



Desert Breeze

Newsletter of the Tucson Cactus & Succulent Society

September 2004

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885-6367

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Deadline for copy: 18th of each month

TCSS Web Page: www.tucsoncactus.org

Next Meeting

Thursday, September 2 at 7:00 pm
Junior League of Tucson
2099 E. River Road
Tucson

September Refreshments

Those with family names beginning with
G to M, please bring your choice of
refreshment to the meeting.

Everyone is Welcome!

Bring your friends, join in the fun,
and meet the cactus and succulent
community.

Thursday, September 2, 2004

7:00 pm

Chuck Hanson

Madagascar: Rapidly Disappearing Succulent Utopia



Chuck Hanson of Arid Lands Greenhouses will present "Madagascar: Rapidly Disappearing Succulent Utopia". Chuck is a long time Tucson resident and TCSS member who relocated to Iowa in 1995. He worked as Curator of Birds and Mammals at the Arizona-Sonora Desert Museum from 1969 to 1978, when he left to begin Arid Lands Greenhouses, specializing in the artificial propagation of rare succulent plants. He successfully propagated and released to cultivation many species, including *Euphorbia horwoodii*, *Euphorbia turbiniformis*, *Euphorbia piscidermis*, *Euphorbia gymnocalycioides*, *Whitesloanea crassa*, and *Pseudolithos caput-viperae*. Many of these releases were the first introductions in the world. He currently maintains 5,000 sq. ft. of greenhouses in Iowa producing material for sale through Arid Lands in Tucson.

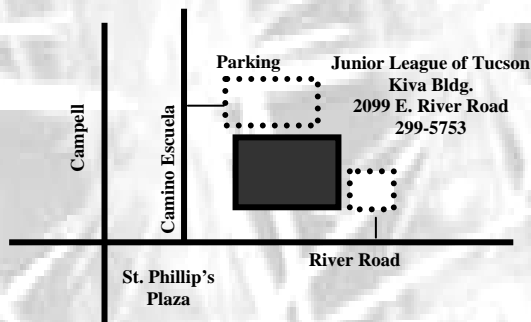


Chuck has made nine trips to Africa and Madagascar in search of succulent plants. He will return to Madagascar this September in search of terrestrial orchids and other great succulents.

Thursday, October 7, 2004

Program to be announced.

Meeting Place



President's Message



Thanks to all who sent back the survey that was mailed out last month. If you haven't filled one out yet, take a moment to jot down some thoughts and bring it to the next meeting or mail it back in the envelope provided. We really value your input. Many good suggestions have been made for events, meeting topics, and workshops. Your Board of Directors will make every effort to provide activities that meet your interest.

Those of you who responded with interest in the BAJA TRIP will be contacted.

On August 21 we had a "Blooming Barrel Sale". It was extremely successful and featured rescued *Ferocactus wislizenii*. This is our local barrel cactus, which blooms during August in color shades from yellow, through orange, to red. Since we had a large supply of plants from recent rescues it was decided to hold this sale. Word was sent to over a thousand individuals by e-mail and postcards, and it worked. We sold out in forty-five minutes and had to restock. As the trailer pulled up with the second load so did the customers and we sold out again before the sale was scheduled to end..

The "Blooming Barrel Sale" will become an annual August event.

I want to thank all who helped out by volunteering time or buying our rescued plants and giving them new homes.

From time to time we will contact you about special activities using email. We do not make our mailing or email lists available to anyone.

Let me remind you of the September 26, 2004 "Good Time Auction". Your donation of plant and related materials will make this real success for our Research Grants Fund. Additional information and materials will be available at the September meeting. Thank you,

Dick Wiedhopf, President

Good Time Silent Auction Sunday, September 26, 2004 Noon



Our Sunday afternoon social gathering and auction will start about noon. We will have refreshments and set up the auction, and have plenty of time to admire and plan before the one o'clock start of the first silent auction. A number of silent auctions will be run in succession, so things don't drag out. Around two o'clock we will have a live auction, and should be wrapping things up around three. Plan to relax, have fun, and get some great new cacti and succulents.

Auction Instructions

First: Bring your donated plants and memorabilia and fill out the slips with the item information. To move things along you might pick up some slips at the meeting and fill them out in advance.

Then sign in and obtain a Bid Number from the volunteers at the front entrance table. If you are a member, all we need is your name. Guests will need to sign in with name, address, and phone in order to get a bid number. You will use this bid number for both live and silent auction bidding. The plants from all of your winning bids will be held in a secure area under your bid number until you are ready to check out.

Silent Auctions: There will be four separate groups of auction tables set up with different bid closing times. The bids will close about every thirty minutes after the 1:00 pm start. You may bid at all tables at any time up to the bid closing. Place your bid number and bid amount on the blue bid sheet associated with each item. You may bid on an item as often as you wish. Make sure that the number on the item and the number on the bid sheet is the same. When the auction closes volunteers will secure your items with the associated bid sheets.

