

Central Spine

Newsletter of the Central Arizona Cactus and Succulent Society



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Echinopsis Ginkel #5 by Kathi Roark.

SHINING A LIGHT ON A HIDDEN AGAVE: WHEN YOU KNOW THAT THEY KNOW THAT THEY DON'T KNOW

Photos and text by Tristan Davis

When our speaker had to cancel for our June program, Tristan stepped in to present our program. Here's a summary.



Greg Starr, left, and Tristan Davis went agave hunting in Mexico for *Agave cryptic*, right.

Have you ever looked at a plant with an ID and thought, “Hmmm...that’s weird?” Trying to answer those types of questions is what science is all about. In the presentation, Tristan took us on a storybook adventure with Greg Starr that ended in a surprising place. It all started with a photo and someone saying, “Something is going on here.” The story took them from the internet, to a nursery, to their gardens, and all the way to Mexico. It’s a story that had a happy ending and lots of pretty photos! It’s also a story that has an unwritten sequel.



Biography: Born into a very "outdoorsy" family, Tristan was introduced to the natural world at a very young age. His initial interest was specific to South American birds, and subsequent education at Louisiana State University and the University of Kansas allowed him to accompany scientific expeditions to most South American countries, as well as China, the Philippines and Equatorial Guinea. It was obvious early on in his travels that Tristan much preferred those locations with less humidity (western Peru, the pampas of Argentina, etc.), and this was a significant reason he moved with his husband to Arizona in 2001.

Once arriving in Arizona, Tristan readily transitioned his scientific passions to cacti and succulents, and although Tristan has authored numerous scientific publications related to ornithology, he published his first paper on desert succulents in 2011 in the *Cactus & Succulent Journal*.

Tristan's current interests and scientific pursuits include Mexican agaves with Greg Starr, Peruvian *Puya* and South American *Cleistocactus*, as well as neotropical birds. And, whatever else piques his interest along the way.

Tristan currently resides in Chandler, AZ and is a member of the Central Arizona Cactus and Succulent Society. He served on the Board of Directors for the society and currently administers the Propagation Education Group (PEG) and the Seed Depot for the society. Tristan also volunteers at the Desert Botanical Garden.



Agave cryptica inflorescence with distinctively upward-pointing flowers.

Be sure to visit CACSS on the web at: centralarizonacactus.org, Facebook, Instagram and YouTube at: CentralArizonaCactus and members only at: CentralArizonaCactus Swap and Shop.

We are finally going back to meeting at the Desert Botanical Garden on July 31 for the board meeting at 11 a.m. in Whiteman Conference room. The regular meeting will be at 2 p.m. in Dorrance Hall. There will be a silent auction, library books and some free plants.

There are no restrictions or limits as to who can attend; please respect others' space. Masks are always encouraged but not required. Our program will be *Out of the Fire, and Into the Pan* by Steven Brack (see last month's newsletter for all the details). Join Steven for a tour of the plant life in southern Africa.

In a few months, we are going to need new officers for our CACSS board. If you are interested, please get in touch with Jo Davis or me. We always need a few new faces and fresh ideas to help on the board.

Hope you are having a good summer, and I look forward to seeing you at the July 31 meeting.

CACSS HISTORY

By Editor Sue Hakala

- November 1973, the first time that the Central Arizona Cactus and Succulent Society (as an official Cactus and Succulent Society of America affiliate) met at the Desert Botanical Garden.
- September 1975, the first CACSS newsletter was published by Editor Charles Merbs.
- July 1976, the DBG Director Hubert Earle suggested the name *Central Spine* for the society newsletter.
- January 1979, Tom Caldwell's drawing of a cactus spine was selected as the society logo. Botanist/artist Wendy Hodgson, of the DBG, is credited for drawing the logo based on *Ferocactus nobilis*.
- March 1983, it was suggested by Jackson Fitz-Randolph to have a People's Choice Award at the Annual Show.
- 2007, first color pictures were used in the newsletter.
- 2023, the 50th anniversary of the founding of the CACSS.

