

# TORREYANA

## THE DOCENT NEWSLETTER FOR TORREY PINES STATE NATURAL RESERVE

Issue 399 August 2018

### Ant Invasion!

by Dan Hammer

If you've ever led or observed a children's nature walk, you probably noticed how many of the kids kept their eyes on the ground, more interested in insects than in plants or mammals. Dr. David Holway has maintained his fascination with insects – particularly ants – and he shared his enthusiasm and knowledge with us at the July TPDS meeting in a talk entitled "Ants at Torrey Pines State Reserve: Why They Matter and Why They Are Under Threat."

Dr. Holway, a professor of Ecology, Behavior and Evolution at UC San Diego, studies invasions of species and their effects on ecosystems. In recent years, he has focused on how invasions of Argentine ants have displaced native species and otherwise disrupted ecosystems around the world and right here at Torrey Pines.

All ants are Formicidae, among the most common and successful families of insects on earth. They first arose about 120 million years ago and became common 60 million years ago. All ants are social, with a division of labor, cooperative brood care, and overlapping generations. Worker ants are always female and usually sisters. In a colony with one queen, all workers are full sisters. (One docent asked Prof. Holway, "What do the men do?" His answer: "Not much. They mate once with the queen and then die.")

Ants' social behavior is key to their ecological importance. They interact with other organisms and often participate in mutualistic associations, such as providing protective services in return for food or nest sites.

Of the 280 or so native ant species in California, about 30-40 occur in TPSNR. Harvester ants or "Pogos" (often mistakenly called "fire ants") are an important player in our local ecosystems, collecting and storing seeds. Our native

### **Docent General Meeting**

Date: Saturday, August 11, 9 am

Location: St. Peter's Episcopal Rec Hall, Del Mar Speaker: Lili Singer, director of special projects and education, Theodore Payne Foundation for Native Plants and Wildflowers

Topic: Theodore Payne and Ralph Cornell: their contribution to Torrey Pines State Natural Reserve

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

NOTE: There will be no September general meeting at the church. Instead, TPDS will have an "Evening in the Pines" special event at the Reserve on Saturday, September 22 at 6:30 - with a potluck dinner, Pavilion grand opening celebration, and moonlight hike. More information to come via Google groups and the September Torreyana.

fire ants are abundant scavenging predators, and the local army ants are specialized predators on other ants.

Here as elsewhere, many native ant colonies have been displaced in recent years by invading Argentine ants. First recorded in California in 1908, Argentines are now

abundant in many locations worldwide, especially in Mediter -ranean-climate ecosystems.

Why are Argentine ants so successful? They are highly aggressive, very good at finding food and raiding colonies, and flexible about what they eat.

Argentine ants are a severe conservation threat. The loss of native ants affects their

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#### **TPDS Executive Board Members:**

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**Sr. Park Aides:** Louis Sands, Jake Mumma **Park Aides:** Tyler Best, Cheryl Biernacki, Krista DeBusschere, Joy Inton, Shawn Jacobs, Johnson Jou (Interpreter)

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

### President's Letter: Got T.O.R.P.E.Y.

We recently gave two walk leader training sessions that focused on developing successful interpretive walks. Much of the talks were based on the six guiding principles of T.O.R.P.E.Y. Give them a shot to spice up your walks and let us know if we can help you along the way.



Thematic: Take time to develop a primary message that you want to get across on your walk. Then find ways to make your presentation interesting and meaningful by using "Fun Facts" and activities and by building connections. Find ways to bring "Tangibles" to life by including "Intangibles." Example: you pass by a Flat-topped Buckwheat. It is not enough to just label the plant; you need to tie in a story to make it interesting. "Did you know the seeds of the Buckwheat are a favorite food for our native Harvester Ants, that in turn disperse the plant's seeds and are a major food source for the endangered Coast Horned Lizard?"

Organized: Make an effort to study your resource material and present it in an organized manner. It will take preparation to build a successful walk. Always start with a clear, friendly introduction that lays the foundation for your walk and develops good rapport with your group. Keep your walk focused on the interests of your walkers and be willing to adjust your content and style. Be sure to provide a conclusion to reenforce your theme and provide closure. Thank your group for participating in your walk and visiting the Reserve.

Relevant: Make your walk meaningful by building intellectual and emotional connections with your walkers' frame of reference. Make it all about your guests. Inspire and share a pleasant experience with them.

