



GATHERINGS



VOLUNTEER NEWSLETTER

SUMMER 2010

Volunteers In The Garden

SUMMER FUN PROGRAMS

SECOND AND FOURTH TUESDAYS

10:00 A.M. IN DORRANCE HALL

RAUL PUENTE-MARTINEZ, on "A Plant of Raul's Choice at the Desert Botanical Garden

GAIL MORRIS, on "Saving the Monarch Butterfly Migration."

STEEN ALLARD-LAWSON, on "The Upcoming Events at the Desert Botanical Garden."

MARILYN SHOMER, on "Do's and Do Not's When Addressing the Visually Impaired."

DOREEN POLLACK, on "Creating Sustainable Gardens."

See Continuing Education article on page 4 for complete details.

PRESIDENT'S MUSINGS

"I have always depended on the kindness of strangers."

Though I'm not Blanche DuBois from Tennessee Williams' Pulitzer Prize winning play, *A Streetcar Named Desire*, her words have found new resonance for me. On April 1st I had surgery to repair a torn meniscus in my right knee. Being a hard walking active person, my knee just happened to need more work than repairing a tear. A lot more! Suddenly I found myself restricted in my movements and confined in my activities. I was down and out!

Maybe you've seen me propelling myself around the Garden on crutches? If nothing else, I'm going to have great arms by the time this is done! I certainly do appreciate and depend on the kindness, not only of strangers, but of all my friends here at the Garden who are helping me get around and keep a good attitude. They are the Rangers who let me use a handicapped parking space. They are the Facility and Hort staff, driving by in their utility carts, who give me rides over to the Horticulture Building, waiting patiently for me to fumble my crutches out of my car. They are the Wednesday Mounters in the Herbarium who don't mind putting my work into the press and handing me more work to do. It's everyone who asked what happened, who told a similar story, or who wished me a speedy recovery. You all have helped to keep my spirits up and keep me moving. I have felt the love! Thank you from the bottom of my poor battered knee.

Summer is upon us. Usually I have left town by May. This year is a little different, but I still intend to leave town as soon as I get clearance. After all I can sit in a chair under a magnificent tree at 8,000 feet somewhere just as easily as sitting in my air-conditioned home. Either way Hubby (Donald) still has to wait on me! I leave feeling good about everything that has happened this Garden Season. I hope you do as well. I think we all had fun and feel good about our time spent here. We accomplished a lot, including building a new exhibit, leading hundreds of tours, selling tons of memberships, and teaching thousands of young people about our Desert. Why the list goes on! So take a rest, slow it down this summer, you deserve it. Recharge those batteries because we will be doing it all over again come September. Well, maybe not the new exhibit part! And hopefully, I will no longer need the crutches.

Whatever you do this summer please be safe, but be sure to have an adventure! I'll be thinking of you!!

DAWN GOLDMAN

PRESIDENT, VOLUNTEERS IN THE GARDEN



Saguaro blossoms
Photo by Gene Almendinger.

VOLUNTEERS IN THE GARDEN

EXECUTIVE OFFICERS

PRESIDENT	DAWN GOLDMAN
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A monthly newsletter for and by the
Volunteers of the Desert Botanical Garden

EDITOR/LAYOUT	NANCY WALKER
PROOFING EDITOR	ELAINE GRUBER
STAFF LIAISON	PAM LEVIN

SIXTEEN DESERT PLANT ADAPTATIONS

Note: TIM CULLISON, VIG docent has developed the following mnemonic device to assist in remembering the sixteen desert plant adaptations. Tim said, knowing how the women liked George Clooney, he tried to use his character name on ER, Dr. Douglas Ross, but it just didn't play out. So he settled for Dr. Stephan O. Ross, MD. Hope it works.