Central Arizona Cactus and Succulent Society, a 501(c) (3) non-profit organization, established in 1973, is an affiliate of the Cactus and Succulent Society of America. We are grateful to the Desert Botanical Garden for providing our meeting space and supporting our projects.

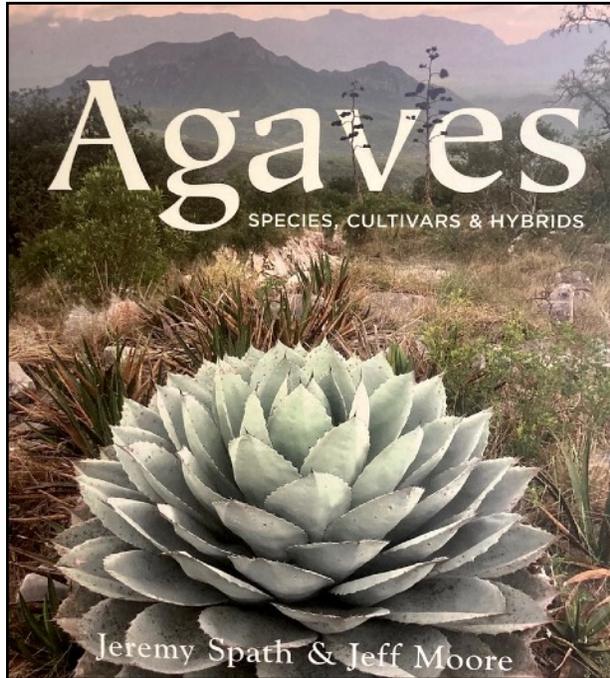
Mammillaria grahamii is a cactus native to Arizona. A tough, durable, easy to grow plant, it does well in the Phoenix area as a potted plant or in the ground. I bought this plant eight years ago and planted it in dappled shade. I moved it four years ago to its present full sun location. The first summer, I covered it with shade cloth. The second summer, I only covered in extreme heat.

Plant in well-draining soil and water when dry. The last two summers it has been in full sun. I fertilize occasionally during the growing season. It responds to summer rainfall by bursting into beautiful bloom.



AGAVES—SPECIES, CULTIVARS AND HYBRIDS A BOOK REVIEW

By Tom Gatz



Cover girl *Agave ovatifolia*. Photo by Jeremy Spath.

This book was published in 2021. Authored by Jeremy Spath and Jeff Moore, it has 356 pages of agave information in paperback for \$40. It is available in the CACSS library.

If you like agaves, you will absolutely love this book. If you are not yet a big fan, this book just might change your mind. If you are thinking, “But hey, I’ve already got Mary Irish and Greg Starr’s great books on agaves, why do I need another one?” Think again.

I too thought this might be just a big coffee table book with pretty pictures (and “pretty” is an understatement!). Yes, the amazing photos are worth the 40 bucks alone. This book is also full of new and useful information for agave growers. In fact, the first 100 pages cover 17 agave-related topics including history,

propagation, containers, cultural issues, morphology, identification, habitat, and much more.

Here are just a few of the useful tips from the authors. While pretty cool and worth having if even if for only a few years, ‘mangaves’ (hybrids between Manfredas and agaves) are often fairly short-lived, sometimes blooming and dying in 3 to 5 years. The good news is that new pups will eventually develop at the base of the flower stalk, if you are patient.

To treat agaves infested with grease mites, spray at least three times in the spring, alternating between spiromesifen and abamectin. Sevin dust (carbaryl) works as well. Remove anything that has mite damage and trash it. Isolate infected plants when possible. The authors recommend using a rotation of treatments to avoid the mites developing an immunity to the insecticides.

The remaining 250 pages are specific accounts of agave species, hybrids, cultivars and mangaves, many of them not covered by Mary Irish or Greg Starr’s books. Since their books came out, many new species of agaves have been discovered and dozens of

new hybrids and cultivars have, or are about to, hit the market. Many of them are covered, and breathtakingly illustrated, in this book.

