SOUTH HILLS INTERFAITH MINISTRIES (SHIM) GARDEN PLAN

INTRODUCTION: The 30 x 40 ft. garden plot at SHIM was developed to supply their food pantries with fresh produce by following a "responsible" gardening philosophy. Our goal is to garden without the use of synthetic chemicals or fertilizers wherever possible, working over time to develop the soil structure and beneficial insect population to promote sustainability. The long-term goal of this project is to set up a model that can be used by various organizations to develop their own gardens to support the fresh produce initiative of SHIM or for other recipients.

OVERVIEW OF PLANNING A COMMUNITY GARDEN

Organize a committee:

- Discuss strategies of garden development (organic/conventional practice)
- Identify chair(s) of committee
- Secure funding and donation strategies
- Determine recipient(s) of produce
- Define subcommittees: preparation, purchases, compost, maintenance, harvest
- Seek volunteers for preparation, planting, harvesting, weeding, etc.

Identify a location:

- May be a single plot or several smaller ones
- Determine hours of sun and degree of drainage
- Identify water source
- Establish need for "critter control"

Prepare the site(s)

- Do soil testing (Penn State); amend as needed
- Gather tools and equipment
- Till the garden plot(s)
- Fence as needed

Decide what to plant: sustainability; height; growing season; yield.

Schedule jobs such as weeding, watering, harvesting, replanting, etc.

Do fall clean-up, plan next year.

Getting started:

An organization or group can begin by setting up a committee to evaluate the goals, prospects and location for a garden. In the case of SHIM, the staff had already identified the need and the location, and had plowed the space and tested the soil. In mid-winter, SHIM staff sent out a mass email to announce an interest group meeting. From this interest group, a philosophy for gardening was developed, and three co-chairs were identified to lead the effort. One co-chair is a certified Master Gardener, and the two others are people with extensive experience and some training.

The interest group met every two weeks, beginning in February, until preparation and planting started in April and May, respectively. Early goals were to develop subcommittees for various tasks, such as preparation, planting, composting, and maintenance. A planting plan was created to decide on vegetables to plant, their location, and their sustainability. We sought plants with long growing seasons and a sustained output. We also considered height of plants to maximize sunlight exposure.

An important consideration of the organization and committee should be funding for the garden effort. Many small grants are available to purchase supplies, and groups such as Grow Pittsburgh often offer seedlings at a reduced price. In addition, donations of seedlings and seeds should be sought. Local businesses and greenhouses may donate supplies and plants, or provide them at reduced cost.

Planting is the most intense effort for the garden development. Many groups offer a Day of Caring experience to their employees, and with supervision, such groups can be very effective in getting the garden planted. Most plants can be put in the soil be May 15.

PLANNING AND PREPARATION OF GARDEN PLOT

Plot sun patterns, by direct observation or by going to suncalc.net and entering location information. This information will determine if the selected area receives adequate sunlight and where plants should be planted depending upon their mature size, their sun requirements, and the path of the sun throughout the day.

Conduct a soil test by contacting the Penn State Cooperative Extension and sending them a soil sample. They will return a detailed report on the soil with recommendations for amendments. Most vegetables prefer slightly acidic soil, pH 6-6.8.

Test drainage of plot by digging 1 ft. hole, fill it with water and time how long it takes to drain. Soil with absorption of 1" per hour is considered to be well-drained. Make amendments as necessary by adding organic material to loosen soil, especially if clay-laden.

Install fencing and chicken or rabbit wire around garden plot to deter animals. Consider installing a gate, and whether a lock will be necessary. If deer are a problem, consider building trellises just inside the fencing to add barriers and to support vertical crops such as cucumbers and pole beans.

Preparing the plot can be an enormous or modest effort, depending on beginning state of the ground. If land needs to be cleared of trash, cement, vegetation, etc., then it is critical to begin this effort early. The soil should be plowed, as with a Roto-tiller, and spaded and raked to relative smoothness. After soil testing, amendments should be made as soon as possible if needed. If the land has been prepared as a garden in previous years, the soil may be loosened without plowing. The sections of the garden can be outlined with string and stakes. It is critical to allow sufficient space or walkways to access plants for harvest. Walkways can be covered with cardboard held down with landscape stakes and/or covered with wood chips.

Gather appropriate tools and supplies to have available for volunteers. Volunteers can be asked to bring their own tools as well. Suggestions include:

- Long handled shovel (2)
- Garden fork (2)
- Pruners (2)
- Metal rake (1)
- Trowels (2 or 3)
- Wheelbarrow (1)
- Hose (if no sprinkler system)
- Twine
- Garden gloves (several pairs)
- Gardening scissors
- Hammer
- Garden stakes
- Soft ties (cloth) and twist ties
- Deer mesh (plastic webbing)
- Shiny construction-type tape

Build Compost Bin- Bin should be located in a sunny area. An easy, low cost-compost bin can be constructed from 3 used shipping pallets lined with plastic chicken wire, 4 pieces of rebar for anchoring into ground and zip ties. Refer to attached list of compostible materials and instructions for turning pile.

