



Desert Breeze

Newsletter of the Tucson Cactus and Succulent Society

July 2009

Thursday, July 2, 2009

"Diseases of Cacti and Succulents"

Presented by Dr. Mary Olsen, Ph.D.



Despite their special adaptations such as thick waxy cuticles, modified leaves (spines), dehydration induced dormancy and other tactics, cacti and succulents suffer from diseases, insect pests and cultural problems just as all other plants. There is relatively little known about the diseases of these

plants, but fungi, bacteria, viruses and parasitic nematodes can cause problems in cacti and succulents. Many of these problems are avoidable, but others are problematic in cacti and succulents even in their native habitats. Recognizing these problems is the first step toward knowing how to control or avoid them. Mary will discuss the problems with which she is familiar, and engage audience participation in expressing problems they may have encountered.

Dr. Mary W. Olsen, is an Extension Specialist in Plant Pathology with the Department of Plant Sciences at the University of Arizona. She received her B.S. in Botany at the University of Arizona in 1976 and her Ph.D. in Plant Pathology at the University of Arizona in 1982.

Mary has been the Extension Specialist in Plant Pathology at the UA since 1997 and works at the the University of Arizona main campus in Tucson. She will diagnose plant diseases for clientele in Arizona including growers, landscapers and homeowners. She also provides information on the identification, prevention and control of diseases of plants in commercial agriculture, landscapes and native sites. Mary currently conducts research on the etiology, ecology and control of important diseases of cotton, grains, vegetables and turf. Information on many diseases of plants in Arizona is provided on her web site (<http://www.ag.arizona.edu/PLP/plpext/>) and there is also information for submitting plant samples for diagnosis.

If you would like to learn more about disease and pest problems, please be sure to attend this meeting!



Our August Meeting

Thursday, August 6, 2009 at 7:00 PM

Dr. Michael W. Douglas, Ph.D Research Meteorologist,
National Severe Storms Laboratory, Norman, Oklahoma

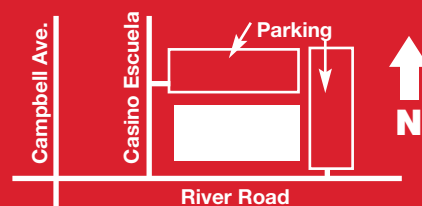
**"Understanding the Climates of
Succulent Plant Habitats"**

July Refreshments

Those with family names beginning with K, L, M, N, O and P, please bring your choice of refreshments to the meeting.

Your generous sharing will be greatly appreciated and enjoyed!

**Meetings are held on the first
Thursday of each month.**



**Junior League of Tucson, Kiva Bldg.
2099 E. River Road**

President's Message



I can't remember weather like this in the 48 years I've been in Tucson. The wonderful cool mornings allow us to work out in the garden for several hours each day. The plants know it is different and are responding with more growth and flowers than normal. Unfortunately, by the time you are reading this the weather has changed and it is probably triple digits, "but it's a dry heat".

Every year I try a new method of growing cacti and succulents from seed. I find all kinds of interesting containers left over from the supermarket or the dollar type stores. They are never quite right. This year I am focusing on two methods that are working well.

The first is very expensive and high tech. I am sure you have seen the product Aero Garden on TV or at many household stores. The company makes a seed starter that fits in the product and allows you to start and grow 70 seeds at a time with each in its own separate growing plug. This is by far the easiest way to start seeds. It has a built in grow light system and indicators when to add water and nutrients. It is almost fool proof. Kevin Barber introduced me to this system and he is growing Adenium seeds, so I had to follow suit and do the same. Within a week the plants have sprouted and are looking good. You can check out this product on the web.



The second is low tech and inexpensive. I decided that the \$0.99 shoe boxes would make a great seed starter and seedling growing container so I purchased a few at the local cheap store and prepared them for growing. The first thing I did was to place a number of drain holes in the bottom using a pointed soldering iron to melt the plastic. Caution: be sure to do this outside since the fumes are irritating and toxic. I placed a piece of screening in the bottom and filled it with my sterile soil mix to a depth of about 2 to 3 inches. To sterilize the soil I use a microwave safe dish, wet down the soil and microwave it until it reaches a temperature of about 180 degrees. That usually kills most problems. Let it cool before you put it into the plastic shoebox. I like to then soak it in

sterile water to thoroughly saturate the soil before I spread my seeds. I cover them lightly with a thin layer of small pumice and then cover the shoebox with plastic wrap held in place with a large rubber band. It's worked this spring outside under a patio roof.

