





BRANDYWINE CONSERVANCY INVASIVE SPECIES PROTOCOLS

Mile-A-Minute (*Persicaria perfoliata*)

<p>What It Is</p>  	<ul style="list-style-type: none"> • Also known as “Asiatic Tearthumb” or “Devil’s Tearthumb.” • Herbaceous, annual, trailing vine that can grow to 15 feet in height. • Downward pointing hooks or barbs on delicate reddish stems and underside of leaf blades. • Leaves light green, alternate, simple, 1-3 inches wide, shaped like an equilateral triangle. • Distinctive stipules, leaf-like appendages at the base of each leaf—an identifying characteristic of mile-a-minute. • Spines on leaves and stems aid climbing over other species and reaching sunlight. • Fruit approximately the size of a small pea and found in metallic blue clusters located at the terminals of the stems. • Flowers small, white and often inconspicuous.
<p>Where It Is Found</p>	<ul style="list-style-type: none"> • Established in the states of Pennsylvania, Delaware and New Jersey, as well as Connecticut, Massachusetts, Maryland, New York, Virginia, West Virginia and Washington D.C. This constitutes only 20% of its range. • Found in open areas and disturbed areas, including fields, roadsides, fencerows, and forest edges and openings, as well as natural areas including stream banks, parks, and meadows. • Thrives in damp to wet soils and needs a significant amount of direct sunlight daily (>63%).
<p>Where It Is From</p>	<ul style="list-style-type: none"> • Native to Japan. • Records indicate that mile-a-minute first arrived in Portland, Oregon, and Beltsville, Maryland, in 1890 and 1937, respectively. However, it wasn’t until mile-a-minute was introduced to a nursery in York County, Pennsylvania, in 1930 that it established itself and became invasive.
<p>Why It Is a Problem</p>	<ul style="list-style-type: none"> • Grows rapidly, often out-competing native vegetation by blocking light. • Weight and pressure exerted from mile-a-minute vines on native vegetation causes stress. • Tree seedlings are smothered as mile-a-minute vines climb over them at a rate of approximately six inches a day and a length of approximately 20 feet or more per growing season. • Seeding period approximately June-October. • Seeds persist in soil for up to six years, with staggered germination over the years. • Mile-a-minute is self-pollinating.
<p>How to Eradicate It</p>	<ul style="list-style-type: none"> • <u>Mechanical Method</u>—It is best to dig up mile-a-minute (before it goes to seed in early August) as it is an annual plant with a shallow root system. • <u>Chemical Method</u>—Contact and systemic herbicides, such as glyphosate, imazapyr, and triclopyr, are effective in controlling mile-a-minute. Due to the waxy coating on the leaves, however, the herbicide should be mixed with a surfactant to help it adhere to the plant. • <u>Biological Method</u>—In 2004 a boll weevil (the insect <i>Rhinoncomimus latipes</i>) of 2mm in length was introduced to a patch of mile-a-minute as a biological control. Weevil adults feed on mile-a-minute foliage and weevil larvae feed within the nodes, causing a lessened seed production. Substantial plant damage has been observed in the years since the release of the weevil.
<p>What Not To Do</p>	<ul style="list-style-type: none"> • When removing plants, be careful not to disturb desirable species. • Once eradicated in an area, be sure to restore by planting native species.

References

- U.S. Dept. of the Interior, National Park Service, Plant Conservation Alliance (www.nps.gov/plants/)
- U.S. Dept. of Agriculture, National Agricultural Library (www.invasivespeciesinfo.gov)
- The Nature Conservancy (www.tnc.org)
- Pennsylvania Dept. of Conservation of Natural Resources (www.dcnr.state.pa.us)