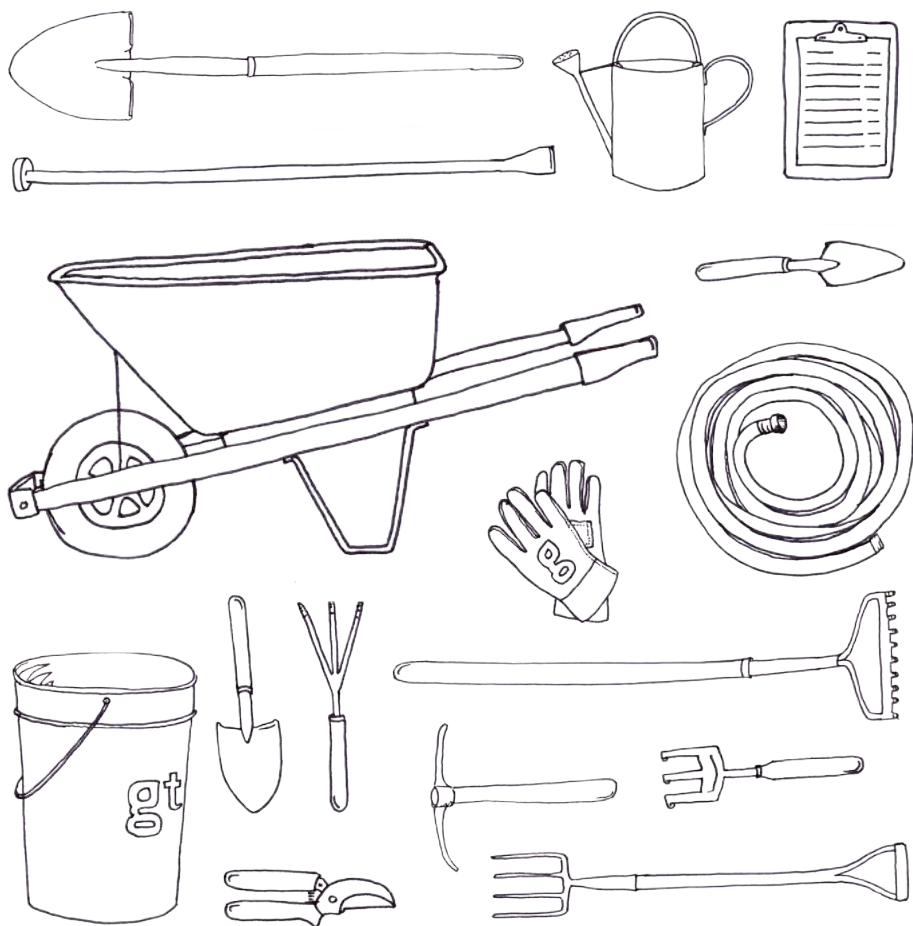


gtech

MAINTENANCE GUIDE



The only constant in nature is change. Plants grow, spread, die, decay and become soil again; paint fades, chips, peels; wood rots; metal rusts; concrete cracks; even the land shifts, eroding gradually, season by season, rutted by water and blown away by the wind. And yet, we somehow expect the things we build to remain unaffected by this constant change.

Transforming a vacant lot into a beautiful space takes a lot of work and deserves celebration, but that work isn't over when you cut the ribbon. Nature never stops working, and it doesn't always work the way you want it to. This guide will help you work alongside nature to keep your lot looking beautiful year after year.

Table of Contents

A Starting Place.....2

Softscape.....3

Hardscape.....9

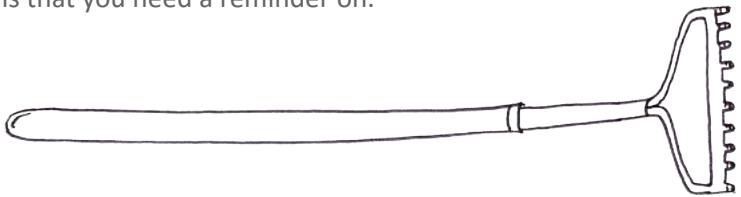
Activate.....11

Stay Connected.....13

Other Resources.....14

A STARTING PLACE

Your lot is unique! Each lot has distinct characteristics, whether in its soil composition, topography, the amount of sunlight it receives, even which weeds grow on it. You've likely spent a lot of time working on your lot, so you already know a bit about how the different components of your lot need to be cared for. This manual can be referenced for any of those details that you need a reminder on.



