The Future of the CACSS is in YOUR hands!

Dear Members,

You are important! You will determine the direction our club takes in future months and years! We, the Board Members want to hear from you!

The Officers and Board of Directors are club members who represent you. We cannot, nor do we want to, run our club alone. Your ideas and suggestions are vital. Club members are always invited and encouraged to attend the board meetings which are usually held just before the general meeting. However, meeting times are changed when there is a lengthy agenda so check with a board member or our website for details.

October is a busy month in the State of Arizona. It is a prime time for gardening and for plant sales across the state. Our club mans the Cactus and Succulent tent at the Desert Botanical Garden’s Fall Sale (October 13th through the 15th). This is an excellent place to promote the CACSS while helping the DBG with friendly assistance for the customers, many of whom are new to the Valley and have questions about growing our favorite plants. If you are interested in volunteering (you pick the day and time), please contact Cathy Babcock at the DBG.

In the very near future (Sunday, October 29th), we will be hosting one of our two biggest events of the year, our annual Silent Auction. It is time to start looking over your collection for duplicates, offsets, cuttings, seeds and plants you can share at the auction. You know you will purchase something, so placing plants in the auction will free up some space! (We also accept nice pottery, photos or other plant related items for the auction.)

Last year, a member suggested that we have a live auction. That suggestion was implemented and it turned out to be a lively bit of fun! Thank you to all the members who donated the extra special plants selected for the live auction. Should we do the live auction again this year? If you have any suggestions for this year’s auction, please mention them to an officer or board member for consideration. We ALWAYS need help setting up and tearing down. Can you come a little early or stay late to help? Thank you!

Continued on page 3...
Officers

President—Kathy Butler
602-840-9612
butlergrin@aol.com

Vice President—Leo Martin
602-852-9714
leo@possi.org

Secretary—Sue Daley
623-876-0060
daleyspudbud4230@msn.com

Treasurer—Tom Ballen
480-502-8639
tballen@aol.com

Past President—Lee Brownson
480-951-4945
lsbrownson@cox.net

Directors

Lee Brownson 480-951-4945
lsbrownson@cox.net

Ray Daley 623-876-0060
daleyspudbud4250@msn.com

Denise Diederich 520-424-3464
rainbowvalleyensy@aol.com

Laurence Garvie 480-855-3850
lgarvie@cox.net

Celeste Gornick 602-548-8106
hheaven77@aol.com

Dana Hiser 480-368-8606
danagarden@aol.com

Cynthia Robinson 602-615-2261
crobin500@msn.com

Lois Schneberger 480-946-8373
lschneberger@cox.net

Ingrid Swenson 602-957-9865
iswenson@cox.net

Robert Torrest 480-994-3868
robertsr9114@msn.com

Librarian—Erik Anderson
480-967-3984
woodcraftman@earthlink.net

Newsletter Editor & CSSA Affiliate Representative
Cynthia Robinson 602-615-2261
crobin500@msn.com

Calendar

July 30th, Sunday, 2 pm
Regular club meeting
Dorrance Hall, Desert Botanical Garden
Robert Webb, new owner of Arid Lands nursery in Tucson, will give a presentation on Aloe of Southern Africa.

August 27th, Sunday, 2 pm
Regular club meeting
Dorrance Hall, Desert Botanical Garden
Ken Schutz, Executive Director of the Desert Botanical Garden, will speak on What's Happening at the Garden.

September 2nd, Saturday, All Day
23rd Annual Huntington Succulent Symposium
"Science from the Garden" will be discussed by experts in the field of botany, ethnobotany, and plant taxonomy.
Huntington Botanical Gardens
Los Angeles, CA

September 24th, Sunday, 2 pm
Regular club meeting
Dorrance Hall, Desert Botanical Garden
CACSS Board member, Laurence Garvie, will give a presentation on Who Cares if Cacti Die?

October 13th - 15th, Friday - Sunday,
DBG Fall Plant Sale
Volunteers will be needed to assist the DBG staff with answering cactus & succulent related questions, giving out CACSS & CSSA info, etc.

October 29th, Sunday, Noon Setup, 2 pm Auction
Silent Auction of Member's Plants
Wildflower Pavilion, Desert Botanical Garden
The Annual Silent Auction is the perfect way to part with some of your propagations and/or expand your collection without spending a lot of money. Review your collection today to see if you have any plants that you could part with to help make this annual event a success!

November 19th, Sunday, 2 pm (Not the last Sunday)
Regular club meeting
Dorrance Hall, Desert Botanical Garden
Guest speaker will be Steve Hammer, topic to be determined.

