

ESPINAS Y FLORES



Program

Joe & Kay Quijada present: "Flying South for the Winter"

From their recent adventures in Southern Africa, see the plants, animals, birds & scenery from the Rep. of So. Africa, Namibia, Botswana and Zimbabwe in the Fall/Winter - May/June season

Cactus of the Month

Juergen Menzel presents: "Turbinicarpus"

The Newsletter of the San Diego Cactus & Succulent Society Inc.
Affiliated with the Cactus & Succulent Society of America



Volume 37 Number 10
Saturday October 12th 2002
1:00 PM
Room 101 Casa Del Prado, Balboa Park

Presidents Message

Happy Fall to all of you!

What a great time we had on the trip to LOTUSLAND! It was a perfect day for a road trip and things went very smoothly. Special thanks to Lee Badger for arranging everything and to Jeff Harris, the "Sandwich King" for all his help. It was great to have some new members along as well as so many "old timers." The quick stop at the UC Irvine Arboretum certainly whetted my appetite - would be a good place to spend more time, maybe in conjunction with a visit to The Getty! (Already planning the next trip.) And what about that Agave with the inflorescence coming out of the side! ?

LOTUSLAND was beautiful as ever - the entire Cycad collection has been replanted and was much more accessible than on my previous visit. This is the most extensive Cycad collection anywhere and it is even more awesome. We were a little disappointed the the Dunlap Cereus collection is not yet on display, but we sure enjoyed what

there was to see - a fantastic collection of rare and not so rare plants in a very special place!

So many great photo opportunities gave me an idea - How about a PHOTO CONTEST!? I think this will be a fun way to share the trip with other members, as well as claim some bragging rights. Here is the idea - select your two favorite shots (any format) from the trip and bring them to the October meeting. We will have a place to display them and conduct a "People's Choice" voting for best shot (there may even be a prize involved.)

SOOO...
come to the meeting
OCTOBER 12 to see
some great photos, share
yours, and be a judge... should be
lots of fun!

Pam Badger
pambadge@earthlink.net





NOMINATING COMMITTEE

Election time is coming up!

A nominating committee, consisting of Herb Stern, Phil Bunch, and Shirley Berry, have worked up the following slate:

- President – Pam Badger
- Vice President – Jeff Harris
- Secretary – Chris Tratnyek
- Treasurer – George Plaisted

Elections will be held in November. If anyone else would like to volunteer for any office; please contact a member of the nominating committee so they can be included on the ballot.

The San Diego Zoo is proposing an expansion plan to the city which in it's current format will seriously impact Balboa Park Prado users.

The parking lot behind Spanish Village & Natural History Museum will be eliminated and Village Plaza street will also be taken out so that all vehicle access to the Prado will terminate.

The vision is to create a green belt and then to push visitors into a pay parking structure directly across from the zoo. The zoo would eliminate it's own parking lot as well and use that area to expand into for new exhibits. The Zoo is rumored to have \$100 million dollars in it's war chest to fund this project. The City of San Diego considers the Zoo it's crown jewel for tourism so the possibility is real. A spokesman for the San Diego Zoo has been invited to the next San Diego Botanical Garden Foundation meeting on November 14th; 7:00 pm tentatively scheduled in our meeting room 104. All are invited to attend for question and answer session along with viewing of the architectural drawings. The meetings never last more than 2 hours. Hope to see some of you there for this informative session. Confirmed specifics will be in the November newsletter.

Tom De Merritt

Turbinicarpus

by Juergen Menzel

Those were the days about 30 years ago, when it was visible at a glance who belonged to the genus *Turbinicarpus* since there were only 11 species and varieties. Today there are about 28 species and varieties recognized as *Turbinicarpus sensu stricto* (although I would rather count 4 of them as belonging to the genus *Normanbokea*) and another 3 are still fighting for general acceptance (*roseiflorus* [rather a *Gymnocactus*], *pulcherrimus* and *mombergeri*).

