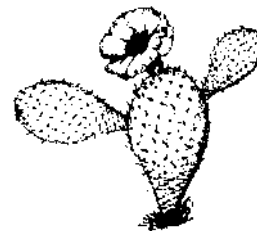




Calandrinia spectabilis
photo by Stephen Cooley

The Cactus Patch



Opuntia basilaris var. treleasei

Volume 8 **June 2005** Number 6

THE NEWSLETTER OF THE BAKERSFIELD CACTUS & SUCCULENT SOCIETY

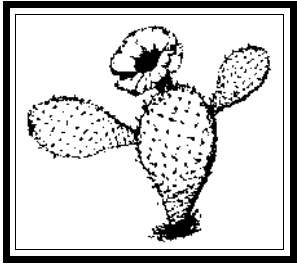
This Month's Program
**Potluck at the Cal State
Succulent Garden**

Monthly Meeting

Tuesday, June 14
Cal State Bakersfield
Environmental Studies
Area (where FACT is
located) at **6:00 PM**

(See Map Inside)

**Please Note
this month's
meeting place
and time!**



The Cactus Patch

Volume 8 Number 6

June 2005

The Cactus Patch is the official publication of the Bakersfield Cactus & Succulent Society (BCSS) of Bakersfield, California. Meetings are held on the second Tuesday of each month at the times and places noted within.
GUEST ARE ALWAYS WELCOME

2005 Officers

President – Vonne Zdenek
Vice-President – Bonnie East
Treasurer - Maynard Moe
Secretary – Les Oxford
Editors - Stephen Cooley
Linda Cooley

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CSSA Representative - open
Past President – Matt Ekegren

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Hospitality - Bill McDonald
Librarian – James Parker
Field Trips – Lynn McDonald
Historian – open
Show & Sale - open

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May 10, 2005



Our May meeting was once again filled with a large number of members as well as a guest or two. President Vonne began by telling us about an invitation from the Camelia Society to a potluck on May 22nd. They were inviting all garden related clubs to come and enjoy the company of other plant enthusiasts. Also discussed was the upcoming BCSS Yard Sale to be held at Jack & Sydney's house.

Treasurer Maynard, who also has been a main force in getting our previous Show & Sale events going, stressed the need to get working on this year's upcoming Show & Sale in October. He said that most of



Woody Minnich
ready to give us both barrels
photo by Les Oxford

the work that needs to be done is now routine and anyone is welcome to help. A signup sheet was passed around for those interested. A Show & Sale planning meeting will be held soon, contact Maynard 861-0238 CooleyMoe@aol.com if you wish to lend a hand.

Donna and Les brought in some great pictures from their recent trip to Mexico (Now, there's a field

trip idea!).

Vice-president Bonnie got us up to date on the next few month's meetings: June will be our Potluck in the garden at Cal State, July will be Gary Duke and "Echinocereus hybrids in the Jarillo Mts", and August will be our always popular traditional end of summer eating meeting at the Cactus Valley restaurant.

Our program, "Travels in Northern Argentina" was next with BCSS member and Cactus Data Plants nurseryman Woody Minnich giving another wonderful presentation. His travels this time started in Cordoba and headed north to Brazil. His route took him up to 15,000 ft in the Andes (yes, the cactus were there). Among the succulents pictured



Members look at some of the plants
Woody brought along
photo by Les Oxford

were many *Gymnocalycium*, *Lobivia*, and *Trichocereus*, which is what you might expect from Argentina. Also seen were *Opuntia*, *Jatropha*, *Notocactus* (now *Parodia*), *Tephrocactus*, *Deuterocohnia*, *Tillandsia*, a rare *Pyrrhocactus*, *Echinopsis*, *Puya*, *Dyckia*, *Parodia*, *Cleistocactus*, *Chorisia* (an Argentine Bottle Tree with an 8 foot wide trunk), *Cereus*, *Abrometiella*, *Rebutia*, *Mauhenia*, *Rhipsalis*, the miniature *Blossfeldia lilliputiana*, *Oreocereus*, the newly described cactus *Yavia cryptocarpa*, and *Stetsonia*. The tour ended at the spectacular Piranha river waterfalls at the Brazil border.

