

# Santa Fe Extension Master Gardeners Newsletter



Chard grows well in a fall garden.

## Fall Vegetable Gardening

By Jannine Cabossel

It's hard to believe it's already August. We've had plenty of hot days to contend with this summer here in Santa Fe. This month temperatures start to drop and daylight hours begin to get shorter, making it a great time to plant cool-season crops, like the ones we planted in spring.

As we begin to harvest our warm-season crops, like tomatoes, we can think about starting our fall gardens. No rest for the wicked! Some people may be too burned out to start more plants, but many of the best crops do well in fall. We can even plant a last crop of bush green beans that can be harvested before the first frost. Beans are a warm-season crop, but you can sneak in bush beans like Contender and Provider, which have shorter days to harvest. These crops grow quickly in August to provide beans in September.

At this time of year daylight hours shorten by about two minutes a day, and fall crops may take a little longer to mature, so get them in soon. If you haven't already planted carrots and beets in July, do it as soon as possible. Other cool season crops—like lettuce, mesclun, chard, spinach, scallions, radishes, peas, arugula, bok choy, mustards, and other Asian greens—can be planted by seed throughout August. When planting by seed, look for those varieties that have shorter “days to harvest” on the packet. Pick something that takes around 60 days or fewer to harvest so you'll get a chance to eat some of the crops before a freeze sets in, usually in October.

Other crops that do well in the fall, like broccoli and cauliflower, should be started with transplants, available at nurseries. And if you procrastinate, you can still plant by buying most of the other crops listed above as transplants up into early September.

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Kale is a great fall crop to grow.

I've already planted peas (right on top of spring's crop), as well as spinach and lettuces by seed. I have enough cabbage, bok choy, chard, kale, and beets growing from spring to take me into fall; you decide which crops you want to try. As a bed finishes up with warm-season crops, you can put in your fall crops, or just tuck them in wherever there's room. Don't forget to plant garlic bulbs in mid-October to get an early crop in late June. Garlic planted in October yields bigger heads in early summer.

You might want to print this handy [fall vegetable planting schedule](#) I created for Santa Fe (Zone 6a).

**Resources:**

Coleman, Eliot. *The New Organic Grower* (Chelsea Green, 1995)

Jabbour, Nikki. *The Year-Round Vegetable Gardener* (Storey, 2011)

Photos by Jannine Cabossel/[giantveggiegardener](#)

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# Message from the President

by Wendy Wilson

Seeds of hope, seeds of beauty, and seeds for sharing. This week, while I have been tidying up the garden, I have also been collecting seeds. I have yellow columbine, sherbet-colored poppies, Santa Fe orange poppies, foxglove, and penstemon. It's hard to believe that these tiny seeds will grow to substantial plants, bursting with bloom. Right now, and I do mean right now, isn't it time to look toward the future? I'm exhausted with worry and uncertainty. I'm lonely for friends. I bet some of you are too. So, as the SFEMG group, let's look ahead.



2020 SFEMG Board President Wendy Wilson

Barbara Ellis, Tom Dominguez, and Dr. Servin (our NMSU representative) have been hard at work on a proposal to revamp the intern program. They would like the presenters to record their presentations and then lead an interactive class while in Santa Fe. There would be time for questions and answers, tutoring in research-based methodology, small-group activities, and hands-on interactions with class and project leaders. Our interns deserve a more exciting and meaningful experience to boost their confidence and give them real-life examples of how class topics apply to Northern New Mexico gardens.

Join our second "Cocktails in the Garden" Zoom event (the first was July 31). Karen Browne-Armijo has arranged lovely evenings for us on the last Fridays of August and September. SUG invitations have been posted. Karen will forward a cocktail recipe to you (of course, a non-alcoholic version is available), send you the Zoom link, and sign you in. Please come join us to "visit" with friends, see a beautiful garden, and drink a cocktail. If you'd like to volunteer your garden, please contact Karen.

Planning for next year, I'd like to encourage you to submit your name, or the name of someone you think would be qualified, for one of our open board and project leader positions. The list of available positions is on the [Members Only](#) section of the SFEMG website. Our organization is dependent on members taking up the call to lead. We need you to take our organization forward. The members that currently hold those positions would be pleased to discuss the demands and benefits of their position. Candidates may submit their names to Christine Hauschel ([chauschel@yahoo.com](mailto:chauschel@yahoo.com)).