Remember: DR STEPHAN O ROSS MD

Drooping branches – Mesquite
Resin – Creosote

Succulence

Trunk photosynthesis – Palo Verde

Epidermis – thick, waxy

Pleating – Saguaro

Hairy leaves – Brittlebush

Absent leaves – cacti

Nurse plants – ½ of all desert plants

Opportunistic bloomer – Creosote

Roots – shallow, widespread

Old seeds – Mesquite seeds sprouted after 45 years

Spines – ½ of all desert plants

Small leaves

Moveable leaves – Jojoba

Drought deciduous

TIM CULLISON

DOCENT



GOLFIN' IN THE DESERT ANOTHER SUCCESSFUL OUTING

May 8th found 93 golfers teeing it up at the Desert Botanical Garden's third Golfin' In The Desert Charity Tournament. And, a successful tournament it was!

It was a beautiful day for golf. In addition to a nice round on a beautiful golf course, the players all had the chance to compete for great prizes, win terrific raffle prizes, received fun items in their goody bags, and were treated to a wonderfully prepared lunch. As the activities wound down, the players left happy, with many eager to play in next year's tournament.



Happy first place tournament winners with Jim Sudal original pots!
Photo by Gene Almendinger.

Thank you to all the players, hole sponsors, volunteers and our tournament sponsor, **REST ASSURED**. Through their combined efforts, this year's tournament raised approximately \$13,000 that will be presented to the Education Department to assist Title One schools. Since the inception of Golfin' In The Desert, we have raised more than \$38,000 for this very worthy cause. Thank you again to all involved.

Golfin' In The Desert is the only fund raising project of VIG. As a VIG member, each of you can help to make future tournaments a success, so that we can help more Title One kids, even if you are not a golfer. **How can you help?** If you work for a company or know someone who owns a company, encourage them to sponsor a hole. If you know golfers, encourage them to play in our tournament. Or perhaps you can help us find raffle prizes.

Next year's tournament will be held on May 7, 2011. Mark your calendars now. We need your help and support.

CHUCK THOMPSON

GOLF COMMITTEE CHAIR

VIG SPRING TRIP (April 2010)

Grand Canyon National Park

Can one word describe the Grand Canyon? Can any one describe the moment when colors collide in a wonder of the natural world? Perhaps: Wow, massive, huge, magnificent, sublime, awesome. Our committee created an incredible experience designed to stimulate the child, botanist, geologist and anthropologist in each of our 35 participants. It was **WICKED AWESOME!**



The intrepid hikers at the Bright Angel Trailhead.

We arrived midday in Tusayan and split into 2 groups: the museum or the canyon botany hike. Not all of the 15 starters on the Bright Angel Trail made it to the first rest house at 1.5 miles but we tied down our hats, broke out the walking sticks and headed on down.

What joy it was to stand where Teddy Roosevelt had stood. We all thank KEITH LONGPRE for the plant descriptions that sent us all on a scavenger hunt for anything with roots. We enjoyed pearls of wisdom from DAWN GOLDMAN prior to sending neophytes down into the canyon and FYI: it did take twice as much time to return as it did going down.

The combined knowledge of DBG volunteers with such vast expertise in plants, rocks, native cultures and birds is amazing! We were lucky to stop at the switchbacks to learn from our own specialists. Words cannot describe the erosion that has shaped the canyon over the past 5-6 million years and thus created the chasm 10 miles across to the north rim.

Our first day finished nicely with our return to Tusayan and our lodge. Some saw three different groups of mule deer taking in their evening feeding. We partied in the halls and enjoyed Café Tusayan as we attempted to recall Canyon

trivia and win those prizes, e.g. "Do you remember the speed limit going through construction zones?."

Day two brought hikers to Shoshone Pt. where we met Ranger Allyson Mathis who shared canyon geology and her demonstration of what "interpretation" is all about. Her inspirational talk showed each of us what it means to share your passion with an eager audience. We learned of timelines, tamarisk and revegetation of the canyon before we embarked on an afternoon of shopping and a glimpse of "Condor 87". (Two hundred condors are now living in the canyon.)

