Happy Holidays to all! It's a perfect time for a walk in the desert with family and friends to see our amazing Arizona desert plants. Who knows, you may come across something unusual like this *Ferocactus acanthodes* with pink spines.

*Photo by Sue Hakala.*

NO MEETING IN DECEMBER.
A big CACSS thank you to the dedicated writers who have produced exceptional articles, fabulous photographs, timely ideas, new features, and so much more.

Say a big thank you to all authors, and encourage them to write more: Greg Starr, Tristan Davis, Mary Ellen Morrissey, Scott McMahon, Dan Smith, Cliff Fielding, Tom Gatz, Thom Young, Beth Kirkpatrick, Dean Patrick, Mike Gallagher, Sue Hakala, Elton Roberts, Eric Lundberg, Rita Gosnell, Kim Andrews, Gard Roper, Kevin Belmonte, Judy Tolbert, Nancy Mumpton, Wendy Barrett, Chris Ginkel, David Crummey, Ken Luiten, Doug Dawson, Leo Martin, Jim Elliott, Kelly Griffin, Marie Hunt, Chuck and Jeanne Ann Brush, Cricket Peterson, Lynn Friedman, and Heather Holst.

Thank you to Nick Diomede who serves as the newsletter technical advisor. With the help of a new computer program, Nick also tweaks every photo in the newsletter to
make each look its best. Thanks must be given to the multitude of photographers, too numerous to mention, who have contributed photos that make each issue lively and entertaining. We wouldn’t look so good without you.

Nancy Mumpton, a great proofreader, plus our other anonymous proofreader and I endeavor to produce a product free of errors. Thank you to all for help with this arduous task.

This year, Tom Gatz and Kathy Miller volunteered to contact all 2019 Annual Show trophy winners and compile the How’d You Grow That Plant? articles. These contributions teach us all how to grow here, in the low desert, successfully. Wendy Barrett took all the photos for the articles this year.

In 2019, Gard Roper and Nick Diomede planned monthly programs. Wayne Kramer, directed by them, gets all monthly program articles and photos from the presenters submitting to the newsletter, website, Facebook and Instagram page.

Michelle Schrade reports monthly on the CACSS Facebook page and has the lucky job of choosing the featured photos.

I hope you agree that is has been fun peeking into a grower’s toolbox to see their Favorite Tool. Contributors for 2019 included: Tom Briggs, Jeanne Ann Brush, Tom Gatz, Kathy Miller, and Chris Willis. It’s never too late to submit your favorite.

A new newsletter feature, suggested by Nick Diomede, is highlighting a member’s Oldest Plant. Contributors for 2019 included: Nick Diomede, Bob Hopfner, Barbara O’Connor, and Iris Philbin. Please share your oldest plant (they all have very interesting stories), and submit them to the address below.

The Education Group has suggested that every newsletter have a beginner’s corner with seasonal articles of interest. A member of the committee with be guiding this in the future.

If you have an idea for an article, regular feature, comments, suggestions, etc., please submit to CACSScentralspine@gmail.com. It will help to make our newsletter great! As you can see, it’s indeed a club effort!

Photo: Ferocactus chrysacanthus
Succulents go through different patterns of growth throughout the year requiring adjustments to their care respectively. With fluctuations in temperature, most succulents transition through phases where they grow less (dormancy) or grow more (actively growing). Succulents are “opportunistic growers,” meaning they grow when conditions are right and slow down when they are not ideal. The art of horticulture is observing your plants to know whether they are actively growing or dormant.

Traditionally, succulents are divided into categories of “winter dormant” and “summer dormant” indicating when they will need more water. While succulents can be placed into these general categories, this is not a rigid rule. In nature, there are always exceptions to the rules.

TEMPERATURE  The range of temperatures succulents can tolerate is quite impressive, but not all species can handle the same temperatures. Most succulents prefer the temperatures between 60 and 90F which is their most active growing period. Growth slows beyond this range as the plant goes into the survival mode of dormancy until more tolerable temperatures return. Temperatures below 60 and above 90F require many succulents to be in dormancy to survive. However, extreme heat and extreme cold will cause death. Knowing each species’ tolerance level to heat and cold is important.

While succulents are drought tolerant plants, this does not necessarily mean they love the extreme heat and direct sun. Many succulents will sunburn, even cactus. Succulents considered to be “summer growers” will slow down growth during the hottest months of the year and the cooler months of the year. Succulents considered to be “winter growers” will slow down growth during the hot months of the year and the coldest months of the year.

