What is the Future for San Diego’s Wetlands?
by Joan R. Simon

Doug Gibson, Executive Director and Principal Scientist at the San Elijo Lagoon Conservancy (SELC), posed a tough question at the April docent meeting: how do you restore our local lagoons “back to” an earlier time when they were more pristine and productive, while at the same time planning for the adaptions these lagoons will need to make in order to handle climate change and rising ocean waters?

Before he tackled this long-term problem, Gibson talked about our local wetlands, which include San Elijo, Los Peñasquitos, and San Dieguito in our immediate neighborhood. As estuarine lagoons, they are located where salt water from the ocean meets fresh water from an inland river, making them saline and brackish. These are unusually diverse and valuable habitats. San Elijo, for example, supports approximately 400 plant species (about 20 of which are sensitive or endangered). All of the lagoons offer a home to a wide variety of resident and transient species of fish, invertebrates, and birds. These biological “hot spots” also provide food in the form of fish, algae and invertebrates. In addition, they filter and control pollution that would otherwise flow into the ocean; Gibson estimated it would initially cost $250 million to install the proper infrastructure to do the same job.

A key job of the SELC is to maintain and improve the health of the lagoon and to educate the community about their importance. The good news is that our local lagoons are in better shape today than they were in the 80s and 90s now that 1972 Clean Water Act and the 1976 California Coastal Act are being enforced. But there are continual threats from urban run-off, invasive species and infrastructure, so the work remains challenging.

Gibson showed us dramatic diagrams of temperature increases in recent decades and the shrinking ice caps and glaciers which are raising sea levels. He gave us some sobering forecast on the consequences of rising seas. With 80% of the world’s population living within 10 miles of the water, coastal floods could displace 200 million people by 2100. Nationally, $1.4 trillion of coastal property could be at risk. Along the California coast 500,000 people, one million jobs, and $100 billion in property are threatened by climate change over the next century.

So what are we experiencing in San Diego today? In general, the west coast has not seen the sea level rise that was predicted, because the trade winds are keeping the Pacific Ocean pushed over to the west, e.g., to Japan. But that phenomenon is expected to break down with a rebounding effect that will raise water levels in the eastern Pacific, i.e., our West Coast.

(cont. on pg. 3)
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FLASH From Joy Inton: Don’t forget to donate your ZooNooz magazines to the Museum Shop.

President’s Letter

Spring has arrived in Torrey Pines and the Reserve is bustling with renewed activity. The wildflowers and native shrubs are bursting with colorful blooms, reacting to the relatively low, but well-timed, rainfall we had throughout the winter season. Snakes and harvester ants have come back out of their underground lairs to bask in the warmth of the sun and seek food. Cawing ravens and crows have been congregating around the seaward canyons, choosing mates and exploring wind caves as possible nesting areas.

The record winter storm waves have changed the landscape of our beaches, ramping layers of stones up against the sandstone cliffs, and pulling the summer sand offshore, radically altering the incline of the coastal zone. Prehistoric carbonized tree remains are now visible during low tides that will be soon covered back up with sand and possibly not seen again for decades. I have noticed a large decline in animal and plant presence in our tide pools which used to teem with seagrasses and marine creatures during this time of year, but are now devoid of practically everything but a slimy algae. I speculate this may have to do with the warmer water temperatures of El Niño or perhaps the impact of dredging and sand dumping operations on our North County beaches.

Docent and volunteer activity in the Reserve has also increased. We are now back to our 9-6 Lodge hosting schedules and have just recently increased our weekend public nature walks to include a noon shift. With a record high of 258 docents and 22 trainees, we should have plenty of ambitious, interpretive leaders to jump on this additional interpretive opportunity. Our park service hours for 2015 totaled 24,443 hours!

The Seabees are continuing with their industrious work to keep visitors on trail, thereby hindering erosion and habitat destruction. Judging by the lack of wayward boot prints and new rogue paths, this has been a great success! If you hike the trails these days, you will now notice vegetation beginning to grow around the new fencing, with young plants filling in the trodden areas created by off-trail walkers. The Whacky Weeders also deserve a very special recognition for their hard work in removing the many non-native, invasive plants that are aggressively springing up this year, taking away space from the native plants. Please consider joining their important work.

Thanks for all of your services in keeping Torrey Pines a great natural place to explore!