Day three took us to a steward's discussion of the Arizona Trail that goes 800+ miles from Utah to Mexico and the current problems with dwarf mistletoe. We listened in the blowing snow and then began our hike on the trail. Climbing up the Grandview Fire Tower was the last opportunity to see the canyon.

The Grand Canyon Museum brought presentations of natural and cultural history and a partial view of one million artifacts. To experience thousands of years of canyon life through pots, art, bones and other artifacts



Allyson Mathis, geologist and Kassy Theobald, restoration ecologist, with Grand Canyon National Park.

left behind was beyond belief. Ask us about "Prince Albert in a Can".

Returning home in a snowstorm at the end of April was beautiful and I thank GEORGE NASH for a wonderful ride. (As John Wesley Powell said (1870)... "This is a Grand Canyon".)

GLORIA EKLUND
CERTIFIED INTERPRETIVE GUIDE

CONTINUING EDUCATION

Hi Everyone! We have quite a varied program for Summer Fun Lectures--2010. Plan on joining us for the following on Tuesdays 10:00 a.m. in Dorrance Hall:

Tuesday June 8, - RAUL PUENTE-MARTINEZ, Curator of Living Collections at the DBG will speak on "A Plant of Raul's Choice at the Desert Botanical Garden."

Tuesday June 22, - GAIL MORRIS, DBG Volunteer and Research Associate for the Southwest Monarch Study will speak on "Saving the Monarch Butterfly Migration." Gail has been a trainer for the Monarch Butterfly Larva Monitoring Plan, part of an effort by Mexico, Canada, and the United States to enhance the population of monarch butterflies. In addition, she is a former Master Gardener and co-author of a publication on creating butterfly gardens with school children.

Tuesday July 13, - STEEN ALLARD-LAWSON, Adult Education Manager at the DBG, will speak on "Upcoming Events at the Desert Botanical Garden."

Tuesday July 27, - MARILYN SHOMER, DBG Volunteer and Past President of the VIG, will speak on "Do's and Do Not's When Addressing the Visually Impaired." She will expound on using sound, smell, taste, and touch in enhancing the experience for the visitor. Safety issues will be addressed. Marilyn has been a volunteer since 1989, has chaired various committees, served as Docent Chair, Co-chair of *Luminaria*, and spent six years on the DBG Board of Trustees.

Tuesday August 10, - DOREEN POLLACK, DBG Volunteer, Master Gardener, Permaculture Designer, and Community Leader, will speak on "Creating Sustainable Gardens." Come and learn about Permaculture and how to garden and grow food in the low desert with sustainable practices that use less water than a lawn. Doreen is the owner of Down 2 Earth Gardens, has been an expert gardening guest on Phoenix Channel 12 News, Jan D'Atri Radio Show, and teaches gardening through the Phoenix Permaculture Guild, the DBG, and her own company.

We hope all of you can attend, and look forward to

seeing you there.

Over the past few months, we have produced DVD recordings of the Monthly VIG Meetings as follows: January 2010 featuring WENDY HODGSON; February 2010 featuring LORI MAKARICK; and March 2010, featuring TINA WILSON and DR. KIMBERLIE MCCUE

The DVD's are available in the Volunteer Library (in the Interpreters' Headquarters) for sign out. If you have any questions, please contact JUDY AGUILAR (jaguilar@dbg.org) for help. This is the very beginning of a program which we hope will grow. Hope you enjoy them!

I also want to thank all members of the DBG VIG Continuing Education Committee - KAY BENSON, SYLVIA GAINES, TOM HERRICK, SUSIE KLEIN, ELEANOR MINK, CARLOS OLDHAM, JUDITH ROBBINS, AL RODNEY, SUELLEN SEIFERT, AND NANCY WHITE - for their ideas, efforts, and support. They are a great group of people to work with!

Have a Terrific Summer!

MIKE GILMAN

CONTINUING EDUCATION COMMITTEE CHAIR



Fishhook cactus. Photo by Charlie Cobeen.

The Garden Corner

BATS IN MY BELFRY?

