



TORREYANA

THE DOCENT NEWSLETTER FOR
TORREY PINES
STATE NATURAL RESERVE

Issue 364

September 2015

SD Geology and the Santa Rosa Pines

by Joan R. Simon and Jeannie Smith

Monte Marshal, Professor Emeritus of Geology and Geophysics at SDSU, tantalized the docents at the August general meeting with the possibility of a geologic explanation for the Torrey pines on Santa Rosa Island. But first he took us on an entertaining, whirlwind tour of the geology of San Diego County. Our area started out with the same kind of volcanic activity that formed the Andes, he said, but that all died out 90 million years ago and erosion has left little visible evidence of this tumultuous heritage.

At Mission Trails, some of these volcanic rocks can be seen, but east of there our mountains are made of plutonic rocks, cooled slowly deep underground. Granitic rock (granite-like, but not genuine granite), composed of white feldspar, quartz and mica, makes up most of this "basement" rock, but there is none of it visible along the coast. However, it is an important part of our surroundings, because when this rock decomposes, the white feldspar grains, along with the glassy quartz and the black mica, form the sand on our beaches. The feldspar also creates clay and provides the minerals our plants need to survive.



Granitic rock, found inland



Magnified view showing white feldspar patches & mica specs

Built on a deep igneous foundation, the strip we can see along the coast consists of sedimentary rock from river deposits. It has been raised and has fallen hundreds of feet over millions of years.

These layers are familiar to us, starting with the Del Mar Formation and Torrey Sandstone (45-50 million years old). Between then and a million years ago, we have no rocks at Torrey Pines that record the geological story, so the next chapter is told by the Linda Vista, where the Torrey pines have taken root, and the Bay Point Formation (120,000 years old), which is now, in Monte's words, "clinging

Inside

General Meeting Minutes	3
Children's Program	4
Docents of the Month	4
Plants of the Month	5
Update: Beach Stair Repair	5
New Desk for Lodge	5
Board Changes	6
Trail Patrol on Sunday	6
Seabees on Guy Fleming	7
TPDS Book Club	7
Memoriam: J. La Grange	8
Did You Know?	9
Bird Survey	9

The Torrey Pines Docent Society publishes the *Torreyana* monthly, edited by Joan Simon and Pat Finn on alternate months, and is formatted and produced by Roger Isaacson. Submissions are due on or about the 20th day of the preceding month and may be emailed to

Editors@torreypine.org.

Circulation manager: Marian Casazza
Extra copies of the printed *Torreyana* may be found in the docent library.

Please send postal/
email address changes to:

Torrey Pines Docent Society
P.O. Box 2414, Del Mar, CA 92014

Attn: Membership or email to

Membership@torreypine.org

Web sites:

TP Docent Society: torreypine.org

TP Association: torreypines.org

Visitor Center phone: **858.755.2063**

TPDS 2015 Board Members:

President: Frank Burham

Vice-president: Ingo Renner

Treasurer: Gerry Lawrence

Secretary: Annette Ring

Dir. of Communications: Roger Isaacson

Dir. of Children's Program: Janet Ugalde

Dir. of Programs: George Beardsley

Dir. of Training: Diane Stocklin

Dir. of Lodge Hosting: Jan Lombardi

TPSNR Staff:

Supervising Ranger: Dylan Hardenbrook

Rangers: Kyle Knox, Jesus "Chuy" Salinas Rodriguez, & Mike Winterton

Sr. Park Aides: Louis Sands & Johnson Jou (Interpreter)

