



TORREYANA

*The docent newsletter for
TORREY PINES
STATE NATURAL
RESERVE*

Issue 340

September 2013

The World of Raptors

by Joan R. Simon

If you didn't attend the August 10th docent meeting, you missed a rollicking good time.

Nancy Conney of Sky Hunters Raptor Rehabilitation and Education returned (by popular demand) to share her wealth of knowledge, based on 26 years working with raptors. Adding to the excitement, Nancy brought four stunning raptors for us to see "up close and personal". There was an American Kestrel, the smallest raptor; a Red-tailed Hawk; a Screech Owl (not a screecher at all, but sounding "more like a bouncing ball"); and a beautiful snowy white Barn Owl, whose only predator is the Great Horned Owl.



Nancy Conney with Red-tailed Hawk
Photo by Herb Knüfken

Sky Hunters takes in sick, injured and orphaned raptors. But do not try this at home, Nancy cautioned. It's against the law to take eggs or baby raptors out of their nest or to keep a

**Docent General Meeting
Saturday, Sept 14th
9 am**

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

Title: Update on the Health of Torrey Pines

Speaker: Charlie Kerns

Charlie Kerns, California State Parks Environmental Services Intern, is our resident Torrey pine expert. He is responsible for monitoring the bark beetle populations at the Reserve to protect the Torrey pines from insects and disease. He will give us an update on the health of the trees in the Reserve.

Charlie regularly surveys the Reserve looking for sick or dying trees. The major threat is the California five-spined engraver beetle, which proliferated during the drought in the late 1980s, and by 1991 had killed over 840 trees -- 12% of the Torrey pines in the Reserve! Implementing a "trap-out" technique, black funnel traps were baited with pheromones specific to these beetles and deployed along the high ridges above the Guy Fleming and Parry Grove Trails. Over 330,000 beetles were trapped between 1991 and 1993. As tree mortality decreased, the trapping program was reduced to a monitoring level. The pheromones, purchased with funds from State Parks and TPA, are replaced every few months.

Refreshment Alert: *The Society will continue to provide coffee, tea and fruit snacks as usual. What is new is that docents are bringing baked goods, special treats, nuts etc. Sept. will be T, U, V, W, Y, Z. Check here every month to see when it's your turn.*

raptor in your possession. The fine is a hefty \$15,000. If you find a raptor, put it in a box (with holes, cut out *before* the animal goes in) and call Sky Hunters. Sky Hunters has permits from both the US Fish & Wildlife Service and the California Department of Fish and Game to care for orphaned or injured raptors. "The government watches us like hawks," Nancy said. Last year Sky Hunters

rescued over 300 birds, 80% of which were released. Currently they are caring for 20 non-releasable raptors. The facility has a 70-foot flight cage where the birds can exercise.

Why might a raptor remain in captivity? Some birds have non-reparable injuries, such as a broken wing. Others have been cared for
(cont. on pg. 3)

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

Editors@torreypine.org.

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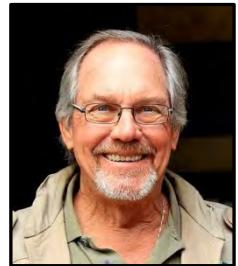
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Starting this month, the Torrey Pines Docent Society newsletter, *Torreyana*, will be published monthly instead of bimonthly. The *Torrey Pinecone* name will no longer be used for the alternate month issues.

The issue labeling will return to the original system, with the September 2013 *Torreyana* numbered 340 to reflect more closely the number of *Torreyana* newsletters produced by the docent society since 1975.

Message from the President

The group is moving! Things are happening at the Reserve, especially among the docents. Not only is the Water Project cooling thirsty walkers after their treks up the hill, they are being received on weekends by friendly smiles and welcoming words from docents eager to help them get oriented for a hike to Razor or Yucca Point, finding the elusive Red Butte or the stairway to the beach. An eager crew attending the TIK (that's Trail Information Kiosk) will gladly direct them to the water filling station that **Frank Burham** built or sell them an inexpensive TPSNR water bottle, if needed. *One visitor from Eldon, MO, a 7th grade physical science teacher named Cathy Roth, thought the water refill station was "awesome" and bought BPA-free water bottles as souvenirs to show her support.*



Inside the Lodge, the three committees identified by the Strategic Committee are staffed and busily working on solutions to needs they have identified for the Reserve. These committees are addressing issues in the areas of Safety, Interpretation and Digital Document Storage (DDS). Clear and thoughtful requests are already coming to the Board for approval and funding.

