



## Sandoval Extension Master Gardener Newsletter

<http://sandovalmastergardeners.org/>



New Mexico State University • Cooperative Extension Service • U.S. Department of Agriculture

Steve M. Lucero,  
County Program  
Director

Rachel Zweig  
County Extension  
Agent

Sandoval County  
Extension  
PO Box 400  
Bernalillo, NM 87004

Ph: 505-867-2582  
Email: [Sandoval@NMSU.edu](mailto:Sandoval@NMSU.edu)

NMSU and the U.S.  
Department of  
Agriculture cooperating.

**SEMG Newsletter  
Submissions  
Deadline: 25<sup>th</sup> of each  
month**

Please submit news,  
articles, events and  
photographs to:  
[newsletter@sandovalmastergardeners.org](mailto:newsletter@sandovalmastergardeners.org)

Editor:  
Kate Shadock

### From Meg Buerkel Hunn, Advisory Council Chair

### Thank YOU!

Recognizing our look of confusion, a man in a purple vest popped up, seemingly out of nowhere, and pointed our family in the right direction to the group meeting place at the bustling and vast Heathrow Airport last July. Our gratitude (and relief) for his help were palpable. Glimpsing the embroidery on this retiree's purple vest, we discovered our angel-in-disguise was an airport volunteer!



*A volunteer Sunflower – Photo: M. Hunn*

In the summer of 2019, my family's first summer season here in New Mexico, the only tomato plant that survived our best intentions was a volunteer that grew in our compost bin. That tomato plant gave us a handful of delicious red beauties - another volunteer who 'popped up' in an unexpected place with longed-for fruit!

I think it is interesting that we term both humans and plants 'volunteers.' Both the human and the plant varieties of volunteers often seem to 'pop up' in unexpected places and give wonderful gifts.

I am particularly aware in this season of our many SEMG volunteers working throughout our county, seeming to pop up in various places.

to nurture gardens for others' enjoyment, education, and eating;  
to research and answer email and in-person queries;  
to put in hours of unseen labor, coding, posts, and articles to support SEMG;  
to contact and prepare and support our interns;  
to lead garden tours and educational activities in our communities;  
to do countless other small and large tasks!

Master Gardeners commit to volunteering at least 30 hours per year, and many of our volunteers go way above and beyond this requirement.

Sandoval Extension Master Gardeners, you all are angels-in-disguise, educating and helping our communities in sustainable high desert gardening. You 'pop up' all over the place, with wonderful gifts in hand. This is a BIG thank you from me, speaking for many, many others. Without you, SEMG would cease to exist, and our communities would be deprived of your time and talents and efforts and wisdom. I am (WE ARE!) grateful to and for you, Volunteers!

-Meg

## Down & Dirty with Rachel – Sandoval Extension Agent

In mid-September, I returned to rural Morocco to visit friends. Some of them asked me if we had tomatoes, onions, potatoes, collard greens, carrots, etc. in the United States. We do. We don't have as many dates and olives, but we have those, too. When I went out to farms, I found myself asking similar questions but regarding farming methods—and weeds.



*Photo: Rachel picking Tiini Khalid -*

I lived in Morocco for a year-and-a-half in 2017-2019 and had worked on some farms then. This time, however, I saw the farms with new eyes. Do they have drip irrigation? What type? Those are basically waffle gardens. The irrigation ditches are smaller versions of the acequias seen throughout New Mexico. Is that Bermuda grass I see? And Russian thistle? However, weeds may not be the right term for Bermuda grass and Russian thistle in rural Morocco.

As the old saying goes, “One man’s trash is another man’s treasure”. I saw a woman harvesting Bermuda grass in a ditch in front of a school, and a man loading Russian thistle onto a donkey to take home. What we see as noxious weeds they see as free food for their sheep, goats, and donkeys. Someone from New Mexico said that maybe Russian thistle is becoming more problematic because people don't sauté and eat the young plants like they did when her mom was growing up.

Looking at things from a different angle often leads to new solutions. If you have ever played anagrams, a word game (physical or virtual) where you need to create words from a set of letters, you know this. By reordering the letters, you often see words you didn't see before. Some companies bring outsiders onto engineering teams because sometimes it is that “dumb” question that leads to a brilliant, simple solution.

