

Invasive Species Profile: Mile-a-Minute (*Persicaria perfoliata*)

By Greg Sykes (greg@grsykes.com)

Native Range: across central to eastern Asia and western Pacific Islands

U.S. Introduction: late 1930s in Stewartstown, PA (see details in the Comments section)

Life Cycle: annual vine

Means of Spreading: seeds

Commercially Available: no, but sometimes seedlings are hitchhikers sprouting from purchased plant pots and burlap-wrapped root balls

Control Method: hand-pull vines; minute thorns act like Velcro enabling large mats of the vine to be rolled into bundles. Vines without seeds may be dropped where pulled and allowed to decompose; bag mature, fruiting vines for landfill or incineration. Herbicidal treatments normally not recommended since mile-a-minute may grow on non-target native species. Scientists are investigating a biological control using a weevil also native to Asia.

Good Alternative Species: mile-a-minute is not intentionally grown. Native vines which quickly grow and sport berries enjoyed by wildlife include peppervine (*Ampelopsis arborea*) and Virginia creeper (*Parthenocissus quinquefolia*).

Comments: People are understanding how much non-native invasive species damage the environment. Many folks already embrace the Invasive Management Area (IMA) ethic and remove these weeds (sample list is at <http://www.invasive.org/eastern/>) from their yards or joined an IMA workday (contact me at greg@grsykes.com to join in the fun). Others are still in a bit of a dilemma: they know a particular plant is on the invasive list and morally realize they should yank it, but they like the flowers, foliage, sentimental memories, or some other attribute. They try to justify keeping the weed, asking, "Since it is just one plant or a tiny patch, what harm can it do?" That little, not-so-innocent plant can do whole lot of harm and mile-a-minute's history is a lesson on what a huge mess one specimen can make.

Mile-a-minute's accidental introduction into the United States began in 1890 and occurred several times since through the nursery trade. In each case, either the plants failed to establish or vigilant gardeners foresaw problems and promptly pulled the seedlings. Then, in the late 1930s, a Pennsylvanian grower planted holly seeds from Japan, but mile-a-minute seeds contaminated the packet. The nursery's owner encouraged mile-a-minute's growth, finding it interesting—and in all honesty, this plant looks and behaves alien enough to be science fiction. Only after he realized what a monster he had on his hands, the mile-a-minute already escaped from cultivation. The following years saw mile-a-minute jump state lines north to New England, south to Virginia, west to Ohio, and eastward along the coastal Atlantic. Some states, such as Oregon where mile-a-minute was detected but now eradicated, maintain this weed on their early detection-rapid response radar so that any sightings will launch immediate action. Even in its Asian homeland, mile-a-minute is usually undesirable except for occasional herbal applications.

Mile-a-minute is easily identified: triangular leaves; small, round secondary leaves called *ocrea* encompass the spindly stems; and, cobalt blue fruit. Fine, hooking barbs line the stems like saw teeth, even extending onto the major leaf veins and inspiring this weed's other common name, "Devil's tear-thumb." Speaking of multiple names, mile-a-minute's former Latin name was *Polygonum perfoliatum*; it is a member of the buckwheat family. However

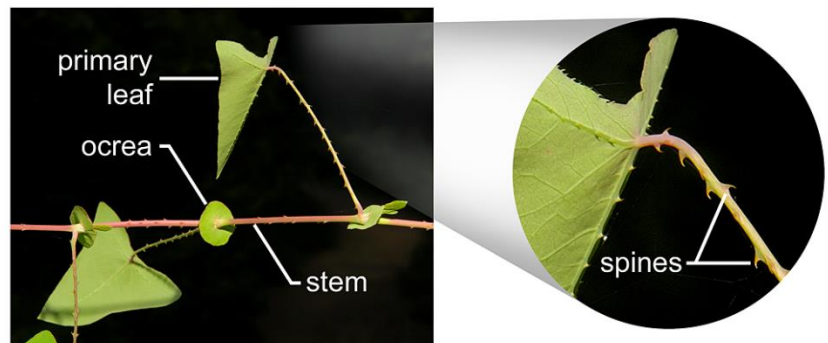


Figure 1. This figure illustrates some of mile-a-minute's distinctive anatomical characteristics.

