



TORREYANA

THE DOCENT NEWSLETTER FOR
TORREY PINES
STATE NATURAL RESERVE

Issue 385

June 2017

Busmen's Holidays

by Dan Hammer

At May's TPDS meeting, Park Aides **Joy Inton** and **Johnson Jou** shared their stories of distant lands and exotic plants and animals.

Though they also savor foreign food, cultures, and people, they tend to gravitate abroad to what they do at home: enjoying nature in all its variety and wonder. The English call this type of vacation a "busman's holiday," as when a London bus driver relaxes by taking a long drive. For Joy and Johnson, whose work involves interpreting the natural world for Torrey Pines' visitors, their busmen's holidays have found them studying biology in Costa Rica, volunteering at the Elephant Nature Park in Thailand, exploring shale fields in Canada, and sharing work tips with rangers in several countries.

Their journeys are often arduous and sometimes perilous. Johnson recalled sailing for 13 hours in a rickety homemade boat to a wildlife refuge on Komodo Island, Indonesia. Plowing through a tropical storm, they lost half the PVC pipes that held the boat together and barely made it to shore. Another time, on the way to Khao Sam Roi Yot in Thailand, their van driver dropped them off at a military zone where they walked for many miles in 90-degree heat with 100% humidity. After several hours and no sign of their contact, they realized they could die there. As Joy says, "We will never understand why the van driver decided to leave us in a military zone, but we were so fortunate to meet a nice Thai man who spoke perfect English and had gone to Purdue! He and his wife were determined to make sure we made it to our destination safely. They even waited several hours with us to say goodbye when our hotel driver arrived."

On yet another trip to another remote locale, Joy saved Johnson from being bitten by a deadly Eyelash Pit Viper. Only afterwards did he realize that this snake's venom kills

Docent General Meeting

Saturday, June 10, 6:30-9 pm (EVENING)

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

Program: We will begin with a graduation ceremony for the TPDS Class of 2017. At 7:15 pm we'll be treated to a one-man show by Abel Silvas, a historian, Fulbright scholar, mime, comedian and storyteller. Mr. Silvas performs as the character Running Grunion, a California Native American storyteller known for his funny verbal antics, miming routines, and interactive audience participation.

Refreshments: Docents with last names beginning with **P, R, S** will be responsible for providing snacks for this meeting.

in two hours – and they were three hours from the nearest hospital. Joy had a similar heart-stopping encounter with the poisonous Orange-kneed Tarantula.

When travel fatigue set in on one vacation, Joy and Johnson looked for a connection to home, something familiar but new (or as the Thais call it, "same-same but different"). They found it in the Monteverde Cloud Forest. Located in the mountains of northwestern Costa Rica, this forest preserve houses one of the world's richest concentrations of biodiversity. Like Torrey Pines, the cloud forest relies on fog to make it through dry seasons. Like

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The Torrey Pines Docent Society publishes the *Torreyana* monthly, edited by Joan Simon and Dan Hammer 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**

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Park Aides: Cheryl Biernacki, Joy Inton, Johnson Jou (Interpreter), Danielle Ornelas

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

California's redwoods, Monteverde's trees absorb moisture from their leaves as much as their roots. Visiting with Monteverde's park rangers, Johnson and Joy compared notes on visitors and their issues, such as wandering off trail, littering, and smoking.

Joy and Johnson found another "same-same but different" place at Pao Canyon, north of Chiangmai, Thailand. Johnson called it an "alternative universe" because it was so reminiscent of TPSNR with pine trees and Linda Vista-like sandstone. "It was as if Red Ridge or Broken Hill became a superthin ridge extending for miles and miles," he said. Joy even found Argiope spiders and harvester ants to remind her of home.

Johnson offered two tips for adventurous travelers. First, keep an open mind so you can better appreciate new experiences on their own terms. And "don't just take — give" so you can fully interact with new people and places and grow together.

Meeting Minutes – May 13, 2017

Meeting called to order at 9:05 am by Ingo Renner.

Earth Day: Ingo thanked all involved with Earth Day for their participation to make it a successful Earth Day event. The book sale raised about \$200 for the library.

