



Manistee Community Kitchen

www.manisteeKitchen.org

Toolkit for Establishing a Community Garden

Manistee Community Kitchen (MCK) is a 501c3 agency in Manistee, Michigan whose mission is to address hunger and obesity by increasing access to healthy foods and improving knowledge of good nutrition. MCK brings together key stakeholders, including local businesses, farmers, gardeners and schools, in Manistee County's fight against hunger and obesity. The organization currently focuses on two initiatives: Manistee Farmers Market and Manistee County Community Gardens (Jesse's Garden and Sophia Street Garden).

Manistee Farmers Market operates every Saturday, May 27 to October 7, offering fresh, local foods, entertainment and an occasional cooking demonstration.

Manistee County Community Gardens supports collective gardening through education and the development and sharing of best practices. MCK manages two garden projects:

- Jesse's Garden – operated to stock Manistee County food pantries with nutrient rich vegetables. It is planted, weeded and harvested by a dedicated team of volunteers.
- Sophia Street Community Garden – a model of best practices in collective gardening for the region; includes raised beds that are rented and planted by individuals, adult foster care homes and agencies in the community who embrace our guidelines for growing healthy food; all levels of expertise are welcome, from the rookie to the expert green thumb.

In 2017, Sophia Garden completed a total rebuild of its raised beds with a design that improves durability, accessibility, and ease of mowing. Our goal was to build a sturdy bed that can stand up to Michigan weather for many years and to use materials that support organic growing practices as much as possible.

Bigger and better than before, we've learned many lessons since Sophia's inception in 2010, and this toolkit shares those experiences, including:

- Sophia Street Garden layout and bed design with resource references
- Bed Rental Form
- Garden Operating Guidelines
- Deer Repellent Guidelines

This toolkit is available as a word document for ease of editing. You are welcome to visit the garden, located at the corner of Sophia and Michael Streets in Manistee, MI.

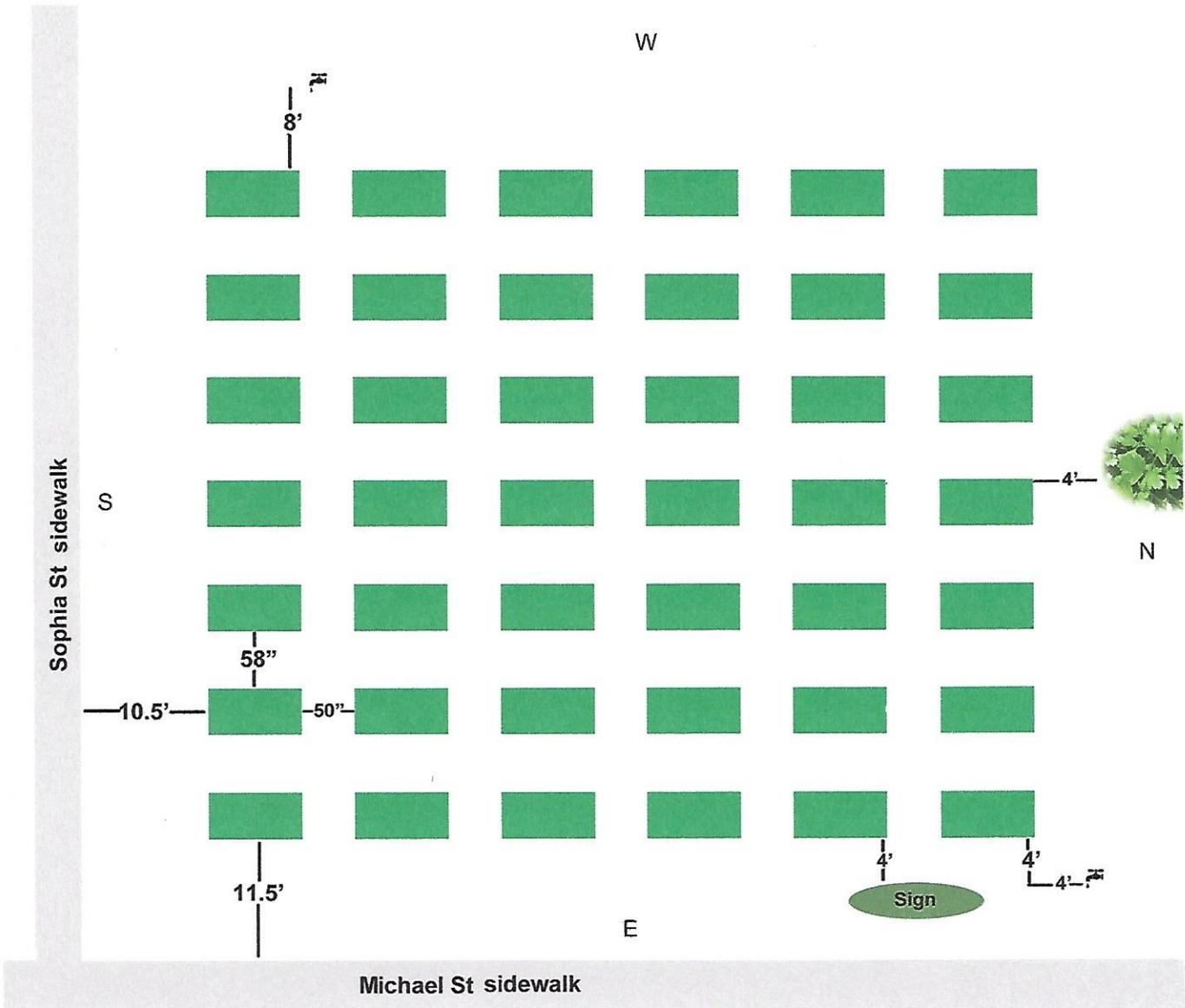
Contact: Sharron Lemmer sharronlemmer@gmail.com 231.887.7000 (text or voice)