I always enjoy visiting farms and gardens to see different ways of growing vegetables, fruits, and flowers. Different practices work in different settings and for different people. Although I may not learn new things from some gardens and farms, most often I discover at least one tidbit to takeaway. I may not adopt this practice wholesale into my garden but rather adapt it to what works best for me.

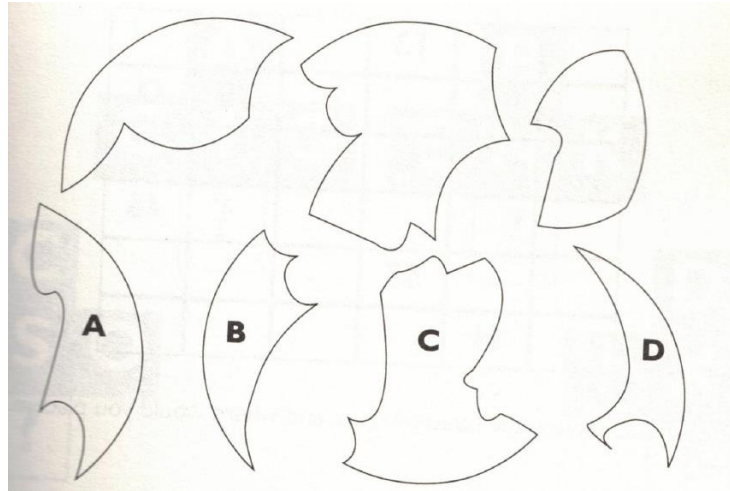
Call this agricultural adaptation, as opposed to cultural adaptation. For example, I created in-ground raised beds in my parents' garden that are similar to those of a farm I worked at. However, I made changes, including to the size of the beds to fit their garden dimensions and larger pathways for easier walking. On the cultural adaptation front, I have learned to just go with the flow and try not to plan too much in Morocco. If someone says they will be there in a half hour, they could show up any time between 30 minutes and two hours later. One consequence of this is that I have learned how to wait without getting exasperated and have been able to transfer this skill to the U.S. My favorite two methods of passing the time are to observe my surroundings in detail or mull over a problem, like the best new technique to try out in my garden.



*Photo: In ground raised beds R. Zweig*

**This month's puzzler:** There is, in the English language, a 7-letter word that contains 9 words without rearranging any of the letters. What is the word? (Adapted from Car Talk.)

**Last month's puzzler:** Which piece is missing to construct a circle? (From Mensa presents the ultimate puzzle challenge, Carter, Russell, and Bremner, 1999).



Answer: B

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### October Garden Checklist

1. Visit your local Growers Market to sample apple varieties
2. Order roses and fruit trees for spring planting
3. Clean and sharpen garden tools. Oil everything metal and wood with vegetable oil and a towel
4. Mulch your roses, or bring the containers of roses into a protected area
5. Water new transplants as long as the ground is unfrozen

Source: *Month-by-Month Gardening: Arizona, Nevada & New Mexico* Jacqueline A Soule,

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## Public Training Opportunities

- ***Ready, Set, Grow***

*Oct. 18 Composting with John Zarola, President and Outreach Coordinator for the Bernalillo County Extension Master Composters program*

- *Nov. 15 Season Extension with Hoop Houses - Title/Presenter TBD*
- *Dec. 13 ANTS! with Dr. Joanie King, NMSU Extension Entomology Specialist*

To register for a class go to: <https://desertblooms.nmsu.edu/grow.html>

Several previous classes are recorded and archived for access. Check out the [Ready, Set, Grow website](#) for those links.

### ***Gardening with the Masters – New Time & New Place***

Upcoming, in-person, classes, held at Loma Colorado Library the 4<sup>th</sup> Monday of the month. The class runs from 6:45 pm to 7:45 pm as the library closes at 8:00 p.m. These classes are not recorded. We encourage you to join us in person, so your individual questions get answered. New Gardening with the Masters classes will be announced here as they are created.

*October 23, 2023 – Strawbale Gardening – Cathryne Richards*

*November 27, 2023 – Poisonous & Peculiar Plants – Sandra Liakus*

*December 25 – No Class – Enjoy the Holiday*

*January 22 – Bee Keeping – Part 2 – Michelle Wittie (September 2023's bee class is NOT a required pre-class)*

### ***Pre-recorded Classes***

Courtesy of COVID, we adapted some of our in-person classes to Zoom, recorded them and they are available at <https://sandovalmastergardeners.org/gardening-classes/gardening-with-the-masters-online/>

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## Garden as though you will live forever.

