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Wading Pool Gardening

"The Low Cost, Low Maintenance, Method Of Extending Your Growing Season"

The Why:
Backyard gardening is an immensely rewarding activity. Cultivating plants is one of the basest skills for making society possible. In being able to grow your own food, you can control the what goes into it, and how it's grown. You have a far larger selection of varieties of fruits and vegetables to choose from. All kinds of heirloom varieties of plants from all over the world are available to the home gardener. One need only look to one of the many seed supply catalogs to view a massive array of genetic diversity available.



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The Why:

Not everybody has good soil in their yard. Good garden soil must often be built over time, andackyard soils can require a lot of additives to improve the character of a soil. Heavy clay soils can be especially hard to work with. Some soils can be rocky and hard to work, and even have things like contaminants in them, things that are hard to remove and may require remediation or outright removal of the soil, which is expensive to say the least. The improvement of in-ground soils is also labor intensive; a lot of physical effort is involved, which can prove daunting for the less physically-abled among us, including the elderly.

The goal of this project was to seek out low cost solutions for this problem. Commercially sold raised beds are a good solution for soil issues, as you can have a good healthy layer above the problem soil, but commercial raised beds can be expensive, the average price ranges above \$100 dollars for a single bed, and D-I-Y wooden raised bed kits will rot over time. Containers are a good option, sharing much of the benefits of raised beds, however, they are often not large enough, and again, share the issue of price.



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The Why:

Through some experimentation, I have found a low cost option for raised bed gardening: wading pools! They're those hard plastic blue pools that are traditionally used for kids to splash around in in the summer. They're inexpensive, with the larger ones being around \$20 in cost. They can be sourced from different places, including dollar stores, big box marts, and toy stores. This is a massive savings compared to the average raised bed garden, and enables one to effectively have 5 large raised beds for the price of a single commercially available raised bed. Additionally through seeing what else is available in similar marketplaces, I have found additional ways of improving the pool planter beyond its base level; by doing a little creative thinking and utilizing other inexpensive materials that are available at the same places the pools are sold. Using something like hula hoops, you can turn the pool planter into a space to grow vegetables over a longer period, by using them as framing for a 'hoop house'. You can use that hoop frame to stretch plastic sheeting across the space, turning it into a mini-greenhouse, which will enable you to keep plants safe from frost. Doing this, you'll get both a head start on growing, and keep plants warmer well into the cooler months of the year. You can use the frames to lay cheesecloth over the hoops, to help plants keep cooler, shade them, and even keep pests off. You can get all this utility for a surprisingly low price. In total, it was \$23 dollars for the pool, hula hoops, and clothespins, and \$47 for the soil. In total everything came in at \$70, not including taxes. Buying 3 bags of pebbles cost \$14, but is optional as you will see. Compared to the base price of a purchased raised bed kit, this is quite a savings.



The Greenhouse Effect in action:



Tomato seedlings were kept safe in the Spring, even as ambient night time temperatures dipped below freezing.



A bucket with a lid on it makes for a comfortable seat to sit and garden at by a wading pool planter, no kneeling necessary.



Shredded cardboard makes for an excellent addition to the bottom of a pool planter, helping to both hold water and provide air pockets for plant roots

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What you'll need:

- **Wading pool** The hard plastic kind (The one I purchased measured 56" across and 9" high)
- **Hula hoops** two of them, the cheaper the quality, the better.
- **Clothespins** 1 pack, will be used to clip plastic sheets to the hoops for the creation of the mini-greenhouse. The clips must open wide enough to clip around the diameter of a hula hoop.
- **Garden Soil** 11-12 cubic feet, this can be bought from a local home improvement store or garden center. (You can shop based on your preferences, organic container mix will be more expensive than the inorganic kind.)
- **Wheelbarrow** This will make the transport of the purchased soil significantly easier. *(optional but recommended)*
- **Rocks** 3 bags (I used rocks on the bottom of the pool planter to help with drainage) *(optional)*
- **Drill** or a **Hammer** and **Nail** Something to make holes with, (you can use most screws in place of a drill bit, just drill it in, then reverse it back out to make a hole) A hammer and nail can be used as well, but make sure the nail is sharp.
- **Twist-ties** *or* **Twine** to lash the hula hoops together. Twist ties proved far easier than tying the hoops together.
- Clear transparent plastic garbage bags It took two of them, after cutting, to cover the entirety of the pool planters in my instance.
- Paper or Shredded Cardboard, this would be added above the rocks on the bottom, or on the bottom if not using rocks. I ended up re-using paper meant to pack stuff away in moving boxes. This is added to both reduce the amount of soil needed, thereby reducing costs, help absorb and retain moisture, and help to stop soil from potentially draining out the side drain holes. (optional but recommended)
- **Compost** you can buy some or make your own. This will be mixed with the purchased soil to add minerals and nutrients and improve the quality of the soil. *(optional but recommended)*



Hula-Hoops and Clothespins



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Putting together the Pool Planter is easy enough, here are the step by step instructions for how to get a wading pool ready for planting:

Step 1 - Selecting a Site

Choose a flat spot that receives lots of sun and place down your pool.