**P**rovocative: Evoke awe and interest by creating an awareness of the unique natural resources in TPSNR and the importance of this dwindling ecosystem. Be careful to just plant a seed of wisdom; don't do a data dump to show off how much you know, as this will turn your walkers off and even give them a headache. This quote by Freeman Tilden sums it up perfectly: "The chief aim of interpretation is not instruction, but provocation."

Enjoyable: Smile, know your audience, focus on individuals, involve your walkers, focus on observations in the here and now, involve all five senses, humor. Use activities and fun exercises.

You make the difference! Share your passion, interests, style and stories. "Be yourself" and don't compare yourself to other docents. Get creative - it's your time to shine!

Ingo Renner, President, TPDS

### **August 2018 CEED Event**

Date: Tuesday, August 14, 2018

Time: 6:10 am, sunrise

Place: Ebb Tide/Tide Pool Discovery

Bird Rock - La Jolla

**Duration:** 2 hrs.

Docent Leader: Wes Farmer

(cont. from pg. 1)

predators, such as the coastal horned lizard, which is disappearing from our area. Argentine ants harm plant species such as Datura and coast barrel cactus by keeping away their pollinators and thus lowering seed production. Another disruption: Tree poppies disperse their seeds by attracting larger ants that eat the seeds' tasty elaisome and transport the seeds. But Argentine ants are too small to carry the seeds; they just eat the elaisome and leave the seeds where they were.

Argentine ant abundance is closely associated with available moisture. Dr. Holway's field studies demonstrate how irrigation in housing developments promotes the spread of these dangerous invaders.

Can this threat to our native ecosystems be stopped or slowed? Eradication programs are now underway on Santa Cruz and San Clemente Islands, but stopping the Argentines' invasion of coastal southern California will be more complicated and difficult. Let's hope these efforts are successful so that future generations of children will have plenty of interesting ants to look at on the ground.

Dr. Holway welcomes questions about ants or other flora and fauna at TPSNR: dholway@ucsd.edu

## **Torrey Pines Docent Society General Meeting Minutes** July 14, 2018

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

**Speaker:** Dr. David Holway, Professor of Ecology, Behavior and Evolution, UCSD, presented his fascinating lecture titled Ants at TPSNR: Why They Matter and Why They are Under Threat (see the article on the front page).

**CEED:** Joe Meyer reminded the docent group that the July CEED event will be a whale watching trip aboard the Privateer on July 19.

Treasurer's Report: Barbara Krueger presented the January through June 2018 TPDS Treasurer's Report. She reported that there has been a 20% increase in Museum Shop sales with increased profit. The figure is inflated somewhat by large inventory purchases in Dec 2017. There has been an increase in donations and gifts; some amounts are donated through Endowment funds and some are PayPal

Nominating Committee: In November the TPDS Bylaws were changed to "A Nominating Committee of five docents shall be appointed by the Executive Board at the July board meeting." The TPDS Standing Rules still stated August. The board voted to change the Standing Rules to align with the Bylaw's month of July for nominating committee

appointment. The board has chosen a new Nominating Committee of Peter Domaille, Ken King, Don McGuire, Joe Meyer and Annette Ring, with Don McGuire being the only returning member from last year. The Docent Society would like to heartily thank the retiring committee members of Walt Desmond, Lillian Lachicotte, Jeannie Smith, and Barbara Wallach.

President's Report: Ingo Renner announced that the kit for the Children's Pavilion will ship 7/24/18 with a 3 to 7 day expected shipping time. The State maintenance personnel have done great work preparing the site where the pavilion will be erected.

The fall training for new docents starts in less than two months, and we need a few more applicants. Please consider friends and associates that you believe would be good interpretive docents, and encourage them to apply. Advise them to check out the Volunteering section of our website, where the docent application link is located.

The September General Meeting will be an evening potluck dinner served at 6:30pm on Saturday, September 22 at the Lodge; it will be similar to last year. During the dinner, awards will be given to the photo contest winners, and the dinner will be followed with an evening hike in the Reserve.

Vice President's Report: Ray Barger reported that 15 docents have uploaded a total of approximately 100 usable photos for the Calendar Photo contest. The deadline for submission is Sunday, July 15, as the photo judging committee will meet shortly after that.

