



# TORREYANA

THE DOCENT NEWSLETTER FOR  
TORREY PINES  
STATE NATURAL RESERVE

Issue 485

January 2026

## Another Successful Holiday Party

by Joan R. Simon; photos by Herb Knufken

Much to the delight of the more than 130 attendees, the holiday potluck party on December 13 was held again at the beautifully appointed hall at St. James Church in Solana Beach. The food was sumptuous and delicious as always, the mulled wine as warming as ever, and John Bowe soothingly serenaded us on his synthesizer keyboard.



In addition to awards for many deserving docents (see page 3), there was an exciting new feature this year: a trivia game of birds, plants, and Torrey Pines history – things we docents surely should know. Each table made



up one team, and while it wasn't quite as easy as we might have thought, it was a lot of fun. The winning table consisted of (drumroll) .... **Barbara Wallach, Jeannie Smith, Susan Elliott, Lillian Lachicotte, and Gerry Lawrence.** And they

have pins to prove it. Congratulations to this knowledgeable group of docents!

## Docent General Meeting

**Date:** Saturday, January 10, 9:00 am

**Location:** Over Zoom only. A link will be sent to all docents, and a recording of the meeting will be available at a later time.

**Speakers:** Sasha Helm & Ashley Salazar from Project Wildlife

**Topic:** *Project Wildlife: Understanding & Co-existing with Wildlife*

Project Wildlife of San Diego Humane Society (SDHS) is one of the largest wildlife rehabilitation programs in the U.S. This presentation will cover their mission, what species are most commonly rehabilitated, some general statistics about the patients, what to do if you find wildlife, and recommendations for being a wildlife steward.

**Sasha Helm** is the Admissions Specialist for Project Wildlife and has worked at SDHS for seven years. **Ashley Salazar** is a Wildlife Rehabilitation Specialist for Project Wildlife and has been with SDHS for four years. They both have worked with domestic species and wildlife.

Thanks first and foremost to the party committee for making all of this happen: **Barbara Gunning** (chair), **Christie Zilberman, Kristi Griffith, Pam Burdt, Jamee Patterson, Kyle Gill, Sally Stoffel, and Mary Makowski.** The lighted centerpieces were crafted by **Leslie Allem, Luz Chung, and Cami McCook, and Marci Rimlinger** decorated the hall.

Lifetime memberships (10 years of service) were awarded to eight docents: **Debi Buffington, Walt Burkhard, Susan Elliott, Sue Lange, Nancy Novak, Nancy Richardson, Tania Popov, and David Walker.**

(Cont. on pg. 3.).

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 Angela Bailey and Roger Isaacson. Submissions are due on or about the 20th day of the preceding month and may be emailed to

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**Rangers:** Stephanie Adams, Emily Garcia, Kyle Knox, Jesus "Chuy" Salinas Rodriguez

**Interpret 1:** Rowan Jackman

**Sr. Interpretive Park Aide:** Lila Beth Scott

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FLASH - Don't forget to donate your nature and conservation magazines to the Museum Shop.

## **President's Message:**

### **Looking Back Before Looking Forward to a New Year**

**A**s we look forward to getting back to the Reserve in March, I want to recognize some of our most productive society members.

**Evelyn Vance** had the most hours at the TIK in 2025. Her unbounded enthusiasm shines through in every interaction, creating meaningful experiences for visitors, including the youngest ones, from all walks of life. It is clear that they really do appreciate her, by the smiles and gifts she receives from them. We applaud all she does and the positive spirit she brings to every program she participates in at the Reserve.

**Craig Carlisle** had the most hours of Roving Interpretation in 2025. Craig gets to the Reserve at 7 am on most days of the week. He puts his heart and energy into every roving session he does. His passion for nature and his talent for guiding visitors make each experience memorable. The Docent Society is grateful for not only the knowledge he shares but the kindness he brings to our community.

**Rick Vogel** had the most hours as a Seabee in 2025 while he led the group during another productive year. There is no maintenance job that he avoids to make things work at the Reserve. Working with him is always a lot of fun.

I also wanted to thank the chairs of the New Docent Training Review Committee **Pao Chau** and **Barbara Wallach** as well as the chair of the New Docent Training Operations Committee **Susan Elliott** for all their extraordinary contributions this year.