The parking lots at the Reserve entrance and at the top of the hill are being surrounded by handsome "peeler pole" fencing with some 800 more linear feet (that's about 100 post holes) in the month of August alone. Candidates for Eagle Scout are making good use of the new post-hole digger that the TPA graciously helped us pay for. The young men get credit for their efforts by organizing, managing and funding fence building; we benefit from their youthful exuberance and strength with new fencing for very little expense. Win, win!

We're members of a very positive group and we should be proud of our alliance. So, please, continue to keep up the momentum. Be aware, be active and behave admirably. We're Docents!

Thank you,

Bill Eckles

President,
Torrey Pines Docent Society

The Nominating Committee is now working on a slate for the 2014 Board of Directors to be voted on in November. If you are interested in a position or have input, please contact one of the committee. A list of board positions is on this page and also the cover of our Member List.

Lillian Lachicotte, Jeannie Smith, Walt Desmond

(cont. from pg. 1)

outside the nest before they come to Sky Hunters and have not learned to hunt for food by themselves. They wouldn't be able to survive for more than a day or two in the wild. That is why raptors that can be released are not touched or fed by the 15 volunteers who work with Nancy.



Nancy Conney with Screech Owl

Photo by Herb Knüfken

Raptors live for about 3 to 4 years in the wild, with rural settings being their most advantageous locale; in captivity, they can live from 15 – 30 years, depending on the species. Why the discrepancy? Besides their natural predators, man poses the biggest threat. BB-guns are one menace, but the most common danger is the poisons we put in our yards to kill rodents and other pests. Raptors and other birds eat the same bait and bring it back to the nest for their young.

Here are some Fun Facts about Raptors:

- They partner for life, but go their separate ways once their yearly brood has fledged.
- Depending on their size, raptors eat mice, lizards, insects, snakes, rabbits and smaller birds.
“Anything moving is a meal for raptors.”
- Raptors cough up a pellet 24 hours after eating, containing material the gizzard has siphoned off from the digestive track; contents include toe nails, bones, fur, teeth and feathers from the most recent meal.

- They have 3 eyelids; the one closest to their eye acts like “safety glass”
- Owls can turn their heads 270°, not the fabled 360°; they have 14 bones in their neck versus our 7.
- Barn Owls have noisy babies that are only the size of your thumb at birth, but grow to full adult size in one month.
- Owls, being nocturnal, hunt mostly by hearing. Barn Owls have the best hearing because they have the most clearly defined facial discs.
- Female raptors are bigger than the males, usually about one-third larger (“because they do all the work, like we girls”), but neither weighs more than a few pounds. That is because they are mostly feathers and their bones are hollow (“that’s why they can fly, unlike us”).
- Feathers from raptors cannot be kept by anyone other than Native Americans.

Sky Hunters is funded only by donations. For more information on their work, go to skyhunters.org.

August 10, 2013 Docent Meeting Minutes

Happy Birthday to **Joan Nimitz**, currently reactivating after some time off (see notice on pg. 5).

Docent of the Month: BJ Withall, the “bird bath lady,” and an active, contributing docent.

“Spotlight On”: **Lynn Alley** discussed her interest in the architectural history of the Lodge and the Guy Fleming house along with her plans to develop a walking tour of the two buildings to

share with interested visitors and docents.

Art in the Pines has been authorized by the Board to begin work for 2014. **Jeff Harrison**, who will chair the project, presented a review of the survey taken after the 2013 event and the general plans for 2014. He requested continued docent support and help. He will share survey results via email with the membership. (See his article on pg. 5.)

President's Announcements:

- Received money from TPA for post hole digger to assist Eagle Scout candidates with their qualifying projects. A big thanks goes to TPA!
- Still need Trail Patrol replacement for **Sherry Doolittle**.
- Water station is still being tested through the summer. Decide benefits of expansion over winter.
- Weddings: report suspected non-permitted participants to Ranger staff. Don’t be the enforcer of the rules.
- Requested volunteers to help maintain new striping of road by sweeping every two to four weeks.

Kristine Schindler announced that the next clean-up on Hwy 101 outside the Reserve will be on Friday, Aug. 16th at 8 am, starting from the north end of the south parking lot.

Museum Shop: to coincide with the preceding talk on raptors, **Nancy Woodworth** pointed out items we stock, such as *Molly the Owl* and several owl hand puppets.