Live Auction: Bidding will begin at 1:40 pm. To bid, hold up your bid number. The bidding will be

quick so make every bid count. When the bidding is closed for each item, the winning amount and the bid number will be recorded with the item and the item will be placed in a secure holding area until you are ready to check out. You will be able to pay for them all at once, by cash, check payable to TCSS, Visa or Master Card.

The proceeds of this auction will support our Research Grants Fund

Unique School Grant Request Awarded!

A TCSS School Grant was just awarded to eighth grade teacher Holly Crawford for a unique request to set up a program for students to teach students about Cactus & Succulents. Holly is an teacher at



Amphitheater's Wilson K-8 School. Last Spring she challenged a few of her advanced students to develop lesson plans to teach elementary students about desert plants. Her eighth graders also were coached on writing professional grant requests and they did an excellent job. There were three groups of three students each writing their own lesson plans and associated grant requests.

The TCSS Board unanimously approved the \$346 request to fund all three proposals. The students, who are now ninth graders, will acquire all their supplies and materials with the grant money and return to Wilson K-8 School to teach third and sixth graders about Cactus and Succulents. An additional part of their assignment was to write letters to the elementary teachers explaining their project and requesting permission to teach these lessons.

If you are not familiar with the requirements to get a lesson plan together and approved for classroom use, consider this. The plan needs to include sections for: Objective; Arizona State Standards Met; Anticipatory; Relevancy; Assessment; Learning Task Description; Closure; and Materials. The students prepared all this information and submitted it with the grant requests for our review. We applaud Holly and her nine students for an excellent project and look forward to some feedback after they teach the classes.

Joe Frannea

"Blooming" Barrel Sale a Big Success!



A beautiful clear bright sunny Saturday morning set the stage for a huge rush of anxious cactus buyers to pick out a fishhook barrel cactus, *Ferocactus wislizeni*,

in bloom. The Rescue Crew held a special sale on a vacant lot on North First Avenue, just south of Wetmore Road near the Tucson Mall. Sales were brisk fifteen minutes before the official opening at 8 AM and by 8:30 almost all of the trailer load of barrels, about a hundred, were sold. A quick trip back to the holding area to load up more proved beneficial. A total of about 150 large barrels were sold, as large as 16 to 24 inches tall, and about 100 smaller cactus. All the smaller *Mammillaria* and Hedge Hogs and various others sold out quickly. We went home shortly after noon with only one barrel not sold. Tucsonans do love landscape cacti and expressed their appreciation for our Rescue Program!

The sale was a big success bringing in \$2,300 in total sales. About half of this will reimburse the club for out of pocket expenses, mostly cactus tag costs, 25% goes to our TCSS School Grant Program fund, and the balance to TCSS operating expenses.

Joe Frannea

Pima Pineapple Cactus Saved Twice

The Tucson Cactus & Succulent Society's Cactus Rescue Crew went the extra mile to save several dozen of the endangered Pima Pineapple Cactus, *Coryphantha scheeri robustispina*.



The developer of about 200 acres of known Pima Pineapple habitat in the Corona de Tucson area, SE of Tucson, utilized the Pima County Conservation Land Bank program to mitigate the habitat loss so that development could

proceed. But the Land Bank program did not consider what might happen to the actual plants that have been mitigated. The developer did not want to destroy the cactus but there were no suitable places to keep the plants on the site and there were no obvious legal ways to remove them from the property for transplanting.

Chris Monrad spearheaded the effort to get the State of Arizona Agriculture Department to let the Rescue Crew relocate the cacti to a nearby preserve that TCSS helped to establish on Vail School District property about two years ago. A special non-commercial transportation permit was obtained and the Rescue Crew transplanted twenty-eight healthy Pima Pineapples to the Vail School District preserve area. Hopefully the monsoon rains will give the transplants a kick-start to get re-established, but TCSS will monitor these plants and carry in supplemental water if needed. Some plants were starting to bud so hopefully they will produce some flowers in a few weeks.



The Pima Pineapple Cactus moved were about 1.5 inches to 4 inches in diameter and not quite as tall as wide. They are not known as the best transplant

candidates so extra care was taken to mark their growing orientation, get them in the ground as soon as possible, and take some of their native dirt with them. Small native grass cuttings were put over the cactus to provide some shade for sun protection and to help hide the new plants. Notice the distinctive bottom portion of the cactus that looks like a pineapple. Once you dig one of these up it becomes quite clear from the portion below ground that it is a Pima Pineapple. The portion above ground is also very distinctive with the individual areoles on the end of each of the thimble-like projections.

