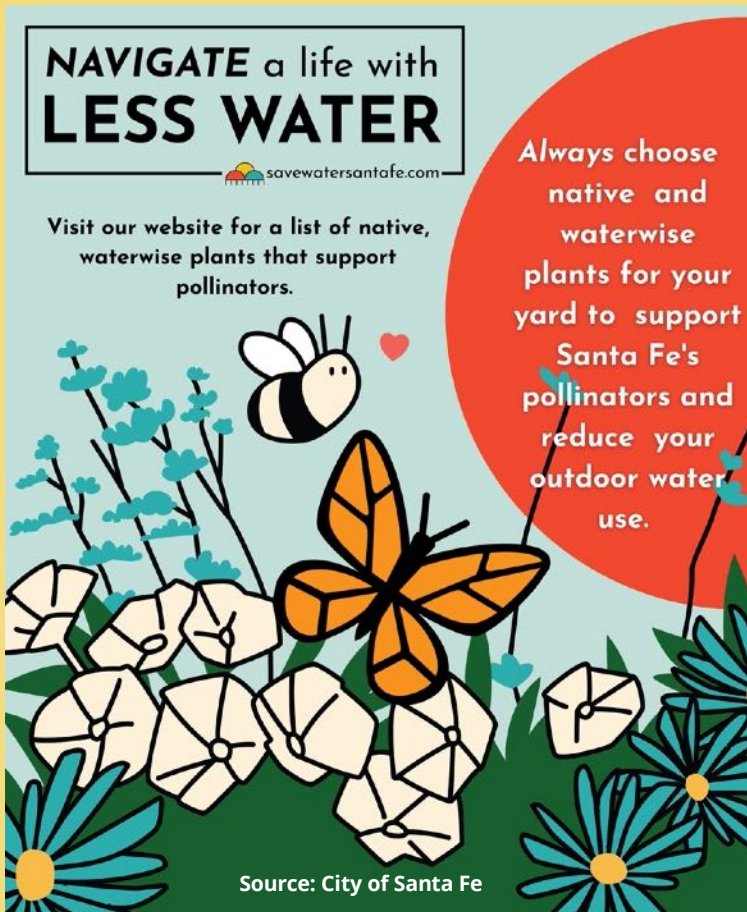


“Navigating a Future With Less Water”



About 40 percent of water used by Santa Fe households is for outdoor watering, so we checked in with Christine Chavez, the city's water conservation manager since 2016, to find out more about how the local gardening community can help conserve this precious resource.

SFEMG: *Does the city of Santa Fe currently have any water use restrictions in place?*

CHAVEZ: Outside watering is prohibited between 10 a.m. to 6 p.m. from May 1 through October 31, and we recommend that watering be limited to three days a week. I encourage your readers to visit [Santa Fe's "Water Use Restrictions" web page](#) for more information. These are not new restrictions; the city's Comprehensive Water Conservation Requirements Ordinance was enacted in 1987.

SFEMG: *Santa Fe County is experiencing extreme drought, according to the [National Integrated Drought Information System](#). Given the nature of the drought, is the city contemplating future water use restrictions? Who would make that decision?*

CHAVEZ: The city is developing a new tool that would decide the extent of restrictions being required. The Santa Fe Water Resources Indicator is a quantitative tool used to summarize water availability to the city and county water utility systems and is being considered as a method to inform seasonal conservation policy. The Indicator could be used in the spring of each year to help define what water use restrictions city and county utility customers should expect during the remainder of the year. The Indicator — as a transparent, quantitative definition of seasonal water resources availability in Santa Fe — could be helpful for explaining to utility customers why they are or are not subject to water use restrictions in a given year. The Santa Fe Water Resources Indicator uses quantitative metrics to assign a local, water-utility-specific outlook somewhere between zero at the driest to 10 at the wettest. A value of zero means the utilities cannot provide water in a sustainable way during the current year; supplies are inadequate, and the utilities need extreme demand management. A value of 10 means that water can be provided sustainably to water utility customers in excess of projected demand during the current year. The Indicator is currently an idea being piloted but could be used to guide conservation policy. Any conservation policy (demand management) that might be put in place as a function of Indicator level would be designed through a publicly informed conservation planning process.