The members of the review committee included **Cres Torres, Evelyn Vance, Allan Heryet, Gabriele Wienhausen, Ingo Renner, and Julia Halter.**

Once again, I want to thank **Barbara Gunning**, a true and thoughtful leader, and her team, who made the holiday potluck party such a great event! The group consisted of **Kyle Gill, Luz Chang, Marci Remlinger, Sally Stoffel, Kristi Griffith, Jamee Patterson, Christina Zilberman, Leslie Allem, Pam Burdt, Cami McCook, and Mary Makowski.**

Matt Xavier

President, TPDS



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(Cont. from pg. 1.)

President **Matt Xavier** presented the Docent of the Year award to **Medi Denker** for her leadership of the CARE program and for her dedicated work in many docent programs, including Lodge hosting (see below), the Museum Shop, the Ambassador program, and the General Meetings refreshment committee.

Ranger Stephanie Adams announced the State Parks Golden Poppy Award will be given to **Eileen Conway** in recognition of her 19 years answering inquiries from the public (on our website). With the help of Supervising Ranger Dylan Hardenbrook, Eileen has fielded questions ranging from "Can I have a picnic with alcohol at the Reserve?" ("No!") to "Where is the Broken Hill Trail?"

**Bob Friedman** was given the Fleming Leadership Award for spearheading the changes to the bylaws, establishing public walks at the beach, and improving the Roving Interpreter program, including the Ambassador stations.

President **Matt Xavier** thanked the outgoing, incoming, and continuing members of the Docent Society board. Gift certificates of \$25 were given to docents who had logged the most hours in core docent programs.

Lodge: **Medi Denker** (thanks to runners-up **Coach Vance**, **Dee Huang**)

BLIK: **Ray Barger** (**Rosemary Wareham**, **Pam Burdt**)

Youth Program: **Wayne Kornreich** (**Patty & Bruce Montgomery**)

TIK: **Coach Vance** (**Dee Huang**, **Barbara Wallach**)

Public Walks: **Ron Styn** (**Gary McCook**, **Coach Vance**)

Roving Interpreter: **Craig Carlisle** (**Gale Darling**, **Allan Heryet**)

Museum Shop: **Valerie Thomas** (**Greg Howard**, **Jeannie Smith**)

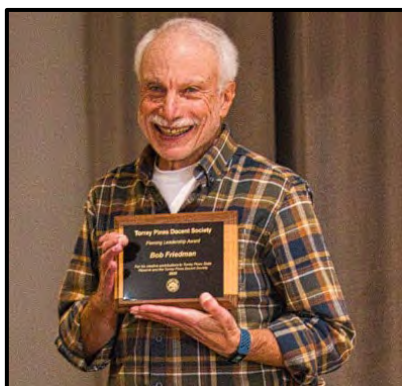
Special Walks: **Bruce Gray** (**Mukesh Mehta**, **Cres Torres**)

Seabees: **Rick Vogel** (**Thomas Stehlik**, **Mukesh Mehta**)

Whacky Weeders: **Pao Chau** (**Diane Russell**, **Darby Lewis**)

Rat Patrol: **Dee Huang** (**Steve Neal**, **Gabriele Wienhausen**)

Mindful Walks: **Cres Torres** (**Santosh Nichani**, **Lorraine Trust**)



## Docent of the Year: Mediha Denker

Photo by Herb Knufken

**G**rowing up in Istanbul, Türkiye, I was very much a city girl. I loved the trees and flowers in our gardens and parks, but "nature" mostly meant the seas that surrounded us: the Black Sea, the Aegean, and the Mediterranean.

When my daughter was accepted to Cornell University to study engineering, I followed her and lived in New York for five years. Later, after she completed her first master's degree, she moved to San Diego for her first job. I came to visit a few times, and we both fell in love with the city and its beautiful surroundings - its light, its energy, and the feeling that you could breathe a little deeper here.

After she completed her other degrees and I received my green card, we moved to San Diego in 1995. Not long after, we discovered Torrey Pines and began hiking the Reserve - mostly early mornings on weekends. For a long time, we simply walked the trails. We didn't even visit the Lodge, and we hadn't yet met a single docent.

Then one morning years later, out of the fog appeared a docent in uniform - a woman with red hair named Gloria Garrett. Something about that moment felt like an invitation. I started asking questions, and she told me about the docent program. I immediately knew this was something I wanted to be a part of. And I can easily say that joining the Torrey Pines Docent Society has been one of the best decisions of my life. I love our Reserve and am honored to serve and protect it.