If one followed Hunt's and Lüthy's view of the genus *Turbinicarpus* one would have to add even some 15 species and varieties, that is the former genus *Gymnocactus* (with the exception of *G. agguireanus* and *G. roseanus*, which were temporarily counted as belonging to *Escobaria*, and now make up the new genus, *Acharagma*).

I would like to limit myself here to the species of the genus *Turbinicarpus* in the restricted sense, meaning the older view. They all grow in Mexico, mainly in the states San Luis Potosi and Nuevo Leon. Some have crossed the borders of these states and grow in the neighboring Coahuila and Zacatecas (*valdezianus*), Hidalgo (*krainzianus* and relatives), Taumalipas (*schmiedickeanus* and *klinkerianus*) and Guanajuata (*alonsoi*).

Turbinicarpus schmiedickeanus was in fact described by Bödeker as *Echinocactus* in 1927, but was described nevertheless as the

first (and later selected type) of the genus *Turbinicarpus*, when Backeberg (and Buxbaum) proposed (introduced) it in 1935 (1937). 5 other species descriptions followed before WWII. Only from 1948 on were there more descriptions, of which the last one I know is *T. panarottoi* (1996). However I have in my greenhouse one month old seedlings of a *T. nieblae* whose description I have not yet encountered.



But enough of taxonomy and history. What really is so special about this genus, other than the fact that all of its species, according to CITES, are on the list of endangered plants? These are relatively undemanding plants, which stay rather small, are usually single headed and bloom profusely. They are therefore also very well suited to the novice with limited room. They are easily grown from seed; many go through a +/- long juvenile phase when some have plumose or pectinate spination. Propagation in mineral substrate with some lime is very easy, they need little water and

fertilizing. However, I used to have occasional problems with fungus in group 2 (mentioned below), and regularly in *T. rioverdensis*. For *T. lophophoroides* at least the susceptibility for fungus in propagation could exist because this species grows in salt marshes, as I could observe last year. Because the salt probably is acting like a fungicide the plants are not used to fungus attack.

From the outer appearance one could divide this genus somewhat arbitrarily into 4 groups:

1. Mostly depressed globose blue-green stem with relatively broad tubercles and few thick, flattened, scarcely pungent spines (*schmiedickeanus*, *macrochele*, *schwarzii* and *v. rubriflorus*, *klinkerianus*, *polaskii*, *flaviflorus*, *frailensis*, *rioverdensis*, *alonsoi*, *panarottoi*, *bonatzii*, *jauernigii*).



T. polaskii

2. Depressed globose blue-grey-green (glaucouse) stem with broad short tubercles and usually quite a few thin, not flattened and rather pungent spines

(*lophophoroides*, *pseudomacrochele*, *lauri*, *swobodae*, *hoferi*).

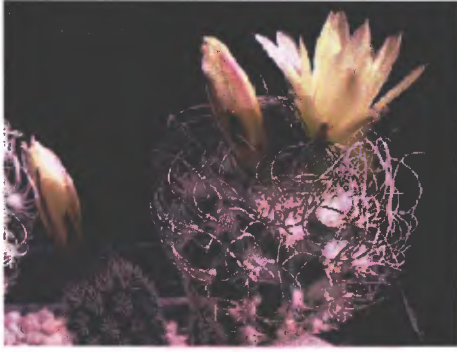


T. lophophoroides

3. Globose to club-shaped green stem with slender, conoidal tubercles and many thin spines, which almost hide the body (*krainzianus* and *v. minimus*, *lausseri*, *sphacellatus*, *gracilis*, *dickinsoniae*).