Science Fair: The four winners gave presentations of their award-winning studies: Aspen Pastore, 11 grader at La Jolla High School; Emily Shi, 8th grader at Cambridge School; Caroline Zdanowski, 8th grader at the Rhoades School; and Sam Kahn, 9th grader at High Tech High. (See pp. 6 - 7 for a full report.)

Speakers: Park Aides Joy Inton and Johnson Jou gave a beautiful slide show and lecture about their recent travels to Thailand, Taiwan, Vietnam, Costa Rica, Canada and Indonesia. The fitting title of their talk was "The Nature of Travel and an Open Mind." (See front page for details.)

May CEED Event: **Joe Meyer** announced a TP Beach Walk for May 26 led by **Wes Farmer**.

TPDS Photo Contest: **Ray Barger** announced a TPDS photo contest. (See pg. 5 for details.)

Joan Nimick: **Barbara Wallach** brought Joan before the gathering and recapped her many stellar contributions to TPDS. Joan was the training officer for many years and was known as the "scat lady." Joan is a radiant 97 years young.

Docent of the Month: **Mary Friestedt** for all her work with the Children's Program. She does both walks and presentations.

June General Meeting: It will be held in the **evening** on June 10 at 6:30 to 9:00 at St. Peter's Episcopal Rec Hall, Del Mar. The entertainment will be by Abel Silvas aka Running Grunion, a Native American entertainer, comedian and historian. The new docent class will graduate that evening. There will be cake and refreshments.

Refreshments: At June's General Meeting docents with last names starting with letters P, R & S are responsible for snacks.

Meeting ended at 11:30 am.

Docent of the Month: Mary Friestedt

Photo by Herb Knüfken

Mary grew up in the San Joaquin Valley on a beautiful farm just 80 miles west of Yosemite that was once inhabited by the Miwok people of Yosemite, who came down to the valley for the winter and left dozens of their mortars and pestles.

She has been married to Jeff for nearly 48 years of uninterrupted bliss. They have two sons, who live in NYC and Chicago, and two grandkids. For the first 30 years of their marriage, Jeff worked for the Ford Motor Company, a wonderful experience that took them around the world and to exciting places such as Detroit, Buffalo, Cleveland, and Pittsburgh.

Mary taught elementary school for two years and ESL at the college level for 18 years. This was never work - just pure joy.

Now she continues to follow her passion as a docent at TPSNR, San Diego Botanic Garden, and as a speaker for Master Gardeners. One of her greatest joys is sharing her love of nature with others.

Whacky weeding is a rewarding and fun activity, but what brings her the most happiness at Torrey Pines is leading walks for the Children's Program, especially when a kid says, "This is better than going to Legoland and getting a yogurt."



Two New Park Aides

Danielle Ornelas

Danielle Ornelas is a 2012 graduate of Sonoma State University with a BS in environmental studies. She was raised in Warner Springs, where she says her "whole foundation for loving the environment" was born. "I grew up with a lot of the plants I'm finding here at Torrey Pines." Danielle is also a park aide at Dixon Lake/Daley Ranch and volunteers as a docent at the Kumeyaay Interpretive Center in Poway. She is currently training to be a docent at Elfin Forest. She lives in Escondido and says the long drive to Torrey Pines "is totally worth it!"



Cheryl Biernacki

Cheryl Biernacki is from the Bay Area and first came to San Diego for college, where she studied engineering. In recent years she has worked as a kindergarten and first grade teacher and also with children on the autism spectrum at Rolling Hills Elementary School in Rancho Peñasquitos. She is a volunteer with Southern California Animal Rescue, working to find homes for Golden Retrievers and Labrador Retrievers. She also worked as a Boy Scout volunteer when her two sons were in school and continued after they grew up. "I already see some good Eagle Scout projects around the Reserve," she noted. Cheryl is currently a 2017 docent trainee.



Children's Program

by Janet Ugalde, Children's Program Director

On June 2, the TPDS Children's Program completed another outstanding school year. This year, by increasing program days and maximum group size, we were able to serve more than 4,500 students, an increase of 12% over last year. We are especially proud of our 28% increase in Title I school participation.

