From our President

This month's program is entitled "Atacama After El Niño," a slide show presented by Woody Minnich. Woody has been one of our favorite speakers, not only because of his excellent presentations and interesting topics, but also because he brings with him an infectious enthusiasm for succulent plants and the places where they are found. Every summer Woody leads small tours into the deserts of Mexico and South America to do field work and photograph plants in habitat. One of Woody's latest excursions has been into the Atacama Desert, which runs along the coast of Chile. The Atacama is one of those places which is constantly passed over by the rain bearing clouds that form over the ocean. Some areas of the desert have not received rain for 50 years or more. Those plants which are found there are restricted to a narrow band along the coast where they receive their moisture from the fogs that roll in from the ocean. Inland there is absolutely no vegetation for miles. When rain arrives every 20 years or so, that extra water is taken in, and plants grow again only to wait for the next rain, if they can survive that long. It was after the recent El Niño rains that Woody was down there to record and photograph its effects on the plant life. We are privileged to see the results of this excursion for our November program.

Woody owns and operates Cactus Data Plants, in Littlerock, Calif., where he grows cacti and other succulents for the discriminating collector. When he is not in the field, he teaches graphic arts at a local school. Woody has written articles for the CSSA Journal and has contributed material for the column: "Cacti and Succulents for the Amateur." He often can be seen at conventions and shows, where he both exhibits his show plants and offers his nursery plants for sale.

Those who wish to have lunch with Woody can meet at Rosita’s, at the N.E. corner of University and Hardy, Tempe, at 11AM, Sunday, Nov. 22. Please RSVP to Cathy Babcock as soon as possible, in order to reserve enough tables.

See you at the meeting!

Scott B. McMahon

Happy Thanksgiving

October Notes

At the October meeting, Scott spoke of our need for volunteers for the upcoming February Cactus Show. Help will be needed for a variety of duties. There is also a need for someone to sell advertising for our newsletter. If interested, please contact Nick. A plea for those interested in running for a board position or an office was again voiced. Let Scott, Leo Martin or Richard Maxwell know if you are interested in helping our society in this manner. Member Leo Martin talked briefly about a collection of Stapeliads he had written about in last month's newsletter. His "show and tell" was very interesting for all.

The passing of former member Flo Fickeisen was brought to our attention. She and her husband Norm are well respected, and she will be missed.

After going over the rules for the silent auction once again, the fun began. Many great plants had been brought in for the sale. The bidding was friendly, but competitive, bringing the price of one plant to more than $100.00! After the bell rang, people collected their slips and paid for their treasures. All in all, between $750 and $800 was made on the auction. A great big THANKS goes to all who brought in the plants and to those who bought them.

Deanna Jones
Secretary

Recordkeeping
by Leo A. Martin

How many plants do you have? When did you get that roundish spiny grey-green one, and what is it called? Where did you get it? What are its cultural requirements? When did you last repot it? Spray it? When does it bloom? It has bloomed, hasn't it? Do you have any others like it? What is it related to? Where does it come from in the wild?

It seems obvious that anybody able to answer all these questions on every plant in a collection has a leg up on other growers, and probably can do a better job caring for plants. (No, I'm not there yet. But I intend to be!) To have all this information at hand requires some means of keeping records.

Plant collectors record where plants they collect come from. The great gardeners of the 18th and 19th centuries kept detailed notes of how they cultivated all the novelties then being introduced to Europe from the Americas, Asia, and Africa. We are the beneficiaries of this record keeping. We can keep a brief history of our own collection to allow us to learn the rhythms of our plants; to look back and see what works best; and to learn what not to repeat.

Our records don't have to be too complicated. They have two components: a garden log and a plant database.

The log is a timeline. You keep adding to one long document, a new entry each time you work with your plants. Each entry records a particular time and what is recorded depends on what you did. Keep a log of what you did and saw each time you visit or work with your plants. Each entry begins with the date; followed by the information: what plants you repotted, what soil mix, when you fertilized, when something started growing that year, when it bloomed, seeds you planted... everything you do. It's really not that difficult; a few lines suffice. Go back and read over your log from time to time. You will be amazed at how much your plants can teach you.

An Index Card System

You can keep the log in a notebook on paper. You can also keep it on your computer as a word processing document. Be sure whatever program you use allows you to search your document. That way, when you have accumulated 47 years of log entries about your plants, you can search on *Mammillaria blossfeldiana* 'Fred' and find out how many you've killed over the years. Or, you can see when each year your plants tend to bloom.

A database, rather than a narrative, is a collection of records. Each record represents one plant. The database grows in size as your collection expands, and the record for each plant gets more voluminous with time. In the database you can look up all the information about a given plant in one place rather than searching through years of entries. Keep a database of your plants and add a new record each time you get a new plant. Each time you work with a plant, add more notes to that plant's record. When you want to look up what you have done with a plant, just pull its record from the database.

For years plant lovers have kept boxes of index cards

with information on their plants. An article from the CSSA Journal in the 1930's describes such a system. Names, cost of plants for insurance purposes, and cultural information can be kept in one place. And, there is more room on index cards than on a nametag. (You do have all your plants named, don't you?)

Don't think you have to enter all your plants into your records ASAP. It will seem overwhelming. Just do a few plants here, a few plants there, and before you know it, you'll be done.

The most important information retrieval feature of a database is the principle of the index. Each record has a unique identifier to enable sorting. For example, the government keeps a database of your earnings, Social Security, and Medicare taxes paid. The identifier is the Social Security number, which is unique for each individual. Give each of your plants a unique index number, as well. This number should never change for a given plant in your collection, though (as we all know) plant names may change. The best system makes the index number a form of the date the plant was acquired, so the index number reveals how long the plant has been in the collection. For example, an index number 19970505.06 would mean this was the sixth plant acquired on May 5, 1997. Most botanical gardens use some variation of the date acquisition for the index.

The best recordkeeping system uses a nametag for each pot, an index card or cards for each nametag, and a box for the index cards. When the first index card for a given plant is full, another card for that plant is labeled with the same index number and added to the stack behind the first card for that plant. The cards are filed by index number.

On the nametag, put the index number. I have found nothing better than #2 pencil for plastic nametags. Many markers run when sprayed with alcohol or soap solutions, but pencil does not. Pencil does not last forever, particularly in full sun; I repot about every 2-4 years and rewrite or replace the tag if necessary when repotting. You might also put the name of the plant on the tag. Some people also write when they last repotted. Remember, most nametags have two sides, so there is enough room for a short story if you write small. Some people want all nametags the same color. Some use different color codes: white for no water in winter, green for a little; or, white for cacti, red for aloes, green for asclepiads, blue for crassulaceae; white for repotted in 1999, blue for 1997, red for 1996, green for 1995; or anything else.

