

## What You Can Do

While it might seem logical, do NOT cut down a live tree-of-heaven. The tree has already sent out underground leaders extending up to 50 feet from the trunk. If the main trunk is cut down, the leaders will send up sprouts. You'll end up with a small forest of *Ailanthus* where there was previously a single tree!

Instead of cutting, nick the stem in a few places just enough to cause an upwards pointing notch. Squirt some glyphosate-based herbicide (such as Roundup) into each open notch, as shown. This will kill the trunk and much of the root system in a few weeks but will not stimulate the leaders to send up new sprouts. You can cut down the main stem once it is clearly dead. Some sprouts may already have emerged. Keep monitoring the area and repeat the treatment on any new sprouts. It may take a year to completely eradicate a tree and its sprouts.



*Application of herbicide  
to a freshly cut notch*

Great native, alternative species to plant once you rid your landscape of tree-of-heaven include:

Shagbark hickory (*Carya ovata*)

Staghorn sumac (*Rhus typhina*)

Smooth sumac (*Rhus glabra*)

Butternut (*Juglans cinerea*)

Black walnut (*Juglans nigra*)

The Invasive Species Committee may be able to provide some guidance, possibly help, and would like to know about any tree-of-heaven in town. To contact the committee, send email to:

***invasive@grotonma.gov***

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# INVASION ALERT!

## *Tree-of-heaven*



*Mature Tree-of-heaven showing leaves and winged seeds;  
distinctive smile-shaped leaf scar*

Groton has been invaded by a foreign plant: Tree-of-heaven (*Ailanthus altissima*). Despite its name, the tree-of-heaven is no divine gift. It is a fast-growing tree that colonizes disturbed areas, crowds out native species, and produces a chemical that inhibits the germination and growth of other plants.

The purpose of this flyer is to show you what it is, how to identify it, and what you can do about it.



# Description

The tree-of-heaven (*Ailanthus altissima*) is native to China and is used medicinally for its astringent properties. It was purposefully brought to Europe, and then the USA, in the 18<sup>th</sup> century as a landscape plant.



Closeup of leaves from below



Mature Tree-of-heaven in a park

One female tree-of-heaven can produce up to 325,000 seeds per year. Large clusters of yellow-green flowers in midsummer yield copious quantities of flat and twisted winged “samaras” with a single seed. These are red and yellow and can stay on the tree for many weeks. Be it from suckers, seeds, or vigorous resprouting after damage, this is a tree capable of very rapid proliferation.



Closeup of ripening seeds



One fascinating aspect of tree-of-heaven biology: It is a natural host plant of the spotted lanternfly, another invasive species spreading in Groton and beyond.

# Identification



Closeup of flowers



Tree-of-heaven in Groton center (Station Ave.)



Sprouting in sidewalk cracks

Tree-of-heaven is a short-lived, fast-growing tree that can reach 70’ at maturity but is often a bushy shrub. Leaves are long and compound, with 11-25 opposing leaflets on each. The pale bark resembles cantaloupe skin.

## Watch out for look-alike native trees!



Black walnut



Tree-of-heaven



Staghorn sumac

If you’re just looking at the leaves, tree-of-heaven can be confused with black walnut, ash, hickory, and various sumacs – all of which grow in Groton. Diagnostic features of tree-of-heaven include smile-shaped leaf scars (see front), smooth leaf edges, flower type, and winged seeds, instead of fruit (no nuts, no berries). Don’t be fooled!