Saturday, June 4

Join the Cactus Rescue Project and Santa Fe Extension Master Gardeners and interns for the 2022 Eldorado Cactus Garden Tour, featuring eight private gardens and two public gardens including one of the largest community volunteer cactus gardens in New Mexico.

The tour is scheduled from 9:30 a.m. to 2:30 p.m. on Saturday, June 4. It will begin at La Tienda shopping center in Eldorado, 7 Caliente Road, which is about 10 miles outside of Santa Fe.

This is a self-guided tour, and a map of the gardens will be available at La Tienda at 9 a.m. on the day of the tour. Look for the information booth there.

The tour is free with a suggested donation of \$5. For more information, check out the organization's Facebook page: [CactusRescueProject](#) or email John "Obie" Oberhausen at jwo1959@gmail.com.

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Note: SFEMG Master Gardeners and interns are invited to share photos from their gardens. Send high-resolution images and caption information to news.sfemg@gmail.com. Photos will be used as space permits.

Our Mission

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

sfemg.org

SFEMG is one of more than a dozen county-based Master Gardener programs run under the auspices of New Mexico State University's College of Agricultural, Consumer and Environmental Sciences. aces.nmsu.edu

NMSU is an affirmative action/equal opportunity employer and educator.

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A Message from SFEMG Board President Wendy Wilson

It's happened again, for the 40th year in a row (I'm estimating here). I have "over-bought" plants. Not only that, but upcoming travel plans are compressing my planting time. Judging from our SFEMG plant sale, some of you are right there with me, and some of you have way more self-control than I do. Thank you for supporting our organization with your purchases. We use the proceeds to fund our projects and bring horticulture outreach to the Santa Fe community.

Speaking of plants and horticulture, in the latest *Horticulture* magazine, Douglas Tallamy, an entomologist at the University of Delaware and author of *Nature's Best Hope* (Timber Press 2020), was interviewed about his hope for a horticultural revolution. He is a champion for meaningful conservation in our yards, pointing out that "almost all native insects have specialized relationships with native plants, planting non-natives reduces biodiversity." Tallamy charges each of us to bring earth stewardship to our plant selections: "It's not just native versus non-native. It's productive natives versus everything else, because there are a whole lot of natives that aren't supporting very much either." He states, "Just 5 percent of our native plants produce 75 percent of the caterpillars that drive the food web. And 14 percent of the native plants are producing about 90 percent of the caterpillars." The essential "keystone" plants, hyper-productive natives, are the "two-by-fours of the ecological house" that you should include in your yard.

Tallamy lists four landscape objectives we should work toward: "support the food web; manage the watershed (that generally means reducing your lawn, and in Santa Fe, implementing water conservation strategies); support pollinators by using a diversity of plants that the specialist pollinators need; and, finally, sequester carbon."

You can research keystone plants for our area by ZIP Code at: <http://nwf.org/NativePlantFinder/Plants>. And as always, you can get your horticulture questions answered at sfemg.org, or stop by our Ask A Master Gardener sites around town.

One final thought posted in an Arizona park and sent to me by Kathleen Morse, a Santa Fe Compost Team member: "Volunteering can improve your health. It can increase your self-confidence, combat depression and help you stay physically fit. It can even lower blood pressure and increase your life expectancy. You can explore your interests while making new friends and strengthening relationships with nature and your community."

It's not too early to think about joining the 2023 SFEMG intern training class. Sign-ups open November 1. We donate more than 10,000 hours of horticultural help and information each year to the Santa Fe community, while meeting interesting gardeners around town and having fun.

Plant wisely and please join us.

