



# TORREYANA

*A Special Edition newsletter  
for prospective  
Torrey Pines State Natural Reserve  
volunteers and docents*

***So you wanna be a volunteer at Torrey Pines? To get an idea of what you'll learn in the Volunteers in Parks Program, we offer the following entries from***

## **Diary of a volunteer-in-training by Cynthia Dukich**

### **Volunteer Orientation—Jim Cassell & Supervising Ranger Allyn Kaye**

**W**hen my partner David and I moved to Encinitas a month ago, we left our car behind in Washington State. Down here, we've opted to hoof, bike, or bus it. Luckily, the Torrey Pines State Natural Reserve is right on the #101 bus route. The bus dropped us off at the lower parking lot at 8:40 AM. Unsure of how long it would take to get to the lodge, we raced up the hill, reaching the top, sweaty and huffing, at 8:54. There, we found coffee and words of encouragement from training officer Jim Cassell, Ranger Kaye and others. Surrounded by startling natural beauty, in a cozy lodge with a stuffed cougar, a fireplace, and outdoorsy people sporting practical hats, I temporarily escaped the rush of the twenty-first century. Grateful for those who've worked to preserve a place like this, located only a fourteen-minute walk (twenty at a reasonable pace) from Highway 101, I wanted to become part of that tradition. I knew I sat in the right spot.

### **Geology—Don Grine**

Contemplating geologic time is like doing brain yoga. It's a stretch to think in millions of years, so I start slow. After all, continents drift leisurely. The Pacific plate heads towards the Aleutians at two inches a year. With a certain perspective, it

might appear as if nothing really changes. Oysters of today look like the Del Mar Formation oysters, fossilized 48 million years ago. But many fossils are not so familiar, having come from life forms that no longer exist. A little change can add up big over the long haul. This is good to remember when I wonder if my actions have impact. Over time, two inches can make quite a difference. If the Pacific plate continues towards the Aleutian chain at that rate per year, in 80 million years what was San Diego County will have been subducted and spewed from a volcano as molten rock—the ultimate in recycling. **(Continued on page two)**



**Geologist and Docent David Rightmer leads a group of trainees from the class of 2002. Rightmer completed his Torrey Pines training in 2001. (photo by Linda Blue)**

## Diary (continued from page one)

After class, some trainees joined Eva Armi and Margaret Fillius on the Guy Fleming trail. We ran into Don, who had to guide another group, but stopped to give a brief field geology lesson, using a magnet, a piece of paper, and a small microscope he pulled from his multi-pocketed vest. I'll admit that one incentive for me to finish volunteer training is so I've an excuse to wear a khaki vest with lots of pockets. Don dropped a handful of sand on the paper, and then moved the magnet underneath. The dark bits, magnetite ( $Fe_3O_4$ ), separated themselves from the lighter sand and zoomed about on top, as if self-propelled. I felt like a kid, delighted with discovery. I'll definitely keep a magnet in one of my vest pockets. Once finished animating magnetite, we viewed the sand under his microscope. Illuminated with a battery-powered light, the magnified grains were as beautiful as gemstones. I'll have to reserve a vest pocket for a microscope too, so I'll never lose sight of how much the world changes with each change in perspective.

## Plants—Jim DeLane

Jim began class by defining our Mediterranean climate, which I learned has little to do with beach umbrellas and luxury yachts. There are five Mediterranean climates in the world. They are coastal, and the majority of their precipitation falls during moist, cool winters, unlike most other areas, which get rain during the warmer season. Mediterranean summers are relatively hot and dry. At TPSR, the temperature differences between water, air, and land cause fog. To survive, plants must be able to cope with ocean haze as well as low rainfall and periods of drought. Since they can't easily relocate if they don't like their neighborhood, they must adapt, not only to weather, but also to the underlying geology, competition from other plants, fire, and munching critters among other things.

TPSR's five plant communities allow opportunity to observe how different survival strategies create plant diversity. San Diego County, with its many microclimates, is even more diverse. Unfortunately, the pressures placed on the land by the current human hyper-survival phase has given this area the dubious distinction of having more rare and endangered plant species than any county in the United States, except in Hawaii. Despite this dismal statistic, I stubbornly choose to hold out hope. TPSR remains protected because there are still people who care enough to do whatever they can. One million people visit this park a year. As volunteers, we'll interact with many. Appreciation for the natural world might grow from a small positive interaction into an eventual desire for conservation and preservation. This thought shall motivate me when I'm at the lodge desk giving cheerful and accurate directions to the restroom.

