Invasive in Similar Climate Zones	1. YES ☒ NO ☐ Where (include trends): Found in NE US, central US, and Pacific Coast (2).
III. Invasive in Similar Habitat Types	1. Upland ☒ Wetland ☐ Dune ☐ Prairie ☐ Aquatic ☐ Forest ☒ Grassland ☒ Bog ☐ Fen ☐ Swamp ☐ Marsh ☐ Lake ☐ Stream ☐ Other: yards, gardens
IV. Habitat Effected	1. Soil types favored (e.g. sand, silt, clay, or combinations thereof, pH): The plant prefers light (sandy), medium (loamy) and heavy (clay) soils and requires well-drained soil. The plant prefers acid, neutral and basic (alkaline) soils. It can grow in semi-shade (light woodland) or no shade. It requires dry or moist soil. (4)
	2. Conservation significance of threatened habitats: Likely to cause similar impacts to garlic mustard, but with potenially faster spread
V. Native Habitat	1. List countries and native habitat types: Northern Africa, Middle East, Central Asia, North Asia, and Europe. (In Britain, hedges and grassy places in dry soils (4).Mixed forests in valleys, grassy places, especially in disturbed areas; 100–3800 m. Throughout China, except Heilongjiang, Nei Mon¬gol, and Xinjiang [widespread as a ruderal in Asia and Europe]. A common species found from the foothills to 2500 m in the Northern parts of W. Pakistan. (5)
VI. Legal Classification	1. Listed by government entities? No
	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:
	3. Length of Seed Viability:
	4. Methods of Reproduction: Asexual ☐ Sexual ☒ Please note abundance of propagules and and other important information:
	5. Hybridization potential:
II. Climate	1. Climate restrictions:
	2. Effects of potential climate change:
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:
	2. Distinguishing characteristics that aid in its survival and/or inhibit its control: velcro-like fruits
IV. Ability to go Undetected	1. HIGH ☐ MEDIUM ☒ LOW ☐
C. DAMAGE POTENTIAL	
I. Competitive Ability	1. Presence of Natural Enemies:
	2. Competition with native species: Appears to be very competitive to species up to 4-5' tall. Shades out all other plants where growing.
	3. Rate of Spread: HIGH(1-3 yrs) ☒ MEDIUM (4-6 yrs) ☐ LOW (7-10 yrs) ☐ Notes: By year 3 large infestations can form
II. Environmental Effects	1. Alteration of ecosystem/community composition? YES ☒ NO ☐ Notes: Completely eliminates smaller plants (and dependant wildlife) in dense infestations
	2. Alteration of ecosystem/community structure? YES ☒ NO ☐ Notes: Can eliminate ground flora and eventually may prevent tree regeneration. Too early to see those effects yet.
	3. Alteration of ecosystem/community functions and processes? YES ☐ NO ☐

	Notes:
	4. Allelopathic properties? YES ☐ NO ☐ Notes: not yet tested
D. SOCIO-ECONOMIC Effects	
I. Positive aspects of the species to the economy/society:	Notes: Parts of the plants are edible and the seeds are used as an expectorant and tonic (4).
II. Potential socio-economic effects of restricting use:	Notes:
III. Direct and indirect effects :	Notes:
IV. Increased cost to a sector:	Notes: High potential costs to land managers, foresters, woodland owners and homeowners
V. Effects on human health:	Notes:
E. CONTROL AND PREVENTION	
I. Costs of Prevention (including education; please be as specific as possible):	Notes:
II. Responsiveness to prevention efforts:	Notes:
III. Effective Control tactics:	Mechanical ☒ Biological ☐ Chemical ☒ Times and uses: Control - pull or mow before flowering. Treat foliage with glyphosate or triclopyr in early spring & when resprouting after cutting. Monitor site. (7).
IV. Minimum Effort:	Notes: Monitor unifested areas and remove infestations
V. Costs of Control:	Notes: Similar to garlic mustard control. Difficult to control.
VI. Cost of prevention or control vs. Cost of allowing invasion to occur:	Notes: Early detection and removal very easy. Control of dense infestations very costly and difficult.
VII. Non-Target Effects of Control:	Notes: Native plants mowed or sprayed
VIII. Efficacy of monitoring:	Notes: Should be very effective
IX. Legal and landowner issues:	Notes: Will become very abundant on private lands and in urban areas soon.

F. REFERENCES USED:

☒ 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	USDA, NRCS. 2006. The PLANTS Database (http://plants.usda.gov, 11 April 2007). National Plant Data Center,

	Baton Rouge, LA 70874-4490 USA.
3	Invasive Plants of Wisconsin. Herbarium, Cofrin Center for Biodiversity, University of Wisconsin - Green Bay. http://www.uwgb.edu/biodiversity/herbarium/invasive_species/torjap01.htm [Accessed 11 April 2007].
4	Plants for a future: Database Search Results. http://www.ibiblio.org/pfaf/cgi-bin/arr_html?Torilis+japonica [Accessed 11 April 2007].
5	www.eFloras.org http://www.efloras.org/florataxon.aspx?flora_id=5&taxon_id=200015963
6	USDA, ARS, Germplasm Resources Information Network. http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?312176 [Accessed 11 April 2007].
7	Robert W. Freckmann Herbarium; University of Wisconsin - Stevens Point. http://wisplants.uwsp.edu/scripts/detail.asp?SpCode=TORJAP [Accessed 11 April 2007].
8	The Illinois State Museum Herbarium Collection. http://www.museum.state.il.us/ismdepts/botany/herbarium/display.html?FIPS_CO=31&Taxon=Torilis%20japonica [Accessed 11 April 2007].

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