## A Fond Farewell to Dylan Hardenbrook

by Joan R. Simon; photos by Herb Knuffen

Supervising Ranger Dylan Hardenbrook retired at the end of 2025. He started work as Supervising Ranger at Torrey Pines on September 1, 2010, after seven years as a ranger in the North Sector campgrounds of San Diego Coast District, with responsibilities including the maintenance of all North Sector vehicles. The 15 years he has been here have been filled with positive changes and improvements too numerous to enumerate. Here are a few examples.



With Dylan's support, the Children's Pavilion was put up in 2018 (see photo below); the TIK was launched in 2012, evolving into the essential interpretation center it is today; the steps at Parry Grove were redone (and are at least a bit less steep now); eye-rod fencing was added to the trails in the main Reserve; the BLIK was established at North Beach; cycling downhill from the Lodge was banned; the North Fork of the Broken Hill Trail was made ADA compliant; a bench and railing were added to High Point; a new shed with shelving was procured for North Beach, replacing the old storage container; and metal maps were placed at the trail heads.



The Lodge also saw a rejuvenation under Dylan's guidance, with new taxidermy, a non-polluting fireplace, historically accurate lantern lights on the front porch, signage for the museum displays, consistent pest control, and a new Lodge desk and merchandise cabinets.

Dylan gets credit for noticing in 2015 that the inner right pillar supporting the entryway to the Lodge was failing and had it shored up for 10 years until work on renovating the Lodge finally began this year.

During Dylan's tenure the number of rangers increased from four to five, following a year-long survey designed by SDSU which showed that the annual visitor count at Torrey Pines was 3.1 million, a big jump from the 1.9 million visitors recorded the previous year using an old methodology. As a result, California State Parks finally authorized a fifth ranger (Stephanie Adams), who started working in January 2020.

Docents will remember when we were banished from the Reserve during the pandemic. Dylan emailed us photos showing how the animals in the Reserve had reclaimed the trails and were flourishing. He arranged a "docent day" on June 23, 2020, when we were allowed back into the Reserve for one glorious day.

Dylan even designed the sign at the entrance to the path leading up to the Lodge that welcomes visitors and identifies the Torrey pine as the "Nation's Rarest Pine Tree."

The many docents who worked with Dylan over the past 15 years have greatly appreciated his steady leadership and unwavering support of our beloved Reserve and the Docent Society. He will be truly missed.

### Whale Watching Trip

**Date:** Thursday, January 29, 2026

**Time:** 10:00 am to 1:00 pm; check in at 9:30 am (in the Bait & Tackle store)

**Departure Location:** Legacy Whale Watch  
1717 Quivira Rd, San Diego (Mission Bay)

**On Board:** restrooms and a snack bar with adult & regular beverages

**Attire:** warm layers; if foggy/misty, wear a rain jacket; sunglasses, hat and gloves are recommended

**Cost:** \$34/person: Online (preferred), <https://www.sdwhale.com> (click Book Now and scroll through to the 1/29 cruise). Phone: (619) 309-1680. Friends and family (including children) with tickets are welcome.

**Cancellation:** Phone call required (no email or text). Up to 24 hours before departure time, a full refund less 10%.

**Ray and Jane Barger** and other SD Natural History Museum whaler naturalists will be on board.

For more information, see GoogleGroups.

## The Green Flash: Fact or Myth?

by Cresencio Torres

For years, sunset observers up and down the California coast have traded stories about the elusive *green flash*, a brief emerald glimmer that appears as the sun slips below the horizon. Some call it a myth; others swear they have seen it. Here at Torrey Pines, where the ocean and sky form a crisp horizon line, the question often resurfaces: Is the green flash real, or is it coastal folklore?

Scientifically, the green flash is real, although rarely witnessed. The effect occurs during the final seconds of sunset, when the Earth's atmosphere acts as a refracting lens. Sunlight, composed of a spectrum of wavelengths, bends as it passes through layers of air with differing densities. Shorter wavelengths – blue and green – are refracted more strongly than the longer red and orange wavelengths. Most blue light is scattered before reaching our eyes, leaving green as the shortest wavelength still visible.

When atmospheric conditions align – clear air, minimal haze, and an unobstructed horizon – the last sliver of the sun can momentarily separate into colors. For one to three seconds, the sun's upper rim flashes green before it disappears entirely.

Why, then, is the green flash so seldom seen? The marine layer, moisture, airborne particulates, and even small surface waves can distort or blur the horizon, disrupting the delicate optical conditions required. Human perception adds another layer of difficulty; blinking or adjusting focus at just the wrong moment can cause you to miss the flash.