## Children's Program

### Barbara Wallach & Margaret Fillius

I like the way children question the world: "Why this? Why that? Why not?" Of course, this curiosity can be unnerving, most particularly if I don't have an answer. It's great to be reminded,

though, that there's probably more than one solution to a problem (think plant adaptation) and that upon careful observation of curious things, an answer to something is usually found, although not necessarily to the original question. For our training class, Barbara and Margaret presented the children's program, Native Americans—Kumeyaay.

Seeing how in the past the Kumeyaay people lived on this land, so directly connected to the plants, animals, and the rest of their surroundings, made me think about how circuitous the connection is today. Plants and animals from around the world end up at grocery stores, wrapped in plastic; water runs from the tap; air is heated, cooled and re-circulated; folks go months without walking anywhere but through malls and parking lots. Still, underlying everything is an absolute reliance on what the earth provides. As soon as that's not there, we won't be either. It seems a good strategy for future survival to teach our children (who hopefully will remind their affiliated grownups) that all people, past, present, and future—no matter how far removed from it—rely on the land.

Volunteering in the Children's Program is a perfect place to begin to awaken this awareness. I've been told, however, such participation involves leading a group of youngsters into the coastal sage scrub. The thought of heading out into the field equipped only with wits, magnets, and magnifiers makes me feel like I did the first day I taught a preschool art class—scared! But I'm counting on the same thing happening on the trail that happened in *Painting Picassos*. While my students discovered that once a primary color goes into a dish of brown, it's never coming out, I learned the energy put into my classes usually came right back to me, amplified, both the positive and negative. How fortunate that TPSR has positive experience potential times ten—beauty, birds, bugs, snakes, smelly plants, magnetite—and the students are on school field trips. What's more fun than a field trip? How about getting the chance to lead one any Wednesday or Friday that suits you, any month between September and May?



Docent Katherine Chaffee (Class of '97) helps students in the Children's Program identify native plants in front of the Torrey Pines Lodge. (photo by Barbara Wallach)



**Great Blue Heron**  
(photo by Margaret Fillius)

## Birds with Barbara Moore

It rained the morning of bird class, the kind of sideways, blow-your-roof-off rain in which sensible birds take shelter. The weather prevented the class from going out in the field with Barbara, but inside the welcome shelter of the lodge, she still did a great job

of introducing the birding novice (me), to the JIZZ—the general shape and size—of birding. She began with what I find most appealing about birds, their ability to fly from place to place. Migrating birds live the life to which I aspire. When natural conditions aren't right, instead of modifying their surroundings, they change place altogether, traveling somewhere else to find the season, latitude, or landscape they're looking for.

Due to individual adaptations, this right-place/right-time equation varies from species to species. The unique characteristics that prevent all birds from eating the same thing, or migrating to a single breeding ground on the same day (the Friday-afternoon gridlock syndrome) are also great clues to identity. Barbara advised the new birder to first observe the general shape and size of an unfamiliar bird's body, as well as the wing, tail, bill, etc., along with other distinguishable characteristics that make up what's known as the JIZZ of birds, such as field markings, songs, and behavior. Then she suggested asking questions about these traits. How are long legs advantageous? A curved beak? Webbed feet? The questions should probe how the bird interacts with the environment, and how these adaptations separate this species. Seven-powered binoculars make it easier to discern field markings. (Plus they look snazzy hanging around the vest with lots of pockets.) A good field guide, either a book, such as *Kaufman's Birds of North America*, or your own personal ornithologist is important as well. Barbara also recommended writing down each bird you see, every time you see it. If you go birding with others, you even get to write down the birds they spot (unless they see a greater bird of paradise, which I believe must be corroborated in San Diego County). Barbara writes in her handout, "You have to work at learning birds. Work?! Oh, no. I see chain gangs, in-boxes and cubicles, until I remember there are good works: working on a philosophy, a tan, a book, or a hot fudge sundae. Then I get into the spirit of what she means. Learning to bird seems a lot like the bulk of other worthwhile things, all about the willingness to look, and the desire to see.