We generally divide a lot's components into two categories - **softscape** and **hardscape**. A lot's softscape consists of its live horticultural elements- all of the plants that you've planted and now are taking care of. Every plant species is different, and needs a particular environment to thrive. Choosing the right plants for your lot and caring for them appropriately is crucial to its success. The hardscape includes the nonliving features of an outdoor area. Components of a hardscape can be pathways and ground cover, seating, structures such as patios and gazebos, or topography. Each element of hardscaping may need a bit of maintenance over time.



In addition to the physical components of your lot, it's important to think about how the lot is already being used, and how it can you and your team can **activate** it if it needs a little more momentum to become a true community space. The success of a vacant lot project is as much about the people who use it as it is about the plants and other objects in it. Plan a party, have regular meetups, host a performance, or simply sit and enjoy your site, and all the hard work you and your friends have put into it. An underutilized site will quickly fall into desrepair, but a busy space can become a vibrant part of the community for a long time to come! Once your lot is reclaimed, it's also important to **stay connected** with your neighbors, community groups, and any volunteers that helped you reclaim your lot. So, if you'd like to learn more, read on!

SOFTSCAPE



Tickseed (Coreopsis)

It's Alive! (Now let's keep it that way)

A lot's softscape consists of its live horticultural elements - all of the plants that you've planted and now are taking care of. Every plant species is different, and grows best in particular environments. Choosing the right plants for your site and caring for them appropriately is crucial. Here are some general pointers:

When shopping for plants, look for plants that are **native** to the area, or are non-invasive. These plants usually provide greater value to the ecosystem, and likely will require less care and attention than exotic and invasive species. To learn more about **invasive** species, see page 7.

Read up on your plants, or ask a vendor about them! Not all plants have the same life cycle, or require the same amount of sunlight or water. Read on to learn more...

Life cycle The amount of maintenance and work you need to provide for your plantings is determined by the plant's life cycle.

Perennials persist for many growing seasons. Some are deciduous (drops foliage in the cold season), while others are coniferous (typically evergreen).

Annuals perform their entire life cycle in one season.

Biennials need two seasons to complete their life cycle.

Sunlight Different types of plants require different amounts of sun exposure. Be sure to read your plant labels carefully to determine if you have the proper space for it:

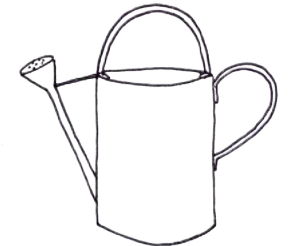
Full sun is 6+ hours of direct sunlight.

Partial sun is 3 to 6 hours of direct sunlight with hot temperatures.

Partial shade is 3 to 6 hours of direct sunlight with cool temperatures.

Dappled sun is occasional sun exposure.

Full shade is up to 3 hours of direct sunlight.



Water Before planting, consider the water requirements of your plants. Depending on soil quality, drainage, space and sun exposure, your lot may not be able to support certain plants. Now that you've maintained your lot for a while, you may have an idea of what grows well and what doesn't.

Native plants are the best choice if you do not want to water your plants regularly because they tend to tolerate existing weather conditions better than exotic plants. Also keep a lookout for "Drought Tolerant" or "Low Water" labels, as these plants will need less care to thrive. If you insist on high maintenance plantings, consider installing rain catchment systems, like rainbarrels, or bioswales to capture water.

When caring for plants, paying attention to the soil and the weather is a must. If it's been dry for a few weeks, it's probably a good idea to water your plants. Perennial and native plants are fairly resilient. They likely will stay alive through dry conditions, but will be healthier if they get a bit of water.

If you're unable to reach the lot with a hose, you can find five-gallon buckets with lids at your local hardware store. Fill a few with water and cart them to your lot. Remember to water as close to the roots as possible.



Photo by Alexander Demarsh

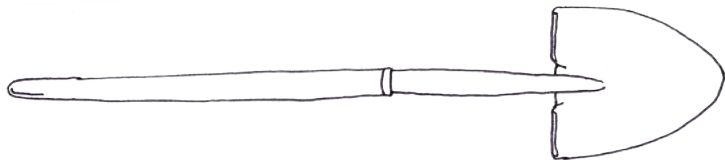
Dividing plants

After a season or two of good growth, you might find yourself with many big perennials competing for space. Never fear - you can **divide** them!