When I pick up most plant reference books, I skim them and come back, from time to time, to look up specific information. However, this book is written in such informal, conversational style that you suspect the authors had fun writing it because it is so enjoyable to read. I literally read it cover to cover in just a few days. It's a real page turner!

Both authors are succulent nursery owners. They don't pretend to be taxonomists and pretty much stay out of the fray that sometimes causes friends to stop talking to one another over sometimes contentious agave classification issues. Instead, they share what is known and what isn't, what they think from their experiences, point us to additional information, and remind us not to worry so much about names but to focus instead on enjoying these wonderful plants.



First described as a new species in 2011, *Agave pintilla* (aka 'OMG') is still rare in cultivation. Photo by Jeremy Spath.



Wavy terminal spines on a version of *Agave potatorum* nicknamed 'Spawn.' Photo by Jeff Moore.

Our members appreciated the library book tables at the May and June meetings; 15 books were checked out. We felt that even an abbreviated amount of our CACSS library collection available was a sign of normalcy returning. Please, a round of applause for our 14 book carrier volunteers who tote heavy books, bins and carts back and forth to meetings. The upcoming July, August and September meetings in Dorrance Hall will see the majority of the collection available to our members.

In an effort to get our collection back to pre-COVID status, many members (as well as no-longer-members) were emailed last month regarding overdue library materials. Thank you to everyone for responding in a timely manner. We've collected over half of the outstanding items.

For both new and longtime members, a brief reminder about the CACSS Library Collection and policies:

- **Traveling Collection:** Since our CACSS books do not have a permanent home, it's become a "mobile collection" transported by volunteers to approximately nine meetings per year. This means not every title will be available at every meeting. Contact the librarians if you would like to borrow a specific title.
- **Holdings:** A listing of the materials owned is available on our website. Choose 'Library' from the drop down menu and use the links for books, journals and periodicals to search for specific titles.
- **Checking out books, journals or magazines:** We limit each member in good standing to 2 items for 2 months. If an item becomes overdue, we'll send an email reminder shortly before the next meeting. Contact the librarian if other arrangements must be made for return of items.
- **PLEASE return items:** Place them **only in the RED Book Return Bin** on the library tables.
- **Donations:** If you want to donate an item(s), please put a slip in each item with your name. If you want your item(s) returned, if we can not use them, state that on the slip with your name.
- **Our Library Donation Policy:** We reserve the right to put items in the CACSS collection, sell on Amazon or eBay, sell at meetings, or donate to other libraries. All these decisions are according to the librarian's knowledge and research on the donation.

If you have questions or requests, please contact CACSS Co-librarians:

Diana Rogers azdiana53@gmail.com or
Nancy Mumpton Nancy.mumpton@gmail.com

Summer is a great time to review articles that have been in the *Central Spine*. They will help make you a better grower. Go to the centralarizonacactus.org website and hover over the Newsletter tab. Click on Newsletter Indexes. Click on the Plant Index or Miscellaneous Index and scroll through the articles, reading those of interest and noting the month and year. Go back to the Newsletter tab and click on it. Find your article by month and year.

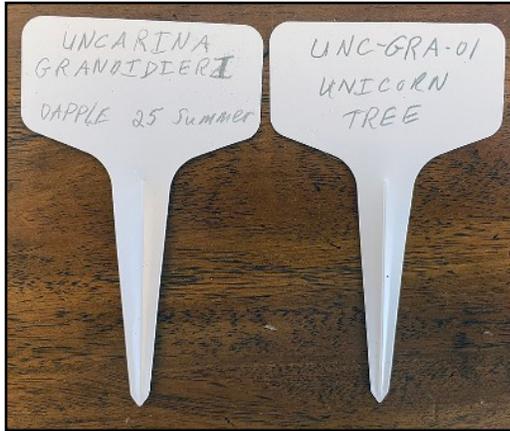
There is a big section for Beginners and a Beginner's Corner in the indexes. Read the articles of interest and print some out to keep in a notebook. The sections on Culture and Summer Heat are of particular importance now. There are several articles on summer watering, shade, etc. Remember, with some exceptions, most plants are dormant when the heat and night temperatures go up and don't want to be watered, especially in the humidity. You want to water, but don't as some plants can just turn to mush overnight. Keep in mind that cactus and succulents have evolved to endure hot and dry times by going dormant. There are always exceptions.