In April I wrote about saguaros and quoted the author of a new book about saguaros who said, "...bats are the primary pollinators of saguaros." Sharp-eyed docent, former DBG ranger and education staffer, and full-time naturalist extraordinaire JUDI IRONS, tactfully reminded me that since nectar-feeding bats don't get much further north than Tucson, it is unlikely that they pollinate saguaro here in the Garden near the northern end of the saguaros' range.

After consulting our trusty docent "bible" [The Natural History of the Sonoran Desert](#) I was reminded that not only don't saguaros depend upon bats to pollinate them here, but perhaps not anywhere in most years. How could that be? After all, the saguaro flower has all the features needed to attract a nocturnal pollinator such as a bat. Their flowers are white, bell-shaped and scented, open at night, produce copious nectar and pollen after dark, are situated high off the ground and are fairly rigid.



A nectar-feeding bat visits a hummingbird feeder near Rio Rico in southern Arizona. Photo by Tom Gatz.

All of these flower characteristics point almost unambiguously to pollination by bats, according to Dr. Mark Dimmitt at the Sonoran Desert Museum. However, he notes that the many saguaro populations

north of the bats' range depend entirely on diurnal (day-time), non-bat pollinators. In fact, he mentions that even where nectar-feeding bats occur but were experimentally excluded from the flowers, the saguaros were still pollinated (and at even a higher percent than those to which the bats had access!); mostly by white-winged doves and introduced (non-native) honeybees.

So if bees and doves accomplish most of the pollination, why do saguaro flowers have so many bat-attracting characteristics? Dr. Dimmitt says, "We just don't know." And he wonders if perhaps we might be witnessing the early stage of an evolutionary shift from nocturnal to diurnal pollinators. "In 100,000 years will saguaros have diurnal yellow flowers? Or do the bats still have sufficient, yet-unknown influence on saguaro evolution to maintain the status quo?"

Thanks to DR. ANDREW SALYWON, Assistant Herbarium Curator at the DBG, for reviewing this article and providing me with additional references.

TOM GATZ
THE GARDEN CORNER

Note: While I'm making corrections, I apologize to Sunday docent Ms. FRANCES COLLEY for misspelling her name in the last *Gatherings* (sorry Frances!). I also gave the wrong date for an article about hawks and hummingbirds this past March. The correct citation is: Greeney, H.F. and S.M. Wethington. 2009. *Proximity to Active Accipiter Nests Reduces Nest Predation of Black-Chinned Hummingbirds*. [The Wilson Journal of Ornithology](#) 121(4): 809-812.

THE GREEN SPOT

COMPACT FLUORESCENT BULBS

The modern compact fluorescent lamp (CFL) was invented in 1973 in response to the oil crisis.

In 1980 the first successful screw-in CFL replacement for an incandescent lamp was developed. Since then, many advancements have made CFLs compatible for most existing light fixtures that formerly used incandescents. CFLs however, are not effective in situations that require dimming or have frequent on/off cycles for short periods of time.

So what are the advantages of a CFL? Their average rated life is between 8 and 15 times that of incandescents. CFLs typically have a rated lifespan between 6000 and 15,000 hours, whereas incandescents last between 750 and 1000 hours.

Also, for a given light output, CFL's use 20 to 33 percent of the energy of equivalent incandescent lamps. The cost of a CFL has typically been three to ten times greater than that of an equivalent incandescent lamp. However, the extended lifetime and lower energy use will more than compensate for the initial higher cost. And, as the technology advances, even that initial cost is coming down.

One article stated that an investment of \$90 to change 30 fixtures to CFLs would save \$440 to \$1500 over the 5 year life of the bulbs depending on your cost of electricity.

The Desert Botanical Garden replaces all spent bulbs with reduced wattage, lower energy bulbs or CFLs, if possible. Also, all of the spent fluorescent tubes and CFL bulbs are taken to a recycling facility. Currently, the garden has converted approximately 50% of all its bulbs to those of lower energy, reduced wattage.