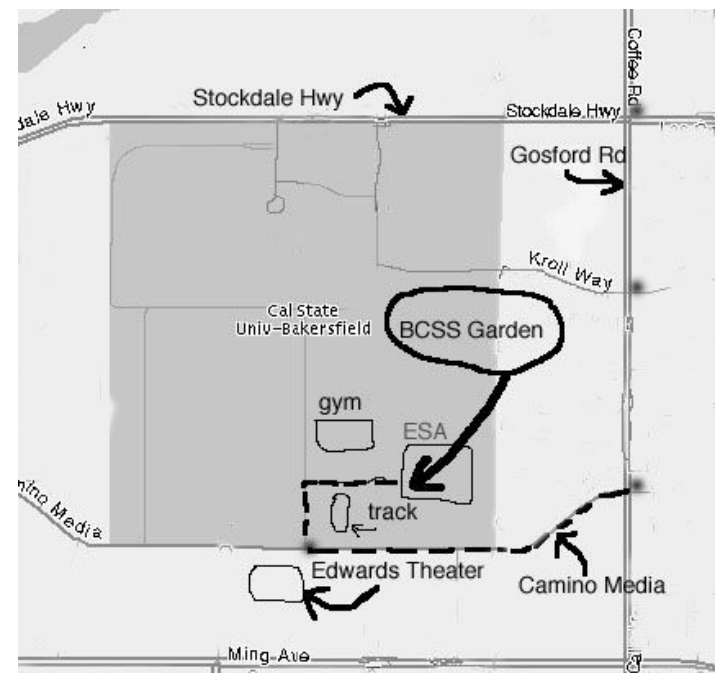
Our meeting ended with everyone vying for the great plants that Woody brought as well as the plants in the raffle.

JUNE'S PROGRAM

Potluck at the Cal State Succulent Garden

This month's program will be an informal get together and potluck in the succulent garden at Cal State Bakersfield. There are no special rules about the potluck, bring whatever you want, it has always been great in the past!

Come and see how the garden is shaping up. For those that have never been at the garden, I'm sure you will be amazed at the size and diversity that we already have. Even those that saw it at last year's potluck will be amazed at the amount of work that has been accomplished. This is your chance to let the club know about your ideas regarding the garden, we're still a long way from completion and we could use all the help and advice we can get.





A NEW CRASSULA

A Letter From Bruce

Having rested from the Maitisong Festival on Sunday, we celebrated my birthday on Monday and I gave a talk on names of birds at the Bird Club on Tuesday, 19th April. (Did you know, for instance, that the American "robin" is in the genus *Turdus* which is Latin for Thrush and that it is really a thrush?)

On the 20th ten of us set off on the ninth Millennium Seed Bank Trip. After a night at Mahalape (which is not far N of Gaborone) we drove west to Shoshong, climbed a hill and relocated the Transvaal Red Balloon, a rare shrub with inflated fruit. We also found some next to the Kgotla (traditional Center) of Shoshong which did not require climbing! This is good because the kgotla area is a proposed historic monument and a rare plant adds to its value.

Next morning we stopped just west of Shoshong and found lots of *Stapelia gettlifeii* in full bloom. Turning north we found *Huernia zebrina* with large flowers and then stopped about halfway to Serowe at a promising site and found, among several other interesting plants, a new species of *Crassula*. It may be *Crassula fragilis*, which is known from several southern African countries, but it is, at least, new to Botswana. It was in bloom and fruit and we collected it for the seed bank. The beautiful *Plectranthus cylindicus* was blooming nearby, but this is well known.

We spent the night at Serowe where we had unseasonable rain which soaked a couple of tents (the fly sheet blew off mine). Next day we proceeded north to look for *Jatropha botswanica*, one of the few endemics here (endemics are found nowhere else), but failed to find it as there is a new road and the old road no longer goes through. On the way back we stopped at an unusual sandstone outcrop where a daisy-bush was blooming. It looks like the *Euryops* I know from Lesotho (where sandstone outcrops are more common) and may be *Euryops subcarnosa* of which Pretoria has a specimen from Botswana. Nearby there was a large colony

of a mesembryanthemum which might be *Phyllobolus splendens*, another species which Pretoria has which was collected in Botswana. It was in fruit, which we collected.

