



CENTRAL SPINE

February 2025



CACSS 2025 Board of Directors and committee chairs.

NATURE'S MEDICINE CABINET: PLANTS OF THE SONORAN DESERT
Photos and text by Bernie Finkel

Join Bernie for our February 2 meeting in Dorrance Hall at Desert Botanical Garden. Come at 1 p.m. for socializing and bidding on plants.



Bernie will take us on a global look at the importance of plants, their physical properties and how they were used throughout centuries to aid in wellbeing. We begin with a global view, then move closer to home to explore some of the medicinal plants found in the McDowell Sonoran Preserve.

Bio: After arriving in this area with his family in 1978 from New York City, Bernie began hiking Squaw Peak, Camelback Mountain and the Grand Canyon wherever he could find a challenging trail. Bernie then started participating in McDowell Sonoran Conservancy hikes, became an expert in Sonoran flora and fauna and rose to be a hike leader. He volunteered for trail

construction and other projects, was responsible for the expanding the steward program and served on the Conservancy's board of directors.

Bernie worked diligently on the development of the Parsons Field Institute, the science arm of the Conservancy. He continues to volunteer for a variety of Conservancy projects. Bernie graduated from the University of Rhode Island's College of Business.

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PACHYCORMUS DISCOLOR—THE OTHER ELEPHANT TREE Photos and text by Tom Gatz

Desert Botanical Garden's 85+ year old prized specimen of *Pachycormus discolor* is located on the north side of Webster Auditorium. It is the only specimen of this species at the Garden out of seven plants originally collected by the Garden's first director George Lindsay in 1939 in Baja, Mexico, where it is endemic. The fate of the other six is unknown.



Although dormant in the summer months, this *Pachycormus discolor* by Webster Auditorium bears clouds of small pink flowers in summer when leafless.

torchwood family. So why do *Pachycormus discolor* and *Bursera microphylla* look so much alike? It is a great example of convergent evolution where two unrelated organisms adapting to similar environmental conditions evolve to look alike. I observed them growing side by side on lava fields in Baja, Mexico and initially had some trouble telling them apart. When in doubt, crush a leaf; most bursera have a distinctive scent, while *Pachycormus discolor* is pretty much odor free.

Its common name, elephant tree, might lead to confusion with the African elephant food (*Portulacaria afra*) or some of the similar appearing members of the unrelated genus *Bursera*. They also share the common name elephant tree. It's easy to get mixed up when only using common names of plants. Even the Garden's sign makers got tripped up, recently installing new signage incorrectly labelling our elephant tree (*Pachycormus discolor*) as 'Elephant Tree' (*Bursera microphylla*).

This illustrates why sticking to scientific names is best to avoid confusion. The University of Arizona website tells us that the genus name pachycormus is a compound of two Greek words, *pachys*, which means thick, and *cormus*, which means trunk or log. The specific epithet discolor means lacking color, referring to the pale bark. *Pachycormus discolor* is the only plant in its genus.

Pachycormus is in the cashew family, while bursera is related to the old-world frankincense (*Boswellia sacra*) and myrrh (*Commiphora* sp.) in the



According to the Garden's records, only one additional nearby planting of *Pachycormus discolor* has survived out of at least fourteen more recent attempts from 1983-2022 to grow this species in the Garden beds. It is in the bed just across the narrow side path from the 1939 plant and originated from a cutting from another Garden specimen. Elsewhere in Phoenix, a few large specimens have survived growing in the ground when in protected backyard sites near buildings or trees, with only some branch die-back in cold winters.

The Garden's growing guru, Kenny Zelov, is cultivating a batch of this special plant from seeds and cuttings, and these will continue to be available at future plant sales. He gets them to germinate and root with regular watering on mist benches in a greenhouse. They are somewhat slow growing but can make outstanding bonsai specimens

(see plant above). Plants developed from larger branch cuttings will give you instantly thicker trunks. Be sure to protect them from nights that are much below freezing, especially when young or in pots. I bring my potted specimens into the garage on the coldest nights.

The Arizona Sonora Desert Museum (ASDM) recommends keeping the soil wet during their winter growing season but reducing watering to once a month or so when the leaves begin to yellow in the spring and until cool weather resumes. However, some of us in the Central Arizona Cactus and Succulent Society have had our best luck watering our potted specimens (with sharp drainage) once a week all year-round. Full sun is best in the winter growing months, but I give my dormant potted specimens filtered sun in the summer, especially with our recent baking summer temps. ASDM recommends feeding lightly during the winter growing season to prevent rank stem growth.