Ingo Renner
TPDS President

May 2016 Torreyana 2
While San Francisco has witnessed a greater rise in sea level than San Diego, we are beginning to catch up. For the first time San Diego Bay has recorded a rise of 9” this year. The current El Niño is causing at least some of the sea level change; however, the upward trend is not expected to be reversed when El Niño subsides. One clear consequence of the rise in sea level along the California coast is the loss of cord grass in Upper Newport Bay. The grass provides material for the floating nests of the endangered Ridgeway’s Rail. The change is not temporary, Gibson cautioned. “The cord grass is not coming back.”

How will lagoons fare when the sea levels rise? In general, lagoons have a very small elevation range, only about 4.5 feet between eelgrass/mudflats and high salt marsh. As waters inevitably rise in the lagoons, subtidal and mudflat habitats, which are at the lower elevations, will become more predominant, while vegetated intertidal habitats (e.g., pickleweed) will shrink. Gibson explained the need to create “stepping stones” by increasing areas with higher elevations to allow habitats to transition upward as the water rises. Our three local lagoons are fortunate to have areas where marsh can migrate and provide a habitat for species to move into. But even micro changes can wipe out entire species, so plants and animals will also have to adapt to survive.

Gibson posed the dilemma that conservators of lagoons are now facing: how do you prepare the lagoons for the adaptations needed as oceans rise, while at the same time preserving what exists now and adhering to the federal government’s policy of “no net loss”? He showed us several models of what can be done to help lagoons adapt when their configuration starts to change. “Restoring toward the future is as important as restoring ‘back to’ some ideal time,” he concluded.

**General Meeting Minutes**

**April 9, 2016**

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

**Speaker:** Doug Gibson, Executive Director/Principal Scientist at the San Elijo Lagoon Conservancy gave a talk on *The Future of Wetlands in San Diego County*. The video of his talk to TPDS is at: vimeo.com/162216742 More about the San Elijo Lagoon Conservancy is at: sanelijo.org/welcome

**Earth Day Celebration:** Ingo Renner announced that the TPDS event will be on Saturday 4/23 in the area adjacent to the TIK and West Overlook. Ingo has 13 booths scheduled.

**Verbal Judo Class** will be held at 3pm on 4/9 in the St. Peter’s Church meeting room. The purpose is to give skills to avoid confrontation when encountering visitors to the Reserve who are breaking the rules.

**La Jolla Half Marathon:** Ann Smith Mercandetti requested docents to help keep the 6,000 runners from “trashing” TPSNR. The La Jolla Half Marathon is on Sunday, 4/24. In the past docents with signs along the route have helped greatly reduce the amount of trash in the Reserve.

**CEED (Continuing Education & Enhancement of Docents):** Joe Meyer announced that the next event is at Los Peñasquitos Canyon Preserve on Saturday, 4/30 at 9:00 am. Email Joe if you intend to participate.

**Spotlight On: Ray Barger** spoke about the mystery towers on and near TPSNR. If you look south from Broken Hill or up from Flat Rock you’ll see a tall tower with a triangle on top. There is another tower like it near the glider port. Why are they there? Ray’s investigation revealed that they were used by the Navy as far back as 1927 to perform speed/distance calibrations on ships. There were two sets of two towers; one of the 4 towers was removed back in 1982. The two sets of towers are one nautical mile apart, so 6080 feet, which is also 1 minute of 1 degree of the earth’s surface. Ships would calibrate their instruments by traveling back and forth at one knot just off-shore and while lining up the towers. Mystery solved, thanks to Ray.

**Extension Flyer: Jane Barger** reported that she was doing trail patrol in the Extension when she heard pounding. Upon investigation she found David Hogan, Director of The Chaparral Lands Conservancy, putting in trail delineators. David gave her a box of flyers about the Extension to share with TP docents. The flyer has a map of the extension and photos of the short-leaved dudleya and the Orcutt’s spine flower with explanations about how rare and delicate these plants are. It emphasizes that going off trail can damage these critically endangered plants. The flyers were handed out at the meeting and the remaining flyers will be available in the library. For more info on The Chaparral Lands Conservancy see: chaparralconservancy.org/

**Bird Sighting:** Kathy Estey explained all the commotion by birders this week. A Little Gull was sighted at TPSNR. It is the smallest gull in the world and is very rare on the west coast. The one that was sighted at TPSNR was seen on Wednesday, Thursday and Friday. It was flying with a flock of Bonaparte’s Gulls. For photos and more info see: allaboutbirds.org/guide/Little_Gull/lifehistory

**Docent of the Month:** Don McGuire for all his work at the TIK and Lodge hosting. He has been known to wear a sign which says, “Not Frank.”

