

# CENTRAL SPINE

NEWSLETTER OF THE CENTRAL ARIZONA CACTUS & SUCCULENT SOCIETY  
ON THE WEB AT [www.centralarizonacactus.org](http://www.centralarizonacactus.org)  
AUGUST, 2007



## PRESIDENT'S LETTER

DOUG DAWSON

The summer continues. As I write this in early August, the hot temperatures are back. We were, however, fortunate to have about two and a half weeks in late July with high dew points and many scattered storms. Unfortunately at my home in Ahwatukee, the rains decided to skip me most of the time. I have planted many new seeds, including ferocactus, pereskias, and mammillarias. This is a good time to start cactus seed.

On a recent trip to Prescott, I drove home through Jerome. After coming down the hill out of Jerome on the way to Clarkdale and Cottonwood, I stopped by Arizona Botanical Gardens, a cactus nursery run by Jason Lavelle (1601 Hwy 89A). If you are up that way, you might think of stopping in. He has an interesting selection. The phone number there is 928-634-2166.

So far, our summer attendance at the general meetings of our club has been very good. At the July meeting, we had a wonderful talk on Mammillarias by Norm Dennis of the Tucson Club. It helped many of us understand why we have sometimes killed some of our Mammillaria gems. Also at the board meeting that day, we voted to purchase about \$500 of new cactus and succulent books. We wish to increase the use of our library. To that end, I remind you that the library list is on our website (see this newsletter). Also if you wish to check out a title, simply telephone our librarian a few days before the next meeting and communicate your needs (Erik Anderson 480-967-3984). He will bring the books to the monthly meeting.

This fall promises to be a busy one: a trip to Wallace Garden, October silent auction, monthly meetings, the December club banquet and election of new board and officers, and, last but not least, Lee Brownson is busy getting the details in order for a very interesting cactus rescue project on a 250 mile pipeline corridor, running from Ashfork to north Phoenix. Many of us really look forward to this rescue. Thanks for your hard work, Lee!

See you Sunday, August 26<sup>th</sup>, at 2pm. ☺

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## THE COVER PHOTO

*Echinocereus x lloydii* in the garden of Ron McKittrick, Yakima, Washington. Photo taken by Cynthia Robinson.

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## LOCAL CALENDAR

**August 26th, Sunday, 2 pm**

Regular club meeting  
Dorrance Hall, Desert Botanical Garden

Guest speaker, **Jerry Barad**, will give a presentation on *The Genus Stapelia*, and **Ryan McNew** of Shoal Creek Succulents will speak on how to grow Stapeliads successfully in Arizona. See page 3 for more details.

**September 30th, Sunday, 2 pm**

Regular club meeting  
Dorrance Hall, Desert Botanical Garden

Guest speaker will be **David Yetman** of the Tucson TV show "The Desert Speaks."

**October 12th - 14th, Friday - Sunday, All Day**

Desert Botanical Garden Fall Plant Sale

Volunteers are needed to assist the DBG staff with answering cactus & succulent related questions, giving out CACSS & CSSA info, etc.

**October 20th, Saturday, 10 am**

Field trip to the Wallace Desert Garden

**October 28th, Sunday, Noon Setup, 2 pm Auction**

Silent Auction of Member's Plants

Wildflower Pavilion, Desert Botanical Garden

**November 18th, Sunday, 2 pm**

Regular club meeting

Dorrance Hall, Desert Botanical Garden

Guest speaker TBA.

**December 9th, Sunday, Noon**

Holiday Party & Elections

Webster Auditorium, Desert Botanical Garden



Photos taken by Ryan McNew.

## REGIONAL CALENDAR

**September 1st, Saturday, All Day**

24th Annual Huntington Succulent Symposium

Join the Huntington in celebrating the centennial of the desert garden!

Huntington Botanical Gardens, San Marino, CA

See page 3 or visit <http://www.huntington.org> for more info.

**June 12th - 15th, 2008, Thursday - Sunday, All Day**

12th Biennial Mid-States Cactus & Succulent Conference

Grand Junction, CO

Visit <http://www.midstatesconference.org> for more information.

**April 10th - 15th, 2009, Friday - Wednesday, All Day**

33rd Biennial CSSA Convention

Westin La Paloma Resort, Tucson, AZ

Visit <http://www.cssainc.org> for more information.