Prepare beds for annual/perennial flowering plants: a strip (about 1 foot) should be dug and prepared around the outside of the fence so that plants that will attract pollinating insects can be planted.

Determine plants to be planted and draw plan taking into account the sunlight and height of plants, etc. A plan to include flowers to attract pollinators should also be included. Examples of perennials that attract pollinators are lavender, black-eyed susan, coneflower, asters, and goldenrod; these can also be divided in future years to cover more area. Annuals such as marigold aren't bothered by wildlife, but will die at the end of the summer.

Outline planting, watering and weeding, as well as harvesting plans. Volunteers should be recruited to perform such jobs on a weekly basis.

Outline end of season projects: Pull out all annual plants and compost
Divide any perennials and replant. Remove any "structures" such as bean trellises, tomato stakes, etc. Clean thoroughly and put all tools away for winter storage. Plan garden for following year, remembering to rotate crops.

Take advantage of these resources and others:
Penn State Extension, http://extension.psu.edu/allegheny
Pennsylvania Association for Sustainable Agriculture (PASA), http://www.pasafarming.org
Phipps Conservatory, http://phipps.conservatory.org
Grow Pittsburgh: check out their gardening classes http://www.growpittsburgh.org

Work to be done early in the creation of the garden:

1. Soil and watering
-Soil can be turned any time as long as it isn't too wet. Big clumps should be broken up as much as possible.
-Add lime and other minerals according to soil test report before turning
-Irrigation system needs to be evaluated and set up based on garden design – future consideration to include rain barrels.
-Contact vendors to see if they will donate 6 or 7 cubic yards of garden soil
(or two different vendors at 3 yards each?) If soil is to be delivered after the garden is turned and limed, then simply spreading the soil on the planting areas makes sense if the vendors will do that. If they will not, then they should deliver and soil should be dumped in an accessible location, then hauled and spread with shovels and rakes. The need for top soil volumes should be calculated to create a 2-inch layer on top of existing soil.

2. Fence project and bean trellis projects should be initiated.

3. Compost area:
-Should be created outside of fence
-Structure to contain compost can be built with donated pallets

4. Planting:
-Based upon garden plan the area should be measured and marked with stakes and strings to prepare for planting. Paths between crops and rows should be marked as well, and covered with wood chips or straw.
-Choose plants based on need, available space, growing time, output, and sustainability.
-Work to find donated plants and seeds; several groups such as Grow Pittsburgh offer reduced prices on these items.
-Planting days require a major workforce; all efforts should be made to maximize volunteer availability.

Maintenance and harvesting:

-Committees and volunteers should be organized to maintain garden by weeding, pruning, repairing, watering, and trellising and staking.
-Harvesting should occur as close to food pantry distribution days as possible.
-Cold storage should be available to store food at safe temperatures.
-Sequential planting should be considered when short-term crops such as lettuce are grown.
-Pest and animal damage should be addressed according to the philosophy put forth by the organizing committee.

Future considerations:

When reaching out to other institutions, perhaps have them be responsible for one type of vegetable per year – this will maximize crop and provide ease of care. The same crop shouldn't be planted every year at the same location.

Addendum

CREATING GOOD COMPOST

Browns=high carbon	Greens=high nitrogen
Ashes (wood)	Alfalfa
Bark	Algae
Shredded cardboard &	Clover
Newspaper	Coffee grounds/tea bags
Corn Stalks	Garden waste
Fruit waste	Green Grass clippings
Leaves	Hedge clippings
Peat moss	Fruit & vegetable scraps
Sawdust	Weeds (that have not gone to seed)
Stems/twigs shredded	Manures (should be well-rotted)

Eggshells are neutral

NEVER ADD ANIMAL PRODUCTS, GREASE, OIL COOKED SCRAPS, DOG OR CAT WASTE, BARBEQUE OR COAL ASHES OR COLORED PAPER

The ratio of brown to green should be 3:2. Alternating 1-2 inch layers of each

It is best to give the compost heap a "big meal" versus small snacks.
Collect your organic waste over a couple of days and then add it all at once.

The pile should never smell bad – if it does, there probably isn't enough oxygen circulating. Turn the pile well with a garden fork and if it still smells, it may be too wet. Add some dry material to soak up the excess moisture. If the pile continues to be too wet, you may have to cover it with a tarp – just don't let it get too dry. The pile should heat up in the middle, if it isn't heating up, it may need nitrogen – add grass clippings or other high nitrogen materials.

Compost can take up to a year or longer before it is ready to be used. Make sure that the scraps you add are shredded into smaller pieces and they will decompose quicker.