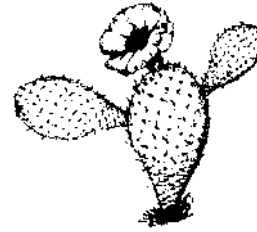


Photo by Stephen Cooley



Heliotropium curassivicum

The Cactus Patch



Opuntia basilaris var. treleasei

Volume 4 **August 2001** Number 8

THE NEWSLETTER OF THE BAKERSFIELD CACTUS & SUCCULENT SOCIETY

This Month's Program

Dinner at the Cactus Valley

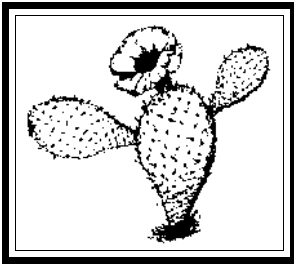
Monthly Meeting

Tuesday, August 14

Cactus Valley
Restaurant
4215 Rosedale Highway
at 6 PM

**Special Time &
Place for the
Next Meeting!**

(see inside)



The Cactus Patch

Volume 4 Number 8
August 2001

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

2001 Officers

President - Rob Skillin
Vice-President - Lynn McDonald
Treasurer - Maynard Moe
Secretary - Bonnie East
Editors - Stephen Cooley
Linda Cooley

2001 Directors

CSSA Representative - Bobby Williams
Past President - Bruce Hargreaves

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Refreshments - Bill McDonald
Historian - Bobby Williams
Librarian - Bobby Williams
Field Trips - Dan French

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BCSS General Meeting: July 10, 2001

Ah, the July meeting. I must say we were a quaint little group that got together and we had fun! The number in attendance I can count on *two hands*. Lynn, Bill, Linda, Maynard, Bonnie, Bobby, Sidney, Jack, Dan, and Jim (that is if I didn't leave anyone out). The question is, where was everyone? I think we know the answer because it is the time of year when folks are on vacation etc.

When I arrived someone asked if I had brought refreshments since I had signed up the month before, and yes I had. Others brought goodies too and so with goodies in hand we were set to watch another thrilling slide show from CSSA. *Treasures of the Sierra Madre* – a journey into the mountains of northern Mexico. This is when the fun really began as Lynn and Linda worked as a team to present the slides. Linda did an amazing job of reading the program script by the ambient light of what was left of the day. Then there was the challenge of pronouncing the many Spanish words and Latin plant names. Lynn was eager to get to the next slide so we could ooh and ah some more. Some of the areas and plants shown were interesting as well as fantastic.

When darkness finally came, Linda finished the script by the light of the slide projector. That in itself made for a great ending to the presentation. The question many of us had over and over again was that of wondering how much habitat has been altered or plant populations wiped out since the slides were taken 30 years ago.

I didn't catch the names of the members who brought plant specimens of the plants of the month, *Turbinicarpus* and *Gymnocactus*. With our small crowd we were still able to hold a nice raffle. Someone, who borrowed a nametag with the name of *Fred* on it, won the final raffle plant - again. That person also did the same thing and won at our May meeting. At the end though she went out to her vehicle and brought in her real nametags and placed them with the others so that next month it has to be her name and not a borrowed one if she is to win.

This month's meeting in August may be even more exciting than July's. Come and join us at the Cactus Valley Mexican Restaurant. Read further for location and time. Until we meet again.

Bonnie

BCSS Executive Board Meeting: July 31, 2001

The executive board members (Rob, Lynn, Bonnie, Maynard, Bill, and Linda) met on July 31st at Lynn and Bill's home. The first item on the agenda was the FAIR. Rob asked if the club had decided to participate this year. The overall impression was that no one had

expressed interest in doing it. So it was decided that we will not participate in the fair this year. Next, Maynard brought us up to date on the Show and Sale. Everything seems to be flowing smoothly along: East Hills Mall has us on their schedule and is ready and willing to help us with this project. Lynn has the publicity tasks well in hand. We discussed the lay-out of the S&S and options for changing it. Displays were mentioned; there may be a couple of new ones this year. A sign-up sheet will be ready for the August dinner meeting so members can start signing up to work the two days of the S&S. Publicity fliers will be ready for the Sept. 11 meeting. September's program will be Woody Minnich talking about shows and sales; the Plant-of-the-Month will be members' show plants. Members will be encouraged to bring in any plants that they would like help and/or feedback about. Members who bring plants to show off will receive a free raffle ticket. Lynn informed us that she has been doing some calling around about field trips: she has lots of information about the Wind Wolves Preserve (which has lots of Bakersfield Cactus on it) and she got some info about the Botanical Garden on Catalina Island. We all thought that Catalina would be a great trip in November and the Wind Wolves preserve would be great in spring, with wildflowers in bloom. We also discussed the need for some new officers for next year and will be trying to entice a few members to consider running for office in the next couple of months. The next executive meeting will be September 4th (not August 28) since both Rob and Maynard will be out of the country. The meeting will be held at Linda and Maynard's house. All members are invited to attend. We really do have a great time!!