Its rarity is precisely what fuels the discussion. The green flash sits at the intersection of science and mythology, fully explained by physics yet elusive enough that many sunset watchers have never observed it. But for those who stand at day's end watching the sunset, the possibility of witnessing that brief burst of emerald light keeps the mystery alive.

**Photography Tip:** To increase the chances of capturing a view of the green flash on your cell phone, open your camera app and begin taking photos every 10 seconds until the sun meets the horizon and sets. Later, enlarge the final frames; the green flash often appears more clearly in photographs than to the naked eye.

*References available on request.*

## Let It Snow! Let It Snow! Let It Snow! ... at Torrey Pines?

by Judy Schuman, TPDS Historian

Usually the only snow we see at Torrey Pines is the occasional view of it on the Cuyamaca or Laguna Mountains. But on December 13, 1967, we actually had snow in our park!

Earlier this year, I was tasked with examining about 3,000 donated slides of our park, some dating back to the early 1960s. The TPDS will eventually digitize those that are deemed worth keeping. I have looked at slides of trails, the Lodge, rangers and staff, docents, the beach, the Extension, and Santa Rosa Island. But I was in for a big surprise when I came across six slides from December 13, 1967, when it snowed in Torrey Pines.

The next day the headline in the *San Diego Union* read "City Gets A Surprise – Wrapped In White." Part of the story read that the icy blast covered trees and cars with snow in Del Mar, Encinitas, Carlsbad, Fallbrook, Pine Valley, Campo, Vista, and La Jolla. Big, soft snowflakes teased downtown San Diego, North Park, East San Diego, Clairemont, and University City.

The headline in the *Evening Tribune* read "Cold Snap Lingers; More Snow Possible." I also found articles about our snowfall in the *Los Angeles Times* and as far away as the *Bangor (Maine) Daily News*.

Can you just imagine a truly snowy day in our park? The trees would be "decorated" with white fluff, with pinecones adding a colorful accent. There would be a snow lift from the lower parking lot to the Fleming residence. Children would be sledding down the park road. And most importantly of all, there would be hot chocolate and hot toddies served in the Lodge.



## Lodge Restoration Continues

by Corbin Schuppert, CA State Parks Restoration Specialist

Restoration of the Lodge entrance continued during November and December, but we had a short delay in procuring the proper materials to continue our re-plastering work. Here's a little background. During the construction of the Lodge in 1922-23, the structure's adobe walls were coated with a lime plaster with the addition of Portland cement. Subsequent repairs also utilized the 20th century technique of cementitious plastering over an earthen substrate (adobe blocks). At the time, it was thought that the relative "weakness" of earthen blocks compared to stone or cement needed to be compensated for by a strong cement plaster covering. It is now understood that these alterations to traditional earthen structures are counterproductive. An adobe building does need a protective outer layer, especially if the building lacks any overhanging roof eaves; however, the outer layers of plaster should always be softer and more flexible than the layer beneath them.

The Natural Hydraulic Lime (NHL) 2.0 we are using for the re-plastering is the softest lime plaster available, very close in its PSI to the adobe block walls. It is also very hard to source and available only from vendors on the East Coast. By late November the last bags of NHL 2.0 from the original material ordered back in May were used up, and a new pallet of material arrived only in mid-December.

### What is Natural Hydraulic Lime (NHL)?

Natural hydraulic lime (NHL) is produced by heating (calcining) limestone that naturally contains clay and other impurities. NHL is classified by its binding strength and setting time.

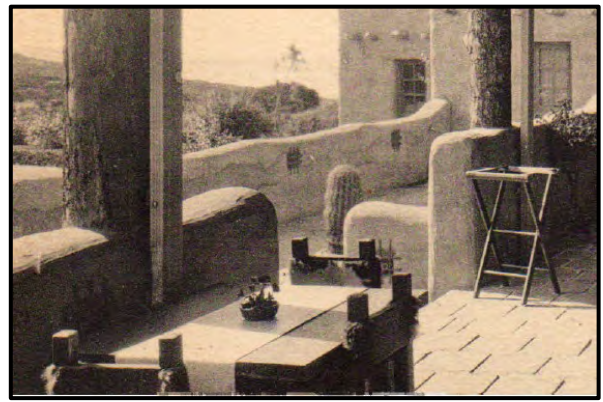
**Feebly Hydraulic (e.g., NHL 2.0):** Lowest strength, slowest set, highly flexible.