Children's Program: Marie announced the start of training for this year on September 13th (see Children’s Program article below).

The meeting was adjourned at 11:20 am.

Docent of the Month

B.J. Withall



Photo by Herb Knüfken



Photo (panoramic camera) by Wes Farmer

Children's Program

by Barbara Justice and Marie Johnson,
Children's Program Directors and
Louis Sands, Children's Program
Coordinator

On August 15th, twenty-two Children's Program docents and prospective docents spent several hours at the Kumeyaay-Ipai Interpretive Center (KIIC) at Pauwai (Poway).

The 5-acre site is rich in Kumeyaay-Ipai local history. The City of Poway began acquiring the various parcels of the Center beginning in 1987 to preserve the significant Native American cultural site. The Friends of the Kumeyaay, the San Pasqual Band of Indians, and the City of Poway have worked together to develop a vision for the property and to begin the development of a replica Kumeyaay village.



Docents and KIIC leader at outdoor museum

The Center's classroom-museum is located on a hillside at the base of large granite boulders. These beautiful boulders helped to discourage early commercial development and were also important to the Kumeyaay settlement. The Kumeyaay lived

primarily on the east side of the boulders for shelter from the prevailing winds. In addition, these boulders gave them the highest vantage point in Pauwai Valley to look out for game and predators.



Eawaa in Kumeyaay Replica Village

After our visit we enjoyed a great lunch at the Hamburger Factory in Old Poway.

On Friday, September 13th, all Children's Program Docents (experienced and prospective) will meet at 10 am in the Library and at the back of the Lodge to share techniques for taking kids out on the trail and to inspect and get props ready for the new school year. For new docents, this is a great opportunity to see what's available to use when the different topics are presented at the benches and out on the trails.

The first day of school programs will be September 26th. We will be able to start signing up on September 2nd for Thursdays and Fridays and also for the first Tuesday of every month starting October 1st.

We are always looking for more docents to join us in this fun and rewarding program. If you are interested, please contact us.

I have always loved being in nature. I spent my summers in Quebec running through the woods, climbing trees and swimming in lakes in the Laurentians. My inspiration for becoming a docent came from Catherine VanderKar, a wonderful educator that I met as an undergraduate student at Penn State University. She moved to California and was a docent for the State Parks near Malibu and Topanga Canyon in the 80s. I moved to California and decided that someday I would follow in her footsteps. The opportunity for me to do so came in 2006 when I was between jobs. I enrolled in the docent training course. The bounty of information, the terrific feeling of giving back to nature while being physically and emotionally refreshed, and the camaraderie I have with both the staff and other volunteers at the Torrey Pines State Natural Reserve have become invaluable to me. I found my niche as the "Bird Bath Lady," cleaning the bird baths (two near the Lodge and one on the Guy Fleming Trail).

I am so very proud and honored to be a docent. Thank you!

Heard in the Reserve

Herewith, the inaugural "Heard in the Reserve" column, a monthly feature of accounts by docents of interesting, humorous, even bizarre encounters in TPSNR.

Three from Frank Burham:

At the TIK, I saw a guy heading down the trail with a large chain saw. Alarmed, I quickly stopped him to ask what he was planning to do with it. He replied that he was a firefighter volunteer and liked to train himself to carry the added weight.

A guy was off-trail in an area that had barriers and closure signs of all kinds. When I questioned him as to why he would climb over all of that, he said, "I wanted to see why you closed it."

A large group was ensconced comfortably in the Reserve having a huge family picnic. When I told them the rules, the reply was, "Well, we saw all these signs everywhere about no food allowed, but there was no sign right here."

From Jack Friery:

I'm always amazed at the number and variety of languages I hear spoken by the visitors to the Reserve. English and Spanish, of course, but also French, German, Russian, Swedish, Croatian, Korean, Japanese, and probably several Chinese languages. But, one day, I heard a young couple speaking to their two little kids in a language I couldn't place at all. Intrigued, I asked them about it. The answer? The only indigenous tongue in Europe. And one that has special resonance for our Reserve, because it provides the root of the word "chaparral." And the proof was when I pointed to the sign that spelled out that word. They said, "we know that word. It's "txapar." Their language? Basque. (*I got to the root of the matter by pronouncing "txa as "sha." Makes sense. – Ed.*)

From Julia Blake:

Gabriel Jardine, age 7 ½, from Coconut Creek, FL, measured his steps from

"the tip" of Razor Point to the TIK, which he proudly reported to everyone in the Lodge: 1,590 steps!

