



**Dutchess County Environmental Management Council
Interim Action Plan
Response to Dutchess County Legislature Resolution No. 207320
Addressing Presence of
Mile-a-Minute Invasive Vine in Dutchess County**

February 13, 2008

Re: DC Resolution No. 207320 “Requesting the DC Environmental Management Council (EMC), Cornell Cooperative Extension of Dutchess County (CCEDC), New York State Department of Environmental Conservation (NYSDEC), Dutchess County Soil & Water Conservation District (DCSWCD), Institute of Ecosystem Studies (IES) and the Dutchess County Planning Department (DCPD) to address the presence of Mile-a-Minute (MaM) in the Environment of Dutchess County.”



Background Information on MaM

The Mile-a-Minute vine, or Asiatic tearthumb (*Persicaria perfoliata*), is a highly aggressive, non-native invasive plant that originated in eastern Asia. It was first introduced to the United States in Pennsylvania in the 1930’s and has since spread north. Like kudzu, Mile-a-Minute grows rapidly – up to 6 inches a day – and can reach over 20 feet long in one year. The vine has infested various parts of Dutchess County (see list of confirmed sites below, although the vine has likely infested other sites).

Mile-a-Minute weed is an herbaceous, annual, trailing vine. It is an environmental and agricultural threat due to its ability to rapidly cover and kill pre-existing vegetation. Prickly stems and leaves allow it to climb over surrounding vegetation and form dense, tangled mats that shade out the sun and choke underlying vegetation. Birds and water are most likely the primary long-distance dispersal agents of the Mile-a-Minute weed. The seeds can survive up to seven years.

Confirmed MaM Infestation in Dutchess County, NY*

- Town of Beekman: location along Hillside Road;
- Town of Dover: large infestation at site of the Dover Knolls Development (former Harlem Valley Psychiatric Center);
- Town of LaGrange: several confirmed sites along Jackson Creek, including LaGrange Park;

* See Appendix A. GIS Maps of known MaM infestation sites in Dutchess County (*created by CCEDC Environment Program GIS Lab*).

Further Information

For more information on the Mile-a-Minute invasive plant, see the USDA National Invasive Species Information Center, at <http://www.invasivespeciesinfo.gov/plants/mileminute.shtml>, or the MaM materials available through the Hudson River National Estuarine Research Reserve, at: http://hrnerr.org/public/training/MAM/MAM_promo/index_promo.html.

To report or confirm a suspected MaM infestation in Dutchess County, please contact:

- Emilie Hauser, Hudson River National Estuarine Research Reserve, Tel: 845-889-4745 or Email: hrnerr@gw.dec.state.ny.us

or

- Stephanie Mallozzi, Cornell Cooperative Extension Dutchess County, Tel: 845-677-8223 or Email: sdm10@cornell.edu

Interim Action Plan (1 to 5-year time frame)

December 2007

1. Information about MaM presented to the DC Legislature by Cornell Cooperative Extension Dutchess County; Hudson River National Estuarine Research Reserve, and NYS Department of Environmental Conservation.

January 2008

1. Forward a copy of Resolution No. 207320 all organizations/agencies listed in the resolution (above). Establish point of contact, and set up a meeting to begin discussion with these agencies.
2. Form a working group and email listserve with the agencies and organizations concerned with the spread of the MaM vine in Dutchess County, including, but not limited, to the agencies and organizations listed below. Discussions will include their willingness to participate in a program (including possibly taking a lead role) to identify, control and eradicate the MAM vine in Dutchess County:

- a. Large Property Owners
 - b. Towns with Infestation
 - c. Dutchess County
 - d. Dutchess County Resource Recovery Agency for disposal of MaM vine
 - e. CCEDEC – technical expertise in invasive plants and pests, information on certification of pesticide applicators, education and outreach, in collaboration with Cornell University
 - f. NYSDEC, including the Hudson River National Estuary Research Reserve, the wetlands permits department, and the Terrestrial Invasive Species Eradication Grant Program
 - g. Mile-A-Minute Project of the Hudson Valley
 - h. Lower Hudson Partnership for Regional Invasive Species Management (PRISM)
 - i. DCSWCD
 - j. DCPD
 - k. Cary Institute of Ecosystem Studies (IES).
3. Contact Dutchess County, municipalities, towns, large property owners, and residents to determine their willingness to take on a role in the identification, control and eradication, and monitoring.
 4. Investigate Funding Possibilities with DEC and other agencies/private organization about potential funding/grant possibilities, including: Pulling Together, Student Conservation Association Work Projects. Research alternative funding structures (such as intermunicipal agreements). Determine if there are funding and resources available to property owners to cover and/or subsidize management, for the following:
 - a. Personnel, including public employees, contractors (NYS certified pesticide applicators), property owners and volunteers.
 - b. Equipment, depending on technique used.
 - c. Funding possibilities for eradication, including government funds, grants, property owner funds or donations, or possibility of insurance, through government entities, contractors or property owners. If applicable, apply for funding.
 5. Gather and evaluate informational resources on MaM vine: Provide technical resources on the MaM Vine, including describing the vine (color photo), its impact on the environment and the people of Dutchess County, why it is a concern to the County, and why it should be eradicated, and its eradication (see the following documents):
 - a. USDA forest Service Pest Alert, Mile-a-Minute Weed, May 2005:
http://www.na.fs.fed.us/spfo/pubs/pest_al/mm/pa_mam.pdf
 - b. Kumar, V. and DiTommaso, A. 2005. Mile-a-Minute (*Polygonum perfoliatum*): An Increasingly Problematic Invasive Species. Weed Technology, 2005. Volume19:1071–1077.
 - c. McCormick, L. H. and C. F. Johnson, Jr. 1997. Mile-a-Minute Weed in the Northeast. In K. O. Britton, ed. Proceedings of Exotic Pests of Eastern Forests; April 8–10, 1997).

- d. Hudson River National Estuarine Research Reserve:
http://hrnerr.org/public/training/MAM/index_MAM.html
 - e. Connelly, Nancy A., Brown, Tommy L. and Smallidge, Peter J. (2007) Public Awareness of Invasive Plants and Insects in the Catskills and Lower Hudson Region, Cornell University, HRDU Series No. 07-7, available at:
<http://www.dnr.cornell.edu/hdru/pubs/Elecpubs.asp>.
6. Gather and evaluate information on possible treatment techniques to eradicate MaM in Dutchess County, including the following:
- a. Hand Pulling, including clothing/protection needed to pull;
 - b. Mechanical Cutting, including equipment needed such as lawn tractors, brush hogs, weed wackers;
 - c. Herbicides, pre-and post-emergent, including the environmental impact of herbicides;
 - d. Steam Spraying;
 - e. Foam Spraying (Waipuna);
 - f. Shading out with tarps;
 - g. Prescribe Burn;
 - h. Flame Thrower;
 - i. Swiper Bar Applicator;
 - j. Biocontrol (technology may be available within the next 3 years);
 - k. Other techniques being used in other counties or regions: contact county coordinators in the MaM Project of the Hudson Valley;
 - l. Proper disposal of cut vines;
 - m. Necessary pre-treatment activities, such as trimming shrubs to get easier access to MaM.