**Moderately Hydraulic (e.g., NHL 3.5):** Good all-around performance for general masonry.

**Eminently Hydraulic (e.g., NHL 5):** Highest strength, fastest set, ideal for severe conditions

While we waited for the plaster shipment, more detail work continued under the porch. Demolition work in the beginning phases of the project had revealed some interesting though long-buried architectural features of the Lodge entrance, and in December we began to reestablish and showcase a series of lighting features and ornamental ironwork that originally graced the entry walkway and stairs.

Historic grille lights can be seen in the photos below, with four that illuminated the stairs and twelve more on either side of the entrance, embedded in the two short walls of the porch area.



A technical challenge of planning new electric lines to the abandoned lights has gotten underway, as "channels" in the adobe walls were cut out to allow electrical conduit to be placed and mortared into the wall before the finish coats of plaster are applied.

An historic iron grille was also extracted from the porch wall (see photo sequence below).



We took the ironwork to Old Town State Historic Park so that, hopefully, the Seely Yard blacksmiths can reconstruct the deteriorated ironwork.

Finally, winter rains of the last two months, as well as an upcoming storm likely to land in San Diego around Christmas, have led to much preparation and "weatherproofing" of the Lodge and several other active historic jobsites around the district. A single short but intense rain event can cause serious damage to unprotected and vulnerable adobe structures. At the Lodge, an evolving system of plastic "curtains" has been put in place to protect unfinished plastering and redirect water off the face of the walls. Further precautions and weatherproofing will continue as we head into the likely wet weather of January and February.

# Chaparral Plant Fire Recovery Strategies

by Ingo Renner

On a misty mid-December morning, about 35 docents gathered at the recently opened Margaret Fleming Trail in the Extension for an OAKS walk led by **Ingo Renner, Barbara Wallach and Gary McCook**. The trail had been closed following the June 2024 fire that killed many plants in the Extension (August 2024 [Torreyana](#)). A year later, an OAKS walk on the Red Ridge Trail in the upper Extension saw the early comeback of some plants after the fire (August 2025 [Torreyana](#)). Now, a year and a half after the fire, many more plant species are thriving. Here's Ingo's explanation of how plants recover after fire.

Historically, fires have occurred naturally in the Southern California Chaparral Biome every 30 to 150+ years. These were ignited by lightning strikes and occasional spontaneous combustion of dry organic fuel. More recently, fires resulting from human activity and global warming may narrow those intervals to 20 years or less, thus destroying indigenous biodiversity and turning once-thriving ecosystems into non-native grasslands.

*Fire followers* are native plants with specialized adaptations that allow them to regenerate and grow after fires. They generally follow one of three main strategies outlined here.

## Obligate Seeders

When fire kills the entire plant, propagation relies entirely on seed banks that may be decades to more than 100 years old. These seeds get dispersed by ants, birds and other animals, wind, water, and explosive dehiscence (seed capsules popping open). Heat from fire cracks open the hard outer hull of the seed (*scarification*), allowing water and oxygen to enter. Smoke from charred wood contains chemicals called *karrikins*, which act as hormones that stimulate germination of the seeds. Ash provides slow-release fertilizers (potassium, phosphorus, nitrogen, calcium) for the seedlings. Fires also clear away brush, providing more sun and space for young plants to grow.

Examples: bush poppy (*Dendromecon rigida*); wart-stem ceanothus (*Ceanothus verrucosus*)

## Obligate Resprouters

These plants survive solely by re-growing from protected underground structures such as root crowns and rhizomes. This strategy allows them to live for centuries, reproducing clonally over many fire cycles (as contrasted with obligate seeders, which depend on new genetically diverse seedlings after each burn). Resprouters tend to have larger, deeper root systems that store water and nutrients underground to evade a passing fire. Their seeds often get eaten by rodents and birds, which precludes their stockpiling of seed banks.

Examples: toyon (*Heteromeles arbutifolia*), scrub oaks (*Quercus dumosa* and *berberidifolia*), Mojave yucca (*Yucca schidigera*), yerba santa (*Eriodictyon crassifolium*), spiny redberry (*Rhamnus crocea*)

## Facultative Seeders

These plants have a higher resilience for post-fire regeneration because they can sprout from seeds as well as from underground vegetative structures. They combine traits of both obligate seeders and obligate sprouters.