Finally, our dear Master Gardener friend Barb Funk passed away in late July. If you'd like to share memories about Barb, please submit them to Karen Browne-Armijo ([kebrowne@hotmail.com](mailto:kebrowne@hotmail.com)). We'll have a memorial in the September newsletter.





Rainstorm over eastern New Mexico.  
Photo by Leaflet via Wikimedia Commons.

# The North American Monsoon System

by Peggy Rudberg

Recent rains have signaled the start of our monsoon season. The word *monsoon* has multiple possible sources, from the Arabic word *mawsim*, meaning season, or from the Dutch *monssoen* or the Portuguese *monção*, terms used by sailors to describe the seasonal shift of prevailing westerly summer winds that transport moisture from the Indian Ocean, resulting in heavy rains in South Asia. This term has been expanded to encompass seasonal shifting wind systems globally, including those that occur in New Mexico, historically from mid-June through the end of September. The American Southwest wind shifts that create precipitation are called the North American monsoon system (NAMS).

Every 365.25 days our spinning Earth revolves around the sun, our source of heat and light. Because Earth's axis is tilted at 23.4°, the strongest perpendicular rays strike the Earth's surface in different places at different times of year. In the American Southwest, the solstice near June 21 is when we are at maximum tilt toward the sun.

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*The North American Monsoon System —cont. from page 4*

Air over land heats and cools faster than ocean air. Uneven heating between sea and land is what creates changes in wind patterns. As Earth reaches the June solstice, the sun heats the Northern Hemisphere, warming New Mexico and its atmosphere. As air heats, it expands and molecules become lighter and less dense. As the heated air rises, winds lose velocity and the polar jet stream that guides our westerly winter winds drifts northward, shifting prevailing winds over New Mexico to weaker south or southeasterly winds. This creates an updraft, allowing the cooler, heavier moist air needed to produce rain to move in from the tropics. Weaker winds produce less predictable localized storms.

Weather is variable and monsoons are no exception. NAMS begins in May and June, with rainfall over southern Mexico. The storm systems spread northwest towards the Gulf of California, where southerly winds draw it into the American Southwest. Favorable climatic conditions support a continuing series of thunderstorms. Northern New Mexico is at the northern boundary of NAMS, and many factors can affect whether the core region shifts to the north or south. Some of these factors are how much atmospheric moisture is available, low- and high-pressure systems that can steer NAMS into or away from northern New Mexico, and extreme weather events such as tropical storms, floods, and severe wildfires.

New Mexico is in a drought, with inadequate snowpack to provide spring runoff to recharge groundwater and replenish lower-elevation rivers. Higher temperatures have accelerated low humidity and evaporation rates, resulting in less consistent wind shifts with more erratic timing of rainfall. Our summer monsoon season provides 30 to 40 percent of New Mexico's annual rainfall, but NMSU's Climate Center predicts below-average precipitation this summer for east and central northern New Mexico and possibly a warm, dry winter. Harvest whatever water you can and plant xeric.

**References:**

National Weather Service, [2020 Monsoon Outlook](#)

National Weather Service, [The North American Monsoon](#)

USDA Cooperative Extension: Climate, Forests and Woodlands, [How Does the Monsoon Work?](#)



## Mojave Sage (*Salvia pachyphylla*)

by Sarah Baldwin

Native to higher elevations in California, Nevada, and Arizona, Mojave sage is a relative newcomer to Northern New Mexico, where it is proving itself to be a desirable garden plant. Once you've seen *Salvia pachyphylla* in full, glorious bloom, you don't forget it. I first witnessed the plant at Santa Fe Botanical Garden, where numerous specimens flourish in the driest parts of that landscape. The shrub's oblong, silvery leaves are evergreen and intensely fragrant. The floral show begins in June, with robust purple bracts and tiny blue tubular flowers, and continues into early autumn.



This exceedingly tough plant withstands our bouts of extreme cold, fierce heat, and prolonged droughts. Its nectar is relished by hummingbirds and other pollinators, at a time when more abundant spring-blooming plants have packed it in for the season. From late fall through winter, the blue-grey foliage adds interest to the dormant garden.