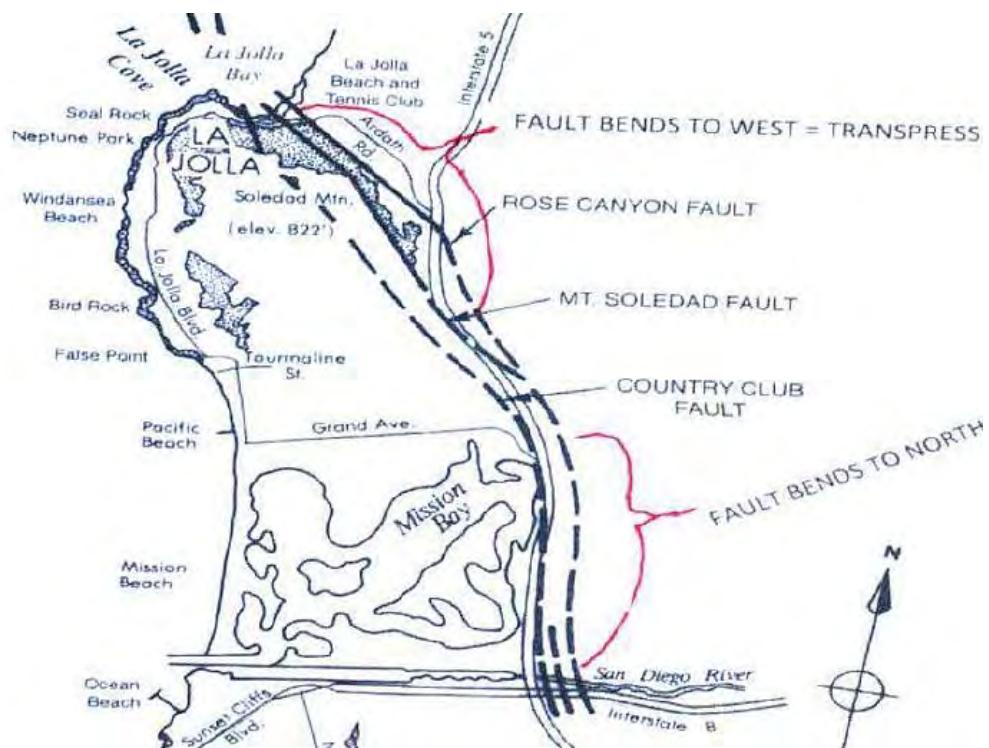
Park Aides: Elliott Beltran, Samantha Collins, Joy Inton, & Jake Mumma

© Torrey Pines Docent Society
Since 1975
All rights reserved

FLASH From Joy Inton: Don't forget to donate your ZooNooz magazines to the Museum Shop.

to the hillsides," with its rilled and reddish surface. He highly recommended Patrick Abbott's *Rise and Fall of San Diego: 150 Million Years of History Recorded in Sedimentary Rock* (available at the Museum Shop) for further edification.

Monte also talked about what he called "the seismic elephant in our room" -- the Rose Canyon Fault which has been active for more than 2 million years. It comes ashore at the La Jolla Beach and Tennis Club, bends around and raises Mt. Soledad, and continues through downtown San Diego, the airport and on to Coronado. "I don't know when it will cause an earthquake next," he said, but gave it a "20 – 30% chance in the next couple of hundred years."



Back to the Torrey pines on Santa Rosa Island. According to geologist and geophysicist Tanya Atwater, 18 million years ago the San Andreas Fault tore away the coastal strip along San Diego and rotated it north, forming the Channel Islands. It carried with it cobbles from the Poway Conglomerate (45 million years old rocks that originated from a volcano that is still in Sonora Mexico). Today these cobbles are found on the northern islands. Monte wondered if the Torrey pines might have gotten to Santa Rosa in much the same way as the rocks did. Perhaps a piece of land stayed above water and carried the Poway conglomerates along with the pines (or their seeds) to their current site on Santa Rosa Island?

Docent Chuck Anders questioned whether natural evolution would have led the two Torrey pine populations to diverge over such a long period of time. Monte responded that a small, isolated species, well-adapted to its environment, might not necessarily change. He cited the gingko of today, which is morphologically identical to the plant of 100 million years ago, as found in fossils (although he did admit DNA evidence to support this finding was lacking). He plans to write a paper on his Torrey pines theory with a botanist from SDSU, and we will all be interested to read their findings.

