

CENTRAL SPINE

NEWSLETTER OF THE CENTRAL ARIZONA
CACTUS & SUCCULENT SOCIETY

AN AFFILIATE OF THE CACTUS & SUCCULENT SOCIETY OF AMERICA

ON THE WEB AT WWW.CENTRALARIZONACACTUS.ORG

April, 2009



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Field Trips.....	Gard Roper and Steve Martinez
By-Laws.....	Lois Schneberger
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APRIL SPEAKER

Landscaping with Succulents

Featuring: **Woody Minnich**

When: **April 26th at 2:00 p.m.**

Where: **Webster Auditorium**

From the editor ...

Laurence Garvie

A huge thank you to this months' contributors - Cliff Fielding, Bob Forrest, and Jim Elliott, without whose time and effort there would be little reason for sending out this newsletter. Our annual show and sale provided a wonderful opportunity to see and photograph some spectacular cacti and succulents, some of which grace this newsletter. Keep those contributions, both written and visual, coming...

A note on latin names - I know they can be a pain to spell, but if in doubt please double check their spelling in your contributions. The internet is my favorite place to check a spelling, just google the name. Similarly, when using common names, please also include the latin names in parentheses.

Central Arizona Cactus & Succulent Society Plant-of-the-Month Selection - a.k.a. Mini Show

April Echinocereus Crassula

May Astrophytum Stem caudiciforms



ON THE COVER

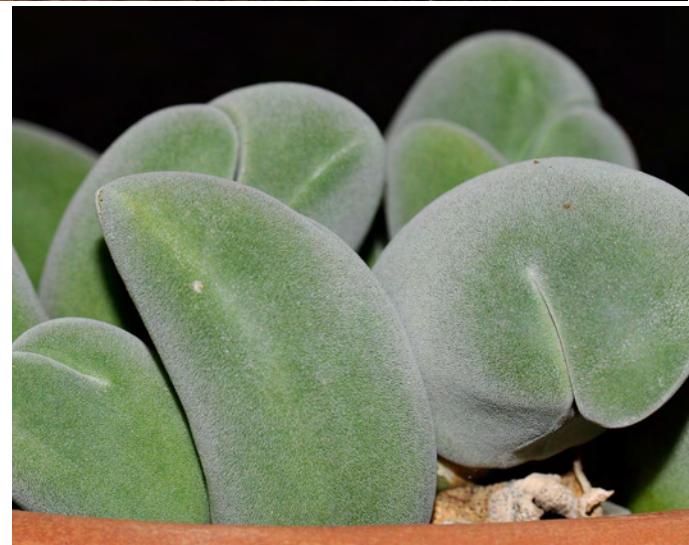
Melocactus matanzanus at the 2009 CACSS Show and Sale. There were oodles of wonderful plants at our annual show and sale and picking one for the cover was difficult. I was particularly taken with this perfect looking *Melocactus*. It was also a joy to watch the fruits mature over the few days of the show.

Melocactus are endemic to the Caribbean Islands and Central and South America. Their curious cephalium is most eye catching and is constructed of tightly packed areoles bearing hairs and short straight spines. Flowers and fruits typically emerge from the top of the cephalium. The evolutionary advantage of a cephalium is debated though without any clear consensus.

Plant property of Jenny Sommerfeld
Photo © Laurence Garvie

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The 2009 CACSS Show and Sale



2009 CACSS Show plants - Top Left: *Graptopetalum bartramii* seedlings, Doug Dawson. Top Right: *Pelargonium moniliforme*, Cynthia Robinson. Middle: *Aztekium ritteri*, Tom Steuber. Bottom Left: *Uebelmannia pectinifera*, Scott McMahon. Bottom Right: *xMuria-Gibbaeum*, Cliff Fielding.

Messing with the Mesembs: Bulbs and Corms

Cliff Fielding

You are right; there are NO mesembs that form bulbs or corms. Why then include them in a series of articles about mesembs? I grew up in the Midwest, like many Phoenicians. Every fall we planted Tulips, Hyacinths, and Daffodils and as every child knew these bulbs came from Holland. In all the books on conophytums, lithops and mesembs that I have seen, there is not a single picture of a bulb or corm. This actually makes sense as the books are not about bulbs. It was not until I read books on Namaqualand and the Richtersveld that I learned that these beautiful and interesting plants grow in the same areas as the lithops and conophytums. The floristic region in Africa called the Succulent Karoo has the second largest number of varieties of bulbs, tubers, and rhizomes (which will be referred to as geophytes) in the world with 630 species. Growing along with these geophytes of the Succulent Karoo are 1,900 species of succulents. The Cape floristic region just to the south has the largest concentration of geophytes with 1,100 species. These plants, with their beautiful flowers and interesting leaves, have been included in the discussion of mesembs because they grow in the same area and require similar care.