Start with one index card for each plant. On the index line, put the index number. Then put the Latin binomial name of the plant. If you only know part of the name, put what you know. A great winter past time is "Name this plant." Other pieces of information you should probably record include:

- What plant family it belongs to
- Where it comes from in the wild
- Date you acquired the plant
- What you paid for it
- What size pot it was in, or whether it was a cutting, offset, or seeds

- Where or from whom you acquired it
- Cultural information for this plant, if known (If you don't know, find out!)
- Mention of this plant in any of your books (title, page number)
- Who you have given cuttings to (very important--if you kill your plant, you might be able to get a piece from somebody you gave some to.)

(Ideally you will have the same information for each plant.)

Then, you will begin chronological notes on the card. The idea is that, when you read the card for each plant, you will see its history and understand it better. When you notice the plant is blooming, pull out the cardfile and enter the date, then the note. When you see mealybugs on it, spray with alcohol, then pull out the cardfile and enter the date, then the note. If the alcohol burned the plant, note that too. When you repot, pull out the cardfile, enter the date, and note the new pot size and what the pot is made of. When you take cuttings, record that.

When the first card is full, take a blank one. Put the index number up top, the plant name, and "Card 2". Then continue with the notes. When card 2 is full, begin card 3, and so on. Keep the cards with one index number together in the box.

Arrange your cards according to some system. Either order them by index number, or alphabetically by plant name. By index number is probably best, since this is always on the name tag, and you will have some plants you haven't identified yet.

Put the cards in a card box, available at any office supply for less than the price of most plants. Wrapping them with a rubber band is not good enough. You've gone to some trouble to make out your cards; treat them well.

When you divide plants, keep the old index number with the parent plant, and assign new numbers to the divisions. Make out nametags and cards for them as well.

When you give plants away, give the nametag and index card too. This will give your friend the plant's history, a quick way to know a lot about growing it.

When a plant dies, don't throw away the card. Record on the card what happened. Keep dead cards separate. When you are ready to try that plant again, read the card to avoid the previous problems.

Computer Based Systems

If you are a computer user, I would recommend skipping the index cards, and using a database program. With some programs, you can custom design how your data entry form looks, and sort your data in many ways (genus name, cost, where you got it, plant family... anything you want.) I use Lotus Approach. I can extract all my Mammillarias to see how many I have. I can sort my plants by date acquired. I can see how many members of family Asclepiadaceae I own. The Cardfile accessory included with Windows 3.1 Also works fine; it is actually a simple database program. Instead of filling out paper cards, you fill out index cards on the screen. The program keeps them sorted automatically by The first entry on the index line. If you already have index

1998 CACSS Library Collection

70 Common Cacti of the Southwest, Pierre C. Fischer (1989, 76 pp.)

Adventures in Close-up Photography, Lief Ericksenn & Els Sincebaugh (1985, 144pp.)

The Agave Family in Sonora, Howard Scott Gentry (1972, 195 pp.)

The Agaves of Baja California, Howard Scott Gentry (1978), 119 pp.) (2 copies)

Agaves of Continental North America, Howard Scott Gentry, (1982, 670 pp.)

Aizoaceae (Mesembs), research paper & handouts, Botany 498, Dr. Donald J. Pinkava, Arizona State University, Karen Kravcov (1996, 90 pp.)

Aloes of South West Africa, W.J. Jankowitz (1975, 61 pp.)

Aloes: Pride of South Africa, Barbara Jeppe (1974, 24 pp.)

An Illustrated Guide to Cactus and Succulents, Peter Chapman & Margaret Martin (1982, 160pp.)

Arizona Cactus, Renaissance House (1988, 48 pp.)

Book of Cacti for the Amateur Collector, Harry C. Lawson (1948, 36 pp.)

British Cactus & Succulent Journal: "The Identification of Escobarias," Nigel Taylor (1986, 9pp.)

The Cactaceae, Vol. I, Britton & Rose, 1937 reprint, HB

The Cactaceae, Vol. II, Britton & Rose, 1937 reprint, HB

The Cactaceae, Vol. III, Britton & Rose, 1937 reprint, HB

The Cactaceae, Vol. IV, Britton & Rose, 1937 reprint, HB

The Cactaceae, Vols. I and II, N.L. Britton & J.N. Rose (1963, 477 pp.)

The Cactaceae, Vols. III and IV, N.L. Britton & J.N. Rose (1963, 576 pp.)

Cacti, J. Borg (1956, 487 pp.)

Cacti, Vincent Cerutti, text, Paul Starosta, photographs (1998, 126 pp., 138 beautiful magnified photographs on black background!) HB

Cacti, Charles Glass & Clive Innes (1991, 320 pp.)

Cacti, Frank D. Venning, a Golden Guide, (1974, 160 pp., 200 species) PB

Cacti and Succulents for the Amateur, Robert Foster & Charles Glass (1977, 80pp.)

Cacti and Their Cultivation, Martin and Chapman Auger (1971, 205 pp.)

Cacti and Other Succulents, eds. of Consumer Guide (1976, 66 pp.) SB

Cacti and Other Succulents, Jack Kramer (1977, 160 pp., 188 photos, 67 color) SB Great photos!

Cacti for the Amateur, Scott E. Haselton (1941, 134 pp.)

Cacti for the Connoisseur, John Pilbeam (1987, 167 pp.)

The Cacti of Arizona, Lyman Benson (1977, 218 pp.)

Cacti of California, E. Yale Dawson (1995, 64 pp.)

Cacti of the Southwest, Del Weniger (not dated, 249 pp.)

Cacti of the Southwest, W. Hubert Earle (1963, 112 pp.) (2 copies)

Cacti of the Southwest, W. Hubert Earle (1980, 112 pp.)

Cacti of the Southwest, W. Hubert Earle (1986, 112 pp.)

The Cacti of Zion National Park, Carolynn Trapp (1969, 21 pp.)

Cacti - The Illustrated Dictionary, R & K Preston Mafham (1991, 224 pp.).

Cacti Wildflowers and Desert Plants of Arizona, W. Hubert Earle (not dated, 15 pp.)

Cactus and Succulents (Sunset Books), Linda Brandt (1978, 80 pp.)

Cactus and Succulents and How to Grow Them, Scott E. Haselton (DBG Science Bulletin #5, 64 pp.)

Cactus Guide, Ladislaus Cutak (1976, 144 pp.)

Cactus Lexicon, Curt Backeberg (1977, 827 pp.)

The Cactus Primer, Arthur C. Gibson & Park S. Nobel (1986, 286 pp.)

Calandrinia (1980, 88 pp.)