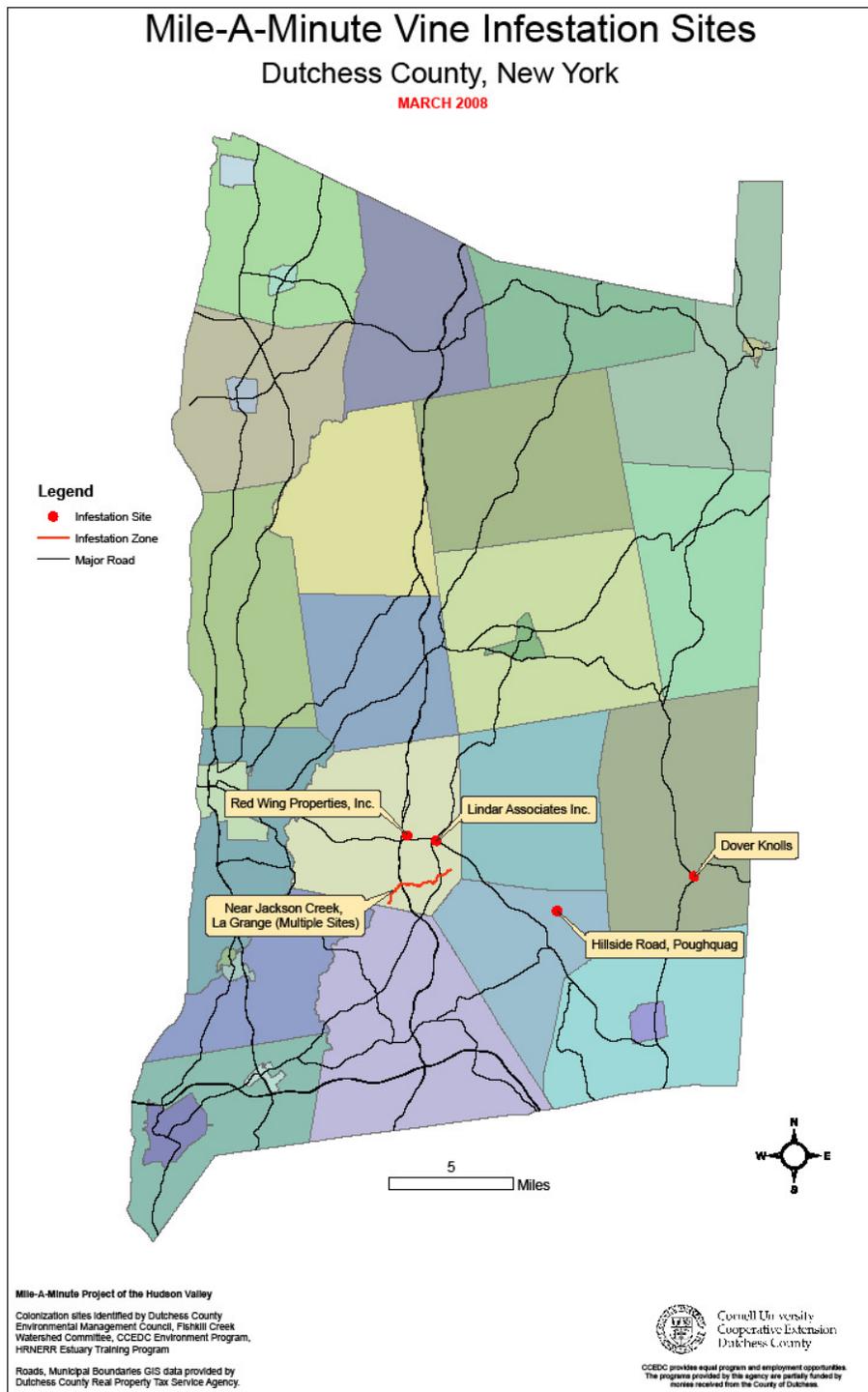
February 2008

1. Evaluate materials and prepare recommendations for the Dutchess County Legislature; obtain EMC approval of report and presentation to the DC Legislature scheduled for March 2008.
2. Gather information from the Mile a Minute project of the Hudson Valley and other sources; create GIS map of known MaM infested areas in Dutchess County (CCEDC Environment Program GIS Lab).
3. Create MaM information packages for landowners, municipalities, CACs, the media, hikers and gardeners, and public.
4. Work with DCSWCD or other agencies to obtain insurance for volunteers to do work on private property; develop draft volunteer job description for MaM efforts for DCSWCD.
5. Work with CCEDC and MaM Project of the Hudson Valley, to continue public educational and outreach programs (ongoing) for citizens to look for and report MaM infestations.
6. Conduct research on legal authority for towns, County, State and others to authorize and undertake eradication of noxious weeds.

March 2008 and Ongoing (1 to 5-year timeframe)