PROGRAM NOTES

Dinner at the Cactus Valley Restaurant

The August meeting will be held on August 14. This is a **Special Meeting!** It will not be in our regularly scheduled location or time!!

We will be meeting at **6:00** (not 7:00)
at the **CACTUS VALLEY RESTAURANT**
on Rosedale Highway.

We probably won't have a program--just a lot of socializing. If you are planning on attending please let Linda know and I will let the restaurant know that we're coming!

Please send an email or call me. (I don't have a message machine.) Please let me know by the 13th. Hope to see you there!

Southern & Kgalagadi Districts Trip A Letter From Bruce

In May I went to the top of Botswana (on the way back from Tsodilo we detoured up to Mahembo (49km or 30mi N from Nxamasere) and rode the ferry across and back on the Okavango River). June took me to the SW corner. Four of us, Queen Turner [herbarium], Diphoteng Moseyane [botanic garden], Moffat Sebogo [Univ. Botswana] and I used the SABONET (Southern Africa Biodiversity Network) vehicle to collect plants. Starting on the 3rd we went to Jwaneng (177 km or 110 mi W of Gaborone) and toured the game reserve that now surrounds the diamond mine there. Then it was on to Khakea (another 133 km or 82.6 km S) for the night. In the morning we collected at Khakea Pan: *Androcymbium* lilies blooming in the calcrete, *Zygophyllum* and *Lycium* bushes on the short cliffs. Then it was off to Tshabong (another 220 km or 137 mi S) for the second night. (This brought us from the southern District to Kgalagadi District.) Next morning we met with the land board to explain Environmental Impact Assessments. We also looked (unsuccessfully) for a *Stapelia* which Desmond Cole reports from there and suggests might be *S. grandiflora*, a species otherwise unknown for Botswana. We did find *Tetragonia calycina* in fruit. Then it was off to Bokspits at the far SW corner of Botswana. The clinic we stayed at had *Aloe hereoensis* but when we tried to find it next morning we failed. We did find *Tridentia marientalensis* and *Euphorbia bergii*, however.

We then drove 53 km (33 mi) N to the Kgalagadi Transfrontier Park now shared with South Africa. (Actually, the border was pretty open even in 1991 when I was there before, but now it is official.) After lunch in South Africa we went back to Andrew Villander's farm just South of the Park. He is excellent on plants and recommended "The Kalahari and its Plants" by van der Walt & le Riche. His copy was in Afrikaans, but I bought an English copy (obviously translated and with some over-exposed pictures) at the Park. His two farm hands were excellent guides, showing us an edible and nonedible stapeliad and a species of *Jatropha* new to me which is used for "thickening" blood (it has a red sap). On the 7th we drove back to Tshabong and on the 8th went N 240 km (149 mi) via Mabuasehube Division of the Transfrontier Park to Hukuntsi. Next day we toured the pans in that area and found a pinker *Androcymbium*, *Huernia longituba*, *Duvalia polita*, *Aloe transvaalensis* etc.

On the 10th we returned to Gaborone (510 km or 317 mi E). Polly arrived on the 16th and despite being dead tired went to see a program featuring Steve Dyer (south African jazz musician we know) with the Tumbuka dance troupe from Zimbabwe and art by Ann Gollifer (a local

artist). On the 21st there was an eclipse of the sun (total at Lusaka, but 69% here) so we had school kids and adults at the garden for safe viewing. Next month was a "trial" and the great grey greasy. More later.

Bruce J. Hargreaves

Addendum

The book "Kalahari and its Plants" was published in 1999 in Pretoria by the authors.

We looked for *Aloe hereoensis* after returning to Bokspits and found hundreds of dead stalks. Was this poachers, disease, donkeys? Who knows. Eventually we found a guide who took us to one live plant which, fortunately, had a dozen heads so we were able to take one head without removing the whole population.