Docent General Meeting

Saturday, September 12, 9 am

Location: St. Peter's Episcopal Rec Hall, Del Mar

Bob Friedman, Vice President for Policy at the J. Craig Venter Institute (JCVI), will talk about the design of this new research facility and about the research that goes on within its walls. JCVI is a not-for-profit genomics research institute, focusing on applications of genomics to improve both human health and environmental sustainability. Bob directs JCVI's Policy Center, which examines the societal and policy implications of genomics, synthetic biology, and other areas of modern biology and biomedicine.

The JCVI laboratory facility on the southern edge of the UCSD campus is covered by 0.5 megawatts of solar panels. JCVI La Jolla hopes to be the first "net zero electricity" research laboratory in the world. The building exceeds the requirements to be certified LEED Platinum and includes many other sustainability features, as well. Bob helped coordinate the design and construction of the new facility.

Refreshments: Docents with last names beginning with **A, B & C** will be responsible for providing snacks for this meeting.

Torrey Pines Docent Society General Meeting Minutes August 8, 2015

Meeting called to order at 9:04 am by Frank Burham.

Speaker: Dr. Monte Marshall, Professor Emeritus of Geology and Geophysics, San Diego State University. Topic: Geology of San Diego and Torrey Pines State Reserve. Much of his presentation is available on his website: tinyurl.com/MonteMarshallGeology

General Announcements:

Torrey Pines related book: Barbara Wallach announced that Honorary Docent **Maryruth Cox**, author of *The Story of the Torrey Pines Extension*, was at the meeting. This latest book by Maryruth was published May 17, 2015. She also published *The Story of Del Mar Terrace* in January, 2014.

San Elijo Docent Discovery Walk: Ingo Renner has another field trip scheduled for Wednesday, August 19 at 8:15 am at the San Elijo Lagoon. The hike will start in the shaded, wild grape canopies of the La Orilla Trailhead in Rancho Santa Fe and will go westward 2.9 miles to N. Rios Ave. in Solana Beach. It is a relatively easy, flat trail that wanders through riparian and marsh habitats with lots of

interesting plants and birds that we are not used to seeing at Torrey Pines.

Outings and field trips: Frank Burnham mentioned that the bylaws state that the TPDS can replace up to four general meetings with field trips. This year's speakers are all lined up but next year we can get out there and explore instead of some of our general meetings.

Museum Desk: Ingo Renner is building a new desk for the museum. He now has all of the signatures and permits completed by Supervising Ranger Dylan Hardenbrook. Ingo expects it will be in place in a couple weeks.

CARE Team: Sally Whitlock and Annette Ring hoped to pique interest in a new TPDS outreach team named CARE, which stands for:

Contact

And

REtain

The CARE team will serve as adjunct committee to membership. The purpose is to stay informed about the well-being of our docent members and, when warranted, offer help and encouragement. Within the TPDS we have an almost 10% drop out rate each year. Through this outreach team we hope to hold on to more docents. Time spent on the phone or computer volunteering on the CARE team can be counted as docent volunteer time. Ten docents signed up at the end of the August meeting. Our first CARE meeting will be after the September General Meeting. At that meeting we'll further define the functions and scope of the team. If you are interested in joining the group, please contact **Sally Whitlock** or **Annette Ring**. Or join us after the September General Meeting.

Coffee Service: Chuck Anders mentioned that while he enjoys providing the coffee service at our meetings, if there is anyone out there that would like to learn the ropes, he'd like to pass on the knowledge.

Museum Shop: Nancy Woodworth mentioned that *The Rise and Fall of San Diego: 150 Million Years of History Recorded in Sedimentary Rocks* by Patrick L. Abbott is available in the museum shop. The guest speaker, Dr. Monte Marshall, recommended it.

Refreshments: At September's General Meeting docents with last names starting with **A, B & C** are responsible for snacks.

Docents of the Month: Bonnie and Cecil Hornbeck. (see pg. 4)

Meeting was adjourned at 11:05 am

Children's Program

by Janet Ugalde, Children's Program Director

September begins a new year for enthusiastic Children's Program docents. Here we go team! The following preview is rated VG -- very good for all audiences:

Good Morning Students. WELCOME TO TORREY PINES STATE NATURAL RESERVE. My name is Janet, and I am one of the docents here today to help you enjoy your visit. In a few minutes, your teachers will divide you into small groups. Each group will have its own docent to lead you on a hike, show you around our Visitor Center, and answer all your questions.

