

# Desert Breeze



December, 1996

Volume 1 Issue 10

## Wisdom of the West

"The coyote watched the first sunrise  
He's watched several million more  
He'll watch the last with a tear in his eye  
As he thinks back on days of yore"

There's a lesson known to all who've been  
A part of the winter, the snow and the wind  
Who've known the world in the freshness of spring  
Marveled at the flowers, heard the birds sing

This lesson is a treasure that all may attain  
Who know not the wet but the joy of the rain  
Who've walked in the mountains, felt the snow fall  
And have felt not the cold by the joy of it all

The westerner knew with each season that came  
That the cold and the heat were just part of the game  
He enjoyed the eagle that sailed high above  
The bear at the creek in the land that he loved

Though the eagle took a chick, or the bear took a foal  
He knew this was only a part of God's goal  
He might shoot the bear, for denying him food  
But if the bear got away, he still knew life was good

He learned to accept it the best way he could  
To go on with life, as he knew he should  
He learned there was no good or bad in the land  
Only the touch of the Almighty's hand

If we love mother earth and treat her with care  
All of her treasure in bounty she'll share  
But cut down her forest and kill off her game  
You'll kill your grandchildren by that act of shame

If you kill the forest, the deer, too, will die  
And then all the rest while we wonder why  
We must learn the lesson not to burden the land  
With more of our children than her riches can stand

Ken Watson

## INSIDE: HOLIDAY STRESS BUSTERS & TAKE TIME TO SMELL THE FLOWERS



*As a child I understood how to give. I have  
forgotten this grace since I have become civilized.  
Chief Luther Standing Bear*

## TCSS HOLIDAY HAPPENING

**SUNDAY, DECEMBER 15, 1996  
PORTER HOUSE,  
TUCSON BOTANICAL GARDENS**

**PROGRAM: HOLIDAY POTLUCK**

*SET UP at 12:30 pm*

*BEGIN SERVING at 1:00 pm*

*TCSS will provide Turkey, Ham, Rolls, Drinks and Cups.  
Members and guests will need to bring a Plate, Utensils,  
Dish to Share, and a Gift to exchange.*

*The Gift will be a Plant, Pot or Related Item.  
It must be Wrapped; worth at least \$3-5.*

*The Dish - bring what you like!  
Bring enough to feed yourself, your guests and six more.  
To aid planning, we encourage you to RSVP by  
December 13 to Dick (885-6367).  
Everyone is WELCOME, whether you RSVP or not.*

# Stop and Smell the Cacti

By Anna Cornett  
San Diego Cactus and Succulent Society

Scent is probably our most evocative and least understood sense. For animals, smell is the most important of the senses. Turtles and salmon use it to return to their natal spawning spots. Predators use it to locate prey, while the prey use it to be aware of the hunter, even producing alarm scents to warn others of danger. Dogs are able to read in urinary messages the social and sexual status of canine passers-by.

Although our olfactory sense can sometimes surprise us by overwhelming our emotions when we catch a whiff of a half-forgotten smell, humans have pretty much lost the ability to consciously analyze scents. Aside from the sensations of sweet, sour, bitter and salty, the taste of food is dependent on the sense of smell. This would account for so many scents being described in terms of food - honey, mint, chocolate, plum, curry, spice, almond, coconut, vanilla, lemon, pineapple, etc.

People smell things differently. Some can catch the faintest of scents, others only appreciate the strongest. Brunettes are said to smell things more acutely than fair-haired people because the olfactory mucous membranes are lightly pigmented. The ability to identify different colored freesias by smell has been shown to be genetic, so if one is not born with the ability, no amount of sniffing will enable one to distinguish some scents.

Several parts of plants may be scented. **Roots** - some Iris roots smell like violets, while *Sedum rhodiola*'s smell like roses, but I have not heard of any fragrant cactus roots. **Leaves** - While the leaves of some succulents such as *Dudleya viscidya* and *Bursera* species have marked aromas, this would not be likely for cacti for the obvious reason. **Fruits** - the fruits of cacti may smell quite delicious. *Opuntia leucotricha* (duraznillo) has fragrant, edible fruit. But it is in the **flowers** where most cactus scents are found.

Fragrances are extremely complex. They consist of a number of compounds

such as aliphatic terpene alcohols and aldehydes which fluctuate according to weather and time of day. The particular scent of a flower derives from various combinations of these compounds into essential oils known as "attars" which are stored in epidermals of the petals. Double petaled forms therefore are usually stronger-smelling than single petaled forms.



