Terri Porter’s post of Echinopsis ‘Sorceress’ in bloom is the featured cactus from the Facebook page this month.
This program will be an introduction to the genus *Ferocactus*, covering identifying characteristics, distribution of the species and basic classification. Many of the species are shown, some with habitat photos. There will be some landscaping and design tips, and information on culture. Short lists of nurseries and references are provided at the end.

I have a BS and MS in Plant Protection from the U of A. I have worked in the agrochemical industry and spent many years off and on working with my father in the commercial landscape and maintenance business. I have been with the DBG for 17 years, first as a certified arborist, and now as manager of the *Cactaceae* here. Our collection of cacti is one of the largest in the world. I have participated in three workshops in Mexico covering desert landscaping with water-efficient plants and have traveled in Peru and Baja California, Mexico.

I have been a member of the CACSS for over 20 years and served twice as president and as show chairman. In addition to collecting *Ferocactus*, I like *Ariocarpus*, *Turbinicarpus*, and Chilean genera. I also have many *Euphorbia* and *Mesemb* species, as well as *Asclepiads* and other caudiciform species.

I have converted my yard to all arid-adapted trees and shrubs, accompanied by cacti and succulents. As a result, I have diverse numbers of wildlife that live in or visit my yard, including native bees that pollinate the various plants. I also have five box turtles indigenous to southeastern Arizona, which I took off someone else’s hands, and they have a good life among all the plants in the backyard.
ASK AN EXPERT:  *Opuntias* wilting  

A member asks: How do I keep my *Opuntias* from drooping and folding over in the summer?

**Tom Gatz responds:** Assuming the question is about the big *Opuntia ficus-indica*, I have to say, you are not alone. I have been fighting that battle for years. I have several of them and haven't found that extra watering always works all that well. My only solution has been to trim off several of the pads to reduce the weight. They, of course, grow back quickly. Here is a photo of one (elongated-leaf variety) I have been fighting with for about 25 years (grown from a single pad). You can see it is now mostly a trunk with few pads. The circle shows where an entire branch broke off last week, so I avoid having any special plants (or people) under them. With my other specimens, I have decided to keep them trimmed back to about 8 feet tall so I can manage them better (see the one peeking over the shed).

In Mary Irish's 2000 book, *Gardening in the Desert*, on page 123 she says, “I have found that a long, slow, deep watering will bring a plant back. Severe desiccation can be prevented by a regular schedule of deep irrigation. If the plant has wilted so much that the pads still droop after a good watering, it is necessary to prune at least one pad from each stem series to reduce the weight and prevent breaking and splitting.”

A few years later, I attended one of her lectures where she said it is a finicky, tropical species that will droop its leaves when it is too hot, too cold, too dry, and even too wet!

In Scott Calhoun's 2012 book, *A Gardener’s Guide to Cactus*, on page 173 he says, “Indian figs (*Opuntia ficus-indica*) need more regular watering during the warm months than most other cactus species. They also will tend to collapse or fall down during extended below-freezing weather.”
At the June meeting, members were asked to write down questions to be answered by an expert. Twenty-two questions were asked, so it’ll take a while to get through them all. The most number of questions were related to watering.

This, we can all agree, has been an unusual year for rain. In Mesa, I’ve gotten 1.6" of rain since August 3 of last year. Supplemental watering is required to keep cactus, succulents, bushes, and trees alive and healthy. I’m not talking about sprinkling, but a deep soaking watering.

Watering is a variable and personal (to the plant) thing. An excellent source of advice comes from Jim Elliott, member, past president, all around nice guy, and owner of Arizona Cactus Sales in Chandler. Jim has made his living caring for and selling cactus and succulents. His Arizona Cactus Sales website has a Care and Tips tab. Choose that, then scroll down to watering outdoor cacti. He provides excellent advise that I’ve followed for decades with great success.