Thanks to Wendy Barrett, Scott McMahon and Joni Ward for helping me with this article.



My dogs also enjoy the plants and critters in this favorite spot.

I love both my front and back gardens on my small fenced lot in Sun Lakes, but a favorite area I enjoy especially is in the back next to my north-facing patio. The area receives sun from the west in the afternoon. However, I have planted a *Cordia boissieri* (Mexican olive) that I pruned to a tree form and a Mexican key lime tree (hybrid citrus from Southeast Asia). They provide dappled shade during the summer. Both these trees flower; the lime smells heavenly in the spring and the olive has big white flowers all summer.

The shade of the trees is needed because I have placed all my favorite cactus genus, gymnocalycium, in their pots in raised planter boxes under the olive. I have so many that they do overflow, but all are near each other making it easy to be consistent with their care. I also have some other favorite plants like parodia, echinopsis, gasteria, sansevieria, and agave in the area, either in fun pots or in the ground. I also like to hang some pots and decorations in the trees.

Right to the north of the olive tree, I have planted miniature pomegranate, octopus agave, red bougainvillea, red shrub bottlebrush (callistemon), *Tecoma stans* 'Sparky,' and a lantana that seeded in all by itself. I love cramscaping (interweaving different types of plants together). Using this method, I water less and pull out weeds less too!

In the many years I have been reading and studying about gardening, I have come to follow two pieces of advice: create a pollinator garden to help the earth's environment, (from the Facebook page [Pollinator Gardening in the Southwest](#)), and be a fearless gardener, as recommended by Loree Bohl in her book *Fearless Gardening*.

Walking out my patio door, I am always greeted with an active, colorful view to appreciate and enjoy!



Cramscaping in my back garden.

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CACSS ANNUAL SHOW AND SALE VOLUNTEERS NEEDED By Chris Ginkel

Desert Botanical Garden
Dorrance Hall and Boppart Courtyard

This event will showcase the long-standing collaborative relationship between the CACSS and DBG. There will be a display of hundreds of fantastic plants demonstrating the talent and ability of club members to raise and cultivate cactus and other succulents to the highest level. There will also be a sales component consisting of over 20 great vendors.

Show plants will be inside Dorrance Hall and vendor sales will be in Boppart Courtyard.

In order to have a great show, we need your help. Help make it a great show by volunteering. We need volunteers from March 25-30. We're using SignUp (the leading online signup and reminder tool) to organize our upcoming activity.

Please sign up to volunteer for the CACSS 2025 Show and Sale!

Here's how it works in three easy steps:

1. **Click this link** to go to our invitation page on SignUp: <https://signup.com/go/QDSwKZp>
2. **Choose your volunteer spots**
3. **Enter your email address:** (You will NOT need to register an account on SignUp)

Sign up! SignUp will send you an automated confirmation and reminders. Easy!
Note: SignUp does not share your email address with anyone. If you prefer not to use your email address, please contact me and I can sign you up manually.

Email me at chris.ginkel@centralarizonacactus.org with any questions.

ARIZONA POPULATION OF *GRUSONIA PARISHII* WITH STRIKING FLOWER COLOR VARIATIONS

Photos and text by Laurence A.J. Garvie

In the late 1990s, I came across a thriving population of grusonia on a small, unleased parcel of state land, located on the northwest side of the small farming town of Maricopa. This grusonia population represents the southernmost extent of a larger group visible on the adjacent Gila tribal lands to the north (photo 1).

The landscape southeast of the Sierra Estrella Mountains features expansive plains dominated by fine alluvial soils and dunes, intersected by the now dry Gila River. The



Photo 1, view across the Gila tribal lands looking northwest towards the Sierra Estrella Mountains. At least nine *G. parishii* clumps are visible.



Photo 2, an older *G. parishii* plant that has spread outward during its growth forming a fairy ring.

surrounding area supported a vibrant cactus population, including *Cylindropuntia arbuscula*, *C. fulgida* var. *fulgida*, *C. leptocaulis*, *C. kleiniae*, *C. spinosior*, *Grusonia* sp., *Mammillaria thornberi*, *M. tetrancistra*, *Echinocereus engelmannii*, *Ferocactus wislizeni*, *Peniocereus greggii*, and, less commonly, *Carnegiea gigantea*. Historically, parts of this area also sustained a dense mesquite bosque (Rea, 1997), which has largely vanished due to the lowering of the water table.

