

## **Mile-a-Minute Weed Quick Monitoring Protocol**

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Recognizing that not all land managers have the labor or time to follow the complete monitoring protocol, we have developed an alternative “quick” protocol, as follows (see form, next page). **The survey should be conducted first on the date of weevil release (before release),** including weevil counts and MAM damage assessment, since weevils may have arrived at the site on their own.

- Physically mark the location where weevils are released, using a wood, metal or plastic stake with flagging tape; record Year, County, Township, and specific location, and sketch map on form
- Determine the latitude and longitude of the release point using GPS or Google Earth
- Record the date and number of weevils that are released under “Weevil Release History” to right of map (note any additional releases here)
- Take a digital photo of the release site and return each year at the same time to take a picture from the same location. Include the release plot and surrounding area in the photo and include a noticeable landmark if possible

**Go back to the release point 3 times each year (spring, summer, and fall),** and record the following (see form, next page):

- Number of weevils (if any) found within ~1 meter radius of the release point; search and count for at least 2 minutes
- Estimated percent cover of MAM in the area immediately surrounding the release point (within a circle of ~1 m radius), to the nearest 5%
- Presence and extent of weevil feeding damage on MAM (none, low, medium, or high; **see form for description of categories**)
- Other plant species that are present and common within ~1-m radius of the release point

Pictures of MAM, weevils, feeding and node damage can be found at  
<http://ag.udel.edu/enwc/research/biocontrol/index.htm>

Please record your results on the survey form (next page) and at the end of each season, send electronically to [jhough@udel.edu](mailto:jhough@udel.edu) OR fax to 302-831-8889, OR send to:

Judy Hough-Goldstein  
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Thank you!

# Mile-a-Minute Quick Monitoring Survey Form

Year: \_\_\_\_\_

County: \_\_\_\_\_ Township \_\_\_\_\_ GPS coordinates \_\_\_\_\_

Location: \_\_\_\_\_

	<b>Spring Survey</b>	<b>Summer Survey</b>	<b>Fall Survey</b>
	Date: _____	Date: _____	Date: _____
Person(s) conducting survey			
# weevils <sup>a</sup>			
Est. % cover MAM <sup>b</sup>			
Weevil feeding damage ( <b>None, Low, Medium, or High</b> ) <sup>c</sup>			
Other common plants <sup>d</sup>			
Comments			

<sup>a</sup> Number of weevils counted within ~1 m radius of release point (2-minute [minimum] count).

<sup>b</sup> Estimated % cover of MAM (to nearest 5% ) within ~ 1 m radius of release point.

<sup>c</sup> Weevil feeding damage: **None** = no visible holes; **Low** = holes in a few scattered leaves; **Medium** = holes in many leaves; **High** = extensive damage on most leaves.

<sup>d</sup> Plant species other than MAM that are common within 1 m radius of release point.

## Site Map:

### Weevil Release History:

Date: \_\_\_\_\_

# Released: \_\_\_\_\_

Date: \_\_\_\_\_

# Released: \_\_\_\_\_

Date: \_\_\_\_\_

# Released: \_\_\_\_\_