Calandrinia II (1982, 91 pp.)

Caudiciform and Pachycaul Succulents, Gordon D. Rowley (1987, 282 pp.)

Ceropegia, Brachystelma and Tenaria in South West Africa, in Dinteria no. 17, P.V. Bruyns (1984, 84 pp.)

"Colour Compact," (153 pp.) in Japanese with photo captions of botanical names in English. Many color & b/w photos of cacti. HB

Colorful Cacti of the American Deserts, Brian and Edgar Lamb (1974, 236 pp.)

cards for your plants, it is easy to copy them over into the Cardfile program. It doesn't come with Windows 95 or Windows NT but works with them (and should work with Windows 2000.) You can get the two program files from Windows 3.1. If you don't have experience with database programs, I would recommend starting here to get the idea. Once you have settled on which items of information you want to record for each plant, you can shift to a more complex database program if you wish.

You can use any one of the many database programs available, like Lotus Approach, Microsoft Access, or many shareware programs. Because you are not going to have that many records, and you are going to be entering text information rather than photos, video, or audio, I recommend using an old DOS, Apple, or Windows database, because they are simpler, faster, and cheaper. Good shareware DOS or Apple programs are available for under $10, and they work with Windows 3.1, Windows 95, DOS, Apple, or whatever operating system you have. (Except Windows NT or Windows 2000. Microsoft wants to make all DOS users buy an upgrade, so DOS programs won't work on these systems.) If you later decide to have photos of each plant in your database, there are programs that let you do that.

To set up the Windows 3.1 Cardfile accessory to use for your plants:

♦ **WINDOWS 3.1:** Decide which Program Group you want to hold the icon for your Plants cardfile. (I recommend making a new Program Group called Plants. From Program Manager, press and hold the Alt key, and press F to access the File menu. Or click on File on the menu bar. Press N for New or click New. Select New Program Group. Press Enter. Type in the name of the new Program Group: Plants. Leave the Group File box empty. Press Enter. You will see an empty Program Group with Plants in the title bar.) Open the Accessories group. Find the Cardfile icon. Click on it once, and press F8 (function key 8, copy), or click on File in the menu bar, then Copy. In the dialog box, be sure Plants is shown for the destination. Hit [Enter]. A copy of the Cardfile icon will now be in your Plants program group. Open the Plants program group and double click on Cardfile to launch the Cardfile program.

♦ **WINDOWS 95:** Find a running version of Windows 3.1. Copy CARDFILE.EXE and CARDFILE.HLP from the \Windows directory to your own \Windows directory. In File Explorer, find CARDFILE.EXE. Double click to launch the Cardfile program.

You will see a blank index card. I recommend you edit the blank card to give you an example card. Press F6 (function key F6) to edit the index line. With the cursor in the box, press the spacebar once (the computer sorts a space before any letters or numbers, ensuring this card will always be on top) and then INDEX NUMBER Genus species. Hit Enter and you will see your new card with the index line INDEX NUMBER Genus species. The cursor will be in the text region of the card.