people want to describe it, this prickly pest skyrockets between late spring and early autumn, smothering to death native shrubs, herbaceous plants, and even small trees. Miniscule, self-pollinating flowers emerge by the ocrea. Ripened berries containing a solitary, shiny black seed easily drop from the parent plant where they overwinter where they land, are washed downstream, or get consumed and dispersed by birds and mammals. Seeds may wait up to six years before germinating and wrecking havoc. Mile-a-minute thrives along disturbed soil areas. At Royal Lake Park, it roots next to the water's edge and cleared areas such as underground utility easements. IMA volunteers monitoring completed sites find and immediately pull mile-a-minute sprouting in areas yet to be fully reestablished by native vegetation. Speaking of multiple names, mile-a-minute's former Latin name was *Polygonum perfoliatum*; it is a member of the buckwheat family. However people want to describe it, this prickly pest skyrockets between late spring and early autumn, smothering to death native shrubs, herbaceous plants, and even small trees. Tiny flowers emerge by the ocrea, and they need not be showy because they self-pollinate! Ripened berries containing a solitary, shiny black seed easily drop from the parent plant where they either overwinter where they land or are washed downstream. The berries may also be consumed and dispersed by birds and mammals. In the coming growing seasons—up to six years later, the seeds germinate and wreck havoc. Mile-a-minute thrives along disturbed soil areas. At Royal Lake Park, it roots next to the water's edge and cleared areas such as underground utility easements. IMA volunteers monitoring completed sites find and immediately pull mile-a-minute sprouting in areas yet to be fully reestablished by native vegetation.

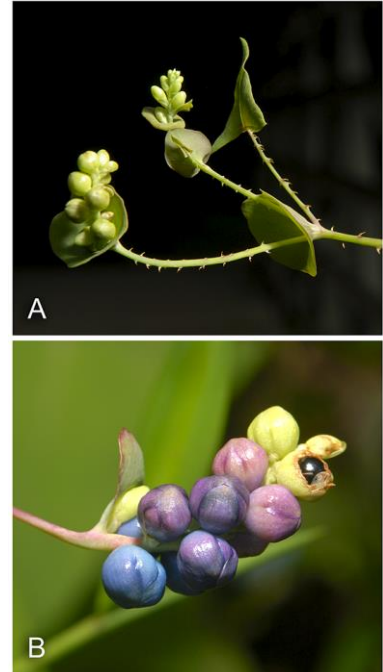


Figure 2. Mile-a-minute fruits start as small, lime green orb clusters (A) and ripened into deep blue berries (B, also with a seed partially exposed).

Those eradicating mile-a-minute hold hope in a new ally: an Asian weevil called *Rhinocomimus latipes*! Extensive test results demonstrated that these beetles and their larvae only munch on mile-a-minute and do not attack native species presented to them. Fairfax County Park Authority and the Virginia Department of Agriculture and Consumer Services partnered over the past two years in releasing several thousand weevils within the Accotink Creek watershed. So far, the results are promising for long term mile-a-minute control.



Figure 3. A wall of mile-a-minute infests Royal Lake's parklands.

Mile-a-minute pops up in residential properties, too. However, most people rip it out, realizing it is an unwanted weed even if they are unable to identify it. Now, we are familiar with mile-a-minute and know how a single person growing a few weeds can unleash a catastrophic outbreak. If you have a non-native invasive plant growing on your property, kindly remove it and don't let it become another mile-a-minute.

For more information on mile-a-minute:

http://www.accotink.org/Weevil_Release_2010.htm

https://www.fs.fed.us/foresthealth/technology/pdfs/FS_mam.pdf

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