On Saturday, 23rd April, we drove east to Sefophe where I relocated *Ceropegia crassifolia* which I had recorded there in 1990 as a species new to Botswana. It was in flower and young fruit. We spent the night at Bobonong and next morning stopped at a site just north of town with *Hoodia currouri*, *Euphorbia limpopoana* and *Taveresia barkleyi*. There was a large *Orbea* species, but it was not in flower, so I will have to grow it to identify it. (I have several such plants, all reluctant to bloom!) At Semolale to the west we found *Jatropha schlecteri* with flowers and young fruit. The hill there had lovely agates and was topped by old stone walls. Further west we reached the Shashe River which there forms the boundary with Zimbabwe. There we found *Jatropha spicata*, the only shrubby species in the genus in Botswana. We returned to Bobonong for the



A new Crassula

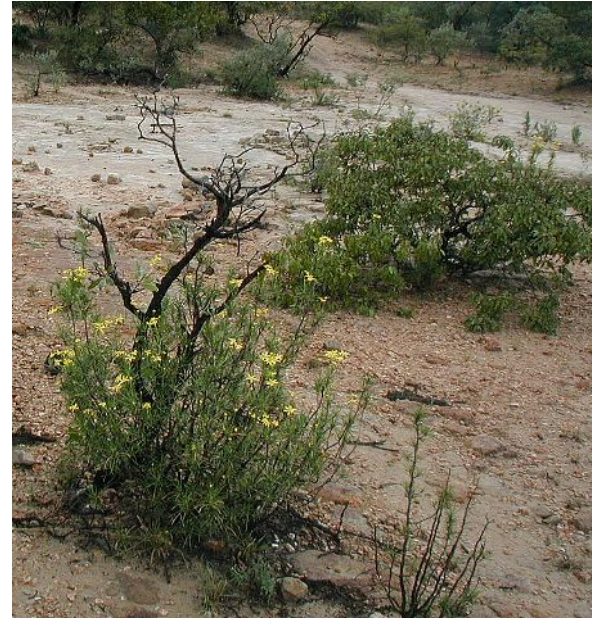
night.

On Sunday we drove west and north to Francistown and relocated the endemic *Jatropha botswanica* in flower and one young fruit. Next morning we drove north and a bit west to Themashanga and located *Anacampseros rhodesica*, *Rhaphionacme grandiflora*, *Euphorbia espinosa*, *Euphorbia venterii*, *Plectranthus tetensis*, *Eulophia hereoensis*, three species of *Ceropegia* (none in bloom), *Adenia repanda* (highly poisonous but being eaten by caterpillars) etc. A rich area for succulents!

Monday the 24th we drove northwest and north to Tutume where we found the healthiest population of *Euphorbia venterii* yet seen as well as *Aloe litoralis*. Further west we found a *Ceropegia* with old fruits, possibly *Ceropegia nilotica*, as well as Botswana's only epiphytic orchid, *Anselia africana*. (An epiphyte grows on a tree.) Finally, on Tuesday we drove north to Tshesebe, the type locality for *Euphorbia venterii*. (A type locality is the place from which a plant was first described.) We found the plant as well as other succulents and a non-succulent lily *Gloriosa superba* which had an unusual brown and yellow flower. On the way back we stopped and collected fruits from a tree of *Eleaodendron matabeleensis* which had much of its bark stripped. It seems this tree is used as a love potion! Closer to Francistown we found *Ceropegia crassifolia* again. That night we celebrated the birthday of Iain Darbyshire who was with us from Kew Gardens in England.

We hated to leave Francistown where we had electricity (and some of us even beds) as well as hot water, but on the 30th we drove south to Serule and then west on dirt roads to the Khama Rhino Sanctuary. Just west of Serule we found *Orbea maculata* in full bloom. That night it turned bitter cold- the first of winter this year. The 1st of May was a holiday, but we went out collecting amidst the zebra, giraffe etc. Fortunately all we saw of the rhinos were footprints. We found a *Ceropegia* which is probably *Ceropegia lugardae*, but it had no flowers. That night we celebrated with what was termed the "Last Supper". The night was no warmer, but we had a bonfire.

