

# Sandoval Extension Master Gardener Newsletter http://sandovalmastergardeners.org/

Meg Buerkel Hunn, Advisory Council Chair

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

Sandoval County Extension PO Box 400 Bernalillo, NM 87004

Ph: 505-867-2582 Email: Sandoval@ NMSU.edu

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

#### SEMG Newsletter Submissions Deadline: First of each mo.

Please submit news, articles, events and photographs to: <u>mailto:newsletter@sandoval</u> <u>mastergardeners.org</u>

Editor: Kate Shadock

### Giving Thanks...



November is a time to take stock of blessings bestowed. What are you grateful for? How do you express your gratitude? What do you overlook - or take for granted? It's a good season to reflect.

I want to express my deep and heartfelt gratitude to the Sandoval Extension Master Gardeners. You all may (or may not!) know that I signed up to become a Master Gardener to try to figure out how to grow tomatoes... we had a gorgeous and very productive vegetable garden in North Carolina, and I was quick to learn gardening in New Mexico is quite different. I hoped for knowledge - which I received. But I also got so much more.

Photo: Meg Buerkel Hunn

I found friends. I found a community who wants to learn. I found people who want to practice sustainable gardening. I found others who want to acquire a new definition of natural (NM) beauty. And I found a place in a group of people who value giving back to our community.

Yes, my tomatoes are better (mostly because I am often gifted with starter plants by other Master Gardeners...) - but I am most grateful that my "roots" here have grown deeper and have been nourished in and by this community. I cherish being a part of something bigger than anything I can do alone.

Here's what we've done, as Sandoval Extension Master Gardeners, so far in 2024:

1. We've made over 1,700 direct contacts with the public, on our email helpline, at growers markets, at festivals and fairs!

- 2. We've escorted nearly 1,000 people through garden tours highlighting sustainable gardening practices in Corrales and Placitas.
- 3. We've raised over 30,000 pounds of food for people in our communities who experience food insecurity.
- 4. We've tended to at least 16 different gardens and projects that have a direct benefit to the residents of Sandoval County.
- 5. We've offered public classes in beekeeping, seed starting, chiles, landscaping with native plants, gardening in raised beds, the unique challenges of a NM Gardener, drip irrigation, preserving the garden bounty, winter sowing, and sustainability thus far this year.
- 6. We've volunteered nearly 6,000 hours for and in our county! Not that everything is worth money, but when you multiply this by the 2024 volunteer hour rate (as set by the federal government), this amounts to over \$200,000.

To be certain, this is a group effort, undertaken by our nearly 200 Sandoval Extension Master Gardeners along with our 30+ 2024 Interns who graduate this month. Thank you, to each and every one of you - you make a difference in our community, in others' lives, and in my world. Thank you.

~ Meg Buerkel Hunn

"When gardeners garden, it is not just plants that grow, but the gardeners themselves." Ken Druse

#### **NOVEMBER GARDEN TIPS**

- **1.** There is still time to plant garlic until first hard freeze (how to ideas on pages 4-7)
- 2. Force indoor bulbs Paperwhites do not require a chilling period before they bloom
- 3. Organize your seed packets to know what to order for the next garden season
- 4. Order seed and rose catalogs to find new treasures to grow
- 5. Update your Garden Journal with the wins and misses from this year's garden

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

# Public Training Opportunities

# Ready, Set, Grow 2024 schedule

November 20, 2024 - "Hydroponics for the Home Gardener: Systems, crops and tips for novice growers" with the NMSU Plant & Environmental Sciences Department's Rachel Gioannini, Associate Professor, Horticulture December 18, 2024 - "Climate-Ready Trees: Planting Smarter for a Warmer and Shadier Future" with Dr. Marisa Thompson, NMSU Extension Urban Horticulture Specialist.

# **Gardening with the Masters - Loma Colorado Library**

Fourth 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 scheduled.