Ray announced the completion of the geology exhibit on the back west porch of the Lodge. The displays will serve the educational/interpretive needs of the Children's Program, nature walks and inquisitive visitors. Ray wants to give credit to his Geo Team of Debi Buffington, Jeannie Smith, and Barbara Wallach as well as Wes Farmer for his fossils. He also thanked the cabinet/maintenance team of Frank Burham, Pao Chau, and Bill Eckles. (See article on pg. 4.)

**Docent of the Month: Frank Burham** for all his efforts with the Seabees, TIK, the new docent training committee, the new Children's Pavilion layout, and the just completed geology exhibit at the Lodge's back west porch. For years Frank has quietly handled the silver and green refillable water bottle logistic for the Lodge and the TIK.

In Memory of Jeff Elman: The meeting concluded, honoring Jeff, by playing a video he created in conjunction with his Docent Class of 2016: The Parry Grove Trail. He and his many talents will be sorely missed, along with his calming voice. (See Tribute on pg. 5.)

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

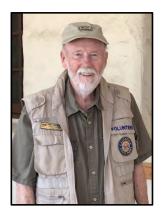
Meeting ended at 11:00 am.

# Docent of the Month: Frank Burham

Photo by Roger Isaacson

Thank you for selecting me as Docent of the Month. I arrived in San Diego in 1976 to accept an engineering position in Sorrento Valley. After retirement, I spent a few years travelling the U.S. in a motor home and visited most of our National Parks.

I always went on their



ranger-led walks and begin to wish I had become a ranger instead of an engineer. I did not know this would lead to my love of doing docent-led nature walks, along with being a presenter and walk leader for the Children's Program under the excellent help and guidance of **Louis Sands**.

On Earth Day 2004, I met **Barbara Wallach**, and she handed me a hoe to do some weeding. Previously, I had met Ranger Gary Olsen and told him I wanted to help sustain the Reserve. At his suggestion, and with Barbara's encouragement, I become a docent in 2005. I joined Gary's maintenance team – now the Seabees but then called the "Garyatrics," a play on geriatrics, since most of us were older.

The supervising ranger, Jody Kummer, discovered I had carpentry skills and soon gave me a number of projects. Jake Mumma arrived as a student needing 150 hours of field experience in parks service and joined me in many projects. Jake became a park aide and was put in charge of Eagle Scout projects. Together we completed over 25 Scout projects, including more than 4000 feet of peeler pole fences, mostly around our parking lots.

Now in my 13<sup>th</sup> docent year, I still enjoy my time in the Reserve, especially sharing time with more than 200 great docents. I have had to slow down a bit but plan to continue to contribute to help protect and sustain the Reserve.

# Museum Geology Exhibit Ready for Docents & Visitors

by Ray Barger

This July, our TPDS Geology and Seabee teams completed a new museum geology exhibit located on the rear, west Lodge porch.

The exhibit cabinet, shown here, includes signage and rock samples from Torrey Pines along with graphics, tables and samples of igneous, metamorphic and sedimentary rocks. The exhibit is available to support



our Children's Program, docent-led Nature & Special Walks, and Lodge interpretation for our visitors.

To highlight other rock elements found in our Reserve, the shelves also include displays of both Linda Vista Formation and Torrey Sandstone concretions, a sampling of fossils (wood, plant & mollusk), and an example of a hole-laden Piddock Clam rock.

The recently created four-fold Geology brochure is available at the exhibit. A small quantity is contained in a

holder mounted on the lefthand side of the cabinet. Based on feedback from the TPSNR staff, an updated black & white version will be available soon in larger quantities for use at the Lodge, Geology exhibit, and Trail Interpretive Kiosk (TIK).

Consistent with our park's Recycle, Reuse & Reduce philosophy, the Seabees were able to repurpose an unused museum cabinet/shelf unit. The



cabinet was painted and a new Plexiglass front cover added to support the Geology team's requirement for a weatherresistant outdoor exhibit. Further, the Seabees trimmed and remounted "The Land" display board on the porch.

The Geology team includes **Ray Barger**, **Debi Buffington**, **Jeannie Smith**, and **Barbara Wallach**. Seabees participating in the exhibit effort included **Frank Burham**, **Pao Chau**, and **Bill Eckles**, with additional rocks from **Wes Farmer** and support from our park aides.

