



TREES FOR URBAN NEIGHBORS

***A Guide to
Resident-Driven Tree Planting
Using Gravel Beds***

THIS GUIDE

If you love trees and live in an urban neighborhood, this guide is for you!



Would you like to increase the number of trees in your city neighborhood? This booklet will get you started.

Trees for Urban Neighbors is based on the experiences of the "Tree Frogs," residents of the Frogtown neighborhood in St Paul who, for over ten years, have planted more than 600 trees around their community.

Using simple tree nurseries built from readily available materials, the Tree Frogs have raised and given away shade and fruit trees to their neighbors. Now, other residents are doing the same, including groups in Hamline-Midway and Summit University neighborhoods.

Leaders from all three neighborhoods have collaborated to share resources, tips, and information, building on the expertise of professionals at the US Forest Service, University of Minnesota, and other institutions.

If you would like to start a tree-planting group in your community, this booklet will help you get organized. You will understand some of the key obstacles that might be encountered, and solutions that our organizations have found around them.

Urban trees need our help. And we need theirs!

Urban trees are essential to combating climate change and its impact on our cities.

Trees remove pollution and gases like carbon dioxide from the atmosphere, reducing the "greenhouse effect."

The shade from mature trees also combats the "heat island effect" of urban asphalt and concrete. Trees provide food and habitat for insects, birds, and wildlife to flourish in.

Urban trees face tough growing challenges, shortening their average lifespan. Heat, lack of regular water, pollution, and human interference all affect city trees, as do pests and diseases.

A small group of residents can make a big difference in the "tree canopy" of their neighborhood. You may want to begin by checking with your city's forestry or parks department to see what your neighborhood's current tree canopy level is.

An emphasis on increasing canopy coverage in a neighborhood is a good goal, but your work will also increase your neighbors' awareness of environmental issues and climate change.

WHY PLANT TREES?

GRAVEL BEDS

How a simple box filled with gravel can help you plant dozens of trees.



Photo: DIY Nuts

A gravel bed is an irrigated bed of gravel which can be used to house and grow bare root trees to give away.

Bare root trees are young trees that are purchased in spring, that are not potted or balled and burlapped. Bare root tree roots need to be kept damp until they are planted .

Gravel beds do not have to be very large in order to hold a large number of trees; a 10'-20' bed can house up to 50 bare root trees.

Bare root trees are cheap. Their roots do not have to be cut apart, which is often the case with trees grown in pots or balls. Over the course of a summer, a bare root tree in a gravel bed will develop a network of robust roots.

A gravel bed is a rectangle of firmly fastened wood planks, filled with approximately 18 inches of gravel. Bare root trees can be simply buried into the gravel and extracted easily by pulling gently and loosening the gravel with a pitchfork.

Gravel beds need not be boxes. A bed can even a simple pile of gravel, watered regularly. Boxes can be made from many types of lumber or other material. Our experience comes from the box-type gravel bed, made of wood..

Bare root trees in gravel beds require regular watering. Your gravel bed will need an irrigation system, which can be as simple as a hose attached to a sprinkler on a timer.

Gravel bed technology couldn't be simpler: a box filled with gravel and bare trees, watered regularly.

Your gravel bed should be in a level area where plenty of sun can reach it. Put it within easy reach of your watering source, and in a place where people will be able to check on it regularly and see the trees as they grow over the summer!

Dimensions for the size and specific material can be found below in a chart originally published in the University of Minnesota's guide, *All You Need to Know About Community Gravel Beds*. There is a link to the guide on the last page of this booklet.

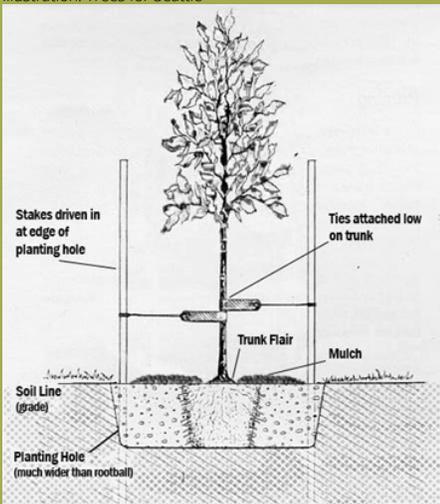
Gravel Bed Size	2' X 10' Quantity-Length	4" X 4" Quantity-Length	3" Galvanized Lag Screws	Geotextile Fabric	Pea Stone (cubic yard)
10' X 10'	8-10'	2-10' 1-8'	48	210sf 70' of 3'roll	5cy
10' X 20'	12-10'	4-10'	72	360sf 120' of 3'roll	9cy
10' X 30'	16-10'	5-10' 1-8'	96	510sf 170' of 3'roll	14cy
10' X 40'	20-10'	6-10' 1-8'	120	660sf 220' of 3'roll	19cy
10' X 50'	24-10'	8-10'	144	810sf 270' of 3'roll	23cy <input type="checkbox"/>

GRAVEL BEDS 101

WHAT'S NEEDED

A checklist for your tree planting program

Illustration: Trees for Seattle



Your tree planting volunteers will need supplies.