**Central Arizona
Cactus & Succulent Society
Member's Collection**
(centerfold pictures)

1 *Astrophytum asterias X Astrophytum myriotigma* Jim & Electra Elliot

2 *Echinocereus pectinatus v.rigidissimus* Debra Korobkin

3 *Gymnocalycium baldianum* Leo Martin

4 *Rebutia graciliflora v.porealis* Scott McMahon

5 *Echinopis 'Tropic'* Stan & Joan Skirvin

6 *Escobaria minima* Scott McMahon

7 *Astrophytum myriostigma v. quadricostatum* Debra Korobkin

8 *Hamatocactus setispinus* Eleanor Kravcov

9 *Stapelia sp.* Richard Maxwell

10 *Hoodia Bainii* Richard Yates

11 *Gymnocalycium ragonesii* Leo Martin

12 *Peniocereus gregii* Karen Kravcov

13 *Notocactus magnificus* Scott McMahon

14 *Tricohocereus huascha rubra* Eleanor Kravcov

15 *Homolocephala texensis* Stan & Joan Skirvin

16 *Lobivia arachnacantha* Eleanor Kravcov

17 *Tricereus grandiflorus* Eleanor Kravcov
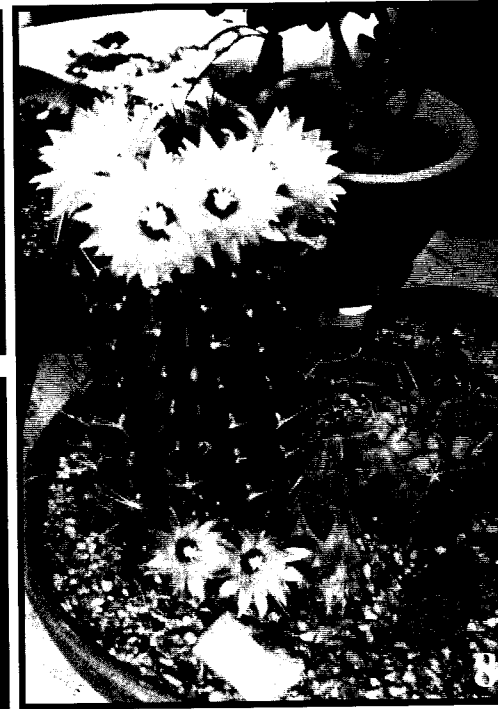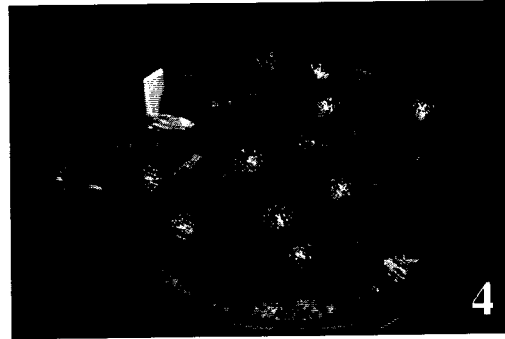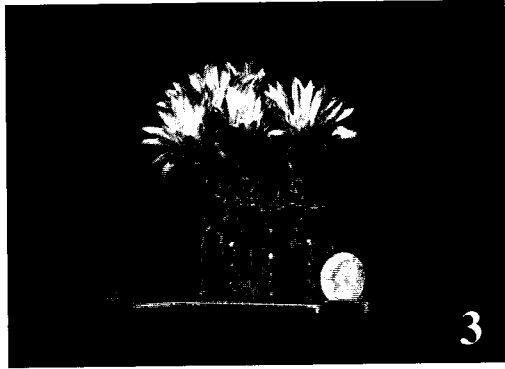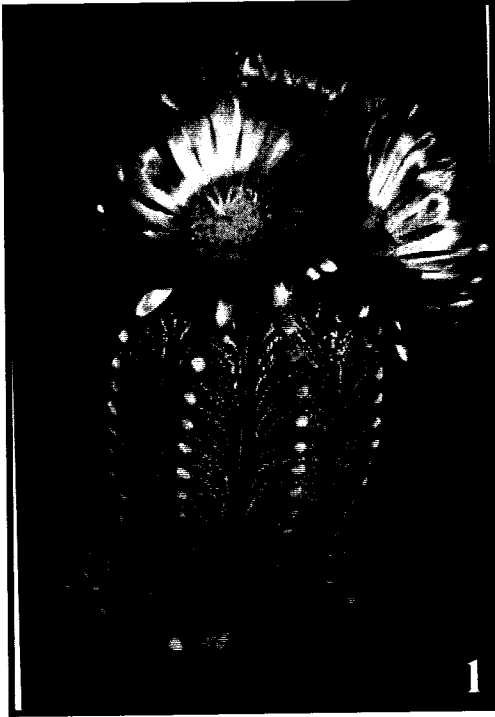
Central Arizona Cactus & Succulent Society Member's Collection
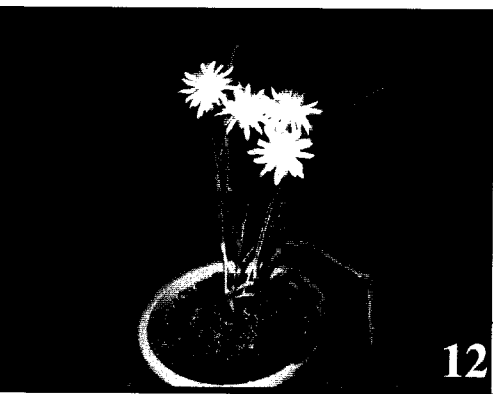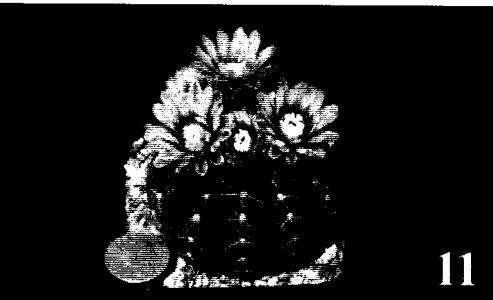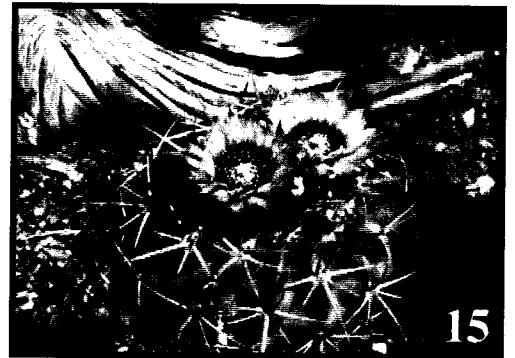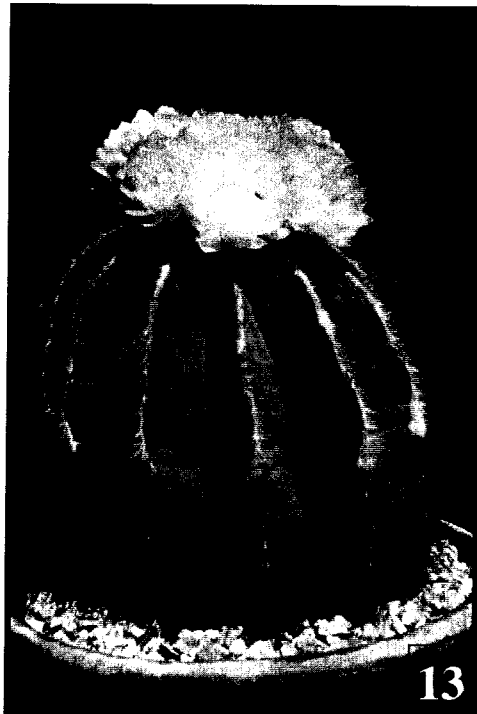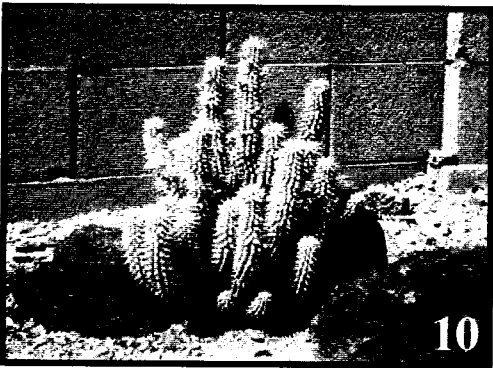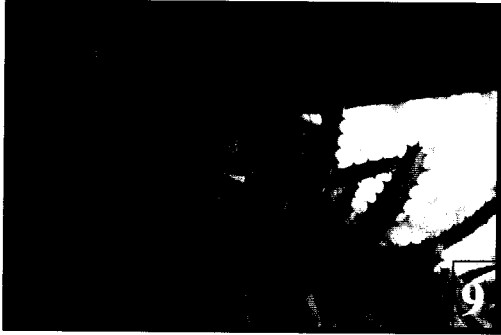
- ♦ Type Genus species Family [Enter]
- ♦ Type Date acquired From whom [Enter]
- ♦ Type Pot size $Cost [Enter]
- ♦ Type Cuttings to [Enter]
- ♦ Type In books [Enter]
- ♦ Type Cultural requirements [Enter]
- ♦ Type Comes from [Enter]
- ♦ Type Notes: [Enter]

(This is for example only. You may want more or less information on your records. Modify this as you wish.)

Now save your file, and give it an appropriate name. Access the file menu: Hold down the ALT key and press F (for file, abbreviated Alt-F.) This opens the File menu at top. Press A for Save as... This pops up a dialog box that asks for a file name. Decide which directory you want to save the file to, and change the directory listing in the dialogue box to the desired directory. Then type in the file name you wish (I suggest Plants.crd) and hit [Enter]. Your file will be saved to the directory you indicated, and the title bar will now show the new file name. Now type Alt-F4 to close the Cardfile program.