Examples: chaparral mallow (*Malacothamus fasciculatus* ssp. *fasciculatus*), chamise (*Adenostoma fasciculatum*), laural sumac (*Malosma laurina*), lemonadeberry (*Rhus integrifolia*), flat-topped buckwheat (*Eriogonum fasciculatum*), sages (*Salvia*), California sagebrush (*Artemisia californica*), bladderpod (*Peritoma arborea*), Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*), mission manzanita (*Xylococcus bicolor*)

## Geophytes

Geophytes are perennial plants that survive via underground storage organs like bulbs, corms, tubers and rhizomes. They have the ability to remain dormant underground and resprout after a fire. Many reflower profusely after a fire.

Examples: large-flowered phacelia (*Phacelia grandiflora*), mariposa lily (*Calochortus*), shiny biscuit root (*Lomatium lucidum*), blue dicks (*Dichelostemma capitatum*), star lily (*Zigadenus fremontii*), Cooper's rein orchid (*Piperia cooperi*)



## CEED: Living Coast Discovery Center

by Rachel Scherba

The 18 docents who attended the CEED event at the Living Coast Discovery Center on November 30 enjoyed learning about the many animals housed at the Center, including an Atlantic sea turtle and multiple birds and sea creatures. After the tour, some of the docents took a sunset walk on the grounds. We hope to host the Living Coast docents for a wildflower walk at Torrey Pines in the spring.



## CEED: Barona Cultural Center and Museum

by Mukesh Mehta

How is Irving Gill, a famous San Diego architect known for structures like the Ellen Browning Scripps residence (now the Museum of Contemporary Art) and the Marston House in Balboa Park, connected to the Barona Indian Reservation? In 1932 Gill designed a church – built first as a focal point for the community – along with several homes for the Barona Band of Mission Indians. Some of these buildings, including the church and a few cottages, remain on the reservation.

On a gorgeous day with the temperature in the 80s, seventeen Torrey Pines docents attended the December 10 tour. We were welcomed by Laurie Hedley, Museum Director and Curator at Barona Cultural Center and Museum. She told us that the Barona Band is part of the Kumeyaay/Diegueno or Ipai Native Peoples. They have lived in San Diego County for thousands of years, maintaining a sustainable connection to the diverse ecosystems of the coast, valleys, deserts, and mountains.

**Summer (coast):** During the warmest months, the Ipai settled along the coastline. They focused on gathering

shellfish, salt, kelp, and seaweed, utilizing the ocean's bounty.

**Fall (mountains):** In the fall, the Ipai moved to higher elevations to harvest acorns. Ms. Hedley explained the use of granaries for long-term storage. All families working as one clan gathered at the *morteros* (grinding holes) to process acorns into flour. These grinding stones served as multi-generational campsites; the depth of the hole in the rock suggests how many generations used the same site.

**Winter (deserts):** To escape the mountain snows, the Ipai moved to the desert in the winter. Here they gathered desert-specific plants for medicine and food, and engaged in hunting animals, including snakes.

**Spring (valleys):** As the inland flora bloomed after the rain, the Ipai moved to the valleys. This season was dedicated to gathering essential resources like fresh water, willow, deergrass for basketry, and specific clays used to make pottery.

Ms. Hedley emphasized that while the Ipai were self-sufficient, they maintained a robust trade network. Obsidian was their most significant trade commodity, alongside salt harvested from the coast. These items allowed them to exchange goods across different geographical territories, linking indigenous groups throughout San Diego County.

Our visit culminated with a tour of Barona's outdoor native plants garden, which contained plants traditionally used by the Ipai for medicine, food, and tools. These included mission manzanita, white sage, toyon, lemonadeberry, chamise and coast prickly pear.

The visit provided a profound look at the Ipai's adaptation to the *seasonal clock* by which they lived. Their ability to adapt to four distinct topographies – coast, valley, desert, and mountain – demonstrates a sophisticated understanding of land management and environmental stewardship that has allowed their culture to survive for thousands of years.



## Bee of the Month:

### Arizona Small Carpenter Bee

by Jess Mullins; photo by Craig Chaddock

The Arizona small carpenter bee (*Ceratina arizonensis*) is the smallest of the small carpenter bees found in San Diego County. If you have ever noticed the minute flowers of salt heliotrope (*Heliotropium curassavicum*), this photo illustrates just how tiny these bees are. They are easily distinguished from the other local small carpenter bees by their patent-leather-like black body, striking blue eyes, and distinct yellow face. Other species tend to have metallic blue coloration and dark eyes. *Ceratina arizonensis* is most commonly found in spring and fall months, but it has been spotted in January at the Reserve, likely in response to a spell of warm Santa Ana winds.