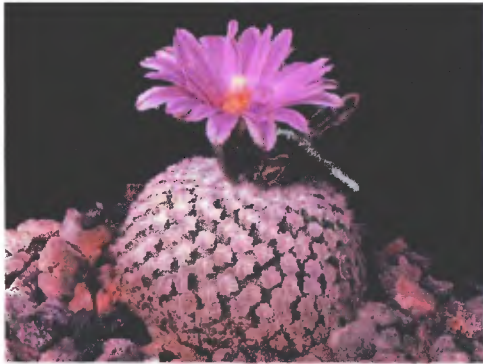


T. gracilis



T. krainzianus

4. Globose to elongated stem with plumose or pectinate spination (earlier these plants comprised the genus Normanbokea: valdezianus and v. albiflorus, pseudopectinatus and v. rubriflorus).



T. valezianus

The majority of the species blooms the whole summer long. The rest blooms usually only once a year, either from fall to winter (jauernigii, schmiedickeanus, panarottoi) or in the spring (the 4 "Normanbokea", schwarzii v. rubriflorus, frailensis, laui, hoferi, rioverdensis, bonatzii). Exceptions prove the rule!

I bought my first Turbinicarpus, a field collected polaskii, 1964 at the International Garden Exhibition in

Hamburg/Germany, and I still find this genus fascinating, even after 38 years.

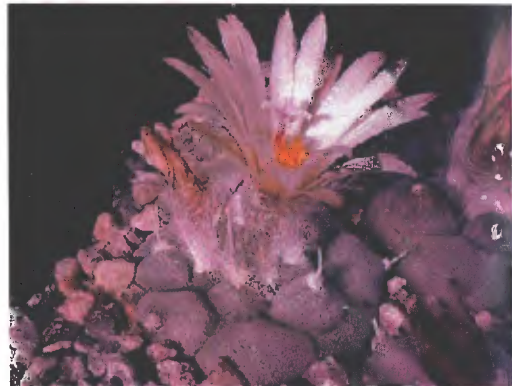
Growing Turbinis is real fun!

References:

C. Glass & R. Foster: A Revision of the Genus Turbinicarpus, Cactus & Succulent Journal (U.S.), Vol 49 (1977), p. 161-176.

Zachar M., Stanik R., Lux A., Dráb I.: Rod (The genus) Turbinicarpus, Roman Staník, Bratislava 1996.

Turbinicarpus-Gruppe (Lechner P.): Turbi-Now, installments 1-11 Vienna 1996-2001, Internet: <http://www.boku.ac.at/tcg/tcgtn.html> and [.../tcgtaxa.html](http://www.boku.ac.at/tcg/tcgtaxa.html)



T. jauernigii

mostly outside of the zoo's 125-acre leasehold, anchors the expansion package it submitted last year to city planners.

Key elements of the proposed boulevard promenade are:

A four-level, underground parking structure for 4,700 cars to replace the zoo's 2,700-car parking lot, which would then become new exhibit space. Elevators and escalators to take visitors from the parking structure to a new zoo entry plaza and to the Plaza de Balboa in front of the Reuben H. Fleet Science Center. A 2 1/2-acre greenbelt, carved from the current zoo parking lot, would extend from Roosevelt Middle School to the new zoo entry and continue south to the Prado, giving access to the rest of the park's central mesa. The greenbelt would contain a pedestrian walkway and the relocated tracks of the zoo's miniature railroad. Plants and trees would screen the new zoo exhibits from traffic and pedestrians along Park Boulevard.

"This is a solution for all of Balboa Park," Myers said, and the zoo has garnered support among the park's other tenants, at least privately. "The Balboa Park Cultural Partnership supports the zoo's efforts to improve Balboa Park, and we look forward to working with the zoo planners to meet parkwide needs," said Don Bacigalupi, executive director of the San Diego Museum of Art and chairman of the partnership, which includes leaders of 22 of the park's museums, cultural institutions and the zoo. The cost estimates and financing alternatives were presented last night to a working group representing neighborhood organizations, park preservationists, Balboa Park tenants and visitors. The group met for more than a year with the zoo to develop guidelines for the expansion plan, which was unveiled in May. The zoo has retained Saybrook Capital and Salomon Smith Barney as financial consultants for the expansion project, and their \$220 million cost estimate for the promenade assumes construction begins in 2004, Myers said. The consultants also put a price tag on three additional taxpayer-financed projects designed to ease Balboa Park's traffic and parking problems, and which the zoo and other park tenants would like to see adopted:

\$85 million for an underground parking lot behind the Spreckels Organ Pavilion. The structure was approved by the City Council a decade ago but never funded. \$8 million for a Balboa Park mass-transit center. \$23 million for "deferred maintenance," which was not further identified. Added to the \$220 million promenade project, it brings the proposed Balboa Park improvement package to \$336 million.

Among the possible revenue sources are bonds secured by revenues from parking, admission and membership fees; bonds secured by property taxes; and bonds secured by other revenues, including sales taxes, rental car taxes and the Transient Occupancy Tax on hotel rooms, the consultants said. The Zoological Society would pay for all construction of new exhibits and related costs inside its boundary through a capital campaign, membership and admission fees and other revenue sources, Myers said. The zoo is taking no

stand on any of the public financing alternatives, Myers said. The only public revenue the zoo receives comes from a special assessment voters added to property taxes in 1934. The money is to be used for "the maintenance of zoological exhibits in Balboa Park," according to a city ordinance. The levy, a half-cent on every \$100 of assessed property valuation, brought in \$1 million in 2000, and was equivalent to the zoo's annual water bill that year, spokeswoman Christina Simmons said. The zoo and everything in it, including the extensive animal and plant collections, belong to the city of San Diego. The zoo is operated by the nonprofit Zoological Society of San Diego. One potential revenue source would be to charge for parking in the proposed promenade parking structure. But if the past is any guide, the public will not give up free parking in the park without a fight. When the City Council voted in June 1993 to impose a \$5 daily parking fee in the park and at some beaches, there was so much opposition the decision was reversed the next month. "A parking fee is going to be an absolute last-ditch action. I wouldn't rule it out, but I want the park to be open to everyone," Atkins said. "I'm not sure what shape (the financing) will take, and we're not ready to move. We have to share information and get feedback," Atkins added. Residents of neighborhoods surrounding Balboa Park are wary of any proposal that requires parking fees, said Dan Mazzella of the Balboa Park Committee, which advises the mayor and City Council. "There is a lot of apprehension from what I'm hearing," Mazzella said. The main concern is that people will park on surrounding streets and walk to the park rather than pay for parking, he said. Spending taxpayer money in conjunction with zoo expansion could prove to be a mixed blessing for the zoo, Mazzella added. "If they're looking for public dollars, then certainly there needs to be more of an accountability and disclosure. The zoo is very wary when it comes to opening the door to what's going inside their footprint," he said.

Price of expansion

\$220 million -- For Park Boulevard Promenade, considered crucial to zoo expansion. It includes a multilevel underground parking lot, elevators and escalators to ferry visitors to a new zoo entrance and to the Plaza de Balboa and a greenbelt with a pedestrian walkway along Park Boulevard.

\$85 million -- For an underground parking lot behind the Spreckels Organ Pavilion.

\$8 million -- For a Balboa Park mass-transit center.

\$23 million -- For "deferred maintenance," which was not further identified.