Sophia Street Community Garden

An Initiative of Manistee Community Kitchen

(corner of Sophia & Michael Streets in Manistee, MI)

Spring 2017 Rebuild



Notes:

1. The outside dimensions of the new garden beds are 51 inches (4' + 3") and 96 inches (8'). They are constructed of 2"x12" untreated pine, stacked two high (4'x8'x2' high) and are unlined. Corner posts are 4x4's. Sides are attached with 4" structural screws, three on both ends of every board.
2. Long side runs north to south for best sun exposure.
3. Width of aisles allows for lawn tractor and wheelchair accessibility. ADA guidelines: paths should be 36" wide for



a wheelchair; five feet wide for two people to walk side by side; and have a five-foot turnaround area for wheelchairs.

4. The little symbols in the southwest and northeast corners represent the water faucets. The oval garden bed on the north side represents the herb garden.
5. Soil: 15" top soil; 3" compost (About 2" of compost will be added each year as the soil compacts.)
6. Project cost: lumber \$4400; soil \$1200; per bed \$135 with volunteer labor

Research sources:

Accessible Raised Beds Community Food and Garden Network, Madison, WI

<https://danecountycommunitygardens.files.wordpress.com/2014/06/accessible-raised-beds.pdf>

Basically the design we followed with some modifications (different size lumber and different type of screws).

Steel-sided garden beds <http://blueberryhillcrafting.com/2013/04/24/how-to-galvanized-garden-beds/>

Universal Design (ADA guidelines for accessibility)

http://www.cacscw.org/downloads/commgardensfinal_univdesign.pdf (City of Madison)

<http://accessiblegardens.org/10-2/> (Nashville Public Health Department)

http://www.grassrootsgardens.org/uploads/2/6/3/8/26383225/a_guide_for_making_community_gardens_accessible_for_all_members.pdf (Grassroots Gardens of Buffalo)