Wendy

Continued from Page 1

SFEMG: *Who enforces water waste in Santa Fe?*

CHAVEZ: The City's Water Conservation Office has a Water Waste Hotline: (505) 955-4222. Staff follows up on any hotline calls.

SFEMG: *Has the city cited anyone for water waste in the past 24 months? If so, can you describe the circumstances?*

CHAVEZ: If an excessive leak is found and the customer does not address it or fix it, the city has the ability to shut the water off until the issue is resolved. Most of the time, our office is able to identify ahead of billing that a leak is occurring. We try to reach out to the customer so that they can address it. The customer is normally happy that we helped them determine there was an issue before substantial damage or a high water bill was incurred.

NO OUTSIDE WATERING



between 10 a.m. and 6 p.m.

SFEMG: *May 15 traditionally is considered the start of the growing season in Santa Fe. What advice do you have for Santa Fe gardeners who are planting new or existing gardens this year?*

CHAVEZ: The Water Conservation Office's campaign this spring is "Navigating a Future with Less Water." Outdoor water use is high in the summer, and I think it's important for all of us to consider how we can plant the gardens we love but challenge ourselves to use less water to grow it. We recommend harvesting rainwater, supplementing with gray water, fixing leaks in your irrigation system, adjusting controllers and planting trees and native plants that double as edibles or are pollinator-friendly.

SFEMG: *What advice do you have for home gardeners thinking about the future of water use in Santa Fe? (For example, should they be taking out certain types of plants and replacing them with others?)*

CHAVEZ: The city recently has been recognized as a [Bee City USA](#) and a [Tree City USA](#). We also developed the [TreeSmart Santa Fe](#) initiative as well as a [Bees, Trees & Water](#) campaign. City departments are collaborating on many fronts to designate pollinator gardens across the city and to work toward the goals outlined in all these initiatives. We have developed a pollinator resource guide and are working in partnership with the [Xerces Society for Invertebrate Conservation](#) to develop resources around recommended plant and tree lists. As we "navigate a future with less water," we'll have to be mindful of what we put in the ground and water. It should have multiple benefits and be something that will be native to this climate which in turn will use less water.

SFEMG: *Does the city have a list of plants that should not be planted, based on water use?*

CHAVEZ: Please visit www.savewatersantafe.com for those resources, particularly "[Our Urban Forest](#)." And consider a self-guided tour of our demonstration gardens at the Water Conservation Office at 801 W. San Mateo Road. They showcase pollinator-friendly plants and cacti and were developed in partnership with the SFEMG's Santa Fe Native Plant Project, the Cactus Rescue Project and the Xerces Society.

If you have questions about water conservation, contact the Santa Fe Water Conservation Office at (505) 955-4225 or via email at wcoffice@santafenn.gov.



Whorled Milkweed, Poison Milkweed, Horsetail Milkweed (*Asclepias subverticillata*) By Carol Pava



Photo by Allan Cressler
Lady Bird Johnson Wildflower Center

The Whorled Milkweed's sweetly fragrant, star-shaped flowers are clumped into rounded umbels (clusters of flowers whose stalks originate from a common location). The erect stems of *Asclepias subverticillata* (Family Apocynaceae, synonym *Asclepias galioides*) feature long slender leaves that taper to a point. These contain a milky sap that can irritate skin and eyes. *Asclepias* includes 76 species and 91 taxa in North America. Whorled Milkweed is native to Mexico and the southwestern United States.

The "milk" in the common name alludes to the white sap in its stem and leaves. The plant is known as Whorled Milkweed due to the arrangement of its leaves. Its name in Spanish is *hierba lechosa* or *talayote*. The genus is named for the Greek god of medicine, *Asklepios*. Whorled Milkweed has narrow leaves and stems that allow it to blend in with grasses when not in bloom.

The plants make hundreds of seeds, each attached to tufts of long silky hairs called coma. When the seedpod ripens and splits, the seeds are released to drift off in the wind on these parachutelike tufts. These light hairs are

waterproof and were used in World War II to fill life jackets when the supply of kapok fiber from Japan was cut off. After the war the plant was considered a weed in range areas, despite its value for pollinators and role in habitat biodiversity.