The grusonia population, consisting of approximately 20 plants, was growing in a small sandy depression measuring roughly 250 by 150 feet and bordered by low dunes. The area also hosted *Atriplex polycarpa* (saltbush), *Suaeda moquinii* (alkali seepweed), *Echinocereus engelmannii*, and *Mammillaria tetrancistra*. The grusonia formed localized clumps up to five feet in diameter and about one foot in height growing among the saltbush and seepweed vegetation. Older individuals spread outwards, sometimes forming a fairy-ring-like structure (photo 2). The stem segments must be difficult to detach as the nodes between them are highly woody.



Photo 3, a selection of *G. parishii* flowers showing some of the flower color and structure variations. Note the color variations in the tepals/petals, stamens and pistil.

I was fortunate to first visit the grusonia population in early summer when they were in full bloom. Striking was the wide range of flower colors, ranging from the characteristic lemon-yellow to a vibrant red (photo 3). Pinkava (1999) describes their flowers as "... inner tepals pale yellow with a narrow reddish center line, or greenish to pale yellow, the anthers pale yellow to yellow; pinkish; stigmas white, greenish white to pale yellow." However, the grusonia flowers at the Maricopa location display greater variations in their color and tepal shape and size. A particularly beautiful flower on one of the plants had tepals and petals that are almost white but fringed with vibrant pink, and stamen with a yellowish green to bright pink filament (photo 4).

The fresh fruit transforms from fleshy green to yellow, to dry and dark brown within a few months. The ripe fruit are intensely glochidiate and retain the remnants of the corolla firmly attached to the pericarpal (photo 5). There is a particular feature regarding the fruits of *G. parishii* that seems to have been overlooked in the many studies of this plant. That is, that the dried fruits have an unpleasant odor when crushed! A recent study by Maurer and Baker (2021) identified a wide range of odorous volatile organic compounds produced in the stems of many taxa of the Cylindropuntieae, including grusonia. Noticeable are compounds with a strong smell of



Photo 4, particularly striking *G. parishii* flower.



rancid butter or cyanoacrylate. In the case of the grusonia fruit, the strong smell may inhibit herbivory. Similarly, the cut stems of *G. parishii* have a strong odor.

Grusonia is an opuntoid genus in the tribe Cylindropuntieae (Cactaceae), endemic to northern Mexico and the southwestern United States (Benson, 1969; Pinkava, 1999; Bárcenas and Hawkins, 2017; Bárcenas and Hernández, 2022; Bárcenas, 2023). The nomenclature of grusonia is

Photo 5, the intensely glochidiate dried *G. parishii* fruit. The remnants of the corolla are visible at the top of the fruit.

complex, currently encompassing 15 species divided into subgenera and sections (Bárcenas, 2023). This complexity is compounded by the proliferation of names and frequent nomenclatural changes, as discussed in the recent paper by Bárcenas and Hawkins (2017), titled “Nomenclatural proliferation and the superabundance of homotypic synonyms in *Grusonia* (Opuntioideae, Cactaceae).” For example, the currently accepted name *G. parishii* has had at least seven synonyms since its first description in 1896 as *Opuntia parishii*. It was later described as *G. stanlyi* var. *peeblesiana* in Benson’s 1969 book, *The Cacti of Arizona*.

The identification of the Maricopa population is uncertain, as these plants are notably larger and more robust than the grusonia plants found just to the south. I visited the

extensive populations along Vekol Valley Road and south of Arizona City. These southern plants are low mat formers and differ significantly in appearance from the Maricopa population. For example, the stem segments of the Maricopa plants range from 5 to 10 cm, with a mean of approximately 7 cm. In contrast, the stem segments of the plants near Arizona City and Vekol Valley range from 3 to 5 cm. According to a recent phylogenetic study of *Grusonia* (Bárcenas, 2023), the species identified at this site is likely *G. parishii*, which belongs to the subgenus *corynopuntia* and section *Xylocaulis*.