I have been growing bulbs for about eight years and very few have died. I am writing not as an expert on how to grow these plants but only with the observations of someone who has enjoyed growing them in Phoenix. I have focused in my collection on plants that stay small, that have spiral or wavy leaves, and that have beautiful /interesting flowers. The spiral and crisping of the leaves is thought to help collect dew to provide additional water in this arid land. For me the crisping of the leaf is a major attraction. I was first exposed to bulbs at Arid Lands, when I purchased a tight little corkscrew of green leaves. It looked like a green spring coming out of the ground. It was a novelty plant and it did not even enter my brain that it came from the same place as lithops. The plant was called *Albuca spiralis*, one of many different plants I have seen bearing the same name. My second bulb was *Lachenalia aloides var.quadracolor* that had been cultivated by Gehard Marx while at Arid Lands. It is prolific at producing new bulblets, in just

a few years the three bulbs I purchased have produced over a thousand plants. The first pot became a solid mass of bulbs two inches deep. They also produced many bulbs that lay on top of the soil. Indeed, several of the species of bulbs grow above ground. In the case of the *Lachenalia* they live in an area with burrowing gophers that eat the underground bulbs. The bulbs lying on the surface will not be eaten.

Success with these first two plants has led to me growing many different and wonderful geophytes. *Brunsvigia* have prostrate leaves that can be quite interesting. The leaves disappear in



Lachenalia aloides

the summer leaving no trace of the plant. In the fall a flower stalk appears out of the ground with a huge ball-shaped star burst of flowers that can reach two feet across! *Boophone* has a huge above ground bulbs that can weigh up to six pounds. *Oxalis* are corms that are relatives of the clover you struggle to get rid of in your lawns. They have been bred in an amazing variety of colors and leaf shapes. They can put on a long lasting display of large flowers that can completely obscure the leaves. Unlike the ones in the lawn most are not a weed problem. *Albuca* is a large genus with some of them having interesting spiral leaves. *Haemanthus*, *Gethyllis*, *Ledebouria*, *Androcymbium*, *Babiana*, *Massonia*, *Veltheimia*, and *Ferraria* are just of few of the genera that are well worth growing.

The care of these plants could not be easier. The Succulent Karoo is mostly a winter rain fall area. In the winter most will take full sun and all the water you want to give them. The plants go dormant and may disappear above ground for the summer. This is the only possible problem. Summer water may rot the bulbs. Some that I have tried in the ground have lasted a few years but none are still alive today. One member of the club recently sent me a photo of an *Albuca namaquana* that was doing fantastic in the ground. I will start to experiment with some other varieties in the ground again. Until then, I keep them in a shaded dry place for the summer. When they start to grow get them to a sunny location quickly to prevent etiolation. Using bloom fertilizer will produce much better flowering.

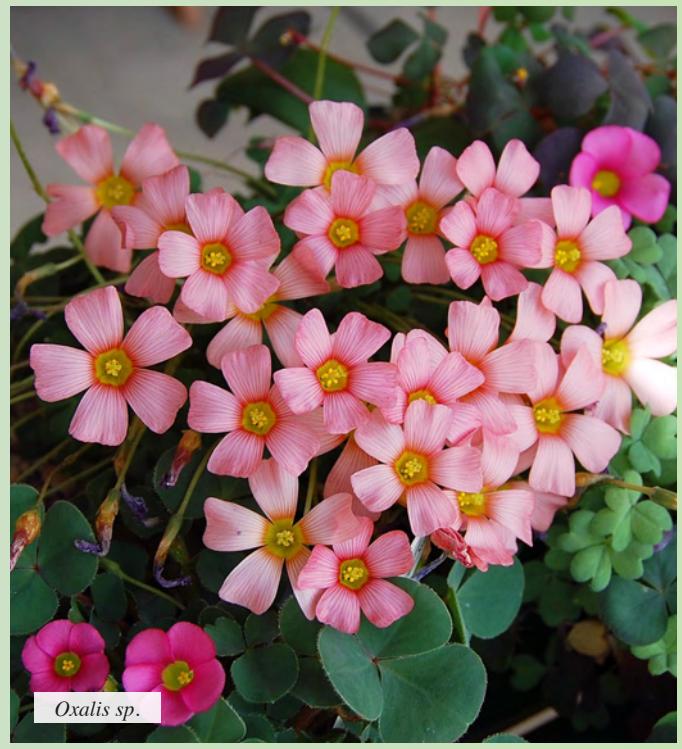
While geophytes are not lithops they add great color and interesting leaves to a mesemb garden without adding much work or hassle. For more information, Celeste Gornick had a nice list of resources in the March issue or contact me at cliff-fielding@msn.com.