Nature seldom does anything without a reason, and the reason for fragrance is a common one - SEX. Since plants can not move around to seek and object for their affection, they have to attract intermediaries such as the birds and the bees. Scent plays a fairly minor role among day-blooming flowers, which generally depend on color and form to attract pollinators. Some plants do tip the odds by having sweet smells to attract bees and butterflies. The *Pereskia* has a definite smell of mildew. Perhaps it seeks to attract fungus gnats.

It is among the night-blooming flowers where the strongest scents are found. Not all of these are pleasant. Bat pollinated flowers are said to be without exception downright repulsive, with flowers that smell of cabbage, garlic, fish, or rotten meat. Examples are found in *Carnegiea*, *Pachycereus*, and *Stenocereus*. Since these are all large arborescent cacti one would have to try hard to sample the scent and would be unlikely to be accidentally offended. *Pterocereus foetidus* sounds like a plant to be especially avoided.

Moth-pollinated flowers are the most highly adapted and the most powerfully scented. The often huge, white blooms of the night-blooming cerei have earned them the title "Queen of the

Night". Brought inside, a single bloom will perfume the whole house, though close up the smell may be too overwhelming. Too much of a good thing -

I have tried to compile a list of plants which I personally know, have read, or have heard, are fragrant. It is very incomplete since books and catalogs do not consistently mention fragrance in their descriptions.

**EPIPHYTIC CACTI:** *Rhipsalis houllentiana*, *R. pilocarpa*, *Selenicereus coniflorus*, *Cryptocereus anthonyanus*, *Discocactus macranthus*, *Epiphyllum crenatum*, *Hylocereus ocamponis*, and *Nyctocereus serpentinus*.

**Other Cacti:** *Echinopsis multiplex*, *Echinopsis hamatacantha*, *Echinocereus davisii*, *E. scopulorum*, *Echinocactus texensis*, *Ferocactus latispinus*, *Leuchtenbergia principis*, *Mammillaria baumii*, *M. camptotricha*, *M. heidiae*, *M. melaleuca*, *M. weingartiana*, *Neoporteria krainziana*, *N. odieri*, *Notocactus bueneckeri*, and *Parodia rubristraminea*.

There are undoubtedly many more fragrant cacti out there. By being more aware of scents and sniffing them out wherever we find them, trying to identify and describe their qualities, we might be able to train our smell palates the way a wine-taster does his taste. So get out there and smell your cacti (carefully, of course)!

## References

- Allardice, P. *The Scented garden*. Angus and Robertson. 1992.  
 Haustenin, E. *The Cactus Handbook*. Chartwell Books Ltd. 1988.  
 Lacey, S. *Scent in Your Garden*. Little, Brown & CO. 1991.  
 Rowley, G. *The Illustrated Encyclopedia of Succulents*. Salamander Books. 1978.  
 Stabler, A. "Some Perfumed Cacti", *Cactus and Succulent Journal* (U.S.) Vol. 58, No. 1, 1986.

# Growing in the Cool Season

Thanks to Jane Evans, our speaker at the November meeting, we can all hope to keep our mesembs, haworthias and aloes alive longer. Jane defined the "cool" season as lasting from October through April, or when the night temperatures drop. "Cool season plants" actively grow... during the cool season! During the rest of the year, they're busy burrowing in, and just trying to hang on 'til things cool off, so it is imperative to pay attention to watering. When the plants are dormant, the soil stays wet, the roots rot, and the plant dies. Another caution is to know how your plant should appear when dormant. Don't throw it out when it shrivels and fades, unless you're really sure it's gone for good.

For lithops, look for flowering, which indicates the plant is actively growing. Start once a week, heavy, watering as soon as the plant leafs out. Water once or twice before fertilizing. After the plant finishes flowering, it will begin splitting (around Nov. - Dec.)- DO NOT WATER! The new leaves take all their

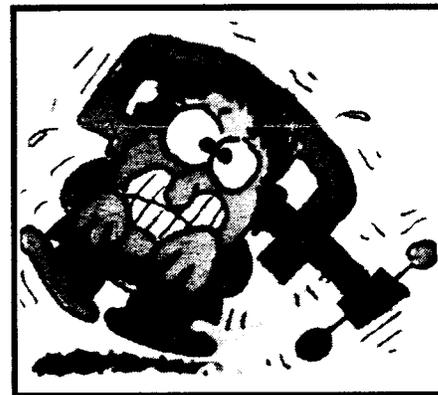
water and sustenance from the old ones. The roots are no longer functioning, and your plant will turn to mush if you soak with it now. Instead, Jane advocates light, infrequent misting - only if there is no moisture in the air for the rest of the cool season. Mesembs are hardy and do best with intense winter sun. Once summer arrives, she increases her imitation of a fog machine as often as three times a week, late in the day.