November 25 – How To Fill Your Spice Cabinet From Your Garden - Monica Sherman December 23 – Propagating Houseplants – Michelle Wittie January 27 – Flower and Garden Photography: Tips and Techniques – Mike Stoy February 24 – Butterfly Clustering for the Home Gardener – Teresa Harner

**Pre-recorded Classes** Courtesy of COVID, we adapted some of our in-person classes to Zoom, recorded them and they are available at <u>https://www.youtube.com/watch?v=QUzZfueVHWY</u>

# "Gardening is the <u>art</u> that uses flowers and plants as paint, and the soil and sky as canvas." ~Elizabeth Murray

# Growing Garlic – Fall Planting

## Compiled from: 1. Stanley Crawford blog in New Mexico Magazine

2. <u>Stephanie Walker NMSU guide</u> H-234

3. How To Grow Garlic In New Mexico - HOW-TO-GROW.ORG

First of all, New Mexico is an excellent place to grow garlic. The altitude still gives us cold winters most years, keeping down pressure from insects and diseases, a plague in warmer climates.



Photographs by Douglas Merriam

Plant away. Do it in the fall—September, October, November **before the ground freezes.** Break each bulb into cloves and plant the cloves about six inches apart, two inches or so deep, in soil enriched with compost and/or manure. The spiciness of garlic comes from sulfur, and generally there should be enough of that element already in the soil, though the addition of a small amount in order to acidify our alkaline soils will serve to release other minerals. Keep it damp; don't let the soil dry out.

# Suggested Varieties For New Mexico per NMSU Guide H-234

There are generally two types of garlic: those that send up a seed stalk (hardneck varieties) and those that don't (soft neck varieties) Under certain conditions, softneck varieties can send up a seedstalk, especially if stressed for water or damaged by freezing weather. Hardneck (subspecies *ophioscorodon*) types like Rocambole and Continental usually do better in colder climates and are larger and easier to peel.

Softneck (subspecies *sativum*) types like Silverskin and Artichoke have been cultivated over a longer period of time and tend to be better adapted over a great range of climatic conditions. Softneck types also tend to hold up better in storage due to their tighter skins.

Below is a suggested list of varieties a new garlic grower may wish to consider. Varieties should be evaluated in the first year to determine their adaptability, yield potential, and quality characteristics for a particular climate and market.

# Rocambole (Hardneck)

**'Spanish Roja'**—6 to 13 cloves per bulb; cloves brown to reddish purple; cloves easy to peel; very popular.

**'Carpathian'**—6 to 10 cloves per bulb; large, uniform bulbs; bulb wrappers have purple blotches; mature one week earlier than 'Spanish Roja'; hot and spicy garlic flavor.

**'German Red'**—10 to 15 cloves per bulb; very vigorous, large, deep green bulb; cloves light brown with some purple at base; hot, spicy flavor.

## Artichoke (Softneck)

**'Inchelium Red'**—4 to 5 clove layers with 8 to 22 cloves per bulb; bulbs over 3 inches in diameter possible; mild lingering flavor.

**'California Early'**—4 clove layers with 10 to 22 cloves per bulb; cloves tan to off-white with pinkish blush; mild, slightly sweet flavor.

**'Chet's Italian'**—4 clove layers with 10 to 20 cloves per bulb; cloves milky white or yellowish; mild flavor; severe cold gives it a stronger taste.

## Silverskin (Softneck)

**'Mild French'**—4 clove layers with 13 to 16 cloves per bulb; cloves vary from reddish-pink blush on yellow-white background to pink-brown; better adapted to hot, dry climates; sharp taste when raw but simple, smooth, nutty taste when cooked.

**'Silverskin (S&H)'**—15 to 20 cloves per bulb, usually in 5 layers; cloves off-white to tan with pink blush; good producer of large bulbs; mild and sweet taste at first but can be hot.

## **Elephant Garlic**

Elephant garlic, or greatheaded garlic (*Allium ampeloprasum*), is not a true garlic; it is closely related to the leek. It does, however, produce a segmented bulb similar to a garlic bulb with a mild garlic flavor. It grows well in mild to moderately cold areas. Cloves should be planted in the fall only slightly farther apart than true garlic.

# Top-Setting Garlic (Hardnecks) – Long Term Planting

Top-setting garlic can be propagated either from cloves or bulbils. Bulbils should be planted in the late winter or early spring in a **location where they can remain undisturbed for 1 1/2 years**. In the fall of the first growing season, bulbils will form larger unsegmented bulbs called "rounds." Left undisturbed, rounds will form segmented bulbs the following summer.

