



TORREYANA

THE DOCENT NEWSLETTER FOR
TORREY PINES
STATE NATURAL RESERVE

Issue 384

May 2017

A Better Way to Carbon Neutrality

by Joan R. Simon

Fellow docent Lou Adamo (Class of 2008) tackled the challenging subject of climate change policy at the April TPDS meeting. Lou is well known as the keeper and interpreter of our weather station. He comes by his climate interest and expertise honestly, with an MS in physical oceanography from Johns Hopkins University and a long career observing and modeling ocean circulation, wind, waves, and their interactions.

Lou began his presentation with a powerful film, [Facing the Storm](#), which depicted the rising sea level and increased storm events in Norfolk, VA, in recent years, leaving residential streets chronically flooded and challenging the survival of the Norfolk Naval Base. After documenting the evidence of how much sea level has risen in the last 100 years — generally one *foot* — Lou presented the current guidance for California planning, based on scientific projections for the coming 100 years — generally one *meter*. Carbon dioxide emissions from combustion of fossil carbon fuels are responsible for about 50% of this rise.

Lou first described the three approaches to controlling these emissions that are now in use:

- **Emissions Control** on vehicles and power plants. These require regulations, penalties, and monitoring.
- **Cap and Trade** on existing stationary sources (refineries, power plants, factories) of CO₂, which are assigned credits to use as they pollute. If they have any remaining credits, they can sell them to others; if they exceed their emission “cap,” they must buy more in the market.
- **Taxes** on emissions or on fuel (e.g., on CO₂ after combustion). These require regulations and an agreed-upon use for the funds collected.

While the above programs are good for curbing CO₂ production, none of them would actually *reduce* carbon

Docent General Meeting

Saturday, May 13, 9 am

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

Speakers: Park Aides Joy Inton and Johnson Jou

Topic: Illustrated lecture about their recent travels

Johnson and Joy will present a slide show and talk about their recent travels in Thailand, Taiwan, Vietnam, Costa Rica, Canada and Indonesia. They will discuss the biodiversity, culture, food, and national park systems in each of these countries and how they are working to conserve natural resources. Of particular interest will be photographs of a park in Thailand which Johnson says “looks just like Torrey Pines.”

Refreshments: Docents with last names beginning with **M, N, O** will be responsible for providing snacks for this meeting.

emissions. Lou then discussed the approach advocated by the Citizens’ Climate Lobby (CCL) — carbon fee and dividend, a better way to carbon neutrality and the end of fossil carbon fuels.

- **Carbon Fee & Dividend** Fees would be levied on petroleum, gas and coal *at the well-head, mine, or border*, based on CO₂ emission value. A monthly rebate would be distributed to every household from these funds to offset higher fuel and other costs attributable to these fees. The fees would initially be low, for example starting

Inside

Meeting Minutes	2-3
Docent of the Month	3-4
May CEED Trip	4
Children’s Program	4
Volgistics Update	5
You Never Know	5
TP Book Club	5
Celebrating Earth Day	6-7
Mat Exhibition	7
La Jolla Half Marathon	8
Plant of the Month	8
Bird of the Month	9
Bird Survey	9

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Rangers: Trevor Irace, Kyle Knox, Jesus "Chuy" Salinas Rodriguez

Sr. Park Aides: Louis Sands, Jake Mumma

Park Aides: Joy Inton, Johnson Jou (Interpreter)

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

at \$15/metric ton of CO₂ (which would translate into a price rise of \$0.12/gallon of gas at the pump). Households would start out receiving approximately \$50/month. The fee to producers could rise \$10/year, and household rebates would rise commensurately.

This approach would actually *reduce* CO₂ emissions. In 20 years it is estimated the level would reach 52% below 1990 levels. Distributing the revenue would create an economic stimulus that could add 2.8 million jobs to the economy. Additionally, Carbon Fee and Dividend is projected to prevent more than 230,000 premature deaths over 20 years from improved air quality. Most importantly, petroleum and other companies like this approach because it permits rational planning and investment. As fees go up, cheaper renewable technologies will be developed until fossil fuels are priced out of the market.

