Japanese stilt-grass has the potential to invade Vermont’s forests, fields and disturbed areas. This threatens native plants and natural habitats in open to shady, and moist to dry locations.

The Problem

- Japanese stilt-grass (*Microstegium vimineum*) is well adapted to low light and can spread quickly to form extensive patches displacing native wetland and forest vegetation as the patch expands.
- Where white-tailed deer are over-abundant, they may facilitate its invasion by feeding on native plant species and avoiding stilt-grass.
- Japanese stilt-grass reproduces exclusively by seed with individual plants producing 100 to 1,000 seeds that may stay viable in the soil for 3 - 5 years.
- Infestations of Japanese stilt-grass change the habitat of the forest floor, making it less hospitable for ground nesting birds.
- Seeds are readily carried by footwear and trailheads on public land are usually the first instance of colonization.
**Mechanical removal:**

**Hand pull:** Stilt-grass is a weak rooted annual and small populations can be hand pulled any time during the growing season when the ground is soft. Be sure to pull up the entire root system. Pulling is easier and probably more effective in mid-to-late summer when the plants are much taller and more branched. Hand pulling of plants will need to be repeated and continued for many seasons until the seed bank is exhausted.

**Mowing:** Larger infestations can be mowed or weed-whacked when plants are mature but seeds have not yet set. Because stilt-grass is an annual plant, cutting late in the season before the plants would die back naturally avoids the possibility of regrowth.

**Chemical removal:**

**Foliar spray:** This method is used for dense populations and best left to a contractor. For extensive stilt-grass infestations, use of a systemic herbicide such as glyphosate is a practical and effective method if used with caution. Glyphosate is a non-specific herbicide that will kill or damage almost any herbaceous plant and possibly some woody plants it contacts. Grass-specific herbicides (graminicides) work very well on stiltgrass and if used correctly can reduce potential damage to woody or broadleaf plants.

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**Safe Chemical Application**

- **Develop an Integrated Plant Management approach.** Use chemical control as only ONE piece of your prevention and management strategy.
- **The label found on the herbicide container is the law.** It indicates the concentrations to use, what protective clothing to wear, how to apply the product, and what environmental and human health hazards are associated with the chemical.
- **Use aquatic formulations within 10 feet of water.** You need a permit to apply herbicides in wetlands. You cannot apply herbicides within 100 feet of a wellhead. Contact VT DEC at 802-241-3761 for more information.
- **You need to be certified to apply herbicides on land that you do not own.**
- **Hire a contractor to manage large infestations.** A good contractor will have the knowledge to help create an effective management plan. For a list of certified contractors, contact the VT Department of Agriculture at 802-828-3482.

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**Common look-alikes**

- nimblewill<br>   *Muhlenbergia schreberi*
- white grass<br>   *Leersia virginica*
- smooth crabgrass<br>   *Digitaria ischaemum*