To read past newsletter articles about watering, utilize the club’s newsletter indexes. Visit the club website, choose newsletters, newsletter indexes, miscellaneous index, then scroll down to the watering heading. You will find LOTS of great information provided by members related to watering plants here in the low desert. Hope this helps for now.

Visit the web site: Soaker Hoses: What Are They And How To Use Them In The Garden.
HOW'D YOU GROW THAT PLANT?  Compiled by Tom Gatz

Best Novice Aloe or Aloe Hybrid of the 2018 Show: Aloe melanacantha var. erinacea
Grown by Thom Young

PURCHASED: About 3 years and 4 months ago from Cactus Data Plants (Woody Minnick) at the January 2015 CACSS meeting. This Aloe was approximately 2 inches tall and 2 inches in diameter. The current dimensions: 3.635 inches tall by 4 inches wide. I was attracted to this Aloe by the toothy/spiky growth habit and rarity.

POT: I prefer ceramic thrown or hand-built pots, and have found that this plant does well in them. This plant rarely needs repotting.

FERTILIZER: I feed it every watering with a very diluted 10-16-38 fertilizer sold by our society.

POTTING MEDIUM: I formulate my own cactus mix to promote fast drainage. I starts with a good basic cactus mix and add pumice, DCG and other proprietary ingredients.

SUN EXPOSURE: This Aloe is protected on the patio that provides morning sun year round. It will take direct sun until noon, but I don’t risk overexposure to the sun.

WATERING: It gets a light watering every week in the winter. Watering is cut way back in the summer, spring and early fall, and I stop watering when humidity is consistently above 30%.

FROST PROTECTION: This Aloe can withstand temperatures of 25˚- 30˚ when dry. I keep this plant on the patio/porch year round.

SPECIAL NEEDS: Aloe melanacantha var. erinacea is a hardy plant when not overwatered. Low to no summer watering is best when temps are above 95˚.
HOW'D YOU GROW THAT PLANT

Best Crest or Monstrose of the 2018 Show:  *Melocactus matanzanus monstrose*
Grown by Tom Briggs

PURCHASED: I purchased the plant at Bach’s Cactus Nursery in Tucson on a weekend plant trip with my boys the summer of 2017. It was hiding in the corner of a greenhouse just waiting for me. I have always been attracted to clumping cactus. My son Danny was actually looking to buy a pot from a vendor at the winter Tempe Art Festival when I stumbled on a pot that I liked and it gave me the idea to enter this plant in the CACSS show this year. I wasn't originally planning to enter this plant in the show for a few years, but did enter it on a whim because of that pot.

FERTILIZER: I just use a little of the CACSS (10-16-38) fertilizer maybe once a month.

POTTING MEDIUM: I’m working on new potting mixes right now with the relatively new house/yard. It’s currently planted in 70% small pumice and 30% backyard soil.

SUN EXPOSURE: The plant seems to do best under 30% shade cloth. Under more sun, it starts to wash out the nice green color.

WATERING: I water most of my plants once every 7-10 days in summer. I’m trying to use more harvested rain water, but tap water seems okay too.

FROST PROTECTION: I haven’t had the plant long enough to deal with frost. Might never again with global warming.

SPECIAL NEEDS: The only special needs so far are keeping an eye out for mealy bugs living in all the crevices the plant has. I mostly go after them with a toothpick or carefully with long, pointy tweezers.
PURCHASED: Gard Roper gave me this plant a little over a year and a half ago. It was a little rough looking, almost all the leaves were stressed red and there were a few dead and damaged leaves. It had also outgrown its pot and was root bound. I took it home, removed the dead leaves and the worst of the damaged leaves, repotted it and gave it regular water and pretty much left it alone for a year. The plant responded fairly quickly, the leaves slowly began turning green again and plumped up.

POT: I had an empty pot made by Kathy Minnich. It was the right shape and size and it was the same reddish color as the leaves.