December 10th, Sunday, Noon (Not the last Sunday)
Holiday Party, Elections
Webster Auditorium, Desert Botanical Garden

The Cover Photo:
Photographed on 7/17/06 by Cynthia Robinson

Monsoon Season in the Mohave Desert
Recent rains had brought noticeable life back into the desert. Small trees & shrubs had a new flush of leaves & Nolina bigelovii is in fruit amidst the boulders approximately 60 miles north of Wickenburg on I-93. The habitat included several species of Cholla, Echinocereus engelmannii, and Yucca baccata.

Publication of the material in the Central Spine does not imply agreement with the ideas expressed therein by any portion of the membership of the CACSS, nor does it constitute an endorsement or support for any portion of such material by the CACSS, or the Central Spine, regardless of any position or office held by the author(s). All such material represents a comment and/or personal opinion of the author(s).
CACSS Board Meeting Minutes for June 22, 2006

Tom Ballen reported on a serious problem concerning the transactions at the Annual Show & Sale. One of the cash registers which we borrowed from the DBG apparently malfunctioned on the Friday sales. As a result, after all of the accounting was finished, the club suffered a $7,515.81 loss on the sale. An investigation has begun with hopes that something can be done to rectify the problem. A motion was passed to help us avert such problems in the future. For the present, the club has a checkbook balance of $11,529.08 with $4,023.25 of that sum in the Plant Rescue account. To date we have 204 members.

A discussion was held concerning speakers for some of our future meetings. Many names were suggested as possibilities. If you know someone who could present a program, contact a board member. Kathy Butler will be contacting Cathy Babcock of the DBG for our meeting dates in 2007.

Lee Brownson is continuing to pursue the Not-for-Profit status for the club.

Celeste Gornick has had to give up the responsibility of Bus Trip planner due to illness in the family. By the time you read this, a tally of those members who would definitely go on the trip will have been made and a decision made as to whether to try to continue with the planning.

Lee Brownson reported that he is looking for outlets for the cacti which we could get from Verrado's holding area. He feels he has been contacted by enough volunteers to make the project doable, at least in part. He also has information regarding a holding area for the plants until they can be sold.

A chairman for the 2007 Annual Show and Sale is needed. It was suggested that we could offer workshops and/or lectures at scheduled times during the event and that a question and answer table could be a good offering as well.

Sue Daley

The Future of the CACSS is in YOUR hands! ...continued from page 1

Our annual Holiday party is coming up (December 10th). At that time we will elect our club officers and board members. Nominations for those positions are needed far in advance of the party. Can you think of a club member (maybe yourself) who would like to be more involved in the club? If they (or you) would be interested in serving on the Board of Directors or as an Officer, submit their (or your) name to our president, Kathy Butler, and she will put the name on the ballot.

What activities would you like to attend in the future? Do bus trips or van pools, open gardens or hikes interest you? Would you like to work at a booth during a Home Show? Enter your plants at the State Fair? Learn more about a particular topic? Did you like the seed growing workshop? Is there another workshop you would like to attend (examples: staging plants for a show, grafting/pruning plants, vegetative propagation, etc)? Who would you like to hear speak to our club? (We do not have to limit ourselves to cacti and succulents--landscape design, trees and shrubs or wildflowers are other topic options.) Let us know what interests you!

How can you help our club? We have many volunteer positions available. Our members really stepped up to help at our annual show and sale. Thank you each and every one! By the way, volunteering is a great way to get to know other club members. Rolling up your sleeves and working together gives you an opportunity to chat about plants or any number of other subjects. Don’t hesitate, jump in! We need each and every member.

And if you love our club, please help us promote it! The Valley of the Sun has many new residents who probably don’t know we exist. Since we have club flyers, why not toss a few in the glove box of your vehicle or in your purse? It is easy to strike up a conversation at your local nursery when you see people shopping the cactus and succulent section. Invite them to a meeting or point them to our webpage. (We are working hard to keep our calendar/information updated.)

The direction our club takes is determined by your ideas and your participation. Let us know how we can improve, change or grow! To be a vibrant, active club we need YOU!!!

Sincerely, your CACSS Board Members
Hello everyone,

The good news is that there is a lot of interest by people wanting to participate in a plant rescue at the Verrado development. And we will need a lot of interest because there is a huge number of plants out there.