CCL has a comprehensive website that describes their proposal, the research that supports it, and their program to get it implemented: citizensclimatelobby.org

Climate change lobbying groups have learned that fighting global warming is not a partisan issue. Both Democratic and Republican politicians have an equal interest in preserving the planet for their children and grandchildren. Those who live in low-lying coastal states, such as Florida and New Jersey, are already on board regardless of their political persuasion. In fact 36 members of Congress, equally spread between both parties, support it, among them local representatives Darrell Issa (R) and Juan Vargas (D). Because meaningful change will require federal legislation, members of Congress have to hear from their constituents. To get involved with CCL locally, contact Dick Stevens at dstevens@westcoastmortgage.biz or

Michael Hetz at michael@thenoodleshop.com.

Meeting Minutes – April 8, 2017

Meeting called to order at 9:00 am by Ingo Renner.

Speaker Lou Adamo, TPDS docent since 2008, an oceanographer and keeper of the TPDS weather station, spoke about climate change policies (see article on pg. 1).

Announcements:

La Jolla Half Marathon: Ann Smith Mercandetti asked for docents to sign-up for the La Jolla Half Marathon which will be held on Sunday, April 23. Docents need to be in the Reserve by 7 am. (See article on pg. 10)

Earth Day: Ingo asked docents to sign up to help with this year's Earth Day celebration on Saturday, April 22. Docents that participate also need to register online at calparks.org/earthday to let the State know how many volunteers helped out with our Earth Day event.

Earth Day Book Sale: During the Earth Day event we plan to hold a used book sale to raise money for the library.

Museum Shop: Joe Meyer showed us the new T-shirt designs that are now available for sale. There are four new women's designs and colors. One is a light purple shirt with a beautiful California poppy design by **Rhea Bridy** that has a TPSNR emblem on the back. There are two new designs in navy blue, green and cream that have a Torrey pine tree on them. There is a new children's shirt with animal tracks on it in a circle and a Torrey pine tree in the center.

There is a new men's T-shirt design with a Torrey pine tree on the back, available in three colors: light blue, green, and cream.

CEED Events: **Joe Meyer** gave a slide show of the CEED trip to Anza Borrego DSP on March 9 & 10.

APRIL CEED Event: Elfin Forest Recreational Reserve, Tuesday, April 25, 9:00 am

Children's Program: **Bruce Montgomery** asked that docents that are leading Children's Program walks include the new trainees.

Trail Patrol in Volgistics: **Ray Barger** announced that when entering hours for Interpretive Trail Patrol there is now a list of trails included. There are 9 trail numbers for the main Reserve and 7 for the Extension. Recording this trail patrol information helps Supervising Ranger Dylan Hardenbrook advocate for our parking passes. (See article on pg. 5.)

Geology Project: **Ray Barger** reported that they are looking into a 3-D topographic model of the Reserve. They are also reorganizing the geology exhibit on the west porch of the Lodge. Evaluation is still in progress for the signage.

TPSNR Smart Phone App: **Ray Barger** announced that the team is gathering info from other parks to decide what will work best for TPSNR.

TPA (Torrey Pines Association): **Ken King** told us that work is getting underway on the drinking fountain replacement and new permanent bench at Whitaker Garden. The project was designed by the Garden Committee and managed by TPA in conjunction with the Stu Smith Memorial Fund. Because of the California gnatcatcher breeding season any work will need to be done quietly.

TPA is celebrating the 90th Anniversary of the Fleming House by having "High Tea with the Flemings," a special night at the Guy Fleming House on Earth Day, Saturday, April 22, from 5:00 pm to 7:30 pm. For \$65 a person it includes:

- "High Tea" libations and culinary delights
- Ribbon cutting and reopening tour of High Point
- Tours of the historic Fleming House private residence led by the Vodrazka family
- Unveiling of Guy Fleming's historic hand-drawn maps, recently restored. (This will be your last chance to view the originals before their transfer to the California State Parks Archives in McClellan, California).

TPA is continuing to work on the Children's Program pavilion.