Windows 3.1: You can modify the Cardfile icon in your program group so it automatically opens your plants.crd file, saving you a step. To do this, select the Cardfile icon in your Plants program group by clicking on it once. Then press and hold the Alt key and press the Enter key (Alt-Enter) or click File on the menu bar, then Properties. This pops up the Properties dialog box. In the top box, type what you want to appear below the icon on the screen. It can be anything you want. I recommend simply 'Plants'. Then use the tab key to move to the next box, Command Line. Type plants.crd, the name of your file. Tab to the Working Directory box, and type the full path to the directory where the plants.crd file is stored. For example, if the full path to the file and the file name is C:\DATA\PLANTS\PLANTS.CRD you would type here C:\DATA\PLANTS (don't type the quotes.) Leave Shortcut key alone. Then hit [Enter] or click on OK. The Cardfile icon changes its name, and now, if you entered the data correctly in the Properties dialog box, your plants.crd file will open automatically when you double click on this icon. Test it now. If it doesn't work, go through the Properties dialog box and correct the information.

Windows 95: You can create a shortcut to the plants.crd file and place the shortcut anywhere you like (desktop, folder, even Start menu.) In File Explorer, find the plants.crd file. Place the mouse pointer over the file, press and hold the left mouse button, and drag the file to the desired location. Release the button; a menu pops up. Select Create shortcut here from the context-sensitive menu. The shortcut appears. Double-click to test it.

Data Entry

Now, let's make some actual entries. The process will be: Open the plants.crd file, if not open already. Duplicate the top (template) card. Change the information on the new card to what you want. Duplicate the template card again as necessary until you have entered all the plants you want to

enter. Save the file.

Open plants.crd: Double click on the icon; or, double click on the plants.crd file in Windows 3.1 File Manager or Windows 95 File Explorer.

Suppose today is May 10, 1997, and you just bought an 8" tall *Cereus peruvianus* in a 4" pot from Blitz Plants for $10. It is pictured in your $100 color-photo coffee table book, Romantic Victorian Cactus and Succulents for Drawing Rooms, Tea Gazebos, Sachets, Potpourris, and Needlepoint with Recipes, on page 156. You are going to assign this plant index number 19970510.01 in keeping with your routine.

The template 'INDEX NUMBER Genus species' card is on top. Hold down the Alt key and press C for card (Alt-C) to get to the Card menu on the menu bar. Or, click on Card. Press P for Duplicate or click on Duplicate. A duplicate of the card appears.

Press F6 to edit the index line (Or, double-click on the index line.) Note that the dialog box shows 'INDEX NUMBER Genus species' highlighted. This means that whatever you type replaces it. Type 19970510.01 *Cereus peruvianus* and hit [Enter]. If the whole name of a plant won't fit on the index line, just put the genus and leave the species off. If you make a mistake, press [Esc] to discard what you've done, and start over. You're supposed to type Latin names in italics, but Cardfile doesn't support italics, so it's ignored here. The card changes its position in the stack and the index line changes to 19970510.01 *Cereus peruvianus.* The cursor is on the first line in the card text area, 'Genus species Family'.

Replace this (use the Delete key to delete the old entry and type the new entry) with *Cereus peruvianus* Cactaceae.

Move the cursor (using the arrow keys) down and replace 'Date acquired From whom' with May 10, 1997 Blitz Plants.

Move the cursor down and replace 'Pot size $Cost' with 4" $10.

Move the cursor down and replace 'In books' with Victorian Cactus and Succulents p 156.

Move the cursor down and replace 'Cultural requirements' with "Warm all year, never too dry, bright light, fertilize monthly during growing season, use potting soil or cactus mix."

Move the cursor to the next line and replace 'Comes from' with Unknown. Bet you thought it was from Peru. Actually, the first collector couldn't remember where he found it, and Linnaeus, the botanist who first described it (as *Cactus peruvianus*), thought it might have been Peru. It does not grow wild in Peru, however. In fact, it has never been found in the wild anywhere since then! It has been in cultivation since at least 1576. See why you should keep good records?

Move the cursor to just past 'Notes:' and type 8" high from top of soil surface.

Now, write the index number and plant name on a nametag and place it in the pot.

Save your file. Press Alt-F, S (for File, Save.) Or,

click on File on the menu bar, then Save.

In October 1997, your plant has outgrown the pot, and is 16" tall. (Actually, if it is *Cereus peruvianus* and you are taking good care of it, it will outgrow a 4" pot in a few months.) You repot into a 10" pot. Naturally, you want to record your good deed.

Open your plant card file. Find this plant's card: Press F4 (Go To). In the box, type the index number from the label: 19970510.01 and press Enter. The card pops up. Move the cursor until it follows your notes and start typing: 'October 1997 Repotted to 10" pot. Now 16" tall. Grew on patio in full sun all summer; watered almost every other day when not raining.' But... You couldn't finish. There wasn't enough room on this card, and you got a warning dialog box. So, duplicate this card. (Alt-C, P if you don't remember.)

Edit the index line (F6, then press the right arrow key to move the cursor all the way to the right) and add #2 to the second card. If you make a mistake, press [Esc] to abandon your work, then start over. Press [Enter] and you see your new card 19970510.01 *Cereus peruvianus* #2. (The first *Cereus peruvianus* card is not visible now.)

Delete everything on the card with the Delete key, then continue typing your notes. When this card is full, just duplicate it and increase the number in the index line.

Save your work. (Alt-F, S). Remember to keep backups of all your data. If you don't keep backups of your data, you will lose everything when your hard drive fails (and it WILL FAIL eventually) or your computer is stolen. Read computer books to learn about backing up data. Because this file is SO VALUABLE, you can keep a current copy on a floppy disk. Be sure and label the floppy disk so you know what is on it. Copy the file to the floppy disk every time you change it. Keep the floppy disk in a safe place away from your computer. You cannot be too protective of your data.

Finding and Viewing Data

Suppose in the future you have thousands of plants. You can't remember whether you have *Gymnocalycium baldianum*. Use the search feature. You can search the index lines if you put Latin names there (use F4, Go to) or you can search card text if you have the names there (Alt-S, F). Either method pops up a dialog box in which you type the text you want to search for. Or, you can use this to pop up sequentially all your Gymnocalyciums. Just hit F4 (Go to) and type Gymnocalycium, then [Enter]. It will pop up the first card it finds with Gymnocalycium on the index line. Repeat the process to find the next Gymnocalycium.

Suppose your *Cereus peruvianus* didn't know enough to come in on a night when it dipped to 19 degrees Farenheit. You need to mark it as dead in your cardfile. Go to its card and edit the index line. (F6) Use the left arrow key to move the cursor to the beginning of the line. (If you make a mistake, press [Esc] to abandon what you did.) Type D [Enter]. Now the card has a D on the index line before the index number. Because the program keeps cards sorted at all times, and because numbers are considered "lower" than letters, these D cards will go to the back of the stack. That way you don't have to look at all your failures each time you run the program.