This species is primarily restricted to southwestern North America and has been introduced to the Hawaiian Islands. Many bee species that occur outside their native ranges are cavity nesters, a nesting strategy shared by small carpenter bees. They earn their common name by hollowing out the soft pith of dead or broken plant stems to construct their nests. Interestingly, only about 30% of the world's more than 20,000 bee species are cavity nesters, yet most species introduced outside of their native range are cavity-nesting. This can be attributed to the ease in which their nests are inadvertently transported, which may explain their accidental introduction to the Hawaiian Islands.

Bees in the genus *Ceratina* provide an especially useful system for studying the evolution of social behavior. In many of the species featured in our previous articles, bees are solitary – each female builds her own nest, lays her eggs, and never encounters her offspring as adults. Small carpenter bees, however, are often classified as *subsocial*. Subsocial mothers remain in the nest to protect developing offspring, and after their offspring reach adulthood to assist with nest maintenance alongside their daughters.

This social structure shares some similarities with more familiar social systems, such as honey bees, but it differs in important ways. In small carpenter bees, mothers assist with nest maintenance, whereas honey bee queens focus exclusively on egg-laying. Social behavior in *Ceratina* has not been studied in detail for all species and can vary even within a species depending on food availability, nesting resources, and predation pressure. Although the social behavior of *C. arizonensis* has not been specifically documented, its close relatives are subsocial.

## Bird of the Month:

### Bushtit

by Robert James; photo from Evergreen State College

Sometimes we do not appreciate the wonder in nature that is visible to us every day. Bushtits (*Psaltirparus minimus*) are tiny birds, usually seen in small flocks quickly moving through shrubs, often hanging upside down. They are one of the smallest songbirds in North America. These birds are plump and large-headed, with long tails and short, stubby bills. As foliage gleaners, they eat mostly small insects, along with seeds and berries.

Ranging over most of the southwestern U.S., the Pacific coast, and into Central America, they are considered a common resident species in our area and can be seen in coastal sage scrub, chaparral, and suburban yards. Unlike many species, they are not sensitive to habitat fragmentation, moving from place to place. As you would correctly infer, bushtits are considered a low conservation concern. Our monthly bird counts have ranged from about 30 to 60 individuals, and there are many eBird records for our area, especially along the coastal plain.

Listen for their quiet but consistent call notes and look for their quick movements in shrubs, as they are tolerant of people. They are sometimes mistaken for the similar looking, federally threatened California gnatcatcher (*Polioptila californica*), which also occurs at the Reserve, but gnatcatchers do not flock.

In early spring the bushtit flocks break into pairs for nesting. They build a hanging nest out of soft materials such as grasses and spider webs. Nests such as these have been noted near the Lodge in past years and are pointed out in Youth Program walks.

Cooperative breeding has been observed in a small minority of bird species, such as the locally occurring acorn woodpecker (*Melanerpes formicivorus*). It is thought that environmental constraints force birds of some species into breeding groups because the opportunities for younger birds to breed independently are severely limited. Bushtits exhibit this uncommon behavior: a breeding pair often has helpers at the nest that aid in raising the nestlings.



## Utility Project Is Underway

by Rowan Jackman, Interpreter 1; photos by Dylan Hardenbrook

The heavy construction is finally underway! The construction crew has been hard at work at South Gate installing protective straw wattles to safeguard our sensitive habitat from construction debris. A trench for the piping that will connect the main sewer line into the park is currently being excavated, and portions of the road are being removed. Our dedicated maintenance team is also making great use of the project by repurposing the fill dirt from the trench to help restore trails.



## Torrey Pines Book Club

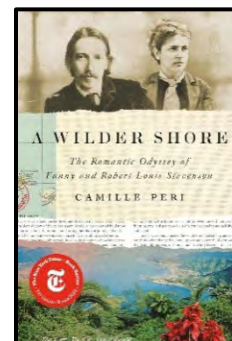
We will meet via Zoom at our regularly scheduled time. Please notify **Annette Ring** if you plan to participate or if you need any extra help getting connected.