The road from Tshabong to the Transfrontier Park was graded dirt and the road from Tshabong to Hukuntsi was a sand track requiring heavy plowing. All else was paved.

ANNOUNCEMENTS

The Next Executive meeting date has been changed to September 4th. It will be held at Maynard and Linda's house.

A field trip to Catalina Island and its Botanical Garden is in the planning stages. A possible month is November. Check your calendars and see when would be a good time for you to go on this trip! There is some interest in staying overnight on the island so we would not have so much travelling to do on one day.



*Thank You Bonnie & Lynn
For bringing the July Treats!*

BE SURE TO VISIT US AT
www.BakersfieldCactus.org

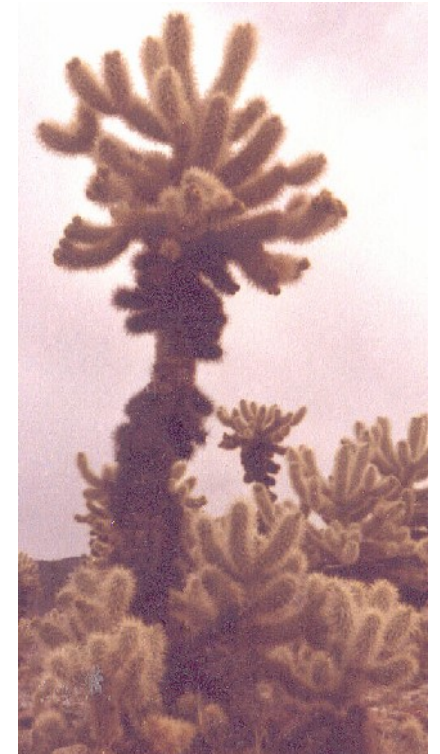
California Succulents

By L. M. Moe

Collecting succulent and caudiciform plants is a popular hobby. The term "succulent" loosely refers to those plants that have fleshy roots, stems or leaves that store water for use during dry periods when no water is available to the roots. A caudiciform succulent is a plant with stem and root fused into a swollen water-storage organ called a caudex. Except for cacti, some other succulents and a few caudiciforms, succulents are mostly plants of Africa and Madagascar. However, there are some succulents and caudiciform plant species native to California.

This is a preliminary listing of succulent or caudiciform native plant species in California. To be included in the list, the plant must have conspicuously succulent leaves or stems or a well developed caudex and live in habitats with prolonged dry periods. Those plants with fleshy leaves (such as some *Claytonia*, *Montia*, *Dithyrea* and others) are not included because they mostly have flat leaves. Plants such as *Allotropa*, *Sarcodes*, *Pholisma*, and *Arceuthobium*, are parasitic plants. Though they can not be grown in pots, they may be called "pseudosucculents."

I selected the species included here mostly based on the idea that, if they were Old World species instead of Californian, they would likely be considered "collector's succulents." The exceptions, of course, are the cacti, dudleyas, stonecrops, and agaves which are found in many succulent collections. Plants like *Marah* were included even though they are really too large for normal collections. The parasitic "pseudosucculents" and the chenopods adapted to "physiological drought" are included out of general interest.



Opuntia bigelovii
Photo by Stephen Cooley

AIZOACEAE

(*Aptenia*, *Carpobrotus*, *Conicosia*, *Delosperma*, *Drosanthemum*, *Malephora*, and *Mesembryanthemum* are all introduced from South Africa. *Tetragonium* is from South America.)

Sesuvium verrucosum "sea-purselane" Saline interior or coastal wetlands.

ASTERACEAE

Jaumea carnosa "jaumea" Coastal salt marshes and bluffs.



Jaumea carnosa
Photo by Brother Alfred
Brousseau, St. Mary's College

BORAGINACEAE

Heliotropium curassavicum "heliotrope"
Dry saline soils throughout California.

CACTACEAE

Bergerocactus emoryi "golden cereus"
San Diego south.

Carnegia gigantea "saguaro" Eastern
Sonoran Desert.

Echinocactus polycephalus "clustered barrel cactus" San Bernardino County south.

Echinocereus engelmannii "hedgehog cactus" San Bernardino County south.

Echinocereus triglochidiatus "hedgehog cactus" San Bernardino County south.

Escobaria vivipera "beehive or foxtail cactus" Mojave Desert south.