## Insects—Ron Lyons

My big revelation today was that most critters I've always called bugs aren't really bugs. Beetles, dragonflies, wasps, ants and bees are not bugs. They're insects, categorized within different

orders of the class *Insecta*. "Bug" applies only to a certain type of insect, one of the order *Hemiptera*. I suppose everyone else already knew that. Such grade-schoolish discoveries (more common than I should fess up to, especially in certain scientific realms) make me wonder what else I'm missing. Yikes! At least it gives me empathy for the blind spots in others that sometimes appear so obvious to me. Anyway, even the ladybug isn't a bug. She (or he) is really the ladybird beetle. The wing alignment gives away her beetledom, T-shaped and rather tidy. Real bugs cross their wings over each other in back, like an X.

## Extension Hike

Wow! I had no idea the Extension was so . . . extensive. If the hike hadn't been added to the volunteer class schedule, it might have been years before I got over there. What a wonderful refuge, and reminder. On days I'm dejected by mini-malls and roads without bike lanes, convinced society is stupid, wasteful, and stinky (except for the rare, correct-thinking folks like me), I'll try to keep the Extension in mind, and the fact that it exists because there are individuals everywhere, even if sometimes they're hard to see through the traffic, who are willing to spend their time fighting for trees and the preservation of open public spaces.

## Interpretive Methods

Today's theme was themes, how to present information effectively, within a context, so that visitors leave TPSR, not with a list of facts they forget as they pull out of the parking lot, but with greater understanding and appreciation of the Reserve, as well as the natural world at large.

## Final Requirements

Now that David and I are nearly rested up from an ambitious vacation schedule, we have few excuses for not finishing up our final volunteer requirements by the end of September (other than sheer laziness). What are we waiting for? What are any of us who haven't yet finished our volunteer training waiting for? A medal? A paycheck? A personal summons from the governor? If it seems a bit scary to answer

tricky questions posed by visitors at the Visitor Center, to come up with a theme for a hike, or to head into the scrub with a group of kids, considering what really matters to me, it seems much scarier to think about never quite getting around to doing any of it! ■



**Black widow with egg sacs**  
(photo by Margaret Fillius)

**T**orrey Pines State Natural Reserve is a 1,700 acre area between Del Mar and La Jolla in San Diego County. It is home to the rarest pine tree in the United States, which grows naturally only in the Torrey Pines Reserve area and on Santa Rosa Island off the coast of Santa Barbara. The tree is a relic of the Ice Age and was officially identified in 1850 by Dr. C. C. Parry, a botanist for the U.S./Mexico boundary survey. He named the tree for his colleague, Dr. John Torrey of New York, a noted botanist.

In 1899, the San Diego City Council set aside 369 pine-clad acres as a city park. Later, local philanthropist Ellen Browning Scripps donated additional land. In 1921, Guy Fleming was appointed park

The Torrey Pines Docent Society is among the oldest volunteer groups in the California State Park System. It was organized in March 1975 and incorporated as a non-profit organization by December 1977. Every year, our docents volunteer hundreds of hours of service to more than 1.5 million visitors to Torrey Pines. Special projects have included publishing books, postcards, and a flower brochure; maintaining an interpretive garden; and providing interpretive programs for more than 3,000 schoolchildren each year. In 1991, the Park System named the Society "Volunteer Organization of the Year."

custodian to help prevent damage to the trees caused by picnickers and campers. In 1923, what is now the Visitor Center, opened as a restaurant. Financed by Miss Scripps, it was popular with both local residents and bus tour travelers until the mid-thirties

The City Council added more land in 1924. When the State of California took over the park in 1959 the land was designated as a Reserve, guaranteeing it one of the highest levels of protection in the California State Park System. The Reserve Extension, on the other side of Los Peñasquitos Lagoon, which is also part of the Reserve, was acquired in 1970 through community effort.

Each year the Reserve's rich natural diversity attracts more than a million visitors, many of whom come to enjoy the more than 400 native plants and 200 resident and migrant bird species, as well as geological formations dating back 45 million years. Other visitors flock to the five-mile-long pristine beach at the foot of the ancient red cliffs.

Between 1988 and 1992, the Reserve lost 12 percent of its 6,000 pines through bark beetle damage. Following control of the beetle infestation by entrapment, hundreds of native pine seeds and seedlings were planted to help restore the loss. ■

The Torrey Pines Docent Society first published this Special Edition newsletter in Nov. 2001. You may reproduce and re-distribute it without restrictions. If you'd like more information about the training program, scheduled to begin on a Saturday in September, please call (858)755-2063. If you're not interested in the Volunteers in Parks Program, please recycle this by passing it along to a friend or neighbor. Thanks.

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