**TPA:** Ken King gave a quick overview for the trainees about the TPA, the sister group to TPDS that does the fundraising. TPA was founded in 1950 by Guy Fleming. TPA has spent $100,000 on the trail delineation project. Upcoming events include Wine in the Pines in October; a wildflower walk with Margaret Fillius on Sunday, 4/11; a
Nighthawk Dusk Stroll in June; and a Full Moon Hike in September. TPA is helping with the purchase of the Children’s Program shade covers, both in Torrey Circle and over the picnic benches at the beach.

**Docent shirts and badges:** Jeanie Smith is going to order shirts and badges for the new trainees soon. All other docents wanting to order shirts or badges should get their orders to Jeanie before the end of April. She sent out the sizes, color chart and prices on a Google Groups email [tpds:3415].

**Docent Vests:** Email Rick Vogel if you want a docent vest. For sizing try on the vests in the library. They run about $57.50 (but occasionally less if there’s a discount).

**Docent Roster:** Carol Smith announced that the 2016 roster (pink cover) is available both at the meeting and in the docent library.

**Museum Shop:** Nancy Woodworth welcomed the new trainees. She mentioned that there is a notebook by the Lodge desk with all the instructions for using the computer sales system. There are new wooden products made from Torrey pine trees by the veterans in the Turn Around for Veterans project. The Torrey pine trees were killed by the bark beetles and then turned into art by veterans recovering from physical or emotional wounds. The article in the August 2015 Torreyana by Suzan Potuznik, “On The Shelf At The Museum Shop, The Beauty of a Torrey Pine Lives On, Inspires and Heals” has more information. The veterans have three woodworking shops in the San Diego area. Nancy emphasized that this is a local non-profit group and they are not part of the Wounded Warriors Project.

**Lifeguard Rescue:** Wes Farmer shared some photos of a lifeguard rescue during the high surf and king tides at La Jolla Cove.

**Treasurer’s Report:** Gerry Lawrence gave the financial recap for the 1st quarter of 2016.

The TPDS Board approved the budget in February. The 2016 budget has some 50 line items in it. For the details, see the copy on the bulletin board in the library. In the first three months of 2016, the museum shop is doing brisk business. Gross sales are up 6%.

**Refreshments:** At May’s General Meeting docents with last names starting with A, B & C are responsible for snacks. Meeting was adjourned at 11:11 am.

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**Children’s Program at Earth Day**

*by Janet Ugalde, Children’s Program Director*

Artists and “poopologists” of all ages enjoyed the Children’s Program table at the TPSNR Earth Day celebration on Saturday April 23rd. Enthusiastic kids created their own unique art projects from natural treasures, including shells, pine needles, cones, bark and seed pods. While they glued and colored we discussed the origins of their materials. Our own Dr. Wesley Farmer identified one of our beach finds as coral.

It was fun to watch the varied reactions to our mystery matching game, “Whose Poop Is This?” We also played an Earth Day themed “Who Am I?” where children used clues to identify local animals and learn how they could take action to help them. Kids enjoyed earning stamps for their Passports, and we had fun awarding prizes to those who filled their cards with stamps.

Thank you Marie Johnson, Mona Kuczenski, Diane Stocklin (who shared Torrey pine needles and bark from her yard), Janet Ugalde, Nancy Walters, Julia Blake, and Chris Richter for making the Children’s Program Art Table a huge success!

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**Pictured:** Chris Richter, Marie Johnson, Mona Kuczenski, Janet Ugalde, and Johnson Jou

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**Flash:**

Los Peñasquitos Lagoon has a "mega" (and hopefully final) opening planned for May 9 - 13 and May 16 - 18. This will be the big annual dredging, with portions of the beach closed to access during this time.
Docent of the Month:
Don McGuire
Photo by Herb Knüfken

I started walking at the Reserve after work in 1999, good exercise and a great way to clear your mind of the stresses of the day. After becoming interested in the history and nature of the area, I joined the TPA in 2006 and enjoyed going to their lectures and joining in on the nature walks. I retired from the printing industry in 2013 and with the encouragement of Louis Sands and Donna Close I signed up for the docent Class of 2015. This past year has been very rewarding and fun. I’m glad I was able to join this great group of people. I would especially like to thank Pao Chau, my mentor, and Franne Fischman, my Lodge partner, for all their help. I hope to stay active with the Docent Society for many more years.

Flashlight Light at Kiosk Signals South Parking Lot is Full

Supervising Ranger Dylan Hardenbrook reports that a new alert is in place to tell drivers that the South Parking Lot is full. “There is now a flashing light on the top of the kiosk to alert visitors when the gate is closed,” he said. Once visitors know exactly where to look, they will be able to see it from as far away as the top of High Bridge or Carmel Valley Rd. “With this early notification, visitors can choose to head straight to North Parking Lot rather than coming all the way to the South entrance,” he said, and avoid making a last-minute U-turn to get back up to North Beach.