First, we need to talk about where we are exactly -- Torrey Pines State Natural Reserve. Pines are easy to identify because they have needles instead of leaves. The Torrey pine is the rarest pine species in North America and one of the rarest in the world.

Without protection, rare plants and animals could become extinct. The State of California protects rare species in reserves. In a reserve, the most important thing is PRESERVATION-- protecting animals, plants and their habitats.

So, there are lots of rules in a Reserve – like no climbing, no dogs and no food, but the rules are necessary to protect everything. Your docent will show you how we have fun here without disturbing nature -- hiking on trails, and searching for animal tracks, homes, and scat (that means poop). My favorite rule is ENJOY your visit to this super amazing place.

Docents of the Month: *Cecil and Bonnie Hornbeck*

Photo by Herb Knüfken

Bonnie and I are originally from Pennsylvania and were married in 1963 after I had served four years in the US Marine Corps. Our son Jeff was born in 1964 before I started college as a 24-year-old freshman, where I



earned a B.A degree in Chemistry at Susquehanna University. I attended graduate school at Arizona State University where I received an M.S. degree in biochemistry. I worked for the Center for Disease Control in Phoenix as a biochemist in hepatitis research. Bonnie worked for the Dean of Liberal Arts at ASU and attained sophomore status at ASU before we moved to San Diego in 1976. Here I was head of a research pharmacokinetics lab at the San Diego VA Hospital, with an adjunct assistant professorship of clinical pharmacology at USC. Later I was the Scientific Director of the San Diego Navy Drug Screening Lab before retiring in 1998. Bonnie worked on grants for the UCSD Medical School in Pediatrics before retiring as the head of the business office for the UCSD library system. After retirement, Bonnie also served as the secretary for the University City Community Association.

Bonnie and I were both surprised and honored to be selected as docents of the month. We discovered the beauty of Torrey Pines after our retirement and began to realize that we wanted to spend more time there. The idea of becoming docents was the perfect way to accomplish that. Before starting the docent training in 2007, neither of us realized how much we would learn about our local environment and the history of Torrey Pines. An additional wealth of knowledge has been gained through our interaction with our dedicated fellow docents. We have thoroughly enjoyed interacting with and educating the many visitors to the Reserve while serving as Lodge hosts and advising visitors at the TIK. Bonnie is the editor of the Torrey Treats Cookbook, available for sale in the Lodge Museum and is heading a small committee to organize the docent library. We travel frequently and 20 years ago we tore down our house and built a bigger new home to match our designer landscaping. I play senior softball and I enjoy taking a day to bike around Mission Bay and San Diego Bay. Bonnie and I also enjoy kayaking and gardening. Our son Jeff and grandson Colin both live nearby in San Diego. It has been a great ride and we anticipate many more years at Torrey Pines.

September Plants of the Month

by Margaret Fillius

Like our August plant, the two perennial subshrubs we'll look at this month are found on the beach. **Woolly Sea-blite** (*Suaeda taxifolia*) and **Estuary Sea-blite** (*Suaeda esteroa*)

are not showy plants, but they are of interest because they grow in saline or alkaline silty-sandy or sandy-clay soil -- that is, above the high-tide line or on the nearby cliff faces. This habitat has mainly disappeared, so Woolly Sea-blite is rare (CNPS 4.2), and Estuary Sea-blite is endangered (CNPS 1B.2). Woolly Sea-blite grows to 3 feet high and

appears to be gray because it is densely covered in hairs; Estuary Sea-blite grows to a foot high and is hairless. The inconspicuous flowers on both plants are along the stems. Head for Black's Beach with a magnifying glass to check them out, but keep an eye on the tide for getting back! If the tide's coming in, Woolly Sea-blite can also be seen by the exit from the South Beach parking lot.