Here's a sample list of supplies used by the Hamline-Midway tree planting group:

- Shovels
- Plastic bags to protect tree roots
- Hydrogel (available from forestrysupplies.com)
- Buckets for carrying mulch
- Wooden stakes of various sizes
- Gloves
- Pruners
- Poly twine for staking
- Mallets
- Post pounder
- Repurposed bicycle inner tubing for staking (see diagram, left)
- Cleaning brushes to clean shoes and tools to reduce spread of Jumping Worms
- Pitchforks for gravel bed extraction
- Printed tree care information
- Mulch
- Wire cutters
- Hardware cloth
- Plastic zip ties

Most materials are readily available at hardware stores. Volunteers may be able to supply their own tools, such as the shovels, buckets and pitchforks.

You'll need some funding to keep your tree planting initiative going, but not much.

Your biggest cost will be the trees you select.

Several things can influence the cost of a tree, including its species, age, and demand for it. In the past decade, Frogtown's Tree Frogs have been able to purchase bare root trees for \$25-\$35.

You'll want to choose trees that are 2 to 3 years old, so that they are mature enough to appeal to residents and withstand transplant.

We recommend that your tree planting group select 5-6 tree varieties for your neighbors to choose from.

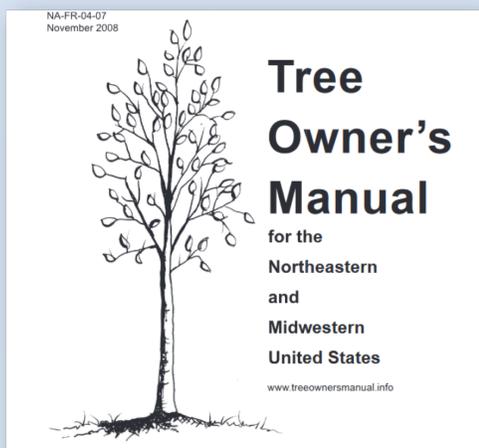
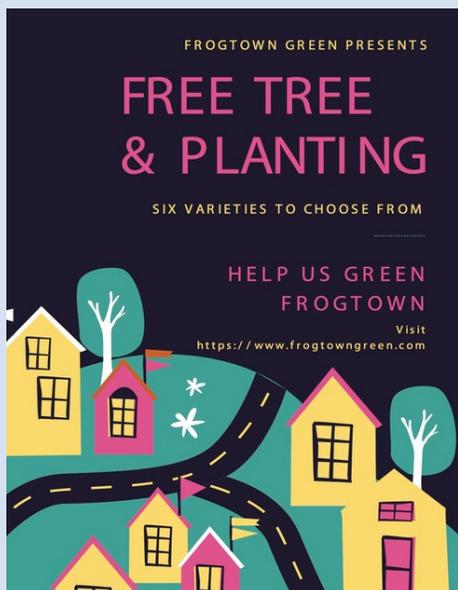
How will you select the right trees to offer your neighbors? Factors to consider include whether the trees will survive in your area's climate zone, and how well they will do in an urban environment.

Watering needs, mature height and width, and fruit or flowering habits are other considerations. You may want to consult a city forester or an arborist for recommendations.

SUPPLIES & SOURCES

REACH OUT

**Getting the word out
to your neighbors**



To plant trees in your neighborhood, you first have to find people who want a new tree in their yard.

There are many ways you can reach out to potential tree recipients. Consider appearing at neighborhood events; handing out flyers; making posts on social media; taking out ads in the local newspaper; and making a page on your website (or creating a website for the project if you do not have one).

It is important to understand the preferences of your neighbors. Once they have contacted you, poll them to ask what type of tree they would like, from choices you provide them.

Constant communication continues all the way up to and through the planting day(s). With many different recipients, there will be complications, ranging from changing minds to misunderstandings over details such as date and time of the planting.

Remind tree recipients of any actions you would like to have done before your arrival (For example, digging a hole for the tree).

Urban yards often have utility lines underground. These need to be marked before a hole is dug for a tree. In St Paul, Gopher One Call will mark utility lines for free. You will have to alert your recipients to what they may need to do before the utility companies arrive.

To ensure that recipients know how to care for their tree, give them some tips. A good resource is the US Forest Service's *Tree Owner's Manual* (link on the back page.)

Communication is the key to success.

Hi, my name is _____, and I am working with _____ to help you receive a tree. I am reaching out to you because we need you to do various tasks before we plant on the _____.