On our way back home we stopped north of Lephephe and found a new site for *Jatropha botswanica*. We all agreed #9 was



Daisy Bush *Euryops subcarnosa*

describes the widespread use of cannabis (marijuana) in the Zambezi area as well the violet tree *Securidaca longipedunculata* (although at that time the latter was not known to be a hallucinogen.) The violet tree (named as buaze or string) is listed for oil and fiber. He also describes a baobab at 97 feet in circumference. (Not the world record, but a big tree none-the-less). Also described are a euphorbia hedge, a triangular "cactus", euphorbia trees and candelabra "cactus" [not very consistent]. Also mentioned are aloes and an arrow poison that might be *Strophanthus kombe*. This is a very interesting journal for me as it is an early record for many of the plants I have recorded since.

Bruce J. Hargreaves

All of Bruce's letters can be viewed
on The Cactus Patch website:

www.bakersfieldcactus.org/thecactuspatch/bruce/bruce.html

the best seed bank trip yet.

To finish off the histories I bought in Pretoria, I turn to The Zambesi Journal of James Steward. Although it was written from 1862 to 1863, it was not published until 1952 (Chatto & Windus, London). He was a companion of David Livingstone on some of his exploits. He

Gone to Seed

by Stephen Cooley

PART FOUR: Customizing Your Cactus

Now that you're practically an expert at raising succulents from seed, let's talk about making the most out of what you raise. There is more to this than meets the eye. Rather than just acquiring any old seed and saying you raised a plant, why not be more specific? Through careful pollination you can preserve the characteristics of a certain population of plants.

For instance, if you obtain seeds for *Lithops leslei* C358 how can you be sure that you haven't received some hybrid of *Lithops leslei* C358? If the person distributing the seeds allowed the seed to set by itself (open pollination) then you run the chance that a roving moth, fly or bee may have brought pollen from another *Lithops*. Why do you care? Random crossing rarely produces wonderful new patterns and colors, instead, what you get is a muddle of characteristics that seem dull in comparison to the original.

In our hobby I have noticed something that seems rare among other plant societies. There is a passion for retaining the characteristics of wild populations. When a new population of a cactus is found, even though it may differ by only a few minor characteristics, it comes into the hobby as is. It is not crossed with more robust or colorful forms to make it more 'desirable.' Though there are hybrid succulents to be found (*Adenium* and *Echinopsis* seem to be the most popular) these are not a major part of the hobby (certainly not like in Rose or Iris Societies).

So then, how can you be sure of what you're getting? Many seed suppliers will let you know where the seed came from. But, more than likely, you may just have to put your trust in one and see what you get. If you are collecting your own seed from your collection there are ways to insure you're getting what you want. The best way is to isolate your selected plants from others that may cross with it. This can be done by physically moving the plants to a distance that pollinators are not likely to travel (the

other side of the greenhouse or patio is not far enough!). You could remove all the flowers from the plants likely to cross (probably not an option). An easier way may be to cover the flowers with cloth or paper bags to prevent pollination. Whatever you do, you will be responsible for pollinating the isolated flowers. Once the flower withers, the isolation can end.

It is a wise idea to mark the flowers that you have selectively pollinated. After several months of fruit maturation you may forget what you have done, especially if you have several plants that have been pollinated. Marking can be done in several ways. What I do is tie a small colored thread to the base of the fruit/flower and then mark down in a notebook what pollinator was used and the date. Sometimes the thread can be laid across the flower and it will 'tie itself' as the flower shrinks and withers (this is good with Cacti that have wooly crowns like *Ariocarpus*). If you always cross plants from the same population, your *Lithops leslei* C358 with other C358, then a string may be all that is necessary to show you which fruits have the 'pure' seeds.

Now let us consider that you may want to create new and wonderful varieties. You could have been inspired by all the wonderful Schick hybrids of *Echinopsis* or you just may want to raise the fattest *Euphorbia obesa*. Whatever the reason, the procedure is the same as above but the strategy is different: you want to protect your plant from being pollinated by itself or others like it.

Once again, isolation is the important part, with one added remark; if the plant you are pollinating can self-pollinate (use it's own pollen to produce seeds) you need to isolate it from itself. This is done by removing the anthers from the flower you are pollinating and then preventing the flower from being accidentally crossed (bagging). The anthers will need to be removed before the pollen is produced – this usually means operating on the flower before it has opened. Don't worry about hurting the petals. You may want to bring pollen to this flower over several days as you may not be sure when the stigma is ready. When the fruit begins to form and the stigma has withered, you can remove the bag. Since most succulents don't self pollinate you won't be confronted with this very often.