Boophone haemanthoides



Lachenalia mutabilis



Oxalis sp.



Leaves of *Albuca spiralis*



Lachenalia trichophylla



Massonia depressa

Around My (or Your) Desert Garden

Bob Torrest

In mid-March, Chanar, the Chilean palo verde (*Geoffrea decorticans*) was in full flower ... spectacular but brief. *Acacia saligna* (Weeping wattle) flowers last longer. This tree has "branch tips with showy clusters of 40 or more large bright yellow flower heads" (1). For much longer lasting flowers there is *Acacia farnesiana* (Sweet acacia), *Eucalyptus torquata* and *Cordia boissieri*, a small tree with 2.5 inch white flowers. All the shrubby cassias and *Caesalpinia mexicana* (Mexican bird of paradise) were flowering along with calliandra, Cape honeysuckle, *Ruellia californica* and brittle bush. Another with long lasting flowers is the Golden Lead Ball tree (*Leucaena retusa*) from the Chihuahuan desert.

New foliage plants in the ground include Mount Lemmon marigold (*Tagetes palmeri*) a shrub with an unusual fragrance, and *Ipomea carnea*, which survived the light frosts of winter. *Brachychiton rupestris* (narrow-leaved bottle tree) that at 6 ft had done nothing in a large pot for too long is now in a sunny spot in the ground near a south facing fence. Miles Anderson (2) says "this is probably the most drought tolerant of the genus ... It will tolerate full, intense sun and brief periods down to 20° F, making it one of the few "hardy" caudiciform trees." We will see.

Aloes are mostly done. Still flowering are *A. gariepensis* (from Namibia) with a long simple inflorescence that is bicolored, *A. striata* and *A. pirottae*. *A. camperi* and *A. eru* are both beginning to flower now, *eru* for the first time. Although the plants look

somewhat different the flowers are identical and Reynolds (3) says they are different forms of the same plant. Both form tight clusters but the plants cut out without roots will readily root. A large aloe (5 ft) with long recurved leaves was finally identified when it flowered in mid-February. The spike was initially a long green cone before the green-lined yellow buds opened to long golden filaments. It is *A. alooides* and there is lots of seed. The three unidentified aloes species mentioned before all have large bright flower stalks and lots of seed but no offsets. Thanks to some club members who had a look (while at our sale) ... but so far they are still a mystery.

The purple flowers of *Ferocactus latispinus* in February are always surprising. Other barrels that have flowered recently at a small size are *F. glaucescens* and a *F. sp.* with 20 acute ribs and small yellow flowers. *F. pilosus*, a much larger plant, will be next. Most of the *Myrtillocactus geometrizans* are flowering, beginning with some of the monstrose plants in February. *Cleistocactus* are easy to grow and, with very colorful long lasting flowers, need a spot in your yard. *Opuntia* got started with *O. basilaris* (Beaver tail) and *O. aciculata* ... both very colorful. The others are *O. macrocentra*, which looks like *O. violacea* (Santa Rita) but with some long spines and yellow flowers with reddish centers, and *O. microdasys* (Bunny ears) and *O. rufida* from Big Bend in Texas and south into Chihuahua. Of course, with chollas, *Echinocereus* and *Stenocereus* just about to

flower the color will continue for a while. The bright red flowers of *Rathbunia* (*Stenocereus alamosensis*) are already open and buds are about to open on other *Stenocereus* including *gummosus*, *griseus*, and *marginatus*.