**When:** Tuesday, January 13, 1:00 pm

**What:** *A Wilder Shore: The Romantic Odyssey of Fanny and Robert Louis Stevenson* by Camille Peri

Amazon says:

Robert Louis Stevenson was an ambitious but drifting writer from a prominent Scottish family. Fanny de Grift was a tough Nevada silver miner's wife, with children, when they met. From their first encounter in France in 1876, Fanny and Louis's partnership transcended societal expectations to become a literary union that was progressive, eccentric, and tempestuous. Seeking creative freedom, inspiration, and better health for Louis, who battled chronic illness, they embarked on a whirlwind journey around the world, from the bohemian enclaves of Europe to the shores of Samoa. Amid the currents of their stormy yet loving relationship, Fanny wrote colorful accounts of her life, contributed to Louis's work and kept him alive to pen classic novels such as *Treasure Island*, *Kidnapped*, and *The Strange Case of Dr. Jekyll and Mr. Hyde*.



All TPDS docents are welcome. Meetings usually last an hour and a half.

**February 10:** *The Light Eaters: How the Unseen World of Plant Intelligence Offers a New Understanding of Life on Earth* by Zoë Schlanger

## Torrey Pines Docent Society Bird Survey: December 2025

**Number of species: 86**  
**(+2 other taxa)**

Blue-winged Teal 2  
Gadwall 8  
American Wigeon 27  
Mallard 21  
Northern Pintail 27  
Green-winged Teal 1  
Redhead 2  
Lesser Scaup 14  
Bufflehead 8  
Red-breasted Merganser 2  
Ruddy Duck 4  
Eurasian Collared-Dove 2  
Mourning Dove 27  
White-throated Swift 18  
Anna's Hummingbird 29  
Allen's Hummingbird 20  
American Coot 3  
Hudsonian Whimbrel 6  
Long-billed Curlew 11  
Marbled Godwit 9  
Willet 8  
Greater Yellowlegs 1

Heermann's Gull 7  
Ring-billed Gull 1  
Western Gull 14  
California Gull 1  
Royal Tern 1  
Pied-billed Grebe 7  
Western/Clark's Grebe 115  
Pacific Loon 3  
Common Loon 2  
shearwater sp. 50  
Double-crested Cormorant 13  
Black-crowned Night Heron 1  
Snowy Egret 4  
Great Egret 5  
Great Blue Heron 5  
Brown Pelican 32  
Turkey Vulture 1  
Osprey 3  
White-tailed Kite 1  
Cooper's Hawk 1  
Northern Harrier 1  
Red-shouldered Hawk 3  
Red-tailed Hawk 6  
Great Horned Owl 2  
Belted Kingfisher 1  
Downy Woodpecker 1

Nuttall's Woodpecker 10  
Northern Flicker 3  
American Kestrel 8  
Merlin 1  
Peregrine Falcon 1  
Black Phoebe 12  
Say's Phoebe 5  
Cassin's Kingbird 10  
Hutton's Vireo 3  
California Scrub-Jay 10  
American Crow 18  
Common Raven 10  
Bushtit 33  
Wrentit 35  
Swinhoe's White-eye 1  
Ruby-crowned Kinglet 2  
Blue-gray Gnatcatcher 2  
California Gnatcatcher 4  
Northern House Wren 6  
Bewick's Wren 2  
California Thrasher 18  
Northern Mockingbird 2  
Western Bluebird 7  
Hermit Thrush 24  
Scaly-breasted Munia 9  
House Finch 105

Purple Finch (Western) 1  
Lesser Goldfinch 25  
Dark-eyed Junco 6  
White-crowned Sparrow 66  
Golden-crowned Sparrow 21  
Savannah Sparrow 2  
Song Sparrow 24  
Lincoln's Sparrow 2  
California Towhee 38  
Spotted Towhee 11  
Orange-crowned Warbler 2  
Common Yellowthroat 12  
Northern Yellow Warbler 2  
Yellow-rumped Warbler 145

**Observers:** Nancy Richardson, Donna Mancuso, Elaine Yuong, Paul Mullholland, Robert James, Dinah Carl, Nancy Novak, Kathy Estey, Robert Turner, Manolo Tutner, Karen Turner, Pam Burdt, Andy Rathbone, Debbie Regottaz, David Walker

And a reminder that the January Count will occur on January 3<sup>rd</sup> so we can join the Rancho Santa Fe Christmas Bird Count CBC. Please check with your group leaders for locations and times to meet. For group leaders, please send me a copy of your list with those who attend and also send a copy to Robert Patton at [rpatton@san.rr.com](mailto:rpatton@san.rr.com) who compiles the CBC.

Herb Knufken's photo gallery includes many birds: <https://pbase.com/herb1rm>



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