~ William Kent

# The Advantages of a No-Till Home Garden

By Kathy Wolfe – Washington State University Extension



The practice of tilling the soil has been around since ancient times. Using a hand-held tool like a hoe, or animals, or slaves to turn the soil, has been done for centuries. The simple wooden plough came into existence before the 12th century. In the 18th century the first successful plough was mass produced in Britain. By 1837 the blacksmith John Deere had invented the steel plough, which allowed American farmers to cultivate lands previously too difficult for the wooden plough to manage.

*Photo: John Deere plow - 1838 – displayed in National Museum of American History – Behring Center – Washington D.C.*

By the mid-1880's an agricultural revolution was underway as farmers increasingly used horses and then steam engines to pull ploughs. This allowed for many subsistence farmers, who could grow only enough for their own use, to cultivate more land and become commercial farmers. Once rotary tillers for home gardens became affordable, many gardeners chose to forgo the strenuous hand digging they had done in past springs for the ease of a machine-tilled bed.

But as more analysis has gone into agricultural practices, the tilling method of gardening has come into question and the no-till approach is becoming more popular, especially in the home garden. **One of the disadvantages of tilling is that it disrupts the natural soil structure or the soil food web, which refers to the billions of microorganisms in the soil that create microscopic pathways to transport water and nutrients, increases the soil's ability to drain excess water, while also retaining the proper moisture levels.**

Good soil is made up of approximately 95% water, air, and various forms of minerals (sand, silt, and clay), which sustain plant growth. The remaining 5% is organic matter (anything in the soil that is or was living, e.g., earthworms, nematodes, fungi, bacteria and plant roots). The live organic matter will eventually die and decompose, breaking down into humus and releasing nutrients to feed the remaining living matter. This cycle of growth, death and decomposition provides nutrients at a rate proportional to the plant's needs. During this process, soil organisms create substances that act like glue, binding organic matter, humus, silt, clay and sand particles, creating soil aggregates and improving soil structure. These soil aggregates are tiny clumps that create large and small spaces in the soil which are used as pathways for water, oxygen, and plant roots to penetrate the layers.

## Reducing or eliminating tilling in your garden provides these benefits:

- Slows the decomposition of organic matter, resulting in increased organic matter levels.
- Improves natural aeration, water percolation into the soil and water drainage.
- Retains the current soil aggregates and increases the formation of new soil aggregates.
- Improves crop root development.
- Saves water by holding moisture in the soil longer.
- Increases resistance to wind and water soil erosion.
- Builds the earthworms and other soil organism populations and activity by not disturbing them.
- Helps soil retain carbon.
- Reduces the need to weed by not exposing buried weed seed to light, which they need to sprout, and suppressing weed development with mulch.



## When might it be useful to till your soil?

- A one-time tilling of a new bed to break up compacted soil or sticky clay by incorporating large amounts of organic matter quickly.
- A one-time tilling to remove massive and invasive roots.
- A one-time tilling for a quick change in soil acidity by incorporating limestone or sulfur. This is a rare need for most gardeners.
- A one-time tilling to loosen soil in order to remove thick, large, invasive weeds in a new food garden, and where other organic methods have proven ineffective.

## Converting to a no-till garden

If you would like to convert your garden to no-till, **start in the fall or winter** by finding a sunny location in your yard.

1. Collect necessary organic materials, e.g., wood chips, yard waste, tree leaves, grass clippings and straw. Newspaper and cardboard can be useful to smother grass and weeds. Composted manure is also a good addition.
2. Outline your new beds so you can easily reach any part of the bed from a path while kneeling. **It is important not to compact the soil by stepping into your garden bed.**
3. A 4-foot wide planting area works well. If you are placing your garden in the lawn and are going to use grass as your paths, be sure to make the paths wide enough for your mower.
4. If using newspaper and/or cardboard, place several layers over the garden area and top with 2" - 6" of organic matter. This will hold the bottom layer in place as it degrades. If using organic material only, your mulch layer should be 8" - 10" deep on top of the soil. Over the winter the organic matter will break down and earthworms and other soil organisms will incorporate it into the underlying soil.
5. In spring, push back the mulch layer where you wish to plant your seeds or transplants. For the first year or two, you may need to dig out old roots and add topsoil or compost in the hole where you want to plant.
6. Once the plants are set in and growing, pull the mulch back and reapply fresh mulch around the base of each plant. This will prevent rain splash of soil and plant pathogens onto your lower leaves and conserve soil moisture.
7. Leave the stems of tomatoes, peppers and long-stemmed plants clear of mulch. Compost any dead vegetation you have during the growing season.
8. In fall or winter when the gardening year is done, add your composted dead vegetation and any extra compost you need to maintain an 8" - 10" mulch layer.