To create your new and wonderful varieties you must give

some thought to what you are doing. If you want an orange flowering *Echinopsis* you might want to cross a red with a yellow. Be aware that the intricacies of genetics do not always produce a mixture of traits. Crossing a yellow flower with a red flower may produce an orange flower, but then again, if red is dominant, it may only produce red flowers. I guess you'll find out.

You need to figure out what you want, then devise a plan on how to get it. An orange flowered *Echinopsis* may not be enough, you may also want it to produce large quantities of huge flowers that bloom in the daytime on small fast growing plants.



Aloe hybrid with parents (top & bottom)



Adding this many traits will take several generations and may require several different parents. This can easily get out of hand (as if you needed another reason for your collection to get out of hand). Each generation will need to be scrutinized for the

traits you want to keep with the undesirables tossed out of the gene pool. Then you must decide

whether to bring in more genes and add another trait or you could strengthen an existing trait by back-crossing it with one of the parents. This could end up taking years. I guess that's why not too many people do it.

But it isn't always as time consuming. If you're not trying to do too much, good results can be had in a relatively short period. A robust, large flowered red *Echinopsis* crossed with a short yellow flowered *Echinopsis* will probably get you a medium sized orange flowered *Echinopsis*. And when you have that orange flowered *Echinopsis* you can give that special name like 'Maynard's Marvelous,' or 'Ed's Extraordinary Echinopsis.' After all, it's your child.

If you have any questions about this article feel free to contact me. Also, when you feel like you're ready to try some seeds let me know and I'll let you have some of mine. Email me at thecactuspatch@aol.com or talk to me at the meeting.



PLEASE WELCOME A RETURNING MEMBER

(and add her name to your roster)

Jaquita Blake

**PLEASE CORRECT THE FOLLOWING
ADDRESSES ON YOUR ROSTER**

Rob Skillin & Family

Bonnie East

the succulent garden at cal state

There will be a **garden work day on Sunday, the 12th** to get the garden ready for the meeting on the 14th. We will meet earlier, at 8:00, maybe even earlier if it is really hot. I will also email all the people on my list with an update/reminder prior to the date.

linda cooley

SHOW & SALE VOLUNTEERS NEEDED!

Our annual Show & Sale will once again be put on in October and it is now time to be thinking about volunteering. Please think about joining in the organization of this, our most popular and visible event.

To have your article printed in

The Cactus Patch get in touch with:

Stephen Cooley, editor

Linda Cooley, editor

thecactuspatch@bak.rr.com

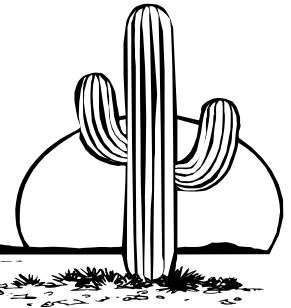


Be Sure To Check Us Out

On The Web At:

www.BakersfieldCactus.org

**UPCOMING
EVENTS**



BAKERSFIELD CACTUS AND SUCCULENT SOCIETY EVENTS

June 12 Work Day at the Cal State Succulent Garden

Meet at 8:00 am (or earlier if it's hot!)

June 14 BCSS Meeting 6:00 pm ESA, Cal State Bakersfield.

Potluck Picnic at the CSUB Cactus Garden

June 28 BCSS Board Meeting

July 12 BCSS Meeting 6:30 pm Olive Dr. Church, 5500 Olive Dr.

SPEAKER: Gary Duke

PROGRAM: Echinocereus hybrids in the Jarillo Mts.

August 10 BCSS Meeting 6:30 pm The Cactus Valley Restaurant

October ANNUAL SHOW & SALE

OTHER CACTUS AND SUCCULENT EVENTS

July 1-3 CSSA Annual Show (2nd-3rd) & Sale (1st-3rd) at the
Huntington Botanical Gardens

Aug 5-11 CSSA Biennial Convention. Scottsdale Plaza Resort,
Phoenix.

Aug 20-21 20th Intercity Show & Sale. Los Angeles Arboretum.
9am-5pm

Sept 3 Huntington Symposium, Huntington Botanical Gardens

Oct 15-16 San Gabriel Valley C&SS Winter Show & Sale, LA
Arboretum

contact the editors (page 14) for more information