Top-setting garlic will form seedstalks in the late spring. What appears to be a single leaf will emerge from the center of the plant. This hollow stalk will reach 2 to 3 feet tall and form one or more coils on the end of the stalk, terminating in a heart-shaped spathe. Seedstalks can be removed when they form to force more energy into the developing cloves. Growers wishing to produce bulbils should leave the stalk undisturbed.

**The best way to obtain planting stock** is from a local grower, who will have acclimatized the plant. Garlic is phototropic, meaning it is sensitive to day length, but it adapts fairly rapidly to changes. Garlic reproduces by cloning, not by sexual reproduction, meaning that the "varieties" are, in effect, landraces—cultivars that have adapted to the soil and water and climatic conditions of this or that particular area. All garlic ultimately originated in the Caucasus.

### Soil And Fertilizers

Garlic grows best in a rich, deep, well-drained sandy loam to clay loam soil with a pH between 6 and 8. Heavier clay soil should be avoided because bulbs may become misshapen and are harder to dig. Garlic is a heavy feeder, and a soil analysis should therefore be taken before planting to determine soil fertility levels. In New Mexico, the main fertilizer needs are phosphorous and nitrogen.

All phosphorous fertilizer should be banded 2 to 3 inches directly below the cloves before or at planting time. Fertilizers containing any nitrogen should be banded below and to the side (2 to 3 inches) of the cloves. When the fertilizer is banded, 75 to 100 lb./ac of  $P_2O_5$  (0.17 to 0.23 lb./100 sq ft) are adequate; when broadcast and incorporated, higher rates may be needed.

A light application of nitrogen fertilizer (25 lb./ac of elemental nitrogen) incorporated into the beds before planting is sufficient to get bulbs off to a good start in the fall. Additional nitrogen fertilizer should be applied in the spring at a rate of 100 to 150 lb./ac (0.23 to 0.34 lb./100 sq ft) of elemental nitrogen. Apply the nitrogen in split applications (30 to 50 lb. increments) at 3 to 4 week intervals beginning when plants emerge in the spring. Lightly incorporate the fertilizer in a band of 4 to 6 inches to the side of the developing plants and irrigate immediately after application. Nitrogen can also be applied in irrigation water.



Above: Garlic Planting Steps. Create divots, fill with cloves, and lightly rake over them.

### Plant Development

Garlic cloves require a period of 6 to 8 weeks of cool weather (below 40°F) after planting to vernalize the plants so they will form bulbs. During the fall and winter, cloves will develop their root systems and initiate some top growth.

By early spring, the clove will have swelled considerably, forming a globular bulb with many fine roots. A pair of intertwined leaves will emerge from the terminal end of the bulb and will eventually break through the soil between February and April, depending on the weather and location. Emergence may be uneven. As the weather warms, leaf development will accelerate with flat, dark green leaves reaching a height of 1 1/2 feet or more. Keep plants well-watered.

As temperatures rise and day length increases, bulb formation begins. Do not apply any more fertilizer after bulb formation begins. In June to early July, leaves will begin to turn brown, and tops will fall, indicating maturity. Irrigation should be terminated at this time to avoid bulb discoloration and bulb rots. To ensure bulbs are fully mature, remove the top layer of soil from the top of a few bulbs and check to make sure the bulbs are fully divided into distinct cloves (differentiated). Digging bulbs prematurely can result in spoilage during storage, while waiting too long can result in disease and/or discoloration of the bulbs.

### Harvest And Marketing

In sandy soils, bulbs can generally be pulled by hand or dug with a garden fork. Growers may wish to run a cutter blade or rod weeder below the bulb to cut the roots, particularly on clay soils.

After pulling, garlic may be cured in several ways. Smaller growers may wish to store and market garlic as a "ristra" by braiding leaves into a rope or wreath. After a week of drying, the tops and roots can be trimmed. Garlic is best stored at a temperature of 32°F. Unless specified, bulbs should be at least 1 1/2 inches in diameter.

Each clove will produce a new bulb containing 5 to 16 new cloves. Growers saving cloves to plant next year's crop will therefore have to hold back 10 to 12% of their crop for planting stock. The actual percentage will depend on the variety and the quality of the bulbs as well as the total acreage to be planted.