Forty-three amazing, awesome docents donated more than 1,650 hours. Please join in a cheer for all who shared their time and talents.

Extra round of applause for those who joined in 20 or more times: **Walt Burkhard, Pao Chau, Susan Elliott, Wes Farmer, Mary Friestedt, Paul Howard, Marie Johnson, Barbara Justice, Bruce Montgomery, Patty Montgomery, Steve Neal and Janet Ugalde.**

Ginormous THANK YOU to **Louis Sands**, our treasured coordinator. Thanks to all who contributed to our success, including Lodge docents, park aides, Seabees, TPDS Board of Directors, and the TPA. See you in September.



Torrey Pines Docent Photo Contest

by Ray Barger

Please dig into your beloved Torrey Pines photo archives! The TPDS Board seeks to create a portfolio of royalty-free TPSNR photos for use in our media. As announced at the recent May General Meeting, the Board is having a photo contest to help create this portfolio, which will consist of four broad categories:

- Torrey Pine Tree (one or more trees)
- Scenic (in/of TPSNR, including beach & lagoon)
- Wildlife (all types)
- Plants (including flowers)

Current lifetime, active and supporting docents are eligible to participate in the Photo Contest. Up to five photos total can be submitted per docent. Photos may be from any year. Photo submittals will be due on or the week before the July General Meeting. Submittals must be high-resolution .TIF, .JPG, .PNG, or .PDF files (softcopy). Details on "how and where" to submit the photos, and on the selection committee and process, will be announced in the near future.

Awards for each category will be announced at the August General Meeting.

News from the Museum Shop

by Lynn Alley and Nancy Woodworth

Trail Posts: A Literary Exploration of California's State Parks is a new offering in our shop and one you won't want to pass up. If you're a California history geek, you won't be able to put it down.

Forty-one stories, each preceded by a description of a related state park, are told through forty-one different sets of eyes as diverse as those of Mark Twain, Jack Kerouac, Isabel Allende, Robinson Jeffers, Jack London, John Steinbeck, and John Muir.

Some have been too brutal for my tastes – treatment of California's indigenous population by European settlers is shocking, or the great trials and difficulties encountered by pioneers crossing the Sierras – but most have ranged from humorous to intriguing to engaging. Other highlights include: A few pages from the writings of Marshall South and his wife, Tanya, who lived from 1930-1947 on Ghost Mountain in the Anza-Borrego Desert; Peter Heller's account of himself as a "kook" at Bolsa Chica State Beach; Susan Straight's introduction to *Inlandia*, the story of her childhood and life in the Inland Empire; Leo Carrillo's thumbnail sketch of the Los Angeles in which he

grew up; and James Marshall's account of the discovery of gold in his own words.

The stories are accompanied by 77 photos of the featured parks that "reveal in equal measure the state's natural beauty, complex history and literary heritage."

Note: *Trail Posts*, an instant best seller, is currently sold out, but it is on order with expected delivery in early June.

Other new titles in the Museum Shop include:

A is for Acorn

Aesop in California

Discovering Nature's Alphabet – test your observation powers

Fylling's Illustrated Guide to Pacific Coast Tide Pools

Spiders in Your Neighborhood

Nature Adventures – fun for children on the trail; A Guidebook of nature facts, songs, and hikes

The Shop welcomes suggestions of new titles and products. Contact: Nancy Woodworth

Torrey Pines Book Club

When: Tuesday, June 13, 2:00 pm

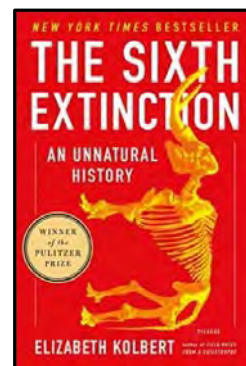
Where: Ken King's home in La Jolla

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

This recent book was winner of the Pulitzer Prize, one of the New York Times Ten Best Books of the Year, and a New York Times bestseller. There are several copies available in our libraries.