Ferocactus cylindraceus "California barrel cactus" Eastern Mojave Desert south.

Ferocactus viridescens "coast barrel cactus" San Diego south.

Mammillaria dioica "fish-hook cactus" Coastal Southern California south.

Mammillaria milleri "fish-hook cactus" San Bernardino County south.

Mammillaria tetrancistra "fish-hook cactus" Mojave Desert south.

Opuntia "chollas, beaver-tails, etc" Widespread.

O. acanthocarpa var. *coloradensis* "buckhorn cholla"

O. basilaris var. *basilaris* "beavertail"

O. basilaris var. *brachyclada* "short-joint beavertail"

O. basilaris var. *treleasei* "Bakersfield cactus"

O. bigelovii "teddy-bear cholla"

O. chlorotica "pancake prickly-pear"

O. echinocarpa "silver or golden cholla"

O. engelmannii var. *engelmannii* "Engelmann prickly-pear"

O. erinacea var. *erinacea* "Mojave prickly-pear"

O. erinacea var. *utahensis*

O. ficus-indica introduced species

O. xfosbergii "pink teddy-bear cholla"

O. fragilis "brittle prickly-pear"

O. littoralis

O. xmunzii "Munz's cholla"

O. xoccidentalis

O. oricola

O. parishii "mat cholla"

O. parryi "cane cholla"

O. phaecantha

O. prolifera"

O. pulchella "sand cholla"

O. ramosissima "pencil cholla"

O. xvaseyi

O. wolfii "Wolf's cholla"

Sclerocactus johnsonii "pineapple cactus" Mojave Desert east and south.

Sclerocactus polyancistrus "Mojave fish-hook cactus" Mojave Desert east.

CHENOPODIACEAE

(Stem succulents adapted to "physiological drought" conditions because they grow in areas with high salt content such as salt marshes and alkali flats)

Allenrolfea occidentalis "iodine bush" Interior saline flats.

Atriplex phyllostegia "arrowscale" Interior saline flats and meadows.

Salicornia "pickleweed" Stem-succulents, saline marshes and alkaline flats.

S. bigelovii

S. europaea

S. subterminalis

S. utahensis

S. virginica

Sarcobatus vermiculatus "greasewood" Interior saline flats and washes.

Suaeda "seepweed" Stem-succulents, saline marshes and alkaline flats.

S. calceoliformis "horned sea-blite"

S. californica "California sea-blite"

S. esteroa "estuary sea-blite"

S. moquinii "bush seepweed"

S. taxifolia "woolly sea-blite"



Allenrolfea occidentalis
Photo by
Charles Webber,
California Academy of
Sciences

CRASSULACEAE

(*Aeonium* and *Cotyledon* introduced from the Canary Islands and South Africa, respectively)

Crassula aquatica "aquatic stonecrop" Salt marshes, vernal pools.

Crassula connata "pygmy weed" Open flats throughout California.

Crassula solieri "vernal pool crassula" Vernal pools.