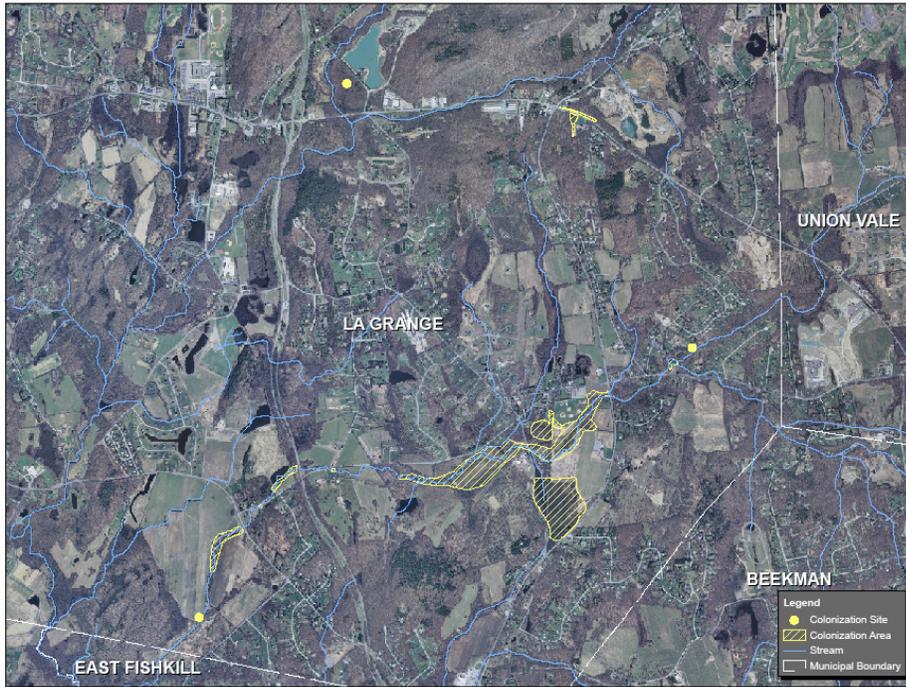
1. Convene a follow-up meeting of agencies, organizations and property owners to get a consensus on an interim Plan of Action, including the following:
 - a. Agencies willing to take on a role in coordination, education, outreach and control efforts, including possibly acting as lead agency (determining roles and responsibilities).
 - b. Property owners and general public volunteers willing to take on a role in identifying and eradicating the MaM vine.
 - c. Recommendations to the DC Legislature.
 - d. If herbicides will be applied to control the MaM infestation around Jackson Creek, T/LaGrange, then identify who will file for the NYSDEC wetland permit, and begin the permit and application process. The permit process will take about 1 month to prepare and 3 months for approval and should end before the growing season in the spring.
 - e. Assessment of potential use of County or municipal equipment for eradication efforts.
 - f. Determination of how control work will be undertaken (i.e. by providing a list of certified applicators to the property owners for them to undertake the work, or a coordinating agency obtaining grants and access to the properties and coordinating the effort, or a combination of both).
2. Contact the Dutchess County Resource Recovery Agency and municipal transfer stations to discuss disposal options (incineration is the preferred method of destruction but yard waste is usually banned for incineration disposal).
3. Actual treatment of MAM should begin in the spring, when growth resumes: Make available a list of NYSDEC commercial pesticide applicators certified to apply herbicides for the control of MaM to property owners and municipalities.
4. Identify other groups/agencies that can help identify MaM infested sites: NYS DOT, highway departments, land inspectors, landscapers, watershed groups, foresters, hiking and biking clubs, utilities, MetroNorth. Work with these groups to identify routes of MaM dispersal: Utility and railroad lines, walking trails, stream corridors, transport of debris and soil.
5. Investigate the possibility of County legislation to address “noxious weeds.”
6. Ensure all other necessary work is carried out, including but not limited to the following :
 - a. Facilitate agencies or organizations in applying for grants, if available.
 - b. Facilitate agencies or organizations in applying for the NYSDEC wetlands permit(s).
 - c. Facilitate agencies or property owners in performing pre-treatment activities, and inform them of management options.
 - d. Facilitate agencies or property owners in obtaining the services of certified applicators.
 - e. Coordinate volunteer efforts to eradicate MaM (weed watchers, pullers and monitors)
 - f. Work with CCEDC and MaM Project of the Hudson Valley to monitor and map additional locations of MaM infestation in the County.

Appendix A. GIS Maps of known MaM infestation sites in Dutchess County (created by CCEDC Environment Program GIS Lab).



Mile-a-Minute Vine Colonization Sites

Town of La Grange, Dutchess County, New York



Mile-A-Minute Project of the Hudson Valley
 Colonization Sites and Areas: Identified by Dutchess County Environmental Management Council, Fishkill Creek Watershed Committee, CCEDC Environment Program, and HRNERR Estuary Training Program.
 Streams: National Hydrography Dataset, USGS 2007
 Roads, Municipal Boundaries: Dutchess County Real Property Tax Service Agency, 2007



CCEDC provides equal program and employment opportunities. The programs provided by this agency are partially funded by monies received from the County of Dutchess.



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