Also, scroll through the Plant Info tab on the home page of the website for more articles about plants.



CACSS member Michael Karpinski has had a few encounters with mealy bugs.

There's an old joke that goes, "How do you get to Carnegie Hall?" Answer: Practice! Well, I said it was old, not funny. When I first started learning about succulents, I was amazed at how people could remember the multisyllabic botanical names. It takes practice to commit these names to memory. Today, I'll present the approach I took to get my head around the 150 or so plants that I track in my collection.



For each plant acquired, I start with a bit of research which I input to a spreadsheet that contains 36 data points (36 columns). I'll present the ones I feel are most important with the hope that this gives you ideas for creating your own system.

I write the data points for the plant that I must know about on plastic tags in pencil. I have friends who use aluminum tags which last much longer but are more difficult to write on. You can see an example of the tag for *Uncarina grandidieri* in the photo. I put the binomial right

on the tag. Each time I water, if I can't recall the name, I take the tag out of the dirt and practice it right then and there.

Asterisks in the list below denote items that are on the tags.

Key Fields I Track and Why

Field Name	Why It Is Important
Family	If you only collect cactus, then there's only one (Cetacea). I focus on old world plants which represent 25 different plant families in my collection.
Genus *	This is on each plant tag and along with species is the primary way that I learned the full binomial. It's easier to remember a name when you can see and touch the plant than it is to memorize a picture of a plant.
Species *	Also on each plant tag.
ID *	I often purchase two of the same species in case one of them dies (which happens way too often). My method is to concatenate the first three letters of the genus and species and a unique number for that individual.

Field Name	Why It Is Important
Cultivar/Variety/ Hybrid	This is particularly helpful as many hybrids are being produced by enthusiastic growers.
Common Name *	I do not memorize these, but many non-collectors do. Consider someone who calls you in distress stating that their desert rose dropped all of its leaves. This would be normal in summer for an <i>Adenium socotranum</i> and of no concern at all. Learning the full binomial does have its advantages.
Date Arrived	I've only had this hobby a few years, but it helps me judge the plant's growth rate.
Data Last Repotted	Arguably this is one of the most important data points as I generally repot every two years.
Source	This has proved helpful as I'm seeing trends of which plants tend to die based upon where I acquire them. I do track which ones died and what happened. It turns out that it's almost always my fault.
Native To	This is extremely helpful when understanding optimal growing conditions.
Water	Most <i>Adenium</i> adore water in the heat of summer but <i>Aloidendron dichotoma</i> will rot.
Sun *	Most plants in my collection can take full sun. But that's for environments much less harsh than Phoenix. I've learned to give this "full sun" plant dappled light under a Palo Verde and it's much happier.
Low Temp *	A lot of plants will survive below freezing if the soil is dry. This one is no exception.
Growth Season *	This summer grower will drop its leaves late fall and spend the winter in a heated greenhouse. It's easy to sort the plants each spring and fall just by reading the tag.
Flower	This is particularly important as many species can only be differentiated by the characteristics of its flower. <i>Pachypodium bispinosum</i> and <i>P. succulentum griquense</i> are good examples of this.

- Do not flood irrigate the plant within the first 30 days of planting (rain excluded). The root system of the ocotillo must redevelop before it may benefit from irrigation.
- For 30 days, shower or mist the wands of the ocotillo thoroughly without substantial accumulation of water on the ground. This will allow the plant to obtain some moisture via the wands.
- After 30 days, fill the well twice every 2 weeks (depending on climate conditions and zone).
- Be patient! If the ocotillo has rooted sufficiently and is getting enough water, it will produce leaves. Watering cycles may need to be altered depending on conditions.



Tom Briggs shares a “plant” he saw at this year’s Tri-City Show at the L.A. Arboretum. Needleworkers be inspired!