## Pest Control

Garlic is susceptible to most onion diseases, including Botrytis, pink root rot, powdery mildew, and purple blotch. Good sanitation and **long-term crop rotation** are important, as well as the application of appropriate fungicides when necessary.

Onion thrips can be a major problem with garlic. Garlic growers should also scout for damage from cutworms, cabbage loopers, and wireworms. Check with your local county Extension agent for appropriate control measures.

Garlic has a very shallow root system. Like onions, it cannot withstand weed competition. Cultivation should be very shallow to prevent root damage. Pre- and postemergence herbicides are also available for weed control.

> https://www.newmexicomagazine.org/blog/post/garlic/ https://pubs.nmsu.edu/\_h/H234/ https://how-to-grow.org/sp/v/garlic-in-new-mexico

Excerpt from Ocean Robbins, Food Revolution Network · Published May 15, 2024

### Summary

Gardens can produce food. The act of gardening gives us far more than just calories. Gardeners tend to be healthier, happier, longer-lived, and more socially engaged than non-gardeners. Why is that? What kind of gardening, and how much of it, produces the biggest health benefits?

Gardening can get you outdoors and connected to nature. It produces fresh, tasty, and healthy food from tiny seeds and seedlings. **Gardening is good exercise and can be fun.** It can positively impact your physical and emotional health. It can be good for the planet — supporting soil regeneration and the "local foods" movement. You can garden on a large property or in a few pots and containers on a windowsill. Talk about win-win.

# Whatever the initial motivation, many people who garden <u>report better moods</u> and greater life satisfaction than non-gardeners.

The physical and psychological benefits are so striking that some doctors are now <u>prescribing</u> <u>gardening</u> as part of a "green prescription" to improve mental health. Let's examine the ways by looking at three categories: physical health, mental health, and communal and social well-being.

# **Physical Benefits of Gardening**



Photo: iStock.com/adamkaz

### **Exercise and Activity**

Gardening is a form of moderate exercise that can be an enjoyable way to increase your fitness and activity level. **Depending on what you're doing bending, digging, hoeing, raking, weeding** — **you may engage a bunch of different muscle groups, build core strength, and improve your agility and flexibility.** It's kind of like yoga, but with "pulling carrot" pose instead of down dog.

Gardening for most people, is a low-risk physical activity. Because of the many and varied movements required, it's less likely to cause a repetitive stress injury the way that exercises like running can.

The guidelines identify "heavy gardening" (which can include shoveling and wheelbarrowing large amounts of soil, amendments, and mulches) as a form of strength training, which can increase bone density and muscle strength. Gardening at a moderate level can also serve as cardio exercise.

## **Nutritional Gains from Gardening**

One of the other great health benefits of gardening. To quote "Gangsta Gardener" <u>Ron Finley</u>, "If kids grow kale, kids eat kale." In other words, people who grow food in their gardens are <u>more</u> <u>likely</u> to include fruits and vegetables in their diets. And partly on account of freshness, **the food you grow yourself is probably going to be of higher quality than equivalent store-bought produce.** You'll receive the benefits of the crops' potential for <u>higher nutritional</u> <u>content</u>, <u>absence of pesticides</u>, and lower risk of <u>microbial contamination</u>.

Gardening can also improve your nutritional prospects if you are subject to <u>food insecurity</u>. **Having** your own local food garden can <u>protect</u> you against compromised access to healthy food, and can supplement what you're able to buy.

Gardening can also give your body a chance to synthesize <u>vitamin D</u>, the "sunshine vitamin," during **mindful** sun exposure while you're outdoors. "Mindful" because there are risks of overexposure. You don't need a huge amount of time or lots of exposed skin to get the benefits during long spring and summer days. Getting enough vitamin D is important for bone health and a well-functioning immune system.

## **Gardening for Disease Prevention**

All these benefits of gardening aren't just theoretical; they show up in the health outcomes of real people. A 2023 study of almost 150,000 US adults 65 years and older <u>found</u> that those who gardened had, on average, better cardiovascular health and less risk of developing type 2 diabetes. They were also 60% less likely to die over a 10-year period, which is pretty impressive!