James Steinberg: (619) 542-4569; jim.steinberg@uniontrib.com

THE QUEST FOR THE CREST

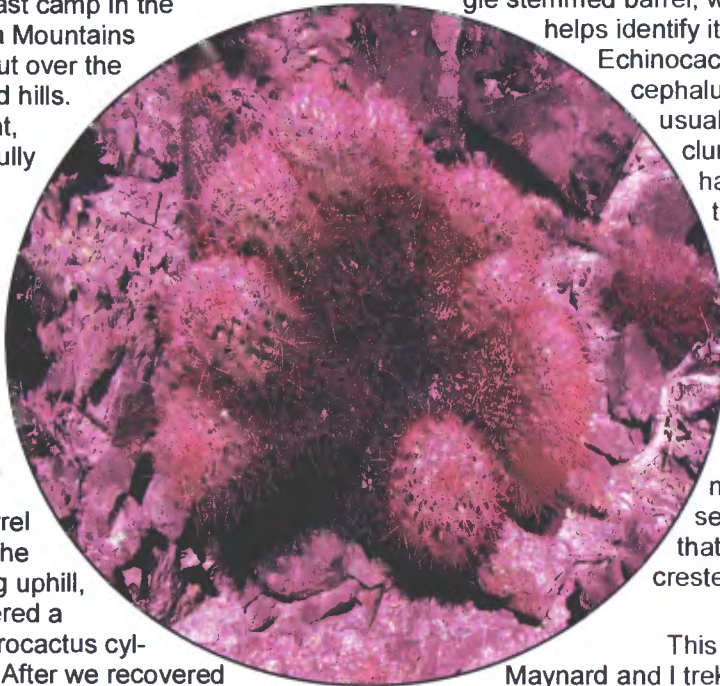
by Stephen Cooley, Bakersfield Cactus & Succulent Society

A year ago, in March 2001, Maynard Moe and I went out on our annual trip to the deserts of California. We made a change of plans and, since we were in the neighborhood, went to Tucson, instead. After visits to the Sonoran Desert Museum, Living Stones Nursery, and Miles to Go Nursery we headed back towards California via Organ Pipe National Park. We took in our fill of Arizona and departed. Arriving at our last camp in the Chuckwalla Mountains we hiked out over the washes and hills. At one point, while carefully navigating our way through a thicket of Teddy Bear Cholla (*Opuntia bigelovii*) we noticed a peculiar looking barrel cactus up the hill. Turning uphill, we discovered a crested *Ferocactus cylindraceus*! After we recovered from the giddy enthusiasm that often overwhelms cactophiles when they see something new, Maynard dutifully took pictures of the specimen and we headed back to camp. The next morning as we prepared to leave, we found that the car had a flat tire. We fixed it just in time to discover the other flat tire. From here on, the story gets too gruesome to tell, so I'll just say that we happened to arrive home very late that

night and that none of the pictures came out.

Ferocactus cylindraceus is the most common of the two *Ferocactus* in California (the other is *F. viridescens* from San Diego County). Those who went on one of the New York Mountains field trips saw splendid specimens of the variety *lecontei*. In the desert, *Ferocactus cylindraceus* is a single stemmed barrel, which helps identify it from

Echinocactus polycephalus, that usually is in clumps and has wool at the crown. Of the thousands of these that I have seen, I have never seen one that was crested.



This year as Maynard and I trekked out into the desert once again, we made it a point to relocate the crested cactus. We arrived at 'Two Flats Camp', checked the tires, and headed off in the direction we remembered from the previous year. There it was, protected by an army of cholla, the 9-headed barrel cactus. This time the pictures made it home, as did we, with our only delay being a date shake at Hadley's.

Upcoming Events

October 4-11 The II International Congress on Cochineal and Natural Dyes in Guadalajara, Mexico. For more information go to www.congresograna.go.to This is organized by the International Cactus Pear Interest Group.

October 9-11 III Simposio Internacional Sobre la Flora Silvestre en Zonas Áridas will take place in the city of Hermosillo, Sonora, Mexico. Details: Dra. Carmen Saenz H., Depto. de Agroindustria y Enología, Facultad de Ciencias Agronómicas, Universidad de Chile, Casilla 1004, Santiago, Chile. Tel: 56 2 6785730 FAX: 56 2 6785796 e-mail: csaenz@UCHILE.CL

October 12 Texas Association of Cactus & Succulent Societies' Fall Seminar hosted by North Texas C&SS, Dallas TX Contact Bob Barth at 512-327-1173 for more details or Michael Rupe at 512-440-7817 or e-mail him at epur@att.net

October 12-13 Central Florida C&SS Sale and Show in conjunction with the USF Botanical Gardens/Plant Clubs. Contact - Mitch Kessler 813-264-5614 or e-mail him at mkessler@kesconsult.com, or Vicki Hunter at bezaleelitsog@aol.com - note identify for inquiries re: CFC&SS in subject line.