Here is a list of things you need to know/do before _____:

1. Water must be provided at the planting site, which can be done through a hose connected to a spigot.
2. You must mark where you want your tree with a white marker. This can be through paint, or just placing a white object like a bucket or flag on the spot. This needs to be done as soon as possible, as it would be preferred to have the spot marked before the Gopher One comes to mark your utility lines, which will occur within these few days before the planting.
3. We have already called Gopher One to come out to your place and mark the utility lines on your property.
4. Dig the hole where the tree will be placed after the utility lines have been marked. Please keep the soil nearby so that we can easily rebury the tree once it is planted. If the lines are through the spot you initially marked you will have to pick a new spot. The hole should be 2ft in diameter and 10inches deep.
5. If you would like to know what type of tree you will be receiving, ask in the email/phone call and I will respond with the tree type.
6. Make sure the part of the yard is accessible on the day of, between the time of _____ - _____ is when we will show up.

My phone number is _____. You can text me, but I'd prefer email when answering questions. If you call me, please leave a message in the voicemail, and I will get back to you.

Above is a sample email that can be used to remind tree recipients of what they will need to do before you arrive with their tree.

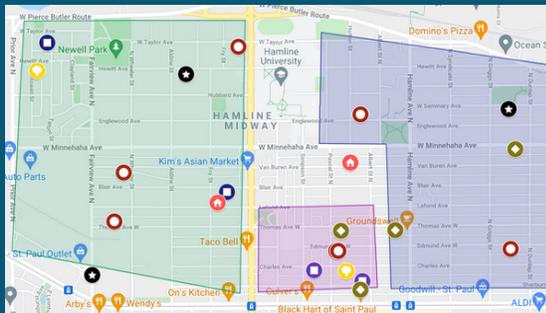
On the right is a tree tag that we give each tree recipient, encouraging them to name their tree, increasing attachment to it.



TIPS & TEMPLATES

HOW & WHEN

How to time your year, and your planting day



Plan your tree planting day well in advance.

Careful scheduling of your volunteers and tree recipients will ensure the success of your tree-planting initiative.

Some recommendations to help smooth out the planting day process, as well as make it more efficient, include:

- If you have enough people, divide your volunteers into groups for planting. If you have enough participants and trees to be planted, divide up the area into sections based on the closeness of tree sites.
- Demonstrate how to plant bare root trees for all volunteers before sending them out to plant.
- Create and print out maps that include any communication meant for recipients, and hand them out to each planting group to help with navigation and tree placement.
- Keep groups small (2-4 people), allowing for each member to have more opportunity to participate in the planting.
- Having a "group leader", or someone who has some experience planting trees, in each group is ideal.

Depending on the number of trees you are planting, you will need more or less time.

Creating a schedule and timetables can help ensure that everyone in your organization is on the same page.

Below is an example schedule that was used for the months and weeks leading up to a planting date.

Date/time	What	What happens
December	Ordering Trees and Grants	Filling out grant applications for securing funds. Choosing what trees to order and placing the order for them.
March-May	Advertising and Securing Recipients	Putting out advertisements through social media, flyers, and speaking at gatherings. Sending out forms to interested people for preference in what tree they want.
June-August	Receive and prepare trees.	Receive trees, count to ensure they are all there and in good condition. Secure temporary location (Gravel bed) where they will be safe and maintained until planted.
Before Sept 25	Notify tree recipients	Recipients receive email confirming that they will get a tree.
September 25, 9-noon	Dress rehearsal planting and filming	"Dress rehearsal" tree planting
Between Sept 25 and Oct 9	Tree recipient notification re markings	Recipients are alerted to the need to mark tree placement with white paint, to prepare for Gopher One marking. After that's done, they will get a second notice to tell them about how to dig and prep their planting site.
October 6	Deadline for Gopher One	Last day for requests to be filed with Gopher One for utilities marking.
October 1-8	Volunteer sign ups	Volunteers need to be signed up by the 8 th . We need 6 trucks to be available on both the 9 th and 10 th . We will confirm and remind volunteers throughout this week.
October 9	Planting date	First of two planting dates, 9-noon
October 10	Planting date	Second of two planting dates, noon-3 or 4pm
After October 10	Follow Up	Follow up, watering, placement of leftover trees in public

TIMETABLES

RESOURCES

AUTHORS

This booklet was produced by Mason Donat, AmeriCorps Community Forestry Corps member, and Patricia Ohmans, director of Frogtown Green.

NEIGHBORHOOD GROUPS

Frogtown Green is a neighborhood environmental initiative in St Paul's most diverse neighborhood.

www.frogtowngreen.com

Frogtown Green's neighborhood-based tree-planting partners in 2021 were:

- [The Hamline-Midway Environmental Committee](#)
- [Canopy Connectors at Unity Church-Unitarian](#)

TREE PLANTING RESOURCES IN ST PAUL

[St Paul Forestry Department](#)

[US Forest Service Urban Connections](#)

[Tree Trust](#)

[Gopher One Call](#)

USEFUL PUBLICATIONS

[Tree Owners' Manual, US Forest Service](#)

[Gravel Bed Guide, University of Minnesota](#)