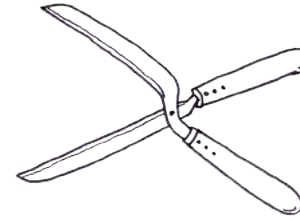
A good rule of thumb is to divide summer flowering plants in spring or fall, when soil is relatively dry. Spring flowering plants are best divided in summer, after flowering, as they are developing new roots.

Perennials should be divided every 3-5 years for general upkeep and to improve their growth and vigor.

As for the how - it's generally simple, but depends on the plants. For most, you can divide and lift plants out of the ground with a trowel, shovel, or garden fork. Some plants require two tools and a little bit of prying apart. Always make sure to water divided plants well soon after division and plant them as soon as possible.



For more information on dividing, visit:
www.rhs.org.uk/advice/profile?PID=363.



Pruning plants

Pruning is the removal of part of a woody plant. However, all plants should not be pruned the same way. The last link under more information at the bottom of this page contains info about the pruning needs of various shrubs and trees. Plants should be pruned for the following reasons:

Maintain plant health

Look for the 5 D's when deciding which branches to remove: Dying, Diseased, Dead, Decayed, Damaged

Improve quality of flowers/fruit/foliage or stems

Some plants produce better fruit/flowers if they are pruned. (Learn more about this through the resources listed below.)

Train newly planted trees/shrubs

Pruning young trees can set them on a good growth trajectory and greatly reduce the amount of corrective pruning needed later in their life. This pruning should be done in winter, while plants are dormant, 1-2 years after planting.

Restrict growth

Sometimes, the size of your lot or obstructions like power lines limit the space in which your plants can grow. You may need to prune to keep your plants from growing where they shouldn't.

Note: If you cannot reach the entire tree when standing on the ground, don't try to prune it yourself! Hire a professional. Also, clean your pruning tools before moving to the next plant to avoid spreading disease.

For more information on pruning, visit:
www.dcnr.state.pa.us/forestry/plants/commontrees/index.htm
www.isa-arbor.com
hort.ifas.ufl.edu/woody/pruning.shtml

Invasive plants

Every plant has a native environment - one which allows for its survival but in which competitors and predators check its growth. Today, plants and animals are transported across the globe - intentionally or accidentally - and can enter environments where they have little or no competition. When this happens, these species take over at the expense of others, harming the ecosystem as a whole. As ecosystems change, sometimes native plants can become invasive, so the two are not mutually exclusive.

Invasives are a persistent problem, especially in the city, where land has been altered again and again, destroying native ecosystems and exposing them to new threats. Fortunately, there are a few ways to combat these plants and help improve the ecosystem that we are part of:

Don't plant them! - Many invasive species remain unlabeled and are sold in nurseries. Make sure to ask the vendor for information on which plants are native and non-invasive, or visit the website iConservePA to learn what plants are best for the local area (www.iconservepa.org/plantsmart)

Mechanical management - Many invasive plants can be cut or pulled by volunteers with little impact on the surrounding landscape. Mechanical management may not be completely effective for all species.

Chemical management - If the problem can't be solved by these first two means, consult a professional to discuss the possibility of chemical management. Herbicides can be safe and effective when used correctly.

Biological management - Releasing a predator or pest from an invasive plant's native environment can control its aggressive growth and reproduction. Biological management is slow, expensive and does not completely eliminate the population of invasive species. Make sure to consult a professional if you'd like to go this route.

For more information and a more thorough list of invasives in the city, ask the Pittsburgh Parks Conservancy's for their guide, "Invasive Plants of Pittsburgh".

Common invasive plants in Pennsylvania



Knotweed is an invasive plant that originated in Japan. The stems look similar to bamboo, but with a reddish tint. The young shoots can be dark maroon or red. Knotweed can grow up to 13 feet tall and can have a large network of underground roots. For information on controlling knotweed, visit www.wikipedia.org/wiki/Fallopia_japonica



Bindweed is a variety of morning glory that is very invasive. Bindweed grows along the ground until it finds something to climb. It can form a blanket over a garden bed if it is not cut back. The best way to get rid of it is to regularly pull it out by its roots until it is too weak to grow.