Woolly Sea-blite



Estuary Sea-blite

Update: Beach Stairs Repair

The center stairs at the beach are in the process of being repaired. Prefabrication of the lumber has been completed at the Maintenance Yard and work has begun to remove the worn steps. Barring unforeseen delays, the new steps should be installed soon, according to Supervising Ranger Dylan Hardenbrook.

Dylan explained that our maintenance staff has been as low as 25% of normal (75% vacant) with no ability to hire replacements due to State Parks budget limitations. "It has been difficult to keep up with day-to-day restroom cleaning and trash collection, let alone address any of the deferred maintenance issues." He reported that the money for the materials used to repair the stairs has come from the Coke Best Beach Award, which Torrey Pines won in 2012.



Below: San Elijo Lagoon hike of August, 19, 2015, another one of Vice President Ingo Renner's great hikes this year
Photo by Ken King

Above: Master craftsman (and TPDS VP) Ingo Renner creating the new desk for the Lodge



Trail Patrol: Drones, Snakes, Ospreys, and Dogs

by Sherry Doolittle

Busy day on Sunday's Trail Patrol (Aug. 9) at Torrey Pines. You'd think people would stay away on such a gorgeous overcast kind of day, but nooooo! Literally hordes filing down Beach Trail, but I'm getting ahead of myself. First stop was at the Lodge to see **Jeannie Smith**, who was Lodge hosting. I told her my plan: hike down the Beach Trail to Razor Point, hit the Overlooks, then down the Beach Trail again and up Broken Hill and finally down the old road back to the Lodge.

Before I could even start out, I spent considerable time pointing out and talking about the many *Argiope* spiders on the two cacti near the TIK. Finally I began my hike, threading in and around the people on the Beach Trail. I almost made it to Red Butte by way of Razor Pt. Trail on the right when I heard what sounded like a race car speeding around a track. Mmm, odd! It lasted but a few minutes and was gone.

Soon, a docent up from Razor Point asked me if I saw the drone that had come up from the beach. So that was the race car. I made it to Razor Point Overlook, but not before I answered many questions and talked to several people, including a young man and his grandmother who asked about what it might take to be a ranger.

On the way to Yucca Overlook, I saw a tiny red velvet ant, but no one was near to show it to, so I moved on. I checked to see if the rattlesnake skin was still at Yucca Point where I had spent hours last weekend pointing it out to the throngs of visitors. Yes, it was, and again I talked to visitors about it and about rattlesnakes in general.

Back up to the hordes on the Beach Trail, I noticed a group looking into the bushes just down the steps from the Yucca Point turnoff. A teenage boy holding an expensive camera was telling the people about a rattlesnake crawling around in those bushes. When he saw me, he ran up and explained

how he got a great picture and did I want to see it. Yes, of course, but when I saw the extreme close up, I gave him the hairy eyeball and said, "Please tell me you used a zoom lens." Nope, he had lain down beside the three foot snake to get the photo. OMG! He said snakes liked him because he has a King snake, and they won't hurt him because they can smell his snake on him. I told him in a very stern, motherly voice that that was baloney and he was never to do that again!

We watched the snake for a while, pointing it out to the multitudes until I noticed the poor thing was actually trying to cross the trail. So I used the boy, much to his delight, to set up a traffic block, with me uphill and him far downhill holding back the people. We quickly had about 30 people stacked up at both ends of the trail. The snake took the lack of stomping feet as a green light and slithered quickly across the trail and up the hill much to the delight and some horror of many visitors. Thanking the boy for his help, I sent him on his way with another admonishment about the danger of rattlesnakes. The rest of my hike was fine, albeit hot since the sun had decided to make its appearance. I did have three more incidents. First, a visitor pointed out all the people on Flat Rock hanging around the "bathtub." A stingray, a lobster, and a dead squid in it were attracting much attention. I called the Lodge to ask Park Aide **Johnson Jou** to find a ranger or lifeguard to deal with the situation. As I rounded the bend up the Broken Hill Trail, I met a man carrying the cutest puppy. I asked him if anyone had said anything to him, and explained, when he said no, that dogs were not allowed. He was very compliant and promised to take him right out. Last, while I was talking with some people from Texas, an Osprey skimmed overhead carrying the remnants of a fish, complete with guts trailing behind.