The less than good news is that it is taking longer to work out the details than I thought. The problem is the sheer number of plants and the cost involved in buying moving tags from the Ag Dept. I have been working with the Ag Dept. to figure out a way to save all of the plants without having to come up with several thousands of dollars up front. I think we are close to a solution...everyone wants to save the plants...but there are regulations to follow.

Be patient. There will be an opportunity to rescue plants. It’s just taking longer than I hoped.

Lee Brownson
Cactus Rescue Program Chairman

---

Nolina bigelovii in fruit 60 miles north of Wickenburg.

Cactus & Succulent Books for Sale
Board Member Celeste Gornick would like to give notice that she has a list of Cactus & Succulent, Native Plant & Landscape books for sale which are duplicates in her collection. To obtain the list of books & prices, contact Celeste by email at hheaven77@aol.com or phone: 602-548-8106. Celeste will also have the books at the July meeting.

Joshua Tree (Yucca brevifolia) 50 miles north of Wickenburg on I-93.

Echinocereus engelmanii growing "exposed root" style in the Mohave Desert.
June 30 - The warmest June ever didn’t seem quite that hot. The average mean temperature of 94.6° F was almost 5 degrees above the normal mean because of higher overnight lows. The cacti didn’t mind and the exceptional flower display continued. This is also the time of year when some of the "common" trees and shrubs provide most of the color. They include desert willow, oleander, red bird, Mexican bird (yellow), red yucca, yellow bells, calliandra, lantana and bougainvillea.

Kapok (Ceiba acuminata) at 5 ft has been slowly leafing out all month. These are trees you can see down in southeast Sonora and further south in the "thorn scrub forest" along with Tabebuia (very colorful in yellow or pink) which is occasionally available in local nurseries. Texas ebony (Pithecellobium flexicaule) has dark green foliage and fragrant flower spikes. Texas sage (Leucophyllum frutescens) responded colorfully to a little bit of rain and the San Marcos hibiscus (Gossypium harknessii) continued with its yellow flowers. Although you can grow tropical hibiscus here it requires constant attention, so we planted the better adapted Blue hibiscus (Alyogyne huegelii) and discovered yet another rabbit favorite. A small Baobab seedling (Adansonia digitata) sold at a nursery for bonsai was "saved" and is now growing rapidly in the heat (in part shade.)

Columnar cacti like the larger cereus varieties flowered again and were joined by C. aethiops and C. huntingtoniana (only the one in some shade). Stenocereus flowering included Rathbunia (tubular red flowers), Arizona organ pipe and Pitaya agria (S. gummiosus) with the largest flowers of all near the tops of the 5 to 6 foot columns. By the way, the fastest growing of the stenocereus, S. griseus, often sold as Mexican organ pipe, is sometimes mislabeled as S. praunosus which is clearly different with 5 or 6 deep ribs and dull green (the only stenocereus that hasn’t flowered for us.) The stenocereus are best in the ground and don’t really lend themselves to pots but pilosocereus can make great pot plants. Pilosocereus are mostly associated with Brazil and Brazilian varieties like gomulaceae, pachycladus and magnificus, and others are often available in the nurseries. The Brazilian varieties can be grown in the ground with a little protection, but there are also Mexican varieties like P. alensis, which is from Sonora and harder that most. It is bluish-green with light purple flowers and white wool near the top (see the photo in Miles Anderson’s book). It makes a great pot plant as do other Mexican varieties like P. palmeri (flowers at a meter or less) and P. chrysacanthus.

Pereskia aculeata was flowering at the start of the month and is best in part shade. The barrels included Ferocactus pilosus, F. potsii F. acanthodes and even a small F. hamatacanthus in deep shade with a cluster of bright yellow flowers. Several trichocereus flowered again as did Thelocactus setispinus. There were also gymnocalyciums, bocasitzti (red tubular flowers), Monvillea spagazzini, cleistocacti and Leucocitaria principis. Notocacti have flowered several times with the best being N. magnificus, N. schumanianus and N. warasii.