There is one downside to the use of CFLs. They, like all fluorescent lamps, contain small amounts of mercury as a vapor inside the glass tubing. Because mercury is poisonous, even these small amounts are a concern for landfills and waste incinerators where the mercury may be released. Due to these health and environmental concerns about mercury, spent lamps should be properly disposed of, or recycled, to contain the mercury. The Home Depot is the first retailer to make CFL recycling options widely available.

For much more detailed information, go to: [http://en.wikipedia.org/wiki/Compact fluorescent lamp](http://en.wikipedia.org/wiki/Compact_fluorescent_lamp)

BOB BUCHWALD
VOLUNTEER



Since there is quite a time lapse between when I write this article for *Gatherings* and when you read it, I am still enjoying the warm days and cool nights as are all of my plants at home. They are still quite happy to be watered every four or five days, although we all know that won't last long! I have been enjoying morning tea on my back porch, watching the hummingbirds politely taking turns bathing in my fountain (quite the atypical behavior), seemingly oblivious to the fact that I am sitting so close to them!

It doesn't seem possible that another summer is upon us! Some of you will head to the hills and cooler weather while many of us will remain in the desert, planning travel to cooler regions throughout the months of July and August. Then, there are those of us crazy people who will actually crawl out of bed at 5 a.m. (I live in Litchfield Park) and fight traffic to come to an oasis of calm called the Desert Botanical Garden. I know there will be many on my Wednesday crew, and other crews, who will do the same because of our love for the Garden.

Thank you to all of the hort crews who welcomed Rosa and me in April when we spoke to you during break time, and a huge thank you to the staff who has been very supportive of our new team. You gave us some awesome ideas and suggestions for improving your work environment. Two of the requests echoed by nearly every crew were to review proper trimming, pruning and cutting techniques from our Horticulture staff and the acquisition of new tools. Over the course of the summer, we will plan the coming year. We are excited about planning the details of fieldtrips and speakers, many of them from our own Horticulture Department.

Rosa and I have some other ideas "in the works" for you and I am so thankful that she agreed to work side-by-side with me in serving all of you. She and I are on the same wave length so we ought to be in for a crazy, fun but productive ride! Should you need to contact either of us, Rosa's email address is rcrespo@dbg.org. Mine is Penthrynn@aol.com.

Have a wonderful summer; see you in the fall, if not before!

DEBBI STEINBERG
HORT AIDE CO-CHAIR

"Love what you do and do what you love". That's the recipe for the perfect job and we are lucky enough to have the perfect job. We love what we do!

It is truly wonderful coming to work everyday, knowing we will be working with all of you. You are such an amazing group –talented, dedicated, hardworking, creative, caring and most of all fun.

Thank you for making our jobs so "perfect" and thank you for all that you have done for the Garden this year. It was a great year!!

Nancy, Pam and Judy
NANCY WHITE, PAM LEVIN, JUDY AGUILAR
STAFF



ENVOY UPDATE

DERBY DAY AT THE DBG

On May 1st the *Envoys* and *Go-Go's* got together in the Wildflower Pavilion to celebrate our successes for the year in a Kentucky Derby Day Brunch Party. Thank you JANIE PARKS for the great party idea! We had a fabulous time wearing Derby hats and sharing our potluck fare of Spiral-cut Ham, Black-eyed Peas Salad, Cheese Garlic Grits, Country Sausage Casserole, Horse Race Pie, Kentucky Sour Creme Coffee Cake, Bourbon Balls, Iced Tea with fresh Mint and Lemon along with countless additional spectacular dishes.

The brunch was followed by three very intense horse races with our very own horses, "Gallop Gertie," "Sonoran Swifty," "Agave Express," "Wildflower Wiz," and "Desert Dynamo". The "horses" were full of great spirit and "ran" an excellent race! It was a fun time for all. (*Note: Very spirited volunteers and staff members became the "horses" who took however many steps indicated by the roll of dice in order to reach the finish line first. They took really BIG steps!*)

Wearing our Derby Day hats would not be complete without a contest for the best, most fitting hat for the day and the location of the party. Congratulations to TRACY DOWDLE who won the "Colonels" prize for the best Derby Day Hat. She took a basic straw hat and adorned it with greenery and a huge (3 open hand size) butterfly topiary.

