

# Identifying and Removing Weedy Tree Saplings

Some trees love to spread their seeds. But in just a few years, small bushy saplings can turn into large trees, shading out your garden. Learn how to identify and remove saplings before they get too big.

# **Table of Contents**

Table of Contents	2
<b>GreenThumb Overview</b>	3
Landscape Analysis	4
Removing Different Weed Trees	4
<b>Disposal of Weed Tree Parts</b>	4
<b>NYC Parks GreenThumb Tree Policies</b>	5
Common Invasive Trees in NYC	6-8

# **GreenThumb Overview**

NYC Parks GreenThumb is proud to be the nation's largest urban gardening program, assisting over 550 gardens and over 20,000 volunteer gardeners throughout New York City on 100 combined acres of open space. GreenThumb gardens create hubs of neighborhood pride while providing a myriad of environmental, health, economic, and social benefits to the neighborhoods in which they thrive. Additionally GreenThumb supports a growing network of over 750 school gardens through the Grow to Learn citywide school garden initiative.

The majority of GreenThumb gardens were abandoned lots transformed by volunteers into green spaces for relaxation, socializing, and growing food, or a combination. These community gardens are managed by neighborhood residents with GreenThumb support. Together GreenThumb and community gardeners make the city safer, healthier, stronger, and more sustainable.

GreenThumb's mission is to support New Yorkers to strengthen their neighborhood through community gardening by providing the resources needed to steward these valuable spaces.

GreenThumb has three teams that support gardeners and gardens:

# **Community Engagement**

GreenThumb's Community Engagement Team is the first point of contact for our network of community and school gardens. Outreach Coordinators assist gardeners with community organizing and development. They also help garden groups with special projects and connect gardeners with a variety of available resources. In addition, our Youth Programming and School Garden Coordinator gives support to school gardens through the Grow to Learn citywide school garden initiative and administers the Youth Leadership Council, our annual volunteer program that engages youth in civic engagement and beautification projects at community gardens throughout the City.

# **Operations**

GreenThumb Operations is our boots-on-the -ground team that provides material and operational support to both community and school gardens in addition to handling property management issues. You may find them delivering clean topsoil and lumber, preparing new garden sites for planting, making repairs, caring for trees in gardens, or inspecting conditions in gardens. The Operations team manages deliveries and seasonal supply distributions that provide gardens with the materials they need to grow.

# **Planning & Programs**

GreenThumb's Planning and Programs Team lays the groundwork for GreenThumb's long-term success and provides gardeners access to the skills, support, and resources needed to flourish. In addition to leading GreenThumb's effort to expand our reach and impact, this team oversees the annual GreenThumb GrowTogether conference, Harvest Fair, Open Garden Day NYC, and other large events and programs. They also host 150+ workshops and numerous volunteer projects. The Planning and Programs Team implements grants and produce quarterly publications that advertise GreenThumb's programs to gardeners and the general public. They oversee data analysis and complicated projects such as new garden builds and provide a variety of services to community gardeners.

# **Landscape Analysis**

# Why is it important to be intentional about the trees that grow in your garden?

- Trees can grow rapidly, soon becoming too large to remove without involving NYC Parks Forestry and professional arborists.
- If you want to grow food and certain pollinator flowers, you need sun. Invasive trees tend to create even heavier shade than usual.
- If you want to create paths, rain gardens, or patios, you have to avoid areas close to tree roots
- Trees often create a lot of leaf litter, which could make beneficial compost or mulch, but might take maintenance to continuously rake up and remove seeds
- Tree roots can create trip hazards, disrupt paths, and even cause damage to foundations. (As a general rule, trees should be their height's distance from a building)
- Trees can embed themselves into fences and make fence repair difficult or impossible
- Trees can interfere with underground utilities
- Branches might require regular pruning on some trees to not obstruct circulation in your garden
- Trees can take up a lot of space in small gardens
- Weed trees can have various harmful effects on and outcompete native plants

# **Removing Different Weed Trees**

This workshop talks about pulling or digging methods which will not work with all weed tree species. Each species responds differently to methods to stop it, so proper handling and disposal, and continued monitoring is important. For example:

- Some invasive species you can cut
- Some will just grow back from the roots
- Some species can reproduce even from the smallest piece of root
- Some species can still go to seed after they have been pulled
- Certain weed trees reproduce even more when you try to cut, burn, or stress them

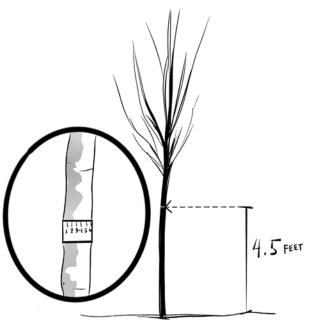
# **Disposal of Weed Tree Parts**

- Do not compost seed producing parts of invasive plants or leave them out for organics collection.
- Do not use leaves containing seeds as leaf mulch.
- Avoid placing material in areas where there is a risk of being swept away by rain or into a waterbody.
- The ideal time to dispose of invasive plants is before they flower and produce seeds This helps minimize seed dispersal.
- For plants that regrow from stems or roots, bag and dispose as regular trash for landfill
- After removing the plants, air dry them until dead. Cover the material with plastic to speed up decomposition and limit dispersal by birds and other animals. Put plant material in thick, durable, black or clear plastic bags and place them in a sunny location for several weeks to kill and decompose the plants. Make sure plant parts do not poke through the bags. Warmer weather will speed this process, but allow the bags to sit for at least three weeks before emptying or discarding them at a landfill1

### **NYC Parks GreenThumb Tree Policies**

The policies in this section are required for community gardens under NYC Parks jurisdiction.