Amazon says:

A major book about the future of the world, blending intellectual and natural history and field reporting into a powerful account of the mass extinction unfolding before our eyes.



*Over the last half a billion years, there have been five mass extinctions, when the diversity of life on earth suddenly and dramatically contracted. Scientists around the world are currently monitoring the sixth extinction, predicted to be the most devastating extinction event since the asteroid impact that wiped out the dinosaurs. This time around, the cataclysm is us. In *The Sixth Extinction*, two-time winner of the National Magazine Award and New Yorker writer Elizabeth Kolbert draws on the work of scores of researchers in half a dozen disciplines, accompanying many of them into the field: geologists who study deep ocean cores, botanists who follow the tree line as it climbs up the Andes, marine biologists who dive off the Great Barrier Reef. She introduces us to a dozen species, some already*

gone, others facing extinction, including the Panamian golden frog, staghorn coral, the great auk, and the Sumatran rhino. Through these stories, Kolbert provides a moving account of the disappearances occurring all around us and traces the evolution of extinction as concept, from its first articulation by Georges Cuvier in revolutionary Paris up through the present day. The sixth extinction is likely to be mankind's most lasting legacy; as Kolbert observes, it compels us to rethink the fundamental question of what it means to be human.

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

On July 11th (2:00 pm) we meet at **Darlene Farnes's** home in North Clairemont. The book is *Trail Posts: A Literary Exploration of California's State Parks* edited by Malcom Margolin and Mariko Conner. (See Museum News on pg. 3 for more information about *Trail Posts*.)

Science Fair Winners

Samuel Kahn: "Post-Fire Regeneration in Coastal Sage Scrub - 3rd Year of Study"

Aspen Pastore: "Effect of Precipitation on Microbial Life in Los Peñasquitos Lagoon"

Emily Shi: "Microscopic Study of Torrey Pine Needles for Moisture Condensation"

Caroline Zdanowski: "Examining Botanical Composition of Coastal California Gnatcatcher Habitats at Local Lagoons"

The four winners presented summaries of their work at the May General Meeting. Each student received \$250 and a California State Parking Pass from the docent society.

For information on the Greater San Diego Science and Engineering fair click here:
[facebook.com/sandiegosciencefair/](https://www.facebook.com/sandiegosciencefair/)

Science Fair Photos by Wes Farmer

Post-Fire Regeneration in Coastal Sage Scrub – 3rd Year of Study

by Samuel Kahn

I studied plant numbers and species (native vs. non-native) in burned (BA) and unburned (UBA) areas after fire in Coastal Sage Scrub (CSS). I sampled plants in 4 quadrants in a BA and UBA once a month. I sampled a third area in the BA that I weeded all non-natives out of. I counted and measured the height of Coastal Sagebrush (*Artemisia californica*) in two large quadrants in the BA and UBA. I analyzed burned and unburned soil samples.

Plant growth correlated with winter rains. More non-native plants and species grew in the BA vs. the UBA, though the percentage of native and non-native species was the same. Different native and non-native species were seen in the BA and UBA. Rattlesnake Spurge and Sun Cups were common natives in the BA; Matchweed and 6 Weeks Fescue in the UBA. Indian Sweet Clover and Black Mustard were common non-natives in the BA; Red-Stemmed Filaree and Smooth Cats Ears in the UBA. In the BA there were significantly more and larger Coastal Sagebrush than in the UBA, possibly due to increased nutrients in the burned soil.

Weeding out non-natives did not increase the number of native species, but did increase the number of plants of seasonal native species. It decreased the number of non-natives by the second winter.

My project can help with management as I identified non-native invasive species, which could be the focus of removal efforts, and I identified what natives grew and when they grew, which could help with restoration.