TPA has funded the flower video by Margaret Fillius describing the wild flowers on the Guy Fleming Trail: torreypines.org/index.php/webfilm-series

An exhibit of "Artist of the Pines" Tsuyoshi "Mat" Matsumoto's sketchbooks and original artwork will be held at the Geisel Library at UCSD until May 26. TPA and TPDS members are invited to a reception on April 18 with Mat's daughter, Helen Kagan. (See photo on pg. 7.)

Docent of the Month: **Jeff Elman** for his work on our website's Plant Identification Pages, trail patrol, TIK, and public walks.

June General Meeting will be held on the evening of June 10 from 6:30 pm to 9 pm at St. Peter's Episcopal Rec Hall, Del Mar. The entertainment will be Running Grunion, a Native American entertainer, comedian and historian. The new docent class will graduate that evening. There will be desserts and refreshments.

Refreshments: At May's General Meeting docents with last names starting with letters **M, N & O** are responsible for snacks.

Meeting ended at 11:15 am.

Docent of the Month: Jeff Elman

Photo by Herb Knüfken

I think I wanted to be a docent at Torrey Pines since I was a four-year-old, though I only realized that a year ago. When I was four, my family moved from Los Angeles to a small rural town on the Hudson River a bit north of New York City. There were two things that made the move good.



One was going to the American Museum of Natural History in the city. I dreamed of growing up to be Roy Chapman Andrews (the museum's director, and supposedly the person Indiana Jones was modeled after). And the town I lived in was also where Lamont Geophysical Laboratories was located. My best friend's father worked there and I got the idea that science was very cool, since it seemed to involve spending a lot of time at sea or visiting exotic places.

Many years later, after detours back to LA, then Boston, then Austin, and several careers later, I found myself with a PhD and a job at UCSD in 1977. But instead of being a naturalist and studying the outside world, I became a cognitive scientist to study the mind. To my surprise, I'm still there after 40 years. Along the way, I've done stints as director of several research

centers, department chair, and for eight years was Dean of Social Sciences. During much of that time, until my knees finally gave out, I was a runner and spent lunch hour with friends running up from campus to the Reserve. But I was quite ignorant of the wonderful world I was passing through. I thought all the plants had the same name (scientific name "chaparral," with species "large" and "small").

Then about two years ago, my partner Ray and I took some out-of-town friends to the Reserve and later went on a nature walk with **Joe Meyer**. That was a real eye opener (thanks, Joe!). We asked how one became a docent. Last year, I went through the training. Ray is in the current class. I'm pretty sure I won't end up being Roy Chapman Andrews (and certainly not Indiana Jones), but I have found great joy in learning about the natural world, the history, and the peoples who lived here. It's a four-year old's dream come true. The real bonus has been getting to know so many friendly, interesting, and generous people who make up the TP Docent Society. I have to admit that being named Docent of the Month was a real shock, but it's one that makes me feel very honored and pleased. Thank you!

MAY CEED Event

What: **TP Beach Walk**

Where: **Meet at South Beach Kiosk Stairs**

Date: **Friday, May 26**

Duration: **2 hrs.**

Time: **7:15 am** (Gate opening time)