**Landscape use:** *Salvia pachyphylla* makes a good companion to penstemons, agastaches, yuccas, agaves, and other native and neighboring-native plants. At the botanical garden, it looks gorgeous set against the deep green foliage and white, lilac-like blooms of fernbush (*Chamaebatiaria millefolium*). Position it where you will brush against it, releasing its scent. It can be used on slopes for erosion control.

**Planting and care:** Plant in lean, sandy soil, with plenty of room around it, and mulch with gravel. Mojave sage will not tolerate soggy soil and does not like to be cramped. It can take a bit of shade but will flower better in full sun. Water sparingly, even as it is getting established. Once established, the plant will get by with little to no supplemental irrigation, although it appreciates a soak every few weeks during the hottest, driest periods.

**Propagation:** Can be propagated with cuttings.

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Mojave Sage—cont. from page 6

**Plant type:** evergreen shrub/sub-shrub

**Bloom time:** early summer into fall

**Size:** 1–2 feet tall x 2–3 feet wide

**Sun:** full sun

**Soil:** sandy, well-drained

**Water:** low

**USDA Zones:** 5–9

**References:**

Phillips, Judith. *Growing the Southwest Garden* (Timber, 2015)

SNaPP, [A Guide to Native Plants for the Santa Fe Landscape](#) (2019)

Photo by Sarah Baldwin



## Vermicomposting

by Madeline Pryor

Are you cooking more and creating more food scraps? Cringing at the mounting pile of brown paper grocery sacks while unable to BYOB at the store? Are your kids getting bored? Vermicomposting, or composting with worms, could be a rewarding addition to your current stay-at-home lifestyle.

Even though the Santa Fe Compost Action Team (SCAT) cannot conduct our usual monthly compost clinics for the time being, we want to support your home composting.



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*Vermicomposting—cont. from page 7*

Home vermiculture has the benefits of being:

- space-saving (little to no backyard required);
- back-saving (worms do the turning);
- landfill-saving (about 22 percent of materials in landfill are food waste); and
- kid-entertaining/teaching (the worm bin is always a favorite of kids at SCAT educational events).

To create a worm bin, collect and weigh your food scraps for one week. The amount of scraps will determine what size bin you should get. A general rule of thumb is one pound of food scraps per one square foot of surface bin space, requiring a half a pound of worms. In ideal conditions, red wigglers eat their weight in food daily. We recommend starting with half that amount because conditions may vary and worms will reproduce quickly to fill their available space. For example, if you collect 7 pounds of food scraps in one week, you will need a bin with 7 square feet of surface and 3.5 pounds of red wigglers. Red wigglers, the most common compost worms, are surface feeders—unlike earthworms, which live deeper in soil—so a bin depth of 8 to 12 inches is sufficient. The worm bin at the SCAT demonstration site is built of six straw bales with a surface of about 10 square feet and a depth of about 14 inches. Ideally, the worms in this bin will eat 10 pounds of food scraps per week. During winter months, however, when worms are sluggish, they consume about half the amount they do in warmer months.

Your bin can be made of straw, wood (non-treated), concrete, or plastic. It can be a single layer or tiered. NMSU's online guide to vermicomposting ([Guide H-164](#)) gives detailed instructions for constructing an outdoor bin. Or check out SCAT's [The 'Almost Free' Homemade Worm Bin](#) to learn how to convert an inexpensive simple plastic tub into a worm bin. My home bin is made of recycled plastic, has three tiers, and measures 1 x 2 x 0.6 feet, for a total of 6 square feet of surface. It lives year-round in my garage.

You need to place the bin in a suitable location for the worms. The optimal temperature for them is 40 to 80 degrees F, similar to humans. They are light-sensitive, so give them a cover and/or shade. They need bedding that is damp and dark but also lightweight and fluffy; the best material is whatever carbon, high-cellulose material you have on hand—newspaper, brown paper sacks, cardboard, straw, leaves. Shred paper-based materials into 1–2-inch strips and moisten to the level of a damp (not soggy) sponge. Worms breathe through their mucous-coated skin, so bedding should allow air circulation; if conditions are either too dry or

*cont. on page 9*



*Vermicomposting—cont. from page 8*

too wet, worms can't breathe. If too wet, they drown. Mix in a couple of handfuls of sand, or soil, for "grit" to aid in worm digestion. Make enough to fill your bin half to three-quarters full.

