Tire Garden Demonstration Project

1. Overview

"Tire gardens were brought to the Haiti country-side after the earthquake by the Papaye Peasant Movement (MPP). More recently, the Bright Educators of Delmas (GEAD) brought the design to urban settings in Port-au-Prince, with financial assistance form the Unitarian Universalist Service Committee, to help reduce food insecurity in the city." —UUSC Web site (more info on following pages)

We adapted the Haitian design somewhat for suburban Palo Alto. We make tire gardens from things that would otherwise have been put in a landfill: old tires, disposable wood pallets, old shower curtains. Plus we use Clay Pot Irrigation, with water from our Rain Barrel.

2. Project Management

To build a new Tire Garden, you will need to do the following:

A. Get approval for location from the Buildings & Grounds Committee.

B. Assemble the materials (see plans on succeeding pages). Note that two Tire Gardens will fit onto one typical support structure, where the top surface is a typical 4 ft. by 4 ft. wood pallet. Note that that it takes 2-3 pallets to make a support structure (one for the top, 2 to 3 for the "legs").

C. If you have two adults in the class, you can divide the teens into two groups — one working on the support structure, and one working on the tire.

D. Once you've made the Tire Garden, you have to fill it with soil. In an ideal world, we'd make soil on site from compost — but our current composters do not have nearly enough capacity to make the soil for even one Tire Garden. So plan on purchasing bags of soil NOTE THAT THIS MEANS YOU WILL NEED MONEY. Either get money from the CYRE Committee, or Buildings & Grounds.

E. When you add the soil, plan on putting in Clay Pot Irrigation. You might also want to make a Bucket Drip irrigation System. On the day you put soil in the garden, you will also want to wet down the soil, and then plant seeds or seedlings.

In short, making and planting a complete Tire Garden, with support structure and irrigation, then adding soil and planting — could take 3 or more weeks.

Making a Tire Garden

I/ Preparing the Tire



Use a hammer to drive a utility knife blade into the tire, in order to start a cut.

(In Haiti, they use a machete to make the cut—not recommended unless you own a machete, and are proficient with its use.)

Then use tin snips to cut the tire as shown.



Now you have to turn the tire inside out. This is not easy, and takes a lot of strength!

The photos on the next page are stills from a video showing a farmer from a Haiti ecovillage turning a tire inside out.

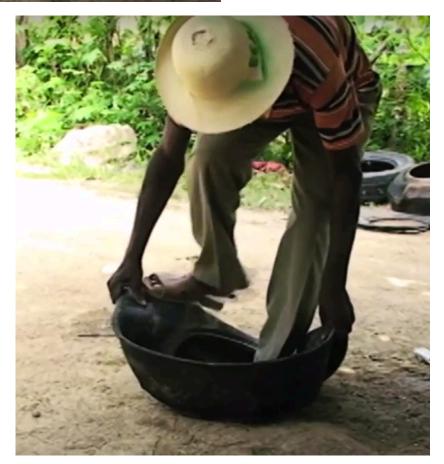


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1.







3.





6.

5.







II/ Build a platform

A platform makes it easier to work in the garden, and helps keep critters out. Salvaged pallets make a good platform.

However, one of the pallets we tried to use had such hard wood that nails crumpled when we tried to hammer them in. So get a couple more pallets than you think you'll need, in case one of them doesn't work.

III/ Fill the tire with soil

Now you have to put something in the hole of the tire so soil will stay in. A good solution is boards or plywood to hold the weight of the soil, plus some kind of semipermeable fabric to keep the soil in (for example, we used an old semi-permeable shower curtain).

IV/ Install Clay Pot Irrigation system

V/ Plant seeds or seedlings