Dylan is encouraging everyone to tell regular visitors about this new alert system. “Hopefully this summer we’ll have a few less stressed-out drivers trying to figure out where to park!”


LJ Half Marathon Another Success
by Ann Smith Mercandetti

On Sunday morning, April 24, several docents who had worked at TP’s Earth Day celebration on Saturday joined others at the Reserve before 7:00 a.m. to support the 6,000-plus La Jolla Half Marathon participants, reminding the runners of the special place in which they were running. Docents Stu Smith, Joe Meyer, Tania Popov, Cindy Wollaeger, Irene Larrimore, Bruce and Patty Montgomery, Maureen Buckley, Franne Fischman, Lillian Lachicotte, Jeff Harrison, Betsy Seible, Helen Grundler, Ann Walker, Nikki Hroutas, Claudia Kay, Sheldon Krueger, Annette Ring, Wes Farmer, Barbara Boone, and Mona Kuczenski, rose to the challenge of the early morning Reserve call, with the moon setting in the west over the ocean while the sun was rising in the east. Again, many docents were thanked by participants, one exiting runner thanking a docent for allowing them to come through the “beautiful park.” The LJHM event has been a very wonderful turnaround from the Reserve being "trashed" four years ago to the extreme lack of litter left in the Reserve these last two years. Many thank you's to the docents who have helped make such a positive change possible.

Photo by Bruce Montgomery
Did you know?  Gum Tree Fever
by Tom Polakiewicz

The lines of eucalyptus trees along North Torrey Pines Road and the eucalyptus trees that cover large portions of the UCSD campus are almost as emblematic of Torrey Pines Mesa as the Torrey pines themselves. The story of how they got to be there is an interesting example of the intersection of horticultural and sociological experimentation.

In the early 1900’s California was going through its second wave of eucalyptus mania. For fifty years before that, eucalyptus trees had been planted all over the state as ornamentals, windbreaks and a source of railroad ties and firewood. But in 1907, when the fledgling National Forest Service predicted a “hardwood timber famine” as the result of the deforestation of East Coast timber reserves, hucksters and horticulturalists alike saw the potential for newfound gold in the California hills. They promoted fast growing eucalyptus trees that could be grown all over the state as the solution to impending hardwood doom.

In stepped young Max Watson, who in 1910 was appointed city forester to “improve” the City of San Diego’s remaining pueblo lands. He began a program to offer indentured and homeless men ten days of employment clearing brush and planting eucalyptus trees on Torrey Pines Mesa, both to solve the city’s homeless problem and to create a cash crop that the city could sell when the trees matured. In time judges in San Diego began to send petty criminals to the eucalyptus project for rehabilitation. The project failed in 1912 when the city, in its war against the union organizers of the International Workers of the World, drove any potential laborers for Watson’s experiment out of town. The eucalyptus forest was left to take care of itself.

Although many acres of eucalyptus on the Mesa were cut down to build the Torrey Pines Science Park, the UCSD campus alone still contains over 200,000 sugar gum eucalyptus trees on 112 acres of its campus—all remnants of Max Watson’s forest, trees that many people think of as fixtures on the Mesa as natural as the Torrey pines themselves.

Trail Markers Being Installed

Look for these new trail markers on your favorite trail. They’ll be posted every 100 yards. Supervising Ranger Dylan Hardenbrook announced that installation has just begun. He noted that they are "primarily for search and rescue," when people call in to say they are lost or with someone who is hurt, but don't know what trail they are on. They will also help with locating needed repairs and re-plantings.

Photo above is at the South Fork Broken Hill (SF) trail head (00). Trail codes are listed in this info online file.

Torrey Pines Book Club

When: Tuesday, May 10, 2:00 pm
Where: David and Debi Buffington’s home in Rancho Bernardo
What: Mr. Darwin’s Shooter: A Novel by Roger McDonald

From Amazon:
From one of Australia’s most acclaimed authors, a dazzling and deeply imagined exploration of ambition, natural marvels, and scientific discovery, and one of history’s most significant crises of faith.
As a boy of thirteen, Syms Covington leaves his home in Bedford and goes to sea, passing into manhood as he sails the world, surveying Patagonia, and losing his virginity in the Pampas. Aboard the HMS Beagle, he enters the service of Charles Darwin as an energetic and precocious fifteen-year-old, and in the course of their voyages together he shoots and collects hundreds of specimens for his “gent,” specimens that become fundamental to the formulation of Darwin’s theory of evolution. Now a crusty, eccentric, near-deaf old man, Covington has settled in Australia and is awaiting the arrival of the first copy of On the Origin of Species. Beset by guilt over participating in a work that will shake the human worldview to its foundations, he nonetheless wonders what part of himself might be reflected in Darwin’s oeuvre.