Our *Envoy* volunteers grew in size this year to 57 strong with 22 new volunteers! Everyone has done such a great job working in either the kiosk and/or special events . Our membership numbers this year compared to '07-'08 (pre-Chihuly) were up 35% for



Hallee Lynch and Marilyn Wolfe on Derby Day
Photo by Arnie Benson.

new memberships and 68% for renewals! Our successes are only as good as the team and what a great team! A special thank you to GEORGE NASH who is an incredible salesman and put in the most *Envoy* hours of 123.5 hours.

The year seems to have flown by as we close our membership kiosk on May 11th. We all look forward to a great summer with fun and exciting new ventures for the *Envoys* and membership in the Fall. We look forward to seeing you then!

ALLISON BROWN
ENVOY CHAIR



DOCENT UPDATES

CROSS-POLLINATION

The plants thought of it first – cross-pollination! Take a pinch of DNA from one plant, add to a pinch of DNA from another plant. A seed forms containing characteristics of each. Thus the species remains strong and resilient.

NANCY WHITE has been asking each day team what they'd like to see in the docent program for next year. We sat in on a few of these conversations. And guess what? Cross-pollination seems to be in the wind – for us, this time. Many suggestions have to do with people's desire to learn more and to refresh understanding. It would seem that *Homo sapiens (variety docentus)* aims to live long and prosper.



Hummingbird at aloe. Photo by Adam Rodriguez.

Here are a couple of the things we heard:

Quite a few people expressed interest in classes. Birding, science reviews, and ethnobotany were some suggested subjects.

A number of us have taken CARLOS OLDHAM's birding class. It is a great way to learn more about birds in general, birding, and the birds in our garden. Each of us (Anna and Archer) took the class and went on a number of the Monday bird walks. After that we felt much more confident about working at the bird station - and just being able to answer some of the questions visitors ask about the birds.

Ethnobotany is always popular. We love to tell people how plants are used - and they love to hear it. Nancy says, "Great, include a bit, but focus on the plants. Don't get specific about which people and when. And always remember the main focus of the tour is that our desert plants have adaptations that make life in the desert a breeze."

Promote exchange among and between docent groups. Visit other days. Get to know each other.

As we have visited the different day teams, we have seen that each has its own personality. We enjoy them all and learn from each. What about taking a different day sometime, checking in with the day captain to see what is needed that day, helping out, and hanging out. Could we welcome visitors from other days into our "family" circles?

It could be fun. We all might learn something – cross pollination. These are just a couple of the valuable suggestions coming out of the discussions. And Nancy is on it!

Have a great summer.

ANNA COOR AND ARCHER SHELTON
DOCENT CO-CHAIRS

Volunteer DATELINE

WEEKLY OPPORTUNITIES

Mondays, 7:00 a.m.

Bird walks - Meet at Admissions

Tuesdays and Thursdays, 4:00 p.m.

Yoga classes, Classroom A, Weisz Learning Center

JUNE

Thursdays and Saturdays, 7:00 - 9:00 p.m.

Flashlight Tours

Tuesday, June 8, 10:00 a.m.

Summer Fun, Dorrance Hall

Tuesday, June 22, 10:00 a.m.

Summer Fun, Dorrance Hall

JULY

Thursdays and Saturdays, 7:00 - 9:00 p.m.

Flashlight Tours

Tuesday, July 13, 10:00 a.m.

Summer Fun, Dorrance Hall

Tuesday, July 27, 10:00 a.m.

Summer Fun, Dorrance Hall

AUGUST

Thursdays and Saturdays, 7:00 - 9:00 p.m.

Flashlight Tours

Monday, August 9

Deadline for submitting articles for September *Gatherings*

Tuesday, August 10, 10:00 a.m.

Summer Fun, Dorrance Hall