## AUGUST SPEAKER



No plant creates a love/hate relationship as easily as a Stapelia. You gotta' love the flowers, some of the most incredible in nature, but, oh that odor! Here is your chance to learn more about these amazing plants from Africa. Jerry Barad is an internationally known expert on Stapeliads and he is going to be our speaker this month. You won't want to miss this fascinating and informative program. As a special bonus, Jerry's friend Ryan McNew, who owns Shoal Creek Succulents in Marana, AZ, will be bringing up an array of Stapeliads that he grows and offers for sale. Mr. McNew will also answer questions about how to grow them in Arizona. You can visit his web site at <http://www.shoalcreeksucculents.com/>. Plan to be in Dorrance Hall at 2 pm on Sunday, August 26th to learn more about these unusual plants. 🌿

Photo: *Caralluma crenulata x hexagona*  
Taken by: Ryan McNew

## MINI-BITS

MINI-BITS.....the front page photo in the July SPINE (of the Yucca in a CSSA member's garden in Yakima) reminded us of an old garden club friend from Ohio. He grew "Rodeo-dendrons" not Rhododendrons, "Jupiters" not Junipers, and "Yakkas" not Yuccas - we wonder what he'd do with the phrase "Yakima Yucca". We belonged to the local dwarf conifer society and he made the fullest possible use of his smallish in-town yard - there was scarcely enough exposed ground to walk on.....talking about names, I had a cousin who called Opuntias "Op-tune-ias", and my father grew "Hiawarthas".....the issue of how to pronounce plant names came up in a conversation at the last meeting and I was reminded of the answer I got when I once put that question to someone knowledgeable - the answer was that it all depends on who your teacher was.....so far this year we've had 8 agaves bloom - *A. parviflora* still looks good, even the head that bloomed 3 years ago. *A. shrevei* ssp. *matapensis* put out a 21.5' bloom stalk (and it's leaves were mostly dead before it finished blooming), *A. colorata* has 3 bloom stalks, one from the main plant is about 5' tall, one from a much smaller side offshoot is about 2', and the one from an even smaller offshoot is about 1' (is the fact that these pups are still attached to the main plant why they are also blooming?).....when we moved into this house, there were a couple clumps of a 'native' mammillaria in the yard, which I've tentatively identified as *M. microcantha*, and we've let them spread more or less at will since they do so well with such little attention. Today (July 27), 4 days after our last rain, all the clumps are blooming at the same time. This same phenomenon was the subject of an interesting article in the June/July 1998 SPINE by Jim Elliott, reprinted in July '03...isn't it just a common response by common organisms to some (unknown to us) external stimuli? in animals it's called instinct - much like the common response by border collies to groups of animals - they try to herd them, even if they're humans.....our 9 year old 12' *Caesalpinia pumila* suffered quite a bit of cold-induced die-back but is recovering quite admirably, even blooming now. The 2 year old 4' *Caesalpinia platyloba* died to the ground and now has is a mass of healthy and happy looking 1' high shoots - maybe next year it'll work on the height issue.....and regarding the winter cold, our volunteer in-the-ground seedling *Euphorbia tortirama* survived the cold just fine with only a box lid for covering - I think it's been there for 3-4 years and must have come from a large potted one we kept nearby.....and our *Agave nixandensis*, which we assumed was somewhat tender, also came through the cold fine with just a rug tossed over it for protection.... and of course the Opuntia I 'rescued' from central Nebraska probably wasn't even aware that it was cold (the *A. nixandensis* and the Euphorbia are under the eaves, which might provide a bit more protection).....when we lived in Ohio (here I go again!) we had to drive 5 miles into town (such as it was) to pick up our mail. On the way we had to pass a pig farm, and there's nothing in the world that smells worse. I was reminded of that earlier this year when our neighbor's *Pyracantha*, which sometimes hangs over our fence, bloomed - not that it smells quite that bad, but it's a strong enough reminder of what we left behind.....Ray D. 🌿

## RAY DALEY

# THE MAY 2007 CSSA CONVENTION IN SEATTLE

## PART 3: SATURDAY, MAY 26

LEO MARTIN

I didn't win one of the early-entry tickets to the sales area, so I had a cup of coffee and a pastry in the lobby for breakfast while the feeding frenzy was in full swing. Meanwhile I chatted with friends attending the Convention:

Graham Charles, here without his boss Elizabeth, and Sheila Collenette, worrying about her opening lecture, both from England; Jan Emming, establishing a botanical garden in the desert at Yucca, AZ; Dave Ferguson, cactus expert from New Mexico; Peter Gammarano, getting more and more nervous about his soon-to-occur talk; Barbara Hall, John Trager and Karen Zimmerman of the Huntington; Tim Harvey, retired (a decade younger than I am) from Amgen, and establishing an *Uncarina* breeding program and nursery in Thousand Oaks, CA; Margaret Holmes from Glasgow, Scotland, who also came to our Convention; Myron Kimmach, former director of the Huntington Gardens; John and Mirielle Lavranos from Portugal; Helen Lindqvist now of Tiburon, CA, a member of the San Francisco club who has provided me with many invaluable suggestions for improving the CSSA; George Lombard, Hawthornist extraordinaire and a member of the CACSS I see more often in California than at our meetings; Jim Mauseth from Austin, Texas, who is working on the 4th edition of his college botany text; CSSA Board member Judy Pigue from Kansas City and her daughter Cynthia Robinson from our club; Jon Rebman from the San Diego Natural History Museum; Chuck and Connie Staples from Iowa; Dave Turner from Las Vegas; and Nathan Wong from Hawaii, just to name a few.

I mention all these people just to show you how valuable are CSSA Conventions for networking! I would feel perfectly comfortable inviting any of them to visit me, and many of them have extended similar invitations to me. If you went to Conventions, you could meet all these friendly people, too!

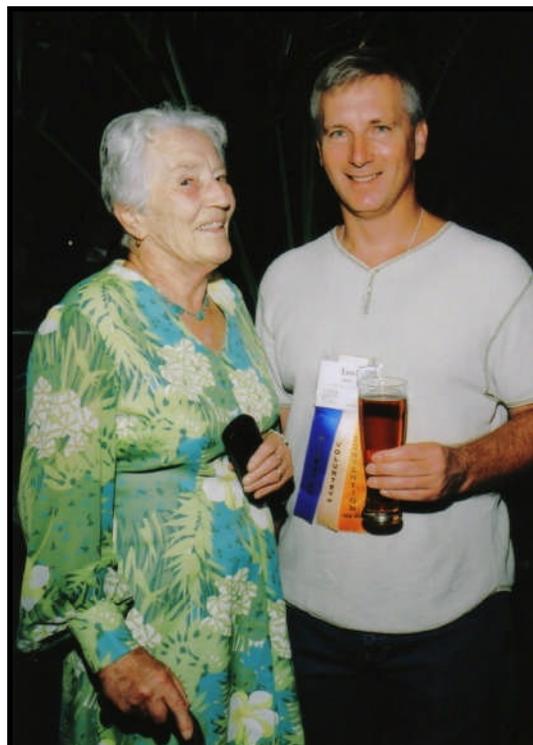
More than 10% of all 2007 Convention attendees were from the Hawaii club! They must have chartered a 747 just to haul home all the plants they bought. A number of people over the entire course of the Convention kept constant pressure on the Hawaii contingent to bid for the 2013 Convention. At first they said, "I don't think we can." By the end of the Convention it had changed to "Maybe we can!"

At 8 the early birds left the sales room with their purchases. The invading horde would tarry no longer; with a few lunges they broke down the doors and poured through, an inchoate flood that once was human. First the box depot was pillaged; cardboard flying through the air, and then feral snarls of succulentists pursuing their prey raked the ears. The poor plants stood no chance against the swarm. Viewing the gluttonous sack, strong men quaked, and women cried while covering the eyes of children.

I was so busy chatting with friends outside the sales room I lost track of the time and forgot that I, as representative of the CACSS, was supposed to be on the platform to hand off the Convention gavel to the Seattle contingent! Dick Wiedhopf, President of the Tucson club as well as the CSSA, took over for me and passed the gavel from one hand to the other. I'm sure a lot of other fine speeches were made in the 30 minute opening ceremony but I was too busy in the sales room. Wait-- I meant to write, I was too busy chatting with friends outside the sales room.