Now that I have all these seedlings up and growing, what to do with them? Answer: We need to have a seedling exchange in the fall! Think about it?

There must be something special about the name Jack Ramsey. I have had the privilege of knowing 3 of them in Tucson. Two were father and son and they took care of my family automobile repairs for years and the 3rd was our TCSS Jack Ramsey (passed away on June 13th) who took care of this society for more than a decade. In every way you can think of Jack did things. He did more things than I can possibly write down and helped us in more ways than there are ways. Jack and his wife Helen were always here for us. Thanks Jack.

Dick Wiedhopf, President

TCSS MONTHLY MEETING FREE PLANT GIVEAWAY

Ceropegia stapeliiformis ssp. serpentina

From the Republic of South Africa and Swaziland, this is one very "snaky" species of *Ceropegia*. The stems creep and twine, possessing peduncles that grab onto convenient surfaces to hold the plant up. The flowers are dark brown and white.

Orbea variegata

From the Western Cape Province of the Republic of South Africa, this widely distributed species is one of the most popular stapeliads. The stems are rather generic and unremarkable, but the flower is large, multicolored, and stinks to high heaven. In Tucson, these plants get leggy; it is best if the stems are short and densely packed.

Huernia keniensis var. keniensis

This small asclepiad grows among basalt rocks and on other rocky ridges in the Great Rift Valley of Kenya and Tanzania. The fragile stems resemble innumerable *Huernia*, but the flowers are bell-shaped and dark purple and about an inch across.

Library Update

***Gymnocalycium In Habitat and Cultivation* by Graham Charles**

The popular genus is described and photographed in 288 pages. Included is the history of the species, comments, distribution maps, history and in some cases conservation status.

***Threatened Cacti of Mexico* by Edward F. Anderson, Salvador Arias Montes, Nigel P. Taylor**

This book looks into the conservation status of the cacti of Mexico. Removed by collectors, destroyed by agriculture or

TCSS Board and Donor Member Offers Matching Funds In Support of Preserving Herbarium Illustrations



At the June 9th meeting the Board voted to match dollar for dollar donations to The Florilegium Program for up to \$3,000. An individual TCSS member donor is willing to add \$500 to this matching amount for a total of \$3,500 in matching funds. The work of cataloguing over 850 botanical illustrations in the University of Arizona Herbarium Collection is almost completed and the next step is to insure preservation of these illustrations. This means each illustration needs to be mounted and enclosed in archival material then stored in boxes. Once they are archived they are not only preserved but their future use can be better monitored. We estimate the cost to archive one illustration is between \$7 - \$10 depending on the choice of materials, price at the time of purchasing materials and taxes. Archiving over 850 illustrations will cost over \$6,000. By offering these matching funds both the Board and TCSS member donor not only offer support for this project but want to encourage members and the public to contribute to this effort. By contributing \$10 dollars (\$20 with matching) you will preserve two illustrations, contributing \$20 (\$40) you will preserve four, contributing \$50 (\$100) ten will be preserved. Whatever amount your contribution will be very much appreciated. Contribution forms will be available on the back table at our monthly meetings. Contributions can also be sent to TCSS, The Florilegium Program, P.O. Box 64759, Tucson, AZ 85728-4759.

Many thanks the TCSS Board and member donor for generously supporting this work. I also want to thank volunteers Nancy Reid, Joan McGann and Kay Marietta for the dedication they have shown to this project for over a year. They

continue to be enthusiastic and look forward to the work of preserving these illustrations that are so important to the botanical history of this region. If you are interested in helping please contact me.

For members who were not able to get to the Desert Museum to see some of these illustrations on display in the exhibit, Illustrations from Howard Scott Gentry's book, *Agaves of Continental North America*. You will have another chance to see them on exhibit in Porter Hall at the Tucson Botanical Gardens from July through September 27, 2009.