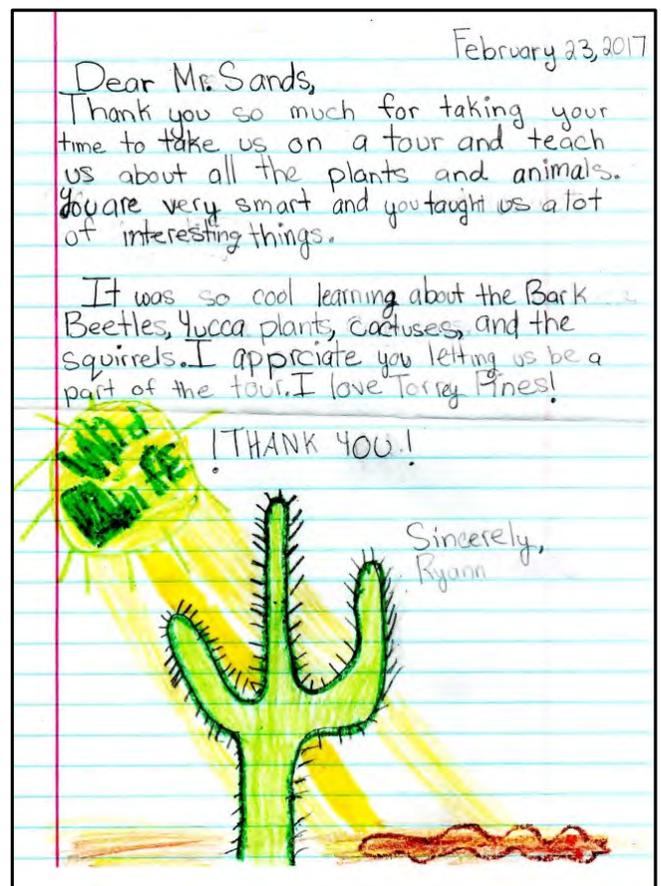
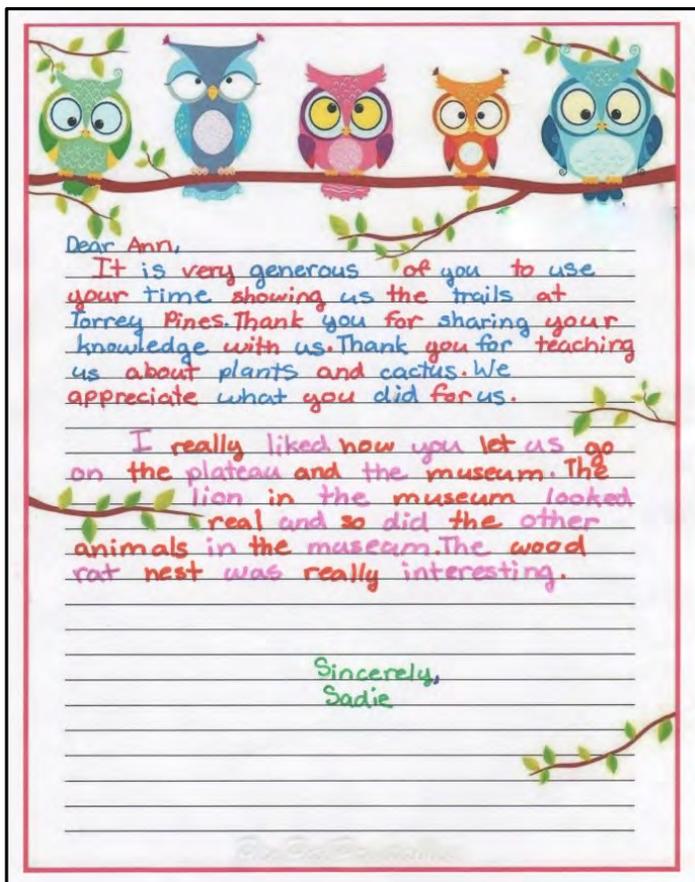
Docent Leader: **Wes Farmer**

Children's Program

by Janet Ugalde, Children's Program Director

April began with fantastic flower displays. Docents were given the opportunity to show off our magnificent Reserve at its best. While many students prefer spiders and lizards, I had the good fortune to guide a group of students who truly appreciated our gorgeous blooms. I was even able to share my favorite shooting stars during their brief appearance on the Guy Fleming Trail.

Spring brought Children's Program docents another precious gift — dozens of adorable thank you notes from grateful students. They rewarded our efforts with lavish praise and priceless works of art, such as shown below.



Volgistics Update: Using Trail Patrol Codes & Logging Hours

by Ray Barger

Codes are now available in Volgistics so docents performing trail patrol can report both “when” (hours) and “which” (code) trail has been patrolled. Logging both hours and trail codes in Volgistics will provide more detailed trail patrol coverage data to our TPSNR rangers, staff and board.

Trail patrol is a significant portion of our Docent Society interpretive hour contribution to the Reserve. Supervising Ranger Dylan Hardenbrook’s annual volunteer hour reporting to CA State Parks, which is broken down into Administrative and Interpretive categories, is required and helps justify our docent parking passes.

As presented at the April 8 docent meeting, the trail codes for docent use are shown below, generally numbered north to south for both the Main Reserve and the Extension. **Roger Isaacson** noted that “codes are single numeric values, and we ran out of codes for the Main Reserve, so for patrolling the beach and the road up to the Reserve (from the South Beach Kiosk to the Torrey Pines Golf Course), use 6 & 7 respectively from the Extension list.”