It's not just cardiometabolic health that's improved by gardening, however. Being out there in the dirt, among all its little critters (that's a fancy word for "microbiota"), can <u>increase the diversity</u> of your <u>skin and gut</u> microbiome. And greater microbial diversity can help fight immune system disorders and the development of chronic disease.

# **Mental Health Benefits of Gardening**

### **Stress Reduction and Relaxation Benefits**

Many who garden will tell you all about how relaxing and good for the soul gardening is. It's not all in their heads, either; there's more and more evidence coming out about how gardening can significantly reduce levels of <u>stress</u> and <u>anxiety</u>.

Gardening can help people who are dealing with challenging living situations. A 2021 study of more than 200 caregivers of people with dementia <u>found</u> that **those who gardened had fewer symptoms of depression, anxiety, and stress than those who didn't.** A <u>number of</u> <u>studies</u> have also found that gardening may alleviate some of the mental stress caused by living with Post-Traumatic Stress Disorder (PTSD).

### **Brain Health Improvement**



Gardening also can positively affect the physical brain in ways that benefit emotional health and mood. **Senior** citizens who garden show

increased <u>neurotransmitter metabolism</u> (including serotonin, the "calm and happy" molecule) and production of <u>brain-derived neurotrophic factor</u>, which, since we're talking about gardening, you can think of as fertilizer for neurons.

A 2020 meta-analysis of eight studies concluded that gardening can help people with dementia manage their

symptoms and live fuller, more satisfying lives. The studies show that gardening reduced emotional agitation and helped people spend more time engaged in activities.

### **Emotional Well-Being**

Gardening can increase how happy people feel and how satisfied they are with their lives. Another meta-analysis study <u>found</u> that communal gardeners (people participating in community gardens) had greater "life satisfaction, happiness, general health, mental health, and social cohesion" than their neighbors who were not involved in the gardens. Interestingly, **a 2020 study <u>found</u> that vegetable gardening produced greater improvements in emotional well-being than ornamental gardening.** 

What's the minimum "dose" of gardening that's been found to produce these wonderful results? A 2023 study of adults in Brisbane, Australia, <u>found</u> that the magic number for full benefit was 150 minutes of gardening per week, **which is two and a half hours**. And the effect was even more pronounced in seniors over the age of 64. Even spending a couple of minutes on gardening now and then — for example, growing sprouts on your windowsill once a month — can still confer some lovely effects.

### **Increasing Social and Community Wellness with Gardening**

There's really no such thing as a healthy cell in an unhealthy body. Healthy humans require healthy communities. When it comes to building healthy communities, there's nothing like a garden to get people working, playing, and sharing together.

### **Fostering Connections**

Especially in shared spaces like <u>community gardens</u> gardening fosters connections and combats loneliness. A 2022 literature review <u>found</u> that **simply living near green space in an urban setting could significantly reduce loneliness among residents.** A 2021 study also <u>collected</u> <u>stories</u> from participants in community gardens and identified a narrative not just of accomplishment but empowerment. That is, the community garden helped people take greater control of their lives and have a greater impact on the wider community.

### NOVEMBER 2024

### **Providing Educational Opportunities**

Gardens also afford educational opportunities to those who work in them. Anyone who puts a seed in the ground and takes care of it naturally learns about the science of plants, and can contribute to "citizen science" by experimenting with innovative ways to do it better.

### Those who garden tend to adopt other pro-environmental behaviors

School gardens also provide compelling learning opportunities for children. If you did the "bean in the paper cup" activity in kindergarten, do you remember how excited you were for the first bit of seedling to emerge from the crumbly dark loam?

In addition to kindling a love of learning through the magic of life, school gardens are associated with other positive outcomes. <u>Kids who garden</u> tend to eat more fruits and veggies, thereby consuming more dietary fiber and vitamins. They also have higher well-being, as evidenced by better social skills, more confidence, and a strong feeling of belonging.



Photo: iStock.com/litiumcloud

Not only do people who garden know more about plants and eat more of them, but they actually <u>prefer eating fruits and vegetables</u> more than non-gardeners, too. That's a huge deal because it means their plant-eating isn't just a temporary thing caused by proximity to a garden. Since it's a preference, it's likely to get reinforced and strengthened throughout their lives.