I wasn't about to miss Sheila Collenette's talk, though. She, an Englishwoman, traveled extensively throughout Saudi Arabia botanizing. Her husband was an executive for British Petroleum, thus she was better able to secure travel permits. The fruit of her years of travel is her magnum opus, *Wildflowers of Saudi Arabia*. Only a few copies exist outside Saudi Arabia.

Sheila showed us all sorts of Aloes, Euphorbias, Senecios, Ceropegias, Kalanchoes... an unbelievable number of plants. She is also a wildlife photographer. She set bait near her campsite and lay in her sleeping bag with a flash camera prefocused on the bait. She was able to photograph two species of seldom-seen fox, and to verify they are not yet extinct.



The author with Sheila Collenette at the 2005 CSSA Convention in Scottsdale, AZ.

Next John Lavranos took us on the first part of a Somali tour. We can't go there now, thanks to our foreign policy as conducted by our past two Presidents, but John thinks that it might be possible in 15 years or so under the right circumstances. So, this was to be as close to Somalia as most of us get. The terrain looks very much like parts of Arizona--low desert, escarpments, highlands--but there is seldom if ever frost, even at higher elevations. Much of the flatter succulent terrain, including the habitat of *Euphorbia turbinicarpus*, has been used for refugee camps since then, and it is questionable what still exists. John thinks *Whitesloanea crassa*, the Holy Grail for stapeliadophiles, may still survive in habitat.



*Euphorbia turbinicarpus*. Photo taken by Frank Horwood.  
<http://www.mobot.org/gradstudents/olson/somalia.html>

For lunch I went across the street with friends to the Denny's. It was fine; the talk was better.

Then it was back for Peter Gammarano's lecture. Peter is a member of the host Cascade C&SS. He was with me on the 2004 CSSA trip to Madagascar. Peter's three great loves are his wife, Mary Beth Hasselquist, MD, for whom he took out a very mushy, lovey-dovey full-page ad in the Convention booklet; fishing; and travel. (I think I listed his loves in the correct order.) If you imagine the perfect plant expedition companion, Peter would be that person. He is always excited about seeing new things; he takes lots of photos; and he has lots of stories. Oh, and he cooks. The CSSA Board had a wonderful evening at the Gammarano/Hasselquist house two years ago while scouting Convention hotels.

Peter talked about windowsill gardening. This is actually kind of funny; most of us have a few windowsills, but the southwest side of Peter's house is one huge, 3-story window! The floors of the house open into this very narrow greenhouse, only wide enough for a narrow bench against the glass, a tiny walkway (no big butts allowed) and another narrow bench against the house. Despite limited space and low Seattle light intensity, Peter grows many beautiful cacti and other succulents, including *Ferocactus* and *Ariocarpus*. He really likes succulent orchids, and one of his *Eulophias* was in bloom. Peter showed us how he grows plants from seed on a heated bench under fluorescent lights. He sprouts so many seed he is always selling them at local sales, and he had a booth at the Convention. The highlight of the talk was when Peter choked up while thanking Mary Beth, listening in the audience, for indulging his hobby for so many years.

Next up was Graham Williamson from South Africa. Now retired, Graham organizes botanizing expeditions for plant lovers, and he is familiar with habitats for many rare, hard-to-find things. He gave two talks on "Kunene to the Karoo"; today's offering was "Kaokoland in Namibia to Richtersveld and Bushmanland in South Africa."

In the dark, I scribbled four or five pages of plant names. He showed hundreds and hundreds of beautiful slides of all kinds of plants: mesembs, Aloes, stapeliads, Euphorbias, and many others. It made me first, want to take a trip with Graham; and second, run out and buy more mesemb seed from Mesa Garden. By the way, it's almost time to plant mesemb seed! Get ready!

Note to self: Why can't lectures be lighted adequately? I couldn't keep them right here in Scottsdale; somebody kept turning out all the lights. Some people like to look at the lecture notes or write their own notes, and a fully-dark room makes this impossible. Plus, dark rooms lead to people tripping as they sneak out for a quick smoke. We need to reinforce in our materials that rooms should have subdued lighting but not be as dark as the Copper Queen mine in Bisbee.

Next note to self: When I was Convention program chair, I asked all the speakers for lecture notes or at least a plant list to publish in the brochure. That way, years from now, people can refresh their memories about what they heard. At this Convention that ball got dropped. I printed out my own notes and distributed them; I can't tell you how many people thanked me and asked for notes from all the speakers, but it was over a dozen.