MAIN RESERVE

Guy Fleming 1
Parry + Whitaker 2
VC area/ADA Loop Trail 3
Razor Pt 4
Yucca Pt 5
Beach Trail 6
Broken Hill 7
BH North Fork 8
BH South Fork 9

EXTENSION

Mar Scenic 1
West Ridge DAR 2
DAR 3
Margaret Fleming 4
Red Ridge 5
BEACH 6
ROAD 7

Trail codes can be combined when two trails are walked. For example, Yucca Point (trail 4) and the Razor Point (trail 5) would be recorded as “45” under the Main Reserve. If more than two trails are covered in one day, it is better to make multiple entries with no more than two trails per entry.

It cannot be emphasized enough how important it is for all active and lifetime docents to report their hours so that we can document our total interpretive contributions each year.

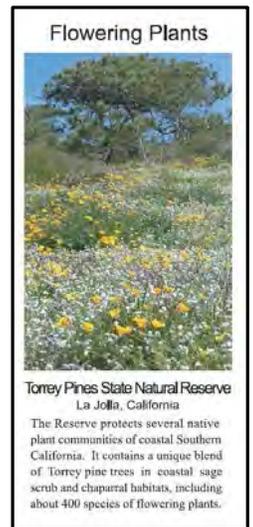
The Volgistics login link is available on torreypine.org by clicking the Volunteering tab, then the Docent Login tab, and then the Volgistics (VicNet) Login tab. Note that the trail codes above can be accessed in Volgistics by clicking the Mail tab, and then the New Messages Trail Codes link.

You Never Know

by Gabrielle Ivany

The other day I was working the 3-6 pm shift at the Lodge when one of the visitors enthusiastically bought our *Flowering Plants* brochure. What great pictures it had! He was not the only one that day who bought the flower brochure; many people wanted to see our wildflowers.

After I closed up the Lodge I went to the UTC area for the monthly meeting of the San Diego Horticultural Society. They always have great speakers for those meetings and this time it was a horticulturist and landscape designer, Scott Kleinrock, who had overseen the installation of the California Garden at the Huntington Library. He is very much into native and Mediterranean climate landscapes. He advocates planting according to natural plant communities and tells his audience to go experience them in person. As an example, he mentioned the Santa Rosa Plateau, but also Torrey Pines and waved our flower brochure to the audience — the brochure he had just bought for \$2 that day — and said what great examples of flowers it had! That’s when I realized that he was the visitor who had bought the brochure from me earlier that day.



Torrey Pines Book Club

When: Tuesday, May 9, 2:00 pm

Where: Carol Hunt’s home in Del Mar Heights

What: *Elephant Company: The Inspiring Story of an Unlikely Hero and the Animals Who Helped Him Save Lives in World War II* by Vicki Croke

From Amazon:

The remarkable story of James Howard “Billy” Williams, whose uncanny rapport with the world’s largest land animals transformed him from a carefree young man into the charismatic war hero known as Elephant Bill. He came to colonial Burma in 1920, fresh from service in World War I, to a job as a “forest man” for a British teak company. Mesmerized by the intelligence, character, and even humor of the great animals who hauled logs through the remote jungles, he became a gifted “elephant wallah.” Increasingly skilled at treating their illnesses and injuries, he also championed more humane treatment for them, even establishing an elephant “school” and “hospital.” In return, he said, the elephants made him a better man. The friendship of one magnificent tusker in particular, Bandoola, would be revelatory. In Elephant Company, Vicki Croke chronicles Williams’s growing love for elephants as the animals provide him lessons in courage, trust, and gratitude.

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

June 13: *The Sixth Extinction: An Unnatural History* by Elizabeth Kolbert.

Celebrating Earth Day 2017 at the Reserve

by Suzan Potuznik

Photos by Mike Yang, Suzan Potuznik, and Roger Isaacson

On April 22 the TPSNR was all dressed up for Earth Day in a bountiful array of flowers and greenery, relishing the moisture-rich soil from the winter rains. The docents turned out in great numbers to share the wonders of the natural world of this “open space” called TPSNR, and reached out beyond the borders of the Reserve to celebrate the earth’s global community, sharing conversations about things one can do to let the earth’s fauna and flora thrive.