FERTILIZER: I use the fertilizer the club sells. I probably fertilized 6 or 7 times the first year but have since cut back to 2 or 3 times a year.

POTTING MEDIUM: I use Black Gold Cactus Mix to which I add pumice.

SUN EXPOSURE: Currently, it sits under 60% shade cloth on the east side of my house.

WATERING: It’s watered every 4 or 5 days in the summer and then every 14 days in the winter.

FROST PROTECTION: When the temperature dropped down towards freezing, I think I brought it in where it sat under fluorescent lights for a couple days.

SPECIAL NEEDS: None that I have found except giving it shade protection.
FACEBOOK UPDATE

Our Central Arizona Cactus & Succulent Society (CACSS) Facebook (FB) page is an open and inclusive forum on cacti and succulents (C&S). Our FB members have many C&S photos, questions, and commentaries, along with requests for C&S IDs. Our FB page membership rose to a total of 3,864 members in June. Please join the CACSS FB page by copying and pasting this url to your search engine: https://www.facebook.com/groups/cacss2/

Each month we feature a cactus and a succulent (non-cactus) photo posted by our FB members. July’s featured cactus photo is Terri Porter’s post of Echinopsis ‘Sorceress’ in bloom (on the cover). The featured succulent photo is Michelle Schrade’s post of Huernia hislopii v. robusta in bloom. Thanks to Michelle and Terri for posting their photos on the CACSS FB page.

Facebookers keep posting!

June Facebook comments

As a new member, I am almost overwhelmed by the amount of information, help and general goodwill that the members of this society provide at its meetings and via Facebook.

Gordon Griffes

I absolutely agree. Being a Facebook member and living “across the pond” in the UK, I have to say that I thoroughly enjoy the photos, the advice and the comradeship of sharing photos of plants.

Colin Young
Members certainly enjoyed socializing and bidding on plants at the June meeting. Come early and enjoy a snack, the library, browsing the free plant table, bidding on plants, and seeing friends.

Be sure to visit CACSS on the web at: centralarizonacactus.org the Society’s website. Facebook Central Arizona Cactus and Succulent Society CACSS Swap and Shop, a place to connect with members.
BUS TRIP

The club is sponsoring a bus trip to the Los Angeles area, August 10-12. Included is a visit to the nation’s top cactus and succulent show and sale. Pay your $200 fee to Treasurer Nick Diomede ASAP. Fee includes bus and a shared room. For your own room, it’s $100 extra.

To read about what a bus trip is like, visit the webpage, choose newsletters archived, and search September 2016 for Lance Runkles excellent article: 2016 California Bus Trip: A Novice View.

See plants like Trichocereus ‘Firecracker’ that you’ve never seen grown so magnificently. Thanks Wayne Wipple for the hands. Photo by Sue Hakala.
PEG will meet July 21, 9-11 a.m., in the Whiteman Conference Room (in the Webster Building) at the DBG to discover that yes, cacti CAN have leaves! There are several genera of cactus that still retain their leaves, can look like trees, and grow well here in the valley. As usual, we will have give-aways of a couple of species that we will be talking about. Garden admission is free when you tell them you are attending the meeting.
Our May meeting of PEG was a great success with over 20 people enjoying an introduction to different species of *Bromeliaceae* that you can grow in AZ. Lots of freebies were available including plants from the genera *Dyckia*, *Hechtia*, *Puya*, and *Billbergia*. No one left without plants. Additionally, CACSS member Ryan Grabe presented information he’s gained from experimenting with soils for growing cacti seeds.

The next PEG meeting we will be concentrating on growing cacti that have leaves! We hope to see you all there.

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NOMINATING COMMITTEE Upcoming Elections for the 2019 Board of Directors and Officers  By Doug Dawson

This fall, the Central Arizona Cactus and Succulent Society must elect several Board members and fill four officer positions: president, vice-president, secretary and treasurer.