By taking time for good planning and prepping, and by layering your beds well, your no-till garden will continue to bring you years of healthy garden growth.

Give this method a try. Your garden and all the critters making their home in your soil will thank you!

Link to full article and references: <https://s3.wp.wsu.edu/uploads/sites/2073/2020/09/No-till-Garden-Advantages.pdf>

## Safe Gardening

*Avid gardeners tout the benefits of gardening, which are many. It's easy to forget gardening also can be hazardous, at least until the gardener is in a doctor's office with an injury or condition that needs professional support. In April, we covered hand safety; in May, avoiding sunburn; In June, preventing heat stroke. In July, various kinds of skin cancer. August covered Muscle cramps, sprains and strains. September covered how to avoid common injuries.*

## Avoiding and Caring For Infections From Gardening

Information from [Medstar Health.ORG](https://www.medstarhealth.org)

From insects and bacteria to improper sitting and lifting, our yard work could lead to an injury or infection. The most common gardening injuries include cuts and scrapes. Other gardening injuries can occur from lawn mower and tool accidents.

It's easy to get small cuts and scrapes on exposed skin while working in the garden. The soil contains bacteria and fungi that are beneficial for plants, but can be harmful for us, and those cuts and scrapes are a gateway for bacteria to enter our bodies. There are two serious infections that can be contracted while gardening:

- Tetanus is an infection that can occur when contaminants found on garden tools or rose thorns enter the body, usually through cuts and scrapes. Symptoms may include weakness, stiffness, cramps, and muscle paralysis, particularly in the jaw. Muscle paralysis in the jaw, also known as lockjaw, can lead to difficulty chewing and swallowing.
- [Sepsis](#) is an infection introduced to the body through cuts and scrapes, particularly when handling soil, mulch, or fertilizer with animal manure. When sepsis enters the bloodstream, your body reacts with an inflammatory response. Sepsis can escalate quickly, leading to life-threatening septic shock and organ failure.

If you have a cut or scrape, the symptoms listed below could be a sign of infection. If you experience any of these, please seek medical attention right away.

- Redness near the irritation site
- Redness that expands beyond the cut or scrape
- Skin that's warm to the touch
- Swollen lymph nodes

It's important to remember, cuts and scrapes can happen anywhere on our body, not just our hands and fingertips. Be sure to wear gloves, long sleeves, long pants, and protective footwear.

## SAVE THE DATE: Saturday 1:00 pm – November 18

### Graduation Celebration for 2023 Interns & Honoring New Life Members

St. Francis Episcopal Church  
2903 Cabezon Blvd. SE  
Rio Rancho , NM 87124

### HELP WANTED #1- Help Line Coverage

We still have need of volunteers to cover the **Helpline**. This is online, from the comfort of your own home. Each week of coverage earns 10 hours of Outreach credit. For more information, contact Penny Lindgren or Sandra Liakus via their email or phone numbers in the member roster.

### HELP WANTED #2 Co-Chair Needed

**Project is Sandoval County Administrative Building Plant Watering/Maintenance**

Backup for watering schedule  
Assistance analyzing plant problems.  
Help resolve plant issues in the building.  
Annual repotting coordination

**Contact Michelle Wittie if you are interested.**

### HELP WANTED #3 Mentors Needed

Master Gardeners, in good standing, are eligible to serve on a Mentor team. The requirements include one hour weekly meetings as well as being responsible for walking Interns through 3 or 4 of the weekly NMSU training videos. Please contact Linda Walsh if you are interested in being part of a Mentor team.

NOTE: As a mentor you cover all your required volunteer hours for the year.

### HELP WANTED #4 Co-Chair Needed

**SANDOVAL SEED SHARE PROJECT**

Seek seed donations from large companies.  
Analyze seeds for viability in Sandoval County.  
Assist in packaging and distributing seeds.

**Contact Michelle Wittie if you are interested.**

