



Vegetable Gardening tips from the Garden at the High Plains Food Bank

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Organic vegetable gardening in your backyard can be cheap, easy, and has a multitude of personal health and environmental benefits. Using resources that are free and widely available will get you started producing fresh fruits and vegetables. These plants, as a major part of your diet, will assist in organ function, overall health, and minimize cancer risks. Also, the average 1,500 mile trip that produce takes from where it is grown to where it is sold in stores can be avoided if vegetables are grown at home. Our air and water would be cleaner if these fossil fuel emissions from truck, plane and boat transports were minimized.

Most importantly is that organic gardening can be fun. It is easy to get excited about it when there are tasks to be done by people of all ages. But the most rewarding part is eating and enjoying your own fresh grown vegetables, literally the fruits of your labor!

Getting Started

Having the right tools in the garden will be a big help, but they are certainly not a necessity. With a little creativity and the ability to improvise, you will be able to use what is available and avoid startup overhead.

Materials that you should have on hand, but are not limited to: a shovel, a pitchfork, a wheelbarrow, and a garden trowel.

Building a Garden Bed

The technique we use for building beds is commonly referred to as "lasagna gardening" because of the several layers that build upon each other. These beds can be any shape or size, and are very handy because of the minimal amount of materials needed.

Once an area is selected for building your garden bed the soil needs to be aerated. This can be done by a motorized aerifier that you can find at a landscape rental business such as A-Team Rentals¹, but breaking up the

ground with a shovel works just as well. The shovel technique is done by inserting the shovel into the soil and then pulling up to loosen the ground and break up the soil.

After this is done, soil amendments should be added to help fertilize the soil. Organic gardening shies away from synthetic fertilizers, and the natural amendments available at garden retailers efficiently fertilize the soil and maintain soil health. The amendments we use in our garden are Rock Phosphate and Green Sand, each used to supply phosphorus and potassium respectively. Both of these amendments can be purchased at nurseries and home improvement stores. In addition to these amendments we also add a ¼ inch thick layer of Natural Fertilizers² compost to provide nutrients to the soil.

Now that the soil has been prepared, the garden bed can begin to be built. Wood chips are the first layer to add on top of the compost layer. Wood chips can be picked up at one of Amarillo's three chipping sites³, but it is important to stay away from chips that have evergreen needles in them due to their high level of acidity and unwillingness to decompose. The wood chips should be applied in a uniform four-inch layer. After this is done, a two-inch layer of grass clippings is placed over the wood chips. Wet newspaper, about six sheets thick, is placed on top of the grass clippings which serves as a weed barrier and aids with maintaining the beds shape. This layer is then covered with wood chips to serve as mulch to prevent evaporation and limit the weed growth in the bed.

The bed will begin to compost over time so it is important to add additional organic matter layers to maintain the health of the soil in the garden.

Seed Starting

Starting seeds on your own is great way to save money, and allows you choose from a greater variety of plants than you would get at a nursery. It can very easy and rewarding to enjoy the produce off of a plant you started from seed.

Growing seedlings starts with the right soil mix. You need growing medium that won't compact and prevent air from coming in, but also retains moisture. To achieve this we make a mix containing four parts finished compost, one part sand, one part peat moss, and one part vermiculite. Premixed mediums can be purchased at most garden suppliers.

Once you have a selected soil mixture and a container to grow in, the seeds can be planted. The depth which each seed should be planted in the soil is 2-4 times deep as the seed is wide. After being covered with soil the seed should remain continuously damp until it germinates.

Planting

A plant that is purchased from a nursery or a small seedling can be planted directly into the bottom of the bed and then filled with the removed materials and compost. Using your hands or a garden trowel you can dig down (about three inches for a transplant, about one inch for a seedling) into the mulch layer and cover it back up. This can be repeated until your bed is full of your desired plants. We recommend a combination of plant spacing methods: companion planting and square foot gardening.

Making Compost

A compost pile is a great way to add nutrients to your garden organically and can be done easily at home. Location is important so you should find a place in your yard that has plenty of space and you don't mind having something unsightly, and at times, smelly.

To begin you should add equal parts wood chips, dried leaves, or old garden waste (this is will be referred to as "brown" material) and fresh organic material like grass clippings, kitchen food scraps, or fresh manure (this will be referred to as "green" material) in equal layers. After every layer is added wet down the infant pile with a hose. The moisture in the pile should be that of a rung out sponge with little dripping or runoff coming from the pile.

Compost Do's and Don'ts

Greens: grass clippings, fruit, vegetables, egg shells, green garden waste

Browns: yard waste, straw, sawdust, ash, wood chips, coffee grounds, bread

No's: Oils, lards, dog and cat manure, dairy products, meat, weeds, diseased plants

Once your pile has been built maintenance is the key to success. It will begin to heat up in the days following its creation. This is a good sign and means that microorganisms are begin to break down the organic matter. A good temperature range of an active compost pile is 120-160 degrees F. To monitor the compost piles temperature a compost thermometer can be purchased⁴, but digging your hand into the pile and judging the temperature can also be adequate, although less accurate. Once the temperature goes above 160 degrees F the pile will begin to go anaerobic and not effectively break down the material. If the pile goes over 160F then it should be turned immediately.

Turning the pile is also done after a pile has heated up, and then cooled down. By turning it you exposed organic material to microorganisms and are

given another opportunity to spray down the pile with water. When turning the pile it is best to spill out all of its contents evenly on the ground using a shovel or pitchfork and then pile it back up again. Introducing new organic material into the pile can be done at this time to heat the pile up again and created a more concentrated, nutrient rich, finished product.

This cycle can be repeated as the microbes in the pile break down the organic matter and the nutrients in the pile become more concentrated. After turning the pile several times, it has cooled down, and you no longer recognize the organic material that has been incorporated into it, the compost is finished. It can now be used a top dressing in your garden beds, tilled into the soil, or used as a medium to start seeds.

¹ A-Team Rentals, 1715 E. 10th, (806) 373-8326

² Natural Fertilizers, 300 E I-40, Wildorado, TX (806) 426-0012

³ Amarillo Chipping Sites, 3401 Broadway St.; 7500 S. Soncy; 34th and Eastern

⁴ Compost thermometer: www.WormWrangler.com, 20' Compost Thermometer

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