To accomplish this goal, we have a Nominating and Election Committee. Currently, we have five members on the committee: Doug Dawson (480-893-1207), Kathryn Good (602-524-5775), Pam Edsall (623-810-2550), Ken Luiten (520-780-2925), and Thom Young (480-460-0782). Their phone numbers are included here to facilitate communication with the committee. If you would like to ask questions about possibly running for a position, please call one of the listed committee members. All paid up members are eligible to run.

Please consider calling one of the committee members to discuss what it means to get involved. Is this the right time for you to make a contribution to the Central Arizona Cactus and Succulent Society? Call us and become informed about board/officer requirements and duties. Maybe this will be a good fit for you!

FAVORITE TOOL  By Edmund Hunt

We all have old plastic credit cards sitting around somewhere doing nothing useful. Something useful, but a bit odd, is to use the old stiff plastic to trim clay pots or scrape clay slabs smooth. An additional odd usage would be to clean cluttered cactus and succulents.

Trim the card down to a more or less sharp point. Not too sharp to avoid damaging the plant but narrow enough to get into little cracks and crevices that other tools might be too big or too crude to thrust into an unsuspecting specimen. If the point is too big, it can be trimmed down and if too small, another card can be sacrificed.
Member Matthijs (Tice) van Soest has a problem with two *Agave weberis*. He writes: I have two *Agave weberis* in my yard affected by a weird “rotting disease.” It does not seem to be affecting any of my other *Agaves*. (Photos by Tice.)

I think this happened in October-November of last year. It was not associated with any wet period. The plants developed a mushy rot that essentially took out, at that point, what was the central core of the plant. It took it out quite high which made me rule out snout weevil, which I treat for. I have had this happen once before to two plants of the previous generation of these *weberis*. One plant recovered and went on to almost flowering before being taken out by weevils (I stop treatment once I notice that the plant might flower.*). The other plant, where this happened much lower in the core, just sat in my yard for about 2-3 years doing absolutely nothing. The outer leaves were not deteriorating, but no new growth ever happened. I eventually took it out.

Whatever this is seems to specifically affect my big *weberis* and none of my other *Agaves* (I have about 30-40 *Agaves* in the ground and many more in pots.). It seems too specific for crown rot, but given how high in the core it happened, it would appear to be a candidate. I have wondered if, despite the treatments, weevils have nibbled on the plant and left behind bacteria that did most of the rotting.

The white/yellow powder you see is leftover from a sulphur treatment that I applied after removing the most heavily affected parts of the plant. Given that it is still alive is evidence of how little rain we have had and how I have avoided watering the core of the plant since I discovered this.
**Greg Star responds:** I see two different problems with this particular *Agave*. The easiest to diagnose is the *Agave* mite damage as manifested in the "grease-like" marks and the subsequent brown scarring that is clearly visible in photo 3.

The other issue with the damaged core is not so easily diagnosed. I had similar damage to potted *Agaves* last year when we had the very hot June followed by the torrential rains in July. However, the damage to the leaves here looks more like something chewed the tender leaves while still tightly bunched in the core. I rule out flower stalk failure because I can see the tip of a new leaf in photo 3. Also, in that same picture, I see a leaf that looks like it was chewed. Now, that could be independent from the general leaf rotting while in the core. My thought is that something ate the leaves in the core without killing it which caused the leaf dieback.

*Stop treating plants that are forming a flower stalk as the chemicals will kill pollinators and the plant will die regardless.*

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In the summer 2018 issue of the Cactus and Succulent Society of America’s *Journal*, there is an article, *Agave Mites: A Quick and Dirty Primer*, by Ron Parker with lots of photos showing the damage and what can be done about it. Available in the club’s library.
## SPECIALISTS TO CONTACT WITH QUESTIONS

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Members are encouraged to submit photos for use in the newsletter. Send photos, questions or comments to CACSScentralspine@gmail.com.