October 12-13 Orange County C&SS Show and Sale Fullerton Arboretum CA

October 12-13 C&SS of Tulsa Fall Sale, Tulsa Garden Center, Tulsa OK

October 18-20 13TH EASTERN C&S CONFERENCE

The Holiday Inn, Gaithersburg, Maryland. Hosted by the National Capital C&SS. Speakers, Show and Sales, banquet, evening mixer, rare plant auction. Speakers confirmed are: Myron Kimnach on Socotra and Peru, Dan Mahr - Succulent Trees plus another talk to replace the one on the 2002 trip to Madagascar which was canceled; Woody Minnich - Aztekium, Ariocarpus, Astrophytum; Atacama Desert after rain; and Steven Hammer on Mesembryanthemum and Haworthias. Plant Show, plant sales, pots and curios at great prices. Conference starts with a Friday evening mixer. Saturday will consist of speakers with a banquet Saturday evening followed by the Rare Plant (and related items) Auction. Sunday will be a half day with speakers and a panel discussion on growing winter hardy plants in the northeastern USA. Registration mailed by June 1 is \$90; Jun to Sept 15 is \$100; after Sept 15 \$120. Banquet \$35. Help the club and pay less by getting in your reservation early. Call the Holiday Inn Gaithersburg MD on 1-301-948-8900 and mention the 13th Eastern C&S Conference to receive the special room rate of \$89 per night.

Information: <http://www.cactus-mail.com/clubs/conference.html>

Registration Form: [http://www.cactus-mail.com/clubs/Final version Registration form 2.doc](http://www.cactus-mail.com/clubs/Final%20version%20Registration%20form%202.doc)

For more details contact Lee Miller at LeeMiller@erols.com, or call him on 202-232-0629 (home) or 301-436-1950 (work)

October 19-20 San Gabriel Valley C&SS Show and Sale LA County Arboretum, 301 N Baldwin Ave., Arcadia CA

October 19-20 C&SS of California Show and Sale at Lakeside Garden Center, Lake Merritt, 666 Bellevue Ave, Oakland CA See September 7-8 for contact details.

2003

February 21 - 23 C&SS of New Zealand AGM and Convention. Wellington, New Zealand at the Angus Inn, Waterloo Road, Lower Hutt, Wellington, New Zealand. Info from Frances Verrity at verrity@actrix.gen.nz

May 18 (Sunday) Epiphyllum Society of America's Show and Sale. Ayers Hall, Arboretum of LA County, Arcadia CA. Information: www.epiphyllum.org

June 14-19 (Sunday through Thursday) CSSA 30th Biennial Convention, St Louis MO hosted by the Henry Shaw Cactus Society.

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Standing Committees & Sub Committees

Conservation: Joey Betzler & Kelly Griffin
Education & Exhibits
Brag Table: Shirley Berry & Kay Quijada
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Lee Badger & Jeff Harris
Summer Show: Tom Knapik, Joey Betzler &
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Winter Show: Ed DeLollis
History: Terry Parr
Liaison
Balboa Park Desert Garden: Susan Hopkins
CSSA Affiliate Rep: Kelly Griffin
Quail Botanical Gardens: Phyllis Flechsig
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Monthly Supply Sales:
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Reception: Ethyl Standish
Regalement
Monthly: Lee Badger, Rudy Lime &
Stefy Mangold
Picnic: Laura & Tom DeMerritt