# A Tribute to Jeff Elman

by Joan R. Simon

Torrey Pines docents were saddened to learn on June 28 that our fellow **L** docent, **Jeff Elman**, had died of a sudden heart attack. Though Jeff was a docent for only two years, he had involved himself with so many activities at Torrey Pines that few could believe he had been with us for such a short time. From leading walks to working at the TIK, Jeff made himself an integral part of docent activities. In addition, he took it upon himself to set up a plant website. Working with Margaret Fillius and other docents, he posted photographs and videos to help docents identify and differentiate some of the common plants in the Reserve.\* As a member of the training class of 2016, Jeff helped to videotape and produce the final class project on the Parry Grove Trail: vimeo.com/170729918

Don McGuire, Jeff's mentor as a trainee, described him as "a great guy, good to work with and an outstanding person to be around." Margaret Fillius reports that in working on the plant website, "Jeff spent a lot of time and effort making the plant videos and used his expertise to emphasize significant plant features." Donna Close remembers working with Jeff at the TIK "where he shared his passion for the Reserve with visitors."

TPDS President **Ingo Renner** recalled that "one of Jeff's passions was learning about native plants in the Reserve. He enjoyed participating with



**JEFF ELMAN** 

the Budding Botanists and sharing his knowledge with others." David Walker, who worked with him on the plant website, called him "one of those people who truly loved Torrey Pines and was able to give back so much. He became a part of Torrey Pines very quickly and when he talked to people, they understood clearly that they were talking to someone who really cared for Torrey Pines." Jeannie Smith, who trained Jeff's docent class, spoke for a great number of docents when she said, "He is missed so much by so many of us."

In addition to all the hours Jeff spent at the Reserve, he continued to work as a Professor of Cognitive Science at UCSD, specializing in language use and artificial intelligence. He served as the dean of the Division of Social Sciences from 2006 to 2014, and prior to that was chair of the Department of Cognitive Science. (See Jeff's obituary in the San Diego Union-Tribune: sandiegouniontribune.com/news/science/sd-me-jeffelman-obit-20180629-story.html)

Jeff's husband, Ray Eller, told us that "once I was asked to describe Jeff in a sentence and I said this: 'If Jeff were a multiple choice question the answer would be, all the above!"

Within a year of completing his docent training, Jeff was named Docent of the Month, and his illuminating profile which appeared in the May 2017 *Torreyana* is reproduced here:

### Docent of the Month: Jeff Elman (April 2017)

Think I wanted to be a docent at Torrey Pines since I was a four-year old, though I only realized that 上 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 [Eller] 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!

\* Jeff's plant photographs and videos are not currently accessible, but it is hoped that they can be recovered and made available through the Torrey Pines website.

#### **Summer Plants in the Reserve**

by Margaret Fillius

A have noted that docents almost panic when there isn't an abundance of flowering plants along the trails, as in August. No need – there actually are still some flowers. Besides, there is always plenty to talk about with our visitors.

You will always find some **Buckwheat** (*Eriogonum fasciculatum*) in bloom in August, and you can probably also find some bronze flowerheads that are producing seeds. You can point out the relationships between those seeds, harvester ants and horned lizards, and what is happening with the encroachment of Argentine ants.

You are likely to still find some **Three-Spot** (*Osmadenia tenella*) in bloom. Have you tried gently rubbing the plants and enjoying the aroma? You can discuss with visitors what it reminds them of. Another aromatic annual flowering plant is **Fascicled Tarweed** (*Deinandra fasciculata*), locally known as Sticky Tarweed.

I marvel (often out loud!) at the ability of **Sand Verbena** (*Abronia umbellata*) to flourish on sand even weeks and months after the last rains.

Other flowering plants you will see are **San Diego Wreath Plant** (**Stephanomeria diagenesis**) and **Goldenbush** (**Isocoma menziesii**). In some areas, e.g. at the roadside, you will also find **Telegraph Weed** (**Heterotheca grandiflora**). You may also see **Laurel Sumac** (**Malosma laurina**) and **Toyon** (**Heteromeles arbutifolia**) still in bloom. But if not, they will have fruit and you can discuss their roles in the food chain.

These are the main plants that you are likely to find in flower at this time of the year, but I expect you will find others. For instance, **Bladderpod** (**Peritoma arborea**) can bloom at any time of the year.