Porcelainberry looks similar to the wild grapes which also grow in Pennsylvania. However, they can take over entire hillsides and smother trees and other vegetation. The vines need to be routinely cut down to the ground to eradicate them and prevent them from shading out other plants, but they can be very difficult to permanently remove.



Tree of heaven is a rapidly growing tree which was native to China and brought to the US as an ornamental tree. The tree is clonal - in other words, it spreads through its root system, allowing one sapling to spread to a whole patch of trees in just a few years. Tree of heaven should be cut down, particularly female trees that bear seeds.

HARDSCAPE



Easy care!

Naturally (or rather, un-naturally) your site's hardscape consists of its non-living items: stones, bricks, mulch, seating, tables, fences, and any other amenities on your site that don't move or grow. Of course, just because they're not alive doesn't mean they don't need to be taken care of. If nature had its way, most of your site's hardscape would deteriorate and decay (in fact, some of it, like mulch, is meant to do just that!).



Before we dive in to care for these items, it's important to note that there's not just one solution - quality care requires knowing the materials you've used and understanding the best methods to preserve them (this is not a complete list!):

Mulch

As mentioned, mulch will inevitably break down and become part of your garden's soil. This is good for the soil, adding valuable nutrients to it. Still, you don't want to leave the ground around your plants over-exposed, especially in the winter, when fluctuating temperatures and freezing soils can damage them. Make sure to replenish mulch as it deteriorates, and add a bit extra for insulation in the colder months.

Stone and Brick

Stairs or walls can loosen over the years because of temperature changes and natural weathering. Make sure to keep an eye on these features and readjust whenever necessary.

Wood

Many lots have wood components on them - decks, fences, benches and any number of other structures. Without proper care, wood can splinter, warp, or rot. There are a variety of ways to treat wood for the outdoors, and each one offers different advantages and disadvantages:

Painting wood is one of the easiest and most versatile ways to protect it. It gives you the opportunity to choose any color you like, and you can change your mind when you need a new coat (caution: it takes more paint to cover darker colors). Downsides: you lose the grain of the wood, which can be attractive visually, and you will still need to repaint the wood regularly, every 1-3 years depending on its amount of exposure to the elements.

Wood stain allows you to retain the grain of the wood, while still providing it with a bit of color - from a dark, mahogany to a light pine look, and some select colors. But stain also needs to be reapplied with the same regularity to prevent damage to the wood.

Sealants can help protect wood from weather and natural decay. To keep your wood looking all-natural, consider a clear sealant. But caution: wood protected with clear sealers will gray rapidly (this is natural, but may not be desirable).

Preparation is key when treating your wood components. Remember to treat the surface appropriately prior to application. This means scraping, sanding, then cleaning and thoroughly drying, prior to a new coat.

Treated Wood or rot resistant species will not need as much protection through the years. Treated wood has been industrially treated with chemicals. Wood is by nature biodegradable, so anything not built of treated lumber will rot and break down with surprising speed. Even treated or rot resistant wood won't last forever.

ACTIVATE

Volunteers

The thought of maintaining your site may be a bit overwhelming. The good news is that you don't have to do it alone! Having a dedicated set of volunteers and a few bigger volunteer events throughout the year can do the trick.

Make a team

Rally together a small team, ideally made up of individuals who live near the site, to help provide consistent support. This team could choose a regular time to meet at the site, or divide up the tasks for more flexibility. Make sure to directly invite folks to the team, as you might not get a lot of responses otherwise. And make it fun! Maintenance meetups can include food, friends and festivities too!

Large volunteer groups

If the tasks on your site are more than the team can manage on its own, there are many opportunities to get support from other groups of volunteers. Start with groups in your own neighborhood, like schools, places of worship, businesses and organizations. Ask if they have a day of service during which they'd be interested in volunteering at your site or if their constituents have required volunteer hours. Universities in the area also provide volunteers regularly. PittServes is a reliable source, as well as Carnegie Mellon University's 1000plus Day of Service. Have your community organization register with PittsburghCares so that you can also post volunteer opportunities on their website.