Grusonia parishii has a vicariant distribution, with populations in southern Arizona and northwestern Arizona and Nevada. According to SEINet (swbiodiversity.org/seinet/index.php), there are 12 recorded occurrences of *G. parishii* south of Phoenix, all situated at or south of the east-west transect defined by Interstate 8, between Vekol Valley Road in the west and Eloy in the east. Pinkava's (1999) distribution map corroborates these occurrences while also suggesting additional populations. However, the Maricopa population extends the known range approximately 20 miles further north. It is possible that there were once more populations south to Interstate 8, but much of this area has been converted to intensive agricultural use.

The climate changes over the past few decades, characterized in southern Arizona by decreasing monsoon and winter rains, have significantly impacted many of the native cactus populations. A recent visit to the *Grusonia* site revealed that 17 plants remain, though they are visibly stressed from the prolonged lack of rainfall. Maybe there is a way to salvage these unique plants from the state land before the population dies out or the land is developed by the ever expanding city of Maricopa.

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We were recently on the island of Curacao and visited a sustainable aloe farm. The farm is on ten acres of cleared jungle vegetation. The aloe that they farm is *Aloe barbadensis* subsp. *murphyi*. They created the farm to produce aloe that could be made into various products that they sell on-site and other locations. We enjoyed a talk



Left, *Aloe barbadensis* subsp. *murphyi* farm and right, the plant in flower.

that illustrated how they gather and fillet the leaves to ready them to be made into products. Only six leaves are harvested at a time from a plant and maybe twice a year, all by hand. That way the plant continues to grow. They have been harvesting the same plants for over 20 years.

Using a big and very sharp knife, we watched as the leaf was filleted; much like you would do a fish. What was left was the gelatinous inside. It was then cut into pieces and passed around so that we could taste it. We did! It had no flavor at all and just tasted a bit slimy in the mouth. We were cautioned to not try this at home unless we were certain of the species and genus of the plant, as very bad things could happen to us otherwise.

The filleting for their products is done in a big warehouse type building on-site that we were not permitted to go in for health safety reasons. We were invited to visit their retail shop—what a surprise. I did buy the aloe facial scrub and like it very much. Visit curaloe.com to learn more and see the farm.



Left, the aloe filleted, and below the cut up pieces to taste.



CONTACT INFORMATION FOR MEMBERS WILL NO LONGER BE PROVIDED IN THE NEWSLETTER AS ISSUES HAVE OCCURRED.

To contact a board member, committee chair, specialist, or others use the Contact Us form on the club website. When filling in the form, put the name of the person in the subject field that the message is intended for so it can be forwarded to the appropriate person.

Just click on the direct link: centralarizonacactus@gmail.com

ORIGIN STORY OF THE COOKIE'S CACTI YOUTUBE CHANNEL Photos and text by Jenny Kuo

Hey, cactus friends! It's Jenny, the plant enthusiast behind Cookie's Cacti, my social media platform dedicated to sharing my love for cacti and succulents. What started as a simple impulse has grown into a full-blown passion—and it all began with a totem pole cactus.



July 2020: I planted my first cactus, a totem pole cactus, in the ground.

Back in the summer of 2020, after my Betta fish died, I wanted to bury her in my yard beneath a plant. Living in the Sonoran Desert, it seemed only fitting for that plant to be a cactus. That decision led me to Arizona Cactus Sales where I asked for a spineless cactus and was introduced to a *Lophocereus schottii* monstrose. Little did I know, that single recommendation would ignite a deep fascination with desert plants. From that moment on, I couldn't get enough.

As my collection grew, so did my interest in learning how to care for it. I immersed myself in

every online cactus-related resource I could find—nursery tours, shopping videos, interviews with expert growers, and endless “how-to” guides. YouTube became my go-to source, and I discovered that my video preferences were the more detailed and the longer the video, the better.



Some of the copiapoa seedlings that kicked off the YouTube channel.