Good sources of red wigglers include Master Gardeners, the farmers market, and the web. Place your worms in their new home for a few days, to get settled. Then begin feeding lightly with veggie and fruit scraps—the smaller, the better. The SCAT handout [Red Worm Composting](#) includes a list of 50 things worms can eat as well as a list of some things they can't eat. As they consume the food you've added, gradually increase the volume to their capacity. Avoid overfeeding to prevent rotting food. (If this occurs, simply remove the uneaten food and go lighter.) In two to four months, you will notice the bedding start to disappear—worms will eat that too—and be replaced by a deep, rich, brown-black substance with uniform crumbles. You're looking at worm castings, ready to be harvested.

Worm castings (manure) are usually harvested every three to four months. There are several methods of harvesting the castings, described in the SCAT handout [Worm Composting: Harvesting](#). Kids are usually eager to help with this. Once engaged, they will oversee your collection of worm food as well.

The castings are great manure, rich in plant nutrients, trace elements, and minerals. They are pH neutral and will not burn your plants. Add a handful in the bottom of every planting hole and top dress existing plantings. Enjoy watching your plants respond gratefully and your refuse shrink substantially. Happy vermicomposting!

### **Other Resources:**

Appelhof, Mary, and Joanne Olszewski. *Worms Eat My Garbage*, 3rd ed. (Storey, 2017)

Raskin, Ben. *Compost: A Family Guide to Making Soil from Scraps* (Roost, 2014)

Stevens, Deborah. [Tea, Worm Tea, Anyone?](#) (Napa Master Gardener Column, 2013)

[Vermicomposting 101: How to Create & Maintain a Simple Worm Bin](#) (YouTube)

[How to Harvest Worm Castings from a Simple Worm Compost Bin](#) (YouTube)

# Backyard Bugs

## Leafhopper

(order: Hemiptera; family: Cicadellidae)

by Pam Wolfe

Leafhoppers appear in a dazzling array of [colors and exotic shapes](#). Adults are slender and wedge-shaped, with one or two rows of spines on the hind tibia and short, bristly antennae at right angles to the head, just below the eyes. They range from 2 to 30 mm but are generally less than 13 mm.



*Graphocephala lugubris*, a locally abundant sharpshooter (5.5 mm), collected from a hollyhock in the South Capitol neighborhood. Photo by Pam Wolfe.



A tomato plant with curly top virus. Right: beet leafhopper. Photos by [giantveggiegardener](#).

Most of the 2,500 species found in North America feed on phloem (the food-conducting tissue of plants), while a few feed on thin-walled cells in leaves. Damaged leaves may appear [stippled, pale, or brown](#). A group known as “sharpshooters” feed on xylem (the water-conducting tissue of plants). Some can damage the vascular system of the host plant, causing [hopperburn](#). Some are garden pests, and several are disease vectors; for example, the [beet leafhopper](#), a phloem feeder, transmits the virus that causes [beet curly top virus](#).

Life history and habits vary with species, but most produce two or more generations annually. Nymphs feed on the underside of leaves and can be controlled with insecticidal soap, but control of adults is difficult. Crop protection is best accomplished by exclusion (row covers).

More details and excellent illustrations of dozens of common species are available in *Garden Insects of North America*, 2nd ed., by Whitney Cranshaw and David Sheltar (Princeton, 2018).

# What's That Weed?

## Western Stickseed (*Lappula occidentalis*)

by Lesley Mansfield

Never heard of stickseed (sometimes called “sticktight”)? Perhaps not, but I’m sure you have met this plant via its “nutlets”—a deceptively charming way to describe the tiny, voluminous burrs the plant produces right after flowering in the spring.

A member of the borage family, Western stickseed is native to the Great Plains; it is very difficult to distinguish from the introduced European stickseed (*Lappula squarrosa*). The USDA defines Western stickseed as a weed, and some states list European stickseed as a noxious weed. *Lappula occidentalis* prefers dry, sunny spots and flourishes in disturbed and overgrazed soil. The plant ranges from 10 to 80 cm tall, with narrow, alternate leaves that are fuzzy. It produces lovely, small white or blue flowers in May. The Navajo have used the plant to make a poultice for insect bites and other skin irritations.