Succulents other than cacti included Pachyormus discolor, Manfreda, and a few small aloes. Aloe sladeniana has a sparse pale colored spike and certainly would not be grown for the flower display. Apparently the rabbits agree and only eat the leaves leaving the flower. A. somaliensis gets the same treatment but A. noblis with its red flower hasn’t been damaged. A. karasbergensis has put up its multi-branched spike and the colorful flowers will open next month. Synadenium grantii is usually grown as a pot plant but is up to 8 feet in the ground under a cascalote tree. This relative of the euphorbias has bright green leaves with purple splotches. The variety "Rubra" has deep purplish red leaves. A Moringa drouhardii which slowly got to 7 ft in the ground is now looking much better in a pot in a more shaded spot.
**Straight Skinny on the Life of Limbs...** Submitted by Ray Daley

If you’re reading this, it’s a given that you have some interest in cacti and/or succulents. In spite of that interest, most, if not all of us have at least one tree in our yard to which we attach some significance, whether for it’s decorative aspect or it’s functionality as a shade provider. For those of us who do care about the dendrological aspects of our yard/garden the following article may be of interest. This article was originally an excerpt from “The Complete Guide to Landscape Design, Renovation, and Maintenance” Ö1991 by Cass Turnbull, and is taken from the March 1992 (really) issue of the “American Horticulturist”, a publication of the American Horticultural Society.

**STRAIGHT SKINNY ON THE LIFE OF LIMBS**

Thank goodness for Dr. Alex Shigo! This world-renowned tree expert has scientifically proven what many gardeners suspected all along and has shown what a lot of other experts have been doing is wrong. He has dissected more than 15,000 trees with chain saws and has studied trees in many countries. His research has yielded 270 publications.

Shigo has shown why topping (also called heading, stubbing, or dehorning) is very bad. He has proven that the common practice of slash-cutting limbs off trees is also bad, and that tree-wound paints and seals don’t do any good whatsoever (except perhaps on rose canes, or with some special sprays that may help reduce suckers on some trees).

He and his cohorts have done this by scientifically testing these products and practices and their effects on trees. He cuts and drills and wounds and saws trees by the score and later dissects them to see what’s really happening. He refers to himself as an “inside man” because he likes to look inside the trees.

But although he is highly respected and his evidence is practically indisputable, even new books on pruning, written by authors who know of Shigo’s work, often repeat misinformation. Here is the straight skinny on his pruning method and the reasons behind it, somewhat simplified, but I trust not oversimplified.

**Some Tree Biology**

Animals often avoid injury by moving away from the source of damage or pain. Trees can’t. They wall off an injury internally and then outgrow it. If a limb is injured, it will be rotted out by microbes, and ultimately it dies. The injury doesn’t kill the tree itself because the tree surrounds the rot with an interior barrier or wall that stops it. That’s why that pocket in your tree where a limb rotted out doesn’t get bigger, it just makes a cute home for a squirrel. When some of that rotten branch gets trapped inside the growing tree, it becomes the knothole that drops out of a piece of lumber. It’s easiest for a tree to wall off a dead or dying limb. It’s somewhat harder to wall off the gash you left when you backed into the trunk with your car after a Christmas party. It’s hardest for it to wall off all the rot that comes charging down the trunk when you top it. It’s sort of the difference between bruising your knee, cutting off your hand, and cutting off your head.

Whether your particular tree dies back totally or partially when wounded depends a lot on how well it walls off wounds generally. There are several species of trees that do not compartmentalize well; in the trade they’re called “rotters.” They include big leaf maple, alder, willow, poplar, tulip poplar, elm, and madrona.

Rotters often make up for their lack of toughness and short life span by reproducing like crazy. You want to help these plants by prompt removal of injured limbs and by avoiding wounding or pruning healthy green wood. Cut out the dead wood and little else. Shigo says that leaving dead wood rotting on a tree acts as a “big stick of sugar,” drawing in the rotting bugs. Besides, it’s ugly.

Shigo tells us that branch wood is different from trunk wood. When you go to remove a limb for whatever reason, you should be careful to cut off only the branch wood and to avoid cutting or wounding the trunk wood, which would doubly injure the tree. You will know where to make your cut on many trees because you will see a bulge or collar of trunk wood at the base of the branch.

The right place to cut is the most logical, easiest place to cut; lazy gardeners have always cut there, as do the ones to whom natural things look right.
But the invention of the chain saw enabled a lot of damage to occur with little effort. For decades, arborists have recommended “flush cutting,” which wounds well into the collar, which is trunk wood, not branch wood, thus causing a second and worse injury.

They had noticed that the branch collar or callus “rolls over” the cut area and covers it up faster when it’s sliced into than when the cut is made just outside it. But this “callus roll” is not a sign of healing. The real work is going on inside where things are being walled off. Cutting the collar opens the trunk to rot and is responsible for many serious problems that show years later.