You can view your cards as a stack of cards (the default view) or as a list. I find the List view more useful for manual searching. To get the List view, press and hold the Alt key and press V, for View, then press L for List. (Alt-V, L) Or, click View on the menu bar, then List. The view changes to an alphabetical list of index lines. Use the [Page Up] or [Page Down] keys to page through rapidly, or use the up and down arrow keys to move one line at a time. When you highlight the card you want, switch back to the Card view by Alt-V, C.

Keyboard shortcuts in Cardfile program:

Help: F1   Add blank card: F7   Delete text: Delete key or Backspace key

Duplicate card shown: Alt-C, P (Card, duplicate)

Edit index line only: F6   Find text on card, not index line: Alt-S, F (Search, Find)

Find text on index line only: F4 or Alt-S, G (Search, Go to)

Print card shown: Alt-F, P (File, Print)

Print all cards: Alt-F, L (File, print all) BE CAREFUL! PRINTS ONE CARD PER PAGE!

Show next card, previous card: Page down, Page up

Show first card in stack, last card in stack: Ctrl-Home, Ctrl-End

View as cards or list of index lines: Alt-V, C (View, Card) or Alt-V, L (View, List)

All other database programs let you do the same things (and very much more.) If you want more than Cardfile, I strongly recommend getting one. They are easy to learn.

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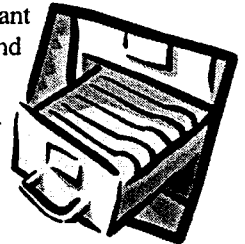
DBG FALL PLANT SALE THANK YOU

I would personally like to take this opportunity to thank the members of the Central Arizona Cactus & Succulent Society for their help during the Fall Plant Sale at the Desert Botanical Garden. Their enthusiasm, knowledge and interest in the plants and in the Garden added immeasurably to the sale. I hope that all these members enjoyed being here as much as we enjoyed having them be a part of the sale, and I hope that we will see all of you again at the spring sale. In particular, I would like to thank **Edra Drake** and **Dana Hiser**, long time volunteers at the Garden as well as CACSS members for their continuous efforts; **Cathy Babcock** for helping coordinate your member's participation and **Richard Zeh, Jo Davis, Leo Martin, Jim Drake, Elain and Jerry Chapman**, and **Ken & Deanna Jones** for all their time and effort during the sale. *Thank you very much.*

Mary Irish
Director of Public Horticulture
Desert Botanical Garden

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Pronunciation of Plant Names

*Reprints from UCI 'Arboretum Quarterly'*
by Dylan P. Hannon

*M*any readers may first feel more exasperation than anything when the subject of pronouncing the scientific names of plants is brought up. I believe one of the primary reasons for this is that rarely, if ever, are gardeners, or even botanists, presented with a workable set of rules by which to operate. Hints and suggestions are often heard from various quarters, but they do not amount to a very satisfactory overall approach. Several years ago, I read an article which I am still trying to track down which addressed this problem, primarily from the perspective of communication between botanists around the world, who must overcome various language barriers. Beginners in the fields of horticulture and botany often feel the need for help in this area as well, and some of the salient points of this article are given below. It is always well to understand that there are no absolutes in the realm of pronouncing plant names, and that the main goal is for both or all parties concerned to understand what is being communicated.

*T*he scientific names of plants are based primarily in Latin, and a distinct, technical language known as botanical Latin has arisen over a period of many centuries. All scientific plant names have technically been "Latinized", even though a good many are based in terminology derived from the Greek and less often from other languages. One of the beautiful features of Latin, and of the languages derived from Latin (Spanish, Italian, etc.), is that the rules of pronunciation for vowels are constant and essentially unvarying. This pronunciation scheme is as follows: "a" is pronounced as the "a" in "father"; "e" is pronounced as the "e" in "end"; "i" is pronounced as the "ee" in "feet"; "o" is pronounced as the "o" in "only"; and "u" is pronounced as the "ue" in "clue". For various reasons, such rules cannot be at once applied rigidly to the scientific names of plants. Try to practice a few of the names you are familiar with using the above "new rules" and you will likely come up with some rather awkward or strange-sounding epithets. And this first step in standardizing the pronouncing of the names of plants does not even address the subject of accent placement or dipthongs, consonants, etc. Taken as a constructive suggested course of change, however, the mastering of vowel pronunciation is a crucial first step in learning any language with confidence and comfort.

As a relatively easy excercise in applying this concept, let us take one of the many specific epithets of plant names which honor a person, usually someone who had something to do with the discovery of the plant. Gerbera jamesonii, the common gerbera or Transvaal Daisy, is often heard as "Ger-ber-a jay-mess-own-ee-eye". According to rules for pronouncing vowels in Latin-based languages, the genus name would sound more or less the same and the specific epithet would be pronounced "jay-mess-own-ee-ee". This will certainly sound strange at first, but it may help to think that there has never been any logical reason or historical precedent for the "ee-eye" sound we usually give to names ending in "ii". Rather, it is an artifact of the English language inhereted from traditions prevalent in the British Isles. One may opt to pronounce each "i" separately or as one long "eeee" and achieve the same basic result.

*S*ince there is much to digest from only the above bare outline of steps toward standardizing pronunciation of scientific plant names, I will leave the reader to her or his own devices in applying some or all of them to plants they may be familiar with already. As a note of caution to any person trying to apply such new concepts in practice, that is, in talking with other plantspeople, one may expect to feel like a stranger in a strange land (speaking a strange language!), but do not despair. Already more botanists and horticulturists in California and around the country are adopting these changes, most of them grateful that there has at last been an attempt to gently impose a sensible order onto an all-too-often nebulous subject.

http://www.reg.uci.edu/UCI/ARBORETUM/latin.html
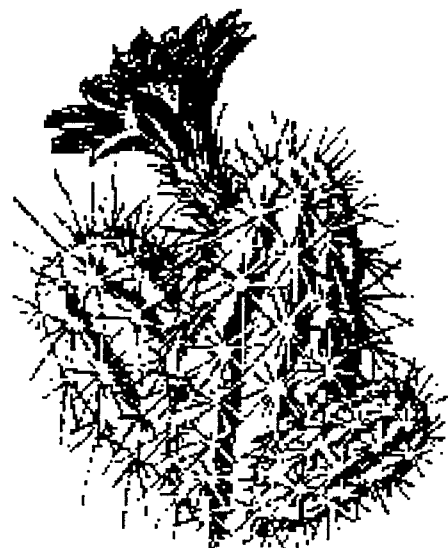
Copiapoa, R. Schulz & A. Kapitany (1996, 176 pp.).

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Desert Gardening (Sunset Books) (1971, 96 pp.)

Desert in Bloom, David L. Eppele (not dated, 32 pp.)