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Continued from Page 5

Toxicity: Whorled milkweed manufactures a neurotoxin that can kill cattle and horses if ingested in sufficient quantities. The plants are most toxic when young. Fortunately, they are unpalatable to livestock but can be incorporated by accident into hay bales. As a result, farmers prefer to eradicate milkweed, at great cost to monarch butterflies. Monarch larvae feed exclusively on leaves of the genus *Asclepias*, which they ingest without harm. The poison makes them unpalatable to predators, providing a key means of defense during their caterpillar stage.

Landscape use: A native perennial that grows well on sandy mesas and desert flats, in rocky plains and grasslands. It prefers full sun and dry conditions. *Asclepias* species are the preferred host plant for monarch and queen butterflies and several species of moths. Whorled Milkweed supplies nectar for native bees and other pollinators such as the great black wasp, as well as the adult stage of predators and parasitoids whose larvae attack garden pests.

Propagation and care: One of the easiest varieties to grow, Whorled Milkweed reproduces from rhizome cuttings or from seeds, which thrive in disturbed soil. Once established it can spread from its rhizomatous root system. To prevent further spread in gardens, remove immature seed pods from the stems.

Plant type: Herbaceous perennial

Bloom time: May to September

Size: 2-3 feet tall by 1 foot wide

Sun: Prefers full sun but will tolerate partial shade

Soil and habitat: Well-drained, sandy or rocky soil; found on plains, mesas, desert flats and slopes; common along roadsides at elevations from 2,500 to 8,000 feet

Water: Low, drought tolerant once established

USDA zones: 5-8

Value to beneficial insects: Special value to monarch butterflies, native bees, bumblebees, and honeybees

References:

[Noxious and Troublesome Weeds of New Mexico](#), NMSU Circular 698

[*Asclepias subverticillata*](#), Lady Bird Johnson Wildflower Center

[*Milkweeds: A Conservation Practitioner's Guide*](#), Xerces Society for Invertebrate Conservation

[*More Than Monarchs: The Untold Story of Milkweed*](#), Monarch Joint Venture

[*A few of our native milkweeds*](#), Native Plant Society of Texas

[*Asclepias Subverticilliata, Horsetail Milkweed*](#), The American Southwest



Photo by Kathy Haq

Backyard Bugs

Banded Ash Borer (*Neoclytus caprea*) Story and photo by Pam Wolfe



The adult banded ash borer is 8-17mm; the larvae may be as long as 22mm.

This handsome animal came to Santa Fe in a load of pecan firewood from Las Cruces. A member of the family Cerambycidae (long-horned beetles), the banded ash borer has one generation annually, with adults emerging May through August in its northern range, February through November farther south. The female lays her eggs in fissures in the bark. Larvae chew into the bark to feed on sapwood and eventually pupate in chambers under the bark. Unlike the emerald ash borer (*Agrilus planipennis*), the introduced ravager of healthy ash trees, the banded ash borer is a recycler, [feeding on stressed or dying trees](#), and is a native North American beetle. It will feed on ash, hickory, elm and oak, often emerging indoors from firewood.

“Without climate change, La Niña and bad luck could have made the [America West’s] drought the worst in 300 years but with climate change it’s the worst in at least 1,200 years.”

— UCLA climate hydrologist Park Williams (as reported May 28 in *AP News*)



Seed to Supper Vegetable Gardening Series

June 21 – July 26, 2022 Time: 10:00 am -12:00 pm
Santa Fe Public Library – Southside Branch - 6599 Jaguar Dr, Santa Fe, NM

June 21, 2022
Planning Your Garden

June 28, 2022
Getting Started with Healthy Soil

July 5, 2022
Planting Your Garden

July 12, 2022
Caring for Your Growing Garden (Part 1)
Young Plant Protection, Watering, and Fertilizing during the growing season

July 19, 2022
Caring for Your Growing Garden (Part 2)
Weeding, Integrated Pest Management, and Identifying Common Pests

July 26, 2022
Harvesting and Using Your Bounty

Classes are free. Space is limited. To register please contact Sally at: 575-646-0334 or scassady@nmsu.edu.
Participants who attend 4 out of 6 classes will receive free gardening supplies!