All TPDS docents are welcome. Meetings usually last a couple of hours. RSVP to David and Debi Buffington if you plan to attend. (Check Member List for email or phone number.)
Plants of the Month

by Margaret Fillius

You may have been enjoying seeing Splendid Mariposa Lilies (Calochortus splendens) the last few weeks, and are now looking forward to also seeing Weed’s Mariposa Lilies (Calochortus weedii var. weedii) towards the end of May. These two beauties (maybe the showiest of our flowers) are monocots, in the Lily family, and grow from bulbs. Their common names come from the patterned, wing-like shape of their petals resembling the wings of butterflies (“mariposa” being Spanish for butterfly). Each petal has a nectary gland at its base, surrounded by hairs. In the case of the Weed’s Mariposa, the nectary is in a sunken pit that can be seen as a bump on the outside of the petal. The surfaces of the yellowish petals of Weed’s Mariposa are covered in yellow hairs that may have a dark (brownish) spot at the base; the petal margins may be fringed with dark hairs; the stamens are yellow. In the case of the Splendid Mariposa, the hairs on the pink or pinkish-lilac petals are white and only on the lower third; stamens are purple. Both species are popular with bees.


Number of species: 89 (plus 3 other taxa)

- Gadwall 9
- American Wigeon 16
- Mallard 19
- Cinnamon Teal 16
- Northern Shoveler 8
- Canvasback 1
- Lesser Scaup 4
- Surf Scoter 1
- Bufflehead 8
- Red-breasted merganser 5
- Ruddy Duck 19
- California Quail 20
- Pacific Loon 23
- Pied-billed Grebe 5
- Eared Grebe 5
- Western Grebe 9
- Brandt’s Cormorant 3
- Double-crested Cormorant 1
- Brown Pelican 10
- Least Bittern 1
- Great Blue Heron 4
- Great Egret 7
- Snowy Egret 14
- White-faced Ibis 60
- Osprey 2
- White-tailed Kite 3
- Cooper’s Hawk 2
- Red-shouldered Hawk 1
- Red-tailed Hawk 4
- Ridgway’s Rail 1
- American Coot 27
- Willet 40
- Whimbrel 5
- Marbled Godwit 1
- Short-billed/Long-billed Dowitcher 2
- Bonaparte’s Gull 22
- Heermann’s Gull 2
- Ring-billed Gull 1
- Western Gull 4
- California Gull 6
- Caspian Tern 5
- Royal Tern 2
- Elegant Tern 4
- Eurasian Collared-Dove 3
- Mourning Dove 9
- Great Horned Owl 1
- White-throated Swift 33
- Anna’s Hummingbird 22
- Allen’s Hummingbird 2
- Rufous/Allen’s Hummingbird 11
- Belted Kingfisher 2
- Nuttall’s Woodpecker 5
- Downy Woodpecker 1
- Northern Flicker 4
- American Kestrel 3
- Peregrine Falcon 2
- Black Phoebe 3
- Cassin’s Kingbird 9
- Western Kingbird 1
- Hutton’s Vireo 2
- Western Scrub-Jay 8
- American Crow 19
- Common Raven 22
- Northern Rough-winged Swallow 28
- swallow sp. 12
- Bushtit 22
- House Wren 1
- Marsh Wren 7
- Bewick’s Wren 7
- California Gnatcatcher 9
- Wrentit 37
- California Thrasher 6
- Northern Mockingbird 2
- European Starling 6
- Cedar Waxwing 20
- Orange-crowned Warbler 7
- Common Yellowthroat 21
- Yellow-rumped Warbler 7
- Black-throated Gray Warbler 1
- Wilson’s Warbler 3
- Yellow-breasted Chat 1
- White-crowned Sparrow 10
- Savannah Sparrow 2
- Song Sparrow 40
- California Towhee 44
- Spotted Towhee 14
- Black-headed Grosbeak 1
- Red-winged Blackbird 30
- Hooded Oriole 1
- House Finch 34
- Lesser Goldfinch 13
- House Sparrow 3
- Cedar Waxwing 20

Observers: Gary Grantham, Jim Wilson, Jack Friery, Marty Hales, Herb Knüfkens, Frank Wong, Kathy Dickey, Bob Glauser, Gabrielle Ivany, and Anonymous

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

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