2014 ART IN THE PINES GETS GOING

by Jeff Harrison

It is with excitement and a diversified and new collective mission for the Art in the Pines Festival that we publish our first update and call for volunteers.

Yes, the vote from the Board is to continue to sponsor the 2014 Art in the Pines Festival. Yes, we heard your concerns and received your input. Yes, we have refashioned Art in the Pines to include education and the celebration of the Reserve's importance and virtues. Yes, we are adding an educational component along with a guest speaker's platform. We are including environmental impact information and developing a mentor program for Girl Scouts and Boy Scouts.

Now, all we need is YOU to step forward to complement a robust undertaking and make this a big success... for the Docent Society and for the Reserve. You say "how can I help and be of service" and we say contact **Jeff Harrison** at aip@torreypines.org and let him know your area of interest. Whether it's volunteering for Plein Air, Artist Sign-Up, Music, Food, Scouts Mentoring, Parking, Logistics, Promotions, Recycling, Education, Guest Speakers, or Random Acts of Helpful Support -- we need to get started and we need to include you in upcoming meetings and implementations of our plan. Stay tuned for further updates. Let's make this an event to remember. PLEASE CONTACT JEFF TODAY!!!

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



Happy 93rd B'day to Joan Nimick

by Jeannie Smith

After too long an absence, **Joan Nimick** joined us for the August general meeting, which happened to fall on her 93rd birthday. Joan joined the Docent Society in 1989 and for many years was a leader and very active member. She was director of training and one of the early founders of the Children's Program. Always popular with children and adults, Joan's lively and enthusiastic presentations on the trail and in the Visitor's Center entertained and educated legions. She knew that youngsters are fascinated by scat and created a clear box of specimens for the museum that challenged the viewer to guess the source animal. As a kicker, she included a deposit from a wombat, carried back from her native Australia for the purpose!



Jeannie Smith and Joan Nimick

Photo by Steve Tarkington

On a personal note, I am one of many indebted to Joan, since she is the docent who recruited me when I joined her on a public walk on New Year's Day in 1996. She was also my trainer, and a very able one indeed. Joan says that she has been absent too long and she intends to remedy that and come to our monthly meetings. Welcome back, Joan! We all appreciate your stories, your humor and your wisdom.

Beach Party: Save-The-Date!

Join Docents and Staff for a fun end-of-the-summer season Potluck Beach Party!

When: Wednesday, September 18, 2013, 4 to 8 pm.

Where: At South Beach just to the left of the stairway after the entry kiosk.

Please bring a dish to share and your own beach chair, plate, eating utensils, and drinks.

We'll have tables set up for everyone to set their food on.

Bring a musical instrument for a sing-along!

Guests are welcome.

Remember, no alcohol or glass items are allowed on the beach.

Lisa Urbach, TPSNR Ranger

A TPSNR TWILIGHT SAGA

by Walt Desmond

"Twilight - a time of pause when nature changes her guard. All living things would fade and die from too much light or too much dark, if twilight were not."—Howard Thurman

We know summer days are longer, but even after sunset do the skies remain lighter longer? Astronomically, "twilight" is the period when the sun is between 0 and 18 degrees below the horizon (morning or evening), with the atmosphere refracting indirect sunlight from the sun already set, or not yet risen.

A complex trigonometric formula describes our sun's path (including twilight) taking into account the tilt of the earth's axis, the date and latitude. The web provides great tools for this such as SUNCALC, suncalc.net : enter date and location

(or use the built-in GPS), and see the sun's path for your location superimposed on a Google Earth map/photo. For example, for TPSNR on June 21 (summer solstice, the longest day of the year), SUNCALC shows the sun rising over Ramona and 14+ hours later setting over Catalina; whereas on December 21, the shortest day/winter solstice, the sun rises over Tecate and in 10 hours sets beyond San Clemente. What does SUNCALC say about twilight? We see that twilight length changes through the year, longest at the summer solstice, shortest at the September and March equinoxes, and in between at the winter solstice. At Torrey Pines (latitude 33°N) this range is from 83 minutes on March 21 and September 21 to 102 minutes on June 21, with 88 minutes on December 21.