Thanks,
Margaret Pope, Email: mpope7@gmail.com



Cactus Rescue Crew Busy with Rescues, Workdays and Sales.



Cactus Rescue Crew activity continued yielding nice quality saguaros, barrels, mamms and hedgehogs, providing several opportunities to collect some nice plants by crew members and to beef up our sales inventory. The New Life Baptist Fellowship was ready to break ground for their new church on west Cortaro Farms Road. The Town of Marana and Chestnut Construction coordinated efforts so cactus in the areas to be cleared that did not need to be relocated could be removed before construction began. Chestnut hurried up the clear limits staking to have it ready for the weekend so we could move in. A Saturday and Sunday cactus rescue allowed us to remove all the smaller plants, over 500, so construction could begin the following Monday.

The site had about two hundred smaller saguaros, under five feet tall, that the crew could handle. There were no roads or paths leading inside the 15 acre property so we parked on the perimeter and got our workout carrying out plants hundreds of feet. We also removed about sixty nice barrels, a couple of Queen of the Nights, one with two nice blooms which makes them much easier to find. There were some nice multi-headed clumps of pincushions *Mammillaria grahamii*, and a few nice hedge hogs. A special thanks to Chestnut Construction for meeting us on site and providing clearing limit maps.

Out Cactus Rescue notices are emailed to all TCSS Members who have elected to receive them, you must be a member to receive the notices and to participate on the crew. We maintain a Cactus Rescue Crew email list and broadcast messages every Thursday as to rescues, holding site workdays or sales for the following weekend. If you want to be on the cactus rescue crew notice list and are not, send an email to cactusrescue at tucsoncactus.org and request to be added to this list. We occasionally can send earlier notices but most details are worked out very close to

the actual rescue weekend. All permits, approvals, clearing limits, maps, site inventory, native plant lists, logistics of site access, safety considerations and parking logistics, load-out access and plans, tag purchased, and other details must be in order to hold each rescue.

Joe Frannea

International Member's Tucson Holiday

Ralf Holzheu is one of our newest TCSS members. He is a 20+ year collector of cactus and a co-Webmaster at the Haage web site. the oldest and largest cactus nursery in Europe. www.kakteen-haage.com/index.htm

Ralf was 22 before the wall separating him from West Berlin was torn down November 9, 1989. He could stand on his roof and see the west as a child. He has edited the synonyms addendum updating the cacti names to match Edward F. Anderson's work "The Cactus Family" for the reprint of the German Cactus "Bible" "Kakteen von A bis Z" by the famed cactus expert Walther Haage (1822-1972). <http://www.kakteen-haage.com/shorthis.htm>

Ralf's long time dream was to experience the desert to better understand what his beloved Mammillaria and other desert cacti require and endure. A 30 minute guided walk in Ironwood National Monument gave him a much better feel for 104° F air temperatures and 130°+ F ground temperatures along with the precautions desert dwellers (flora, fauna and people) must observe to survive and thrive.

Continued on the back page of the Desert Breeze



TCSS Rescue Cacti for Sale

Barrels - from 2" to 14" diameter (about \$1 per inch)
 Hedgehogs – from 1 to 20 heads (about \$1 per head)

TCSS Club Members receive a 10% discount

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Thursday, July 2, 2009

7:00pm
 Monthly meeting: Presentation by Dr. Mary Olsen, Ph.D.
 "Diseases of Cacti and Succulents"

Tuesday, July 14, 2009

7:00pm,
 Board Meeting at the U of A College of Pharmacy

International Member's Tucson Holiday *Continued from page 4*

Until Ralf's visit to Tucson he had never observed a cactus in habitat. We took care of that deficiency with several trips for him to walk among the Giants.

As a TCSS member Ralf assisted the Rescue Crew on a Saturday morning rescue. With a little guidance his

enthusiasm was under control and he harvested his first saguaro along with many other plants for the club.

We welcome Ralf as a full time TCSS member and self proclaimed "Part-time Arizona Ralf".



Photo by John Durham



Photo by Ed Bartlett