WATER  Most plants grown indoors never go into survival mode, meaning they actively grow and need more watering. Succulents grown indoors can be watered at nearly the same rate year-round.

Success in growing succulents outdoors is knowing the plant’s water needs based on whether they are actively growing or dormant. When a succulent is dormant, it is trying to survive and is not putting energy into growing, meaning it will need minimal water. Succulents going into survival mode during cold periods will need little to no water depending on how cold the temperature is. Succulents going into survival mode during hot periods will need less water but still need some to prevent dehydration leading to death.

The key to keeping succulents happy is watering only when the soil is dry. If you are not watering frequently enough, your plant’s stems and leaves will become limp, dull
and shriveled. If you are providing too much water, your plant will be yellowing. If the soil is waterlogged, repot it into dry soil.

WINTER DORMANCY Succulents that are dormant in the winter will actively grow during the spring, summer and fall months. However, during the hottest days of summer, they will go through a mini dormancy period and slow down their growth. *Agaves* and cacti slow their growth when temperatures are above 100°F and during the winter months. Once temperatures get below 40°F though, you’ll see growth slowing down drastically. Limit the amount of water these plants receive as they can easily rot while dormant. Many cacti won’t bloom unless they experience a period of cold weather, around 40°F for at least 60 days.

Once the weather begins warming, begin watering slowly but increasingly as the temperatures increase. Start adding some fertilizer in the spring.

WINTER DORMANT SUCCULENTS

<table>
<thead>
<tr>
<th>Adenium</th>
<th>Mammillaria</th>
<th>Sedum (cold hardy varieties)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aloinopsis</td>
<td>Mangave</td>
<td>Sempervivum</td>
</tr>
<tr>
<td>Agave</td>
<td>Notocactus</td>
<td>Stapelianthus</td>
</tr>
<tr>
<td>Ceropegia</td>
<td>Opuntia</td>
<td>Tillandsia</td>
</tr>
<tr>
<td>Echeveria</td>
<td>Pachypodium</td>
<td>Titanopsis</td>
</tr>
<tr>
<td>Echinocactus</td>
<td>Pedilanthus</td>
<td></td>
</tr>
<tr>
<td>Euphorbia</td>
<td>Rhipsalis</td>
<td></td>
</tr>
<tr>
<td>Ferocactus</td>
<td>Schlumbergera</td>
<td></td>
</tr>
</tbody>
</table>

SUMMER DORMANCY These plants prefer cooler temperatures for active growing. They grow the most during the fall, winter and spring. However, during the coldest parts of the winter, they will go through a mini dormancy. They grow the most when temperatures are below 60°F at night and slightly warmer during the day.

Protect these plants from extreme heat as much as possible, and limit the amount you water during the summer. Water only when the soil is dry.

SUMMER DORMANT SUCCULENTS

<table>
<thead>
<tr>
<th>Adromischus</th>
<th>Gasteria</th>
<th>Peperomia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aeonium</td>
<td>Graptopetalum</td>
<td>Portulacaria</td>
</tr>
<tr>
<td>Aloe</td>
<td>Graptopelia</td>
<td>Sansevieria</td>
</tr>
<tr>
<td>Anacampseros</td>
<td>Haworthia</td>
<td>Sedeveria</td>
</tr>
<tr>
<td>Cotyledon</td>
<td>Kalanchoe</td>
<td>Sedum (non-cold hardy varieties)</td>
</tr>
<tr>
<td>Crassula</td>
<td>Pachyphytum</td>
<td>Senecio</td>
</tr>
<tr>
<td>Dudleya</td>
<td>Pachyveria</td>
<td></td>
</tr>
</tbody>
</table>
SEPTEMBER BOARD MEETING HIGHLIGHTS  By Board Secretary Heather Holst

The Board meets every other month in Farrington Hall at 11 a.m. before the general meeting. All club members are welcome to attend. Stop by and see what your club is doing. Some highlights from September:

- $5,000 was set aside for a future scholarship fund.
- Dan Smith stepped down as vice president due to health issues. Eric Holst was selected to take his place for the remainder of the year.
- Tristan Davis was awarded a $2,000 research grant.
- Jo Davis, Wayne Whipple and Dan Smith were approved as lifetime members.
- A new brochure for the club is being printed and will be unveiled at the holiday party.