<https://view.officeapps.live.com/op/view.aspx?src=http%3A%2F%2Fwww.sdcgn.org%2Fwp-content%2Fuploads%2F2011%2F04%2FSchool-and-Community-Garden-ADA-Guidelines-1.doc> (Nashville Public Health Department Communities Putting Prevention to Work campaign)

<http://www.adachecklist.org/doc/fullchecklist/ada-checklist.pdf> (ADA Checklist)

<http://support.naturalyards.com/accessible-gardens/>

Treated Lumber

<http://duval.ifas.ufl.edu/documents/GardeninginRaisedBeds7.11.pdf>

<https://ask.extension.org/questions/135135>

http://www.agri.ohio.gov/Public_Docs/Pest_Study_Material/4b%20Wood%20Preservation.pdf

<https://ncppt.nps.gov/wp-content/uploads/GuidePreservTreatHistoric.pdf>

<http://www.health.state.mn.us/divs/eh/hazardous/topics/toxfreekids/comments/twc072710.pdf>

<https://www.epa.gov/ingredients-used-pesticide-products/overview-wood-preservative-chemicals-0>

http://treatedwood.com/uploads/Preserve_Plus_MSDS.pdf

https://www3.epa.gov/pesticides/chem_search/ppls/010829-00008-20080605.pdf

<http://www.anthonyforest.com/assets/pdf/msds/msds-cop-8-treated-wood.pdf>

<http://www.finegardening.com/are-pressure-treated-woods-safe-garden-beds>

https://www.alibaba.com/product-detail/LGB-factory-ISO-FDA-certificates-industrial_60137554046.html

Treated Lumber guidelines for organic gardens

Devon Pattillo, Standards Division, National Organic Program, USDA who said: "I hope I can help to clarify the regulations around the use of treated lumber in organic production. In fact, we have recently published draft guidance on this topic." The draft guidance document that Mr. Pattillo referred to can be found at this website:

<https://www.ams.usda.gov/sites/default/files/media/NOP%205036%20Treated%20Lumber%20Draft%20Guidance.pdf>

USDA National Organic Program's NATIONAL LIST OF ALLOWED AND PROHIBITED SUBSTANCES which is published in the Code of Federal Regulations and can be found at: <http://www.ecfr.gov/cgi-bin/text-idx?SID=ddbb6b57aac082cbc6d844c07a51fe5b&mc=true&node=sg7.3.205.g.sg0&rgn=div7>

Structural screws vs. lag screws

<http://www.familyhandyman.com/tools/structural-screws-vs-lag-screws/view-all>

Plastic lining

<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=9874504b6f1025eb0e6b67cadf9d3b40&rgn=div6&view=text&node=7:3.1.1.9.32.7&idno=7>

https://www.ccof.org/sites/default/files/media_files/documents/CCOF%20USDA%20NOP%20Standards%20Manual.pdf (see 205.206c #6, p. 14)

http://agr.wa.gov/FoodAnimal/Organic/docs/3007_Mulch_Factsheet.pdf

<http://modernfarmer.com/2015/09/agriculture-plastic-waste/>

http://www.barringtoncommunitygarden.org/uploads/2/7/6/0/27609161/bcg_organic_guidelines_2016.pdf

<http://www.roserootsgarden.org/wp-content/uploads/2012/01/Organic-Gardening-Guidelines-03.05.12.pdf>

<http://www.oxfordcga.org/Home/sample-guidelines-from-other-gardens>

<http://www.care2.com/greenliving/which-plastics-are-safe.html>

<http://www.epicgardening.com/which-plastics-are-safe-for-gardening/>

<http://www.rodalorganicle.com/garden/when-sheet-metal-meets-soil>

Other

<http://gardeningwormcomposting.com/is-galvanized-steel-harmful-to-the-soil/>

<https://ask.extension.org/questions/170051>

For more information, contact Sharron Lemmer, sharronlemmer@gmail.com, 231.887.7000



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Sophia Street Community Garden

Corner of Sophia and Michael Streets, Manistee, MI

2019 Plot Rental



Sophia Street Community Garden is a volunteer-led program of Manistee Community Kitchen ~ a place where people gather, plant and grow together as a community. We encourage everyone to dig in!