BE BOLD. Shape the Future.
New Mexico State University
Cooperative Extension Service



If you are an individual with a disability and need an auxiliary aid or service, please contact Sally Cassady at 575-646-0334 one week prior to the scheduled class.

This material was funded by USDA's Supplemental Nutrition Assistance Program - SNAP. USDA is an equal opportunity provider and employer. College of Agricultural, Consumer and Environmental Sciences is an engine for economic and community development in New Mexico, improving the lives of New Mexicans through academics, research, and extension programs. NMSU is an equal opportunity employer and educator.

Calendar

Please read the fine print!

- Master Gardeners must complete 10 hours of continuing education (CE) by Nov. 30 and are encouraged to record CE credit hours in [Track It Forward](#) as soon as possible after completing the activity. **Note: SFEMG no longer uses the NMSU database for tracking volunteer hours that was piloted in 2021.**
- If there is a dollar sign, there is a fee.
- The acronym "phc" means Master Gardeners can earn 1 credit hour of continuing education for each hour attended.
- If there are other opportunities, suggestions, or questions please send them to Stephanie Deutsch: deutsch.stephanie@gmail.com



FREE public education series for the home gardener

SFEMG Demonstration Gardens at the Santa Fe County Fairgrounds, 3229 Rodeo Road, Santa Fe

Saturday, June 4

Learn about composting.

An introduction to various methods, including straw bale and red worm composting
Hands-on activities from 9 a.m. to 11 a.m.
Presented by the Santa Fe Compost Action Team

Saturday, June 18

Learn how to divide cactus and how to grow more.

Tips on soil preparation, planting and maintenance
Drop-in demonstrations at 9 a.m., 10 a.m. and 11 a.m.
Presented by Cullen Hallmark



Learn about low-water, low-maintenance native plant gardens, pollinator patches and native grass restoration.

Tips on soil preparation, planting and maintenance
Drop-in demonstrations at 9:30 a.m., 10:30 a.m. and 11:30 a.m.
Presented by Lesley Mansfield and the Santa Fe Native Plant Project (SNaPP) garden stewards
Link to a 45-minute YouTube SNaPP presentation on [The Importance of Native Plants](#)



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Thursday, June 2

[Reducing Reliance on Pesticides in New Mexico](#) (in-person and live-streamed)
Pajarito Environmental Education Center / 1 CE

Saturday, June 4

[Simple Greywater Systems](#)
Santa Fe Community College / \$ / 3 CE

Tuesday, June 7

[Habitat for Pollinators - Progress, Maintenance, and Challenges](#)
Xerces Society for Invertebrate Conservation / 1 CE

Wednesday, June 8

[Wild by Nature with Noel Kingsbury and Claire Takacs](#)
New York Botanical Garden / \$ / 1 CE

Wednesday, June 15

[Keep It Cool: Shading Your Veggies](#)
New Mexico State University "Ready, Set, GROW!" Webinar / 1 CE phc

Thursday, June 16

[The Western bumble bee: causes and consequences of a vanishing pollinator \(live-streamed\)](#)
Pajarito Environmental Education Center / 1 CE



Saturday, June 18

[Arid Land Restoration](#)
Santa Fe Community College / \$ / 3 CE

Wednesday, June 29

[Designing for the Intangible](#)
New York Botanical Garden / \$ / 1 CE

Thursday, June 30

[Bring Back the Pollinators: Growing Pollinator-Friendly Flowers and More](#)
Xerces Society for Invertebrate Conservation / 1 CE

many thanks

... to SFEMG intern Lucinda Surber, who shared her photo of this western tiger swallowtail. Lucinda says this about the shot, taken May 1 here in Santa Fe:

"Last year's fennel was very popular with swallowtail caterpillars, so hoping this is one of them all grown up and enjoying the lilac."