References cited are 1- W. Jones and C Sacamano - "Landscape Plants for Dry Regions" (2000), 2-M. Anderson "Cacti and Succulents" - Illustrated Encyclopedia (1999) in several versions, 3 - G. W. Reynolds - "The Aloes of Tropical Africa and Madagascar" (1966)



Stenocereus alamosensis - Laurence Garvie

Things are not what they seem

Jim Elliott

We field many questions through our nursery web site. A recent inquiry about desert spoons and their care from Silver City, NM, typically focused on the types of soils. The hobbyist focused on quick draining soils and how to get them. For as long as I can remember in every article on the care of cacti, the term 'quick draining' is spoken of as a Holy Grail for cactus growers. However, like so much that is accepted at face value I often find that the common knowledge on this need for quick draining soils can not be expanded from a pot on a bench to desert habitats. In fact, I have gradually come to realize that the most successful plants in the Sonoran desert are often those that have found a niche that has above average water. Those sites are often on hillsides.

How can that be? They are obviously 'well drained' as the water moves quickly away from them. Not so fast. They may seem to be 'quick draining' but just the opposite is really the case. These hillside sites are supplied with water for much longer times than the flatter sites on the valley floors. Although this fact is counter-intuitive, it makes sense once other factors are considered. I began to analyze this when I consistently found the fattest saguaro were growing on hillsides in just inches of soil. Their nearby

counterparts in the flats were often showing severe dehydration even though the rains obviously fell on both sites in the same amounts at the same time.

Just what is happening here? The very thin soils that seem so unproductive are covering bedrock that keeps the water from being pulled straight down as happens out in the 'better' soils in the flats. Instead, gravity forces this hillside water to move laterally as well as downward. Thus, the hillside plant is watered for weeks from higher locations on the hills after the water in the flats has gone dry. The same gravity that steals the water from the deeper soils has nourished the plants on the thin hillside locations. The next time you are in the desert check out the distribution of plants and their overall condition with their location on the slopes as a factor. I think you will find the richest plant communities on the lower slopes of our hills.

I have been in the desert plant business for over thirty years and have never read this simple explanation for the abundance of cacti on the bajadas. Hopefully, my (unverified) theory will cause others to express their experiences and thoughts. Be careful of the obvious as it often isn't true.

MEMBERS' PHOTOS



Senecio stapeliaeformis - photo © Charles Stephens
The plant is from Ingrid & Chris' shade house.



Aloe sp. - photo © R.P. Brown

MISCELLANEA

DUES

Pay your dues! Membership is by calendar year. Annual dues \$20 individual (1 newsletter, 1 vote), \$25 household (1 newsletter, 1 vote per member); 1/2 price paid August-December.

Make checks payable to and mail to:

**CACSS, PO Box 63572, Phoenix, AZ
85082-3572. More info: 602-852-9714.**

CACSS WEBSITE UPDATES

Please check out the new additions and changes to the CACSS website. We have even more new changes coming in the near future. Soon to be added will be helpful articles and reference materials, including a search capability (a great big "thank you!" to Sue Hakala and Diana Decker for all their hard work in getting these articles prepared)! If you have not already done so, be sure to check it out at www.centralarizonacactus.org/

If you have any suggestions or ideas please contact Melinda Louise at 602-326-1684 or email melindalouise@hotmail.com

PUMICE FOR SALE

If anyone is interested in buying some pumice, I can bring bags of pumice to the meeting on Sunday. One bag - equivalent to a 5 gallon bucket full - is \$2.00. Email me if you want some and how many bags you would like.

Lee Brownson - lsbrownson@cox.net

THE POINT OF MISCELLANEA

This page is reserved for news snippets, announcements, items for sale etc. Email contributions to lgarvie@cox.net

PHOTOS NEEDED

Would you like to see your best photographs adorn the cover of Central Spine? Well then send them to me. Initially, send me medium-sized jpeg images. If your image is chosen for the cover then I will request a higher resolution image. Please keep photo editing to a minimum. If necessary I will adjust contrast, color, etc.

Email contributions to lgarvie@cox.net

NAME BADGES

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! Talk to Jo Davis at the meeting or send her a check for \$7.50, made out to "Jo Davis" to her home address:

2714 W. Monte Ave. Mesa, AZ 85202

CENTRAL SPINE APRIL, 2009



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PLANT QUESTIONS???

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 principal interests. When more members add their information, the list will be cross-referenced by topic.

WHOM TO CONTACT!!!

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