LIBRARY NOTES  Photo and Text by Nancy Mumpton

The Library has recently purchased five new colorful books for our collection. If you are a member and would like to check one out, the library will be set up at the January 2020 meeting. Come see Wendy Barrett and me!

Also, I want to thank our wonderful, dedicated book carriers who generously help Wendy and I bring the books to meetings: Jeanne Ann and Chuck Brush, Cindy Capek, Pam Edsall, Russ Faust, Gabby Herold, Heather and Eric Holst, Adam Humphreys, Janet Karasz, Diana Rogers, and Ann Winchell.

All gardeners live in beautiful places because they make them so.  Linda Larson

PURCHASED: It came from Plants for the Southwest Nursery in Tucson about 17 years ago.

POTS: The pot is ceramic. Using clay with these plants helps prevent overgrowth if they get too much water.

FERTILIZER: I fertilize with 1/2 strength Miracle Grow or other similar fertilizer.

POTTING MEDIUM: Typical well-draining mix without a lot of organic material.

SUN EXPOSURE: The *Conophytums* can be sensitive to full sun. In the winter, they get three-fourths of the day in sun under 30% shade cloth. The shade cloth is doubled in February until 110F hits, then a third layer of 30% shade cloth is added until the intense heat ends. Then back to 30% in late November.

WATERING: The only water it gets in the summer is when it gets monsoon rains. The first real soaking monsoon will get a growth response from the plants, after which I will give them a very light watering every two weeks. You do not want to give them enough water to emerge from their old leaves that serve as protection, until the temperature drops below 80 degrees at night. Then regular watering to keep them plump but not enough to make them big and split.

FROST PROTECTION: Below 25F they get protection.

SPECIAL NEEDS: Allow the plant to have a summer rest when they go dormant (when temps rise above 90F). Avoid the temptation to hide the *Conophytums* in deep shade (under a tree) in the summer.
Judges’ Choice for a Succulent and People’s Choice Award: *Adenium* ‘Mini-star.’
Grown by Dan Smith.

**PURCHASED:** It was grown from seed imported from China.

**POT:** Any pot will do; this plant went into this pot in March 2018.

FERTILIZER: I use the club fertilizer 10-16-38 at a weak mixture every time I water during the summer.

POTTING MEDIUM: It’s planted in 50% cactus mix with a mixture of pumice/coir making up the other 50%.

SUN EXPOSURE: It lives under 60% shade cloth getting sun most of the day.

WATERING: I water three times a week during summer, more when about 115F, none in winter.

FROST PROTECTION: This plant cannot handle frost. It goes dormant during winter and needs protection.

SPECIAL NEEDS: It needs to be kept totally dry during winter or will rot.
Early last summer, the Education Group decided to tackle the redesign of the CACSS brochure to better educate the public about our club and its offerings. Brochures from other organizations were gathered and discussed. The group chose a simple, contemporary format that would be timeless and up-to-date.

An eye-catching central Arizona plant was wanted for the cover. After reviewing nearly a hundred photos submitted by members, Tom Gatz's photo of a blooming *Opuntia* was selected.

Work began on the wording, condensing what we had in the old brochure. Months were spent on this task, with all members of the Group having input. CACSS board members were asked to provide feedback, and these comments were incorporated. The Desert Botanical Garden was invited to submit wording outlining our relationship with them. More massaging was done to the text.

Nick Diomede, a professional graphic designer earlier in his life, took on the design and layout. More discussion, input and changes got us to the final look.

The brochure design and wording were presented to the full board for any suggestions and approval. The go ahead was given and a budget was approved.

A very big thank you goes to Nick for being patient and redesigning, incorporating all the changes, and to the Ed Group for persistence in producing a high quality brochure. We hope that you like it too. The brochure was unveiled at the holiday party and will be available for all at future meetings.
2020 CACSS DUES

By Membership Chair Beth Kirkpatrick

If you have not yet paid your 2020 dues, you have until December 31, 2019, to keep
your CACSS membership current.

You can print the membership form in this newsletter and surface mail it, or you can pay
via PayPal or credit card on the website by clicking HERE.

For new and renewal membership, complete this form and make check payable to CACSS.

Mail to: CACSS, P.O. Box 63572, Phoenix, AZ 85082-3572.

Please take special care in ensuring all information is legible.

