

# Weeds getting your garden down? Don't give up yet!

## *Weston County Community Garden weed control trial seeks answers to a weedy issue*

Gardening can be very rewarding! It's cheaper than therapy *and* you get tomatoes. Next to reaping a bountiful harvest, there is little more satisfying than maintaining a relatively weed-free garden. However, sometimes the gardener may encounter a problem beyond just a little weeding. When the weeds have officially taken over, must the gardener admit defeat? Or, is there an alternative?

### **Weeds, weeds, everywhere**

What can be done to reclaim your garden when weeds have been running rampant? When they've choked out everything you neatly planted, transforming that once well-organized and manicured garden into a jungle?

Weston County Community Garden was in that position in 2021. The garden has a total of 60 raised beds ranging in size from 4 ft x 4 ft to 4 ft x 16 ft as well as several hundred feet of tilled planting beds for squash, pumpkins, corn, and other plants too large for the raised beds.

In summer 2021, nearly half of the raised beds were so overgrown that they seemed beyond hope. The tilled beds were more weeds than anything else. From these ruins, our team found a mission for the 2022 growing season: to determine the best approach to taming the weeds.

When you feel like throwing up your hands in despair and walking away, follow our journey as we

seek answers and offer suggestions on how to fight back. While we can't guarantee you will end the war, we offer hope in winning the battle!

### **Trial parameters for the 2022 weed management study**

The term *management* is indicative of the fact that we will never completely be rid of all weeds. Instead, we seek to manage them at an acceptable



*Weston County Community Garden before weed management study.*



*Installation of black landscape fabric in progress.*



*An example of the cardboard and compost treatment.*

level where the weeds won't impede the production of desirable plants and the garden can be maintained with a minimal amount of weeding.

Even with effective management strategies, removal of weeds either by hand or other means is still necessary. As of summer 2021, the Weston County Community Garden beds were not being diligently maintained. The extent of the weed invasion created by this situation provided the perfect opportunity to try multiple strategies for weed management and test their effectiveness.

Of the 60 raised beds in the garden, 21 were selected as those most in need of management efforts. They were set aside for the 2022 growing season to take part in this study. This number of beds allowed for six different treatments with three replications of each and three beds remaining for a control group (which will receive no treatment).

The beds were randomly selected for each treatment and will be evaluated over the growing season. Note that control of weeds with synthetic herbicides was not one of the techniques chosen for this experiment. Final results are to be determined in spring 2023.

## **The plan**

The pumpkin patch and the corn rows will be covered with heavy-duty landscape fabric, using 10-inch stakes as anchors. Holes can then be cut in the fabric to allow for planting. To determine the most effective type of bed preparation, some beds will be tilled before the fabric is placed, while others will be mowed but not tilled before the fabric is applied.

## **Mulching the garden**

A quick online search for “garden weed management” brings up several options that could be classified as mulch. Mulch is any material that is spread or laid over the surface of the soil as a covering. In addition to helping to inhibit weed growth, other benefits of applying mulch include retaining moisture, moderating soil temperature, and increasing the attractiveness of the garden.

Applying organic mulches such as bark/wood (shredded or chipped), pine needles, grass clippings, newspaper, shredded leaves, or straw also has an added benefit: the mulch will slowly decompose, adding to the organic matter in the soil. To combat the weeds in the garden we chose four popular types of organic mulch (mulch composed of items that were once living). We also chose two non-organic weed control options.

The weed management strategies chosen include:

**Organic mulch**

- **Grass clippings:** Dried grass clippings will be used as they are less likely to mold than fresh, or still green, grass clippings. They will be layered about 3 to 4 inches thick. It's important to build the layer of clippings in stages to help prevent them from matting.
- **Newspaper and grass clippings:** The newspaper adds an additional barrier to help prevent weeds from poking through the clippings.
- **Cardboard and compost:** Cardboard adds a more robust weed barrier and the compost provides a growing medium for new plants.
- **Alfalfa hay:** Alfalfa is a good source of nitrogen and provides a layer to help with weed suppression. Be aware that potential concerns are similar to those associated with using grass clippings.

**Non-organic mulch**

- **Landscape fabric:** Fabric provides a tough layer for weeds but still allows sunlight and water to get through. To plant, simply cut holes into the fabric. Mulch is not typically laid on top of the fabric because the fabric prevents it from breaking down into the soil.
- **Clear plastic:** This treatment is referred to as solarization. The idea is to use the heat of the sun to sterilize the seeds in the soil. The plastic should be left on for 4 to 6 weeks before the bed is planted. Avoid disturbing the soil too much after solarization, as this method is only effective at killing seeds in the top 5 inches or so.



*An example of solarization using clear plastic to sterilize the soil.*

**Results**

Ultimately the goal is to reclaim these beds for future use, but the project is also an educational opportunity. This trial will be used as an opportunity to discuss and demonstrate effective weed management for gardeners in the community and a follow-up article will appear in *Barnyards & Backyards* to present the results.

If you would like to follow along on our journey, please visit the Weston County Natural Resource District Facebook page at [facebook.com/westoncountynrd](https://facebook.com/westoncountynrd). Check out [bit.ly/weed-resources](https://bit.ly/weed-resources) for more information about weed identification and control.

Good luck with your own weed management efforts this summer!

.....  
**Caleb Carter** is the district manager for the Weston County Natural Resource District and can be reached at (307) 746-3264 or [ccarter.wcnrd@gmail.com](mailto:ccarter.wcnrd@gmail.com). He's not about to give up on the Weston County Community Garden.