Haworthias are cool season growers, but they are not hardy. They will require heat during the Tucson winter. Jane treats her Haworthias like mesembs, not watering during the summer, and keeps them under a bench for less light but with frequent light waterings. Other people water them along with their other succulents without problems.

Aloes are great for hummingbirds. You can grow a fantastic specimen in ten to twelve years, so that you can have a really beautiful plant before you desiccate it. In the landscape, aloes do best in a soil which drains quickly away from

the roots. Some protection from summer rains can also be garnered by surrounding the aloe with summer growers, like salvias. For protection from the cold, consider grouping aloes under palo verde or other protective cover. Most are hardy to the low thirties, but will need protection, especially of the spikes if you are hoping to propagate.

The cool season is also the time for propagation. Mesembs have tiny seeds which need not be buried. Instead use fine soil, very fine screened sand on the surface, and sow the seed on top. Start your seed in October/November, or possibly in March. Start haworthias in early fall or early spring, and aloes during the monsoons to get a jump on the growing season.



## Developments at Tucson Botanical Gardens

Judy Davidson, the director of development at the gardens addressed the club at the November meeting. She explained that the site includes approximately 5.5 acres, of which half is currently developed. The new "master plan" which was adopted about a year ago, will cost \$2 million to bring to reality. There are three phases planned:

- 1) "first impressions": the focus will be on improving the front entrance, the Porter garden, the xeriscape area and the parking lot.
- 2) a new education center will

include two fifty-person classrooms with a removable divider, kitchens and patio areas.

- 3) a market plaza which will include the nursery, marketing and a cafe. Within this phase a wall may be added around the cactus garden.

TBG has collected a third of the needed funds needed. There is a brochure available which better details the plans in each phase and information about how to make donations.

**HO HO HO LIDAY STRESSSSSSSS?**  
 Pop some popcorn without putting on the lid. Find out what liver in the blender really looks like. Make a "TO DO" list of things you've already done. Dance naked in front of your house pet. Forward all your calls to "Dial a Farm Animal". Have your surname legally changed to "Your Highness". Put a bag on your head. Mark it "Closed for remodeling". Tell your boss to blow it out her mule, and let her figure it out. Stare at people through the tines of a fork and pretend they're in jail. Write a book entitled, "neurotic, compulsive, antisocial, manic-depressive, and paranoid, but basically happy"...but most of all: take time to smell the flowers.

## Reports from October 1996 Conference

In future months we will be printing reports of some of the talks and workshops presented the the October 1996 conference. We thank the members of the TCSS who have compiled these reports.

### Workshop: **Mounting Rock Figs**

Presented by: Gene Joseph

Gene Joseph demonstrated his step-by-step process of mounting a rock fig. He started by putting some soil into a shallow (approximately 10") plastic pot. He selected a rock large enough to achieve the desired affect. Then, it was like watching a sculptor at work as Gene removed the *Ficus petiolaris* from the pot, carefully spreading roots and removing the soil. He placed the fig on the "planted" rock draping and tangling the roots down and over the sides. To secure the plant, he packed damp un-milled sphagnum moss around the rock, covering the exposed roots. Gene tied tree staking tape around the moss to hold it on and told us not to be surprised if the plant dropped it's leaves. Monsoon time is the best season to do this and extra water and misting for awhile helps the plant to establish itself.

The final steps take place months later when you repot the *Ficus* and it's rock into it's "final" pot and remove the moss. Water it frequently for awhile. As you can see patience is essential for the project but Gene's results make me anxious for monsoon season so I can plant my own masterpiece.

Submitted by: Judi Gaston

Workshop: **Plant Photography: Close-up Work**  
Presented by: Michael Stoklos

Being a professional photographer, Mr. Stoklos approached the subject from a professional point of view. All equipment for close-up studio work was shown and their purpose explained and demonstrated. Best film brands and types were discussed and studio techniques were demonstrated. There was a lively question and answer period afterwards. I am a rank amateur photographer, mainly interested in having a record of my plants, but I have a good set of notes just in case I really get serious about photography some day. It was a good workshop.