Name (1): ____________________________________  E-mail: ________________________________
Name (2): ____________________________________  E-mail: ________________________________

☐ For renewing members, please complete the form and check here if all the following information
remains the same.
Address: ____________________________________________________________________________
City: _______________________________ State: ______________ Zip Code: ____________________
Phone (Home): ________________________________ (Cell): _________________________________

☐ Do not publish my information in the CACSS membership list. (Note: we do not share information.)

Areas of volunteer interest: ______________________________________________________________

How did you hear about us:  _____________________________________________________________

Includes monthly full color newsletter via e-mail.

Annual Membership Fee: ☐ Individual $20 ☐ Family $25

Multi-year renewal (x) Years ___________ = Total fees submitted ___________

Please share your ideas for speakers or how we can improve your club experience:
____________________________________________________________________________________
____________________________________________________________________________________

If you would like to speak to someone about your membership, please contact Beth Kirkpatrick, membership chair, at
bethalia@gmail.com or 480-275-4833. We look forward to your continued participation in the club.
PEG POINTS: The Latest from the Propagation Education Group (PEG)  Photos and Text by Tristan Davis

Next Meeting: **Agave Extravaganza IV: Agave vs. Aloe Smackdown**

Join us on January 11, 2020, at 9–11 a.m. in Dorrance Hall at the Desert Botanical Garden.

After a brief hiatus, PEG meetings are back! As is usual for the first meeting of the year, we are having our annual Agave Extravaganza. Not only will we have tons of Agaves to give away (last year, we had 43 species of Agave and 8 additional related species up for grabs!), but this year we will focus on a question many beginners have about Agaves: What is the difference between an Agave and an Aloe?

We are going to talk about these differences and similarities and will even have a few Aloes on hand to giveaway in addition to the Agaves.

We’ll cover topics such as:

- What exactly is an Agave and an Aloe, and how many are there of each?
- Where are these plants from naturally?
- Which species are most commonly grown?
- Which species are recommended for beginners?
- Which species are recommended for more experienced growers?
- How can Agaves and Aloes be propagated?

Attendees are encouraged to bring their own specimens of Agaves, Aloes and relatives to show off! Also, you are encouraged to bring your extra Agaves and Aloes for sharing at the PEG meeting (note: no selling of plants at the meeting; all extra plants you bring for sharing will be considered freebies).

Additionally, we will have several extra-special giveaways of rather rare/uncommon/sought-after species of Agave that will only be available to paid-up CACSSS members. You definitely do not want to miss this great opportunity to learn more about these fascinating plants.

PEG meetings are open to anyone, even non-members of the CACSSS. However, to be eligible for the special drawings, you must be a member paid up through 2020. So, be...
sure you renew before the meeting. Renewals will not be accepted at the meeting except via PayPal online.

**IMPORTANT NOTE:** The DBG has asked that attendees be sure to check in at the main entrance to the garden for all PEG meetings and explain you are headed to the PEG meeting. This allows the DBG to track how many attendees they have at the garden at any one time and for forecasting purposes. Please do NOT enter in the side gate without stopping by the entrance first. You will NOT be required to pay an entrance fee if you are not a DBG member, though you really should be. Totally worth it.

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**DESERT BOTANICAL GARDEN CLASSES**

Register for these classes online at: [learn.dbg.org](http://learn.dbg.org) or call 480-481-8123.

- **Adeniums**, February 9, 1-3 p.m. or 4-6 p.m. with Mark Dimmitt, members $30/public $38
- **Agave and Aloe Soaps**, January 12, 2-5 p.m., $75/$95
- **Felted Cactus**, February 1, 2-5 p.m., $65/$85
- **Plant Problems and Diagnosis**, February 19, 6:30-8:30 p.m., $30/$38
- **Watercolor Cactus**, January 11, 1-4 p.m. or February 13, 5:30-8:30 p.m., $65/$80
- and so much more
Think of every plant as having a first and last name: genus and species. It’s just like you: *Homo sapiens*.

It’s easy to remember how to write botanical names if you keep a few simple rules in mind.

- **A genus** name is the first name and is always capitalized and italicized (If you can’t italicize a botanical name, underlined it.) like *Ferocactus, Mammillaria* and *Lithops*. When you don’t know the species (second name), write the genus name like *Ferocactus* sp. Written as “sp.,” short for species, it is never italicized. Plants in a genus share common characteristics, such as all *Mammillaria* have tubercles.

- **A species** name (remember it as the second name) is always italicized but never capitalized: *Ferocactus chrysacanthus*, *Mammillaria petterssonii* and *Lithops schwantesii*. Members in a species can interbreed with other members of the species but not with those in another species.

