Callery Pear Control Best Management Practices

Controlling the Invasive Pyrus Calleryana

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Callery Pear...An Accidental Invader

The Callery pear (*Pyrus calleryana*) is a non-native, invasive tree that is threatening ecosystems throughout the eastern and midwestern U.S. The Callery pear tree and its various cultivars were originally introduced as ornamental landscape trees, and quickly took off in popularity due to their ideal shape, showy spring flowers and inexpensive price. The cultivars were once considered to be the perfect neighborhood tree – in part, because they were thought to be sterile. However, when these trees were planted in the landscape, they were able to cross-pollinate and reproduce. The trees spread aggressively into natural areas, aided by birds moving their fruits. Today, you can see wild-type Callery pear trees displacing beneficial native tree species along roadsides, old fields, forest edges and even deep within forests.

On top of these ecological problems, the tree is also a dangerous liability as they are structurally weak and prone to snapping and dropping heavy limbs after weather events. As these trees revert to their wild type, they also produce large, sharp thorns that have been known to pop tractor tires. While their spring blooms might look pretty, they produce a scent that many consider off-putting. All in all, Callery pears are not the perfect tree they were once thought to be.

Removing Callery pear trees will help reduce their ability to further spread in the wild.

Controlling Callery Pear

Callery pear trees produce significant resprouting from a cut stump and will require an herbicide treatment to prevent regrowth. For safety reasons, we strongly recommend hiring an International Society of Arboriculture (ISA) certified arborist to remove the tree from your property and treat the stump with herbicide to prevent regrowth. Find an ISA-certified arborist here: www.treesaregood.org/findanarborist.

Click this link or scan the QR code to view more Callery pear information and a demonstration of chemical treatment methods.

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Manual Control

Unfortunately, manual control options, such as cutting and mowing, are not effective control methods for this species. Callery pear trees thrive in disturbed habitats, and are able to resprout vigorously when cut. The exception to this would be for young seedlings and saplings, which can be manually pulled out of the soil. Be sure to remove all roots and be cautious of thorns. Gloves and eye protection are recommended.

For established trees, manual methods can be used in combination with an appropriate herbicide treatment to successfully remove this invasive tree. However, manual methods will make an infestation worse if used on their own without chemical control.

Chemical Control

Remember that the label is the law! Ensure you have read the entire herbicide label, follow all recommendations, and utilize the appropriate personal protective equipment when working with herbicides. See Page 2 for chemical treatment options based on tree size.

For more information about services or programs in your area, contact your local VDOF office:

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Chemical Treatments for Various Sizes of Callery Pear Trees.

Large trees taller than 6 feet and greater than 6 inches diameter at the base that can be cut down	Cut-stump herbicide treatment (see Herbicide Options, Concentrations and Timing)	Treatment most effective in summer and fall, but can be applied any time of year except during spring leaf out

This treatment requires cutting down the tree and painting the stump with a concentrated herbicide immediately (within 15 minutes). The entire stump does not need to be treated; focus on the outer 2-3 inches where the living tissue is found. For herbicide, glyphosate or triclopyr are appropriate options. If immediate treatment with herbicide is not possible, there are two options.

- Option 1 is a basal cut-stump treatment with triclopyr ester mixed with basal oil. This method is similar to the cut-stump method, but requires herbicide also be applied to the sides of the stump and any exposed roots in addition to the top of the cut. This treatment can occur any time before resprouting begins.
- Option 2 is to treat resprouts with a foliar herbicide application in late summer or early fall. A foliar application is achievable with a glyphosate or triclopyr herbicide mixed in water at a 2% solution with an appropriate surfactant. Before treating, ensure weather conditions are appropriate as described on the label. Then, thoroughly wet all leaves though not to the point of runoff. It may take several weeks before results are visible.

Herbicide Options, Concentrations and Timing for Cut-Stump Treatment

Herbicide Active Ingredient	% Active Ingredient (ai) Found on Label	Recommended Concentration for Cut-Stump Treatment	Time period for Treatment
Glyphosate	41% ai or higher	50%, mixed with water	Immediately, within 15 minutes of cut
Triclopyr amine	44.4% ai or higher	50%, mixed with water	Immediately, within 15 minutes of cut
Triclopyr ester	60.45% ai or higher	50%, mixed with water	Immediately, within 15 minutes of cut
		30%, mixed with basal oil	Anytime before resprouting begins

Large trees taller than 6 feet and greater than 6 inches diameter at the base that cannot be cut down	Hack-and-squirt herbicide treatment	Treatment most effective in summer and fall, but can be applied any time of year except during spring leaf out

Using a sharp tool like a hatchet, make downward angled cuts around the entire stem. Apply undiluted triclopyr amine into the cuts. Use enough herbicide to fill the cuts, but do not overfill to the point of runoff.

Trees shorter than 6 feet	Foliar application treatment without needing to cut the tree first	Treatment in late summer or early fall

A foliar application is achievable with a glyphosate or triclopyr herbicide mixed in water at a 2% solution with an appropriate surfactant. Before treating, ensure weather conditions are appropriate as described on the label. Then, thoroughly wet all leaves though not to the point of runoff. It may take several weeks before results are visible.

Trees smaller than 6 inches diameter at the base	Basal bark treatment without needing to cut the tree first	Treatment year-round as long as snow or ground water is not present

An oil-soluble herbicide such as triclopyr ester mixed with a basal oil at a 20% solution is sprayed directly on the bark of the tree in a complete band, covering the bottom 12-15 inches of the trunk. If any roots are visible, apply herbicide to the roots as well.