• Garden groups must get written permission from GreenThumb to plant new trees and remove existing trees, even if damaged, diseased, or dead. Due to excessive tree plantings in past years, many GreenThumb gardens now have significant shade coverage and/or fruit trees that are left unattended to, with fallen fruit that attracts rodents. In addition, improper tree pruning has occurred, causing damage to property and risking injury to gardeners. Also, NYC Parks has very strict and detailed laws governing tree removal on NYC Parks property, and fines can be significant for improper removals. As a result, garden groups are not permitted to plant, damage or remove trees, or perform major pruning such as limb removals, without the prior written approval of NYC Parks.



- No gardener may cut, remove, damage a tree, including by cutting roots, inside the community garden or street tree adjacent to the site without prior authorization from GreenThumb and NYC Parks Forestry.
- Self-seeded ("volunteer") trees under 6" in diameter may be removed by gardeners. GreenThumb encourages gardeners to remove of young saplings of invasive trees such as Siberian elm, mulberry, Norway maple, and ailanthus (tree of heaven) as soon as they are spotted.
- If you want to prune your garden's trees yourself, you
  must first take a tree pruning course. Gardeners who
  have completed the Citizen Pruner Course offered
  by Trees New York\* or another recognized pruning
  training such as Bronx Green-Up of The New York
  Botanical Garden's certification\* may handle basic
  pruning needs in the garden. This includes dead,
  diseased, or crossing branches.
- All pruning in the garden must be completed on the ground—no climbing trees or ladders in order
  to prune unless the garden group has brought in a licensed professional arborist. Any arborist
  or contractor hired by a garden group requires a Tree Work Permit\* from NYC Parks Borough
  Forestry office prior to performing any work in the garden.

<sup>\*</sup> See pages 34-36 in the GreenThumb Gardeners Handbook 2021 for more information and resources.

# **Common Invasive Trees in NYC**

# Norway maple (Acer platinoides)

#### Where to look

- Shady areas
- Side of the road
- Fences
- Can tolerate very dry conditions
- Seedlings can sprout with almost no soil and complete darkness
- Helicopter-type samara seeds horizontal rather than hanging in late spring through summer

## **Problems Caused**

- Creates dense shade
- Monopolizes soil moisture
- Produces many seedlings under its own canopy
- Reduces overall plant diversity on a site
- Long lag time before early dispersers mature, then spread rapidly due to heavy seed production

#### Removal

- Physically remove the seeds with a rake
- Handpick the sprouts once they germinate
- Overly wet, poor nutrition, flooding, extreme weather events or construction can stress a maple tree and cause it to produce more seeds

# Composting

Leaves good for compost, but seeds will grow if mixed in with the leaves

# Black Locust (Robinia psuedoacacia)

#### Where to look

- Sunny areas
- Thrive in polluted areas
- Seedpods form in the fall but persist over winter

#### **Problems Caused**

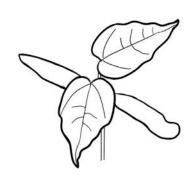
- Bark, leaves, and wood are toxic to both humans and livestock
- Create shade with little ground vegetation
- Large blossoms compete with native plants for pollinating bees.
- Reproduces vigorously by root suckering and stump sprouting

#### Removal

Physical damage to the roots and stems increases suckering and sprouting

#### **Composting**

Not recommended: allelopathic chemicals in bark, leaves, and roots can kill other plants



# Common Invasive Trees in NYC

# Tree of Heaven (Ailanthus altissima)

#### Where to look

- Fences
- Sunny areas
- Poor soil
- Side of the street
- Sidewalks
- Papery samara late summer to early fall

# **Problems Caused**

- Prevents other plants from growing nearby
- Continues to grow back
- Smells bad
- Grows quickly
- Host for the spotted lanternfly
- Grows from roots and seeds
- High pollen producer

#### Removal

- Hand pull seedlings before taproot develops (< 3 months)</li>
- Dig plants up rather than just pull them out to get all roots out of soil, after rain best
- Bag and dispose of any seed capsules in a heavy garbage bag
- Wear gloves to avoid contact with any part of the plant that may cause a reaction

# Composting

• Not recommended: allelopathic chemicals in bark, leaves, and roots can kill other plants

# **Empress or princess tree (Paulownia tomentosa)**

# Where to look

- Sidewalks
- Fences
- Large tropical looking leaves when young
- Winged seeds (up to 20 million a tree)
- Persistent suckering from stump or roots

#### **Problems Caused**

- Fastest growing trees in the world 20 feet tall in its first year
- Branches are susceptible to wind damage
- Produce thick, large roots that can damage foundations and concrete
- Drop many seed capsules and small twigs litter the ground
- Branches droop restricting space around the tree
- Cutting off sunlight and sucking up resources like water and nutrients

#### **Removal**

- Dig plants up rather than just pull them out to get all roots out of soil, after rain best
- Remove all root fragments as
- Bag and dispose of any seed capsules in a heavy garbage bag



# **Common Invasive Trees in NYC**

# White Mulberry (Morus alba)

## Where to look

- Shady areas of garden
- Fences
- Flowers in spring followed by multiple-seeded berries that range in color from black to pink to White when ripe



- Produce a lot of heavy shade
- Damage utility pipes, sewer systems, and irrigation systems
- Have shallow invasive roots that can create trip hazards
- Can shed a lot of fruit, some consider messy
- Roots damage irrigation systems, sewer systems, sidewalks, driveways, and foundations
- Male trees produce a large amount of pollen

# **Removal**

- Dig plants up rather than just pull them out to get all roots out of soil, after rain best
- May to September, when the tree is actively growing, is the best time to kill
- When weed is small remove by hand

# **Composting**

 Leaves are good for compost, but seeds might grow if mixed into leaves

Not to be confused with Urtica dioica or common nettle