- A **subspecies** is distinctly different from the normal species, usually based on an isolated geographical location in nature where the subspecies evolved independently. These plants do not interbreed and are written as “ssp.” and not capitalized or italicized, such as *Mammillaria petterssonii ssp. apozolensis*.

- **Variety** names are given when a mutation occurs in nature. Seedlings grown from a variety will have the same unique characteristic of the parent plant, but will somehow be different. Variety is written “var.” and never capitalized or italicized, such as *Mammillaria petterssonii ssp. apozolensis var. saltensis* or *Agave parryi var. truncata*.

- **Cultivar** is short for cultivated variety. Humans select plants for growth form or flower color and then cross them with each other to reproduce the desired characteristics. This can be done through artificial pollination or vegetatively through cuttings, grafting or tissue culture as these plants are not natural. Cultivar is written as “cv.” and is never capitalized or italicized, such as *Sansevieria trifasciata cv. ‘Silver Cloud.’* The cultivar name is always capitalized, not italicized, and written with single quotes like 'Silver Cloud.'

- **Hybrid** is used for a plant that is the result of a cross between two unrelated plants (either wild or cultivated) and often done artificially by humans transferring pollen from one plant to another to produce unique qualities, such as the brilliant flower colors found in *Echinopsis* and *Adenium*. Seeds from the hybrid are often sterile. A hybrid is written as an “x,” not capitalized or italicized, like *Austrocyllindropuntia vestita x Opuntia subulata*. If it precedes the genus, it denotes an intergeneric hybrid (coming from two different genera) and is written x *Graptoveria* (*Graptoptetalum* crossed with an *Echeviera* with the female genus always written first). If the “x” precedes the
hybrid name, it denotes the cross of species in the same genus, such as *Crassula* x 'Morgan’s Pink,' a hybrid of two *Crassula* species. The hybrid name is always capitalized, never italicized, and written with single quotes around it like ‘Morgan’s Pink.’

- **Forma** refers to minor differences within a species, often one characteristic, like flower color. It is never capitalized or italicized and written as “forma” or “f.” like *Stenocereus hollianus* f. cristata.

- There are other adjectives that can be used in plant names, like cristate (or crest or cristata), monstrose and variegate. Never capitalize or italicize them, such as *Mammillaria spinosissima* f. rubrispina cristata.

- If a plant name has letters and numbers after it like *Sansevieria ballyi* FKH 432, that just means that the plant is identified, temporarily, by the person’s initials who found it and their field collection number. A proper identification has not been made. When it has, a species name, etc., will be given to it.

Look at your own plant names and be sure they are written correctly. It’ll give you great practice, and pretty soon you won’t even think about how to write them. You’ll just do it.

Keep in mind that not all publications, nurseries, websites and growers go by the rules. Sometimes the scientific name may be underlined or appear in bold. Don’t be concerned about what others do; you now know how to do it correctly.

In summary: Cut and save this handy reference

**Genus:** *Mammillaria* sp.

**Species:** *Mammillaria petterssonii*

**Subspecies:** *Mammillaria petterssonii* ssp. apozolensis

**Variety:** *Mammillaria petterssonii* ssp. apozolensis var. saltensis

**Cultivar:** *Sansevieria trifasciata* cv. ‘Silver Cloud’

**Hybrid:** *Crassula* x ‘Morgan’s Pink’ or x *Graptoveria*

**Forma:** *Stenocereus hollianus* f. cristata

Not so hard after all.

A very big thank you goes to Desert Botanical Garden *Cactaceae* Collections Manager Scott McMahon who offered suggestions for this article. *The International Code of Botanical Nomenclature*, prepared and edited by W. Greuter, et al., was also consulted (not easy or fun reading).
The Central Arizona Cactus FB page has grown to 5,318 members worldwide.

New this month:

• After one of the driest monsoons on record, metro Phoenix is experiencing a very rainy fall. The first round of rains brought over three inches to some areas followed by several smaller storms.

• “How much rain can my plant take?” and “Should I protect my plants from more rain?” were asked by many concerned posters.

• Everyone has been spending time outdoors, and their gardens reflect it. I have especially enjoyed the pictures of gardens and potted plant collections.

• One bonus of the extended warm weather we experienced has been a longer growing season. Members have been busy posting photos of “bonus blooms.”