Dudleya "live forever or dudleya" Widespread, Many Uncommon and Rare

D. abramsii var. *abramsii*

D. abramsii var. *affinis* "San Bernardino Mountains dudleya"

D. abramsii var. *bettinae* "Betty's Liveforever"

D. abramsii var. *muirina* "mouse-leaved dudleya"

D. abramsii var. *parva* "Conejo dudleya"

D. attenuata var. *orcuttii* "Orcutt's dudleya"

D. blochmaniae ssp. *blochmaniae* "Blochman's dudleya"

D. blochmaniae ssp. *brevifolia* "short-leaved dudleya"

D. blochmaniae ssp. *insularis* "Santa Rosa island dudleya"

D. caespitosa

D. calcicola "limestone dudleya"

D. candelabrum "candleholder dudleya"

D. cymosa ssp. *costafolia* "Pierpoint Springs dudleya"

D. cymosa ssp. *crebrifolia* "San Gabriel river dudleya"

D. cymosa ssp. *cymosa*

D. cymosa ssp. *marcescens* "marcescent dudleya"

D. cymosa ssp. *ovatifolia* "Santa Monica mountains dudleya"

D. cymosa ssp. *paniculata*

D. cymosa ssp. *pumila*

D. densiflora "San Gabriel mountains dudleya"

D. edulis

D. farinosa

D. greenei "Greene's dudleya"

D. hassei

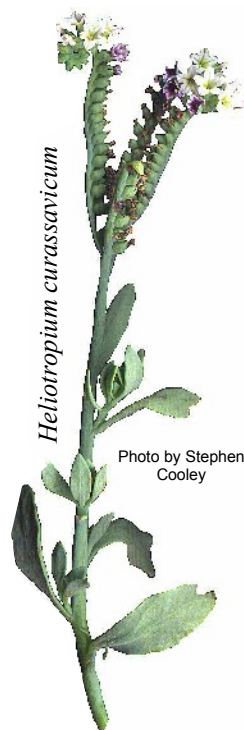
D. lanceolata

D. multicaulis "many-stemmed dudleya"

D. nesiotica "Santa Cruz island dudleya"

D. palmeri

D. pulverulenta ssp. *arizonica*



D. pulverulenta ssp. *pulverulenta*

D. saxosa ssp. *aloides*

D. saxosa ssp. *saxosa* "Panamint dudleya"

D. setchellii "Santa Clara Valley dudleya"

D. stolonifera "Laguna Beach dudleya"

D. traskiae "Santa Barbara island dudleya"

D. variegata "variegated dudleya"

D. verityi "Verity's dudleya"

D. virens "green liveforever"

D. viscida "sticky-leaved liveforever"

Parvisedum congdonii "annual stonecrop" Open rocky sites in the Sierra.

Parvisedum leiocarpum "annual stonecrop" Vernal pools, Lake County.

Parvisedum pentandrum "annual stonecrop" Serpentine or sandstone, northern California.

Parvisedum pumilum "stonecrop" Vernal pools and rock outcrops, northern California.

Sedum (14 species) "stonecrop" Too many to list here.

S. albomarginatum "Feather River stonecrop"

S. divergens "Cascade stonecrop"

S. eastwoodiae "Red Mountain stonecrop"

S. lanceolatum

S. laxum ssp. *flavidum* "pale yellow stonecrop"

S. laxum ssp. *heckneri* "Heckner's stonecrop"

S. laxum ssp. *laxum*

S. niveum "Davidson's stonecrop"

S. oblanceolatum "Applegate stonecrop"

S. obtusatum ssp. *boreale*

S. obtusatum ssp. *obtusatum*

S. obtusatum ssp. *retusum*

S. oregonum

S. oregonense

S. paradisum "Canyon Creek stonecrop"

S. radiatum

S. roseum ssp. *integrifolium*

S. spathulifolium

S. stenopetalum

CUCURBITACEAE

Cucurbita digitata "finger-leaved gourd" Southern California east.

Cucurbita foetidissima "calabazilla" Central Calif. south and east.

Cucurbita palmata "coyote melon" Central California south and east.

Marah "man-root" Throughout California.

M. fabaceus "California man-root"

M. horridus

M. macrocarpus var. *macrocarpus*

M. macrocarpus var. *major*

M. oreganus "Coast man-root"

M. watsonii



Fruit of *Marah horridus*

Photo by Stephen Cooley

ERICACEAE

(These are sometimes referred to as "pseudosucculents", parasitic plants with succulent stems or leaves.)

Allotropha virgata "sugar stick" Mountain forests, northern California north.

Hemitomes congestum "gnome plant"

Mountain forests, northern California north.

Pityopus californicus "pinefoot" Mountain forests, northern California north.

Pleuricospora fimbriolata "pleuricospora" Mountain forests, northern California north.

Sarcodes sanguinea "snow plant" Mountain forests, southern California north.

LENNOACEAE

(These are sometimes referred to as "pseudosucculents", parasitic plants with succulent stems or leaves.)

Pholisma arenarium "sand food" Coastal dunes into the deserts.

Pholisma sonora "sand food" Imperial County south and east.

LILIACEAE

Agave deserti "century plant" Sonoran desert southeast.

Agave shawii "Shaw's agave" San Diego County south.

Agave utahensis "Utah agave" Mojave desert east.

NYCTAGINACEAE

Abronia latifolia "yellow sand verbena" Coastal dunes.

Abronia maritima "red sand verbena" Coastal dunes.

Abronia villosa "desert sand verbena" Desert dunes.

OROBANCHACEAE

(These are sometimes referred to as "pseudosucculents", parasitic plants with succulent stems or leaves.)

Boschniakia hookeri "small ground-cone" Mountains north of San Francisco.

Boschniakia strobilacea "California ground-cone" Throughout California.

Orobanche "broom rape" Throughout California.