Dry Climate Gardening with Succulents, Editors, Huntington Botanic Gardens (1996, 224 pp.).

The Encyclopedia of Cacti, W. Cullman, E. Gotz & G. Groner (1986, 340 pp.)

The Environment and Plant Response, Michael Treshow (1970, 422 pp.)

Epiphyllum Handbook, Scott E. Haselton (1951, 231 pp.)

The Euphorbia Journal, Vol. 1, Euphorbia Society (1983, 130 pp.)

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Field Manual to the Cactus & Succulents of Barranca de Metztitlan, Sanchez Mejorada (1978, 132 pp.)

The Flowering Plants of Africa, Botanical Research Institute

Flowering Succulents, Gordon Rowley, (1959, 80 pp.) HB

Flowers of the Countryside, Phillip & Marjorie Blarney (1980, 223 pp.)

The Full Bloom of Cactus Flowers, Y. Ito, (1962, 127 pp.) PB - in Japanese with photo captions of botanical
     names in English; good photos.

The Genus Gasteria, a Synoptic Review, Ernst van Jaarsveld (1992, 30 pp.)

Grow Cacti - a Practical Handbook, C. Marsden, 2nd ed. (1958, 178 pp., 4 color & 6 b/w photos, 15 illustra
     tions) HB

Growing Cacti & Succulents in Australia & New Zealand, W & S Harland (1981, 80pp.)

Growing the Mesembs, Ed Storms (1976, 24 pp.)

Guide to the Aloes of South Africa, B. van Wyck & G. Smith (1996, 302 pp.).

Gymnocalyciums, ed. R. Ginns, The Succulent Plant Institute (ca. 1965, 44 pp., 12 b/w photos)

Haseltonia no. 1, M. Kimnach, Ed. (1993, 77 pp.).

A History of Succulent Plants, Gordon Rowley, 1st ed. (1997, 409 pp.)

How Plants Get Their Names, L.H. Bailey (1963, 180 pp.)

How to Know the Cacti, E. Yale Dawson (1963, 158 pp.) (2 copies)

I Never Met a Houseplant I Didn't Like, Jerry Baker (1974, 320 pp.)

The Identification of Escobarias, N. Taylor (1986)

The Illustrated Encyclopedia of Cacti & Other Succulents, J. Riha & R. Subik (1981, 352 pp.)

The Illustrated Encyclopedia of Succulents, Gordon D. Rowley (1978, 256 pp.)

The Illustrated Guide to Cacti, Rudolf Slaba (1992, 224 pp., 200 color art images and 120 b/w drawings) HB

The Illustrated Reference on Cacti and Other Succulents, Vol. 1, Brian and Edgar Lamb (1955-1978, 300 pp.)

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The Illustrated Reference on Cacti and Other Succulents, Vol. 4, Brian and Edgar Lamb (1955-1978, 300 pp.)

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The Instant Guide to Healthy Cacti, John Pilbeam (1984, 80 pp.)

Lexicon of Succulent Plants, Hermann Jacobsen (1974, 682 pp.)

Lithops for the Curious, the Collector and the Cultist, Nick Rowlett (1990, 133 pp.)

Name That Succulent, Gordon D. Rowley (1980, 268 pp.)

Native Plants for Southwestern Landscapes, Judy Mielke (1993, 310 pp.)

Noteworthy Species of Kleinia, P. Halliday (1988, 133 pp.)

Notocactus, Tony Mace (1975, 95 pp.)

The Observer's Book of Cacti and Other Succulents, S. H. Scott, (1975, 159 pp., over 300 species, 16 color plates & 48 b/w photos) HB

On the Desert, David L Eppele (1990, 58 pp.)

Our Native Cacti, Ethel Bailey Higgins (1931, 170 pp.) HB

Picture Guide to Southern Arizona Wildflowers, Lou Blachly (1963, 43 pp.) pamphlet

Pinguone, Kenya - Succulents and Their Environment, Rudolf Schulz and Anne Powys (1998, 160, pp. 304 color photos)

Plant Biology: A Concise Introduction, Ross H. Arnett Jr. & F. Bazinet Jr. (1977, 553 pp.)

Poison Dwellers of the Desert, Natt N. Dodge (1952, 48 pp.)

Popular Exotic Cacti in Color, Edgar & Brian Lamb (1974, 176 pp.)

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The Punctured Thumb, George Ashley (1977, 168 pp.)

Rebutia, J. Pilbeam (1997, 160 pp.)

Succulent Compositae, (a grower's guide to the succulent species of Senecio and Othonna) Gordon Rowley, 1st ed. (1994, 238 pp.)

Succulent Euphorbiaceae of India, Meena Singh (1994, 55 pp.)

Succulent Flora of Southern Africa, Doreen Court (1981, 224 pp.)

The Succulent Riches of South Africa and Namibia and Their Adaptive Strategies, Ernst van Jaarsveld (1987, 46 pp.)

Succulents and Cactus, (1973, 80 pp.)

Succulents for the Amateur, J.R. Brown, Alain White, Boyd L. Sloane & G.W. Reynolds (1955, 172 pp.)

Succulents ... in the Garden, Dr. Robert E. Atkinson (1961, 32 pp.) pamphlet

Succulents, The Illustrated Dictionary, M. Sajeva/M. Costanzo (1994, 239 pp.)

Succulents of Madagascar, W. Rauh (1995, 343 pp.)

Succulent and Xerophytic Plants of Madagascar, Vol. II, Werner Rauh, 1st ed. (1998, 386 pp.)

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What Kinda Cactus Izzat? Reg Manning (1957, 107 pp.)

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Agave, Quarterly Magazine of the Desert Botanical Garden, Phoenix, Arizona (Vol. 2, No. 4, Fall, 1987)

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Aloe, 24, No. 3 & 4, 1987, Succulent Society of South Africa (featuring *"The Succulent Riches of South Africa and Namibia"* by Ernst van Jaarsveld)

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Ballya (Vol. 4, No. 1, February 1997) Succulenta East Africa, a division of the East Africa Natural History Society, Nairobi, Kenya; articles include: Pelargonium, caudiciforms, stapeliads, aloes, Portulacaceae, cristate Euphorbia

Ballya (Vol. 4, No. 2, June 1997); articles include: *"The NMK Nairobi Botanic Garden, Aloe tugenensis, Aloe fibrosa, Plumerias; an Update on East African Succulents "*

Cactus and Succulent Journal (U.S.), Cactus and Succulent Society of America, Inc. Vol. 45, Nos. 4-6. (1973)
Vols. 46-65 (1974-1993)
Vols. 66-69 (1994-1997 with supplements)
Vol. 70 (all current 1998 editions with supplements)

C.S.S.A. - Ten Year Index (1979/1988), Vols. 51-60

Desert Plants, The University of Arizona for the Boyce Thompson Southwestern Arboretum, Vol. 14, No. 1 (June, 1998)

Central Arizona Cactus & Succulent Society

Meetings held last Sunday of the month
Time: **2:00-4:00 PM**
Location: **Webster Auditorium, DBG**
Next Meeting: **Sunday, November 22th 1998**
Board Meeting: **1:00-2:00 PM** *Location:* **Archer House**

Saturday November 21st 1998   **Boyce Thompson Arboretum** *Feeling of Fall Festival*
Sample the sights and smells of fall. The Arboretum should be at peak color. Sip Arizona apple cider, eat apple pie, doughnuts and enjoy music. There will be displays on fall harvests, demonstrations and special event for kids.