Submitted by : Sara Perper

Workshop: **Winter Growers: How to Grow, Pot-up and Propagate**  
Presented by: Jane Evans

I think my few winter-growing plants will thank me for attending Jane's Workshop! She first explained the growing process from start-up to dormancy; showed how to divide and repot, water and fertilize. Propagation methods by seed, cuttings and division were demonstrated. Jane is an excellent lecturer and was extremely helpful with attendees questions.

Submitted by: Sara Perper

Workshop: **Basics and More About Growing Cacti and Succulents for the Landscape in the Sonoran Desert**  
Presented by: Mark Sitter

Although more general in applicability, this presentation was largely devoted to raising cacti and succulents in pots and small enclosures (as is the case for

starting growth in nurseries and for extended growth for many users).

The type of soil (sand, mulch, fertilizer, et.al) commonly used by nurseries and the Desert Museum locally is more than a simple collection of desert earth. The planting procedure is more than a move of the root package into a larger environment (the roots are freed from their original surroundings and spread out in the new soil; if there were two types of soil present, an inhomogeneous distribution of water would result, with local areas of dryness and wetness to possible excess).

The vulnerability to bugs is countered by covering the bottom of the pot with mesh, screening the holes where bugs would enter.

The speaker brought samples and demonstrated his points as he prepared and planted. The result was a graphic presentation of basic use to the novice, and a useful basis for comparison by those more familiar with the art.

Submitted by: Lloyd Perper

Workshop: **Landscaping with Cacti and Succulents**

Presented by: Judy Mielke

The author of two authoritative publications on this subject, the presenter showed a large collection of slides illustrating good and bad examples of cacti and succulents in landscaping design.

In some bad cases, the plants were so located that they would not have room to grow or would crowd out the users of the space. Aesthetically, it became apparent that a single type of plant or an absence of variety was less pleasing than a proper balance of shape and color.

The examples shown were largely drawn from the Phoenix area, where small spaces were available, and large, often displeasing living structures needed to be offset or partially hidden.

The listener was given a picture of what type of plant to look for to cover a variety of areas, what plants would go together and where to look for more detailed and specific information.

Despite a malfunction of one of the slide projector machines and the need to talk around the resulting delays, the speaker was able to make a well-rounded, cohesive, and memorable presentation.

Submitted by: Lloyd Perper



*thanks*

For the invitation, Boyce Thompson, we'll be droppin' by soon!

Plantas del Sol (Dorothy and John Pasek) for the door prizes:

- Agave verschaffertii*
- Beaucarnea recurvata*
- Cereria pygmaea*
- Fouquieria diguetii*
- Monadenium ritchiei*

Arid Lands for

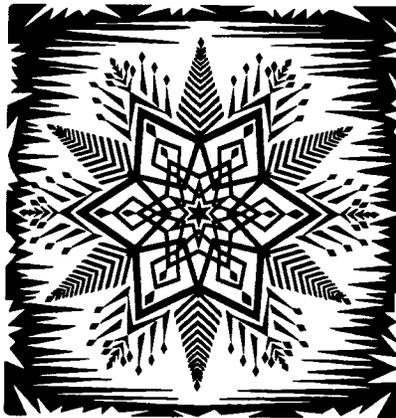
- Ammocharis coranica*
- Drimia maculata*
- Tillinum caffrum.*

Our raffle plant was:

- Euphorbia cylindifolia.*

Free Plant: *Melocactus macrodiscus.*

ELECTION  
TIME



*Please call Dick Wiedhopf  
@ 885-6367  
to recommend names for:  
President, Vice President, Secretary,  
Treasurer and Newsletter Editor.  
Three Board positions are also open.  
It is ABSOLUTELY  
respectable to nominate yourself!*

*Forthcoming*

CSSA Convention 1997  
San Diego

July 5-11  
Town & Country Hotel  
500 Hotel Circle North  
San Diego, California 92108

Speakers: Steven Hammer, Dr. Ted Anderson, Steve McCabe, Sheila Collenette, Rudy Lime, Professor Mats Thulin, John Lavranos, Dr. Larry Mitich, Dr. Seymour Linden, Dr. Graham Williamson, Dr. Pierre Braun, Professor James Mauseth, Jon Dixon, Dr. Gerald Bard, Myron Kinnach, Dr. James Hendrickson

For more information contact:  
Marti Monney, Convention Host  
Society Chairman (619) 427-6796,  
or FAX (619) 427-8239