When I ventured into growing cacti from seed, I noticed a gap in the content available. While there were resources, I often found myself wanting more: detailed care instructions, progress updates, growing insights into specific genera of plants in particular, and wanting information about growing copiapoa from seed. Intrigued by the lack of certain content online and recognizing the potential opportunity it

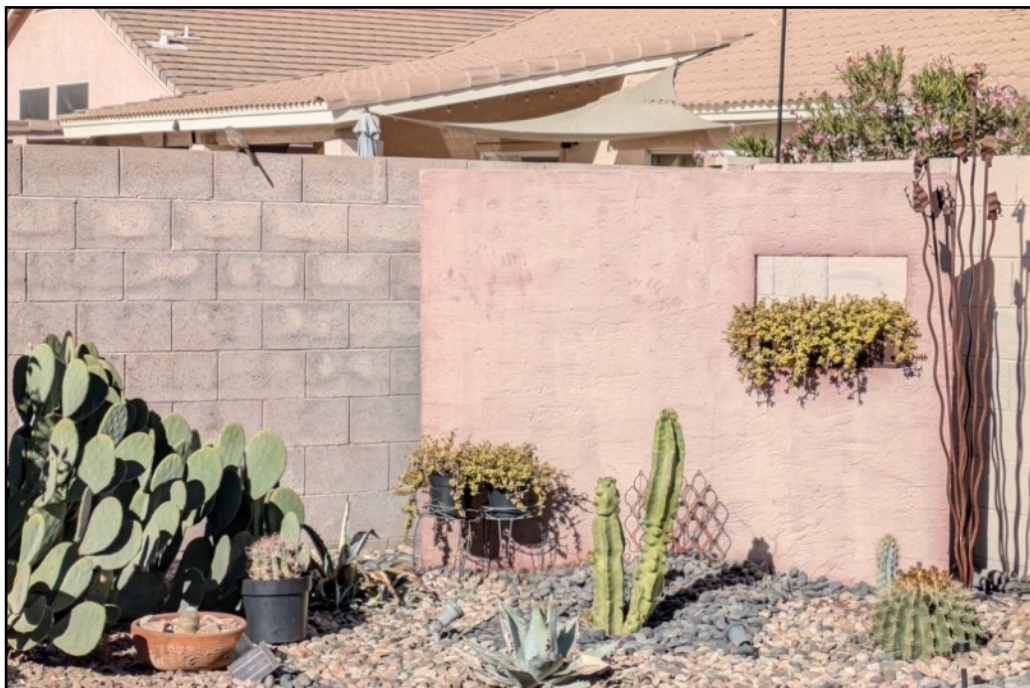


Plants under my pergola. The setup is dictated by the curved bill thrashers (to keep them out).

presented, I decided to create what I couldn't find. That's how the Cookie's Cacti YouTube channel began.

In May 2022, I published my first video. I had no prior experience in video production, armed only with an old camera and a desire to share my copiapoa seedlings' journey. My initial videos were simple and raw, reflecting my passion more than technical expertise in plant keeping and video production. Along the way, I faced challenges, particularly critical feedback about camera movement. While difficult to accept, I must admit that those critiques helped me improve.

Over time, I invested in better equipment, learned to use editing software and gradually enhanced the production quality. Despite the improvements, my focus remains clear: sharing authentic, detailed content about my cactus adventures.



The past two years have been a whirlwind of plant adventures. I've documented everything from shopping hauls and nursery tours to a seven-hour marathon repotting over 500 astrophytum seedlings. My videos tend to emphasize long-form storytelling, provide regular updates on seedling growth and present an honest portrayal of my learning process.

Another goal of my channel has been to spotlight Arizona's incredible nurseries, parks and plant events that may have a low presence on YouTube. Sharing CACSS events, like the Show and Sale and the Mega Silent Auction, has been especially rewarding. It's a way to connect plant lovers worldwide to our local community.

You might be wondering who is Cookie? Cookie is my sweet, calico cat and the true star of this story. The channel is named in her honor, as it began during the year when her health issues first appeared. My videos stay within Arizona so that I can always be close by to care for her daily health management needs. In a way, this channel is how Cookie will live on, sharing her cuteness with plant enthusiasts everywhere.

Join me every Sunday at 9 a.m. Arizona time for more plant-filled adventures. Whether you're a seasoned grower or just starting out, I hope Cookie's Cacti brings a little joy, inspiration, and love for desert plants into your life!

January 2025: The totem pole cactus over four years later. Other plants have been added to the landscape as well.

PRESIDENT’S MESSAGE By Don Begley

During 2024, your board took action to strengthen the relationship with Desert Botanical Garden and improve security for the club and its members, while ensuring operations are within the legal guidelines required by the Arizona Corporation Commission.