Sunday November 22nd 1998   2:00 PM   **(CACSS) Woody Minnich** *Atacama After El Nino* (see cover article)

Thursday November 26th 1998   **Happy Thanksgiving**

December 2nd –5th 1998   **Desert Botanical Gardens** *Las Noches de las Luminarias*
The Volunteers in the Garden cordially invite you to the 21st annual Las Noches de las Luminarias. Luminaria, as it is called by the Volunteers, will run Wednesday, Thursday, Friday and Saturday, December 2nd, 3rd, 4th and 5th, 1998, at the Desert Botanical Garden in Papago Park from 5:30 to 9:30 p.m. each evening. Because the event has become such a beloved tradition in the community, a fourth night has been added this year to accommodate public demand. As is customary, the first evening (Wednesday, December 2) is reserved for Garden members and their guests. We will once again line the entry way, pathways and rooftops of the Garden with over seven thousand luminarias (lighted candles glowing in paper bags weighted with sand) in our traditional "gift to the community" and fundraiser for the Garden. For many, Luminaria heralds the beginning of the holiday season. Music, food, lights, and ambiance are the essence of Luminaria. This year we plan fifteen music stations throughout the Garden, featuring a wide selection of musical styles. Guests will also enjoy free hot apple cider and gourmet cookies, and can purchase southwestern cuisine prepared by The Barbecue Company in the food tent. Ticket prices are: member adult, $7; member child (aged 5-12), $2, non-member adult, $10; and non-member child (aged 5 - 12), $4. Children under five years old are admitted free. All tickets will be mailed in November. Call 602.754.8188 for tickets.

December 13th 1998   **1:00 PM**   **(CACSS) Holiday Party** *Mark your calendar now!*

December 25th 1998   **Merry Christmas**

January 1st 1999   **Happy New Year**

January 24th 1999   **2:00 PM**   **(CACSS) Show Preperations / Steve Southwell** *RSVP Nursery*

February 17th – 21st   **(CACSS) Annual Show**

March 28th 1999   **2:00 PM**   **(CACSS) Jim Wheat** *Landscape Architect: History of Landscaping*

April 11th – 16th 1999   **(CSSA) 28th BIENNIAL INTERNATIONAL CONVENTION**
Tropicana Hotel, Las Vegas, Nevada For further information conatct: Duke Benadom, CSSA Convention Chairman 1746 Julie CircleSimi Valley, CA 93065; e-mail: duke@advancedbionics.com; dukebenadom@earthlink.net

April 18th 1999   **2:00 PM**   **(CACSS) Jon Weeks** *Landscape Cacti Nursery: Landscaping with Cacti*

April 22nd – 24th 1999   **San Antonio Cactus & Xerophyte Soc.** *Texas State Show & Sale*
The show will be held at Central Park Mall, San Antonio TX. Time of show 10am to 9pm Thursday, Friday. Saturday 10am to7.pm. This is a state show, many members of TACSS will be participating. At this time we have at least 10 dealers that will be participating, with the sale of rare and unusual plants and 350 to 500 judged plants on display. The judges this year are CSSA certified judges. Included in the program will be Educational display's, nurserymen you can talk to about your problem plants. A master gardener from the Bexar county extension agency will answer questions on cold hardy plants for your yard. Each day at 2pm there will be a rare plant auction. This is the week of Fiesta San Antonio, Reservations for hotel & motel must be made as soon as possible. For further information contact CLAUDE TOWNSEND 210-655-8959 or E-mail: chtownsend@aol.com
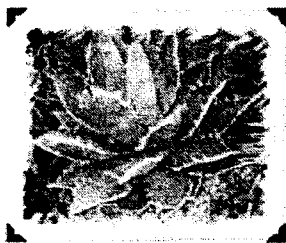
MEMBERSHIP APPLICATION

NAME: _____ SIGNIFICANT OTHER: _____
ADDRESS: _____
CITY STATE ZIP: _____
PHONE (H): _____ (W): _____
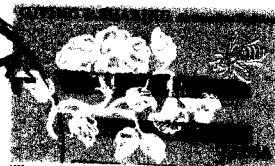E-MAIL: _____

MEMBERSHIP FEE $15 + $3 EACH ADDITIONAL FAMILY MEMBER
MAKE CHECK PAYABLE TO: **CENTRAL ARIZONA CACTUS & SUCCULENT SOCIETY**
MAIL TO: REGINA RODGERS 8744 W. TIERRA BUENA LANE PEORIA, AZ 85382

Doug Dawson

CACSS
HOLIDAY POTLUCK

DBG Webster Auditorium
Sunday
December 13th 1998
1:00 - 4:00 PM

Look for you invitation coming soon.

CACSS
Annual Plant Show
February 17ᵗʰ - 21ˢᵗ

Volunteers are needed for all days of this very important event. Below is a list of where assistance is needed, dates & times and the number of volunteers required.

If you can offer assistance please contact:
Cathy Babcock @ 921-9396

Registration of Plants: Wed. Feb 17ᵗʰ 10:00 AM till ? (6)
Record Results in Log Book & Place Award Ribbons on Plants: Thurs. Feb 18ᵗʰ 8:00 AM - 7:00 PM (8)
Watch Over Plants & Answer Questions:
Fri. Feb 19ᵗʰ 9:00 AM - 5:00 PM (8)
Sat Feb 20ᵗʰ 9:00 AM - 5:00 PM (8)
Sun Feb 21ˢᵗ 9:00 AM - 5:00 PM (8)
Sell Raffle Tickets:
Fri. Feb 19ᵗʰ 9:00 AM - 5:00 PM (5)
Sat Feb 20ᵗʰ 9:00 AM - 5:00 PM (5)
Sun Feb 21ˢᵗ 9:00 AM - 5:00 PM (5)
Clean Up & Tear Down: Sun Feb 21ˢᵗ 5:00 PM (12)