Awesome! A very hot, uneventful climb up Broken Hill brought me to the road and a cooling, breeze-filled walk back to the Lodge. Not once on my hike did I have to ask anyone to stay on trail or stop eating. Another rewarding Trail Patrol at Torrey Pines!

Changes Coming: TPDS Board Structure and Elections

by George Beardsley (for the 2015 Board)

According to the TPDS bylaws, Docent Society policy is formulated by a nine-member Executive Board elected by the membership at the annual meeting. At last year's meeting, November 8, 2014, those bylaws were amended, changing the composition of the Board and the duties of some Board members. The changes will take effect in 2016 and the first election under the new structure will be at this year's November 14 meeting. At present, the nine Board members comprise the President, Vice-President, Secretary,

Treasurer and five Activity Directors with specific responsibilities for the following:

- (1) Communications
- (2) Monthly Meeting Programs
- (3) Training
- (4) Lodge Hosting
- (5) Children's Program

Under the changes taking effect next year, the first four officers and their duties continue. However, instead of the Activity Directors, TPDS members will elect five Directors at Large, the principal duty of which is to participate with the officers in the governance of the society: serving as

liaison to specific activity groups, learning about issues, proposing and discussing ideas and plans, and voting on policy decisions.

Activity directors will be appointed by the Executive Board; they may or may not be chosen from the Directors at Large. For example, the current Communications Director, **Roger Isaacson**, expects to be a candidate for one of the at-large positions; he has also indicated willingness to continue his communications responsibilities. On the other hand, I (**George Beardsley**) will not be a candidate for the 2016 Board, but, if appointed, will continue as Program Director.

On that personal note, serving on the Board has been most interesting, educational, and satisfying to me; my decision not to continue has to do with the significant time required for meetings -- 36 hours per year -- plus the additional time as liaison to other activity groups.

Docents interested in contributing to the TPDS direction, and willing to accept the time commitment, should speak to a member of the current Nominating Committee: **Lillian Lachicotte, Jeannie Smith, Walt Desmond, or Barbara Wallach.**

Seabees and Intuit Volunteers Install New Fencing on Guy Fleming Trail

by Joan R. Simon

On August 18, Senior Park Aide **Jake Mumma** and Seabees leader **Michelle Kurtis Cole** led a group of 13 Seabees and 27 volunteers from the Intuit office in San Diego as they removed the existing post and rail fence and installed over 1250 ft of eye-rod and cable on the west side of the Guy Fleming trail overlooking the ocean. They also replaced the crumbling fencing at the South Overlook. The project took more than 5 hours. Materials for this day's work, costing about \$5,500, were donated by the Torrey Pines Association (TPA) as part of the ongoing trail delineation project. Supervising Ranger Dylan Hardenbrook estimated that the donated labor saved the State \$2,400 dollars (40 people x 5 hours x \$12/hr). This is the fourth project employees from Intuit have participated in with the Seabees since last spring.

Dylan explained that eye-rod was chosen as the approved trail delineation method for Torrey Pines in 2013. It has the advantage of being minimally invasive in terms of view obstruction and protective of the environment. The rods are driven into the ground like big nails; post and rail fencing requires digging a large hole for the post and using cement to secure it. Dylan added that it works with bends and slopes easily. It costs about \$5 per foot, half the cost of the "peeler pole" fencing used around the parking lots and has a much longer life expectancy.

Dylan explained the importance of trail delineation. "It serves three purposes," he said. "It keeps people on trail; it

keeps the trail from 'drifting' over time, as people tend to walk the straightest line possible; and it creates a guideline for maintaining the vegetation along the trail edges."



Fencing replaced, before & after, all in one day!



Torrey Pines Book Club

When: Tuesday, September 22, 2:00 pm

Where: Cindy Tozer's home

What: *The Snow Child: A Novel* by Eowyn Ivey

From Amazon:

Alaska, 1920: a brutal place to homestead, and especially tough for recent arrivals Jack and Mabel. Childless, they are drifting apart -- he breaking under the weight of the work of the farm; she crumbling from loneliness and despair. In a moment of levity during the season's first snowfall, they build a child out of snow. The next morning the snow child is gone -- but they glimpse a young, blonde-haired girl running through the trees.