The nutlets are actually intricately beautiful when viewed under magnification. They have numerous marginal, velcro-like prickles, which act as a highly effective dispersal mechanism. The nutlet (or burr) is what makes stickseed a nuisance for ranchers who raise sheep for wool, as well as for pet owners and anyone who wears socks.

Management of stickseed requires mechanical intervention early in the season because once the burrs develop, they are tenacious. To avoid burr-covered gloves and clothing, pull young plants by hand or use a stirrup hoe on larger patches.

### References:

Minnesota Wildflowers, [Lappula occidentalis \(Western Stickseed\)](#)

SEINet, [Lappula occidentalis](#)

Whitson, Tom D., et al. [Weeds of the West](#), 11th ed. (University of Wyoming, 2012)

# New & Noteworthy

Have you recently read a plant-related article or book, visited a horticultural website or blog, listened to a podcast, or seen a nature show or documentary you think other gardeners would enjoy or find useful? Send a link to the newsletter (news.sfemg@gmail.com) and we'll include the information in the next issue. **Note that some of these sources may have paywalls.**

*Edible New Mexico*, [Touch and Grow: Resources for Gardening in New Mexico](#),  
by Marisa Thompson

Garden Professors, [Falling forward: Time to plan and plant the fall veggie garden](#),  
by John Porter

Garden Rant, [A Gentle Plea for Chaos](#), by Mary Vaananen

*The Guardian*, [‘Not just weeds’: how rebel botanists are using graffiti to name forgotten flora](#),  
by Alex Morss

Liceu Opera Barcelona, [Concierto para il bioceno](#) (YouTube video of classical performance for an audience of plants)

Native Plant Society of Texas, [Ten tips for creating a home wildscape](#), by Lauren Simpson

*New York Times*, [There Are Wasps in Your Yard. You'd Better Get to Know Them.](#),  
by Cara Giaimo

*Santa Fe New Mexican*, [Feisty rufous hummingbirds return to Santa Fe](#), by Anne Schmauss

*Santa Fe New Mexican*, [In Dixon, a ground-level mystery](#), by Robert Nott

Science Daily, [Bee disease spreading via flowers](#) (Cornell University study)

*Smithsonian Magazine*, [In Social Insects, Researchers Find Clues for Battling Pandemics](#),  
by Michael Schulson

Southwest Yard & Garden (NMSU), [Summer Planting: Hydrate Your Plants AND Yourself Too!](#),  
by Marisa Thompson

*The right tomato can move you to tears.*

—**Craig LeHoullier (b. 1956)**



# The Garden Journal Radio Show

Every Saturday  
10–10:30 a.m.



Tune in to KSFR 101.1 FM on Saturday mornings from 10 to 10:30 to listen to a lively, entertaining, and informative gardening show.

- Aug 01      Santa Fe Botanical Garden edition with host Lindsay Taylor
  
- Aug 08      SFEMG edition with host Christine Salem and guest Dr. Amanda Skidmore, Extension Integrated Pest Management Specialist for NMSU, on thoughtful garden design for pollinators and natural enemies
  
- Aug 15      Santa Fe Farmers Market Institute edition, “Food, Farms & Friends,” with host Carrie Core live from the Farmers Market
  
- Aug 22      SFEMG edition with host Christine Salem and guest Carey Gillam, author of *Whitewash: The Story of a Weed Killer, Cancer, and the Corruption of Science*
  
- Aug 29      Home Grown New Mexico edition with host Christine Salem and guest Jannine Cabossel, the Tomato Lady, offering tips and techniques for next month’s veggie garden; more info at [Giant Veggie Gardener](#)

Schedule subject to change. To listen to previous broadcasts, click [here](#).

## Calendar of Events

Because of the COVID-19 crisis, most events through the season have been cancelled. Some classes may be held electronically. Please check the SFEMG [website](#) as well as the websites of other relevant organizations for updates on the status of events.



## We Are Here to Help!

If you have a gardening question, Santa Fe Master Gardeners are available to help. Go to our [website](#), click on the Garden Questions? link, and pose your question. Someone will do research and get back to you.



### *Mission Statement:*

*Santa Fe Extension Master Gardeners is a non-profit volunteer organization whose mission is to learn, teach, and promote locally sustainable gardening through reliable, current research-based practices*

*New Mexico State University is an affirmative action/equal opportunity employer and educator*