Joe Frannea

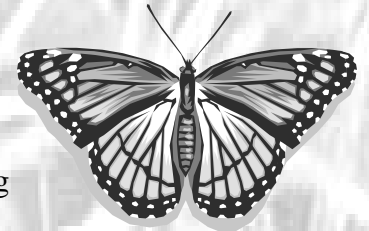
Treasurer's Report August 2004

Total checking & savings (including Research and School Grant Funds)	\$23,815.70
Research fund	\$ 2,000.00
School Grant Funds	\$ 2,261.74

Butterfly Magic at TBG

October 11, 2004 through January, 2005

Volunteers are needed for this first ever live tropical butterfly exhibition in Tucson. Several two hour training sessions are scheduled starting September 13. In order to volunteer, you must complete one of the training sessions as well as agree to volunteer an average of at least four 2.5 hour shifts per month. Shift times will be from 10:00 am to 12:30 PM and from 12:30 PM to 3:00 PM. If you would like more information, or would like to sign up for one of the sessions, please contact Julia Armstrong, 326-9686, ext. 27 or email at butterfly@tucsonbotanical.org.



A handout with all the information will be available at our September meeting.

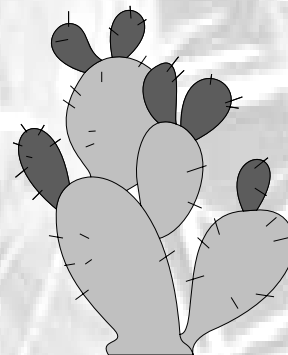
More on Madagascar

Books on Madagascar Succulents available in our library include:



Succulent & Xerophytic Plants of Madagascar, by Werner Rauh, *Pachycaul and Caudiciform Plants* by Philippe de Vosjoli, And the *Euphorbia Journals*.

Other books you may find in bookstores or the public library are *Madagascar - A World Out Of Time* by F.Lanting, and *Madagascar - The Red Island* by A. Kouwenhoven.



Things That Make You Go Ouch!

Many of the plants that we love have spines, prickles or thorns. Sometimes these are part of the attraction of the plant, but other times they are more of a pain in the finger than attractive.

So what is the difference between a spine, a prickle and a thorn? Botanically, spines are modified leaves or in some cases the stipules of leaves. Cacti have spines, as do barberries; some Euphorbia and Pachypodium can have spines too. However, many of the structures we call spines are in fact not spines. Prickles are extensions of the epidermis and cortex tissues. Raspberries, blackberries and roses all have prickles, and Euphorbia may also. Thorns are modified shoots; think of those thorns on your citrus plants as examples.

You might have pondered the functions of spines...there is the obvious answer: defense against predators. But it seems that spines do have a number of other possible functions. Spines can shade the plant by forming an overhead lattice for the plant body below. Spines can also reflect away the light – this may be the reason for high altitude plants often having dense spination.

Water loss can be reduced if air can be trapped next to the plant surface where transpiration occurs, and temperature shifts can be lessened as this trapped air acts as an insulating layer. This is handy since cacti often live where there are large differences in daytime and night temperatures.

Some other uses come to mind...for example, spines can collect condensation and the water that forms can either drip down to the base of the plant, or run down the spines to the plant body where special cells may absorb the water into the plant body.

For those of us living in the Sonoran Desert, the cholla is a well-known danger. Looking from the plant's point of view, joints that dislodge easily and are carried to another location by a passerby is a nice way to reproduce. Many of the hooked-spined *Mammillarias* from the Southwest and NW Mexico have weakly attached pups that may be distributed in a similar fashion.

Perhaps you can think of some other possible functions of those ouchy spines. You may want to visit these websites for more information:

<http://scidiv.bcc.ctc.edu/rkr/Biology203/lectures/Modified/modified.html>

<http://www.exn.ca/Stories/2000/05/15/51.asp>

<http://cactuspro.com/arides/article0005.html>

http://www.hgtv.com/hgtv/gl_cacti_succulents/article/0,1785,HGTV_3557_1380805,00.html

Norm Dennis

Standing Room Only

Remember, a few short years ago, when we had a Mark Dimmitt talk at the Tucson Botanical Garden, and realized that TCSS had grown too large for the room? When we moved to the Junior League building it seemed to have all of the space we could ever need.

Then, last month, we filled the Junior League almost to overflowing. Maybe we should try the Convention Center the next time Mark speaks!





TCSS Rescue Cacti for Sale

Lots & lots to choose from.....

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 15% discount

Call Joe or Patsy if interested 575-7126



New Member Listings and changes

Photos by Barry McCormick. Chris Monrad, Joe Frannea. Logo Artwork by Vonn Watkins

Tucson Cactus and Succulent Society
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