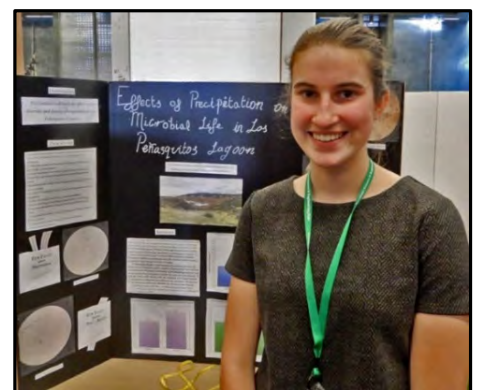
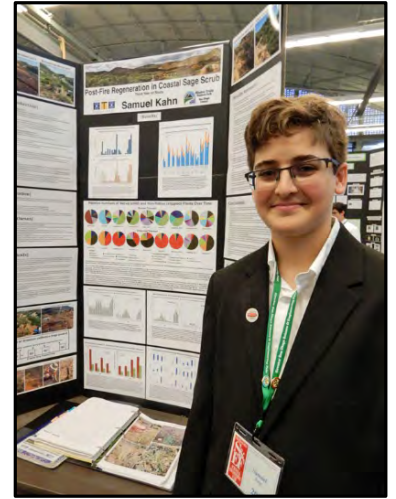
Effects of Precipitation on Microbial Life in Los Peñasquitos Lagoon

by Aspen Pastore

The purpose of this study is to learn how microbial life responds to the natural stimulus of precipitation.

Estuaries play a key role in water filtration and harbor both marine and freshwater life. The most important component of the estuary ecosystem is microbial life; microbial algae is

a primary producer, and bacteria is the most prevalent decomposer. When we better understand the natural life of estuary microbes in San Diego (specifically, Los Peñasquitos Lagoon), we can more effectively take action to preserve these essential ecosystems. Precipitation



influences many factors that affect microbes and therefore is an important aspect of microbial life to examine.

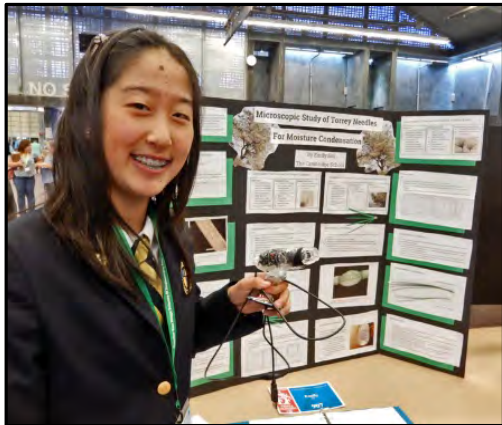
To investigate the effects of precipitation on microbial diversity and density in Los Peñasquitos Lagoon, samples of lagoon water were collected and analyzed for the presence and density of five morphological phyla, both during high levels of precipitation and after five days of no precipitation. To study the effects on density of life, the organisms were counted and the average number of organisms per millimeter was calculated. The Shannon-Weiner Index was employed to determine the diversity of microbial life.

From these values, it has been concluded that precipitation had a negative effect on the diversity and density of organisms in Los Peñasquitos Lagoon in January of 2017.

Microscopic Study of Torrey Pine Needles for Moisture Condensation

by Emily Shi

The Torrey pine tree is one of the very few plants that are “self-watering.” The Torrey pine tree needles can condense fog that will fall as dew drops, thus watering itself. The purpose of this study was to do a microscopic study of the morphology of Torrey pine tree needles to examine how these needles condense fog so efficiently. The results might be used to develop fog condensing material or devices using bio-mimicry.



This study was performed with a microscope and humidifier to examine how these needles collect fog, especially focusing on the surface properties and surface structure. The analysis indicated that Torrey pine tree needles have a unique three-sided structure, like a triangular prism, with one smooth surface and two rough surfaces. The two rough surfaces are very hydrophilic with a contact angle of nearly zero. They play the role of collecting airborne moisture which they quickly pass to the smooth third surface. The third face has a very smooth structure, which allows the water droplets to travel towards the end of the needles quickly.

Examining Botanical Composition of Coastal California Gnatcatcher Habitats at Local Lagoons

by Caroline Zdanowski

In my project, I sought to understand more deeply the specific botanical composition of this songbird's habitat, so that I might be able to know why the California Gnatcatcher makes the at-risk Coastal Sage Scrub Plant Community its home. The California Gnatcatchers' fluctuating endangerment status is a reflection of gains and losses in the struggle to save this iconic California bird from the edge of extinction.