The 4' x8' raised bed plots are filled with nutrient-rich compost. They can be rented by individuals and organizations for \$30 annually. Gardeners have access to on-site water, asparagus & rhubarb patches, herb garden, compost bins and horticultural support. Gardeners agree to use organic and natural fertilizers and pest control.

Make checks or money orders payable to Manistee Community Kitchen with "Sophia Garden" as the memo. Please complete and return this form with your payment to:

**Manistee Community Kitchen
c/o Sharron Lemmer
1668 Ramona Drive
Manistee, MI 49660**

Name: _____

Address: _____

Phone: _____

Email: _____

Preferred Plot Number(s), if any: _____

Special offer for Sophia Gardeners:
10% savings on plants (up to one flat)
Weesie's Greenhouses
 3691 US 31 South, Manistee
 Just tell them you are a Sophia Gardener when you are checking out.

Questions or Concerns? Contact Sharron Lemmer, 887-7000, sharronlemmer@gmail.com

Item	Cost	Quantity	Subtotal
Plot Rental & all the extras	\$30.00		
Optional Tax-Deductible Donation (rental fees cover about 67% of costs)			
(Financial assistance available. Contact Sharron.)		Total Enclosed	

My gardening level is (circle one)

First-Timer
I've never done this before.

Beginner
I've grown a few things.

Intermediate
I've grown and harvested food somewhat successfully.

Experienced
I could teach a class.

What gardening demonstrations and instruction are of interest to you? _____

I have read and agree to the Sophia Street Garden Guidelines. I am excited to be part of the Sophia Garden Community. I understand that I could lose my gardening privileges if I do not comply with these guidelines.

Signed _____ Date _____

2019 Sophia Street Garden Guidelines

1. Gardeners will have their plot planted for the majority of the growing season. Each gardener will maintain (plant, water, weed and harvest) their rented plot(s). If a plot is unkempt, the gardener will be notified about a cleanup plan. If the plot is not cleaned, it will be reassigned or tilled in.
2. We require organic or natural fertilizers and pest control, if needed.
3. Deer, unfortunately, are regular visitors at Sophia. Repellents and barriers will follow Sophia policy and posted guidelines. Assistance is available if needed.
4. The compost bin should be used according to posted guidelines. These are essential for a healthy microbial mix. Finished compost may be used as a nutritious top-dressing in your bed.
5. If a gardener must abandon his/her garden, they will notify Sharron Lemmer, 887-7000, sharronlemmer@gmail.com.
6. Gardeners may harvest crops only from their own plots or from the marked common areas.
7. At the end of the growing season, gardeners will clear their own plot and assist with the fall cleanup.
8. Gardeners may work in their plots from dawn until dusk. Children are welcome to work in the garden if accompanied by an adult.
9. Pets will be kept on a leash and closely supervised. We do not want any unexpected compost piles in the garden.
10. Any conflicts, cases of vandalism, or problems will be communicated with Sharron Lemmer, 887-7000, sharronlemmer@gmail.com.
11. The garden is family friendly. Smoking, drunkenness, swearing, bullying, and intimidation will not be tolerated and may result in loss of privileges.
12. All gardeners agree to the following: "I understand that Manistee Community Kitchen is not responsible for my actions. I therefore agree to hold harmless the MCK, partners, organizations, and sponsors for any liability, damage, loss or claim that occurs in connection with use of the garden by me or any of my guests."



Sophia Street Community Garden

Guidelines for Deer Repellants

July 2018

In the spirit of Sophia Garden, the following deer repellent guidelines have been adopted:

Underlying requirement of any method:

- Safe for use with food producing plants
- Follow organic-like practices (no synthetics; chemical free and all natural)
- Respects our community of gardeners and does not encroach on other beds

Fencing

A fence inside your raised bed is the most effective deterrent. This one works both for deer and for our occasional human marauders. A bonus is that the fence also can be used as a trellis for vining plants; be sure to keep the produce inside the fence.