### **Torrey Pines Book Club**

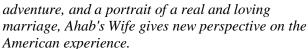
When: Tuesday, August 14, 1:00 pm

Where: Darlene Farnes's home in North Clairemont What: Ahab's Wife: Or, The Star-gazer by Sena Jeter

Naslund

From Amazon:

From the opening line – Captain Ahab was neither my first husband nor my last – you will know that you are in the hands of a master storyteller and in the company of a fascinating woman hero. Inspired by a brief passage in Moby-Dick, Sena Jeter Naslund has created an enthralling and compellingly readable saga, spanning a rich, eventful, and dramatic life. At once a family drama, a romantic



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

**September 11**: West into the Night: A Memoir by Beryl Markham

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August 2018 Torreyana

## **Today's Dinosaurs at Torrey Pines Reserve!**

by Jack Friery; photo courtesy of Herb Knüfken.

inosaurs were birds, and birds are dinosaurs. That's more or less the conclusion of a fascinating article recently published by the Cornell Lab of Ornithology. Over the last few decades, paleontologists have discovered that dinosaurs were more bird-like than previously imagined: many were warm-blooded, and more than a few had feathers. The time of the dinosaurs' dominance, according to current theory, was not the Age of Reptiles. It was the "Age of Big Weird Feathered Things." Per the article, "The biggest carnivores, with their nineinch teeth, were more like roadrunners than lizards. The skies were full of pterosaurs, which were not dinosaurs, birds, or reptiles, in any sense that we understand the word reptile. Their wings were covered with fur or fuzzy feathers and they ranged from the size of a hummingbird to the wingspan, if not the weight, of a 747."

According to one expert, the mighty T-Rex was really "the 20,000 pound roadrunner from Hell."



(The picture above is today's version of the T-Rex, the Greater Roadrunner. Now you can tell your friends that you saw a dinosaur at Torrey Pines Reserve.)

Footnote: the article contains a fascinating YouTube video, comparing human size to dinosaurs, from the tiniest to the most gargantuan. See youtu.be/rRiecAmGWHU. Also, a book I recently discovered puts a very creative and entertaining spin on depicting the lost dinosaur birds. See Martyniuk, Matthew. A Field Guide to Mesozoic Birds and Other Winged Dinosaurs. Vernon, NJ: Pan Aves, 2012. Print.

Sources: allaboutbirds.org/they-had-feathers-is-the-world-ready-to-see-dinosaurs-as-they-really-were-2/;

allaboutbirds.org/guide/Greater\_Roadrunner/overview.

### **Torrey Pines Docent Society Bird Survey: July 7, 2018**

Number of species: 61 (+3 other taxa)

Mallard 1 Surf Scoter 2

Black-vented Shearwater 30 Brandt's Cormorant 1 Double-crested Cormorant 5

Brown Pelican 8 Great Blue Heron 1 Great Egret 2 Snowy Egret 17

Black-crowned Night-Heron 2

Osprey 4

White-tailed Kite 1 Cooper's Hawk 1 Red-tailed Hawk 1 Whimbrel 6 Heermann's Gull 8

Western Gull 9 Caspian Tern 4 Royal Tern 31 Elegant Tern 1 Royal/Elegant Tern 1 Eurasian Collared-Dove 1 Mourning Dove 27

White-throated Swift 21 Anna's Hummingbird 25 Allen's Hummingbird 10 Rufous/Allen's Hummingbird 2 Bewick's Wren 6 hummingbird sp. 11

Nuttall's Woodpecker 9 American Kestrel 1 Peregrine Falcon 3 Black Phoebe 3 Sav's Phoebe 2

Ash-throated Flycatcher 3 Cassin's Kingbird 7 Hutton's Vireo 3

California Scrub-Jay 5 American Crow 26 Common Raven 24 Northern Rough-winged Swallow 16 Tree Swallow 1

Cliff Swallow 12 Bushtit 12

White-breasted Nuthatch 1 House Wren 2

California Gnatcatcher 13

Wrentit 34 Western Bluebird 1 California Thrasher 3 Northern Mockingbird 4 Phainopepla 2

Orange-crowned Warbler 1 Common Yellowthroat 2

Song Sparrow 3

California Towhee 40 Spotted Towhee 17 Yellow-breasted Chat 6 Black-headed Grosbeak 5 Hooded Oriole 4 Red-winged Blackbird 4 House Finch 158 Lesser Goldfinch 36 House Sparrow 2

Observers: Kathy Dickey, Andy Rathbone, David Walker, Herb Knüfken, Jack Friery, Marty Hales, Margaret Fillius, David Gambling, Steve Neal, Michelle Haglund, Jacqui Todd, Tsaiwei Olee, Gary Grantham, and Anonymous

View this checklist online at ebird.org/view/checklist/S47235274

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



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