Each month a photo of a cactus and succulent posted by CACSS FB members is selected for recognition.

Post with Most Likes: “Driving Home with my Babies” posted November 3 by Robert Serrano with 212 likes.

You can join the CACSS FB page at: https://www.facebook.com/group/cacss2/

Succulent of the Month: (left) Huernia ‘Purple Nurple’ posted November 7 by Barbara O’Conner.

Cactus of the Month: Browningia hertlingiana posted November 14 by Ronald Souder. This plant was also selected to grace the cover of the club FB page this month.
Way back in about 1984, I bought my first cactus. It was a little golden barrel (Echinocactus grusonii) in a bowl with two other cactus that have since died. I had no special interest in cactus and succulents at that time. However, having recently moved to Arizona from North Dakota, it seemed like something one should have here. It followed us to our second home where it was put in the ground and eventually joined by hundreds (and still counting) of other cactus and succulents I have acquired in the intervening 35 years.

One of the most popular cactus species in the world, I even noticed little potted golden barrels in several toll booths in China. I asked why and was told that many people believe that cactus somehow absorb or block the electromagnetic frequency (EMF) radiation from computers and other electrical equipment. A contributor to the online site, Naked Science Forum, said there is likely more danger from being “spiked” by the cactus than being harmed by EMF radiation.

Some cactus collectors look down their nose at this species because it is so common. Still, even Scott McMahon, Cactaceae collections manager at the DBG, has a few hiding out in his yard. They’re everywhere!
The book tells us the author, Stefano Mancuso, “...is the world’s leading authority in the field of plant neurobiology, which explores signaling and communication at all levels of biological organization.”

In this thought-provoking book, the author reminds us that plants colonized every part of the earth before animals appeared. Plants comprise 80 percent of the weight of all living things on the earth, and plants are responsible for supplying the air we breathe while also providing us with food, medicine and fuel (oil, gas and coal).

According to the author, the most important distinction between animals and plants is how the organisms are internally organized. Animals have a top-down, centralized structure while plants spread single functions (such as respiration, photosynthesis) throughout the whole organism in a decentralized, distributed intelligence. The book reveals the often surprising, and yet sophisticated ability, of plants to innovate, remember and learn, all without a brain or central nervous system. Plants are much, much more than merely a part of the landscape!

Plants are not animals and they have nothing in common with us. They adapted to life by remaining rooted in place and by using sunlight as an energy source. They developed different solutions for defense from predators, for surviving fire, heat, cold, and arid conditions. Plants even entice animals to defend them and spread their seeds.

In the nine chapters of this beautifully illustrated book, the author discusses how plants learn, understand and react to new or challenging situations. For example, in the first chapter the author cites experiments done with the Mimosa pudica plant that closes its leaves when subjected to a harmless external stimulus. Once the plant perceives that there is no harm, it is capable of remembering for up to 40 days!

Subsequent chapters discuss how plants move without muscles. Plants actively use the transportation of water into or out of the tissues, thus controlling cellular pressure, which opens or closes stomata, allows flowering, or allows the Mimosa to open or close its leaves. Often seed dispersal depends on passive movement. For example, the Erodium cicutarium seed, which is being studied for its potential use in unmanned planetary exploration.
Several chapters that will be of particular interest to members of the CACSS include those on plant mimics, such as the *Boquila trifoliolata* (an amazing vine native to South America) and the *Lithops* that we all know.

The author discusses how cacti and succulents, as well as other plants, have inspired us to develop solutions to technical and ecological problems. For example, architects have developed structures that produce moisture from atmospheric condensation, provide air circulation and provide light from all sides to every unit in an apartment building.

As humans, we have much to learn from plants.

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**CORRECTION TO LAST MONTH’S FEED ME ARTICLE**

The caption for the *Adenium* pictures states the growth resulted from two treatments. Author Eric Lundberg says, “I wish it were so. However, the growth actually took place over two growing seasons of low N liquid feeding.”
CONTACT THESE CLUB SPECIALISTS WITH ANY QUESTIONS YOU HAVE

Wendy Barrett   wbarrett@cox.net
Nancy Mumpton   nancy.mumpton@gmail.com
Co-librarians for CACSS collection

Nicky Davis   nicky.davis4@gmail.com
Manages the Seed Depot.

Tristan Davis  480-540-9540
minime8484@hotmail.com
Specializations include plant propagation, and heading PEG (Propagation Education Group).