New & Noteworthy

Have you recently read a gardening-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 try to include the information in the next issue. **Note that some of these sources may have paywalls.**

- ["Weather's unwanted guest: Nasty La Niña keeps popping up"](#) by Seth Borenstein, *AP News* (May 28, 2022)
- ["Chelsea Flower Show 2022: all 39 gardens \(and winners\) at this year's show"](#) by Olivia Heath, *House Beautiful* (May 24, 2022)
- ["Chelsea Flower Show trends 2022: our top 10 highlights to try at home"](#) by Holly Crossley, *Gardeningetc* (May 24, 2022)
- ["Mushroom magic: 5 ways fungus-based technology will change the world"](#) by Eugenia Bone, *BBC Science Focus Magazine* (May 23, 2022)
- ["Hummingbirds Can't Resist Firecracker Plant"](#) by Kaitlin Stainbrook, *Birds & Blooms* (May 19, 2022)
- ["Where Will the Water Come From?"](#) by William Melhado, *Santa Fe Reporter* (May 18, 2022)
- ["Sponsorship takes a backseat to a garden's cause at the Chelsea Flower Show this year"](#) opinion piece by Kendra Wilson, *Gardens Illustrated* (May 18, 2022)
- ["Tree-planting projects abound. Which should you support?"](#) by Craig Welch, *National Geographic* (May 16, 2022)
- ["Husband's love for his wife lives on in field of 40,000 daffodils"](#) by Steve Hartman, *CBS Evening News* (May 13, 2022)
- ["Scientists Grow Plants in Moon Soil — A First in Human History"](#) by University of Florida in *SciTechDaily* (May 13, 2022)
- ["The biggest living thing on Earth is being nibbled to death. Can it be saved?"](#) by Craig Welch, *National Geographic* (May 10, 2022)
- ["A Guide to companion planting"](#) by Clare Foster, *House & Garden* (May 10, 2022)
- ["These Are The Only 2 US States That Grow Coffee"](#) by Michelle Welsch, *Tasting Table* (May 10, 2022)
- ["What Israel, Las Vegas and other places can teach SoCal about using a lot less water"](#) by Hayley Smith and Ian James, *Los Angeles Times* (May 8, 2022)
- ["What the World's Largest Organism Reveals About Fires and Forest Health"](#) by Colin Hogan, *Atlas Obscura* (May 6, 2022)
- ["God's own gardens: why churchyards are some of our wildest nature sites"](#) by Alexander Turner, *The Guardian* (May 6, 2022)

The Garden Journal Radio Show



Every Saturday
10 to 10:30 a.m. on KSFR 101.1 FM

June 4: Slow Food Santa Fe Outloud Edition

Hosts Lissa Johnson and Nina Rosenberg talk with Steve Sando, founder of Rancho Gordo, a company that grows and sells heirloom and heritage varieties of beans and also sources heritage bean varieties from farmers in Mexico and Central America.

June 11: SFEMG Edition

Permaculturist Amanda Bramble joins host Alexa Bradford to discuss the permaculture program at [Ampersand Sustainable Learning Center](#) and living off the grid.

June 18: Soil Stories Edition

Host Carrie Core returns with a new episode in her series on regenerative agriculture.

June 25: Home Grown New Mexico Edition

Jannine Cabossel, "The Tomato Lady," shares tips and techniques for backyard vegetable gardening and a to-do list for July. See more at [Giant Veggie Gardener](#).

You can find past episodes of The Garden Journal [here at sfemg.org](#).



We are here to help!

If you have a gardening question, Santa Fe Extension Master Gardeners are available to help.

Just go to [sfemg.org](#) and pose your question. We'll do some research and get back to you.