I hypothesized that the Gnatcatcher has a preference for areas of dense, low growing shrub where it can search for berries and insects while being protected from predators. I hypothesized this habitat would consist of California Sagebrush, Laurel Sumac, Lemonadeberry, Black Sage, and Cleveland Sage due to being aromatic, dense and low-growing.

I visited eight trails at the San Elijo and San Dieguito Lagoons. I observed and documented sightings of California Gnatcatchers. I recorded weather conditions including air temperature, wind speed, and humidity. I also recorded the other birds I observed while in the field. Each time I observed the California Gnatcatcher, I documented the plants that grew within a five meter radius.

I documented Coastal Sagebrush (*Artemisia californica*) within the 5-meter radius at 77% of the observations, Deerweed (*Acmispon glaber*) 72% of the time and Cleveland Sage (*Salvia clevelandii*) 61% of the time. I observed California Brickellbush (*Brickellia californica*) within a 5-meter radius at 55% of the sites, Black Sage (*Salvia mellifera*) at 50%, Lemonadeberry (*Rhus integrifolia*) at 44%, and Goldenbush (*Isocoma menziesii*) at 44% of the sites. I also gathered data about where the California Gnatcatchers perched. I found that 33% of the time, the California Gnatcatcher perched in Laurel Sumac (*Malosma laurina*). I encountered the Gnatcatcher in Coastal Sagebrush 22% of the time and Black Sage 11% of the time.

I have learned that the birds naturally favor a microhabitat consisting of dense shrubs such as Coastal Sagebrush and Deerweed and taller plants such as Laurel Sumac. These particular plants seem to be key components of the California Gnatcatcher habitat because they offer food opportunities, shelter, and protection from predators. It appears the endangered California Gnatcatcher favors habitats within the Coastal Sage Scrub Plant Community that foster dense, native scrub, where they are able to forage and perch undisturbed.

Plants of the Month: Buckwheat Family

by Margaret Fillius

This month's group of plants are "belly flowers" in the Buckwheat (Polygonaceae) family. They are annual **Spineflowers**, and at Torrey Pines there are four in the *Chorizanthe* genus and one in the *Mucronea* genus. As the common name implies, this group of plants is usually prickly. Plants in the *Chorizanthe* genus have basal leaves, and pointed bracts along the stems. The *Mucronea* has leaves along the stems. Spineflowers are found in western North America and South America. Of the 64 species of *Chorizanthe*, 52 are found in California. Of the two species of *Mucronea*, both are in California, and one (*Mucronea californica*) is at TPSNR.

Many of these plants are threatened or endangered species. *Chorizanthe orcuttiana* (**Orcutt's Spineflower**) is federally endangered CNPS 1B.1; *Chorizanthe polygonoides* var. *longispina* (**Knotweed Spineflower**) is CNPS 1B.2; and *Mucronea californica* (**California Spineflower**) is CNPS 4.2. *Chorizanthe procumbens* (**Prostrate Spineflower**) was removed from the threatened list a few years ago. Being diminutive doesn't seem to be good for survival in this part of the world!

The two spineflowers that are more plentiful – *Chorizanthe fimbriata* (**Fringed Spineflower**) and *Chorizanthe staticoides* (**Turkish Rugging**) – tend to be more showy when flowering than the others. The single-seeded *Chorizanthe* fruit is encased by the involucre. The whole involucre drops free from the plant to be dispersed by wind or animal.

Various Spineflowers are scattered around TPSNR, not always in plain sight. Orcutt's Spineflower is all off-trail; one the best places to see Knotweed Spineflower is by the turnoff to go out to the Broken Hill overlook; you will usually find California Spineflower on the east side of the Guy Fleming trail north of the Shaw's Agave; most years there is Turkish Rugging near the south end of the "Elfin Forest" trail; Fringed Spineflower tends not to be near the trail at TPSNR and is more abundant elsewhere, for example at Carmel Mountain.