The Passport was back, bringing children to each and every table to learn, share and receive their specially designed stamp. Well done **Patty** and **Bruce Montgomery**. The Green Table, first in the series of stations focused on the theme of Reduce, Reuse, and Recycle, awarded participants in the various “share and solve” puzzles and games around the theme with a “color me postcard” designed for Torrey Pines by Sharon Belknap. **Suzan Potuznik** and **Molly McConnell** guided the children through the discussion with hand puppets while docent trainee Coleen Huang, asked wheel game questions of the visitors.



Geology came to life as **Debi** and **David Buffington** made the connection between the sandstone of Torrey Pines and its fragile state, while relating the movement of the geological layers using “Tectonic Dance.”

Wes Farmer brought his amazing paleontology display and spoke to the children of the organic nature of fossils and the soft shell turtle of Torrey Pines, while creating a connection between the earth’s poles and magnetic particles in the sand.



Barbara Wallach introduced the children to writing using a bird feather with its hidden barbules, much to their amazement. At the Children's Craft Table the children were busy making crafts from natural materials while docents demonstrated and spoke of tracking, adaptations, the Kumeyaay, geology, and recycling.

The Children's Program's props were used to bring the Kumeyaay way of life and respect for nature into perspective, as boys and girls alike, with the help of **Sharon Clay Rose** and docent trainee Adam Gemus, loved to try on the basket cap, tumpeline and basket.



This year a large number of wild creatures came to celebrate Earth Day at the Reserve: a great horned owl, a peregrine falcon, and kestrels (Raptor Institute); a Merlin falcon (Project Wildlife); numerous reptiles that can be spotted at the Reserve, including a gopher snake, a striped racer, a western skink and a blue bellied fence swift lizard (Jeff Nordland). **Johnson Jou** and **Joy Inton** brought their collection of live and mounted insects, fascinating all with their stories which included the life cycle of the Monarch butterfly, from caterpillar to cocoon to butterfly, with live specimens. The visitors had the opportunity to hold the reptiles, photograph the raptors and take a close look at the insects while listening to stories of the importance of “rescue, rehabilitate and educate.”

Docents and visitors alike were gathered to tackle some of the wish list projects of the Reserve. **Guy Lawrie** and **Jim Patterson** led a group to scrape off graffiti from the sandstone cliffs and pick up trash along the beach south of Flat Rock. **Lynne Small** took a band of student volunteers from Hoover High to pull up invasive plants near the North Beach parking lot. **Steve Neal** led the trash pickup along North Torrey Pines Rd. and the Peñasquitos Lagoon.

Ranger Chuy Salinas recruited a group of volunteers to help stain the newly-installed TIK interpretive desk under the direction of **Ingo Renner** and **Frank Burham**, which had been installed earlier in the week by the Seabees under the guidance of Frank.



Many interesting reads were found at the “used book sale,” from the collection of books donated by docents (photo below), with proceeds going to the docent library.



TPA’s **Rick Vogel** and others were there to share their stories of preserving this home to the rarest pine in North America.

Lesson learned:
Make Every Day an Earth Day!
 Thank you, docents, for making Earth Day such a success, and a special Thank You to Ingo Renner for making it all come together.

Early Earth Day Gift from Halozyme Therapeutics”

by Kristine Schindler

What do you get when you combine 28 Halozyme employees, two docents, buckets, trash grabbers, and a beautiful April afternoon? A successful Old Sorrento Valley Road clean-up.

Halozyme Therapeutics is a biopharmaceutical company located in Sorrento Valley focused on cancer research. Their Green Team, made up of six employees, wanted to plan something for Earth Day. Lead by Dan Mackensen and Elizabeth Borst (docent adjunct) they came up with the idea of giving back to Torrey Pines State Natural Reserve by doing a road cleanup at neighboring Los Peñasquitos lagoon. It was a successful event on April 18th enjoyed by all and the lagoon road looks better thanks to their efforts. **Steve Neal** pitched in along with me to provide docent support. In addition to “boots on the ground,” I am pleased to report that Halozyme will also be providing a generous Earth Day donation to TPA. Well done Halozyme !!!