Continued on page 6...

Then it was time for Urs Eggli, a researcher living in the Czech Republic. He gave a beautifully-photographed outline of the anatomy of succulent plants called "Succulent Plants: An Inside View." He showed many photographs and microphotographs of insides of succulent plants. Most of us never see this because we couldn't bear to chop up our favorite plants. The extreme close-ups of such things as a cut Hoya leaf were breathtaking. He showed us what being succulent really is. In the after-talk discussion, somebody questioned him as to why he doesn't think members of genus *Pereskia*, the leafy trees and shrubs in the cactus family, are succulent, since they have crassulacean acid (C4) metabolism, as do most succulents.

Urs replied that current thinking is that C4 metabolism did not evolve to support living in arid climates. Nearly identical DNA sequences encoding C4 enzymes are found in many different plant families, including the very primitive water plants like *Nymphaea* and *Nelumbo*, water lilies and lotus. It is unlikely the exact same DNA sequences evolved many times over in many plant families; rather, it is likely the C4 system evolved ages ago in aquatic plants to help trap carbon dioxide, which is not very available in water. Terrestrial plants descended from these aquatics retained the genes, though they didn't always use them. It is now thought succulent plants are succulent because C4 metabolism requires a lot of water in the plant body, and such plants can survive in arid regions! Thus, having C4 metabolism should not be a criterion for succulence.

There was just time for a brief but intense and productive pub stop and a change of clothing. Then it was Banquet Time! Unlike our Convention, where we gave guests a choice of only one thing, boring vegetable lasagna, at both banquets, the food in Seattle was much better. The carnivores ate some kind of rotting flesh, which they said was good, and vegetarians had a vegetable wrap. Salad was fresh and good; dessert, if I recall, was some kind of fruit custard tart; and the coffee was excellent.

With dessert came the Awards. Three Fellows of the CSSA were named. This is the highest honor conferred by the CSSA, and it comes with a life membership. Named were Graham Charles of England, known for his work on South American cacti and many trips to habitat, as well as the *New Cactus Lexicon*; Dr. Urs Eggli of the Czech Republic, for his scientific work on succulent plants; and Professor Dr. Hans-Dieter Ihlenfeldt (EE-len-felt) of the University of Hamburg, Germany, for his work with mesembs. The two-species genus *Ihlenfeldtia* is named after him; we can grow it here. Mesa Garden has seed.

There were other awards as well, but I don't have space. New Fellow Graham Charles gave the banquet presentation: *Highlights of South America: A Compilation of 16 Visits*. Made me want to go there, too. Then it was time for another pub visit, again intense but this time not brief. ☞

## CACTUS LONGHORN BEETLE

SUE HAKALA

If there's ever a bug that cactus growers hate, it's the shiny black, hard-bodied cactus longhorn beetle. About a scary inch long, they are active all year feasting on succulent cactus tissue. They prefer cactus that are easy to get to without a lot of dense spines, but can work their way into chollas and prickly pears with no problem.

A female will lay single eggs in many different cacti. The brown-headed pale larvae burrow into the cactus and eat, eat, eat. They push out a semi-liquid greenish substance at their entrance hole, which will turn black. This is their calling card alerting you to their presence, if you haven't already seen the entrance hole. If left on their own, the cactus will die, sometimes looking like it's melting.

The larvae then winter in cells they construct around the base of the cactus. Adults emerge in late spring and early summer feeding at night on the young pads.

The best bet to control cactus longhorn beetles is to seek-and-destroy just after sunrise and at sunset, especially in early summer. You may notice them even more when the monsoon starts, as they are more likely to be on the go. The cactus longhorn beetle is easy to catch, as they have no flying wings. Then, use the stomp method. ☞



Cactus Longhorn Beetle.

Photo courtesy of: Robert Potts © California Academy of Sciences  
<http://calphotos.berkeley.edu/fauna/com-Insect.html>

## CLIFF FIELDING BIOGRAPHY

SUE HAKALA

Cliff Fielding won the most blue ribbons in our 2007 show this spring. Half of them he grew from seed. He entered many plants in many categories, but a large number in the mesemb category, "As no one ever grows in this category," Cliff said. "I was, at times, competing against myself. It's easy to win blue ribbons, when no one else is entering." Cliff said that last year he brought in a number of plants just as an educational exhibition. This year he entered them for judging. "My hope was that others would see plants in these categories, and enter next year so that there would be some competition."