**Inside the Tree**

Let’s divide the tree into four sections. The outside section is the protective bark. Just under the bark is where all the action takes place; this part of the tree is made up of the cambium, the phloem, and the xylem. The cambium is where all the growth happens. It pushes out the cells that turn into everything else, including the phloem and the xylem. These cells conduct nutrients and sugars up and down the plant. Phloem and xylem are the major plumbing area. Just inside this high activity area is the sapwood, which is just the regular old wood making up the major part of the tree. It’s actually old xylem. It conducts nutrients up the plant, too, but less energetically. Very old xylem at the central core of the tree is called heartwood and is often darker in color. Scientific types argue about whether this part is alive or dead.

When you nick the bark to see if a branch is alive or dead, you’re checking out the green cambium. When you saw down a big tree and paint the edges with a deadly chemical to keep it killed, you’re painting the cambium. Cambium is important stuff.

It’s essential that people understand that the most living, most vulnerable part of a tree is like a sheath just under the bark. When you strip off the bark and cambium in a ring all the way around the base of your tree, by weed whacking or scraping a lawn mower around its base, you have girdled the tree. It cannot wall off the wound or send nutrients up to the part above the ring. It will die down to the stripped section, or perhaps die altogether. If it’s a good compartmentalizer, it will wall off below the injury and send up new shoots from the roots or trunk base.

You can also girdle the top of your tree by leaving something tied around it; once, at a park where I worked we managed to top five little Douglas firs in two years by forgetting to untie harmless-looking burlap tree stake ties.

People assume that if a tree doesn’t die right after they drive nails or a car into it, it’s all right. Wrong! Trees usually die from a series of blows over a long time and when one dies, it is from the proverbial straw that broke the camel’s back. You may have a giant column of dead rotten wood walled off inside your tree from some old wound and when the drought hits, whammo! You’ve got a dead tree. Or, as Shigo explains, wounds and injuries, including flush cuts, will often “cock the gun” and a freeze or bright sun scald will “pull the trigger,” so that frost cracks or sun scald appear a year or two later. The sun or frost gets the blame.

**How to Prune a Big Limb**

The major objectives in taking off a big limb are: 1) to remove all the limb so that a big stub is not left to look ugly, sucker back, and/or rot and die, and 2) not to injure the branch collar, which is trunk wood. If it’s a big branch, this may not be as simple as it sounds. Most people cut downward from the upper surface of the limb. The weight of the big limb can then cause it to break and rip down the trunk wood when they get about three-quarters through, or, if the branch crotch angle is narrow, they will saw off the bottom of the collar.

To avoid these hazards, use the three-cut system. Somewhat farther out on the branch than you plan to make the final cut, make a bottom cut and then a top cut that doesn’t quite match up. This will act as a hinge so that the limb will gently fold down to the ground instead of dropping on your leg. Or you can just saw it off some distance out. This relieves the weight of the branch and makes an accurate pruning cut easier and safer. When you have a narrow trunk branch crotch, you will have to use the somewhat awkward method of sawing up from the bottom to avoid cutting into the collar. If you cut from the top down, you cannot appropriately angle your saw to avoid sawing through the collar. Even when the angle is wide enough to cut from the top down, always, always make a brief undercut to keep the branch from ripping down the trunk.
Plant Questions???

Many CACSS members have experience with different kinds of succulent plants. I hope they will add their names to the following list (just call or e-mail Bob Torrest). For now, the list is simply alphabetical with principle interests. When more members add their information, the list will be cross-referenced by topic.

DOUG DAWSON
480-893-1207
doug.dawson@jcom.mail.maricopa.edu

MIKE GALLAGHER
602-942-8580
mgallagher26@cox.net

STEVE PLATH
623-915-7615
reveglude1@juno.com

CYNTHIA ROBINSON
602-615-2261
crobin500@msn.com

BOB TORREST
480-994-3868
robertrst9114@msn.com

Specialization includes Flora of Namibia, Growing from Seed, Lithops, other Mesembs & Melocactus.

Specialization includes Aloes, Haworthias, Columnar Cacti & Turbinicarpus.

Specialization includes Ariocarpus, Astrophytum, Cyphostemma, Echinocereus, Fouquieria, Thelocactus, General Propagation & Desert Revegetation.

Specialization includes Flora of Madagascar, Growing from Seed, Caudiciform & Pachycaul Succulents, Aloes, Apocynaceae, Burseraceae, Euphorbiaceae, Fouquieriaceae, & Succulent Bonsai.

Specialization includes Desert Landscaping, Unusual (including Rare Fruit) Trees & Shrubs, Aloes, Agaves, Columnar Cacti, Trichocereus & Opuntia.

Who To Contact!!!