Exhibition Opening for Mat’s Drawings

A large crowd of docents and TPA members joined family and friends of Tsuyoshi “Mat” Matsumoto’s daughter Helen Kagan and her husband Ron for the April 18 debut of a new exhibition of Mat’s drawings in the Seuss Room of UCSD’s Geisel Library. The exhibition runs through May 26, 2017. Admission is free. Visitor parking is available in the nearby Hopkins structure.



From left: Docent President Ingo Renner, Chancellor Pradeep Khosla, Ron Kagan, Helen Kagan (Mat’s daughter), librarian Lynda Claassen, library director Brian Schottlaender, and TPA President Peter Jensen *Photo by Ken King*

LJ Half Marathon Celebrates the Torrey Pine

by Ann Smith Mercandetti

On Sunday morning, April 23, twenty-one Torrey Pines docents and docent trainees reported for “duty” at 0700 to help monitor the 6,000+ LJHM runners as they came through TPSNR. **Ann Walker** gets credit for being there even though a San Diego policeman would *not* allow her to pass on roads that were closed *before* the announced times. Those other wonderful early rising docents who *did* get past the SD police or had no problems were: **Nikki Hrountas, Joellen Barnett, Helen Grundler, Marlis Sticher, Joe Meyer, Mark Embree, Gabriele Wienhausen, Irene Larrimore, Guy Lawrie, Jeff Harrison, Annette Ring, Paul Dunphy, Gabrielle Ivany, Greg Howard, Judith Zyskind, Sheldon Krueger, Ron Kuczewski, Lillian Lachicotte, Maureen Buckley, Ken King, and Steve Neal.**

Around 8,000 participants support the host organization, the La Jolla Kiwanis, which nets \$200,000 from sponsoring this annual event. The La Jolla Kiwanis Foundation distributes 100% of its net proceeds to organizations right here in the San Diego area to support children, seniors, and other community groups.



Photo by Ken King

The inspiration for this year's LJHM medal and T-shirt design was the *Torrey Pine*. The medal is given to all runners who complete the 13.1 mile course in 3 hours. With this emblem, there is no one better to monitor and encourage the LJHM runners through TPSNR than our Torrey Pines docents. One runner, from within the CA State Park system, specifically thanked Gabrielle and Judith for our docent/volunteer presence and encouragement through the Reserve.

Another *great* job of docents caring for the Torrey Pines State Natural Reserve on our fifth year of monitoring the LJHM. **THANK YOU!!**

Plant of the Month: California Poppy

by Margaret Fillius

An enduring symbol of the Golden State, the **California Poppy** (*Eschscholzia californica*) has been our official State Flower for more than a century. It grows throughout the state and as far away as southern Washington, New Mexico, and northwestern Baja California. Central Coastal California poppies are larger and deeper orange than the bicolored poppies we know in Southern California. Unfortunately, these orange poppies have been introduced in this area through roadside planting, revegetation projects, and horticulture and have escaped into the wild.



The California Poppy can be either annual or perennial, growing from a tap root. The flower has a base of a pink or purple ring called a *torus* below its four shiny, deep orange to light yellow petals, which enclose the pistil and surrounding cluster of stamens. The flowers open in bright sun and close up at dusk or in overcast conditions. The compound leaves are deeply divided. The fruit is a long, bivalve capsule that forcefully expels the seeds when ripe. The whole plant contains isoquinoline alkaloids and is toxic, causing a decrease in respiratory function if ingested. This is particularly a problem for livestock in Australia, where the plant is invasive.

Germination of the California Poppy seeds occurs in cool, moist soil. There is a germination inhibitor in the skin of the seed, and sufficient rain is needed to wash it away before germination can occur. Because of this, in years of low rainfall many fewer poppies germinate and grow than in wet years. This adaptation helps preserve the seed bank.