Doug Dawson  480-893-1207
dawsonlithops@hotmail.com
Specializations include growing from seed, flora of Namibia, Lithops, other Mesembs, Melocactus, and miniature cacti and succulents of Arizona.

Mike Gallagher  602-942-8580
mgallagher26@cox.net
Specializations include Aloes, Haworthias, columnar cacti, and Turbinicarpus.

Chris Ginkel  602-908-2664
chrisginkel@gmail.com
Manages the Facebook CACSS Swap and Shop page. Co-manages the Facebook page.

Eric Holst  480-786-2010
heats@cox.net
Manages the fertilizer program.

Ken Luiten  520-780-2925
luit6987@gmail.com
Manages the Instagram page.

Dean Patrick  602-909-8530
desertpatrick@cox.net
Specializations in softwood stem-cuttings, plant division and seed starting, rooting cacti, Agave and Aloe.

Steve Plath   623-238-3342
revegdude@gmail.com
Specializations include general propagation and desert revegetation, Ariocarpus, Astrophytum, Cyphostemma, Echinocereus, Fouquieria, and Thelocactus.

Gard Roper  602-996-9745
Manages the pumice pile.

Dan Smith  480-981-9648
smithdans@outlet.com
Specializes in Adenium, raising Adeniums from seed, grafting and Adenium culture in general, and co-manages the Facebook page.

Bob Torrest  480-994-3868
robertst9114@msn.com
Specializations include desert landscaping, unusual (including rare fruit) trees and shrubs, Aloes, Agaves, and columnnar cacti.

Sue Tyrrel  480-797-8952 or styrrrel@cox.net
Manages selling at meetings.

Thom Young  480-460-0782
te77@q.com
Co-manages the CACSS Facebook page, 2020 Annual Show Chair.

Beth Kirkpatrick  480-275-4833
bethalia@gmail.com Website contact.
Anna Rosa Lampis provides technical support.

Send comments, suggestions and submissions to caccsscentralspine@gmail.com

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**Officers:** President: **Chris Ginkel** 602-908-2664 chrisginkel@gail.com | Vice President: **Eric Holst** 480-786-2010 forex@cox.net | Secretary: **Heather Holst** 480.786.2010 heats@cox.net | Treasurer: **Judy Tolbert** 602-421-5290 tolbertjl10@gmail.com

**Directors:** **Cindy Capek** 623-979-9389 cindycapek48@gmail.com | **Nick Diomede** 602-772-8282 nich.diomede@gmail.com | **Pam Edsall** 623-810-2550 cygnetti@yahoo.com | **Russ Faust** 480-588-6613 faust224@hotmail.com | **Mike Gallagher** 602-942-8580 mgallagher26@cox.net | **Chris Ginkel** 602-908-2664 chrisginkel@gmail.com | **Emily Glenn** 920-217-6681 glenneg13@gmail.com | **Beth Kirkpatrick** 480-275-4833 bethalia@gmail.com | **Ken Luiten** lui6987@gmail.com | **Barbara Macnider** 602-448-2954 zeneda@yahoo.com | **Cricket Peterson** 602-326-2604 cricketrealtyaz@gmail.com

CACSS PROGRAM AND COMMITTEE CHAIRS 2020

**2020 Annual Show Chair:** Thom Young  
**Archivist/Historian:** Lois Schneberger  
**Audit Committee:** Mike Gallagher  
**CSSA Representative:** Mike Gallagher  
**Donations:** Jim Oravetz  
**Facebook Coordinators:** Dan Smith, Thom Young, Chris Ginkel, Celeste Gornick, and Ken Luiten  
**Fertilizer Sales:** Eric Holst  
**Holiday Party 2019:** Sue Glenn  
**Librarians:** Wendy Barrett, Nancy Mumpton  
**Mailed Newsletters:** Sue Tyrrel  
**Keeping in Touch with Members:** Jo Davis  
**Membership:** Beth Kirkpatrick  
**Newsletter:** Sue Hakala  
**October Auction 2019 Chair:** Nick Diomede  
**Plant Rescue:** open  
**Private Plant Sales:** Sue Tyrrel  
**Programs and Room Setup:** Nick Diomede  
**Propagation Education Group (PEG):** Tristan Davis  
**Pumice Sales:** Gard Roper  
**Refreshments:** Tara Richards  
**Website:** Beth Kirkpatrick  
**Website Technical Assistance:** Anna Rosa Lampis