Our members refer to “the club” and our full name says “Society,” but in the eyes of the State of Arizona Corporation Commission and the federal government, CACSS is a corporation operating as a 501(c)(3) non-profit corporation. This “corporation” status

places more demands for security, adequate insurance, adherence to mandated policies and procedures, and proper internal controls (checks and balances).

The following actions have been taken to remain a relevant and strong organization in the community and a solid partner in conservation with Desert Botanical Garden.

We increased our organizational support to Desert Botanical Garden:

- Included DBG as participant in 2024 Show as a vendor and educator.
- Initiated relationships with DBG partners and programs.

Central Arizona Conservation Alliance (CAZCA)

Save the Saguaro program

Saguaro census project

Southwest Integrated Field Laboratory project

We donated \$18,800 to like-minded conservation-based organizations:

- Desert Botanical Garden

\$6,800 for research

- IUCN - CSSG

\$6,000 Intl Union Conservation of Nature

- Boyce Thompson Arboretum \$4,000

- Natural Restorations \$2,000



Cookie hanging out with her plants.

Veterans’ based conservation

Launched legal review:

- Ensured compliance with all federal and state corporation laws and regulations.
- Engaged Caritas Law Group.
- Updating bylaws and supporting policies.
- Established document retention through Google Workspace.

Launched financial review:

- Improved internal financial controls, including double authorization security for bank accounts.
- Engaged Certified Public Accountants Monica Stern CPA LLC for tax preparation, advice and periodic financial review.

Launched insurance review:

- Replaced California insurance agent with local State Farm agent.
- Closed coverage gaps for liability insurance.
- Purchased mandatory workmen's compensation insurance.

Technology:

- Rebuilt CACSS website with up-to-date software capable of supporting a wide range of applications and broader scope of information.
- Implemented Google Workspace software to improve organizational efficiency and enable legally required record retention.

We are grateful to Desert Botanical Garden for providing our meeting space and supporting our projects.

Members will continue to talk about “the club” and use “Society” in our name, but rest assured, your Board will be managing our organization under the state required guidelines of an Arizona corporation as we continue to “embrace the tradition and engage the future.”

CACSS SHOW AND SALE MARCH 28-30, 2025 By Kathi Metzger

The exciting CACSS Show and Sale will take place at Desert Botanical Garden from March 28-30, 2025. Hundreds of incredible plants from collections of our members will be on display, allowing CACSS to share our love of cacti and succulents with the public. Over twenty vendors will participate, selling lots of fantastic plants, pottery and assorted goods. This will be a great opportunity to add to your plant collection and buy the perfect pot for your plant.

There are over 160 opportunities for CACSS members to volunteer at our signature event and support the activities during the week of preparation and when the event is open to the public. The online volunteer signup has been posted and can be accessed through the link provided in a recent email blast. Please consider helping our organization to make this event a huge success. We need your help!

If you plan to enter an educational display, please contact Pat Adler or Kathi Metzger so that we can be sure there is ample space for your entry, as Dorrance Hall is expected to be quite full.

We also need many, many boxes for customers to transport purchases to their vehicles. Please continue to collect boxes for this purpose. They can be brought to Dorrance Hall anytime during the Show and Sale week.

UPDATE: After much discussion, this year we are implementing a “No Cash” event. The main reasons are to implement risk reduction for the Society, meaning that individuals will no longer be transporting large sums of money and potentially be subject to loss or robbery and efficiency to make transactions faster and smoother at checkout. Realizing this is a change from previous shows, we believe it is in the best interest of the Society to move forward with this change. The transaction fees are de minimis and worth the risk reduction.

The 2025 Show and Sale will continue to provide a channel to promote our organization, share the talents of our members and serve as a significant means to highlight our collaboration with Desert Botanical Garden. Thank you for your passion to create an event with elegance and excitement for others to enjoy.

SEARCH ENGINE FEATURES By Webmaster Peter Bockenthien

In the January 2025 *Central Spine* I introduced Content Management Systems (CMS) with a cooking analogy. I likened WordPress to an automatic oven that premixes sugar, flour, eggs and milk to bake the same recipe. And I mentioned that the current CMS serving the CACSS website – MODX – can bake all kinds of different recipes, just like you and I can bake anything requiring an oven.