Its not enough to just plop a pool down and fill it with dirt; consideration must be given to the amount of hours of direct sunlight a space receives. If your yard receives little direct sunlight, you'll have to look into growing shade tolerant vegetables. Elevation is also something to consider: if you place a pool on sloped terrain, water in the planter will tend to pool to one side, leading to an uneven distribution of water. If you find you have too much water on one side, you can make additional drainage holes at a lower height.

Step 2 - Drilling drainage holes

Drill holes all along the sides of the pool at an even height.

Drainage is important. Plant roots need to breathe, and roots left saturated in water for too long will essentially drown and start to rot. To help combat an excess amount of water, drainage holes are made on the sides of the planter evenly to help water drain away beyond a certain level. I recommend putting drainage holes on the sides of the pool rather than the bottom, as by having them on the sides, a level of water can be maintained, allowing plants to grow their roots down to a 'water table', which will help reduce the need for watering. In addition, this side drainage should help to reduce fertilizer runoff, as nutrients will remain in that 'water table' instead of being directly washed through the soil if the holes were on the bottom. Be careful about excessive fertilization if you do drill holes on the sides, as it will accumulate.



The eyes of the fish on this pool's pattern made for a convenient marker for drilling nice and even drainage holes.

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Step 3 - Adding the Base Layer

Add your paper and/or pebbles to the bottom of the pool, spreading them evenly. Add pebbles before the paper if you have them. Try to evenly spread the paper material across the bottom of the pool.

Adding a base layer of pebbles can help aid in drainage, and paper will act as both as filler and a water retentive layer. Using a hoe or a stiff rake will enable you to quickly spread out material. If you find your paper difficult to work with, you can dampen it with a hose to make it easier to spread.

Step 4 - Adding the soil

Spread the soil from your bags, mixing them as you spread.

Try to spread a layer out on top of the paper as you go instead of dumping the dirt in one place. This will make further mixing easier, as the paper will be weighed down, and less likely to be pulled out of place when you mix. When the container is halfway full, you can sprinkle on some compost and/or shredded paper to help improve the soil. Keep raking back and forth as you walk around the pool to help evenly mix the soil.



"...spread evenly..."



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"...add compost..."



"...add shredded paper..."



"...mix the soil..."



When you're done, you'll have a garden bed ready for planting.

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Step 5 - Place the hoops

Snap the two hoops in half and press them deep into the soil on the edges of the pool, forming an 'X', then lash them together where they intersect with twist ties.

The hoops used had a seam that made them very easy to break by hand. If your hoops don't have a seam, then you may need to cut them using something like a hacksaw or garden loppers. Once arranged, they can easily be lashed (tied) together where they intersect using twist ties or twine. The hoops provide a lightweight framework for cover materials.

Step 6 - Cutting the plastic sheeting

Using a pair of sharp scissors, cut down one layer of a clear plastic garbage bag all the way to the seam. Then cut the end seam off. The result is a single sheet of rectangular plastic film.

Use something to weigh down the seam end of the bag as you cut, this will prevent it from moving due to the wind, making your job much easier.



"...press them into the soil..."



"...lash them together with twist ties..."

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"...all the way to the seam..."



"...then cut the end seam off..."



The result is one large rectangular sheet of plastic, ready to be clipped onto the hoop frame.

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Step 7 - Securing the plastic sheeting

Lay the plastic sheet across one side of the hoops, and secure it in the middle with a clothespin. Keep adding clothespins along the hoop frame until the plastic is held taut to the frame, then proceed to clip the plastic down around the edges of the pool.

Be sure to clip down the plastic all the way around the edges of the pool. Having someone to hold the sheeting in place while you first clip it will make it significantly easier to do. If your pool has a lip on its rim, then clipping down the plastic sheeting should be much easier. This step's instruction can also be applied to securing shade cloth material like cheesecloth.

With that last step completed, you are officially done! Note that on a sunny day the plastic may keep temperatures inside the mini-greenhouse up to ten degrees above ambient temperatures, so when the weather starts getting warmer during the day, but is still cool at night, be sure to un-clip a section of the plastic to allow the hot air to escape, then re-secure it in evening for night time protection. Once it starts getting hot out, remove the plastic entirely and store for re-use in the fall.



"...secure in the middle..."



"...pool has a lip..."

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The End:
By using this method, your growing window will be lengthened, and if cold hardy vegetables like carrots, lettuce, kale, spinach, peas, etc. are grown in the minigreenhouse, then you can likely extend your harvest into the of winter.

Don't forget to keep plants grown under the greenhouse watered, as when the plastic sheeting is in place, rainwater will not be entering the soil.

Soil costs could potentially be brought down further if the soil is ordered in bulk, or topsoil on site is used and mixed with soil conditioners for use in the pool planter. It is my hope that people will use this technique to help reconnect with the way they produce food, and ultimately how they think about food.

Thank you, and good luck in your gardening.

-Tyler Draves