This month, our FB page came alive with photos of cactus in bloom. I was particularly taken with the number of *Echinopsis* and *Trichocereus* flowers. Many CACSS members are collectors of these lovely plants and have spectacular collections. I always find it surprising to find such lovely blooms during the brutal heat of June.



Left, Cactus of the Month: *Echinopsis* hybrid 'Antimatter' posted June 21 by Terri Porter. Right, Succulent of the Month: *Edithcolea grandis* posted June 24 by Cameron Davis.,

Chris Ginkel, our FB page administrator, has an extensive collection of *Echinopsis* (*Trichocereus*) hybrids and posts lovely, high quality close-ups of them in bloom. Check out his album, *Echinopsis* (*Trichocereus*) and hybrids, on the CentralAZCactus Facebook page. Be sure and click on each individual photo to open. You will find the identification of each plant and can view full screen for best effect.

Eric CactusDude wrote a thought provoking piece about using a light meter to figure out exactly how much light your cacti are receiving. Eric found that a potted plant on a covered patio right next to full sun receives much less sunlight than you would expect. A light meter is an excellent tool in deciding how much sun your plant is actually receiving. Eric suggests that filtered shade, all day, allows for a full day of growth rather than a half day of sun and a half day of shade.

Thank you to our members who posted photos of their collections grown from seed. Did you see this month's postings by Linda Branum Hoefner, Eric CactusDude, Tristan Davis, Tom Briggs, and Ken Luiten? Did you know you can do a search on the CAC page to find postings about growing from seed? Simply enter "growing cactus from seed" and numerous postings will appear with oodles of information.

You can join the CAC FB page at: <https://facebook.com/groups/cacss2/>

Each month a photo of a cactus and succulent posted by CentralArizonaCactus members is selected for recognition, and can be seen above.



Members enjoying the frenzy of the silent auction last month.

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CACSS PROGRAM AND COMMITTEE CHAIRS 2022

Annual Show/Sale Chair 2023: open
Archivist/Historian: Lois Schneberger
Audit Committee: Mike Gallagher
Central Arizona Cactus Swap and Shop Page: Chris Ginkel
CSSA Representative: Mike Gallagher
Facebook Coordinators: Tom Briggs, Chris Ginkel, Celeste Gornick, Ken Luiten, Thom Young
Holiday Party 2022: Sue Glenn
Co-librarians: Diana Rogers and Nancy Mumpton
Keeping in Touch with Members: Jo Davis
Membership: Beth Kirkpatrick
Newsletter: Sue Hakala
2022 Auction Chairs: Nick Diomede, Chris Ginkel
Private Plant Sales at meetings: Sue Tyrrel
Programs and Room Setup: Elaine Hu
Propagation Education Group (PEG): Tristan Davis
Pumice Sales: Tom Briggs
Website: Anna Rosa Lampis

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SPECIALISTS TO CONTACT WITH QUESTIONS

Diana Rogers and Nancy Mumpton
Co-librarians for CACSS collection.

Tom Briggs
Manages the pumice pile.

Tristan Davis
Specializations include plant propagation, and heading PEG (Propagation Education Group), and manages the Seed Depot.

Doug Dawson
Specializations include growing from seed, flora of Namibia, *Lithops*, other *Mesembs*, *Melocactus*, and miniature cacti and succulents of Arizona.

Chris Ginkel
Co-manages the Facebook page along with Tom Briggs, Celeste Gornick, Ken Luiten and Thom Young, and manages the CACSS Swap and Shop page.

Ken Luiten
Manages the Instagram page.

Dean Patrick
Specializations in softwood stem-cuttings, plant division and seed starting, rooting cacti, *Agave* and *Aloe*.

Bob Torrest
Specializations include desert landscaping, unusual (including rare fruit) trees and shrubs, *Aloes*, *Agaves*, and columnar cacti.

Sue Tyrrel
Manages selling at meetings.

Send comments, suggestions and submissions to Editor Sue Hakala at cacsscentralspine@gmail.com



Opuntia sp. by Lalit Grupta.