O. bulbosa

O. californica ssp. *californica*

O. californica ssp. *feudgei*

O. californica ssp. *grandis*

O. californica ssp. *grayana*

O. californica ssp. *jepsonii*

O. cooperi

O. corymbosa

O. fasciculata "clustered broom-rape"

O. parishii ssp. *brachyloba* "short-lobed broom-rape"

O. parishii ssp. *parishii*

O. pinorum

O. ramosa introduced species

O. uniflora "naked broom-rape"

O. valida ssp. *howellii* "Howell's broom-rape"

O. valida ssp. *valida* "Rock Creek broom-rape"

O. vallicola

PORTULACACEAE

(mostly small caudiciforms)

Calyptridium monospermum "pussypaws" Montane conifer forests.

Calyptridium umbellatum "pussypaws" Montane conifer forests to alpine.

Claytonia lanceolata "western spring beauty" Woodland meadows.

Claytonia megarhiza "fell-fields claytonia" Sierran alpine.

Claytonia umbellata "claytonia" Rocky montane slopes.

Lewisia brachycalyx "lewisia" Montane meadows.

Lewisia cotyledon "cliff maids" Subalpine forests"

Lewisia glandulosa "lewisia" Montane to alpine meadows.

Lewisia leana "quill-leaved lewisia" Pine forests.

Lewisia nevadensis "lewisia" Montane conifer forests to alpine.

Lewisia pygmaea "small lewisia" Rocky slopes and meadows.

Lewisia rediviva "bitter root" Central California north.

SOLANACEAE

Lycium andersonii "box thorn" Mojave desert south. (A shrub with small fat leaves)

CALENDAR

- Aug. 14 BCSS meeting; 6:00 pm Cactus Valley Restaurant**
Aug. 18-19 Inter-City Show & Sale, Los Angeles Arboretum
Sept. 1 Huntington Symposium, Huntington Botanical Gardens
Sept. 4 BCSS executive meeting; 7:00 pm Linda & Maynard's
Sept. 8-9 South Coast C&SS Show & Sale. Kiyoto Ken Nakaoka Memorial Community Ctr, 1670 W 162nd St., Gardena. 9am - 4pm.
Sept. 11 BCSS meeting; 7:00 pm Olive Drive Church
speaker: Woody Minnich
program: Showing Plants
plant-of-the-month: member's show plants
Sept 15-16 Monterey Bay Area C&SS Show & Sale, Jardins De San Juan, San Juan Bautista
Oct. 9 BCSS meeting; 7:00 pm Olive Drive Church
Oct. 13-14 BCSS 2nd Annual Show & Sale!
Oct. 13-14 C&S Society of California Show & Sale. Lakeside Garden Center, Lake Merritt, 666 Bellevue, Oakland.

To have your article printed in The Cactus Patch get in touch with:
Stephen Cooley, editor Linda Cooley, editor
thecactuspatch@bak.rr.com

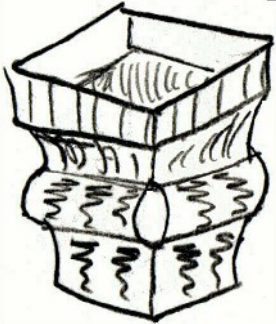
Membership in the Bakersfield Cactus & Succulent Society costs \$10 per year for an individual and \$15 a year for a family. This extraordinarily reasonable price not only includes twelve issues of The Cactus Patch but entitles you to participate in club field trips to far-off (out-of-town) and exotic places (more exotic than Bakersfield). You will also receive a nifty name tag that will be your ticket to the members only plant raffle held every meeting featuring the best plant on the raffle table! All this is in addition to the wonderful programs and people at the meetings. To become a member contact:

Maynard Moe, treasurer
Lithops44@bak.rr.com

Anatomy of a Winner



Pot hand-thrown, double-glazed,
high-fired, traditional ancient
Japanese ceremonial urn
\$134.99



Soil exact mixture of
25% #10 grit sand from the
Kalahari
15% pure Nile delta sandy-clay
loam collected at low tide
33% fresh pumice from
the north side of Kilauea



27% native Mexican soil guaranteed
collected next to a cactus
\$49/quart



Top Dressing
dug by Andean nomads, cleaned in
spring water, quality checked 3 times
and never touched by human hands



Plant **\$99/pound**
Mammillaria on sale at
Wal-Mart 2 for \$1

Stephen Cooley 2001