For more information on local sources of volunteers, visit:
www.studentaffairs.pitt.edu/pittserves
www.pittsburghcares.org
<http://thebridge.cmu.edu/organization/1000plus>

Tools

The right tool makes all the difference. There are a wide variety of tools made specifically for different tasks, and having the appropriate tool for the job makes it so much easier. Make sure to routinely maintain and clean your tools so they can last a long time and are safe to use. Tools with dirt left on them will get rusty, so watch out for that. If you're not sure how to use a tool, or you're struggling with a task on your lot, ask other volunteers what they know, or do a Google search or look for a YouTube video that gives instructions.

Grow Pittsburgh Garden Resource Center

If you want to make sure you have all the tools you need, but can't necessarily afford to purchase them, consider signing up as a member of [Grow Pittsburgh's](http://www.growpittsburgh.org/garden-resource-center/) Garden Resource Center.

For more information on the Garden Resource Center:
www.growpittsburgh.org/garden-resource-center/

Events

If you intend to have your lot be a space for the community to use, make sure your neighbors know that it is for their use. A great way to do this is by holding an event on your site. Pass out flyers to make sure everyone has a chance to participate. If you don't have the resources to plan an event on your own, reach out to local businesses, schools, organizations and places of worship to see if they have interest in using your lot. Just make sure you have proper permission from the property owner before holding a large event on your lot.

Programming

If you'd like to see your lot being used more regularly, not just for special events, consider running weekly or monthly programs on your site. Perhaps a neighbor wants to teach gardening classes, or a nearby daycare needs an outdoor space for their kids to play, or there is a reading club that could meet outside...see if you could work up a partnership that can add value to the lot and put it to use.

STAY CONNECTED

With the land owner

If your site is privately owned (owned by an individual or organization), make sure to keep in contact to inform them about any major changes you'd like to make to the site.

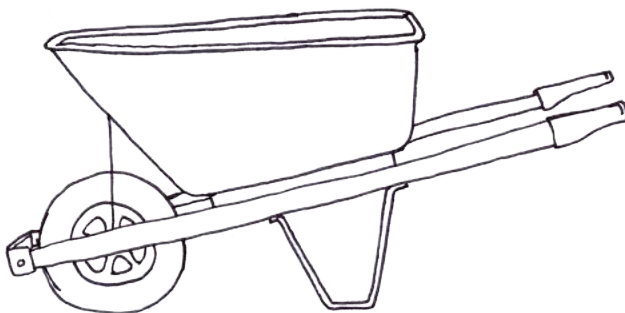
If your site is owned by the City of Pittsburgh, make sure you know when your contract ends. The Open Space Specialist should reach out to you to inquire about renewing your lease. If you have other questions, you can contact the Open Space Specialist at [412-255-2287](tel:412-255-2287).

With your community

Wherever you live, your community is bound to have groups of like minded individuals working to make your neighborhood a better place. Whether it's a Block Club, Citizen's Council or Community Development Corporation, consider getting involved. They can connect you to other resources throughout the city, and will certainly welcome a dedicated individual with their own stake in the community to the table.

With us gtech

- Attend GTECH Events (www.gtechstrategies.org/events)
- Connect with the GTECH Ambassador Alumni page on Facebook
- Use www.LotstoLove.org. Add new vacant lot projects to the map. Get ideas, advice and information.
- Give us a call! 412-361-2099



OTHER RESOURCES

Lots to Love

www.lotstolove.org

Lots to Love is a guide for community organizations and residents who are interested in transforming vacant lots into well-loved spaces. As you explore this site, you will find resources and ideas to do just that. A good place to start is the 'Your Lot' button under the 'Reclaim' tab. You will also find information about many organizations that are already strengthening and greening the Pittsburgh region.

The map on the home page details every vacant lot in Allegheny County. If you're looking for a particular vacant lot, you can search by dragging and zooming on the map, or type in the neighborhood, municipality or address. When you click a lot on the map, you will see its unique identification number, ownership and tax delinquency status.

The Adopt-a-Lot Program's Vacant Lot Toolkit

www.pittsburghpa.gov/dcp/adoptalot

A resource guide for Pittsburgh residents that compiles the goals, policies, processes, procedures and guidelines allowing residents to build temporary edible, flower and rain gardens through the Adopt-A-Lot Program. Useful for projects on both public and private land, the toolkit clearly defines the process to access the nearly 7,200 City-owned vacant lots for food, flower and/or rain gardens.



Photo by Alexander Demarsh



This booklet was created by GTECH
Strategies for Ambassadors and
partners working on vacant land in
and around Pittsburgh.