This little girl, who calls herself Faina, seems to be a child of the woods. She hunts with a red fox at her side, skims lightly across the snow, and somehow survives alone in the Alaskan wilderness. As Jack and Mabel struggle to understand this child who could have stepped from the pages of a fairy tale, they come to love her as their own daughter. But in this beautiful, violent place things are rarely as they appear, and what they eventually learn about Faina will transform all of them.

All TPDS docents are welcome. Meetings usually last a couple of hours. RSVP to **Cindy Tozer** if you plan to attend. (Check Member List for email or phone number.)

In Memoriam: Jessie La Grange

by Maryruth Cox

Jessie La Grange was a staunch supporter of Torrey Pines State Reserve for more than 50 years. She died on March 16 after a short illness. Her almost 95 years had spanned the great events of the 20th century: the Depression, the Second World War, the counter-culture, and the growing awareness of environmental degradation. Her voice, pen and camera were involved in all these issues as she “fought for the right.”



Jessie was a child of California, born in Petaluma where she learned early to enjoy fishing and camping with her family along the river and at the beach. When she was in high school, her family moved to San Francisco. Jessie sometimes escaped boring classes by catching the downtown bus to the courthouse where she sat in on trials and acquired a taste for legal argument.

She went to nursing school in Berkeley where a rigorous nurse of the old school taught the students to scrub vigorously to fight disease germs (before antibiotics). When the war started, she joined the Army nursing corps. On a field trip to San Diego with fellow students she met her “sparring partner” (Jessie’s description), Lee La Grange, a lanky young Marine on his way to the South Pacific. They agreed to marry if they survived the war.

Jessie was stationed in England and managed to care for wounded soldiers under rough conditions and with short supplies. She and her companion nurses had to “make do” and cope with authority. When the war ended she met Lee in San Francisco and married, had three kids, and finally settled in San Diego.

A local school teacher, “Uncle” Ivan Olson, introduced them to Torrey Pines. He operated a summer day camp there, with an intensive program of crafts, nature study, hikes, and treasure hunts, open to children from San Diego for \$10/child/week. On Fridays the camp feasted around a big bonfire on the beach. Jessie and Lee gathered firewood and goodies and became involved with the camp as their children became campers and then counselors.

Jessie and Lee decided to build a home on Via Pisa in Del Mar Terrace, across the lagoon from the Park. When they moved in 1963 to their new house, our lives changed. Our children dropped in to savor Jessie’s home-baked cookies on their way home from school. We saw Jessie and Lee biking to the beach and hiking in the hills. Jessie took

photos of everything with her new camera: the stinky, putrid lagoon that bred mosquitoes when the entrance was closed to the sea, the chasms in the canyon that resulted from heavy run-off after rain eroded recently graded land, the concrete trucks that dumped waste into the slough. She sent her pictures to appropriate government agencies, such as the Regional Water Quality Control Board. They were delighted to have an on-the-spot observer. Her pictures of the flooding on Carmel Valley Road helped them prod the City of San Diego to require the two siltation ponds now near the North Beach entrance which have trapped sand and silt that otherwise would have clogged the lagoon.

When excessive sand closed the lagoon channel to the sea, stagnant water bred mosquitoes and neighbors complained. Jessie and Lee organized “dig-ins.” Friends gathered on Saturday mornings when the tide was right and dug ditches to the sea that allowed the pent-up waters in the lagoon to escape to the ocean. Later the La Granges helped form the Los Peñasquitos Lagoon Foundation which provides funds to hire big machines to clear the sand away and truck it down the beach.



Jessie was one of the first “Lodgesitters” who manned the Lodge on weekends to help visitors to the Park. Later she became a TPA counselor and fought to retain the Lodge as a historic site. She was in the thick of the struggle to acquire the Torrey Pines Extension. In 1998, she and Lee were honored by the State with a prestigious award for their work in preserving Torrey pines.