A variety of materials can be used. Keeping in mind the toxicity of the materials that are in contact with the soil:

- No treated lumber
- **No PVC** or other plastics containing phthalates. (Phthalates are a large group of chemicals that act as binding agents, make plastics flexible and are mainly used to soften PVC. Phthalates have been linked to an alarming number of health issues and diseases. These include breast cancer, ADHD, asthma, obesity, type II diabetes, autism spectrum disorders, reproductive problems and male fertility issues.)
- Safer options, depending on the use you have in mind: sustainable timber, bamboo, clay pipes, cardboard, cast iron, steel, concrete vitrified clay, and plastics such as HDPE (high density polyethylene) #5

Repellents (If you have a fence, there's no need for repellents or home remedies.)

- **Plantskydd Repellent** is *one of two spray products allowed* at this time. Based on research by a Sophia planning team, this is the safest and most effective spray and will be provided with your rental. A Plantskydd sprayer will be kept in the shed. To gain access to it, call 231-233-0088 or 231-690-3739, and someone will meet you at the garden. Plantskydd repels by odor, it is OMRI listed organic, and its main ingredient is dried blood. Follow these instructions when using it:
 - When spraying, choose a calm day and do not permit spray to drift onto other beds. Nearby gardeners might not want the product on their plants even though it is safe.
 - The Plantskydd website indicates that it does not rinse off and stays effective for three to four months. Once a plant bears fruit, do not apply onto edible parts of fruit, vegetables & other food crops. Do not spray on salad greens like lettuce and kale as the repellent binds strongly to the plant material and can be difficult to wash off. There is no safety issue, but Plantskydd could affect the taste.
 - Spray on dry plants, and allow to dry for 24 hrs. Spray mainly top of plant until wet but not dripping.

- Ideally, apply in the early morning or late afternoon. Avoid application in direct, hot sunlight.
 - Wash your hands after spraying, and wash fruits and vegetables before eating.
 - Keep out of reach of children and pets.
- Note: If gardeners want to purchase their own repellent alternative, **Outta Here** is the *only other product* that meets our community garden standards. Outta Here repels by odor, is PCO certified organic, and its main ingredient is mint oil. Follow these instructions when using it:
 - When spraying, choose a calm day and-do not permit spray to drift onto other beds. Nearby gardeners might not want the product on their plants even though it is safe.
 - Carefully follow directions on the label.
- **Green Screen** bags have been used since the garden began. Green Screen bags are safe for edible plants and are organic, but their effectiveness is questionable. The Sophia deer seem to have acclimated to it.
- **Home remedies** must be chemical free, all natural and have no synthetic ingredients. Application should be placed on the soil and leaves. If spraying, choose a calm day and do not permit drift onto other beds.
- **Perimeter repellent** will be applied to the ground around the garden to habituate the deer to avoiding the garden area in the spring before planting has begun.

Unsafe Repellents – Absolutely Forbidden at Sophia

Research identified the following list of products **unsafe for edible and food producing plants**:

Bobbex	Everguard
Deer B Gone	Liquid Fence
Deer Off	Miller Hot Sauce
Deer Stopper	Shot Gun

The following repellents are considered safe and meet organic practice guidelines; however, out of respect for our community setting, these are not allowed at Sophia because they contain putrescent eggs, a common allergen.

Deer Out	Nature's Mace
Natural Armor	I Must Garden

In summary: There are two spray products only that are acceptable at Sophia. Plantskydd is the preferred repellent and will be provided with your rental. Outta Here is an acceptable alternative. **Fencing is the best of all options, and it can be structurally simple and inexpensive.**

Questions about these guidelines? Contact Sharron Lemmer, 231.887.7000, sharronlemmer@gmail.com