Poppies produce lots of pollen and so attract many different native bees as well as honey bees, thus ensuring pollination. Other pollen collectors include beetles, flies, butterflies, and thrips. Bees find the pollen with the aid of their UV vision, as the poppy's anthers stand out more against the central part of the flower when viewed in the UV wavelength. Also, bumblebees build up a positive charge as they fly, and plants often have a negative charge. As a bumblebee approaches the charged flower, pollen is attracted to the positive charge of the bee's hairs, making it more likely for pollination to occur on the next flower the bee visits. The flower remains discharged for long enough to not attract another bee right away.

Bird of the Month: White-crowned Sparrow

by Jack Friery

Photo by Herb Knüfken

Watch quickly, for this bird is about to leave! This month's star is the **White-crowned Sparrow**, (*Zonotrichia leucophrys*). It is an elegant bird, with a clean gray breast, dramatic black and white head stripes, and a pink or yellow bill. (Note: immature White-crowns have gray and brown head stripes instead of black and white.) The White-crowned Sparrow is only a winter visitor to Torrey Pines State Reserve, heading north in spring for its breeding grounds, as far as Alaska and arctic Canada.

Look for White-crowned Sparrows scratching for seeds on open ground, but close to the safety of nearby shrubs. And listen for their song, a thin sweet whistle.

Sources: allaboutbirds.org/guide/White-crowned_Sparrow/id,
glosbe.com/en/la/Zonotrichia%20leucophrys,



Torrey Pines Docent Society Bird Survey: April 1, 2017

Number of species: 82

Gadwall 4	Osprey 1	Western Kingbird 2	Song Sparrow 32
Mallard 10	Red-tailed Hawk 4	Hutton's Vireo 1	Lincoln's Sparrow 1
Blue-winged Teal 6	Ridgway's Rail 1	California Scrub-Jay 3	California Towhee 49
Cinnamon Teal 7	Common Gallinule 1	American Crow 20	Spotted Towhee 29
Lesser Scaup 5	American Coot 23	Common Raven 24	Black-headed Grosbeak 4
Surf Scoter 6	Killdeer 2	Northern Rough-winged Swallow 15	Red-winged Blackbird 16
Red-breasted Merganser 3	Willet 4	Tree Swallow 6	Hooded Oriole 7
Ruddy Duck 4	Western Gull 3	Cliff Swallow 2	Bullock's Oriole 1
California Quail 17	California Gull 2	Bushtit 49	House Finch 25
Red-throated Loon 240	Caspian Tern 1	House Wren 6	Lesser Goldfinch 36
Pied-billed Grebe 2	Forster's Tern 1	Marsh Wren 4	
Eared Grebe 2	Royal Tern 4	Bewick's Wren 12	<i>Observers:</i> Frank Wong,
Western Grebe 65	Eurasian Collared-Dove 3	California Gnatcatcher 7	Bob Glaser, Steve Neal,
Brandt's Cormorant 2	Mourning Dove 21	Wrentit 44	Marty Hales, Jack Friery,
Double-crested Cormorant 37	White-throated Swift 12	California Thrasher 5	David Walker, Andy
Brown Pelican 209	Anna's Hummingbird 33	Northern Mockingbird 7	Rathbone, Tina Rathbone,
Great Blue Heron 4	Rufous/Allen's Hummingbird 26	European Starling 3	Mark Embree, Jim Wilson,
Great Egret 4	Belted Kingfisher 1	Orange-crowned Warbler 15	Gary Grantham, Pete di
Snowy Egret 6	Nuttall's Woodpecker 8	Common Yellowthroat 13	Girolamo, Tsaiwei Olee,
Green Heron 2	Northern Flicker 4	Yellow-rumped Warbler 15	Charlotte Morris, Gabrielle
Black-crowned Night-Heron 3	American Kestrel 2	Townsend's Warbler 1	Ivany, Herb Knüfken, Kathy
White-faced Ibis 2	Peregrine Falcon 2	Wilson's Warbler 1	Dickey, and Anonymous
Cooper's Hawk 5	Black Phoebe 7	Yellow-breasted Chat 4	
	Cassin's Kingbird 20	White-crowned Sparrow 29	
		Savannah Sparrow 2	

View this checklist online at ebird.org/ebird/view/checklist/S36037902

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



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