Editor's Note: This will be Margaret Fillius's final regular Plant of the Month column. It has been my great pleasure and honor to work with her on this project for the past two years. These pages have been compiled and are available [online here](#). Margaret will continue to write occasional pieces for the *Torreyana* and to enrich TPSNR in countless ways.

– DH



Orcutt's Spineflower



Knotweed Spineflower



California Spineflower



Prostrate Spineflower



Fringed Spineflower



Turkish Rugging

Bird of the Month: Spotted Towhee

by Jack Friery

Photo by Herb Knüfken

The **Spotted Towhee**, *Pipilo maculatus*, is a common resident of the chaparral—but you seldom see the bird. It is harlequin-colored: black head and back, wings covered in white spots, rusty-colored flanks, white chest and belly, dramatic orange eyes. Despite all this, the bird remains secretive. What you do notice are its many calls: a descending trill; a cat-like mew (a friend described it as “an angry cat sound”); a high, thin flight call.

The Spotted Towhee is a sparrow relative, normally buried deep with the brush. In

springtime, however, it rises to sing over its breeding territory and is more likely to be seen. The name “towhee,” by the way, is a geographical accident. The word describes the call of an eastern relative of our western Spotted Towhee.

Sources: allaboutbirds.org/guide/Spotted_Towhee/id; audubon.org/field-guide/bird/spotted-towhee.



Torrey Pines Docent Society Bird Survey: May 6, 2017

Number of species: 77

(+1 other taxon)

Unusual species **bolded**

Gadwall 11

Mallard 21

Cinnamon Teal 4

Red-breasted Merganser 2

California Quail 23

Common Loon 4

loon sp. 22

Pied-billed Grebe 5

Black-vented Shearwater 1

Double-crested Cormorant 7

Brown Pelican 113

Great Blue Heron 3

Great Egret 4

Snowy Egret 6

Green Heron 1

Osprey 1

Cooper's Hawk 2

Red-tailed Hawk 3

American Coot 1

Killdeer 4

Ring-billed Gull 3

Western Gull 6

California Gull 7

Caspian Tern 4

Eurasian Collared-Dove 3

Mourning Dove 58

Lesser Nighthawk 1

White-throated Swift 6

Anna's Hummingbird 37

Allen's Hummingbird 17

Acorn Woodpecker 2

Nuttall's Woodpecker 9

Peregrine Falcon 4

Western Wood-Pewee 1

Pacific-slope Flycatcher 1

Black Phoebe 4

Ash-throated Flycatcher 1

Cassin's Kingbird 3

Western Kingbird 23

Hutton's Vireo 2

Warbling Vireo 4

California Scrub-Jay 10

American Crow 33

Common Raven 36

Northern Rough-winged

Swallow 59

Tree Swallow 4

Barn Swallow 3

Bushtit 54

House Wren 5

Marsh Wren 2

Bewick's Wren 11

California Gnatcatcher 4

Ruby-crowned Kinglet 1

Wrentit 34

Western Bluebird 5

California Thrasher 8

Northern Mockingbird 13

European Starling 5

Orange-crowned Warbler 13

Common Yellowthroat 9

Black-throated Gray Warbler 1

Townsend's Warbler 2

Wilson's Warbler 2

Yellow-breasted Chat 5

Song Sparrow 23

California Towhee 53

Spotted Towhee 40

Rose-breasted Grosbeak 1

Black-headed Grosbeak 5

Blue Grosbeak 2

Lazuli Bunting 6

Indigo Bunting 1

Red-winged Blackbird 13

Brown-headed Cowbird 3

Hooded Oriole 5

House Finch 58

Lesser Goldfinch 32

Scaly-breasted Munia 6

Observers: Frank Wong, Jim Wilson, David Walker, Marty Hales, Gary Grantham, John Bruin, Andy Rathbone, Tina Rathbone, Kathy Dickey, Herb Knüfken, Valerie Thomas, Molly McConnell, and Anonymous

View this checklist online at ebird.org/ebird/view/checklist/S36982436

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