### Give Gardening a Try — for Your Health!

Gardening significantly benefits people's physical health, mental and emotional well-being, social connections, and overall life satisfaction. The act of gardening can connect us to the earth, our communities, and ourselves. It teaches patience, care, and the value of nurturing life in all its forms. The benefits we reap from gardening reinforce the idea that when we care for our gardens, we are, in turn, caring for ourselves. And as we do so, we are working together to cultivate a greener and more sustainable world.

Full Article link: https://foodrevolution.org/blog/why-is-gardening-good-for-you/

"The greatest service which can be rendered any country is to add a useful plant to its culture." ~Thomas Jefferson

# SEMG Members & Interns: It's That Time Again! Meg Buerkel Hunn,

Advisory Council Chairs, SEMGs, and 2024 Interns: Please be on the lookout for an email survey designed to collect the hours you have given to SEMG in 2024. Each MG needs to complete annually a minimum of • 10 hours of Continuing Education (earned either by attending the SEMG Intern Training classes or approved continuing education classes) • 20 hours of Volunteer work - this can be in project gardens, at information tables, on the email helpline, on committees, doing administrative tasks for the organization, etc. • 10 hours of Outreach - this is volunteer work that occurs directly with the public: helpline, information tables at Growers Markets and other public events, as well as answering questions during Placitas / Corrales Garden Tours. These hours are reported through our Extension County Director to our funding sources (the USDA, to NMSU, and to Sandoval County) - and show the impact of Master Gardeners in our county and across the state.

In 2023, SEMG had 195 Master Gardeners who volunteered over 9,000 hours in our communities (a value of more than \$300,000). We helped educate our neighbors about the most up-to-date methods of sustainable gardening in the high desert through classes and demonstration gardens, and we raised more than 58,000 pounds of produce for our neighbors who experience food insecurity!

A reminder that all SEMGs (except Life Members) are required to submit their hours and dues on an annual basis. Life Members are encouraged to submit their hours, and may submit dues as a donation. A SEMG who neglects to pay the annual \$25 dues will be moved to Inactive Status, and will not be eligible to vote that calendar year or receive the website password.

A SEMG who is unable to complete their necessary volunteer hours (due to illness, caregiving, education, military service, etc.) will automatically be placed in Leave of Absence status. If they have paid their dues, they will remain in Active Status and may still vote and receive the website password. All years spent on Leave of Absence and/or Inactive do not count towards the 15 years needed to obtain Life Membership.

For more information, please see our Membership Policy Document posted at: <u>https://sandovalmastergardeners.org/wp-content/uploads/2023/08/SEMG-Membership-Policies-August2023.pdf</u>. Your \$25 annual dues for 2025 may be paid via the PayPal link on the website and/or mail a check to SEMG Sandoval County Extension P.O.Box 400, Bernalillo, NM 87004 by December 31.

The 2024 Intern training fee INCLUDES your 2025 dues; 2024 Interns do NOT pay 2025 dues. Voting for 2025 SEMG leadership (Chair, Vice Chair, and Treasurer) will take place in late 2024.

# **HELP WANTED #1 – Help Line**

**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 Sandra Liakus via email or phone number in the member roster.

# **Reminder to Members & Interns**

Throughout the year, SEMG provides several opportunities for interns and members to visit public gardens with a guide, labs where garden research is undertaken and commercial locations that are not accessible to the public. Sometimes we even get to tour private gardens with the designer and/or homeowner to see and hear why they made the design decisions. These opportunities are most numerous in the early spring when both gardens and gardeners are resting.

To be current on these openings – keep an eye on our website, in the MEMBERS ONLY section called **PROJECTS AND VOLUNTEERS**. Some of these sessions are initially available only to Interns; and will be open to members, if there are spaces left towards the end of the sign up period. Some are only available to members as part of their advanced training.

On this same link is an ever changing list of volunteer opportunities where we can give hours to in order to both fulfill our requirements for the year and to learn more about SEMG's support of Sandoval County residents.

"The garden suggests there might be a place where we can meet nature halfway." ~Michael Pollan