At her memorial service her son spoke: “Jessie’s death marks the end of an era, but not the end of the family and community that she created. Let us all, family and friends, go forward remembering Jessie’s generosity, her integrity and her dedication to the protection of things that are really important to all of us.”

Did you know?

Waves: Where Do They Come From?

by Tom Polakiewitz

Throughout the year, unceasingly and relentlessly, the waves come ashore at Torrey Pines beach, sometimes delighting swimmers and surfers, and sometimes gnawing away at the base of the cliffs. It's not hard to imagine the origins of the wild and erratic surf of a winter storm. The high winds that produce whitecaps on the open ocean are the obvious source. But what about the smaller summer surf, or the long clean lines of waves that appear on a windless morning any time of year? Where do they come from? The answer can be found in the interval between the waves as they break on the beach.

Ocean waves are generated by winds blowing across the surface of the water. The more time the winds blow, and the greater distance over which they blow, the larger the waves they generate. At first, the wind produces ripples, which in time become chop, and then confused, seas: steep waves, close together, sometimes breaking in deep water as the weight of the water pulls them down.

When the seas leave their generating source winds, the individual waves begin to coalesce into ocean swells. The speed and the distance between the crests of the swells increase, as does their "period," the time between the crests. If the swells are large enough, they may travel enormous distances across the ocean. At Torrey Pines our large winter and early spring surf is caused by North Pacific storms in the Gulf of Alaska. In summer we may see large surf generated by hurricanes off the southern coast of Mexico, or from storms as far away as the Southern Ocean between New Zealand and Chile.

The period between the breaking waves is the key to their origin. If the interval between the waves is on the order of six seconds, they were probably generated by local winds no more than tens of miles away. If the period between the waves is fifteen seconds or more, it is a good bet they have traveled across thousands of miles of open ocean to finally give up their energy on our own tiny stretch of the California coast.

Torrey Pines Docent Society Bird Survey: August 1, 2015

Number of species: 56

Gadwall 10
Mallard 2
California Quail 6
Pacific Loon 4
Pied-billed Grebe 1
Black-vented Shearwater 45
Double-crested Cormorant 7
Brown Pelican 10
Great Blue Heron 4
Great Egret 4
Snowy Egret 9
White-tailed Kite 2
Red-tailed Hawk 2
Willet 5
Whimbrel 33

Heermann's Gull 12
Western Gull 19
California Gull 1
Caspian Tern 10
Elegant Tern 4
Eurasian Collared-Dove 9
Mourning Dove 16
White-throated Swift 2
Anna's Hummingbird 8
Rufous/Allen's Hummingbird 3
Belted Kingfisher 1
Nuttall's Woodpecker 3
American Kestrel 2
Peregrine Falcon 2
Black Phoebe 6
Cassin's Kingbird 4
Western Scrub-Jay 2

American Crow 22
Common Raven 12
Cliff Swallow 1
Bushtit 27
House Wren 2
Marsh Wren 2
Bewick's Wren 5
California Gnatcatcher 7
Wrentit 20
California Thrasher 1
Northern Mockingbird 1
Orange-crowned Warbler 2
Common Yellowthroat 6
Yellow-breasted Chat 1
Savannah Sparrow 2
Song Sparrow 9
California Towhee 13

Spotted Towhee 3
Blue Grosbeak 2
Red-winged Blackbird 40
Brewer's Blackbird 1
Hooded Oriole 2
House Finch 20
House Sparrow 2

Observers: Bob Glaser,
Pete di Girolamo, Herb
Knüfken, John Bruin, Frank
Wong, Jack Friery, Janet
Speer, Eva Armi, Blair
Francis, Gary Grantham, and
Anonymous

Monthly Bird Surveys are available back to 2005 at torreypine.org/nature-center/birds/birdsurveys/

Herb Knüfken's amazing photo gallery, including many birds, may be found here: pbase.com/herb1rm



Torrey Pines Docent Society
PO Box 2414
Del Mar, CA 92014
(858) 755-2063
torreypine.org