Cliff grows his plants in his small backyard under shade cloth; up to 90% shade cloth for the conophytums and lithops in the hot summer. "I was fortunate to be able to go to Namibia to see a lot of the plants I especially love growing in their natural environments," Cliff said. "They grow in shadows between rocks and under bushes. I try to duplicate that shade in my yard." Cliff doesn't see himself as a good grower, just a lucky one, as he has killed his share of plants along the way. "I think the key is to find out just what the plants like and want, and then give it to them in a consistent way."

To be able to figure out their secrets, Cliff has turned to experienced growers who are happy to share their knowledge. "Club members Doug Dawson, Stan and Joan Skirvin, and George Lombard have taught me so much. Doug has told me how to grow lithops successfully in Phoenix (and from seed). George's greenhouse is like an Eden paradise. All his plants are so perfectly grown it's wonderful to see. The Skirvins just know so much about everything, they are both a great source of knowledge. I find that these folks and lots of others will share anything they know if I just ask. I fell so lucky." They've taught Cliff well. One of the haworthia cuttings the Skirvins gave him a while back won a blue ribbon this year.

Cliff started growing lithops when he was 10 years old growing up in Deerfield, Illinois. He discovered the late Ed Storms in Texas, got his catalog, and learned how to grow his plant that lived through his college years. "Then I started growing orchids in Colorado," Cliff said. "When I moved to Phoenix nine years ago, I had to give up on orchids, although I still love them." Now he grows a lot of his plants from seed that he gets from Steve Hammer, Doug Dawson and Steve Bract of Mesa Gardens in New Mexico. Nurseries Cliff frequents include Arizona Cactus Sales in Chandler, Bakers in Phoenix, and Bach's, Plants for the Southwest, and Miles to Go in Tucson. "I think that Miles has the best plants and selection and prices of anyone," Cliff said.

References that Cliff consults frequently include Steve Hammer's books on conophytums and lithops, and his *Mesembs of the World*. Cliff buys his soil mix in five gallon buckets from Miles Anderson that is about 50% pumice, 10% humus and 40% regular desert soil (not clay or caliche). "The soil drains well, doesn't stay wet long, and doesn't have anything in it that rots. I use it with great success. All the lithops and mesembs are grown in just regular Arizona dirt," Cliff said. "I get my decomposed granite top dressing from a wash near Maricopa that Doug Dawson took me to."

Cliff's favorite plants are ariocarpus, and when he isn't admiring them, he works for Glaxo Smith Kline in pharmaceutical sales. ☞

## SEPTEMBER SPEAKER

In September, our speaker will be **David Yetman** from Tucson. Known throughout the country from his excellent PBS program, *The Desert Speaks*, David has visited deserts across the face of the earth. He has a million stories to tell about the plants, animals and people he has encountered in his extensive travels and will share some of those next month.

**September 30th, Sunday, 2 pm**  
**Dorrance Hall, Desert Botanical Garden**

Make plans now to attend. ☞

CENTRAL ARIZONA CACTUS AND SUCCULENT SOCIETY



**JO**  
**DAVIS**

Interested in one of the name badges you see other members wearing? You can have one of your very own! See Jo Davis at the meeting or send her a check for \$7.50, made out to "Jo Davis," to her home address: 2714 West Monte Avenue, Mesa, AZ 85202.



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ARTICLE SUBMISSION DEADLINE FOR NEXT  
CENTRAL SPINE ISSUE IS: SEPTEMBER 10, 2007  
EMAIL TO CROBIN500@MSN.COM

## PLANT QUESTIONS???

## WHOM TO CONTACT!!!

Many CACSS members have experience with different kinds of succulent plants. I hope they will add their names to the following list (just call or e-mail Bob Torrest). For now, the list is simply alphabetical with principle interests. When more members add their information, the list will be cross-referenced by topic.

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Specialization includes Aloes, Haworthias, Columnar Cacti & Turbinicarpus.

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Specialization includes Desert Landscaping, Unusual (including Rare Fruit) Trees & Shrubs, Aloes, Agaves, Columnar Cacti, Trichocereus & Opuntia.