Thus the skies, after sunset, do stay lighter longer in the summer, although perhaps surprisingly the twilight length increases again somewhat in mid-winter! However, we actually see a light sky much shorter than the above times indicate. This apparent discrepancy stems from the definition of "twilight." The sun's twilight descent 18° below the horizon is in three 6° phases:

-civil twilight: sky light enough to be considered daylight for various legal requirements (driving, lighting, some crime definitions)

-nautical twilight: sufficient light for mariners to see the horizon and bright stars — enabling navigation readings; close-up details and colors are difficult to distinguish

-astronomical twilight: sky is dark to our eyes, but dimmer stars aren't yet visible

If we exclude the darkest, astronomical phase in our visual definition of twilight, then SUNCALC tells us the range of twilight duration at Torrey Pines is 53 minutes (March, September) to 63 minutes (June), much more consistent with our observations.

Recalling that twilight depends on latitude, we would find in Seattle a twilight range (excluding astronomical) of 67 to 98 minutes. Further north, even more extreme: in Prince Rupert, BC (55°N) twilights vary from 180 min (June) to 82 min (September) to 96 min (December).

Have fun with other internet resources. Animation of the sun's path -- and your shadow -- for any date and latitude:

astro.unl.edu/naap/motion3/animations/sunmotions.html; an iPhone app at juggleware.com/iphone/sol/; or try googling "axial tilt animation" or "World Clock Sun Calculator."

Finally, observations, calculations, and, yes, Google, show why twilight duration changes from day to day and with distance from the equator: the setting sun doesn't sink the 18 degrees below the horizon perfectly vertically, but moves at an angle changing with date and latitude. At the equinoxes, the path is steepest and the 18° drop is fastest. At the solstices, the path is flatter making the sun's drop slower — and twilight longer.

Further twilight thoughts:

- "Crepuscular" animals and plants are active or otherwise function specifically in twilight ("vespertine," if evening; "matutinal," if morning). Do we have any at TPSNR? Why are they crepuscular?¹

- Torrey Pines is close to 33°N: Who else in the world sees our same sun path and twilight?²
- Why is there no twilight on the moon?³
- Earth's axial tilt determines the sun's path, twilight length and our seasons. What would life be like without it?⁴

¹ Probably by their name Evening Primrose, Four O'clock, Morning Glory, Nighthawk, Night Heron; bats (Family *Vespertilionidae*). Also, by observation, bobcats, coyotes, foxes, some matutinal bee species. Others??

² Madeira, Tunisia, Syria, Golan Heights, Iraq, Afghanistan, India, Sichuan; also Louisiana, South Carolina, San Clemente Island and Bermuda (almost)

³ Twilight is a result of atmospheric refraction of sunlight; no atmosphere on moon means there is no twilight, just day, then night!

⁴ Seasons would not change over the year—always summer at the

equator, always winter at the poles. Day and night length would be 12 hrs everywhere. This would have profound impacts on crops, plant/animal/human distribution, diseases, soil fertility, cultural aspects.

150th Anniversary California State Parks

California State Parks will be celebrating their 150th anniversary in 2014. There is a self-standing display in the Lodge Museum facing the west wall near the back door. We also have a banner hanging outside on the front wall of the Lodge. For more information on the history of the parks and upcoming events, go to www.parks.ca.gov.



Torrey Pines Docent Society Bird Survey: August 3, 2013

Number of species: 60

Gadwall 12	Red-necked Phalarope 10
California Quail 11	Heermann's Gull 16
Pied-billed Grebe 1	Western Gull 15
Western Grebe 1	California Gull 16
Brandt's Cormorant 1	Caspian Tern 3
Double-crested Cormorant 9	Forster's Tern 4
Brown Pelican 80	Royal Tern 14
Great Blue Heron 3	Eurasian Collared-Dove 2
Great Egret 4	Mourning Dove 2
Snowy Egret 8	Greater Roadrunner 1
Osprey 1	Anna's Hummingbird 28
Red-tailed Hawk 1	Rufous/Allen's Hummingbird 4
Whimbrel 17	Nuttall's Woodpecker 5
Long-billed Curlew 2	American Kestrel 3
Sanderling 8	Peregrine Falcon 1

Black Phoebe 9	Spotted Towhee 9
Ash-throated Flycatcher 2	California Towhee 43
Cassin's Kingbird 4	Savannah Sparrow 2
	Song Sparrow 11
	Black-headed Grosbeak 3
	Red-winged Blackbird 3
	Brewer's Blackbird 7
	Hooded Oriole 3
	House Finch 88
	Lesser Goldfinch 46
	House Sparrow 2

Observers: Blair Francis,
Herbert Knüfken, Kathy
Dickey, Jack Friery, Bob
Glaser, and Anonymous



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