In this article, I'm going to show that same flexibility/utility that MODX gives to websites to optimize search engine results. The internet, like life, is all about being able to find information about people, places and things. Countless songs sing about searching. It's human nature to want more than what you currently have.

"And I still haven't found what I'm looking for," U2.

"Swear I'm gonna find you one of these nights," Eagles.

"I've been looking for love in all the wrong places," Nick Jonas.

Old school HTML is what search engines love most. MODX creates old school HTML, meaning that it creates HTML without the use of Javascript and its performance drag. Looking at you, WordPress.

These HTML elements need to be congruent and consistent on every single page in order to rank high and relevant in search engines.

- URL: the address such as <https://centralarizonacactus.org/about-cacss.html>
- Title: `<meta name="title" content="About CACSS-Central Arizona Cactus and Succulent Society">`
- Description: `<meta name="description" content="About CACSS-Central Arizona Cactus and Succulent Society">`
- Navigation Menu: `<ul class="dropdown-menu">About CACSS`
- Headers: `<h1>About the Central Arizona Cactus and Succulent Society (CACSS)</h1>`
- Content: It's important that the abbreviation "CACSS" is used wherever possible to aid in people finding CACSS/Central Arizona Cactus and Succulent Society
- Keywords: It was 15 years ago that Google started ignoring keywords because attention-seeking spam websites were stacking miscellaneous topical keywords in the `<meta keyword>` tag. When keywords are used, they must be congruent with the content or else Google will penalize that page and the entire website if they contain the same sequence of miscellaneous keywords.

There must be at least one word that matches in those elements in order to rank high with search engines. MODX is built specifically for security, speed and search engines. Since 2021, Google changed their search algorithm to favor fast-loading web pages. MODX is a top 3 CMS in speed and search performance. Wix, WordPress and Squarespace occupy the bottom. Every millisecond counts! So, even though a website loads fast, it doesn't mean that search engines are going to rank it higher.

In the coming weeks, I will be optimizing every CACSS web page to create the best search engine results possible. I'll also be monitoring website traffic to see how people are searching for cactus and succulent related information.

If your plant's leaves are turning yellow, it might be because it has too much water, too little water, too much light, too little light, too much fertilizer, not enough fertilizer or maybe your plant just doesn't want you to be successful and happy.



CACSS OFFICERS AND BOARD OF DIRECTORS 2025

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Members-at Large: **Pat Adler** | **Kim Andrews** | **Chris Ginkel** | **Joanne Johnson** | **Joan McDonnell** | **Kathy Metzger** | **Mary Miller** | **Ruthanne LaQua** | **Erik Ruggaard**

CACSS PROGRAM AND COMMITTEE CHAIRS 2025

- Annual Show and Sale Team: **Pat Adler, Bob Hopfner, Joan McDonnell and Kathi Metzger**
- Archivist/Historian: **Lois Schneberger**
- Assistant Treasurer: **Hank Radda**
- CSSA Affiliate Representative: **Don Begley**
- Calendar Coordinator: **vacant**
- Donations Coordinator: **Chris Ginkel**
- Education Committee chair: **vacant**
- Facebook Coordinators: **Tom Briggs, Celeste Gornick, Ken Luiten, Erik Ruggaard, Thom Young**

- Facebook Swap and Shop Page: **Erik Ruggaard and Tom Briggs**
- Google Workspace Administrator: **Emily Adler**
- Graphic Designers: **Erik Ruggard, Bob Hopfner**
- Holiday Party: vacant
- Instagram Coordinator: **Erik Ruggaard**
- Keeping in Touch with Members: **Jo Davis**
- Co-Librarians: **Diana Rogers and Nancy Mumpton**
- Meeting AV Support: **Enna Post**
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- Mega Auction Chair: **Javier Gurrola**
- Monthly Auction Chair: **Javier Gurrola and Ann Winchell**
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- Outreach: **Kathi Metzger**
- Private Plant Sales at Meetings: **Chris Ginkel**
- Propagation Education Group (PEG): **Tristan Davis**
- Pumice Sales: **Tom Briggs**
- Recognition Committee: **Cricket Peterson**
- Speaker Coordinator: **Nadia Whiteside**
- Technology Committee: vacant
- Trip Coordinator: vacant
- Website: **Peter Bockenthien, Angela Stephens**

Direct any comments, questions, ideas to Editor Sue Hakala.